PUERTO RICO DEPARTMENT OF HOUSING
CDBG-MIT PROGRAM
ENVIRONMENTAL ASSESSMENT INSTRUCTIONAL GUIDE 24 C.F.R. PART 58

Project Information

Project Name: Laderas de Palmas (SF-HDI-00012)

Responsible Entity: Puerto Rico Department of Housing (PRDOH)

Grant Recipient: Rebuilders PR, LLC

State/Local Identifier: Puerto Rico

Preparer: Elvelisse Figueroa Hernandez / Environmental Preparer

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Consultant (if applicable): Green Projects Environmental Consultants, LLC

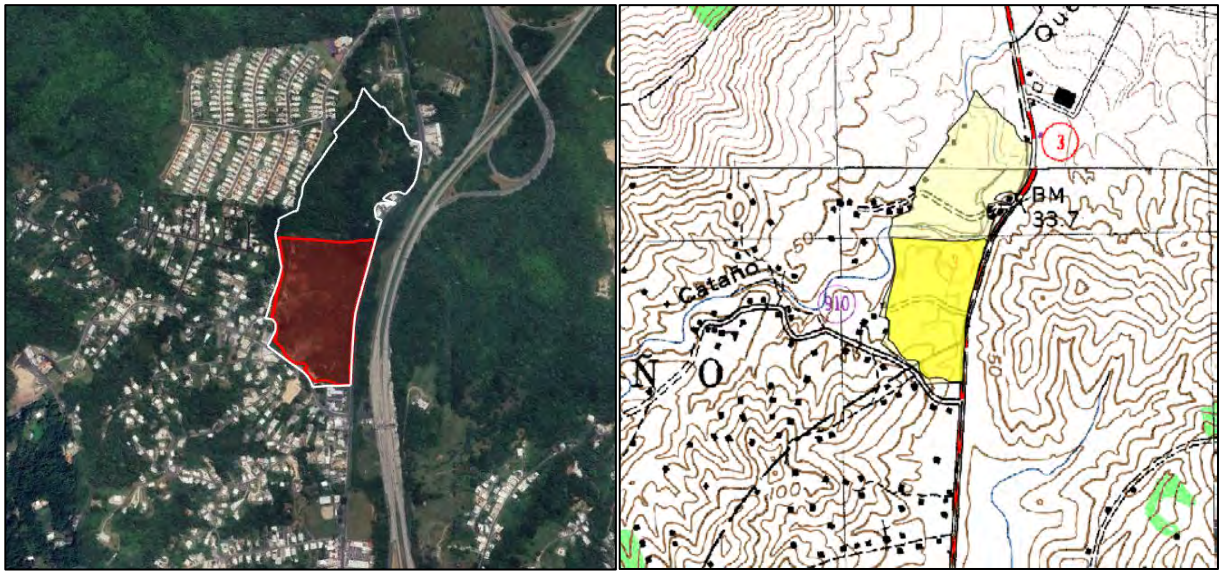
Direct Comments to PRDOH at comentariosambiental@vivienda.pr.gov.

Project Location:

Laderas de Palmas is located on State Road PR-3, Km 33.7, in the Cataño Ward of Humacao, Puerto Rico. The project is bounded to the north and east by PR-3, to the south by a parcel owned by Pan Pepín, Inc., and to the west by the Pepita López community.

Parcel Id. 329-000-005-61

Coordinates: Lat: 18.121317, Lon: -65.822449



Project Location

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

PROPERTY DESCRIPTION:

The activities to be funded with CDBG-MIT funds consist of acquiring 106 one-story, single-family units, each approximately 1,264 square feet, along with streets, associated infrastructure, and a passive park. Of these units, 100 correspond to Project SF-HDI-00012. The acquired units will benefit families holding a housing voucher under the CDBG Housing Program. The Puerto Rico Department of Housing (PRDOH) will proceed with the acquisition of said units once construction is completed.

In compliance with § 58.32 Project aggregation, PRDOH, as the Responsible Entity, grouped together as a single project the construction of the residential development and the later acquisition of the 100 single-family units.

CONSTRUCTION ACTIVITIES:

- Site clearing and grubbing
- Earth movement for parcel grading and detention pond
- Site Improvements for infrastructure and utilities
    - Storm Sewer system installation
    - Sanitary Sewer system installation and connection to PRASA
    - Potable Water system installation and connection to PRASA
    - Electric and Telecommunication system installation and connection to PREPA/LUMA
    - Street pavement, concrete sidewalks, curbs and gutters
- Dwelling Unit Construction
    - Foundation and Structure Concrete Work
    - Masonry work and plastering
    - Plumbing Works
    - Electrical Works
    - Exterior doors and Windows installation
    - House Finishes
        - Floor and wall tile installation
        - Interior doors installation
        - Painting
        - Bathroom equipment and accessories installation
        - Kitchen cabinet
        - House cleaning
- Landscaping

PROJECT SITE

The land designated for the ***Laderas de Palmas Project*** is classified as ***Urban Land*** and zoned for ***Residential Use***, according to the official ***Land Use Plan Map*** and the ***Zoning Map*** (Sheet 329) issued by the Municipal Government of Humacao.

According to the HUD Environmental Assessment Factors and Category eGuide, the site's topography does not present significant limitations for development. The slopes within the project area range from 6% to 12%, which falls within the acceptable parameters for residential construction in urban areas. Based on slope suitability standards, the site holds a favorable rating for housing development.

The existing vegetation on the property is primarily composed of herbaceous plant species, with occasional presence of invasive tree species. The land is currently not in active use, although unauthorized grazing by loose cattle has been observed, indicating informal use.

The parcel where the project is proposed is located outside the designated flood zones, in accordance with the current FEMA flood maps. The Cataño Creek crosses the property but lies

outside the project's impact area. According to the National Wetlands Inventory (NWI) of the U.S. Fish and Wildlife Service, the water body and its associated areas are classified as a riverine wetland (R2UBH) and a freshwater forested/shrubby wetland (PFO3A). In compliance with environmental best practices and HUD regulations, both the creek and its buffer zone—which ranges approximately between 20.9 and 86.28 feet, together with the undeveloped portion of the property, will be preserved in their natural condition to protect local hydrology, ecological functions, and stormwater management capacity. In addition to the creek, there are no other bodies of water or environmentally sensitive natural features, such as caves, forests, sinkholes, nature reserves, or critical habitats, within a 1,300-foot radius measured from the property's proposed development perimeter.

The land located on the east side of the creek, as well as the creek itself, will be preserved in its natural condition. This portion of the property is difficult to access and, therefore, no future development is planned for this area. The project is committed to conserving these natural features. As shown in the site plans, all construction activities will be limited to the designated project impact footprint. For the reasons outlined above, the development of future phases within this area is not being considered.

ACCESS:

Access to the project is provided from State Road PR-3. The entrance has been designed with two lanes for ingress and one lane for egress, allowing sufficient space for controlled access while ensuring safe and efficient movement for both vehicles and pedestrians.

Overall, the entrance has been thoughtfully planned to offer convenient access for residents and visitors, while promoting safety, operational efficiency, and sustainability. The inclusion of landscaped planting areas along the entrance road will enhance the project's visual appeal and contribute positively to the environmental quality of the community.

INFRASTRUCTURE:

The project's supporting infrastructure is located along PR-3 Road, directly in front of the proposed development, ensuring convenient access to existing public utilities. All utility connections, including water supply and sanitary sewer systems (PRASA), electrical service (LUMA), and telecommunications, have been fully designed and coordinated, requiring no off-site construction work. At present, 100% of the project's infrastructure design has been completed and is ready for implementation. In addition, the project includes the construction of a detention pond to manage stormwater in compliance with regulatory requirements, as well as the development of two landscaped green areas intended to enhance residents' quality of life and provide recreational opportunities.

Electrical Design:

A residential project within the CBDG-MIT program of one hundred (100) housing units in Humacao, designed with a semi-underground electrical infrastructure, will have the primary distribution built above ground and the secondary distribution constructed underground with

excavations three feet deep. The connection point provided by LUMA Energy is right in front of the project. The transformers will be single-phase "Pole Type" located on the overhead line poles that will supply energy to no more than fourteen (14) houses per 75Kva transformer. The street lighting will be a 37-watt LED type installed on 33' and 45' concrete poles, as approved by the Energy Bureau.

Telecommunication Design:

The telecommunications infrastructure for the project has been designed as an underground system to ensure safety, durability, and aesthetic value. The main distribution network will consist of 4-inch empty conduits constructed with PVC Schedule 40 piping, allowing sufficient capacity for future service expansion if required. From the designated junction points, each residence will be provided with a dedicated 1-inch conduit to accommodate both telephone and cable television (CTV) services. This configuration ensures reliable connectivity, ease of maintenance, and compliance with current utility provider standards.

PRASA:

The water service connection for the project will be provided through a 4-inch diameter pipeline. The point of connection will be the existing 4-inch valve located at the intersection of Street 1 and Street 8, within the pre-project property. This configuration ensures adequate capacity to meet the project's demand while maintaining compliance with PRASA's design and operational standards.

Sanitary System:

The connection point for this project will be to the existing sanitary sewer system located within the pre-project property. This connection ensures that all wastewater generated by the development will be directed to the public sanitary infrastructure, in compliance with PRASA's design requirements and environmental regulations.

NEIGHBORHOOD FACILITIES

The neighborhood facilities will include green areas designed to function as a passive park, occupying approximately 0.46 acres. This open-air space will be dedicated to passive recreation and community gatherings, offering residents a natural setting for relaxation, walking, and social interaction.

EARTH MOVEMENT:

Earthworks for the project are estimated to be balanced, minimizing the need for external disposal or import of material. It is proposed to cut and fill approximately 41,854 cubic yards of soil and deposit an additional 26,159 cubic yards of fill. The earthwork plan has been designed to optimize site grading, ensure structural stability, and support proper stormwater drainage, in compliance with engineering and environmental standards.

STAGING AREAS:

Construction staging areas for equipment and material storage will be located within the designated project impact zone. These areas will serve as temporary facilities for storing construction materials, parking heavy equipment, and performing assembly and preparation work by installation crews at the start of construction activities. To minimize long-term impacts, staging areas will be temporarily established within portions of the project's designated green spaces (neighborhood facilities) and will be restored to their planned recreational use once construction is completed.

PROPOSED HOUSING UNIT & DESIGN

The proposed design for the Single-Family Housing Development Initiative of the Puerto Rico Department of Housing will prioritize the safety and well-being of its occupants by utilizing resistant materials and construction techniques. Our design will include hurricane-resistant windows and doors, reinforced concrete walls, and other features to withstand severe weather conditions and external threats.

In addition to safety considerations, our design will prioritize creating a healthy living environment for occupants. We will use high-quality materials that are free from harmful chemicals and toxins and promote natural ventilation and lighting to enhance indoor air quality. We will also incorporate energy-efficient features to reduce the development's carbon footprint and promote a sustainable living environment for the long term.

RB Model (Laderas de Palmas)

We will ensure compliance with all relevant building codes and zoning regulations throughout the design process.

The proposed design for the Single-Family Housing Development Initiative for the Puerto Rico Department of Housing will consist of a single-family, one-level, detached home with a total area of 1,264 square feet. The house will be designed to provide a comfortable and functional living space for its occupants, with three (3) bedrooms that feature natural light, ventilation, and ceiling fans with integrated LED-type lights. The bedrooms will also have closets featuring wall-mounted cabinetry, providing ample storage space.

In addition to the bedrooms, the home will feature two (2) bathrooms, each with a window, shower, and water-resistant vanities. The bathrooms will be designed to provide a comfortable and functional space for their intended use while incorporating features promoting natural lighting and ventilation.

The home's design will prioritize using high-quality materials and construction techniques, ensuring the development is durable and efficient. This will include using hurricane-resistant windows and doors and reinforced concrete walls to ensure the safety and well-being of its occupants during severe weather conditions. The home will also feature energy-efficient lighting and appliances, reducing its environmental impact and lowering energy costs for its occupants.

To ensure comfort and energy efficiency, ceiling fans and LED lighting have been designed for every living area, including the bedrooms, living room, and dining room. Additionally, the home will be equipped with solar panels, 3 kW DC PV modules, and 9 kWh 48 V voltage lithium-ion, allowing it to generate its own energy and reduce reliance on the grid. A 500-gallon cistern will also be included as a resiliency measure.

The home's open-concept design provides a spacious and flexible living area. The kitchen flows seamlessly into the dining and living rooms, creating a sense of openness and connection between the spaces. The living room has access to the backyard through storm-resistant doors, which incentivizes the use of exterior areas and creates a natural indoor-outdoor flow.

The home has been designed with energy-efficient storm impact-resistant windows to protect against inclement weather conditions. Additionally, it is ADA-compliant or adaptable, ensuring that it can accommodate the needs of individuals with disabilities and support aging in place.

Additionally, the residential unit will provide a kitchen with a rough-in for a gas stove and an electric-powered circuit outlet for the electric stove, water-resistant cabinets, an open space living and dining area with ceiling fans with integrated LED type lights, a laundry area with rough-in the interior of the unit, linen closet, and an ADA compliant covered garage for two (2) vehicles. Ceramic or porcelain finishes will be provided on all floors and baseboards to enhance the residential unit's comfort and aesthetic appeal. This will ensure a durable and low-maintenance surface that is also visually pleasing. In addition, all interior and exterior surfaces will be painted with high-quality paint, providing a durable finish that is resistant to wear and tear and easy to clean. LED lighting throughout the unit will further promote energy efficiency, reducing electricity consumption and lowering energy bills for the occupants.

By incorporating these features into the design, the proposed Single Family Housing Development Initiative will provide a functional, comfortable, and sustainable living space that will meet the needs and expectations of its occupants while contributing to the overall economic and social development of Puerto Rico.

To comply with the requirements of Executive Order No. OE-2018-033 and Act 109 of 1985, the proposed residential model will use standard construction methods such as reinforced concrete, locally manufactured cement blocks, and flat roofs with a composite of reinforced concrete and a 3-year aged solar reflectance. The design features for the proposed model are readily adaptable to accommodate ADA details and features to comply with the 2010 ADA Standards for Accessible Design, and a minimum of 5% of the proposed project will comply with ADA standards.

To ensure the security of all external systems, the solar water heater, photovoltaic system with battery storage, and water storage system will be installed and secured following specifications

and regulations to withstand hurricane-force winds. To reduce environmental impact, all products and appliances provided will comply with the Energy Star and Water Sense standards, as outlined in 83 FR 5844. The photovoltaic system will be designed and installed by a licensed engineer in accordance with Regulation No. 7796 of January 19, 2010, and will comply with Article 17 of Regulation No. 7796. The provided P.V. system will be able to run critical loads, household appliances, and life support devices, enabling its residents to shelter during electrical outages. The photovoltaic package will supply a minimum of 3 kW of PV modules, a 48V voltage lithium-ion battery bank with a minimum output of 9 kWh, and autonomy for 2 hours. An automatic transfer switch will be installed to allow system operation in standalone mode.

A 500-gallon water storage system located on the roof will provide domestic water to the residence. A ¾ horsepower electrical water pump, control, and a diaphragm-type pressurized tank will be installed to provide a backup water supply with adequate pressure, ensuring the water fixture is not damaged. The system will be connected to the utility's main water line, featuring a water level control valve and backflow preventer located at ground level. To comply with FDA and NSF regulations, the provided water storage will be constructed using ultraviolet (UV) and corrosion-resistant materials approved for potable water and food-grade applications. To ensure water level changes, the storage tank will be vented in a downward position and will include a protective screen for pest control. After installation, the water storage system's disinfection will be provided in accordance with the manufacturer's standards and recommendations.

Our primary approach will be passive design methods through which comfortable interior environments will be created using low energy & water efficiency. The use of modern technology principles of passive design, such as, but not limited to, location, landscape, orientation, massing, shading, thermal mass, and insulation, will play essential and exclusive roles in our proposed models as we describe below:

- THERMAL & ENERGY EFFICIENCY

    - ROOF: The roof will be a concrete slab with a minimum three-year aged solar reflectance index of 55 and 3-year aged thermal emittance of 0.75 as per table C402.3 of the 2018 International Energy Conservation Code. The roof will be designed with an adequate slope to ensure proper water drainage and prevent leaks.
    - OVERHANGS: Compact, but rather efficient roof overhangs will beprovided on top of exterior doors as required by the ICC/ASHRAE 700-2015.
    - WINDOWS: We will install windows with low-e transmission materials that meet the 2018 Puerto Rico Energy Conservation Code. This will help to improve energy efficiency and reduce the need for artificial heating and cooling. The windows will also be strategically placed to maximize natural light and ventilation, further reducing energy consumption.

- VENTILATION

  - WINDOWS: Windows will be strategically located in either adjacent walls or at opposite ends of each wall rather than in the exact location to take advantage of cross ventilation in every room. This will ensure taking advantage of the constant trade winds typical of our Caribbean location and enhance the energy efficiency of our proposed housing units and therefore limit the energy consumption. According to sections R401.2.1 and R303.1 of the I.R.C., habitable room windows must have a minimum opening size of 14% of the room area to meet the ventilation requirement. All bathrooms will be provided with operable windows for ventilation purposes.

- LIGHTING/ILLUMINATION

  - WINDOWS: As per section R303.1 from the PRBC. and the ICC/ASHRAE 700- 2015, all our models habitable rooms windows will have 8% of the room area as a minimum glazing size for light requirement compliance.

- POWER

  - Photovoltaic System: The house will be equipped with a photovoltaic system with a battery storage system designed to meet the needs of each household and will be integrated with the local power grid to ensure a seamless power supply. The use of a photovoltaic system will reduce the overall energy consumption of the development and will provide a reliable and sustainable source of energy for its residents. The battery storage system will ensure that excess energy generated during the day is stored and made available for use at night or in the event of a power outage. This will provide an added layer of security for residents in the event of any unforeseen circumstances.

- CODE COMPLIANCE

  - The proposed design for single-family homes will comply with required codes and regulations such as International Building Code 2018 edition (I.B.C.), International Residential Code 2018 Edition (I.R.C.), International Fire Code 2018 Edition, International Plumbing Code 2018 Edition, International Mechanical Code 2018 Edition, International Conservation Code 2018 Edition (I.E.C.C.), Puerto Rico Building Code 2018 (P.R.B.C.), National Fire Protection Association (N.F.P.A.) and the American Concrete Institute to ensure durability, safety, and efficiency. Additionally, but not limited to, our proposed models will comply with the Americans with Disabilities Act of 2010 (ADA), the Fair Housing Act (FHA), the Uniform Federal Accessibility Standards (UFAS) (Section 504), and American National Standards.

- ENERGY EFFICIENCY CODE

  ICC/ASHRAE 700-2015 of The National Green Building standard.

  - ROOF: The roof will be a concrete slab with a minimum three year-aged solar reflectance index of 55 and 3-year aged thermal emittance of 0.75 as per table C402.3 of the 2018 International Energy Conservation Code (I.E.C.C.)
  - WINDOWS/FENESTRATIONS/GLAZING: Our proposed models' windows will comply with section R401.2.1.4 (Tropical Climate) of the I.E.C.C. 2018 edition by providing a solar heat gain coefficient of less than or equal to .40. This will enhance the interior environment by reducing heat gain, therefore, minimizing energy consumption costs and climate control.
  - SOLAR WATER HEATER: A solar water heater will be installed on all our models, assuring lower utility power costs.

- WIND LOADS

  - WINDOWS: Windows will be designed, manufactured, and installed with an assembly compliant with the 170-m.p.h. wind resistance required by section 1609 of the P.R.B.C. and I.B.C. 2018.
  - WALLS: The walls of our residential models will comply with the newly adopted P.R.B.C. 2018 wind load factor, as they will be constructed either from reinforced concrete or CMU walls.

- ACCESIBILITY AS PER A.D.A., U.F.A.S., F.H.A., A.N.S.I.

  - BATHROOMS: Bathrooms will be provided with a 32-inch minimum width clearance opening and with the required maneuvering clearances within the equipment and accessories, as per A.D.A. requirements.
  - DOORS: The doors provided in all unit models will have a minimum clear width of 32 inches, as per Section R311.2 of the 2018 I.R.C. and A.D.A.
  - HALLWAYS: Hallways will have a minimum of 36 inches wide clearance as per section R311.6 of the I.R.C. 2018 and A.D.A.

- LIFE SAFETY, MEANS OF EGRESS, AND EMERGENCY EXIT

  - WINDOWS: As per section R303.1 of the I.R.C. all rooms will have a window operable to provide a minimum opening of 5.7 square feet (4% of the floor area), located at a maximum height of 36" above the finished floor (R312.1.2 I.R.C. 2018) and with a minimum of 20" in width and 24" minimum in height (R310.2 I.R.C. 2018).
  - BEDROOMS: All bedrooms will be equipped with smoke detectors as required by section R314 of the I.R.C. 2018 and the NFPA 72 and UL 2034 listed.
  - HALLWAY: Hallways will be equipped with a smoke detector as well as the required carbon monoxide detector. These detectors will be strategically placed to ensure the earliest possible detection of any potential threats, ensuring the safety and well-being of all residents.

- MINIMUM ROOM AREAS AND HEIGHTS

    - HABITABLE ROOMS: All habitable rooms will have an area of not less than 70 square feet and a minimum dimension of 7' in any horizontal dimension as per sections R304.1 and R304.2 of the I.R.C. 2018. All habitable spaces will have a ceiling height of 8 feet.
    - BATHROOMS: All bathrooms will have a minimum ceiling height of 8 feet.
    - SHOWER STALLS: All shower walls will be finished with a nonabsorbent surface to a height of no less than 6 feet above the floor as per section R307.2 of the I.R.C. 2018.
    - WINDOWS: All emergency windows required at every sleeping room as per section R312.1.2 of the I.R.C.2018 will have a windowsill height of not more than 36 inches above the floor.

SPACE PROVIDED

The Project's home model, RB, features all the requirements outlined in the Design Criteria of the RFP and all the spaces a family needs to live comfortably. The homes sit on plots of land that are a minimum of 2,960.85 square feet. The site's distribution means there will be units with lots larger than 2,960.85 square feet. The one-car garage, measuring 420 square feet, also provides space for families with more than one vehicle.

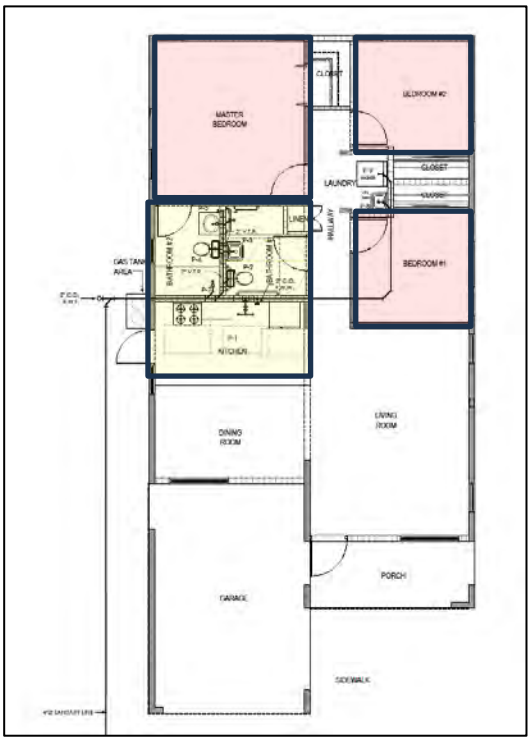
The interior of the house features a comfortable layout, including a 173.50 sq. ft. master bedroom with its own 65 sq. ft. bathroom. Two additional bedrooms, measuring 109.70 sq. ft. and 148 sq. ft., respectively, provide ample sleeping and leisure space for other family members. Bathrooms will have a 32-inch minimum clearance opening and the required maneuvering clearances within the equipment and accessories, as per the A.D.A. Finally, the living area of 134.3 sq. ft., the dining room of 134.30 sq. ft., and the kitchen of 123.50 sq. ft. provide sufficient space for interaction with friends and family.

LADERAS DE PALMAS MODEL RB MINIMUM DESIGN STANDARDS

1. Laderas de Palmas Development comprises the RB model home whose primary construction material is reinforced, plastered concrete with locally manufactured cement.

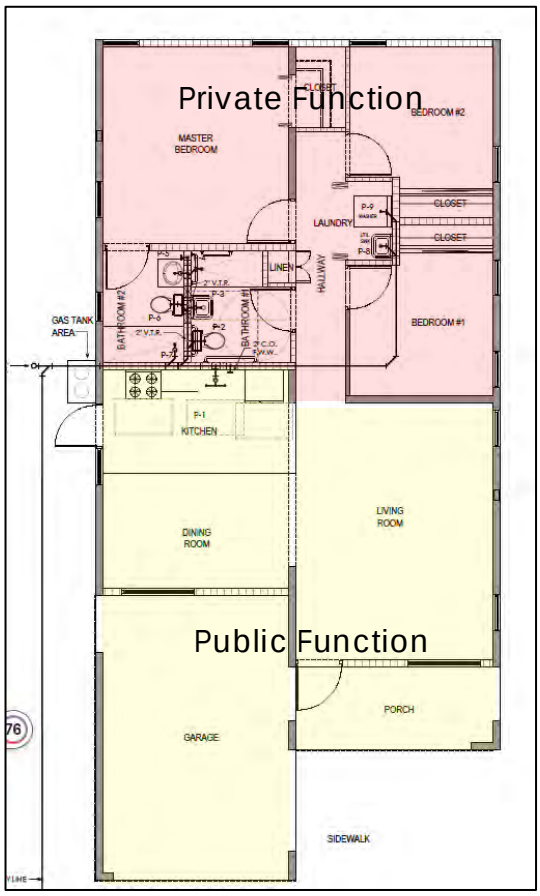
RB Model

2. All Laderas de Palmas Development housing units are single-story, detached, single-family homes. All housing units in Laderas de Palmas have three bedrooms and two full bathrooms.



RB Model Bedrooms and Bathrooms

3. The housing units of Laderas de Palmas will have a minimum construction area of 1,264 square feet. The length of the RB model home is divided by the main structural wall separating the home's two major program functions, the public and private functions. The public function of the home features an open floor concept that includes the living room, the dining room, and the kitchen. It is approximately 400 square feet. The private half of the house hosts the master bedroom and master bathroom as well as the remaining two bedrooms, a laundry room, and the second full bathroom. This half of the home is approximately 650 square feet. Finally, an approximately 60 square feet outdoor porch frames the front entryway.



4. There are 100 properties within the Laderas de Palmas community, which would require a minimum of 5 properties to comply with ADA Standards for Accessible Design. The master plan of Laderas de Palmas was intended to accommodate a variety of occupants' needs, including those of an ADA occupant. While occupants may request a property based on availability, Rebuilders PR, LLC did anticipate the different occupant needs during the design of the Laderas de Palmas Master Plan and has outlined ADA optimal properties (properties with good positioning, ease of development access and egress, as well as proximity to communal spaces, etc). Examples of these properties are depicted in the diagram below, and they will be used to prioritize ADA needs during the property closing process.

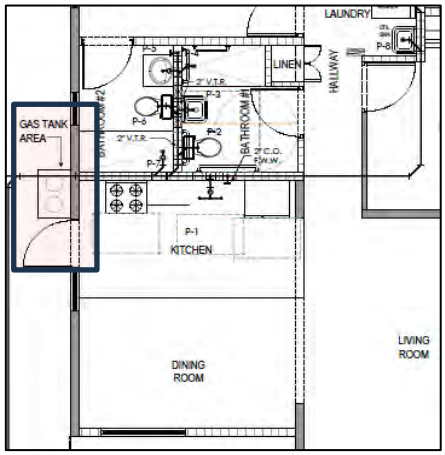
5. The Laderas de Palmas RB model home was designed to protect occupants from inclement weather. Together, the Laderas de Palmas homes aimed to develop a collectively resilient housing fabric. Therefore, window kit and door kit selections were contemplated within the design process. Additionally, a recessed front entryway provides an extra layer of security and privacy for the occupant, as depicted below.

6. The Laderas de Palmas home is equipped with a 500-gallon roof-mounted cistern and a lithium-ion battery, 3 kW DC-operated solar panel system.

7. Rebuilders PR, LLC understands that using carefully considered door and window kits is contingent upon their proper installation. The quality of construction for the Laderas de Palmas homes will be ensured through the quality assurance plan, which the resident engineer will complete.

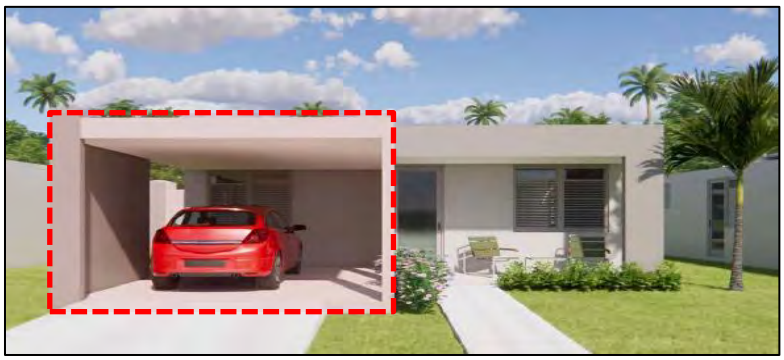
8. Rebuilders PR, LLC values natural light and ventilation highly, understanding their vital role in a person's health. Therefore, embracing natural occurrences was a core component of the Laderas de Palmas design. As depicted in the diagrams below, the positioning of windows was considered to permit daylighting techniques and cross-ventilation upon opening their louvers.

9. The gas tank storage is placed strategically near the kitchen. The tanks can be easily moved through the stairless front entryway and, when necessary, quickly connected by local codes, regulations, and standards.



Gas Tank Location

10. All Laderas de Palmas housing units will have a one-car, concrete-covered garage, continuing the reinforced concrete primary building component. The driveway access to the garage also serves as the primary pedestrian access.



11. All Laderas de Palmas homes will undergo the standard QA/QC procedures the Resident Engineer conducts.

12. All products used within the Laderas de Palmas RB model home will comply with the Energy Star Water Sense standards, as outlined in 83 FR 5844, and will undergo the QA/QC procedures the resident engineer implements.

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

The U.S. Department of Housing and Urban Development (HUD) allocated $8.285 billion to the Government of Puerto Rico through the Community Development Block Grant for Mitigation (CDBG-MIT) Program. These funds, made available as part of the recovery efforts following Hurricanes Irma and María, are specifically intended to support projects and activities that strengthen community resilience by preventing and withstanding the impacts of future natural disasters. The allocation aims to reduce risks to life and property, ensuring that mitigation measures are integrated into the planning and development of housing and infrastructure.

On December 21, 2022, the Puerto Rico Department of Housing (PRDOH) issued Request for Proposals No. CDBG-MIT-RFP-2022-04 for Single-Family Housing Initiatives. This RFP aimed to provide services for the development of detached single-family homes as part of the broader CDBG-MIT Program. The initiative represents a unique and impactful opportunity for Puerto Rico to implement strategic, high-impact mitigation activities that reduce disaster risks and future losses.

The devastation caused by Hurricanes Irma and María significantly increased the demand for safe and affordable housing. In response, the Laderas de Palmas Project will deliver 100 single-family housing units, backed by an investment of $30,485,000.00. This development will help address the housing shortage and stimulate regional and national economic activity and job creation during its construction phase.

The project is designed to serve 100 families currently living in unsafe conditions, particularly low-income households, the elderly, and individuals with special needs who are unable to access safe housing due to high property costs and bank interest rates. The homes will be constructed with durable, resilient structures that can withstand extreme weather, offering long-term protection to residents.

Additionally, the Laderas de Palmas Project aims to enhance family well-being by recognizing housing as a fundamental aspect of quality of life. Beyond offering physical shelter, housing provides emotional security, social stability, and a foundation for personal growth and development. This project will deliver sustainable, affordable homes with permanent tenure for low-income families, fostering long-term social, economic, and environmental resilience.

Health and sustainability are central to the project's design. Homes will be constructed with high-quality, non-toxic materials and incorporate natural ventilation and lighting to enhance indoor air quality. Energy-efficient features will be integrated to reduce the development's carbon footprint and ensure a healthier, more sustainable living environment.

The development will fully comply with all applicable building codes and zoning regulations. It will offer safe, healthy, and resilient housing that benefits the local community for generations. By expanding access to secure and affordable housing, the project will help mitigate the risk of injury, death, and property loss in the event of future natural disasters, enabling families to be better prepared and more protected.

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

The proposed Laderas de Palmas social-interest residential project is located on an undeveloped parcel of land in Humacao, Puerto Rico. The site is zoned for residential use and classified as urban land, according to the Soil Classification Map of the Municipality of Humacao (Sheet 329) and the Puerto Rico Land Use Plan Map, although it has not been previously impacted or developed. The land remains in a natural state, predominantly covered by herbaceous vegetation with the presence of some invasive tree species. No formal activities currently take place on the parcel.

The surrounding area is undergoing residential growth and benefits from proximity to existing infrastructure networks, including State Road PR-3, nearby utilities, and established transportation corridors. This connectivity will facilitate future service extensions and minimize disruptions during construction activities.

The Laderas de Palmas project is specifically designed to support families affected by Hurricanes Irma and María, providing safe, permanent, and resilient housing for households that remain among the most vulnerable populations in the region. The site is situated in a predominantly residential area facing socioeconomic challenges, including limited employment opportunities, low educational attainment, and exposure to climate-related hazards. Many potential beneficiaries continue to experience housing instability and economic hardship because of the hurricanes and require permanent, code-compliant housing as a foundation for long-term recovery.

The project will be constructed using non-toxic, high-quality materials and will incorporate sustainable design strategies, emphasizing natural ventilation, energy efficiency, and indoor environmental quality. It will also include green spaces that promote recreation, community engagement, and ecological balance. By integrating resource-efficient construction methods and resilient design, the project aligns with best practices for sustainable development and disaster recovery in Puerto Rico.

The Laderas de Palmas development aligns with the Municipality of Humacao's current demographic, housing, and recovery priorities, addressing the urgent need for resilient, affordable housing. It contributes to equitable redevelopment, environmental stewardship, and long-term community sustainability, helping to build a stronger and more inclusive future for the residents of Humacao.

In the absence of the Laderas de Palmas project, vulnerable families in Humacao, particularly those affected by Hurricanes Irma and María, would continue to experience limited access to safe and affordable housing, prolonging their housing insecurity and delaying overall community recovery. The undeveloped site, although zoned and serviced for residential use, would remain underutilized, allowing invasive vegetation and potential illegal dumping to degrade its environmental value. Without this planned, resilient development, the community would lose a critical opportunity to strengthen local infrastructure, reduce socioeconomic disparities, and enhance resilience to future climate-related hazards. Overall, the lack of the project would perpetuate housing instability, economic vulnerability, and environmental neglect in the area, hindering long-term recovery and sustainable growth in Humacao.

Funding Information

Grant Number	HUD Program	Funding Amount
B-18-DP-72-0002	Community Development Block Grant – Disaster Recovery (CDBG-MIT)	$8,285,284,000

Estimated Total HUD Funded Amount: $ 30,485,000.00

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: $ 30,485,000.00

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

The 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—note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance Determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	The closest civil airport to the Project is the José Aponte de la Torre (RVR), approximately 66,500 feet Northeast of the Property limit to the Airport Runway Protection Zone (RPZ) buffer. The nearest military joint airport is the Luis Muñoz Marín (SJU), approximately 111,400 feet Northwest of the Property limit to the Accident Protection Zone (APZ) buffer. The project site is located outside of any Accident Potential Zone (APZ) or Runway Protection Zone/Clear Zone (RPZ/CZ), ensuring compliance with applicable safety and land-use regulations. Therefore, the Project is in compliance with 24 CFR Part 51 Subpart D. **See Exhibit 1. Airport RPZ/APZ Protection Zone Map**
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	The proposed project is not located within a Coastal Barrier Resources Unit. The CBRS Unit closest to the Project is PR-39, situated in Puerto Yabucoa, South of the Property, at an approximate distance of 4.1 miles (21,648 ft). Therefore, the Project is in compliance with the Coastal Barrier Resources Act.

		See Exhibit 2. Coastal Barrier Resources System Map and 2a. Puerto Yabucoa Unit PR-39 Map
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	A FEMA Flood Insurance Rate Map (FIRM) shows the project is located outside a special Flood Hazard Area. https://msc.fema.gov/portal/home The project location is within Flood Zone X (Area of Minimal Flood Hazard) in FEMA FIRM 72000C1805J), effective 11/18/2009. Due to its zone designation, there is no need to obtain flood insurance for the site. Therefore, the project is in compliance with the Flood Disaster Protection Act. **See Exhibit 3. National Flood Hazard Layer FIRMette (72000C1805J)**
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	The EPA's Green Book classified several municipalities in Puerto Rico as non-attainment areas or in maintenance for certain criteria pollutants, including lead, sulfur dioxide, and particulate matter. An area is considered an attainment area (designated "attainment/unclassifiable") if the air quality meets or exceeds the national air quality standards. The following municipalities, which are either in non-attainment or maintenance areas, are: Arecibo, Bayamon, Cataño, Guaynabo, Salinas, San Juan, and Toa Baja. The project site is in Cataño Ward, Humacao, PR. According to EPA NEPA Assist or any other official regulatory source, it is not designated as a non-attainment area. The nearest non-attainment area is approximately 20.6 miles (108,768 feet) Northwest of the project site. https://www.epa.gov/nepa/nepassist The installation of generators or other equipment that may impact or degrade air quality, Is not proposed once the project is

		finalized and operating with resident presence. During construction, the primary anticipated emissions will include fugitive dust, emissions from portable electric generators used for power supply, and emissions from internal combustion engines in vehicles, trucks, and equipment. These emissions are temporary and are generally considered minor sources by the EPA and the Puerto Rico Department of Natural and Environmental Resources (DNER). However, several preventive measures will be implemented to minimize these impacts: • All construction machinery and vehicles will undergo regular maintenance to ensure optimal performance and reduce exhaust emissions. Well-maintained equipment operates more efficiently and generates fewer pollutants. • To minimize air pollutants, the use of low-emission or electric construction equipment will be prioritized whenever possible. This includes selecting generators that meet low emission standards and using energy-efficient machinery to reduce overall emissions. • To further reduce vehicle emissions, efficient traffic management strategies will be implemented. These measures will minimize idling times, ensure that construction vehicles follow the most direct routes, and reduce congestion around the construction site. These preventive measures will help reduce emissions' impact on air quality during construction, ensuring that temporary emissions remain within acceptable limits and comply with environmental regulations.

		Therefore, the Project is in compliance with the Clean Air Act. **See Exhibit 4. Nonattainment Areas Map and 4a. List of Puerto Rico Nonattainment Areas**.
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	The coastal zone boundary is approximately 1.80 miles (9,504 feet) Southeast of the project site. The construction of the residences does not affect the coastal zone as defined in the state's Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act. **See Exhibit 5. Coastal Zone Management Map**
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	The subject property is a vacant, undeveloped parcel of land with no evidence of prior commercial, residential, agricultural, or industrial use. Since 2004, the property has been subject to permitting and endorsement processes for the development of a residential project; however, no construction activities were initiated, and the land remains in its natural condition. Records confirm that the site is not listed as a LUST (Leaking Underground Storage Tank) facility and that no violations or penalties were identified. Furthermore, no landfills, dumping sites, or other forms of historical use were observed on the subject property or the adjoining lots. The soil does not show evidence of water accumulation during precipitation. Additionally, no petroleum products, hazardous substances, power generators, storage tanks, or standing surface water were observed. There are no pools, sumps, or containers with potentially hazardous substances, no pungent or noxious odors, and no corroded or stained metal containers.

		The property also lacks drains, sumps, pits, ponds, or lagoons, as well as any evidence of trash, construction debris, demolition waste, or other solid waste disposal. No stained soil, pavement, wastewater discharges, or underground injection systems were found. There are no dry, irrigation, abandoned, or other wells or on-site septic systems. The Phase I Environmental Site Assessment ('Phase I Environmental Study') was conducted in November 15, 2023 in conformance with the scope and limitations of ASTM Practice E 1527-13. The Phase I Environmental Study determined: • There is no evidence of oily films in standing water. • There is no evidence of discolored and oil-stained floors. • There is no evidence of discarded chemical containers. • There is no evidence of waste pipes or buried waste. • There is no evidence of distressed vegetation. • There is no presence of unusual odors. • There is no evidence of a LUST Facility at the adjoining properties • The results of this assessment have revealed no Recognized Environmental Conditions (RECs) associated with the subject property. • The results of this assessment have revealed no Controlled Recognized Environmental Conditions (CRECs) associated with the subject property. • The results of this assessment have revealed no Historically Recognized Environmental Conditions (HRECs) associated with the subject property. • The results of this assessment have revealed no De *Minimis Condition* associated with the subject property. • This Phase I ESA did not identify RECs in connection with the subject property or evidence of any potentially

		significant environmental concern. Therefore, no further investigations at the subject property are recommended to satisfy All Appropriate Inquiries. • The subject property has been identified as a LUST (Leaking Underground Storage Tank) facility. The subject property itself has **not** been identified as a LUST (Leaking Underground Storage Tank) facility. However, according to the Phase I ESA (Section 5.3), the following findings were noted with respect to LUSTs in the vicinity: According to DRNA and USGS records, no public supply wells, agricultural wells, or USGS monitoring wells are located within the subject property or adjoining parcels. CTS Group, Inc. identified one adjoining facility, Gulf Humacao (UST ID 2-860352), which was registered as a LUST in 1999 during a UST removal at the northeastern boundary of the subject property. The reported release did not trigger regulatory action, is not listed in EPA databases, and does not represent a risk of human exposure or groundwater contamination. The service station continues to operate under valid permits in compliance with state and federal UST regulations. Furthermore, no Superfund Sites or EPA National Priorities List (NPL) facilities were identified in the vicinity. The NEPAssist identifies seven locations with contamination or toxic substances within a 3,000-foot radius of the project perimeter. According to information from the Enforcement and Compliance History Online (ECHO), the compliance status for all seven locations is "No Violation" Identified. The nearest facilities (RCRA) is adjacent to the property, belonging to Luis Riefkohl Ss, with a status of "No Violation" Identified.

		No structures are to be demolished within the project limit, so there is no possibility of contamination with asbestos or lead. Regarding radon, the Puerto Rico Department of Housing (PRDOH) has determined that testing the property's radon levels is infeasible and impracticable. This conclusion follows consultations with several agencies, including the United States Geological Survey (USGS), the Centers for Disease Control and Prevention (CDC), the Puerto Rico Department of Health, and the United States Environmental Protection Agency (EPA). These agencies confirmed the lack of scientific data on radon testing in Puerto Rico, as well as the technical challenges associated with it. These challenges include a shortage of trained and professionally licensed personnel to collect samples, the unavailability of test kits, high testing costs, difficulties in ensuring the quality control of results, and the lengthy process required to purchase, ship, and analyze samples. Furthermore, local authorities in Puerto Rico lack the specialized equipment and trained personnel needed to perform radon testing and ensure proper quality control. Additionally, no certified radiation laboratory in Puerto Rico is authorized to conduct radon testing. Based on these factors, the PRDOH memorandum concludes that radon testing is not feasible for this property, and no further consideration of radon is required for the environmental review. Therefore, the Project is in compliance with the 24 CFR Part 50.3(i) & 58.5(i)(2). **Exhibit 6. EPA NEPAssits – EPA Facilities MAP / 6a. Environmental Assessment Phase I Report/ Exhibit 6b. PRDOH Memorandum for Infeasibility and Impracticability of Radon Testing / 6c. Radon Memorandum Attachments.**

Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	Under Section 7 (a)(2) of the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 et seq.), and in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 et seq.) is required to determine the effect of the project on protected (listed or proposed) threatened or endangered species. Using the Information for USFWS Planning and Consultation (IPaC) System and the Fauna/Flora Survey, it has been determined that the proposed project lies within the range of the following federally listed species and critical habitats: • ***Reptiles:*** o *Chilabothrus inornatus* (Puerto Rican Boa)/ Status: Endangered • ***Amphibians:*** o *Eleutherodactylus cooki* (Guajon) / Status: Threatened There are no critical habitats, refuge lands, or fish hatcheries within the Project under FWS Jurisdiction. Based on the nature of the Project, the scope of work, information available, and a careful analysis of the *IPAC list, conservation measures that will be implemented, and biological studies of the site,* the following effects determinations have been made for the species mentioned above. **<u>Not Likely to Adversely Affect (NLAA)</u>** <u>*Chilabothrus inornatus*</u> *Eleutherodactylus cooki* The following conservation measures will be implemented during the construction of the Project: • USFWS Puerto Rican Boa (*Chilabothrus inornatus*) Conservation Measures 2024

		• USFWLS Conservation measures for the Coqui Guajon (*Eleutherodactylus cooki*) The conservation measures are described in Exhibits 3 and 4 of the USFWS Informal Consultation Package (Exhibit 7a). Regarding the Puerto Rican Boa found in the Project Action site, work shall cease until the Boa moves off independently. If the Boa does not move off, the CM shall contact the Puerto Rico Department of Natural and Environmental Resources. PRDOH, as the Responsible Entity, is conducting due diligence to assess Federally Listed Threatened and Endangered Species, in accordance with the Endangered Species Act Section 7. This involves consulting the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS) databases, as well as field surveys. An informal consultation was submitted to the agency for determination (or other sources such as Fauna/Flora Survey), which identified the proposed project's range within the habitat of federally listed species and critical habitats on October 8, 2024. The agency responded on November 6, 2024 with the following determination: "*With regards to federally listed species, you have determined that the Puerto Rican boa (Chilabothrus inornatus), and the guajón (Eleutherodactylus cooki) can be found within the project action area. The determination that the project may affect but is not likely to adversely affect these species is based on following the Fish and Wildlife Service established conservation measures for both species. Please remember that these conservation measures have reporting requirements that should be followed by the grantee. We have reviewed the information provided in your letter and our files and concur with your determination that the proposed action may affect, but is not likely to adversely affect, the above-*

		referenced species. No adverse impacts to designated critical habitat are anticipated." In the same letter, the agency provided comments regarding Quebrada Cataño, which runs through the central portion of the property and along the northern boundary of the proposed Project. This stream is classified as a riverine wetland according to the National Wetland Inventory (NWI). Based on the inventory information, it could potentially be impacted by the Project's development. To avoid potential direct impacts on the wetland area, the agency recommended removing Lots 1, 17, 18, 33, and 34, as well as redesigning the proposed detention pond. These recommendations were adopted, resulting in modifications to the Project's design that included the removal of five lots and the redesign of the detention pond. The revised design incorporates a riser structure and an outfall oriented toward the stream at a 45-degree angle, in alignment with the natural flow direction. These measures are intended to preserve the existing bed and banks of Quebrada Cataño in their natural condition. Therefore, the project is in compliance with the Endangered Species Act. **See Exhibit 7. USFWL Endangered Species Concurrence for NLAA Determination Letter, 7a. USFWLS Informal Consultation Package**
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	The project is located near places with inherent potential dangers associated with facilities that store, handle, or process hazardous substances of a flammable or explosive nature that can expose the inhabitants of the Project to the risk of injury in the event of a fire or an explosion. To identify stationary hazards, the following was done:

		1. Identification of a one-mile (5,280 feet) radius of the project any current or planned stationary aboveground storage tank (AST) with more than 100-gallon capacity, containing common liquid industrial fuels or any capacity, containing hazardous liquids or gases that are not common liquid industrial fuel. 2. Georeferenced photos were taken of the Hazard stationary or the place where it is located. 3. The type of material, capacity of the tanks, and information on the dams were identified. 4. The tanks were in an aerial photo to determine the distance from the project. 5. The acceptable distance was determined using the Acceptable Separation Distance (ASD) Electronic Assessment Tool. https://www.hudexchange.info/environmental-review/asd-calculator/ 6. The ASD is measured from the center of the assessed container to the perimeter of the Project. During the visual assessment conducted on November 26, 2024, twelve (12) potential explosive hazard sources were identified, all associated with the operation of stationary Aboveground Storage Tank (AST) facilities. Each of these facilities is located at a safe distance from the project site and from areas where residents or the general public may be present or congregate. The nearest facility to the subject property is a propane gas storage tank with a capacity of 1,000 gallons, located to the south of the project site within the Pan Pepín facilities. This tank is approximately 322 feet from the closest residential structure. According to HUD's Acceptable Separation Distance (ASD) standards, the required distances are 276.57 feet for human occupancy and 50.28

		feet for buildings or structures. Therefore, the existing distance between the propane tank and the project site exceeds the HUD ASD thresholds, and no additional mitigation measures are required. It is also noteworthy that several existing features further reduce the potential risk in the event of an incident, including intervening structures (industrial buildings) and natural topographic barriers (slopes) located between the tank and the project area. These additional protective elements provide an extra layer of safety and further support the conclusion that the project complies with HUD's explosive and flammable hazard safety requirements. Therefore, the Project is in compliance with the 24 CFR Part 51 Subpart C. **See Exhibit 8. Explosive and Flammable Hazard Location (Aerial Image), Table with description of AST and ASD, and photos of the facilities.**
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	The Laderas de Palma Project comprises 39.54 acres. According to the Web Soil Survey (WSS), the project area corresponds to the Humacao Area, Puerto Rico. A WSS soil interpretation report was generated for farmland classification to evaluate map units subject to the Farmland Protection Policy Act (FPPA). According to the report, the area of interest encompasses a total of 39.54 acres. According to the NRCS Farm Classification maps, 14 acres are identified as Prime Farmland, another 21.3 acres are classified as farmland of Statewide Importance, and 4.2 acres are classified as Not Prime Farmland. Form AD-1006 (03-02) for the Laderas de Palmas project was submitted to the agency on August 13, 2024, and officially completed on September 13, 2024. The determination concluded that 14.91 acres would be directly

		converted and 24.63 acres indirectly converted. After the evaluation of the USDA-NRCS Form, it determined the following: *After evaluating the project footprint (refer to the attached maps, including the WSS Farmland Classification map and the 2020 US Census Bureau Urban Area map), it was found that the area of interest includes land classified as prime farmland. However, it is located within the designated urban area, as shown on the 2020 Census map. Therefore, this area is not subject to the Farmland Protection Policy Act (FPPA)".* Following the redesign of the project to incorporate the recommendations of the U.S. Fish and Wildlife Service (USFWS) to avoid impacts to the Quebrada Cataño (a riverine wetland), the total final impact area is now smaller than the area initially evaluated by the Natural Resources Conservation Service (NRCS). As a result of these changes, 13.69 acres will be directly converted, while 25.81 acres will be indirectly affected. See Exhibit 9b: *Final Acres Breakdown – Direct and Indirect Converted Acres*. Since the final conversion area is smaller than initially evaluated by the NRCS and the redesign includes stricter conservation measures, a new consultation with the agency was not deemed necessary. Although the project is not subject to the Farmland Protection Policy Act (FPPA), the Puerto Rico Department of Housing (PRDOH) has determined that, as a mitigation measure, consultation with the USDA-NRCS will be completed once the environmental assessment is approved. Therefore, the project is in compliance with the Farmland Protection Policy Act.

		See Exhibit 9. USDA-NRCS Farmland Protection Policy Act Evaluation for Laderas de Palma Development Determination (September 13, 2024)- Exhibit 9a. Form AD-1006 (03-02) Farmland Conversion Impact Rating Consultation Package / Exhibit 9b. Final Acres Breakdown – Direct and Indirect Converted Acres.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	The project is not within the floodplain. The extent of the floodplain was determined using the 0.2 percent flood approach. According to Advisory Base Flood Elevation (ABFE), issued on October 18, 2024 the project is in Zone X. According to the Flood Insurance Rate Map (FIRM), effective November 18, 2009, the project is in Zone X Area of Minimal Flood (Map number 72000C1805J). The PFIRM Map is not available for the project site. The project will not undergo activities within a floodplain. Therefore, the Project is in compliance with the Executive Order 11988. **See Exhibit 3 National Flood Hazard Layer FIRMette, 10. Advisory Base Flood Elevation Map (ABFE) Map (JP)**
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	For the Project, archaeologists Heidi J. Dilan (SOI-Qualified Archaeologist) and Fernando Alvarado Muñoz (SOI-Qualified Architect/Architectural Historian) conducted historical archaeological and architectural evaluations for the property. The evaluations concluded the following: • Direct Effects: No Historic properties are present within the direct or indirect APE. The only thing that will be affected is the land impacted by the construction and development of the

		project, whether the areas for future streets, sidewalks, or house footprints. • Indirect Effects: Due to the long distance between the project and the historic area, no historic properties will be affected indirectly by the proposed project. In a letter dated October 11, 2024, the State Historic Preservation Office (SHPO) executive director, Mr. Carlos A. Rubio indicates the following: "Our records support your findings of no historic properties affected for this undertaking" Therefore, the project is in compliance with National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 C.F.R. Part 800. **See Exhibit 11. SHPO-CF-10-02-24-05 SF-HDI-00012 Determination / Exhibit 11a. Section 106 NHPA Effect Determination Form (Package)**
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☒ No ☐	The Laderas de Palma Project is located 127,280 feet from the "Tren Urbano", 120 feet from the primary highway PR-3, and 13.07 miles (69,0090.6 ft) from José Aponte de la Torre (RVR) Airport, a Noise Level Assessment (NLA) Report was prepared on February 12, 2024, revised in October 2025 by CMA Architects and Engineers, LLC. The report concluded the following: The noise level study at the Laderas de Palmas future site indicated that the noise levels exceed the acceptance levels established by the Housing and Urban Development (HUD) regulations. The HUD noise acceptance level is 65 dB(A), while the current noise level at the site was measured to be 67.4 dB(A). Based on HUD guidelines, this places the site within the "Normally Unacceptable" noise zone.

		The noise assessment for the proposed *Laderas de Palma* residential development determined that existing ambient noise levels at the site (67.4 dB(A)) exceed the U.S. Department of Housing and Urban Development (HUD) acceptable limit of 65 dB(A). However, the analysis of the proposed building materials indicates that the exterior walls, constructed primarily of concrete with glass windows, will provide an average noise reduction of approximately 19.73 dB. This reduction lowers the estimated interior noise level to 47.66 dB(A), which falls within the HUD acceptable range. The Noise Reduction Coefficients (NRC) used in the study certified by Engineer Pedro A. Janer were obtained from M. David Egan (1988), *Architectural Acoustics*, Chapter 2 – Sound Absorption, McGraw-Hill. Therefore, although the project area is classified as "normally unacceptable" for outdoor noise exposure, the proposed construction design provides adequate mitigation to ensure interior noise levels remain acceptable for residential use. In compliance with these requirements, the project design incorporates construction materials with high acoustic absorption coefficients, capable of reducing exterior noise levels by up to 38 dB. This ensures that the interior noise level within the residential units will remain below 65 dB, thus meeting HUD's attenuation criteria. In conclusion, although the exterior noise level at the housing site exceeds HUD's acceptance threshold, the proposed construction methods and materials provide the necessary attenuation to comply with HUD standards. To minimize or prevent the impact of construction noise on the surrounding community, the following noise control measures will be implemented: • **Idle reduction:** Construction equipment and vehicles will be turned

		off when not in use to avoid unnecessary noise emissions and fuel consumption. • **Restricted work hours:** Noisy construction activities will be scheduled during designated daytime hours to minimize disturbance to nearby residents and sensitive receptors. • **Low-noise equipment selection:** Whenever feasible, machinery and tools with lower noise output will be selected, and sound-dampening attachments (such as mufflers and acoustic shields) will be utilized. • **Preventive maintenance:** All equipment will undergo routine inspection and maintenance to ensure optimal performance and reduced noise levels, since poorly maintained machinery typically generates excessive noise. • **Worker training and awareness:** Construction personnel will receive training on best practices for noise management, proper equipment handling, and adherence to noise control protocols. • **Monitoring and compliance:** Noise levels will be periodically monitored during construction to ensure compliance with HUD noise standards and applicable local regulations, and corrective actions will be implemented as needed. Therefore, the project is in compliance with the Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 C.F.R. Part 51, Subpart B **See Exhibit 12. Noise Assessment Report and Exhibit 12a. Image with Project distance to Roadways, Railroads, and Airports.**

Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	The proposed project site consists of new housing development construction; however, it is not located within a Sole Source of Aquifers and will not directly or indirectly impact one. There are no Sole Sources of Aquifers in Puerto Rico. https://www.epa.gov/dwssa (SSA Locations) https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b The project is not served by a US EPA-designated sole-source aquifer, is not located within a sole-source aquifer watershed, and would not affect a sole-source aquifer subject to the HUD EPA Memorandum of Understanding ("MOU"). The Puerto Rico Aqueduct and Sewer Authority (PRASA) provides drinking water for the area. Therefore, the project is in compliance with the Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 C.F.R. Part 149 **See Exhibit 13. Sole Source Aquifers Map**
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☒ No ☐	The proposed project site consists of new housing development construction. According to the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory (NWI) Map https://www.fws.gov/wetlands/data/Mapper.html, the property proposed for the project and future development contains the following wetlands: • Riverine Wetland (R2UBH), which occupies approximately 2.04. • Freshwater forested/shrub wetland (PFO3A) with an approximate capacity of 0.24 acres. Both wetlands identified on the site are associated with the Quebrada Cataño. This

		stream flows through the central portion of the property and along the northern edge of the Project's impact footprint. In accordance with Executive Order 11990, which mandates the protection of wetlands, a formal wetland evaluation was conducted using data from the U.S. Fish and Wildlife Service's National Wetland Inventory (USFWS-NWI). In a letter dated November 6, 2024, Ms. Lourdes Mena (Exhibit 7), Field Supervisor for the USFWS, provided official comments under the authority of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. §1531 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. §661 et seq.). The agency identified the Quebrada Cataño as a riverine wetland based on the NWI mapping and noted the potential for adverse impacts resulting from the proposed development. To mitigate these impacts, the USFWS recommended the removal of Lots 1, 17, 18, 33, and 34 and the redesign of the proposed detention pond to avoid direct disturbance to the wetland and its associated buffer. **Design Modifications in Response to USFWS Recommendations** In response to the USFWS recommendations (Exhibit 14a) the project was significantly redesigned. Five residences were removed from the plan, and the detention pond was relocated entirely outside the wetland boundary as delineated by the NWI. The updated stormwater design incorporates a riser and outfall system positioned at a 45-degree angle to the flow of the Quebrada Cataño, ensuring alignment with the natural hydrology. These design changes help preserve the existing bed and banks of the stream in their natural state.

		The overall project impact footprint was reduced from 22.33 acres to 18.9 acres. Furthermore, the redesigned layout ensures that the nearest point of development is no closer than 20.9 feet from the wetland boundary. These modifications comply with USFWS guidelines and were formally submitted to the agency via email on November 7, 2024. The USFWS subsequently responded by email on February 11, 2025, expressing its approval of the project's revised design (Exhibit 7b). **Regulatory Compliance under HUD and PRDOH Guidelines** According to U.S. Department of Housing and Urban Development (HUD) regulations, the proposed development qualifies as new construction and is subject to the requirements outlined in 24 CFR 55.20 (not exempt under 24 CFR 55.12). Therefore, an assessment of both direct and indirect impacts on wetlands due to construction, occupancy, and potential future modification was required. In compliance with Executive Order (EO) 11990, the Puerto Rico Department of Housing (PRDOH), as the Responsible Entity, requested a visual assessment, which was conducted on February 27, 2025. The purpose of this assessment was to confirm the presence of wetlands on the property and to complete the Primary Screening for Wetlands, as required under HUD regulations at 24 CFR 55.9(b). The evaluation verified the existence of hydrological conditions and wetland-associated vegetation within the site (Exhibit 3 of Exhibit 14c). The Quebrada Cataño flows through the property outside the revised impact footprint. The stream, its variable buffer zone, ranging from 20.9 feet to 86.28 feet in width, and the remainder of the property beyond the

		project footprint will remain undisturbed in their natural condition. **Public Notification and Participation** In compliance with regulatory requirements, a public notice describing the proposed project and its potential wetland impacts was published in *Primera Hora*, a widely circulated local and regional newspaper, on October 1, 2024. The notice targeted all nearby residents, including those residing in or near the wetland area (Exhibit 5 of the Exhibit 14c). The notice included all required information: the project's name and location, a brief description of the activity, the total number of floodplain acres potentially affected, contact details for the HUD official or responsible entity, and the address and hours of the office where full project documentation could be reviewed. The public was given 15 calendar days to submit comments. A copy of the published notice was retained as part of the project's environmental review record and is attached to this document. As part of the 8-step process required by HUD regulations for projects that may affect wetlands, various alternatives to the proposed development of 100 housing units were evaluated. Among the options considered is the "no action" alternative, which would involve not moving forward with the project and, therefore, avoiding any direct or indirect impact on the wetland area. Design alternatives aimed at reducing the project's footprint or relocating the project to another property within the municipality of Humacao were also analyzed. See Exhibit 14c.

		8-Step Decision-Making Process Determination: The Final Notice was published on June 10, 2025, and no public comments were received. It was determined that no practicable alternative exists outside the floodplain due to the project's urgency and lack of viable sites in the municipality. The project will proceed on the proposed site, as it does not directly impact wetlands and will provide a total of 106 safe housing units, of which 100 units correspond to Project SF-HDI-00012. Temporary and permanent mitigation measures will be implemented to minimize indirect impacts and to preserve the integrity of adjacent wetlands. Therefore, the Project is in compliance with the Executive Order 11990, particularly sections 2 and 5. **See Exhibit 14. USFWS National Wetland Inventory Map, Exhibit 14a. Memorandum to USFWS Project's Redesign and confirmation emails 14b. Project Original and Final Layout, and 14c 8 Step Process Package**
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	The proposed project site consists of new housing development construction; however, it is not located within Wild and Scenic Rivers and will not directly or indirectly impact one. The wild and scenic rivers in Puerto Rico are in the El Yunque National Forest, approximately 7.86 miles (41,500 feet) West of the Project. These rivers include La Mina River, Icacos River, and Mameyes River, with the Icacos River being the closest to the Project. https://www.arcgis.com/apps/mapviewer/index.html?layers=a37eb56966cc4b11b69909e288414e53

		Therefore, the project is in compliance with the Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c). **See Exhibit 15. Wild and Scenic Rivers Map**

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]

The qualitative and quantitative significance of the proposal's effects on the project area's character, features, and resources are recorded below. 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 approval permits have been obtained or noted. Citations, dates/names/titles of contacts, and page references are precise. Additional documentation is attached, as appropriate. All conditions, attenuation, or mitigation measures have been identified.

Impact Codes: Use an impact code from the following list to determine the impact for each factor.
(1) Minor beneficial impact
(2) No impact anticipated
(3) Minor Adverse Impact – May require mitigation
(4) Significant or potentially significant impact requiring avoidance or modification, which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	The subject parcel, encompassing approximately 39.54 acres, is located within an established residential neighborhood. Of this total area, the Project will occupy 18.9 acres, while the remaining 20.64 acres will be preserved in their natural state, thereby contributing to the environmental balance and green space detention in the area. The property is designated for residential use, in alignment with the existing land use patterns and the character of the surrounding neighborhood. This alignment is supported by the consultation query 2000-51-0202-JPU (see Exhibit 20a), which

		the Puerto Rico Planning Board approved on January 28, 2005, and formally notified on March 11, 2005. The approval allows for the development of 144 housing units, consistent with the density permitted under applicable planning regulations. According to the official Puerto Rico Land Use Plan Memorial Map dated November 19, 2015, the property is classified as Urban Land. This classification confirms the site's suitability for residential development. The map can be accessed at the following link: https://gis.jp.pr.gov/mipr/. On January 11, 2024, the Office of Permit Management (OGPe, by its Spanish acronym) authorized the reopening of the Urbanization Permit (see Exhibit 19b), thereby enabling the completion of infrastructure works related to the Project. This step reaffirms the project's viability and compliance with current regulatory frameworks. The parcel, currently vacant and in disrepair, presents an opportunity for revitalization without exceeding the permitted density limits. The surrounding community's scale, character, and overall functionality will be preserved. Architectural elements and housing typologies will be in harmony with neighboring properties, supporting a cohesive and visually consistent streetscape. Notably, the Project does not include high-intensity land uses, large-scale structures, or materials that would be out of character with the area. Instead, the design reflects a commitment to compatibility, ensuring that the new development respects the community's established aesthetic and functional qualities. Regarding regulatory compliance, the Project adheres to all applicable building codes and land use regulations. This ensures the safety and welfare of future residents and protects the interests of the broader community. By meeting these standards, the development promotes orderly growth, enhances neighborhood livability, and contributes to the long-term sustainability of the urban area. **See Exhibit 20a. Consultation query 2000-51-0202-JPU**
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	The project entails the construction of 106 new housing units, of which 100 correspond to Project SF-HDI-00012. A site assessment conducted on June 2, 2024, found no evidence of geotechnical instability, such as landslides, slumps, tilted trees, or other signs of unstable soil. Likewise, there were no visible indicators of foundation distress during neighborhood

		inspections, including cracking, heaving, settling, or basement flooding. Based on these observations, the site is not subject to unsuitable soil conditions. The soil is stable and capable of supporting the proposed development without requiring specialized remediation or engineering treatments. A geotechnical study will be conducted prior to the start of construction, and its recommendations will be followed. To prepare the site for construction, earth-moving activities will be carried out to level the terrain. As the property has remained abandoned, secondary and invasive vegetation has taken root and must be cleared. This will involve removing the topsoil as part of the grading process. Tree removal will be mitigated according to Section 3.4.2.2 of the Joint Regulation for Permits Related to Development, Land Use, and Business Operations (effective June 16, 2023), which requires planting 3 to 5 trees for each tree removed, depending on the diameter at breast height (DBH). To prevent soil degradation, erosion and sediment control measures will be implemented during all construction phases. Final site stabilization will include landscaping with grass and tree planting to protect the soil surface and minimize erosion risks. The project does not involve any alteration of steep slopes, sensitive ecosystems, or unique natural habitats, and it is not expected to affect the local microclimate, community activities, or cultural resources. According to the Puerto Rico Land Use Plan and the 2020 Census Urban Areas Map (see Exhibit 9a, Attachment 1), the soils at the project site are classified as Urban Soils. These are not considered viable for agriculture, forestry, or conservation purposes. Field visits confirmed the absence of erosion features such as landslides, sediment deposits, swales, active rills, or gullies. The proposed development will not impact downslope areas or disrupt the surrounding natural environment. Upon completion, the project will include paved streets and landscaped green areas, which contribute to soil stability and erosion prevention. Before initiating construction, the contractor will apply for the Single Incidental Operational Permit, including the Earth Crust Movement Permit for Incidental Actions to Works, through the

		Office of Permit Management (OGPe). Significant amounts of excess soil are not anticipated to require off-site disposal. In compliance with Section 402(p) of the Federal Clean Water Act, the project will implement a Stormwater Pollution Prevention Plan (SWPPP) prior to any soil movement. This plan, aligned with the NPDES Construction General Permit 2022 (CGP-2022), will incorporate Best Management Practices (BMPs) to control erosion, sedimentation, and pollutant discharge. It will also include provisions for worker training, internal inspections, and notification to the EPA via a Notice of Intent (NOI). Additionally, a rainwater management system will be constructed to handle increased runoff resulting from soil impermeabilization. This system, which includes a detention pond, will be designed in accordance with municipal stormwater regulations. Once operational, it will collect, treat, and manage stormwater, protecting the site and surrounding areas from erosion and flooding.
Hazards and Nuisances, including Site Safety and Noise	2	The proposed project site is not located in an area subject to natural hazards such as volcanic activity, landslides, wildfires, droughts, flooding, cliffs, bluffs, crevices, high winds, sandstorms, hazardous terrain, or the presence of poisonous plants, insects, or animals. Furthermore, while there are existing residences in the vicinity, the proposed project is not a recognized source of noise such as a commercial or industrial facility. Any noise generated will occur only temporarily during construction activities and will be mitigated through the implementation of noise-control measures. Furthermore, the site is free from proximity to man-made hazards. These include, but are not limited to: recreational areas adjacent to high-traffic roadways, hazardous intersections, insufficient separation between pedestrian and vehicular traffic, routes used for transporting hazardous materials, unfenced highways or railroads, open bodies of water without barriers, active construction sites lacking fencing, areas with poor lighting or shade, unrestricted access to lakes or streams, inadequately protected drains or catchments, quarries or excavations, waste disposal sites or landfills, mining operations, reclaimed radioactive phosphate lands, vacant lots posing safety risks, chemical tank-car terminals, chemical storage facilities, high-pressure gas or petroleum pipelines, overhead transmission lines, oil or

		gas wells, industrial sites, or sources of emissions such as smoke, gas, or fumes. No existing activities in or near the property generate significant air pollution. The site is not located near heavy industrial operations, incinerators, power plants, rendering facilities, fugitive dust sources, cement plants, large parking facilities (1,000+ vehicles), major highways with six or more lanes, or oil refineries. No environmental or aesthetic nuisances have been identified on or around the property that could impact future residents. These include, but are not limited to: gas emissions, smoke, odors, excessive lighting from commercial or industrial uses, vibration, glare, boarded-up or abandoned structures, deteriorated land uses, lawn parking, abandoned vehicles, or signs of vermin infestation. The project is not a recognized noise-generating facility and is located outside of noise-sensitive areas such as schools or industrial/commercial zones. Anticipated noise levels are consistent with residential settings (below 65 dB during the day and 55 dB at night). Additional mitigation measures, including limiting construction to daytime hours, maintaining equipment, and applying temporary barriers when necessary, will be implemented to ensure compliance with noise and nuisance requirements and to minimize potential impacts on nearby residences During construction, noise levels will vary depending on the equipment and activities being performed. It is estimated that noise levels will range between 70 and 85 dB, with the highest levels associated with bulldozing and truck operations for material transport. To mitigate these impacts, several measures will be adopted, including the use of quieter or noise-reducing machinery, limiting construction to daylight hours, and ensuring regular maintenance of equipment for optimal performance. The construction site does not present logistical difficulties for the contractor, and no extraordinary hazards or nuisances are expected beyond those typical of standard development projects. Nevertheless, the contractor will be responsible for maintaining a safe environment both on-site and off-site, in full compliance with all applicable safety and environmental regulations issued by agencies such as OSHA,

		the EPA, and the Puerto Rico Department of Natural and Environmental Resources (DNER). All construction activities will be restricted to the permitted working hours. Nearby residents will be notified in advance of construction schedules. Access to existing residences will not be obstructed, and construction vehicles will be confined to designated parking areas within the project site. Construction waste and debris will be collected regularly and disposed of in accordance with regulatory standards.

Environmental Assessment Factor	Impact Code	Impact Evaluation
SOCIOECONOMIC		
Employment and Income Patterns	1	According to the U.S. Census Bureau (2023), the municipality's median household income is approximately $26,083, and the employment rate is 35.9%. Regarding class of worker, 56.7% are private wage and salary employees, 3.2% are self-employed in their own incorporated businesses, 7.7% are private not-for-profit wage and salary workers, 19.7% are employed by local, state, or federal government, and 12.7% are self-employed in their own unincorporated businesses or are unpaid family workers. The proposed project will generate temporary employment opportunities during the construction phase, requiring a diverse range of professionals, including engineers, architects, and consultants, for design, planning, and inspection activities. Construction will also rely on skilled trades such as builders, masons, electricians, plumbers, and other specialized workers. Administrative and human resources personnel will also be crucial to the project's execution. Priority will be given to hiring qualified individuals from the local community, particularly those with relevant construction experience or skills. Workers will be sourced from neighboring towns and municipalities for areas that cannot be filled locally. To further support workforce development, the contractor will implement a mentorship program to help local individuals acquire new skills and access long-term employment opportunities in the construction sector. Upon completion, the project is expected to generate ongoing employment through the need for routine

		maintenance and specialized residential services, offering additional opportunities for residents. Beyond job creation, the arrival of new families to the area is anticipated to stimulate the growth of local services and businesses, including schools, childcare centers, and recreational facilities for children and youth. Furthermore, the project will contribute to the municipality's economic well-being by collecting municipal taxes and fiscal contributions at the Municipal Revenue Collection Center (CRIM, by its Spanish acronym).
Demographic Character Changes, Displacement	2	According to the 2020 Decennial Census and U.S. Census Bureau estimates, the Municipality of Humacao has a total population of 50,896. Of this population, approximately 67.6% identify as Hispanic or Latino (of any race), 25.2% as Some Other Race alone, 6.1% as Black or African American alone, 1.0% as White alone (not Hispanic or Latino), 0.1% as Asian alone, and less than 0.1% as Native Hawaiian or Other Pacific Islander alone. Housing in the area is primarily owner-occupied, with a median gross rent of approximately $531. This affordability is complemented by strong digital access, with approximately 82.7% of households reporting access to a computer and/or broadband internet, slightly above the national average of 78%. The project is expected to have a relatively short construction timeframe and will likely rely on local labor. The project is anticipated to have a relatively short construction timeframe, indicating efficient planning and a focused scope of work that could lead to lower costs and quicker realization of benefits. Additionally, it is expected to rely on local labor, which presents several advantages. Utilizing local workers will boost the local economy by providing jobs and increasing spending in the area. It also reduces transportation costs and time, allowing for quicker workforce mobilization. Engaging local labor strengthens community ties, enhances project acceptance among residents, and leverages local knowledge to deliver higher-quality work. These factors emphasize commitment to efficiency and community involvement, benefiting the project and local development. Given the property's current vacant status, the project is not anticipated to result in any residents' physical, social, or psychological displacement. There is no expectation of gentrification or significant alteration of property values or rents in the immediate vicinity.

		The project supports neighborhood revitalization by addressing housing needs and reducing vacant lots, while integrating into the community without displacing residents or concentrating on low-income groups. In conclusion, the proposed project will positively impact the local community by revitalizing vacant land, addressing housing shortages, and fostering long-term community stability. It will not cause displacement or significantly alter the local demographic composition.

Environmental Assessment Factor	Impact Code	Impact Evaluation
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	As the proposed project is designed to accommodate new residents, it is important to evaluate the availability and capacity of existing educational and cultural facilities within the Municipality of Humacao. These resources are essential for supporting a growing population and ensuring the long-term well-being and integration of future residents. Based on projections, the project may result in an estimated increase of approximately 200 students across preschool through high school levels, assuming an average of two students per household. However, this increase is not expected to exceed the capacity of existing educational infrastructure. According to U.S. Census data, the population of Humacao has experienced a notable decline over the past decade from 58,466 in 2010 to an estimated 49,616 in 2024. Consequently, many of the educational facilities in the municipality, which were originally designed to serve a larger student population, currently operate below full capacity. Although these facilities are considered safe and accessible, they are not within walking distance of the proposed development site. As a result, transportation will be necessary, and families will be responsible for providing transit to and from school. Future residents will have access to a range of educational institutions in Humacao. The municipality hosts a total of 23 public schools, including 16 elementary schools, three middle schools, one high school, and three combined elementary and middle schools. In addition to public schools, the area offers several reputable private institutions, including *Colegio San Antonio Abad*, *Colegio Nuestra Señora del Perpetuo Socorro*, and *The Palmas Academy*. A few private childcare

		centers are also available, alongside federally funded Head Start Program Centers, which offer early childhood education services designed to promote school readiness for infants, toddlers, and preschool-aged children from low-income families. While Head Start services may have enrollment limits, they remain accessible to qualifying residents of the project. In terms of cultural resources, the Municipality of Humacao, founded in 1722, offers several prominent institutions that will benefit incoming families. These include the *Centro de Bellas Artes Dr. Aguedo Mojica Marrero*, the *Centro de Arte Ángel Peña Plaza*, and the *Humacao Performing Arts Center*, all located approximately two miles from the project site. These facilities provide access to the arts, music, theater, and community events that enrich the cultural life of the municipality. While the arrival of new residents may modestly increase the number of users of these educational and cultural facilities, it is not expected to place undue strain on existing resources. Instead, the integration of new families into the community is expected to promote a more balanced utilization of these services, support local institutions, and contribute positively to the area's vitality.
Commercial Facilities	1	The proposed project is situated in a predominantly residential zone, complemented by a diverse mix of nearby commercial establishments that cater to the daily needs of the local population. Surrounding the site are various small businesses, including local grocery stores, restaurants, bakeries, and service stations with convenience stores. This commercial diversity supports the area's functionality and self-sufficiency, making it an ideal setting for new residential development. Primary access to the site is provided by Road PR-3, a key regional road that links directly to the main municipal avenues of Humacao. This connection facilitates efficient access to the town's urban core, located approximately 2.4 miles from the project site. Within this central area, residents will have convenient vehicular access to a broad range of essential services and amenities, including banks, supermarkets, tire centers, pharmacies, cafes, restaurants, and other commercial establishments. The introduction of new residents is expected to have a positive economic effect on local businesses. Increased consumer demand will support the sustainability and potential expansion of existing commercial services,

		particularly those catering to everyday household needs. This growth in demand can lead to job creation, increased revenue for small businesses, and strengthened local supply chains. Notably, the project is not expected to displace or adversely impact current commercial operations. On the contrary, the development aligns with the scale and character of the neighborhood and is likely to reinforce the viability of surrounding enterprises by expanding their customer base. In summary, the proposed residential development will benefit the local economy, stimulate commercial vitality, and foster a mutually beneficial relationship between new residents and existing businesses.
Health Care and Social Services	2	The proposed development will provide 106 homes, of which 100 correspond to Project SF-HDI-00012, for families affected by natural disasters, including Hurricanes Irma and María. While the project will result in a modest increase in population, it is not expected to overwhelm local healthcare or social service systems. The development is not specifically targeted to families with significant social service needs, thereby ensuring that existing programs in the Municipality of Humacao and surrounding areas remain sustainable. Furthermore, the project does not concentrate disadvantaged populations, maintaining compliance with HUD's site and neighborhood standards. Healthcare Services The area has several well-established healthcare facilities capable of accommodating the increased demand resulting from this development. Local medical providers include: • The Menonita Hospital - Humacao is located approximately 2.7 miles from the project site and offers integrated healthcare services. It is about a 7-minute drive from the project. • HOPE Medical Center: Hospital HIMA San Pablo—Humacao is approximately 2.5 miles from the project site, about an 8-minute drive away, and offers additional specialized care. • Hospital Ryder: is located approximately 3 miles from the project site and offers integrated healthcare services. It is roughly a 9-minute drive from the project. Puerto Rico's Medicaid program covers many of these services, ensuring affordable access for low-income

		residents. Additionally, community outreach initiatives are available to assist individuals in coping with post-disaster trauma and recovery. Residents will also have access to ambulance services to nearby healthcare facilities in Humacao or surrounding municipalities. The ambulance route does not require any railroad crossing, and healthcare providers are within a 20 to 30-minute drive from the project site, which is considered reasonable for rural or non-metropolitan settings. This travel time could be reduced to less than 15 minutes in more populated areas. While an increase in demand for preventative care, pediatric services, and mental health counseling is anticipated, the impact is expected to be manageable. The population growth associated with the project is relatively small compared to the municipality's overall population. However, short-term strain on specific services, such as general practitioner appointments, may occur due to the ongoing recovery from previous disasters. Social Services: The Municipality of Humacao provides a range of free social services, programs, and activities to support older adults and the broader community. Families residing in the project will benefit from these services, which include recreational programs, community support initiatives, and assistance for vulnerable populations. Given the municipality's current population decline (2010: 58,466 / 2024: 49,616, as reported by the U.S. Census), adding new families is not expected to overburden these programs.
Solid Waste Disposal / Recycling	3	During construction, the project will generate non-hazardous solid waste, including construction debris, plastics, cardboard, wood, metals, and other materials typical of development activities. To prevent environmental harm, all waste will be stored and transported off-site in accordance with environmental regulations. Upon completion and occupancy, the development generates household waste, including organic materials, plastics, paper, cardboard, glass, and metals. Without proper planning, this could present long-term waste management challenges. To mitigate these potential impacts, the project includes comprehensive solid waste and recycling strategies for the construction and post-construction phases. Waste

		generated during construction will be managed under the construction contract, with removal and disposal handled by a company duly authorized by the Puerto Rico Department of Natural and Environmental Resources (DNER). Waste management during construction will include strategically placed containers at designated areas throughout the site. These containers will be regularly emptied and transported to DNER-approved sanitary landfills or certified recycling centers. A waste reduction and recycling plan will be implemented, emphasizing diverting recyclable materials, including wood, cardboard, paper, aluminum, and plastics, to authorized recycling channels for processing. The contractor will provide separate containers for recyclable materials, ensuring proper segregation, collection, and management by licensed waste haulers. During the construction phase, solid waste will be transported and disposed of by YAC Construction Group, which operates under a permit issued by the Puerto Rico Department of Natural and Environmental Resources (DRNA), permit number SR-40-0976. Non-hazardous solid waste generated during construction will be disposed of at the Juncos Landfill, which operates under permit number IDF-40-0012. The Municipality of Juncos, which administers the landfill, confirmed in written communication dated July 15, 2024, its availability and capacity to accept the non-hazardous waste generated by the project. The anticipated non-hazardous waste includes construction debris, cardboard, metals, wood, and domestic refuse generated by employees, among others. The project will not generate hazardous waste; therefore, no specialized permit for hazardous waste management is required, nor is additional documentation regarding its acceptance necessary. Following project completion, solid waste generated by residents of Laderas de Palma will be managed through the Municipality of Humacao's public waste collection system. This municipal service is available to communities without access control. Residents will be responsible for placing waste in designated curbside bins or collection areas for regular pick-up in accordance with local guidelines. In addition, the Municipality of Humacao has implemented recycling programs that will be available to the residents of

		Laderas de Palmas, promoting responsible waste management and environmental sustainability. Furthermore, in a letter dated February 25, 2025, the Municipality of Humacao endorsed the project, noting that it will benefit the city by providing new housing in urban areas and fostering renewed community activity. **See Exhibit 16: YAC Construction Group Permit SR-40-0976; Exhibit 16a: Juncos Landfill Permit; Exhibit 16b: Authorization for Disposal from the Municipality of Juncos; and Exhibit 16c: Endorsement from the Municipality.**
Waste Water / Sanitary Sewers	2	The proposed residential development will be connected to the sanitary sewer system managed by the Puerto Rico Aqueduct and Sewer Authority (PRASA), responsible for providing wastewater collection and treatment services throughout the Municipality of Humacao. PRASA's infrastructure is designed to accommodate residential developments and ensure the safe and efficient wastewater management. For this project, sanitary sewage will be managed through a direct connection to the existing PRASA network. The estimated wastewater generation is approximately 30,000 gallons per day (GPD), based on a standard generation rate of 300 GPD per household, in accordance with PRASA's Design Standards (Regulation 3149, dated September 13, 1984). This calculation reflects accepted estimates for public housing developments, ensuring adequate planning for system capacity and performance. PRASA has reviewed and approved the project's sanitary system design, including the designated connection point to the existing infrastructure. Importantly, this approval confirms that the current system has sufficient capacity to handle the projected wastewater load without requiring off-site upgrades or improvements, streamlining implementation and reducing potential environmental impacts. While the existing system is currently adequate, climate change poses ongoing challenges to wastewater infrastructure across Puerto Rico. More frequent and intense extreme weather events, such as hurricanes, heavy rainfall, and flooding, can overwhelm sewer systems and lead to combined sewer overflows (CSOs), which release untreated or partially treated wastewater into the environment. These events can jeopardize public health, contaminate water bodies, and degrade ecosystems. Historically, low-income and minority communities are disproportionately affected by such overflows due to their

		location in flood-prone areas or communities with under-resourced infrastructure. However, the proposed project is not located in a flood-prone area, and up-to-date building codes and engineering standards have designed its sanitary sewer system to withstand projected environmental stressors. These designs safeguard the minimized risk of system failure and support climate resilience. Furthermore, the integration with PRASA's regulated system ensures continuous monitoring, operation, and maintenance by qualified personnel, adding a layer of protection for both public health and the surrounding environment. In summary, the proposed development's connection to PRASA's sewer system offers a reliable and compliant wastewater management solution. With sufficient capacity, regulatory approval, and climate-adaptive design considerations, the project is well-positioned to handle current and future wastewater demands without contributing to public health risks or environmental degradation. See **Exhibit 17. PRASA Response Letter and Approved Plans**
Water Supply	2	The proposed development will receive potable water service from the Puerto Rico Aqueduct and Sewer Authority (PRASA), the public utility responsible for water distribution throughout Humacao and across the island. The project will be connected to an existing 4-inch-diameter water main, which will serve as the point of connection for the development's water supply infrastructure. The estimated water demand for the project is approximately 30,000 gallons per day (GPD), based on a standard consumption rate of 300 GPD per household, consistent with PRASA's Design Standards for public housing projects. This estimation enables the proper sizing of the infrastructure, ensuring that water demand will be met under typical residential use scenarios. PRASA holds all necessary operational permits and is subject to stringent regulatory oversight, ensuring the quality and reliability of its water services. The agency conducts routine testing of its potable water supply to ensure compliance with the safety and quality standards established by the United States Environmental Protection Agency (EPA) and the Puerto Rico Department of Health. These tests monitor a range of potential contaminants, including chemical pollutants, heavy metals, and microbiological agents such as bacteria and pathogens. Continuous monitoring and

		analysis enable PRASA to detect potential risks promptly and take corrective action, thereby safeguarding public health. It is important to note that the project is not served by or located within the watershed of an EPA-designated sole-source aquifer. There are no sole-source aquifers designated in Puerto Rico. Therefore, the development does not pose a risk to any such critical groundwater resources. To enhance water supply reliability at the individual unit level, each residence will be equipped with a 500-gallon rooftop water storage system. This system will be a backup domestic water source, ensuring continuous water availability during temporary service interruptions. The storage system will be supported by a ¾-horsepower electric water pump, a pressure control system, and a diaphragm-type pressurized tank to maintain adequate water pressure without damaging fixtures or plumbing systems. The setup will include a water level control valve and a backflow preventer at ground level to protect the main utility line from contamination. In summary, the water supply system for the proposed development will be fully integrated with PRASA's existing infrastructure and supported by on-site backup systems. Together, these components will ensure consistent, safe, and reliable access to potable water for all residents while adhering to both local and federal regulatory standards. **See Exhibit 17. PRASA Response Letter and Approved Plans**
Public Safety - Police, Fire and Emergency Medical	2	The Municipality of Humacao is served by a comprehensive network of emergency service providers that ensure prompt and effective responses to public safety needs. These include the Office of Emergency Management, located approximately 2.4 miles from the project site, and the Humacao Fire Department, situated just 2.7 miles away both within an estimated 10-minute drive. Additionally, the municipal and state police headquarters are located approximately 3 miles from the development and are accessible within about 10 minutes, depending on traffic conditions. Medical emergency services are readily accessible through several healthcare facilities in Humacao. The nearest emergency care center is the *Centro de Diagnóstico y Tratamiento*, located approximately 2.2 miles from the project, with a travel time of about 10 minutes. This center

		provides essential emergency care and stabilization services. For cases requiring more advanced treatment, nearby facilities like the Menonita Hospital offer expanded medical capabilities, including inpatient care and specialized services. Police response times across Puerto Rico typically range from 6 to 12 minutes, influenced by factors such as the type of incident, location, traffic conditions, and resource availability. The Municipality of Humacao benefits from a full-time police force dedicated to crime prevention, criminal investigation, and emergency response. Fire protection services are also well-established. The Humacao Fire Department is equipped to handle fire suppression, hazardous materials incidents, and rescue operations. The department's proximity to the project site ensures a rapid response under typical conditions; however, actual response times may vary depending on the severity of the emergency, call volume, and traffic patterns. Notably, the proposed development is not expected to place additional strain on existing emergency services. According to the 2020 U.S. Census, Humacao has experienced a population decline, which suggests that current police, fire, and medical resources are adequately positioned to support the projected increase in residents without negatively impacting service quality. To further enhance safety and emergency preparedness, all residential units within the development will be equipped with strategically placed smoke detectors, carbon monoxide detectors, and both interior and exterior lighting. The site layout will also include designated access points for emergency vehicles and ensure unobstructed access to nearby fire hydrants, supporting efficient emergency operations when needed.
Parks, Open Space and Recreation	2	The proposed project is designed to support families affected by future natural disasters, with a focus on serving vulnerable populations, including households with children, older adults, and individuals with disabilities. The development will include designated areas for passive recreation, thoughtfully planned to accommodate the diverse needs of its future residents. Additionally, the project's location provides convenient access to a variety of existing parks and recreational amenities. Residents will benefit from access to several parks and natural areas within a 3-mile radius, approximately 5,280 feet. Notable nearby resources include the Humacao Nature

		Reserve, located approximately 5.7 miles from the project site (a 10-minute drive), and the Pterocarpus Forest, situated about 2.9 miles away (an 8-minute drive). Both sites offer valuable opportunities for outdoor activities, environmental education, and community engagement. Beyond recreational amenities, the municipality of Humacao also offers valuable cultural resources, such as the Centro de Arte Ángel "Lito" Peña Plaza, located approximately 2.1 miles (12 minutes), the UPR Humacao Specialized Libraries, located approximately 4.1 miles (10 minutes), and the Centro Cultural Doctora Antonia Sáez located 2.5 miles (14 minutes). These facilities provide opportunities for arts, history, and community engagement, complementing the recreational assets available to residents. In closer proximity, the Cataño Community Center park and recreational area is located approximately 1,970 feet from the project site about an 8-minute walk, offering convenient access to green space for daily recreation. In addition to these off-site resources, a passive recreational park will be developed within the project itself, ensuring that residents have on-site access to open space for relaxation and community interaction. The development will not increase pressure on existing parks or recreational facilities, and it will not result in the loss of any publicly accessible open space. While the project is being constructed on currently vacant land, the parcel is privately owned and unavailable for public use. Therefore, the project does not reduce public access to green spaces. In summary, the project enhances community livability by integrating on-site recreational areas and providing convenient access to existing parks while avoiding adverse impacts on public recreational resources.
Transportation and Accessibility	2	Vehicular access to the Project is safe, with direct connectivity to PR-3. This main roadway links to municipal avenues and facilitates travel to downtown Humacao. Parking within the building will be adequate, with each unit featuring one garage. Humacao has a limited municipal transit service regarding public transportation, which may not directly serve the Project's location. To ensure pedestrian safety, the development will include:

		• Well-defined sidewalks throughout the community. • Marked pedestrian crossings for enhanced visibility and security. • Proper street lighting to facilitate safe movement for all residents. A general analysis of the roadway infrastructure indicates that the existing roads will be able to accommodate the additional traffic generated by the Project without causing a significant adverse impact on the local transportation network. Additionally, emergency vehicle access will be adequate, as the access roads comply with regulatory width requirements, and no obstacles are expected to delay emergency response times. From an environmental perspective, the Project is not located near high-traffic roadways that would expose families to air pollution. The development is situated in a residential area with an established urban pattern, meaning that air and noise pollution are not expected to be significant concerns. During construction, the Maintenance of Traffic (MOT) guidelines will be followed, and the Puerto Rico Highway Authority must approve them before the start of the project. In terms of accessibility, the Project design incorporates: • Ramps and proper signage for ease of mobility. • ADA compliance with 5% of the residents, ensuring inclusivity for individuals with disabilities. These features ensure a safe, accessible, well-integrated community for all future residents. **See Exhibit 18. "APS" RB Model and Exhibit 17a. Laderas de Palma Home Design**

Environmental Assessment Factor	Impact Code	Impact Evaluation
NATURAL FEATURES		
Unique Natural Features, Water Resources	2	The project will not cause problems by introducing nuisance or non-indigenous species of vegetation that could be ecologically disruptive, invasive, or threatening the survival of unique plant or animal habitats. Additionally, it will not limit the capacity of natural features to provide essential ecosystem services to the community. Appropriate measures will be taken to ensure the conservation and respect of local flora and fauna, thereby maintaining ecological balance in the area, such as planting trees that serve as shelter and food for local wildlife. The subject parcel does not contain any unique or natural features. It is in a residential area, and residents' drinking water is primarily provided by the Puerto Rico Aqueduct and Sewer Authority (PRASA). No nearby industrial or commercial activities pump large quantities of water from the groundwater table. The project does not propose using groundwater for its water supply, nor is the construction of septic tanks part of the plan. A detention pond will be constructed to mitigate the impact of increased surface runoff caused by the proliferation of impermeable surfaces such as roofs, roads, and pavements. These surfaces prevent water from naturally infiltrating the ground, leading to a significant rise in both the volume and velocity of runoff. As a result, there is an increased risk of soil erosion, flooding, and water pollution in nearby ecosystems. The proposed detention pond will help address these issues by reducing peak runoff flows, as it will temporarily store excess water and gradually release it into the Cataño stream. In addition, it will contribute to improving water quality through the settling of suspended solids and natural filtration processes occurring within the pond, resulting in cleaner water reaching the Cataño stream. During construction, the contractor will implement erosion and sedimentation control measures. Once the project is complete, grass will be planted where soil is exposed to promote stabilization.
Vegetation, Wildlife	1	The vegetation on the property is diverse. In the impact footprint area, herbaceous species dominate, along with trees and bamboo that have grown scattered across the site. In the central portion of the property, where the Cataño stream runs, mature secondary succession trees and riparian vegetation predominate; this area will be preserved in its

		natural condition. In the remaining part of the property, there is a combination of open areas dominated by herbaceous species and shrubs. There are also concentrated groves dominated by mature secondary succession trees. This remaining area will also be preserved in its natural condition. Before construction begins, an inventory will be conducted for all trees with a diameter at breast height (DBH) greater than four inches. Based on the DBH measurements, tree removals will be mitigated using 3:1, 4:1, or 5:1 ratio. A comprehensive planting plan for obtaining construction permits will also mandate planting one native tree for each new residence. This strategy is designed to protect local wildlife, bolster the community's resilience against severe weather events such as hurricanes, and ensure that the landscape design harmonizes with the area's character. The project will not adversely affect local wildlife, including species such as lizards and birds typical of suburban and urban environments. Moreover, it is structured to avoid harming or destroying any rare, threatened, or endangered species or critical habitats at both the state and federal levels. The project will not introduce landscape maintenance actions, such as using pesticides or fertilizers, that could threaten the survival of indigenous plant habitats or disrupt agricultural or silvicultural activities. Instead, careful planning and environmentally friendly management practices will be implemented to ensure minimal impact on the surrounding ecosystems. For example, the instructions on the labels of the products used to fertilize the trees will be followed. Additionally, organic fertilizers will be chosen over synthetic options to promote soil health and biodiversity. Mulching and landscaping with native plants will also support local wildlife. The project aims to maintain ecological balance through these practices while fulfilling landscape maintenance needs. The project will be designed to have a minimal impact on migratory birds and their habitats. We are committed to following guidelines and best practices to protect these species, including consulting with the U.S. Fish and Wildlife Service (USFWS) to ensure compliance with the Migratory Bird Treaty Act. In addition, before construction begins, surveys will be conducted to identify any migratory bird nests on the site, allowing us to take appropriate measures to protect them. The project will also be carefully managed to prevent conditions that could harm or harass wildlife, such as

		excessive noise or pesticide usage. By employing environmentally responsible practices and maintaining a focus on conservation, the project aims to coexist harmoniously with local wildlife and contribute positively to the ecosystem.
Other Factors		There are no other factors to consider for this project.

Environmental Assessment Factor	Impact Code	Impact Evaluation
CLIMATE AND ENERGY		
Energy Efficiency	1	This development transforms a vacant lot in an established residential neighborhood into a single-family affordable housing community. Although the new use will inherently increase energy consumption compared to the vacant state, the design emphasizes energy efficiency and sustainability to mitigate environmental impacts and lower utility costs for residents. Key Energy Efficiency and Sustainable Features • Efficient Lighting & Appliances: To reduce energy consumption and costs, all living areas including bedrooms, living rooms, and dining rooms will feature LED lighting, ceiling fans, and energy-efficient appliances. • Design Optimization: The homes are designed with strategic window placement maximizes natural ventilation while limiting solar heat gain. Enhanced insulation and thermal mass contribute to stable indoor temperatures throughout the day. • Advanced Windows: Low-e transmission windows that comply with the 2018 Puerto Rico Energy Conservation Code will improve energy efficiency by reducing the need for artificial heating and cooling while enhancing natural light and ventilation.

		• Photovoltaic System & Energy Storage: Each home will include a photovoltaic system with a minimum of 3 kW DC PV modules and a 9 kWh 48V lithium-ion battery bank. This system, integrated with the local power grid via an automatic transfer switch, is capable of powering critical loads, household appliances, and life support devices, ensuring reliable energy supply during outages. • Resilient Infrastructure: The solar water heater, photovoltaic system, and water storage are all designed and secured to withstand hurricane-force winds. All systems and appliances comply with Energy Star and Water Sense standards, ensuring reduced environmental impact and robust performance. Overall, the project leverages modern passive design principles—encompassing location, orientation, shading, and insulation—to create a resilient, energy-efficient, and sustainable housing development.

Additional Studies Performed:

Studies Performed	Exhibit Number	Company / Professional	Date
PHASE I ASTM E1524-21	6 a	CTS Group Inc	November 15, 2023
Section 106 NHPA Effect Determination	11 a	SOI-Qualified Archaeologist: Fernando Alvarado SOI-Qualified Historic Architect/Architectural Historian Heidi J. Dilan	Last Review August 27, 2024
Noise Assessment Report	12	CMA Architects & Engineering	February 12, 2024
Primary Screening For Wetlands	14c	Green project Environmental Consultants LLC Elvelisse Figueroa Hernandez	February 27, 2025
Visual Assessment for Explosives	8	Agro. Gamaliel Rivera Rivera	February 6, 2024

Field Inspection (Date and completed by):

- Completed Date: June 2, 2024
- Completed By: Gamaliel Rivera Rivera
- See Exhibit 19

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

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:			
Agency	**Sources**	**Persons Consulted**	**Purpose**
FAA			UAS Facilities
FWLS	• https://fwsprimary.wim.usgs.gov/CBRS Mapper-v2/ • https://www.arcgis.com/apps/mapviewer/index.html?url=https://coast.noaa.gov:443/arcgis/rest/services/Hosted/CoastalZoneManagementAct/FeatureServer/0&source=sd • https://www.fws.gov/library/collections/coastal-barrier-resources-system-maps-puerto-rico-us-virgin-islands • https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/ • https://ipac.ecosphere.fws.gov		CBRS Wetlands Endangered Species
FEMA	• https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd • https://gis-r2-fema.hub.arcgis.com/apps/31dfa15671944086b54b55bfc03344d7/explore		National Flood Hazard Layer ABFE
HUD	• https://www.hudexchange.info/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/ • https://www.hudexchange.info/environmental-review/asd-calculator/ • https://www.hudexchange.info/programs/environmental-review/environmental-assessment/case-study/#Conformance		
EPA	• https://nepassisttool.epa.gov/nepassist/nepamap.aspx • https://www3.epa.gov/airquality/greenbook/map/mapnpoll.pdfhttps://www.hudexchange.info/environmental-review/asd-calculator/ • https://nepassisttool.epa.gov/nepassist/nepamap.aspx • https://www.epa.gov/dwssa • https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b • https://www.epa.gov/green-book • https://www.epa.gov/ejscreen		Air Quality Toxic Release Species List Sole Source Aquifers

NRCS	• https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx		Farmland Map and Soil Surveys
USFS	• https://www.arcgis.com/apps/mapviewer/index.html?layers=a37eb56966cc4b11b69909e288414e53		Wild and Scenic Rivers
U.S. Census	• https://www.census.gov/quickfacts/sanjuanmunicipiopuertorico		
Others	• https://livingatlas.arcgis.com/assessment-tool/search • https://gis.jp.pr.gov/mipr/ • https://gis.jp.pr.gov/ll/bn_DetermStandard.html • https://earth.google.com/		
OGPe	OGPE AAA LUMA NET (PR Telecomunication Bureau)	Lcdo. Felix Rivera Lcda. Eilzabeth Ocacio Ing, Ángel L Ramos Ing. Alexander del Rio Ing. Anthony Yrimia	Local permits and endorsements
Humacao Municipality	Mayor Office Oficina de Planificación	 Zugeily Donato Ramos	

List of Permits Obtained:

List of Permit			
Permit	**Exhibit**	**Permit Number**	**Date**
SHPO Endorsement	11	SHPO-CF-10-02-24-05 SHDI-00012	10/11/2024
USDA-NRCS FORM AD-1006 (03-02)	9	NRCS Response Letter	09/13/2024
USFWLS Informal Consultation	14a	Concurrence with NLAA	11/06/2024
USFWS Memo Project Redesign Response	7b	--	02/11/2025
"Consulta de Ubicación"	20a	2000-51-0202-JPU	01/28/2005
PR Environmental Compliance Environmental Quality Board	20b	DN-01-0867(JP) 2000-51-0202-JPU	10/08/2004
Reopening of Urbanization Permit	20c	2023-506359-PRR-013228	01/11/2024
Extension for the Reopening of Urbanization Permit	20d	2023-506359-PRR-301146	05/19/2025
SRI-AAA (PRASA)	20e	2023-503622-SRI-304920 AAA-RE-23-36-0020 Humacao	10/21/2024
LUMA	20f	2023-503622-SRI-314669	In Process Receipt of Filing
PR Telecommunication Bureau	20g	2023-503622-SRI-305091	07/22/2024
'Aprobación Planos Seguros' (APS)	20h	2023-APS-005487	04/22/2024
Municipio de Gurabo	20l	Oficina de Planificación	25/febrero/2025

Public Outreach [24 CFR 50.23 & 58.43]:

1. Early Notice and Public Review of a Proposed Activity in a Wetland – October 1, 2024 Primera Hora Newspaper – See Exhibit 14c (Exhibit 5).

2. Final Notice and Public Explanation of a Proposed Activity in a Wetland – June 10, 2025 Primera Hora Newspaper – See Exhibit 14 c (Exhibit 13- Step Process).

3. The Finding of No Significant Impact (FONSI) has been approved following the completion of the Environmental Review (ERR) process for Ladera de Palmas project. This approval signifies that, after careful analysis, the project will not cause significant adverse environmental effects. The FONSI determination will be publicly available and published in this newspaper, providing the community with full transparency regarding the project's environmental impact.

Cumulative Impact Analysis [24 CFR 58.32]:

Cumulative Impact Analisys		
Resource	**Possible Impact**	**Analysis of impacts**

The proposed residential project in Humacao will consist of 106 single-family homes, of which 100 correspond to Project SF-HDI-00012. These homes are designed to provide safe, resilient, and affordable housing for families with low to moderate incomes, particularly those affected by natural disasters. Given its scale and nature, the development will contribute to cumulative environmental and infrastructural impacts. However, proactive mitigation measures have been incorporated into the project design and construction plans to minimize potential adverse effects.

1. Infrastructure and Utility Demand

The project will increase the demand for electricity, potable water, and wastewater treatment.

- Electricity Consumption: The additional housing units will lead to higher electricity use; however, LUMA Energy, which oversees Puerto Rico's power distribution, has reinforced the grid to accommodate new developments. Furthermore, integrating hurricane-resistant solar panels will reduce reliance on fossil fuel-generated electricity, promoting long-term energy sustainability.
- Water Supply and Wastewater Management: The Puerto Rico Aqueduct and Sewer Authority (PRASA) will manage the necessary infrastructure improvements to ensure sufficient water availability and wastewater treatment. The system's capacity has been evaluated, confirming it can support the proposed development without overburdening existing resources.

2. Transportation and Traffic Considerations

- The construction and occupancy of the project will generate additional vehicle trips, leading to a potential increase in traffic.
- The existing access roads can accommodate the expected traffic volume with only minor, temporary disruptions.

3. Environmental and Ecological Considerations
- While the development of a residential community will alter the existing landscape and ecosystem, efforts have been taken to minimize and compensate for potential environmental impacts.

4.Vegetation Removal & Wildlife Displacement:
- Construction activities may result in deforestation and habitat loss for local wildlife.
- A reforestation program will be implemented to replace lost vegetation, helping restore ecological balance and providing green spaces for residents.

5.Stormwater & Flood Management:
- The project site has been assessed as non-flood-prone, reducing long-term risks associated with extreme rainfall events.

6.Air Quality & Noise Pollution:
- Temporary construction-related air pollution (e.g., dust emissions) will be controlled through dust suppression measures, such as water spraying and soil stabilization.
- Noise mitigation strategies, including limited construction hours and noise-dampening equipment, will be used to minimize disturbances to nearby communities.

7.Solid Waste Management:
- During construction, a private company will be responsible for properly disposing of the project's solid waste. In the post-occupancy phase, solid waste management will be coordinated with the Municipality of Humacao to ensure proper collection, recycling, and disposal.

8.Cultural and Historic Preservation:
- A preliminary environmental and archaeological assessment determined that no significant cultural, historical, or archaeological resources exist within the project site, ensuring the development will not disrupt heritage assets.

9. Socioeconomic and Community Benefits:
Beyond environmental considerations, the project provides critical social benefits, including:
- Affordable, hurricane-resilient housing for families in need.
- Job creation during the construction phase, stimulating local economic activity.
- Improved infrastructure and community services that benefit the broader region.

In conclusion, while the project introduces specific environmental and infrastructural impacts, including sustainability measures, resilient infrastructure, and proactive ecological mitigation strategies, it minimizes adverse effects. The long-term benefits—providing secure, affordable, and disaster-resilient housing—outweigh potential drawbacks, making this development a valuable addition to the Humacao community.

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

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]:			
Alternative	**Benefits**	**Disadvantages**	**Reasons for Reject**
Multifamily Projejct	A multifamily project in a single-family residential area can provide several economic, social, and environmental benefits. It can drive improvements in local infrastructure, such as roads, water, electricity networks, and public services, benefiting the entire community, including single-family homeowners. By increasing the housing supply, it meets the growing demand from individuals seeking to relocate to areas for economic or lifestyle reasons. Additionally, such projects stimulate local economic development by creating jobs during construction and fostering new business opportunities, including retail, dining, and transportation services. A multifamily development also promotes population diversification, attracting young professionals, families, and other demographics,	Even though a multifamily project maximizes the use of a property, it also presents several disadvantages for both residents (property owners) and the surrounding community. One of the primary drawbacks is the lack of privacy, as residents share common areas and may experience noise or disturbances from neighboring units. Additionally, the high population density within the same area can lead to issues such as limited parking, overburdened public services, and a shortage of green or recreational spaces. Conflicts between neighbors may also arise due to differences in lifestyles, community rules, or the use of shared spaces. Another challenge is building maintenance, as management responsibilities and associated costs must be shared among all owners or tenants, which can lead to disagreements in decision-making. Furthermore, multifamily projects may be subject to stricter government regulations and zoning	The area where the project is proposed is predominantly composed of single-family homes, and introducing a multifamily development could create a visual and stylistic mismatch with the existing environment. This may affect the neighborhood's cohesion and identity, particularly if residents value the tranquility and uniformity typically associated with single-family areas. Additionally, the existing infrastructure may not be equipped to support the increased population and higher demand for services that a multifamily development would bring. Potential challenges include strain on water supply, electricity, sewage systems, and road access, which could create difficulties for both current and future residents. Multifamily projects in single-family neighborhoods often face opposition from residents who wish to preserve a peaceful lifestyle with open

	contributing to a more dynamic community. In terms of land use, it optimizes available space, preventing uncontrolled urban sprawl and ensuring a more efficient distribution of resources.	restrictions, potentially limiting flexibility in their use or renovation. Lastly, in some cases, high-density developments can negatively impact property values due to market saturation or urban-related issues such as congestion and inadequate infrastructure.	spaces and avoid the densification associated with such developments. This resistance could lead to social conflicts and disagreements with developers or local authorities. Furthermore, a multifamily project could contribute to traffic congestion, reduced accessibility, and overcrowded public services, issues that may be difficult to manage without significant upgrades to local infrastructure. Implementing such a project could also alter the character of the area, transforming it from a quiet, low-density neighborhood into a denser, more urbanized environment. This change may be undesirable for current residents, leading to a perceived loss of neighborhood identity and negatively impacting the overall atmosphere. Considering these factors, rejecting a multifamily project in favor of a 106-unit single-family development, of which 100 units are part of Project SF-HDI-00012, would ensure better integration with the surrounding environment

			and more effectively address the community's needs.
Alternative	**Benefits**	**Disadvantages**	**Reasons for Reject**
Single-Family Housing Project with Larger Lots	A residential development with lots larger than 500 square meters (5,3810.95 square feet) offers numerous benefits across environmental, social, and economic aspects. Larger lots allow for more spacious homes and expansive outdoor areas, enhancing the comfort and well-being of residents by providing private gardens, recreational spaces, and opportunities for sustainable practices such as solar energy and rainwater harvesting. This also promotes greater privacy and a lower population density, reducing noise and congestion. The development supports better urban planning and infrastructure distribution, ensuring efficient services while minimizing strain on public utilities. Additionally, larger plots can increase property values over time, making the area more desirable. From an environmental	While a residential development with lots larger than 500 square meters offers several advantages, there are also some potential disadvantages. Larger lots require more land, which can lead to higher land acquisition costs and potentially reduce the overall density of the development, making it less efficient in terms of land use. This can result in a higher environmental footprint, as more natural land is cleared for development. Additionally, maintaining larger lots requires more resources, such as water and energy for landscaping and upkeep, which could increase the environmental impact over time. The increased distance between homes may also lead to a reliance on cars for transportation, contributing to higher traffic volumes and emissions. The larger lot sizes can also drive up construction and infrastructure costs, making the development more expensive, which may limit accessibility for	Given the challenges faced by communities in the aftermath of recent and potential future natural disaster, the proposal for a residential development with larger lots should be reconsidered in favor of the current project design. While alternatives that focus on larger lots offer some advantages, such as privacy and green space, these benefits must be weighed against the urgent need for resilient housing solutions in the wake of these natural disasters. The proposed project, with its more compact design and efficient use of space, is better suited to address the immediate and long-term housing needs of families who lost their homes. Larger lots require significant land, which could hinder the speed of construction and delay the recovery process. In contrast, the current design optimizes available land, allowing for faster development and the delivery of homes to families in need more quickly. Furthermore, the

	perspective, the development can promote biodiversity through native plantings and habitat preservation. Economically, it stimulates local growth by generating jobs in construction and services, while new residents can support local businesses. Access to recreational areas encourages a healthier lifestyle, and the controlled spread of homes helps reduce the urban footprint, fostering sustainable growth. Overall, such developments contribute to a higher quality of life, increased sustainability, and long-term economic benefits for the region.	lower-income buyers. Finally, the spread-out nature of such developments can potentially strain public services, like transportation and emergency response, as these areas may be less integrated into existing urban infrastructure	proposed project includes necessary improvements to infrastructure, such as flood control, resilient construction materials, and energy-efficient systems, which are crucial in a region prone to hurricanes. While larger lots may increase the environmental footprint, the proposed design ensures that construction is carried out in a way that minimizes impact, with careful attention to water management, sustainable practices, and integration with the local environment. Additionally, larger lots can lead to increased construction and maintenance costs, which may make the housing less affordable and limit its accessibility for low- and moderate-income families—those who are most vulnerable in the aftermath of disasters. By focusing on a more efficient use of space, the proposed project can offer affordable housing solutions to a larger number of families, providing them with the safety and stability they need after losing their homes. Finally, the development of larger lots would require more resources

			for infrastructure and maintenance, possibly overwhelming existing systems. The proposed plan, however, is designed to integrate seamlessly with the surrounding area and make use of existing services, reducing strain on utilities and other public services. This approach ensures that the housing remains sustainable in the long term, without placing undue pressure on local resources. In conclusion, while larger lots may offer some aesthetic and lifestyle benefits, the primary goal of this project must be to provide resilient, affordable housing for families displaced by natural disasters. The proposed design is more aligned with this objective, offering a quicker, more efficient solution to the housing crisis, while still ensuring sustainability and long-term resilience..
Alternative	**Benefits**	**Disadvantages**	**Reasons for Reject**
Prefabricated Homes	Prefabricated homes offer a series of advantages that make them increasingly attractive in the construction market. One of the main benefits is the speed of	Despite the many advantages of prefabricated homes, they also have some drawbacks. Location restrictions and local regulations can make installation challenging in certain areas. Additionally, social	After the devastating impacts of recent natural disasters in Puerto Rico, single-family homes built with concrete and blocks appear to be a more suitable option than prefabricated homes for low- and moderate-

	construction, as the components are manufactured in an industrial plant and then assembled on-site, significantly reducing construction time. This not only allows the homes to be ready much faster, but it also translates into lower costs compared to traditional construction, due to optimized processes and reduced waste. Additionally, prefabricated homes are known for their sustainability, as they use eco-friendly materials, and their controlled manufacturing in factories minimizes waste. Many of these homes incorporate energy-efficient technologies, such as advanced insulation systems, which help reduce maintenance costs and make them more environmentally friendly. They also offer design flexibility, allowing customization of both the layout and finishes according to the owner's needs and preferences. Finally, since they are quicker	perception may work against them, as some markets still view these homes as less valuable or durable, affecting their resale value. Transportation and logistics can also add costs, especially if the land is difficult to access. While generally durable, some prefabricated homes may not have the same long-term lifespan as traditionally built houses, and their insulation may be less effective in extreme climates.	income individuals. While prefabricated homes have a lower initial cost and are faster to construct, concrete homes offer greater hurricane resistance, durability, and safety, which are essential in an environment prone to natural disasters. Concrete homes also require less maintenance over time, resulting in lower operational costs and greater sustainability in the long run, whereas prefabricated homes may incur higher future expenses due to their vulnerability and the need for more frequent repairs. Additionally, concrete homes have greater social and cultural acceptance and are seen as more stable and valuable, making it easier to access financing and ensuring a higher resale value. In summary, while prefabricated homes are more affordable in the short term, concrete homes offer a more appropriate and durable solution to ensure the safety and stability of communities affected by hurricanes in Puerto Rico.

	to build, prefabricated homes generate fewer climatic interruptions during the process, further shortening the delivery time. In summary, these homes are not only an economical and fast option, but also a sustainable, high-quality, and flexible solution, ideal for those looking for an efficient construction adapted to their needs.		

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

No Action Alternative
Preserving the land in its natural state is a valid option within the spectrum of land-use alternatives, and at first glance, it may seem like the least invasive choice. However, this is not always the most appropriate course of action. Population growth and the need to adapt to climate change call for proactive planning that clearly defines where and how development should occur. Effective planning requires balancing conservation and responsible development, ensuring land-use decisions aligning with long-term social, economic, and environmental goals. The reasonableness of undeveloped land was evaluated based on several factors, including its location, land-use classification, and the availability of infrastructure, transportation, and public services. The Puerto Rico Planning Board approved this property for residential development several decades ago. Moreover, the Land Use Plan classified the area as Urban Land (SU), confirming that the site has long been considered suitable for development. Limiting its use solely to natural conservation would go against this longstanding planning framework and could result in unintended consequences. Restricting development on this site would generate pressure to expand in other parts of the Municipality or into other areas of the Island, potentially in locations that have not been planned or designated for such growth. The demand for housing, exceptionally safe residences for relocating families, and the ongoing need for infrastructure and services rarely diminish. Redirecting growth toward areas lacking proper infrastructure or appropriate land-use designations could present more significant environmental, social, and logistical challenges for the municipality. While conservation is a key pillar of territorial planning, it must be weighed against the need for organized and sustainable development. In this case, utilizing the land in accordance with its current classification is not only consistent with sound planning principles, but also responsive to the real needs of both the community and the country.

Summary of Findings and Conclusions:

Summary of Findings and Conclusions
A comprehensive environmental evaluation of the project site and its surroundings confirms that the Proposed Action is not anticipated to result in any significant environmental impacts. This conclusion is supported by the residential development's inherently low-impact nature and by the implementation of appropriate mitigation measures to minimize any potential adverse effects. The site does not contain critical environmental features such as caves, nature reserves, sinkholes, forests, or ecologically sensitive areas. The area of the Cataño creek, which crosses the property, will not be impacted by the project's development footprint and will be preserved in its natural condition. The area's vegetative diversity is limited, and the local fauna primarily includes common urban species such as *Ameiva azul* and *Iguana iguana*. Various bird species were recorded through visual identification and vocalization, consistent with existing urban edge environments. A cultural and historical resource assessment confirmed the absence of historical, archaeological, or culturally significant resources within the project boundaries. In the unlikely event that such resources are uncovered during construction, all activity will be immediately suspended, and the appropriate authorities will be notified in accordance with SHPO protocols. As a residential development, the Proposed Action will not produce hazardous air emissions or discharge toxic substances into nearby water bodies. The infrequent use of heavy machinery further reduces the likelihood of air or water contamination. Accordingly, no significant risk to human health or the environment is expected, and the project does not require complex risk management strategies typical of industrial or commercial developments. In conclusion, the environmental assessments conducted for this project confirm that its development, construction, and operation will not result in significant environmental degradation. All recommendations and requirements from the permitting process will be fully and promptly implemented to ensure regulatory compliance and environmental protection.

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 mitigation plan should identify the staff responsible for implementing and monitoring mitigation measures.

Law, Authority, or Factor	Mitigation Measure
SHPO	Since the State Historic Preservation Office (SHPO) determined that the project will have no adverse effect, no mitigation measures are required, as no historic properties are affected. However, if any historic properties are discovered during construction, all work in the vicinity will be halted immediately, and SHPO will be promptly notified in accordance with applicable regulations.
CES Plan Construction General Permit (2022-CGP) EPA Notice of Intent (NOI) Single Incidental Operational Permit (PUI, for its acronym in Spanish)	The delimitation and adequate identification of work areas with the required sectoral controls. Inform construction labor personnel and contractors about the delimitation described above. Personnel selected for inspection and maintenance responsibilities will receive training from qualified personnel. They will be trained in inspection and maintenance practices to keep the erosion and sediment controls in good working order. Disturbed portions of the site where construction activities temporarily cease will be compacted or stabilized with temporary seed, synthetic material, and mulch within 14 days from the last construction activities in that area. However, exposed regions of rocks or any other non-erosional material may not require additional temporary stabilization. Personnel selected for inspection and maintenance responsibilities will receive training from qualified personnel. They will be trained in inspection and maintenance practices to keep the erosion and sediment controls in good working order. Disturbed portions of the site where construction activities temporarily cease will be compacted or stabilized with temporary seed, synthetic material, and mulch within 14 days from the last construction activities in that area. However,

	exposed regions of rocks or any other non-erosional material may not require additional temporary stabilization. Areas of the site to be paved will be temporarily stabilized by applying geotextile and a stone sub-base until a bituminous pavement can be applied. Disturbed portions of the site where construction activities permanently cease may be stabilized using concrete and asphalt, synthetic material, or vegetative coverage, as applicable, within 14 days after the last placement of material. The implemented structural controls for the project are: • Access Road Stabilization. If the access road is not paved, the area where vehicles access disturbed areas must be stabilized. • Sediment barriers. Silt fences and straw bales will be installed during the project's construction to prevent sediment from reaching surface water bodies. • Vehicle Wash Area. A tire-cleaning area will be located at the site's exit so that vehicles leaving the site do not transport sediment outside the project area. • Sediment Trap. A sediment trap will be located at each area where concentrated flows occur, if any. • A tire wash area may be near the entrance to minimize sediment tracks outside the project. During construction activities, sanitary waste will be collected from portable units installed at the site once a week by a licensed Commonwealth sanitary waste management contractor, as required by local regulations. Areas where soil piles are temporarily or permanently stored will be provided with stormwater erosion control, such as silt fences, hay packs, diversion ditches, plastic coverings, etc. The controls used in these areas are determined in the field based on site conditions and will be discontinued once vegetation coverage protects the pile. The following housekeeping practices will be followed during the construction project: • An effort will be made to store only enough products required to do the job. • Materials stored onsite will be stored in an orderly manner in their appropriate containers and, if possible, under a roof or other enclosure. • Products will be kept in containers with the original manufacturer's label.

	• Substances will only be mixed if recommended by the manufacturer. • The project supervisor will make daily visual inspections to ensure proper use and disposal of materials onsite. • Stained soils with hydrocarbons should be removed and properly disposed of. Onsite vehicles will be monitored for leaks and receive regular preventive maintenance to minimize the possibility of leakages. Petroleum products will be stored in tightly sealed containers, clearly labeled if needed. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations. If used, fertilizers will be applied only in the amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills. Concrete trucks will be allowed to wash out or discharge surplus concrete or drummed water in designated areas. The project supervisor will supervise fuel loading/unloading operations. Spill collection pans or similar systems will collect any leakages during loading/unloading operations. Tank appurtenances such as valves and hoses will be inspected before each loading/unloading operation. If signs of leakages are observed, the appurtenances will be fixed before the loading/unloading operation is conducted. The following inspection and maintenance practices will be implemented to maintain erosion and sedimentation controls: • Maintenance of control measures in good working order. If repairs are necessary, they will be initiated within 24 hours of reporting. • Remove built-up sediment from silt fences when it reaches one-third of the fence's height. • Removal of built-up sediments from sedimentation ponds and traps when it has reached 50% or more of the capacity of the control.
Waste/ Construction Debris	Non-hazardous waste materials will be collected and stored in securely lidded metal dumpsters rented from a licensed solid waste management company in Puerto Rico. The dumpster lid must be kept closed. Trash generated at the site will be deposited in dumpsters. The dumpsters will be emptied at least once a week or more often if necessary, and the trash will be transported to an authorized landfill.

	Construction debris will be stored correctly in a site-designated area by the project engineer. No construction waste materials will be buried on-site. All personnel will be instructed regarding the correct procedures for waste disposal. Areas where construction debris is stored will be provided with stormwater erosion control, such as silt fences, hay packs, diversion ditches, etc. The field's control will be determined based on on-site conditions. Hazardous waste is not expected to be generated and managed at the project site. If hazardous wastes need to be managed, they will be disposed of in a manner consistent with the Commonwealth of Puerto Rico and federal regulations. Site personnel will be instructed in these practices, and the Site Manager will be responsible for seeing that these practices are followed. The following practices will be used to reduce the risks associated with hazardous materials in case they need to be used on-site: • Products will be kept in original containers unless they are not sealable. • Original labels and material safety data sheets will be retained on-site; they contain essential safety information. • If surplus products must be disposed of, manufacturers' or local and federal recommended methods for proper disposal will be followed. • These materials will be stored in a covered area with a containment system.
Clean Air Single Incidental Operational Permit (PUI)	**Dust Control:** The movement of the earth's crust will be related to the preparation and leveling of the land; formation of plots and stabilization of slopes; construction of foundations, streets, curbs, rainwater, and sanitary systems; and installation of underground utilities, among other works. Before the beginning of construction, the Single Incidental Operational Permit will be requested, which includes the Earth Crust Movement Permit for Actions Incidental to Works, before the Permit Management Office (OGPe) begins the proposed works through the Single Permit. Operational Incidental (PUI). It is not expected that an excess of material will be generated that will have to be disposed of outside the property. Before commencing soil movement, the owner and operator of the Project will adopt a Storm Water Pollution Prevention Plan (SWPPP) prepared in compliance with the National Pollutant Discharge Elimination to conform with Section 402 (p) of the Federal Clean Water Act, 33 U.S.C. secs. 1251 et seq., 1342 (p) ("CWA")

Noise	The project's construction activities will be limited to the times specified and approved by the required permits. To ensure transparency and community engagement, neighboring residents will receive advance notice of upcoming construction activities. Adequate mufflers installed on construction equipment that relies on combustion engines will manage noise control. Proper maintenance of this equipment, particularly internal combustion engines, will ensure that noise levels remain low and compliant with design specifications. Furthermore, heavy equipment operators will receive training on recognized noise reduction practices. These measures will include: • Shutting down equipment that is not in use. • Avoiding unnecessary acceleration when operating machinery. • Keep engine cabin covers closed during operation. • Ensuring that all threaded bolts, washers, screws, and tie-downs are adequately secured. By implementing these strategies, we aim to minimize noise disturbances and ensure a quieter environment for the surrounding community during construction.
Endangered Species *Chilabotrus inornatus* Puerto Rican Boa Guajon (*Eleutherodactylus cooki*)	A protocol to avoid/minimize impacts to these species or their habitat is provided and must be implemented by the contractor. If a Puerto Rican Boa is found in the Project action site, work shall cease until the Boa moves off independently. If the Boa does not move off, the CM shall contact the Puerto Rico Department of Natural and Environmental Resources. Construction labor personnel and contractors will be trained on conservation protocols for the Puerto Rico boa and other appropriate species. Vegetation will be conserved outside the construction limit of the project.
Earthworks and Runoff Management	Earth movement activities will be associated with site preparation and grading; the formation of lots and slope stabilization; as well as the construction of foundations, streets, curbs, stormwater drainage, sanitary systems, and the installation of underground utilities, among other related works. Prior to the start of construction, a Single Incidental Operational Permit (Permiso Único Incidental, PUI) will be obtained from the Permit Management Office (OGPe), which

	will include the Earth Movement Permit for Incidental Work Actions. No significant excess of material requiring off-site disposal is anticipated. Before commencing soil movement, the owner and operator of the Project will adopt a Storm Water Pollution Prevention Plan (SWPPP) prepared in compliance with the National Pollutant Discharge Elimination System General Permit for Discharges from Construction Activities (NPDES Permit) to conform with Section 402 (p) of the Federal Clean Water Act, 33 U.S.C. secs. 1251 et seq., 1342 (p) ("CWA"), During the construction phase, runoff water generated on the Property will flow superficially or through percolation to the adjacent receiving water bodies, subject to the controls established in compliance with CGP-2022. Stormwater will be connected to the two detention ponds.
Vegetation Single Incidental Operational Permit	The project requires planting one tree for each residence and planting 3,4, or 5 trees to mitigate the impact of removing existing trees. Once the planting plan authorized in the Cutting, Sowing, and Forestation Authorization is completed, it is expected that the vegetation that is part of the green areas will constitute an area equal to or better for wildlife than the existing one, with the use of species that provide food for it. The species to be used in planting trees will be selected from the list provided by Law No. 97 of June 24, 1998 – Law to Promote the Planting of Trees Whose Fruits or Seeds Provide Food for Wild Bird Species of Puerto Rico.
Farmlands AD-1006 (03-02)	Once the environmental review process is approved, the consultation with USDA-NRCS will be finalized to ensure compliance with all applicable conservation guidelines and best management practices. This consultation will help assess additional measures necessary to protect natural resources and promote sustainable land use. Any recommendations provided by USDA-NRCS will be carefully considered and incorporated into the project's implementation to minimize potential environmental impacts further.
Wetlands	Quebrada Cataño flows through the property but lies outside the project impact footprint. It is classified as a riverine wetland. The stream, its variable buffer zone—which ranges from approximately 20.9 to 86.28 feet in width—and all areas of the property beyond the development footprint will remain undisturbed and preserved in their natural condition. To reduce or avoid indirect impacts to wetlands during and after construction, the following mitigation measures will be implemented: • Temporary: clearly defined work areas, erosion and sediment controls, ongoing staff training and

	inspections, and temporary stabilization of paved surfaces. • Permanent: stabilization of access roads, construction of a detention pond, and planting of native trees to prevent erosion and promote biodiversity.

Determination:

☒ **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: Elvelisse Figueroa Hernández Date: December 1, 2025

Name/Title/Organization: Green Projects Environmental Consultants, LLC

Certifying Officer Signature: Santa D Ramirez Lebron Digitally signed by Santa D. Ramírez Lebrón Date: 2025.12.05 14:17:53 -04'00' Date: December 05, 2025

Name/Title: Santa D. Ramírez Lebrón - 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 following recordkeeping requirements for the HUD program(s).

Exhibits

Exhibit Number	Description
1	**Airport RPZ y APZ Protection Zone Map**
2	**Coastal Barrier Resources System Map**
2a	**Puerto Yabucoa Unit PR-39 Map**
3	**National Flood Hazard Layer FIRMette (72000C1805J)**
4	**Nonattainment Areas Map**
4a	**List of Puerto Rico Nonattainment Areas**
5	**Coastal Zone Management Map**
6	**EPA NEPAssits – EPA Facilities MAP**
6a	**Environmental Assessment Phase I Report**
6b	**PRDOH Memorandum for Infeasibility and Impracticability of Radon Testing**
6c	**Radon Memorandum Attachments**
7	**USFWL Endangered Species Concurrence For NLAA Determination Letter**
7a	**USFWLS Informal Consultation Package**
8	**Explosive and Flammable Hazard Location**
9	**USDA-NRCS Farmland Protection Policy Act Evaluation for Laderas de Palmas Development Determination**
9a	**Form AD-1006 (02-03) Farmland Conversion Impact Ration Consultation Package**
9b	**Final Acres Breakdown – Direct and Indirect Converted Acres.**
10	**Advisory Base Flood Elevation (ABFE) Map**
11	**SHPO-CF-10-02-24-05 SF HDI-00012 Determination**
11a	**Section 106 NHPA Effect Determination Form**
12	**Noise Assessment Report**
12a	**Project Distance to Major Roads and Airports**
13	**Sole Source Aquifers Map**
14	**National Wetland Inventory Map (U.S. F&WLS)**
14a	**Memorandum to USFWS Project's Redesign**
14b	**Project Original and Final Layout**
14c	**8 Step Process Package**
15	**Wild and Scenic Rivers Map**
16	**YAG Construction Group Permit SR-40-0976**
16a.	**Juncos Landfill Permit**
16b.	**Authorization for disposal in landfill from Municipallity of Juncos**
16c.	**Municipallity of Humacao Endoserment**
17	**PRASA's Letter and Approved Plans**
18	**"APS" RB Model**
18a.	**Laderas de Palmas Home Design**
19	**Field Inspection**
20	**Project Permits and Endorsements (20a @ 20l)**
21	**Projects Drawings**

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

Exhibit 1

Airport RPZ y APZ Protection Zone Map

Laderas de Palmas

SF-HDI-00012

Airport RPZ/APZ Protection Zones Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

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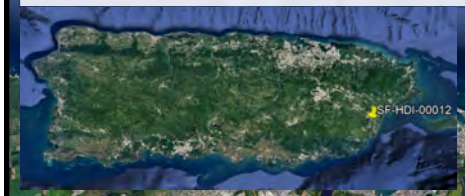

Legend

- 1. SJU Airport (111,400 ft)
- 2. RVR Aiport (66,500 ft)
- Accident Protection Zone
- Distances
- Runway Protection Zone

(21.09 miles / 111,400 ft)

(12.59 miles / 66,500 ft)

SF-HDI-00012

10 mi

N

Google Earth

Image © 2024 Airbus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2024 Maxar Technologies

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

Airport name	Municipality	Type of airport	RPZ Distance (FT)	APZ Distance (FT)	24CFR 51 Subpart D Compliant
Luis Muñoz Marín (SJU)	San Juan	Civil large/medium hub and joint military airfield	122,700	111,400	Yes
Fernando Luis Ribas Dominicci (SIG)	San Juan	Civil small/non-hub	150,000	N/A	Yes
Rafael Hernández (BQN)	Aguadilla	Non-hub commercial service	464,600	N/A	Yes
Eugenio María de Hostos (MAZ)	Mayagüez	Regional Commercial service	456,700	N/A	Yes
Mercedita (PSE)	Ponce	Primary non-hub commercial service	253,400	N/A	Yes
José Aponte De LA Torre (RVR)	Ceiba	Primary non-hub commercial service	66,500	N/A	Yes
Antonio Rivera Rodríguez (VQS)	Vieques	Primary non-hub commercial service	108,600	N/A	Yes
Benjamin Rivera Noriega (CPX)	Culebra	Primary non-hub commercial service	188,300	N/A	Yes

Environmental Assessment Determinations and Compliance Findings for HUD-Assisted Projects
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Exhibit 2

Coastal Barrier Resources System Map

Laderas de Palmas

SF-HDI-00012

Coastal Barrier Resource System Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

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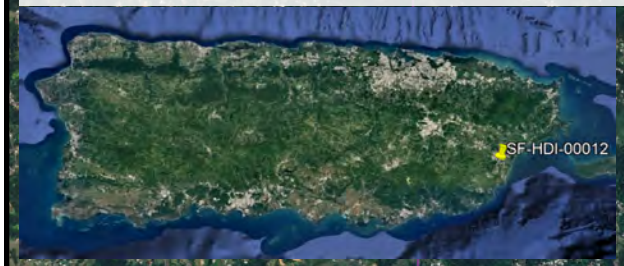

Legend

- Distance (4.1 miles)
- Project Limit
- SF-HDI-00012

SF-HDI-00012

4.1 miles

PR-39

3 mi

N

Google Earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2024 Airbus
Image © 2024 CNES / Airbus

https://fwsprimary.wim.usgs.gov/CBRSMapper-v2/

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

Puerto Yabucoa Unit PR-39

This map has been produced by the U.S. Fish and Wildlife Service as authorized by Section 4(c) of the Coastal Barrier Resources Act (CBRA) of 1982 (Pub. L. 97-348), as amended by the Coastal Barrier Improvement Act of 1990 (Pub. L. 101-591). The CBRA requires the Secretary of the Interior to review the maps of the Coastal Barrier Resources System (CBRS) at least once every 5 years and make any minor and technical modifications to the boundaries of the CBRS units as are necessary solely to reflect changes that have occurred in the size or location of any CBRS unit as a result of natural forces.

The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of coastal barriers is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the CBRA or CBRS, please visit www.fws.gov/cbra.

1:24,000

0 0.25 0.5 1 1.5 2 Miles

0 1,000 2,000 4,000 6,000 8,000 Feet

0 0.25 0.5 1 1.5 2 Kilometers

System Unit Boundary

Otherwise Protected Area (OPA) Boundary; OPAs are identified on the map by the letter "P" following the unit number

Approximate State Boundary

$^{36}54^{000m}N$ 2000- meter Universal Transverse Mercator grid values, Zone 20 North

Basemap Date(s): 2010 & 2015

Basemap Source(s): United States Army Corps of Engineers; United States Geological Survey Landsat 8 OLI / TIRS

Coordinate System: North American Datum 1983 Universal Transverse Mercator, Zone 20 North

Map 72-007A **November 15, 2016**

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

Exhibit 3

National Flood Hazard Layer FIRMette
(72000C1805J)

Laderas de Palmas

SF-HDI-00012

National Flood Hazard Layer Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
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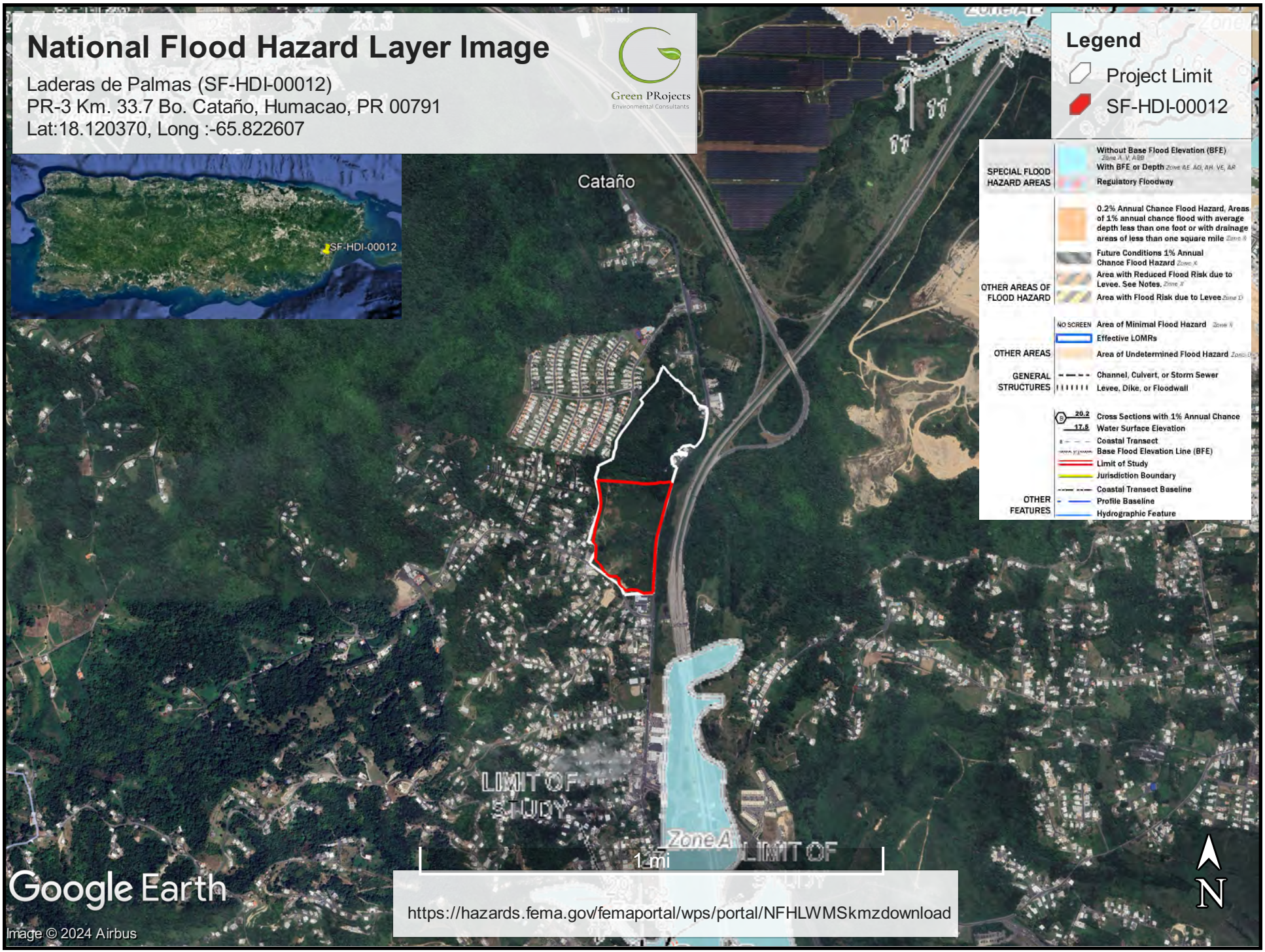

Legend

- Project Limit
- SF-HDI-00012

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee. See Notes. Zone X
	Area with Flood Risk due to Levee Zone D
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X
	Effective LOMRs
	Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
OTHER FEATURES	20.2 Cross Sections with 1% Annual Chance
	17.5 Water Surface Elevation
	Coastal Transect
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature

https://hazards.fema.gov/femaportal/wps/portal/NFHLWMSkmzdownload

Environmental Assessment Determinations and Compliance Findings for HUD-Assisted Projects
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Exhibit 4

Nonattainment Areas Map

Laderas de Palmas

SF-HDI-00012

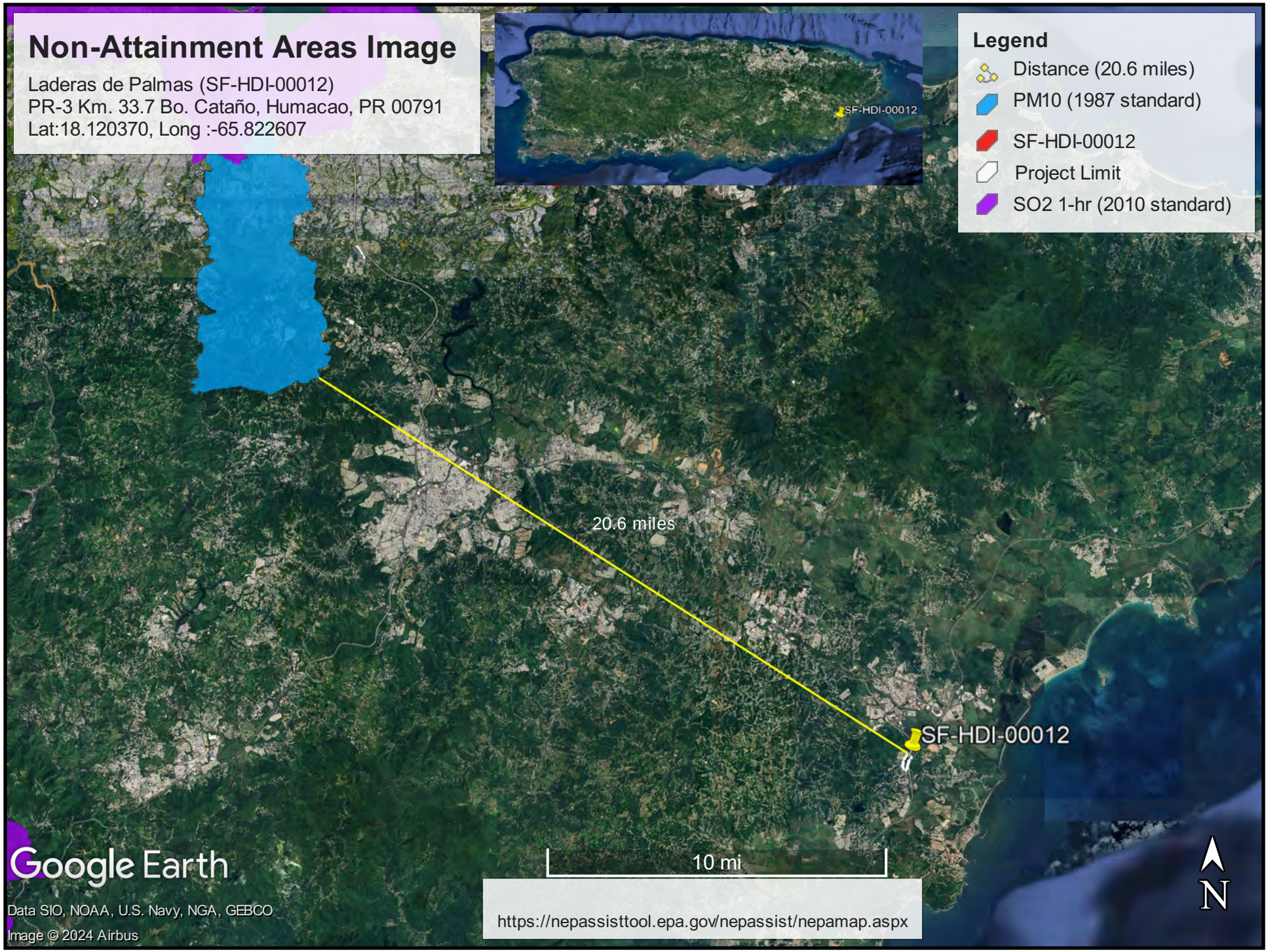

Non-Attainment Areas Image
Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607
SF-HDI-00012
Legend
Distance (20.6 miles)
PM10 (1987 standard)
SF-HDI-00012
Project Limit
SO2 1-hr (2010 standard)
20.6 miles
SF-HDI-00012
Google Earth
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2024 Airbus
10 mi
https://nepassisttool.epa.gov/nepassist/nepamap.aspx
N

Exhibit 4a

Current Nonattainment Counties for All Criteria Pollutants

Data is current as of December 31, 2023

The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.
The asterisk (*) indicates only a portion of the county is included in the designated nonattainment area (NA).

Download National Dataset of all designated areas (currently nonattainment, maintenance, revoked):
dbf | xls | Data dictionary (PDF)

Listed by State, County, NAAQS * Part County NA NA Area Name (Classification, if applicable)

ALASKA
Fairbanks North Star Borough
PM-2.5 (2006) *Fairbanks, AK - (Serious)
ARIZONA
Cochise County
PM-10 (1987) *Cochise County; Paul Spur/Douglas planning area, AZ - (Moderate)
Gila County
Lead (2008) *Hayden, AZ
PM-10 (1987) *Hayden, AZ - (Moderate)
PM-10 (1987) *Miami, AZ - (Moderate)
Sulfur Dioxide (2010) *Hayden, AZ
Sulfur Dioxide (2010) *Miami, AZ
8-Hour Ozone (2015) *Phoenix-Mesa, AZ - (Moderate)
Maricopa County
PM-10 (1987) *Maricopa and Pinal Counties; Phoenix planning area, AZ - (Serious)
8-Hour Ozone (2008) *Phoenix-Mesa, AZ - (Moderate)
8-Hour Ozone (2015) *Phoenix-Mesa, AZ - (Moderate)
Pima County
PM-10 (1987) *Pima County; Rillito planning area, AZ - (Moderate)
Pinal County
Lead (2008) *Hayden, AZ
PM-10 (1987) *Hayden, AZ - (Moderate)
PM-10 (1987) *Maricopa and Pinal Counties; Phoenix planning area, AZ - (Serious)
PM-10 (1987) *Miami, AZ - (Moderate)
PM-10 (1987) *Pinal County (part); West Pinal, AZ - (Serious)
PM-2.5 (2006) *West Central Pinal, AZ - (Moderate)
Sulfur Dioxide (1971) *Hayden (Pinal County), AZ
Sulfur Dioxide (2010) *Hayden, AZ
8-Hour Ozone (2008) *Phoenix-Mesa, AZ - (Moderate)
8-Hour Ozone (2015) *Phoenix-Mesa, AZ - (Moderate)
Santa Cruz County
PM-10 (1987) *Santa Cruz County; Nogales planning area, AZ - (Moderate)
Yuma County
PM-10 (1987) *Yuma, AZ - (Moderate)
8-Hour Ozone (2015) *Yuma, AZ - (Marginal)
CALIFORNIA
Alameda County
PM-2.5 (2006) San Francisco Bay Area, CA - (Moderate)

8-Hour Ozone (2015) Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Moderate)
Butler County
8-Hour Ozone (2008) Pittsburgh-Beaver Valley, PA - (Marginal)
Carbon County
8-Hour Ozone (2008) Allentown-Bethlehem-Easton, PA - (Marginal)
Chester County
8-Hour Ozone (2008) Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)
8-Hour Ozone (2015) Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Moderate)
Delaware County
8-Hour Ozone (2008) Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)
8-Hour Ozone (2015) Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Moderate)
Fayette County
8-Hour Ozone (2008) Pittsburgh-Beaver Valley, PA - (Marginal)
Indiana County
Sulfur Dioxide (2010) Indiana, PA
Lancaster County
8-Hour Ozone (2008) Lancaster, PA - (Marginal)
Lehigh County
8-Hour Ozone (2008) Allentown-Bethlehem-Easton, PA - (Marginal)
Montgomery County
8-Hour Ozone (2008) Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)
8-Hour Ozone (2015) Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Moderate)
Northampton County
8-Hour Ozone (2008) Allentown-Bethlehem-Easton, PA - (Marginal)
Philadelphia County
8-Hour Ozone (2008) Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)
8-Hour Ozone (2015) Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Moderate)
Warren County
*Sulfur Dioxide (2010)**Warren, PA
Washington County
8-Hour Ozone (2008) Pittsburgh-Beaver Valley, PA - (Marginal)
Westmoreland County
8-Hour Ozone (2008) Pittsburgh-Beaver Valley, PA - (Marginal)

PUERTO RICO
Arecibo Municipio
Lead (2008) *Arecibo, PR
Bayamon Municipio
*Sulfur Dioxide (2010)**San Juan, PR
Catano Municipio
Sulfur Dioxide (2010) San Juan, PR
Guaynabo Municipio
*Sulfur Dioxide (2010)**San Juan, PR
Salinas Municipio
*Sulfur Dioxide (2010)**Guayama-Salinas, PR
San Juan Municipio
*Sulfur Dioxide (2010)**San Juan, PR
Toa Baja Municipio
*Sulfur Dioxide (2010)**San Juan, PR

TENNESSEE
Sullivan County
*Sulfur Dioxide (2010)**Sullivan County, TN

TEXAS
Anderson County
*Sulfur Dioxide (2010)**Freestone and Anderson Counties, TX
Bexar County
8-Hour Ozone (2015) San Antonio, TX - (Moderate)
Brazoria County
8-Hour Ozone (2008) Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015) Houston-Galveston-Brazoria, TX - (Moderate)
Chambers County
8-Hour Ozone (2008) Houston-Galveston-Brazoria, TX - (Severe 15)

8-Hour Ozone (2015) Houston-Galveston-Brazoria, TX - (Moderate)

Collin County
8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015) Dallas-Fort Worth, TX - (Moderate)

Dallas County
8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015) Dallas-Fort Worth, TX - (Moderate)

Denton County
8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015) Dallas-Fort Worth, TX - (Moderate)

El Paso County
PM-10 (1987) *El Paso County, TX - (Moderate)
8-Hour Ozone (2015) El Paso-Las Cruces, TX-NM - (Marginal)

Ellis County
8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015) Dallas-Fort Worth, TX - (Moderate)

Fort Bend County
8-Hour Ozone (2008) Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015) Houston-Galveston-Brazoria, TX - (Moderate)

Freestone County
Sulfur Dioxide (2010) *Freestone and Anderson Counties, TX

Galveston County
8-Hour Ozone (2008) Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015) Houston-Galveston-Brazoria, TX - (Moderate)

Harris County
8-Hour Ozone (2008) Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015) Houston-Galveston-Brazoria, TX - (Moderate)

Howard County
Sulfur Dioxide (2010) *Howard County, TX

Hutchinson County
Sulfur Dioxide (2010) *Hutchinson County, TX

Johnson County
8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015) Dallas-Fort Worth, TX - (Moderate)

Kaufman County
8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015) Dallas-Fort Worth, TX - (Moderate)

Liberty County
8-Hour Ozone (2008) Houston-Galveston-Brazoria, TX - (Severe 15)

Montgomery County
8-Hour Ozone (2008) Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015) Houston-Galveston-Brazoria, TX - (Moderate)

Navarro County
Sulfur Dioxide (2010) *Navarro County, TX

Panola County
Sulfur Dioxide (2010) *Rusk and Panola Counties, TX

Parker County
8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015) Dallas-Fort Worth, TX - (Moderate)

Rockwall County
8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)

Rusk County
Sulfur Dioxide (2010) *Rusk and Panola Counties, TX

Tarrant County
8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015) Dallas-Fort Worth, TX - (Moderate)

Titus County
Sulfur Dioxide (2010) *Titus County, TX

Waller County
8-Hour Ozone (2008) Houston-Galveston-Brazoria, TX - (Severe 15)

Wise County

8-Hour Ozone (2008) Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015) Dallas-Fort Worth, TX - (Moderate)

UTAH

Box Elder County
PM-2.5 (2006) *Salt Lake City, UT - (Serious)
Davis County
PM-2.5 (2006) Salt Lake City, UT - (Serious)
8-Hour Ozone (2015) Northern Wasatch Front, UT - (Moderate)
Duchesne County
8-Hour Ozone (2015) *Uinta Basin, UT - (Marginal)
Salt Lake County
PM-2.5 (2006) Salt Lake City, UT - (Serious)
Sulfur Dioxide (1971) Salt Lake County, UT
8-Hour Ozone (2015) Northern Wasatch Front, UT - (Moderate)
Tooele County
PM-2.5 (2006) *Salt Lake City, UT - (Serious)
Sulfur Dioxide (1971) *Tooele County, UT
8-Hour Ozone (2015) *Northern Wasatch Front, UT - (Moderate)
Uintah County
8-Hour Ozone (2015) *Uinta Basin, UT - (Marginal)
Utah County
PM-2.5 (2006) *Provo, UT - (Serious)
8-Hour Ozone (2015) *Southern Wasatch Front, UT - (Marginal)
Weber County
PM-2.5 (2006) *Salt Lake City, UT - (Serious)
8-Hour Ozone (2015) *Northern Wasatch Front, UT - (Moderate)

VIRGINIA

Alexandria city
8-Hour Ozone (2015) Washington, DC-MD-VA - (Moderate)
Arlington County
8-Hour Ozone (2015) Washington, DC-MD-VA - (Moderate)
Fairfax County
8-Hour Ozone (2015) Washington, DC-MD-VA - (Moderate)
Fairfax city
8-Hour Ozone (2015) Washington, DC-MD-VA - (Moderate)
Falls Church city
8-Hour Ozone (2015) Washington, DC-MD-VA - (Moderate)
Giles County
Sulfur Dioxide (2010) *Giles County, VA
Loudoun County
8-Hour Ozone (2015) Washington, DC-MD-VA - (Moderate)
Manassas Park city
8-Hour Ozone (2015) Washington, DC-MD-VA - (Moderate)
Manassas city
8-Hour Ozone (2015) Washington, DC-MD-VA - (Moderate)
Prince William County
8-Hour Ozone (2015) Washington, DC-MD-VA - (Moderate)

WASHINGTON

Whatcom County
Sulfur Dioxide (2010) *Whatcom County, WA

WISCONSIN

Kenosha County
8-Hour Ozone (2015) *Chicago, IL-IN-WI - (Moderate)
Milwaukee County
8-Hour Ozone (2015) Milwaukee, WI - (Moderate)
Ozaukee County
8-Hour Ozone (2015) Milwaukee, WI - (Moderate)
Racine County
8-Hour Ozone (2015) *Milwaukee, WI - (Moderate)
Sheboygan County
8-Hour Ozone (2015) *Sheboygan County, WI - (Moderate)

Washington County
8-Hour Ozone (2015) *Milwaukee, WI - (Moderate)
Waukesha County
8-Hour Ozone (2015) *Milwaukee, WI - (Moderate)

WYOMING

Lincoln County
8-Hour Ozone (2008) *Upper Green River Basin Area, WY - (Marginal)
Sublette County
8-Hour Ozone (2008) Upper Green River Basin Area, WY - (Marginal)
Sweetwater County
8-Hour Ozone (2008) *Upper Green River Basin Area, WY - (Marginal)

Discover. **Connect.** **Ask.**

Follow.

2023-12-31

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

Exhibit 5

Coastal Zone Management Map

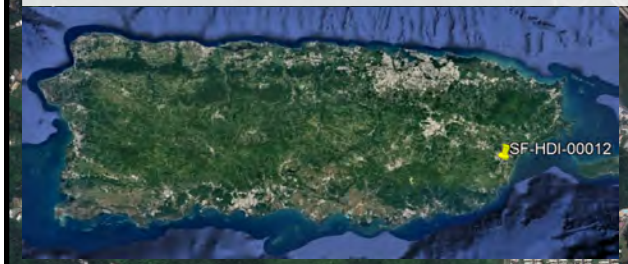
Laderas de Palmas

SF-HDI-00012

Coastal Zone Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants



Legend

- Coastal Zone
- Distance (1.80 miles)
- Project Limit
- SF-HDI-00012

1.80 miles

1 mi

N

https://erma.noaa.gov/layer/26282

Google Earth

Image © 2024 Airbus

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

Exhibit 6

EPA NEPAssits – EPA Facilities MAP

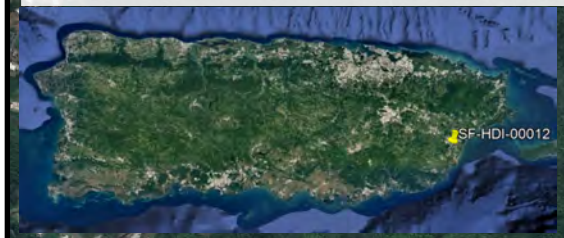
Laderas de Palmas

SF-HDI-00012

EPA Facilities Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants



Legend

- 3,000 ft Buffer
- Project Limit
- RCRAInfo (Hazardous Waste)
- SF-HDI-00012

1,2
3
4
5
6
7

5000 ft

N

Google Earth

Image © 2025 Airbus

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

NEPAssist Report

Laderas de Palmas

April 7, 2025

1:22,931

Toxic Releases (TRI)
Hazardous Waste (RCRAInfo)
Hazardous Waste (RCRAInfo)
Water Dischargers (NPDES)
Water Dischargers (NPDES)
Air Pollution (ICIS-AIR)
Project Buffer
Laderas de Palmas
laderas de palmas

0 0.28 0.55 1.1 mi
0 0.42 0.85 1.7 km

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

Input Coordinates: 18.124609,-65.821304,18.124413,-65.821079,18.124404,-65.820989,18.124199,-65.820836,18.123969,-65.820513,18.123773,-65.820441,18.123619,-65.820324,18.123568,-65.820073,18.123218,-65.820073,18.122757,-65.820172,18.122543,-65.820262,18.122321,-65.820450,18.122389,-65.820603,18.122347,-65.820845,18.122210,-65.821025,18.122116,-65.820693,18.122065,-65.820747,18.122116,-65.821007,18.122082,-65.821169,18.122031,-65.821205,18.121971,-65.821223,18.121758,-65.821196,18.121698,-65.821052,18.119478,-65.821708,18.117754,-65.821834,18.117711,-65.822786,18.117933,-65.822894,18.118086,-65.823037,18.118693,-65.823927,18.119068,-65.823720,18.119239,-65.823720,18.119333,-65.823810,18.119359,-65.823972,18.120571,-65.823567,18.121382,-65.823729,18.121621,-65.823648,18.121732,-65.823648,18.121928,-65.823235,18.121920,-65.823181,18.122287,-65.823064,18.122526,-65.823037,18.122791,-65.822867,18.123636,-65.822220,18.123704,-65.822184,18.123807,-65.822256,18.124370,-65.821717,18.124823,-65.821546,18.124857,-65.821501,18.124609,-65.821304

Project Area	0.06 sq mi
Within 3000 feet of an Ozone 1-hr (1979 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of an Ozone 8-hr (2015 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a CO Annual (1971 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a NO2 Annual (1971 standard) Non-Attainment/Maintenance Area?	no

Within 3000 feet of a Federal Land?	no
Within 3000 feet of an impaired stream?	no
Within 3000 feet of an impaired waterbody?	yes
Within 3000 feet of a waterbody?	no
Within 3000 feet of a stream?	yes
Within 3000 feet of an NWI wetland?	Available Online
Within 3000 feet of a Brownfields site?	no
Within 3000 feet of a Superfund site?	no
Within 3000 feet of a Toxic Release Inventory (TRI) site?	no
Within 3000 feet of a water discharger (NPDES)?	no
Within 3000 feet of a hazardous waste (RCRA) facility?	yes
Within 3000 feet of an air emission facility?	no
Within 3000 feet of a school?	no
Within 3000 feet of an airport?	no
Within 3000 feet of a hospital?	no
Within 3000 feet of a designated sole source aquifer?	no
Within 3000 feet of a historic property on the National Register of Historic Places?	no
Within 3000 feet of a Chemical Data Reporting (CDR) site?	no
Within 3000 feet of a Land Cession Boundary?	no
Within 3000 feet of a tribal area (lower 48 states)?	no
Within 3000 feet of the service area of a mitigation or conservation bank?	no
Within 3000 feet of the service area of an In-Lieu-Fee Program?	no
Within 3000 feet of a Public Property Boundary of the Formerly Used Defense Sites?	no
Within 3000 feet of a Munitions Response Site?	no
Within 3000 feet of an Essential Fish Habitat (EFH)?	yes
Within 3000 feet of a Habitat Area of Particular Concern (HAPC)?	no
Within 3000 feet of an EFH Area Protected from Fishing (EFHA)?	no
Within 3000 feet of a Bureau of Land Management Area of Critical Environmental Concern?	no
Within 3000 feet of an ESA-designated Critical Habitat Area per U.S. Fish & Wildlife Service?	no
Within 3000 feet of an ESA-designated Critical Habitat river, stream or water feature per U.S. Fish & Wildlife Service?	no

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Exhibit 6a

CTS GROUP INC.
ENGINEERS & ENVIRONMENTAL CONSULTANTS

PHASE I
ASTM E1527-21
NOVEMBER 15, 2023

PREPARED FOR:
PUERTO RICO DEPARTMENT OF HOUSING
REBUILDERS PR, LLC

SITE:
UNDEVELOPED LAND
ROAD PR-3, KM 33.7, CATAÑO WARD
HUMACAO, PUERTO RICO.

PREPARED BY:	PROJECT ID:	CUSTOMER:
CTS GROUP, INC.	LDP-11-023	REBUILDERS PR, LLC.

Background and Disclaimer: The purpose of a Phase I Environmental Site Assessment is to identify actual or potential "recognized environmental conditions" that may result in liability or land use restrictions as defined by the American Society for Testing and Materials (ASTM E1527-21) and 40 C.F.R. Part 312. The ASTM E1527-21 Phase I Environmental Site Assessment is the minimum standard for environmental due diligence in the commercial real estate industry and currently meets the standard for All Appropriate Inquiry under the Small Business Liability Relief and Brownfield's Redevelopment Act of 2002. The U.S. Environmental Protection Agency (USEPA) has determined that the ASTM E1527-21 Standard is consistent with the requirements for conducting an "All Appropriate Inquiry" under 40 C.F.R. Part 312. A diligent effort following generally accepted good commercial and customary standards and practice was undertaken to identify the "recognized environmental conditions" that might affect the subject property, and CTS Group, Inc. conducted this Phase I ESA in conformance with the ASTM E1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Identifying old hazardous waste sites is an evolving process; therefore, CTS Group, Inc. cannot state with absolute certainty that no other potentially hazardous waste sites are in the subject property's area.

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Appendix A
Site Photographs & Imagery

Appendix I
EPA Superfund CERCLIS List

Appendix II
EPA Enforcement and Compliance History (ECHO)

Appendix III
EPA National Priorities List (NPL)

Appendix IV
EPA Toxic Release Inventory (TRI)

Appendix V
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Appendix VI
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Appendix VII
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Appendix VIII
USGS and Puerto Rico EQB Water Monitoring Wells

Appendix IX
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Registered Underground Storage Tanks (UST)

Appendix X
Additional Documentation

Appendix XI
Reliance Letter
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1.0 EXECUTIVE SUMMARY

Mr. Carlos Aldarondo, an authorized representative of Rebuilders PR, LLC, engaged CTS Group, Inc. to conduct a Phase I ESA at a commercial property at Road PR-3, Km 33.7, Cataño Ward, Humacao, Puerto Rico. This report will subsequently refer to this property as "the subject property." This assessment was prepared following the American Society of Testing Materials (ASTM) Standard Practice for Phase I Environmental Site Assessments Process (ASTM Designation E1527-21).

The purpose of the Phase I ESA is to evaluate potential environmental concerns or issues concerning the range of contaminants within the scope of the Comprehensive Environmental Response and Liability Act (CERCLA) and petroleum products that may be associated with the subject property based upon readily available information and site observations. In defining a standard of good commercial and customary practice for conducting a Phase I ESA of a property, the goal of the processes established by this practice is to identify *"Recognized Environmental Conditions (RECs)."* A Recognized Environmental Condition (REC) is defined as (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

The Puerto Rico Land Use Plan, Municipal Ordinance Plans, several overlaid special district plans, and the corresponding applicable regulations and guidelines regulate land use in Puerto Rico. Based on the information obtained by reviewing Humacao's Zoning Ordinance Map 304, dated October 30, 2010, and Map 329, dated September 25, 2011, the subject property is located within an "R-I" (Residential One) and "SRC" (Common Rustic Land) zoning districts. The environmental professional, however, is not qualified to determine zoning compliance for the identified use of the subject property. The subject property is assumed to be free of zoning compliance violations that might affect its intended use, and no liability or responsibility is assumed in this respect. A zoning compliance assessment is beyond the scope of this Phase I ESA. According to the Federal Emergency Management Agency Advisory Map for Humacao Puerto Rico Panel No. 72000 C1805 J, dated April 13, 2018, the subject property has been placed under Zone X, defined as an area of minimal flood hazard. The environmental professional, however, is not qualified to determine the flooding conditions of the subject property. The subject property is assumed to be free of adverse floodable conditions that might affect its intended development, and no

liability or responsibility is assumed in this respect. Further analysis of the flood insurance or flood certification is beyond the scope of this Phase I ESA.

CTS Group, Inc. contacted the Municipality of Humacao on November 14, 2023, to obtain information about the subject property. Mr. Jesus Rosa, the director of the Office for Emergency Management, indicated that there is no record connecting the subject and adjoining properties with any incidents or violations that could result in a Recognized Environmental Condition. Mr. Jose Tolentino, the director of the Public Works Department, was also interviewed. Mr. Tolentino stated that there is no record in the Public Works Department linking the subject property to any environmentally related incidents or violations that could pose a risk to human health or contaminants at the subject property. Additionally, a review of the available documentation from the U.S. EPA and the PR Department of Natural and Environmental Resources' Underground Storage Tank Program concerning the subject property yielded no information that would affect the professional opinion in this report.

On October 24, 2023, CTS Group, Inc. sent a letter to the Puerto Rico Department of Environmental and Natural Resources requesting information regarding any environmentally related incidents or violations concerning the commercial operations of the subject property and the neighboring businesses. In response, the PR DNER Regional Office of Humacao sent us a communication from the desk of the office director, Mrs. Vanessa del Moral Rosario, on August 30, 2023. This correspondence indicated that no records were found in her office linking either the subject property or any adjoining properties to any environmentally related incidents, and that no violations were discovered regarding the subject property or adjoining properties. Upon reviewing the available documentation in the U.S. EPA (Record Search) and the PR Department of Natural and Environmental Resources' Underground Storage Tank Program (UST and LUST List) pertaining to the subject property, no information was found that would change the professional opinion issued in this report.

CTS Group, Inc. identified a gasoline service station adjoining the subject property on the northeastern boundary. The service station is registered with the Puerto Rico Department of Natural and Environmental Resources as follows:

Facility Name	UST ID	LUST (Reported)	Facility Location	Distance from SP (ft)
Gulf Humacao	2-860352	Yes (March 16, 1999)	Rd. PR-3, Km. 83.9, Cataño Ward, Humacao, PR.	Adjoining

The PR DNER recorded the UST 2-860352 site as a LUST on March 16, 1999. The service station operates under the Gulf brand and has managed other generic brands and administrations. The release was reported during a UST removal, and while it was recorded, it did not warrant a response from the regulatory agencies, nor is the incident listed in any of the researched EPA databases. Bureaucratic delays and insufficient personnel in government agencies often hinder the record-keeping process, resulting in the site being listed for several decades. However, the agency continues to issue operating permits for that location. Obtaining an operating license for a service station requires compliance with state and federal guidelines and regulations governing UST facility operations. The reported release of petroleum products recorded over 24 years ago does not pose a risk of human exposure to contamination or the migration of contaminated groundwater into the subject property or any adjoining properties. During UST removals, minor releases that do not warrant a response from regulatory agencies typically diminish due to natural attenuation over time. The site is not a Superfund Site and has not been listed in the EPA National Priorities List, suggesting that natural attenuation has occurred or is likely to occur over time. Appendix IX of this report lists all registered petroleum USTs and leaking petroleum USTs in the Municipality of Humacao. None of the listed facilities present a risk of human exposure to contamination or the migration of contaminated groundwater from or to the subject property. Neither the subject nor any adjoining properties are on this list.

The site reconnaissance of the subject property surroundings yielded the following results:

- There is no evidence of oily films in standing water.
- There is no evidence of discolored and oil-stained floors.
- There is no evidence of discarded chemical containers.
- There is no evidence of waste pipes or buried waste.
- There is no evidence of distressed vegetation.
- There is no presence of unusual odors.
- There is no evidence of a LUST Facility at the subject property

This assessment revealed no Recognized Environmental Condition (REC) associated with the subject property.

This assessment revealed no Controlled Recognized Environmental Conditions (CRECs) were associated with the subject property.

This assessment revealed no Historical Recognized Environmental Conditions (HRECs) were associated with the subject property.

This assessment revealed no De *Minimis Condition was* associated with the subject property.

We have performed a Phase I ESA conformance with the scope and limitations of ASTM Practice E1527-21 of undeveloped land at Road PR-3, Km 33.7, Cataño Ward, Humacao, Puerto Rico. (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. Any exceptions to, or deletions from, this practice are described in Section 13.0 of this report. This report's Findings, Opinions, and Conclusion sections are based on sections 12.5, 12.6, and 12.8 of ASTM E E1527-21, respectively.

In this Phase I ESA, CTS Group did not identify RECs in connection with the subject property or evidence of any potentially significant environmental concern. Therefore, further investigative work at the subject property is optional to satisfy All Appropriate Inquiries. CTS Group, Inc. identified a data failure while conducting the Phase I ESA at the subject property, as the available Standard Historical Sources only go back to 2004. The data failure mentioned above does not represent a significant data gap since CTS Group, Inc. did not identify any source of environmental impairments in connection with the subject property before 2004 based not only on the available historical records review but also on the commonly known or reasonably ascertainable information regarding the subject property's immediate vicinity. Except for the limitations and exceptions discussed in Section 2.4, this Phase I ESA complies with the ASTM Standard E1527-21.

2.0 INTRODUCTION

CTS Group, Inc. conducted a Phase I ESA of an undeveloped land lot at Road PR-3, Km 33.7, Cataño Ward, Humacao, Puerto Rico. (the "subject property").

2.1 Purpose

The purpose of this Phase I ESA is to define recognized environmental conditions through good commercial and customary practices in the United States of America by conducting an *environmental site assessment* of a parcel concerning the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. § 9601) and *petroleum products*. As such, this practice is intended to permit a user to satisfy one of the requirements to qualify for the *innocent landowner, contiguous owner representative, or bona fide prospective purchaser* limitations on CERCLA liability (from now on, the "*landowner liability protections*," or "LLPs"): that is, the practice that constitutes *all appropriate inquiries* into the previous ownership and uses of the *property* consistent with good commercial and customary standards and practices as defined at 42 U.S.C. § 9601(35)(B). Controlled substances are not included within the scope of this practice.

2.2 Detailed Scope of Services

CTS Group, Inc. was engaged by Mr. Carlos Aldarondo, an authorized representative of Rebuilders PR, LLC, to conduct a Phase I ESA to conform to ASTM E1527-21. Rebuilders PR, LLC and its representatives, affiliates, subsidiaries, successors, and assigns (collectively, the User or Client) understand the scope of services for this project, including a visual reconnaissance of the subject property and neighboring properties, review of readily available Federal, state, and local regulatory records; examination when available of historical information and evaluation of current and past operations and activities on-site. Matrix reviewed/utilized historic aerial photographs, Sanborn Fire Insurance Maps, historic topographic maps, and city directories as part of the Phase I ESA. Additionally, a regulatory database search was conducted by CTS Group, Inc. for information available in governmental databases. The Phase I ESA also included an initial Vapor Encroachment Screening (VES) to determine if a Vapor Encroachment Condition (VEC) is identified for the Target Property TP (that is, the presence or likely presence of Chemicals of Concern (COC) vapors in the subsurface of the TP caused by the release of vapors from contaminated soil and groundwater either on or near the TP as identified by the Tier 1 procedure of ASTM E2600-22.

As required by the ASTM E1527-21 standard, a Phase I ESA consists of four primary components, which are described below:

Records Review

Review of property deeds, titles, and any other pertinent legal records. Review available records, including permitting, topographic maps, geological maps, aerial pictures, and historical records. The U.S. Environmental Protection Agency and the Puerto Rico Department of Natural and Environmental Resources database were reviewed to determine if any regulated facilities were located at the subject property or in its vicinity.

Site Reconnaissance

A site reconnaissance of the subject property and adjoining properties was conducted to identify the potential presence of any RECs.

Interviews

CTS Group, Inc. conducted interviews with present and past owners of the subject property, neighbors and owners of adjoining property, and local and state government officials.

Preparation of Final Report and Declaration of the Environmental Professional

This Final Report reveals the Environmental Professional evaluation of findings after conducting an ASTMA E1527-21 Phase I ESA for the subject property.

2.3 Significant Assumptions

CTS Group, Inc. assumes that the reports, documents, and general and specific information provided by the Client, government agencies, and the people interviewed while conducting this study are complete and reliable. No other significant assumptions have been made while performing this Phase I ESA.

2.4 Limitations and Exceptions

A Phase I ESA aims to identify actual or potential "recognized environmental conditions" that may result in liability or land use restrictions as defined by the American Society for Testing and Materials (ASTM E1527-21) and 40 C.F.R. Part 312. The ASTM E1527-21 Phase I Environmental Site Assessment is the minimum standard for environmental due diligence in the commercial real estate industry and currently meets the standard for All Appropriate Inquiry under the Small Business

Liability Relief and Brownfield's Redevelopment Act of 2002. The U.S. Environmental Protection Agency (USEPA) has determined that the ASTM E1527-21 Standard is consistent with the requirements for conducting an "All Appropriate Inquiry" under 40 C.F.R. Part 312. A diligent effort following generally accepted good commercial and customary standards and practice was undertaken to identify the "recognized environmental conditions" that might affect the subject property, and CTS Group, Inc. conducted this Phase I ESA in conformance with the ASTM E1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Identifying old hazardous waste sites is an evolving process; therefore, CTS Group, Inc. cannot state with absolute certainty that no other potentially hazardous waste sites are in the subject property area. This assessment reflects the expected degree of care and skill ordinarily exercised by competent environmental professionals conducting business in this or similar localities. In no event shall CTS Group, Inc., or its employees be liable for any damages, injury, loss, cost, or expenses whatsoever arising in connection with the use or reliance on the information contained in this report, except as otherwise provided within this report, the contract to commission this report, or by law.

As part of this assessment, CTS Group, Inc. submitted requests for information to various governmental agencies via the Freedom of Information Act (FOIA) and Office of Public Records Act (OPRA). As of the preparation of this report, these requests may not have been fulfilled. The conclusions of this report are subject to change upon receipt of a response from these FOIA and OPRA requests. Where access to portions of the subject property or structures on the subject property was unavailable or limited, CTS Group, Inc. renders no opinion as to the presence of direct or indirect evidence relating to petroleum substances, hazardous substances, or both in that portion of the subject property or structure.

In addition, CTS Group, Inc. renders no opinion as to the presence of indirect evidence related to hazardous material or oil where direct observation of the ground surface, interior walls, floors, ceilings, or a structure is obstructed by objects or materials, including snow, covering on or over these surfaces. The information in this report is based on reviewing available historical documents, governmental databases, deed records, aerial photographs, governmental environmental files, interviews with past/present owners and neighbors, and a site reconnaissance of the area by the environmental professional. The result of this assessment, as written in this report, is valid as of the date of the report. The assessment does not include soil, rock, groundwater, surface water, or air sampling. Mold, indoor air quality, asbestos, and lead-based paint surveys are out of the scope of the Phase I ESA.

2.5 Special Terms and Conditions

The Phase I ESA was conducted in conformance with the scope and limitations of ASTM designation E1527-21 standard practice. There are no special terms or conditions to the report's content in addition to the scope outlined in Section 2.2.

Authorization to perform this assessment was given by Mr. Carlos Aldarondo, acting as an authorized representative of the Client. Instructions as to the location of the subject property, access, and an explanation of the subject property and facilities to be assessed were provided by Mrs. Elvelisse Figueroa.

The following is a list of terminology that is used throughout this report and, therefore, should be defined:

Actual Knowledge: The knowledge possessed by an individual who is a natural person rather than an entity.

Adjoining Properties: Any real property or properties the border of which is contiguous or partially contiguous with that of the subject property or that would be contiguous or partially contiguous with that of the subject property but for a street, road, or another public thoroughfare separating them.

All Appropriate Inquiry: That inquiry constituting "all appropriate inquiry into previous ownership and uses of the subject property consistent with good commercial or customary practice," as defined in CERCLA, 42 U.S.C 9607 (b)(3), 9607 (q); and 9607 (r), assuming compliance with other elements of the defense.

Activity and Use Limitation (AUL): Legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, and surface water on the property, or (2) to prevent activities that could interfere with the effectiveness of a response action, to ensure maintenance of a condition of no significant risk to public health or the environment.

Area of Concern (AOC) (defined by the Approximate Minimum Search Distance)*:* Records to be reviewed pertain to the *TP* and to properties within the *AOC* (that is, within the *approximate minimum search distance*). The *AOC* is one-third of a mile around the *TP.*

Business Environmental Risk: A risk that can have a material environmental or environmentally driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental

issues required to be investigated in the ASTM E1527-21 practice. Considerations of business environmental risk may involve addressing one or more non-scope considerations.

Chemical(s) of Concern (COC): Chemicals present in the subsurface environment and can potentially migrate as a vapor into the sub-surface of the TP.

Controlled Recognized Environmental Condition (CREC): A Recognized Environmental Condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, activity and use limitations or other property use limitations).

Data Failure: Failure to achieve the historical research objectives of ASTM E1527-21 even after reviewing the standard historical sources that are reasonably ascertainable and likely useful. Data failure is one type of data gap.

Data Gap: A lack of or inability to obtain information required by this practice despite reasonable faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to, site reconnaissance (for example, an inability to conduct the site visit) and interviews (for example, an inability to interview the key subject property manager, regulatory officials, etc.).

De minimis condition: A condition related to a release that generally does not threaten human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Due Diligence: The process of inquiring into the environmental characteristics of a parcel of commercial real estate or other conditions, usually in connection with a commercial real estate transaction.

Environmental Professional: A person meeting the education, training, and experience requirements outlined in the ASTM E1527-21 practice.

Hazardous Substance: A substance defined as a hazardous substance pursuant to CERCLA 42 USC 9601(14), as interpreted by USEPA regulations and the courts.

Historical Recognized Environmental Condition (HREC): A previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and

meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations). A historical recognized environmental condition is not a recognized environmental condition.

Migrate/ Migration: Refers to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface and vapor in the subsurface.

Obvious: That which is plain or evident; a condition or fact that a reasonable observer could not ignore or overlook while visually or physically observing the subject property.

Occupants: Those tenants, subtenants, or other persons or entities using the subject property or a portion of the subject property.

Owner: Generally, the fee owner of record of the subject property.

Practically Reviewable: *Practically reviewable Information* means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the subject property without the need for extraordinary analysis of irrelevant data.

Reasonable Ascertainable: Information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable.

Recognized Environmental Condition (REC): (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

Significant Data Gap: A data gap that affects the ability of the environmental professional to identify a recognized environmental condition.

Subject Property: The property subject to the environmental site assessment described in this Phase I ESA.

Target Property (TP): Property involved in the real estate transaction that is the subject of the VES defined by this guide.

User: The party seeking to use Practice E E1527-21 to perform a Phase I ESA of the subject property, defined here as Rebuilders PR, LLC, including its representatives, affiliates, subsidiaries, successors, and assigns.

Vapor Encroachment Condition (VEC): Presence or likely presence of COC vapors in the subsurface of the TP caused by the release of vapors from contaminated soil or groundwater or both either on or near the TP as identified by the *VES*.

2.6 User Reliance

While conducting a Phase I ESA, as recommended by ASTM E1527-21, an environmental professional is not required to verify independently the information provided but may rely on information provided unless the environmental professional has actual knowledge that certain information is incorrect or unless it is evident that certain information is incorrect based on other information obtained in the Phase I ESA or otherwise actually known to the environmental professional. This Phase I ESA was conducted solely to provide information to the Client. The findings, opinions, conclusions, and other information provided in this report may be released to third parties. However, third parties shall have no right to rely on any information contained in this report, and CTS Group, Inc. shall have no liability to third parties in any manner whatsoever.

3.0 USER INFORMATION

3.1 Location and Legal Description

The subject property, an undeveloped piece of land, is located at Road PR-3, Km 33.7, in the Cataño Ward of Humacao, Puerto Rico. Its general location is in the western area of the island. While conducting this assessment, the environmental professional did not have access to a copy of the subject property's legal description. No evidence of a Recognized Environmental Condition (REC) related to the subject property was identified from the user information.

3.2 Owner Information

The subject owner representative of records is Rebuilders PR, LLC.

3.3 Title and Judicial Records

The environmental professional did not review any title or judicial records as part of this Phase I ESA.

3.4 Environmental Liens or Activity and Use Limitations.

The Client reports no Environmental Liens or Activity and Use Limitations that are known on the subject property.

3.5 Specialized Knowledge or Experience of the User

The Client reports no specialized knowledge regarding the subject property, which has not already been discussed in this Phase I ESA.

3.6 Actual Knowledge of the User

The Client reports no actual knowledge regarding the subject property that has not been addressed in this Phase I ESA.

3.7 Reasons for Significantly Lower Purchase Price.

No significant environmental issues or contamination concerns that may significantly reduce the fair market value of the subject property were reported. None are identified or suspected by CTS Group, Inc.

3.8 Commonly Known or Reasonably Ascertainable Information.

The Client has no knowledge of spills or environmental cleanups at the subject property.

3.9 Reason for performing Phase I

The objective of performing this Phase I ESA at the subject property is to identify any potential RECs in connection with the present and past operations of the subject property and the neighboring businesses. The scope of this practice includes research and reporting requirements that support the User's ability to qualify for the LLPs. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice is provided in this report.

4.0 SITE RECONNAISSANCE

4.1 Methodology and Limiting Conditions

The methodology used for the site reconnaissance of the subject property consisted of visually inspecting the subject property's surrounding areas. EP Ihosvany Negret performed the site reconnaissance of the subject property on November 13, 2023. The methodology used for the site reconnaissance of the subject property consisted of visually inspecting the subject property's interior and surrounding areas. The site reconnaissance aims to identify potential RECs and any potential source of

environmental impairment in connection with the subject property. There were no physical obstructions such as adjacent buildings, bodies of water, asphalt, or other paved areas, and any other physical constraints (for example, snow and rain) encountered during the site reconnaissance.

4.2 General Site Setting

All areas of the subject property were accessible during the inspection, with no visual or physical obstructions present. An interior and exterior walk-through of the property was conducted, and the exteriors of adjoining properties were visually evaluated to identify any potential RECs.

General Description

The subject property refers to vacant undeveloped land with no record of commercial use.

Roads

The primary access is via Road PR-3, which travels from north to south. Additionally, there is access to PR-30, PR-53, and the interior municipal roads streets.

Utilities

The Puerto Rico Electrical Power Authority (PREPA) provides electrical power to the subject property's immediate neighborhood. The Puerto Rico Aqueducts and Sewers Authority (PRASA) provides potable water to the area, and the Puerto Rico Telephone Company provides telephone services. There are no other utilities available at the subject property. The subject property vicinity has the typical and necessary government services available, including fire and police protection provided by the Commonwealth government, street cleaning provided by the municipal government, and postal service provided by the federal government.

Floods

According to the Federal Emergency Management Agency Advisory Map for Humacao , Puerto Rico Panel No. 72000 C1805 J, dated April 13, 2018 , the subject property has been placed under Zone X, defined as an area of minimal flood hazard. The environmental professional, however, is not qualified to determine the flooding conditions of the subject property . The subject property is assumed to be free of adverse floodable conditions that might affect its intended development , and no liability or responsibility is assumed in this respect . Further analysis of the flood insurance or flood certification is beyond the scope of this Phase I ESA.

Landfill, Dumping, Disturbed Soil

No landfills, dumping, or disturbed soil exist at the subject or adjoining properties. The soil is not disturbed and does not show possible water accumulation in several areas in the presence of precipitation. The subject property's lot, located east of SR PR-53, is adjoined by the "El Coquí Landfill," which is owned and operated by El Coquí Landfill Company, Inc. (Waste Management of Puerto Rico) and has been in operation under this company for over 20 years and employs almost 265 people within the Commonwealth of Puerto Rico. El Coquí Landfill opened in 1972 under the Municipality of Humacao's control. In 1985, a private individual bought the site and sold it to a predecessor of Waste Management in 1995, and in 1998, the site formally became a "Waste Management" site. Currently, there are approximately 128 permitted cuerdas. Now, about 2,500 tons of waste is disposed daily. The El Coquí Landfill is a private, Subtitle D-compliant landfill and is only one of two private Subtitle D-compliant landfills on the island. Waste Management owns both compliant landfills. The El Coquí Landfill services one-third of the island's geography. The El Coquí Landfill manages waste disposal for San Juan, Caguas, and the island's East side. Under Puerto Rico Law, importing any waste into the island is prohibited.

Acceptable Waste:

Municipal solid waste (household waste), construction and demolition debris, selective non-hazardous industrial waste, contaminated non-hazardous soils, sludge (no free liquids), and ash, among others. The landfill also accepts segregated vegetative waste and wooden pallets for shredding and mulch production.

Unacceptable Waste:

Hazardous waste, refrigerators, freezers, air conditioners, lead acid batteries, paint, liquid waste, regulated biomedical waste, asbestos, radioactive waste, and others as deemed necessary by the facility. No waste generated off the island is accepted.

4.3 Current Use(s) of the Property

The subject property is vacant, undeveloped land with no commercial use on record.

4.4 Past Use(s) of the Property

The subject property is vacant, undeveloped land with no commercial use on record.

4.5 Current Uses of Adjoining Properties

On the north, the subject property is adjoined by vacant land and the "El Coqui Landfill."

On the South, the subject property is adjoined by vacant land, residential properties, and a commercial property operating as a "Pan Pepin" distribution center.

On the East, the subject property is adjoined by vacant land, residential properties, and the following commercial operations:

- El Criollito Restaurant
- Gulf Service Station

On the West, the subject property is adjoined by a commercial property operating as a branch of Oriental Bank.

4.6 Past Uses of Adjoining Properties

No additional historical use information was identified with any of the adjoining properties.

4.7 Current and Past Uses in the Surrounding Area

Current uses in the subject property's neighborhood are primarily residential, with some commercial industrial and institutional facilities.

4.8 Interior and Exterior Observations

Hazardous Substances and Petroleum Products in Connection with Identified Uses.

No hazardous substances and petroleum products were observed or reported.

Power Generators

No power generators were observed or reported.

Storage Tanks

No storage tanks were observed or reported.

Drums

No drums were observed or reported.

Pools of Liquid

During the site reconnaissance, no standing surface water, pools, or sumps containing liquids likely to be hazardous substances or petroleum products were observed.

Odors

No potent, pungent, or noxious odors were identified at the subject property and its surroundings.

Unidentified Substance Containers

During the site reconnaissance, no unidentified substance containers were observed at the subject property.

Hazardous Substance and Petroleum Products Containers (Not Necessarily in Connection with Identified Uses)

During the site reconnaissance, no hazardous substances or petroleum products were found in the containers.

Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, we identified no visual indications of equipment likely to contain PCBs.

Interior Observations:

Heating/Cooling

The subject property is a vacant, undeveloped land with no recorded commercial use.

Stains or Corrosion

During the site reconnaissance, no corroded or stained metal containers were observed at the subject property.

Drains and Sumps

During the site reconnaissance, no drains or sumps systems were observed at the subject property.

Exterior Observations:

Pits, Ponds, or Lagoons

During the site reconnaissance, no pits, ponds, or lagoons were observed at the subject property.

Solid Waste

No trash, construction debris, demolition debris, or other solid waste disposal mounds

or depressions suggesting trash or other solid waste disposal were observed at the subject property.

Stained Soil or Pavement

During the reconnaissance, no stained soil or pavement was observed at the subject property.

Stressed Vegetation

No stressed vegetation was observed at the subject property during the reconnaissance.

Wastewater

No wastewater or discharge into a drain, ditch, underground injection system, or stream on or adjacent to the subject property was observed at the subject property during the site reconnaissance.

Wells

During the site reconnaissance, no dry, irrigation, injection, abandoned, or other wells were observed at the subject property.

Septic Systems

No on-site septic system was observed at the subject property during the reconnaissance.

4.9 Vapor Encroachment Screen (VES)

This Phase I ESA included an initial Vapor Encroachment Screening (VES). An initial Vapor Encroachment Screening (VES) is intended to determine if a Vapor Encroachment Condition (VEC) is identified for the Target Property TP (that is, the presence or likely presence of Chemicals of Concern (COC) vapors in the subsurface of the TP caused by the release of vapors from contaminated soil and groundwater either on or near the TP as identified by the Tier 1 procedure of ASTM E2600-22.

The following table summarizes the results of the Tier 1 Vapor Encroachment screening performed at the subject property.

Sources of COC	Location	*AOC (m)*	*Distance from TP (m)*	*LUST List*	*VEC*
Gulf Humacao UST: 2-861369	Rd. PR-3, Cataño Ward, Humacao, PR	528	Adjoining	Yes (July 15, 2005)	Not Likely

Note: The above table refers to sources of Petroleum Hydrocarbon COCs. No other source of volatile/semi-volatile hazardous COCs was identified in the proposed Area of Concern.

5.0 RECORDS SEARCH REVIEWS

5.1 Standard Environmental Records Sources

There was no evidence of a REC to the subject property while reviewing standard environmental records sources.

Superfund CERCLIS List

Information from the EPA Superfund CERCLIS List was reviewed on November 15, 2023, and included in Appendix II. No facilities were identified in this database under the specified search criteria. There were no Superfund facilities within 0.5 miles of the subject property, and no NPL Superfund facilities were identified within 1 mile. Refer to Appendix I.

Enforcement and Compliance History (ECHO)

Information from ECHO was reviewed on November 15, 2023, and included in Appendix II. Fifty-six (56) facilities were identified in this database under the specified search parameters. The "El Coqui" landfill, which adjoins the subject property on one of its northern boundaries, has no current violations listed. None of the listed facilities represent a risk of human exposure to contamination and migration of contaminated groundwater from or to the Subject Property. Neither the subject nor any adjoining properties are on this list.

EPA National Priority List (NPL)

Information from the EPA NPI list was reviewed on November 15, 2023. No facilities were identified in the municipality of Humacao under the specified search criteria. Refer to Appendix III.

EPA Toxic Release Inventory (TRI)

Information from the EPA Toxic Release Inventory (TRI) facilities information system was reviewed on November 15, 2023. No facilities were identified in this database under the specified search criteria. Refer to Appendix IV.

Resource Conservation and Recovery (RCRA)

Information from the EPA RCRA database was reviewed on November 15, 2023. Twenty-three (23) facilities were identified in the municipality of Humacao under the specified search criteria. None of the listed facilities represent a risk of human exposure to contamination and migration of contaminated groundwater from or to the Subject Property. Neither the subject nor any adjoining properties are on this list. The RCRA CORRACTS database was also reviewed on November 15, 2023. Two facilities were identified in the municipality of Humacao under the search criteria. CTS Group did not identify any CORRACTS site within 1 mile of the subject property as recommended by the governing standard. The listed CORRACT facilities do not represent a risk of human exposure to contamination and migration of contaminated groundwater from or to the Subject Property. Neither the subject nor any adjoining properties are on this list. Refer to Appendix V.

EPA List of Brownfield Grant Information

Information was obtained using the EPA data information system on November 15, 2023. Two (2) jurisdictions were identified in the municipality of Humacao under the specified search criteria. CTS Group did not identify any CORRACTS site within 1 mile of the subject property as recommended by the governing standard. None of the listed facilities represent a risk of human exposure to contamination and migration of contaminated groundwater from or to the Subject Property. Neither the subject nor any adjoining properties are on this list. Refer to Appendix VI.

EPA Safe Drinking Water Information System (SDWIS)

Information from the EPA Safe Drinking Water Information System Database was reviewed on November 15, 2023. Two (2) facilities are listed under the specified search area. None of the listed facilities represent a risk of human exposure to contamination and migration of contaminated groundwater from or to the subject property. Refer to Appendix VII.

5.2 Regulatory Agency File and Records Review

The service station adjoining the subject site on its northeastern boundary is listed as a LUST facility with the PR DNER. Therefore, regulatory files and records associated with the site must be reviewed. Otherwise, this finding represents a REC in connection with the subject property.

5.3 Additional Environmental Records Sources

Department of Natural Resources and Environment (DRNA) & US Geological Survey (USGS)

According to the DRNA and the USGS, no public supply wells or agricultural wells exist within the subject property or any of the adjoining properties. According to the USGS Groundwater Monitoring Network, no active USGS are Monitoring Wells in the municipality of Humacao under the specified search criteria. Refer to Appendix VIII.

EQB List of Registered Petroleum Storage Tanks

CTS Group, Inc. identified a gasoline service station adjoining the subject property on the northeastern boundary. The service station is registered with the Puerto Rico Department of Natural and Environmental Resources as follows:

Facility Name	UST ID	LUST (Reported)	Facility Location	Distance from SP (ft)
Gulf Humacao	2-860352	Yes (March 16, 1999)	Rd. PR-3, Km. 83.9, Cataño Ward, Humacao, PR.	Adjoining

The PR DNER recorded the UST 2-860352 site as a LUST on March 16, 1999. The service station operates under the Gulf brand and has operated other generic brands and administrations. The release was reported during a UST removal, and while recorded, it did not merit a response from the regulating agencies, and the incident is not listed in any of the researched EPA's databases. The bureaucracy and the need for more personnel in government agencies often delay the record-keeping process, resulting in the site being listed for several decades, even after the agency issues operating permits for that location. The issuance of an operating license for a service station requires the station involved to follow state and federal guidelines and regulations governing the operation of a UST facility. The reported release of petroleum products recorded over 24 years ago does not represent a risk of human exposure to contamination and migration of contaminated groundwater into the subject property or any of the adjoining properties. During a UST removal, minor releases that do not merit a response from the regulating agencies tend to fade due to natural attenuation, which happens over time. The site is not a Superfund Site and has not been identified in the EPA National Priorities List, indicating that natural attenuation has or will likely occur over time. Appendix IX of this report lists all the registered petroleum USTs and leaking petroleum USTs in the Municipality of Humacao. None of the listed facilities represent a risk of human exposure to contamination and migration of contaminated groundwater from or to the subject property. Neither the subject nor any adjoining properties are on this list.

5.4 Physical Setting Source

Physical Setting Sources were obtained from the USGS and the US Department of Agriculture and visits to the subject property and its vicinity.

General Site Settings

Humacao is located on the island's east end and is part of the eastern coastal valleys. The municipalities of Naguabo border it on the north, Yabucoa on the south, and Las Piedras on the west and east by the Vieques Passage. Agricultural production is high because of Humacao's alluvial soil. The lowlands are located near the coast and are mainly used for coconut farming. Most of Humacao's territory is flat and generally does not rise more than 100 meters (328 feet) above sea level. Elevated points in the southwest area of the municipality include Mount Candelero, at 656 feet (Candelero Arriba ward), and Mount Mabú, at 853 feet (Mabú and Collores wards) in the northeast region. Humacao's hydrographic system includes the Antón Ruiz, Humacao, and Candelero rivers and the Frontera brook, all of which flow into the Vieques Passage. The Antón Ruiz River, 13.4 kilometers (8.4 miles) long, springs from Collores ward, and its tributaries include Collores, Mambiche, Tinajera, and Las Mulas. The Humacao River runs from Montones de Las Piedras ward and is 27 kilometers (17 miles) long. Its tributaries are the El Inglés, Obispo, Mariana, and Humacao brooks. The Candelero River springs from Candelario Arriba ward and is approximately 7 kilometers (4.3 miles) long. The geology of the Naguabo-Maunabo region is described in terms of two basic lithologic types: the Eocene to lower Cretaceous plutonic and volcanic bedrock outcropping in the mountains and underlying the alluvial deposits in the valleys and the Holocene and Pleistocene age alluvial deposits filling the valleys. Small areas of swamp and beach deposits are associated with coastal alluvial deposits. The plutonic rocks are mostly granodiorite and quartz diorite of the San Lorenzo Batholith, frequently veined with calcite. The volcanic bedrock is a mixture of medium- to thick-bedded volcaniclastic tuff, breccia, sandstone, conglomerate, and andesitic lava flows. Much of the volcanic rock was deposited in the sea and, during quiescent conditions, was interbedded with limestone (McGonigle, 1978 and 1979; Rogers and others, 1979). The alluvial deposits are composed of poorly sorted clay, silt, and sand. In the Humacao-Naguabo basin, the alluvial deposits range in thickness from near zero at the bedrock-alluvium contact to more than 160 feet near the coast (Graves, 1989, p. 15). The maximum thickness of the alluvium in the Yabucoa basin is unknown but probably exceeds 180 feet (Anders, 1971, p. 15). Anders reported clean sand beds as thick as 50 feet in this area (1971, p.15). In the Maunabo basin, the alluvial deposits are estimated to be as much as 200 feet thick (Adolphson and others, 1977, p. 5).

General Hydrogeology

The principal aquifers in the Naguabo-Maunabo region are in the alluvial deposits that fill the valleys. These aquifers are under water-table conditions but are influenced by the delayed yield of water from clay beds present within them and by anisotropy characterized by a horizontal component of hydraulic conductivity that is several times larger than the vertical component. These aquifers may range in thickness from near zero at the bedrock-alluvium contact to 200 feet near the coast and toward the central part of the valleys. The aquifers in the fractured volcanic and plutonic rocks are discussed only briefly in this report because of their meager yields, although locally, they may represent an important water source. Based on data from Anders (1971), Adolphson and others (1977), and Graves (1989), the hydraulic conductivity of the bedrock and the alluvial bedrock contact area is estimated at five ft/d throughout the region. The average hydraulic conductivity for the alluvial deposits is estimated at ten ft/d. Observed alluvium hydraulic conductivity differences result from aerial and vertical variability in sediment particle size. In addition, hydraulic conductivity values along the major rivers are usually high. Within the Humacao-Naguabo basin, a minor increase in hydraulic conductivity to 20 ft/d is observed along the Río Humacao, Río Blanco, Río Santiago, and the lower part of the Río Antón Ruiz. In the Yabucoa basin, hydraulic conductivity is about 20 ft/d along the significant streams (Río Guayanés and Río del Ingenio). Along the Maunabo basin, hydraulic conductivity averages 100 ft/day (Adolphson and others, 1977). Along the major tributaries to the Río Maunabo and other streams in the Maunabo basin, hydraulic conductivity ranges from 50 to 75 ft/d—apparent transmissivity values within the Humacao-Naguabo basin range from 600 to 2,000 ft2/d (Graves, 1989). In the Yabucoa basin, apparent transmissivity can be as high as 7,000 ft2/d. Transmissivity values as high as 20,000 ft2/d were calculated for areas adjacent to the Río Maunabo due to large hydraulic conductivity values.

Groundwater Levels and movements

Groundwater levels in the plutonic and volcanic rocks in the mountains and uplands follow the topography. The water-table surface lies within 50 to 100 feet below the land surface in the ridges and at or near the land surface in the valleys. Ground-water discharge from the plutonic and volcanic rocks maintains stream base flow in the mountain and upland areas. The contribution of groundwater from the volcanic and plutonic rocks to the alluvial aquifers is relatively tiny compared to the total groundwater in the valleys. Water levels within the alluvial aquifers of the Naguabo-Maunabo region vary from 100 feet above mean sea level near the bedrock-alluvium contact to near mean sea level in coastal areas. Although the water table fluctuates seasonally due to rainfall, pumpage has caused significant overall declines in the

Yabucoa and Maunabo basins. The water table is generally at its lowest elevation during the dry months of March and April and at its highest elevation in September. Groundwater in the alluvial aquifers flows east in the Humacao-Naguabo and Yabucoa basins and southeast in the Maunabo basin towards the coast. Groundwater may flow toward or away from streams, depending on the hydraulic gradient between the stream and the adjacent aquifer. Within the Humacao-Naguabo basin, a considerable amount of groundwater discharges to the rivers in the upper reaches of the alluvial valleys, whereas in the lower reaches, the alluvial aquifer is recharged by streamflow losses (Graves, 1989, p. 20). In the lower-most reaches, swampy areas and lagoons serve as aquifer discharge zones (Graves, 1989, p. 48). In contrast, rivers in the Yabucoa and Maunabo alluvial valleys drain the alluvial aquifer. According to the water budget presented by Anders (1971, p. 38) and Adolphson and others (1977, p. 17), discharge from the alluvial aquifers into the streams represents 27 and 50 percent of the annual river flow in Yabucoa and Maunabo basins, respectively.

5.5 Historical Use of the Property

The subject property is a vacant, undeveloped land with no recorded commercial use.

5.6 Use of Properties in Surrounding Area

Current uses in the subject property's neighborhood are primarily residential, with some commercial, industrial, and institutional facilities.

5.7 Standard Historical Sources

Aerial Photographs

Aerial photographs were obtained using the Google Professional Server. The images taken from an aerial platform had sufficient resolution to identify the development and activities of areas encompassing the subject property. The reviewed material included images from the past 20 years. The review of the aerial photography does not provide any evidence of potential RECs in connection with the subject property.

Fire Insurance Maps

No fire insurance map was reviewed as part of this investigation. Sanborn Maps are not available for Puerto Rico.

Property Tax Files

No property tax files were reviewed as part of this Phase I ESA.

Recorded Land Title Records

No land title records were reviewed as part of this Phase I ESA.

USGS Topographic Maps

The USGS Topographic Map of the subject property vicinity was reviewed. Besides the commercial use listed under sections 4.5 and 4.6, no additional commercial use was identified with the subject property or any adjoining properties. Refer to Appendix A.

Local Street Directories

Local street directories were not available for the subject property vicinity.

Building Department Records

No building department records were reviewed as part of this assessment.

Zoning/Land Use Records

The Puerto Rico Land Use Plan, Municipal Ordinance Plans, several overlaid special district plans, and the corresponding applicable regulations and guidelines regulate land use in Puerto Rico. Based on the information obtained by reviewing Humacao's Zoning Ordinance Map 304, dated October 30, 2010, and Map 329, dated September 25, 2011, the subject property is located within an "R-I" (Residential One) and "SRC" (Common Rustic Land) zoning districts.

The environmental professional, however, is not qualified to determine zoning compliance for the identified use of the subject property. The subject property is assumed to be free of zoning compliance violations that might affect its intended use, and no liability or responsibility is assumed in this respect. A zoning compliance assessment is beyond the scope of this Phase I ESA.

Prior Environmental Assessment

No prior environmental assessments were reviewed as part of this Phase I ESA.

Other Historical Sources

No other historical sources were reviewed as part of this Phase I ESA.

6.0 INTERVIEWS AND QUESTIONNAIRES

6.1 User/client questionnaire

Refer to Appendix X for a copy of the client/user questionnaire.

6.2 Past owners and past occupants Questionnaire

The subject property's past owners (before development) were not available to be interviewed.

6.3 Present owner and site manager interview

Date of Interview: November 15, 2023

Name: Mrs. Elvelisse Figueroa

Title: Acting Owner Representative

Environmental Questionnaire

(1.) Environmental cleanup liens filed or recorded against the site (40 CFR 312.25).

Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law?

Refer to Appendix X for a copy of the client/user questionnaire. No evidence of a REC to the subject property was identified in the User/Client Questionnaire.

The owner representative is unaware of any environmental cleanup liens against the property filed or recorded under federal, state, or local law.

(2) Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).

Are you aware of any AULs, such as engineering controls, land use restrictions, or institutional controls, in place at the site and have been filed or recorded in a registry under federal, tribal, state, or local law?

The owner representative is unaware of any AULs, such as engineering controls, land use restrictions, or institutional controls, that are in place at the site and have been filed or recorded in a registry.

***(3.) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR* 312.28).**

As a user of this ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

The owner representative has no specialized knowledge or experience related to the property or nearby properties.

(4.) Relationship of the purchase price to the property's fair market value if not contaminated (40 CFR 312.29).

Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

The owner representative did not provide any details regarding the current transaction.

(5.) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).

(a) Do you know the past uses of the property?

Undeveloped land with no commercial use on record.

b) Do you know of specific chemicals present or once present at the property?

The owner representative states that besides the information in section 4.8 of this report, he is unaware of any other specific chemicals present or once present at the subject property.

(c) Do you know of spills or other chemical releases that have taken place at the property?

The owner representative does not know of any spills or other chemical releases at the subject property.

(d) Do you know of any environmental cleanups that have taken place at the property?

The owner representative is not aware of any environmental cleanups that have taken place at the subject property.

(6.) The degree of obviousness of the presence or likely presence of contamination at the property and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the user of the ESA, based on your knowledge and experience related to the property, are there any indicators that point to the presence or likely presence of contamination at the property?

The owner representative does not know of any indicators that point to the presence or likely presence of contamination at the subject property.

6.4 Government Official(s) Interview (s)

CTS Group, Inc. contacted the Municipality of Humacao on November 14, 2023, to obtain information about the subject property. Mr. Jesus Rosa, director of the Office for Emergency Management, indicated no information on record connecting the subject and adjoining properties with any incident or violation that would result in a Recognized Environmental Condition. Mr. Jose Tolentino, the Public Works Department director, was also interviewed. Mr. Tolentino stated that there is no record in the Public Works Department connecting the subject property with any environmentally related incident or violation that would result in a potential risk to human health and contaminants at the subject property. Additionally, a review of the available documentation in the U.S. EPA and the PR Department of Natural and Environmental Resources' Underground Storage Tank Program in connection with the subject property yielded no information that would affect the professional opinion in this report.

CTS Group, Inc. sent a letter to the Puerto Rico Department of Environmental and Natural Resources on October 24, 2023, requesting information regarding any environmentally related incident or violation concerning the commercial operations of the subject property and the other businesses located in the subject property's immediate vicinity. In response to our request for information, the PR DNER Regional Office of Humacao sent us a communication from the desk of the office director, Mrs. Vanessa del Moral Rosario, on August 30, 2023, indicating that no records were found in his office connecting the subject property or any adjoining properties to any environmental impairments and that no violations were found in connection with the subject property or any of the adjoining properties. In reviewing the available documentation in the U.S. EPA (Record Search) and the PR Department of Natural and Environmental Resources' Underground Storage Tank Program (UST and LUST List) concerning the subject property, no information was found that would affect the professional opinion issued in this report.

7.0 OUT OF SCOPE SERVICES

Following are several non-scope considerations that the user may want to assess in connection with *commercial real estate*. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list of non-scope considerations is not intended to be all-inclusive:

Wetlands/Flood Plain

No evidence of wetlands was observed on the subject property. The vicinity surrounding the subject property was evaluated using the U.S. Fish and Wildlife Service Natural Wetland Inventory (NWI) map, and no wetlands were identified on the subject property. The current operations at the subject property are believed to cause no adverse impact on the off-site wetlands identified on the NWI map. Appendix A of this report includes a copy of the National Wetland Inventory for the subject property vicinity issued by the U.S. Fish and Wildlife Service. According to the Federal Emergency Management Agency Advisory Map for Humacao , Puerto Rico Panel No. 72000C1805J, dated April 13, 2018, the subject property has been placed under Zone X, defined as an area of minimal flood hazard . The environmental professional , however , is not qualified to determine the flooding conditions of the subject property . The subject property is assumed to be free of adverse floodable conditions that might affect its intended development , and no liability or responsibility is assumed in this respect . Further analysis of the flood insurance or flood certification is beyond the scope of this Phase I ESA.

Endangered Species

Under the Endangered Species Act, the government protects endangered and threatened plants and animals (listed species) and their habitats. The presence of listed species can restrict the use of the property to ensure that the proposed or current activities do not adversely affect endangered or threatened species and their critical habitats. Based on limited reviewed information, CTS Group, Inc. did not identify any record of threatened or endangered species in the subject property or immediate vicinity that may be affected by the current operations at the subject property.

Lead-Based Paint

The Consumer Product Safety Commission (CPSC) prohibited using lead in paint for residential use in 1978 in concentrations greater than 0.06 percent lead by weight. Since CERCLA authorizes EPA to address releases of hazardous substances into the environment, the agency has limited authority to use the federal Superfund program to address exposure from building interior lead-based paint (“LBP”). In limited circumstances, EPA may use its CERCLA authority to conduct response actions for soils contaminated by a release of lead-contaminated paint from building exteriors that pose a lead hazard and to prevent recontamination of soils that have been remediated. CTS Group, Inc. did not perform a Lead-based Paint inspection at the subject property.

Asbestos Containing Building Materials (ACBM's)

National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations require sampling potential ACBM before demolition or extensive renovation, regardless of the date of construction; therefore, if such activities are planned, it may be necessary to conduct a survey of the entire facility, or that portion slated for renovation or demolition, before initiating such destructive activities. That survey should include assessing all subject building materials, including those in normally inaccessible areas. Any material found to be ACBM should be handled according to applicable regulations. CTS Group, Inc. did not perform an Asbestos Containing Materials inspection at the subject property.

Microbial Contamination (Mold)

A comprehensive mold survey was beyond the scope of this Phase I ESA; however, during the assessment, no visual evidence of active water or mold damage was observed in the areas inspected by CTS Group, Inc.

Radon

Radon gas is a product of the decay series that begins with uranium. Radon is produced directly from radium, commonly found in bedrock containing black shale and granite. Radon gas can migrate through the ground and enter buildings through porous concrete or fractures. Radon tends to accumulate in poorly ventilated basements. Long-term radon exposure has been associated with lung cancer. The EPA Map of Radon Zones does not provide a map for Puerto Rico. Performing Radon monitoring and sampling is not required to give a professional opinion under the ASTM E1527-21 Standard.

Lead in Drinking Water

CTS Group, Inc. researched information about the source and the regulatory compliance of the drinking water supplied to the subject property. The subject property receives drinking water from the Puerto Rico Aqueduct and Sewer Authority (PRASA). According to the PRASA's website, 100 % of its water is tested before it enters the distribution system. The water supplied to the subject property's vicinity meets federal and state drinking water standards.

Indoor Air Quality

Indoor pollution sources that release gases or particles into the air are the primary cause of indoor air quality problems in homes. Inadequate ventilation can increase indoor pollutant levels by not bringing in enough outdoor air to dilute emissions from indoor

sources and not carrying indoor air pollutants out of the home. High temperature and humidity levels can also increase concentrations of some contaminants. CTS Group, Inc. did not monitor indoor air quality at the subject property.

Noise Pollution

A Noise Survey was not performed as part of this Phase I ESA, and the environmental professional was not provided with information on whether one was conducted at the premises.

8.0 FINDINGS & OPINION

The site reconnaissance of the subject property surroundings yielded the following results:

- There is no evidence of oily films in standing water.
- There is no evidence of discolored and oil-stained floors.
- There is no evidence of discarded chemical containers.
- There is no evidence of waste pipes or buried waste.
- There is no evidence of distressed vegetation.
- There is no presence of unusual odors.
- There is no evidence of a LUST Facility at the subject property

This assessment revealed no Recognized Environmental Condition (REC) associated with the subject property.

This assessment revealed no Controlled Recognized Environmental Conditions (CRECs) were associated with the subject property.

This assessment revealed no Historical Recognized Environmental Conditions (HRECs) were associated with the subject property.

This assessment revealed no De *Minimis Condition was* associated with the subject property.

9.0 SIGNIFICANT DATA GAPS

In this Phase I, ESA did not identify RECs in connection with the subject property or evidence of any potentially significant environmental concern. Therefore, further investigative work at the subject property is optional to satisfy All Appropriate Inquiries. CTS Group, Inc. identified a data failure while conducting the Phase I ESA at the subject property, as the available Standard Historical Sources only go back to 2004. The data failure mentioned above does not represent a significant data gap

since CTS Group, Inc. did not identify any source of environmental impairments in connection with the subject property before 2004 based not only on the available historical records review but also on the commonly known or reasonably ascertainable information regarding the subject property's immediate vicinity. Except for the limitations and exceptions discussed in Section 2.4, this Phase I ESA complies with the ASTM Standard E1527-21.

10.0 ADDITIONAL INVESTIGATIONS

In this Phase I ESA, CTS Group did not identify RECs in connection with the subject property or evidence of any potentially significant environmental concern. Therefore, further investigative work at the subject property is optional to satisfy All Appropriate Inquiries.

11.0 CONCLUSIONS

We have performed a Phase I ESA conformance with the scope and limitations of ASTM Practice E1527-21 of undeveloped land at Road PR-3, Km 33.7, Cataño Ward, Humacao, Puerto Rico. (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. Any exceptions to, or deletions from, this practice are described in Section 13.0 of this report. This report's Findings, Opinions, and Conclusion sections are based on sections 12.5, 12.6, and 12.8 of ASTM E E1527-21, respectively.

12.0 ENVIRONMENTAL PROFESSIONAL STATEMENT & SIGNATURE

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 specific qualifications based on education, training, and experience to assess a *property* of the subject property's nature, history, and setting. I have developed and performed all appropriate inquiries conforming to 40 CFR Part 312 standards and practices.

Ihosvany Negret Lapeira, MS, ME.
Lead Environmental Consultant
CTS Group Inc.
San Juan, PR

13.0 REFERENCES

ASTM Standards:

1. *ASTME1527-21 Standard Practice for Environmental Site Assessments Phase I*
2. *E2091 Guide for the Use of Activity and Use Limitations, Including Institutional and Engineering Controls*
3. *E2600 Guide for Vapor Encroachment Screening on Property*
4. *Involved in Real Estate Transactions*

Federal Statutes:

1. *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA" or "Superfund"), as amended by the Superfund Amendments and Reauthorization Act of 1986 ("SARA") and Small Business Liability Relief and Brownfields Revitalization Act of 2002 ("Brownfields Amendments"), 42 U.S.C. §§9601 et seq.*
2. *Emergency Planning and Community Right-To-Know Act of 1986 ("EPCRA"), 42 U.S.C. §§11001 et seq.*
3. *Freedom of Information Act, 5 U.S.C. §552, as amended by Public Law No. 104-231, 110 Stat. 3048*
4. *Resource Conservation and Recovery Act (also referred to as the Solid Waste Disposal Act), as amended ("RCRA"), 42 U.S.C §6901 et seq.*

USEPA Documents:

1. *"All Appropriate Inquiries" Final Rule, 40 C.F.R. Part 312*
2. *Chapter 1 EPA, Subchapter J-Superfund, Emergency*

Appendix A
Site Photographs & Imagery

Site Photographs

SP – View from south - (11/2023)

SP – View from north - (11/2023)

SP – View from west - (11/2023)

SP – View from west (11/2023)

SP – View from north (Lot 2) - (11/2023)

Adjoining Properties

AP – North – (11/2023)

AP - North – (11/2023)

AP – El Coqui Landfill – North – (11/2023)

AP – South – (11/2023)

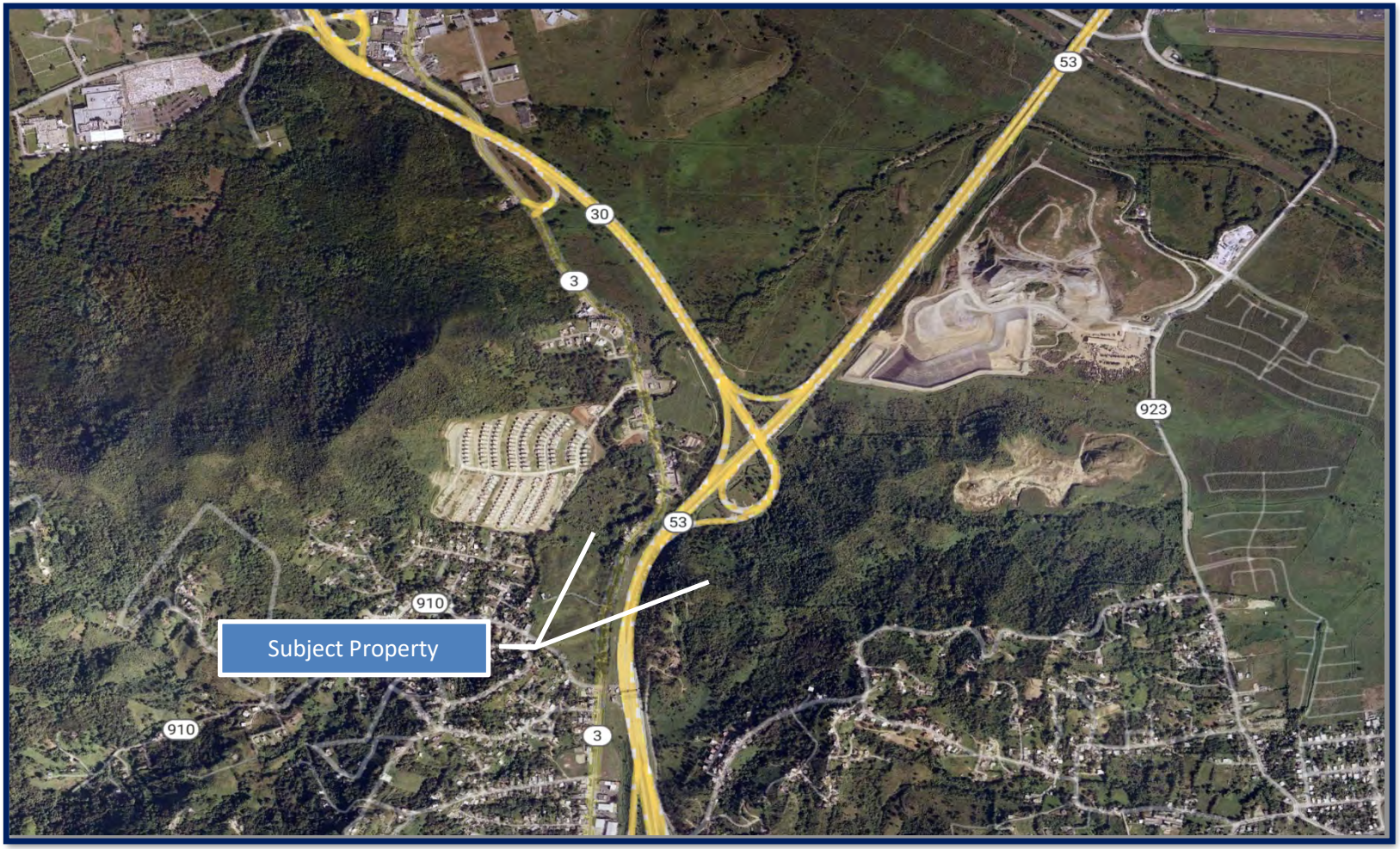
AP – South (Lot 2) - (11/2023)

AP – East - Gasoline S/S (11/2023)

AP – West - (11/2023)

AP - West – (11/2023)

Aerial Photographs



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SUBJECT PROPERTY VICINITY
AERIAL VIEW – 2004
GOOGLE EARTH

LADERAS DE PALMA – HUMACAO
ROAD PR-3 KM 33.7, CATAÑO WARD
HUMACAO, PUERTO RICO 00791.

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Subject Property Vicinity
Aerial View – 2006
Google Earth

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

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SUBJECT PROPERTY VICINITY
AERIAL VIEW – 2017
GOOGLE EARTH

LADERAS DE PALMA – HUMACAO
ROAD PR-3 KM 33.7, CATAÑO WARD
HUMACAO, PUERTO RICO 00791.

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Subject Property Vicinity
Aerial View – 2023
Google Earth

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

Subject Property Boundaries Map

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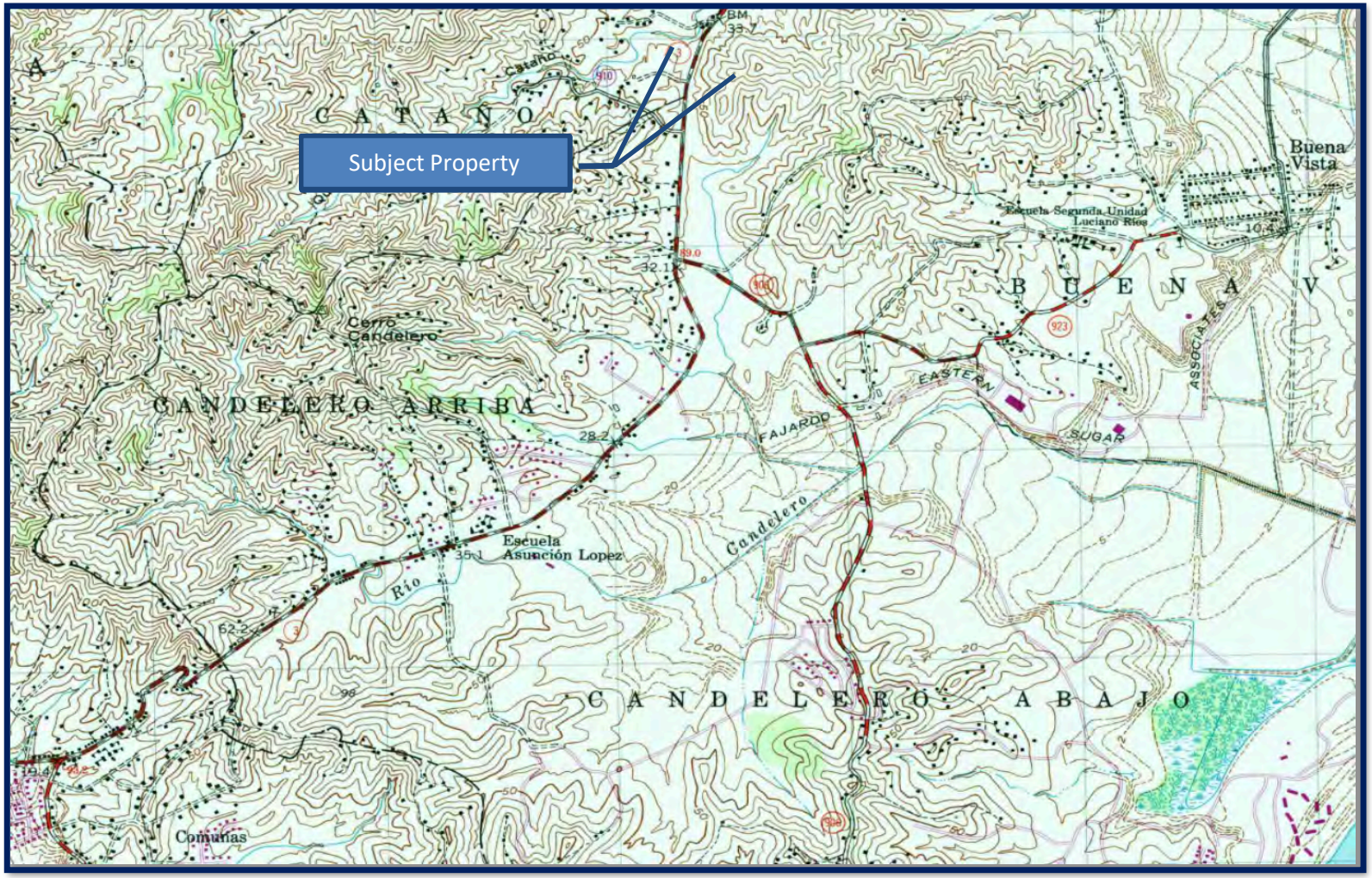
Subject Property Bundaries Map

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

Topographic Map

Subject Property Vicinity
Topographic View - 1946
Source: USGS

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.



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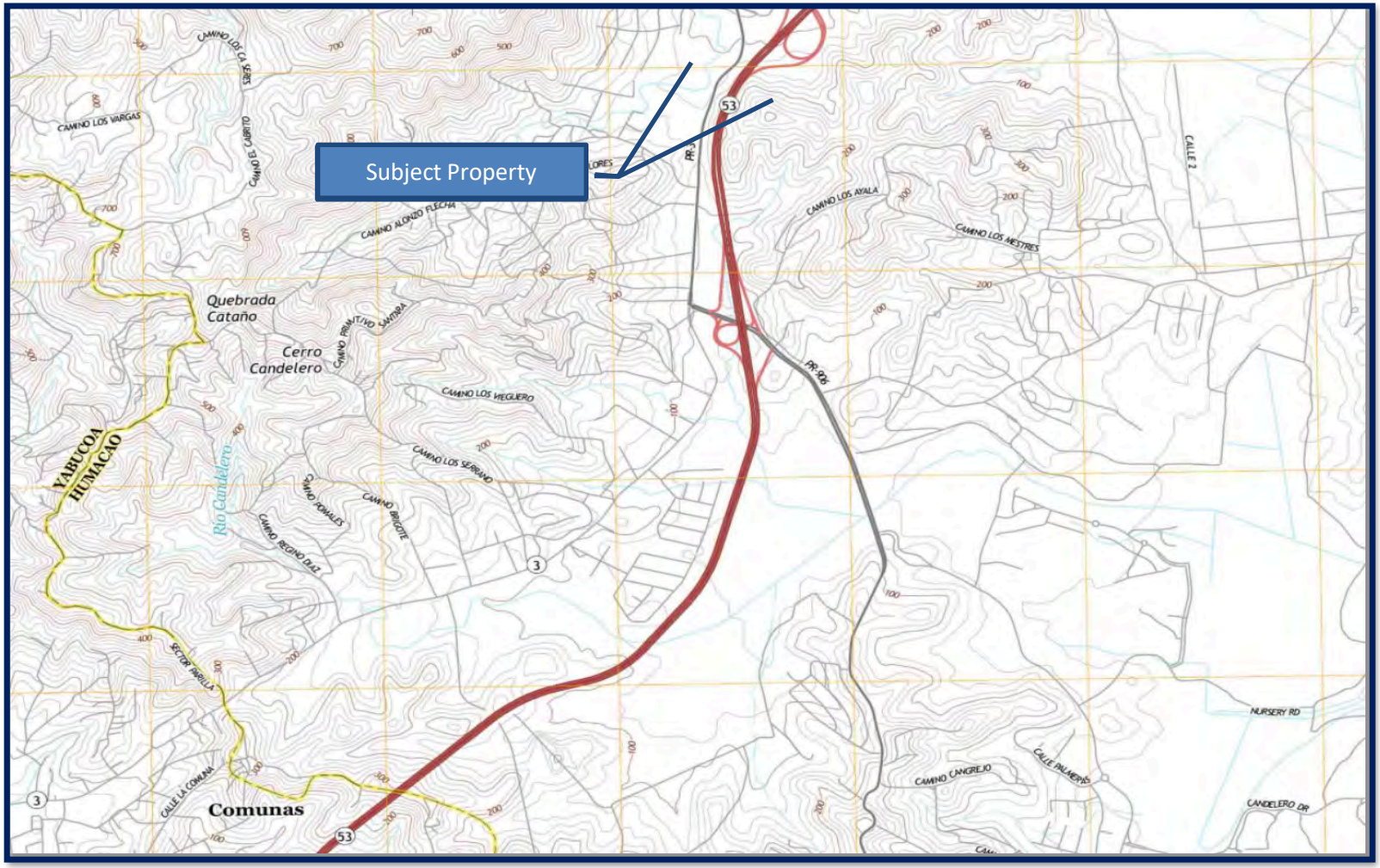
Subject Property Vicinity
Topographic View - 1960
Source: USGS

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.



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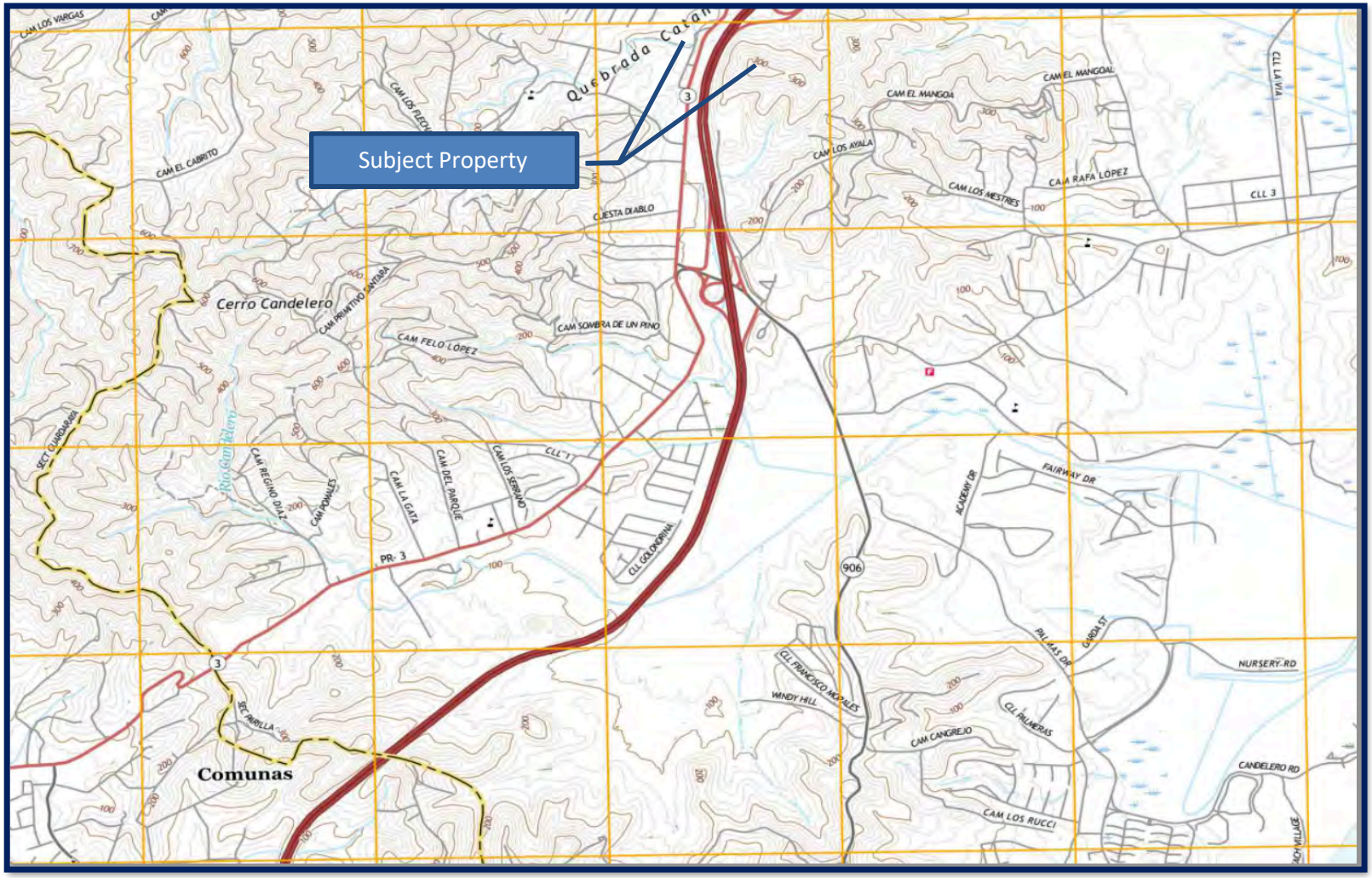
Subject Property Vicinity
Topographic View - 2013
Source: USGS

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.



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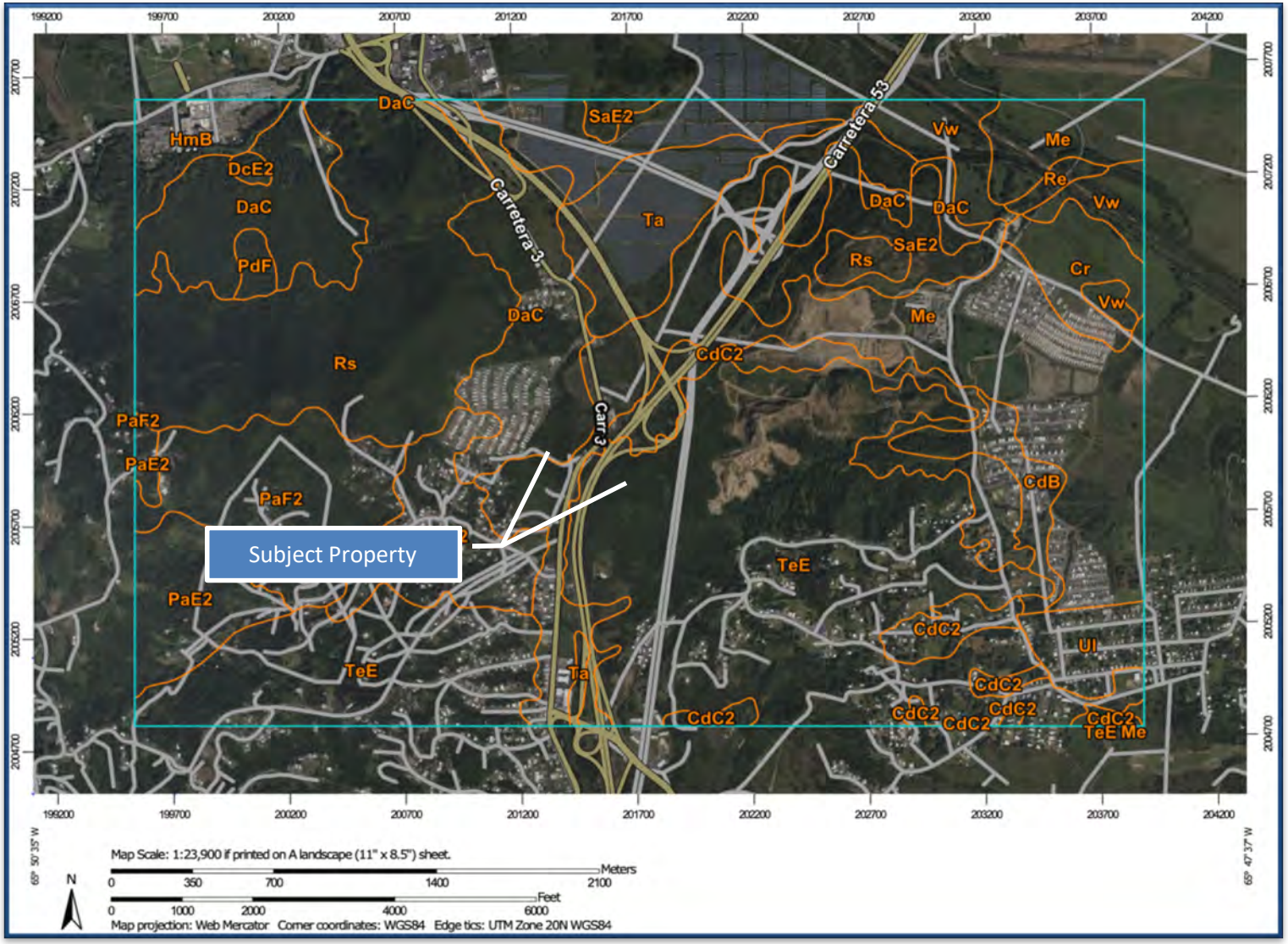
Subject Property Vicinity
Topographic View - 2018
Source: USGS

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

USDA Soil Map



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Subject Property Vicinity
Soil Map
Source: USDA

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

Property Tax ID Information

Ubicación	
Catastro	**329-000-005-61**
Coordenadas Nad83	x: 264856.9134, y: 231900.7495 (Lat: 18.12057893, Lon: -65.82050337) Ver: Google | Google Earth | OpenStreet | Temblores USGS| Waze
Area Aprox. (m.c.)	292426.4191
Municipio	Humacao
Barrio	Cataño (51.4%), Buena Vista (45.2%), Candelero Arriba (3.4%)
Características Ambientales	
Zona Inund. Advisory	X
Zona Inundabilidad (firm)	X
Panel Inundabilidad (advisory)	72000C1805J
Floodway	No ubica en floodway
Suelo (NRCS)	TeE (39.5%) , CdC2 (32.7%) , DaC (21.7%) , PaE2 (6.0%) , Me (0.2%)
Calificación y Clasificación de Suelo	
Calificación	Oficializacion del geodato en proceso, favor de referirse al mapa de calificacion vigente.
Clasificación PT	Oficializacion del geodato en proceso, favor de referirse al mapa de calificacion vigente.
Clasificación PUT	SU (60%) , SRC (40%)
Mapas de Calificación	Hoja: 329 de Humacao Mapa PUT
Distrito Sobrepuesto	
Zona Histórica	
Sitio Histórico	

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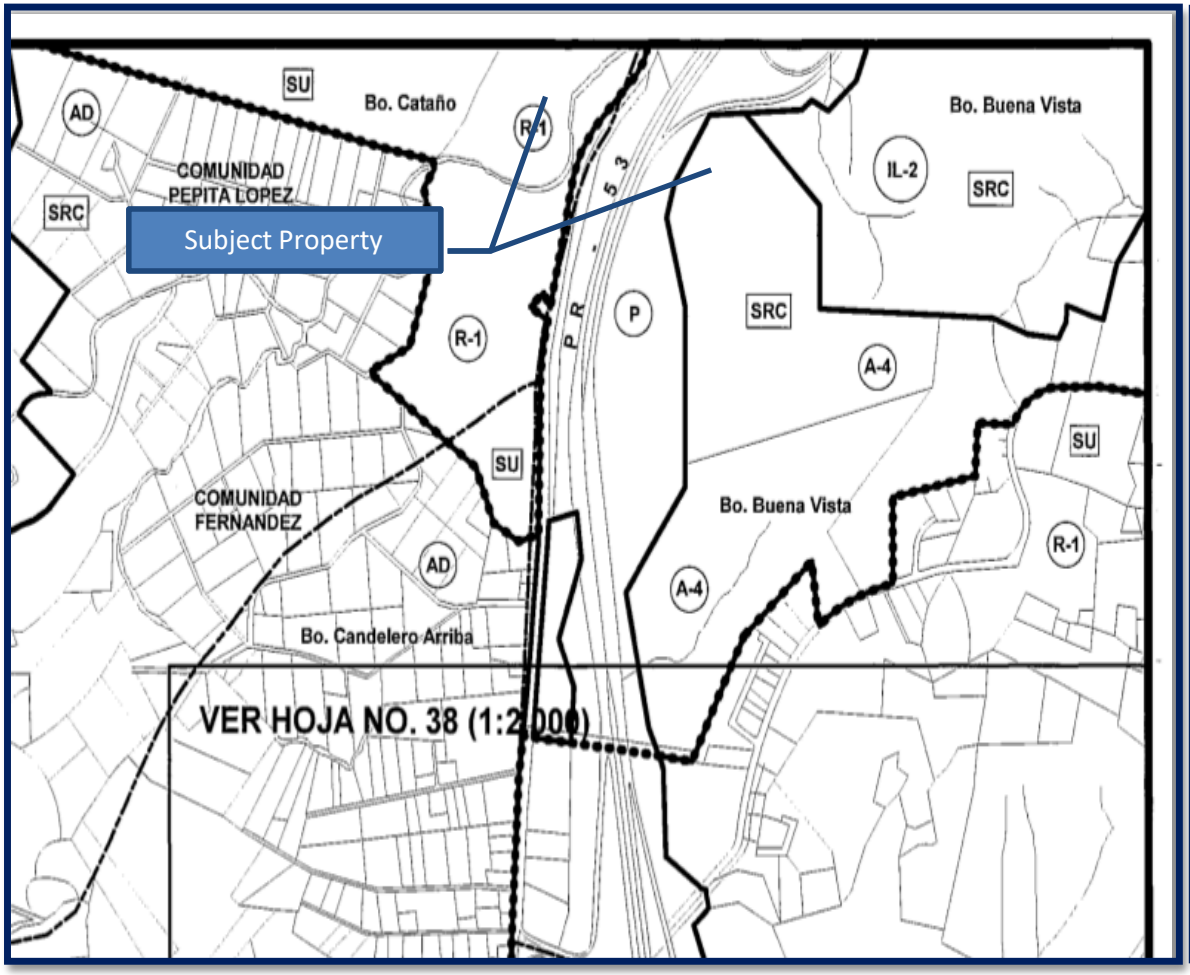
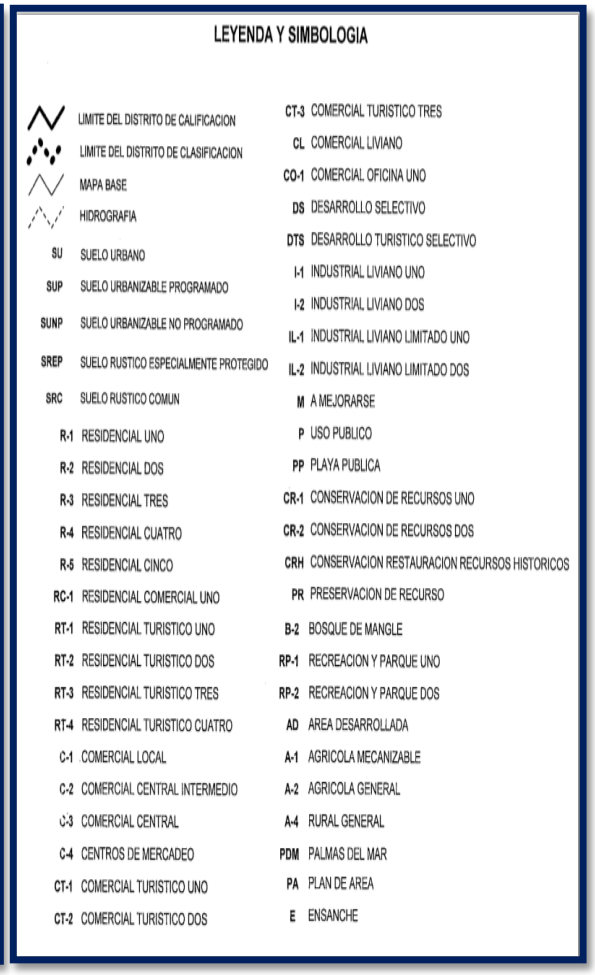
Property Tax ID Information
Source: PR Planning Board

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

Zoning Map





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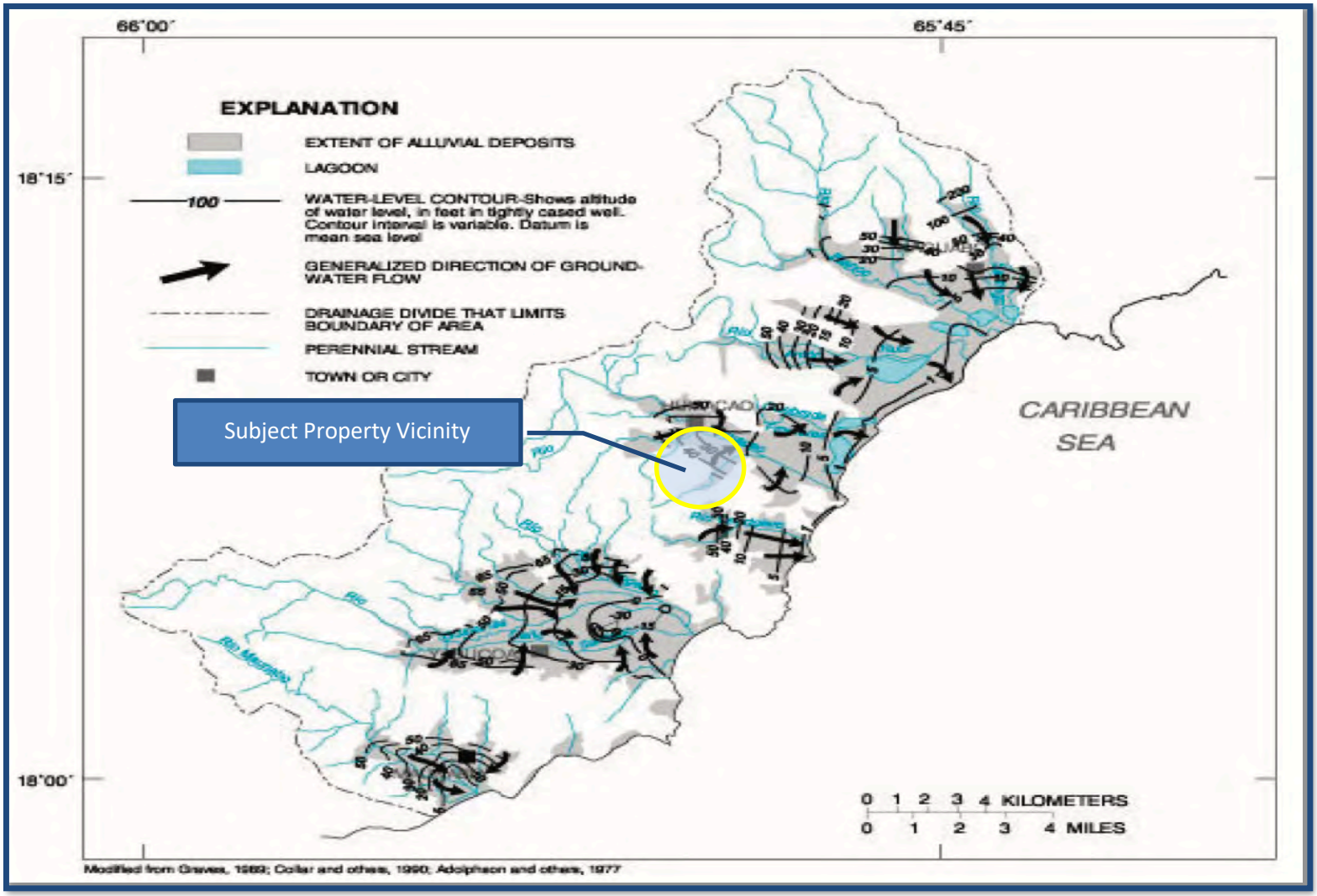
Subject Property Vicinity
Zoning Map
Source: Planning Board of PR

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

U.S. USGS

Vicinity Groundwater Movement



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Juana Diaz – Ponce Region
Ground-Water Movement
Source: Atlas of PR Ground-Water

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

U.S. Fish and Wildlife Service
National Wetland Inventory Map

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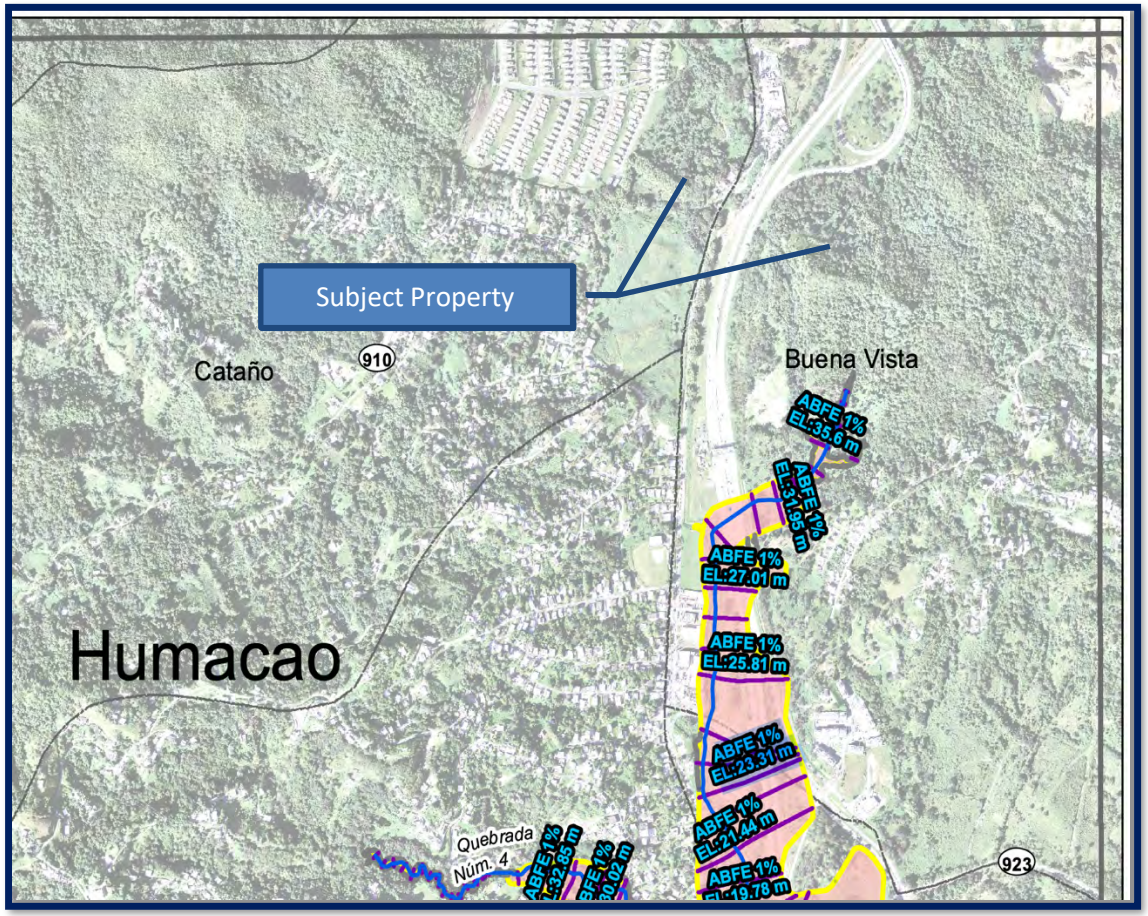
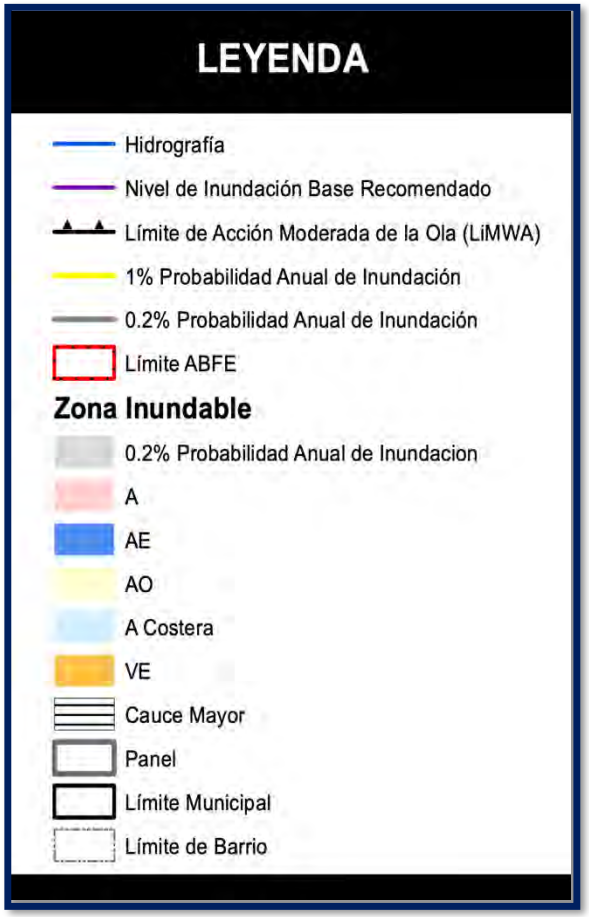
U.S. Fish & Wildlife Service
National Wetland Inventory
Map

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

U.S. FEMA
Puerto Rico Advisory Map





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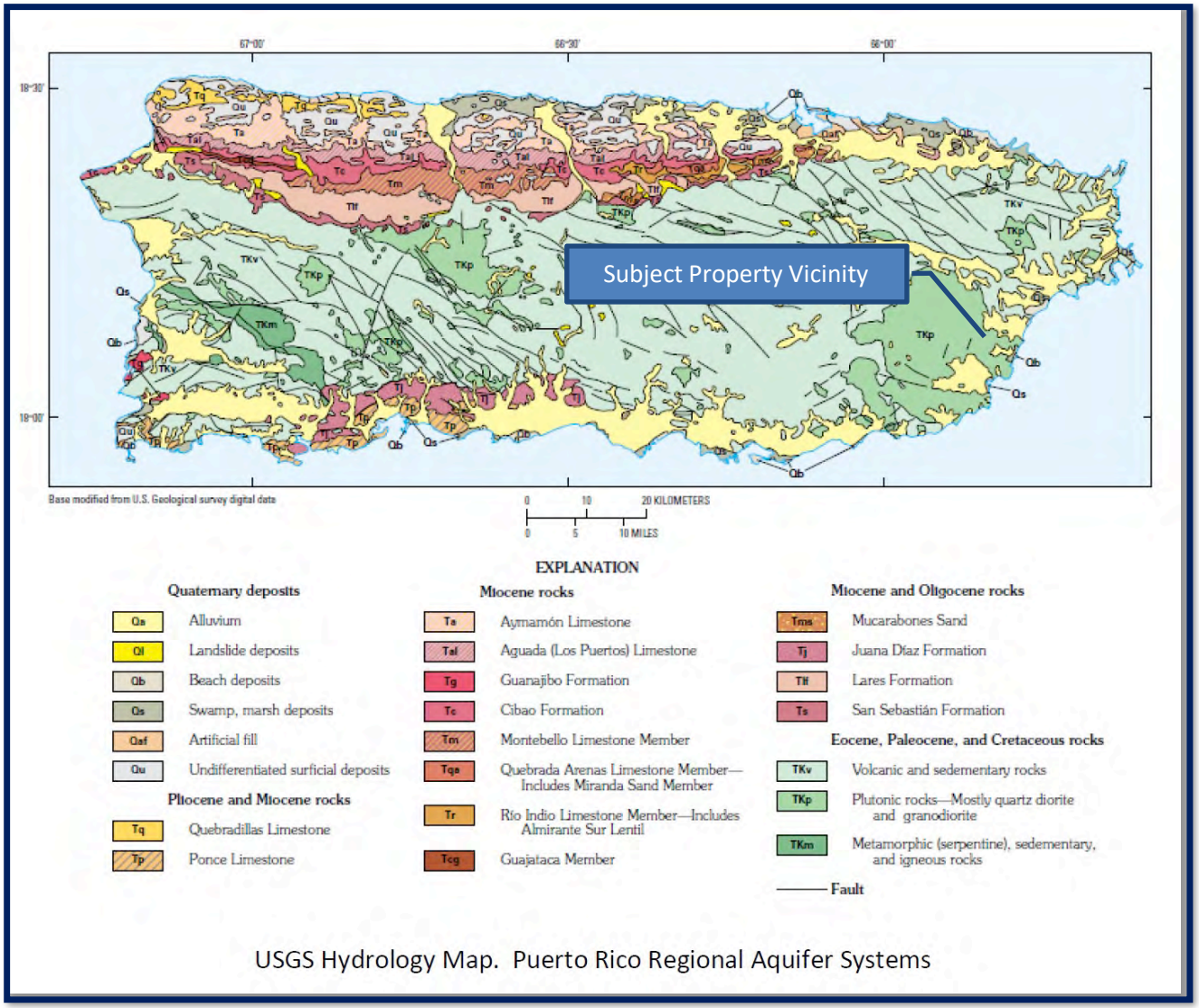
SUBJECT PROPERTY VICINITY
ADVISORY MAP# 72000C1805J
SOURCE: US FEMA

LADERAS DE PALMA – HUMACAO
ROAD PR-3 KM 33.7, CATAÑO WARD
HUMACAO, PUERTO RICO 00791.

USGS Geologic Map



USGS Hydrology Map. Puerto Rico Regional Aquifer Systems

N

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USGE Hydrology Map
Puerto Rico Regional Aquifer System
USGS Resources

Laderas de Palma – Humacao
Road PR-3 Km 33.7, Cataño Ward
Humacao, Puerto Rico 00791.

Appendix I
EPA Superfund CERCLIS List

Superfund Site Search Results

Found **0** site(s) that match your search criteria listed below.

Search Criteria:

Active, Archived, or All :	***Active***
City:	*HUMACAO*
State:	*Puerto Rico*
ZIP Code:	*00791*

To conduct another search, return to the **Search Superfund Site Information** page.

NOVEMBER 13, 2023

Appendix II
EPA Enforcement and Compliance History (ECHO)

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An official website of the United States government

Search EPA.gov

ECHO Enforcement and Compliance History Online

<https://echo.epa.gov/>

Search Options <https://epa.gov/> **Analyze Trends** <https://epa.gov/> **Find EPA Cases** <https://epa.gov/>

Data Services <https://epa.gov/> **Help** <https://epa.gov/>

Login Contact Us <https://epa.gov/resources/general-info/contact-us>

Facility Search Results

Missouri, Nebraska, North Carolina, Pennsylvania, Vermont, Washington, West Virginia, and Wisconsin are working with EPA to fix problems with their Clean Water Act violation data.

Read More...

Report Violation

<https://epa.gov/rep environmental-violat

Help

<https://epa.gov/help search/facility-search help>

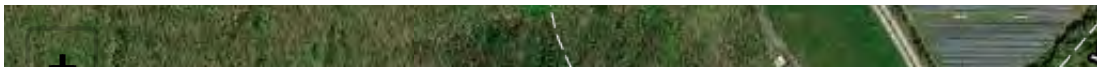
Map Legend **Basemap Options**

EJScreen Add EJ Summary Map Supplemental Indexes (US)

Zoom To: Enter city, state, and/or zip cod

Facility Summary

PALACIOS DEL MAR
CARR. 923 KM 1.5



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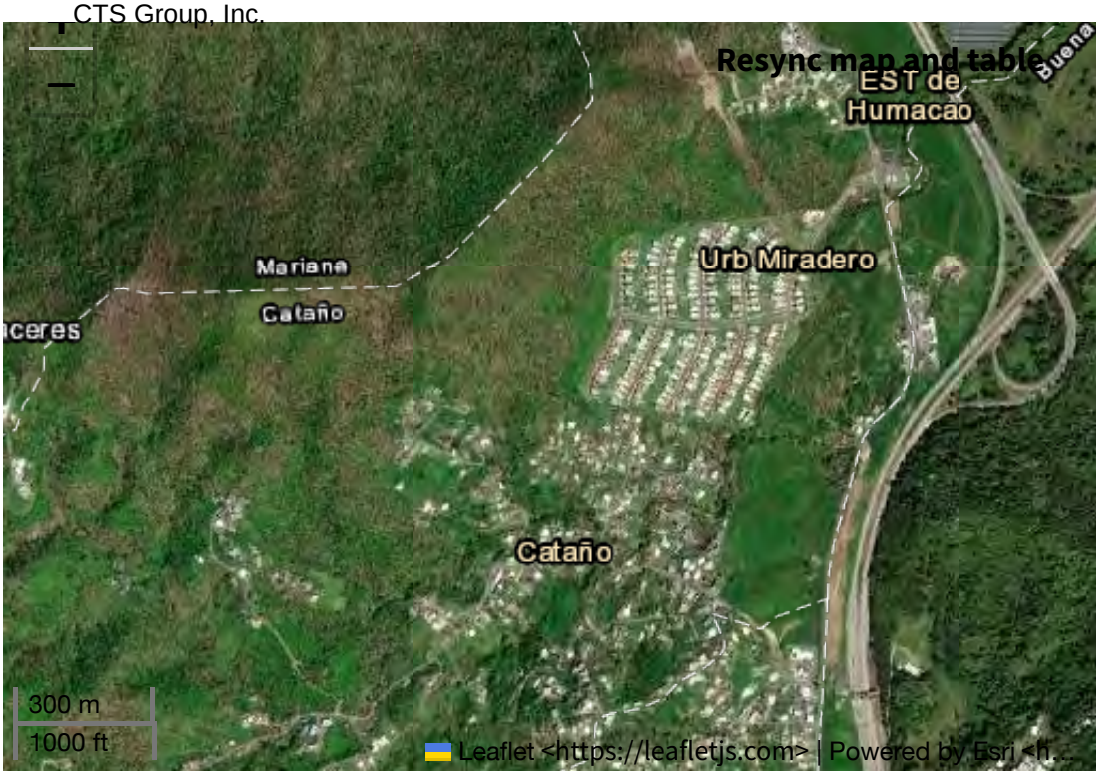

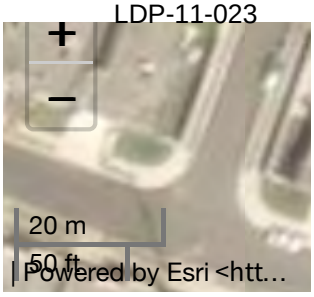

CAA	
CWA	No Violation Identified
RCRA	
SDWA	

Days Since Last Compliance Monitoring Activity: --
Date of Last Formal Enforcement Action: --
Last Penalty Amount: $--
More Facility Details

Customize Columns **Download Data** **Quick CSV Download**

Source Data <https://epa.gov/resources/echo-data/about-the-data>

Results Guide <https://epa.gov/help/facility-search/all-data-search-results-help#results>

Reports Legend <https://epa.gov/help/facility-search/search-results-reports-legend>

▼ Current Search

56 Facilities Found

Selected Criteria

Media Program: All Media Programs
State: Puerto Rico ✕
Active/Operating: Yes ✕
ZIP Code: 00791 ✕
City: Humacao ✕

Explore Enforcement and Compliance Criteria

☐ **4** Facilities with Current Violations
☐ **3** Facilities with Significant

Facility Name	Mapped	Street Address	City	State	ZIP
MEDTRONIC PR OPERATIONS CO. - HUMACAO BUILDING 2		DR. JOHN A SMITH, PARCEL #21	HUMACAO	PR	11006

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MICROSOFT OPERATIONS PUERTO RICO LLC		1200 DR JOHN A SMITH STREET	HUMACAO	PR	11007
MICROSOFT OPERATIONS PUERTO RICO LLC		PR-3 KM 82.5 CATANO IND PK	HUMACAO	PR	11000
MICROSOFT OPERATIONS PUERTO RICO, LLC.		1200 DR. JOHN A. SMITH ST.	HUMACAO	PR	11006
NATIONAL LABEL CO PR		RD 3 KM 76.9 STREET B	HUMACAO	PR	11000
NELIPAK PUERTO RICO		180 CALLE CACIQUE JUMACAO	HUMACAO	PR	11007
OUTLET CHINA HUMACAO		3 CALLE DRIVE VIDAL	HUMACAO	PR	11007
PALACIOS DEL MAR		CARR. 923 KM 1.5	HUMACAO	PR	11007
PALACIOS DEL MAR		CARR. PR-923, KM. 1.5, BUENA VISTA WARD	HUMACAO	PR	11007

Violations

- ☐ **8** Facilities with Violations (3 years)
- ☐ **2** Facilities with Formal Enforcement Actions (5 years)
- ☐ **0** Facilities with Informal Enforcement Actions (5 years)

Modify Search

▼ Filter Facilities

Not Filtering on 56 Facilities

- ☑ Only Show Matches

Facility Characteristics

Facility Type

- ☐ **4** Major
- ☐ **52** Non-Major

Facility Permit/ID

- ☐ **23** Has Water Permit (ICIS-NPDES)
- ☐ **8** Has ICIS-Air ID
- ☐ **32** Has RCRA ID
- ☐ **9** Has TRI Releases

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LDP-11-023

Enforcement and Compliance Characteristics

- [ ] **9** Facilities with Violations (1 or more quarters within the past 3 years)

1 2 3 4 5 6 7 8 9 10 11 12

Facilities with Formal Enforcement Actions (5 yrs)

- [ ] **2** Yes
- [ ] **54** No

1 2 3 4 5

Facilities with Informal Enforcement Actions (5 yrs)

- [ ] **0** Yes
- [ ] **56** No

1 2 3 4 5

Facilities with Compliance Monitoring Activities within Date Range

- [ ] **0** Yes
- [ ] **56** No

11/15/2C

11/15/2C

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Community

☐ **54** Facilities Located in Areas with Supplemental Indexes At or Above 80th Percentile (US)

◎ ○ ○ ○ ○

Any 1 or More | 4 or More | 7 or More | 10 or More

▼ Layers −

⚠ Each map layer requires a specific map scale for display. Layers are only available for selection if the map is zoomed in to a sufficient scale. Zoom in further to enable selection of additional layers. Note that adding multiple overlapping map layers may cause performance issues in the browser and display.

☐ Do not show again

Current Zoom: 78%

▶ **EJScreen Maps**

▶ **Air Maps**

▶ **Water Maps**

▶ **Places**

▶ **Boundaries**

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▶ **Endangered Species Act Critical Habitat**

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<https://www.epa.gov/aboutepa/frequent-questions-specific-epa-programstopics>

Follow.

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No FEAR Act Data

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White House

<https://www.whitehouse.gov/>

Last updated on September 21, 2022

Data Refresh Information

<https://epa.gov/resources/echo-data/about-the-data#sources>

Customize Columns | Download Data | Quick CSV Download | Source Data

Facility Name	Mapped	Street Address	City	State	FRS ID	Reports	Count of Supplemental Indexes At or Above 80th Percentile (US - Block Group)	Compliance Monitoring Activity (5 years)	Significant Violations
ALPHA RESEARCH & CONSULTING		RD 3 KM 82.5 CATANO IND PK	HUMACAO	PR	110007822623	C	7	0	No
ALUMINIOS DE PUERTO RICO LLC		CARR 3 KM 77.4 BARIO RIO ABAJO SOLAR 5	HUMACAO	PR	110071192827	C	6	0	No
ALUMINUM EXTRUSION FACILITY		PARQUE INDUSTRIAL HUMACAO BO. RÍO ABAJO	HUMACAO	PR	110070362668	C E L X	6	0	Yes
BARD SHANNON LTD		RD 3 KM 77.5 LOTS 1 SAN GERONIMO IND PARK	HUMACAO	PR	110024258603	C	7	0	No
BARD SHANNON LTD		PARQUE INDUSTRIAL SAN GERONIMO LOTE 1	HUMACAO	PR	110069321460	C A	7	0	No
BARD SHANNON LTD		ROAD PR-3 KM 76.7, SAN GERONIMO INDUSTRIAL PARK	HUMACAO	PR	110069210972	C E L X	7	0	No
BETTEROADS ASPHALT PLT HUMACAO		PR-198 KM 26.6 BO COTTO MABU	HUMACAO	PR	110054313989	C I	5	1	No
BRISTOL MYERS SQUIBB MANUFACTURING CO		PR-3 KM 77.5	HUMACAO	PR	110000744696	C I A E L X	6	2	No
CANTERA PEREZ		CARRETERA PR-198, KM 11.1, BARRIO COTTO MABU	HUMACAO	PR	110071295464	C X	5	0	No
CARDINAL HEALTH		PR-925, KM 6.1, JUNQUITO WARD	HUMACAO	PR	110054277796	C	6	0	No
COLEGIO UNIVERSITARIO DE HUMACAO		AVE TEJAS RD 908 KM 1.3	HUMACAO	PR	110007804536	C	7	0	No
COLORCON PUERTO RICO INC		STATE RD 3 KM 76.9	HUMACAO	PR	110007806696	C	7	0	No
COLORCON PUERTO RICO LLC		160 CALLE CACIQUE JUMACAO	HUMACAO	PR	110064857739	C X	6	0	No
DANBURY PHARMACAL CARIBE INC		STATE RD 3 KM 76.9	HUMACAO	PR	110007811671	C I	7	0	No
DR. HERMENEGILDO ORTIZ QUINONES AIRPORT (HUC)		CARR 923	HUMACAO	PR	110071157951	C E L X	5	0	Yes
E-CYCLING PUERTO RICO		ROAD PR-3 KM 85.06 DR JOHN A SMITH STREET	HUMACAO	PR	110071337120	C X	7	0	No
EL COQUI LANDFILL		PR-3 & PR-923 KM 1.7 BO BUENA VISTA	HUMACAO	PR	110043784492	C A	6	2	No
ESSO STANDARD OIL CO PR SC-029		RD 3 KM 0.3 INT 925	HUMACAO	PR	110009437546	C	9	0	No
FARMACIA EL AMAL #49		VISITA DEL RIO SHOP CTR L-4	HUMACAO	PR	110007904768	C	7	0	No

FARMACIA ROSALINA		344 AVE FONT MARTELO	HUMACAO	PR	110071140105	C	7	0	No
FUNDAL		SOLAR #5A CARR. 3 KM. 77.4	HUMACAO	PR	110070836988	C X	6	0	No
GE INDUSTRIAL OF PUERTO RICO LLC		STATE RD 3 KM 82.0	HUMACAO	PR	110007805937	C A	7	1	No
HINDUSTAN PLATINUM PR LLC		STATE RD # 3 KM 82.0	HUMACAO	PR	110070398412	C	7	0	No
HOME DEPOT STORE #6415		NWC PR3/PR923	HUMACAO	PR	110070680605	C	7	0	No
HUMACAO FILTRATION PLANT		PR-198 KM 28.3	HUMACAO	PR	110009700332	C I E L X	7	0	No
HUMACAO MONOFILL		CARR. #3, KM 76.7	HUMACAO	PR	110070237632	C X W	T	0	No
HUMACAO WASTEWATER TREATMENT PLANT		PR-3 KM 77.2	HUMACAO	PR	110000577304	C I E L X	7	3	No
HUMACAO WWTP		STATE ROAD 3 KM 76.7	HUMACAO	PR	110066917153	C E L X	7	0	No
INGRAM MICRO		RAD #3, KM. 76.4, HUMACAO INDUSTRIAL PARK NORTH	HUMACAO	PR	110064854894	C X	6	0	No
LAUSSELL INC. AKA ALUMINIO DEL CARIBE		PR STATE ROAD #3 KM 77.4	HUMACAO	PR	110042293933	C	7	0	No
LEGACY PHARMACEUTICALS PR LLC		RD 909 KM 1.1	HUMACAO	PR	110000580639	C I	4	0	No
MEDTRONIC MED-REL, INC		STREET 909 KM. 0.4 MARIANA	HUMACAO	PR	110000819767	C A	7	1	No
MEDTRONIC PR OPERATIONS CO.		ROAD 909, KM 0.4	HUMACAO	PR	110064854732	C E L X	7	0	No
MEDTRONIC PR OPERATIONS CO. - HUMACAO BUILDING 2		DR. JOHN A SMITH, PARCEL #21	HUMACAO	PR	110067189125	C X	7	0	No
MICROSOFT OPERATIONS PUERTO RICO LLC		1200 DR JOHN A SMITH STREET	HUMACAO	PR	110071068985	C X	7	0	No
MICROSOFT OPERATIONS PUERTO RICO LLC		PR-3 KM 82.5 CATANO IND PK	HUMACAO	PR	110009437252	C D	7	0	No
MICROSOFT OPERATIONS PUERTO RICO, LLC.		1200 DR. JOHN A. SMITH ST.	HUMACAO	PR	110064865098	C X	7	0	No

NATIONAL LABEL CO PR		RD 3 KM 76.9 STREET B	HUMACAO	PR	110007820572	C	7	0	No
NELIPAK PUERTO RICO		180 CALLE CACIQUE JUMACAO	HUMACAO	PR	110070553128	C E L X	6	0	No
OUTLET CHINA HUMACAO		3 CALLE DRIVE VIDAL	HUMACAO	PR	110071219697	C I	7	0	No
PALACIOS DEL MAR		CARR. 923 KM 1.5	HUMACAO	PR	110070080183	C X	5	0	No
PALACIOS DEL MAR		CARR. PR-923, KM. 1.5, BUENA VISTA WARD	HUMACAO	PR	110071402988	C X	5	0	No
PALACIOS DEL MAR		CARR. PR-923, KM. 1.5, BUENA VISTA WARD	HUMACAO	PR	110071404556	C X	5	0	No
PALMAS DEL MAR		170 CANDELERO DR.	HUMACAO	PR	110007175671	C	T	0	No
PRAXAIR PR AIR SEPARATION PLANT		ROAD #3 KM 77.7 TECHNICON INDUSTRIAL PARK	HUMACAO	PR	110064856482	C X	6	0	No
PREPA-YABUCOA GAS TURBINES POWER PLANT		PR-3 KM 86.5 BO CANDELARIO ABAJO	YABUCOA	PR	110007342795	C A	7	3	No
PUERTO RICO ASPHALT, LLC - HUMACAO		PR 198 KM. 26.6 MABU WARD	HUMACAO	PR	110071075300	C E L X	5	0	Yes
REEDCO & DENTCO, INC.		RD. 3, KM 76.4	HUMACAO	PR	110000747559	C I	5	0	No
SEAMLESS TEXTILES		#3 ST 83.6 KM	HUMACAO	PR	110020514852	C I A	7	0	No
SP FABRICATORS INC		STATE ROAD PR-3 KM 76.9	HUMACAO	PR	110039562835	C	6	0	No
TOTAL PETROLEUM PUERTO RICO CORP-SERVICE STATION 210307		INTERSECCION CARR #921 Y RAMAL	HUMACAO	PR	110042422740	C	5	0	No
TOTAL PETROLEUM PUERTO RICO CORP-SERVICE STATION 304128		251 CALLE FONT MARTELO	HUMACAO	PR	110042422759	C	7	0	No
TOTAL PETROLEUM PUERTO RICO CORP-SERVICE STATION 410106		CARR #3 KM 76.4 BO RIO ABAJO	HUMACAO	PR	110042422768	C	6	0	No
TOUCHSTONE WIRELESS DBA INGRAM MICRO		RD 3 KM 76 HUMACAO INDUSTRIAL PARK N RIO ABAJO WAR	HUMACAO	PR	110071140112	C	6	0	No
WALGREENS #906		477 CARR 3	HUMACAO	PR	110070398402	C	7	0	No
WALMART SUPERCENTER #2240		PLAZA PALMA REAL	HUMACAO	PR	110042293853	C	7	0	No

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Detailed Facility Report

ECHO

Detailed Facility Report

Facility Summary

EL COQUI LANDFILL

PR-3 & PR-923 KM 1.7 BO BUENA VISTA, HUMACAO, PR 00791

FRS (Facility Registry Service) ID: 110043784492

EPA Region: 02

Latitude: 18.128111

Longitude: -65.806915

Locational Data Source: FRS

Industries: Waste Management and Remediation Services

Indian Country: N

Enforcement and Compliance Summary

Statute	CAA
Compliance Monitoring Activities (5 years)	2
Date of Last Compliance Monitoring Activity	06/23/2021 (FCE)
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)	--

This count only reflects full compliance evaluations

Statute	RCRA

Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	04/26/2016
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): Operating Major (PR0000007206900022)

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PRO007001357)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): 15512211

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		110043784492					N	18.128111	-65.806915
ICIS-Air	CAA	PR0000007206900022	Major Emissions	Operating	CAAGACTM, CAAMACT, CAANSPS, CAATVP		N	18.132987	-65.820394
EIS	CAA	15512211					N	18.13	-65.809
RCRAInfo	RCRA	PRO007001357	Other	Inactive (...			N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110043784492	EL COQUI LANDFILL	PR-3 & PR-923 KM 1.7 BO BUENA VISTA, HUMACAO, PR 00791	Humacao Municipio
ICIS-Air	CAA	PR0000007206900022	EL COQUI LANDFILL DE HUMACAO	RD3 INT 923 KM1.7 BUENA VISTA, HUMACAO, PR 00791	Humacao Municipio
EIS	CAA	15512211	EL COQUI LANDFILL	PR 923, KM 1.7, BUENA VISTA WARD, HUMACAO, PR 00726	Humacao Municipio
RCRAInfo	RCRA	PRO007001357	EL COQUI CDS	CARR 923 BO BUENA VISTA, HUMACAO, PR 00791	Humacao Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-Air	PR0000007206900022	1953	Refuse Systems

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
EIS	15512211	562212	Solid Waste Landfill
ICIS-Air	PR0000007206900022	562212	Solid Waste Landfill

Facility Tribe Information

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

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

CAA	*PR0000007206900022*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*03/31/2023*	
CAA	*PR0000007206900022*	*ICIS-Air*	*Inspection/Evaluation*	*FCE Off-Site, FCE On-Site*	*State*	*06/23/2022*	
CAA	*PR0000007206900022*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*03/31/2022*	

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	*PR0000007206900022*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Title V CCR*	*State*	*03/31/2022*	*Reviewed: 04/22/2022 Facility Reported Deviations*
CAA	*PR0000007206900022*	*ICIS-Air*	*Inspection/Evaluation*	*PCE On-Site*	*EPA*	*11/18/2021*	
CAA	*PR0000007206900022*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Title V CCR*	*State*	*03/31/2021*	*Reviewed: 06/10/2021 Facility Reported Deviations*
CAA	*PR0000007206900022*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Title V CCR*	*State*	*05/05/2020*	*Reviewed: 05/25/2020 Facility Reported Deviations*
CAA	PR0000007206900022	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	06/18/2019	
CAA	PR0000007206900022	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	06/18/2019	
CAA	*PR0000007206900022*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Title V CCR*	*State*	*03/29/2019*	*Reviewed: 04/02/2019 Facility Reported Deviations*

Entries in italics are not counted as compliance monitoring strategy activities. For programs without compliance monitoring strategies, entries in italics are not counted as on-site activities within EPA's Annual 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
CAA	PR0000007206900022	No	11/12/2023	0	11/11/2023
RCRA	PRO007001357	No	11/12/2023	0	11/11/2023

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
CAA (Source ID: PR0000007206900022)		01/01-03/31/21	04/01-06/30/21	07/01-09/30/21	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
	Facility-Level Status	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	HPV History												
	Violation Type / Agency / Programs / Pollutants												

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
RCRA (Source ID: PRO007001357)		01/01-03/31/21	04/01-06/30/21	07/01-09/30/21	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
	Facility-Level Status	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation / Agency												

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

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

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/Filed Date	Settlements/Actions	Settlement/Action Date	Federal Penalty Assessed	State/Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

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

No data records returned

Air Quality Nonattainment Areas

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

No data records returned

Pollutants

CTS Group, Inc. LDP-11-023

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

Air Pollutant Report

TRI Facility	Year	Air Emissions	Surface Water Discharge	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injection	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

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.

EJScreen Indexes Shown

Compare to

US State

Index Type

Environmental Justice Supplemental

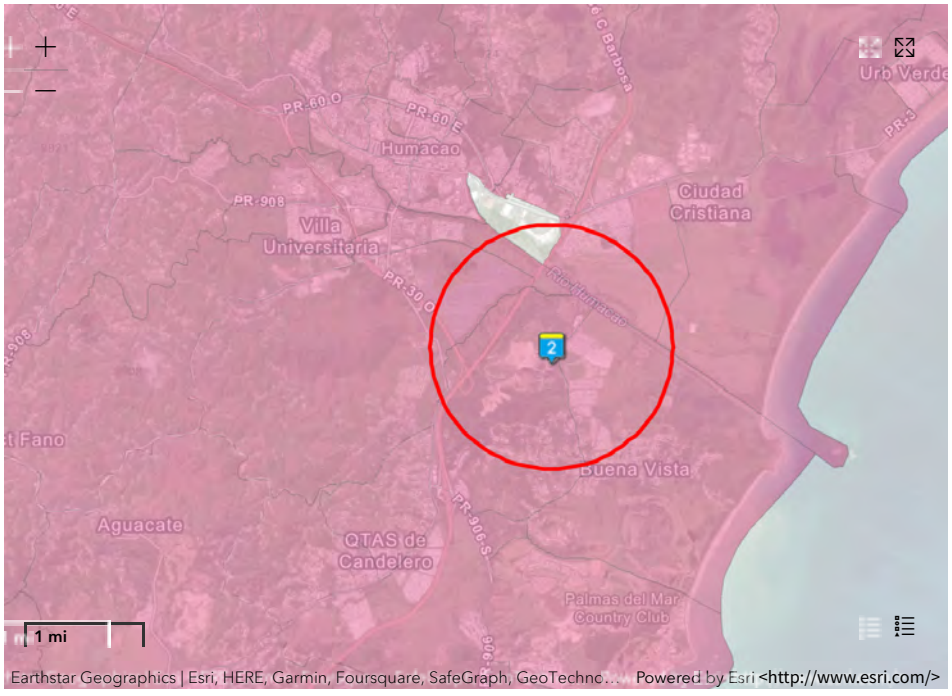
Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 720691809011	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	6	7
Particulate Matter 2.5	--	--
Ozone	--	--
Diesel Particulate Matter	0	--
Air Toxics Cancer Risk	16	52
Air Toxics Respiratory Hazard Index	14	34
Toxic Releases to Air	46	56
Traffic Proximity	79	98
Lead Paint	89	93
Risk Management Plan (RMP) Facility Proximity	99	99
Hazardous Waste Proximity	97	99
Superfund Proximity	94	98
Underground Storage Tanks (UST)	94	98
Wastewater Discharge	86	98

Facility 1-mile Radius Facility Census Block Group



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 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about

radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) 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 (U.S. Census)	
Total Persons	1,585
Population Density	513/sq.mi.
Housing Units in Area	684

General Statistics (ACS (American Community Survey))	
Total Persons	3,178
Percent People of Color	100%
Households in Area	928
Households on Public Assistance	15
Persons With Low Income	2,015
Percent With Low Income	63%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.128111
Center Longitude	-65.806915
Land Area	97%
Water Area	3%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	223 (24.06%)
$15,000 - $25,000	169 (18.23%)
$25,000 - $50,000	332 (35.81%)
$50,000 - $75,000	109 (11.76%)
Greater than $75,000	94 (10.14%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	88 (6%)
Minors 17 years and younger	365 (23%)
Adults 18 years and older	1,219 (77%)
Seniors 65 years and older	188 (12%)

Race Breakdown (U.S. Census) - Persons (%)	
White	979 (62%)
African-American	329 (21%)
Hispanic-Origin	1,574 (99%)
Asian/Pacific Islander	4 (0%)
American Indian	9 (1%)
Other/Multiracial	264 (17%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	258 (11.54%)
9th through 12th Grade	168 (7.52%)
High School Diploma	694 (31.05%)
Some College/2-year	185 (8.28%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	590 (26.4%)

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Appendix III

EPA National Priorities List (NPL)

Watson Johnson Landfill	Richland Township	PAD980706824	09/13/2001	70.71	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/03/900246> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2001-09-13/pdf/01-22741.pdf> (9 pp, 193 K)	Site Loca
Westinghouse Electric Corp. (Sharon Plant)	Sharon	PAD005000575	08/30/1990	41.33	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/03/900176> • Site Progress Profile • Federal Register Notice (PDF) <https://semspub.epa.gov/src/document/11/189637> (22 pp, 293 K)	Site Loca
Westinghouse Elevator Co. Plant	Cumberland Township	PAD043882281	06/10/1986	36.37	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/03/900336> • Site Progress Profile • Federal Register Notice (PDF) <https://semspub.epa.gov/src/document/11/189628> (34 pp, 369 K)	Site Loca
Whitmoyer Laboratories	Jackson Township	PAD003005014	06/10/1986	46.25	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/03/900337> • Site Progress Profile • Federal Register Notice (PDF) <https://semspub.epa.gov/src/document/11/189628> (34 pp, 369 K)	Site Loca
William Dick Lagoons	West Caln Township	PAD980537773	07/22/1987	36.64	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/03/900364> • Site Progress Profile • Federal Register Notice (PDF) <https://semspub.epa.gov/src/document/11/189629> (27 pp, 287 K)	Site Loca
Willow Grove Naval Air and Air Reserve Station	Willow Grove	PAD987277837	09/29/1995	50.00	Yes	• Site Listing Narrative <https://semspub.epa.gov/src/document/03/900223> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-1995-09-29/pdf/95-24415.pdf> (5 pp, 166 K)	Site Loca

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Puerto Rico (19 sites)							
Site Name	**City**	**Site EPA ID**	**Listing Date**	**Site Score**	**Federal Facility Indicator**	**Additional Information**	**Site Locatio**

Atlantic Fleet Weapons Training Area - Vieques	Vieques	PRN000204694	02/11/2005		Yes	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363533> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2005-02-11/pdf/05-2711.pdf> (8 pp, 175 K)	Site Locatio
Cabo Rojo Ground Water Contamination	Cabo Rojo	PRN000206319	03/10/2011	50.00	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363179> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2011-03-10/pdf/2011-5337.pdf> (9 pp, 179 K)	Site Locatio
Cidra Ground Water Contamination	Cidra	PRN000204538	07/22/2004	50.00	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363531> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2004-07-22/pdf/04-16571.pdf> (8 pp, 205 K)	Site Locatio
Corozal Well	Corozal	PRN000206452	03/15/2012	50.00	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363184> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2012-03-15/pdf/2012-6329.pdf> (9 pp, 250 K)	Site Locatio
Dorado Ground Water Contamination	Dorado	PRN000201872	09/09/2016	50.00	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363674> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2016-09-09/pdf/2016-21615.pdf> (7 pp, 245 K)	Site Locatio
Fibers Public Supply Wells	Jobos	PRD980763783	09/21/1984	35.34	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363610> • Site Progress Profile • Federal Register Notice (PDF) <https://semspub.epa.gov/src/document/11/189627> (22 pp, 177 K)	Site Locatio
Juncos Landfill	Juncos	PRD980512362	09/08/1983	32.57	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363606> • Site Progress Profile • Federal Register Notice (PDF) <https://semspub.epa.gov/src/document/11/189620> (36 pp, 441 K)	Site Locatio
Maunabo Area	Maunabo	PRN000205831	09/27/2006	50.00	No		Site

Ground Water Contamination						• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363168> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2006-09-27/pdf/e6-15858.pdf> (9 pp, 212 K)	Locatio
Ochoa Fertilizer Co	Guanica	PRD091171264	09/09/2022	56.15	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/11/403042> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2022-09-09/pdf/2022-19148.pdf> (7 pp, 245 K)	Site Locatio
Papelera Puertorriquena, Inc.	Utuado	PRD090290685	09/23/2009	34.69	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363173> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2009-09-23/pdf/e9-22934.pdf> (10 pp, 170 K)	Site Locatio
Pesticide Warehouse I	Arecibo	PRD987367349	09/27/2006	50.00	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363165> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2006-09-27/pdf/e6-15858.pdf> (9 pp, 212 K)	Site Locatio
Pesticide Warehouse III	Manati	PRD987367299	04/30/2003	50.00	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363521> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2003-04-30/pdf/03-10648.pdf> (8 pp, 191 K)	Site Locatio
PROTECO	Peñuelas	PRD000831487	05/15/2019	36.33	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/11/199498> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2019-05-15/pdf/2019-09924.pdf> (7 pp, 324 K)	Site Locatio
San German Ground Water Contamination	San German	PRN000205957	03/19/2008	50.00	No	• Site Listing Narrative <https://semspub.epa.gov/src/document/02/363170> • Site Progress Profile • Federal Register Notice (PDF) <http://www.gpo.gov/fdsys/pkg/fr-2008-03-19/pdf/e8-5557.pdf> (9 pp, 214 K)	Site Locatio
Scorpio	Candeleria	PRD987376662	02/04/2000	50.00	No		Site

Appendix IV
EPA Toxic Release Inventory (TRI)

CTS Group, Inc. LDP-11-023

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Search Parameters:

TRI facility information searched
ZIP Code: 00971
City Name: Humacao
State Abbreviation: PR

Results are based on data extracted on OCT-13-2023

No Results found.

Total Number of Facilities Retrieved: 0

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Appendix V
EPA Resource Conservation and Recovery Act (RCRA)

CTS Group, Inc. LDP-11-023

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Only RCRAInfo facility information was searched to select facilities

ZIP Code: 00791

City: Humacao

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HANDLER ID	NAME	STREET	CITY	COUNTY

PRR000012203 <>	ALPHA RESEARCH & CONSULTING	RD 3 KM 82.5 CATANO IND PK	HUMACAO	HUMACAO
PRR000026443 <>	ALUMINIOS DE PUERTO RICO LLC	CARR 3 KM 77.4 BARIO RIO ABAJO SOLAR 5	HUMACAO	HUMACAO
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PRD090021056 <>	BRISTOL-MYERS SQUIBB MANUFACTURING COMPANY UNLIMITED CO	STATE RD 3 KM 77.5	HUMACAO	HUMACAO
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PRR000004523 <>	ESSO STANDARD OIL CO PR SC-029	RD 3 KM 0.3 INT 925	HUMACAO	HUMACAO

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PRR000013730 <>	FARMACIA EL AMAL #49	VISITA DEL RIO SHOP CTR L-4	HUMACAO	HUMACAO
PRR000027185 <>	FARMACIA ROSALINA	344 AVE FONT MARTELO	HUMACAO	HUMACAO
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You searched on:

Only RCRAInfo facility information was searched to select facilities

ZIP Code: 00791

City: Humacao

State: PR

Handler Type: Other Universes - Subject to Corrective Action

Sites: Only Active

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Clear

HANDLER ID	NAME	STREET	CITY	COUNTY
PRD090021056 <>	BRISTOL-MYERS SQUIBB MANUFACTURING COMPANY UNLIMITED CO	STATE RD 3 KM 77.5	HUMACAO	HUMACAO
PRD090083478 <>	LAUSSELL INC. AKA ALUMINIO DEL CARIBE	3 PR STATE ROAD KM 77.1	HUMACAO	HUMACAO

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Appendix VI
EPA Brownfield's Grants

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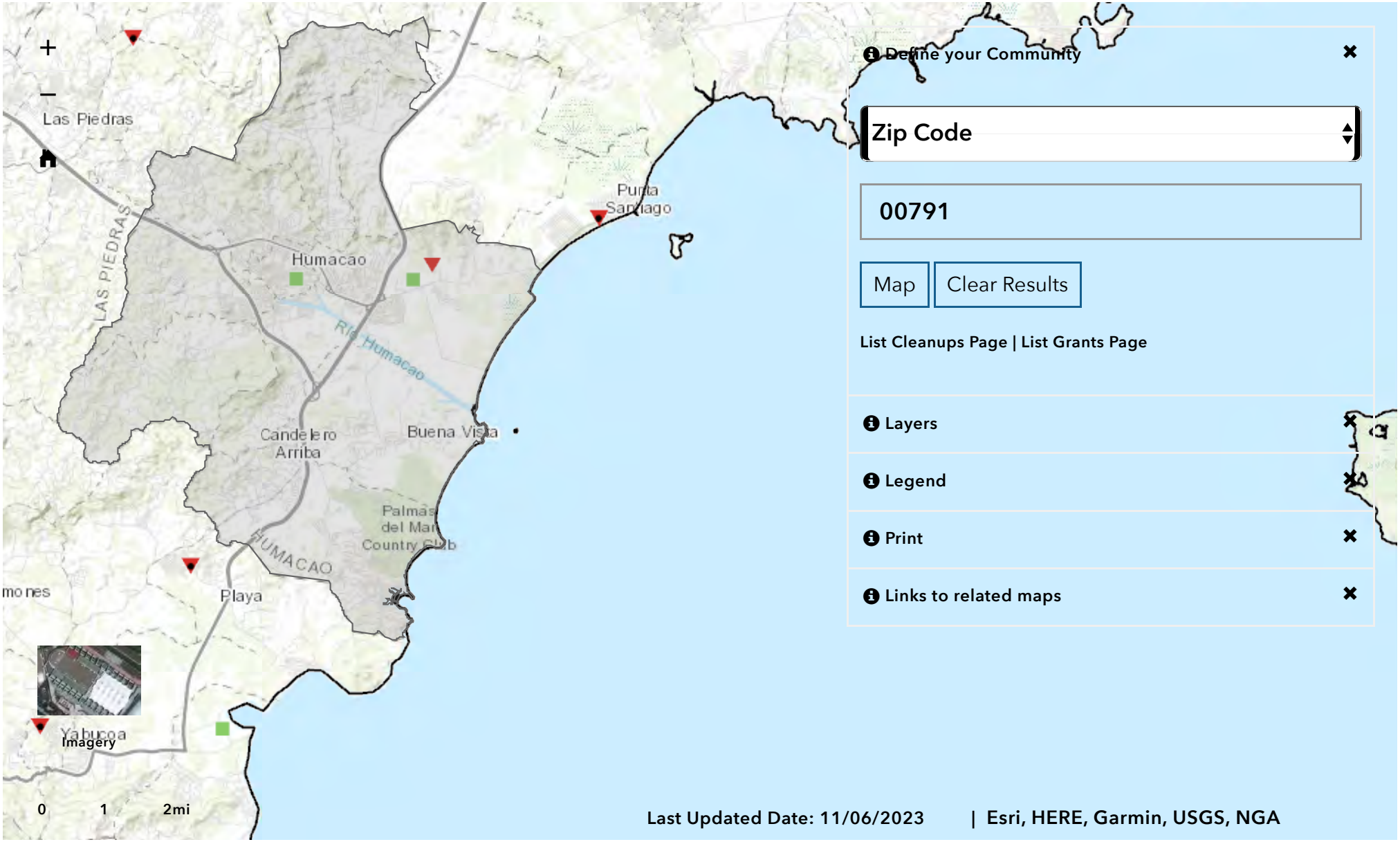

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United States Environmental Protection Agency

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You are here: EPA Home>>Cleanups>>Cleanups In My Community (CIMC)

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Cleanups and Grants Listing Page

Use this page to get a listing of cleanups or grant areas in the geographic area you define.

Step 1 - Define your geographic area of interest.

Complete the boxes below from left to right, choosing options and entering names or numbers.

Zip Code (Cleanups Or | 00791

Step 2 – Choose your search type.

Choose a Basic or Advanced search for Cleanups, or the search option for Brownfields Grant Jurisdictions. You can click on each option to see what additional choices each search type provides.

- (●) Basic Filters
- ( ) Advanced Filters
- ( ) Grants Filters
- ( ) RE-Powering Filters

Step 3 - Choose programs and/or other specific filters within your search type, and then click the "Apply" button.

Basic Filters Apply

All Cleanups ☑

Brownfields BCRA Superfund Responses UST

- [x] Properties

- [x] Assessmen Grants
- [x] Assessmen Pilots
- [x] Cleanup Grants
- [x] RLF Grants
- [x] RLF Pilots
- [x] Multi-Purpose Grants
- [x] Area-Wide Grants
- [x] State and Tribal 128(a) Grants
- [x] State and Tribal 128(a) Pilots
- [x] Showcase Community
- [x] Targeted Brownfields Assessmen

- [x] Hazardous Waste - Corrective Actions

- [x] Current Corrective Action
- [x] Remedy Selected
- [x] Constructio Complete
- [x] Remedy Action Complete
- [x] Remedy Not Yet Selected
- [x] Ready for Anticipated Use

- [x] Federal Agency Hazardous Waste Compliance Docket

- [x] NPL Superfund
- [x] BRAC
- [x] RCRA
- [x] Other Docket Facilities

- [x] Federal Facilities

- [x] BRAC
- [x] Superfund
- [x] RCRA

- [x] NPL Sites

- [x] Proposed
- [x] Final
- [x] Deleted
- [x] Superfund Sites Targeted for Immediate, Intense Action
- [x] Superfund Alternative Approach (SAA) Agreement Sites

- [x] Superfund Non-NPL Sites

- [x] Assessmen Needed or Ongoing
- [x] Not Eligible for the NPL/No Further Remedial Action Planned
- [x] Referred to Cleanup Program

- [x] Recovery Act (2009)

- [x] Brownfields Properties
- [x] Superfund

Response Type

- [x] Emergency
- [x] Non-Time-Critical
- [x] Pre-Deploymen
- [x] PRP Oversight
- [x] Time-Critical
- [x] No Category

Response Au-thority

- [x] CERCLA
- [x] CERCLA/OI
- [x] CWA
- [x] OPA
- [x] Stafford Act
- [x] No Category

Status

- [x] Active
- [x] Complete

Incident Cate-gory

- [x] Removal Action
- [x] Removal Assessmen
- [x] No Category

- [x] Releases

Substance

- [x] Aviation
- [x] Diesel
- [x] Gas
- [x] Hazardous Substance (HazSub)
- [x] Oil
- [x] PHG
- [x] Other

Land Use

- [x] Developed
- [x] Non-Developed
- [x] Low Intensity
- [x] Medium Intensity
- [x] High Intensity
- [x] Open Space
- [x] Other

SPA Water Type

- [x] Surface Water (SW)
- [x] Groundwat Under The Influence of Surface Water (GU)
- [x] Other

SPA Facility Type

- [x] Community Water System (CWS)
- [x] Infiltration Gallery (IG)
- [x] Intake

Acronyms

RLF: Revolving Loan Fund

NPL: National Priority List

CWA: Clean Water Act

OPA: Oil Pollution Act

RCRA: Resource Conservation & Recovery Act

BRAC: Base Realignment & Closure

CERCLA: Comprehensive Environmental Response, Compensation, & Liability Act

UST: Underground Storage Tank

(IN)
Reservoir (RS)
Spring (SP)
Well (WL)
Other

WHPA Water Type

Ground Water (GW)
Other

WHPA Facility Type

Spring (SP)
Well (WL)
Other

- Click on the column header to sort in ascending or descending order.
- To directly view any profiles and reports available for a cleanup, click on the associated report(s) found in columns designated as "…Link"
- To see a map of a cleanup, click on the "Map It" link found in the "Map Site" column.
- To export /download the list of cleanups, click Actions (located below), then click Download and choose the report format.
- To add additional columns, click Actions, click Select Columns, then choose the column(s) from the left "Do Not Display" box and move them to the "Display in Report" box. Columns can be re-ordered by moving them up or down in the "Display in Report" box but return to the default order when opening a new session.

Go Actions

1 - 2 of 2

FRS Link	Cleanup Name	Location Address	City Name	State Code	Postal Code	County Name	EPA ID
110000744696	BRISTOL MYERS SQUIBB MANUFACTURING CO	PR-3 KM 77.5	HUMACAO	PR	00791	HUMACAO	PRD09002105
110007805937	GE INDUSTRIAL OF PUERTO RICO LLC	STATE RD 3 KM 82.0	HUMACAO	PR	00791	HUMACAO	PRD09007045

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Submission Year is **2023** and Quarter is **3** and Primacy Agency in **(PR)** and Activity Status is **A** and City Served is **Humacao**

Go

Filter Report | Select Columns | Reset Report | Download Report | Help

Rows 20 Actions

1 - 2 of 2

PWS ID	PWS Name			PWS Type	Primary Source	Count	Facilities	Violations	V
PR0005376	LAS PIEDRAS HUMACAO	Community water system	Surface water	Humacao Municipio, Naguabo Municipio	HUMACAO	36,600	10	117	
PR0636046	COLEGIO SAN ANTONIO ABAD	Non-Transient non-community system	Ground water	Humacao Municipio	HUMACAO	401	3	31	
						37,001			

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Appendix VIII
US Geological Survey (USGS)

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NGWMN NETWORKS

Water level: ☑

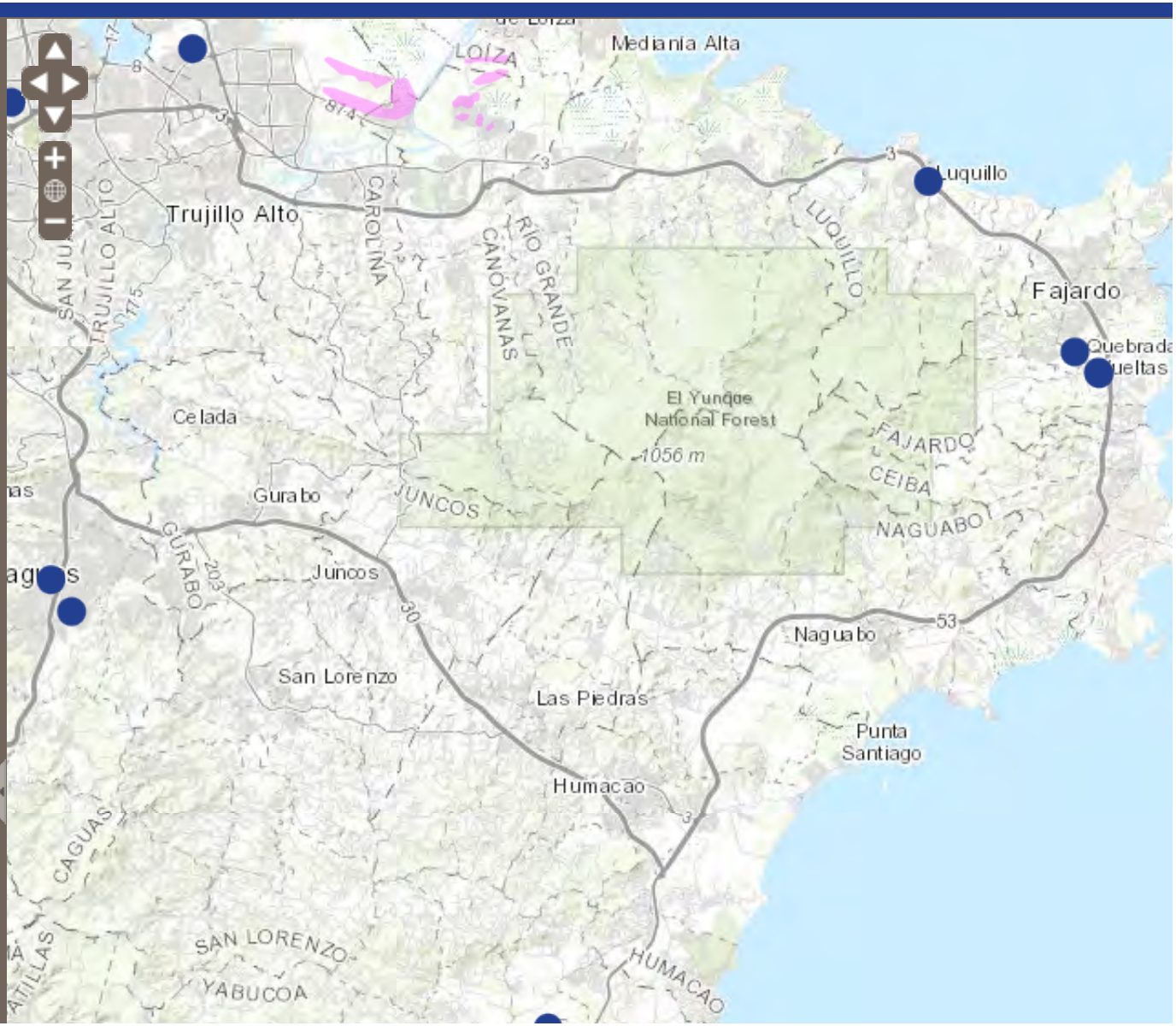
Subnetwork: All
- Background
- Suspected Changes
- Documented Changes

Monitoring Category: All
- Surveillance
- Trend
- Special

Water quality: ☑

Subnetwork: All
- Background
- Suspected Changes
- Documented Changes

Monitoring Category: All
- Surveillance
- Trend
- Special



Appendix IX
Leaking Underground Storage Tanks & Registered Underground Storage Tanks

Owner Name	AltFacilityID	Notification Description	Facility Name	Street Address	City	Facility Description
SOL PUERTO LIMITED	2-860846	Closure	LOPEZ VELEZ VICTOR	RD # 2 KM. 86.6	Hatillo	Gas Station
CENTRAL SOYA DEL NORTE INC	2-900096	Closure	CENTRAL SOYA DEL NORTE INC	RD # 2 KM 83.0	Hatillo	Industrial
SOL PUERTO LIMITED	2-910263	Amended	SHELL S/S #003972	RD 129 & 134, KM 15.2	Hatillo	Gas Station
HECTOR M. FEAL	2-861603	Amended	Garaje El Leñero	ROAD 134 KM 29.5	Hatillo	Gas Station
Caribbean Petroleum Corporation	2-860400	Amended	GULF S/S #423	RD 119 KM 1.0	Hatillo	Gas Station
CARLOS CRUZ ROMAN	2-860231	Amended	Willie Gas Station	CARR. 491	Hatillo	Gas Station
IVAN ROMAN ROSA	2-000025	Amended	Daytona gas	Carr. #2 Km 86.7	Hatillo	Gas Station
Hector M. Lorenzo	2-960014	Amended	GARAJE TEXXAS	CRR 129 KM 17.1	Hatillo	Gas Station
Celso Santiago Rosado	2-980005	Amended	King Oil Co.	Carr. 129 Km. 10.6	Hatillo	Gas Station
TEXACO PUERTO RICO INC	2-861605	Amended	Texaco- Efraín González S/S #579	RD. 129 KM. 13.6	Hatillo	Gas Station
Agustín Romero	2-000037	Amended	Agustín Romero S/S	Carr.129 Km. 10.7	Hatillo	Commercial
Ferdinand Barreto	2-860233	Amended	Estacion Independiente (ExTotal	RD. 493 INT. CARR. 492 Bo Corcovado	Hatillo	Gas Station
Caribbean Petroleum Corporation	2-860396	Amended	GULF S/S #0419	RDS. 487 & 488 Bo Buena Vista	Hatillo	Gas Station
TEXACO PUERTO RICO INC	2-861645	Amended	LUMEN MENDEZ S/S #541	RD. 130 KM. 7.8	Hatillo	Gas Station
ERIC ROSADO	2-861556	Amended	Hatillo S/S	DR. SUSONI AVE. #123	Hatillo	Gas Station
PUERTO RICO TELEPHONE CO	2-890010	Closure	HORMIGUEROS C.O.	RD.103 (SALUD PUBLICA)	Hormigueros	Utilities
ESSO STANDARD OIL CO PR	2-861192	Amended	ESSO S/S CO-296	ROAD 2 KM 156.3	Hormigueros	Gas Station
Caribbean Petroleum Corporation	2-860284	Amended	GULF S/S #068	RD. 2 KM. 162.2	Hormigueros	Gas Station
ASFALTO DEL OESTE INC.	2-862004	Closure	ASFALTO DEL OESTE INC.	PR 309 KM 0.2 Parcelas San Romualdo	Hormigueros	Industrial
SOL PUERTO LIMITED	2-860909	Amended	SHELL S/ S #003425	RD. 2, KM. 162.4	Hormigueros	Gas Station
JOSE JUAN ALVAREZ	2-990054	Amended	JOSE J. ALVAREZ AGRAIT	CARR. 2 KM. 166.4	Hormigueros	Gas Station
José Crespo Lorenzo	2-980036	Amended	Hormigueros S/S	Carr. 2 Km. 167.3	Hormigueros	Gas Station
ALLERGAN AMERICA	2-860590	Closure	ALLERGAN AMERICA	P.R. ROAD 345 KM 1.5 BOX 60	Hormigueros	Not Listed
Caribbean Petroleum Corporation	2-860382	Amended	GULF S/ S #401	RD 343, KM 0.9	Hormigueros	Gas Station
Caribbean Petroleum Corporation	2-860322	Amended	GULF S/S #0123	RD. 343, KM. 0.3 Valle Hermoso	Hormigueros	Gas Station
V B INVESTMENT, INC.	2-910062	Amended	VB Investment, Inc.	Carr. 2 km. 159.4	Hormigueros	Gas Station
TEXACO PUERTO RICO INC	2-861795	Amended	HORMIGUEROS S/S #675	ROAD # 2 KM. 166.0	Hormigueros	Gas Station
EFRAIN SANTANA	2-860352	Amended	ESR Service Station	RD. 3 KM. 83.9 Bo. Cataño	Humacao	Gas Station
PUERTO RICO TELEPHONE CO	2-890073	Closure	PALMAS DEL MAR	RD.906 CANDELERO ABAJO WARD	Humacao	Not Listed
TEXACO PUERTO RICO INC	2-862009	Amended	HUMACAO S/S # 343	RD # 3 KM 80.2	Humacao	Gas Station
PUERTO RICO TELEPHONE CO	2-890097	Closure	HUMACAO C.O.	RD.909, KM. 1.1Calle Dr. Vidal	Humacao	Utilities
AUTORIDAD DE EDIFICIOS	2-930059	Closure	HOSPITAL AREA HUMACAO	RD 988 KM 0.5	Humacao	Other
COLEGIO UNIV. HUMACAO	2-861964	Closure	COLEGIO UNIV. HUMACAO	RD. 908 TEJAS AVE. KM 1.3	Humacao	State Government
SOL PUERTO LIMITED	2-860622	Amended	SHELL S/S #803960	RD. #924	Humacao	Gas Station
ERNESTO ACOSTA MATOS	2-910134	Amended	Humacao S/S	RD 3 KM 85.8	Humacao	Gas Station
TEXACO PUERTO RICO INC	2-860654	Amended	Texaco- Luis Riefkhol S/S #990	RD. 3 KM. 85.7	Humacao	Gas Station
Lydia Medina	2-862001	Amended	Junquito S/S	Carr. 3 Int. 925	Humacao	Gas Station
COMBE PRODUCTS, INC.	2-861943	Closure	COMBE PRODUCTS, INC.	STATE ROAD #3 KM. 82.4	Humacao	Not Listed
SOL PUERTO LIMITED	2-860627	Amended	SHELL S/ S #803995	RD. #3 KM. 82.2 Ext Buxo	Humacao	Gas Station
CHANEL MANUFACTURING CO.	2-861897	Closure	CHANEL MANUFACTURING CO. INC.	ROAD 3 KM 76.9	Humacao	Industrial
YAMIL ABDEL RAHMAN	2-860979	Amended	Eureka #3 gas Station	RD. 3, KM. 71.5	Humacao	Gas Station
SOL PUERTO LIMITED	2-860632	Amended	SHELL S/S #803979	RD. 3 CORNER MAUNEZ	Humacao	Gas Station
Juan Ortiz	2-920084	Amended	Juan Ortiz 345	Carr 908 Km 2.6 Bo Tejas	Humacao	Gas Station
HOSPITAL FONT MARTELO INC	2-880069	Closure	HOSPITAL INTERAMERICANO DE	FONT MARTELO ST. #3	Humacao	Other

Owner Name	AltFacilityID	Notification Description	Facility Name	Street Address	City	Facility Description
SOL PUERTO LIMITED	2-860626	Amended	SHELL S/ S #804843	RD. 908 KM 0.4 TEJAS AVE. Urb Los Pinos	Humacao	Gas Station
RYDER MEMORIAL HOSPITAL INC	2-862013	Amended	RYDER MEMORIAL HOSPITAL INC	FONT MARTELO AVE NO 317	Humacao	Other
ESSO STANDARD OIL CO PR	2-861369	Closure	ESSO S/S CO-259	RD. 3 KM 83.8 Barrio Cataño	Humacao	Gas Station
TEXACO PUERTO RICO INC	2-861738	Amended	JUNQUITO S/S # 390	ROAD 3 KM 78.0	Humacao	Gas Station
PALMAS DEL MAR COMPANY	2-860419	Amended	PALMAS DEL MAR COMPANY	P.O. BOX 2020	Humacao	Industrial
ESSO STANDARD OIL CO PR	2-861221	Amended	ESSO S/S CO-246	Calle Font Martello # 10	Humacao	Gas Station
COLORCON OF PUERTO RICO INC.	2-940069	Closure	COLORCON OF PUERTO RICO INC.	RD. #3 KM 76.9	Humacao	Industrial
Autoridad de Acueductos y	2-861498	Closure	OFICINA REGIONAL AAA	ROAD 3 KM 82.1 RT.YABUCOA	Humacao	Utilities
Municipio Humacao	2-970037	Amended	Taller Municipal	Carr. 923 Km. 0.4	Humacao	Local Government
Hiram Pérez	2-980108	Closure	Edificio Hiram Pérez	Calle Georgetti #67	Humacao	Commercial
MARINA DE PALMAS SHIPYARD,	2-000020	Closure	MARINA PALMAS DEL MAR	VARADERO DE MARINA DE PALMAS DEL MAR	Humacao	Gas Station
Total Petroleum Puerto Rico Corp.	2-910382	Amended	Total Petroleum #2307	INT. RD 921 & RAMAL Bo tejas	Humacao	Gas Station
Caribbean Petroleum Corporation	2-930084	Amended	Gulf S/S #900	Road 3 km 74.0	Humacao	Gas Station
AUTORIDAD DE LOS PUERTOS	2-860086	Closure	AEROPUERTO HUMACAO	RD. 923	Humacao	State Government
Autoridad de Energia Electrica	2-860748	Amended	Taller Mecánica Automotriz	Carr. 3 km. 86.7	Humacao	Utilities
BOURNS PUERTO RICO, INC.	2-861536	Closure	BOURNS PUERTO RICO, INC.	ROAD 3 KM 82.5	Humacao	Industrial
ALCON(PUERTO RICO), INC.	2-860084	Closure	Cardinal Health (ALCON(PUERTO	PR ROAD 925	Humacao	Commercial
PUERTO RICO TELEPHONE CO	2-890115	Closure	EL COMETA (RSB)	RD. 3 CORNER RD. 909	Humacao	Utilities
TEXACO PUERTO RICO INC	2-010033	Amended	Pedro Diaz Lopez S/S 342	Carr. # 927, Km 2, Hm 2 Barrio Anton Ruiz	Humacao	Gas Station
LAVANDERIA DEL ESTE	2-940111	New	LAVANDERIA DEL ESTE	DR. VIDAL 10	Humacao	Commercial
LAS PIEDRAS TRUKING ING	2-880070	Amended	LAS PIEDRAS TRUKING ING	APARTADO 183 P.R	Humacao	Truck/Transporter
SOL PUERTO LIMITED	2-861027	Amended	SHELL S/ S #003271	RD. 3, KM. 78.1	Humacao	Gas Station
ESSO STANDARD OIL CO PR	2-861220	Amended	ESSO S/S CO-245	Calle Dr. Vidal Esq. Minerva Urb Ponce de Leon	Humacao	Gas Station
Total Petroleum Puerto Rico Corp.	2-910080	Amended	Total Petroleum #3128	FONT MARTELO ST.#51	Humacao	Gas Station
Telecomunicaciones Ultramarinas de	2-890113	Amended	Humacao Satelite Earth Station	RD.3 KM 76.6	Humacao	Utilities
TEXACO PUERTO RICO INC	2-861733	Amended	JUAN CARRASQUILLO S/S 365	ROAD 924 KM 2.2	Humacao	Gas Station
TEXACO PUERTO RICO INC	2-861720	Amended	ADALBERTO CASTRO S/S #234	ROAD 3 KM 87.8	Humacao	Gas Station
BETTEROADS ASPHALT COPR.	2-920007	Closure	BETTEROADS ASPHALT CORP.	RD. 198 KM 27.0	Humacao	Industrial
Total Petroleum Puerto Rico Corp.	2-910076	Amended	Total Petroleum #3106	RD 3 KM 76.4	Humacao	Gas Station
Caribbean Petroleum Corporation	2-860187	Amended	GULF S/S#168	RD 3 KM 80.7	Humacao	Gas Station
Moises Velazquez	2-861371	Amended	Pitahayas S/S	RD. 924 KM 3.3 BO PITAHAYA	Humacao	Gas Station
SQUIBB MANUFACTORING INC.	2-860058	Closure	SQUIBB MANUFACTORING INC.	SATATE ROAD #3 KM 77.5	Humacao	Industrial
SOL PUERTO LIMITED	2-860981	Amended	SHELL S/S #000116	FONT MARTELO #155	Humacao	Gas Station
COMPAÑIA DE FOMENTO	2-980030	Closure	Microsoft (S-0984-0-73)	Carr. 3 Km. 77.8	Humacao	Industrial
Iván Quiñones	2-010001	Amended	Isabela gas Station	Carr. 472 km. 2.9	Isabela	Gas Station
CATALINO SANCHEZ RODRIGUEZ	2-860733	Amended	GARAGE CHAVES	AGUADILLA AVE.	Isabela	Gas Station
CORPORATION SUBLISTATICA S.A.	2-861532	Closure	CORPORATION SUBLISTATICA S.A.	ROAD 112 KM 122.2	Isabela	Not Listed
GILBERTO BENITEZ REYES	2-980109	Amended	Velez S/S	CARR. 446 KM. 3.3	Isabela	Gas Station
HECTOR RENE PEREZ	2-910322	Amended	Garage Hmnos. Nieves Rivera	Carr 446 Int 457 km 6	Isabela	Gas Station
LINO RODRIGUEZ PEREZ	2-890195	Amended	GARAGE RODRIGUEZ (LINO RGUEZ)	Carr 2 KM 112.7 Bo. MORA Guerrero	Isabela	Gas Station
Hauger Martin Hau	2-030002	New	Hauger Martin Hau	Carr 4466	Isabela	Gas Station
COMPAÑIA DE FOMENTO	2-020001	Closure	Isabela Shoe (T-0358-0-56)	Carr.112 Km. 2.3	Isabela	State Government
SOL PUERTO LIMITED	2-860862	Amended	SHELL S/S #3492	RD. 2 KM. 112.5	Isabela	Gas Station
COMPAÑIA DE FOMENTO	2-980031	Closure	ISABELA FIBER (T-0806-0-68)	Carr. 2 Zona Industrial	Isabela	Industrial

ACTIVE SITES LUST LIST

2020

	UST ID	NAME	CITY	ADDRESS	OWNER	HOWKNOWN	DTKNOWN
277	86-1311	Esso SC-316	Lares	Ave Muñoz Rivera	Esso Standard Oil Co.	UST Removal	4/1/2005
278	86-1320	Esso SC-304	San Sebastián	Carr 119 km 31.2, Hoya Mala	Esso Standard Oil Co.	Product in Well	1-Jul-86
279	86-1321	Esso Standard Oil	Aguadilla	Carr. 467 km. 2.3	Esso Standard Oil Co.	UST Removal	14-Jul-98
280	86-1325	Esso S/S #DO-311	Aguadilla	Carr. 459 Km. 5.2, Bo. Calero	Esso Standard Oil Co.	UST Removal	11-Sep-00
281	86-1334	Esso DO - 305	Aguada	Calle Colón # 316 salida Rincón, Aguada	Esso Standard Oil Co.	Vapor in MW	2-Feb-97
282	86-1336	Esso 2P-321	Las Mariás	Calle Comerio	Esso Standard Oil Co.	UST Removal	9-Apr-02
283	86-1337	Esso 55324	Mayaguez	Balboa #63	Esso Standard Oil Co.	UST Removal	30-Jul-97
284	86-1339	Jose D. Vélez S/S	Cabo Rojo	Carr 1 km 7.7	Esso Standard Oil Co.	Product in Well	10-Aug-98
285	86-1340	Cancel Service Station	Lajas	Carr 116 km 14	Esso Standard Oil Co.	UST Removal	10-May-99
286	86-1342	Garaje Ramos Ust Removal	Maricao	Carr 120 Int 105	Antonio Ramos	Spill	23-May-91
287	86-1346	Ex- Esso(D. Irizarry)	Lajas	Carr, # 116 km 2.9	Esso Standard Oil Co.	High Concentrations	12-Apr-00
288	86-1349	Miguel Chabrier	Ponce	Jobos Calle 2 , Coto Laurel	Esso Standard Oil Co.	Unknown	Unknown
289	86-1350	Esso DO-397	Yauco	Calle 25 Julio #26	Esso	Ust Removal	21-Nov-95
290	86-1351	Esso S/S	Guánica	Calle 25 de Julio Esq. Sebastián Rodríguez	Esso Standard Oil Co.	Product in Well	28-Sep-01
291	86-1354	Former Esso Service Station	Ponce	Carr. 578 Bo. Sabanetas Ponce, PR	Esso	UST Removal and Spill	19-Apr-16
292	86-1359	Ex Esso (Garaje Muñoz)	Yauco	Calle 25 de julio # 19	Esso	UST Removal	19-Jan-99
293	86-1367	Esso CO-266	Yabucoa	Calle Cristobal Colón 65	Esso Standard Oil Co.	UST Removal	27-May-91
295	86-1373	Anibal Dávila S/S	Maunabo	Calle Muñoz Rivera Esq. Barceló	Esso Standard Oil Co.	UST Removal	23-Apr-98
296	86-1376	Esso	Cidra	Cidra	Esso Standard Oil Co.	Spill	6-Nov-98
297	86-1380	Ex ESSO 3P-436	Aibonito	Carr 14 km 80.0	Esso Standard Oil Co.	UST Removal	Unknown
298	86-1381	Carlos Rodríguez	Barranquitas	Carr 156 km 14.7 Bo. La Vega	Esso Standard Oil Co.	Spill	10-May-99
299	86-1395	Hormigonera Mayaguezana	Mayaguez	PR-114 Km. 147.7 Bo. Guanajibo Castillo	Esso Standard Oil Co.	Film in MW	17-Jun-03

Appendix X
Environmental Questionnaire & Additional Documentation

Government Agencies Communications

CTS GROUP INC.
ENGINEERS & ENVIRONMENTAL CONSULTANTS

24 de octubre de 2023

Sra. Vanessa del Moral
Dir. Oficina Regional de Humacao
Departamento de Recursos Naturales y Ambientales
Puerto Rico.

RE: ROAD PR-3 KM 33.7, CATAÑO WARD, HUMACAO, PR 00791.

Estimada Sra. Del Moral:

Reciba un cordial saludo de parte del equipo de CTS Group, Inc. Nuestra firma ha sido contratada para realizar una Evaluación Ambiental (Fase I) en la propiedad en referencia ubicada en el municipio de Humacao. La ubicación de la propiedad en estudio es: latitud 18° 7'18.57"N y longitud 65°49'19.61"W y el número de catastro es: 329-000-005-61. Con dicho Estudio se espera establecer la presencia de algún tipo de condición ambiental reconocida (si alguna) como producto de sus operaciones y la de los negocios adyacentes a la propiedad en cuestión. A raíz de lo antes mencionado, le solicitamos respetuosamente nos provea información sobre el caso en referencia o su autorización para ir a verificar el expediente de la propiedad.

Le agradecemos su disponibilidad y cooperación para asistirnos en este asunto.

Cordialmente,

Mayte Pérez Patiño
Project Coordinator
CTS Group, Inc.
Tel. (786) 622-3721
E-mail: mayte.perez@ctsgrouppr.com

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTALES

27 de octubre de 2023

mayte.perez@ctsgrouppr.com

Mayte Pérez Patiño
CTS Group, Inc.
400 Calaf, Suite 235
San Juan, PR 00918

Estimada señora Pérez:

En carta con fecha del **24 de octubre de 2023**, usted solicita información sobre los incidentes ambientales que hayan ocurrido en la propiedad que se menciona a continuación:

Facilidad: Laderas de Palmas
Carr. PR. 3 Km 33.7 Bo. Cataño, Humacao, Puerto Rico
Catastro: 329-000-005-61

La Oficina Regional de Humacao (ORH) del Departamento de Recursos Naturales y Ambientales (DRNA), recibió su comunicación escrita mediante correo electrónico, requiriendo toda la información ambiental significativa disponible y relacionada con la propiedad ubicada en el lugar antes mencionado. En respuesta a la misma, deseamos informarle que el Área Respuesta a Emergencias Ambientales, adscrito a esta Oficina, no mantiene expedientes relacionados con investigaciones a emergencias ambientales en el mencionado lugar, así como tampoco existe en nuestros archivos físicos o electrónicos, procedimientos administrativos en proceso.

Cabe señalar que la información aquí provista está limitada a los datos disponibles al momento de esta consulta, basándonos en los documentos, registros y expedientes disponibles en nuestra Oficina Regional. De igual manera, se debe tener en consideración la posibilidad de que existan equipos o sistemas que requieran ser evaluados previamente, así como el obtener los correspondientes permisos y autorizaciones, pero que no hayan sido reportados por el dueño u operador ante este Departamento.

Por lo antes, mencionado deberán referirse a cada área programática, para la obtención de información relacionada con permisos, procedimientos administrativos, notificaciones, documentos y/o endosos. Esperamos que esta información le sea de utilidad.

De tener alguna duda o pregunta, se puede comunicar con la que suscribe a la Oficina Regional, al número de teléfono (787) 852-4440 o al (787) 999-2200 ext. 3084.

Cordialmente,

Vanessa Del Moral Rosario
Directora
Oficina Regional de Humacao

Environmental Questionnaire

ENVIRONMENTAL QUESTIONNAIRE

BORROWER: *Rebuilders PR, LLC – Laderas de Palma*

SITE: *Vacant Undeveloped Commercial Property*

Road PR-3 Km 33.7 , Cataño Ward		
STREET ADDRESS OF SUBJECT PROPERTY		
Humacao	*Puerto Rico*	*00791*
CITY	STATE	ZIP CODE

Ihosvany Negret MS. M. Eng. – Environmental Consultant			
NAME & TITLE OF PARTY COMPLETING QUESTIONNAIRE			
400 Calle Juan Calaf, Suite 235	*San Juan*	*PR*	*00918*
STREET ADDRESS	CITY	STATE	ZIP
CTS Group, Inc.	*787.507.0017*	*info@ctsgrouppr.com*	
NAME OF FIRM	PHONE NUMBER	E-MAIL	

NAME AND POSITION OF INTERVIEWED PERSONS:

Mr. Carlos Aldarondo – Owner

Mrs. Elvelisse Figueroa – Owner's Representative

Mr. Ihosvany Negret – CTS Group – Environmental Professional

ENVIRONMENTAL QUESTIONNAIRE

Persons to be Questioned – The following questions should be asked of

- the current owner of the property
- any commercial occupant of the property (residential occupants do not need to be asked the questions)

The preparer should ask each person to answer all questions to the best of the respondent's actual knowledge and in good faith. When completing the site visit portion of the questionnaire the preparer should be sure to observe the property and the buildings and other structures on the property. All questions should be answered as indicated in the form.

	QUESTION	LENDER/SERVICER OR OBSERVED DURING SITE VISIT	OWNER	OCCUPANTS
1.	Is the *property* or any *adjoining property* used for an industrial use?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
2.	To the best of your knowledge, has the *property* or any *adjoining property* been used for an industrial use in the past?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
3.	Is the *property* or any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
4.	To the best of your knowledge has the *property* or any *adjoining property* been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____

	QUESTION	LENDER/SERVICER OR OBSERVED DURING SITE VISIT	OWNER	OCCUPANTS
5.	Are there currently, or to the best of your knowledge have there been previously, any damaged or discarded automobile or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the *property* or at the facility?	Yes _____ No _____ Unknown____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
6.	Are there currently, or to the best of your knowledge have there been previously, any industrial *drums* (typically 55 gal [208 L]) or sacks of chemicals located on the property or at the facility?	Yes _____ No _____ Unknown____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
7.	Has *fill dirt* been brought onto the property that originated from a contaminated site or that is of an unknown origin?	Yes _____ No _____ Unknown____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
8.	Are there currently, or to the best of your knowledge have there been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
9.	Is there currently, or to the best of your knowledge have there been previously, any stained soil on the *property*?	Yes _____ No _____ Unknown____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
10.	Are there currently, or to the best of your knowledge have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____

	QUESTION	LENDER/SERVICER OR OBSERVED DURING SITE VISIT	OWNER	OCCUPANTS
11.	Are there currently, or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* adjacent to any structure located on the *property*?	Yes _____ No _____ Unknown____	Yes _____ No ____X____ Unknown ____	Yes _____ No _____ Unknown ____
12.	Are there currently, or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?	Yes _____ No _____ Unknown ____	Yes _____ No ____X____ Unknown ____	Yes _____ No _____ Unknown ____
13.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated contaminated by any government environmental/health agency?	Yes _____ No _____ Unknown ____	Yes _____ No ____X____ Unknown ____	Yes _____ No _____ Unknown ____
14.	Does the *owner* or *occupant* of the *property* have any knowledge of *environmental liens* or governmental notification relating to the past or recurrent violations of environmental laws with respect to the *property* or any facility located on the *property*?	Yes _____ No _____ Unknown ____	Yes _____ No ____X____ Unknown ____	Yes _____ No _____ Unknown ____
15.	Has the *owner* or *occupant* of the *property* been informed of the past or current existence of *hazardous substances* or petroleum *products* or environmental violations with respect to the *property* or any facility located on the *property*?	Yes _____ No _____ Unknown ____	Yes _____ No ____X____ Unknown ____	Yes _____ No _____ Unknown ____

	QUESTION	LENDER/SERVICER OR OBSERVED DURING SITE VISIT	OWNER	OCCUPANTS
16.	Does the *owner* or *occupant* of the property have any knowledge of any environmental site assessment of the *property* or facility that indicated the presence of *hazardous substances* or *petroleum products* on, or contamination of, the *property* or recommended further assessment of the *property*?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
17.	Does the *owner* or *occupant* of the *property* know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property* by any owner or occupant of the *property*?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
18.	Does the *property* discharge wastewater on or adjacent to the *property* other than storm-water into a sanitary sewer system?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
19.	To the best of your knowledge, have any *hazardous substances* or *petroleum products*, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____
20.	Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCB's on the *property*?	Yes _____ No _____ Unknown ____	Yes _____ No X Unknown ____	Yes _____ No _____ Unknown ____

CTS GROUP INC.
ENGINEERS & ENVIRONMENTAL CONSULTANTS

FORM 0109
ENVIRONMENTAL QUESTIONNAIRE

Please provide details relating to any question answered "yes" in the space provided. Attach additional sheets or informative documents if necessary.

_____

_____

_____

This questionnaire was completed by:

Name:	Ihosvany Negret MS. M. Eng.
Title:	Lead Environmental Consultant
Firm:	CTS Group, Inc.
Address:	400 Calaf St. Ste. 235 San Juan, PR 00918
Phone Number:	787-247-0640
Date:	October 17, 2023

If the preparer is different than the user, complete the following:

Name of Users:	US HUD
Address of Users:	Washington, DC
Phone Number of User:	
Relationship of Preparer to Site:	None
Relationship of Preparer to User:	Consultant

Note: The undersigned owner(s) and/or operator(s) acknowledge(s) and agree(s) that intentionally falsifying or concealing any material fact with regard to the subject matter of this Environmental Questionnaire may, in addition to other penalties, result in prosecution under applicable law including 18 U.S.C. section 1001.

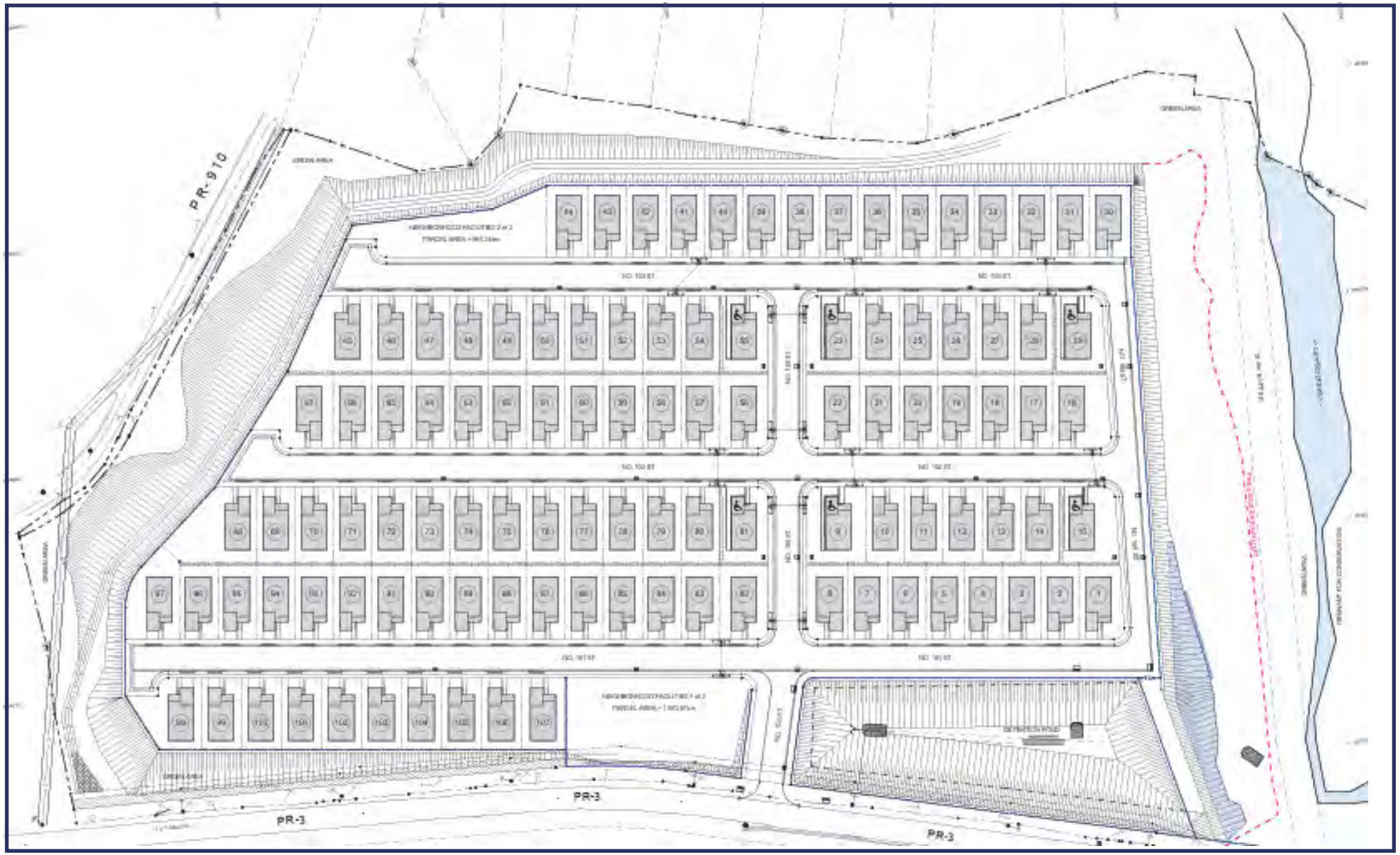
Owner or (Owner's Rep.): _Carlos Aldarondo-Rivera___ Signature: _____ Date: _10/17/2023____

Date: 10/17/2023. Signature: _____

Title: Environmental Professional

CTS GROUP, INC. #182650 2008 Puerto Rico Engineers & Environmental Consultants

Documents Provided by Client


PR-910
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Appendix XI
Reliance Letter
Evidence of Insurance

Exhibit 6b

DEPARTMENT OF
HOUSING
GOVERNMENT OF PUERTO RICO

CDBG-DR FUNDS
CDBG-MIT FUNDS

Memorandum to File

Date: April 14, 2025

From: Elvelisse Figueroa Hernandez
Environmental Consultant
CDBG-MIT Program
Single-Family Housing Mitigation Program
Puerto Rico Department of Housing

Application Number: SF-HDI-00012
Project: Laderas de Palmas

Re: Justification for the Infeasibility and Impracticability of Radon Testing

After reviewing Application Number SF-HDI-00012 under the Single-Family Housing Mitigation 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 reasons:

- 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

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.

Radon
Attachments

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

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
Guaynabo, PR 00968-8069

Via 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 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.

This Notice emphasizes the importance of radon testing and mitigation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Mitigation (CDBG-DR/MIT), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any mitigation efforts within the islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following information:

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

Reports and assessments – Any reports, studies, or assessments your agency has produced or commissioned that address radon testing or mitigation.

Policies and guidelines – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

Historical data – 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 let 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.

Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

Cc:
Mr. Oleg Povetko, Povetko.Oleg@epa.gov
Mr. Matthew Laurita, laurita.matthew@epa.gov

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

August 20, 2024

Dr. Silvina Cancelos
Professor
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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CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Rico
Page 2 / 2

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Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

Cc:
Dr. Carlos Marín, carlos.marin3@upr.edu

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

August 20, 2024

Dr. Jessica Irizarry
Director
Office of Island Affairs
U.S. Centers for Disease Control and Prevention
1324 Cll 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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Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

August 20, 2024

Mrs. Anaís Rodríguez
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@drna.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 Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

Cc:
Mr. Luis Márquez, secretariaaire@drna.pr.gov
Engr. Amarilys Rosario, aire@drna.pr.gov
Ms. Eldi Ortega, eortega@drna.pr.gov

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

August 20, 2024

Dr. Carlos R. Mellado López
Secretary
Puerto Rico Department of Health
PO Box 70184
San Juan, PR 00936-8184

Via email: drcarlos.mellado@salud.pr.gov

RE: Request for information regarding available data on radon testing and levels within Puerto Rico

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Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

Cc:
Mr. Raúl Hernández Doble, rhernandez2@salud.pr.gov

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

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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Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

Cc:
Mr. R. Randall Schumann, rschumann@usgs.gov

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
Geosciences 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 <aarivera@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

Bubble Dynamics Lab
University of Puerto Rico - Mayaguez

EPA REGION 2
CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION

September 23, 2024

VIA EMAIL

William O. Rodríguez Rodríguez, Esq.
Secretary
Puerto Rico Department of Housing
Barbosa Ave. 606 Building Juan C. Cordero
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 (USGS, 1995) in which the USGS concluded that several areas of Puerto Rico have the geologic potential to generate indoor radon levels exceeding the EPA Action Level of 4 pCi/L (picocuries per liter), perhaps locally reaching very high levels above 50 pCi/L, if a house construction and ventilation allow for soil-gas radon to enter and concentrate within the structure.[1] 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 aftermath of 2017 Hurricanes Irma 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, Ciales, Arecibo, Morovis, Camuy, and Hatillo and later expanded the project to other municipalities such as Rincon, Aguada, Aguadilla, Isabela, Quebradillas, Barceloneta and Vega Baja. The quality assurance protocols were anchored in American National Standards Institute/American Association of Radon Scientists and Technologists (ANSI/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 of 4 pCi/L with CH were measured at the second stage of the sampling using RAD7 and Corentium Pro Continuous Radon Monitors (CRMs). Nationally certified radon sampling professionals led by one such professional from 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 preliminary data at this time because it contains privileged information. Nevertheless, preliminary data from the study does show homes with levels over 4 pCi/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 aiming to answer your request, the EPA can provide information on Best Management Practices for sampling indoor radon in Puerto Rico.

[1] **Reference**: USGS. Geologic Radon Potential of Guam and Puerto Rico, Report 93-292-K. Washington, DC: USGS. Retrieved 9/11/2024, from https://pubs.usgs.gov/of/1993/0292k/report.pdf.

CITY VIEW PLAZA II BUILDING, 7TH FLOOR
ROUTE 165 GUAYNABO, PR 00968

If you have any questions or need any additional information, please contact me at 787-977-5865 or guerrero.carmen@epa.gov or have your staff contact Reyes, Brenda at reyes.brenda@epa.gov or (787) 977-5869.

Sincerely,

CARMEN GUERRERO PEREZ

Digitally signed by CARMEN GUERRERO PEREZ
Date: 2024.09.23 09:41:39 -04'00'

Carmen R. Guerrero Pérez
Director

cc: Roberto Mendez, Esq (Acting Secretary, PR Department of Natural and Env. Resources)
Melany Medina: mmedina@vivienda.pr.gov
Elaine Dume Mejia: Edume@vivienda.pr.gov
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Aldo A. Rivera-Vazquez: aarivera@vivienda.pr.gov
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Environmental Assessment Determinations and Compliance Findings for HUD-Assisted Projects
24 CFR Part 58

Exhibit 7

USFWL Endangered Species Concurrence For NLAA Determination Letter

Laderas de Palmas

SF-HDI-00012

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Bayamón | Mayagüez | Maricao | Río Grande | St Croix
P.O. Box 491
Boquerón, Puerto Rico 00622

In Reply Refer To:
FWS/R4/CESFO/72069-054

Submitted via electronic mail: environmentcdbg@vivienda.pr.gov

Ms. Santa Rodríguez
Permits and Environmental Compliance Division
Disaster Recovery Office
PR Department of Housing

Re: SF-HDI-00012 Laderas de Palmas,
Humacao, Puerto Rico

Dear Ms. Rodríguez:

This is in reply to the above referenced housing development to be financed under the Single Family Housing Mitigation of the Community Development Block Grants. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

The project is in a 39 acre site, of which the proposed project will occupy about18 acres. An estimated 100 single family houses will be built. The Quebrada Cataño, a tributary to the Humacao River, runs along the eastern boundary of the proposed development. About 2.8 acres of riverine wetlands will be impacted by the project. These wetland impacts are associated with the toe of the fill and storm water detention pond. We believe that all wetland impacts can be eliminated if housing units 1, 17, 18, 33 and 34 are eliminated and the detention pond be redesigned to include a riser and discharge into the quebrada at a 45 degree angle in direction of the flow.

The project designer HF Engineering should redesign the project accordingly. This will ensure compliance with Executive Orders 11990 and 11988 for protection of wetlands and river floodplains, eliminate the need for a US Army Corps of Engineers Permit and any required compensatory mitigation for wetland impacts which would have to be included in the overall project costs. This will also leave the existing bed and bank of the Quebrada Cataño in its natural state.

The property has another undeveloped section of some 21 acres, the Quebrada Cataño runs diagonally through this parcel and any future residential development should include the quebrada as a linear green space and incorporated into the design.

With regards to federally listed species, you have determined that the Puerto Rican boa (*Chilabothrus inornatus*), and the guajón (*Eleutherodactylus cooki*) can be found within the project

action area. The determination that the project may affect but is not likely to adversely affect these species is based on following the Fish and Wildlife Service established conservation measures for both species. Please remember that these conservation measures have reporting requirements that should be followed by the grantee.

We have reviewed the information provided in your letter and our files and concur with your determination that the proposed action may affect, but is not likely to adversely affect, the above referenced species. No adverse impacts to designated critical habitat are anticipated.

In view of this, we believe that requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

Thank you for the opportunity to comment on this action, if you have any questions, please contact Felix Lopez of my staff at (305) 304-1128.

Sincerely,

LOURDES MENA

Digitally signed by LOURDES MENA
Date: 2024.11.06 21:38:09 -04'00'

Lourdes Mena
Field Supervisor

fhl
cc:
DNER, San Juan
PRPB, San Juan
COR3, San Juan
COE, San Juan

Exhibit 7a

Green PRojects
Urb. Cielo Dorado Village #42
Calle Cielo Diamante
Vega Alta, PR 00692
787-528-3322
greenprojectpr@gmail.com

Lourdes Mena
Acting Field Supervisor
Caribbean Ecological Services Field Office
U.S. Fish and Wildlife Service
Office Park I, Suite 303
State Road #2 Km 156.5
Mayagüez, Puerto Rico 00680
Email: caribbean_es@fws.gov; Lourdes_Mena@fws.gov

RE: Puerto Rico Department of Housing / Single-Family Mitigation – Housing Development Initiative (SF-MIT HDI)
SF-HDI-00012 – Laderas de Palmas
Endangered Species Concurrence for NLAA Determination

Dear Mrs. Mena:

The Puerto Rico Department of Housing (PRDOH) is requesting informal consultation under Section 7 (a)(2) of the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 *et seq.*), and in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) for the proposed project Laderas de Palmas, located on Road PR-3, Km. 33.7, Cataño Ward, Humacao PR 00791 (Lat. 18.120370, -65.822607).

The proposed project consists of constructing 100 single-family housing units on a site covering 39.5 acres, of which the project's impact footprint occupies 21.22 acres. Additionally, the proposal includes constructing neighborhood facilities (green areas), streets, sidewalks, and a retention pond. The houses to be built will be one level, with three bedrooms, two bathrooms, a living room, a kitchen, a dining room, and a carport for one vehicle. The residences will be resilient to weather events by installing photovoltaic panels, energy storage batteries, cross ventilation, fans, efficient appliances, and a water cistern.

Within the property, but outside the project's impact footprint, is the Quebrada Cataño identified as a riparian wetland (R2UBH) covering approximately 2.04 acres and a freshwater forested shrub wetland (PFO3A) covering approximately 0.24 acres, according to the NWI Map. This stream (wetland) collects runoff water from the Cataño Sector, which flows to the Humacao River. The flora and fauna surrounding the creek (wetlands) are species of mature secondary succession that serve as a refuge for fauna species, mainly birds commonly seen in urban settlements. Wetland areas represent conservation areas that contribute biodiversity to the Sector where the Project is located.

Using the Information for Planning and Consultation (IPaC[1]) system and the Fauna/Flora Survey[2], it has been determined that the proposed project lies within the range of the following federally listed species and critical habitats:

Name of the species	Threatened/Endangered/ Candidate
Puerto Rican boa (*Chilabothrus inornatus*)	Endangered
Guajon (Eleutherodactylus cooki)	Threatened

Critical Habitat
There are no critical habitats within the Project area.

The dominant vegetation in the area that occupies the impact footprint of the project is dominated by herbaceous species. There are several scattered trees on the property. These trees do not form forest areas or areas of importance for wildlife. The area of the creek is located outside the impact footprint. The riverine vegetation associated with the creek will be preserved in its natural condition.

Due to the low diversity in the vegetation, the fauna identified is limited to several species of lizards, siguana (*Ameiva azul*), iguana (*Iguana iguana*). The dominant fauna are birds that were seen flying over the place or were identified by their sounds heard in the vicinity of the Project, as is typical of urban settlements.

Based on the nature of the project, scope of work, information available, and a careful analysis of the *IPAC lists, conservation measures that will be implemented and biological studies of the site*, we have made the following effects determinations:

Name of the species	Effect Determination	Conservation Measures that will be implemented
Puerto Rican boa (*Chilabothrus inornatus*)	Not likely to adversely affect (NLAA)	USFWS Puerto Rican boa Conservation Measures 2024[3]
Guajon (Eleutherodactylus cooki)	Not likely to adversely affect (NLAA)	USFWLS Conservation measures for the Coqui Guajon (*Eleutherodactylus cooki*)[4]

[1] Exhibit 1- Information for Planning and Consultation
[2] Exhibit 2 - Flora & Fauna Study
[3] Exhibit 3 – USFWS Conservation Measures for the Puerto Rican boa
[4] Exhibit 4 – Conservation Measures for the Coqui Guajon (Eleutherodactylus cooki).

Critical Habitats[5]
There are no critical habitats within the Project area.

The NLAA effect was determined since according to the USFWS IPaC portal, the property where the project is proposed is one where the Puerto Rican boa (*Chilabothrus inornatus*) and the Guajon (Eleutherodactylus cooki) may be present. The USFWS has not made a critical habitat designation for the Puerto rican boa. During the visits made to the Property on its evaluation for the Project, no individuals of the Puerto Rican Boa were identified. The FWS has promulgated *IPaC Project Design Guidelines – Puerto Rican Boa, the protocol of which will be implemented by the construction company, including general contractor and subcontractors, responsible for the development and construction of the project.*

In relation to the guajón, there is no critical habitat for this species within the Property. The nearest critical habitat is located 1.14 miles west of the Property. Although the Project will not have any impact on the critical habitat of the guajón, the conservation measures of the USFWS will be implemented and the creek channel and the buffer zone will be preserved in their natural condition with a minimum width of 32.80 feet, measured on both sides of the creek channel.

In order to complete the informal consultation process, we are requesting your concurrence for the NLAA determinations included in this letter. Attached to this letter, we are including the documents used to reach our effect determinations for the listed species. If more information is required, please do not hesitate to contact PRDOH at enviromentcdbg@vivienda.pr.gov or 787-274-2527 ext. 4320.

Cordially yours:

Elvelisse Figueroa Hernandez

[5] USFWS Critical Habitat Map

Exhibit
1. IPaC List & List threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project
2. Flora & Fauna Study
3. Conservation Measures for the Puerto Rican Boa (Chilabothrus inornatus)
4. Conservation Measures for the Coqui Guajon (Eleutherodactylus cooki)
5. USFWS Critical Habitat Map
6. Topographic Map
7. Aerial Photo
8. NWI Mapper
9. Site Photos
10. Aerial Images (1994 to 2023)

EXHIBIT 1

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Post Office Box 491
Boqueron, PR 00622-0491
Phone: (787) 834-1600 Fax: (787) 851-7440
Email Address: CARIBBEAN_ES@FWS.GOV

In Reply Refer To:
Project Code: 2023-0080116
Project Name: Laderas de Palmas

May 10, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

THE FOLLOWING SPECIES LIST IS NOT A SECTION 7 CONSULTATION. PLEASE CONTACT OUR OFFICE TO COMPLETE THE CONSULTATION PROCESS

The purpose of the Endangered Species Act (Act) is to provide a means whereby threatened, and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect those species and/or their designated critical habitat.

Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". The enclosed species list provides information to assist with the U.S. Fish and Wildlife Service (Service) consultation process under section 7 of the Act. However, **the enclosed species list does not complete the required consultation process.** The species list identifies threatened, endangered, proposed and candidate species, as well as proposed and designated critical habitats, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. A discussion between the Federal agency and the Service should include what types of listed species may occur in the proposed action area and what effect the proposed action may have on those species. This process initiates informal consultation.

Once a species list is obtained for the proposed project, an effect determination for endangered and threatened species should be made. The applicant could make an effect determination by using available keys on IPaC for specific species. For species with no determination keys, the applicant should request concurrence from the Service by sending a project package

to caribbean_es@fws.gov. To obtain guidance for completing this process and the minimum requirements for project packages, please visit:

https://www.fws.gov/southeast/pdf/letter/consultation-under-section-7-of-the-endangered-species-act-with-the-caribbean-ecological%20Services-field-office-template-letter.pdf

When a federal agency, after discussions with the Service, determines that the proposed action is not likely to adversely affect any listed species, or adversely modify any designated critical habitat, and the Service concurs, the informal consultation is complete, and the proposed project moves ahead. If the proposed action is suspected to affect a listed species or modify designated critical habitat, the Federal agency may then prepare a Biological Assessment (B.A.) to assist in its determination of the project's effects on species and their habitat. However, a B.A. is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a B.A. where the agency provides the Service with an evaluation on the likely effects of the action to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a B.A. are described at 50 CFR 402.12.

If a federal agency determines, based on its B.A. or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to further consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation process. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species.

This list is provided pursuant to Section 7 of the Endangered Species Act and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". Please use this list to determine whether your project requires consultation and to make your effects determination. For more guidance, use the Guideline for Consultation under Section 7 of the Endangered Species Act with the Caribbean Ecological Services Field Office by clicking here.

This species list is provided by:

Caribbean Ecological Services Field Office
caribbean_es@fws.gov

Post Office Box 491
Boqueron, PR 00622-0491
(786) 244-0081

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Caribbean Ecological Services Field Office
Post Office Box 491
Boqueron, PR 00622-0491
(787) 834-1600

PROJECT SUMMARY

Project Code: 2023-0080116
Project Name: Laderas de Palmas
Project Type: New Constr - Above Ground
Project Description: Single Family Housing
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@18.12141205,-65.82240029280163,14z

Counties: Humacao County, Puerto Rico

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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

REPTILES

NAME	STATUS
Puerto Rican Boa *Chilabothrus inornatus*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/6628
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/BRHWJGRCERF4ZDIOPCNFEOSXA4/documents/generated/6941.pdf

AMPHIBIANS

NAME	STATUS
Guajon *Eleutherodactylus cooki*	Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/6963
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/BRHWJGRCERF4ZDIOPCNFEOSXA4/documents/generated/6944.pdf

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge 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 OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

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.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS FAQ

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 USFWS Birds of Conservation Concern (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 the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, 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), 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 Rapid Avian Information Locator (RAIL) 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 Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

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 RAIL 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 Birds of Conservation Concern (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 Northeast Ocean 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 Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

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 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 FAQ "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.

WETLANDS

Impacts to NWI wetlands 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 U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R2UBH

IPAC USER CONTACT INFORMATION

Agency:	Green Projects
Name:	Elvelisse Figueroa
Address:	Urb. Cielo Dorado Village
Address Line 2:	Calle Diamante Num 42
City:	Vega Alta
State:	PR
Zip:	00692
Email	greenprojectpr@gmail.com
Phone:	7875283322

EXHIBIT 2

Estudio de Flora y Fauna

PROPÓSITO DEL ESTUDIO DE FLORA Y FAUNA

Se preparó este estudio con el propósito de describir la composición biótica del área donde se propone la construcción del proyecto Ladera de Palma ("el Proyecto"), ubicado en la Carretera PR-3, Km. 33.7 en el Barrio Cataño del Municipio de Humacao PR 00791 (Lat: 18.120370, Long: -65.822607). La propiedad tiene una cabida de 39.5 acres, no obstante la huella de impacto del proyecto es de 21.22 acres. El estudio incluye una lista de las especies presentes en el área, pero no constituye un inventario de los organismos presentes en los predios donde se propone construir el proyecto.

DESCRIPCIÓN DEL PROYECTO

El Proyecto consiste en la construcción de 100 unidades de vivienda unifamiliar, en un predio con cabida de 39.5 acres de los cuales la huella de impacto del Proyecto ocupa 21.22 acres. Además, se propone la construcción de facilidades vecinales (áreas verdes), calles, encintados y charca de retención. Las casas a construirse serán de un nivel, tres cuartos, dos baños, sala, cocina, comedor y una marquesina para un vehículo. La residencia será resiliente a eventos atmosféricos mediante la instalación de paneles fotovoltaicos, baterías de almacenaje de energía, ventilación cruzada, abanicos, equipos eficientes y cisterna de agua. Dentro de la propiedad, pero fuera de la huella de impacto del proyecto ubica la Quebrada Cataño identificada como humedal riberino (R2UBH) con una cabida de aproximadamente 2.04 acres y un humedal boscoso arbustivo de agua dulce (PFO3A) con una cabida aproximada de 0.24 acres, según el NWI. Esta quebrada (humedal) recolecta las aguas de escorrentías provenientes del Sector Cataño, las cuales discurren hasta el Rio Humacao. La flora y fauna que bordea a la quebrada (humedales) son especies de sucesión secundaria temprana que sirve de refugio para especies de fauna en su mayoría aves comúnmente avistadas en asentamientos urbanos.

DESCRIPCIÓN DETALLADA DE FLORA Y FAUNA

1. Flora:

Se identificó un total de 40 especies del área inventariada distribuidas en 17 familias. (Tabla 4. Listado Flora). Las plantas fueron distribuidas en las siguientes categorías: Árboles, Arbustos, Bejucos, Cicadas, Herbáceas, Helechos, Hierbas y Orquídeas. Los patrones de uso del predio identificados en las imágenes áreas (Ver apéndice 1) se observa que la vegetación dominante en el lugar son especies herbáceas. Aun cundo el área no ha sido impactada con la limpieza de capa vegetal ni remoción de vegetación la presencia de arboles se limita a varios rodales de árboles dominados por la especie acacia (*Albizia procera*). La acacia común (*Albizia procera*) como se mencionará anteriormente es la especie dominante en el predio. La misma es considerada como una especie exótica tanto por ecologistas, agrónomos y conservacionistas por el potencial impacto que tienen en la reducción de la productividad agrícola, supresión en el crecimiento de especies nativas y en la alteración de las propiedades de los sistemas ecológicos. La *Albizia procera* es una leguminosa introducida en Puerto Rico como una especie ornamental en 1924 y reconocida como una plaga en 1957. La misma se extendió a través de las áreas húmedas de la isla invadiendo las orillas de las carreteras y caminos, tierras abandonadas y zonas dedicadas al pastoreo de ganado. (*Invasion dynamics of the exotic legume tree Albizia procera in Puerto Rico*, *Jesus Danilo Chinea*, *Cornell University 1992*).

En Puerto Rico la *Albizia procera* se ha naturalizado durante los últimos 50 años. Es una especie pionera agresiva que tiende a repoblar sitios físicamente perturbados en la zona de vida sub tropical húmeda. Es también común en pastizales a elevaciones bajas y a lo largo de los bancos de arroyos a través de toda la isla a elevaciones de menos de 600m.[1]

La mayor parte de la cobertura forestal que aparenta ser de sucesión temprana, esta dominada por arboledas abiertas y espacios sin cobertura, en donde prevalecen zonas de pastos en donde predomina la hierba guinea (*Panicum maximun*) y la yerba brava (*Paspalum millegrana*). Los árboles de *Albizia procera* crecen en rodales en lugares alterados como las orillas de la carretera.

[1] Albizia procera, Jhon A. Parrotta (Roxb.) Benth, US Department of Agriculture, Forest Service, pg 26

2. Fauna:

El grupo de fauna dominante lo fueron las aves con 17 especies identificadas en el predio. Las mismas fueron observadas en el predio, sobrevolando el área o por la identificación del canto de las mismas. En adición, a las aves se observaron en el predio 5 especies de reptiles y 4 especies de anfibios. (Véase Tabla 5- Lista de Especies de Fauna). Durante el inventario no se observaron especies de fauna en peligro de extinción. La fauna identificada dentro de la Propiedad se limita a varias especies de lagartijos y siguanas (*Ameiva azul*). La fauna dominante son aves que fueron vistas sobrevolando el lugar o fueron identificadas por su canto escuchado en las cercanías del Proyecto, según es típico de asentamientos urbanos.

Según el portal *Information for Planning and Consultation* ("IPaC") del *Fish and Wildlife Service* (FWS)[2], el predio donde se propone el proyecto es uno donde puede estar presente la boa de Puerto Rico (*Chilabothrus inornatus*), antes *Epicrates inornatus*). El FWS no ha hecho una designación de hábitat crítico para esta especie. Durante las visitas realizadas a la Propiedad con motivo de su evaluación para el Proyecto no se identificaron individuos de la Boa de Puerto Rico. El FWS ha promulgado *IPaC Project Design Guideline*s – Puerto Rican Boa,[3] cuyo protocolo se recomienda sea implementado por la compañía de construcción, incluyendo contratista general y subcontratistas, responsables por el desarrollo y construcción de la Acción Propuesta.

Además, el IPaC identifica el predio como uno donde puede estar el coquí guajon (*Eleutherodactylus cooki*). El *Eleutherodactylus cooki* (coquí guajón) es una de las 17 especies del género en Puerto Rico que se encuentran en estado de vulnerabilidad. Se diferencia de las demás especies en que presenta alta especialización a su hábitat, lo cual ha influenciado en su evolución. Entre las estrategias para manejar una especie vulnerable es declarar hábitats críticos para garantizar el rango geográfico como una unidad continua, sin fragmentación o interrupciones para la especie.

La especie está restringida geográficamente al sureste de Puerto Rico, donde está asociada a ambientes rocosos. Por el momento, se ha documentado poblaciones de la especie en los municipios de Las Piedras, Humacao, Yabucao, Maunabo, Patillas, San Lorenzo y Juncos. El hábitat tradicional del coquí guajón es conocido como guajonal (Véase Ilustración 1), el mismo consiste de grandes rocas de granito sobrepuestas unas sobre otras con cavidades, o sistemas de

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[2] Vease Anejo 1- USF&WLS General Project Design Guidelines y Conservation Measures for the Puerto Rican Boa (*Chilabothrus inornatus*)

cuevas complejas que consisten de varias cámaras de forma y tamaño irregulares, las cuales pueden diferir en profundidad y cercanía al agua (USFWS, 2004), y que le sirven de refugio a la especie (Burrowes, 2000; Rivero, 1998). Dentro de su rango de distribución, la especie también se puede encontrar en quebradas rocosas.

Entre las causas en el descenso de esta especie se pueden incluir la radiación ultravioleta, depredación, modificación y fragmentación del hábitat (Cushman, 2006; Fahrig, 2009), contaminantes presentes en el medio ambiente (Stallard, 2001), enfermedades (Burrowes, Joglar, & Green, 2004), cambios en el clima o patrones climáticos e interacciones, entre estos factores (Alford & Richard, 1999; Stuart et al., 2004; Hussain & Pandit, 2012). La vulnerabilidad de los anfibios radica en su naturaleza evolutiva. Los anfibios son organismos exotérmicos con piel desnuda, humedad, altamente vascularizada y permeable que sirve de órgano respiratorio. Este tipo de piel los mantiene en contacto íntimo con el ambiente que los rodea, y los pone en riesgo si hay cambios en la calidad del mismo.[4]

Ilustración 1- Ejemplo de Guajonal (Las Piedras)

Los terrenos donde se propone la Acción Propuesta no poseen guajonales. Los terrenos posee una topografía con pendientes entre 6-12%. El área de la Quebrada Cataño que discurre dentro de la Propiedad pero al norte y fuera de la huella de impacto será conservada en su condición natural al igual que la faja verde de mínimo 32.80 pies de ancho, medidos desde el borde del cauce.

[4] Perspectivas en asuntos ambientales, Coqui Guajon o Demonio de Puerto Rico (Eleutherodactylus cooki) Marla M. Barrios González, BS,MS& Jonathan Alfredo López Colon) Volumen 7, 2019. Disponible en: https://documento.uagm.edu/cupey/perspectivas/p_perspectivas_7_2020_10-21.pdf

METODOLOGÍA DE INVENTARIO

La fase de inventario sobre la flora fue realizada en el lugar donde se propone la construcción del proyecto Laderas de Palma. Durante las inspecciones de campo, se recorrió en transectos el área que ocupa la huella de impacto de las obras propuestas ; para documentar las especies de flora. El área del Proyecto se encuentra desprovista de vegetación.

En cuanto a la fauna, se realizó el estudio comenzando a tempranas horas (6:45 am-10:00 am) y en horarios de la tarde (4:00pm-10:00 pm) durante los meses de octubre 2023 – febrero 2024. Para lograr la identificación de las aves y fauna en general se establecieron lugares de muestreo donde era posible observar todo el lugar. La identificación de aves fue visual y por la identificación del sonido peculiar de cada una de las especies. Debido a la falta de vegetación la fauna del lugar se limita a aves que fueron identificados volando sobre el lugar o por la identificación del canto.

Para los reptiles se determinó su presencia al momento en que salían a termo-regular. Para identificarlos se utilizaron mecanismos indirectos para determinar la presencia de diferentes especies de animales como por ejemplo: restos de nidos, plumas, heces fecales entre otros.

Como recursos adicionales para determinar la presencia o ausencias de especies consideradas como críticas, raras o en peligro de extinción se consultó con la División de Patrimonio Natural del Departamento de Recursos Naturales y Ambientales (DRNA).

RESULTADOS Y DISCUSIÓN

Flora:

Se identificó un total de 40 especies del área inventariada distribuidas en 17 familias. (Véase Tabla 4. Listado Flora). Las plantas fueron distribuidas en las siguientes categorías: Árboles, Bejucos, Cicadas, Herbáceas, Helechos, Hierbas y Orquídeas.

Fauna:

El grupo de fauna dominante lo fueron las aves con 17 especies identificadas en el predio. Las mismas fueron observadas en el predio, sobrevolando el área o por la identificación del canto de las mismas. En adición, a las aves se observaron en el predio o terrenos circundantes 5 especies de reptiles y 4 especies de anfibios. (Véase Tabla 5- Lista de Especies de Fauna). Durante el inventario no se observaron especies de fauna en peligro de extinción. La fauna identificada dentro de la Propiedad se limita a varias especies de lagartijos, siguana (*Ameiva azul*) e iguana (*Iguana iguana*). La fauna dominante son aves que fueron vistas

sobrevolando el lugar o fueron identificadas por su canto escuchado en las cercanías del Proyecto, según es típico de asentamientos urbanos.

Tabla 4- Lista de Flora:

Familia	Nombre Común	Nombre Cientifico	Clasificacion
Astaraceae	Margarita silvestre	*Bidens pilosa*	H
Bignoniaceae	Tulipán africano	*Spathodea campanutata*	A
Combretaceae	Almendro	*Terminalia catappa*	A
Comelinaceae	Cohítre	*Commelina diffusa*	H
Compositae	Guaco	*Mikania cordifolia*	B
Compositae	Margarita	*Bidens pilosa*	H
Compositae	Clavelillo rojo	*Emilia fosbergii*	H
Compositae	Santa María	*Vernonia albicaulis*	H
Compositae	Yerba socialista	*Vernonia cinerea*	H
Connaraceae	Juan Caliente	*Rourea surinamensis*	B
Convolvulacea	Batatilla blanca	*Merremia quinquefolia*	B
Convulvulaceae	Bejuco de puerco	*Ipomoea setifera*	B
Cucurbitaceae	Pepinito	*Melothria pendula*	B
Cucurbitaceae	Cundeamor	*Momordica charantia*	B
Cyperaceae	Coquí	*Cyperus rotundus*	H
Euphorbacea	Ricino	*Ricinus communis*	H
Fabaceae	Acacia	*Albicia procera*	A
Fabaceae	Acacia pálida	*Leucaena leucocephala*	AR
Fabaceae	Cascabelito	*Clotalaria retusa*	H
Fabaceae	Habichuela parada	*Macroptilium lathyroides*	H
Fabaceae	morivivi giganre	*Mimosa pigra*	Ar
Fabaceae	moca	*Andira inermis*	A
Fabaceae	Algarrobo	*Hymanaea courbaril*	A
Fabaceae	Moriviví	*Mimosa pudica*	H
Fabaceae	Moriviví bobo	*Chamaecrista aeschynomene*	H
Papilionoideae	Frijol silvestre	*Vigna luteola*	B
Papilionoideae	Flor de Pito	*Centrosema pubescens*	B
Passifloraceae		*Passiflora sexflora*	B
Phytolaccaceae	Bejuco de paloma	*Trichostigma octandrum*	B
Poacea	Malojillo	*Brachiaria purpurascens*	H
Poaceae	Yerba brava	*Paspalum millegrana*	H
Poaceae	Yerba guinea	*Panicum maximun*	H
Poaceae	Yerba estrella	*Cynodon nlenfuensis*	*H*
Poaceae	Yerba Dulce	*Eleusine indica*	*H*
Poaceae	Matojo blanco	*Paspalum virgatum*	H
Polygalaceae	Bejuco de sopla	*Securidaca virgata*	B
Rubiaceae	Bejuco de beraco	*Chiococca alba*	B

A- Árbol Ar- Arbusto B- Bejucos H- Herbáceas He- Helechos P- Palma

Solanaceae	Berenjena cimarrona	*Solanum torvum*	H
Poaceae	Yerba Venezolana	*Paspalum fasciculatum*	*H*

Tabla 5: Lista de Fauna

Aves		
Nombre Comun	Nombre Científico	Clasificación
Ardea alba	Garza Real	R
Falco sparverius	Falcón Común	R
Columbina passerima	Rolita	R
Columba livia	Paloma Casera	I
Columba squamosa	Paloma Turca	R
Zenaida asiatica	Tortola Aliblanca	R
Zenaida aurita	Tortola Cardosantera	R
Crotophaga ani	Judío	R
Coereba flaveola	Reinita Común	R
Dendroica adelaidae	Reinita Mariposera	E
Tiaris bicolor	Gorrión Negro	R
Margarops fuscatus	Zorzal Pardo	R
Mimus polyglottos	Ruiseñor	R
Tyrannus dominicensis	Pitirre	R
Vireo latimeri	Bienteveo	E
Pterochelidon fulva	Golondrinas de cuevas	R
Quiscalus niger	Mozambique	I
Reptiles		
Nombre Comun	Nombre Científico	Clasificación
Anolis cristatellus	Lagartijo Común	E
Anolis pulchellus	Lagartijo de las Hierbas	E
Anolis stratulus	Lagartijo Manchado	E
Ameiva exul	Siguana	E
Iguana iguana	Iguana	I
Anfibios		
Nombre Comun	Nombre Científico	Clasificación
Leptodactylus albilabris	Ranita de Labio Blanco	E
Eleutherodactylus antillensis	Coquí churí	R
Eleutherodactylus coqui	Coquí común	E
Bufo marinus	Sapo marino	I

I-Introducido R- Residente E- Endémico PE- Peligro de extinción

CONCLUSIÓN

Luego de haber evaluado los aspectos de flora, fauna y de hábitats contenidos en este informe puedo concluir que las obras propuestas, no representa un impacto negativo para la flora o fauna debido a las siguientes razones:

- Los predios que comprenden la huella de impacto no contienen una composición única de especies ni se identificaron especies de vida silvestre, poblaciones o comunidades de especies de distribución específica y limitada de baja capacidad de dispersión que puedan ser afectadas por las obras propuestas.

- No se identificó en el lugar, áreas de importancia para el anidaje, pernocte o de alimentación para ninguna especie ya sea de aves, anfibios o de reptiles que pueda ser impactada por las obras propuestas.

- Las medidas de mitigación que serán implementadas durante la construcción y operación del proyecto evitarán o minimizarán cualquier impacto adverso sobre la flora y fauna terrestre.

- En el lugar donde se propone el proyecto no se identificaron especies de flora o fauna identificadas como raras, vulnerables o en peligro de extinción.

- No se observó individuos de la boa (*Chilabrothrus inornatus*) ni de coquí guajon (*Eleutheroctylus cooki*)

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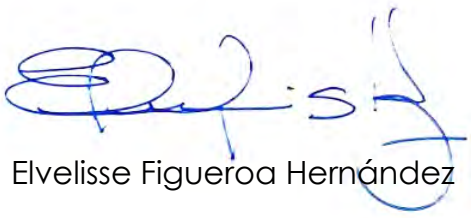
CERTIFICACION

Yo, Elvelisse Figueroa Hernández certifico que he preparado y revisado el Estudio de Flora y Fauna para el proyecto Laderas de Palma localizado en la Carretera PR-3, Km. 33.7 en el Barrio Cataño del Municipio de Humacao, PR 00791.

Afirmo y reconozco las consecuencias de incluir información falsa en dicho documento.

Y para que así conste, firmo la presente certificación en Toa Alta, PR hoy de 17 de mayo de 2024.



Elvelisse Figueroa Hernández

EXHIBIT 3

U.S. Fish & Wildlife Service

Caribbean ES Puerto Rican Boa

Puerto Rican Boa

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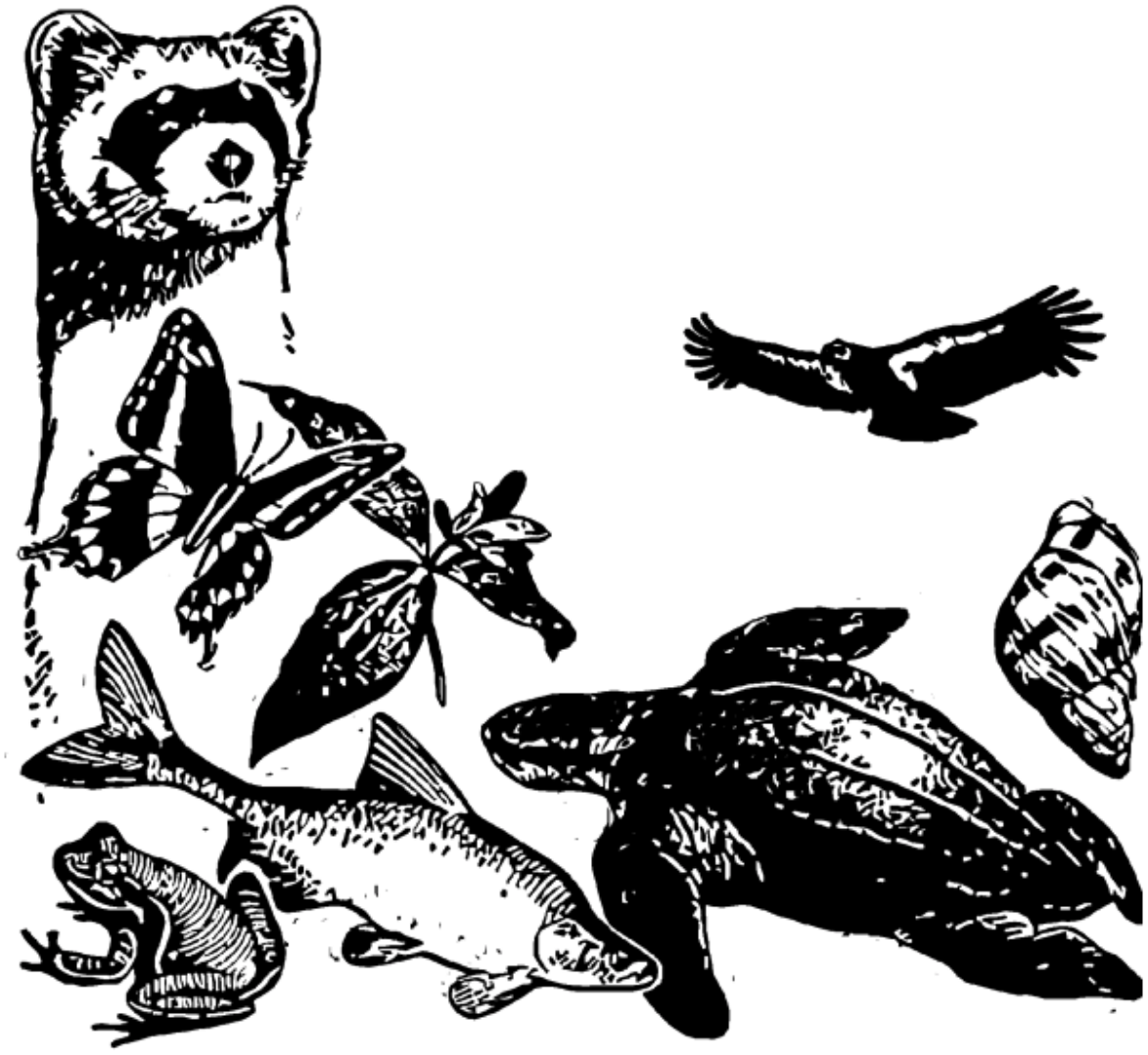


IPaC - Information for Planning and Consultation (https://ipac.ecosphere.fws.gov/): A project planning tool to help streamline the U.S. Fish and Wildlife Service environmental review process.

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 federally 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.

Adult PR boa – *Chilabothrus inornatus*
Photo: Puerto Rico by JP Zegarra

Last Revised: January 2024

The PR 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 such as roadsides or houses, especially if near their habitat in rural areas. The PR 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 project 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. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #5). **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 that 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.

5. 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.

6. If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service.

7. 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 #4). If not possible, the animal should be left alone until it leaves the vehicle on its own.

8. 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.

9. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #5). 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 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.

10. 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 Program Coordinator
  - Email: jose_cruz-burgos@fws.gov
  - Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
  - Email: jan_zegarra@fws.gov
  - Office phone (786) 933-1451

Last Revised: January 2024

EXHIBIT 4

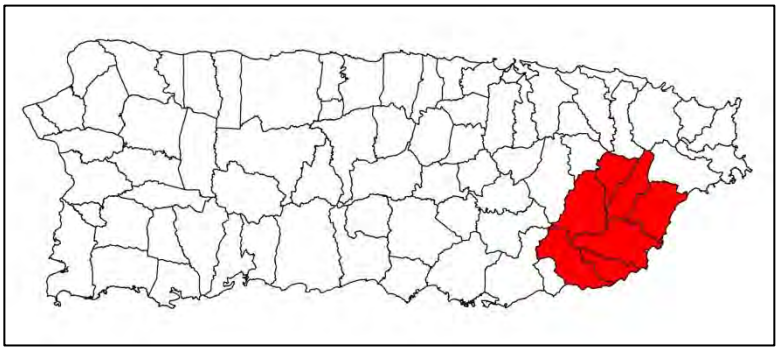
U.S. FISH AND WILDLIFE SERVICE
CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE

Conservation Measures for the Coquí Guajón (*Eleutherodactylus cooki)*

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 Coquí guajón destroy its eggs, and/or modify its critical habitat is subject to penalties under Federal law. If federal funds or permits are needed, the funding or permitting agency shall 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. Download the project evaluations fact sheet to learn more about the requirements or visit our project evaluations webpage.

The coquí guajón is a relatively large species within the coqui frog family, reaching approximately 3 inches in length with females being larger than males. The species is considered mostly nocturnal, but can also be heard calling during daylight hours and late afternoon. This coquí was federally listed as threatened in 1997 and is only known to occur in southeastern Puerto Rico in the Municipalities of Yabucoa, San Lorenzo, Patillas, Humacao, Las Piedras, Juncos, and Maunabo (shaded area in map below). You may find more information on this species including a recording of its call here: http://www.proyectocoqui.com/portfolio/coqui-guajon/#.XHginlW6PIV, and educational materials including a printable poster here: https://www.coquiguajon.org/materiales-educativos.

Adult male coquí guajón
Photo: Patillas, PR by USFWS-JP Zegarra



The coquí guajón utilizes large to small caves and crevices formed by different sized granite boulders within rocky streams. This type of habitat is commonly known as *guajonal*. The species also has been detected using road culverts and adjacent to Puerto Rico's sewer and aqueduct water

Last Revised: October 2023

facilities. Projects that occur upstream or upland where the species occurs may also impact its habitat further downstream.

Critical habitat has been designated in each of the municipalities mentioned above, all within private lands. The enclosed link describes and illustrates all of the 17 designated critical habitats for this species: https://www.govinfo.gov/content/pkg/FR-2006-10-05/pdf/06-8482.pdf. You may also download spatial data for these critical habitats by searching here: https://ecos.fws.gov/ecp/report/table/critical-habitat.html.

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

Conservation Measures:

1. Confirm the presence/absence of the species at the project site. The most effective way to do this is to identify the guajon's call during the late afternoon or night. You may contact the Service for recommendations on how and when to do this.

2. Inform all project personnel about the potential presence of the coquí guajón 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 this species. An educational poster or sign with photo or illustration of the species should be displayed at the project site.

3. Proposed activities should avoid adversely affecting any of the 17 critical habitat units or any other occupied guajón habitat.

4. Be advised that the designated critical habitat is not the entire range of the species; the species can be found in any boulder type habitat in streams, ravines or drainages within the above referenced Municipalities. If the species is detected outside of the designated critical habitat areas, it is still protected under the Endangered Species Act.

5. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area, the buffer zones, and areas to be excluded and protected should be clearly marked in the project plan and in the field.

6. It is important to implement proper erosion and sedimentation control measures when working within or adjacent to coqui guajón habitat. Sediment runoff can adversely impact the species and its habitat by filling the caves and crevices were the species occurs and uses to lay its eggs. As water is a very important component of the species' habitat, any stream, creek, or similar body of water with the habitat characteristics indicated above may harbor the species, hence it should protected to the maximum extent possible.

7. Areas that can be impacted by construction or any other activity would potentially require the relocation of frogs and consultation with the Service for such action is required. If

relocation is proposed, a capture and relocation protocol should be developed and sent to the Service for evaluation before the project starts. Capture and relocation of frogs should be conducted only by qualified personnel avoiding harming, injury or killing individuals.

8. A before and after photographic record of the project area should be established. In addition, a record of all coquí guajón detections, including date, time, location, and approximate number of individuals should be established.

9. Projects must comply with all State laws and regulations. Also, contact PRDNER for further guidance.

If you have any questions regarding the comments above, please contact the Service Monday to Friday 8:00 am – 4:30 pm

- José Cruz-Burgos, Endangered Species Coordinator
  - Email: jose_cruz-burgos@fws.gov
  - (305) 304-1386
- Jan P. Zegarra, Fish and Wildlife Biologist
  - Email: janz_zegarra@fws.gov
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Last Revised: October 2023

Guidance for Repair, Replacement, and Clean-up of structures in Streams and Waterways of Puerto Rico and US Virgin Islands

In Puerto Rico (PR) and US Virgin Islands (USVI), flooding caused by heavy rainfall events, tropical storms, and hurricanes can damage stream crossings (bridges, culverts, low-water crossings, etc.) and in-stream structures (piers, docks, etc.), and create debris jams. Many streams in PR and USVI support an array of aquatic species, including anadromous and catadromous native fish and a suite of native shrimp. Repair and clean-up activities in streams have the potential to adversely affect these species and their habitat, causing sedimentation in areas downstream of the project and disruption of sediment transport leading to channel instability.

This guidance applies to repair, replacement, and clean-up projects related to storm damage or natural processes. The guidance applies to creeks, rivers, and tidally-influenced waters in PR and USVI. All projects in aquatic habitats should be considered with the following conditions below.

General Guidance for Road Crossing Structures

Road-Stream Crossing Removal and Associated Channel Restoration

If a temporary crossing structure will be removed, the affected area should be restored to a natural state. Following structure removal, the stream channel should be reconstructed to match natural bankfull (i.e., channel shape from effective discharge or channel forming discharge [Figure 1]) width, channel slope and active floodplain dimensions, which exist upstream and downstream of the structure being removed. This activity should occur to restore physical and biological aquatic habitat connectivity, most notably, passage for aquatic and terrestrial organisms.

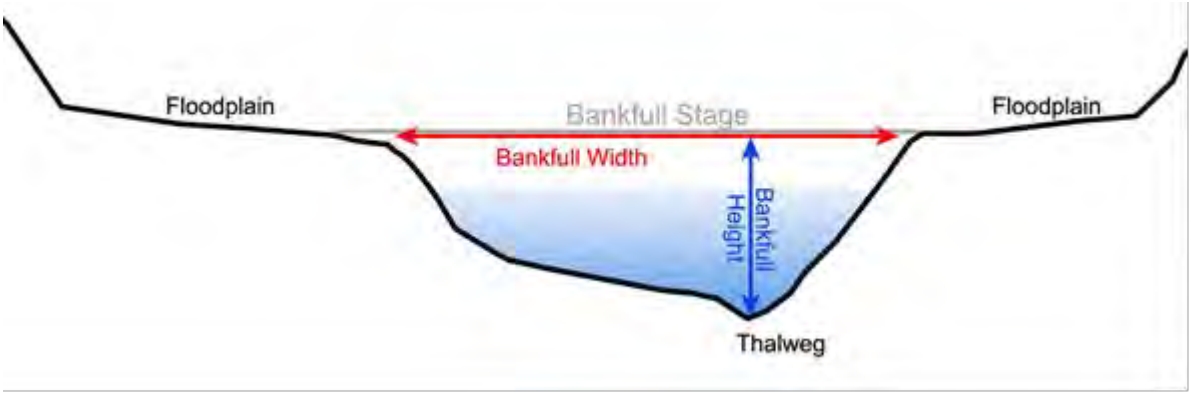


Figure 1. Bankfull Cross Section.

Road-Stream Crossing Replacement Structure

Replacement with a culvert or open-bottomed structure. Culvert refers to a variety of closed-bottomed metal and concrete structures. Open-bottomed structures include arches, three-sided boxes and bridges. Structure widths should be at least 1.2 times bankfull width with stable bank rocks on both sides. Structures should be constructed in a manner that accommodates 100-year flows, (Figures 2 and 3) and allows for natural stream processes including sediment and woody debris transport to the greatest degree possible given the structure dimensions. Flood relief culverts (Figure 4) on unconfined floodplains may be used. Crossings with large unconfined floodplains may require additional capacity or may include floodplain relief structures.

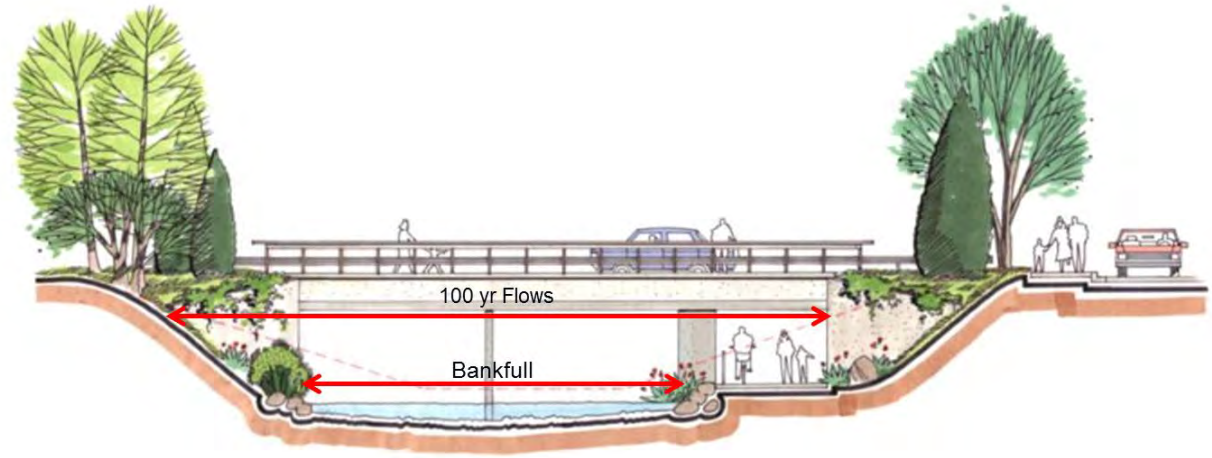


Figure 2. 100 yr Flow Design.

Figure 3. Bridge with Floodplain and Height Capacity for 100 yr Flows.

Figure 4. Bankfull Channel Culvert with Flood Relief Culverts at Floodplain Elevation.

Design Criteria

Stream crossing designs are intended to replicate the natural stream processes within and immediately adjacent to a culvert or opened-bottom structure. Aquatic organism passage, sediment transport and flood and wood conveyance within the structure are intended to imitate the stream conditions upstream and downstream of the crossing, as close to natural conditions as the structure type allows (Figures 5 and 6). Culverts and open-bottomed structures, when properly sized and designed, can accomplish these natural stream processes. Culverts should be partially filled with

material that simulates the natural streambed. Open-bottomed structures should contain substrate that matches the natural stream channel.

Figure 5. Poor design has resulted in scour and degradation below culvert and obstruction to fish passage.

Figure 6. Bankfull Bottomless Arch Culvert with Floodplain Relief Drain.

Implementation of a replacement project requires a high level of information and site-specific data regarding stream hydrology and geomorphology, as well as engineering and construction expertise. Project design criteria include several components as described below.

Structure Width

The width of structures (at bankfull or top of bank elevation) should be equal to or greater than 1.2 times bankfull channel width. A single structure span of the width is preferred but multiple culverts are allowed, and should be accompanied with flood relief drains. The minimum structure width of a culvert should be five feet to allow placement of substrate material. The width of the structures within the vertical adjustment potential should be equal to or greater than 1.2 times bankfull channel width. No piers, footers, piles, or abutments should be within 1.2 times bankfull width, unless there are constraints in placement and design criteria which then should allow for a minimum amount of structures.

Structure Alignment

The structure should achieve optimal orientation relative to both the road and stream channel. Replacement structures are sometimes shifted to achieve better alignment with the natural stream channel pattern at the crossing location. Skew angle should be in line with stream channel orientation.

Structure Capacity

The structure should accommodate a 100-year flood flow without significant change in substrate size and composition. To meet this requirement, unconstrained channel types may require structures wider than 1.2 times bankfull or additional flood relief structures. The headwater depth to structure height ratio should not exceed 0.8:1 for 100-year flows in order to allow for additional vertical clearance for woody debris and sediment transport.

Channel Slope

The culvert structure slope should match an appropriate reference reach of the natural stream (assessed at a minimum of approximately 20-30 times the channel width upstream and 20-30 times the channel width downstream of the site, though a suitable reference reach could be located further upstream or downstream). The maximum slope should not exceed 3.5 percent because of difficulties in retaining substrate within the structure at higher gradients, increasing both costs and design complexity. Bridges do not have a maximum slope range.

Embedment

If a culvert is used, the bottom of the culvert should be buried into the streambed not less than 20 percent of the culvert height.

Elevation

For open-bottomed structures, the footings or foundation should be designed to be stable for the maximum scour depth. The structure should also provide a low flow channel.

Substrate

Material in structures should match the natural stream channel. Bed materials should match natural stream bed mobility characteristics. Bank and other key bed structural elements (e.g. steps, weirs, ribs, etc.) should be stable at the 100-year flow.

Geotechnical analysis

Structure design and construction methods may be influenced by soil composition and subsurface conditions including, but not limited to, the presence of bedrock and clay. The need for geotechnical analysis is determined on a project-specific basis and is not always necessary.

These recommendations promote the use of the U.S. Forest Service's Stream Simulation approach for designing road-stream crossings, an approach which our agencies have successfully used on previous projects to support recovery of anadromous and catadromous fishes by restoring stream habitat.

***Specific Conditions for Road-Stream Crossings*:**

A. Bridge and Culvert Repair, Replacement, or Upgrade to a Higher Preference Order

All bridge and culvert projects should follow the guidelines below and the General Conditions in D. General design drawings and recommendations are shown in Appendix A. Stream crossing structures are listed in order of preference from 1 (most preferred) to 4 (least preferred). Bridges that fully span the stream and have no in-stream pilings are preferred over other crossing types and should be used whenever possible as they minimize impacts to listed species and critical habitat, and reduce the need for future repairs.

Order of Preference	Structure	Project Description	Conditions
N/A	Bridge	Repair/ reinforcement	Follow the General Conditions listed in D. below.
		Repair/reinforcement with new rip rap	*Placement of new rip rap in-stream should be consulted on with the Service on a case-by-case basis for specific recommendations.*
1	Bridge – no in-stream pilings	Replacement or upgrade	1) Remove all remnants of the damaged structure from the stream channel and dispose of in an off-site disposal area. 2) Follow the General Conditions listed in D. below.
2	Bridge – with in-stream pilings	Replacement or upgrade	*All bridge replacements and upgrades that require in-stream supports should be consulted on with the Service on a case- by-case basis for specific recommendations.*
3	Culvert – bottomless	Replacement or upgrade	1) Culvert width should be 1.2 times bankfull width. 2) Multiple culverts are needed when the maximum culvert width available is reached, but bankfull width has not been reached. 3) Culvert slope should match channel grade. 4) It is recommended that floodplain relief drains be installed in road approaches.
4	Culvert – box, elliptical or round (in order of preference for minimization of impacts)	Replacement	1) Culvert width should be 1.2 times bankfull width. 2) Culvert should be counter sunk below substrate to a depth of 20% of the culvert diameter (round) or rise (elliptical, box). 3) Multiple culverts are needed when the maximum culvert width available is reached, but bankfull width has not been reached. 4) Culvert slope should match channel grade. 5) It is recommended that floodplain relief drains be installed in road approaches.

B. Demolition and Removal of Damaged Structures

- Conduct activities in a manner that minimizes disturbance to the stream bottom and banks.
- The structure should be lifted or floated out of the stream, not dragged on the bottom.
- Wooden pilings should be cut or pinched off at the substrate level.

- Remove all remnants of the damaged structure from the stream channel and dispose of in an off-site disposal area.
- In addition, follow the General Conditions listed in D. below.

C. Debris Removal

- When feasible and safe, natural woody debris should remain in the stream.
- Conduct activities in a manner that minimizes disturbance to the stream bottom and banks.
- Debris should be lifted or floated out of the stream, not dragged on the bottom.
- In addition, follow the General Conditions listed in D. below.

D. General Conditions for all Projects

1. Keep in-stream work to a minimum.

2. Conduct work activities from atop a stable streambank or reinforced platform, when feasible, and in a manner that does not degrade or destabilize the streambank.

3. Install erosion and sediment control devices before any work is performed, and closely monitor and maintain for the life of the construction project. Implement the appropriate best management practices for preventing and minimizing erosion and sediment outlined in the following manuals: *Florida Stormwater, Erosion, and Sediment Control Inspector's Manual* (July 2008), and *State of Florida Erosion and Sediment Control Designer and Reviewer Manual* (July 2007).

4. Keep land clearing to the minimum level necessary for project completion. Stream bank vegetation should be left intact to the extent practicable. Cutting vegetation is preferred to root grubbing near streams.

5. Cover disturbed areas with erosion controls mats and revegetated promptly with native grasses.

6. Locate debris collection sites, borrow sites, fill dirt stockpiles, and equipment staging areas at least 200 feet from stream channels to minimize the potential of sediments and contaminants entering the waterway.

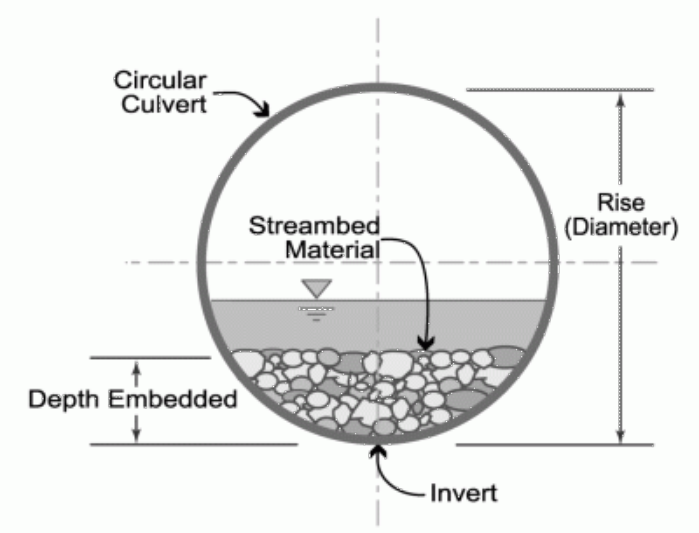
E. Low Water Crossings-Fords

1. All recommendations for Low Water Crossings-Fords can be found in the U.S. Forest Service Publications Number 0625 1808—SDTDC Titled "Low-Water Crossings: Geomorphic, Biological, and Engineering Design Considerations".

Contact Information:

Caribbean Ecological Services Field Office
Marelisa Rivera
U.S. Fish and Wildlife Service
P.O. Box 491
Carr 301, Bo Corozo
Boqueron, Puerto Rico 00622
Phone: (787) 851-7297 x 206
https://www.fws.gov/caribbean/

Appendix A
General Design Drawings for Fish Passage Structures



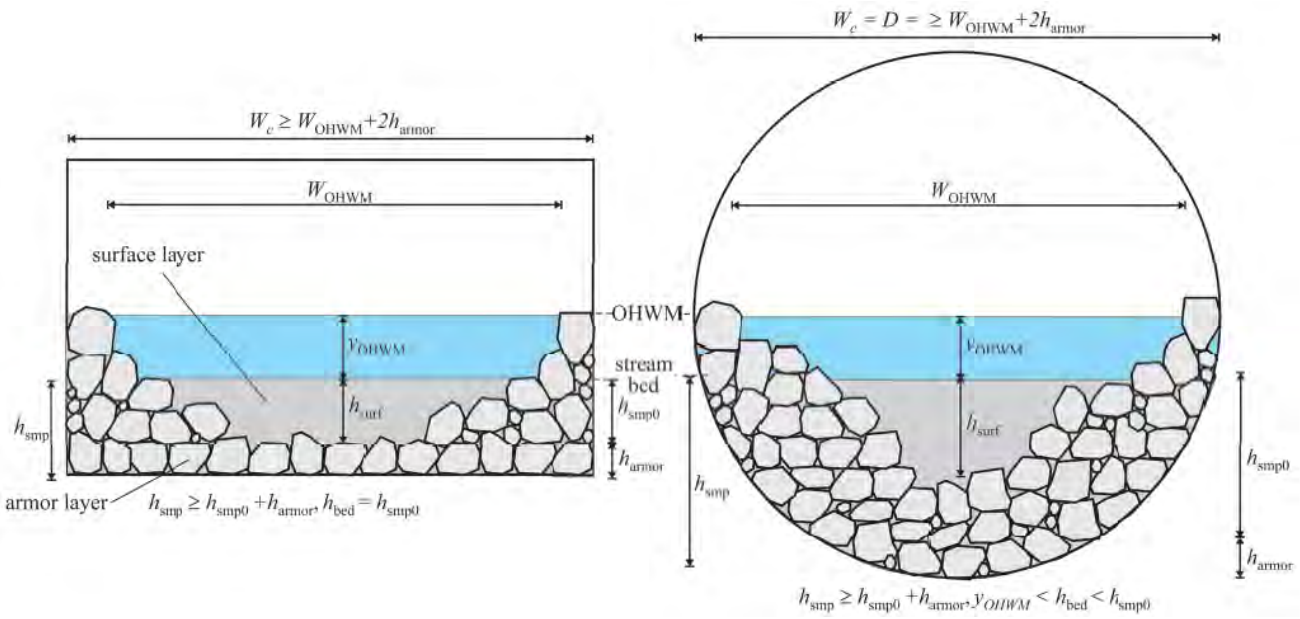
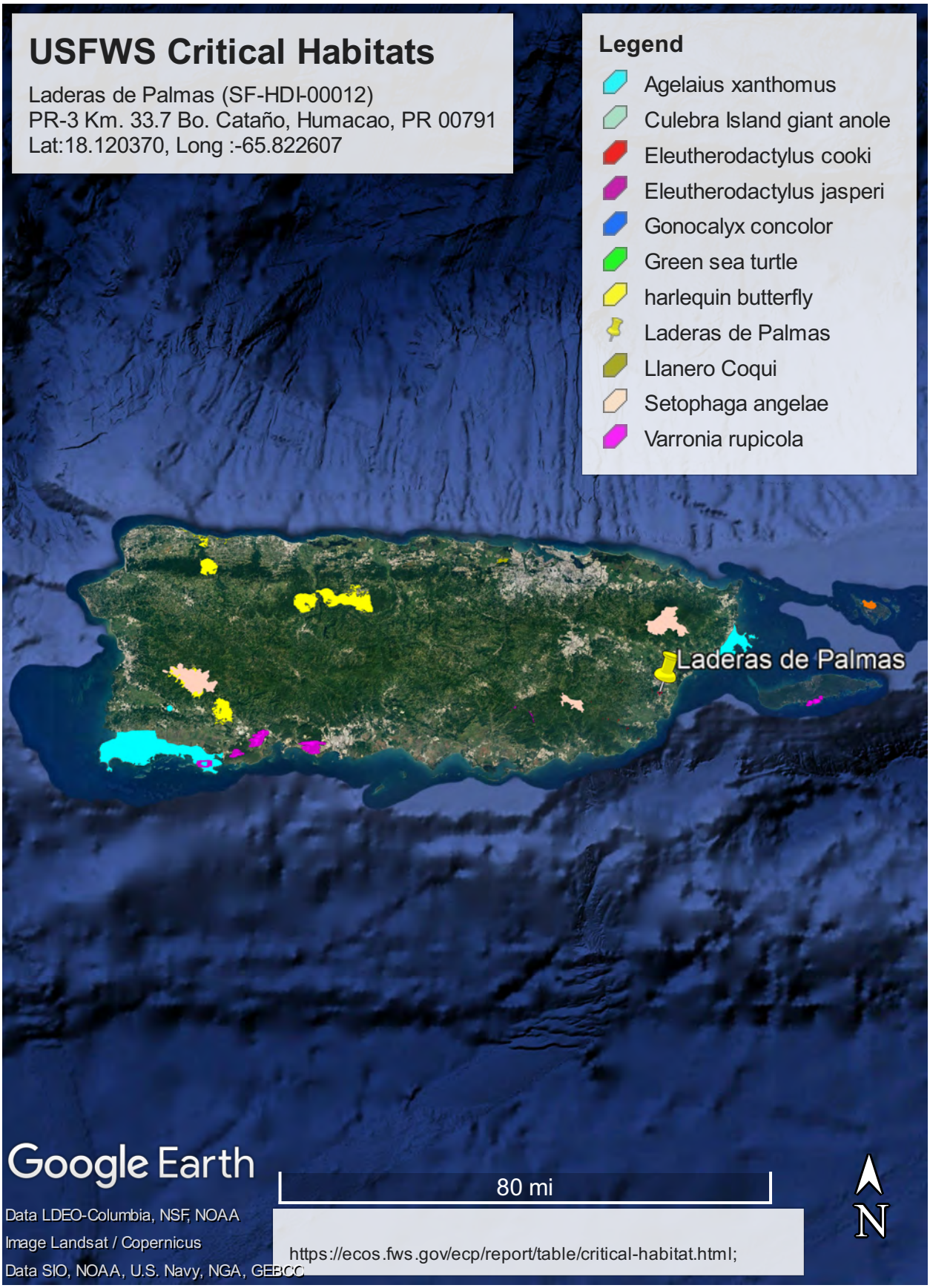


EXHIBIT 5



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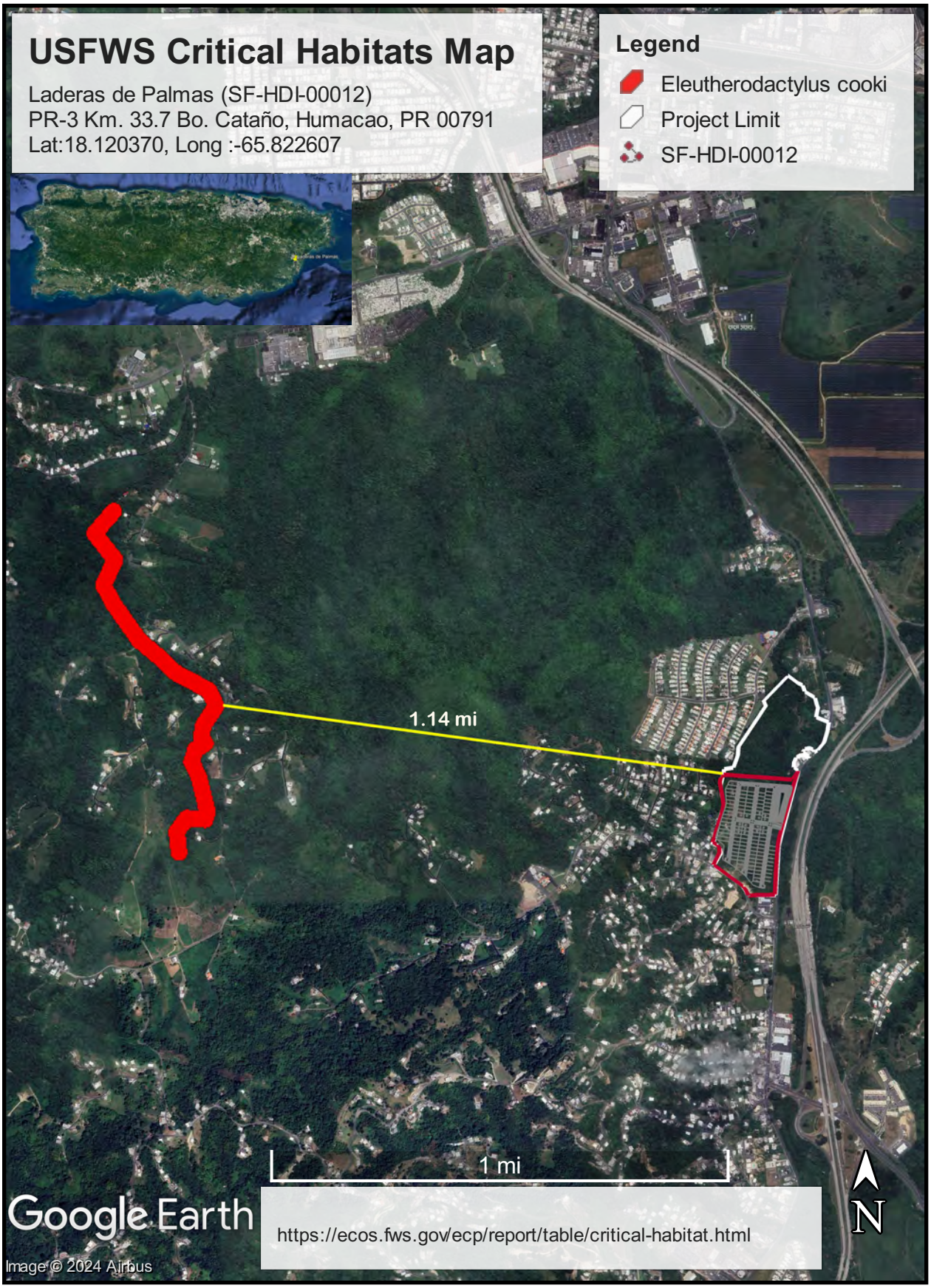

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EXHIBIT 6

Topographic Map

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Legend

- Project Limit
- SF-HDI-00012

CAM DEL MIRADERO

Quebrada Cataño

600 300 100 100 300 300 300 200

3

2000 ft

N

Google Earth

https://ngmdb.usgs.gov/topoview/viewer/#15/18.1150/-65.8159

Image © 2024 Airbus

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EXHIBIT 7

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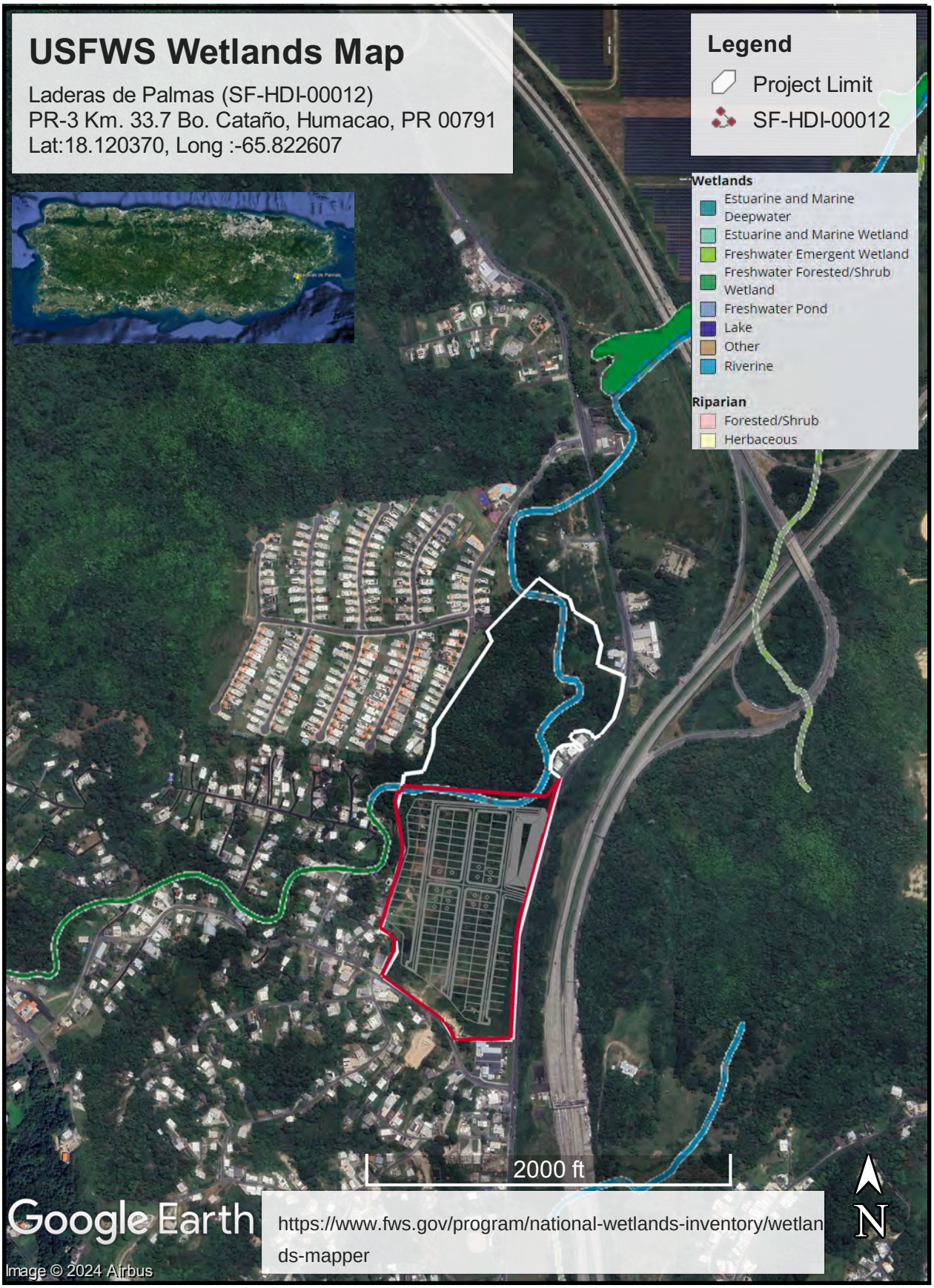
EXHIBIT 8



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PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 1924 84, SAN JUAN, P. R. 00919-2484

HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Alpinista Hernandez@gmail.com
T: 787-249-4106 M: 787-224-2447 1457 SAN PATRICIO AVE. - SAN JUAN PR 00921

REVISIONS			
NUMBER	DATE	BY	DESCRIPTION

SHEET IDENTIFICATION: C–101
SHEET NO: .
TOTAL: .

SHEET TITLE:
PROPOSED GENERAL SITE PLAN

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.& C.C. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR SUBMITTED TO PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.& C.C. UPON THE REQUEST BY THIS OFFICE.

J. C. A.:	.
CONSULTA.:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D A T E:	AS SHOWN
S C A L E:	AS SHOWN
DRAWING:	1045•

PLAN
SCALE = 1:500
0 10 20 30 40
N
W E
S

R2UBH
10.0m BUFFER - PENDING TO JD
>> CATAÑO CREEK >>
REMNANT FOR CONSERVATION
GREEN AREA
DETENTION POND
NEIGHBORHOOD FACILITIES 1 of 2
PARCEL AREA = 1,873.67sm
NEIGHBORHOOD FACILITIES 2 of 2
PARCEL AREA = 961.24sm
NO. 104 ST.
NO. 103 ST.
NO. 102 ST.
NO. 101 ST.
NO. 100 ST.
PR-3
PR-910
FUTURE PRPA ROW
PAN PEPIN INC
>TO HUMACAO<
<TO ARBOLOAK<

CIVIL ENGINEERING NOTES:
1 ALL WORK SHALL PROCEED WITH CONSTRUCTION HIGHLIGHTS. CONSTRUCTION PERMITS ARE APPROVED
2 SEE SHEET C-101 FOR GENERAL NOTES
3 MINIMUM GRADES: FLAT/NO GREEN AREAS 1%, 2% PREFERRED.
4 ALL P.L.C. CORNERS TO BE TOPOGRAPHICALLY SURVEYED AND STAKED BY A LICENSED SURVEYOR
5 CONTRACTOR IS RESPONSIBLE FOR ALL DOPK, MUNICIPALITY, PRASA PREPA,PRHTA, ANY OTHER GOVERNMENT AGENCY PERMIT FEES.
6 CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, DESIGN, PAYMENT, SUBMISSION, AND MAINTENANCE OF THOSE WORKS
7 FOR ACCESSIBLE RAMP DESIGN, THE CONTRACTOR SHALL USE THE PROPORTIONS OF
8 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SIGNS AND BARRICADES FOR ACCESSIBLE DESIGN.
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78 AS PER 2 CFR PART 84 - 403 STANDARD FOR ACCESSIBLE DESIGN. THIS APPLY TO THE HANDICAPPED PARKING FOOD TOO
79 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SIGNS AND BARRICADES FOR ACCESSIBLE DESIGN.
80 CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, DESIGN, PAYMENT, SUBMISSION, AND MAINTENANCE OF THOSE WORKS
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111 AS PER 2 CFR PART 84 - 403 STANDARD FOR ACCESSIBLE DESIGN. THIS APPLY TO THE HANDICAPPED PARKING FOOD TOO
112 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SIGNS AND BARRICADES FOR ACCESSIBLE DESIGN.

115 PHYSICAL RETAINING WALL, RET-A WING WALL ON SITE REQUIRES A FENCE ON THE TOP - SEE ARCH. DWGS. FOR DETAILS.
116 INCIDENTAL PERMIT AT DNER / DOPK IS DELEGATED TO THE C.C. ALL DESIGN AND SUBMISSION FEES BY E.C. (TYPICAL FOR ALL DELEGATED PERMITS)
117 THIS PROJECT REQUIRES AN EROSION CONTROL DESIGN AND A CONSOLIDATED EFFLUENTS PERMIT (CEP) FROM DNER. CEP IS DELEGATED TO THE E.C. (SEE SPECIFICATIONS FOR
118 THE PROJECT REQUIRES A NPDES PERMIT FROM EPA. THE CONTRACTOR SHALL PREPARE AND SUBMIT THE NOI AND THE SWPPP AS REQUIRED
119 TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR SUBMISSION TO THE PERTINENT AGENCY
120 T.B.V.= TO BE VERIFIED IN FIELD BY CONTRACTOR. ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS SHOWN ON THESE PLANS
121 MUST BE VERIFIED ON FIELD VERIFICATION SHALL BE BY THE GENERAL CONTRACTOR. ANY DISCREPANCY
122 MUST BE REPORTED TO THE ENGINEER OF RECORD BEFORE PROCEEDING WITH THE WORK. DIMENSIONS SHOWN ON
123 PLANS ARE DELEGATED TO THE GENERAL CONTRACTOR.
124 REPAVING OF EXISTING STREETS SHALL WARRANTY A MINIMUM SLOPE OF 0.5% (1.0%) TO A CURB, OS OR DRAINAGE AREA
125 ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION
126 THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION
127 AND SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS.
128 ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION
129 THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION
130 AND SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS.
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139 AND SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS.
140 ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION

LEGEND
INDICATED NEW CONCRETE CROSS GUTTER ON STREET INTERSECTIONS, SEE STORM SEWER AND GRADING PLAN.
INDICATED NEW 6'-0" CYCLONE FENCE, SEE GARDING PLAN

▶AAA-RE-23-36-0020◀
2023-503622-SRI-073046

PROGRESS SET FOR COMMENTS
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

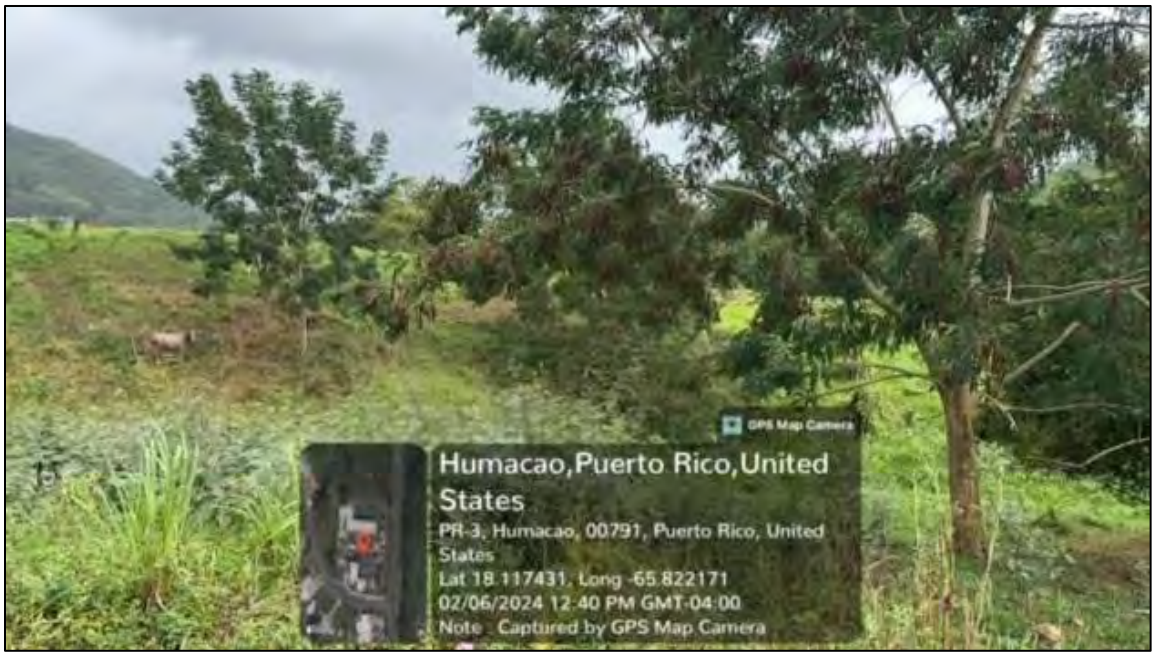
240209

REV-1
REV-2

EXHIBIT 9

October 17, 2023: General Site View

October 17, 2023: General Site View



October 17, 2023: General Site View

October 17, 2023: General Site View

EXHIBIT 10

Laderas de Palmas

Aerial Images
2004

Legend

- Project Limit
- SF-HDI-00012

3000 ft

N

https://earth.google.com/web/@18.12096534,-65.8227319html

Google Earth

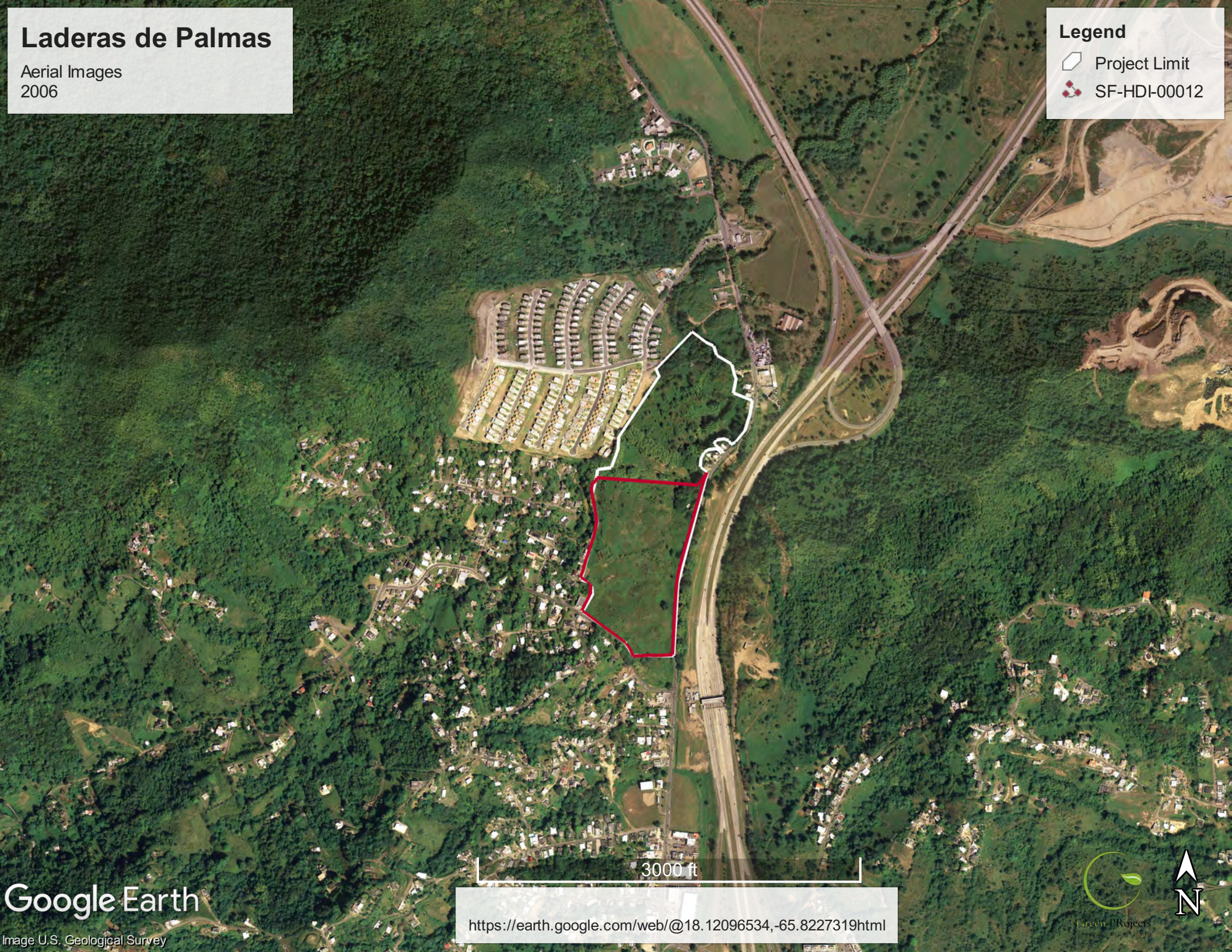
Image U.S. Geological Survey

Laderas de Palmas

Aerial Images
2006

Legend

- Project Limit
- SF-HDI-00012



Laderas de Palmas

Aerial Images
2015

Legend

- Project Limit
- SF-HDI-00012

Image © 2024 Maxar Technologies

Laderas de Palmas

Aerial Images
2023

Legend

- Project Limit
- SF-HDI-00012

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

Exhibit 8

Explosive and Flammable Hazard Location

Laderas de Palmas

SF-HDI-00012

Stationary Hazards Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Legend

- 1 Mile Buffer
- A VP Fuels Gas Station
- J AAA Waste Pump
- B Empire Gas Company
- C Gulf Gas Company
- D Pan Pepin Company
- E Texaco Gas Station
- F Hardware Store
- G Laboratory
- H AAA Waste Pump
- I Yabucoa Gas Turbine
- K Commercial Building
- L Telecommunication Tower
- Project Limit
- SF-HDI-00012

1 mi

N

Google Earth

Image © 2025 Airbus

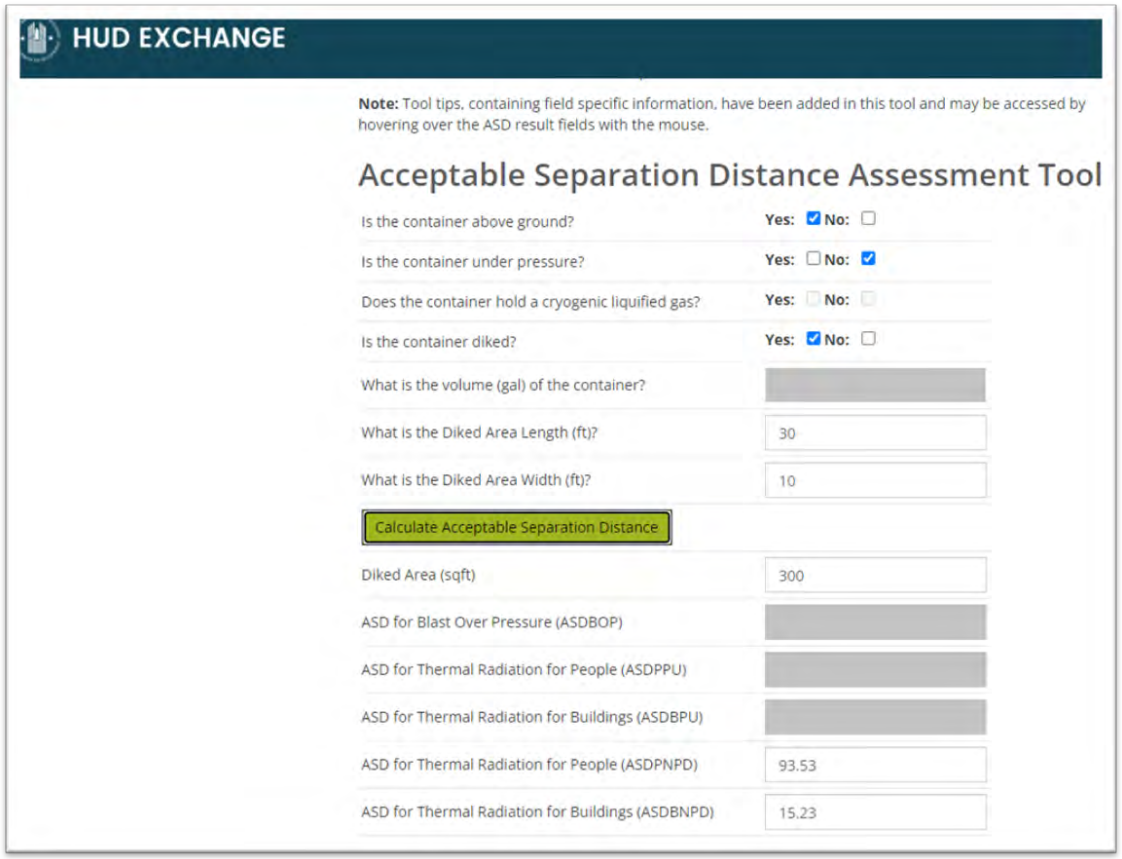
https://earth.google.com/web/@18.12096469,-65.8227327

ID	Location	Description Stationary Hazards	Project Distance (fT)	Acceptable Separation Distance (ft)		Mitigation
				People	Buildings	
A	18.129068 -65.821905	VP Fuels Gas Station 10,000 Gal Diesel Tank Tank In side Diked (10 x 30)	10,000	94	15	Not Apply
B	18.126923 -65.82065	Empire Gas Company 2,000 Gal Gas Tank	2,100	370	70	Not Apply
C	18.12367 -65.819754	Gulf Gas Station 2 Electric Generator 200 Gal Diesel Tank (Each One)	1,200	141	24	Not Apply
D	18.117125 -65.821999	Pan Pepin Company 1,000 Gal Gas Tank Coordinate: 18.117125, -65.821999	225	277	51	HUD has updated the definition of "hazard" in 24 CFR 51.201 to exclude from mandatory separation distance requirements in 24 CFR part 51, subpart C all containers that are 1,000 gallons or less in water volume capacity and comply with the National Fire Protection Association Code 58, in the 2017 edition (NFPA 58 (2017)).
E	18.112129 -65.821846	Texaco Gas Station 5,000 Gal Diesel Tank	2,080	79	13	Not Apply

		Tank In side Diked (10 x 20)				
F	18.112563 -65.821907	Hardware Store Electric Generator 500 Gal Diesel Tank	1,960	208	37	Not Apply
G	18.11083 -65.822399	Laboratory Electric Generator 500 Gal Diesel Tank	2,530	142	24	Not Apply
H	18.110571 -65.821851	AAA Waste Pump Electric Generator 500 Gal Diesel Tank	2,620	208	37	Not Apply
I	18.105603 -65.822914	Yabucoa Gas Turbine Electric Plant (Genera PR)	4,440	399	76	Not Apply
J	18.109936 -65.819123	AAA Waste Pump Electric Generator 500 Gal Diesel Tank	3,000	208	37	Not Apply
K	18.109587 -65.8177	Commercial Building 3 Electric Generator 200 Gal Diesel Tank (Each One)	3,350	141	24	Not Apply
L	18.11281 -65.818643	Telecommunication Tower (160' High) 500 Gal Diesel Tank for Electric Generator	2,570	208	37	Not Apply

Photos for Stationary Hazards

A. VP Fuels Gas Station
10,000 Gal Diesel Tank
Tank In side Diked (10 x 30)
Coordinate: 18.009453, -66.494311



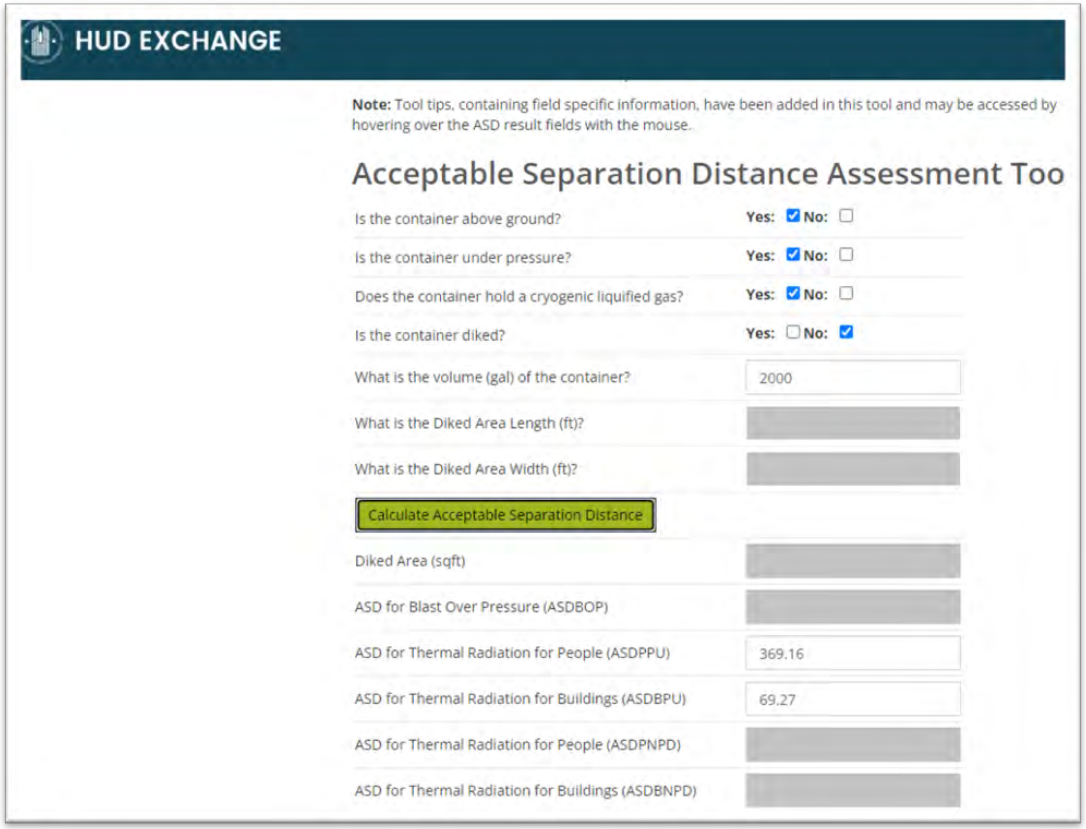
HUD EXCHANGE

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

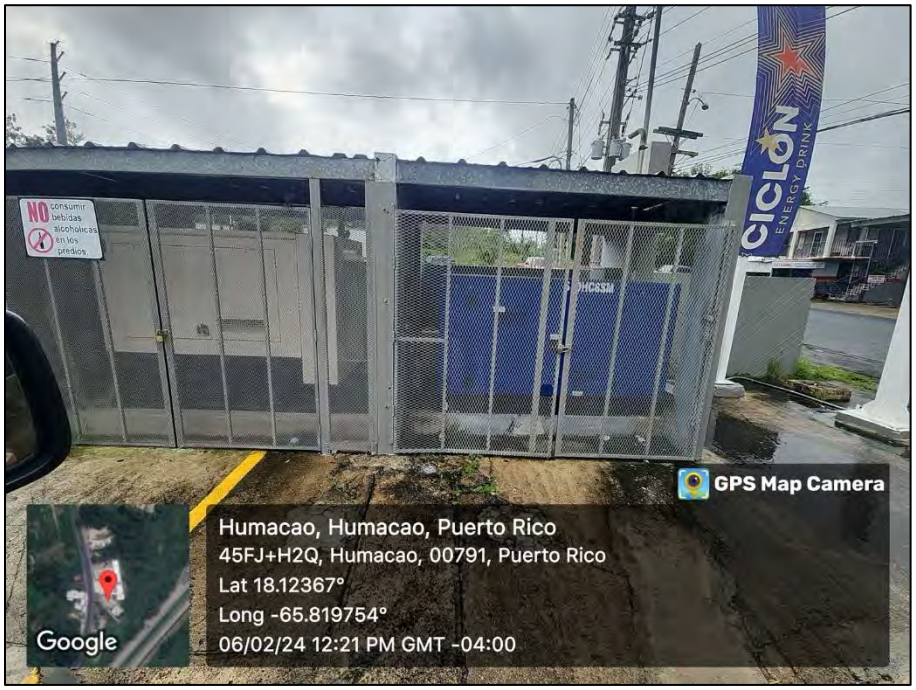
Acceptable Separation Distance Assessment Tool

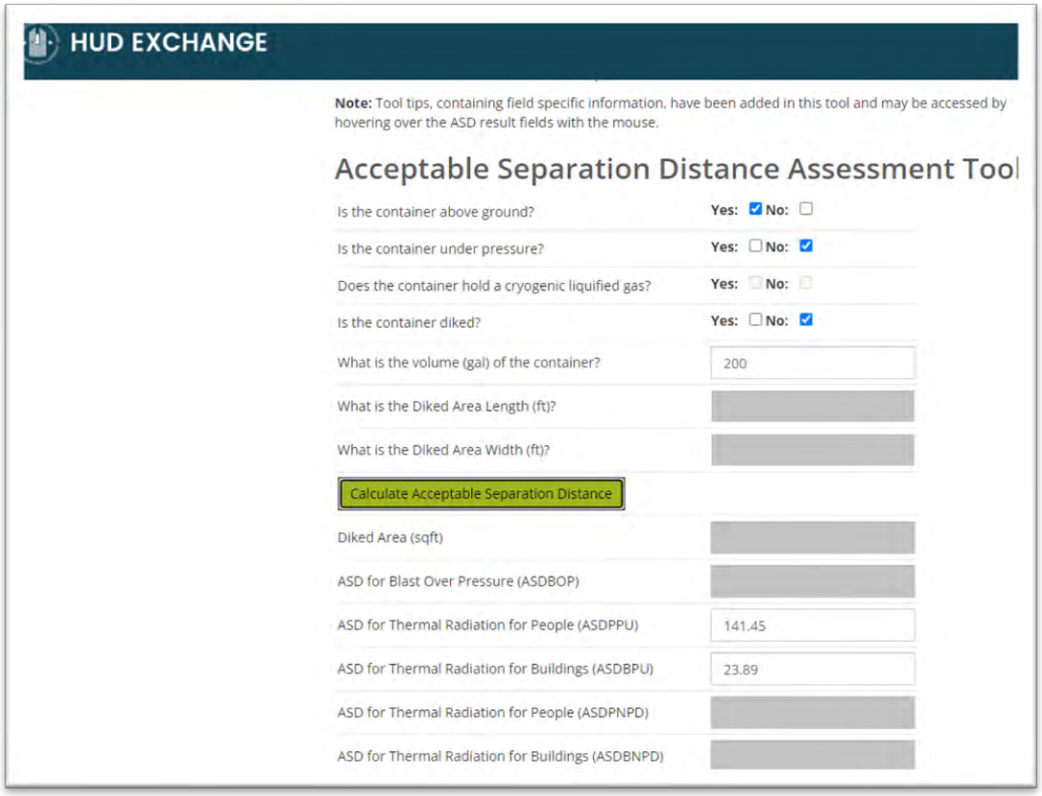
Is the container above ground?	Yes: ☑ No: ☐
Is the container under pressure?	Yes: ☐ No: ☑
Does the container hold a cryogenic liquified gas?	Yes: ☐ No: ☐
Is the container diked?	Yes: ☑ No: ☐
What is the volume (gal) of the container?	
What is the Diked Area Length (ft)?	30
What is the Diked Area Width (ft)?	10
Calculate Acceptable Separation Distance	
Diked Area (sqft)	300
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	
ASD for Thermal Radiation for Buildings (ASDBPU)	
ASD for Thermal Radiation for People (ASDPNPD)	93.53
ASD for Thermal Radiation for Buildings (ASDBNPD)	15.23

B. Empire Gas Company
2,000 Gal Gas Tank
Coordinate: 18.126923, -65.82065

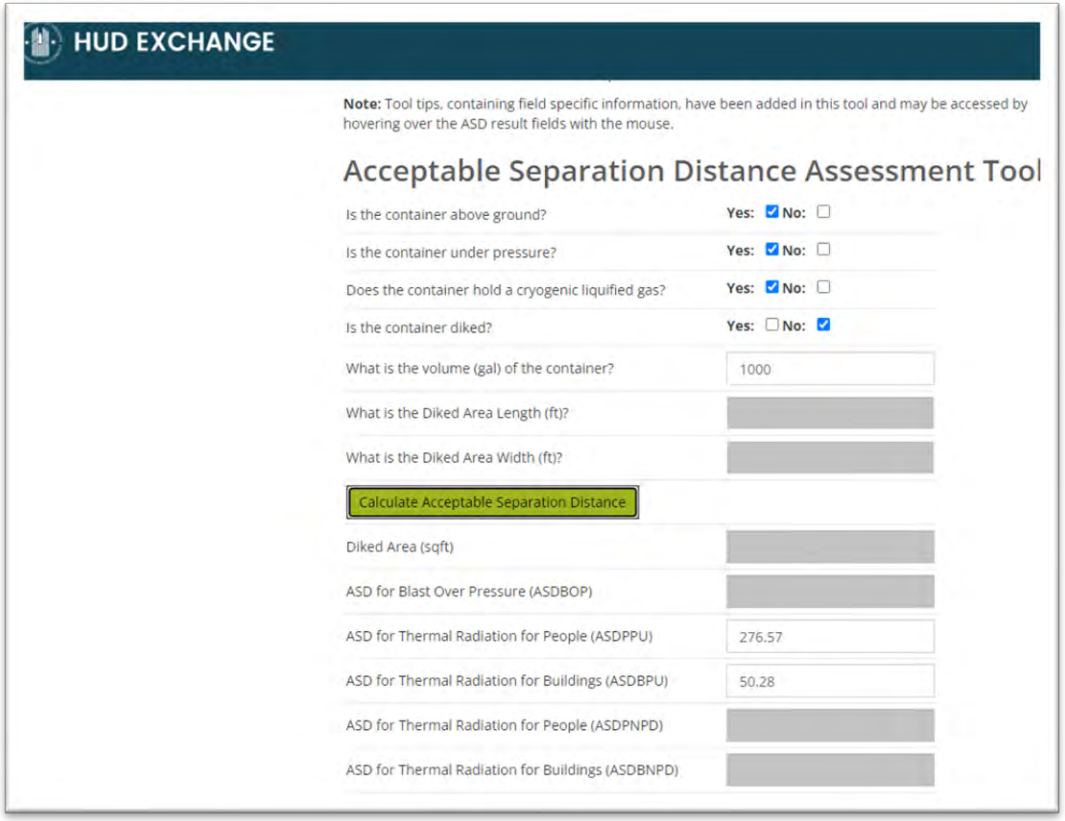


C. Gulf Gas Station
2 Electric Generator
200 Gal Diesel Tank (Each One)
Coordinate: 18.12367, -65.819754

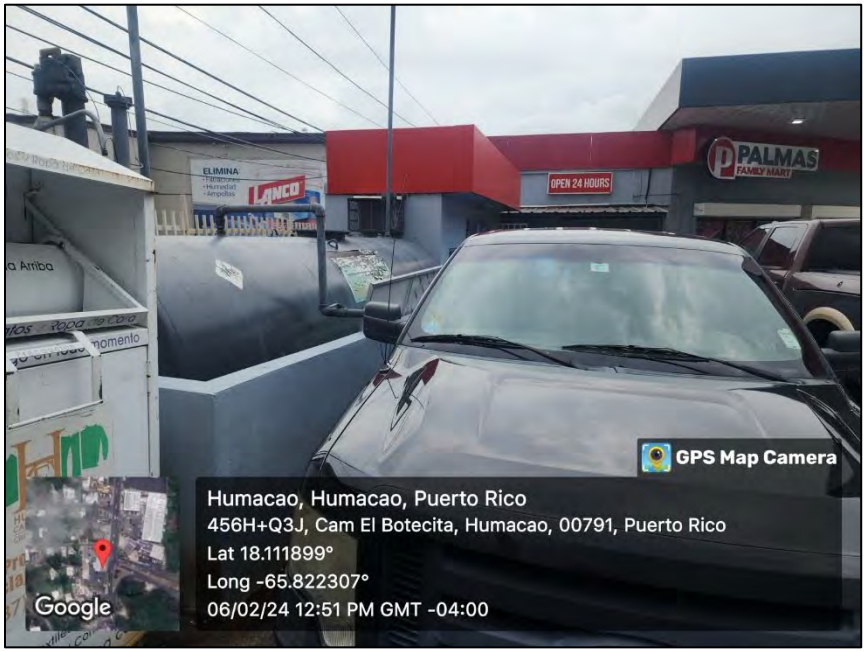




D. Pan Pepin Company
1,000 Gal Gas Tank
Coordinate: 18.117125, -65.821999



E. Texaco Gas Station
5,000 Gal Diesel Tank
Tank In side Diked (10 x 20)
Coordinate: 18.112129, -65.821846



HUD EXCHANGE

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: ☑ No: ☐
Is the container under pressure?	Yes: ☐ No: ☑
Does the container hold a cryogenic liquified gas?	Yes: ☐ No: ☐
Is the container diked?	Yes: ☑ No: ☐
What is the volume (gal) of the container?	
What is the Diked Area Length (ft)?	20
What is the Diked Area Width (ft)?	10
Calculate Acceptable Separation Distance	
Diked Area (sqft)	200
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	
ASD for Thermal Radiation for Buildings (ASDBPU)	
ASD for Thermal Radiation for People (ASDPNPD)	78.95
ASD for Thermal Radiation for Buildings (ASDBNPD)	12.63

F. Hardware Store
Electric Generator
500 Gal Diesel Tank
Coordinate: 18.112563, -65.821907

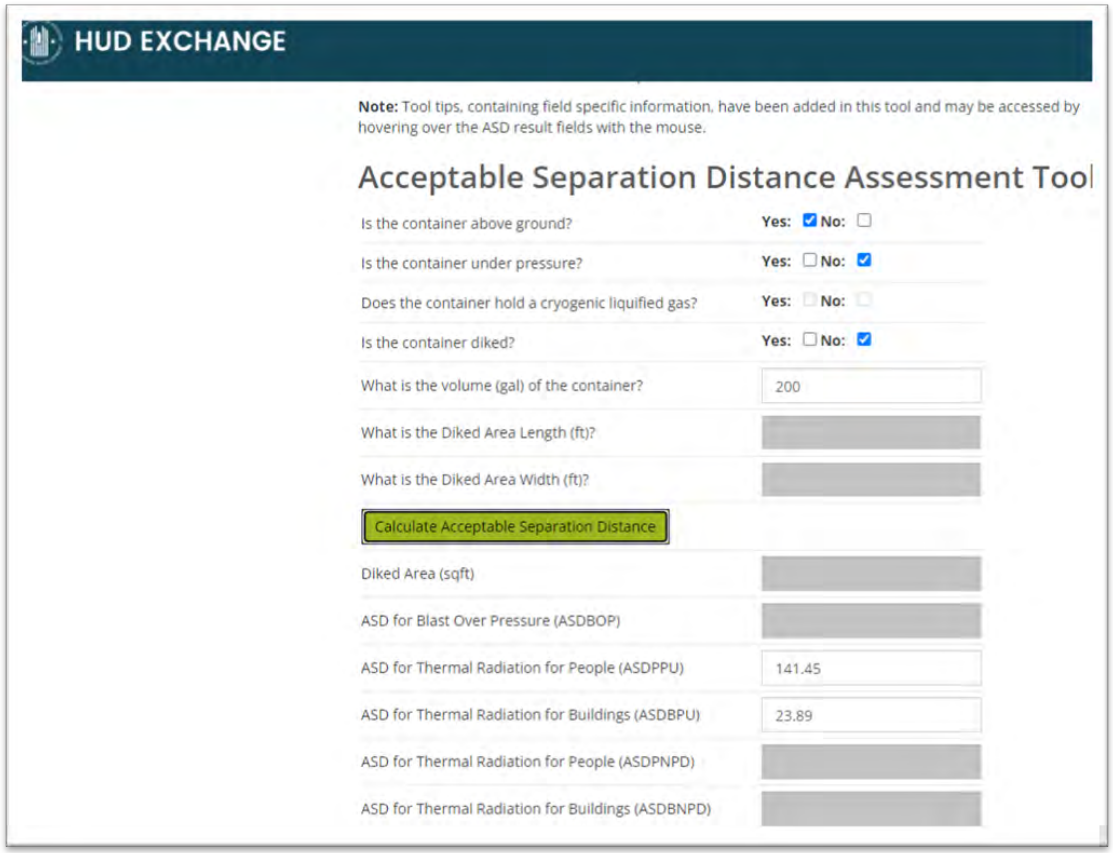
HUD EXCHANGE

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

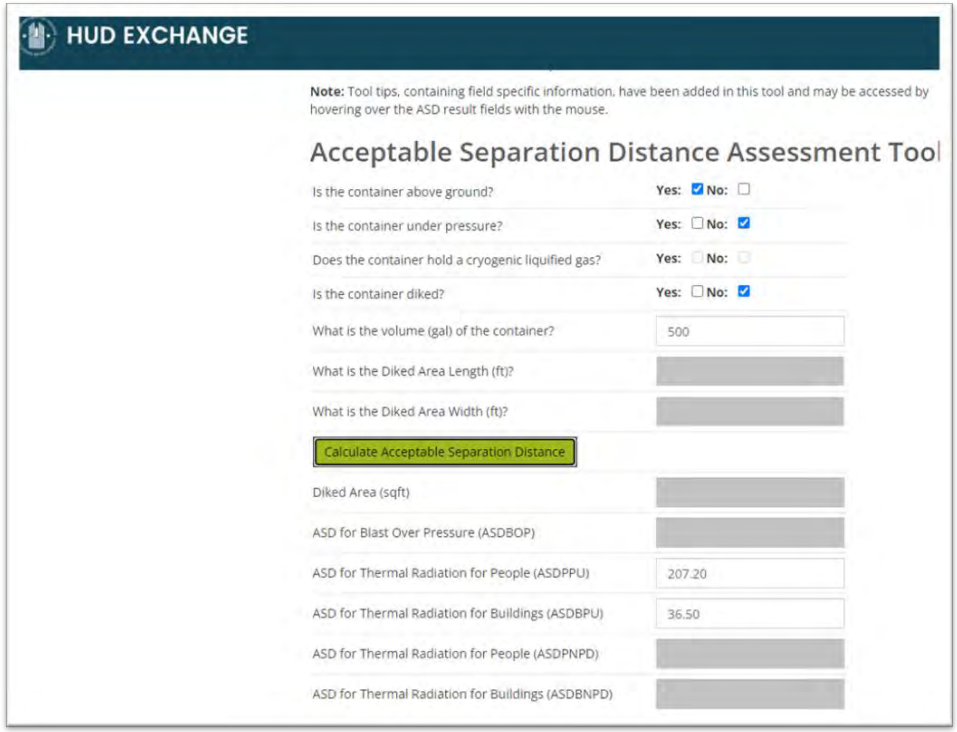
Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: ☑ No: ☐
Is the container under pressure?	Yes: ☐ No: ☑
Does the container hold a cryogenic liquified gas?	Yes: ☐ No: ☐
Is the container diked?	Yes: ☐ No: ☑
What is the volume (gal) of the container?	500
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	207.20
ASD for Thermal Radiation for Buildings (ASDBPU)	36.50
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

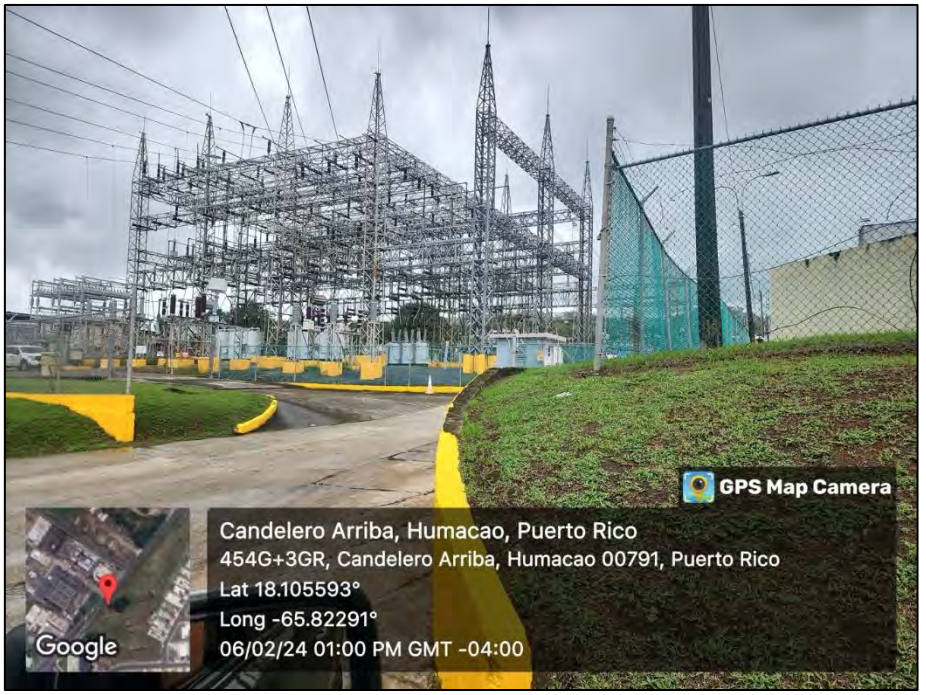
G. Laboratory
Electric Generator
200 Gal Diesel Tank
Coordinate: 18.11083, -65.822399



H. AAA Waste Pump
Electric Generator
500 Gal Diesel Tank
Coordinate: 18.110571, -65.821851



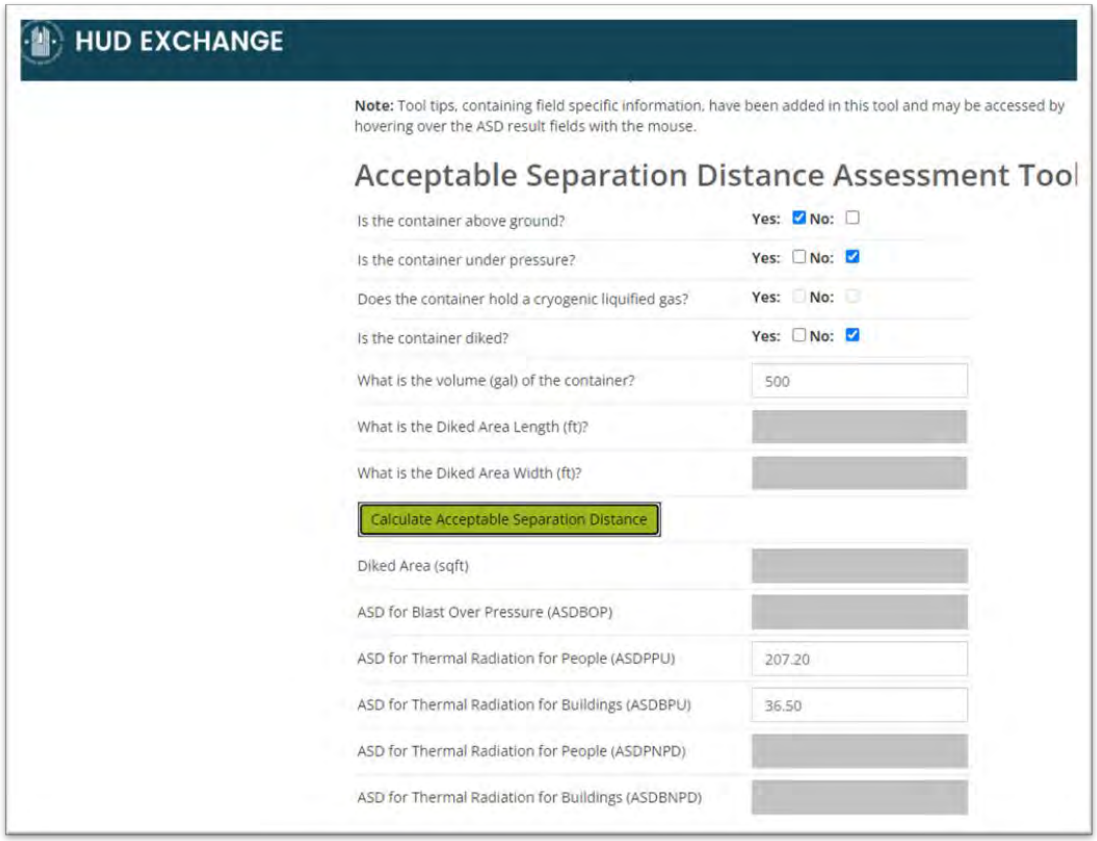
I. Yabucoa Gas Turbine
Electric Plant (Genera PR)
Coordinate: 18.105603, -65.822914



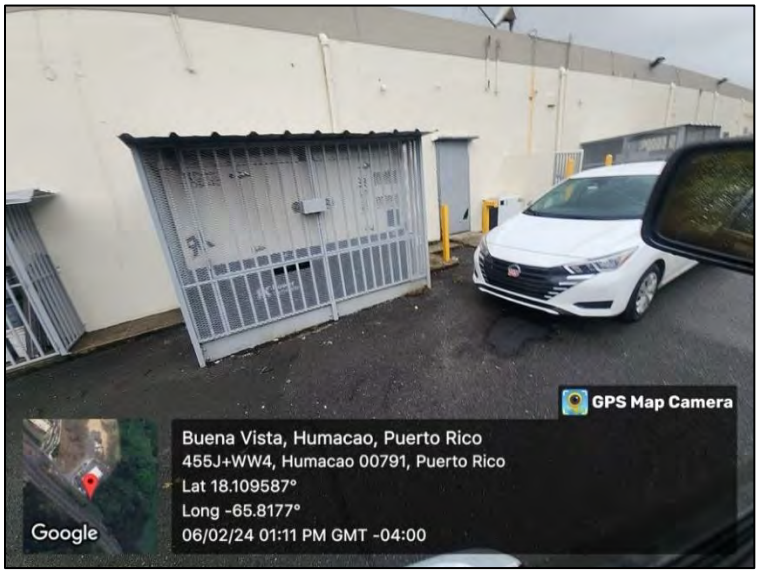
Acceptable Separation Distance Assessment Tool

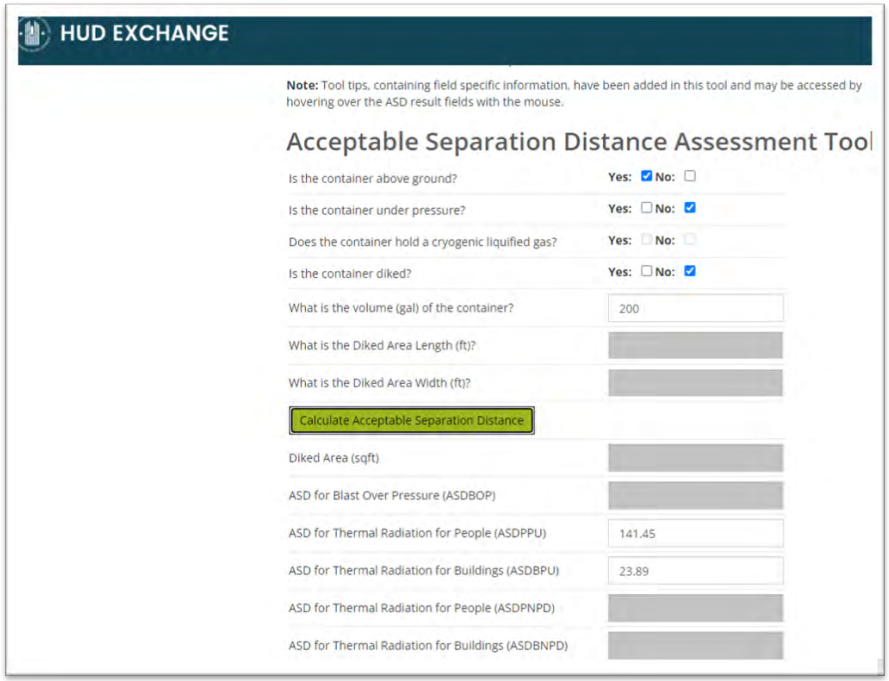
Is the container above ground?	Yes: ☑ No: ☐
Is the container under pressure?	Yes: ☐ No: ☑
Does the container hold a cryogenic liquified gas?	Yes: ☐ No: ☐
Is the container diked?	Yes: ☑ No: ☐
What is the volume (gal) of the container?	
What is the Diked Area Length (ft)?	132
What is the Diked Area Width (ft)?	73
Calculate Acceptable Separation Distance	
Diked Area (sqft)	9636
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	
ASD for Thermal Radiation for Buildings (ASDBPU)	
ASD for Thermal Radiation for People (ASDPNPD)	398.81
ASD for Thermal Radiation for Buildings (ASDBNPD)	75.59

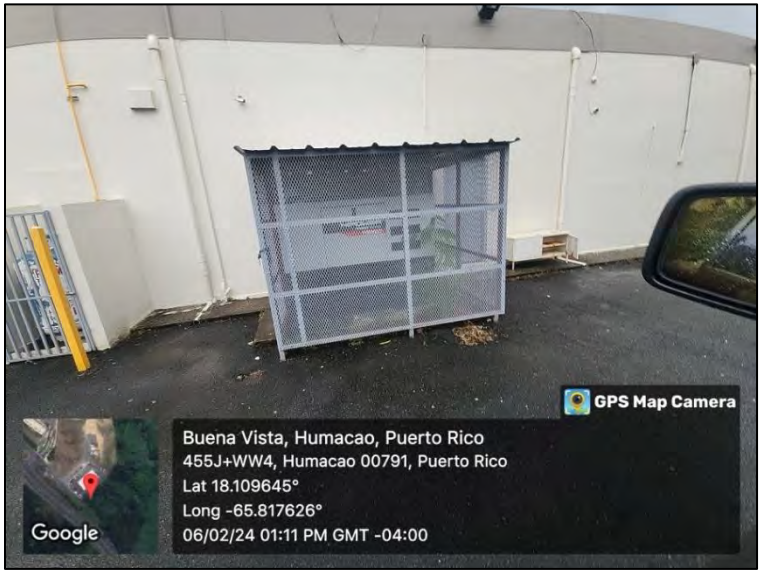
J. AAA Waste Pump
Electric Generator
500 Gal Diesel Tank
Coordinate: 18.109936, -65.819123

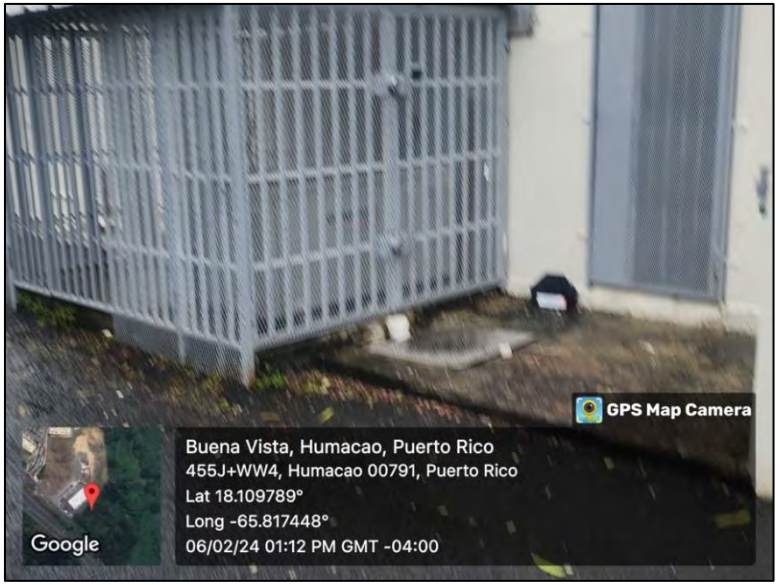


K. Commercial Building
3 Electric Generator
200 Gal Diesel Tank (Each One)
Coordinate: 18.109587, -65.8177

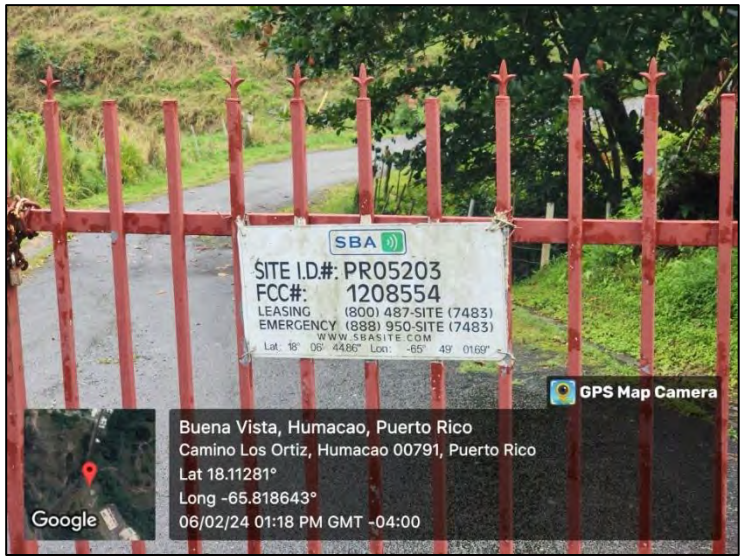








L. Telecommunication Tower (160' High)
500 Gal Diesel Tank for Electric Generator
Coordinate: 18.11281, -65.818643



HUD EXCHANGE

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: ☑ No: ☐
Is the container under pressure?	Yes: ☐ No: ☑
Does the container hold a cryogenic liquified gas?	Yes: ☐ No: ☐
Is the container diked?	Yes: ☐ No: ☑
What is the volume (gal) of the container?	500
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	207.20
ASD for Thermal Radiation for Buildings (ASDBPU)	36.50
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

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

Exhibit 9

USDA-NRCS Farmland Protection Policy Act Evaluation for Laderas de Palmas Development Determination

Laderas de Palmas

SF-HDI-00012

United States Department of Agriculture

Natural Resources Conservation Service

Caribbean Area State Office

654 Muñoz Rivera Ave. Suite 604
San Juan, PR 00918

787-766-5206

www.pr.nrcs.usda.gov

Septiembre 13, 2024

Juan Carlos Pérez Bofill, PE, MEng.
Director- Disaster Recovery, CDBG-DR/MIT Program

SUBJECT: Farmland Protection Policy Act Evaluation for Laderas de Palma Urbanization (Project ID Case: SF- HDI-00012).

Dear Mr.Pérez Bofill,

This letter is in response to your request for evaluation of the above-mentioned project. The project is located at State Road PR-3, Km. 33.7, Cataño Ward, in Humacao, Puerto Rico. The proposed project may be entitled to federal funds from the United States Department of Housing and Urban Development (HUD) under the Community Development Block Grant – Mitigation (CDBG-MIT) program. This project is part of the Single-Family Housing Mitigation Program (Laderas de Palmas SF-HDI-00012) to provide safe and resilient housing solutions for homes facing an immediate threat or that are uninhabitable due to natural disasters or other hazardous events. The project involves constructing a housing development consisting of 100 single-family home lots and the corresponding infrastructure.

The Farmland Protection Policy Act (FPPA) is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland. The USDA Natural Resources Conservation Service (NRCS) is responsible for evaluating the site and conducting a Farmland Conversion Impact Rating.

Farmland means prime or unique farmlands as defined in section 1540(c)(1) of the FPPA or farmland that is determined by the appropriate state or unit of local government agency or agencies with concurrence of the Secretary of Agriculture to be farmland of statewide local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forestland, pastureland, cropland, or other land, but not water or urban built upland.

Farmland does not include land already in or committed to urban development or water storage. Farmland already in urban development or water storage includes all land with a density of 30 structures per 40-acre area, and includes lands identified as urbanized area.

Based on the information provided and supporting documents, the proposed project (attached documents shows the areas of interest) would include:

- Construction of a housing development consisting of 100 single-family home lots and the corresponding infrastructure.

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- Clearing the site, removing vegetation, and grading the land, including creating a detention pond.
- Site improvements for infrastructure and utilities including storm sewer, sanitary sewer, potable water, electric and telecommunication system installation, and street pavement.
- Dwelling unit construction including foundation, masonry work, plumbing, electrical works, installation of exterior doors and windows, house finishes, and landscaping

NRCS uses a land evaluation and site assessment (LESA) system to establish a farmland conversion impact rating score on the proposed site of Federally funded and assisted projects. This score is used as an indicator for the project sponsor, in this case HUD (federal funds provider), to consider alternative sites if the potential adverse impacts on the farmland exceed the recommended allowable level. The assessment is completed on form AD-1006, Farmland Conversion Impact Rating. The sponsoring agency completes the site assessment portion of the AD-1006, which assesses non-soil related criteria such as the potential for impact on the local agricultural economy if the land is converted to non-farm use, and compatibility with existing agricultural use. The FPPA does not authorize the federal government to regulate the use of private or nonfederal land or, in any way, affect the property rights of owners.

According to the Web Soil Survey (WSS), the project area corresponds to the Humacao Area, Puerto Rico (PR689). A WSS soil interpretation report was generated for farmland classification to evaluate map units subject to the Farmland Protection Policy Act (FPPA). Based on the report, the area of interest covers a total of 39.4 acres. 89.6 percent (35.3 acres), of the project footprint area (Map Unit: Candelero loam, 5 to 12 percent slopes, eroded; Daguao silty clay loam, deep variant, 2 to 12 percent slopes and Maunabo clay) is classified as prime farmland and 10.4 percent (4.1 acres) (Map Unit: Pandura loam, 12 to 40 percent slopes, eroded) is classified as not prime farmland. There is also a 1 to 32 percent present of hydric soil in the area, which are soils formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions. Hydric soils are an indicator of wetlands and are crucial for maintaining water quality, reducing flood risks, and supporting diverse plant and animal life(refer to attached WSS Hydric Soil Map).

After evaluating the project footprint (refer to the attached maps), including the WSS Farmland Classification map and the 2020 US Census Bureau Urban area map, it was found that the area of interest includes land classified as prime farmland (prime farmland). However, it is within the designated urban area based on the 2020 Census map. Therefore, this area is not subject to the Farmland Protection Policy Act (FPPA).

Other environmental considerations include the presence of Riverine areas identified as part of the various types of wetlands and water bodies on the National Wetlands Inventory map for the area of interest. We advise contacting the U.S. Army Corps of Engineers (USACE) to determine if a Section 404 permit under the Clean Water Act or other permits are necessary. Regarding susceptibility to erosion, the area of interest is including areas classified as highly erodible land (HEL). During the construction phase, proper erosion and sediment control measures should be incorporated into your construction plan to ensure minimal environmental degradation.

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This data used to make the evaluation is not designed for use as a primary regulatory tool in permitting or siting decisions but may be used as a reference source and for planning purposes. This is public information and may be interpreted by organizations, units of government or others based on needs; however, these entities are responsible for the appropriate use and application of these data. Digital and tabular data files are updated yearly, and users are responsible for obtaining the latest version of the data.

If you have any questions, please contact us at 787-766-5064 or by email: manuel.matos@usda.gov.

If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

JACQUELINE VEGA-PEREZ Digitally signed by JACQUELINE VEGA PEREZ Date: 2024.09.13 12:49:51 -04'00'

Jacqueline Vega Pérez
Resource Soil Scientist for the Caribbean Area

Enclosures

pc: Luis Cruz Arroyo, State Conservationist, USDA-NRCS Caribbean Area; Manuel Matos Rodríguez, State Soil Scientist for the Caribbean Area; Aldo A.Rivera Vázquez, Director for Program Management, Puerto Rico Department of Housing (Departamento de la Vivienda de Puerto Rico); Angel G. López Guzmán, Deputy Director, Puerto Rico Department of Housing (Departamento de la Vivienda de Puerto Rico)

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U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request July 29, 2024
Name of Project Laderas de Palmas SF-HDI-00012	Federal Agency Involved Puerto Rico Department of Housin
Proposed Land Use Residential	County and State Humacao, PR 00791
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 9/11/2024 — Person Completing Form: Jacqueline Vega- NRCS

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES	NO	Acres Irrigated	Average Farm Size
	☑	☐	1666	87

Major Crop(s)	Farmable Land In Govt. Jurisdiction	Amount of Farmland As Defined in FPPA
Plantains, Nursery, Vegetables	Acres: 126825% 27	Acres: 12682% 27

Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS
LESA - Humacao SSA	N/A	9/13/2024

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	14.91			
B. Total Acres To Be Converted Indirectly	24.63			
C. Total Acres In Site	39.54			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	13.70			
B. Total Acres Statewide Important or Local Important Farmland	21.60			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.0278			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	23			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	53			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Site Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Distance From Urban Built-up Area	(15)				
6. Distance To Urban Support Services	(15)				
7. Size Of Present Farm Unit Compared To Average	(10)				
8. Creation Of Non-farmable Farmland	(10)				
9. Availability Of Farm Support Services	(5)				
10. On-Farm Investments	(20)				
11. Effects Of Conversion On Farm Support Services	(10)				
12. Compatibility With Existing Agricultural Use	(10)				
TOTAL SITE ASSESSMENT POINTS	160				
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100				
Total Site Assessment *(From Part VI above or local site assessment)*	160				
TOTAL POINTS ***(Total of above 2 lines)***	260				

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☐

Reason For Selection:

Name of Federal agency representative completing this form:	Date:

(See Instructions on reverse side) **Form AD-1006 (03-02)**

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.

Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map**,** or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)

Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.

Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.

Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.

Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.

2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

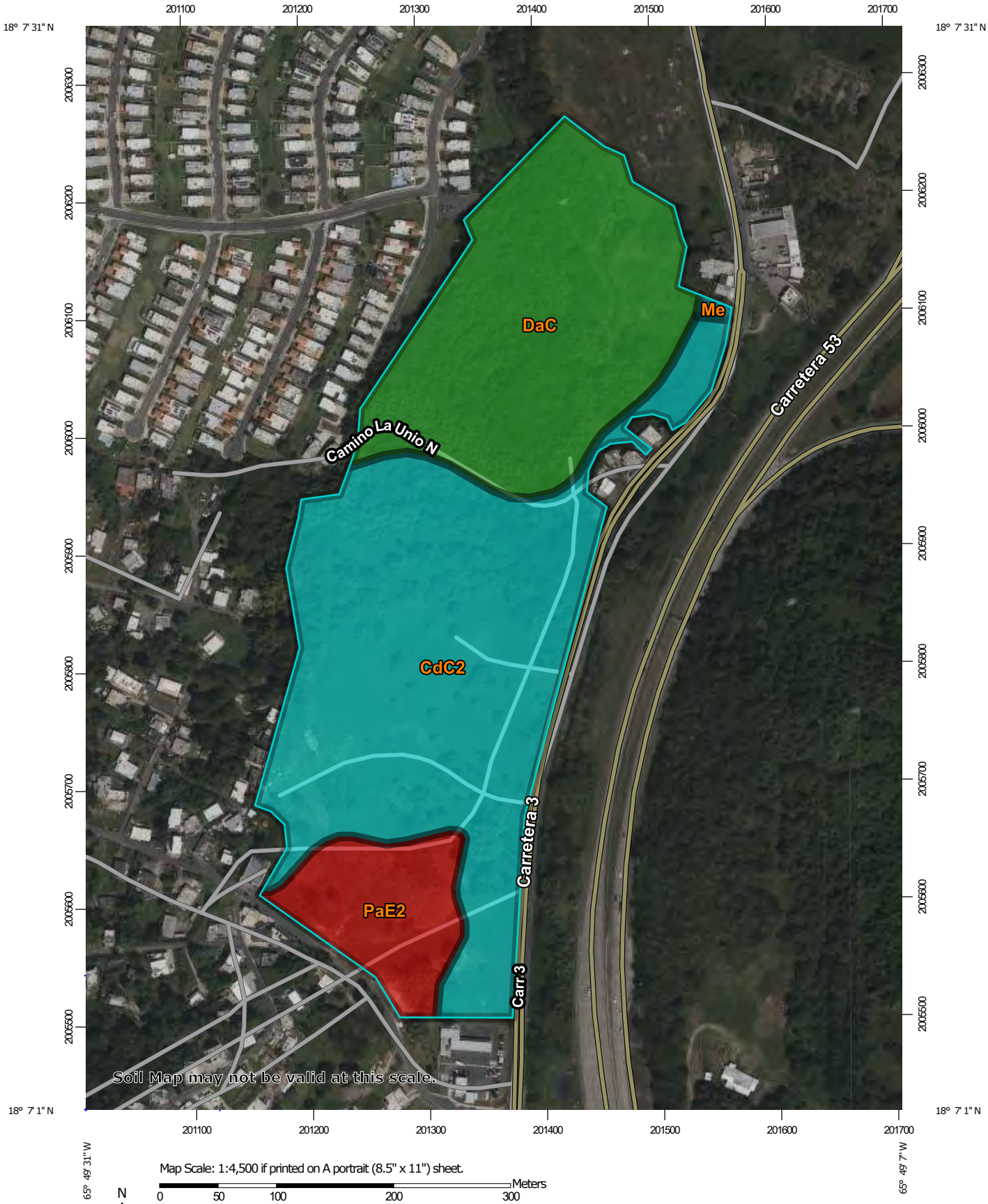
Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \text{ X } 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

Farmland Classification—Humacao Area, Puerto Rico Eastern Part
(LaderasDePalmas)



Map Scale: 1:4,500 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 20N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

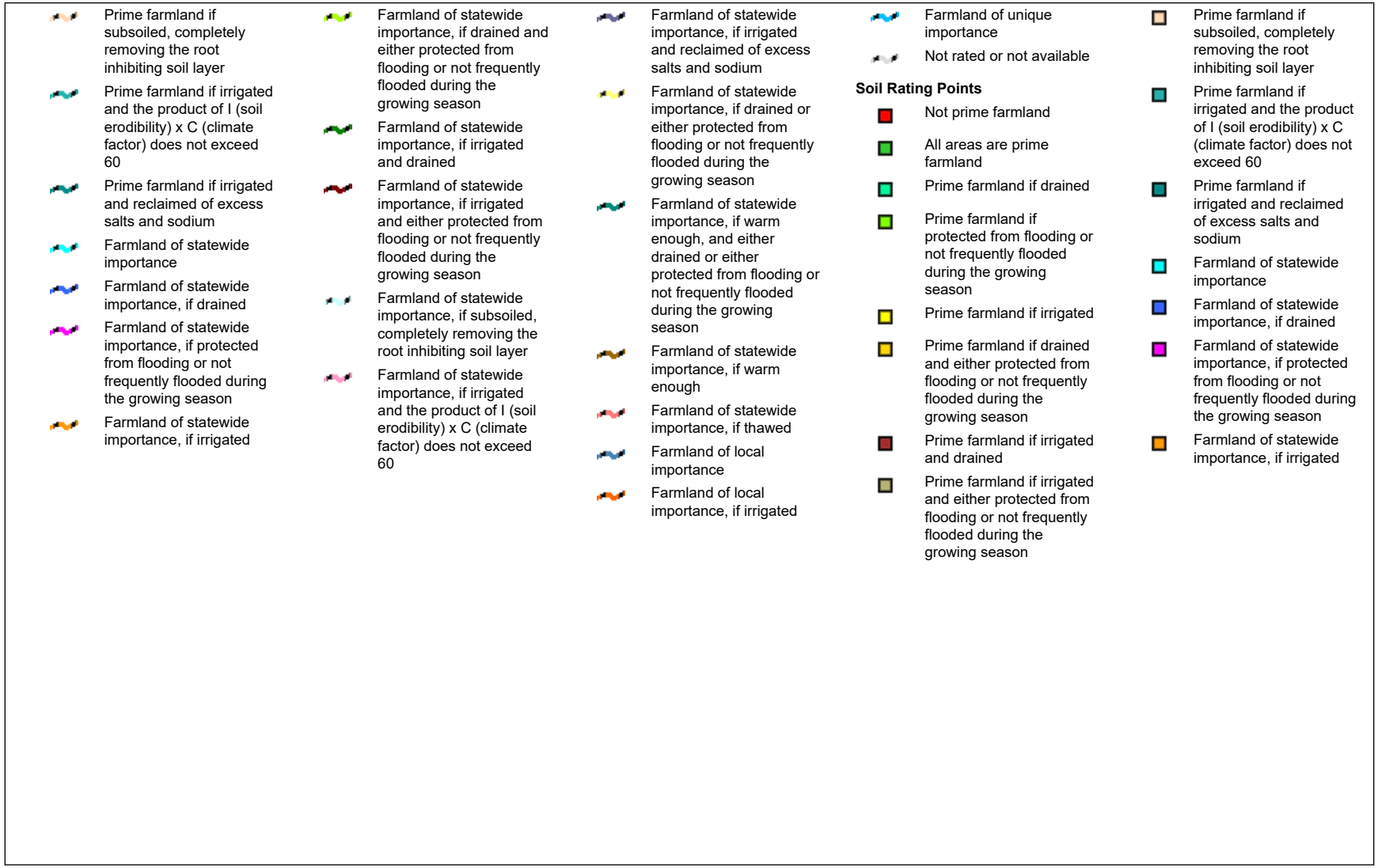
Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated
- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season


Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated
Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated and drained
Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough
Farmland of statewide importance, if thawed
Farmland of local importance
Farmland of local importance, if irrigated
Farmland of unique importance
Not rated or not available
Soil Rating Points
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:20,000.

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 scale.

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: Humacao Area, Puerto Rico Eastern Part
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.

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CdC2	Candelero loam, 5 to 12 percent slopes, eroded	Farmland of statewide importance	21.5	54.6%
DaC	Daguao silty clay loam, deep variant, 2 to 12 percent slopes	All areas are prime farmland	13.7	34.7%
Me	Maunabo clay	Farmland of statewide importance	0.1	0.3%
PaE2	Pandura loam, 12 to 40 percent slopes, eroded	Not prime farmland	4.1	10.4%
Totals for Area of Interest			**39.4**	**100.0%**

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Hydric Rating by Map Unit—Humacao Area, Puerto Rico Eastern Part

Map Scale: 1:4,500 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 20N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

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 scale.

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: Humacao Area, Puerto Rico Eastern Part
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.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CdC2	Candelero loam, 5 to 12 percent slopes, eroded	5	21.5	54.6%
DaC	Daguao silty clay loam, deep variant, 2 to 12 percent slopes	0	13.7	34.8%
Me	Maunabo clay	10	0.1	0.3%
PaE2	Pandura loam, 12 to 40 percent slopes, eroded	0	4.1	10.4%
Totals for Area of Interest			**39.4**	**100.0%**

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

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

Exhibit 10

Advisory Base Flood Elevation (ABFE) Map

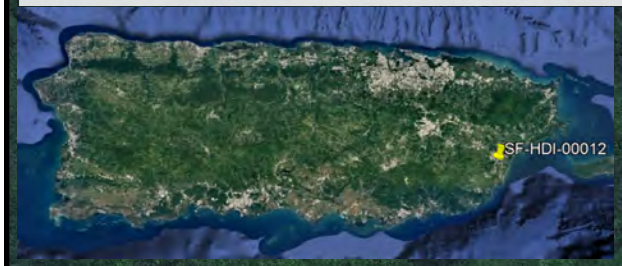
Laderas de Palmas

SF-HDI-00012

Advisory Base Flood Elevation Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants



Legend

- Project Limit
- SF-HDI-00012

Limit of Moderate Wave Action (LiMWA)

Flood Hazard Extent
- 1% Annual Chance Flood
- 0.2% Annual Chance Flood

Zone/BFE Boundary

Flood Hazard Area (zoom in to make visible)
- A
- AO
- AE
- Coastal A Zone
- VE
- 0.2% Annual Chance Flood Zone
- A-Floodway
- AE-Floodway
- Coastal A Zone and Floodway

ABFE 1% EL: 29.4 m

3000 ft

N

Google Earth

Image © 2024 Airbus

https://gis-r2-fema.hub.arcgis.com/apps/31dfa15671944086b54b55bfc03344d7/explore

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

Exhibit 11

SHPO-CF-10-02-24-05 SF HDI-00012
Determination

Laderas de Palmas

SF-HDI-00012

GOVERNMENT OF PUERTO RICO
STATE HISTORIC PRESERVATION OFFICE
Executive Director | Carlos A. Rubio Cancela | carubio@prshpo.pr.gov

Friday, October 11, 2024

Lauren B Poche

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

SHPO-CF-10-02-24-05 SF-HDI-00012 (Humacao), Laderas de Palmas

Dear Ms. Poche,

Our Office has received and reviewed the above referenced project in accordance with 54 U.S.C. 306108 (commonly known as Section 106 of the National Historic Preservation Act) and 36 CFR Part 800: Protection of Historic Properties.

Our records support your finding of no historic properties affected for this undertaking.

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

Sincerely,

Carlos A. Rubio Cancela
State Historic Preservation Officer
CARC/GMO/ MB

GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

April 30, 2024

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

10/2/2024

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-MIT Program: Single Family – Housing Development Initiative Program

Section 106 NHPA Effect Determination Submittal for SF-HDI-00012, Laderas de Palmas Project, Humacao, Puerto Rico – No Historic Properties Affected

Dear Architect Rubio Cancela,

On April 10, 2018, the U.S. Department of Housing and Urban Development (HUD) allocated nearly $28 billion in Community Development Block Grant for Disaster Recovery (CDBG–DR) funds appropriated by the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act of 2018 (Public Law 115–123, approved February 9, 2018). Of those $28 billion, HUD allocated $10.03 billion to address unmet needs from disasters that occurred in 2017; $2 billion for enhanced or improved electrical power systems in Puerto Rico and the U.S. Virgin Islands; and $12 billion for mitigation activities. The amount of funds for mitigation activities was later increased to $15.9 billion after HUD completed an assessment of unmet needs and awarded funding to a total of eighteen (18) grantees through a newly created Community Development Block Grant - Mitigation (CDBG-MIT) Program.

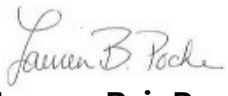
In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, HORNE is providing information for your review and requesting your concurrence regarding the above-referenced project on behalf of the Puerto Rico Department of Housing (PRDOH) and the Single Family – Housing Development Initiative Program. This Program was created out of the need to aid applicants from the Repair, Reconstruction, or Relocation (R3) Program and the newly launched Single-Family Housing Mitigation (SFM) Program in their search for new homes through the relocation pathway. The

Single-Family Housing Development Initiative was designed to provide additional housing options to these program applicants, constructed with the goal of resilience against future disasters and to reduce or eliminate the long-term risk of loss of life, injury, damage to and loss of property, and suffering and hardship. These new homes will be constructed in non-risk areas of Puerto Rico. This initiative aims to expand the inventory of resilient, code-compliant, new housing options for the benefit of R3 and SFM Program applicants.

On behalf of PRDOH, we are submitting documentation for SF-HDI-00012, the proposed Laderas de Palmas Project in the Barrio Cataño in the municipality of Humacao. This project proposes the construction of 100 one-story, single-family units of 1,267 square feet (approx.) within a previously undeveloped lot of 39.52 acres. The full scope of the project, which includes mapping, photographs, and construction plans, is described in the submitted documentation. Based on the provided documentation, the Program has determined that a finding of **no historic properties affected** is appropriate for the proposed undertaking.

We look forward to your review and response. Please contact me with any questions or concerns by email at lauren.poche@horne.com or phone at 225-405-7676.

Kindest regards,



Lauren Bair Poche, M.A.
Architectural Historian, EHP Senior Manager
Attachments
JCO

SF-HDI-00012

Laderas de Palmas Project

Humacao, Puerto Rico

Section 106 Effect Determination Form

Exhibit 11a

CDBG-DR & CDBG-MIT PROGRAMS **Single-Family Housing Development Initiatives** **Section 106 NHPA Effect Determination Form**	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Project Location: PR-3 Km. 33.7, Bo. Cataño, Humacao, PR 00791	
Project Coordinates: Lat: 18.120370, Long: -65.822607	
TPID (Número de Catastro)**:** 329-000-005-61-000	
Type of Undertaking: ☐ Substantial Repair/Improvements ☒ New Construction	
Construction Date: n/a	**Property Size** (acres)**:** 39.54

SOI-Qualified Historic Architect/Architectural Historian: Heidi J. Dilan, SOI Architectural Historian
Date Reviewed: 12/6/2023, 08/15/2024 (rev.), 09/04/2024 (rev.)
SOI-Qualified Archaeologist: Fernando Alvarado Muñoz, SOI Archaeologist
Date Reviewed: 10/16/2023, 02/16/2024 (rev.), 05/23/2024 (rev.), 07/30/2024 (rev.), 08/27/2024 (rev.)

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. It has been determined by the SOI-qualified professionals that the project undertaking does not conform to Stipulation II.A (Project Review – Programmatic Allowances) of the Section 106 Programmatic Agreement (PA) among FEMA, SHPO and COR3, as amended (May 3, 2023).

Project Description (Undertaking)

Rebuilders PR LLC ("Rebuilders") is proposing the Laderas de Palmas Project (Project), a housing development consisting of 100 single-family housing units in the municipality of Humacao.

The proposed site design concept was visualized to comply and harmonize the Minimum Architectural and Design Standards set for required under the Single-Family Housing Development Initiatives CDBG-MIT-RFP-2022-04 (the "RFP").

The Project's site will consist of 100 single-family housing lots with a typical lot size of 325 sq. m. to be built in a new development known as Laderas de Palmas and is proposed in a parcel of 21.22 acres.

The single-family, one-level, detached home, with 1,267 square feet will provide accommodations such as three (3) bedrooms with natural light, ventilation, ceiling fans with integrated LED type lights, and closets with wall-mounted cabinetry. In addition, two (2) bathrooms with window or mechanical ventilation, shower, and water-resistant vanities. Additionally, the residential unit will provide a kitchen with a rough-in for a gas stove and an electric-powered circuit outlet for the electric stove, water resistant cabinets, an open space living and dining area with ceiling fans with integrated LED type lights, a laundry area with rough-in in the interior of the unit, linen closet and an ADA compliant covered garage for one vehicle. Ceramic or porcelain finishes will be provided on all floors and baseboards. All Interior and exterior surfaces will be painted and all indoor and outdoor lighting will be LED type to provide higher energy efficiency.

To comply with the requirements of Executive Order No. OE-2018-033 and Act 109 of 1985, the proposed residential model will use standard construction methods such as reinforced concrete, with locally manufactured cement blocks and flat roofs with a composite of reinforced concrete and a 3-year aged solar reflectance. The design features for the proposed model are readily adaptable to accommodate “ADA” details and features to comply with the 2010 ADA Standards for Accessible Design and a minimum of 5% of the proposed project will comply with ADA standards.

The building envelope materials will be selected and designed to meet specifications and standards such as impact resistance windows and doors, fire rating, energy efficiency, air and water infiltration security, and privacy. Windows will be installed as specified by the supplier and to meet the requirements of the Single-Family Housing Mitigation Program. All doors will provide a minimum of 32 inches of clear door opening width.

To ensure the security of all external systems, the solar water heater, photovoltaic system with batteries storage, and water storage system will be installed and secured following specifications and regulations to withstand hurricane-force winds. To reduce environmental impact, all products and appliances provided will comply with Energy Star, and Water sense as per 83 FR 5844. The photovoltaic system will be performed by a licensed engineer and comply with Regulation No. 7796 of January 19, 2010, and installed by a certified installer per Article 17 of Regulation No. 7796. The provided P.V. system will have the capacity of running critical loads, household appliances, and life support devices, to enable its residents to shelter in place during electrical outages. The provided photovoltaic package will supply a minimum of 3kw PV modules 48V voltage lithium-ion

battery bank with a minimum output of 9kwh and autonomy for 2 hours. An automatic transfer switch will be installed to allow for system operation in standalone mode.

A 500-gallon water storage system located on the roof will provide domestic water to the occupants of the residence. The ¾ horsepower electrical water pump, control, and a diaphragm type pressurized tank will be installed to provide a backup water supply with adequate pressure and without damaging the water fixture. The system will be connected to the utility's main water line with a water level control valve and backflow preventer located on ground level. To comply with FDA and NSF, the provided water storage will be constructed with ultraviolet (UV) and corrosion-resistant materials approved for potable water and food-grade application. To ensure water level changes, the storage tank will be vented in a downward position and will include a protective screen for pest control. After installation, the water storage system's disinfection will be provided per manufacturer standards and recommendations.

In general, the project will provide its residents with resilient, green, eco-friendly homes which will endure the inclement weather of the Caribbean.

Ground disturbance activities for the project area:

1. The project includes site clearing and grubbing for the construction of the previously mentioned activities. This will involve ground-disturbing work, but the depth of this activity is not specified in the provided plan. Additionally, the proposed staging area is not identified in the plan, so its location is also not detailed (**see Page 32**).

2. Excavations for new utility infrastructure of sanitary sewers will reach a maximum depth of 4 feet.

3. Excavations for new utility infrastructure of water lines will reach a maximum depth of 3 feet.

4. Excavations for new utility infrastructure of pluvial lines and storm sewers will reach a maximum depth of 8 feet.

5. The new electric and telecommunication lines will be buried, requiring excavations that will reach a maximum depth of approximately 13 feet.

6. Excavations for a new detention pond located along the northeast of the project site will reach a maximum depth of 8 feet.

7. The existing soil will be compacted, backfilled, and then compacted again to establish the street grading for the construction of concrete sidewalks, gutters, road paving and to prepare the detention pond after excavation.

8. The creation of concrete sidewalks/gutters and the paving of roads will require excavations that will reach a maximum depth of 1 foot.

9. The proposed scope of work includes adding two green/recreation areas with trees and other vegetation along the east and southwest sides of the project site, in addition to general landscaping (**as shown on Page 32)**. This will require excavations up to 1 meter deep in the planting areas.

Area of Potential Effects

As defined in 36 CFR §800.16(d), the area of potential effects (APE) refers to the geographic area within which development could directly or indirectly alter the character or use of historic properties, if such properties are present. Based on this definition and the scope of the project, the Program has determined that the direct APE for this project covers 21.22 acres (85,874.293 square feet), with approximate dimensions of 550 meters in length and 217 meters in width. It is bordered to the north and east by PR-3, to the south by a parcel owned by Pan Pepin, Inc., and to the west by the Pepita López ward community.

The Visual APE encompasses an area approximately 407 meters long and 613 meters wide, or about 249,491 square feet, which includes the Direct APE visual field or viewshed of the proposed project. This area comprises the Pepita López ward community to the west and south, a parcel owned by Pan Pepin, Inc. to the south, an unnamed community and unoccupied land to the north, and the Autopista Dr. José Celso Barbosa and unoccupied land to the east. It is bounded by Camino del Miradero Street to the north, a parcel owned

by Pan Pepin, Inc. to the south, Camino León Monterrosa Street to the west, and unoccupied land to the east.

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 there are no documented archaeological sites within a 0.25-mile radius of the project area. The project area is not located within the boundaries of a mapped historic district.

Prehistoric and Historic Background

According to Humacao Capital del Este: Two hundred years prior to the official founding of Humacao, there existed a Taíno village named Macao, governed by its Cacique Jumacao, situated along the banks of the Humacao River (approximately 2.45-miles to the East). Jumacao was the first Cacique to read and write Spanish, as evidenced by his letter to the King of Spain, wherein he lamented the breaches of the peace treaty.

Between 1513 and 1515, Jumacao along with Daguao (the Taino chief of Naguabo) and the chief of Guayama rebelled against the Spanish conquerors in the Spanish Taino War that started in 1511 (Francisco Moscoso , 2021, Rebelión de los Tainos de Boriquen, Enero de 1511).

The town of Humacao was established around the year 1722. In 1881, it was granted the title of Villa. By 1893, it obtained the status of a City. Its name is of indigenous origin, derived from the Cacique Jumacao.

In 1722, a group of migrants from the Canary Islands arrived on its shores, founding a small settlement they named San Luis del Príncipe de la Rivera de Jumacao, in honor of Prince Luis and Cacique Jumacao or Macao, the lord of these lands prior to colonization.

During the first two centuries of Spanish presence, the eastern area of Puerto Rico remained sparsely populated. Initially, it was inhabited by some Carib Indians, followed by other European powers who had settled in the Lesser Antilles. However, the primary reason for the scarcity of settlements in the area was its vulnerability to hurricanes, which struck Puerto Rico's shores most frequently.

In 1781, Humacao, whose name had been shortened and Hispanicized according to some historians, was granted the title of a town, although others insist this event occurred in 1793. By 1828, it had a population of 4,713,000 inhabitants, including 4.5 slaves. In the same year, it was bestowed the title of district for military and administrative affairs. In 1894, owing to its rapid population growth, it was declared a city, hence its municipal coat of arms bearing five towers.

During World War II, under American control, "El Morrillo" was constructed (now located in the Humacao Nature Reserve). This small bunker served as a military observation point against potential attacks in the event of an invasion.

The following table shows the results of all archaeological projects identified within the 0.25-mile Research Zone. This data is based on the research done and obtained from the Institute of Puerto Rican Culture and the State Historic Preservation Office.

Study Identification	Title	Author	Type	Results	Distance from the Project
ICP/CAT-HC-93-08-01	Mejoras al Sistema Sanitario Comunidades Pepita López, Fernández y Australia	Eugenio Barnés Español	Phase IA-IB	Negative	0.01 miles
ICP/CAT-HC-00-14-04	Vistas de Humacao	Juan González Colón	Phase IA-IB	Negative	0.03 miles
ICP/CAT-HC-06-21-03	Laderas de Palmas	Carlos M. Ayes Suárez	Phase IA-IB	Negative	0.00 miles
ICP/CAT-HC-06-21-04	El Coquí Landfill Expansion	Jaqueline López Jiménez	Phase IA	Positive	0.24 miles
ICP/CAT-HC-06-21-05	El Coquí Landfill Expansion	Jaqueline López Jiménez	Phase IB	Negative	0.24 miles

Study Identification	Title	Author	Type	Results	Distance from the Project
ICP/CAT-YB-89-01-08	Relocalización PR-3 De Humacao a Guayama, Tramo 2	Ethel V. Schlafer Román	Phase IB	Positive	0.21 miles
ICP/CAT-YB-00-03-09	Toma De Aguas Crudas - Río Guayanés	Norma Medina Carrillo	Phase IA-IB	Negative	0.00 miles

Aerial Imagery and Topographic Map Analysis

Four topographic quadrangles were identified:

- 1946 Punta Guayanes, Puerto Rico, USGS 7.5-Minute Topographic Quadrangle (USGS)
- 1952 Punta Guayanes, Puerto Rico, USGS 7.5-Minute Topographic Quadrangle (USGS)
- 1960 Punta Guayanes, Puerto Rico, USGS 7.5-Minute Topographic Quadrangle (USGS)
- 1982 Punta Guayanes, Puerto Rico, USGS 7.5-Minute Topographic Quadrangle (USGS)

All four topographic quadrangles show little to no development in the Direct APE except for some rural buildings in the periphery outside of the Direct APE and a rural road that crosses from east to west.

Eight Aerial images were identified:

- 1936 Aerial Image (DTOP Photogrammetry Office)
- 1951 Aerial Image (DTOP Photogrammetry Office)
- 1977 Aerial Image (DTOP Photogrammetry Office)
- 1988 Aerial Image (DTOP Photogrammetry Office)
- 1992 Aerial Image (DTOP Photogrammetry Office)
- 2004 Aerial Image (Google Earth Pro)
- 2006 Aerial Image (Google Earth Pro)

- 2012 Aerial Image (Google Earth Pro)2

The 1936 Aerial Image shows a road crossing the Direct APE from east to west ending on a small building, the same as the topographic maps. The Direct APE seems free of large vegetation and trees in the image. The 1951 Aerial Image shows an additional rectangular building in the plot diagonal to the northeast of the building in the 1936 Aerial Image. The 1977 aerial image shows a new building inside the Direct APE in the site where the rectangular building used to be in the 1951 Aerial Image. The building persists in the 1988, 1992, 2004 and 2006 Aerial Images. The new construction is on the central western border of the Direct APE and has a fence with a road leading to road PR-3 (the same shown in the topographic quadrangles and the 1936 ,1951, 1977, 1988, 1992 and 2004 aerial images). The 2006 image shows the same building abandoned, overgrown by vegetation and with a damaged roof, the road leading to PR-3 is barely visible. As of the December 2012 image, the building is no longer there and seems to have been demolished. Current aerial imagery shows compacted ground where the building used to be located. All topographic and aerial images referenced are included with the other maps at the end of the document.

Preliminary Results

Our research and the resources at our disposal have enabled us to pinpoint seven (7) archaeological projects that are relevant to this undertaking. Five (5) of them had negative results and two (2) positive. Three of the archaeological investigations with negative results were located directly over our project site. ICP/CAT-HC-93-08-01 from the year 1993, ICP/CAT-HC-06-21-03 from the year 2006 and ICP/CAT-YB-00-03-09 from the year 2000. ICP/CAT-HC-06-21-03 project site overlaps entirely with our undertaking since the goal of that project was to study the plot for a previous housing development project of the same name.

ICP/CAT-YB-89-01-08 was 1989 phase IB archaeological investigation directed by Ethel Schlafer Román and located about 0.20-miles to the south of the Direct APE. The project was part of the relocation of the PR-3 road from Humacao to Guayama by the *Autoridad de Carreteras* (DTOP). The project identified in the second segment of the project (Tramo II) remains of historic material related to bricks, tiles, glass fragments and ceramic fragments between test pits 6 and 16 at about 0.80-miles to the south of the Direct APE.

ICP/CAT-HC-06-21-04 was a 2006 phase IA archaeological investigation 0.24-miles to the East of the Direct APE. The study was directed by Jaqueline López Jiménez and was part of El Coqui Landfill Expansion that was going to be built on the Buena Vista Ward. During

the surface inspection of the site the archaeologist identified one historic ceramic fragment and two indigenous ceramic fragments on the surface which prompted the positive result. These fragments were of less than 5 cm length. The location of these fragments was approximately 0.62 miles to the east of the Direct APE in the proximity of an old road in the center of the El Coqui Landfill land plot. A phase IB archaeological investigation (ICP/CAT-HC-06-21-05) was approved and directed by the same archaeologist. This project found no further evidence and ended with Negative results.

Previous development of rural buildings (residences) identified in 1936, 1951, 1977, 1988, 1992, 2004 and 2006 aerial images were demolished. Taking into consideration the proximity and overlap of the archaeological projects to our Direct APE, that five studies got negative results, that the only two with positive results their findings are outside the 0.25-mile research zone and that there are no previously reported cultural resources within the 0.25-mile research zone, we believe that no historic properties affected are anticipated for this project.

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 the boundaries of the National Register of Historic Places (NRHP)-eligible or listed Traditional Urban Center / Historic District or locally designated historic zone. In addition, within a 1/4-mile radius of the project area, there are no NRHP-listed or NHRP- eligible properties:

The project site is located in a suburban area of the municipality of Humacao, between an urbanization and housing land scattered on its west side, while on the east side is Highway 3 and adjacent to it the Dr. José Celso Barbosa Highway. To the north of the site there are undisturbed green lands, while in the south there are lands dispersedly occupied by housing infrastructure.

The digital USGS Historical Topographic Maps illustrate the area's evolution from 1946 to 1982, emphasizing the creation of an informal path running from east to west across the proposed site between 1946 and 1952. According to the maps, urban and building development in the area began with scattered properties to the north of the proposed site. And, from 1952 to 1982, this development gradually expanded southward and westward from the proposed project site.

Determination

The following historic properties have been identified within the APE:

- Direct Effects:
  - No Historic properties are present within the direct or indirect APE.
  - The only thing that will be affected will be the land impacted for the construction and development of the project, whether the areas for future streets, sidewalks, and footprints of the houses.
- Indirect Effects:
  - Due to the long distance between the project and the historic area, no historic properties will have an indirect effect from the proposed project.

Based on the results of our historic property identification efforts, the Program has determined that there are no historic properties within the Area of Potential Effect. The project area is not within or adjacent to the boundaries of a National Register of Historic Places (NRHP)-eligible or listed historic district or Traditional Urban Center. Cultural Resource surveys conducted within the 0.25-mile research radius yielded negative results. No reported archaeological materials or significant cultural properties are present within a quarter-mile radius of the proposed project location.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Recommendation

The Puerto Rico Department of Housing requests that the Puerto Rico SHPO concur that the following determination is appropriate for the undertaking (Choose One):

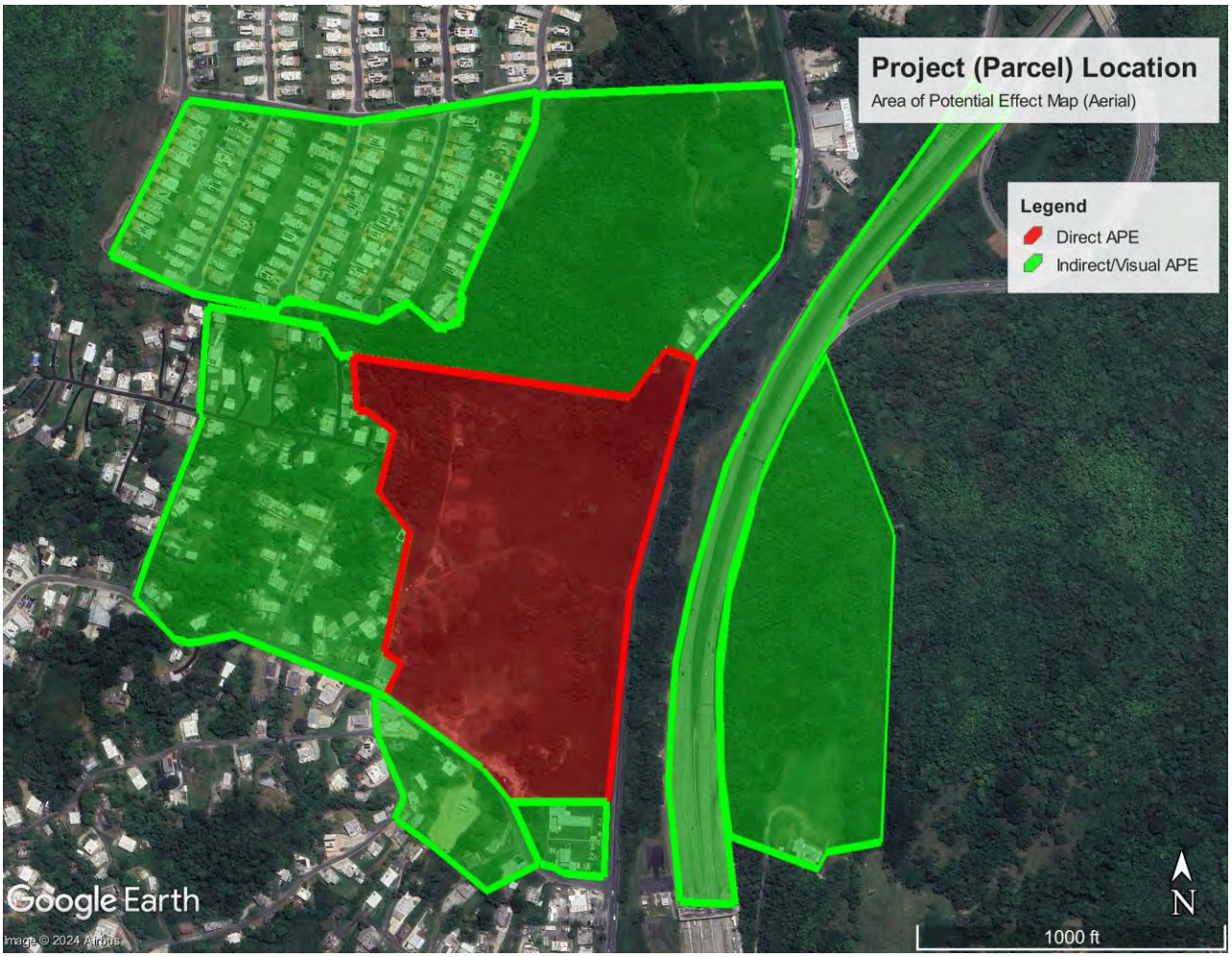
☒ No Historic Properties Affected
☐ No Adverse Effect
Condition (if applicable):
☐ Adverse Effect
Proposed Resolution (if appliable)

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:	
Carlos Rubio-Cancela State Historic Preservation Officer	Date:

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Project (Parcel) Location – Area of Potential Effect Map (Aerial)



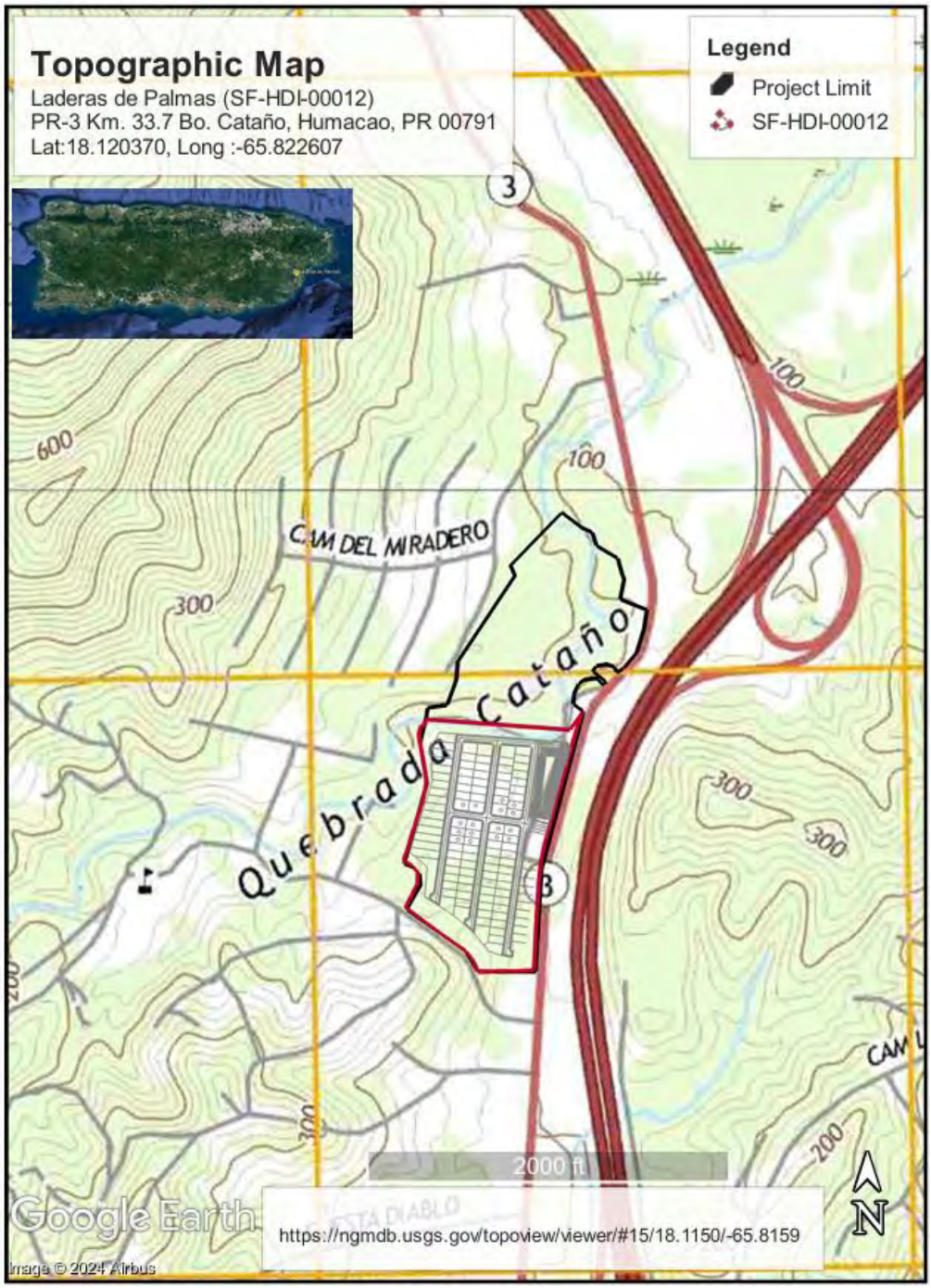
Description: Detailed aerial image from Google Earth 2023. This map shows defined direct and indirect APE.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Project (Parcel) Location - Aerial Map

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Project (Parcel) Location - USGS Topographic Map



CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Project (Parcel) Location – Soils Map

Description: The soil map data was sourced from ARCGIS SSURGO and presented using Google Earth overlay.

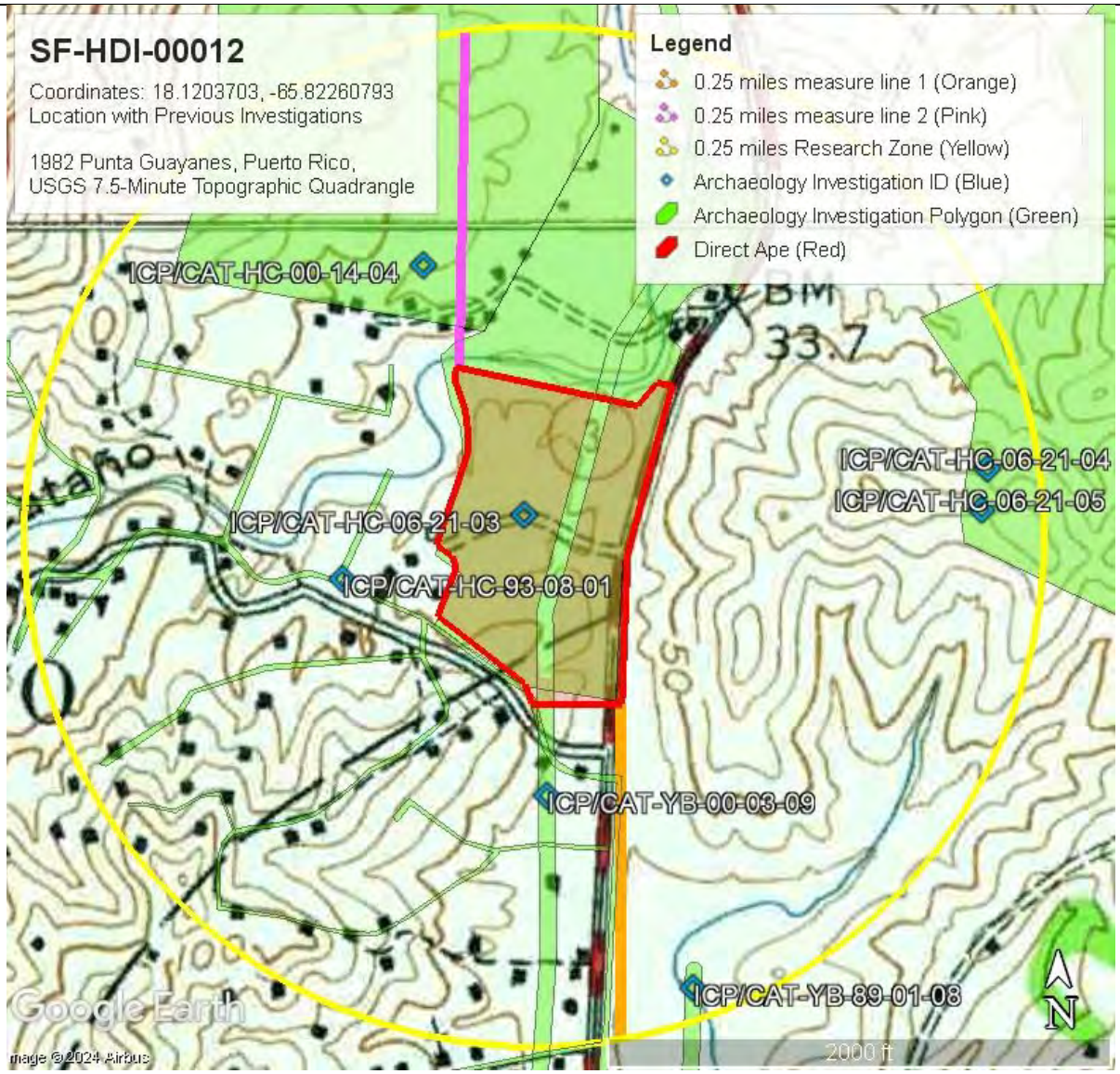
CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Project (Parcel) Location with Previous Investigations - Aerial Map

Description: The image above focuses on the archaeology projects within the 0.25-mile Research Zone. The data was sourced from ICP/CAT and SHPO.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Project (Parcel) Location with Previous Investigations – Topographic Map



Description: The image above focuses on the archaeology projects within the 0.25-mile Research Zone. The data was sourced from ICP/CAT and SHPO. The topographic map was sourced from USGS Historical Topographic Map Explorer.

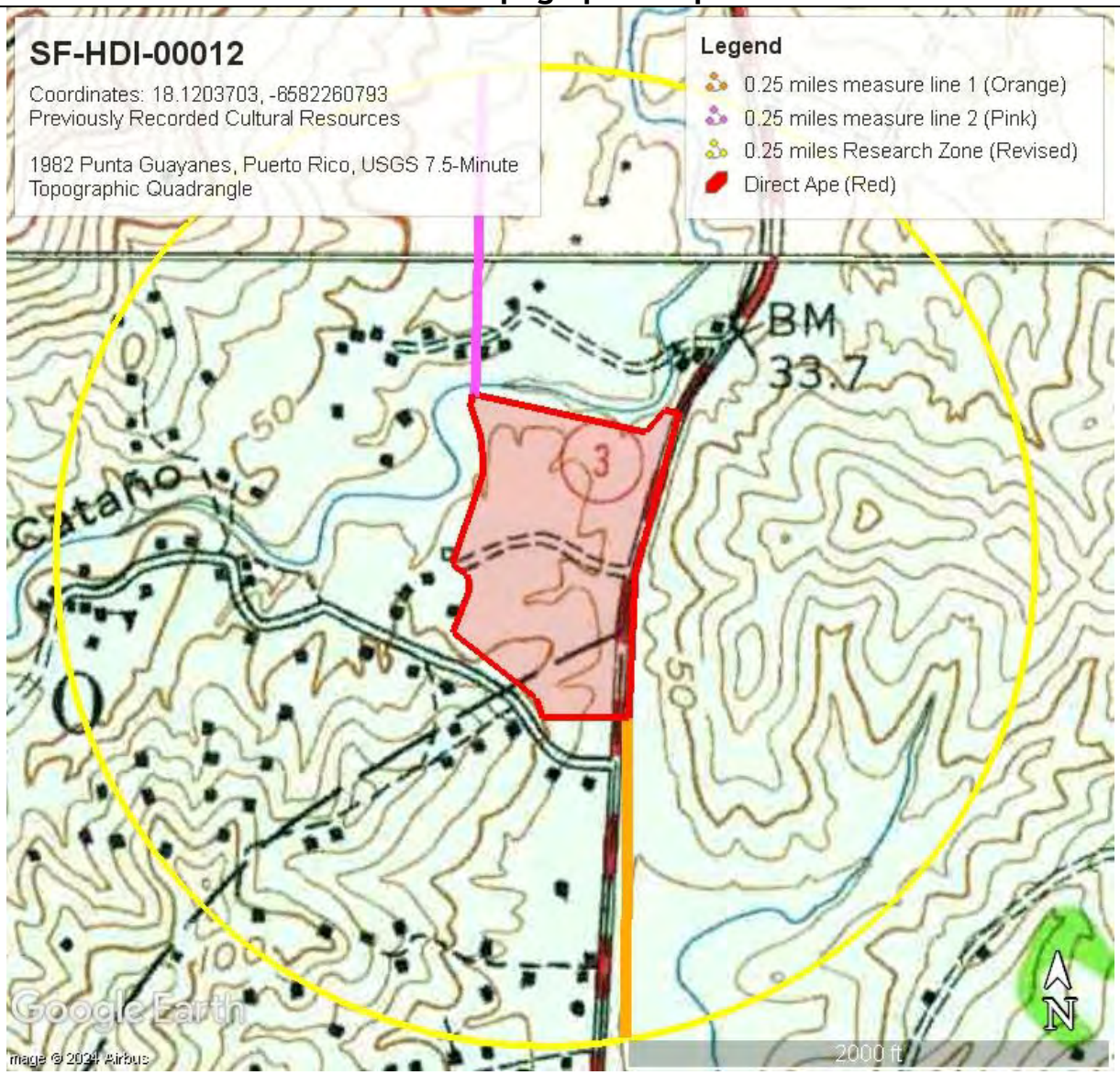
CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Project (Parcel) Location with Previously Recorded Cultural Resources
USGS Topographic Map

Description: The image above shows that there are no previously recorded cultural resources within the 0.25-mile Research Zone.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

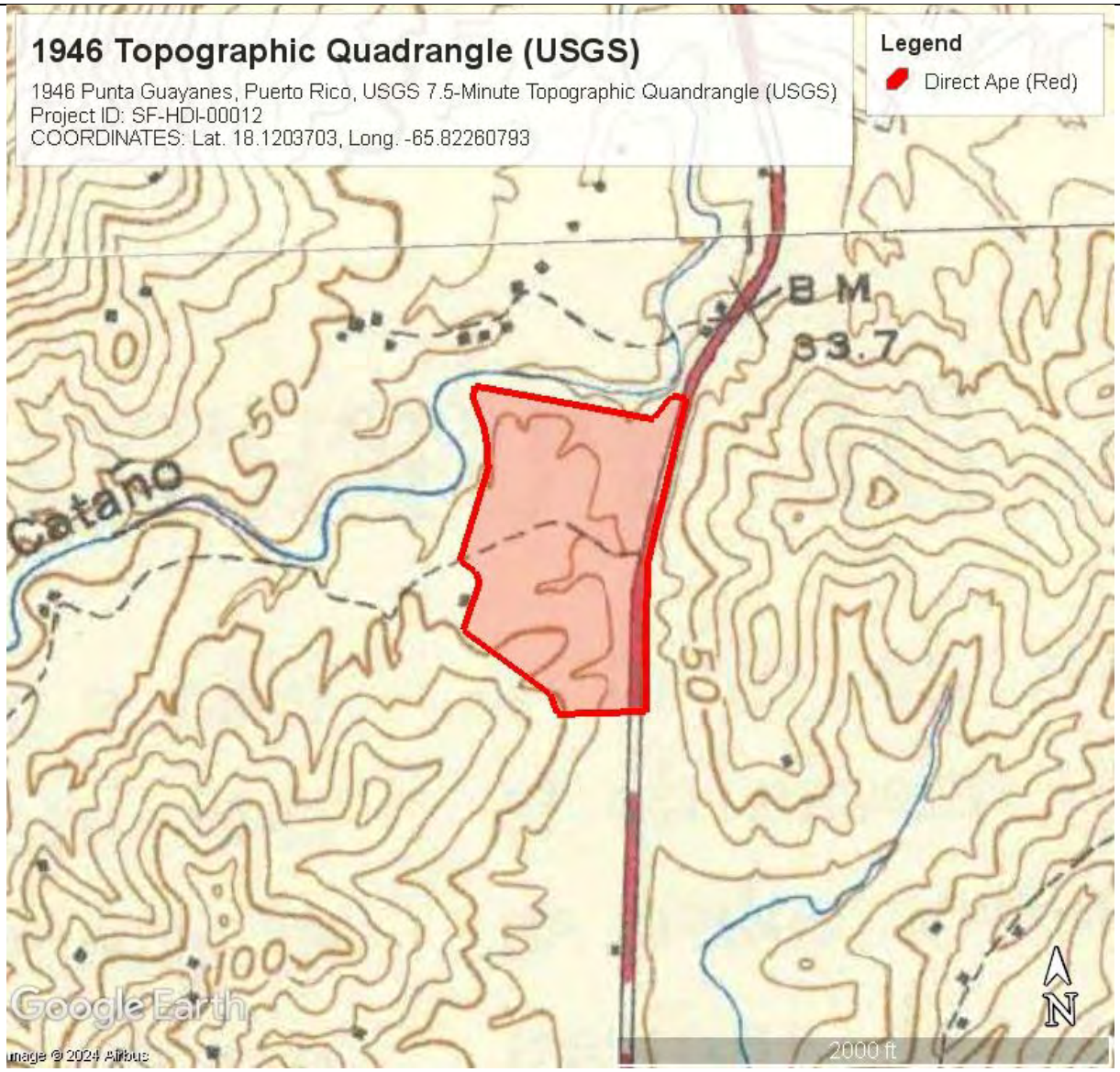
Project (Parcel) Location with Previously Recorded Cultural Resources
USGS Topographic Map



Description: The image above shows that there are no previously recorded cultural resources within the 0.25-mile Research Zone. The topographic map was sourced from USGS Historical Topographic Map Explorer.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

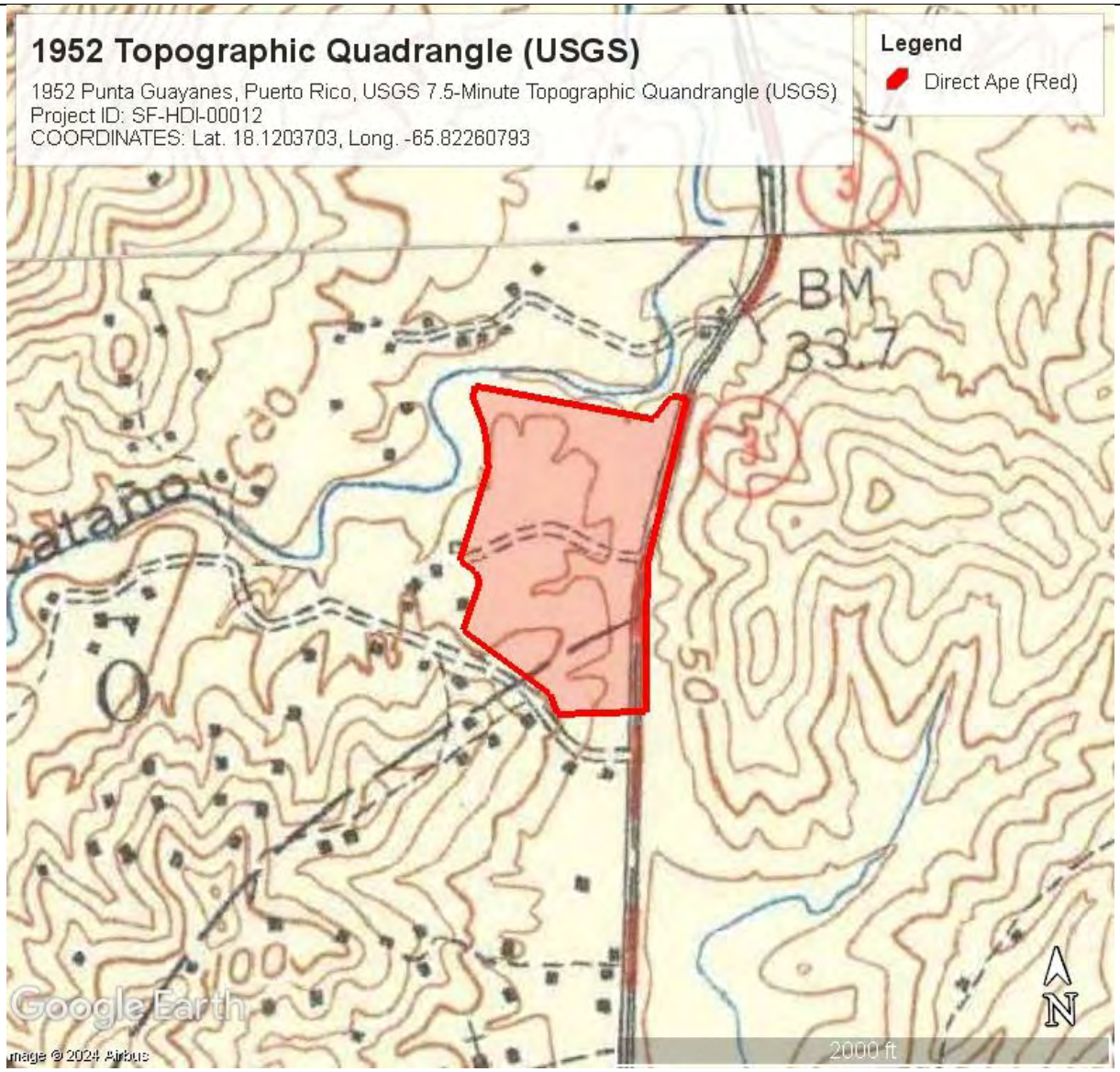
1946 USGS Topographic Map



Description: The image was sourced from USGS Historical Topographic Map Explorer.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

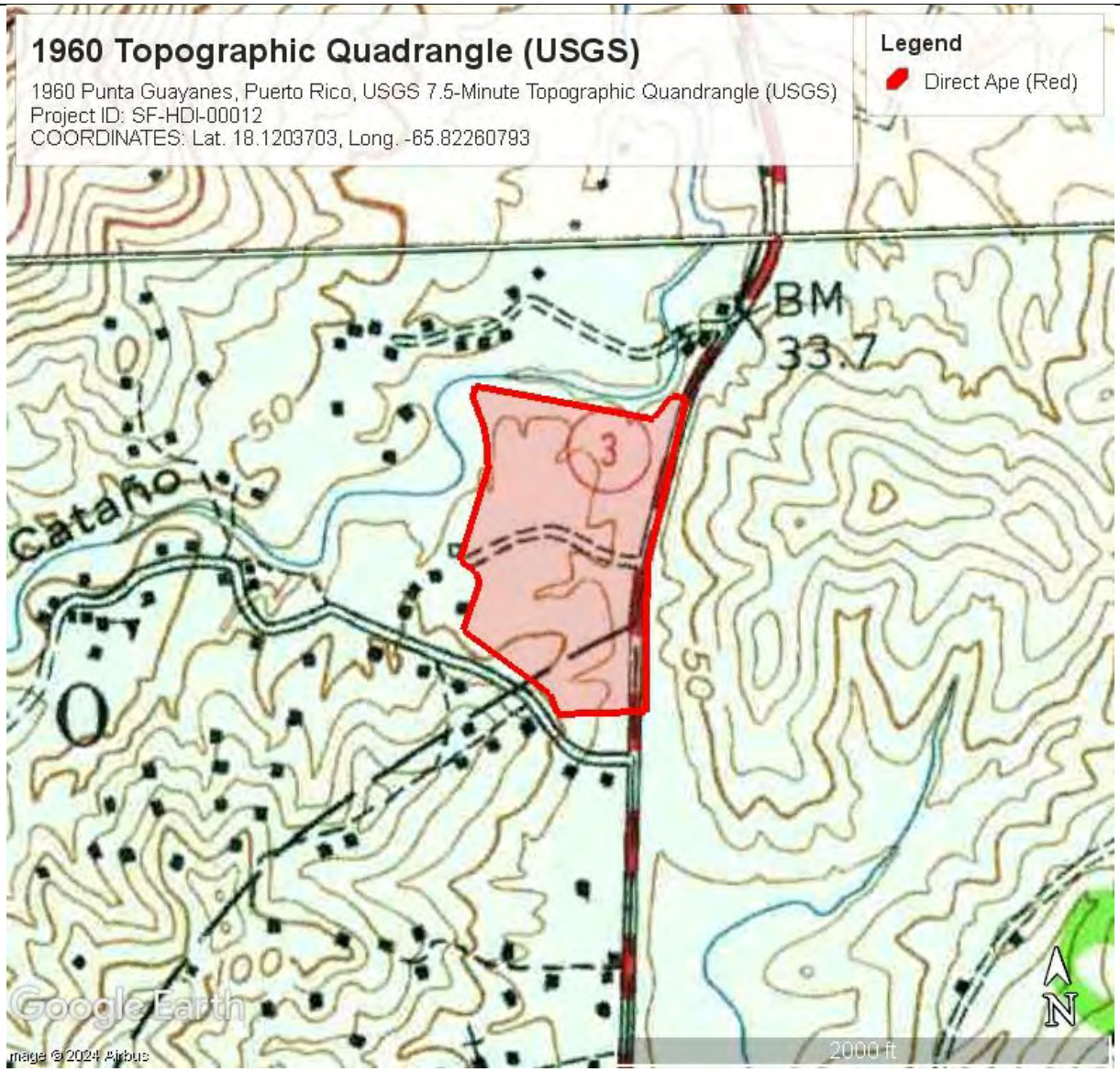
1952 USGS Topographic Map



Description: The image was sourced from USGS Historical Topographic Map Explorer.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

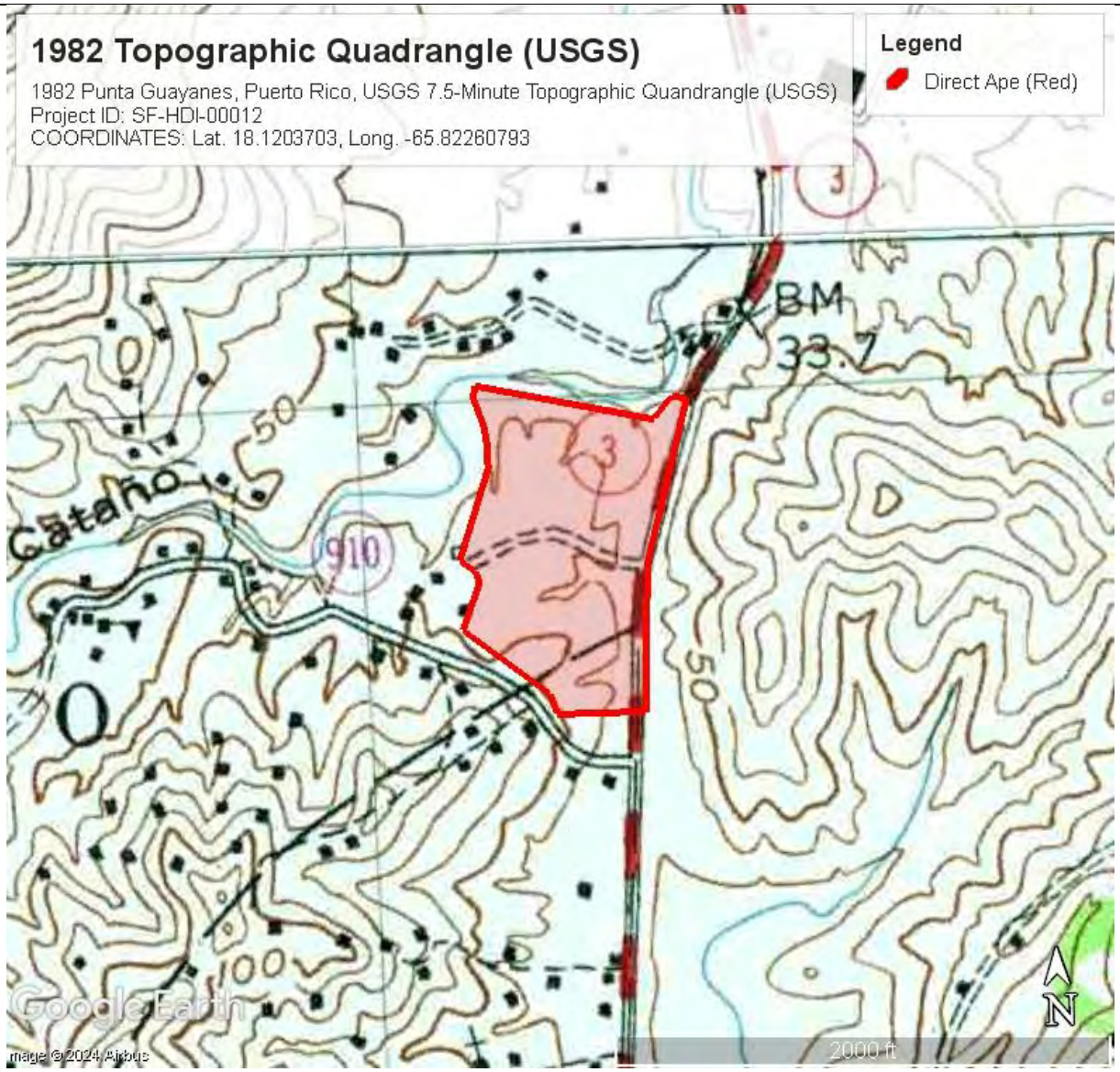
1960 USGS Topographic Map



Description: The image was sourced from USGS Historical Topographic Map Explorer.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

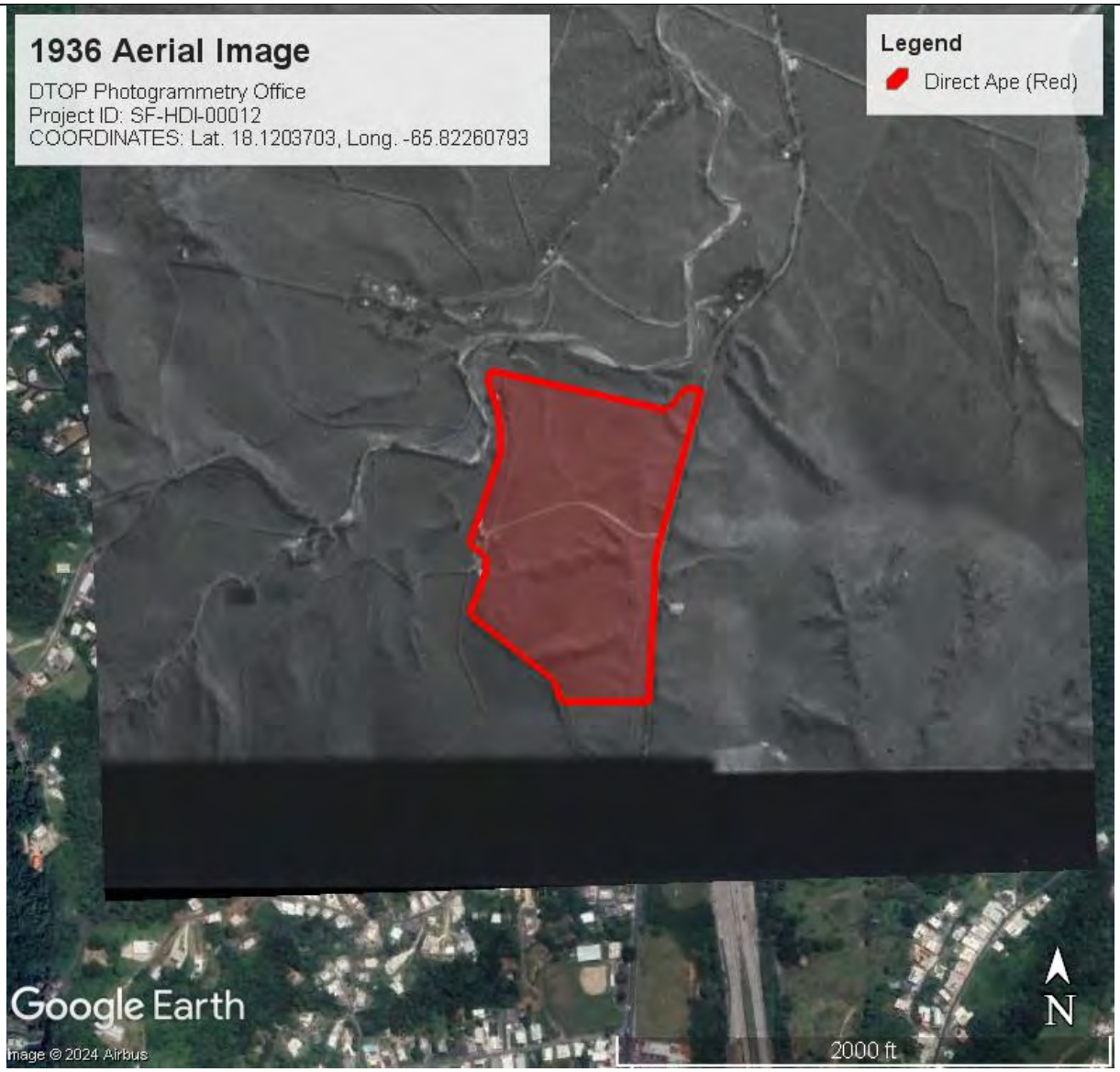
1982 USGS Topographic Map



Description: The image was sourced from USGS Historical Topographic Map Explorer. This 1982 Topographic map was revised from the 1960 version by the USGS.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

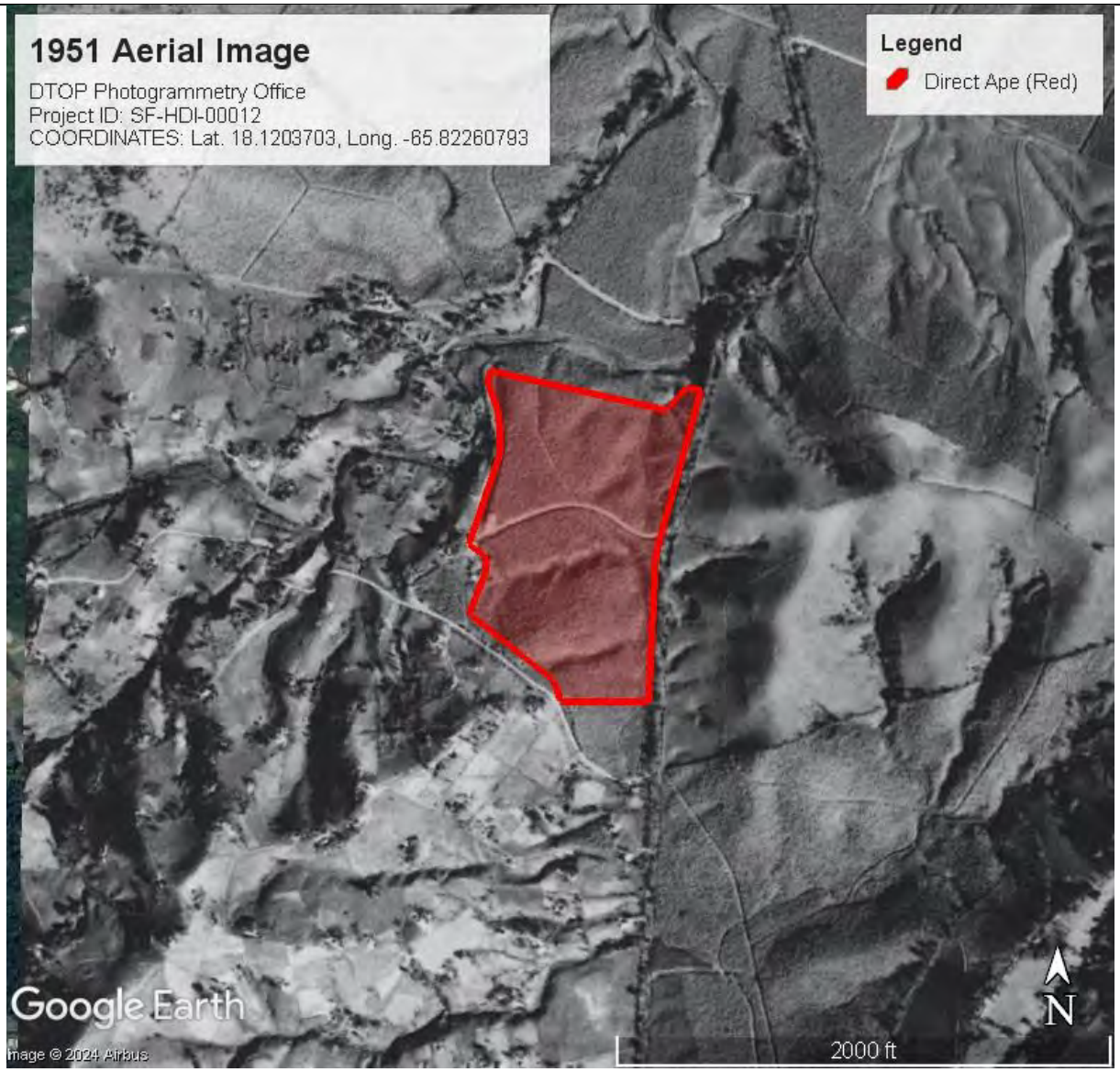
1936 Aerial Image



Description: The image was sourced from DTOP Photogrammetry Office and overlayed using Google Earth.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

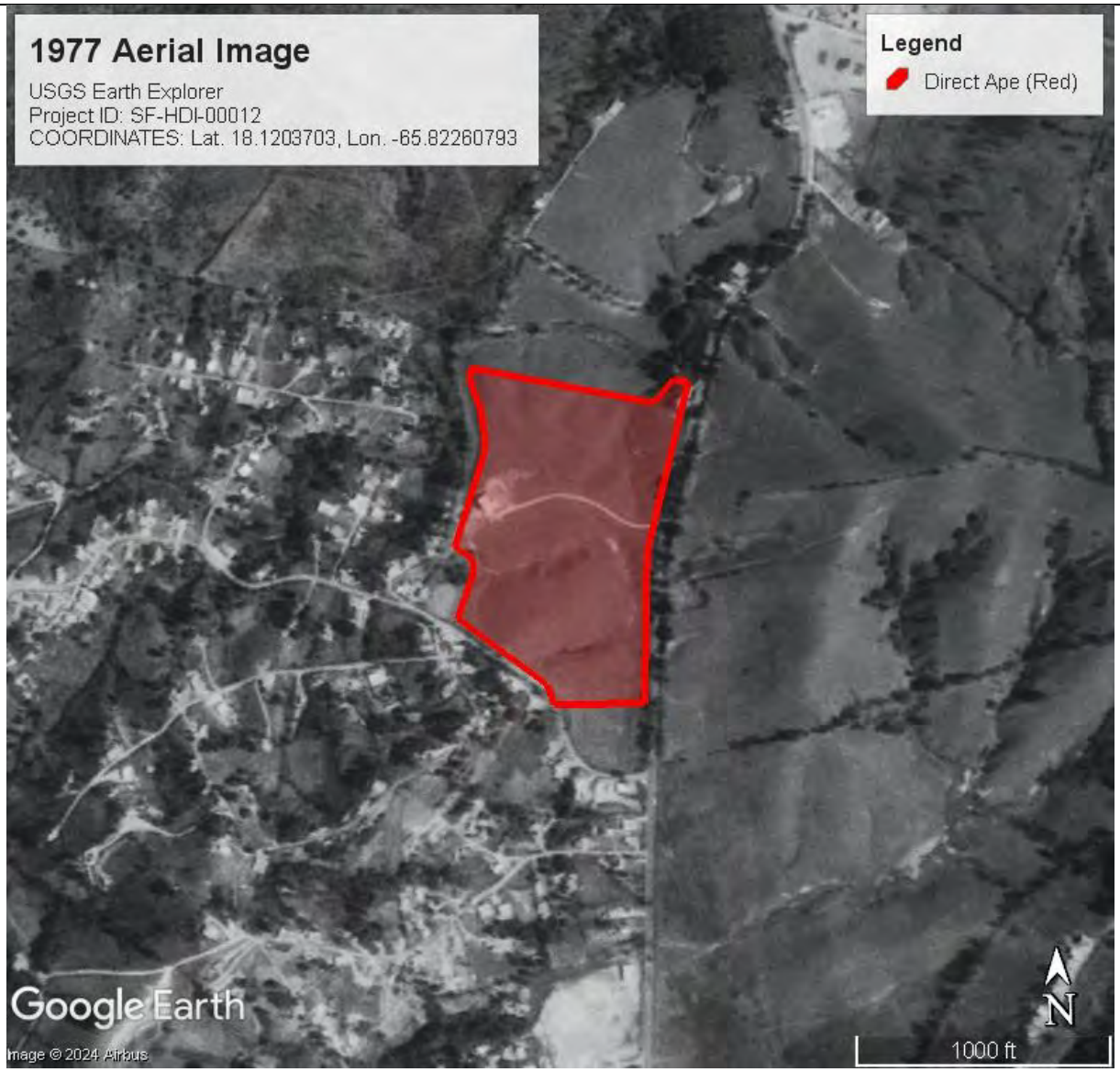
1951 Aerial Image



Description: The image was sourced from DTOP Photogrammetry Office and overlayed using Google Earth.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

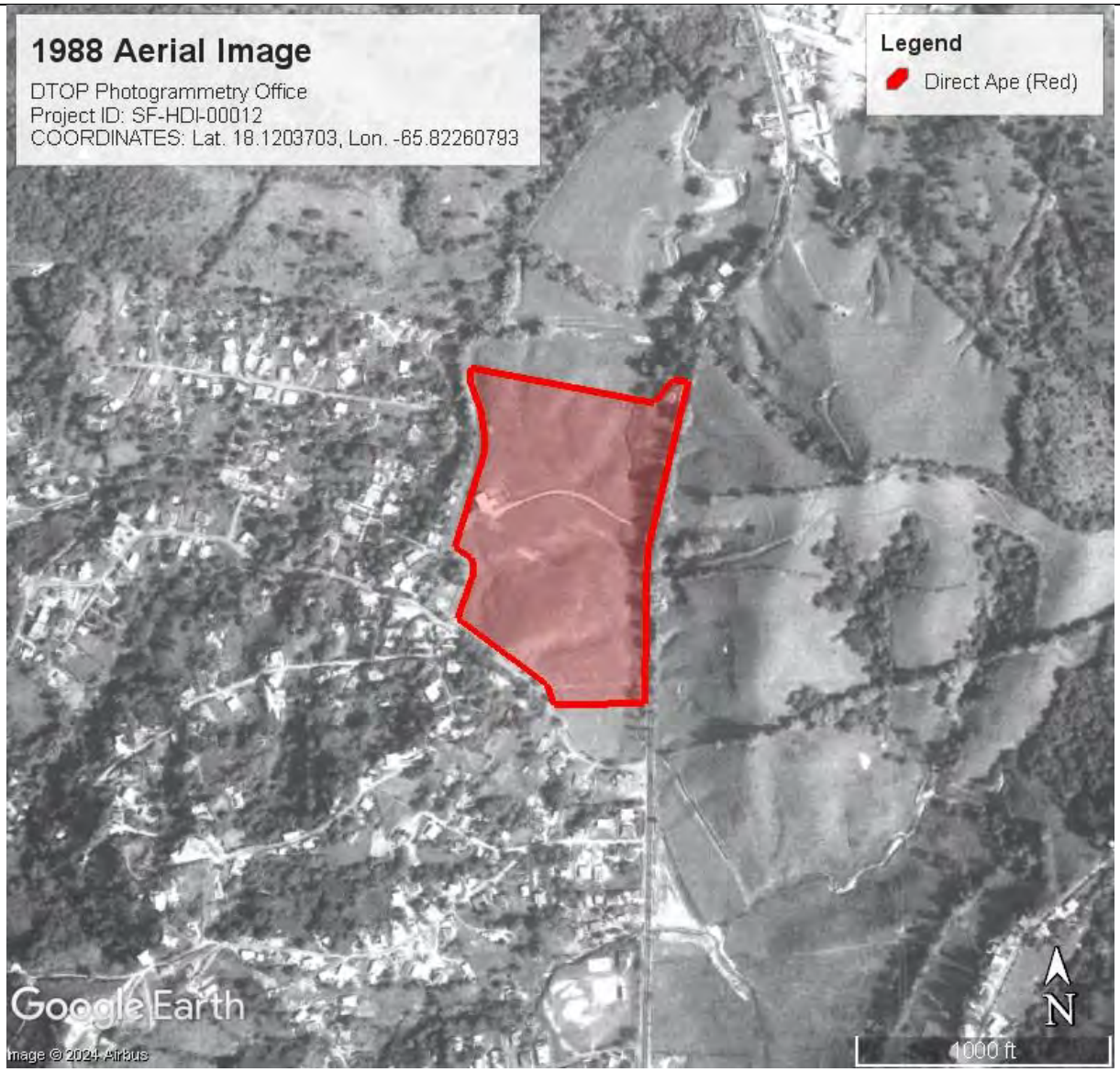
1977 Aerial Image



Description: The image was sourced from DTOP Photogrammetry Office and overlayed using Google Earth.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

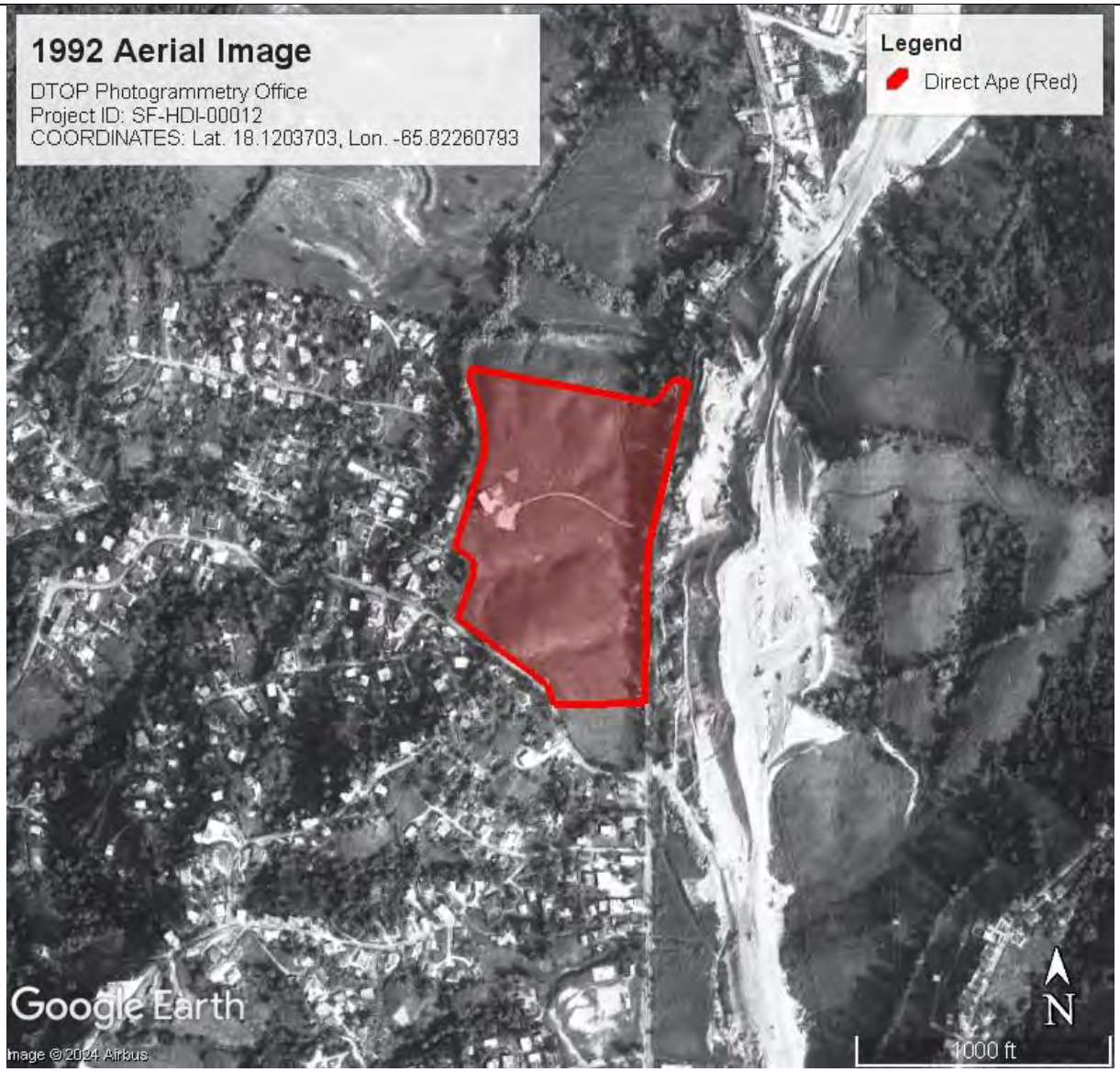
1988 Aerial Image



Description: The image was sourced from DTOP Photogrammetry Office and overlayed using Google Earth.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

1992 Aerial Image



Description: The image was sourced from DTOP Photogrammetry Office and overlayed using Google Earth.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

2004 Aerial Image

Description: The image was sourced from USGS and Google Earth.

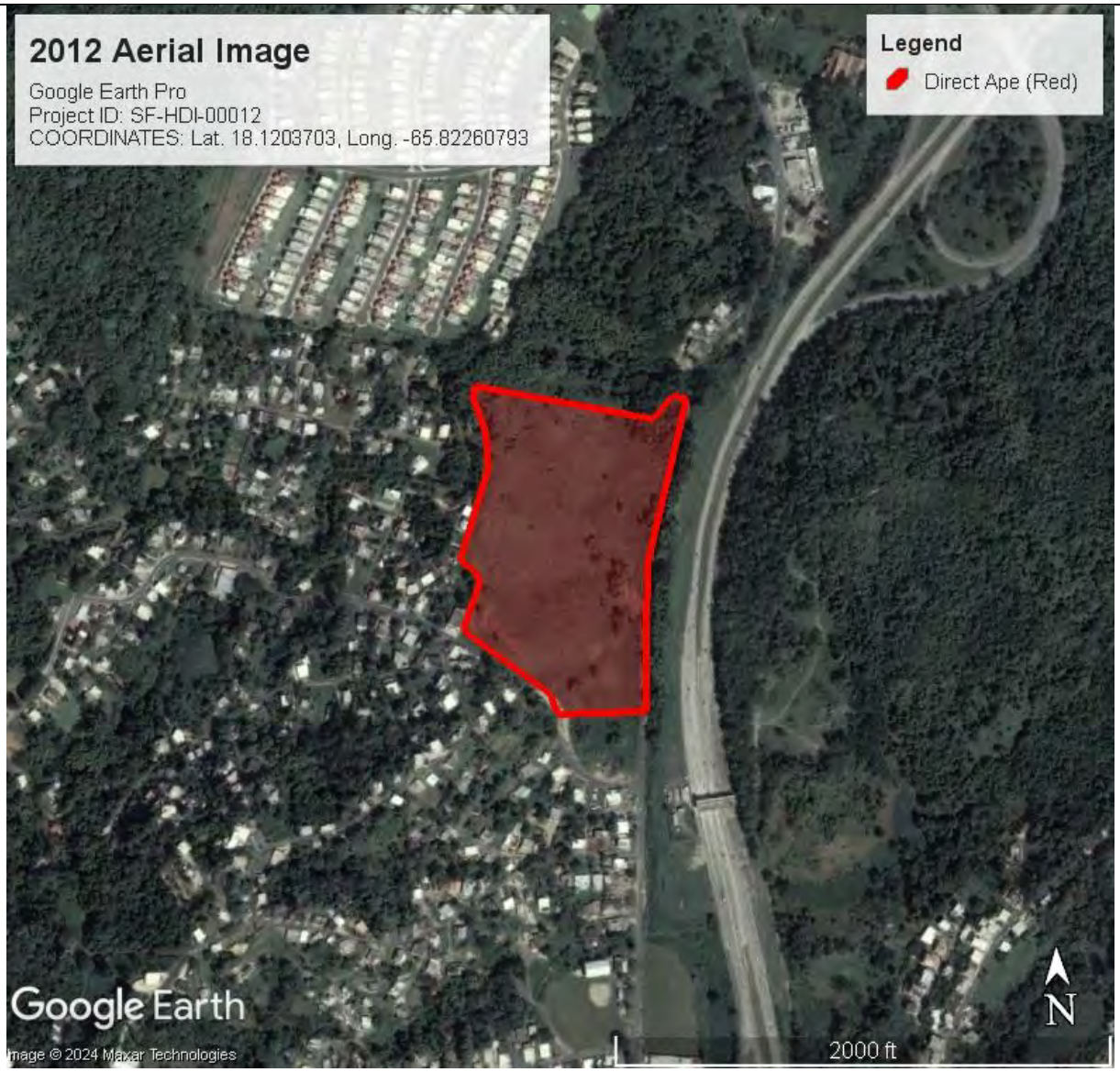
CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

2006 Aerial Image

Description: The image was sourced from USGS and Google Earth.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

2012 Aerial Image



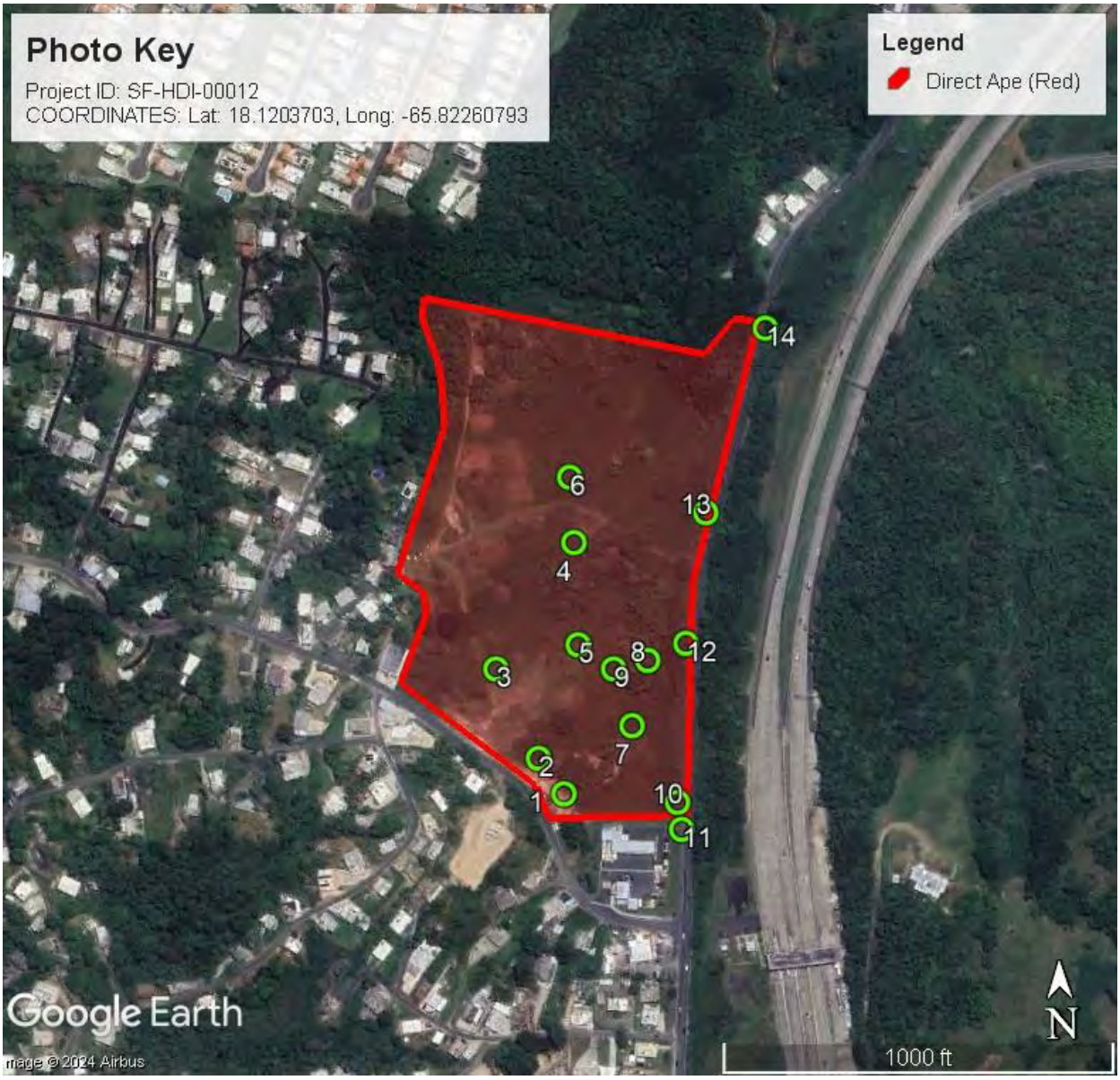
Description: The image was sourced from USGS and Google Earth.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Laderas de Palma Conceptual Plan

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Photograph Key



CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Photo #: 1 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Wild grass and cows are what takes up the most in the place. Looking West.

Photo #: 2 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Wild grass and cows are what takes up the most in the place. Looking North.

CDBG-DR & CDBG-MIT PROGRAMS Single-Family Housing Development Initiatives Section 106 NHPA Effect Determination Form	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Subrecipient: Rebuilders PR LLC	
Case ID: SF-HDI-00012	**City:** Humacao
Project Name: Laderas de Palma	

Photo #: 3 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Wild grass and cows are what takes up the most in the place. Looking Northwest.

Photo #: 4 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Wild grass and cows are what takes up the most in the place. Views towards the WEST urbanization adjacent to the site (west side).

Photo #: 5 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Wild grass and cows are what takes up the most in the place. Looking North.

Photo #: 6 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Wild grass and cows are what takes up the most in the place. Looking North.

Photo #: 7 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Wild grass and cows are what takes up the most in the place. Looking Northeast.

Photo #: 8 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Views towards PR-3 (east side). Looking East.

Photo #: 9 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Views towards PR-3 (east side). Looking East.

Photo #: 10 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Looking North Northwest.

Photo #: 11 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Looking West.

Photo #: 12 **Date:** 10/17/23	**Description (include direction):** Images showing the actual conditions of site. Looking Northwest.

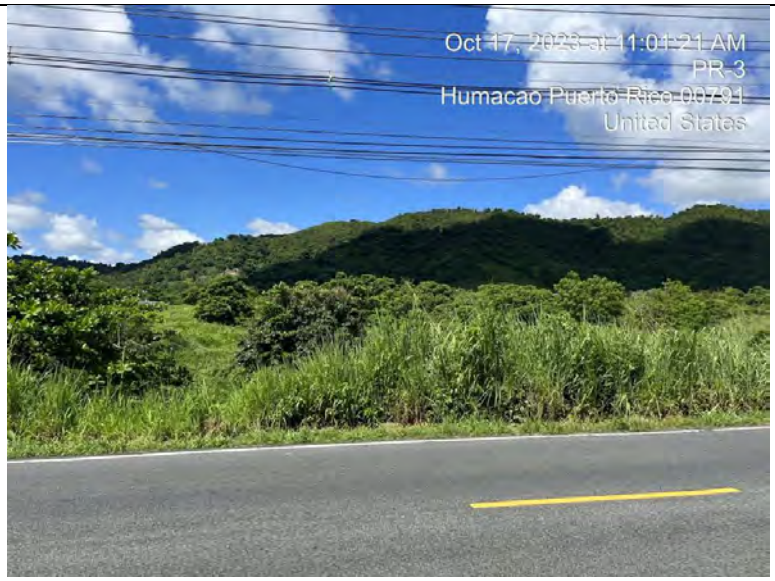


Photo #: 13 **Date:** 10/17/23	**Description (include direction):** Views of the actual conditions of site from PR-3. Looking West.

Photo #: 14 **Date:** 10/17/23	**Description (include direction):** Views from across the PR-3 towards the northwest border of the Direct APE. Looking Southest.

SF-HDI-00012

Laderas de Palmas Project

Humacao, Puerto Rico

Design Drawings

PROJECT:

LADERAS DE PALMAS CDBG-MIT

CARRETERA PR-3 KM 84.0
BO. CATAÑO
HUMACAO, PR 00791

OWNER:

REBUILDERS PR, LLC

TELEPHONE: 939-347-0046
P.O. BOX 192484
SAN JUAN, PUERTO RICO 00919

INDEX OF DRAWINGS

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CIVIL DRAWINGS	
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PROPOSED STREETS SITE PLAN	C-102
PROPOSED STREETS PROFILES 1 OF 3	C-103
PROPOSED STREETS PROFILES 2 OF 3	C-104
PROPOSED STREETS PROFILES 3 OF 3	C-105
PROPOSED STREETS DETAILS 1 OF 2	C-106
PROPOSED STREETS DETAILS 2 OF 2	C-107
PROPOSED WATER DISTRIBUTION SITE PLAN	C-201
PROPOSED WATER DISTRIBUTION DETAILS	C-202
PROPOSED SANITARY SEWER SITE PLAN	C-301
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NOTES, LEGEND & DIAGRAM	SE-3.0
TELECOMMUNICATIONS SITE PLAN-CTV DISTRIBUTION	T-1.0
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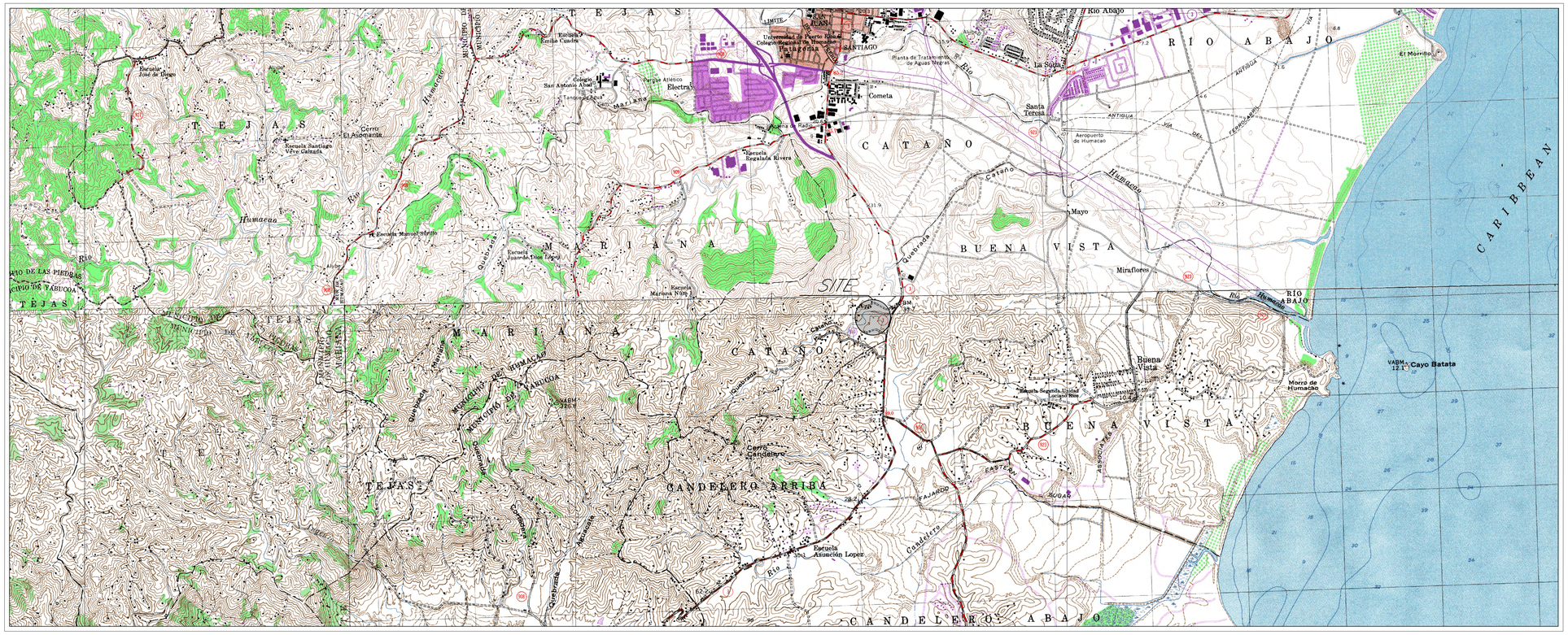
TELECOMMUNICATIONS SITE PLAN-RIGHT OF WAY	T-3.0
TELECOMMUNICATIONS -NOTES AND DETAILS	T-4.0
TELECOMMUNICATIONS -NOTES AND DETAILS	T-5.0

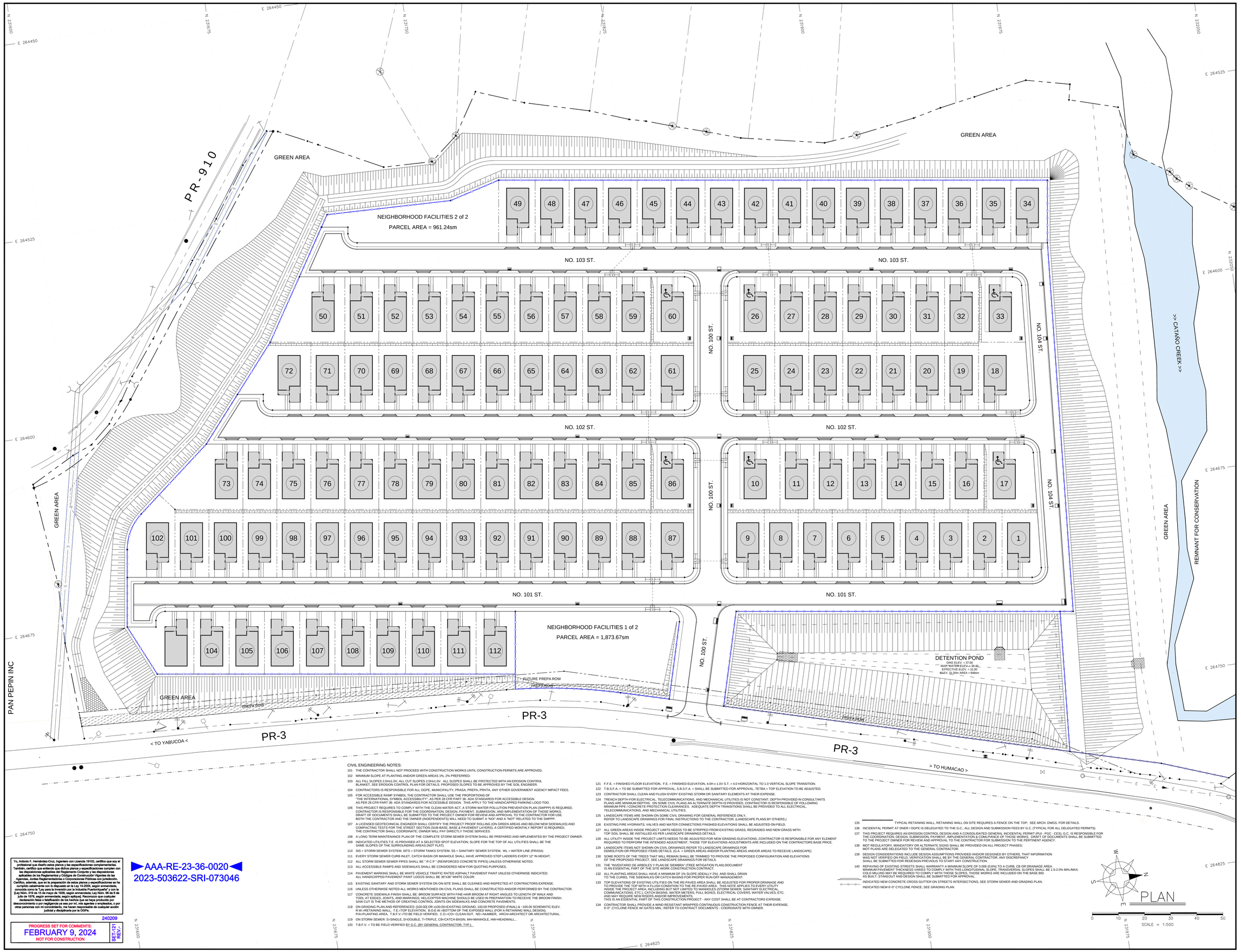


LOCATION PLAN
SCALE: 1=20,000

Coordenadas Lambert (X, Y) 264856.9134, 231900.7495

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT

HF ENGINEERING CONSULTING GROUP, PSC
Antonio.Hernandez@hfcg-pr.com LAS LOMAS DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T: 787-724-3627 F: 787-724-3947 M: 787-501-8136 POSTAL ADDRESS: 425 CARR 693 - PMB 269 - DORADO PR 00646



CIVIL ENGINEERING NOTES:

101 THE CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION WORKS UNTIL CONSTRUCTION PERMITS ARE APPROVED.

102 MINIMUM SLOPE AT PLANTING AND/OR GREEN AREAS 1%, 2% PREFERRED.

103 ALL FILL SLOPES 2.0Hx1.0V, ALL CUT SLOPES 2.0Hx1.0V. ALL SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET, SEE EROSION CONTROL PLAN FOR DETAILS. PROPOSED SLOPES TO BE APPROVED BY THE SOIL ENGINEER.

104 CONTRACTORS IS RESPONSIBLE FOR ALL OCIPE, MUNICIPALITY, PRASA, PREPA, PRHTA, AND ANY OTHER GOVERNMENT AGENCY IMPACT FEES.

105 FOR ACCESSIBLE RAMP SYMBOL THE CONTRACTOR SHALL USE THE PROPORTIONS OF
"THE INTERNATIONAL SYMBOL ACCESSIBILITY", AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN.
AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN. THIS APPLY TO THE HANDICAPPED PARKING LOGO TOO.

106 THIS PROJECT REQUIRES TO COMPLY WITH THE CLEAN WATER ACT, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED, CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, DESIGN, PAYMENT, SUBMISSION, AND IMPLEMENTATION OF THOSE WORKS.
DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR USE.
BOTH THE CONTRACTOR AND THE OWNER (INDEPENDENTS) WILL NEED TO SUBMIT A "NOI" AND A "NOT" RELATED TO THE SWPPP.

107 A LICENSED GEOTECHNICAL ENGINEER SHALL CERTIFY THE PROJECT PROOF ROLLING (ON GREEN AREAS AND BELOW NEW SIDEWALKS) AND COMPACTING TESTS FOR THE STREET SECTION (SUB-BASE, BASE & PAVEMENT LAYERS), A CERTIFIED MONTHLY REPORT IS REQUIRED.
THE CONTRACTOR SHALL COORDINATE; OWNER WILL PAY DIRECTLY THOSE SERVICES..

108 A LONG TERM MAINTENANCE PLAN OF THE COMPLETE STORM SEWER SYSTEM SHALL BE PREPARED AND IMPLEMENTED BY THE PROJECT OWNER.

109 INDICATED UTILITIES' E.F. IS PROVIDED AT A SELECTED SPOT ELEVATION; SLOPE FOR THE TOP OF ALL UTILITIES SHALL BE THE SAME SLOPES OF THE SURROUNDING AREAS (NOT FLAT).

110 SIS = STORM SEWER SYSTEM, SITS = STORM TANKS SYSTEM, SS = SANITARY SEWER SYSTEM, WL = WATER LINE (PRASA)

111 EVERY STORM SEWER CURB INLET, CATCH BASIN OR MANHOLE SHALL HAVE APPROVED STEP LADDERS EVERY 12" IN HEIGHT.

112 ALL STORM SEWER SEWER PIPES SHALL BE " R C P " (REINFORCED CONCRETE PIPES) UNLESS OTHERWISE NOTED.

113 ALL ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE CONSIDERED NEW FOR QUOTING PURPOSES.

114 PAVEMENT MARKING SHALL BE WHITE VEHICLE TRAFFIC RATED ASPHALT PAVEMENT PAINT UNLESS OTHERWISE INDICATED.
ALL HANDICAPPED PAVEMENT PAINT LOGOS SHALL BE 36"x36" WHITE COLOR.

115 EXISTING SANITARY AND STORM SEWER SYSTEM ON ON-SITE SHALL BE CLEANED AND INSPECTED AT CONTRACTORS EXPENSE.

116 UNLESS OTHERWISE NOTED ALL WORKS MENTIONED ON CIVIL PLANS SHALL BE CONSTRUCTED AND/OR PERFORMED BY THE CONTRACTOR.

117 CONCRETE SIDEWALK FINISH SHALL BE: BROOM SURFACE WITH FINE-HAIR BROOM AT RIGHT ANGLES TO LENGTH OF WALK AND
TOOL AT EDGES, JOINTS, AND MARKINGS; HELICOPTER MACHINE SHOULD BE USED IN PREPARATION TO RECEIVE THE BROOM FINISH.
SAW CUT IS THE METHOD OF CREATING CONTROL JOINTS ON SIDEWALKS AND CONCRETE PAVEMENTS.

118 ON GRADING PLAN AND REFERENCES: [(10.00) OR x(10.00)=EXISTING GROUND, 100.00 PROPOSED (FINAL) & -100.00 SCHEMATIC ELEV.
R.W.=RETAINING WALL, T.E.=TOP ELEVATION, B.O.E.W.=BOTTOM OF THE EXPOSED WALL (FOR A RETAINING WALL DESIGN),
P/A=PLANTING AREA, T.B.F.V.=TO BE FIELD VERIFIED, C.O.=CO= CLEAN OUT, NO.=NUMBER, ARCH=ARCHITECT OR ARCHITECTURAL.

119 ON STORM SEWER: S=SINGLE, D=DOUBLE, T=TRIPLE, CB=CATCH BASIN, MH=MANHOLE, MW=HEADWALL...

120 T.B.F.V. = TO BE FIELD VERIFIED BY G.C. (BY GENERAL CONTRACTOR, TYP.)...

121 F.F.E. = FINISHED FLOOR ELEVATION, F.E. = FINISHED ELEVATION, 4.0H x 1.0V S.T. = 4.0 HORIZONTAL TO 1.0 VERTICAL SLOPE TRANSITION.

122 T.B.S.F.A. = TO BE SUBMITTED FOR APPROVAL, S.B.S.F.A. = SHALL BE SUBMITTED FOR APPROVAL, TE/TBA = TOP ELEVATION TO BE ADJUSTED.

123 CONTRACTOR SHALL CLEAN AND FLUSH EVERY EXISTING STORM OR SANITARY ELEMENTS AT THEIR EXPENSE.

124 TRENCH DEPTH FOR ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES IS NOT CONSTANT; DEPTH PROVIDED IN CONSULTANTS PLANS ARE MINIMUM DEPTHS. ON SOME CIVIL PLANS AN ALTERNATE DEPTH IS PROVIDED, CONTRACTOR IS RESPONSIBLE OF FOLLOWING:
MINIMUM PIPE / CONCRETE PROTECTION CLEARANCES. ADEQUATE DEPTH TRANSITIONS SHALL BE PROVIDED TO ALL ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES.

125 LANDSCAPE ITEMS ARE SHOWN ON SOME CIVIL DRAWING FOR GENERAL REFERENCE ONLY,
REFER TO LANDSCAPE DRAWINGS FOR FINAL INSTRUCTIONS TO THE CONTRACTOR. (LANDSCAPE PLANS BY OTHERS.)

126 EXISTING FIRE HYDRANTS, VALVES AND WATER CONNECTIONS FINISHED ELEVATIONS SHALL BE ADJUSTED ON FIELD.

127 ALL GREEN AREAS INSIDE PROJECT LIMITS NEEDS TO BE STRIPPED FROM EXISTING GRASS, REGRADED AND NEW GRASS WITH TOP SOIL SHALL BE INSTALLED AS PER LANDSCAPE DRAWINGS DETAILS.

128 ALL UTILITY INSIDE THE PROJECT LIMITS NEEDS TO BE ADJUSTED FOR NEW GRADING ELEVATIONS, CONTRACTOR IS RESPONSIBLE FOR ANY ELEMENT REQUIRED TO PERFORM THE INTENDED ADJUSTMENT; THOSE TOP ELEVATIONS ADJUSTMENTS ARE INCLUDED ON THE CONTRACTORS BASE PRICE.

129 LANDSCAPE ITEMS NOT SHOWN ON CIVIL DRAWINGS REFER TO LANDSCAPE DRAWINGS FOR
DEMOLITION OR PROPOSED ITEMS DETAILS. (C.A. = GREEN AREAS AND/OR PLANTING AREAS AND/OR AREAS TO RECEIVE LANDSCAPE)

130 SOME ROOTS OF THE TREES THAT WILL REMAIN SHALL BE TRIMMED TO PROVIDE THE PROPOSED CONFIGURATION AND ELEVATIONS OF THE PROPOSED PROJECT, SEE LANDSCAPE DRAWINGS FOR DETAILS.

131 THE "INVENTARIO DE ARBOLES Y PLAN DE SIEMBRA" (TREE MITIGATION PLAN) DOCUMENT IS AN ESSENTIAL PART OF THE SITE WORK CONSTRUCTION CONTRACT.

132 ALL PLANTING AREAS SHALL HAVE A MINIMUM OF 1% SLOPE (IDEALLY 2%) AND SHALL DRAIN TO THE CURBS, THE SIDEWALKS OR CATCH BASINS FOR PROPER RUN-OFF MANAGEMENT.

133 TOP ELEVATIONS OF EXISTING UTILITIES ON THE RE-PAVED AREA SHALL BE ADJUSTED FOR PROPER DRAINAGE AND SLOPES, THE TOP OF ALL UTILITIES SHALL BE FLUSH WITH THE FINISHED RE-PAVED AREA. THIS NOTE APPLIES TO EVERY UTILITY INSIDE THE PROJECT AREA, INCLUDING CLEAN OUT BOXES, FIELD MANHOLES (STORM SEWER, SANITARY ELECTRICAL, COMMUNICATIONS, ETC.), CATCH BASINS, WATER METERS, PULL BOXES, ELECTRICAL COVERS, WATER VALVES, ETC. AND MAY REQUIRE NEW RISERS AND/OR IMPROVEMENTS.
THIS IS AN ESSENTIAL PART OF THIS CONSTRUCTION PROJECT - ANY COST SHALL BE AT CONTRACTORS EXPENSE.

134 CONTRACTOR SHALL PROVIDE A WIND RESISTANT WRAPPED CONTINUOUS CONSTRUCTION FENCE AT THEIR EXPENSE, 6'-0" CYCLONE FENCE W/ GATES MIN.; REFER TO CONTRACT DOCUMENTS - COORDINATE WITH OWNER.

135 TYPICAL RETAINING WALL, RETAINING WALL ON SITE REQUIRES A FENCE ON THE TOP. SEE ARCH. DWGS. FOR DETAILS.

136 INCIDENTAL PERMIT AT OWER / OOPE IS DELEGATED TO THE G.C.; ALL DESIGN AND SUBMISSION FEES BY G.C. (TYPICAL FOR ALL DELEGATED PERMITS)

137 THIS PROJECT REQUIRES AN EROSION CONTROL DESIGN AND A CONSOLIDATED GENERAL INCIDENTAL PERMIT (PUI - PGC - CES), G.C. IS RESPONSIBLE FOR THE COORDINATION, DESIGN, SUBMISSION, PAYMENT, IMPLEMENTATION & COMLPANCE OF THOSE WORKS. DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR SUBMISSION TO THE PERTINENT AGENCY.

138 MOT REGULATORY, MANDATORY OR ALTERNATE SIGNS SHALL BE PROVIDED ON ALL PROJECT PHASES;
MOT PLANS ARE DELEGATED TO THE GENERAL CONTRACTOR.

139 DESIGN CONSIDERATIONS INCLUDE DESIGN ASSUMPTIONS PROVIDED AND/OR DESIGNED BY OTHERS, THAT INFORMATION WAS NOT VERIFIED ON FIELD; VERIFICATION SHALL BE BY THE GENERAL CONTRACTOR, ANY DISCREPANCY SHALL BE SUBMITTED FOR REDESIGN PREVIOUS TO START ANY CONSTRUCTION.

140 REPAVING OF EXISTING STREETS SHALL WARRANTY A MINIMUM SLOPE OF 0.50% (0.6%) TO A CURB, CB OR DRAINAGE AREA.
MINIMUM PAVEMENT THICKNESS VARIES TO COMPLY WITH THIS LONGITUDINAL SLOPE, TRANSVERSAL SLOPES SHALL BE 1.5-2.0% MIN.MAX.
COLD MILLING MAY BE REQUIRED TO COMPLY WITH THOSE SLOPES, THOSE WORKS ARE INCLUDED ON THE BASE BID.
AS BUILT, STAKEOUT AND DESIGN SHALL BE SUBMITTED FOR APPROVAL.

INDICATED NEW CONCRETE CROSS GUTTER ON STREETS INTERSECTIONS, SEE STORM SEWER AND GRADING PLAN.

INDICATED NEW 6'-0" CYCLONE FENCE, SEE GRADING PLAN.

PLAN
SCALE = 1:500
0 10 20 30 40 50

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley 173 de 12 de agosto de 1988, según enmendada, conocida como la "Ley de Calidad de Vida de 1978, según enmendadas, según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION
SET-01 REV-

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C-101

SHEET NO: .
TOTAL: .

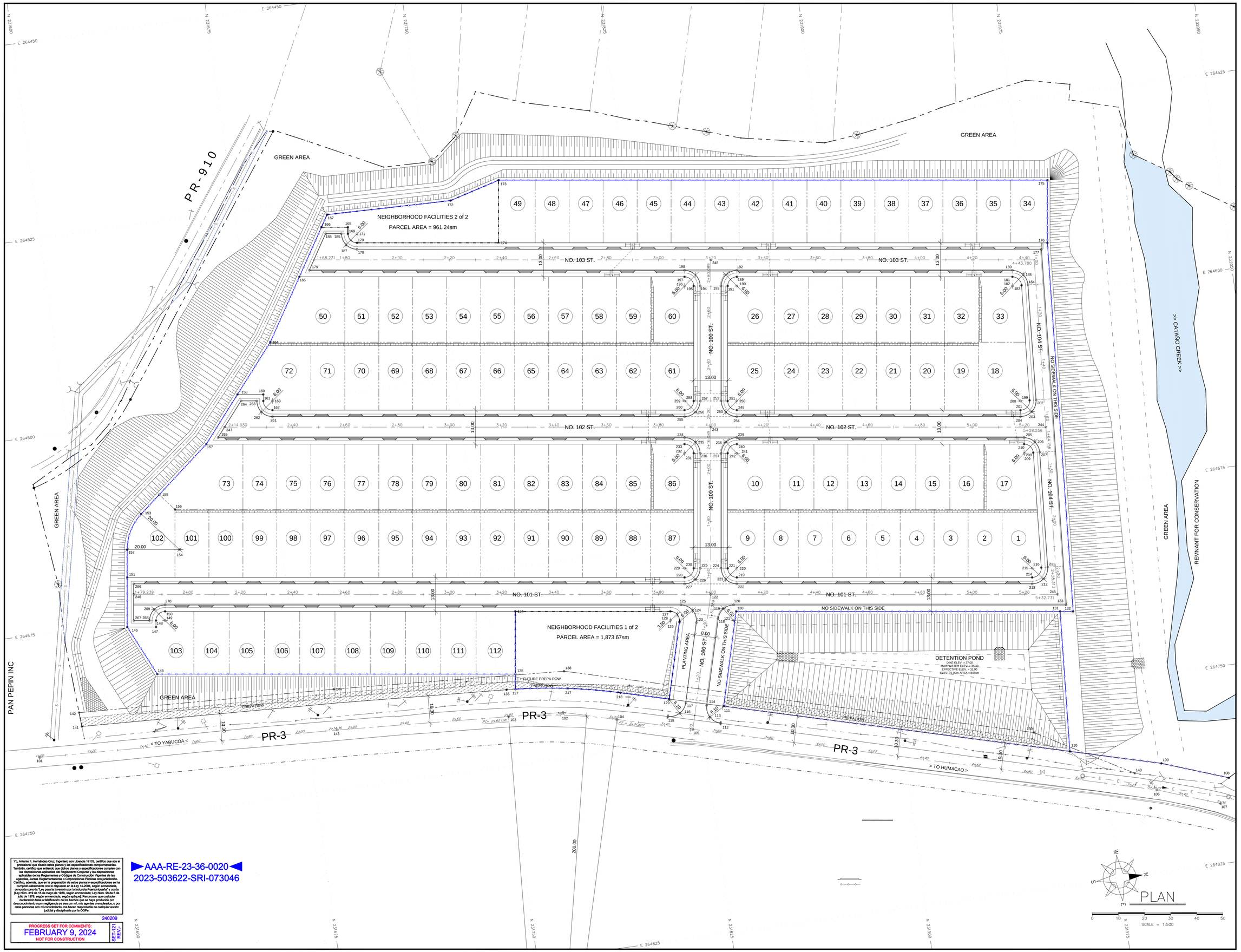
SHEET TITLE:
PROPOSED GENERAL SITE PLAN

J. C. A.:	.
CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045•

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF HF E.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED WITHOUT WRITTEN CONSENT OF HF E.C.S. IN WHOLE. IT SHALL BE RETURNED TO HF E.C.S. UPON THE REQUEST BY THIS OFFICE.

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Avenida Hostos #1 Edificio Profesional Plaza Suite 204 - MAYAGUEZ, PR 00680



SHEET TITLE:
PROPOSED STREETS SITE PLAN

J. C. A. .
CONSULTA: .
AAA NO.: .
ACT NO.: .
APPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045*

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.E.C. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED WITHOUT WRITTEN CONSENT OF H.F.E.C. IN WRITING. IT SHALL BE RETURNED TO H.F.E.C. UPON THE REQUEST BY THIS OFFICE.

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Antonio.hernandez@hfegroup.com LAS LOMAS 2KV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T.787.792.2047 M.787.509.6138 FCSA, ASCE/SEI #2 CERT.RE-788 (EXP.12/31/2024)

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—102

SHEET NO: .
TOTAL: .

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 76 de 5 de junio de 2000, según enmendada, y la Ley Núm. 45 de 18 de junio de 1979, según enmendada; según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET / 01 REV / .

AAA-RE-23-36-0020
2023-503622-SRI-073046

PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: C–103
SHEET NO: .
TOTAL: .

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Ahernandez@hfengr.com - LAS LOMAS DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T: 787-626-5257 F: 787-724-2447 M: 787-604-6106 POSTAL ADDRESS: 435 CARR 833 - PMB 339 - GUAYNABO PR 00966

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED STREETS PROFILES 1 OF 3

STATUS:
ADVANCED DRAWINGS

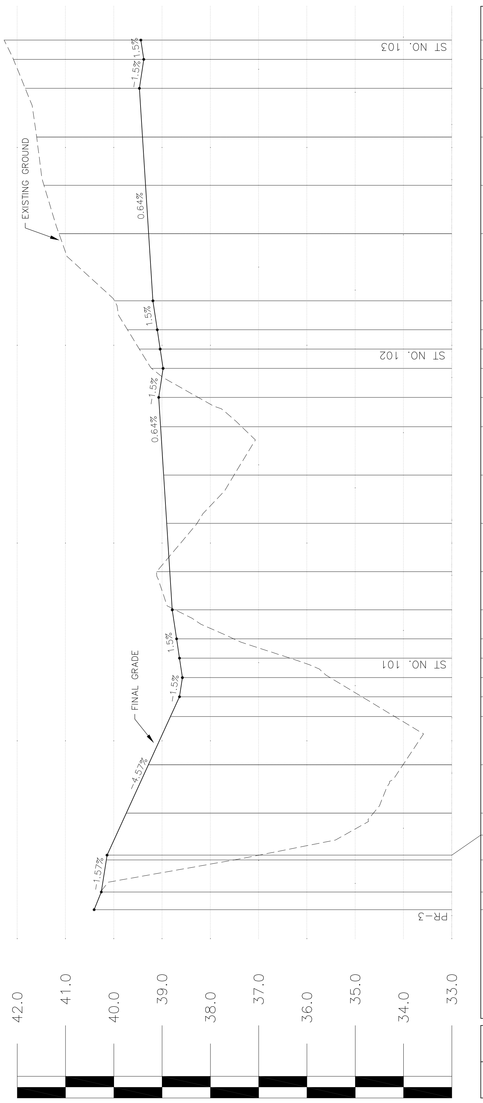
THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.C.C. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR CHANGED UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.C.C. UPON THE REQUEST BY THIS OFFICE.

J. C. A.:	.
CONSULTA.:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D A T E:	AS SHOWN
S C A L E:	AS SHOWN
DRAWING:	1045•

STATION	PARTIAL	EXISTING	FINAL
	DISTANCES	ELEVATIONS	
1+79.239	0.000	37.751	40.406
1+90.000	10.761	36.904	40.320
2+00.000	10.000	37.834	40.240
2+10.000	10.000	37.524	40.160
2+20.000	10.000	34.566	40.080
2+30.000	10.000	34.426	40.000
2+40.000	10.000	36.491	39.920
2+50.000	10.000	38.560	39.840
2+60.000	10.000	39.133	39.760
2+70.000	10.000	39.278	39.680
2+80.000	10.000	38.316	39.600
2+90.000	10.000	37.394	39.520
3+00.000	10.000	38.069	39.440
3+10.000	10.000	37.892	39.360
3+20.000	10.000	36.054	39.280
3+30.000	10.000	33.903	39.200
3+40.000	10.000	34.537	39.120
3+50.000	10.000	35.628	39.040
3+60.000	10.000	38.115	38.960
3+70.000	10.000	39.422	38.880
3+80.000	10.000	38.939	38.800
3+90.000	10.000	37.858	38.720
4+00.000	10.000	36.350	38.640
4+10.000	10.000	35.796	38.560
4+20.000	10.000	35.186	38.480
4+30.000	10.000	33.436	38.400
4+40.000	10.000	31.973	38.320
4+50.000	10.000	31.632	38.240
4+60.000	10.000	31.404	38.160
4+70.000	10.000	31.412	38.080
4+80.000	10.000	31.396	38.000
4+90.000	10.000	31.175	37.920
5+00.000	10.000	30.674	37.840
5+10.000	10.000	31.801	37.760
5+20.000	10.000	32.786	37.680
5+30.000	10.000	32.269	37.600
5+32.731	2.731	31.610	37.578

STREET NO. 101 PROFILE

SCALES: H 1:500 & V 1:50



STATION	PARTIAL	EXISTING	FINAL
	DISTANCES	ELEVATIONS	
1+00.000	0.000	40.408	40.408
1+03.657	3.657	40.260	40.260
1+10.300	6.643	37.510	40.156
1+11.300	1.000	36.990	40.140
1+20.000	8.700	34.624	39.742
1+30.000	10.000	34.011	39.285
1+40.000	10.000	34.184	38.827
1+44.089	4.089	34.862	38.640
1+48.054	3.965	35.519	38.580
1+52.089	4.035	36.350	38.640
1+56.089	4.000	37.518	38.700
1+62.089	6.000	38.728	38.790
1+70.000	7.911	39.114	38.840
1+80.000	10.000	38.276	38.904
1+90.000	10.000	37.511	38.968
2+00.000	10.000	37.350	39.031
2+06.089	6.089	38.254	39.070
2+12.089	6.000	39.219	38.980
2+16.089	4.000	39.471	39.040
2+20.089	4.000	39.717	39.100
2+26.089	6.000	39.986	39.190
2+40.000	13.911	41.136	41.136
2+50.000	10.000	41.446	41.446
2+60.000	10.000	41.597	41.598
2+70.089	10.089	41.832	39.470
2+76.089	6.000	42.078	39.380
2+80.089	4.000	42.272	39.440

STREET NO. 100 PROFILE

SCALES: H 1:500 & V 1:50

AAA-RE-23-36-0020
2023-503622-SRI-073046

No. 8 Artículo 7. Verificación.Cruz, ingeniero por licencia 18745, certifica que en el proyectado del diseño vista plano y las especificaciones complementarias. Todas las instalaciones eléctricas cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones complementarias de la Autoridad de Energía Eléctrica de Puerto Rico. Además, todas las instalaciones y componentes eléctricos son aprobados. Cualquier cambio realizado sin la aprobación de la Ley 114-2004, según enmendada, constituirá una violación de esta ley y de este reglamento. Artículo 8. Artículo 8.1 Artículo 8.2 Artículo 8.3 Artículo 8.4 Artículo 8.5 Artículo 8.6 Artículo 8.7 Artículo 8.8 Artículo 8.9 Artículo 8.10 Artículo 8.11 Artículo 8.12 Artículo 8.13 Artículo 8.14 Artículo 8.15 Artículo 8.16 Artículo 8.17 Artículo 8.18 Artículo 8.19 Artículo 8.20 Artículo 8.21 Artículo 8.22 Artículo 8.23 Artículo 8.24 Artículo 8.25 Artículo 8.26 Artículo 8.27 Artículo 8.28 Artículo 8.29 Artículo 8.30 Artículo 8.31 Artículo 8.32 Artículo 8.33 Artículo 8.34 Artículo 8.35 Artículo 8.36 Artículo 8.37 Artículo 8.38 Artículo 8.39 Artículo 8.40 Artículo 8.41 Artículo 8.42 Artículo 8.43 Artículo 8.44 Artículo 8.45 Artículo 8.46 Artículo 8.47 Artículo 8.48 Artículo 8.49 Artículo 8.50 Artículo 8.51 Artículo 8.52 Artículo 8.53 Artículo 8.54 Artículo 8.55 Artículo 8.56 Artículo 8.57 Artículo 8.58 Artículo 8.59 Artículo 8.60 Artículo 8.61 Artículo 8.62 Artículo 8.63 Artículo 8.64 Artículo 8.65 Artículo 8.66 Artículo 8.67 Artículo 8.68 Artículo 8.69 Artículo 8.70 Artículo 8.71 Artículo 8.72 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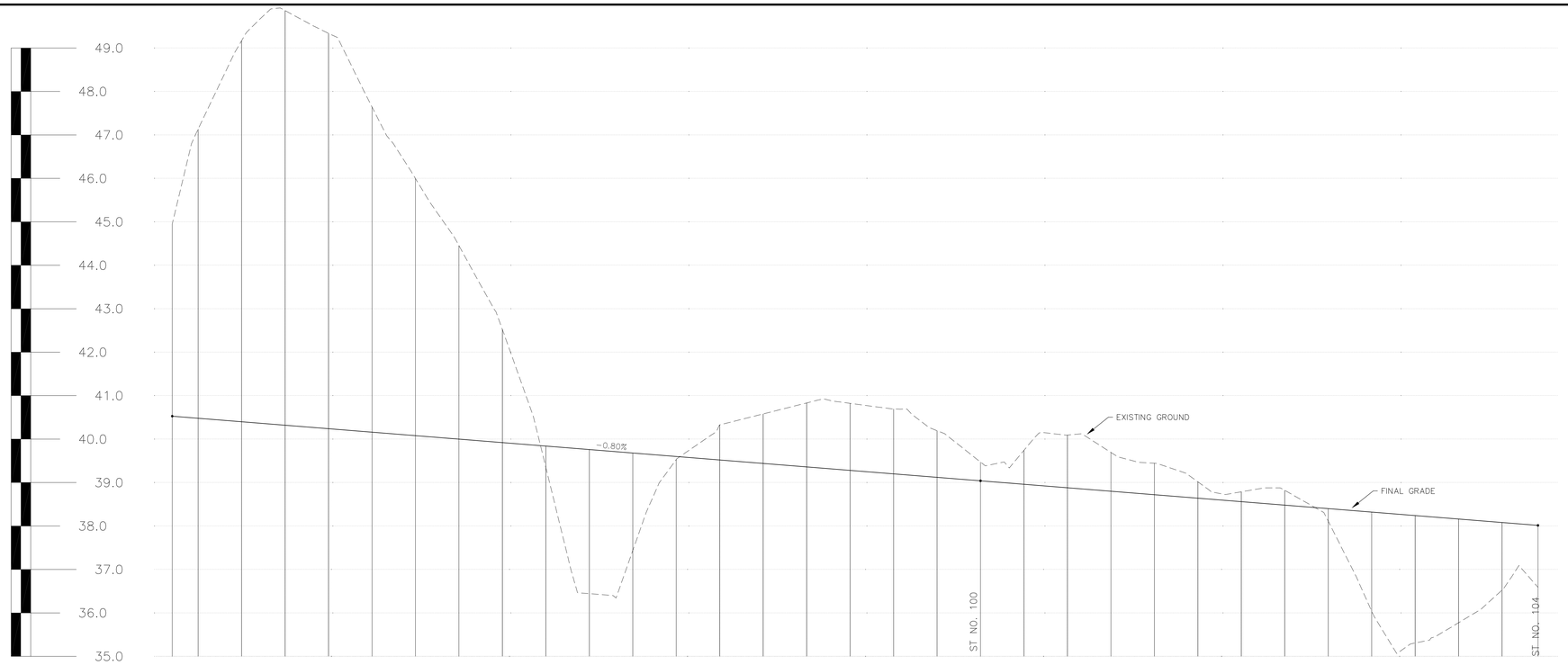
PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

240209

REVISIONS



DISTANCES		ELEVATIONS	
STATION	PARTIAL	EXISTING	FINAL
2+14.030	0.000	44.947	40.528
2+20.000	5.970	47.134	40.480
2+30.000	10.000	49.168	40.400
2+40.000	10.000	49.861	40.320
2+50.000	10.000	49.337	40.240
2+60.000	10.000	47.645	40.160
2+70.000	10.000	45.996	40.080
2+80.000	10.000	44.452	40.000
2+90.000	10.000	42.522	39.920
3+00.000	10.000	39.348	39.840
3+10.000	10.000	36.443	39.760
3+20.000	10.000	37.437	39.680
3+30.000	10.000	39.529	39.600
3+40.000	10.000	40.327	39.520
3+50.000	10.000	40.579	39.440
3+60.000	10.000	40.832	39.360
3+70.000	10.000	40.823	39.280
3+80.000	10.000	40.694	39.200
3+90.000	10.000	40.193	39.120
4+00.000	10.000	39.471	39.040
4+10.000	10.000	39.742	38.960
4+20.000	10.000	40.093	38.880
4+30.000	10.000	39.694	38.800
4+40.000	10.000	39.443	38.720
4+50.000	10.000	39.017	38.640
4+60.000	10.000	38.787	38.560
4+70.000	10.000	38.820	38.480
4+80.000	10.000	38.111	38.400
4+90.000	10.000	36.040	38.320
5+00.000	10.000	35.308	38.240
5+10.000	10.000	35.775	38.160
5+20.000	10.000	36.526	38.080
5+28.256	8.256	36.590	38.014

STREET NO. 102 PROFILE

SCALES: H 1:500 & V 1:50

PROJECT TIE POINTS

POINT	LOCAL COORDINATES	
	Y	X
101	231572.1926	264721.7421
102	231772.8851	264732.5381
103	231752.0754	264731.2525
104	231792.9823	264738.0862
105	231821.2375	264745.8912
106	231993.7875	264793.5430
107	232017.2617	264802.1178
108	232021.7326	264792.7852
109	231996.9305	264783.7254
110	231962.8916	264774.3251
111	231834.1112	264738.7609
112	231831.9643	264745.0475
113	231828.2773	264742.1750
114	231827.7055	264737.5362
115	231812.4974	264739.7224
116	231817.1159	264739.1384
117	231819.9776	264735.4666
118	231836.6685	264705.2167
119	231839.1606	264701.8025
120	231843.2854	264700.8786
121	231842.4503	264706.8202
122	231835.1576	264695.6970
123	231828.2558	264705.6161
124	231827.4918	264700.7229
125	231823.3091	264698.0711
126	231821.8515	264704.3865
127	231818.9659	264699.9853
128	231818.4788	264703.4512
129	231813.8690	264733.1707
130	231843.8931	264703.4886
131	231966.6387	264720.7393
132	231971.6021	264721.4369
133	231969.2952	264718.5881
134	231760.2193	264691.7290
135	231756.8791	264715.4954
136	231752.7105	264720.9721
137	231756.0764	264721.2071
138	231775.4819	264716.9986
139	231950.2836	264765.2723
140	231986.1121	264786.0294
141	231589.8503	264712.2735
142	231589.5313	264706.8821
143	231686.4199	264727.1962
144	231687.2767	264711.5493
145	231621.2124	264696.4287
146	231612.3294	264677.0034
147	231623.2224	264678.5343
148	231623.5703	264676.0586
149	231627.0363	264676.5457
150	231627.5234	264673.0798
151	231614.9737	264658.1883
152	231616.4532	264647.6613
153	231623.6605	264634.9113
154	231636.2586	264650.4448
155	231631.4767	264628.5722
156	231636.6758	264634.9828
157	231652.0383	264611.8962
158	231666.4877	264594.7402
159	231675.0000	264595.9365
160	231676.2743	264596.1156
161	231675.9264	264598.5912
162	231678.9052	264602.5443
163	231679.3923	264599.0784
164	231681.6976	264576.6812
165	231696.1994	264553.4736
166	231707.2207	264535.8358
167	231710.0058	264531.3787
168	231717.2457	264537.2448
169	231716.8977	264539.7204
170	231719.8766	264543.6735
171	231720.3637	264540.2075
172	231757.5317	264532.6374
173	231776.8456	264527.4441
174	231773.5055	264551.2105
175	231984.8019	264556.6704
176	231981.4618	264580.4369
177	231978.8052	264582.5861
178	231719.5286	264546.1491
179	231700.3595	264551.5337
180	231966.7491	264588.9723
181	231966.4011	264591.4480
182	231965.9140	264594.9139
183	231969.4055	264595.1581
184	231971.8994	264595.3325
185	231714.4221	264539.3725
186	231708.4804	264538.5375
187	231715.5719	264543.8184
188	231970.5769	264591.1380
189	231861.9898	264576.7711
190	231861.4827	264580.2371
191	231858.0168	264579.7500
192	231862.3178	264574.2955
193	231855.5411	264579.4020
194	231847.6190	264578.2887
195	231845.1433	264577.9407
196	231841.6774	264577.4536
197	231842.1645	264573.9877
198	231842.5124	264571.5120
199	231966.3287	264639.1581
200	231962.8373	264638.9139
201	231962.3501	264642.3799
202	231968.8226	264639.3325
203	231966.6132	264643.5768
204	231962.0022	264644.8555
205	231962.2738	264652.9723
206	231966.1016	264655.1380
207	231967.4241	264659.1325
208	231964.9302	264659.1581
209	231961.4387	264658.9139
210	231961.9258	264655.4480
211	231964.3473	264703.3325
212	231962.1379	264707.5768
213	231957.5269	264708.8555
214	231957.8748	264706.3799
215	231958.3619	264702.9139
216	231961.8534	264703.1581
217	231776.0670	264723.7327
218	231795.7242	264728.1598
219	231845.9649	264690.6520
220	231846.4520	264687.1860
221	231842.9861	264686.6989
222	231845.6170	264693.1276
223	231841.6602	264690.7969
224	231840.5104	264686.3510
225	231832.5883	264685.2376
226	231830.2576	264689.1944
227	231825.8116	264690.3442
228	231826.1596	264687.8685
229	231826.6467	264684.4026
230	231830.1126	264684.8897
231	231836.2362	264641.3179
232	231832.7703	264640.8308
233	231833.2574	264637.3648
234	231833.6053	264634.8892
235	231837.5621	264637.2199
236	231838.7119	264641.6658
237	231846.6341	264642.7792
238	231848.9648	264638.8224
239	231853.4107	264637.6726
240	231853.0628	264640.1483
241	231852.5757	264643.6142
242	231849.1097	264643.1271
243	231844.0647	264632.3198
244	231971.0722	264650.1696
245	231966.5968	264714.1696
246	231616.5448	264664.9729
247	231659.9042	264606.4377
248	231852.9718	264568.9427
249	231854.8720	264627.2748
250	231855.3591	264623.8089
251	231851.8932	264623.3218
252	231849.4175	264622.9738
253	231850.5673	264627.4198
254	231854.5241	264629.7505
255	231834.7187	264626.9670
256	231839.1647	264625.8172
257	231841.4954	264621.8604
258	231839.0197	264621.5125
259	231835.5538	264621.0254
260	231835.0667	264624.4913
261	231678.5573	264605.0200
262	231674.6005	264602.6892
263	231673.4507	264598.2433
264	231667.5091	264597.4083
265	231656.8622	264610.0495
266	231617.1015	264661.0119
267	231615.1530	264674.8756
268	231621.0947	264675.7107
269	231623.4254	264671.7539
270	231627.8713	264670.6041

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como "Ley para la Inversión por la Industria Puertorriqueña" y con la [illegible] 1979 de 1 de mayo de 1979, según enmendada, y la Ley Núm. 417 de 15 de julio de 1978, según enmendada, según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET-121 REV.

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED STREETS PROFILES 2 OF 3

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.H.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED IN ANY MANNER WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF H.F.H.C.S. UPON THE REQUEST IN WRITING, IT SHALL BE RETURNED TO H.F.H.C.S. UPON THE REQUEST BY THIS OFFICE.

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S. C. A. L. E.: AS SHOWN
DRAWING: 1045•

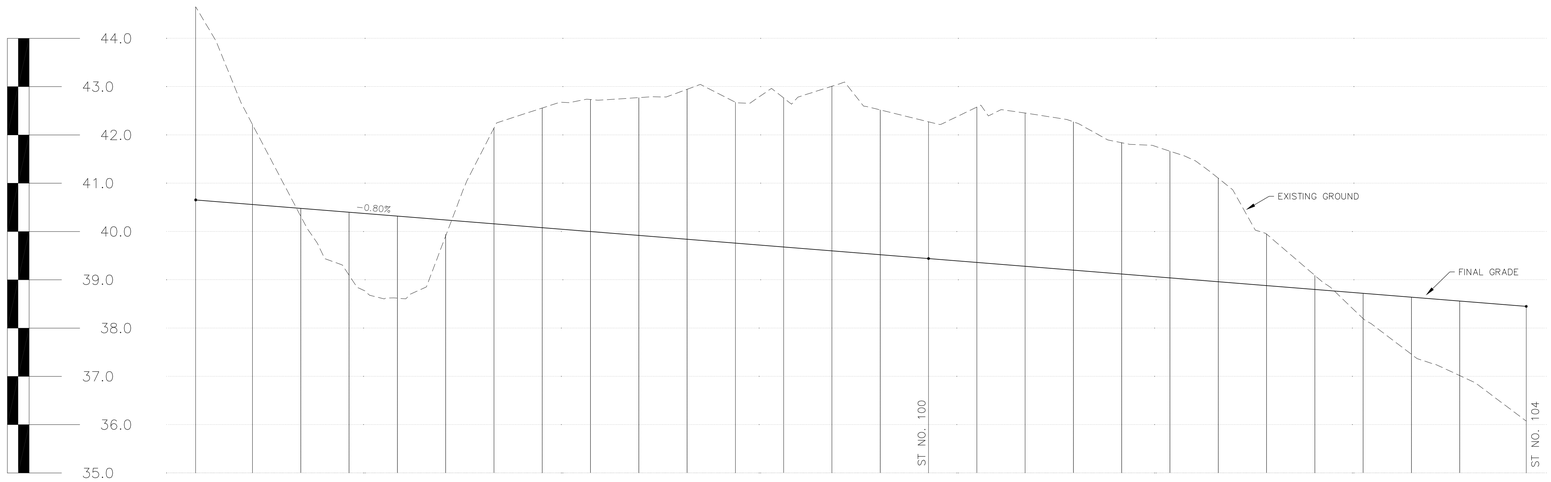
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Andres.hernandez@hfegroup.com LAS LOMAS DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR. 00921
T.787-782-2881 F.787-792-2647 M. 787-565-4436 P.O.B. 9020032 OLD SAN JUAN PR. 00902-0032

PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P.R. 00919-2484

SHEET IDENTIFICATION:
C–104

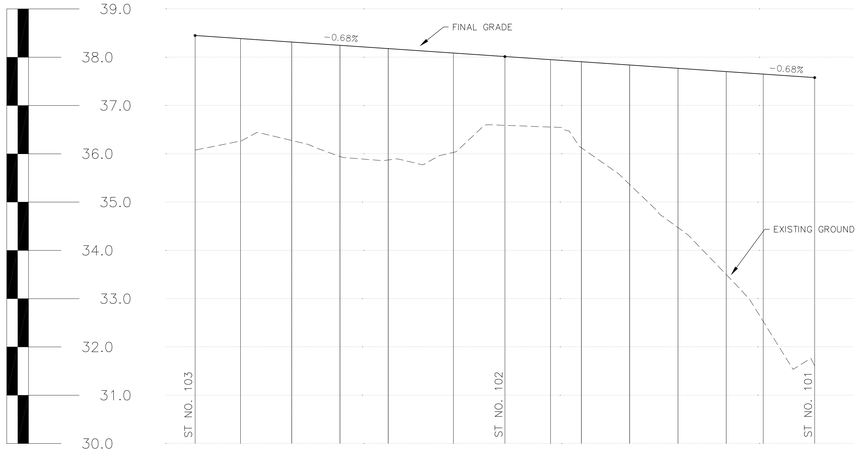
SHEET NO: .
TOTAL: .



DISTANCES		ELEVATIONS	
STATION	PARTIAL	EXISTING	FINAL
1+68.231	0.000	44.654	40.654
1+80.000	11.769	42.215	40.560
1+90.000	10.000	40.313	40.480
2+00.000	10.000	39.096	40.400
2+10.000	10.000	38.620	40.320
2+20.000	10.000	39.907	40.240
2+30.000	10.000	42.141	40.160
2+40.000	10.000	42.558	40.080
2+50.000	10.000	42.733	40.000
2+60.000	10.000	42.773	39.920
2+70.000	10.000	42.945	39.840
2+80.000	10.000	42.677	39.760
2+90.000	10.000	42.765	39.680
3+00.000	10.000	43.008	39.600
3+10.000	10.000	42.518	39.520
3+20.000	10.000	42.272	39.440
3+30.000	10.000	42.577	39.360
3+40.000	10.000	42.454	39.280
3+50.000	10.000	42.272	39.200
3+60.000	10.000	41.838	39.120
3+70.000	10.000	41.663	39.040
3+80.000	10.000	41.105	38.960
3+90.000	10.000	39.947	38.880
4+00.000	10.000	39.090	38.800
4+10.000	10.000	38.196	38.720
4+20.000	10.000	37.458	38.640
4+30.000	10.000	37.017	38.560
4+43.780	13.780	36.074	38.450

STREET NO. 103 PROFILE

SCALES: H 1:500 & V 1:50



DISTANCES		ELEVATIONS	
STATION	PARTIAL	EXISTING	FINAL
1+00.000	0.000	36.074	38.450
1+09.395	9.395	36.265	38.386
1+20.000	10.605	36.277	38.314
1+30.000	10.000	35.945	38.246
1+40.000	10.000	35.873	38.178
1+53.503	13.503	36.029	38.086
1+64.156	10.653	36.590	38.014
1+73.604	9.448	36.554	37.950
1+80.000	6.396	36.124	37.906
1+90.000	10.000	35.365	37.838
2+00.000	10.000	34.472	37.770
2+10.000	10.000	33.499	37.702
2+17.659	7.659	32.530	37.650
2+28.313	10.654	31.610	37.578

STREET NO. 104 PROFILE

SCALES: H 1:500 & V 1:50

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 119 de 1 de mayo de 1974, según enmendada, conocida como la Ley de Julio de 1978, según enmendada, según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET-121
REV.-

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED STREETS PROFILES 3 OF 3

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF HF e.c.g. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR ASSIGNED TO ANY PROCESSOR WITHOUT WRITTEN PERMISSION. IF SHALL BE RETURNED TO H.F.e.c.g. UPON THE REQUEST BY THIS OFFICE.

J. C. A. CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E:	AS SHOWN
S. C. A. L. E:	AS SHOWN
DRAWING:	1045•

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Andres.hernandez@hfegroup.com LIC.(19,042) CEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR. 00921
T.787-782-2877 F.787-783-6247 M. 787-397-4105 POSTAL ADDRESS: 425 CARR.693 - PMB 288 - DORADO PR 00646

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P.R. 00919-2484

SHEET IDENTIFICATION:
C-105

SHEET NO:	TOTAL:
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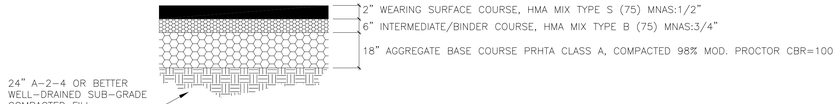
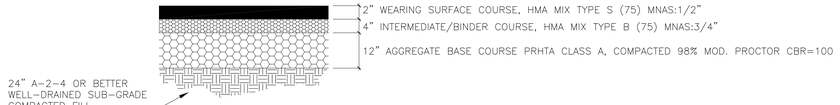


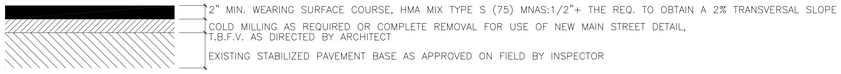
NEW TYPE "F" CURBS TO BE USED AT BOTH SIDES OF THE STREET
TRANSVERSAL SLOPES = 1.0% MIN. & 2.0% PREFERRED

NEW STREET ASPHALT PAVEMENT DETAIL – ON ROADWAYS – EXTERIOR

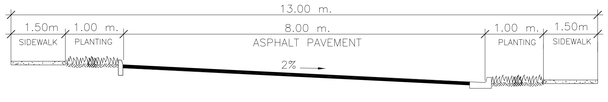


NEW TYPE "F" CURBS TO BE USED AT BOTH SIDES OF THE STREET
TRANSVERSAL SLOPES = 1.0% MIN. & 2.0% PREFERRED

NEW STREET ASPHALT PAVEMENT DETAIL – ON ROADWAYS – INTERIOR

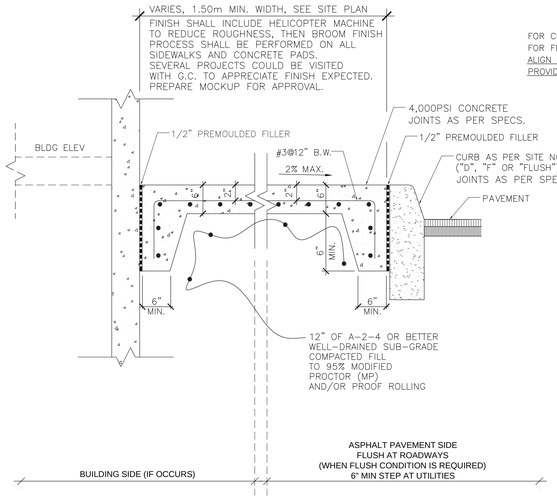


EXISTING STREET PAVEMENT RESURFACING DETAIL



TYPICAL ROAD (13.00 MTS.)

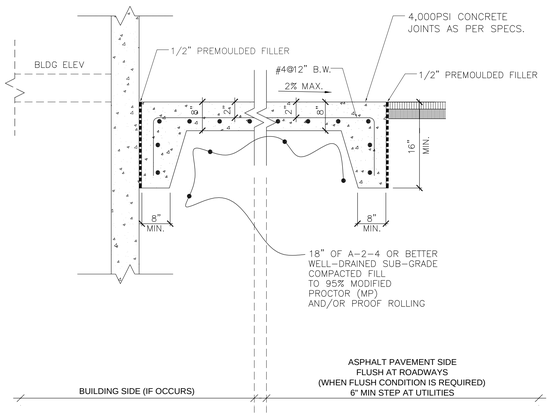
NOT TO SCALE



6" SIDEWALK DETAIL

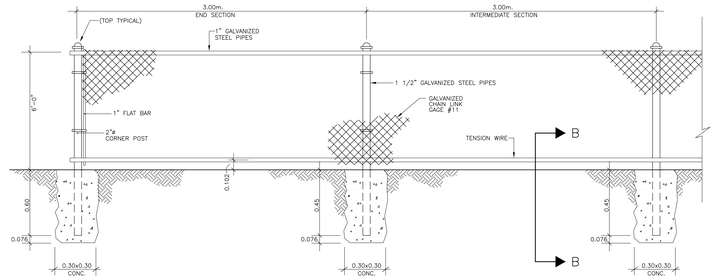
NOT TO SCALE

FOR CURBS AND WHEELSTOP LOCATION ONLY
FOR FINAL PAINTING DETAILS REFER TO SITE PLANS, USE THIS AS A MINIMUM BASE.
ALIGN ALL SIDEWALKS AND CURB JOINTS WITH PARKING LINES DIVISIONS PROJECTION; PROVIDE A JOINT PLAN FOR APPROVAL.
PROVIDE FINAL PAINTING PLAN FOR APPROVAL, REFER TO CRITERIA; SPECIAL PAINTING REQUIRED, CONTRACTOR SHALL INCLUDE IT.



8" CONCRETE PAVEMENT DETAIL

NOT TO SCALE

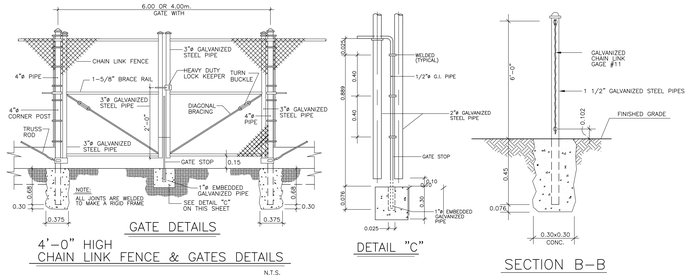


CORNER & INTERMEDIATE FENCE DETAILS

NOTE:
ALUMINUM TIE WIRE AND STEEL STRAPS SHALL BE USED TO FIX CYCLONE FENCE TO POST AND PIPES.
TIE SHALL BE @ 0.60 NTS O.C. ON PIPES AND 0.35 NTS O.C. ON POST LINES.

6'-0" PERIMETRAL FENCE DETAILS

SC.=1:20



GATE DETAILS

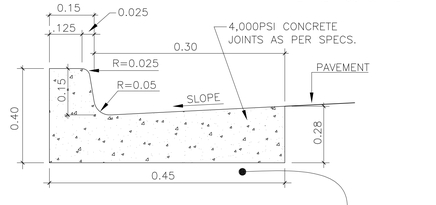
4'-0" HIGH CHAIN LINK FENCE & GATES DETAILS

N.T.S.

DETAIL "C"

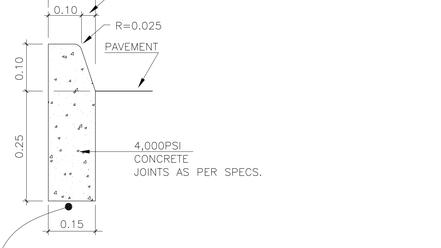
SECTION B-B

ALL SITE CONCRETES SHALL BE BROOM FINISHED UNLESS OTHERWISE SPECIFIED
NO PLASTER WILL BE ALLOWED, FINISHED SHOULD BE ON NON-PLASTIC CONCRETES.
PREPARE MOCKUP FOR APPROVAL.



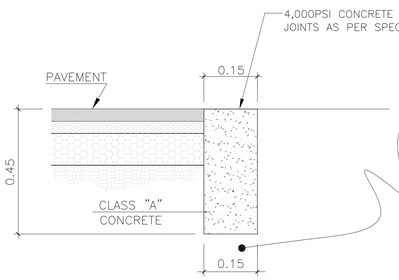
TYPE F CURB (TYPICAL)

NOT TO SCALE



TYPE D CURB

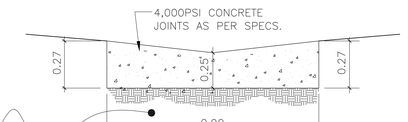
NOT TO SCALE



FLUSH CURB

NOT TO SCALE

18" OF A-2-4 OR BETTER WELL-DRAINED SUB-GRADE COMPACTED FILL TO 95% MODIFIED PROCTOR (MP) AND/OR PROOF ROLLING (TYP. BELOW EACH CONCRETE CURB OR GUTTER)

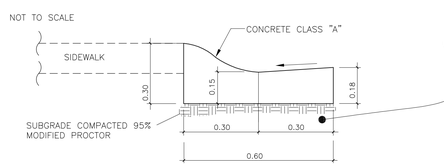


CONCRETE CROSS GUTTER

NOT TO SCALE

TYPICAL SECTIONS CURBS & GUTTERS

ALL ROADS SHALL HAVE TYPE F CURB AT BOTH EDGES UNLESS OTHERWISE SPECIFIED.



MOUNTABLE CURB (TO BE USED AT ROAD ENDS) (COULD REPLACE A TYPE "F" CURB)

N.T.S.

18" OF A-2-4 OR BETTER WELL-DRAINED SUB-GRADE COMPACTED FILL TO 95% MODIFIED PROCTOR (MP) AND/OR PROOF ROLLING (TYP. BELOW EACH CONCRETE CURB OR GUTTER)

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido con la política pública establecida en la Ley Núm. 76 de 5 de junio de 2000, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la (Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendadas; según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION
SET 1/21 REV.

AAA-RE-23-36-0020
2023-503622-SRI-073046

SHEET TITLE:
PROPOSED STREETS DETAILS 1 OF 2

J. C. A.: .
CONSULT.: .
AAA NO.: .
ACT NO.: .
ARPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045-*

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF HF A.C.E. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, DISCLOSED OR USED IN WHOLE OR IN PART AS DESCRIBED IN WRITING. IT SHALL BE RETURNED TO H.F.A.C.E. UPON THE REQUEST BY THIS OFFICE.

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

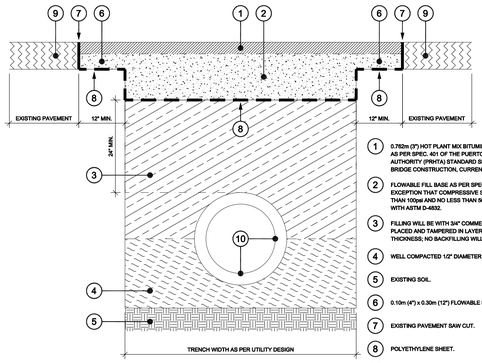
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Avenida Hernández Aguilú Esq. Calle Cabo Rojo, Urb. Hyde Park, San Juan, PR 00921
Teléfono: 787-793-2547 ■ Fax: 787-793-2548 ■ Email: ahernandez@hfegroup.com

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C-106

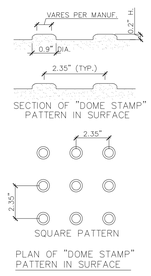
SHEET NO: .
TOTAL: .

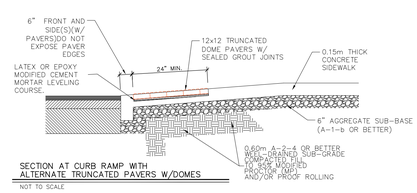


1. 0.762m (3") HOT PLANT MIX BITUMINOUS ASPHALT PAVEMENT S-1 (75) AS PER SPEC. 401 OF THE PUERTO RICO HIGHWAY AND TRANSPORTATION AUTHORITY (PRHTA) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
2. FLOWABLE FILL BASE AS PER SPECIFICATION 905 (PRHTA) WITH THE EXCEPTION THAT COMPRESIVE STRENGTH AT 28 DAYS SHALL NO BE GREATER THAN 100psi AND NO LESS THAN 50psi AS DETERMINED IN ACCORDANCE WITH ASTM D-4832.
3. FILLING WILL BE WITH 3/4" COMMERCIAL CRUSHED STONE. THE FILL MUST BE PLACED AND TAMPERED IN LAYERS NO EXCEEDING 0.45m (18") IN LOOSE THICKNESS; NO BACKFILLING WILL BE ALLOWED.
4. WELL COMPACTED 1/2" DIAMETER DOWN OF CLEAN CRUSHED STONE / BEDDING.
5. EXISTING SOIL.
6. 0.10m (4") x 0.30m (12") FLOWABLE BASE TRANSITION ZONE.
7. EXISTING PAVEMENT SAW CUT.
8. POLYETHYLENE SHEET.
9. EXISTING PAVEMENT TO BE PROTECTED.
10. PROPOSED UTILITY ON STATE ROAD.

PAVEMENTS REPAIR DETAIL

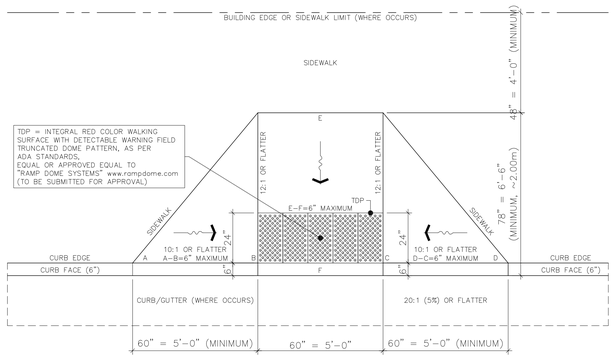
NOT TO SCALE





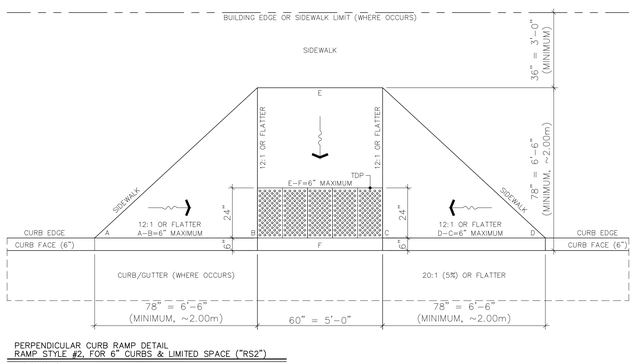
SECTION AT CURB RAMP WITH ALTERNATE TRUNCATED PAVERS W/DOMES

NOT TO SCALE



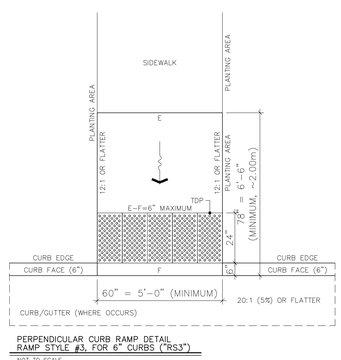
PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #1, FOR 6" CURBS ("RS1")

NOT TO SCALE



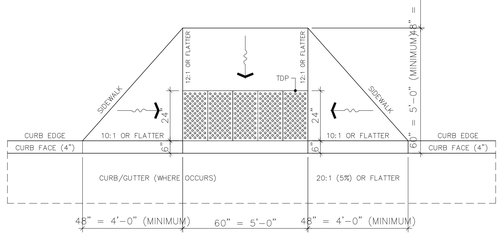
PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #2, FOR 6" CURBS & LIMITED SPACE ("RS2")

NOT TO SCALE



PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #3, FOR 6" CURBS ("RS3")

NOT TO SCALE



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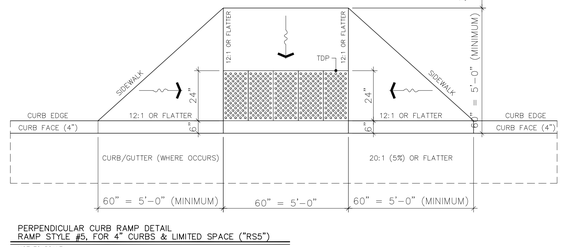
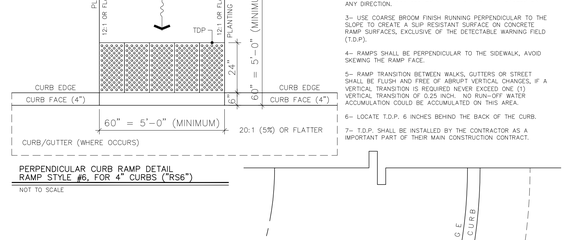
RAMP STYLE #4, FOR 4" CURBS ("RS4")

NOT TO SCALE



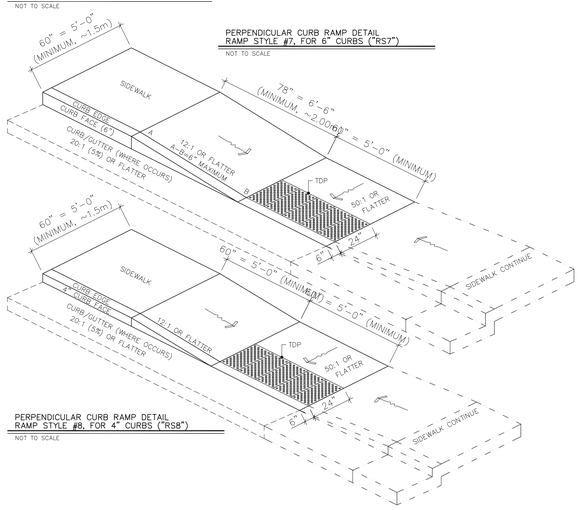
PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #5, FOR 4" CURBS & LIMITED SPACE ("RS5")

NOT TO SCALE



PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #6, FOR 4" CURBS ("RS6")

NOT TO SCALE

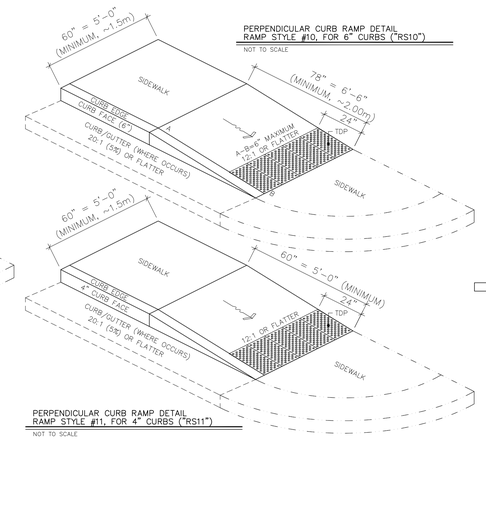


PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #7, FOR 6" CURBS ("RS7")

NOT TO SCALE

PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #8, FOR 4" CURBS ("RS8")

NOT TO SCALE

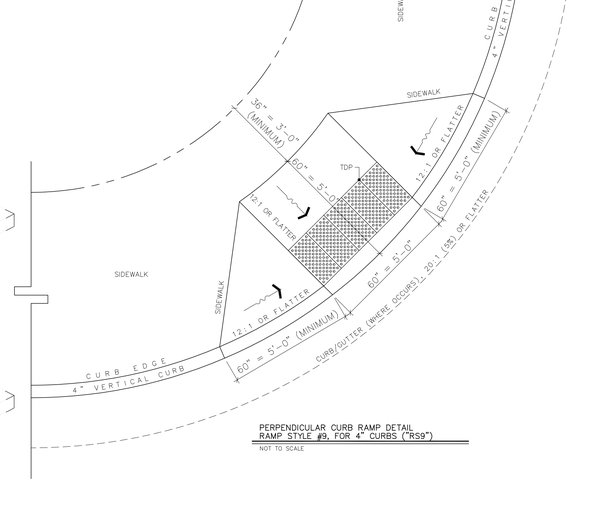


PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #10, FOR 6" CURBS ("RS10")

NOT TO SCALE

PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #11, FOR 4" CURBS ("RS11")

NOT TO SCALE



PERPENDICULAR CURB RAMP DETAIL
RAMP STYLE #9, FOR 4" CURBS ("RS9")

NOT TO SCALE

IMPORTANT NOTES:

1.- CURB RAMPS SHALL CONFORM WITH A A MAXIMUM RISE OF 6" TO NOT REQUIRE HANDRAILS.

IF FOR SOME FIELD REASON OR CONTRACTOR ERROR ANY RAMP HAVE GREATER THAN A 6" RISE THIS RAMP SHALL HAVE HANDRAILS ON BOTH SIDES AND CURBED EDGE PROTECTION ON BOTH SIDES. EDGE PROTECTION CONSISTS OF CURBS, WALLS, RAILINGS, OR PROJECTING SURFACES THAT PREVENT PEOPLE FROM SLIPPING OFF THE RAMP. HANDRAIL DETAILS SHALL FOLLOW ACCESSIBLE GUIDELINES. THIS REMEDIAL WORK DESIGN IS BEYOND H.F.e.C.G. SCOPE OF WORK.

2.- MAXIMUM CROSS SLOPES OF RAMPS MUST NOT EXCEED 2% IN ANY DIRECTION.

3.- USE COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE TO CREATE A SLIP RESISTANT SURFACE ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELD (T.D.P.).

4.- RAMPS SHALL BE PERPENDICULAR TO THE SIDEWALK, AVOID SKEWING THE RAMP FACE.

5.- RAMP TRANSITION BETWEEN WALKS, GUTTERS OR STREET SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES, IF A VERTICAL TRANSITION IS REQUIRED NEVER EXCEED ONE (1) VERTICAL TRANSITION OF 0.25 INCH. NO RUN-OFF WATER ACCUMULATION COULD BE ACCUMULATED ON THIS AREA.

6.- LOCATE T.D.P. 6 INCHES BEHIND THE BACK OF THE CURB.

7.- T.D.P. SHALL BE INSTALLED BY THE CONTRACTOR AS A IMPORTANT PART OF THEIR MAIN CONSTRUCTION CONTRACT.

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 119 de 1 de mayo de 2011, según enmendada, conocida como "Ley Núm. 119 de julio de 1974, según enmendada, según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION
SET-121 REV.1

AAA-RE-23-36-0020
2023-503622-SRI-073046

SHEET TITLE:
PROPOSED STREETS DETAILS 2 OF 2

J. C. A.: .
CONSULTA: .
AAA NO.: .
ACT NO.: .
APPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045-*

STATUS:
ADVANCED DRAWINGS

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REVISIONS

NUMBER	DATE	BY	DESCRIPTION

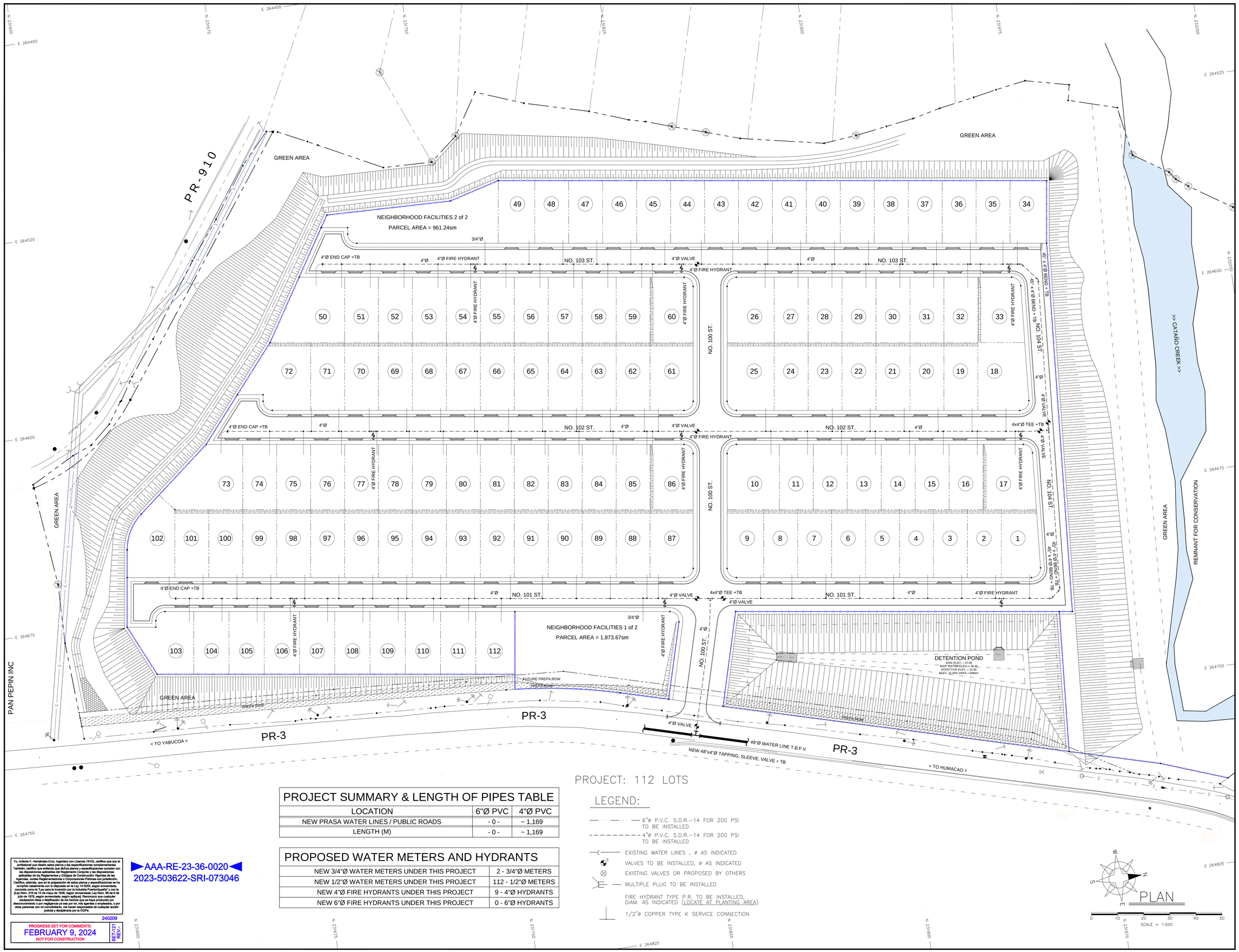
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Andres.hernandez@hfegroup.com LIC.(LICENCIA) CIV. / TEL SAN PATRICIO AVE. - SAN JUAN PR. 00921
T.(TELEFONO) 787-792-5247 ■ M. 787-565-4105 FOCSL-CLOSED-CERTIFIED-SBE-MBE-WBE-SBA-00000-PR-0004

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—107

SHEET NO: .
TOTAL: .



PROJECT: 112 LOTS

PROJECT SUMMARY & LENGTH OF PIPES TABLE

LOCATION	6"Ø PVC	4"Ø PVC
NEW PRASA WATER LINES / PUBLIC ROADS	- 0 -	~ 1,169
LENGTH (M)	- 0 -	~ 1,169

PROPOSED WATER METERS AND HYDRANTS

NEW 3/4"Ø WATER METERS UNDER THIS PROJECT	2 - 3/4"Ø METERS
NEW 1/2"Ø WATER METERS UNDER THIS PROJECT	112 - 1/2"Ø METERS
NEW 4"Ø FIRE HYDRANTS UNDER THIS PROJECT	9 - 4"Ø HYDRANTS
NEW 6"Ø FIRE HYDRANTS UNDER THIS PROJECT	0 - 6"Ø HYDRANTS

LEGEND:

- 6"ø P.V.C. S.D.R.–14 FOR 200 PSI TO BE INSTALLED
- 4"ø P.V.C. S.D.R.–14 FOR 200 PSI TO BE INSTALLED
- EXISTING WATER LINES , ø AS INDICATED
- VALVES TO BE INSTALLED, ø AS INDICATED
- EXISTING VALVES OR PROPOSED BY OTHERS
- MULTIPLE PLUG TO BE INSTALLED
- FIRE HYDRANT TYPE P.R. TO BE INSTALLED, DIAM. AS INDICATED (LOCATE AT PLANTING AREA)
- 1/2"ø COPPER TYPE K SERVICE CONNECTION

PLAN
SCALE = 1:500

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de los Municipios Autónomos donde ubica el proyecto, según enmendados. También, Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendadas; Ley Núm. 96 de 6 de julio de 1978, según enmendadas; según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET, V.21, REV.:

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED WATER DISTRIBUTION SITE PLAN

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.H.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REUSED OR DISCLOSED WITHOUT WRITTEN CONSENT OF H.F.H.C.S. IN WHOLE. IT SHALL BE RETURNED TO H.F.H.C.S. UPON THE REQUEST BY THIS OFFICE.

J. C. A.:	.
CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045*

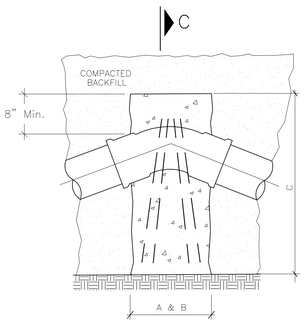
HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Antonio.hernandez@hfengr.com 1343 LOMAS DRV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T: 787-792-2647 F: 787-726-2647 M: 787-561-6126 PSC/LA-629535 IEC-6496 IBE-1-1 IBE-29 - 3300629-5864

PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

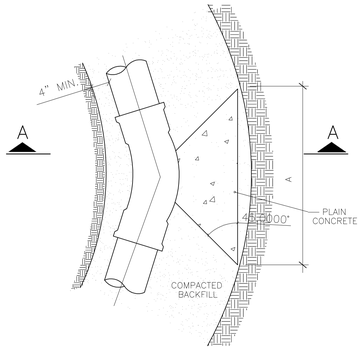
SHEET IDENTIFICATION:
C–201

SHEET NO:	TOTAL:
.	.



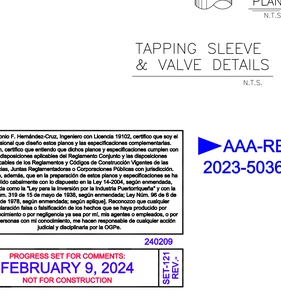
PLAN

NOT TO SCALE



PLAN

NOT TO SCALE



SECTION "C–C"

NOT TO SCALE

SECTION "A–A"

NOT TO SCALE

THRUST BLOCK FOR HORIZONTAL AND VERTICAL BENDS

THRUST BLOCK FOR HORIZONTAL BENDS

11–1/4°

PIPE ø	A (in)	B (in)	C (in)
4	6	6	4
6	8	8	6

22–1/2°

PIPE ø	A (in)	B (in)	C (in)
4	6	7	4
6	8	11	6

90° , TEES & PLUGS

PIPE ø	A (in)	B (FT)	C (FT)
4	6	14 in	8in
6	8	21 in	13in

45° & WYES

PIPE ø	A (in)	B (FT)	C (in)
4	6	10 in	4
6	8	16 in	8

THRUST BLOCK FOR VERTICAL BENDS (GRAVITY BLOCKS)

11–1/4°

PIPE ø	A, B & C (FT)	REBAR	TIES
4	18 in	2 # 3	4 # 3
6	22 in	2 # 3	4 # 3

22–1/2°

PIPE ø	A, B & C (FT)	REBAR	TIES
4	21 in	2 # 3	4 # 3
6	27 in	2 # 3	4 # 3

45°

PIPE ø	A, B & C (FT)	REBAR	TIES
4	26 in	2 # 3	4 # 3
6	3.00	3 # 3	4 # 3

COLOR: BLUE

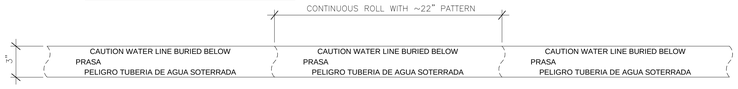
MATERIAL:
- 5.0 Mil Overall Thickness
- 0.80 Mil Polypropylene Film Thickness
- 0.35 Mil Solid Aluminum Foil Core
- 3.75 Mil Polyethylene Film Thickness
- Reverse Printed Polypropylene Structure
- Diagionally Striped Design (Patented)
- Acid, Akali, Chemical, and Oil Resistant
- Direct Burial Rated

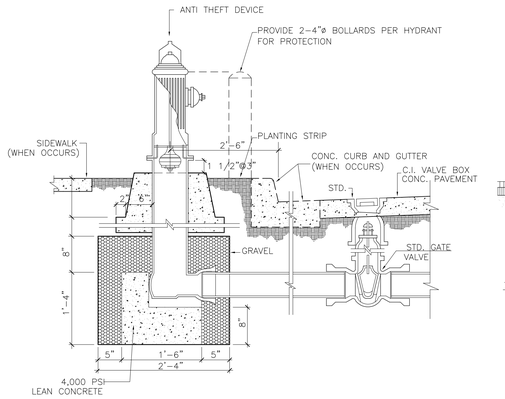
PRINT COLOR: BLACK

MANUFACTURER: PRO–LINE SAFETY PRODUCTS (https://prolinesafety.com)

3" DETECTABLE MARKING TAPE DETAIL

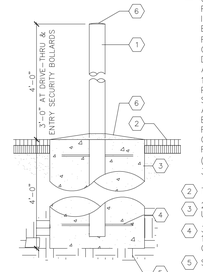
NOT TO SCALE





FIRE HYDRANT LOCATED AT PLANTING STRIP CROSS SECTION AND ELEVATION

NOT TO SCALE

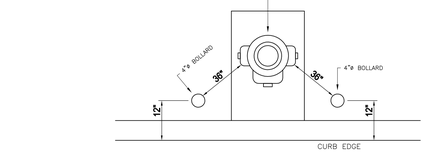


KEYED NOTES

1. 6"ø STANDARD STL. PIPE CONCRETE FILLED IN RECEIVING LOCATIONS INCLUDING UTILITIES, TRASH ENCLOSURE, AND SPRINKLER RISERS; 4"ø STL. PIPE CONCRETE FILLED AT DRIVE–THRU CANOPY ISLAND AND FRONT WALK. PROVIDE 1/4" WELDED CLOSURE PLATE AT BOTTOM. ALL STEEL TO BE RUST FREE AND PRIME COATED. BOLLARDS ON WALK TO RECEIVE GRAY POLYETHYLENE COVER. ALL OTHERS TO RECEIVE A YELLOW COVER (FROM IDEAL SHIELD – 313–842–7290).
2. TOP OF PAVEMENT.
3. 24"ø CONCRETE FOUNDATION. USE SONOTUBE FORM.
4. 3/8"ø WELDED HOOPS. 18"ø TOP, BOTTOM, AND CENTER.
5. SOLID UNDISTURBED SOIL.
6. PROVIDE PITCH, SMOOTH CONCRETE FINISH.

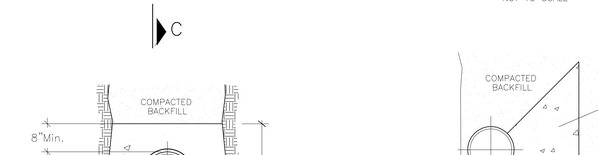
TYPICAL PIPE BOLLARD

NTS



TYPICAL PIPE BOLLARD & HYDRANT PLAN

NTS



TAPPING SLEEVE & VALVE DETAILS

N.T.S.

NOTES:

1 – A DETECTABLE TAPE SHALL BE PROVIDED OVER THE P.V.C. PIPE, EQUAL OR SIMILAR TO THE "REEF INDUSTRIES INC." PRODUCT THIS DETECTABLE TAPE SHALL BE INSTALLED 0.30 BEYOND THE FINISHED ELEVATIONS.

2 – THE CONTRACTOR SHALL INSTALL WATER CLOSETS THAT USE 1.6 GAL/FLUSH EQUAL OR SIMILAR TO "UFO". ANY EQUIPMENT USED SHALL BE SUBMITTED FOR THE OWNER APPROVAL.

3 – A THRUST BLOCK SHALL BE PROVIDED FOR EACH BEND, TEE, WYE, REDUCER, INCREASER OR MULTIPLE PLUG.

4 – THE WATER MAIN SHALL BE INSTALLED WITH A MINIMUM SOIL COVER OF ONE METER. IF THIS COVER IS NOT PROVIDED A CONCRETE PROTECTION SHALL BE PROVIDED.

5 – CROSSING OF WATER MAIN WITH THE SANITARY SEWER SHALL COMPLY WITH THE PRASA STANDARD (SEE SANITARY SEWER DETAILS)

6– THE WATER METER BOXES MUST BE INSTALLED OUT OF THE ROADWAY, PARKING OR MOTOR VEHICLES ACCESS RAMPS.

7– THE WATER METER BOXES MUST BE INSTALLED OUT OF PROPERTY LIMITS.

8– THE WATER METER BOXES MUST BE INSTALLED AT A SAFE AND ADEQUATE DISTANCE FROM ELECTRIC EQUIPMENT.

9– THE FITTINGS USED TO INSTALL THE WATER METER MUST BE THREADED OR FLARED TYPE, WELDED FITTINGS ARE NOT ALLOWED FOR THE METER INSTALLATION.

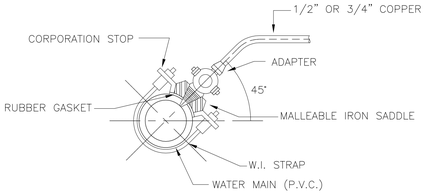
10–THE DISTANCE BETWEEN THE WATER SERVICE CONNECTION AND THE SANITARY SEWER CONNECTION MUST BE MORE OR EQUAL THAN 5'–0". THE INSTALLATION OF BOTH SERVICES IN THE SAME TRENCH IS NOT PERMITTED.

11–FIRE HYDRANTS MUST BE INSTALLED AT A SAFE AND ADEQUATE DISTANCE FROM ELECTRIC EQUIPMENT.

12– THE WATER METERS BOX MUST BE CALIBRATED IN CUBIC METERS.

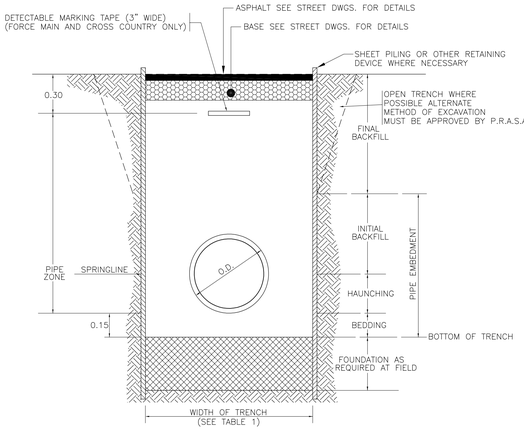
13–CONTRACTOR IS RESPONSABLE FOR THE AAA CLORINATION AND DESINFECTION FEES.

14–CONTRACTOR IS RESPONSABLE FOR THE AAA "CONSTRUCTION WATER" FEES.



SERVICE STRAP CONNECTION WITH CORPORATION STOP

NOT TO SCALE



TRENCH DETAILS FOR P.V.C. PIPE

NOT TO SCALE

TABLE 1
WIDTH OF TRENCH

DIAMETER (INCHES)	*WIDTH OF TRENCH AT TOP OF PIPE (INCHES)
4"–15"	O.D. + 24"
16"–27"	O.D. + 36"

NOTE:

* WHENEVER MOVABLE SHEET PILING OR OTHER TRENCH PROTECTION IS USED BELOW THE TOP OF THE PIPE,THE CLEAR DISTANCE BETWEEN THE OUTSIDE FACE OF THE PIPE AND THE MOVABLE TRENCH SUPPORT SHALL BE NOT LESS THAN 2–1/2" X OUTSIDE PIPE DIAMETER.

NOTE:

FOUNDATION AND BEDDING:

1) BACKFILL COMPACTED TO 95% OF MAXIMUM DESNSITY AS PER ASTM D–2049 FOR GRANULAR SOILS.
2) FILL MATERIAL SHALL BE PLACED IN 0.20 mt. LAYERS.

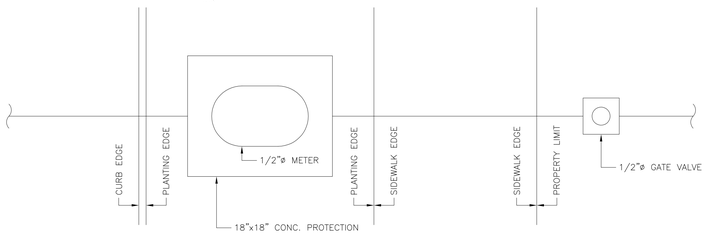
HAUNCHING

1) SAME MATERIALS AS FOR FOUNDATION AND BEDDING.
2) FILL MATERIAL SHALL BE PLACED IN 0.20 mt. LAYERS.

INITIAL AND FINAL BACKFILL–UNDER ROADS,STREETS,WALKS,APRONS AND OTHERS IMPROVED SURFACES:

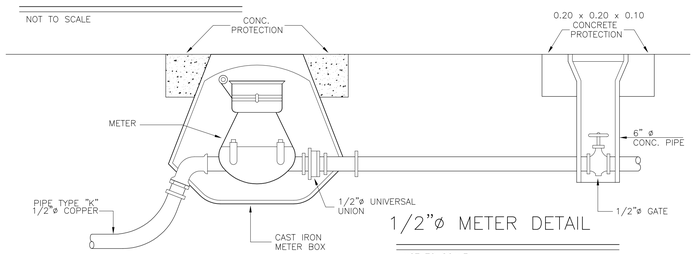
1) BACKFILL COMPACTED TO 95% OF MAXIMUM DESNSITY AS PER ASTM D–2049 FOR GRANULAR SOILS.

2) FILL MATERIAL SHALL BE PLACED IN 0.20 mt. LAYERS.
1) BACKFILL COMPACTED TO 95% OF MAXIMUM DESNSITY AS PER ASTM D–2049 FOR GRANULAR SOILS. ROLLING EQUIPMENT NOT ALLOWED FOR WORKING BACKFILL MATERIAL IN THE INITIAL BACKFILL SECTOR.



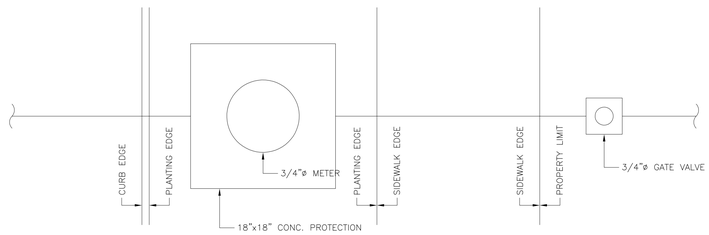
1/2"ø METER PLAN

NOT TO SCALE



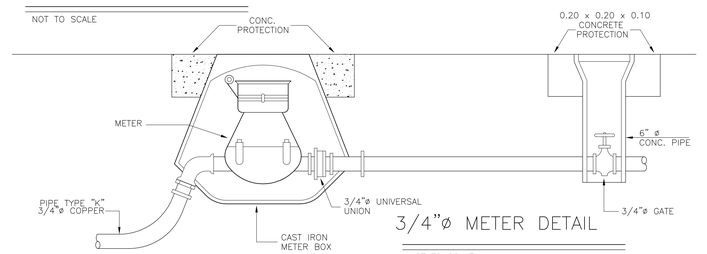
1/2"ø METER DETAIL

NOT TO SCALE



3/4"ø METER PLAN

NOT TO SCALE



3/4"ø METER DETAIL

NOT TO SCALE

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240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET (2) REV. 2

AAA-RE-23-36-0020
2023-503622-SRI-073046

SHEET TITLE:
PROPOSED WATER DISTRIBUTION DETAILS

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.E.C. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, DISCLOSED OR USED WITHOUT WRITTEN CONSENT. ALL COPIES OF THIS DRAWING, IF SHALL BE RETURNED TO H.F.E.C. UPON THE REQUEST BY THIS OFFICE.

J. C. A.	.
CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E:	AS SHOWN
S. C. A. L. E:	AS SHOWN
DRAWING:	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

HF ENGINEERING CONSULTING GROUP, PSC
Antonio Hernandez-Cruz, PE
PRESIDENT
URB. LAS LOMAS 2 CALLE 30 SO 1760 SAN JUAN, PR 00921
T: (787) 707-7139 M: (939) 814-8118 POSTAL ADDRESS: PO BOX 1760 SAN JUAN PR 00936-1760

PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919–2484

SHEET IDENTIFICATION:
C–202

SHEET NO: .

TOTAL: .

NEIGHBORHOOD FACILITIES 2 of 2

PARCEL AREA = 961.24sm

NEIGHBORHOOD FACILITIES 1 of 2

PARCEL AREA = 1,873.67sm

GREEN AREA

PR-910

NO. 103 ST.

NO. 100 ST.

NO. 104 ST.

NO. 102 ST.

NO. 101 ST.

NEW SMH NO. 301
TE = 40.66
IE = 39.46
N 231705.1082
E 264546.6472

NEW SMH NO. 302
TE = 40.11
IE = 38.91
N 231772.4465
E 264556.1105

NEW SMH NO. 303
TE = 39.57
IE = 38.37
N 231839.7847
E 264565.5746

NEW SMH NO. 304
TE = 39.02
IE = 37.82
N 231907.1229
E 264575.0384

NEW SMH NO. 305
TE = 38.48
IE = 37.28
N 231974.4611
E 264584.5021

NEW SMH NO. 306
TE = 40.53
IE = 39.33
N 231662.5076
E 264605.2889

NEW SMH NO. 307
TE = 39.92
IE = 38.72
N 231738.2631
E 264615.9353

NEW SMH NO.308
TE = 39.29
IE = 38.09
N 231815.5040
E 264626.7911

NEW SMH NO. 309
TE = 38.67
IE = 37.47
N 231892.7449
E 264637.6486

NEW SMH NO.310
TE = 38.05
IE = 36.85
N 231969.9858
E 264648.5021

NEW SMH NO. 311
TE = 40.43
IE = 39.23
N 231617.9266
E 264641.6524

NEW SMH NO. 312
TE = 39.86
IE = 38.66
N 231688.2355
E 264651.5337

NEW SMH NO. 313
TE = 39.29
IE = 38.09
N 231757.5542
E 264661.2758

NEW SMH NO. 314
TE = 38.73
IE = 37.53
N 231826.8730
E 264693.0179

NEW SMH NO. 315
TE = 38.17
IE = 36.97
N 231896.1917
E 264702.7600

NEW SMH NO.316
TE = 37.61
IE = 36.41
N 231965.5105
E 264712.5031

NEW SMH NO.317
TE = 37.30
GE~37.00
IE = 36.36
N 231969.3370
E 264725.1578

NEW SMH NO.318
TE = 40.30 GE~40.00
IE = 36.18
N 231965.7352
E 264776.6666

NEW SMH NO.319
TE = 38.30 GE~38.00
IE = 36.06
N 231997.3172
E 264785.4636

EXISTING SMH NO.4
TE = 37.73
IE = 36.21
N 232020.5881
E 264800.0370

EXISTING SMH NO.3
TE = 40.94
IE = 39.49
N 231966.4429
E 264784.2633

EXISTING SMH NO.5
TE = 35.55
IE = 34.00
N 232044.6586
E 264817.6760

NEW SMH NO. 316
TE = 37.61
IE = 36.41
N 231965.5105
E 264712.5031

NEW SMH NO. 315
TE = 38.17
IE = 36.97
N 231896.1917
E 264702.7600

NEW SMH NO. 313
TE = 39.29
IE = 38.09
N 231757.5542
E 264681.2758

NEW SMH NO. 312
TE = 39.86
IE = 38.66
N 231688.2355
E 264651.5337

NEW SMH NO. 311
TE = 40.43
IE = 39.23
N 231617.9266
E 264641.6524

DETENTION POND
DIKE ELEV. = 37.00
MAX WATER ELEV.= 36.40
EFFECTIVE ELEV. = 35.00
49x5V 31.00m AREA = 846sm

NEW 8"ø PVC SDR-35 L=68.000 S=0.0081

NEW 8"ø PVC SDR-35 L=68.000 S=0.0079

NEW 8"ø PVC SDR-35 L=68.000 S=0.0081

NEW 8"ø PVC SDR-35 L=68.000 S=0.0079

NEW 8"ø PVC SDR-35 L=76.500 S=0.0080

NEW 8"ø PVC SDR-35 L=78.000 S=0.0081

NEW 8"ø PVC SDR-35 L=78.000 S=0.0079

NEW 8"ø PVC SDR-35 L=78.000 S=0.0067

NEW 8"ø PVC SDR-35 L=71.000 S=0.0080

NEW 8"ø PVC SDR-35 L=71.000 S=0.0081

NEW 8"ø PVC SDR-35 L=70.000 S=0.0080

NEW 8"ø PVC SDR-35 L=70.000 S=0.0080

NEW 8"ø PVC SDR-35 L=78.000 S=0.0066

NEW 8"ø PVC SDR-35 L=13.222 S=0.0038

NEW 8"ø PVC SDR-35 L=56.635 S=0.0035

NEW 8"ø PVC SDR-35 L=32.784 S=0.0037

NEW 8"ø PVC SDR-35 L=27.737 S=0.0036

NEW 8"ø PVC SDR-35 L=6.022 S=0.0622

NEW 8"ø PVC SDR-35 L=4.000 S=0.0450

N08°00'00"E

S86°00'00"E

N73°10'38"E

N15°33'54"E

N06°14'02"E

IE= 36.95

IE = 36.51

IE = 34.20

FUTURE PREPA ROW

PREPA ROW

PREPA ROW

PR-3

PR-3

PR-3

< TO YABUCOA <

> TO HUMACAO >

>> CATAÑO CREEK >>

GREEN AREA

GREEN AREA

REMNANT FOR CONSERVATION

(PUBLIC GREEN AREA)

OVERHEAD ELECTRIC LINE

OVERHEAD ELECTRIC LINE

OVERHEAD ELECTRIC LINE

CROSSING OF SANITARY PIPES
(TOP) EXISTING PIPE IE ~ 36.55 T.B.F.V.
(BELLOW) NEW PIPE IE = 35.98 T.B.F.V.

E 264500

E 264575

E 264650

E 264725

E 264800

N 231625

N 231700

N 231775

N 231850

N 231925

N 232000

N 232075

SANITARY SEWER LEGEND:

- P.V.C. PIPE TO BE INSTALLED AS INDICATED
- SS — EXISTING SANITARY SEWER
- STANDARD MH TO BE CONSTRUCTED
- EXISTING MANHOLE
- 4" SANITARY SEWER CONNECTION TO BE INSTALLED TYPICAL HOUSE CONNECTION (P.V.C. SDR.35)
- 6"ø 6" SANITARY SEWER CONNECTION TO BE INSTALLED ONLY FOR PLAY LOT (P.V.C. SDR.35)
- TBFV = TO BE FIELD VERIFIED

PLAN

SCALE = 1:500

0 10 20 30 40 50

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha dado cumplimiento a la Sección 1202.4 de la Ley 161 de 2009, mejor conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la [Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la CGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET-121
REV.:

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED SANITARY SEWER SITE PLAN

J. C. A.: .
CONSULTA.: .
AAA NO.: .
ACT NO.: .
ARPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045*

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.e.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED IN ANY MANNER WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF H.F.e.C.S. UPON THE REQUEST IN WRITING, IT SHALL BE RETURNED TO H.F.e.C.S. UPON THE REQUEST BY THIS OFFICE.

HF ENGINEERING CONSULTING GROUP, PSC
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T: 787-529-3647 F: 787-720-3647 M: 787-561-4536 PO BOX 4235 GUAYNABO, PR 00970-4235 LIC. NUM. PE-19102

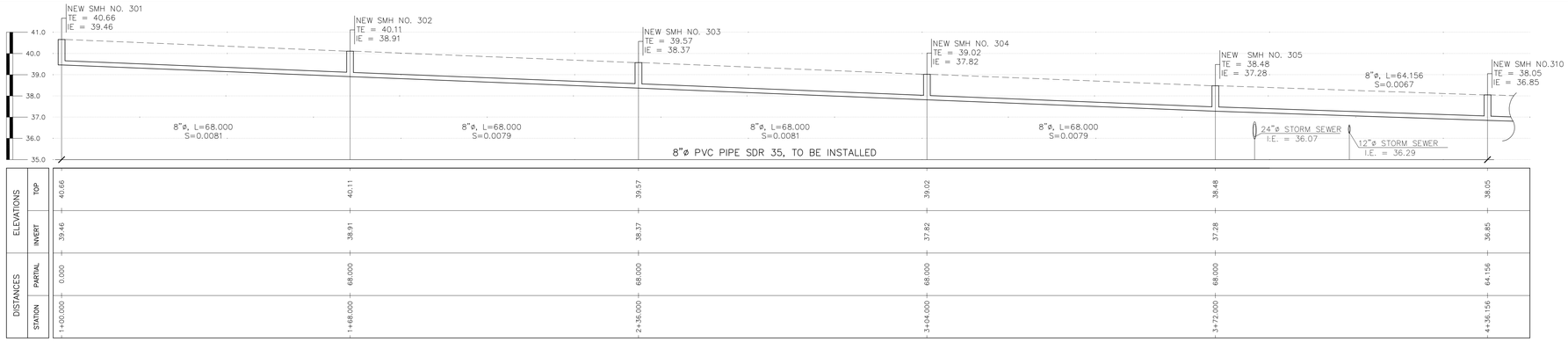
PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—301

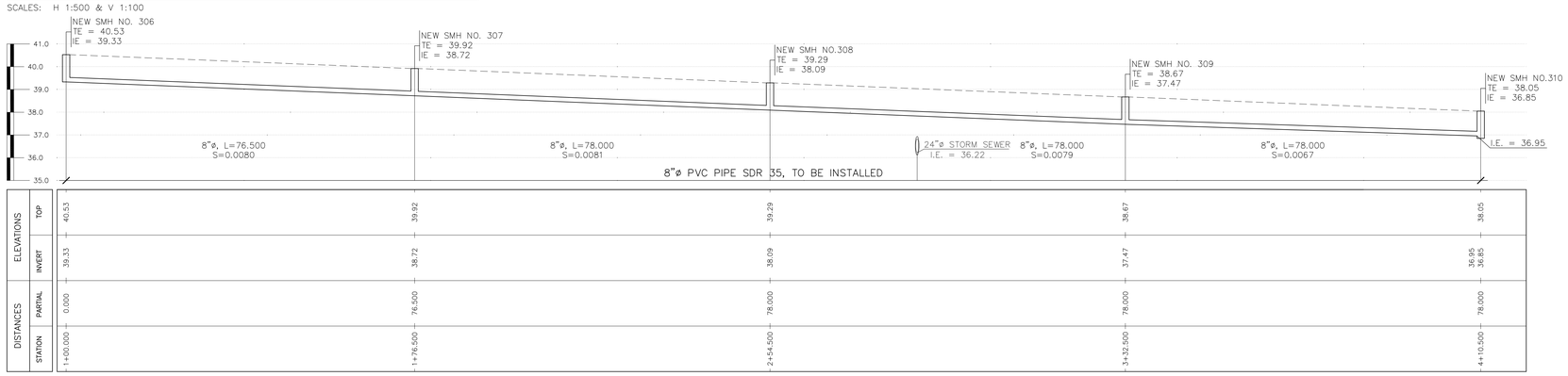
SHEET NO: .

TOTAL: .



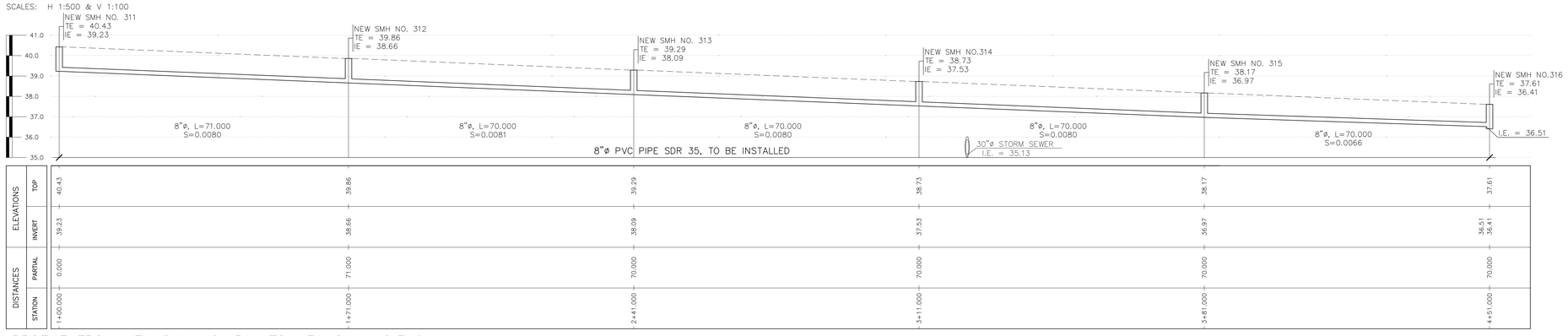
PROFILE FROM NEW SMH NO. 301 TO NEW SMH NO.310

SCALES: H 1:500 & V 1:100



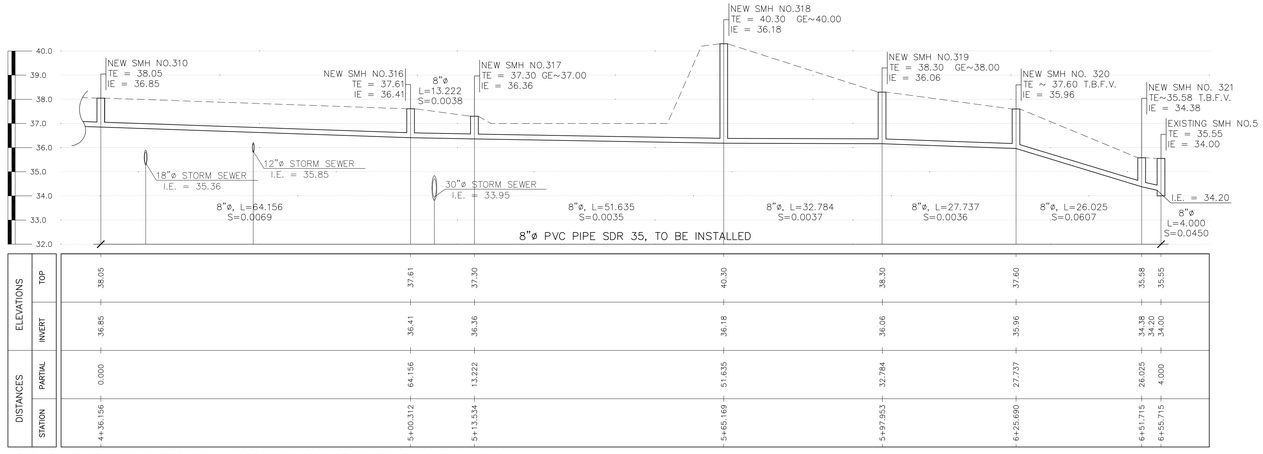
PROFILE FROM NEW SMH NO. 306 TO NEW SMH NO.310

SCALES: H 1:500 & V 1:100



PROFILE FROM NEW SMH NO. 311 TO NEW SMH NO.316

SCALES: H 1:500 & V 1:100



PROFILE FROM NEW SMH NO.310 TO EXISTING SMH NO.5

SCALES: H 1:500 & V 1:100

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, (conocida como "Ley para la Inversión por la Industria Puertorriqueña") y con la Ley Núm. 119 de 1 de mayo de 1974, según enmendada, (conocida como "Ley de Julio de 1974, según enmendada, según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION
SET-121
REV.1

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED SANITARY SEWER SITE PLAN

J. C. A.
CONSULTA:
AAA NO.: .
ACT NO.: .
ARPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045+

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.& C.G. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED IN ANY MANNER WHATSOEVER EXCEPT BY WRITING. IT SHALL BE RETURNED TO H.F.& C.G. UPON THE REQUEST BY THIS OFFICE.

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
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Andres.hernandez@hfengr.com LIC.I.G.M.& C.R.V. - 787 SAN PATRICIO AVE. - SAN JUAN PR. 00921
T.787-782-2877 F.787-792-2547 M. 787-565-4436 P.O.B. 1-A-20533 GUAYNABO PR 00970-0533

PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P.R. 00919-2484

SHEET IDENTIFICATION:
C–301

SHEET NO: .
TOTAL: .

SANITARY SEWER NOTES:

1– SANITARY SEWER PIPE SHALL BE 8" DIA. POLYVINIL CHLORIDE PIPE, S.D.R. 35 WITH RUBBER GASKET JOINT.

2– CONTRACTOR IS RISPONSABLE FOR THE AAA IMPACT FEES.

3– ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE SPECIFICATIONS OF P.R.A.S.A.,AND SHALL ADHERE WITH THE ADDITIONAL CONDITIONS INDICATED IN THE WRITTEN APPROVAL BY P.R.A.S.A. IN CASE OF CONFLICT WITH DRAWINGS, P.R.A.S.A. WRITTEN CONDITIONS SHALL PREVAIL.

4– ALL PIPES,FITTINGS,RELATED MATERIALS AND CONSTRUCTION PROCEDURES SHALL CONFORM TO P.R.A.S.A. SPECIFICATIONS.

5– A DETECTABLE PLASTIC WARNING RIBBON SHALL DE PLACED OVER THE P.V.C. PIPING TO BE INSTALLED AS PART OF THE SANITARY SEWER SYSTEM. RIBBON SHALL BE AS MANUFACTURED BY REEF INDUSTRIES,INC. OR APPROVED EQUAL.SAID RIBBON SHALL BE INSTALLED DIRECTLY ABOVE THE SANITARY SEWER SYSTEM AT TWELVE(12) INCHES BENEATH FINISHED GRADE.

6– ALL INTERIOR SURFACES OF SANITARY SEWER MANHOLES SHALL BE COATED WITH CEILGARD 663, DURAKOTE OR APPROVED EQUAL. DRY FILM THICKNESS SHALL BE 40 MILS.

7– ALL ELEVATIONS AND DISTANCES ARE EXPRESSED IN METERS.

8– CARTESIAN COORDINATES REFERRED TO LAMBERT COORDINATE SYSTEM, METERS ARE USED.

9– ELEVATIONS REFERRED TO MEAN SEA LEVEL, PUERTO RICO DATUM PLANE, METERS.

10–THE DISTANCE BETWEEN THE WATER SERVICE CONNECTION AND THE SANITARY SEWER CONNECTION MUST BE MORE OR EQUAL THAN 5'–0". THE INSTALLATION OF BOTH SERVICES IN THE SAME TRENCH IS NOT PERMITTED.

11–SANITARY CLEAN OUTS MUST BE INSTALLED OUT OF THE ROADWAY.

12– THE INFILTRATION AND OUTFLOW OF WATER IN THE SEWER COULD NOT BE MORE THAN 50 GALLONS PER INCH OF DIAMETER PER MILE OF LENGTH IN CONTINUOUS 24 HOURS. THE CONTRACTOR SHALL PAY AND PERFORM THE INFILTRATION AN OUTFLOW TEST AS REQUIRED BY THE PRASA ENGINEER. THE SEWER THAT NOT ACCOMPLISH WITH THIS PARAMETER SHALL BE IMPROVED OR REINSTALLED BY THE CONTRACTOR AND THE SHALL BE PERFORMED UNTIL THE PRASA ENGINEERS APPROVED IT.

SISTEMA DE ALCANTARILLADO SANITARIO

LOS REGISTROS SANITARIOS SERAN PINTADOS EN SU INTERIOR CON PINTURA EPOXICA IGUAL O SIMILAR AL DENOMINADO CEILGUARD 663 O DURALKOTE.

LA DISTANCIA ENTRE LA ACOMETIDA DE ALCANTARILLADO SANITARIO Y LA ACOMETIDA DE SERVICIO DE AGUA SERA MAYOR O IGUAL A 5 PIES, NO SE PERMITIRA LA INSTALACION DE AMBAS ACOMETIDAS EN LA MISMA EXCAVACION.

ESTA AUTORIDAD SERA RESPONSABLE DEL SISTEMA ALCANTARILLADO SANITARIO HASTA EL REGISTRO DE INSPECCION SANITARIO ROTULADO PRASA C.O. EN EL PLANO, EL DUEÑO O LA ASOCIACION DE RESIDENTES DEL PROYECTO SERA RESPONSABLE DE TODA INSTALACION SANITARIA DESPUES DEL REFERIDO REGISTRO.

EN CASO DE QUE LOS REGISTROS DE INSPECCION SEAN INSTALADOS EN AREAS INUNDABLES EL MARCO Y TAPA DE ACCESO DEBERA SER DE TIPO HERMETICO "WATERTHIGHT".

NO SE PERMITIRA EL USO DE REGISTROS SANITARIOS FUNDIDOS EN SITIO. SE DEBERA UTILIZAR REGISTROS PREFABRICADOS POR UN MANUFACTURERO AUTORIZADO. SE DEBERA SOMETER EVIDENCIA DE LA ORDEN DE COMPRA O LA CERTIFICACION DEL FABRICANTE DE LOS MISMOS.

PARA ACEPTAR FINALMENTE EL PROYECTO EL MISMO DEBERA ESTAR PAVIMENTADO CUANDO SE REALICE LA VALIDACION FINAL.

LAS ACOMETIDAS SANITARIAS SERAN INSTALADAS A UNA DISTANCIA RAZONABLE Y SEGURA DE TODO EQUIPO ELECTRICO.

LA INFILTRACION O EXFILTRACION DE AGUA EN LAS TUBERIAS NO SERA MAYOR DE 50 GALONES PRO PULGADA DE DIAMETRO POR MILLA DE LONGITUD EN 24 HRS. EL CONTRATISTA PROVEERA LOS MEDIOS SEGUN LO REQUIERA EL INSPECTOR DE LA A.A.A. PARA LLEVAR A CABO LAS PRUEBAS DE TUBERIAS SANITARIAS.

TODA TUBERIA QUE NO LLENE LOS REQUISITOS DE LAS PRUEBAS, SERA REPARADA POR EL CONTRATISTA Y SOMETIDA Y SOMETIDA A PRUEBA HASTA QUE SEA APROBADA DEFINITIVAMENTE POR EL INSPECTOR DE LA A.A.A.

LA A.A.A. SE RESERVA EL DERECHO DE REQUERIR CUALQUIER CAMBIO PERTINENTE QUE PRO OMISION O ERROR INVOLUNTARIO NO SE HAYA INCLUIDO EN EL PROYECTO Y A SU JUICIO, SEA NECESARIO PARA EL BUEN FUNCIONAMIENTO DEL SISTEMA DE ALCANTARILLADO SANITARIO.

TODAS LAS DISTANCIAS ESTAN EXPRESADAS EN METROS, A MENOS QUE SE ESPECIFIQUE OTRA UNIDAD.

CUALQUIER CAMBIO QUE SEA NECESARIO A LO INDICADO EN ESTE PLANO O EN SU CARTA DE APROBACION, RELACIONADO AL SISTEMA DE ALCANTARILLADO SANITARIO, DEBERA SER CONSULTADO Y EVALUADO CON ESTA OFICINA PARA APROBACION, PREVIA A SU CONSTRUCCION Y/O DESARROLLO.

EN EL DROP-MH LA ABRAZADERA SERA EN ALUMINIO. LAS TUERCAS Y ARANDELAS TIENEN QUE SER ACERO INOXIDABLE.

NOTES:

1–MINIMUM CONCRETE COMPRESSIVE STRENGTH IN ALL SECTIONS SHALL BE 3,000 PSI.

2–ALL SECTIONS ARE MADE IN ACCORDANCE WITH ASTM C–478 IN ANY HEIGHT REQUIRED AND P.R.A.S.A. REQUIREMENTS.

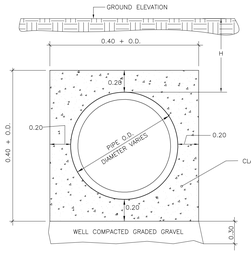
3–LIFTING HOLES PROVIDED IN ALL UNITS TO FACILITATE INSTALLATION.

4–MANHOLE BASE TO BE INSTALLED ON A FIRM STABILIZED FOUNDATION.

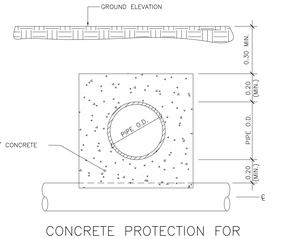
5–FOR PROTECTIVE LININGS SEE CONTRACT SPECIFICATION.

6–ON ASPHALT ROADS THE MANHOLE FINISHED TOP SLAB SHALL BE FLUSH WITH THE ROADWAY SURFACE.

7–THE BOTTOM CHANNEL TO THE MANHOLE MUST HAVE THE SAME GRADIENT OF THE SEWER PIPE.

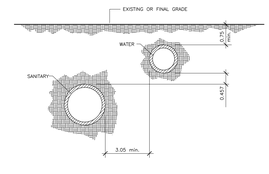


CONCRETE PROTECTION DETAIL
N.T.S.

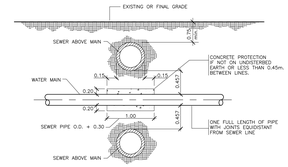


CONCRETE PROTECTION FOR SHALLOW PIPE CROSSINGS
NOT TO SCALE

NOTES:
THIS ENCASEMENT IS REQUIRED UNDER STREAMS AND ROAD CROSSING AND WHEN "H" IS LESS THAN 0.75 MTS. WHEN SPECIFIED IN THE DRAWING OR WHEN REQUIRED BY THE ENGINEER.

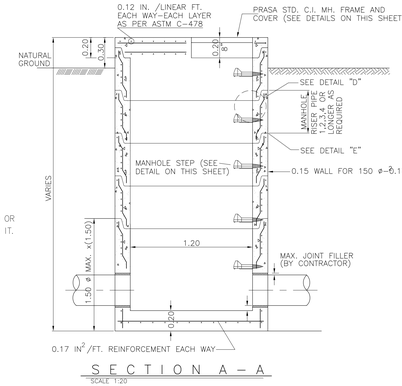


PARALLEL INSTALLATION
N.T.S.

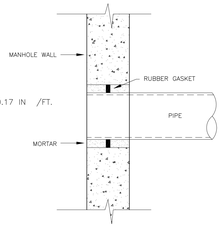


CROSSING INSTALLATION
N.T.S.

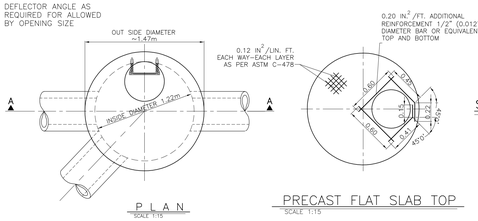
SEPARATION OF WATER & SEWER MAINS



SECTION A–A
SCALE 1:20



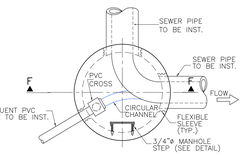
MANHOLE CONNECTION DETAIL
SCALE 1:20



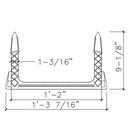
P L A N
SCALE 1:15

PRECAST FLAT SLAB TOP
SCALE 1:15

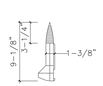
DETAILS OF PRE–CAST MANHOLES
NOT TO SCALE



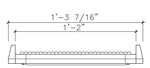
PLAN
N.T.S.



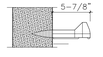
PLAN VIEW



SIDE VIEW

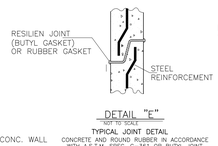


FRONT VIEW

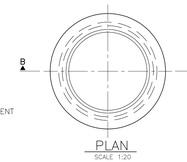


ANCHORAGE DETAIL CONC. WALL

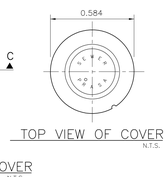
PLASTIC LADDER RUNGS DETAIL
NOT TO SCALE



DETAIL "F"
NOT TO SCALE
TYPICAL JOINT DETAIL
CONCRETE AND ROUND RUBBER IN ACCORDANCE WITH A.S.T.M. SPEC. C–361 OR BUTYL JOINT

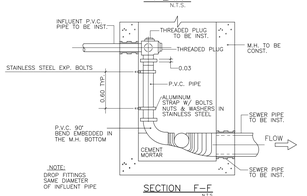


PLAN
SCALE 1:20



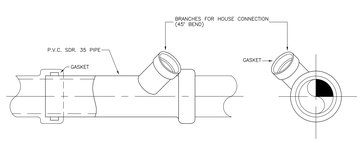
BOTTOM VIEW OF COVER
N.T.S.

TOP VIEW OF COVER
N.T.S.

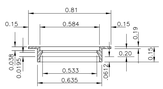


SECTION F–F
N.T.S.

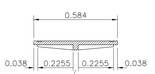
DROP MANHOLES DETAILS



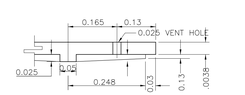
DETAIL SHOWING POSITION OF BRANCHES FOR HOUSE CONNECTIONS
NOT TO SCALE



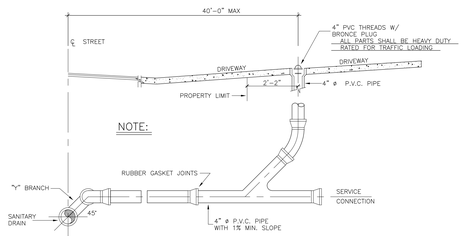
SECTION B–B
N.T.S.



SECTION C–C
N.T.S.



SECTION SHOWING VENT. HOLE
N.T.S.



4"ø SANITARY SERVICE CONNECTION FOR ALL RESIDENTIAL UNITS
NOT TO SCALE

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el único responsable de la preparación de los documentos contractuales y que, también, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico además que he preparado los cálculos estructurales de este proyecto de cumplirlo satisfactoriamente con lo dispuesto en la Ley 74-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la (Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con o sin conocimiento de mi parte, está sujeta a cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION
SET-121
REV-1

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE: PROPOSED SANITARY SEWER SITE PLAN

STATUS: ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.e.c.c. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS. ANY REPRODUCTION OR ALTERATION OF THIS INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REUSED, REPRODUCED OR BORROWED UNLESS PERMISSION IS GRANTED IN WRITING. A FEE MAY BE REQUIRED UPON THE REQUEST BY THIS OFFICE.

L. C. A.	-
CIRCULITA:	-
AAA. NO.:	-
ACT. NO.:	-
APPR. NO.:	-
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045*

HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Antonio.Hernandez@hfgroup.com LAS LOMAS STA. 787 SAN PATRICIO AVE. SAN JUAN PR. 00921
T: 787.792.2047 F: 787.792.2048 M: 787.561.6136 POSTAL ADDRESS: 400 CAMINO REAL PMB 286 - 00960 PR 00966

PROJECT: LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919–2484

SHEET IDENTIFICATION: C–301

SHEET NO: .

TOTAL: .

GREEN AREA

PR-910

NEIGHBORHOOD FACILITIES 2 of 2
PARCEL AREA = 961.24sm

NEW GRASS EARTH SWALE W=3.00m D=0.50m, SEE GRADING PLAN L=~230m

NEW CONCRETE SWALE W=2.00m D=0.50m @3@0.30m E.W., SEE GRADING PLAN L=~212m

NEW 18"ø C3 L=50.800 S=0.0087

NO. 103 ST.

NEW 24"ø C3 L=27.050 S=0.0222

NEW 18"ø C3 L=52.158 S=0.0082

NEW 24"ø C3 L=11.423 S=0.0444

NEW 4x3 SCB NO. 401 TE = 40.00 IE = 38.00 N 231776.1645 E 264562.1874

NEW 4x3 SCB NO. 402 TE = 39.56 IE = 37.56 N 231827.6584 E 264569.4244

NEW 5x4 SCB TE = 39.36 IE = 36.96 N 231855.6335 E 264573.3560

NEW 4x3 SCB NO. 441 TE = 38.89 IE = 36.89 N 231913.3166 E 264581.4629

NEW 4x3 SCB NO. 442 TE = 38.46 IE = 36.46 N 231966.1549 E 264588.8888

NEW 5x4 SCB NO. 443 TE = 38.33 IE = 35.93 N 231977.8848 E 264595.7510

NEW 12"ø PVC SDR-35 L=10.200 S=0.0108

NEW 12"ø C3 IE = 37.08

NEW 24"ø C3 L=25.100 S=0.0112

NEW 12"ø C3 IE = 37.28

NO. 100 ST.

NEW 3x3 SCB NO.404 TE = 39.39 IE = 37.19 N 231840.8745 E 264597.5373

NEW 12"ø PVC SDR-35 L=3.700 S=0.0541

NEW 5x4 SCB TE = 39.28 IE = 36.68 N 231852.7577 E 264599.2074

NEW 3x3 SCB NO.405 TE = 39.28 IE = 37.48

N231856.7187 E264599.7641

NEW 3x3 SCB NO.444 TE = 38.34 IE = 36.84 N 231966.5009 E 264615.1930

NEW 5x4 SCB NO.445 TE = 38.16 IE = 35.56 N 231976.4277 E 264616.5881

NEW 12"ø PVC SDR-35 L=8.221 S=0.0462

N. 5x4 SCB 448 TE = 37.89 IE = 34.89 N 231973.4058 E 264659.8033

NEW 24"ø C3 L=36.200 S=0.0144

NEW 24"ø C3 L=25.100 S=0.0109

NO. 104 ST.

NEW 18"ø C3 L=63.800 S=0.0082

NO. 102 ST.

NEW 24"ø C3 L=53.050 S=0.0175

IE = 36.46

NEW 18"ø C3 L=54.633 S=0.0119

NEW 18"ø C3 L=71.862 S=0.0522

NEW 4x3 SCB NO. 410 TE = 39.91 IE = 37.91 N 231728.6369 E 264620.1368

NEW 4x3 SCB NO. 411 TE = 39.39 IE = 37.39 N 231793.0043 E 264629.1831

NEW 5x4 SCB TE = 38.96 IE = 36.16 N 231846.7264 E 264636.7332

NEW 4x3 SCB NO. 446 TE = 38.47 IE = 36.47 N 231906.3900 E 264645.1184

NEW 4x3 SCB NO. 447 TE = 38.02 IE = 35.82 N 231961.6796 E 264652.8888

NEW 12"ø C3 L=18.545 S=0.0542

NEW 12"ø C3 L=25.100 S=0.0199

NEW 12"ø C3 IE = 36.88

NEW 30"ø C3 L=25.100 S=0.0191

NEW 12"ø C3 IE = 36.88

NO. 100 ST.

NEW 3x3 SCB NO.422 TE = 38.88 IE = 37.08 N 231847.8117 E 264663.1412

NEW 12"ø PVC SDR-35 S=0.0541

NEW 5x4 SCB NO.450 TE = 37.75 IE = 34.50

NEW 12"ø PVC SDR-35 L=8.221 S=0.0377

NEW 30"ø C3 L=25.100 S=0.0171

NEW 30"ø C3 L=36.200 S=0.0171

NEW 5x4 TE=38.88 IE=35.68 N 231843.3506 E 264662.6846

NEW 3x3 SCB NO.423

NEW HW NO. 453 W/ 40sm GROUTED RIP-RAP IE = 31.00 N 231941.7718 E 264731.0727

NEW 10x7 SCB NO.452 TE = 37.70 IE = 32.70 N 231944.0256 E 264715.0367

NEW 3x3 SCB NO.449 TE = 37.86 IE = 36.06 N 231962.0256 E 264679.1930

10x7DCB 451 TE = 37.50 IE = 34.00 N231969.3758 E264717.4360

NEW 30"ø C5 L=39.606 S=0.0404

NEW 24"ø C3 L=25.100 S=0.0142

NEW 30"ø C3 L=36.200 S=0.0142

NEW 4x3 SCB NO. 424 TE = 39.53 IE = 37.53 N 231716.9954 E 264683.1297

NEW 18"ø C3 L=66.561 S=0.0081

NO. 101 ST.

NEW 24"ø C3 L=53.050 S=0.0156

IE = 36.16

IE = 34.56

NEW 30"ø C3 L=4.960 S=0.1008

NEW 30"ø C5 L=16.194 S=0.0150

NEW 30"ø C3 L=22.893 S=0.0568

NEW 36"ø C5 L=26.482 S=0.1004

NEIGHBORHOOD FACILITIES 1 of 2
PARCEL AREA = 1,873.67sm

NEW 4x3 SCB NO. 425 TE = 38.99 IE = 36.99 N 231784.0973 E 264692.5602

NEW 7x5 DCB NO. 434 TE = 38.66 IE = 33.66 N 231836.3879 E 264706.2286

NEW 18"ø C3 L=24.946 S=0.0293

DETENTION POND
DIKE ELEV. = 37.00
MAX WATER ELEV.= 36.80
EFFECTIVE ELEV. = 33.00
ELEV. 33.00= AREA = 940sm

FUTURE PREPA ROW

PREPA ROW

NEW 18"ø C3 L=15.617 S=0.0237

NEW 18"ø C3 L=16.653 S=0.0312

NEW 7x5 DCB NO. 431 TE = 39.76 IE = 37.76 N 231813.3972 E 264736.4640

NEW 7x5 DCB NO. 432 TE = 39.91 IE = 37.91 N 231841.4155 E 264744.2016

NEW 4x3 SCB NO. 433 TE = 39.89 IE = 37.39 N 231829.2808 E 264731.8559

NEW HW NO. 435 W/ 60sm GROUTED RIP-RAP IE = 31.00 N 231857.0235 E 264722.8257

NEW POND OUTLET NO.461
AS PER HH STUDY
1.80m x 0.90m INTERIOR DIM. (MIN.)
OPEN TOP (18'-0" OVERFLOW) ELEV. = 36.20
WIER #2: W=24' H=12" OPENING @ IE=34.20m
WIER #1: 2-12"ø OPENING @ IE=31.00m
POND DRY DRAINAGE: 1-4"ø OPENING @ IE=30.00m
3" MAX. OPENING CAGE TO BE PROVIDED FROM 30.00 TO 31.00
BOTTOM OF ESTRUCTURE = 29.00
N 231950.1995
E 264740.7968
GEOMETRY AND STRUCTURAL DELEGATED DESIGN TO G.C.
MIN. BOUYANCY S.F. = 1.50; EXPECT ADDITIONAL CONCRETE

NEW HW NO. 462 W/ 100sm GROUTED RIP-RAP IE = 27.40 N 231900.8328 E 264744.5470

GREEN AREA

GREEN AREA

GREEN AREA

REMNANT FOR CONSERVATION

>> CATAÑO CREEK <<

PAN PEPIN INC

PR-3

PR-3

PR-3

< TO YABUCOA <

> TO HUMACAO >

NO. 103 ST.

NO. 102 ST.

NO. 101 ST.

NO. 100 ST.

NO. 104 ST.

PLAN

SCALE = 1:500

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones no se ha violado ninguna disposición de la Ley 76-2004 (mejor conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendadas; según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la CGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET X.21
REV.:

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED STORM SEWER SITE PLAN

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF HF E.N.G. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED WITHOUT WRITTEN CONSENT OF HF E.N.G. IN WRITING. IT SHALL BE RETURNED TO H.F.E.C. UPON THE REQUEST BY THIS OFFICE.

J. C. A.	.
CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045*

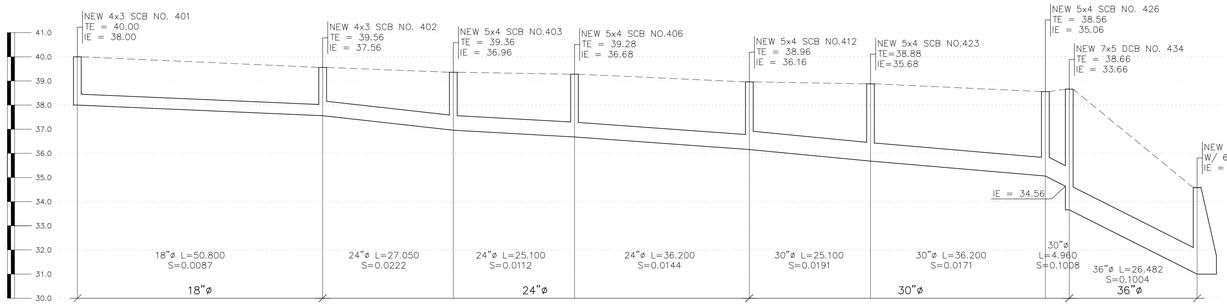
HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Andres.hernandez@hfegroup.com 1451 CRAS 2 SUR, - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T.787.622.2677 F.787-792-3647 M. 787-645-1818 POSTAL ADDRESS: PO BOX 885 - HATO REY PR 00919

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C-401

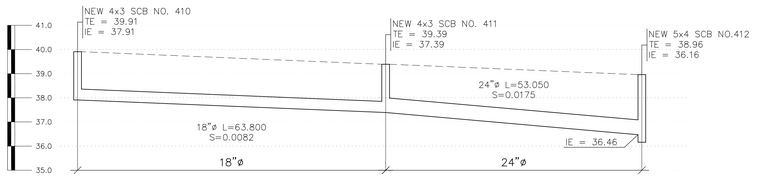
SHEET NO:	TOTAL:
.	.



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	38.00	40.00
1+50.800	50.800	37.56	39.56
1+77.850	27.050	36.96	39.36
2+02.950	25.100	36.68	39.28
2+39.150	36.200	36.16	38.96
2+64.250	25.100	35.68	38.88
3+00.450	36.200	35.06	38.56
3+05.410	4.960	34.56 33.66	38.66
3+31.892	26.482	31.000	XXX

PROFILE FROM NEW 4x3 SCB NO. 401 TO NEW HW NO. 435

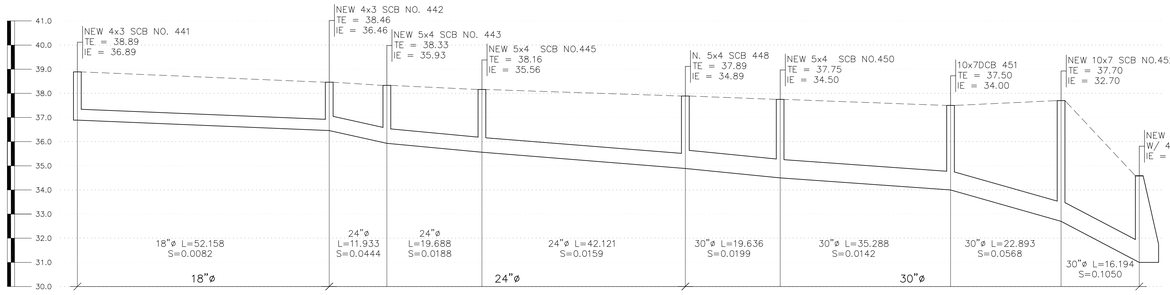
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	37.91	39.91
1+63.800	63.800	37.39	39.39
2+16.850	53.050	36.46 36.16	38.96

PROFILE FROM NEW 4x3 SCB NO. 410 TO NEW 5x4 SCB NO.412

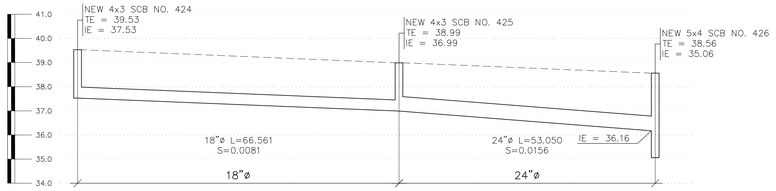
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	36.89	38.89
1+52.158	52.158	36.46	38.46
1+64.091	11.933	35.93	38.33
1+83.779	19.688	35.56	38.16
2+25.900	42.121	34.89	37.89
2+45.536	19.636	34.50	37.75
2+80.824	35.288	34.00	37.50
3+03.717	22.893	32.70	37.70
3+19.911	16.194	31.00	XXX

PROFILE FROM NEW 4x3 SCB NO. 441 TO NEW HW NO. 453

SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	37.53	39.53
1+66.561	66.561	36.99	38.99
2+19.611	53.050	36.16 35.06	38.56

PROFILE FROM NEW 4x3 SCB NO. 424 TO NEW 5x4 SCB NO. 426

SCALES: H 1:500 & V 1:100

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 119 de 1 de mayo de 1974, según enmendada, conocida como "Ley" de julio de 1974, según enmendada, según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET-121
REV.-

AAA-RE-23-36-0020
2023-503622-SRI-073046

SHEET TITLE:
PROPOSED STORM SEWER PROFILES 1 OF 2

STATUS:
ADVANCED DRAWINGS

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J. C. A.	.
CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

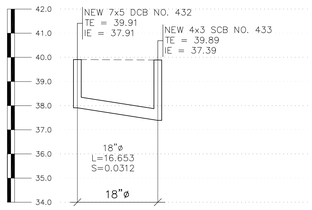
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Andres.hernandez@hfegroup.com LIC.(19102) CIV. - 787 SAN PATRICIO AVE. - SAN JUAN PR. 00921
T.(787) 782-2877 F.(787) 782-2447 M. (787) 565-4105 POSTAL ADDRESS: GPO SAN JUAN PR. 00936-7894

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P.R. 00919-2484

SHEET IDENTIFICATION:
C-402

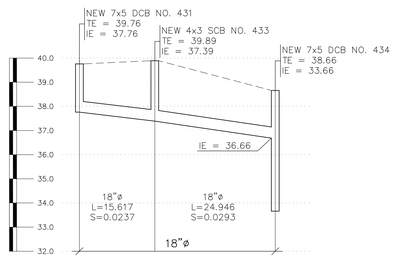
SHEET NO:	TOTAL:
.	.



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	37.91	39.91
1+16.653	16.653	37.39	39.89

PROFILE FROM NEW 7x5 DCB NO. 432
TO NEW 4x3 SCB NO. 433

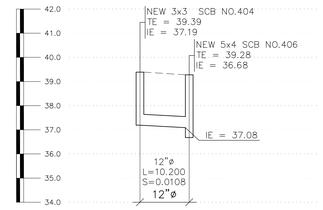
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	37.76	39.76
1+15.617	15.617	37.39	39.89
1+40.563	24.946	35.66 35.66	38.66

PROFILE FROM NEW 7x5 DCB NO. 431
TO NEW 7x5 DCB NO. 434

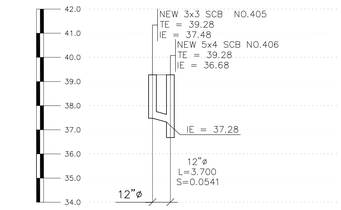
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	37.19	39.39
1+10.200	10.200	37.08 36.68	39.28

PROFILE FROM NEW 3x3 SCB NO.404
TO NEW 5x4 SCB NO.406

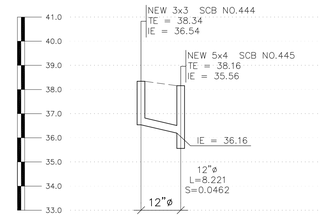
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	37.48 37.28 36.68	39.28
1+03.700	3.700		39.28

PROFILE FROM NEW 3x3 SCB NO.405
TO NEW 5x4 SCB NO.406

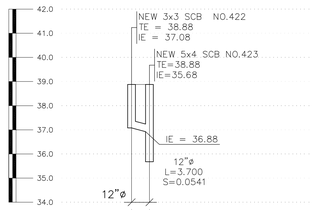
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	36.54	38.34
1+08.221	8.221	35.16 35.56	38.16

PROFILE FROM NEW 3x3 SCB NO.444
TO NEW 5x4 SCB NO.445

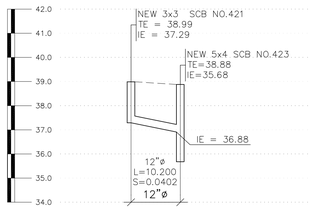
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	37.08 35.68	38.88
1+03.700	3.700		38.88

PROFILE FROM NEW 3x3 SCB NO.422
TO NEW 5x4 SCB NO.423

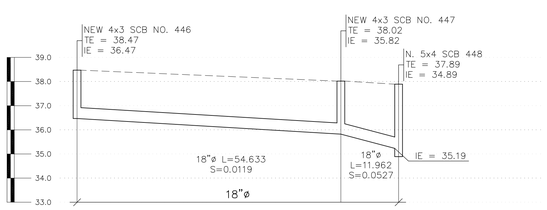
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	37.29	38.99
1+10.200	10.200	36.88 35.68	38.88

PROFILE FROM NEW 3x3 SCB NO.421
TO NEW 5x4 SCB NO.423

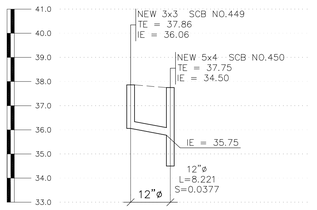
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	36.47	38.47
1+54.633	54.633	35.82	38.02
1+66.595	11.962	35.19 34.89	37.89

PROFILE FROM NEW 4x3 SCB NO. 446 TO N. 5x4 SCB 448

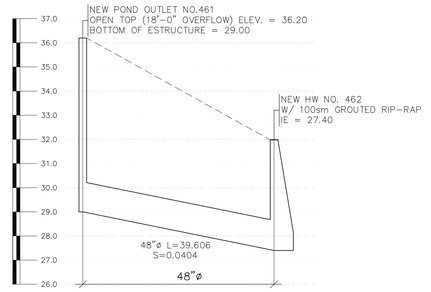
SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	36.06	37.86
1+08.221	8.221	35.75 34.50	37.75

PROFILE FROM NEW 3x3 SCB NO.449
TO NEW 5x4 SCB NO.450

SCALES: H 1:500 & V 1:100



DISTANCES		ELEVATIONS	
STATION	PARTIAL	INVERT	TOP
1+00.00	0.00	29.00	36.20
1+39.606	39.606	27.40	XXX

PROFILE FROM NEW POND OUTLET NO.461
TO NEW HW NO. 462

SCALES: H 1:500 & V 1:100

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido con la Ley Núm. 173 de 12 de agosto de 1988, según enmendada (mejor conocida como la "Ley para la Inversión por la Industria Puertorriqueña") con la (Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET: 1.21
REV.:

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED STORM SEWER PROFILES 2 OF 2

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.E.C. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REUSED, DISCLOSED OR LOANED WITHOUT PRIOR WRITTEN CONSENT IN WRITING. IT SHALL BE RETURNED TO H.F.E.C. UPON THE REQUEST BY THIS OFFICE.

J. C. A.	.
CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E:	AS SHOWN
S. C. A. L. E:	AS SHOWN
DRAWING:	1045*

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Antonio.hernandez@hfegroup.com LAS LOMAS DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T.787.792.2007 F.787-792-2447 ■ 1.787.645.4539 POSTAL ADDRESS: 65 CAMS BIS - HATO REY - SAN JUAN PR 00936

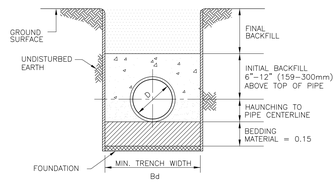
PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C-403

SHEET NO:	TOTAL:
.	.

NO. OF PIPES	DIAMETER in	H(m)	L(m)	X(m)	W(m)	tw (in)	tbs (in)	AS1		AS2		AS3		AS4
								#5@	#7@	#3@	#4@	#5@	#6@	#4@
1	18	1.0	1.0	0.5	1.7	6	10	0.30	–	0.25	0.30	0.30	–	0.25
2	18	1.0	1.0	1.2	2.4	6	10	0.30	–	0.25	0.30	0.30	–	0.25
1	24	1.1	1.1	0.7	2.0	6	10	0.30	–	0.25	0.30	0.30	–	0.25
2	24	1.1	1.1	1.6	2.9	6	10	0.30	–	0.25	0.30	0.30	–	0.25
1	30	1.3	1.3	0.8	2.4	6	10	0.30	–	0.25	0.30	0.30	–	0.25
2	30	1.3	1.3	2.0	3.6	6	10	0.30	–	0.25	0.30	0.30	–	0.25
1	36	1.4	1.4	1.0	2.7	6	10	0.30	–	0.25	0.30	0.30	–	0.25
2	36	1.4	1.4	2.3	4.0	6	10	0.30	–	0.25	0.30	0.30	–	0.25
1	42	1.6	1.6	1.1	3.0	6	10	0.20	0.30	0.25	0.30	0.30	–	0.25
2	42	1.6	1.6	2.7	4.6	6	10	0.20	0.30	0.25	0.30	0.30	–	0.25
1	48	1.7	1.7	1.3	3.3	6	10	0.15	0.30	0.20	0.30	0.30	–	0.25
1	60	2.00	2.00	1.60	3.60	8	12	0.15	0.30	0.20	0.30	0.30	–	0.25



TRENCH DETAILS
NOT TO SCALE

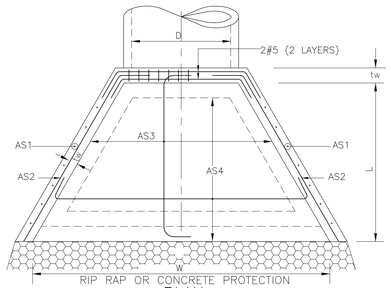
LEGEND:

Bd – MAXIMUM TRENCH WIDTH
Bc – OUTSIDE PIPE DIAMETER
H – HEIGHT OF FILL ABOVE TOP OF PIPE
D – INSIDE PIPE DIAMETER

PIPE (IN)	TRENCH WIDTH Bd –(IN)	MIN. CLEAR DIST. BETWEEN PIPES (IN)	MIN. PIPE STIFFNESS (PSI)
12	24	12	50
15	30	12	42
18	36	12	40
24	48	14	34
30	54	18	28
36	60	22	22
42	66	24	19
48	72	27	17

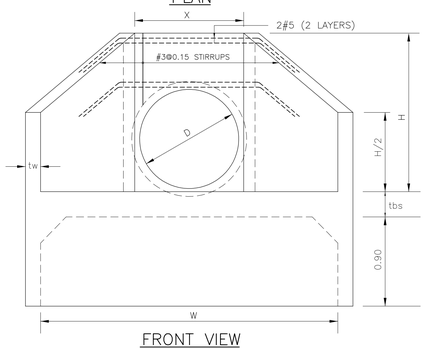
BEDDING AND HAUNCHING SHALL BE A-1, A-3 OR A-2-4 COMPACTED 95 % MAXIMUM DENSITY OR A WELL GRADED CRUSHED STONE WITH 100% PASSING THE 1/4 INCH SIEVE AND NOT MORE THAN 10% PASSING THE #200 SIEVE COMPACTED IN CONFORMANCE WITH SPECIFICATION 304.

BACKFILL MATERIALS SHALL BE SOILS SUITABLE FOR ENBANKMENT CONSTRUCTION UNDER SPECIFICATION 203 AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY OBTAINED UNDER AASHTO-180, METHOD D.

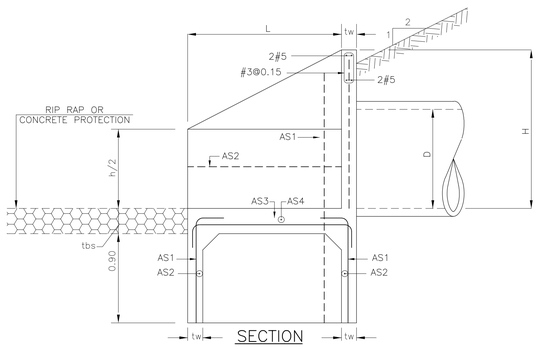


RIP RAP OR CONCRETE PROTECTION

PLAN

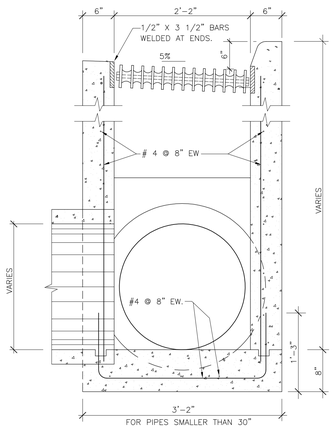


FRONT VIEW

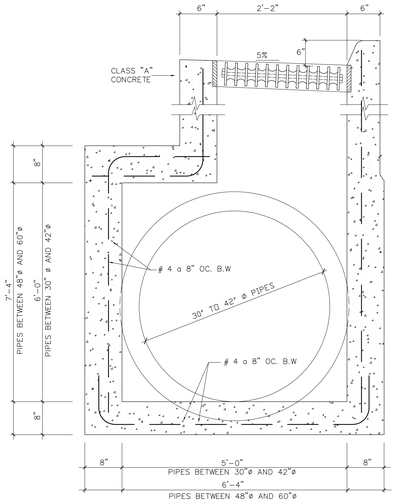


SECTION

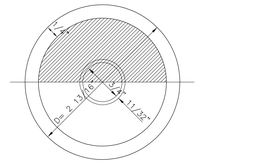
DETAILS OF HEADWALLS WITHOUT ENERGY DISPENSER



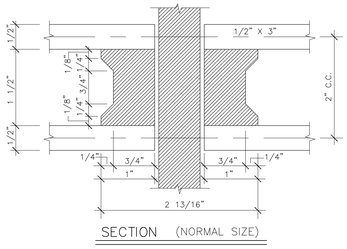
SECTION E-E
N.T.S.



SECTION E-E
N.T.S.



HALF PLAN HALF SECTION



SECTION (NORMAL SIZE)

SPOOL DETAILS

NOTES:

1-MINIMUM CONCRETE COMPRESSIVE STRENGTH IN ALL SECTIONS SHALL BE 4,000 PSI.

2-ALL SECTIONS ARE MADE IN ACCORDANCE WITH ASTM C-478 IN ANY HEIGHT REQUIRED AND P.R.A.S.A. REQUIREMENTS.

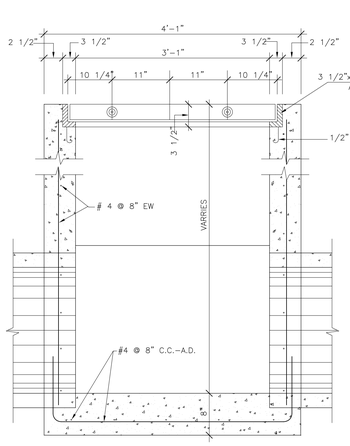
3-LIFTING HOLES PROVIDED IN ALL UNITS TO FACILITATE INSTALLATION.

4-MANHOLE BASE TO BE INSTALLED ON A FIRM STABILIZED FOUNDATION.

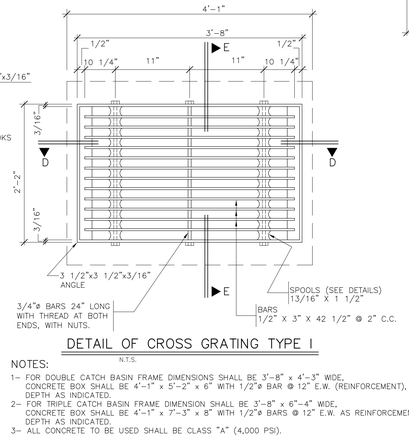
5-FOR PROTECTIVE LININGS SEE CONTRACT SPECIFICATION.

6-ON ASPHALT ROAD THE MANHOLE TOP SLAB SHALL BE 0.02 LOWER THAN THE ROADWAY SURFACE, THIS AREA WILL BE COVERED BY THE ASPHALT PAVEMENT CAUTION SHALL BE TAKEN TO KEEP THE C.I. FRAME AND COVER AT THE SURFACE LEVEL.

7-THE BOTTOM CHANNEL TO THE MANHOLE MUST HAVE THE SAME GRADIENT OF THE SEWER PIPE.



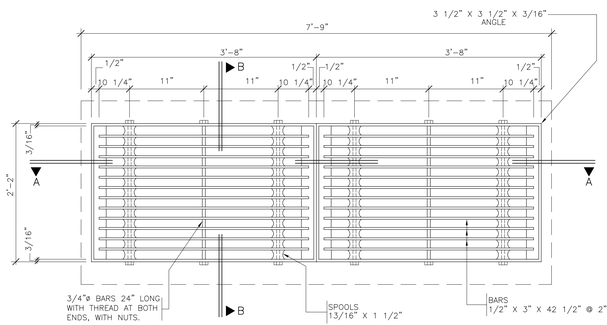
SECTION D-D (SINGLE CATCH BASIN)
N.T.S.



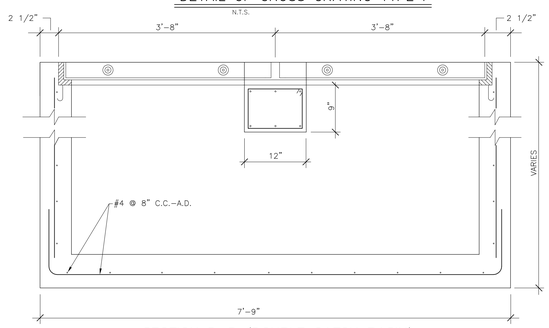
DETAIL OF CROSS GRATING TYPE I
N.T.S.

NOTES:

1- FOR DOUBLE CATCH BASIN FRAME DIMENSIONS SHALL BE 3'-8" x 4'-3" WIDE, CONCRETE BOX SHALL BE 4'-1" x 5'-2" x 6" WITH 1/2"ø BAR @ 12" E.W. (REINFORCEMENT), DEPTH AS INDICATED.
2- FOR TRIPLE CATCH BASIN FRAME DIMENSION SHALL BE 3'-8" x 6'-4" WIDE, CONCRETE BOX SHALL BE 4'-1" x 7'-3" x 8" WITH 1/2"ø BARS @ 12" E.W. AS REINFORCEMENT, DEPTH AS INDICATED.
3- ALL CONCRETE TO BE USED SHALL BE CLASS "A" (4,000 PSI).



DETAIL OF CROSS GRATING TYPE I
N.T.S.



SECTION D-D (DOUBLE CATCH BASIN)
N.T.S.

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la (Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET #2 / REV. 2

AAA-RE-23-36-0020
2023-503622-SRI-073046

SHEET TITLE:
PROPOSED STORM SEWER DETAILS

J. C. A.: .
CONSULTA: .
AAA NO.: .
ACT NO.: .
ARPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045+

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REUSED OR DISCLOSED WITHOUT WRITTEN PERMISSION FROM H.F.A.C.S. INC. IT SHALL BE RETURNED TO H.F.A.C.S. UPON THE REQUEST BY THIS OFFICE.

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

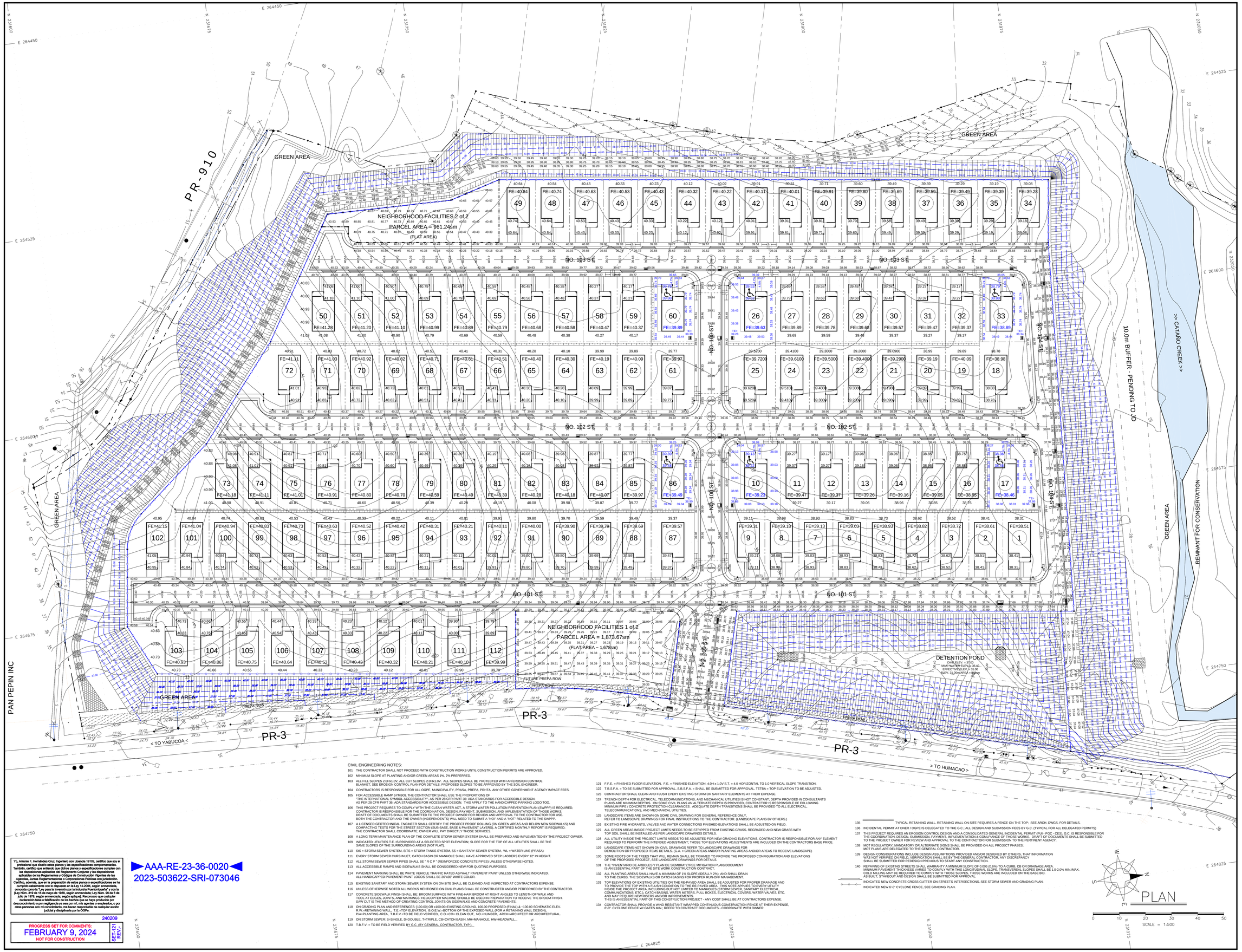
HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Antonio.hernandez@hfeng.com LAS LOMAS 2 DO. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T: 787-792-2987 / 787-718-2987 M: 787-361-6118 POSTAL ADDRESS: HC 01 9000 RIO - 7462 PR - 00964

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C-404

SHEET NO: .
TOTAL: .



CIVIL ENGINEERING NOTES:

101 THE CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION WORKS UNTIL CONSTRUCTION PERMITS ARE APPROVED.

102 MINIMUM SLOPE AT PLANTING AND/OR GREEN AREAS 1%, 2% PREFERRED.

103 ALL FILL SLOPES 2.0Hx1.0V, ALL CUT SLOPES 2.0Hx1.0V. ALL SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET, SEE EROSION CONTROL PLAN FOR DETAILS. PROPOSED SLOPES TO BE APPROVED BY THE SOIL ENGINEER.

104 CONTRACTORS IS RESPONSIBLE FOR ALL DGPE, MUNICIPALITY, PRASA, PREPA, PRHTA, ANY OTHER GOVERNMENT AGENCY IMPACT FEES.

105 FOR ACCESSIBLE RAMP SYMBOL THE CONTRACTOR SHALL USE THE PROPORTIONS OF "THE INTERNATIONAL SYMBOL ACCESSIBILITY", AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN. AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN. THIS APPLY TO THE HANDICAPPED PARKING LOGO TOO.

106 THIS PROJECT REQUIRES TO COMPLY WITH THE CLEAN WATER ACT, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED, CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, DESIGN, PAYMENT, SUBMISSION, AND IMPLEMENTATION OF THOSE WORKS. DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR USE. BOTH THE CONTRACTOR AND THE OWNER (INDEPENDENTS) WILL NEED TO SUBMIT A "NOI" AND A "NOT" RELATED TO THE SWPPP.

107 A LICENSED GEOTECHNICAL ENGINEER SHALL CERTIFY THE PROJECT PROOF ROLLING (ON GREEN AREAS AND BELOW NEW SIDEWALKS) AND COMPACTING TESTS FOR THE STREET SECTIONS (SUB-BASE, BASE & PAVEMENT LAYERS), A CERTIFIED MONTHLY REPORT IS REQUIRED. THE CONTRACTOR SHALL COORDINATE; OWNER WILL PAY DIRECTLY THOSE SERVICES.

108 A LONG TERM MAINTENANCE PLAN OF THE COMPLETE STORM SEWER SYSTEM SHALL BE PREPARED AND IMPLEMENTED BY THE PROJECT OWNER.

109 INDICATED UTILITIES T.E. IS PROVIDED AT A SELECTED SPOT ELEVATION; SLOPE FOR THE TOP OF ALL UTILITIES SHALL BE THE SAME SLOPES OF THE SURROUNDING AREAS (NOT FLAT).

110 SIS = STORM SEWER SYSTEM, SITS = STORM TANKS SYSTEM, SS = SANITARY SEWER SYSTEM, WL = WATER LINE (PRASA)

111 EVERY STORM SEWER CURB INLET, CATCH BASIN OR MANHOLE SHALL HAVE APPROVED STEP LADDERS EVERY 12" IN HEIGHT.

112 ALL STORM SEWER SEWER PIPES SHALL BE " R C P " (REINFORCED CONCRETE PIPES) UNLESS OTHERWISE NOTED.

113 ALL ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE CONSIDERED NEW FOR QUOTING PURPOSES.

114 PAVEMENT MARKING SHALL BE WHITE VEHICLE TRAFFIC RATED ASPHALT PAVEMENT PAINT UNLESS OTHERWISE INDICATED. ALL HANDICAPPED PAVEMENT PAINT LOGOS SHALL BE 36"x36" WHITE COLOR.

115 EXISTING SANITARY AND STORM SEWER SYSTEM ON-SITE SHALL BE CLEANED AND INSPECTED AT CONTRACTORS EXPENSE.

116 UNLESS OTHERWISE NOTED ALL WORKS MENTIONED ON CIVIL PLANS SHALL BE CONSTRUCTED AND/OR PERFORMED BY THE CONTRACTOR.

117 CONCRETE SIDEWALK FINISH SHALL BE: BROOM SURFACE WITH FINE-HAIR BROOM AT RIGHT ANGLES TO LENGTH OF WALK AND TOOL AT EDGES, JOINTS, AND MARKINGS; HELICOPTER MACHINE SHOULD BE USED IN PREPARATION TO RECEIVE THE BROOM FINISH. SAW CUT IS THE METHOD OF CREATING CONTROL JOINTS ON SIDEWALKS AND CONCRETE PAVEMENTS.

118 ON GRADING PLAN AND REFERENCES: [100.00] OR x100.00=EXISTING GROUND, 100.00 PROPOSED (FINAL) & ~100.00 SCHEMATIC ELEV. R.W.=RETAINING WALL, T.E.=TOP ELEVATION, B.O.E.W.=BOTTOM OF THE EXPOSED WALL (FOR A RETAINING WALL DESIGN), P/A=PLANTING AREA, T.B.F.V.=TO BE FIELD VERIFIED, C.O.=CO= CLEAN OUT, NO.=NUMBER, ARCH=ARCHITECT OR ARCHITECTURAL.

119 ON STORM SEWER: S=SINGLE, D=DOUBLE, T=TRIPLE, CB=CATCH BASIN, MH=MANHOLE, HW=HEADWALL,.

120 T.B.F.V. = TO BE FIELD VERIFIED BY G.C. (BY GENERAL CONTRACTOR, TYP.).

121 F.F.E. = FINISHED FLOOR ELEVATION, F.E. = FINISHED ELEVATION, 4.0H x 1.0V S.T. = 4.0 HORIZONTAL TO 1.0 VERTICAL SLOPE TRANSITION.

122 T.B.S.F.A. = TO BE SUBMITTED FOR APPROVAL, S.B.S.F.A. = SHALL BE SUBMITTED FOR APPROVAL, TETBA = TOP ELEVATION TO BE ADJUSTED.

123 CONTRACTOR SHALL CLEAN AND FLUSH EVERY EXISTING STORM OR SANITARY ELEMENTS AT THEIR EXPENSE.

124 TRENCH DEPTH FOR ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES IS NOT CONSTANT, DEPTH PROVIDED IN CONSULTANTS PLANS ARE MINIMUM DEPTHS. ON SOME CIVIL PLANS AN ALTERNATE DEPTH IS PROVIDED, CONTRACTOR IS RESPONSIBLE OF FOLLOWING: MINIMUM PIPE / CONCRETE PROTECTION CLEARANCES. ADEQUATE DEPTH TRANSITIONS SHALL BE PROVIDED TO ALL ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES.

125 LANDSCAPE ITEMS ARE SHOWN ON SOME CIVIL DRAWINGS FOR GENERAL REFERENCE ONLY, REFER TO LANDSCAPE DRAWINGS FOR FINAL INSTRUCTIONS TO THE CONTRACTOR. (LANDSCAPE PLANS BY OTHERS.)

126 EXISTING FIRE HYDRANTS, VALVES AND WATER CONNECTIONS FINISHED ELEVATIONS SHALL BE ADJUSTED ON FIELD.

127 ALL GREEN AREAS INSIDE PROJECT LIMITS NEEDS TO BE STRIPPED FROM EXISTING GRASS, REGRADED AND NEW GRASS WITH TOP SOIL SHALL BE INSTALLED AS PER LANDSCAPE DRAWINGS DETAILS.

128 ALL UTILITY INSIDE THE PROJECT LIMITS NEEDS TO BE ADJUSTED FOR NEW GRADING ELEVATIONS, CONTRACTOR IS RESPONSIBLE FOR ANY ELEMENT REQUIRED TO PERFORM THE INTENDED ADJUSTMENT, THOSE TOP ELEVATIONS ADJUSTMENTS ARE INCLUDED ON THE CONTRACTORS BASE PRICE.

129 LANDSCAPE ITEMS NOT SHOWN ON CIVIL DRAWINGS REFER TO LANDSCAPE DRAWINGS FOR DEMOLITION OR PROPOSED ITEMS DETAILS. (G.A. = GREEN AREAS AND/OR PLANTING AREAS AND/OR AREAS TO RECEIVE LANDSCAPE)

130 SOME ROOTS OF THE TREES THAT WILL REMAIN SHALL BE TRIMMED TO PROVIDE THE PROPOSED CONFIGURATION AND ELEVATIONS OF THE PROPOSED PROJECT, SEE LANDSCAPE DRAWINGS FOR DETAILS.

131 THE "INVENTARIO DE ARBOLES Y PLAN DE SIEMBRA" (TREE MITIGATION PLAN) DOCUMENT IS AN ESSENTIAL PART OF THE SITE WORK CONSTRUCTION CONTRACT.

132 ALL PLANTING AREAS SHALL HAVE A MINIMUM OF 1% SLOPE (IDEALLY 2%) AND SHALL DRAIN TO THE CURBS, THE SIDEWALKS OR CATCH BASINS FOR PROPER RUN-OFF MANAGEMENT.

133 TOP ELEVATIONS OF EXISTING UTILITIES ON THE RE-PAVED AREA SHALL BE ADJUSTED FOR PROPER DRAINAGE AND TO PROVIDE THE TOP WITH A FLUSH CONDITION TO THE RE-PAVED AREA. THIS NOTE APPLIES TO EVERY UTILITY INSIDE THE PROJECT AREA, INCLUDING BUT NOT LIMITED TO MANHOLES (STORM SEWER, SANITARY ELECTRICAL, COMMUNICATIONS, ETC.), CATCH BASINS, WATER METERS, PULL BOXES, ELECTRICAL COVERS, WATER VALVES, ETC. AND MAY REQUIRED SOME RISERS AND/OR IMPROVEMENTS. THIS IS AN ESSENTIAL PART OF THIS CONSTRUCTION PROJECT - ANY COST SHALL BE AT CONTRACTORS EXPENSE.

134 CONTRACTOR SHALL PROVIDE A WIND RESISTANT WRAPPED CONTINUOUS CONSTRUCTION FENCE AT THEIR EXPENSE, 6'-0" CYCLONE FENCE W/ GATES MIN.; REFER TO CONTRACT DOCUMENTS - COORDINATE WITH OWNER.

135 _____ TYPICAL RETAINING WALL, RETAINING WALL ON SITE REQUIRES A FENCE ON THE TOP; SEE ARCH. DWGS. FOR DETAILS.

136 INCIDENTAL PERMIT AT DNER / OGPE IS DELEGATED TO THE G.C.; ALL DESIGN AND SUBMISSION FEES BY G.C. (TYPICAL FOR ALL DELEGATED PERMITS)

137 THIS PROJECT REQUIRES AN EROSION CONTROL DESIGN AND A CONSOLIDATED GENERAL INCIDENTAL PERMIT (PUI - PGC - CES), G.C. IS RESPONSIBLE FOR THE COORDINATION, DESIGN, SUBMISSION, PAYMENT, IMPLEMENTATION & COMPLIANCE OF THOSE WORKS. DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR SUBMISSION TO THE PERTINENT AGENCY.

138 MOT REGULATORY, MANDATORY OR ALTERNATE SIGNS SHALL BE PROVIDED ON ALL PROJECT PHASES; MOT PLANS ARE DELEGATED TO THE GENERAL CONTRACTOR.

139 DESIGN CONSIDERATIONS INCLUDE DESIGN ASSUMPTIONS PROVIDED AND/OR DESIGNED BY OTHERS, THAT INFORMATION WAS NOT VERIFIED ON FIELD; VERIFICATION SHALL BE BY THE GENERAL CONTRACTOR, ANY DISCREPANCY SHALL BE SUBMITTED FOR REDESIGN PREVIOUS TO START ANY CONSTRUCTION.

140 REPAVING OF EXISTING STREETS SHALL WARRANTY A MINIMUM SLOPE OF 0.00% (0.6%) TO A CURB, CB OR DRAINAGE AREA, MINIMUM PAVEMENT THICKNESS VARIES TO COMPLY WITH THIS LONGITUDINAL SLOPE. TRANSVERSAL SLOPES SHALL BE 1.5-2.0% MIN.MAX. COLD MILLING MAY BE REQUIRED TO COMPLY WITH THOSE SLOPES, THOSE WORKS ARE INCLUDED ON THE BASE BID. AS BUILT, STAKEOUT AND DESIGN SHALL BE SUBMITTED FOR APPROVAL.

INDICATED NEW CONCRETE CROSS GUTTER ON STREETS INTERSECTIONS, SEE STORM SEWER AND GRADING PLAN.

INDICATED NEW 6'-0" CYCLONE FENCE, SEE GRADING PLAN.

Yo, Antonio F. Hernández-Cruz, ingeniero con Licencia 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con todas las disposiciones aplicables de la Ley Núm. 313 de 24 de diciembre de 1998, aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la (Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET-121
REV.-

AAA-RE-23-36-0020
2023-503622-SRI-073046

REVISIONS			
NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED FINAL GRADING SITE PLAN

J. C. A.:	.
CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045•

STATUS:
ADVANCED DRAWINGS
THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.e.G. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR PUBLISHED WITHOUT THE EXPRESS CONSENT OF H.F.e.G. UPON THE REQUEST BY THIS OFFICE.

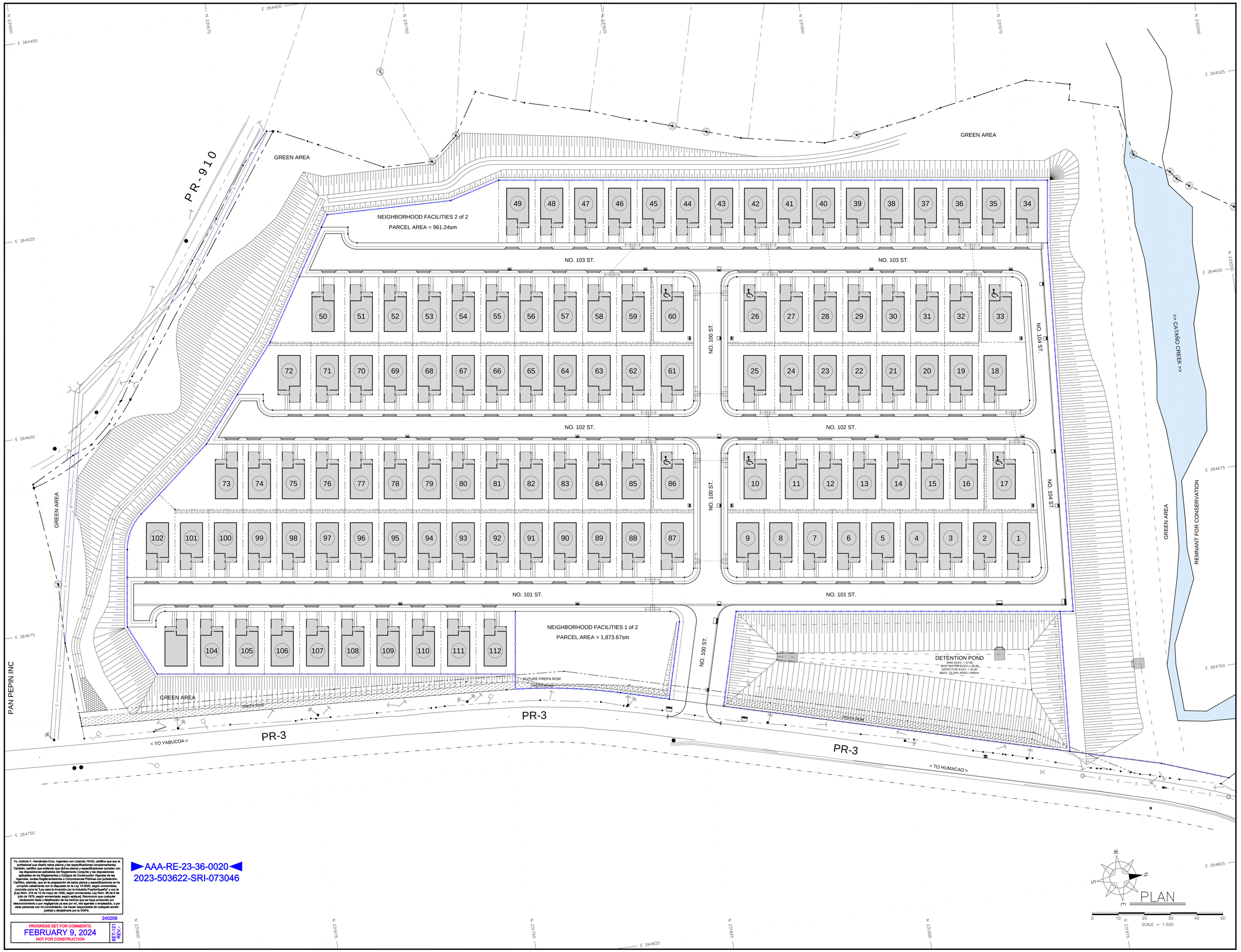
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Antonio.hernandez@hfegroup.com LIC.(19,102) - TEC (MAYAGUEZ) - SAN JUAN PE 00921
T.787-742-2987 - F. 787-724-3646 - M. 787-638-4158 - POSTAL ADDRESS: 455 SAN PEDRO PUERTO NUEVO

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
P.O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—501

SHEET NO:	TOTAL:
.	.



Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 119 de 30 de junio de 1976, según enmendada, y la Ley Núm. 45 de 18 de julio de 1978, según enmendadas según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET / 21 REV. /

AAA-RE-23-36-0020
2023-503622-SRI-073046

PLAN
0 10 20 30 40 50
SCALE = 1:500

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED MODEL SELECTION SITE PLAN

J. C. A. .
CONSULTA: .
AAA NO.: .
ACT NO.: .
ARPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045*

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.E.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED IN ANY MANNER WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF H.F.E.C.S. UPON THE REQUEST IN WRITING, IT SHALL BE RETURNED TO H.F.E.C.S. UPON THE REQUEST BY THIS OFFICE.

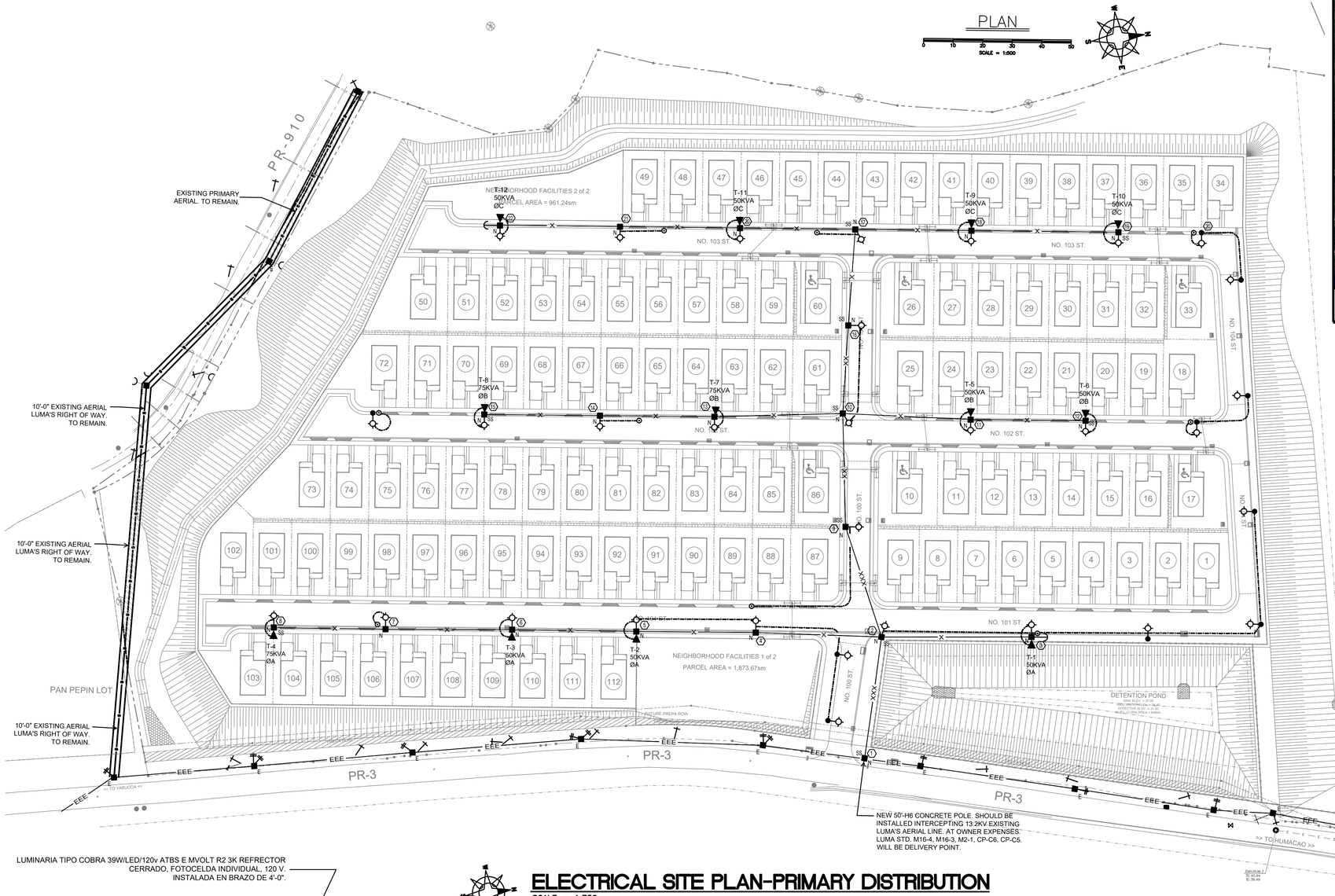
HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Antonio.hernandez@hfegrp.com LAS LOMAS 2KV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T.787.792.2687 M.939.645.68 P.O.BOX 4290535 ST.SAN FELIPE - PMB 288 - 3000 CPR 00984

PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C–701

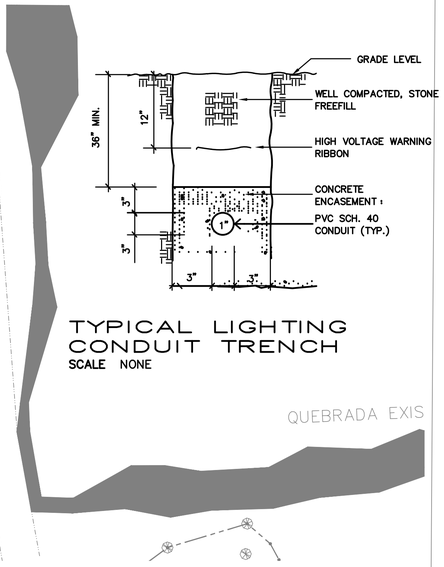
SHEET NO: .
TOTAL: .



LOCATION PLAN 1:20,000

COORDINATES
Y = 264733. 04, X = 231798. 37

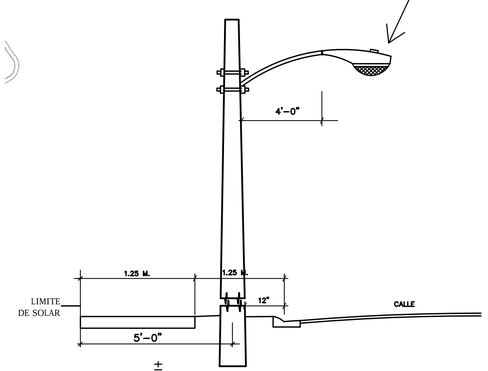
OGPE : 2023-503622-SRI-073049



TYPICAL LIGHTING CONDUIT TRENCH

SCALE NONE

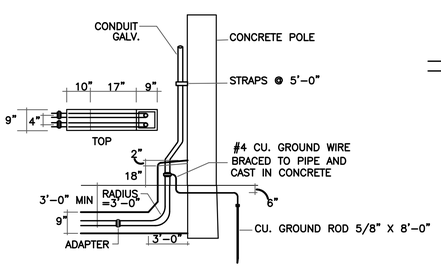
LUMINARIA TIPO COBRA 39W/LED/120v ATBS E MVOLT R2 3K REFRECTOR CERRADO, FOTOCELDA INDIVIDUAL, 120 V. INSTALADA EN BRAZO DE 4'-0".



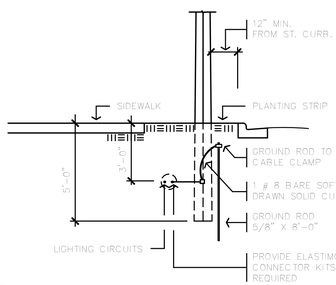
DET. DE POSTE Y ALUMBRADO PUBLICO

ELECTRICAL SITE PLAN-PRIMARY DISTRIBUTION

SCALE = 1:750



UNDERGROUND DISTRIBUTION RISER (URD-4)



POLE DETAIL

SCALE NONE

CERTIFICACIÓN DEL DISEÑADOR / DESIGNER'S CERTIFICATION

1. Certifico que soy ingeniero, agrimensor o arquitecto, licenciado y colegiado en cumplimiento con la Ley 173 de 1988, según enmendada, y estoy autorizado por el dueño del proyecto a presentar estos planos de construcción ante LUMA Energy como operador y administrador del Sistema de Transmisión y Distribución de la AEE. / I certify that I am a licensed and registered engineer, surveyor, or architect (in compliance with Act 173 of 1988, as amended) and authorized by the project or land owner to submit these construction plans to LUMA Energy as operator and administrator of the Transmission and Distribution System of the Puerto Rico Electric Power Authority.
2. En armonía con las disposiciones de la Ley Núm. 135 de 15 de junio de 1967, según enmendada, conocida como Ley de Certificación de Planos o Proyectos, certifico que preparé el diseño eléctrico de este proyecto en conformidad con los códigos, patrones, normas y reglamentos aprobados por la AEE, la Junta de Planificación y la Oficina de Gerencia de Permisos, Lluma Energy y el Manual de Práctica Profesional del CIAPR. / In compliance with Act No.135 of July 15, 1967, as amended known as the "Construction Plans or Projects Certification Act", I certify that I prepared the electric design for this project in accordance with the codes, Standards, rules, and regulations approved by LUMA, Puerto Rico Planning Board and Permits Management Office and the CIAPR Professional Practice Manual.

FIRMA DEL DISEÑADOR / DESIGNER'S SIGNATURE

LUMA

ENDOSO / ENDORSEMENT

Nombre del Proyecto / Project Name: URBANIZACION LADERAS DE PALMAS
Número de Proyecto / Project Number: 05-2-201 (23-2-0695)-R2
Carga / Load: (kVA): 675KVA Revisión / Revision:

ENDOSADO POR / ENDORSED BY

1. LUMA endosa el diseño eléctrico mostrado en estos planos de construcción basándose en la certificación sometida por el diseñador en cumplimiento con la Ley Núm. 135 del 15 de julio de 1967, según enmendada. / LUMA endorses the electric design shown in these construction plans based on the certification presented by the designer in compliance with Act 135 of July 15, 1967, as amended.
2. LUMA no asume responsabilidad sobre el diseño certificado. El endoso por parte de la LUMA no releva al diseñador de la responsabilidad profesional que asume al certificar estos planos. Este endoso no releva al constructor ni al inspector de obra privado de cumplir con las disposiciones del Código Eléctrico Nacional, Código Eléctrico de Seguridad, códigos, patrones, normas y reglamentos vigentes de LUMA y de otras agencias de gobierno, así como leyes federales y estatales, vigentes al inicio de las obras. / LUMA does no assume responsibility over the certified design. LUMA's endorsement does not relieve the designer from the professional responsibility assumed with the certification of these project's plans. This endorsement relieves neither the builder nor private inspector from compliance with standing dispositions from; National Electric Code, National Electric Safety Code, constructions standards, norms, and regulations from LUMA and other government agencies as well as federal and state laws ruling by the time construction begins.
3. El presente endoso tiene vigencia de un (1) año. De iniciar las obras eléctricas dentro de este término, mediando notificación previa a LUMA, el endoso mantendrá su vigencia hasta la terminación de las mismas. En caso de que no se certifique obra eléctrica en ese periodo, este endoso perderá su vigencia. Este endoso no es para constituir servidumbre ni para completar procesos de Cesión, Traspaso y Garantía del equipo. Para esto es necesario cumplir con todo lo dispuesto en el Reglamento de Servidumbres Para la Autoridad de Energía Eléctrica (7282 de 2007 / This endorsement is valid for one (1) year. If electrical works have begun during this year, with prior notification to LUMA, the endorsement will still be valid until work's completion. In case there is no certified electrical work during this period, this endorsement will lose its validity. This endorsement is not to constitute an easement or to complete the Assignment, Transfer and Guarantee process of the equipment. For this, it is necessary to comply with all the provisions of the Easements Regulation for the Electric Power Authority (7282 of 2007).

Yo, Ing. Eduardo Chardon Casals, lo 15348, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones he cumplido con lo dispuesto en la Ley Núm. 84 de 26 de junio de 2018, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada. Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la CGPe.

EDUARDO CHARDON CASALS
ELECTRICAL ENGINEERS
LIC. NO 15348
#148 SAN JOSE STREET STE. 701
OLD SAN JUAN, PUERTO RICO 00901
TEL. 787-725-1222

SHEET TITLE: ELECTRICAL SITE PLAN-PRIMARY DISTRIBUTION

STATUS: ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.C.G. ENGINEERING CONSULTING GROUP, PSC AND PERTAINS TO THE LATEST PLANS CONSIDERED BY THE OWNER'S COVERED PLANS AND ISSUED FOR CONSTRUCTION. AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REUSED, REPRODUCED OR EXHIBITED UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.A.C.G. UPON THE REQUEST BY THIS OFFICE.

J. C. A.	-
CONSULTA:	-
AAA NO.:	-
ACT NO.:	-
APPR. NO.:	-
D.A.T.E.	8/8/2023
S.C.A.L.E.	AS SHOWN
DRAWING.	1045+

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

ANTONIO F. HERNANDEZ CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Antonio.hfengr@gmail.com LAS LOMAS DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
CONSULTING ENGINEERS - CIVIL, ELECTRICAL, MECHANICAL, PLUMBING, FIRE PROTECTION
CORP. ID NO. 7 32 74 2 LIC. # 16,979 EXP. DATE: 12/2023 LIC # 24,851 EXP. DATE: 12/2023 TEL. 787-645-1566

PROJECT: LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: SE-1.0

SHEET NO: .

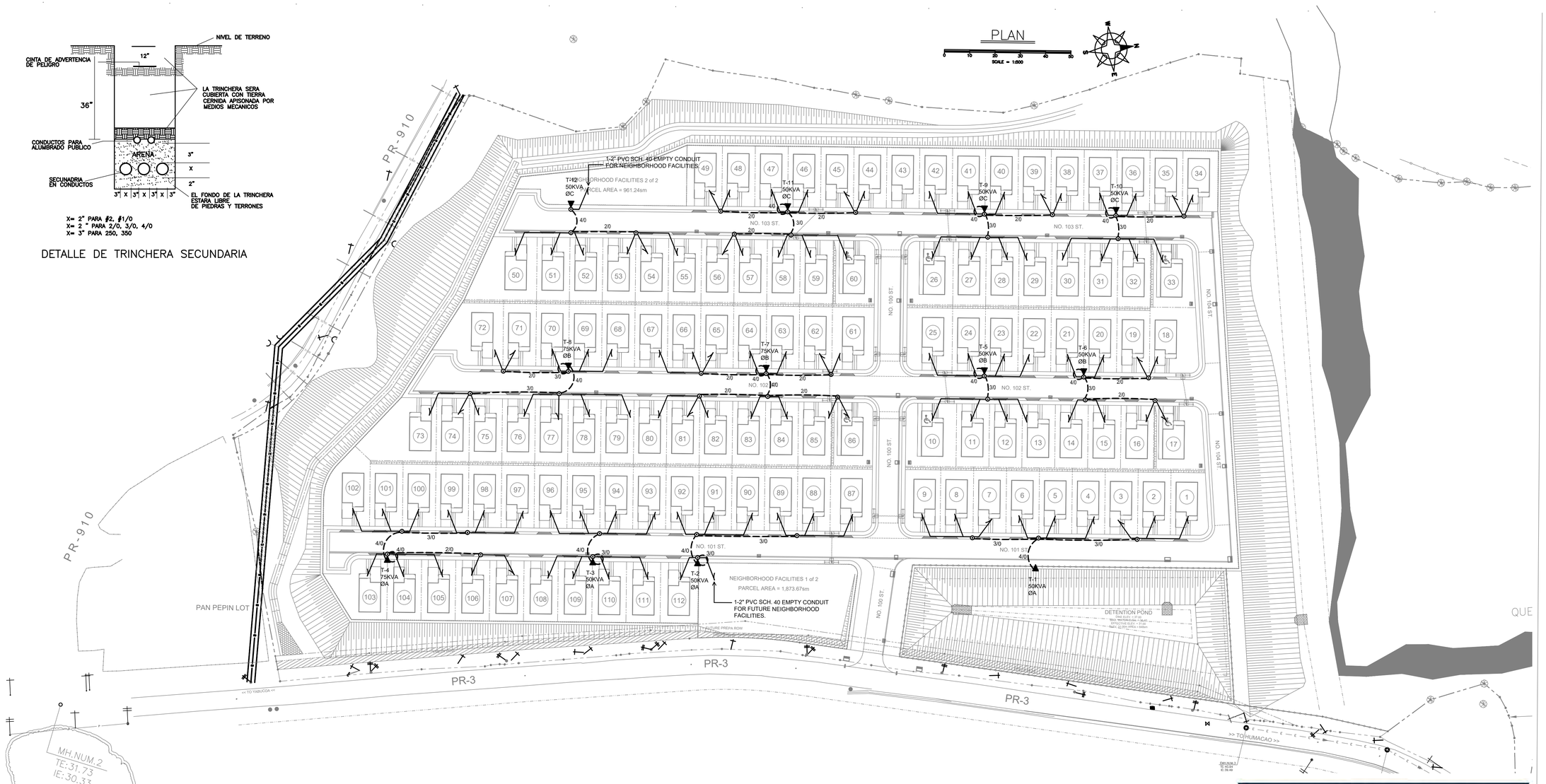
TOTAL: .

X= 2" PARA #2, #1/0
X= 2 " PARA 2/0, 3/0, 4/0
X= 3" PARA 250, 350

DETALLE DE TRINCHERA SECUNDARIA

PLAN

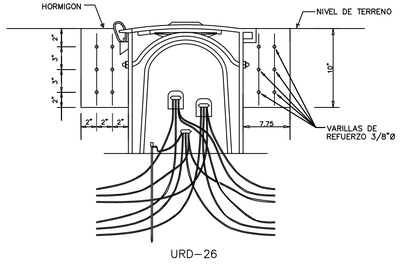
SCALE = 1:600



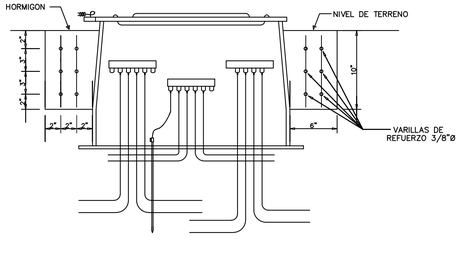
ELECTRICAL SITE PLAN-SECONDARY DISTRIBUTION

SCALE = 1:750

PROTECCION EN HORMIGON PARA PEDESTALES SECUNDARIOS INSTALADOS EN AREA DE SIEMBRA O AREA PUBLICA ACCESIBLE A TRANSITO VEHICULAR

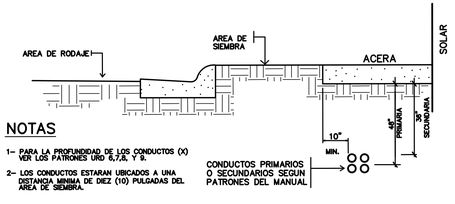


URD-26



URD-27

NOTAS:
EL HORMIGON ESTARA RODEADO DE TIERRA Y DESCANSANDO EN TERRENO FIRME.



NOTAS

1- PARA LA PROFUNDIDAD DE LOS CONDUCTOS (X) VER LOS PATRONES URD 6,7,8, Y 9.

2- LOS CONDUCTOS ESTARAN UBICADOS A UNA DISTANCIA MINIMA DE DIEZ (10) PULGADAS DEL AREA DE SIEMBRA.

CONDUCTOS PRIMARIOS O SECUNDARIOS SEGUN PATRONES DEL MANUAL

INSTALACION DE CABLES SOTERRADOS CUANDO EXISTE AREA DE SIEMBRA
URD-8

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico que he visitado el lugar donde se realizará la obra especificada y que he cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada, Ley Núm. 96 de 6 de julio de 1978, según enmendada, según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia de mi parte no, mis agentes o empleados, o por otras personas con mi autorización, me hace responsable de cualquier acción judicial y disciplinaria por la OGPe.

EDUARDO CHARDON CASALS
ELECTRICAL ENGINEERS
LIC. NO 15346

CALLE NUEVA ESPAÑA PARCELAS 235, 237,
HUMACAO, PUERTO RICO 00791
TEL. 787-850-1866

CERTIFICACIÓN DEL DISEÑADOR / DESIGNER'S CERTIFICATION

1. Certifico que soy ingeniero, agrimensor o arquitecto, licenciado y colegiado en cumplimiento con la Ley 173 de 1988, según enmendada, y estoy autorizado por el dueño del proyecto a presentar estos planos de construcción ante LUMA Energy como operador y administrador del Sistema de Transmisión y Distribución de la AEE. / I certify that I am a licensed and registered engineer, surveyor, or architect (in compliance with Act# 173 of 1988, as amended) and authorized by the project or land owner to submit these construction plans to LUMA Energy as operator and administrator of the Transmission and Distribution System of the Puerto Rico Electric Power Authority.
2. En armonía con las disposiciones de la Ley Núm. 135 de 15 de junio de 1967, según enmendada, conocida como Ley de Certificación de Planos o Proyectos, certifico que preparé el diseño eléctrico de este proyecto en conformidad con los códigos, patrones, normas y reglamentos aprobados por la AEE, la Junta de Planificación y la Oficina de Gerencia de Permisos, Luma Energy y el Manual de Práctica Profesional del CIAPR. / In compliance with Act No.135 of July 15, 1967, as amended known as the "Construction Plans or Projects Certification Act", I certify that I prepared the electric design for this project in accordance with the codes, Standards, rules, and regulations approved by LUMA, Puerto Rico Planning Board and Permits Management Office and the CIAPR Professional Practice Manual.

FIRMA DEL DISEÑADOR / DESIGNER'S SIGNATURE

LUMA ENDOSO / ENDORSEMENT

Nombre del Proyecto / Project Name: URBANIZACION LADERAS DE PALMAS
Número de Proyecto / Project Number: 05-2-201 (23-2-0695)-R2
Carga / Load: (kVA): 675KVA Revisión / Revision:

ENDOSADO POR / ENDORSED BY

1. LUMA endosa el diseño eléctrico mostrado en estos planos de construcción basándose en la certificación sometida por el diseñador en cumplimiento con la Ley Núm. 135 del 15 de julio de 1967, según enmendada. / LUMA endorses the electric design shown in these construction plans based on the certification presented by the designer in compliance with Act 135 of July 15, 1967, as amended.
2. LUMA no asume responsabilidad sobre el diseño certificado. El endoso por parte de la LUMA no relieva al diseñador de la responsabilidad profesional que asume al certificar estos planos. Este endoso no relieva al constructor ni al inspector de obra privado de cumplir con las disposiciones del Código Eléctrico Nacional, Código Eléctrico de Seguridad, códigos, patrones, normas y reglamentos vigentes de LUMA y de otras agencias de gobierno, así como leyes federales y estatales, vigentes al inicio de las obras. / LUMA does no assume responsibility over the certified design. LUMA's endorsement does not relieve the designer from the professional responsibility assumed with the certification of these project's plans. This endorsement relieves neither the builder nor private inspector from compliance with standing dispositions form: National Electric Code, National Electric Safety Code; constructions standards, norms, and regulations from LUMA and other government agencies as well as federal and state laws ruling by the time construction begins.
3. El presente endoso tiene vigencia de un (1) año. De iniciar las obras eléctricas dentro de este término, mediando notificación previa a LUMA, el endoso mantendrá su vigencia hasta la terminación de las mismas. En caso de que no se certifique obra eléctrica en ese período, este endoso perderá su vigencia. Este endoso no es para constituir servidumbre ni para completar proceso de Cesión, Traspaso y Garantía del equipo. Para esto es necesario cumplir con todo lo dispuesto en el Reglamento de Servidumbres Para la Autoridad de Energía Eléctrica (7282 de 2007 / This endorsement is valid for one (1) year. If electrical works have begun during this year, with prior notification to LUMA, the endorsement will still be valid until work's completion. In case there is no certified electrical work during this period, this endorsement will lose its validity. This endorsement is not to constitute an easement or to complete the Assignment, Transfer and Guarantee process of the equipment. For this, it is necessary to comply with all the provisions of the Easements Regulation for the Electric Power Authority (7282 of 2007).

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
ELECTRICAL SITE PLAN-SECONDARY DISTRIBUTION

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.C.G. LLC. AS CONSULTING GROUP, PSC. AND HER CONSULTANTS AND IS ISSUED FOR LIMITED USE AS INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REUSED, REPRODUCED OR EXHIBITED UNLESS PERMISSION IS GRANTED IN WRITING. SHALL BE RETURNED TO H.F.A.C.G. UPON THE REQUEST BY THIS OFFICE.

J. C. A.	-
CONSULTA:	-
AAA NO.:	-
ACT NO.:	-
ARPE NO.:	-
D A T E	8/6/2023
S C A L E	AS SHOWN
DRAWING.	1045*

HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, P.E.
PRESIDENT
Antonio.hernandez@hfegroup.com 1.305.0384.EEV. - 787.844.PATRIOS.AVE. - SAN JUAN PR. 00921
1.305.0384.EEV. - 787.844.PATRIOS.AVE. - SAN JUAN PR. 00921
1.787.844.PATRIOS.AVE. - 787.615.1.GLOBO.EEV.GRUPO - 1.305.0384.EEV. - 787.844.PATRIOS.AVE. - SAN JUAN PR. 00921

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
SE-2.0

SHEET NO:	TOTAL:
.	.

PREPA GENERAL NOTES

1. These drawings coincide with the inscription drawings submitted at the Permits and Regulations Administration (ARPE).
2. The owner of the project is responsible of manage and obtain, before the date of commencement of the project, all the endorsements, permits, and right of ways required by government, state, municipal, federal, and private entities concerning the development of the typeof the proposed project.
3. The owner of this project has to contract the services of a licensed engineer and authorized to exercise engineer in the Commonwealth of Puerto Rico, to inspect the construction of the electrical work in accordance with Law No. 7 from July 19, 1985, as amended, and with the Regulations for Electrical Construction Drawings Certification in force. The owner will have to notify the PREPA the designation of this private inspector before the commencement of the project.
4. The execution of the electrical works, as designed on these drawings, will observe the best practices of the electrical and construction industry in accordance with the norms and regulations adopted by PREPA and concerning agencies, as well as the Codes, NEC and NESC, and other adopted standards from IEEE, NFPA, NEMA, and ANSI.
5. The contractor is not authorized to make variations to this design. It is the responsibility of the contractor to consult with the designer or designated inspector for this project any doubt which arises from the interpretation of these drawings, the execution of the proposed works, technical specifications, or discrepancies between the field's existing conditions and those used for the purpose of the design.
6. The owner or electrical contractor shall notify PREPA the commencement of the works, through the submittal of the Notice of Commencement of the Project document to the corresponding Regional Distribution Engineering Department, with at least fifteen (15) days anticipation to the proposed date.
7. The private inspector and the electrical contractor are responsible to attend to a pre-construction meeting to be coordinated with the corresponding Regional Distribution Engineering Department.
8. All works to be performed under electrical energized lines, including the connection of this project, will have to be performed by PREPA. The proponent has to assume all the equipment costs, materials, and labor. The proponent has to request from the PREPA an estimate for these works, which will have a validity date of three (3) months from its expedition.
9. It is prohibited to perform any type of work within electrical right of ways without written authorization from the PREPA.
10. The PREPA will not approve the connection of projects with invasion of right of ways conditions or which do not comply with safety clearances required.

SYSTEMS

1. The owner of the project is responsible of performing tests for the primary and secondary conductors and its terminations. The results of these tests shall have to be in accordance with the parameters established for them by PREPA. These tests have to be performed in coordination with a representative from the Inspections Office from the corresponding Regional Distribution Engineering Department.
2. During the installation of the conductors, this will need to be protected against humidity and abrasions. The contractor is responsible of installing the conductor using pulling recommended practices in order not to exceed the specified tension for the conductor.
3. The manhole covers to be installed in a sowing area have to be protected by a reinforced concrete slab, as specified in standard URD-52.
4. In those cases where the project is located less than a mile from a salt body of water, the ascending conduits shall be PVC Schedule 80 or fiberglass, as approved by PREPA.
5. Underground system conduit banks shall be inspected by PREPA before backfilling and compacting.
6. All underground conduit banks exposed to vehicular traffic shall have to be protected with concrete. Those located near other utilities shall have a minimum clearance of thirteen (13) inches from each other.
7.The amount of spare fuses provided by the contractor shall be equal to the ones installed at each substation.
8. The connectors to be used for grounding connections from antennas and substations shall be thermo-weld or compression.
9. The contractor shall provide a fish wire in each spare conduit.
10. All distribution systems shall have a maximum ground resistance of ten (10) ohms. A ground rod shall be installed to connect the neutral to ground at every four (4) poles or each one thousand (1,000) feet and in all transformers.
11. All concrete bases for self supported poles have to include two (2) spare conduits for future use, as required by the PREPA.
12. All bases for self supported poles will have to be inspected by the PREPA during its construction stage.

MATERIALS

1. All equipment to be used in the construction shall have to comply with the standards from IEEE, ANSI, NEMA, and ASTM.
2. The contractor is responsible of verifying with the PREPA that all material and equipment to be used is approved by the PREPA previous to its installation. The PREPA reserves its right of accepting any equipment that will be transferred to them.
3.All equipment and material (including transformers and substation transclosures) to be installed at a distance of one (1) mile or less from a salt body of water shall have to be constructed in stainless steel, with the exception of meter bases.
4. In underground systems, primary cables with 15 KV terminations shall be used for distribution voltages and of 46 kV for 38 KV lines.
5. In aerial systems, 15 KV polymer insulators shall be used for distribution voltages and of 46 KV for 38 KV lines.
6. The contractor shall be responsible of labeling all transformers to be transferred to the PREPA with a property number provided by the corresponding Regional Distribution Engineering Department.

SPECIAL NOTES

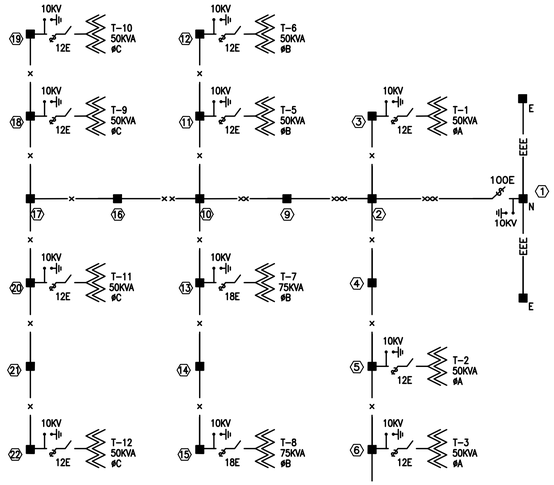
1. Project owner shall contribute to the PREPA the amount of (SEE NOTAS ESPECIALES HOJA SE-3) for the improvements to the existing electrical system. This contribution shall be made according to the proposed load in accordance with the prevailing Regulations for Determining and Collecting Contributions from Persons or Institutions in Development Projects.
2. The PREPA will not connect a project to its electrical system until the owner constitutes the required right of ways in accordance with the Regulations of Right of Ways for the Electric Power Authority. This note applies to all required right of ways, within or outside project limits.
3. The installation of metering systems shall have to be coordinated with the Metering Office of the corresponding office. The designer or electrical contractor has to assure consulting with this office in relation to equipment and materials to be used in addition to the location of the equipment.

The installation of substations, transformers or other electrical equipment over sanitary sewer systems, potable water pipelines or other utilities is prohibited

POLE REFERENCE LIST

NO.	TYPE	P.R.E.P.A. STDS.
1	50'-H6 SELF SUPPORT	CP-C5, M2-1, M16-3, M16-4.
2	45'-H6 SELF SUPPORT	CP-C6, CP-A6, M16-3, M16-4, STL-11, M2-1.
3	45'-H4 UTILITY	CP-A5, E1-2-3, F2-1, T-1, URD-4, STL-11, M2-1.
4	45'-H4 UTILITY	CP-A1, STL-11, M2-1.
5	45'-H4 UTILITY	CP-A1, T-1, URD-4, STL-11, M2-1.
6	45'-H4 UTILITY	CP-A1, T-1, URD-4, STL-11, M2-1.
7	45'-H4 UTILITY	CP-A1, STL-11, M2-1.
8	45'-H6 SELF SUPPORT	CP-A5, T-1, URD-4, STL-11, M2-1, M16-3, M16-4.
9	45'-H6 SELF SUPPORT	CP-C5, CP-B5, M16-3, M16-4, STL-11, M2-1.
10	45'-H6 SELF SUPPORT	CP-B6, CP-A6, M16-3, M16-4, STL-11, M2-1.
11	45'-H4 UTILITY	CP-A1, STL-11, T-1, URD-4, M2-1.
12	45'-H6 SELF SUPPORT	CP-A5, M16-3, M16-4, T-1, URD-4, STL-11, M2-1.
13	45'-H4 UTILITY	CP-A1, T-1, URD-4, STL-11, M2-1.
14	45'-H4 UTILITY	CP-A1, STL-11, M2-1.
15	45'-H6 SELF SUPPORT	CP-A5, M16-3, M16-4, T-1, STL-11, M2-1.
16	45'-H6 SELF SUPPORT	CP-B5, CP-A5, M16-3, M16-4, STL-11, M2-1.
17	45'-H6 SELF SUPPORT	CP-A6, CP-A5, M16-3, M16-4, STL-11, M2-1.
18	45'-H4 UTILITY	CP-A1, T-1, URD-4, STL-11, M2-1.
19	45'-H6 SELF SUPPORT	CP-A5, M16-3, M16-4, T-1, URD-4, STL-11, M2-1.
20	45'-H4 UTILITY	CP-A1, T-1, URD-4, STL-11, M2-1.
21	45'-H4 UTILITY	CP-A1, STL-11, M2-1.
22	45'-H6 SELF SUPPORT	CP-A5, M16-3, M16-4, T-1, URD-4, STL-11, M2-1.

* ALL STRESS CONES CABLE TERMINATION AND AERIAL LINE INSULATOR, SHALL BE SILICONE RUBBER CONSTRUCTION, PREPA APPROVED TYPE.



ONE LINE DIAGRAM

NOTAS ESPECIALES:

1. EN EL SECTOR EXISTEN LÍNEAS ELÉCTRICAS AÉREAS, TRIFÁSICA CON **4** CONDUCTORES CALIBRE NÚMERO **556_ACSR** A UN VOLTAJE DE **13.2** KV.
2. EL VOLTAJE DE ALIMENTACIÓN PARA EL PROYECTO SERÁ DE **13.2** KV.
3. EL DISEÑO DEBERÁ SER UN SISTEMA SEMI-SOTERRADO.

PARA SERVIR EL PROYECTO, EL DUEÑO REALIZARÁ LOS SIGUIENTES TRABAJOS:

A. **APORTARÁ LA CANTIDAD DE $ 14,850.00 PARA REALIZAR MEJORAS AL SISTEMA ELÉCTRICO. DICHA APORTACIÓN ESTÁ BASADA EN LOS 675 KVA DE TRANSFORMACIÓN QUE SERÁN AÑADIDOS AL SISTEMA.**
B. **EXTENDER EL ALIMENTADOR PRIMARIO, AÉREO CON AISLAMIENTO 15 KV, Y EL ALIMENTADOR SECUNDARIO, SOTERRADO CON AISLAMIENTO 600V, REQUERIDO DESDE EL PUNTO DE CONEXIÓN HASTA EL PROYECTO.**
C. **INSTALARA POSTE PRIMARIO DE 50 PIES EN CONCRETO PARA INTERCEPTAR Y DESVIAR LÍNEA DE 13.2 KV Y ASÍ CREAR EL PUNTO DE CONEXIÓN INDICADO EN EL DIAGRAMA.**
D. **EL DUEÑO DEL PROYECTO DEBERÁ CONFIRMAR CON EL GERENTE DE DISTRITO TÉCNICO CORRESPONDIENTE EL VOLTAJE PRIMARIO A SER UTILIZADO, PREVIO A LA COMPRA DE LOS TRANSFORMADORES.**
E. **EL USO DEL ÁREA DE LAS SERVIDUMBRES DE PASO DE LÍNEAS DE TRANSMISIÓN Y SUB-TRANSMISIÓN, NO ESTÁ PERMITIDA.**
F. DEBERÁ COORDINAR DETALLES Y COSTOS DE ESTOS TRABAJOS CON LA OFICINA DE INGENIERÍA DE CAGUAS POR LO QUE, EN SU MOMENTO, DEBERÁ FORMALIZAR LA SOLICITUD DEL ESTIMADO.

4. EL DUEÑO DEL PROYECTO, UNA VEZ SEA ENDOSADO EL PLANO DE DISEÑO, SOLICITARÁ LA PREPARACIÓN DEL ESTIMADO DE LOS TRABAJOS DESCRITOS EN EL INCISO ANTERIOR. DEBERÁ SOLICITAR UN REFERIDO DE PAGO, PARA REALIZAR LAS MEJORAS. UNA VEZ REALIZADO EL PAGO, DEBERÁ SOMETER COPIA DE LA EVIDENCIA DE ESTE A LA OFICINA INGENIERÍA DE ARECIBO, CON TRES MESES DE ANTICIPACIÓN AL COMIENZO DE LOS TRABAJOS.
5. A MENOS DE UNA MILLA DE DISTANCIA DE LA COSTA TANTO LOS EQUIPOS COMO LOS MATERIALES DEBERÁN SER EN **ACERO INOXIDABLE**, Y EL CONDUCTOR A UTILIZAR SERÁ **ACAR (ALUMINUM CONDUCTOR ALLOY REINFORCED)**, **AAAC (ALL ALUMINUM ALLOY CONDUCTOR)** O SU EQUIVALENTE EN **COBRE**.
6. TODO TRANSFORMADOR DE DISTRIBUCIÓN A SER CONECTADO AL SISTEMA DE **LUMA** DEBERÁ SER DISEÑADO Y CONSTRUIDO CON **CARACTERÍSTICAS DE PÉRDIDAS MEJORADAS, Y LOS NIVELES DE EFICIENCIA MÍNIMOS QUE ESTABLECE EL DEPARTAMENTO DE ENERGÍA DE ESTADOS UNIDOS** (**DOE,** POR SUS SIGLAS EN INGLÉS), Y DESCRITOS EN EL **COMUNICADO 15-03**, **"*REVISIÓN DE PARÁMETROS PARA TRANSFORMADORES SEGÚN REGLAMENTACIÓN DEL DEPARTAMENTO DE ENERGÍA FEDERAL (DOE)*"**, DEL 30 DE SEPTIEMBRE DE 2015**.**

LEYENDA:

—XXX— LINEA PRIMARIA AEREA 3Ø - 4 HILOS 13.2 KV. 1/0 ACSR. A INSTALAR.

— XX — LINEA PRIMARIA AEREA 3 HILOS 13.2 KV. 1/0 ACSR. A INSTALAR.

— X — LINEA PRIMARIA AEREA 2 HILOS 7.62 KV. 1/0 ACSR. A INSTALAR.

—EEE— LINEA PRIMARIA AEREA EXISTENTE 3Ø - 4 HILOS 13.2 KV. 556.5 ACSR, HA PERMANECER.

SS BASE PARA POSTE "SELF SUPPORT" SEGUN PATRONES M16-3, M16-4.

E POSTE PRIMARIO DE HORMIGON EXISTENTE.

N POSTE PRIMARIO NUEVO DE HORMIGON A INSTALARSE. (SEGUN TABLA)

TENSOR PRIMARIO A INSTALARSE. SEGUN PATRONES E1-2-3, F2-1.

LINEA SECUNDARIA 120/240V A INSTALARSE SOTERRADA RHH-RHW CALIBRE INDICADO EN EL PLANO. EN CONDUCTO DE 2" PVC SCH. 40. A 36" DE PROFUNDIDAD.

LINEA SECUNDARIA 120/240V A INSTALARSE PARA CIRCUITO DE ALUMBRADO, CONSISTE DE UN TUBO PVC 1" SCH 40 Y DOS CABLES #10AWG RHH 600V O SEGUN SE INDIQUE.

TOMA DE SERVICIO 120/240V SEGUN PATRON URD.8 Y URD-29, 3#2 RHH RHW INSTALADO EN TUBO PVC SCH-40 DE 2" A 36" DE PROFUNDIDAD.

PEDESTAL DE SERVICIO REDONDO A INSTALRSE PATRON URD-26, URD-28.

PARARRAYOS 10KV DE POLYMERO.

FUSIBLE DEL TIPO (OPEN FUSE CUT- OUT) 15KV 100A, O SEGUN SE INDIQUE.

TRANSFORMADOR TIPO "POLE TYPE", 7,620V EN PRIMARIA 120/240V EN SECUNDARIA CON CAPACIDAD SEGUN SE INDIQUE, CON 2 DERIVACIONES 1/2% POR ARRIBA Y 2, 1/2% POR DEBAJO DEL VOLTAJE NOMINAL ACEITE SIN PCB, CONSTRUIDO CON CARACTERISTICAS DE PERDIDAS MEJORADAS DEL 2016. CONSTRUIDO EN ACERO GALVANIZADO.

LUMINARIA TIPO COBRA LED/120v AMERICAN ELECTRIC LIGHTING MODELO ATBS-P10-MVOLT-R2-3K-P7 REFRECTOR CERRADO, FOTOCELDA INDIVIDUAL, 120 V. INSTALADA EN BRAZO DE 4'-0". MONTADA EN POSTE OCTAGONAL DE CONCRETO, L33'. SEGUN PATRON STL-11. "FULL CUT-OFF".

IGUAL AL ANTERIOR PERO PERO INSTALADA EN POSTE DE HORMIGON DE 45'.

BALANCE DE CARGA				
No.	KVA	Ø A	Ø B	Ø C
T-1	50	50	–	–
T-2	50	50	–	–
T-3	50	50	–	–
T-4	75	75	–	–
T-5	50	–	50	–
T-6	50	–	50	–
T-7	75	–	75	–
T-8	75	–	75	–
T-9	50	–	–	50
T-10	50	–	–	50
T-11	50	–	–	50
T-12	50	–	–	50
Total KVA	675.0	225	250	200

Yo, Ing. Eduardo Chardon Casals, lo 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Código Eléctrico Nacional, Código Eléctrico de Seguridad, Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley Núm. 114 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada, Ley Núm. 96 de 26 de junio de 1978, según enmendada, según aplique. Finalmente, certifico que asumo la responsabilidad por todos los hechos que se haya producido por desconocimiento o por negligencia ya sea por mi, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

EDUARDO CHARDON CASALS
ELECTRICAL ENGINEERS
LIC. NO 15346

CERTIFICACIÓN DEL DISEÑADOR / DESIGNER'S CERTIFICATION

1. Certifico que soy ingeniero, agrimensor o arquitecto, licenciado y colegiado en cumplimiento con la Ley 173 de 1988, según enmendada, y estoy autorizado por el diseño del proyecto a presentar estos planos de construcción ante LUMA Energy como operador y administrador del Sistema de Transmisión y Distribución de la AEE. / I certify that I am a licensed and registered engineer, surveyor, or architect (in compliance with Act 173 of 1988, as amended) and authorized by the project or land owner to submit these construction plans to LUMA Energy as operator and administrator of the Transmission and Distribution System of the Puerto Rico Electric Power Authority.
2. En armonía con las disposiciones de la Ley Núm. 135 de 15 de junio de 1967, según enmendada, conocida como Ley del Certificación de Planos o Proyectos, certifico que preparé el diseño eléctrico de este proyecto en conformidad con los códigos, patronales, normas y reglamentos aprobados por la AEE, la Junta de Planificación y la Oficina de Gerencia de Permisos, Luma Energy y el Manual de Práctica Profesional del CIAPR. / In compliance with Act No.135 of July 15, 1967, as amended known as the "Construction Plans or Projects Certification Act", I certify that I prepared the electric design for this project in accordance with the codes, Standards, rules, and regulations approved by LUMA, Puerto Rico Planning Board and Permits Management Office and the CIAPR Professional Practice Manual.

FIRMA DEL DISEÑADOR / DESIGNER'S SIGNATURE

LUMA **ENDOSO / ENDORSEMENT**

Nombre del Proyecto / Project Name: URBANIZACION LADERAS DE PALMAS
Número de Proyecto / Project Number: 05-2-201 (23-2-0695)-R2
Carga / Load: (kVA): 675KVA Revisión / Revision:

ENDOSADO POR / ENDORSED BY

1. LUMA endosa el diseño eléctrico mostrado en estos planos de construcción basándose en la certificación sometida por el diseñador en cumplimiento con la Ley Núm. 135 del 15 de julio de 1967, según enmendada. / LUMA endorses the electric design shown in these construction plans based on the certification presented by the designer in compliance with Act 135 of July 15, 1967, as amended.
2. LUMA no asume responsabilidad sobre el diseño certificado. El endoso por parte de la LUMA no releva al diseñador de la responsabilidad profesional que asume al certificar estos planos. Este endoso no releva al constructor ni al inspector de obra privado de cumplir con las disposiciones del Código Eléctrico Nacional, Código Eléctrico de Seguridad, códigos, patronales, normas y reglamentos vigentes de LUMA y de otras agencias de gobierno, así como leyes federales y estatales, vigentes al inicio de las obras. / LUMA does no assume responsibility over the certified design. LUMA's endorsement does not relieve the designer from the professional responsibility assumed with the certification of these project's plans. This endorsement relieves neither the builder nor private inspector from compliance with standing dispositions form, National Electric Code, National Electric Safety Code, constructions standards, norms, and regulations from LUMA and other government agencies as well as federal and state laws ruling by the time construction begins.
3. El presente endoso tiene vigencia de un (1) año. De iniciar las obras eléctricas dentro de este término, mediando notificación previa a LUMA, el endoso mantendrá su vigencia hasta la terminación de las mismas. En caso de que no se certifique obra eléctrica en ese período, este endoso perderá su vigencia. Este endoso no es para constituir servidumbre ni para completar procesos de Cesión, Traspaso y Garantía del equipo. Para esto es necesario cumplir con todo lo dispuesto en el Reglamento de Servidumbres Para la Autoridad de Energía Eléctrica (7282 de 2007 / This endorsement is valid for one (1) year. If electrical works have begun during this year, with prior notification to LUMA, the endorsement will still be valid until work's completion. In case there is no certified electrical work during this period, this endorsement will lose its validity. This endorsement is not to constitute an easement or to complete the Assignment, Transfer and Guarantee process of the equipment. For this, it is necessary to comply with all the provisions of the Easement Regulation for the Electric Power Authority (7282 of 2007).

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE: NOTES, LEGEND & DIAGRAM

STATUS: ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.C.G. ENGINEERING CONSULTING GROUP, PSC AND HER CONSULTANTS AND IS ISSUED FOR THE PURPOSE AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REUSED, REPRODUCED OR CHANGED UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.A.C.G. UPON THE REQUEST BY THIS OFFICE.

J. C. A.	-
CONSULTA:	-
AAA NO.:	-
ACT NO.:	-
ARPE NO.:	-
D.A.T.E.	8/6/2023
S.C.A.L.E.	AS SHOWN
DRAWING.	1045+

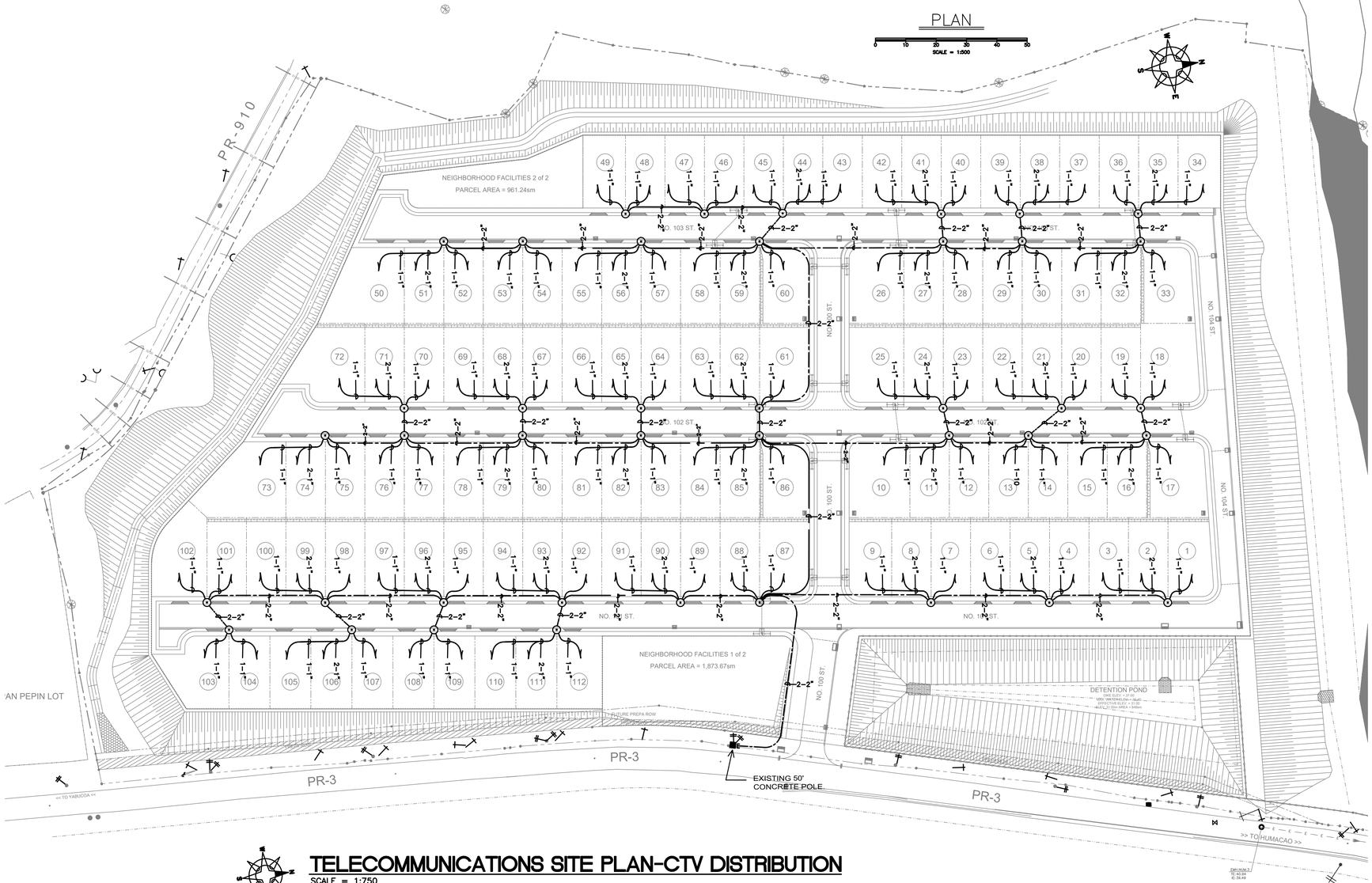
HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Antonio@hfengineer.com 145 LOMA DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T.787.707.8787 EXT. 8 M.787.615.1616 FAX EL CODEC 787.289 - 2OKOUTSIDE

PROJECT: LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: SE-3.0

SHEET NO: . TOTAL: .



TELECOMMUNICATIONS SITE PLAN-CTV DISTRIBUTION

SCALE = 1:750

LOCATION PLAN 1:20,000

COORDINATES
Y = 264733. 04, X = 231798. 37

OGPE : 2023-503622-SRI-073049

TELECOMMUNICATIONS SITE PLAN LEGEND:

- UNDERGROUND TELECOMMUNICATIONS CONDUIT AS PER THE TELEPHONE/CATV CONDUITS TRENCH DETAIL. SIZE & QTY. AS REQUIRED ON PLAN. WHERE EXPOSED TO PHYSICAL DAMAGE (I.E. CONDUII RISERS AI POLES), CONDUII SHALL BE RIGID STEEL GALVANIZED. WHERE TERMINATED AT POLES, INSTALL AS PER THE TYPICAL TELEPHONE/CATV POLE CONDUIT RISER DETAIL. VERIFY FINAL QUANTITY OF THESE CONDUITS WITH JRT PRIOR TO THE PROJECT'S START. PVC SDR SCH. 26. PROVIDE CONDUITS WITH 1/4"ø FISH NYLON ROPE AS REQUIRED BY JRT.
- 1 – 1" PVC SCH. 40, UNDERGROUND CABLE TV CONDUIT RUN TO THE HOUSE MAIN CABLE TV OUTLET BOX, AS PER THE TELEPHONE/CATV CONDUITS TRENCH DETAIL. PROVIDE CONDUITS W/ 1/8"ø FISH NYLON ROPE AS REQUIRED BY NETPR.
- DENOTES CABLE TV CONDUIT TERMINATED WITH CAP. VERIFY EXACT LOCATION WITH NETPR. AT HOUSES/LOTS, COORDINATE THE EXACT LOCATION AND WORK WITH THE HOUSE OWNER, ARCHITECT, AND NETPR.
- DENOTES NETPR RIGHT OF WAY FOR TELEPHONE AND CABLE TV CONDUITS. 5'–0" WIDE UNLESS OTHERWISE INDICATED ON PLANS.
- CATV DISTRIBUTION POINT, CONSISTING OF AREA WITHIN THE TELECOMMUNICATIONS RIGHT OF WAY STRIP, WHERE THE CATV CONDUITS ARE TO BE TERMINATED AND CAPPED, AS PER THE TELECOMMUNICATIONS DISTRIBUTION POINT DETAIL. THE REQUIRED CONDUITS SHALL BE AT 36" B.F.G. VERIFY THE EXACT AND FINAL LOCATION OF THESE AREAS WITH THE NETPR.

NOTE: COORDINATE TELECOMMUNICATIONS CONDUITS WORK WITH NETPR. EXACT ROUTE OF CONDUITS SHALL SHALL BE COORDINATED WITH NETPR IN ORDER TO AVOID THE INSTALLATION OF THE CONDUITS IN THE SAME TRENCH AS THE ELECTRICAL FACILITIES OR OTHER UTILITIES CONDUITS. TELEPHONE CONDUITS SHALL NOT RUN ABOVE THE ELECTRICAL CONDUITS, EXCEPT FOR PERPENDICULAR CROSSINGS. COORDINATE WORK WITH NETPR PRIOR TO THE PROJECT'S START.

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico que he leído y entiendo que estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

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TEL. 787-622-0882

NET NEGOCIADO de TELECOMUNICACIONES DE PUERTO RICO

Negociado de Telecomunicaciones de Puerto Rico

ENDOSO DE PLANOS DE FACILIDADES Y/O SERVIDUMBRE DE TELECOMUNICACIONES Y TELEVISIÓN POR CABLE

NÚMERO DE CASO NETPR 2023-RI-0329
NÚMERO DE CASO OGPE 2023-503622-SRI-073050

Revisado por: _____ Fecha _____

Aprobado por: _____ Fecha _____

ESTE ENDOSO NO EXIME AL CONSTRUCTOR Y AL DESARROLLADOR DE CUMPLIR CON LOS REQUERIMIENTOS DE CONSTRUCCIÓN CONFORME A TODAS LAS DISPOSICIONES DE LOS REGLAMENTOS APLICABLES.

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE: TELECOMMUNICATIONS SITE PLAN–CTV DISTRIBUTION

STATUS: ADVANCED DRAWINGS

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J. C. A.	-
CONSULT#:	-
AAA NO.:	-
ACT NO.:	-
APPE NO.:	-
D A T E:	5/8/2023
S C A L E:	AS SHOWN
DRAWING:	1045*

HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
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T: 787-707-1877 F: 787-725-5847 M: 787-397-6458 POSTAL ADDRESS: 425 CARR 693 - RIMI 398 - DORADO PR 00646

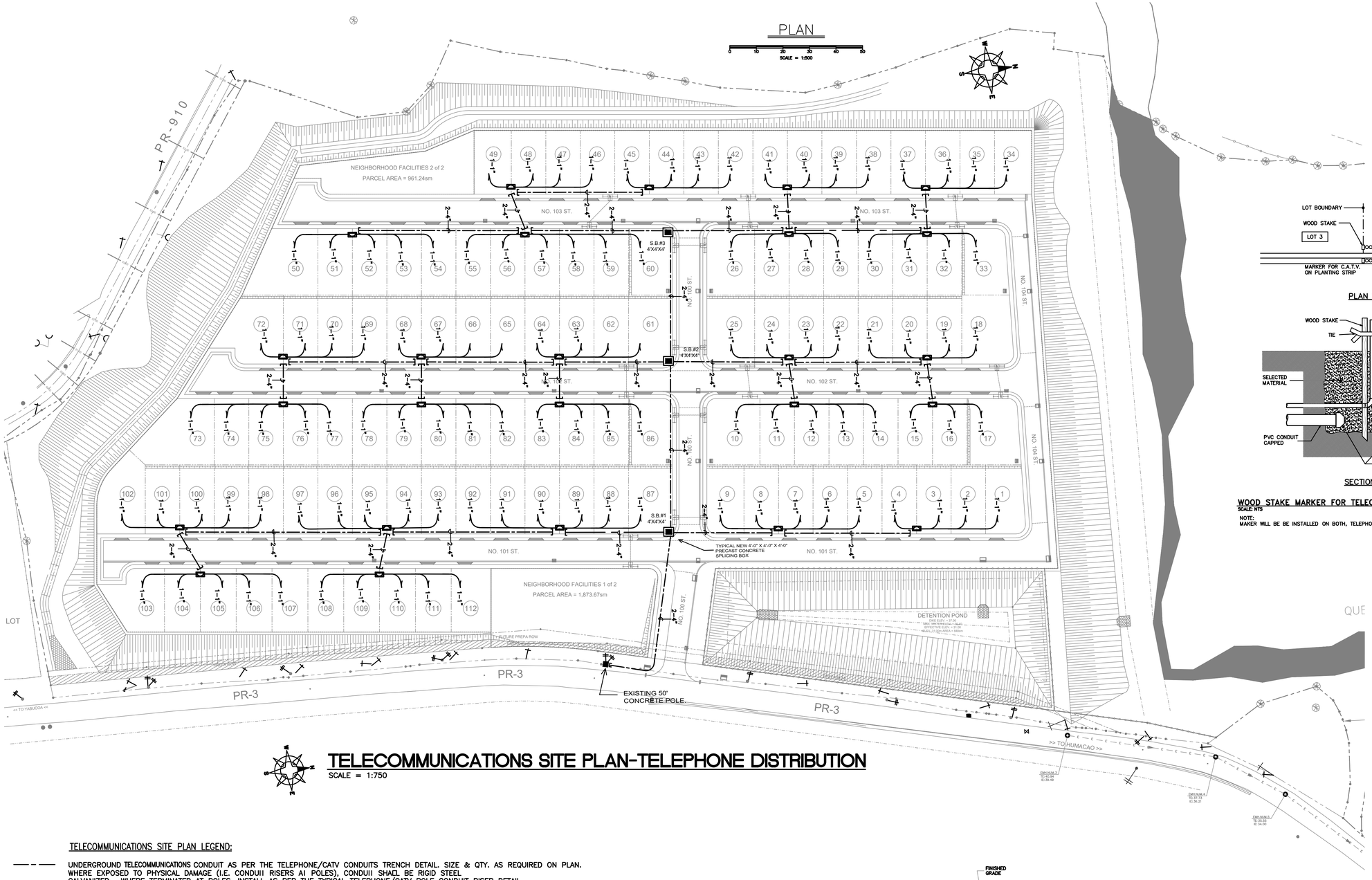
PROJECT: LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

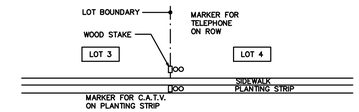
OWNER: LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: T–1.0

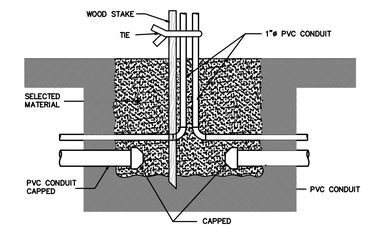
SHEET NO: .

TOTAL: .





PLAN VIEW



SECTION VIEW

WOOD STAKE MARKER FOR TELECOMMUNICATIONS DISTRIBUTION POINTS
SCALE NTS

NOTE:
MAKER WILL BE BE INSTALLED ON BOTH, TELEPHONE AND CATV. DISTRIBUTION PLAN.

TELECOMMUNICATIONS SITE PLAN-TELEPHONE DISTRIBUTION

SCALE = 1:750

TELECOMMUNICATIONS SITE PLAN LEGEND:

UNDERGROUND TELECOMMUNICATIONS CONDUIT AS PER THE TELEPHONE/CATV CONDUITS TRENCH DETAIL. SIZE & QTY. AS REQUIRED ON PLAN. WHERE EXPOSED TO PHYSICAL DAMAGE (I.E. CONDUII RISERS AI POLES), CONDUII SHAIL BE RIGID STEEL GALVANIZED. WHERE TERMINATED AT POLES, INSTALL AS PER THE TYPICAL TELEPHONE/CATV POLE CONDUIT RISER DETAIL. VERIFY FINAL QUANTITY OF THESE CONDUITS WITH JRT PRIOR TO THE PROJECT'S START. PVC SDR SCH. 26. PROVIDE CONDUITS WITH 1/4"ø FISH NYLON ROPE AS REQUIRED BY JRT.

CONCRETE SPLICE BOX, 7'-0" X 4'-6" X 4'-0" (INTERIOR DIMENSIONS), PRECAST, AS MANUFACTURED BY POWER POLES INC, PB-00, IN COMPLIANCE WITH THE JRT REQUIREMENTS. NUMBER DENOTES IDENTIFICATION. BOX COVERS TOP SHALL BE INSTALLED FLUSH W/ SIDEWALK, FREE OF DAMAGE AND SAFE TO PEDESTRIANS.

UNDERGROUND DISTRIBUTION BOX, 4'-0" X 4'-0" X 4'-0" (INTERIOR DIMENSIONS), PRECAST, AS MANUFACTURED BY POWER POLES INC, PB-01, IN COMPLIANCE WITH THE JRT REQUIREMENTS. NUMBER DENOTES IDENTIFICATION. INSTALL IN JRT RIGHT OF WAY PLANTING AREAS, W/ ITS COVER TOP AT 6" B.F.G.

30' CREOSOTED WOOD POLE FOR P.R. TELEPHONE COMPANY AND/OR CATV LINES. VERIFY EXACT LOCATION AND INSTALLATION REQUIREMENTS OF THIS POLES WITH NETPR.

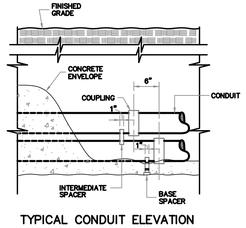
1 - 1" PVC SCH. 40, UNDERGROUND TELEPHONE CONDUIT RUN TO THE HOUSE MAIN TELEPHONE OUTLET BOX, AS PER THE TELEPHONE/CATV CONDUITS TRENCH DETAIL. PROVIDE CONDUITS W/ 1/8"ø FISH NYLON ROPE AS REQUIRED BY JRT.

DENOTES TELEPHONE CONDUIT TERMINATED WITH CAP. VERIFY EXACT LOCATION WITH NETPR. AT HOUSES/LOTS, COORDINATE THE EXACT LOCATION AND WORK WITH THE HOUSE OWNER, ARCHITECT, AND NETPR.

DENOTES NETPR RIGHT OF WAY FOR TELEPHONE AND CABLE TV CONDUITS. 5'-0" WIDE UNLESS OTHERWISE INDICATED ON PLANS.

TELEPHONE DISTRIBUTION POINT, CONSISTING OF AREA WITHIN THE TELECOMMUNICATIONS RIGHT OF WAY STRIP, WHERE THE TELEPHONE CONDUITS ARE TO BE TERMINATED AND CAPPED, AS PER THE TELECOMMUNICATIONS DISTRIBUTION POINT DETAIL. THE REQUIRED CONDUITS SHALL BE AT 36" B.F.G. VERIFY THE EXACT AND FINAL LOCATION OF THESE AREAS WITH THE NETPR.

NOTE: COORDINATE TELEPHONE CONDUITS WORK WITH NETPR. EXACT ROUTE OF CONDUITS SHALL SHALL BE COORDINATED WITH NETPR IN ORDER TO AVOID THE INSTALLATION OF THE CONDUITS IN THE SAME TRENCH AS THE ELECTRICAL FACILITIES OR OTHER UTILITIES CONDUITS. TELEPHONE CONDUITS SHALL NOT RUN ABOVE THE ELECTRICAL CONDUITS, EXCEPT FOR PERPENDICULAR CROSSINGS. COORDINATE WORK WITH JRT PRIOR TO THE PROJECT'S START.



TYPICAL CONDUIT ELEVATION

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada, Ley Núm. 96 de 6 de julio de 1978, según enmendada, según aplica en los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

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NET NEGOCIADO de TELECOMUNICACIONES DE PUERTO RICO

Negociado de Telecomunicaciones de Puerto Rico

ENDOSO DE PLANOS DE FACILIDADES Y/O SERVIDUMBRE DE TELECOMUNICACIONES Y TELEVISIÓN POR CABLE

NÚMERO DE CASO NETPR 2023-RI-0329
NÚMERO DE CASO OGPE 2023-503622-SRI-073050

Revisado por: _____ Fecha _____

Aprobado por: _____ Fecha _____

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SHEET TITLE:
TELECOMMUNICATIONS SITE PLAN-TELEPHONE DISTRIBUTION

J. C. A.	-
CONSULTA:	-
AAA NO.:	-
ACT NO.:	-
APPE NO.:	-
D A T E:	8/8/2023
S C A L E:	AS SHOWN
DRAWING:	1045*

STATUS:
ADVANCED DRAWINGS

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REVISIONS

NUMBER	DATE	BY	DESCRIPTION

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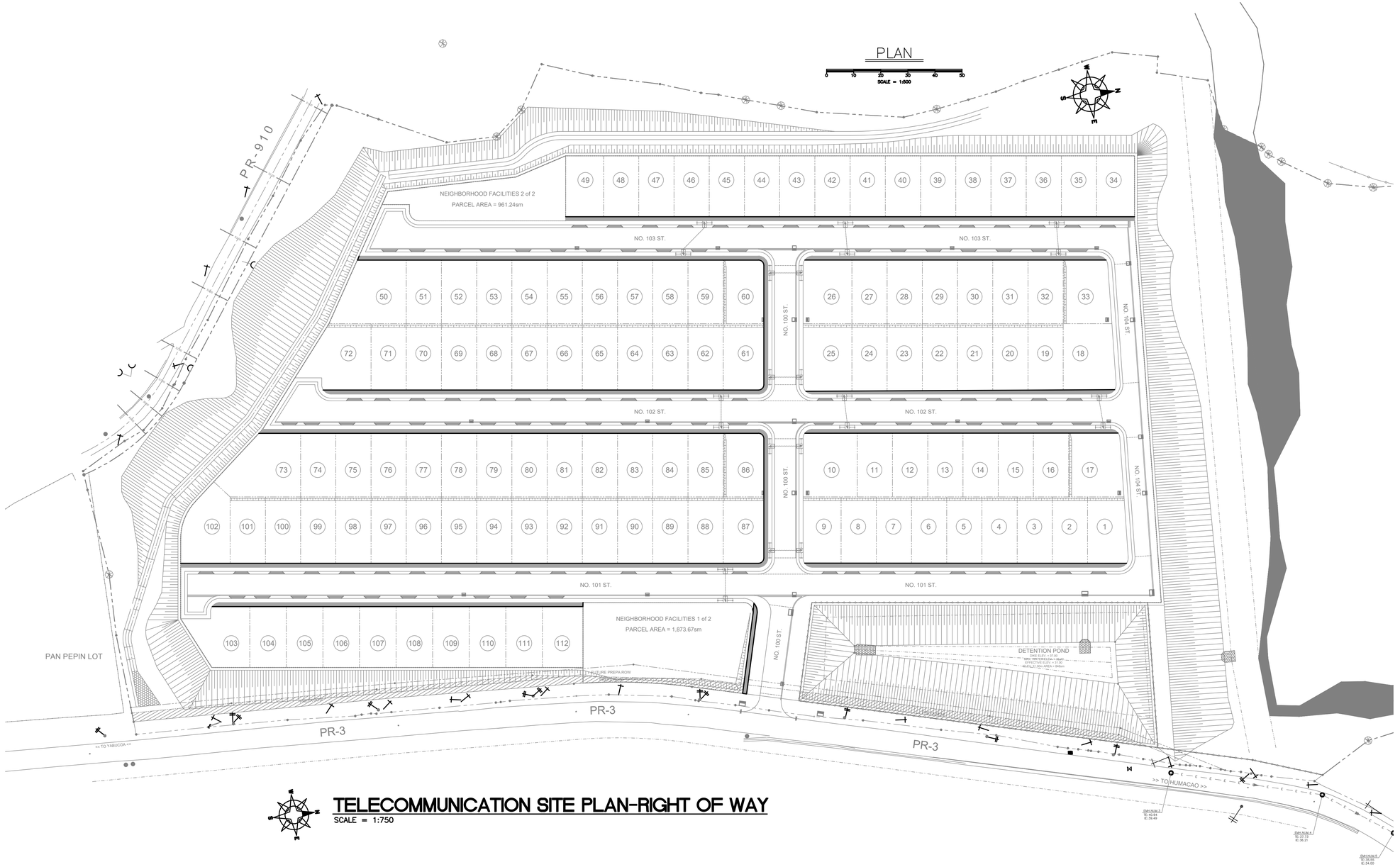
T: 787-707-2626 M: 787-381-6155 POSTAL ADDRESS: 425 CARR 183 - PMB 289 - GUAYNABO PR 00966

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
T-2.0

SHEET NO: .
TOTAL: .



TELECOMMUNICATION SITE PLAN-RIGHT OF WAY

SCALE = 1:750

TELECOMMUNICATIONS SITE PLAN LEGEND:

DENOTES NETPR RIGHT OF WAY FOR TELEPHONE AND CABLE TV CONDUITS. 5'-0" WIDE UNLESS OTHERWISE INDICATED ON PLANS.

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como "Ley para la Reforma Educativa de Puerto Rico" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada, Ley Núm. 96 de 6 de julio de 1978, según enmendada, según aplique] Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

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NET NEGOCIADO de TELECOMUNICACIONES DE PUERTO RICO

Negociado de Telecomunicaciones de Puerto Rico

ENDOSO DE PLANOS DE FACILIDADES Y/O SERVIDUMBRE DE TELECOMUNICACIONES Y TELEVISIÓN POR CABLE

NÚMERO DE CASO NETPR 2023-RI-0329

NÚMERO DE CASO OGPE 2023-503622-SRI-073050

Revisado por: _____ Fecha _____

Aprobado por: _____ Fecha _____

ESTE ENDOSO NO EXIME AL CONSTRUCTOR Y AL DESARROLLADOR DE CUMPLIR CON LOS REQUERIMIENTOS DE CONSTRUCCIÓN CONFORME A TODAS LAS DISPOSICIONES DE LOS REGLAMENTOS APLICABLES.

SHEET TITLE: TELECOMMUNICATIONS–RIGHT OF WAY

STATUS: ADVANCED DRAWINGS

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J. C. A.	-
CONSULTA:	-
AAA NO.:	-
ACT NO.:	-
APPR. NO:	-
D. A. T. E:	8/8/2023
S C A L E	AS SHOWN
DRAWING:	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

ANTONIO F. HERNANDEZ-CRUZ, PE
PE-19,525-PR

HF ENGINEERING CONSULTING GROUP, PSC
Antonio.hernandez@hfegroup.com 1-A5 LOMAS SUR / 787 SAN ANTONIO AVE. ~ SAN JUAN PR 00921
1-(787) 407-7777 EXT 4 & 1-787-510-4118 POSTAL ADDRESS: PO BOX 363846 ~ SAN JUAN PR 00936-3846

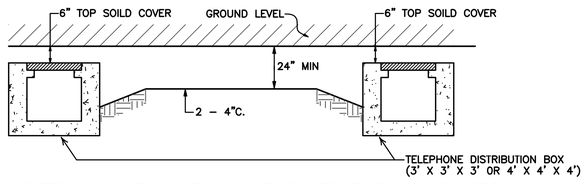
PROJECT: LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: T–3.0

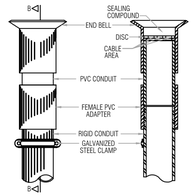
SHEET NO: .

TOTAL: .



DETAIL INSTALLATION OF DISTRIBUTION BOXES AND CONDUIT BETWEEN THEM

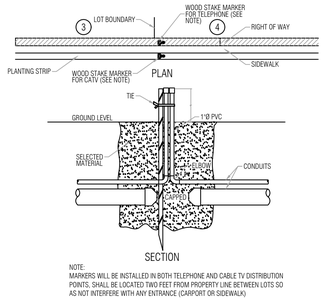
SCALE: N.T.S.



ELEVATION SECTION B-B

SEALED CONDUIT DETAIL

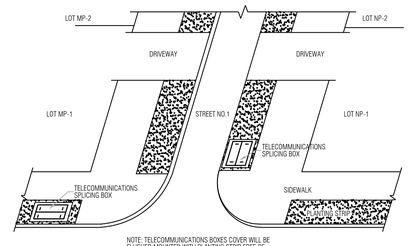
NOT TO SCALE



NOTE:
MARKERS WILL BE INSTALLED IN BOTH TELEPHONE AND CABLE TV DISTRIBUTION POINTS, SHALL BE LOCATED TWO FEET FROM PROPERTY LINE BETWEEN LOTS SO AS NOT INTERFERE WITH ANY ENTRANCE (CARPORT OR SIDEWALK)

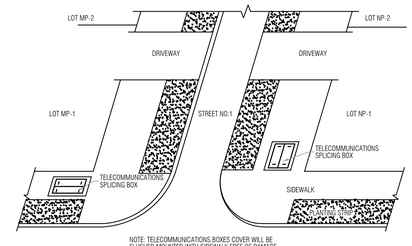
WOOD STAKE MARKER

NOT TO SCALE



NOTE: TELECOMMUNICATIONS BOXES COVER WILL BE FLUSHED MOUNTED WITH PLANTING STRIP FREE OF DAMAGE AND SECURE TO PEDESTRIANS.

PLANTING STRIP LOCATION

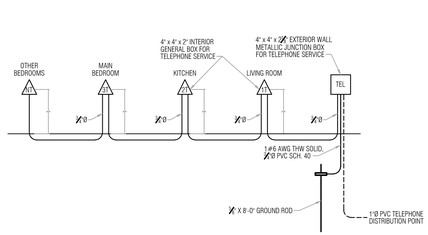


NOTE: TELECOMMUNICATIONS BOXES COVER WILL BE FLUSHED MOUNTED WITH SIDEWALK FREE OF DAMAGE AND SECURE TO PEDESTRIANS.

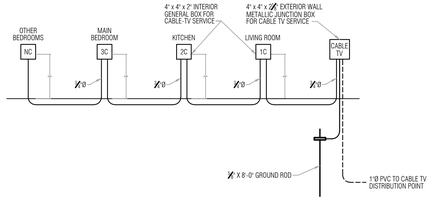
SIDEWALK LOCATION

TELECOMMUNICATIONS SPLICING BOXES LOCATION DETAIL

NOT TO SCALE



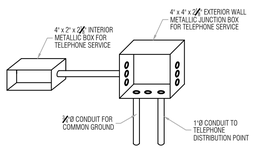
TELEPHONE

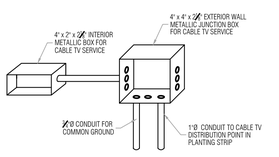


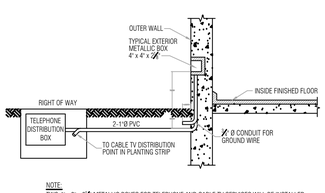
CABLE T.V.

TELEPHONE & CABLE T.V. ONELINE DIAGRAMS

NOT TO SCALE



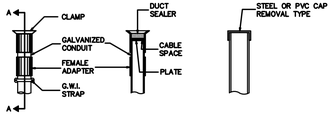




NOTE:
TWO 4" x 2" x ¾" METALLIC BOXES FOR TELEPHONE AND CABLE TV SERVICES WILL BE INSTALLED IN EACH BEDROOM, KITCHEN AND LIVING ROOM, CONNECTED TO THE CORRESPONDING SYSTEM WITH ¾" Ø CONDUITS.

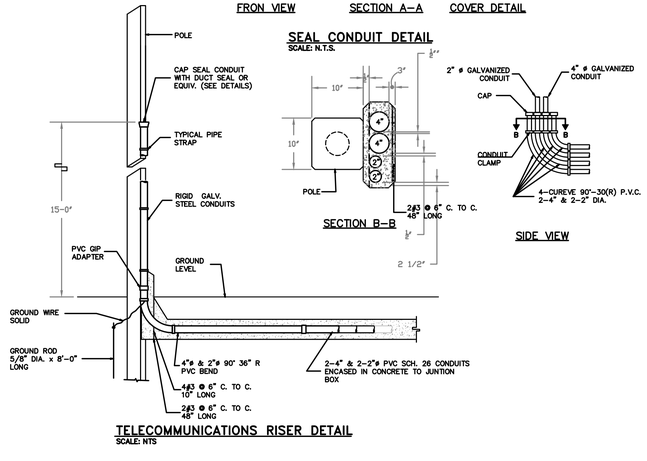
METALLIC BOXES & INDIVIDUAL CONDUITS DETAILS

NOT TO SCALE



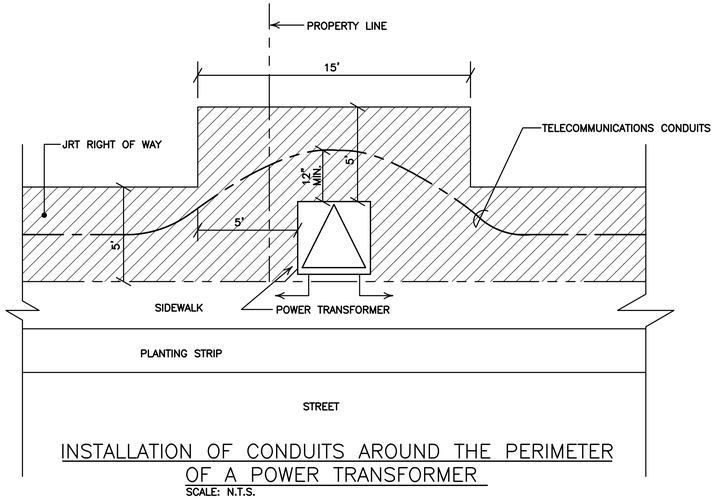
SEAL CONDUIT DETAIL

SCALE: N.T.S.



TELECOMMUNICATIONS RISER DETAIL

SCALE: NTS



INSTALLATION OF CONDUITS AROUND THE PERIMETER OF A POWER TRANSFORMER

SCALE: N.T.S.

GENERAL NOTES:

1. THE DEVELOPER, OR IT'S REPRESENTATIVES SHALL SUPPLY AND INSTALL ALL THE MATERIALS REQUIRED FOR THE TELECOMMUNICATIONS INFRASTRUCTURE, INCLUDING BUT NOT LIMITED TO 1", 2" AND 4" DIAMETER CONDUITS SHOWN ON THE PRINTS.
2. THE 1"Ø CONDUITS SHALL BE PVC SCH 40 RODDED WITH ¼" Ø NYLON ROPE WITH A MINIMUM PULLING STRENGTH OF 300 LB.
3. THE 2"Ø PVC CONDUIT (FOR CATV DISTRIBUTION FACILITIES) AND THE 4"Ø (FOR TELEPHONE DISTRIBUTION FACILITIES) SHALL BE INSTALLED IN THE TELECOMMUNICATIONS EASEMENT. 2"Ø CONDUITS SHALL BE INSTALLED ON THE SIDEWALK SIDE OF THE TRENCH AND 4"Ø ON THE FARTHERMOST SIDE OF THE TRENCH FROM THE SIDEWALK (SEE EASEMENT CONDUIT INSTALLATION DETAIL).
4. 2"Ø AND 4"Ø CONDUITS SHALL BE SCH 40 (MINIMUM) RODDED WITH ¼"Ø NYLON ROPE WITH A MINIMUM BREAKING STRENGTH OF 500 LBS. AND SHALL BE TESTED WITH ½" AND ¾" MANDRELS, RESPECTIVELY.
5. ALL CONDUIT ENDS SHALL BE CAPPED WITH PVC END CAPS.
6. THE MINIMUM DEPTH OF THE CONDUITS PLACED ALONG THE EASEMENT AND SERVICE CONDUITS TO EACH RESIDENCE SHALL BE:
   1"Ø CONDUITS: 14" BELOW GROUND LEVEL
   2"Ø CONDUITS: 24" BELOW GROUND LEVEL
   4"Ø CONDUITS: 24" BELOW GROUND LEVEL
7. WHEN CONDUITS ARE INSTALLED ON CONCRETE ENCASE PLASTIC SPACERS SHALL BE INSTALLED EVERY SIX FEET (6') OR AS SPECIFIED BY THE MANUFACTURER IN ORDER TO MAINTAIN THE PROPER CONDUIT RUN FORMATION AND SEPARATION.
8. WHEN EXPOSED TO VEHICULAR TRAFFIC (HIGHWAYS, STREETS, CARPORT CROSSINGS AND PARKING AREAS), CONDUITS WILL BE INSTALLED AT DEPTHS BETWEEN 30" AND 36" MEASURED FROM PAVEMENT SURFACES AND SHALL BE ENCASED IN CONCRETE WITH A 3,000 LBS PER SQUARE INCH (3000 PSI) MINIMUM RESISTANCE.
9. TRENCH BACKFILLING SHALL BE MADE WITH SELECTED MATERIAL FREE OF LARGE STONES AND OTHER CONTAMINANTS, SUCH AS SCRAPS OF WOOD, ASPHALT, CONCRETE PAVEMENT, ETC. BACKFILL SHALL BE COMPACTED TO 95% IN SIX INCHES (6") LAYERS BY MEANS OF A TAMPER, WITH THE FIRST TWELVE INCHES (12") TAMPED USING LIGHTWEIGHT EQUIPMENT.
10. INSTALL A SIX INCH (6") WIDE ORANGE WARNING RIBBON (EQUAL OR SIMILAR TO TERRA TAPE IN 42-0007), AT A DEPTH OF TWELVE INCHES (12") BELOW GROUND LEVEL ABOVE THE CONDUITS, AND ALONG THE WHOLE CONDUIT RUN.
11. THE DEVELOPER, OR IT'S REPRESENTATIVES SHALL CLEARLY IDENTIFY ALL CONDUIT ENDS (INCLUDING, BUT NOT LIMITED TO DISTRIBUTION POINTS, SERVICE CONDUITS), WHEN SPLICING OR DISTRIBUTION BOXES HAVE NOT BEEN SPECIFIED OR RECOMMENDED. SEE WOOD STAKE DETAIL.
12. 2"Ø AND 4"Ø CONDUIT BENDS SHALL NOT BE LESS THAN 90° AND SHALL HAVE A MINIMUM RADIUS OF 36". CONDUITS SHALL BE LIMITED TO TWO (2) 90° SWEEPING BENDS IN A CONDUIT SECTION.
13. GENERALLY, DISTRIBUTION BOXES WILL BE 3' x 3' x 3', 4' x 4' x 4', AS WELL AS 6' x 6' x 4', AND/OR 7' x 4'-6" X 4'. SPLICE BOXES WILL BE INSTALLED FOR TELECOMMUNICATIONS SERVICES AS INDICATED ON PRINTS. THESE BOXES WILL BE LOCATED IN AREAS NOT EXPOSED TO VEHICULAR TRAFFIC AND SHOULD BE DESIGNED TO RESIST INCIDENTAL TRAFFIC. IF BOXES WILL BE EXPOSED TO VEHICULAR TRAFFIC, A MANHOLE OR SPECIAL BOX DESIGNED FOR THAT APPLICATION SHOULD BE INSTALLED WITH THE CAPACITY TO AVOID ANY DEFORMATION OR COLLAPSE OF IT'S ENTRANCE COVER. SIMILAR OR EQUAL TO POWER POLES MH 6' x 6' x 7'.
14. DISTRIBUTION POINTS OR BOXES SHALL BE PLACED IN EASEMENTS LOCATED TWO FEET FROM THE PROPERTY LINE BETWEEN LOTS WITHOUT INTERFERING WITH ANY ENTRANCE (CARPORT OR SIDEWALK).
15. DISTRIBUTION BOXES AND SPLICE BOXES SHALL BE:
   A. PREFABRICATED WITH STEEL REINFORCED CONCRETE (EQUAL OR SIMILAR TO POWER POLES INC.)
   B. CAST IN PLACE WITH STEEL REINFORCED CONCRETE.
   C. PREFABRICATED POLYMER CONCRETE BOX EQUAL OR SIMILAR TO QUAZITE® 17" x 30" x 18" (MAXIMUM SIZE ALLOWED) ONLY WILL BE ACCEPTED FOR CABLE TV APPLICATION IN AREAS WITH SPACE PROBLEM.
   NOTE: ANY CHANGE IN THE TYPE OF BOXES TO BE USED WILL REQUIRE THE APPROVAL OF NETPR BEFORE THEIR INSTALLATION.
16. ALL CONDUITS, WHETHER OR NOT IN USE, SHALL BE SEALED IN DISTRIBUTION BOXES, SPLICE BOXES, AND BUILDING'S TELECOMMUNICATION CABINET USING A DUCT SEALER (EQUAL OR SIMILAR TO 3M® 4414 DUCT SEALING KIT).
17. 2"Ø CONDUITS FOR CABLE TELEVISION (CATV) DISTRIBUTION FACILITIES IN RESIDENTIAL PROJECTS, OF SINGLE FAMILY UNIT HOMES, ROW HOUSES, PATIO HOUSES, ETC., SHALL NOT BE TERMINATED AT TELECOMMUNICATIONS DISTRIBUTION BOXES. THESE CONDUITS, AS WELL AS THE 1"Ø CONDUITS FOR CATV SERVICE DROPS, SHALL BE END CAPPED AND LEFT AT CATV DISTRIBUTION POINTS LOCATED IN THE PLANTING STRIP (GENERALLY NEXT TO LIGHT POSTS) AS INDICATED ON PRINTS.
18. EXTERIOR METALLIC BOXES OF 4" x 4" x 2" (MIN.) FOR TELECOMMUNICATIONS SERVICE DROPS (TELEPHONE AND CATV), WILL BE INSTALLED ON ONE OF THE LIVING UNITS WALLS CONVENIENTLY LOCATED SO AS TO PROVIDE EASY UNOBSTRUCTED ACCESS.
19. THE CONDUIT THROUGH WHICH THE GROUND WIRE FOR EXTERIOR SERVICE DROP METALLIC BOXES WILL BE INSTALLED, SHALL COME OUT FROM THE LIVING UNIT WALL AT A DEPTH OF SIX INCHES (6") BELOW GROUND LEVEL.
20. TELECOMMUNICATIONS SERVICE DROPS ELECTRICAL GROUNDING WILL BE ACHIEVED WITH THE NECESSARY 8' x 5/8" COPPER WELDED GROUND RODS INSTALLED BY THE TELECOMMUNICATIONS SERVICE PROVIDER AND MUST COMPLY WITH THE CURRENT NATIONAL ELECTRIC CODE.
21. ALL TELECOMMUNICATIONS SYSTEMS (TELEPHONE AND CATV) SHALL BE BONDED AND GROUNDED AT ALL POINTS AND MUST COMPLY WITH THE CURRENT NATIONAL ELECTRIC CODE.
22. NO MORE THAN TWO 90° BENDS SHALL BE ALLOWED IN CONDUITS CONNECTING THE EXTERIOR METALLIC BOXES FOR SERVICE DROP AND INTERIOR SERVICE BOXES.
23. ALL INTERIOR RESIDENTIAL TELECOMMUNICATIONS SERVICE DISTRIBUTION CONDUITS SHALL HAVE A MINIMUM OF ½"Ø INSIDE, AND EACH LIVING UNIT SHALL BE PROVIDED WITH TELECOMMUNICATIONS SERVICES (TELEPHONE AND CATV) OUTLETS IN THE KITCHEN, LIVING ROOM AND EACH OF THE BEDROOMS.
24. AT WALK-UPS AND MULTI-STORY RESIDENTIAL BUILDINGS THE MINIMUM SIZE FOR TELECOMMUNICATIONS CABINETS WILL BE 36" x 24" x 6" FOR TELEPHONE AND 36" x 6" FOR CATV, AND WILL SERVE NO MORE THAN 16 UNITS. CABINETS SHALL BE EQUIPPED WITH A ½" THICK TREATED PLYWOOD BACKBOARD, A HINGED DOOR WITH LATCH AND KEY, AND WILL HAVE COMPLETE FRONT ACCESS. CABINETS WILL ALSO PROVIDE FOR PROPER BONDING AND GROUNDING OF TELECOMMUNICATIONS FACILITIES AND MUST COMPLY WITH THE CURRENT NATIONAL ELECTRIC CODE.
25. WALK-UP PROJECTS WILL HAVE INDEPENDENT TELECOMMUNICATIONS CABINETS FOR TELEPHONE AND CATV SERVICES. THE TELEPHONE CABINET WILL BE CONNECTED TO THE NEAREST SPLICING BOX BY MEANS OF 2-2"Ø PVC CONDUITS. THE CATV CABINET WILL BE CONNECTED TO THE NEAREST SPLICING BOX OR THE NEAREST CATV CABINET (IN THE NEXT BUILDING) DEPENDING ON THE LOOP DESIGN SPECIFIED BOX, OR THE NEAREST CATV CABINET (IN THE NEXT BUILDING), DEPENDING ON THE LOOP DESIGN SPECIFIED ON THE DRAWINGS BY MEANS OF 2-2"Ø PVC CONDUITS. MINIMUM SIZE OF THE SPLICE BOX SHALL BE 3' x 4'-6" x 4' AND MAY BE JOINTLY USED FOR TELEPHONE AND CATV SERVICES.
26. RESIDENTIAL BUILDINGS (MULTI-STORY APARTMENT BUILDINGS, OTHER THAN WALK-UPS, HIGH-RISE CONDOMINIUMS, ETC.) SHALL HAVE INDEPENDENT MAIN DISTRIBUTION CABINETS FOR TELEPHONE AND CATV SERVICES. MAIN DISTRIBUTION CABINETS, GENERALLY CONSISTING OF 8' x 4' x ¾" FIRE-RETARDANT PLYWOOD PANEL OR 8' x 4' x ¾" TREATED PLYWOOD PANEL, PAINTED WITH TWO COATS OF FIRE RETARDANT PAINT, WILL BE PLACED IN A TELECOMMUNICATIONS CLOSET OR ROOM. MAIN DISTRIBUTION PANELS FOR TELEPHONE AND CATV SERVICES SHALL BE CONNECTED VERTICALLY TO OTHERS DISTRIBUTION CABINETS (EACH SERVING A MAXIMUM OF 16 UNITS) BY MEANS OF 2-4"Ø AND 2-2"Ø PVC CONDUITS RESPECTIVELY.
27. EACH CABINET, OR PANEL SHALL ALSO PROVIDE PROPER BONDING AND GROUNDING OF TELECOMMUNICATIONS FACILITIES WITH A GROUND BAR, GROUND WIRE, AND CONNECTED TO A 8' x ⅝" COPPER WELD GROUND ROD SYSTEM AND MUST COMPLY WITH THE CURRENT NATIONAL NATIONAL ELECTRIC CODE. THIS WILL BE A DEVELOPER'S RESPONSIBILITY.
28. EVERY APARTMENT SHALL BE CONNECTED TO EACH OF THEIR CORRESPONDING DISTRIBUTION CABINETS (TELEPHONE AND CATV) BY MEANS OF 1- 1"Ø CONDUIT.
29. ENTRANCE FACILITIES FOR RESIDENTIAL BUILDINGS SHALL CONSIST OF A MINIMUM OF 2-4"Ø PVC CONDUITS FOR TELEPHONE SERVICE, AND 2-2"Ø PVC CONDUITS FOR CATV SERVICE. CONDUITS SHALL CONNECT THE MAIN DISTRIBUTION CABINETS AND THE DESIGNATED BUILDING TELECOMMUNICATIONS POINT OF CONNECTION. WHEN THE BUILDING'S TELECOMMUNICATIONS POINT OF CONNECTION IS A SPLICE BOX, IT SHALL HAVE A MINIMUM SIZE OF 7' x 4'-6" x 4' AND MAY BE JOINTLY USED FOR TELEPHONE AND CATV SERVICES.

SPECIAL NOTES:

30. IN COMPLIANCE WITH SECTION 19.04 OF PUERTO RICO PLANNING BOARD'S "REGLAMENTO DE LOTIFICACIÓN Y URBANIZACIÓN (REGLAMENTO DE PLANIFICACIÓN 3) REVISADO", THE DEVELOPER SHALL TRANSFER TO PUERTO RICO'S TELECOMMUNICATIONS DEPARTMENT (NETPR), THE RIGHT OF WAY DEPICTED ON THESE DRAWINGS REQUIRED TO PROVIDE TELECOMMUNICATIONS SERVICES (TELEPHONE AND CATV) TO THIS PROJECT BY MEANS OF A PUBLIC DEED.
31. THE PUERTO RICO TELECOMMUNICATIONS DEPARTMENT (NETPR) MAY ISSUE PARTIAL ENDORSEMENTS FOR SINGLE FAMILY RESIDENTIAL PROJECTS (SINGLE FAMILY HOMES, ROW HOUSES, TOWNHOUSES, PATIO HOUSES, ETC.) SO THAT THE DEVELOPER CAN DELIVER PORTIONS OF THE PROJECT AS THEY ARE COMPLETED, ONCE THE PROJECT IS COMPLETED, THE DEVELOPER SHALL COMPLY WITH THE PROCEDURES SPECIFIED IN SECTION 5.02.6 OF THE NETPR "REGLAMENTO PARA ENDOSOS DE SERVIDUMBRES E INFRAESTRUCTURA" RELATED TO OBTAIN THE FINAL ENDORSEMENTS.
32. THE DEVELOPER SHALL ALLOW TELECOMMUNICATIONS SERVICE PROVIDERS (TELEPHONE AND CATV) AUTHORIZED BY THE NETPR TO PROVIDE SAID SERVICES, TO INSTALL THEIR DISTRIBUTION FACILITIES IN A COORDINATED AND ORDERLY MANNER IN THOSE PORTIONS OF THE PROJECT FOR WHICH A PARTIAL ENDORSEMENT HAS BEEN ISSUED.
33. THE DEVELOPER SHALL COORDINATE WITH TELECOMMUNICATIONS SERVICE PROVIDERS (TELEPHONE AND CATV) AND LUMA PUERTO RICO THE INSTALLATION OR CONNECTION OF RISERS, CONDUITS OR ANY ACTION TO ACCESS TO THEIR FACILITIES.
34. THE DEVELOPER SHALL COORDINATE WITH THE TELECOMMUNICATIONS SERVICE PROVIDERS (TELEPHONE AND CATV) AND WITH ANY OTHER PUBLIC OR PRIVATE ORGANIZATION WHOSE FACILITIES ARE AFFECTED BY THE CONSTRUCTION OF THE PROJECT, THE REMOVAL, RELOCATION AND/OR MODIFICATIONS OF ANY EXISTING INFRASTRUCTURE.
35. THE DEVELOPER SHALL ASSIGN AN ENGINEER OR ARCHITECT TO INSPECT AND CERTIFY THAT THE CONSTRUCTION JOBS WERE PERFORMED AND COMPLETED AS THE ENDORSED DRAWINGS BY THE PUERTO RICO TELECOMMUNICATIONS DEPARTMENT (NETPR). FOR THAT PROCESS WILL USE FORM NETPR F-102 AND SUBMIT TO NETPR AND OBTAIN THEIR APPROVAL BEFORE APPLYING FOR THE USAGE PERMIT AT THE OFFICE OF MANAGEMENT AND PERMITS (OGPe).
36. COMMERCIAL BUILDINGS WILL REQUIRE TWO (2) MAIN DISTRIBUTION CABINETS OR PANELS FOR THE RESPECTIVE TELEPHONE AND CATV SERVICES. A TELECOMMUNICATIONS ROOM OR AREA WILL BE DESIGNATED TO PLACE THEM AND THEY MUST COMPLY WITH ONE OF THE SPECIFICATIONS DESCRIBED BELOW:
   A. TREATED WOOD PANEL 4' x 8' x ¾" (DOUBLE COATED WITH WHITE FIRE RETARDANT PAINT).
   B. TELEPHONE METAL CABINET 36" x 24" x 6" (MIN.) AND CATV 36" x 30" x 6", BOTH CABINETS SHALL BE EQUIPPED WITH A ½" THICK TREATED PLYWOOD BACKBOARD, A HINGED DOOR WITH LATCH AND KEY, AND SHALL HAVE COMPLETE FRONTAL ACCESS.

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiones aplicables de los Reglamentos y Codigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción científico, además, que en la preparación de estos planos y especificaciones no he incurrido en conducta prohibida en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la (Ley Núm. 319 de 15 de mayo de 1938, según enmendada, Ley Núm 96 de 6 de julio de 1978, según enmendada, según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi autorización seré responsable de cualquier acción judicial y disciplinara por la OGPe.

EDUARDO CHARDON CASALS
ELECTRICAL ENGINEERS
LIC. NO 15346
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CELL. 787-529-4888

NET NEGOCIADO de TELECOMUNICACIONES DE PUERTO RICO

Negociado de Telecomunicaciones de Puerto Rico

ENDOSO DE PLANOS DE FACILIDADES Y/O SERVIDUMBRE DE TELECOMUNICACIONES Y TELEVISIÓN POR CABLE

NÚMERO DE CASO NETPR 2023-RI-0329
NÚMERO DE CASO OGPE 2023-503622-SRI-073050

Revisado por: _____ Fecha _____

Aprobado por: _____ Fecha _____

ESTE ENDOSO NO EXIME AL CONSTRUCTOR Y AL DESARROLLADOR DE CUMPLIR CON LOS REQUERIMIENTOS DE CONSTRUCCIÓN CONFORME A TODAS LAS DISPOSICIONES DE LOS REGLAMENTOS APLICABLES.

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE: TELECOMMUNICATIONS–NOTES AND DETAILS

STATUS: ADVANCED DRAWINGS

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DRAWING:	1045*

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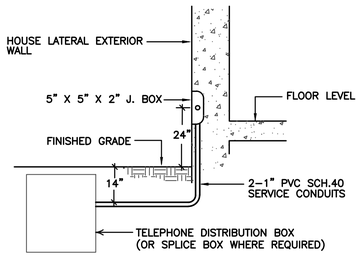
CAÑAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919–2484

SHEET IDENTIFICATION: T–4.0

SHEET NO: .

TOTAL: .



TYPICAL TELEPHONE HOUSE SERVICE JUNCTION BOX GENERAL INSTALLATION DETAILS

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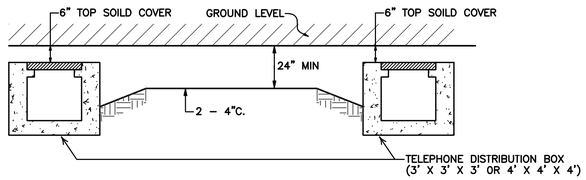

DETAIL INSTALLATION OF DISTRIBUTION BOXES AND CONDUIT BETWEEN THEM

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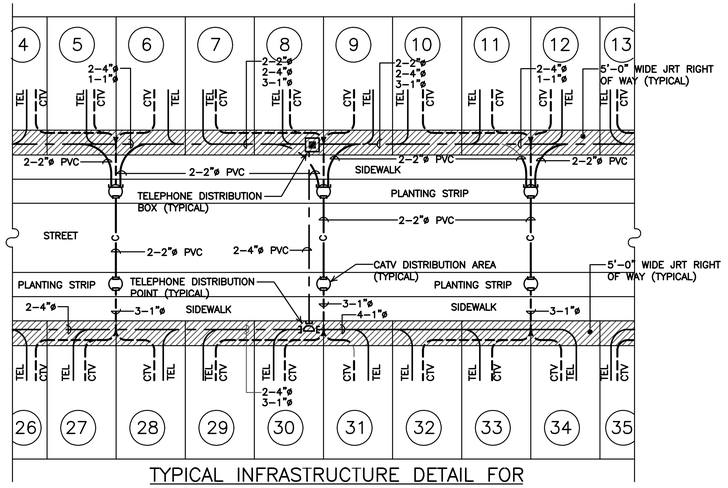

TYPICAL INFRASTRUCTURE DETAIL FOR TELEPHONE & CATV DISTRIBUTION

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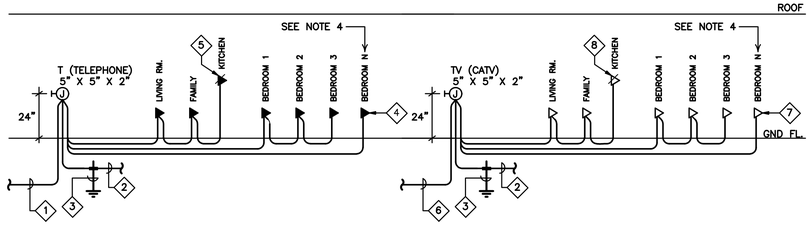
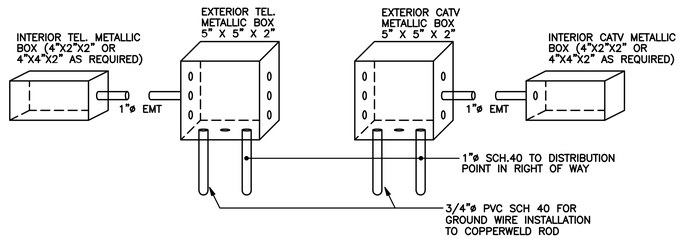


NOTES:
1. UNLESS OTHERWISE INDICATED, ALL CONDUITS SHALL BE 3/4" W/ A 1/8" NYLON FISH ROPE. THERE SHALL BE NOT MORE THAN 2 – 90° ELBOWS ALONG ANY CONDUIT RUN BETWEEN OUTLETS/PANELS BOXES.
2. THE MAXIMUM NO. OF OUTLETS TO BE CONNECTED TO A COMMON CONDUIT RUN TO THE SERVICE JUNCTION BOX (OR COMMUNICATIONS PANEL WHERE APPLICABLE), SHALL NOT EXCEED 5. CONDUITS SERVING 4 OR MORE OUTLETS SHALL BE 1".
3. REFER TO THE HOUSE INTERIOR DRAWINGS FOR THE EXACT QUANTITY AND INTERCONNECTION LAYOUT/REQUIREMENTS OF THE TELEPHONE/CATV OUTLETS.
4. DENOTES OUTLETS FOR EVERY OTHER HOUSE BEDROOM TO BE INTERCONNECTED THE SAME WAY AS SHOWN FOR THE OTHER OUTLETS.

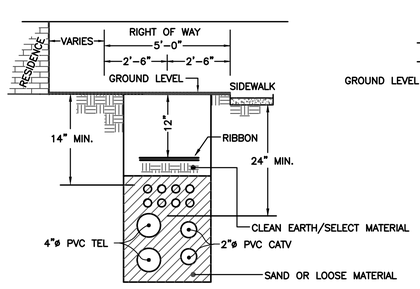
1. 1 – 1" PVC SCH. 40 W/ 1/8" NYLON FISH ROPE TO THE JRT TELEPHONE FACILITIES AT THE PROPERTY ENTRANCE. COORDINATE WORK AND POINT OF CONNECTION LOCATION W/ JRT AND TELEPHONE DISTRIBUTION SITE PLANS. INSTALL UNDERGROUND AS PER THE TELEPHONE CONDUITS TRENCH DETAIL.
2. #6 AWG GROUND CONDUCTOR IN 3/4" C. TO THE GROUND ROD AND POWER SYSTEM GROUND
3. 5/8" X 8'–0" COPPER CLAD GROUND ROD
4. TYPICAL TELEPHONE OUTLET BOX AT 18" A.F.F. 4" X 4" X 2".
5. TYPICAL TELEPHONE OUTLET BOX AT 6" ABOVE COUNTERTOP. 4" X 4" X 2".
6. 1 – 1" PVC SCH. 40 W/ 1/8" NYLON FISH ROPE TO THE CORRESPONDING JRT CABLE TV FACILITIES ADJACENT TO THE PROPERTY ENTRANCE. COORDINATE WORK AND POINT OF CONNECTION LOCATION W/ THE JRT AND CABLE TV SITE PLANS. INSTALL UNDERGROUND AS PER THE CABLE TV CONDUITS TRENCH DETAIL.
7. TYPICAL CABLE TV OUTLET BOX AT 18" A.F.F. 4" X 4" X 2".
8. TYPICAL CABLE TV OUTLET BOX AT 6" ABOVE COUNTERTOP. 4" X 4" X 2".

TYPICAL DWELLING UNIT TELEPHONE SYSTEM RISER DIAGRAM



TYPICAL DETAIL RESIDENTIAL METALLIC BOXES

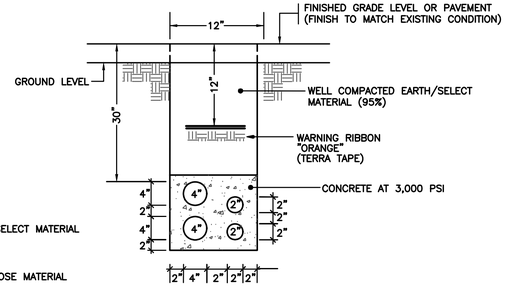
SCALE: N.T.S.



NOTE: FOR THE EXACT AMOUNT OF REQUIRED CONDUITS, REFER TO THE CORRESPONDING TELEPHONE AND CABLE TV DISTRIBUTION SITE PLANS

DETAIL OF CONDUITS TRENCH ON RIGHT OF WAY

SCALE: N.T.S.



NOTE: FOR THE EXACT AMOUNT OF REQUIRED CONDUITS, REFER TO THE CORRESPONDING TELEPHONE AND CABLE TV DISTRIBUTION SITE PLAN

CONDUITS TRENCH DETAIL UNDER STREET CROSSING

SCALE: N.T.S.

GENERAL NOTES

1. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL THE MATERIALS NECESSARY FOR THE TELECOMMUNICATIONS INFRASTRUCTURE INCLUDING BUT NOT LIMITED TO THE 1", 2" AND 4" DIAMETER CONDUITS INDICATED ON THESE DRAWINGS.
2. 1" DIAMETER CONDUITS SHALL BE PVC SCHEDULE 40 WIRED WITH A 1/8" DIAMETER NYLON ROPE.
3. THE 2"ø PVC CONDUITS (FOR THE DISTRIBUTION OF CATV FACILITIES) AND THE 4"ø PVC CONDUITS (FOR THE DISTRIBUTION OF THE TELEPHONE FACILITIES) SHALL BE INSTALLED ALONG THE TELECOMMUNICATIONS RIGHT OF WAY. THE 2"ø CONDUITS SHALL BE INSTALLED AT THE SIDEWALK SIDE OF THE TRENCH, ANT THE 4"ø CONDUITS AT THE FARTHERMOST SIDE OF THE TRENCH FROM THE SIDEWALK (SEE THE EASEMENT CONDUIT INSTALLATION TRENCH DETAIL).
4. THE 2" AND 4"ø CONDUITS SHALL BE WIRED WITH 1/4" ø NYLON ROPE WITH A MINIMUM BREAKING STRENGTH OF 500 LBS. AND SHALL BE TESTED WITH 1–3/5" AND 3–5/16" MANDRELS RESPECTIVELY.
5. ALL EXPOSED CONDUIT ENDS SHALL BE CAPPED WITH PVC END CAPS.
6. THE MINIMUM DEPTH OF THE CONDUITS THAT WILL BE INSTALLED ALONG THE RIGHT OF WAY AND SERVICE CABLE CONDUITS TO THE DWELLING UNITS SHALL BE AS FOLLOWING.
   a. 1"ø CONDUITS – 14" BELOW FINISHED GRADE
   b. 2"ø CONDUITS – 18" BELOW FINISHED GRADE
   c. 4"ø CONDUITS – 24" BELOW FINISHED GRADE
8. WHEN EXPOSED TO VEHICULAR TRAFFIC (HIGHWAY, STREET AND CARPORT CROSSINGS) CONDUITS SHALL BE INSTALLED AT A DEPTH BETWEEN 30" AND 36" MEASURED FROM THE SURFACE OF THE PAVEMENT AND SHALL BE ENCASED IN CONCRETE WITH A MINIMUM RESISTANCE OF 3000 LBS PER SQUARE INCH (3000 PSI)
9. THE DEVELOPER OR HIS REPRESENTATIVES SHALL CLEARLY IDENTIFY ALL CONDUIT ENDS (INCLUDING BUT NOT LIMITED TO STREET CROSSINGS AND SERVICE CONDUITS) WHEN THE USE OF DISTRIBUTION OR SPLICE BOXES HAS NOT BEEN RECOMMENDED.
10. PROVIDE 6" WIDE ORANGE COLOR WARNING RIBBON (TERRA TAPE) INSTALLED OVER ALL UNDERGROUND TELECOMMUNICATIONS CONDUITS AT 12" BELOW THE FINISHED GRADE.
11. THE 2" AND 4" DIAMETER CONDUITS BENDS SHALL NOT BE MORE THAN 90°, AND SHALL HAVE A MINIMUM RADIUS OF 36".
12. ALL DISTRIBUTION, SPLICE AND PULL BOXES SHALL BE INSTALLED AS INDICATED ON DRAWINGS.
13. DISTRIBUTION BOXES SHALL BE PLACED IN EASEMENT COINCIDING WITH THE DISTRIBUTION POINTS OF COINCIDENCE WITH TELECOMMUNICATION FACILITIES. THESE BOXES AS WELL AS DISTRIBUTION POINTS SHALL BE LOCATED TWO FEET FROM THE PROPERTY LINE BETWEEN LOTS SO AS NOT TO INTERFERE WITH ANY ENTRANCE (CARPORT OR SIDEWALK).
14. DISTRIBUTION AND SPLICE BOXES SHALL BE:
   a. PREFABRICATED WITH STEEL REINFORCED CONCRETE (EQUAL OR SIMILAR TO POWER POLES INC).
   b. CAST IN PLACE WITH STEEL REINFORCED CONCRETE.
   c. PREFABRICATED WITH POLYMER CONCRETE (EQUAL O SIMILAR TO EQUAZITE)
15. ALL CONDUITS WHETHER OR NOT IN USE SHALL BE SEALED IN DISTRIBUTION BOXES AND SPLICE BOXES.
16. THE MINIMUM SIZE OF THE TELECOMMUNICATION CABINETS (TELEPHONE OR CATV) WHEN REQUIRED (AT WALK–UPS OR OTHER STRUCTURES) SHALL BE 36"X24"X6" EQUIPPED WITH A 3/4" PLYWOOD BACKBOARD, A HINGED DOOR WITH LATCH AND KEY, AND SHALL HAVE COMPLETE FRONTAL ACCESS. THE CABINETS SHALL ALSO PROVIDE FOR THE PROPER BONDING AND GROUNDING OF THE TELECOMMUNICATIONS FACILITIES.
17. THE EXTERIOR METALLIC BOXES (4" X 4" X 2" MINIMUM), FOR TELECOMMUNICATION SERVICES DROPS (TELEPHONE AND CATV), SHALL BE INSTALLED ADJACENTLY ON ONE OF THE LIVING UNITS WALLS CONVENIENTLY LOCATED SO AS TO PROVIDE EASY UNHINDERED ACCESS.
18. THE CONDUIT THAT WILL BE USED TO WIRE THE GROUNDING CONNECTION ON METAL BOXES SHALL RUN OUTSIDE THE WALL OF THE HOUSE AT A DEPTH OF 6" BELOW FINISHED GRADE.
19. THE ELECTRICAL GROUNDING OF THE TELECOMMUNICATIONS SERVICE DROPS WILL BE ACHIEVED WITH THE 8' X 5/8" COPPER WELD GROUND ROD INSTALLED BY THE TELECOMMUNICATIONS SERVICE PROVIDER.
20. ALL TELECOMMUNICATION SYSTEM (TELEPHONE AND CATV) SHALL BE BONDED AND GROUNDED AT ALL POINTS.
21. NOT MORE THAN TWO 90° BENDS SHALL BE ALLOWED IN THE CONDUITS CONNECTING THE EXTERIOR SERVICE DROP METALLIC BOXES AND THE INTERIOR SERVICE BOXES.
22. THE INTERIOR RESIDENTIAL TELECOMMUNICATIONS SERVICE DISTRIBUTION CONDUITS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 3/4" AND EACH LIVING UNIT SHALL BE PROVIDED WITH TELECOMMUNICATION SERVICES (TELEPHONE AND CATV) OUTLETS IN THE KITCHEN, LIVING ROOM AND EACH OF THE BEDROOMS.
23. WALK–UPS TELECOMMUNICATION CABINETS (TELEPHONE OR CATV) SHALL BE CONNECTED TO THE NEAREST DISTRIBUTION OR SPLICING BOX BY TWO 2"ø PVC CONDUITS.
24. MULTIPLE STORIES RESIDENTIAL BUILDINGS SHALL HAVE AN INDEPENDENT MAIN DISTRIBUTION CABINET FOR TELEPHONE SERVICE AND ANOTHER ONE FOR CATV, EACH ONE PROVIDED WITH A FIRE – RETARDANT 4' X 8' X 3/4" PLYWOOD PAINTED WITH A FIRE – RESISTANT COATING. THE MAIN CABINETS SHALL BE INTERCONNECTED VERTICALLY WITH THE TELEPHONE AND CATV DISTRIBUTION CABINETS LOCATED ON FLOORS OR ON EACH FLOOR, DEPENDING ON THE CASE, BY MEANS OF 4" OR 2" CONDUITS RESPECTIVELY
25. EACH APARTMENT SHALL BE FED BY MEANS OF 2–1"ø CONDUITS, ONE FROM THE TELEPHONE DISTRIBUTION CABINET AND THE OTHER ONE FROM THE CATV DISTRIBUTION CABINET.
26. FOR MULTIPLE STORIES RESIDENTIAL BUILDINGS, 2–4"ø SERVICE ENTRANCE CONDUITS SHALL BE INSTALLED FOR TELEPHONE AND CATV SERVICE RESPECTIVELY, FROM THE SPLICING BOX DESIGNATED AS CONNECTION POINT, TO THE BUILDING AND TO THE CORRESPONDING MAIN CABINET.

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada, Ley Núm. 96 de 6 de julio de 1978, según enmendada, según aplique). Reconozco que cualquier declaración falsa o falsificación de mi parte, ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

EDUARDO CHARDON CASALS
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NET NEGOCIADO de TELECOMUNICACIONES DE PUERTO RICO

Negociado de Telecomunicaciones de Puerto Rico

ENDOSO DE PLANOS DE FACILIDADES Y/O SERVIDUMBRE DE TELECOMUNICACIONES Y TELEVISIÓN POR CABLE

NÚMERO DE CASO NETPR 2023-RI-0329
NÚMERO DE CASO OGPE 2023-503622-SRI-073050

Revisado por: _____ Fecha _____

Aprobado por: _____ Fecha _____

ESTE ENDOSO NO EXIME AL CONSTRUCTOR Y AL DESARROLLADOR DE CUMPLIR CON LOS REQUERIMIENTOS DE CONSTRUCCIÓN CONFORME A TODAS LAS DISPOSICIONES DE LOS REGLAMENTOS APLICABLES.

SHEET TITLE: TELECOMMUNICATIONS–NOTES AND DETAILS

STATUS: STAMPED DRAWINGS

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NUMBER	DATE	BY	DESCRIPTION

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PROJECT: LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919–2484

SHEET IDENTIFICATION: T–5.0

SHEET NO: .
TOTAL: .

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

Exhibit 12

Noise Assessment Report

Laderas de Palmas

SF-HDI-00012

NOISE ASSESSMENT REPORT

PREPARED FOR:
GREEN PROJECTS

AT:
LADERAS DE PALMA RESIDENTIAL PROJECT
HUMACAO, PUERTO RICO

FEBRUARY 12, 2024
REVISED OCTOBER 2025

CMA 23280
Revision 0

CMA
ARCHITECTS &
ENGINEERS LLC

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1.0 INTRODUCTION

Rebuilders, PR LLC proposes developing a 160,063.71 square meters (m^2) site to construct a residential project called Laderas de Palma. The project is located at Cataño, Buena Vista and Candelero Arriba wards in the Municipality of Humacao. Figure Number 1 shows an aerial photo depicting the project area. The project is located 380 feet from State Road PR-53, 120 feet from State Road PR-3, 16.19 miles from Diego Jiménez Torres Airport in Fajardo, and 13.07 miles from José Aponte Hernández Airport in Ceiba. Diego Jiménez Torres Airport was closed in 2015. No railways are located in the area. Nearest military airport is the Luis Muñoz Marín located 21.09 miles to the north-west.

Rebuilders PR, LLC has retained the services of CMA Architects & Engineers LLC to carry out a Noise Assessment as per Section 5.0 of the Noise Handbook published by the Department of Housing and Urban Development (HUD) in the project area.

Figure Number 1 - Aerial Photo

The assessment of site acceptability is presented first as an evaluation of the site's exposure to three major sources of noise - aircraft, roadways, and railways. These are then combined to assess the total noise at a site.

After obtaining the available data on the site, adjacent main roads, and noise sources and following the HUD procedure to estimate the site noise levels, we conclude the site acceptability standards established by 24 CFR 51.103 are exceeded. The acceptability standards establish an acceptable maximum noise level of 65 dB(A). The noise level at the site was estimated to be 67.4 dB.

The proposed unifamiliar houses will be mainly constructed of concrete walls and crystal windows. Each material can absorb noise. Noise reduction coefficient, or NRC, is a rating used to measure how effective a material is at absorbing sound. Materials with coefficients of 0.50 and higher are generally classified as "sound absorbing," while those with coefficients at or below 0.20 are "sound reflecting." In our case, concrete has an NRC of 0.97 and glass 0.95. Walls facing State Road PR-3 will cause a decibel drop of 29.37 dB, lowering the noise levels inside the house to 38 dB, which will maintain the noise level inside the building below 65 dB.

2.0 REGULATORY BACKGROUND

Title 24 of the Code of Federal Regulations (CFR) includes the regulations established for HUD operations. Sub-part B of the 24 CFR Part 51 consists of their project's Noise Abatement Control policies.

24 CFR 51.100 Purpose and Authority

(a) It is the purpose of this subpart B to:
(1) Call attention to the threat of noise pollution.
(2) Encourage the control of noise at its source in cooperation with other Federal departments and agencies.
(3) Encourage land use patterns for housing and other noise-sensitive urban needs that will provide a suitable separation between them and major noise sources.
(4) Generally, prohibit HUD support for new construction of noise-sensitive uses on sites having unacceptable noise exposure.
(5) Provide policy on the use of structural and other noise attenuation measures where needed; and
(6) Provide policy to guide the implementation of various HUD programs.

Section 103 of the 24 CFR 51 shows the noise criteria and standards for HUD projects, including the site acceptability standards. The noise environment inside a building is considered acceptable if:

1. The noise environment external to the building complies with the standards shown in Table Number 1 and:
2. The building is constructed in a manner familiar to the area or, if of uncommon construction, has at least the equivalent noise attenuation characteristics.

Table Number 1 – HUD Noise Standards		
Level	Day-Night Average Sound Level[dB(A)]	Special Approvals and Requirements
Acceptable	Not Exceeding 65 dB(A)[1]	None
Normally Unacceptable	Above 65 dB but not exceeding 75dB	Special Approval[2]
		Environmental Review[3]
		Attenuation[4]
Unacceptable	Above 75 dB	Special Approval[2]
		Environmental Review[3]
		Attenuation[5]

Appendix A shows a copy of the current 24 CFR 51 Subpart B. The noise levels obtained during the noise survey will be compared with these values to determine if the site is acceptable for the project and if noise attenuation measures need to be applied.

24 CFR 51.104.a.1 Noise Attenuation

Noise attenuation measures are those required in addition to attenuation provided by buildings as commonly constructed in the area and requiring open windows for ventilation. Measures that reduce external noise at a site shall be used wherever practicable in preference to the incorporation of additional noise attenuation in buildings. Building designs and construction techniques that provide more noise attenuation than typical construction may be employed also to meet the noise attenuation requirements.

[1] Acceptable threshold may be shifted to 70 dB in special circumstances pursuant to Sec. 51.105(a).

[2] See Sec. 51.104(b) for requirements.

[3] See Sec. 51.104(b) for requirements.

[4] 5 dB additional attenuation required for sites above 65 dB but not exceeding 70 dB and 10 dB additional attenuation required for sites above 70 dB but not exceeding 75 dB. (See Sec. 51.104(a).)

[5] Attenuation measures to be submitted to the Assistant Secretary for CPD for approval on a case-by-case basis.

3.0 METHODOLOGY

Because no noise level prediction was available for the project site, CMA technical personnel conducted a noise assessment following the procedure established in Section 5.0 of the HUD Noise Guidebook.

The site is surrounded to the north by an undeveloped site and Laderas de Palma Residential Development, to the east and west by Laderas de Palmas Residential Development, and and to the south by an undeveloped parcel. State Road PR-3 is located 120 feet to the east, and State Road PR-53 is located 380 ft to the east.

The primary noise source in the project area is José Aponte Hernández Airport, located 13.07 miles to the northeast. There are no railroads inside the maximum distances shown in Table Number 2.

Table Number 2 – Distances to Main Noise Source

Noise Source	Assessment Distance
Roadways	1,000 ft
Railroads	3,000 ft
Airport	15 miles

The first step to conducting the noise assessment is to search for available current noise level studies conducted at the site. No study was encountered, so the procedure established in Section 5 of the Noise Guidebook was followed. The following data was obtained to prepare the assessment:

- The distances from the Noise Assessment Location (NAL) to the center of the airport landing track. The distance from the NAL to the airport landing track is 13.07 miles.
- Based on the average day and night flights, we prepared noise contours around the airport's main landing track[6]. Appendix B shows the airport flights.

[6] Average flights information was obtained from the Flightradar24 webpage, https://www.flightradar24.com/data/airports/pse

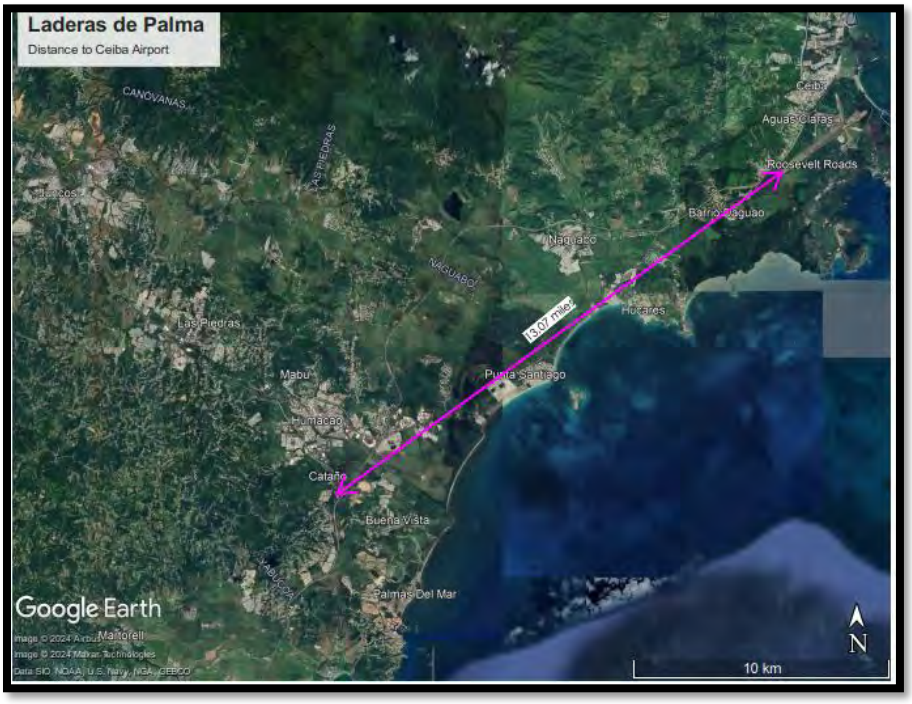

Figure Number 2 – Distances to José Aponte Hernández Airport

We used Figure 3 – Chart for Estimating DNL for Aircraft Operations of the HUD Noise Guidebook to prepare the airport noise contours. To prepare the noise contours, we use the average flights at the airport. The effective number of operations (22 flights) equals ten times the nighttime and daytime jet operations. Figure Number 3 shows the noise contours prepared for the Ceiba airport.

Please refer to the Worksheets from the HUD Noise Guidebook, Section 5, to estimate the noise level. Appendix C depicts the worksheets and work charts with the data included. Using georeferenced aerial photos, we prepared the noise contours and determined the distance from the airport to the NAL (D2) and perpendicular from the flight path to the 65 dB contour (D1). Dividing D2 by D1, we obtain the day and night noise levels from Table 2 of the Noise Guidebook.

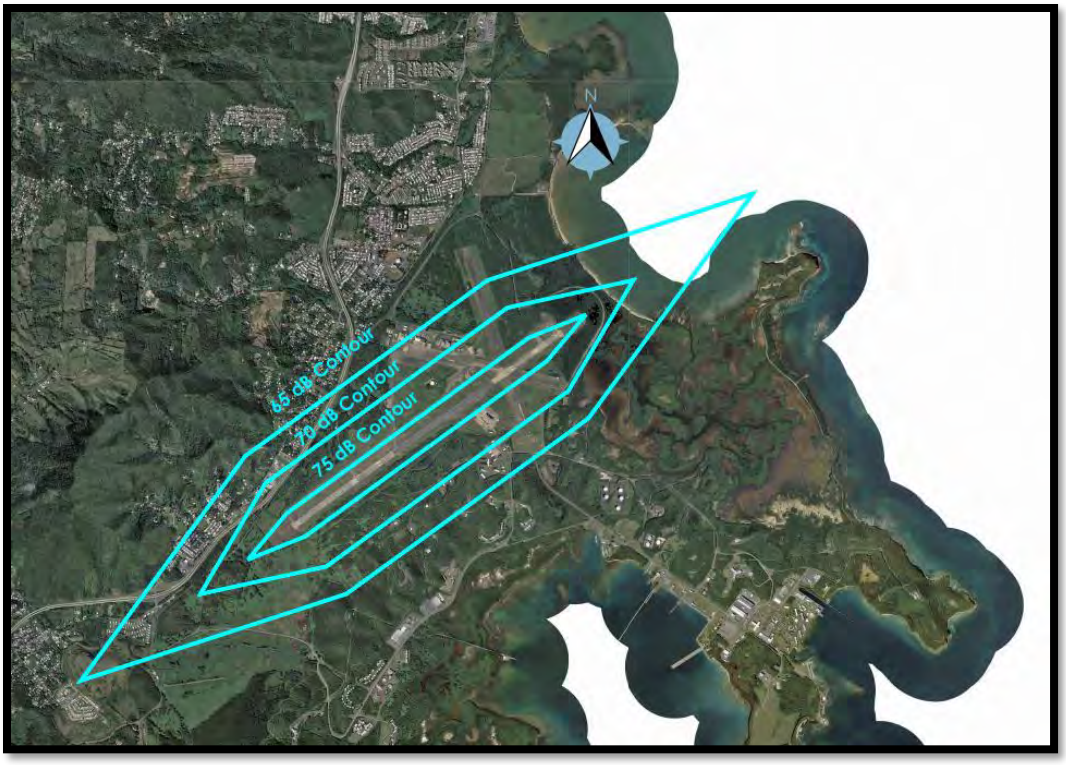

Figure Number 3 – Noise Contours

This data is posted in Worksheet B of the Noise Guidebook, Section 5, to estimate the noise level. The obtained noise levels are compared with the Site Acceptability Standards established at 24 CFR 51.103. Appendix C depicts the worksheets and work charts with the data included.

4.0 RESULTS

The site acceptability standards established by 24 CFR 51.103 will not be exceeded at the Noise Assessment Location, Laderas de Palma Residential Development. This was determined using the procedure established in the HUD Noise Guidebook. The estimated noise level at the site is 67.4 dB. This level falls into the normally unacceptable standards. The acceptability standards establish a maximum noise level of 65 dB(A) as acceptable.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The noise levels study at the Laderas de Palma future site indicated that the noise levels are above the acceptance levels established by the Housing Urban Development (HUD) regulations. The HUD noise acceptance level is 65 dB(A), while the current noise level at the site was measured to be 67.4 dB(A).

The proposed project comprises concrete unfamiliar houses. The project is located 120 feet from PR-3 and 380 feet from PR-53. The eastern face of the proposed house envelope will be constructed of concrete with glass windows.

Each material can absorb noise. Noise reduction coefficient, or NRC, is a rating used to measure how effective a material is at absorbing sound. Materials with coefficients of 0.50 and higher are generally classified as "sound absorbing," while those with coefficients at or below 0.20 are "sound reflecting". In our case, concrete blocks have an NRC of 0.35, and glass has an NRC of 0.15.[7]

Using the NRC, the decibel drop through a material can be calculated using the formula:

Equation 1 => $d = -20\log_{10}(1-C)$; where:

d => Decibel drop (dB)

C => Noise Reduction Coefficient

For the building wall facing State Road PR-3:

First, we calculate the average NRC based on the area occupied by each material, in this case, concrete and glass. We assume that the house facing adjacent to the PR-3 comprises 80% concrete and 20% glass.

[7] Noise Reduction Coefficients (NRC) obtained from M. David Egan (1988). Chapter 2 – Sound Absorption, *Architectural Acoustics*, McGraw Hill.

Equation 2 => Avg. NRC = Concrete NRC * Concrete Percent Area + Glass NRC * Glass Percent Area

Average NRC = 0.35*0.80 + 0.15*0.20

Average NRC = 0.31

Using Equation 1 to calculate the decibel drop (d):

d = -20*log10 (1-0.31) = 19.73 dB

This means that the concrete wall with glass windows facing State Road PR-3 will drop the current noise level to 47.66 dB, less than the HUD noise acceptance level.

In conclusion, although the sound level outside the houses is above the HUD acceptance level, the exterior walls and windows will cause a drop in the sound level of up to 19.73 dB, which will maintain the noise level inside the building below 65 dB.

The procedure established by Housing and Urban Development was followed to obtain the estimated noise levels at the Noise Assessment Location, Los Valles Residential Development. The results show a noise level of 67.4 dB. This level classifies the NAL as normally unacceptable but unifamiliar houses construction materials will serve as a sound barrier reducing the internal levels to 47.66. This level is acceptable.

Respectfully submitted:

Pedro A. Janer
Registered Environmental Manager REM-11515
CMA Architects & Engineers LLC

6.0 REFERENCES

1. Housing Urban Development, 24 CFR 51
2. Housing Urban Development, The Noise Guidebook.
3. Flightradar24 webpage, https://www.flightradar24.com/data/airports/pse, December 11, 2023.
4. McGraw Hill, Inc., Standard Handbook of Environmental Engineering, First Edition, 1990.
5. American National Standards Institute, Methods for the Measurement of Sound Pressure Levels, ANSI S1.13-1962(R1976)

APPENDIXES

Appendix A

24 CFR 51 Subpart B

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

Title 24 —Housing and Urban Development
Subtitle A —Office of the Secretary, Department of Housing and Urban Development
Part 51 —Environmental Criteria and Standards

Authority: 42 U.S.C. 3535(d), unless otherwise noted.
Source: 44 FR 40861, July 12, 1979, unless otherwise noted.

Subpart B Noise Abatement and Control
§ 51.100 Purpose and authority.
§ 51.101 General policy.
§ 51.102 Responsibilities.
§ 51.103 Criteria and standards.
§ 51.104 Special requirements.
§ 51.105 Exceptions.
§ 51.106 Implementation.
Appendix I to Subpart B of Part 51
Definition of Acoustical Quantities

Subpart B—Noise Abatement and Control

§ 51.100 Purpose and authority.

(a) It is the purpose of this subpart B to:

(1) Call attention to the threat of noise pollution;

(2) Encourage the control of noise at its source in cooperation with other Federal departments and agencies;

(3) Encourage land use patterns for housing and other noise sensitive urban needs that will provide a suitable separation between them and major noise sources;

(4) Generally prohibit HUD support for new construction of noise sensitive uses on sites having unacceptable noise exposure;

(5) Provide policy on the use of structural and other noise attenuation measures where needed; and

(6) Provide policy to guide implementation of various HUD programs.

(b) ***Authority.*** Specific authorities for noise abatement and control are contained in the Noise Control Act of 1972, as amended (42 U.S.C. 4901 *et seq.*); and the General Services Administration, Federal Management Circular 75–2; *Compatible Land Uses at Federal Airfields.*

[44 FR 40861, July 12, 1979, as amended at 61 FR 13333, Mar. 26, 1996]

§ 51.101 General policy.

(a) It is HUD's general policy to provide minimum national standards applicable to HUD programs to protect citizens against excessive noise in their communities and places of residence.

(1) ***Planning assistance.*** HUD requires that grantees give adequate consideration to noise exposures and sources of noise as an integral part of the urban environment when HUD assistance is provided for planning purposes, as follows:

(i) Particular emphasis shall be placed on the importance of compatible land use planning in relation to airports, highways and other sources of high noise.

(ii) Applicants shall take into consideration HUD environmental standards impacting the use of land.

(2) ***Activities subject to 24 CFR part 58.***

(i) Responsible entities under 24 CFR part 58 must take into consideration the noise criteria and standards in the environmental review process and consider ameliorative actions when noise sensitive land development is proposed in noise exposed areas. Responsible entities shall address deviations from the standards in their environmental reviews as required in 24 CFR part 58.

(ii) Where activities are planned in a noisy area, and HUD assistance is contemplated later for housing and/or other noise sensitive activities, the responsible entity risks denial of the HUD assistance unless the HUD standards are met.

(3) ***HUD support for new construction.*** HUD assistance for the construction of new noise sensitive uses is prohibited generally for projects with unacceptable noise exposures and is discouraged for projects with normally unacceptable noise exposure. (Standards of acceptability are contained in § 51.103(c).) This policy applies to all HUD programs providing assistance, subsidy or insurance for housing, manufactured home parks, nursing homes, hospitals, and all programs providing assistance or insurance for land development, redevelopment or any other provision of facilities and services which are directed to making land available for housing or noise sensitive development. The policy does not apply to research demonstration projects which do not result in new construction or reconstruction, flood insurance, interstate land sales egistration, or any action or emergency assistance under disaster assistance provisions or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster.

(4) ***HUD support for existing construction.*** Noise exposure by itself will not result in the denial of HUD support for the resale and purchase of otherwise acceptable existing buildings. However, environmental noise is a marketability factor which HUD will consider in determining the amount of insurance or other assistance that may be given.

(5) ***HUD support of modernization and rehabilitation.*** For modernization projects located in all noise exposed areas, HUD shall encourage noise attenuation features in alterations. For major or substantial rehabilitation projects in the Normally Unacceptable and Unacceptable noise zones, HUD actively shall seek to have project sponsors incorporate noise attenuation features, given the extent and nature of the rehabilitation being undertaken and the level or exterior noise exposure. In Unacceptable noise zones, HUD shall strongly encourage conversion of noise-exposed sites to land uses compatible with the high noise levels.

(6) ***Research, guidance and publications.*** HUD shall maintain a continuing program designed to provide new knowledge of noise abatement and control to public and private bodies, to develop improved methods for anticipating noise encroachment, to develop noise abatement measures through land use and building construction practices, and to foster better understanding of the consequences of noise. It shall be HUD's policy to issue guidance documents periodically to assist HUD personnel in assigning an acceptability category to projects in accordance with noise exposure standards, in evaluating noise attenuation measures, and in advising local agencies about noise abatement strategies. The guidance documents shall be updated periodically in accordance with advances in the state-of-the-art.

(7) ***Construction equipment, building equipment and appliances.*** HUD shall encourage the use of quieter construction equipment and methods in population centers, the use of quieter equipment and appliances in buildings, and the use of appropriate noise abatement techniques in the design of residential structures with potential noise problems.

(8) ***Exterior noise goals.*** It is a HUD goal that exterior noise levels do not exceed a day-night average sound level of 55 decibels. This level is recommended by the Environmental Protection Agency as a goal for outdoors in residential areas. The levels recommended by EPA are not standards and do not take into account cost or feasibility. For the purposes of this regulation and to meet other program objectives, sites with a day-night average sound level of 65 and below are acceptable and are allowable (see Standards in § 51.103(c)).

(9) ***Interior noise goals.*** It is a HUD goal that the interior auditory environment shall not exceed a day-night average sound level of 45 decibels. Attenuation measures to meet these interior goals shall be employed where feasible. Emphasis shall be given to noise sensitive interior spaces such as bedrooms. Minimum attenuation requirements are prescribed in § 51.104(a).

(10) ***Acoustical privacy in multifamily buildings.*** HUD shall require the use of building design and acoustical treatment to afford acoustical privacy in multifamily buildings pursuant to requirements of the Minimum Property Standards.

[44 FR 40861, July 12, 1979, as amended at 50 FR 9268, Mar. 7, 1985; 61 FR 13333, Mar. 26, 1996]

§ 51.102 Responsibilities.

(a) ***Surveillance of noise problem areas.*** Appropriate field staff shall maintain surveillance of potential noise problem areas and advise local officials, developers, and planning groups of the unacceptability of sites because of noise exposure at the earliest possible time in the decision process. Every attempt shall be made to insure that applicants' site choices are consistent with the policy and standards contained herein.

(b) ***Notice to applicants.*** At the earliest possible stage, HUD program staff shall:

(1) Determine the suitability of the acoustical environment of proposed projects;

(2) Notify applicants of any adverse or questionable situations; and

(3) Assure that prospective applicants are apprised of the standards contained herein so that future site choices will be consistent with these standards.

(c) ***Interdepartmental coordination.*** HUD shall foster appropriate coordination between field offices and other departments and agencies, particularly the Environmental Protection Agency, the Department of Transportation, Department of Defense representatives, and the Department of Veterans Affairs. HUD staff shall utilize the acceptability standards in commenting on the prospective impacts of transportation facilities and other noise generators in the Environmental Impact Statement review process.

[44 FR 40861, July 12, 1979, as amended at 54 FR 39525, Sept. 27, 1989; 61 FR 13333, Mar. 26, 1996]

§ 51.103 Criteria and standards.

These standards apply to all programs as indicated in § 51.101.

(a) ***Measure of external noise environments.*** The magnitude of the external noise environment at a site is determined by the value of the day-night average sound level produced as the result of the accumulation of noise from all sources contributing to the external noise environment at the site. Day-night average sound level, abbreviated as DNL and symbolized as L_{dn}, is the 24-hour average sound level, in decibels, obtained after addition of 10 decibels to sound levels in the night from 10 p.m. to 7 a.m. Mathematical expressions for average sound level and day-night average sound level are stated in the Appendix I to this subpart.

(b) ***Loud impulsive sounds.*** On an interim basis, when loud impulsive sounds, such as explosions or sonic booms, are experienced at a site, the day-night average sound level produced by the loud impulsive sounds alone shall have 8 decibels added to it in assessing the acceptability of the site (see appendix I to this subpart). Alternatively, the C-weighted day-night average sound level (L_{Cdn}) may be used without the 8 decibel addition, as indicated in § 51.106(a)(3). Methods for assessing the contribution of loud impulsive sounds to day-night average sound level at a site and mathematical expressions for determining whether a sound is classed as “loud impulsive” are provided in the appendix I to this subpart.

(c) ***Exterior standards.***

(1) The degree of acceptability of the noise environment at a site is determined by the sound levels external to buildings or other facilities containing noise sensitive uses. The standards shall usually apply at a location 2 meters (6.5 feet) from the building housing noise sensitive activities in the direction of the predominant noise source. Where the building location is undetermined, the standards shall apply 2 meters (6.5 feet) from the building setback line nearest to the predominant noise source. The standards shall also apply at other locations where it is determined that quiet outdoor space is required in an area ancillary to the principal use on the site.

(2) The noise environment inside a building is considered acceptable if:

(i) The noise environment external to the building complies with these standards, and

(ii) the building is constructed in a manner common to the area or, if of uncommon construction, has at least the equivalent noise attenuation characteristics.

Site Acceptability Standards

	Day-night average sound level (in decibels)	Special approvals and requirements
Acceptable	Not exceeding 65 dB(1)	None.

	Day-night average sound level (in decibels)	Special approvals and requirements
Normally Unacceptable	Above 65 dB but not exceeding 75 dB	Special Approvals (2)
		Environmental Review (3).
		Attenuation (4).
Unacceptable	Above 75 dB	Special Approvals (2).
		Environmental Review (3).
		Attenuation (5).

Notes: (1) Acceptable threshold may be shifted to 70 dB in special circumstances pursuant to § 51.105(a).

(2) See § 51.104(b) for requirements.

(3) See § 51.104(b) for requirements.

(4) 5 dB additional attenuation required for sites above 65 dB but not exceeding 70 dB and 10 dB additional attenuation required for sites above 70 dB but not exceeding 75 dB. (See § 51.104(a).)

(5) Attenuation measures to be submitted to the Assistant Secretary for CPD for approval on a case-by-case basis.

[44 FR 40861, July 12, 1979, as amended at 49 FR 12214, Mar. 29, 1984]

§ 51.104 Special requirements.

(a)

(1) ***Noise attenuation.*** Noise attenuation measures are those required in addition to attenuation provided by buildings as commonly constructed in the area, and requiring open windows for ventilation. Measures that reduce external noise at a site shall be used wherever practicable in preference to the incorporation of additional noise attenuation in buildings. Building designs and construction techniques that provide more noise attenuation than typical construction may be employed also to meet the noise attenuation requirements.

(2) ***Normally unacceptable noise zones and unacceptable noise zones.*** Approvals in Normally Unacceptable Noise Zones require a minimum of 5 decibels additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 decibels but does not exceed 70 decibels, or a minimum of 10 decibels of additional sound attenuation if the day-night average sound level is greater than 70 decibels but does not exceed 75 decibels. Noise attenuation measures in Unacceptable Noise Zones require the approval of the Assistant Secretary for Community Planning and Development, or the Certifying Officer for activities subject to 24 CFR part 58. (See § 51.104(b)(2).)

(b) ***Environmental review requirements.*** Environmental reviews shall be conducted pursuant to the requirements of 24 CFR parts 50 and 58, as applicable, or other environmental regulations issued by the Department. These requirements are hereby modified for all projects proposed in the Normally Unacceptable and Unacceptable noise exposure zones as follows:

(1) ***Normally unacceptable noise zone.***

(i) All projects located in the Normally Unacceptable Noise Zone require a Special Environmental Clearance except an EIS is required for a proposed project located in a largely undeveloped area, or where the HUD action is likely to encourage the establishment of incompatible land use in this noise zone.

(ii) When an EIS is required, the concurrence of the Program Assistant Secretary is also required before a project can be approved. For the purposes of this paragraph, an area will be considered as largely undeveloped unless the area within a 2-mile radius of the project boundary is more than 50 percent developed for urban uses and infrastructure (particularly water and sewers) is available and has capacity to serve the project.

(iii) All other projects in the Normally Unacceptable zone require a Special Environmental Clearance, except where an EIS is required for other reasons pursuant to HUD environmental policies.

(2) ***Unacceptable noise zone.*** An EIS is required prior to the approval of projects with unacceptable noise exposure. Projects in or partially in an Unacceptable Noise Zone shall be submitted to the Assistant Secretary for Community Planning and Development, or the Certifying Officer for activities subject to 24 CFR part 58, for approval. The Assistant Secretary or the Certifying Officer may waive the EIS requirement in cases where noise is the only environmental issue and no outdoor noise sensitive activity will take place on the site. In such cases, an environmental review shall be made pursuant to the requirements of 24 CFR parts 50 or 58, as appropriate.

[44 FR 40861, July 12, 1979, as amended at 61 FR 13333, Mar. 26, 1996]

§ 51.105 Exceptions.

(a) ***Flexibility for non-acoustic benefits.*** Where it is determined that program objectives cannot be achieved on sites meeting the acceptability standard of 65 decibels, the Acceptable Zone may be shifted to L_{dn} 70 on a case-by-case basis if all the following conditions are satisfied:

(1) The project does not require an Environmental Impact Statement under provisions of § 51.104(b)(1) and noise is the only environmental issue.

(2) The project has received a Special Environmental Clearance and has received the concurrence of the Environmental Clearance Officer.

(3) The project meets other program goals to provide housing in proximity to employment, public facilities and transportation.

(4) The project is in conformance with local goals and maintains the character of the neighborhood.

(5) The project sponsor has set forth reasons, acceptable to HUD, as to why the noise attenuation measures that would normally be required for new construction in the L_{dn} 65 to L_{dn} 70 zone cannot be met.

(6) Other sites which are not exposed to noise above L_{dn} 65 and which meet program objectives are generally not available.

The above factors shall be documented and made part of the project file.

[44 FR 40861, July 12, 1979, as amended at 61 FR 13334, Mar. 26, 1996]

§ 51.106 Implementation.

(a) ***Use of available data.*** HUD field staff shall make maximum use of noise data prepared by others when such data are determined to be current and adequately projected into the future and are in terms of the following:

(1) ***Sites in the vicinity of airports.*** The noise environment around airports is described sometimes in terms of Noise Exposure Forecasts, abbreviated as NEF or, in the State of California, as Community Noise Equivalent Level, abbreviated as CNEL. The noise environment for sites in the vicinity of airports for which day-night average sound level data are not available may be evaluated from NEF or CNEL analyses using the following conversions to DNL:

> DNL ≑ NEF + 35
>
> DNL ≑ CNEL

(2) ***Sites in the vicinity of highways.*** Highway projects receiving Federal aid are subject to noise analyses under the procedures of the Federal Highway Administration. Where such analyses are available they may be used to assess sites subject to the requirements of this standard. The Federal Highway Administration employs two alternate sound level descriptors:

(i) The A-weighted sound level not exceeded more than 10 percent of the time for the highway design hour traffic flow, symbolized as L_{10}; or

(ii) the equivalent sound level for the design hour, symbolized as L_{eq}. The day-night average sound level may be estimated from the design hour L_{10} or L_{eq} values by the following relationships, provided heavy trucks do not exceed 10 percent of the total traffic flow in vehicles per 24 hours and the traffic flow between 10 p.m. and 7 a.m. does not exceed 15 percent of the average daily traffic flow in vehicles per 24 hours:

> DNL ≑ L_{10} (design hour)—3 decibels
>
> DNL ≑ L_{eq} (design hour) decibels

Where the auto/truck mix and time of day relationships as stated in this section do not exist, the HUD Noise Assessment Guidelines or other noise analysis shall be used.

(3) ***Sites in the vicinity of installations producing loud impulsive sounds.*** Certain Department of Defense installations produce loud impulsive sounds from artillery firing and bombing practice ranges. Noise analyses for these facilities sometimes encompass sites that may be subject to the requirements of this standard. Where such analyses are available they may be used on an interim basis to establish the acceptability of sites under this standard. The Department of Defense uses day-night average sound level based on C-weighted sound level, symbolized L_{Cdn}, for the analysis of loud impulsive

sounds. Where such analyses are provided, the 8 decibel addition specified in § 51.103(b), is not required, and the same numerical values of day-night average sound level used on an interim basis to determine site suitability for non-impulsive sounds apply to the L_{Cdn}.

(4) ***Use of areawide acoustical data.*** HUD encourages the preparation and use of areawide acoustical information, such as noise contours for airports. Where such new or revised contours become available for airports (civil or military) and military installations they shall first be referred to the HUD State Office (Environmental Officer) for review, evaluation and decision on appropriateness for use by HUD. The HUD State Office shall submit revised contours to the Assistant Secretary for Community Planning and Development for review, evaluation and decision whenever the area affected is changed by 20 percent or more, or whenever it is determined that the new contours will have a significant effect on HUD programs, or whenever the contours are not provided in a methodology acceptable under § 51.106(a)(1) or in other cases where the HUD State Office determines that Headquarters review is warranted. For other areawide acoustical data, review is required only where existing areawide data are being utilized and where such data have been changed to reflect changes in the measurement methodology or underlying noise source assumptions. Requests for determination on usage of new or revised areawide data shall include the following:

(i) Maps showing old, if applicable, and new noise contours, along with brief description of data source and methodology.

(ii) Impact on existing and prospective urbanized areas and on development activity.

(iii) Impact on HUD-assisted projects currently in processing.

(iv) Impact on future HUD program activity. Where a field office has determined that immediate approval of new areawide data is necessary and warranted in limited geographic areas, the request for approval should state the circumstances warranting such approval. Actions on proposed projects shall not be undertaken while new areawide noise data are being considered for HUD use except where the proposed location is affected in the same manner under both the old and new noise data.

(b) ***Site assessments.*** Compliance with the standards contained in § 51.103(c) shall, where necessary, be determined using noise assessment guidelines, handbooks, technical documents and procedures issued by the Department.

(c) ***Variations in site noise levels.*** In many instances the noise environment will vary across a site, with portions of the site being in an Acceptable noise environment and other portions in a Normally Unacceptable noise environment. The standards in § 51.103(c) shall apply to the portions of a building or buildings used for residential purposes and for ancillary noise sensitive open spaces.

(d) ***Noise measurements.*** Where noise assessments result in a finding that the site is borderline or questionable, or is controversial, noise measurements may be performed. Where it is determined that noise measurements are required, such measurements will be conducted in accordance with methods and measurement criteria established by the Department. Locations for noise measurements will depend on the location of noise sensitive uses that are nearest to the predominant noise source (see § 51.103(c)).

(e) ***Projections of noise exposure.*** In addition to assessing existing exposure, future conditions should be projected. To the extent possible, noise exposure shall be projected to be representative of conditions that are expected to exist at a time at least 10 years beyond the date of the project or action under review.

(f) ***Reduction of site noise by use of berms and/or barriers.*** If it is determined by adequate analysis that a berm and/or barrier will reduce noise at a housing site, and if the barrier is existing or there are assurances that it will be in place prior to occupancy, the environmental noise analysis for the site may reflect the benefits afforded by the berm and/or barrier. In the environmental review process under § 51.104(b), the location height and design of the berm and/or barrier shall be evaluated to determine its effectiveness, and impact on design and aesthetic quality, circulation and other environmental factors.

[44 FR 40861, July 12, 1979, as amended at 61 FR 13334, Mar. 26, 1996]

Appendix I to Subpart B of Part 51—Definition of Acoustical Quantities

1. ***Sound Level.*** The quantity in decibels measured with an instrument satisfying requirements of American National Standard Specification for Type 1 Sound Level Meters S1.4–1971. Fast time-averaging and A-frequency weighting are to be used, unless others are specified. The sound level meter with the A-weighting is progressively less sensitive to sounds of frequency below 1,000 hertz (cycles per second), somewhat as is the ear. With fast time averaging the sound level meter responds particularly to recent sounds almost as quickly as does the ear in judging the loudness of a sound.

2. ***Average Sound Level.*** Average sound level, in decibels, is the level of the mean-square A-weighted sound pressure during the stated time period, with reference to the square of the standard reference sound pressure of 20 micropascals.

   Day-night average sound level, abbreviated as DNL, and symbolized mathematically as L_{dn} is defined as:

$$L_{dn} = 10 \log_{10} \left[\frac{1}{86400} \left(\int_{0000}^{0700} 10^{[L_A(t)+10]/10} dt + \int_{0700}^{2200} 10^{L_A(t)/10} dt + \int_{2200}^{2400} 10^{[L_A(t)+10]/10} dt \right) \right]$$

   Time t is in seconds, so the limits shown in hours and minutes are actually interpreted in seconds. $L_A(t)$ is the time varying value of A-weighted sound level, the quantity in decibels measured by an instrument satisfying requirements of American National Standard Specification for Type 1 Sound Level Meters S1.4–1971.

3. ***Loud Impulsive Sounds.*** When loud impulsive sounds such as sonic booms or explosions are anticipated contributors to the noise environment at a site, the contribution to day-night average sound level produced by the loud impulsive sounds shall have 8 decibels added to it in assessing the acceptability of a site.

   A loud impulsive sound is defined for the purpose of this regulation as one for which:

   (i) The sound is definable as a discrete event wherein the sound level increases to a maximum and then decreases in a total time interval of approximately one second or less to the ambient background level that exists without the sound; and

   (ii) The maximum sound level (obtained with slow averaging time and A-weighting of a Type 1 sound level meter whose characteristics comply with ANSI S1.4–1971) exceeds the sound level prior to the onset of the event by at least 6 decibels; and

(iii) The maximum sound level obtained with fast averaging time of a sound level meter exceeds the maximum value obtained with slow averaging time by at least 4 decibels.

[44 FR 40861, July 12, 1979; 49 FR 10253, Mar. 20, 1984; 49 FR 12214, Mar. 29, 1984]

Appendix B

Airport Flights

Find flights, airports and more
LOG IN

NRR/TJRV

Ceiba Jose Aponte de la Torre Airport

Puerto Rico

N/A
MY FLIGHTRADAR24 RATING

N/A
WEATHER

N/A
WIND

LOCAL TIME: 7:01 AM

N/A
MY FLIGHTRADAR24 RATING

N/A
ARRIVAL DELAY INDEX

N/A
DEPARTURE DELAY INDEX

General
Arrivals
Departures
On Ground

Departures

TIME	FLIGHT	TO	AIRLINE	AIRCRAFT	STATUS

Load earlier flights

Scheduled
9:00 AM
F43201
Isla De Culebra(CPX)
BNI
Air Flamenco

Scheduled
11:30 AM
F43202
Isla De Culebra(CPX)
BNI
Air Flamenco

Scheduled
4:30 PM
F43203
Isla De Culebra(CPX)
BNI
Air Flamenco

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

9:30 AM

F43252

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

11:30 AM

F43202

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

12:30 PM

F43203

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

3:30 PM

F43254

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

4:30 PM

Air Flamenco

Scheduled

4:30 PM

F43203

Isla De Culebra(CPX)

BNI

Air Flamenco

Thursday, Dec 14					
9:00 AM	F43201	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
11:30 AM	F43202	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
4:30 PM	F43203	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
Friday, Dec 15					
9:00 AM	F43202	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
9:30 AM	F43252	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
11:30 AM	F43202	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
12:30 PM	F43203	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
3:30 PM	F43254	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
4:30 PM	F43204	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
4:30 PM	F43203	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled

* All times are in local timezone

Disclaimer: The information provided on this page is a compilation of data from many different sources including flight scheduling systems, airline booking systems, airports, airlines and other third-party data providers. The data is provided as is, there are no guarantees that the information is fully correct or up to date. Changes and errors may occur. Therefore Flightradar24 cannot be held liable either for the accuracy of the information or for ensuring that the information is up to date at all times. Some of the flights presented may be charter, cargo, ambulance or other types of flights not available for passenger travel.

Knots
Km/h
Mph

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Find flights, airports and more
LOG IN

NRR/TJRV

Ceiba Jose Aponte de la Torre Airport

Puerto Rico

N/A

MY FLIGHTRADAR24 RATING

N/A

WEATHER

N/A

WIND

LOCAL TIME: 7:00 AM

N/A

MY FLIGHTRADAR24 RATING

N/A

ARRIVAL DELAY INDEX

N/A

DEPARTURE DELAY INDEX

General
Arrivals
Departures
On Ground
Reviews
Routes
Weather
Statistics

Arrivals

TIME	FLIGHT	FROM	AIRLINE	AIRCRAFT	STATUS

Load earlier flights

Scheduled
8:35 AM
F42301
Isla De Culebra(CPX)
BNI
Air Flamenco

Scheduled
11:15 AM
F42302
Isla De Culebra(CPX)
BNI
Air Flamenco

Scheduled
3:50 PM
F42104
Isla De Culebra(CPX)
BNI
Air Flamenco

Scheduled
4:15 PM
F42303

*All times are in local timezone

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

8:35 AM

F42301

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

9:15 AM

F42352

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

11:15 AM

F42302

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

3:15 PM

F42354

Isla De Culebra(CPX)

BNI

*All times are in local timezone

Scheduled

4:15 PM

F42303

Isla De Culebra(CPX)

BNI

Air Flamenco

Scheduled

5:15 PM

F42304

Isla De Culebra(CPX)

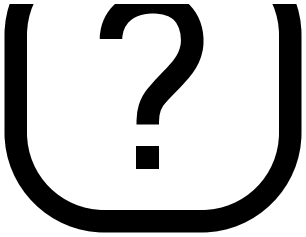
BNI

Air Flamenco

Thursday, Dec 14					
8:35 AM	F42301	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
11:15 AM	F42302	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
3:50 PM	F42104	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
4:15 PM	F42303	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
5:15 PM	F42304	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
Friday, Dec 15					
8:35 AM	F42301	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
9:15 AM	F42352	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
11:15 AM	F42302	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
3:15 PM	F42354	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled
3:50 PM	F42104	Isla De Culebra (CPX)	Air Flamenco	BNI	Scheduled

* All times are in local timezone

Changes and errors may occur. Therefore Flightradar24 cannot be held liable either for the accuracy of the information or for ensuring that the information is up to date at all times. Some of the flights presented may be charter, cargo, ambulance or other types of flights not available for passenger travel.



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12-hour clock
Temperature

Celsius °C
Farenheit °F

Wind speed

Knots
Km/h
Mph
M/s

Appendix C

Worksheets

Worksheet A
Site Evaluation

Noise Assessment Guidelines

CDBG-MIT
Site Location

Laderas de Palma Residential Development
Program

Humacao, Puerto Rico
Project Name

23280
Locality

File Number

Sponsor's Name

Phone

Street Address

City, State

	Acceptability Category	DNL	Predicted for Operations in Year
1. Roadway Noise	Acceptable	38.1	2024
2. Aircraft Noise	Acceptable	55	2024
3. Railway Noise			

Value of DNL for all noise sources: (see page 3 for combination procedure) 55

Final Site Evaluation (circle one)

(Acceptable)

Normally Unacceptable

Unacceptable

Signature

Date February 12, 2023

Clip this worksheet to the top of a package containing Worksheets B-E and Workcharts 1-7 that are used in the site evaluations

List all major roads within 1000 feet of the site:

1. State Road PR-3
2. State Road PR-53
3.
4.

Necessary Information	Road 1	Road 2	Road 3	Road 4
1. Distance in feet from the NAL to the edge of the road				
a. nearest lane	90	250		
b. farthest lane	120	380		
c. average (effective distance)	105	315		
2. Distance to stop sign				
3. Road gradient in percent				
4. Average speed in mph				
a. Automobiles	45	55		
b. heavy trucks - uphill	35	45		
c. heavy trucks - downhill	35	45		
5. 24 hour average number of automobiles and medium trucks in both directions (ADT)				
a. automobiles	10294	39673		
b. medium trucks	325	937		
c. effective ADT (a + (10xb))	13544	39043		
6. 24 hour average number of heavy trucks				
a. uphill	108	312		
b. downhill	109	313		
c. total	217	625		
7. Fraction of nighttime traffic (10 p.m. to 7 a.m.)	5%	5%		
8. Traffic projected for what year?	2024	2024		

Adjustments for Automobile Traffic

	9 Stop and-go Table 3		10 Average Speed Table 4		11 Night-Time Table 5		12 Auto ADT (line 5c)		13 Adjusted Auto ADT	14 DNL (Workchart 1)		15 Barrier Attenuation		16 Partial DNL
Road No. 1	1.0	x	0.67	x	0.62	x	13,544	=	5626	61	–		=	61
Road No. 2	1.0	x	1.0	x	0.62	x	39,043	=	24,207	61	–		=	60
Road No. 3		x		x		x		=			–		=	
Road No. 4		x		x		x		=			–		=	

Adjustments for Heavy Truck Traffic

	17 Gradient Table 6		18 Average Speed Table 7		19 Truck ADT / 2	20		21		22 Stop and-go Table 8		23 Night-Time Table 5		24 Adjusted Truck ADT	25 DNL (Work-chart 2)		26 Barrier Attn.		27 Partial DNL
Uphill	1.4	x	0.81	x	108	=	122												
Road No. 1								Add	210	x	1.8	x	0.62	= 63		–		=	63
Downhill			0.81	x	109	=	88												
Uphill	1.4	x	0.81	x	312	=	353												
Road No. 2								Add	666	x	1.8	x	0.62	= 743	61	–		=	61
Downhill			1.0	x	313	=	313												
Uphill		x		x		=													
Road No. 3								Add		x		x		=		–		=	
Downhill				x		=													
Uphill		x		x		=													
Road No. 4								Add		x		x		=		–		=	
Downhill				x		=													

Combined Automobile & Heavy Truck DNL

Road No. 1 65.1 Road No. 2 63.1 Road No. 3 _____ Road No. 4 _____ Total DNL for All Roads 67.2

Signature _____ Date February 12,2024

Railway Noise Data Sheet

Noise Assessment Guidelines

N/A

List All Railways within 3000 feet of the site:

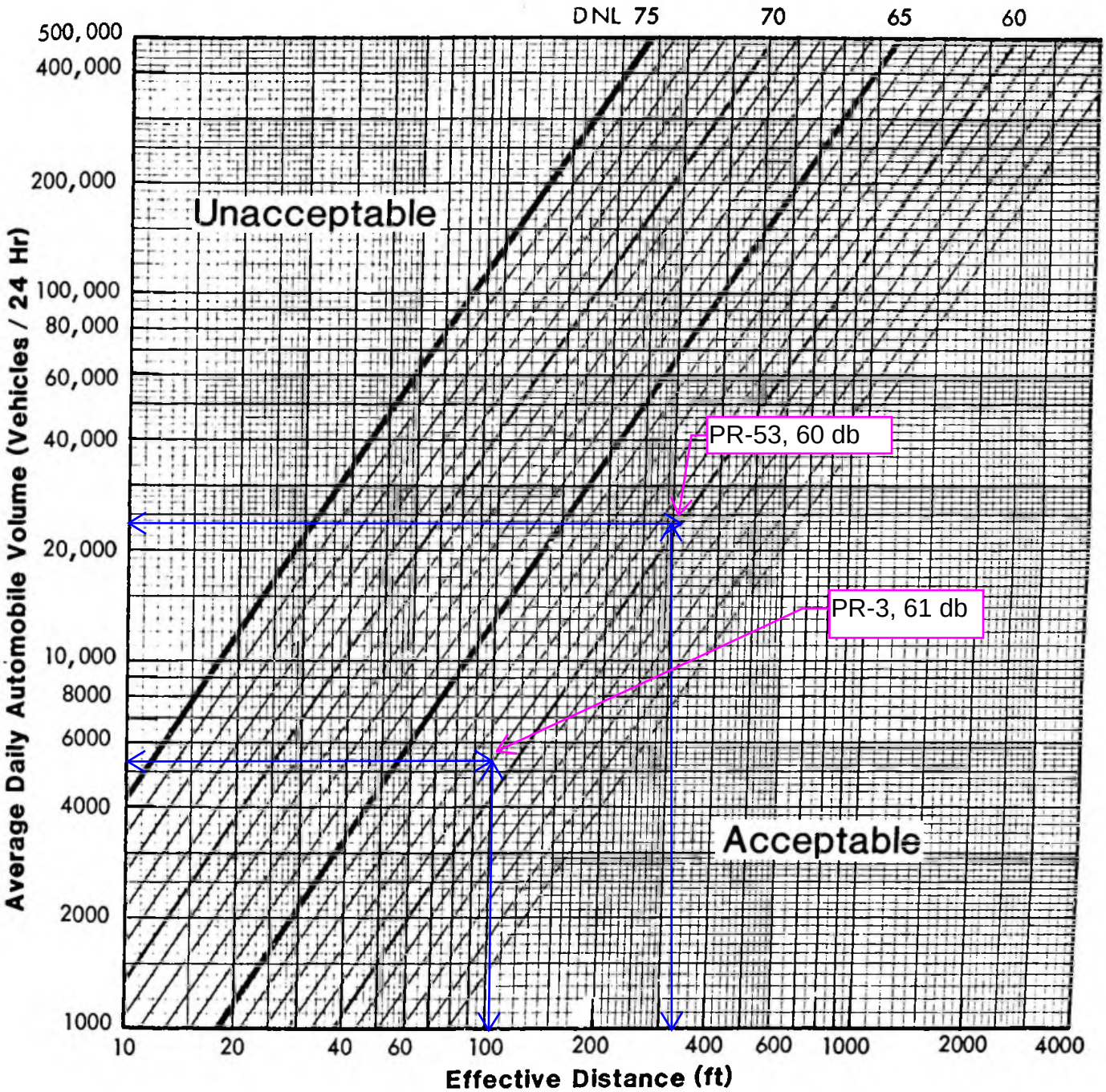
1. _____

2. _____

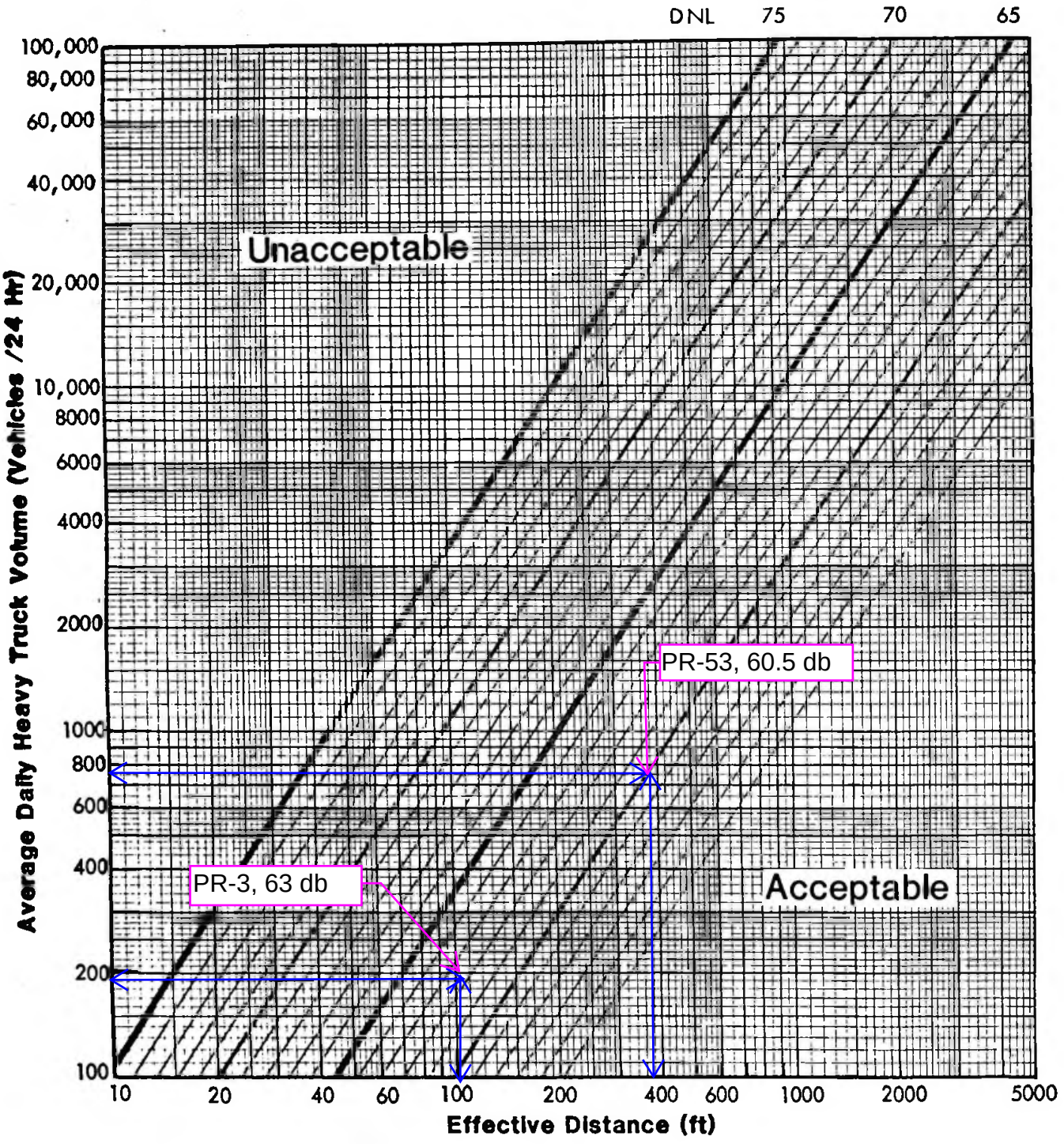
3. _____

Necessary Information	**Railway No. 1**	**Railway No. 2**	**Railway No. 3**	**Notes**
1. Effective distance:				Measured in feet from NAL to center of track
2. Number of Trains in 24 hours:				
a. diesel				
b. electrified				
3. Fraction of operations occuring at night:				10 p.m. - 7a.m.
4. Number of diesel locomotives per train:				
5. Number of rail cars per train:				
a. diesel trains				
b. electrified trains				Include locomotive for electrified trains
6. Average train speed:				
7. Is track welded or bolted?				
8. Is the site opposite a section of tracks between whistle stops?				

Workchart 1
Autos (55 mph)



Workchart 2
Heavy Trucks (55 mph)



Railway Noise Data Sheet

Noise Assessment Guidelines

N/A

List All Railways within 3000 feet of the site:

1. _____

2. _____

3. _____

Necessary Information	**Railway No. 1**	**Railway No. 2**	**Railway No. 3**	**Notes**
1. Effective distance:				Measured in feet from NAL to center of track
2. Number of Trains in 24 hours:				
a. diesel				
b. electrified				
3. Fraction of operations occuring at night:				10 p.m. - 7a.m.
4. Number of diesel locomotives per train:				
5. Number of rail cars per train:				
a. diesel trains				
b. electrified trains				Include locomotive for electrified trains
6. Average train speed:				
7. Is track welded or bolted?				
8. Is the site opposite a section of tracks between whistle stops?				

N/A

Adjustments for Diesel Locomotives

	9 No. of Locomotives 2	10 Average Speed (Table 9)	11 Horns (Enter 10)	12 Night-time (Table 5)	13 No. of Trains (Line 2a)	14 Adj. No of Opns.	15 DNL (Workchart 3)	16 Barrier Attn.	17 Partial DNL
Railway No. 1	_____ x	_____ x	_____ x	_____ x	_____ =	_____	_____ -	_____ =	_____
Railway No. 2	_____ x	_____ x	_____ x	_____ x	_____ =	_____	_____ -	_____ =	_____
Railway No. 3	_____ x	_____ x	_____ x	_____ x	_____ =	_____	_____ -	_____ =	_____

Adjustments for Railway Cars or Rapid Transit Trains and Electric Locomotives

	18 Horns on Electric Trains only (Enter 100)	19 Number of cars 50	20 Average Speed (Table 10)	21 Bolted Rails (Enter 4) Welded (Enter 1)	22 Night-time (Table 5)	23 No. of Trains (Lines 2a and 2b)	24 Adj. No. of Opns.	25 DNL (Workchart 4)	26 Barrier Attn.	27 Partial DNL
Railway No. 1	_____ x	_____ x	_____ x	_____ x	_____ x	_____ =	_____	_____ -	_____ =	_____
Railway No. 2	_____ x	_____ x	_____ x	_____ x	_____ x	_____ =	_____	_____ -	_____ =	_____
Railway No. 3	_____ x	_____ x	_____ x	_____ x	_____ x	_____ =	_____	_____ -	_____ =	_____

Combined Locomotive and Railway Car DNL (See combining noise levels table for procedures)

Partial DNL Railway No. 1	Partial DNL Railway No. 2	Partial DNL Railway No. 3	Partial DNL Total DNL for all Railways
_____	_____	_____	_____

Signed _____ Date _____

Exhibit 12a

Distance to Major Roads, Airports and Railroads Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants

Legend

- Distance to RVR Airport (13.07 miles)
- Distrance to Tren Urbano (127,280 ft)
- PR-3 (120 ft)
- Project Limit
- Runway
- RVR Airport
- Tren Urbano

127,280 ft / 24.29 miles

13.07 miles / 69,000 ft

Google Earth

Image © 2024 Airbus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2024 Maxar Technologies

10 mi

N

https://earth.google.com/web/@18.12096469,-65.82273279

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

Exhibit 13

Sole Source Aquifers Map

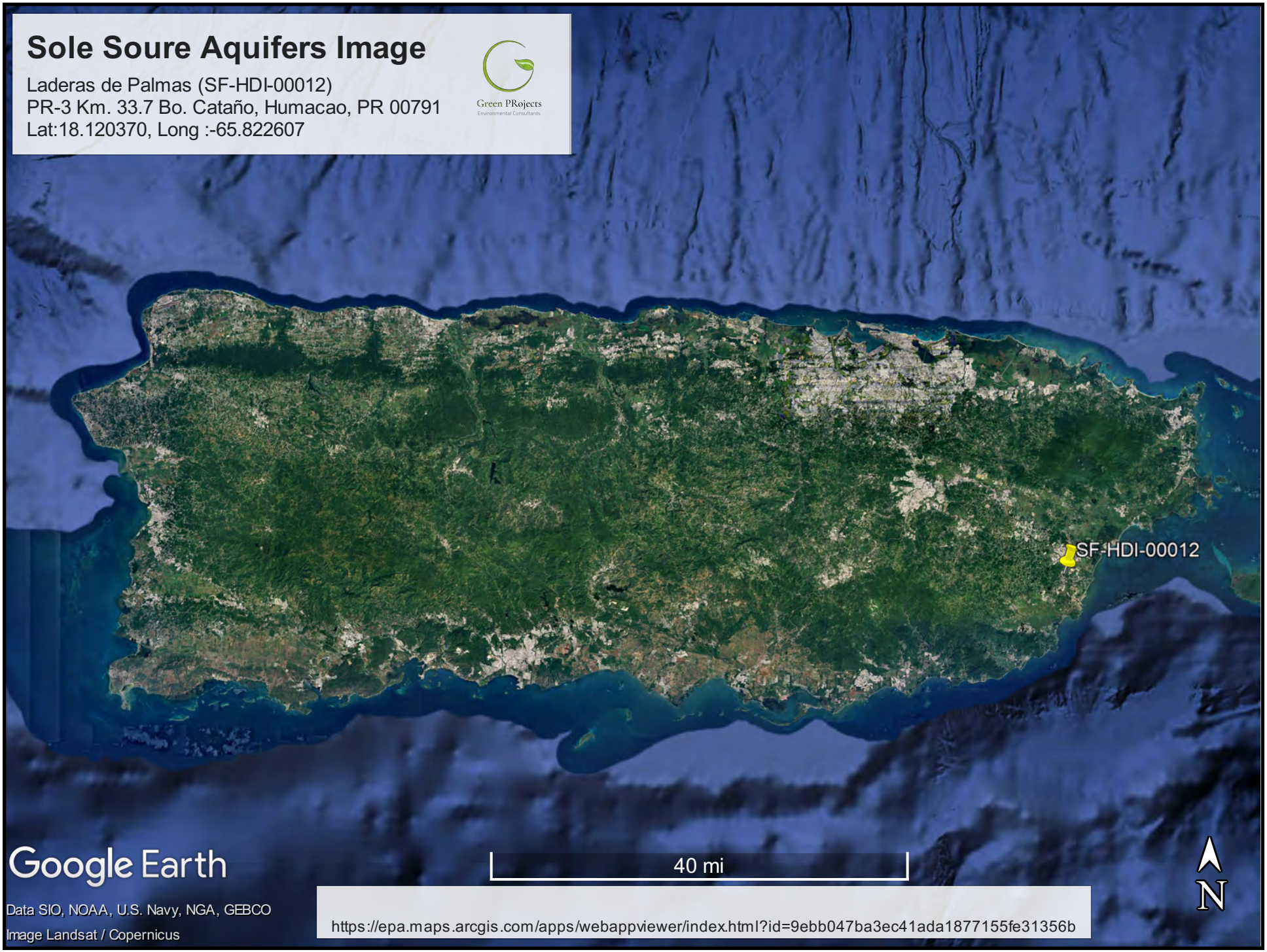
Laderas de Palmas

SF-HDI-00012

Sole Soure Aquifers Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants



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

Exhibit 14

National Wetland Inventory Map (U.S. F&WLS)

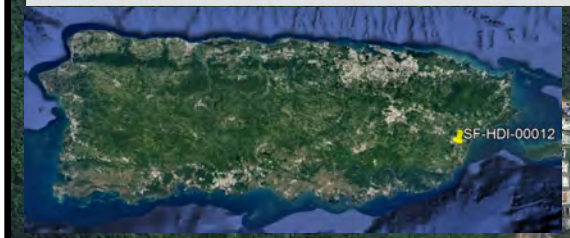
Laderas de Palmas

SF-HDI-00012

National Wetlands Inventory Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants



Legend

- Project Limit
- SF-HDI-00012

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

2000 ft

N

Google Earth

Image © 2025 Airbus

https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

Exhibit 14a

February 5, 2025

Lourdes Mena
Field Supervisor
Fish and Wildlife Service
Caribbean Ecological Service Field Office
PO Box 491
Boquerón, Puerto Rico 00622

Subject: **Response to Comments**
SF**-HDI-00012**
Laderas de Palma, Humacao, PR

Dear Ms. Mena,

On November 6, 2024, we received your letter in response to our consultation, as per the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. and its amendments). In that letter, the agency concurs with the determination that the project may affect but is not likely to adversely affect, the Puerto Rican boa (*Chilabothrus inornatus*) and the guajón (*Eleutherodactylus cooki*). This determination is based on compliance with the conservation measures established by the Fish and Wildlife Service (FWS) for both species.

Additionally, your letter mentions that the project could impact approximately 2.8 acres of riverine wetlands. These impacts are related to the filling area and the stormwater detention pond. You also indicated that the implications for the wetlands could be eliminated if housing units 1, 17, 18, 33, and 34 are removed and the detention pond is redesigned to include a riser and discharge water toward the stream at a 45-degree angle in the direction of the flow.

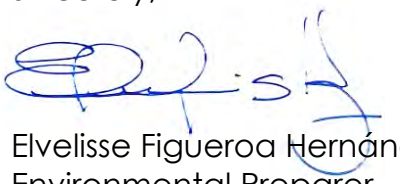
Following your recommendations, we have redesigned the project, removing six residences. The detention pond has been relocated outside the wetland area delineated in the National Wetland Inventory Map (NWI). The impact area is now at a minimum distance of 20.9 feet from the nearest point of the project to the wetlands. With these design changes, the natural bed and bank of the Quebrada Cataño are preserved, as required by the FWS.

With the project redesign, we believe we have adequately addressed the recommendations provided in your letter. Therefore, we respectfully request your agency's final endorsement to continue with the required evaluation and

permitting processes for the project so that construction can begin. The updated design overlaid on the NWI map is attached to this letter.

If you have any questions or need additional information, please feel free to contact me at 787-528-3322 or greenprojectpr@gmail.com.

Sincerely,



Elvelisse Figueroa Hernández
Environmental Preparer
Green project Environmental Consultants, LLC

N 231600 N 231675 N 231750 N 231825 N 231900 N 231975 N 232050

E 264450 E 264525 E 264600 E 264675 E 264750 E 264825

PR-910

GREEN AREA

NEIGHBORHOOD FACILITIES 2 of 2
PARCEL AREA = 961.24sm

NEIGHBORHOOD FACILITIES 1 of 2
PARCEL AREA = 1,873.67sm

NO. 103 ST.

NO. 102 ST.

NO. 101 ST.

NO. 100 ST.

NO. 104 ST.

44 43 42 41 40 39 38 37 36 35 34 33 32 31 30

45 46 47 48 49 50 51 52 53 54 55

23 24 25 26 27 28 29

67 66 65 64 63 62 61 60 59 58 57 56

22 21 20 19 18 17 16

68 69 70 71 72 73 74 75 76 77 78 79 80 81

9 10 11 12 13 14 15

97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82

8 7 6 5 4 3 2 1

98 99 100 101 102 103 104 105 106 107

26.1

5.0

11.8

7.4

6.5

6.4

7.8

7.1

8.8

5.0

26.3

10.0m BUFFER ZONE

PREVIOUS DESIGN LIMIT

5m BUFFER ZONE TO WET LAND

>> CATAÑO CREEK <<

GREEN AREA

REMNANT FOR CONSERVATION

DETENTION POND
BASE ELEV. = 37.50
MAX. WATER ELEV. =+96.90
EFFECTIVE ELEV. = 31.50

FUTURE PREPA ROW

PREPA ROW

PAN PEPIN INC

PR-3

< TO YABUCOA <

> TO HUMACAO >

N

S

PLAN

0 10 20 30 40 50

SCALE = 1:500

Yo, Ingeniero Antonio F. Hernandez-Cruz, licencia número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias y que están en conformidad con los Códigos de Edificación vigentes de "Puerto Rico Codes 2018". También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además que, en la preparación de estos planos y especificaciones, se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 del 15 de mayo de 1938, según enmendada; Ley Núm. 96 del 6 de julio de 1978, según enmendada, según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe y cualquier otra autoridad competente". También certifico que, los planos están en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Archivo Gráfico de Puerto Rico, en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y certifico que cumple con los Códigos de Edificabilidad vigentes del "Puerto Rico Codes".

241216

SUBMITTED FOR AGENCIES APPROVAL:
DECEMBER 16, 2024

SET: 029
REV: -

ID: SF-HDI-00012

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046

CIAPR (EDE) STAMPS FOR PE:19,102
1045-2301-230908_2458-1744-3431-8573
1045-2402-240209_5768-8424-8604-1134

PRHTA / PRDOTPW:
2016-117262-SRI-200477
C#5005-16-197
5005-JRZH-NTC-dm

SHEET TITLE:
PROPOSED GENERAL SITE PLAN

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED IN ANY MANNER WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF H.F.C.S. UPON THE REQUEST IN WRITING, IT SHALL BE RETURNED TO H.F.C.S. UPON THE REQUEST BY THIS OFFICE.

J. C. A.	.
CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Avenida Hostos González 1245 LOMAS DEV. - TEL 787.645.PATRICIO AVE. - SAN JUAN PR. 00921
T: 787.792.2687 M: 939.340.6138 FOTOS, AZORES 425 SUR 688 - PMB 288 - 3000 CR 31846

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C–101

SHEET NO:	TOTAL:
.	.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Bayamón | Mayagüez | Maricao | Río Grande | St Croix
P.O. Box 491
Boquerón, Puerto Rico 00622

In Reply Refer To:
FWS/R4/CESFO/72069-054

Submitted via electronic mail: environmentcdbg@vivienda.pr.gov

Ms. Santa Rodríguez
Permits and Environmental Compliance Division
Disaster Recovery Office
PR Department of Housing

Re: SF-HDI-00012 Laderas de Palmas,
Humacao, Puerto Rico

Dear Ms. Rodríguez:

This is in reply to the above referenced housing development to be financed under the Single Family Housing Mitigation of the Community Development Block Grants. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

The project is in a 39 acre site, of which the proposed project will occupy about18 acres. An estimated 100 single family houses will be built. The Quebrada Cataño, a tributary to the Humacao River, runs along the eastern boundary of the proposed development. About 2.8 acres of riverine wetlands will be impacted by the project. These wetland impacts are associated with the toe of the fill and storm water detention pond. We believe that all wetland impacts can be eliminated if housing units 1, 17, 18, 33 and 34 are eliminated and the detention pond be redesigned to include a riser and discharge into the quebrada at a 45 degree angle in direction of the flow.

The project designer HF Engineering should redesign the project accordingly. This will ensure compliance with Executive Orders 11990 and 11988 for protection of wetlands and river floodplains, eliminate the need for a US Army Corps of Engineers Permit and any required compensatory mitigation for wetland impacts which would have to be included in the overall project costs. This will also leave the existing bed and bank of the Quebrada Cataño in its natural state.

The property has another undeveloped section of some 21 acres, the Quebrada Cataño runs diagonally through this parcel and any future residential development should include the quebrada as a linear green space and incorporated into the design.

With regards to federally listed species, you have determined that the Puerto Rican boa (*Chilabothrus inornatus*), and the guajón (*Eleutherodactylus cooki*) can be found within the project

action area. The determination that the project may affect but is not likely to adversely affect these species is based on following the Fish and Wildlife Service established conservation measures for both species. Please remember that these conservation measures have reporting requirements that should be followed by the grantee.

We have reviewed the information provided in your letter and our files and concur with your determination that the proposed action may affect, but is not likely to adversely affect, the above referenced species. No adverse impacts to designated critical habitat are anticipated.

In view of this, we believe that requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

Thank you for the opportunity to comment on this action, if you have any questions, please contact Felix Lopez of my staff at (305) 304-1128.

Sincerely,

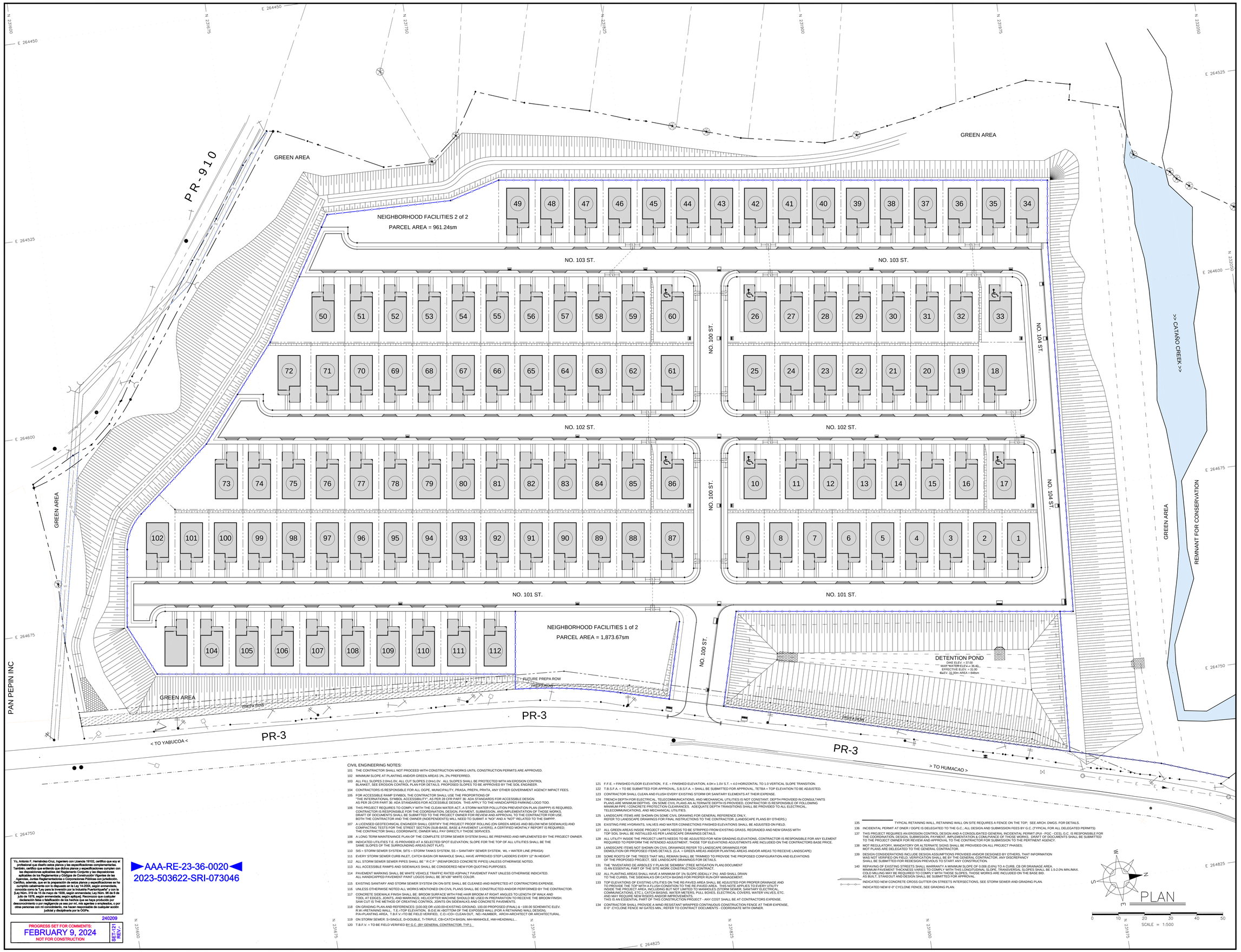
LOURDES MENA

Digitally signed by LOURDES MENA
Date: 2024.11.06 21:38:09 -04'00'

Lourdes Mena
Field Supervisor

fhl
cc:
DNER, San Juan
PRPB, San Juan
COR3, San Juan
COE, San Juan

Exhibit 14b



CIVIL ENGINEERING NOTES:

101 THE CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION WORKS UNTIL CONSTRUCTION PERMITS ARE APPROVED.

102 MINIMUM SLOPE AT PLANTING AND/OR GREEN AREAS 1%, 2% PREFERRED.

103 ALL FILL SLOPES 2.0Hx1.0V, ALL CUT SLOPES 2.0Hx1.0V. ALL SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET, SEE EROSION CONTROL PLAN FOR DETAILS. PROPOSED SLOPES TO BE APPROVED BY THE SOIL ENGINEER.

104 CONTRACTORS IS RESPONSIBLE FOR ALL OGPE, MUNICIPALITY, PRASA, PREPA, PRHTA, AND ANY OTHER GOVERNMENT AGENCY IMPACT FEES.

105 FOR ACCESSIBLE RAMP SYMBOL THE CONTRACTOR SHALL USE THE PROPORTIONS OF
"THE INTERNATIONAL SYMBOL ACCESSIBILITY", AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN.
AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN. THIS APPLY TO THE HANDICAPPED PARKING LOGO TOO.

106 THIS PROJECT REQUIRES TO COMPLY WITH THE CLEAN WATER ACT, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED, CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, DESIGN, PAYMENT, SUBMISSION, AND IMPLEMENTATION OF THOSE WORKS.
DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR USE.
BOTH THE CONTRACTOR AND THE OWNER (INDEPENDENTS) WILL NEED TO SUBMIT A "NOI" AND A "NOT" RELATED TO THE SWPPP.

107 A LICENSED GEOTECHNICAL ENGINEER SHALL CERTIFY THE PROJECT PROOF ROLLING (ON GREEN AREAS AND BELOW NEW SIDEWALKS) AND COMPACTING TESTS FOR THE STREET SECTION (SUB-BASE, BASE & PAVEMENT LAYERS). A CERTIFIED MONTHLY REPORT IS REQUIRED.
THE CONTRACTOR SHALL COORDINATE; OWNER WILL PAY DIRECTLY THOSE SERVICES..

108 A LONG TERM MAINTENANCE PLAN OF THE COMPLETE STORM SEWER SYSTEM SHALL BE PREPARED AND IMPLEMENTED BY THE PROJECT OWNER.

109 INDICATED UTILITIES' E.F. IS PROVIDED AT A SELECTED SPOT ELEVATION; SLOPE FOR THE TOP OF ALL UTILITIES SHALL BE THE SAME SLOPES OF THE SURROUNDING AREAS (NOT FLAT).

110 SIS = STORM SEWER SYSTEM, SITS = STORM TANKS SYSTEM, SS = SANITARY SEWER SYSTEM, WL = WATER LINE (PRASA)

111 EVERY STORM SEWER CURB INLET, CATCH BASIN OR MANHOLE SHALL HAVE APPROVED STEP LADDERS EVERY 12" IN HEIGHT.

112 ALL STORM SEWER SEWER PIPES SHALL BE " R C P " (REINFORCED CONCRETE PIPES) UNLESS OTHERWISE NOTED.

113 ALL ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE CONSIDERED NEW FOR QUOTING PURPOSES.

114 PAVEMENT MARKING SHALL BE WHITE VEHICLE TRAFFIC RATED ASPHALT PAVEMENT PAINT UNLESS OTHERWISE INDICATED.
ALL HANDICAPPED PAVEMENT PAINT LOGOS SHALL BE 36"x36" WHITE COLOR.

115 EXISTING SANITARY AND STORM SEWER SYSTEM ON ON-SITE SHALL BE CLEANED AND INSPECTED AT CONTRACTORS EXPENSE.

116 UNLESS OTHERWISE NOTED ALL WORKS MENTIONED ON CIVIL PLANS SHALL BE CONSTRUCTED AND/OR PERFORMED BY THE CONTRACTOR.

117 CONCRETE SIDEWALK FINISH SHALL BE: BROOM SURFACE WITH FINE-HAIR BROOM AT RIGHT ANGLES TO LENGTH OF WALK AND TOOL AT EDGES, JOINTS, AND MARKINGS; HELICOPTER MACHINE SHOULD BE USED IN PREPARATION TO RECEIVE THE BROOM FINISH.
SAW CUT IS THE METHOD OF CREATING CONTROL JOINTS ON SIDEWALKS AND CONCRETE PAVEMENTS.

118 ON GRADING PLAN AND REFERENCES: [(10.00) OR x(10.00)=EXISTING GROUND, 100.00 PROPOSED (FINAL) & -100.00 SCHEMATIC ELEV.
R.W.=RETAINING WALL, T.E.=TOP ELEVATION, B.O.E.W.=BOTTOM OF THE EXPOSED WALL (FOR A RETAINING WALL DESIGN),
P/A=PLANTING AREA, T.B.F.V.=TO BE FIELD VERIFIED, C.O.=CO= CLEAN OUT, NO.=NUMBER, ARCH=ARCHITECT OR ARCHITECTURAL.

119 ON STORM SEWER: S=SINGLE, D=DOUBLE, T=TRIPLE, CB=CATCH BASIN, MH=MANHOLE, MW=HEADWALL...

120 T.B.F.V. = TO BE FIELD VERIFIED BY G.C. (BY GENERAL CONTRACTOR, TYP.)...

121 F.F.E. = FINISHED FLOOR ELEVATION, F.E. = FINISHED ELEVATION, 4.0H x 1.0V S.T. = 4.0 HORIZONTAL TO 1.0 VERTICAL SLOPE TRANSITION.

122 T.B.S.F.A. = TO BE SUBMITTED FOR APPROVAL, S.B.S.F.A. = SHALL BE SUBMITTED FOR APPROVAL, TE/TBA = TOP ELEVATION TO BE ADJUSTED.

123 CONTRACTOR SHALL CLEAN AND FLUSH EVERY EXISTING STORM OR SANITARY ELEMENTS AT THEIR EXPENSE.

124 TRENCH DEPTH FOR ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES IS NOT CONSTANT; DEPTH PROVIDED IN CONSULTANTS PLANS ARE MINIMUM DEPTHS. ON SOME CIVIL PLANS AN ALTERNATE DEPTH IS PROVIDED, CONTRACTOR IS RESPONSIBLE OF FOLLOWING MINIMUM PIPE / CONCRETE PROTECTION CLEARANCES. ADEQUATE DEPTH TRANSITIONS SHALL BE PROVIDED TO ALL ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES.

125 LANDSCAPE ITEMS ARE SHOWN ON SOME CIVIL DRAWING FOR GENERAL REFERENCE ONLY,
REFER TO LANDSCAPE DRAWINGS FOR FINAL INSTRUCTIONS TO THE CONTRACTOR. (LANDSCAPE PLANS BY OTHERS.)

126 EXISTING FIRE HYDRANTS, VALVES AND WATER CONNECTIONS FINISHED ELEVATIONS SHALL BE ADJUSTED ON FIELD.

127 ALL GREEN AREAS INSIDE PROJECT LIMITS NEEDS TO BE STRIPPED FROM EXISTING GRASS, REGRADED AND NEW GRASS WITH TOP SOIL SHALL BE INSTALLED AS PER LANDSCAPE DRAWINGS DETAILS.

128 ALL UTILITY INSIDE THE PROJECT LIMITS NEEDS TO BE ADJUSTED FOR NEW GRADING ELEVATIONS, CONTRACTOR IS RESPONSIBLE FOR ANY ELEMENT REQUIRED TO PERFORM THE INTENDED ADJUSTMENT; THOSE TOP ELEVATIONS ADJUSTMENTS ARE INCLUDED ON THE CONTRACTORS BASE PRICE.

129 LANDSCAPE ITEMS NOT SHOWN ON CIVIL DRAWINGS REFER TO LANDSCAPE DRAWINGS FOR
DEMOLITION OR PROPOSED ITEMS DETAILS. (C.A. = GREEN AREAS AND/OR PLANTING AREAS AND/OR AREAS TO RECEIVE LANDSCAPE)

130 SOME ROOTS OF THE TREES THAT WILL REMAIN SHALL BE TRIMMED TO PROVIDE THE PROPOSED CONFIGURATION AND ELEVATIONS OF THE PROPOSED PROJECT, SEE LANDSCAPE DRAWINGS FOR DETAILS.

131 THE "INVENTARIO DE ARBOLES Y PLAN DE SIEMBRA" (TREE MITIGATION PLAN) DOCUMENT IS AN ESSENTIAL PART OF THE SITE WORK CONSTRUCTION CONTRACT.

132 ALL PLANTING AREAS SHALL HAVE A MINIMUM OF 1% SLOPE (IDEALLY 2%) AND SHALL DRAIN TO THE CURBS, THE SIDEWALKS OR CATCH BASINS FOR PROPER RUN-OFF MANAGEMENT.

133 TOP ELEVATIONS OF EXISTING UTILITIES ON THE RE-PAVED AREA SHALL BE ADJUSTED FOR PROPER DRAINAGE AND SLOPES TO THE NEW PAVEMENT AREA, INCLUDING BUT NOT LIMITED TO THE RE-PAVED AREA. THIS NOTE APPLIES TO EVERY UTILITY SUBSYSTEMS, INCLUDING BUT NOT LIMITED TO MANHOLES (STORM SEWER, SANITARY ELECTRICAL, COMMUNICATIONS, ETC.), CATCH BASINS, WATER METERS, PULL BOXES, ELECTRICAL COVERS, WATER VALVES, ETC. AND MAY REQUIRE NEW RISERS AND/OR IMPROVEMENTS.
THIS IS AN ESSENTIAL PART OF THIS CONSTRUCTION PROJECT - ANY COST SHALL BE AT CONTRACTORS EXPENSE.

134 CONTRACTOR SHALL PROVIDE A WIND RESISTANT WRAPPED CONTINUOUS CONSTRUCTION FENCE AT THEIR EXPENSE, 6'-0" CYCLONE FENCE W/ GATES MIN.; REFER TO CONTRACT DOCUMENTS - COORDINATE WITH OWNER.

135 TYPICAL RETAINING WALL, RETAINING WALL ON SITE REQUIRES A FENCE ON THE TOP. SEE ARCH. DWGS. FOR DETAILS.

136 INCIDENTAL PERMIT AT OWER / OGPE IS DELEGATED TO THE G.C.; ALL DESIGN AND SUBMISSION FEES BY G.C. (TYPICAL FOR ALL DELEGATED PERMITS)

137 THIS PROJECT REQUIRES AN EROSION CONTROL DESIGN AND A CONSOLIDATED GENERAL INCIDENTAL PERMIT (PUI - PGC - CES), G.C. IS RESPONSIBLE FOR THE COORDINATION, DESIGN, SUBMISSION, PAYMENT, IMPLEMENTATION & COMLPANCE OF THOSE WORKS. DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR SUBMISSION TO THE PERTINENT AGENCY.

138 MOT REGULATORY, MANDATORY OR ALTERNATE SIGNS SHALL BE PROVIDED ON ALL PROJECT PHASES;
MOT PLANS ARE DELEGATED TO THE GENERAL CONTRACTOR.

139 DESIGN CONSIDERATIONS INCLUDE DESIGN ASSUMPTIONS PROVIDED AND/OR DESIGNED BY OTHERS, THAT INFORMATION WAS NOT VERIFIED ON FIELD; VERIFICATION SHALL BE BY THE GENERAL CONTRACTOR, ANY DISCREPANCY SHALL BE SUBMITTED FOR REDESIGN PREVIOUS TO START ANY CONSTRUCTION.

140 REPAVING OF EXISTING STREETS SHALL WARRANTY A MINIMUM SLOPE OF 0.50% (0.6%) TO A CURB, CB OR DRAINAGE AREA.
MINIMUM PAVEMENT THICKNESS VARIES TO COMPLY WITH THIS LONGITUDINAL SLOPE, TRANSVERSAL SLOPES SHALL BE 1.5-2.0% MIN.MAX.
COLD MILLING MAY BE REQUIRED TO COMPLY WITH THOSE SLOPES, THOSE WORKS ARE INCLUDED ON THE BASE BID.
AS BUILT, STAKEOUT AND DESIGN SHALL BE SUBMITTED FOR APPROVAL.

INDICATED NEW CONCRETE CROSS GUTTER ON STREETS INTERSECTIONS, SEE STORM SEWER AND GRADING PLAN.

INDICATED NEW 6'-0" CYCLONE FENCE, SEE GRADING PLAN.

PLAN
SCALE = 1:500
0 10 20 30 40 50

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley 173 de 12 de agosto de 1988, según enmendada, conocida como la "Ley de Apoyo al Desarrollo Empresarial", según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

240209

PROGRESS SET FOR COMMENTS:
FEBRUARY 9, 2024
NOT FOR CONSTRUCTION

SET / 01 REV / -

AAA-RE-23-36-0020
2023-503622-SRI-073046

SHEET TITLE:
PROPOSED GENERAL SITE PLAN

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.E.C.S. (H.F. Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED IN ANY MANNER WHATSOEVER WITHOUT AN WRITING. IT SHALL BE RETURNED TO H.F.E.C.S. UPON THE REQUEST BY THIS OFFICE.

J. C. A. .
CONSULTA: .
AAA NO.: .
ACT NO.: .
ARPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

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PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—101

SHEET NO: .
TOTAL: .

N 231600 N 231675 N 231750 N 231825 N 231900 N 231975 N 232050

E 264450 E 264525 E 264600 E 264675 E 264750 E 264825

PR-910

GREEN AREA

NEIGHBORHOOD FACILITIES 2 of 2
PARCEL AREA = 961.24sm

NEIGHBORHOOD FACILITIES 1 of 2
PARCEL AREA = 1,873.67sm

NO. 103 ST.

NO. 102 ST.

NO. 101 ST.

NO. 100 ST.

NO. 104 ST.

44 43 42 41 40 39 38 37 36 35 34 33 32 31 30

45 46 47 48 49 50 51 52 53 54 55

23 24 25 26 27 28 29

67 66 65 64 63 62 61 60 59 58 57 56

22 21 20 19 18 17 16

68 69 70 71 72 73 74 75 76 77 78 79 80 81

9 10 11 12 13 14 15

97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82

8 7 6 5 4 3 2 1

98 99 100 101 102 103 104 105 106 107

26.1

5.0

11.8

7.4

6.5

6.4

7.8

7.1

8.8

5.0

26.3

10.0m BUFFER ZONE

PREVIOUS DESIGN LIMIT

5m BUFFER ZONE TO WET LAND

>> CATAÑO CREEK <<

GREEN AREA

REMNANT FOR CONSERVATION

DETENTION POND
BASE ELEV. = 37.50
MAX. WATER ELEV. =+96.90
EFFECTIVE ELEV. = 31.50

FUTURE PREPA ROW

PREPA ROW

PAN PEPIN INC

PR-3

< TO YABUCOA <

> TO HUMACAO >

N

S

PLAN

0 10 20 30 40 50

SCALE = 1:500

Yo, Ingeniero Antonio F. Hernandez-Cruz, licencia número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias y que están en conformidad con los Códigos de Edificación vigentes de "Puerto Rico Codes 2018". También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además que, en la preparación de estos planos y especificaciones, se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 del 15 de mayo de 1938, según enmendada; Ley Núm. 96 del 6 de julio de 1978, según enmendada, según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe y cualquier otra autoridad competente". También certifico que, los planos están en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Archivo Gráfico de Puerto Rico, en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y certifico que cumple con los Códigos de Edificabilidad vigentes del "Puerto Rico Codes".

241216

SUBMITTED FOR AGENCIES APPROVAL:
DECEMBER 16, 2024

SET: 029
REV: -

ID: SF-HDI-00012

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046

CIAPR (EDE) STAMPS FOR PE:19,102
1045-2301-230908_2458-1744-3431-8573
1045-2402-240209_5768-8424-8604-1134

PRHTA / PRDOTPW:
2016-117262-SRI-200477
C#5005-16-197
5005-JRZH-NTC-dm

SHEET TITLE:
PROPOSED GENERAL SITE PLAN

STATUS:
ADVANCED DRAWINGS

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REVISIONS

NUMBER	DATE	BY	DESCRIPTION

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PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C–101

SHEET NO:	TOTAL:
.	.

8-Step Process

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT:

8-STEP PROCESS

Laderas de Palmas – Humacao, PR

SF-HDI-00012

The Puerto Rico Department of Housing (PRDOH) has determined that the proposed action under the Hazard Mitigation Grant Program, Community Development Block Grant – Mitigation (CDBG-MIT)—B-18-DP-72-0002, Project ID SF-HDI-00012, affects a wetland area.

Rebuilders PR, LLC is working on the Environmental Review Process for the Project Laderas de Palmas. The project is in the State Road PR-3, Km. 33.7, Cataño Ward, in Humacao, Puerto Rico 00791 (Lat. 18.121317, Long. -65.822449). The Property has a capacity of 39.54 acres, and the SF-HDI-00012 project occupies 18.9 acres. The Proposed Action involves the construction of 100 units of single-family housing.

The houses will have three bedrooms, two bathrooms, and a living room. The rest of the project's components are a room, a kitchen, a dining area, and a one-car garage. The residences will be resilient to weather events by installing photovoltaic panels, energy storage batteries, cross-ventilation, fans, efficient equipment, and a water cistern.

Within the property but outside the project's impact footprint is located the Cataño Stream, identified as a riverine wetland (R2UBH), which occupies approximately 2.04 acres, and a freshwater forested/shrub wetland (PFO3A) with an approximate capacity of 0.24 acres, according to the National Wetland Inventory (FWS-NWI) Map, available at https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/[1].

Below is a summary of the eight-step process and how the PRDOH has or will comply with Executive Order 11990 since there is a wetland area at the Property.

[1] Exhibit 1.- USFWS National Wetlands Inventory Map

Step 1: *Determine whether the action is located in a 100-year floodplain (or a 500-year floodplain for critical actions)*

According to the Federal Emergency Management Agency Flood Insurance Rate Map No. 72000C1805J for the Commonwealth of Puerto Rico, effective on November 18, 2009, and the Advisory Base Flood Elevation Map (ABFE)[2], issued on April 13, 2018, the property is in Flood Zone X and outside the Advisory Base Flood Elevation (ABFE) Map. The proposed project is located outside the FFRMS floodplain.

Under HUD regulations, this project is considered new construction and, therefore, is not exempt from the requirements of 24 CFR 55.20 (24 CFR 55.12). An evaluation of direct and indirect impacts associated with the wetland's construction, occupancy, and modification is required.

Regarding Executive Order 11990, the wetland evaluation was conducted according to the United States Fish and Wildlife Service National Wetland Inventory (USFWS-NWI). The NWI shows the Cataño Creek that runs through the central portion of the Property but outside the footprint of the Project. This stream collects runoff water from the Property and the properties upstream. It is identified as a riverine wetland (R2UBH) and a freshwater shrubby wooded wetland (PFO3A).

The extent of the wetlands areas was determined using the National Wetland Inventory Mapper of USFWS (NWI-FWS).

As requested by PRDOH, a visual assessment was conducted on February 27, 2025, to confirm the presence of wetlands on the property and complete the Primary Screening for Wetlands as per HUD's Regulations at 24 CFR 55.9(b).[3]

The assessment concluded that the property exhibits hydrological conditions and vegetation associated with wetlands. Within the property but outside the project's impact footprint, the Cataño stream flows. The stream's channel runs through the central portion of the property, north of the project's impact footprint. The stream, its buffer zone—which varies in width from 20.9 to 86.28 feet—and the remaining portion of the property will remain in their natural condition.

It was also observed that the delineation of the stream's channel differs from what is shown on the Wetlands Inventory Map. The stream flows slightly north, meaning

[2] Exhibit 2 – Advisory Base Flood Elevation (ABFE) Map.
[3] Exhibit 3- Primary Screening for Wetlands

farther from the impact footprint, as indicated in the survey and topographic plan.[4]

Step 2: *Notify the public for early review of the proposal and involve the affected and interested public in the decision-making process.*

A public notice describing the project was published in the Primera Hora, the local and regional paper, on October 1, 2024. The ad targeted residents, including those in the wetland. A copy of the published notification was kept in the project's environmental review records and attached to this document. The required 15 calendar days were allowed for public comment. As required by regulation, the notice also included the name, proposed location and description of the activity, the total number of floodplain acres involved, and the HUD official or responsible entity contact for information as well as the location and hours of the office at which a full description of the proposed action can be viewed.

The Early Notice and Public Review of a Proposed Activity in a Wetlands was published in the newspaper of general circulation Primera Hora on October 1, 2024[5]. A comment was received through the Permits and Environmental Compliance Division e-mail: environmentcdbg@vivienda.pr.gov, for the project Laderas de Palmas (SF-HDI-00012), as part of the CDBG-MIT Single-Family Housing Mitigation Program, on October 2, 2024 by the USFWS Ecologist, Contaminants Specialist and Alt. Regional Emergency Coordinator, Félix López. The email received requested additional documentation regarding the project. As a response, maps, the study of flora and fauna, a technical proposal, and the USFWS informal consultation package were provided on October 15, 2024, according to the PRDOH validation letter dated November 6, 2024[6].

In a letter dated November 6, 2024[7], the FWS commented on the initial notice publication (2 Step) as follows:

> *The project is in a 39-acre site, of which the proposed project will occupy about18 acres. An estimated 100 single family houses will be built. The Quebrada Cataño, a tributary to the Humacao River, runs along the eastern boundary of the proposed development. About 2.8 acres of riverine wetlands will be impacted by the project. These wetland impacts are associated with the toe of the fill and storm water detention pond. We believe that all wetland impacts can be eliminated if housing units 1, 17, 18, 33 and 34 are eliminated and the detention pond be redesigned to*

[4] Exhibit 4. Survey plan
[5] Exhibit 5. Early Notice Publication
[6] Exhibit 6. PRDOH Validation Letter
[7] Exhibit 7. USFWS Letter- Permits and Environmental Compliance Division

include a riser and discharge into the quebrada at a 45 degree angle in direction of the flow.

The project designer HF Engineering should redesign[8] the project accordingly. This will ensure compliance with Executive Orders 11990 and 11988 for protection of wetlands and river floodplains, eliminate the need for a US Army Corps of Engineers Permit and any required compensatory mitigation for wetland impacts which would have to be included in the overall project costs. This will also leave the existing bed and bank of the Quebrada Cataño in its natural state.

In response to the FWS recommendations, the project has been redesigned[9]. Six residences were removed, and the retention pond was relocated outside the wetland area as delineated by the NWI. The impact footprint is now situated at a minimum distance of 20.9 feet from the closest point of the project to the wetland. With these design changes, the existing bed and bank of the Quebrada Cataño have been preserved in their natural state, as required by the FWS. The design changes were communicated to the FWS via a letter[10], and the agency responded, expressing their approval of the project's redesign through email[11].

The project's redesign resulted in a significant reduction of the impact footprint, decreasing from 21.22 acres to 18.9 acres. This was achieved by eliminating six residential units, reducing the total from 112 to 106. Of these, 100 houses are part of the contract under the CDBG-MIT program. These changes promote more efficient land use and enhanced environmental integration and expand green spaces, benefiting the natural surroundings, the wetlands, and the quality of life for future residents.

Step 3: *Identify and evaluate practicable alternatives.*

The proposed development includes the construction of 100 houses to reduce the demand for safe and affordable housing for families whose homes were affected by the impact of the hurricanes in 2017. The Project will include the construction of streets, infrastructure, retention ponds, and green areas (passive park).

As required by the PRDOH, the following practical alternatives were considered to avoid impact on wetlands:

- Locating the Project outside of the wetland zones.

[8] Exhibit 8. Response to USFWS Comments
[9] Exhibit 9. Project Site Plans
[10] Exhibit 10. Letter to FWS
[11] Exhibit 11. FWS Response (via Email)

- Finding alternative methods to accomplish the proposed objectives.
- Evaluate the impact of taking no action.

The viability of each of the alternatives mentioned above was evaluated in terms of cost, feasibility, technology, hazard reduction, and environmental impacts. The evaluation of each alternative is summarized below.

Alternative 1. Avoid wetlands impacts by relocating the project to another undeveloped parcel:

The Municipality of Humacao contains large areas of land classified as common rustic soil, which are specially protected as agricultural, coastal zones, and forest areas designated for conservation. The available land is also primarily used for commercial, industrial purposes, or conservation. It is often affected by pluvial valleys or other environmental factors unsuitable for safe housing development. The lands designated for residential development in Humacao are limited, driving up land value and making it challenging to develop affordable housing. This shortage restricts access to affordable housing for families with children, seniors, and individuals with special needs.

After evaluating the project's potential benefits and the mitigation measures proposed to minimize or avoid impacts on wetland areas, it was concluded that this alternative would not be the most beneficial course of action.

Alternative 2. To avoid impact on the wetland, build on the plot but maintain a buffer zone greater than 100 feet.

An alternative explored to reduce the potential indirect impacts of the project on the wetland was to increase the width of the buffer zone to 100 feet.

However, this alternative would affect 15 families, preventing them from acquiring safe and affordable property in an area with high demand for such housing. It is important to note that the rising cost of new housing makes it increasingly difficult for thousands of families impacted by past environmental events to access affordable, secure homes, such as those promoted by the CDBG-MIT Program.

After evaluating the project's potential benefits and the proposed mitigation measures to reduce or avoid indirect impacts on the wetlands, it was concluded that this alternative would not be the most beneficial course of action.

Alternative 3. No Action Alternative

The no-action alternative would result in the loss of 100 homes for families needing safe and affordable housing. While maintaining the land naturally may initially seem like an option with minimal or no impact, this is not always the case. The natural growth of the population and the need to adapt to climate change require proactive planning to determine where this growth should occur. This is a critical component of any urban planning process. Therefore, the feasibility of preserving the land in its natural state must be evaluated considering its location, designated uses, and its ability to support the continuity of existing communities, rather than creating isolated urban centers.

The land in question is designated for residential use by the Puerto Rico Planning Board (JP, by its Spanish acronym). More importantly, the Puerto Rico Land Use Plan has classified the land as Urban (SU). Keeping the land in its natural state and not using it for its intended purpose would create development pressures elsewhere in the municipality, driven by population growth and the need for safe and affordable housing. Furthermore, not using the property as planned would hinder the development of agricultural, industrial, or recreational projects that could benefit low-income communities.

Step 4: *Identify Potential Direct and Indirect Impacts of Associated with Floodplain Development.*

Even though wetlands exist within the Property, residences, and families are not expected to be affected. The design of the Project outside the wetland area and the conservation of a minimum 20.9 feet strip of the edge of the wetland channel (creek) will prevent the instability of the wetlands soils from affecting the structures, streets, and even the infrastructure necessary to provide services to residents. In addition, temporary and permanent erosion and sedimentation control measures will be implemented, as well as prohibiting impervious surfaces in and directly around the wetland to prevent permanent and adverse impact to the wetland.

Potential Direct Impacts:

1. None: Since the project has been assessed not directly to impact wetlands, there are no expected direct effects such as habitat destruction, alteration of water flow, or changes to wetland hydrology due to construction activities.

Potential Indirect Impacts:

1. Water Quality Degradation: Increased sedimentation and runoff caused by land development could lead to water quality issues if stormwater management practices are inadequate.

2. Altered Hydrology: Changes in land use, such as alterations in groundwater recharge or changes to surface water drainage patterns, may indirectly affect the hydrology of nearby wetlands.

3. Increased Invasive Species: Development may encourage introducing invasive plant species that could spread to nearby wetland areas, potentially disrupting local ecosystems.

4. Human Activity and Disturbance: Increased human presence in the area, including construction workers and later residents, could disturb wildlife behavior and habitat use adjacent to wetland areas.

5. Pollution from Runoff: Post-construction runoff from residential areas may introduce pollutants (e.g., fertilizers, pesticides, oils) that could indirectly affect wetland health over time.

6. Indirect Land Use Changes: The project could encourage further development in the surrounding area, increasing pressure on nearby wetlands through direct encroachment or increased runoff.

7. Vehicle Traffic and Access: Increased vehicle traffic and access roads may lead to more pollutants entering nearby wetlands and could contribute to habitat fragmentation.

Step 5: *Where practicable, design or modify the proposed action to minimize the potential adverse impacts to lives, property, and natural values within the floodplain and to restore, and preserve the values of the floodplain.*

1. Preserving Lives: To ensure the safety of residents and protect lives, the wetland area will be maintained in its natural condition. This will enable the wetland to effectively manage stormwater runoff generated by the property and the upstream regions. By preserving natural hydrology, we can mitigate flooding risks and safeguard the community from potential hazards associated with excessive rainfall or storm events.

2. Preserving Property: A retention pond will be integrated into the project design to enhance property safety and reduce potential flood damage. This retention pond will collect and manage the increased runoff resulting from the project's development, providing a controlled area for excess water to help prevent adjacent properties' flooding. The pond will be designed to accommodate peak flow rates, ensuring that downstream areas are not adversely affected.

3. Preserving Natural Values and Minimizing Impacts: The project's design prioritizes the preservation of the natural characteristics of the wetland area and the surrounding buffer zone. These buffers will serve as a vital habitat for wildlife and enhance water quality by filtering pollutants before they enter the wetland. Notably, the project has been carefully planned to ensure no net loss of wetlands, aligning with environmental stewardship goals and regulatory requirements.

To minimize these potential indirect impacts, the following mitigation measures will be implemented:

- Stormwater Management: Install effective stormwater management systems to prevent runoff and sedimentation from affecting nearby wetlands.

- Buffer Zones: Adequate buffer zones should be established between the residential project and the wetland area to help protect water quality and minimize disturbances. The buffer zone between the project's impact footprint and the wetland ranges from 20.9 to 86.28 feet.

- Invasive Species Management: Implement measures to control and manage invasive species in the developed area and adjacent wetlands. One measure is to replace invasive species within the project's impact footprint by planting native and endemic species that will enhance the biodiversity and ecological stability of the wetland (Cataño Creek).

- Public Education: Educating residents on best practices for maintaining water quality and avoiding pollutant runoff.

By implementing these strategies, the project aims to provide a balanced approach that effectively addresses the need for development while prioritizing the community's health and safety and the preservation of critical natural resources within the floodplain.

In addition, the following temporary and permanent erosion and sedimentation control measures will be implemented:

Temporary Measures:

- Delimitation and Identification: Clearly delineate and identify work areas with appropriate sector controls.
- Informing Personnel: Provide information to construction personnel and contractors regarding the abovementioned delineation.
- Training for Inspection and Maintenance Personnel: Selected personnel responsible for inspection and maintenance will receive training from qualified professionals in best practices for maintaining erosion and sediment controls to ensure their effective operation.
- Site Stabilization: Disturbed areas of the site where construction activities temporarily halt will be compacted or stabilized with temporary seed, synthetic materials, and mulch within 14 days of the last construction activity in that area. Exposed sections of rock or other non-erosive materials may not require additional stabilization.
- Temporary Stabilization for Paved Areas: Areas designated for paving will be temporarily stabilized using geotextile and a stone sub-base until bituminous pavement can be applied.
- Permanent Stabilization of Disturbed Areas: Disturbed portions of the site where construction activities permanently cease will be stabilized using concrete, asphalt, synthetic materials, or vegetative cover, as applicable, within 14 days after the last material placement.

- Implemented Structural Controls for the Project:

    - Access Road Stabilization: Vehicle access points to disturbed areas will be stabilized unless paved.
    - Sediment Barriers: Silt fences and straw bales will be strategically placed throughout the project area as construction progresses.
    - Vehicle Wash Area: A tire cleaning station will be established at the site exit to prevent sediment from being tracked off the project site.
    - Sediment Traps: Sediment traps will be installed in areas with concentrated flows to capture sediment.
    - Additional Tire Wash Area: A wash area may be near the entrance to minimize sediment tracking outside the project.

Permanent Measures:

- Construction of Retention Ponds:
    - Benefits:
        - Improved water quality in surrounding bodies of water
        - Increased biodiversity

    - Enhanced wildlife habitat
    - Water conservation
    - Flood prevention
- Paving of Streets
- Slope Stabilization: Implement grass sowing or geotextile application.
- Tree Planting: Introduce tree planting initiatives to enhance the environment.

These measures are designed to effectively manage erosion and sedimentation throughout the construction process and beyond, ensuring the protection of surrounding ecosystems and water quality.

Step 6: *Reevaluate the Alternatives.*

After thoroughly evaluating all available alternatives, we have determined that constructing 100 residential housing units on urban land is the most viable option. While potential indirect effects on the riverine wetland (R2UBH) and a freshwater forested/shrub wetland (PFO3A) could be avoided by prohibiting development on the property, this approach is impractical due to the severe housing shortage in Puerto Rico. There is an urgent need for safe, affordable, and resilient housing for families who were affected by Hurricanes Irma and Maria.

The alternatives considered included reducing the project's impact by lowering the number of housing units or adopting a no-action approach. However, due to its residential zoning classification, the property would not be suitable for agricultural, commercial, or industrial purposes if not utilized for the proposed development.

Although the property contains wetland conditions, the project has been designed to avoid or minimize any adverse impact. The development footprint remains outside the wetland and buffer zones, ensuring the protection of human life, real property, and the natural and beneficial functions of the wetland ecosystem.

Additionally, temporary and permanent mitigation measures will be implemented to prevent indirect impacts on wetland areas. These include temporary measures and several actions to ensure proper erosion and sediment control during construction activities. First, the work areas will be clearly defined and adequately identified with the necessary sectoral controls. Additionally, construction personnel and contractors will be informed about the delimitation described. The

personnel selected for inspection and maintenance tasks will receive training from qualified personnel in inspection and maintenance practices to ensure the proper functioning of the erosion and sediment controls. Disturbed portions of the site where construction activities temporarily cease will be compacted or stabilized with temporary seed, synthetic material, and mulch within 14 days of the last construction activity in that area. However, exposed regions of rock or other non-erosive materials may not require additional temporary stabilization. Furthermore, areas to be paved will be temporarily stabilized by applying geotextile and a stone sub-base until a bituminous pavement can be applied. Disturbed areas where construction activities permanently cease will be stabilized using concrete, asphalt, synthetic material, or vegetative coverage, as appropriate, within 14 days of the last material placement. The structural controls implemented for the project include the stabilization of the access road to disturbed areas if it is not paved, sediment barriers such as silt fences and straw bales in selected areas along the project site, the installation of a tire wash area at the site exit to prevent vehicles from transporting sediment outside the project area, and sediment traps in areas where concentrated flows occur.

As for permanent measures, the construction of a retention pond is planned. This will offer several benefits, such as improving water quality in surrounding water bodies, increasing biodiversity, providing wildlife habitats, conserving water, preventing floods, and minimizing erosion.

Implementing an alternative that increases the buffer zone to 100 feet or more would significantly raise project costs due to necessary redesigning, relocation of facilities and infrastructure, and the loss of housing units.

Not developing the property would also mean forfeiting the opportunity to create projects that provide essential services and benefits to low-income communities, strengthening their resilience to future climate events. The project design includes specific mitigation measures, both temporary and permanent, to protect the wetlands, preserve their ecological functions, and promote long-term environmental stability.

In summary, the following alternatives and mitigation measures were considered to minimize adverse impacts while preserving and restoring the natural and beneficial functions of the existing wetland:

1. Avoiding impacts on wetlands by relocating the project to another undeveloped parcel within the Municipality of Humacao.
2. Expanding the buffer zone to a minimum width of 100 feet on both sides of the wetlands.
3. Taking no action.

However, alternatives (2) and (3) are not viable, as they would result in the loss of 100 safe and resilient housing units intended for families displaced by hurricanes Irma and María. Taking no action would prevent the construction of the project, depriving these families of the opportunity to live in a secure and hazard-free environment. Additionally, relocating the project to another site would require the purchase of new land, which is not financially feasible.

All possible alternative locations within the municipality of Humacao have been evaluated, but no practical options were identified. Therefore, the project must be carried out on the proposed site, as developing the project elsewhere is neither economically viable nor environmentally preferable.

Furthermore, the project does not directly impact wetland areas; if it is not constructed, the land will remain unused. The proposed development will provide 100 safe and affordable housing units while ensuring the preservation of wetland areas in their natural state.

Both temporary and permanent mitigation measures will be implemented during and after construction to mitigate, minimize, or avoid indirect impacts on the wetlands. These measures include the installation of erosion and sedimentation controls, construction of sedimentation ponds, implementation of noise control measures, designation of specific areas for waste and topsoil storage, fugitive dust control measures, staff training in environmentally responsible practices, street paving and stabilization of entry and exit points, slope protection and stabilization, grass and tree planting, and the construction of retention ponds to prevent direct discharge into wetland areas. These actions will ensure the project is environmentally responsible, promoting wetland conservation while addressing the need for safe housing for displaced families.

The construction of these 100 homes will help meet the demand for secure housing, benefiting the families who acquire these properties and future generations. The no-action alternative is impractical, as it fails to address the critical need for affordable housing that protects families from future extreme weather events.

Step 7: Determination of No Practicable Alternative

Step 8: *Implement the Proposed Action*

Exhibit 1: 8 Step Process: USFWS National Wetlands Inventory Map

Wetlands Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants

Legend

- Project Limit
- SF-HDI-00012

1000 ft

N

Google Earth

Image © 2024 Airbus

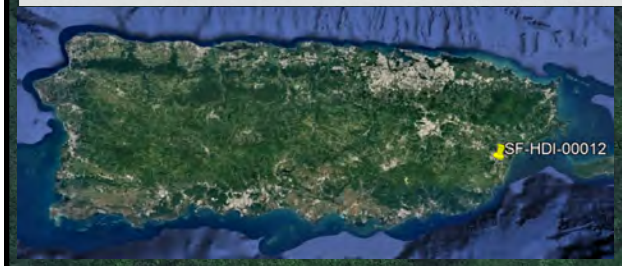
https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

Exhibit 2: 8 Step Process : Advisory Base Flood Elevation (ABFE) Map

Advisory Base Flood Elevation Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants



Legend

- Project Limit
- SF-HDI-00012

Limit of Moderate Wave Action (LiMWA)

Flood Hazard Extent
- 1% Annual Chance Flood
- 0.2% Annual Chance Flood

Zone/BFE Boundary

Flood Hazard Area (zoom in to make visible)
- A
- AO
- AE
- Coastal A Zone
- VE
- 0.2% Annual Chance Flood Zone
- A-Floodway
- AE-Floodway
- Coastal A Zone and Floodway

ABFE 1% EL: 29.4 m

3000 ft

N

Google Earth

Image © 2024 Airbus

https://gis-r2-fema.hub.arcgis.com/apps/31dfa15671944086b54b55bfc03344d7/explore

Exhibit 3: 8 Step Process: Primary Screening for Wetlands

CDBG-MIT PROGRAM

Hazard Mitigation Grant Program, Community Development Block Grant – Mitigation (CDBG-MIT)—B-18-DP-72-0002

PRIMARY SCREENING FOR WETLANDS AS PER HUD's REGULATIONS AT 24 CFR 55.9(b)

General Information:		
Project Name (Case ID):	Laderas de Palma (SF-HDI-00012)	
Coordinates:	Lat. 18.121317, Long. -65.822449	
Parcel ID:	329-000-005-61	
Municipio:	Humacao	
Report Date:	02/27/2025	
Preparer:	Elvelisse Figueroa Hernandez	
Project Scope:		
Does this project involve new construction as defined in Executive Order 11990? (The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order.)	☒ Yes	☐ No (Based on the response, the review is in compliance)
Project Site Conditions: (Indicate whether the area is impacted or not. If impacted, specify what elements or factors are present.)	The area covering the project's impact footprint is mainly grasslands, with several scattered trees on the property. The riverine wetlands (stream area) have mature vegetation in a secondary succession stage.	

A. Visual Assessment (Desktop Study)

National Wetlands Inventory (NWI) Reference		
Coordinates: Lat. 18.121317, Long. -65.822449		
Is the project area located in proximity to wetlands identified on the National Wetlands Inventory (NWI)?	☒ Yes	The project site is in proximity of wetlands identified on NWI.
	☐ No	The project site is not in proximity of wetlands identified on NWI.

B. Visual Assessment (Field Study)

Visual Assessment performed on: 2/14/2025		
Individual(s) present:	Elvelisse Figueroa Hernandez	
Weather Conditions: (Prior and during the site visit)	The weather conditions during the site visit were generally favorable. Sunny conditions prevailed throughout the assessment, with minimal wind speeds. No precipitation was recorded either prior to or during the site visit.	
Where transects performed?	☐ Yes	☒ No
If performed, how many transects were performed per transects?	N/A	

Wetland Vegetation:		
Was vegetation identified throughout the visit?	☒ Yes	Wetland vegetation was identified. (Provide supporting documentation)
	☐ No	No wetland vegetation was identified. (Provide supporting documentation).

Wetland Hydrology:		
Was visual inundation, ponding or saturation present at the site?	☐ Yes	☒ No
Were watermarks present within site (If applicable)?	☐ Yes	☒ No
If performed, how many borings were performed per transects?	N/A	
If performed, how many samples were taken?	N/A	
If performed, was underground water found throughout borings?	☐ Yes	☐ No
If boring were performed, summarize determination of borings:	N/A	
Reasoning as for why borings were not performed:	The wetland is associated with the Cataño stream channel. The project does not impact this stream or the minimum buffer zone of 20.9 feet. Additionally, the project does not affect wetland areas.	

Wetland Hydrology:
Provide supporting documentation (Photo Log) with brief descriptions and georeferenced document of all boring sample locations taken at end of form.

Hydric Soils:		
What is the NRCS' soil classification for this site?	CdC2, DaC, & PaE2	
If performed, how many borings were performed per transects?	N/A	
If performed, when were the borings performed?	N/A	
If performed, how many samples were taken?	N/A	
If performed, what were the identified soils for each sample?	N/A	
If performed, does the identified soil sample concur with NRCS Soil Study Identification?	☐ Yes	☐ No
If performed, was underground water found throughout borings?	☐ Yes	☐ No
If boring were performed, summarize determination of borings:	N/A	
Reasoning as for why borings were not performed:	The wetland is associated with the Cataño Stream Channel.	
Provide supporting documentation (Photo Log) with brief descriptions and georeferenced document of all boring sample locations taken at end of form.		

Summary of Finding for Wetland Indicators	
Is there a presence of mentioned indicators or characteristics of wetlands within the assessed area?	☒ Wetlands Vegetation
	☐ Hydric Soils
	☒ Hydrology
	☐ No Indicators were observed

C. Determination

Visual Assessment Field Study and Desktop Study		
Based on Visual Assessment Field Study and Desktop Study:	☒	The primary screening conclusively determined that the project site contains wetlands.
	☐	The primary screening conclusively determined that the project site does not contain wetlands.
	☐	The primary screening is inconclusive; potential wetlands should be further studied.

D. Supporting Documentation

The best available information such as NRCS Soil identification, Maps, USDA Plant Lists, previous USACE wetland determinations, if any, and/or documentation of project site (if available) must be provided to support the determination made. All supporting documentation must provide source reference.

Field Study photos, photo log, and georeferenced document demonstrating location of all boring sample must be included in this form.

Appendix
1. NRCS Soil Map
2. National Wetlands Inventory Map
3. Site Drawings
4. USFWS Determinations Letters
5. Site Photos

Exhibit 1

Soil Map—Humacao Area, Puerto Rico Eastern Part
(Ladera de Palmas)

Map Scale: 1:4,500 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 20N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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 scale.

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: Humacao Area, Puerto Rico Eastern Part
Survey Area Data: Version 16, Sep 10, 2024

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

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

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CdC2	Candelero loam, 5 to 12 percent slopes, eroded	21.5	54.6%
DaC	Daguao silty clay loam, deep variant, 2 to 12 percent slopes	13.7	34.7%
Me	Maunabo clay	0.1	0.3%
PaE2	Pandura loam, 12 to 40 percent slopes	4.1	10.4%
Totals for Area of Interest		**39.4**	**100.0%**

Exhibit 2

Wetlands Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants

Legend

- Property Limit
- SF-HDI-00012

1000 ft

N

Google Earth

Image © 2024 Airbus

https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

Exhibit 3

N 231600 N 231675 N 231750 N 231825 N 231900 N 231975 N 232050

E 264450 E 264525 E 264600 E 264675 E 264750 E 264825

PR-910

GREEN AREA

NEIGHBORHOOD FACILITIES 2 of 2
PARCEL AREA = 961.24sm

NEIGHBORHOOD FACILITIES 1 of 2
PARCEL AREA = 1,873.67sm

NO. 103 ST.

NO. 102 ST.

NO. 101 ST.

NO. 100 ST.

NO. 104 ST.

44 43 42 41 40 39 38 37 36 35 34 33 32 31 30

45 46 47 48 49 50 51 52 53 54 55

23 24 25 26 27 28 29

67 66 65 64 63 62 61 60 59 58 57 56

22 21 20 19 18 17 16

68 69 70 71 72 73 74 75 76 77 78 79 80 81

9 10 11 12 13 14 15

97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82

8 7 6 5 4 3 2 1

98 99 100 101 102 103 104 105 106 107

26.1

5.0

10.0m BUFFER ZONE

PREVIOUS DESIGN LIMIT

5m BUFFER ZONE TO WET LAND

11.8

7.4

6.5

6.4

7.8

7.1

8.8

5.0

26.3

>> CATAÑO CREEK <<

GREEN AREA

REMNANT FOR CONSERVATION

DETENTION POND
BASE ELEV. = 37.50
MAX. WATER ELEV. =+96.90
EFFECTIVE ELEV. = 31.50

FUTURE PREPA ROW

PREPA ROW

PAN PEPIN INC

< TO YABUCOA <

PR-3

> TO HUMACAO >

Yo, Ingeniero Antonio F. Hernandez-Cruz, licencia número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias y que están en conformidad con los Códigos de Edificación vigentes de "Puerto Rico Codes 2018". También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además que, en la preparación de estos planos y especificaciones, se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 del 15 de mayo de 1938, según enmendada; Ley Núm. 96 del 6 de julio de 1978, según enmendada, según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe y cualquier otra autoridad competente". También certifico que, los planos están en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Archivo Gráfico de Puerto Rico, en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y certifico que cumple con los Códigos de Edificabilidad vigentes del "Puerto Rico Codes".

PLAN
SCALE = 1:500
0 10 20 30 40 50

SHEET TITLE:
PROPOSED GENERAL SITE PLAN

STATUS:
ADVANCED DRAWINGS

(HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR PUBLISHED WITHOUT WRITTEN CONSENT. IN WRITING. IT SHALL BE RETURNED TO H.F.e.C. UPON THE REQUEST BY THIS OFFICE.

J. C. A.	.
CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Antonio.hernandez@hfegroup.com LAS LOMAS 29 ST. - 787 SAN PATRICIO AVE. - SAN JUAN PR. 00921
T.787.792.2687 M.787.509.6138 P.O.BOX 4280 CAROLINA PR. 00984-4280 LIC.#19102

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—101

SHEET NO:	TOTAL:
.	.

Exhibit 4

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Bayamón | Mayagüez | Maricao | Río Grande | St Croix
P.O. Box 491
Boquerón, Puerto Rico 00622

In Reply Refer To:
FWS/R4/CESFO/72069-054

Submitted via electronic mail: environmentcdbg@vivienda.pr.gov

Ms. Santa Rodríguez
Permits and Environmental Compliance Division
Disaster Recovery Office
PR Department of Housing

Re: SF-HDI-00012 Laderas de Palmas,
Humacao, Puerto Rico

Dear Ms. Rodríguez:

This is in reply to the above referenced housing development to be financed under the Single Family Housing Mitigation of the Community Development Block Grants. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

The project is in a 39 acre site, of which the proposed project will occupy about18 acres. An estimated 100 single family houses will be built. The Quebrada Cataño, a tributary to the Humacao River, runs along the eastern boundary of the proposed development. About 2.8 acres of riverine wetlands will be impacted by the project. These wetland impacts are associated with the toe of the fill and storm water detention pond. We believe that all wetland impacts can be eliminated if housing units 1, 17, 18, 33 and 34 are eliminated and the detention pond be redesigned to include a riser and discharge into the quebrada at a 45 degree angle in direction of the flow.

The project designer HF Engineering should redesign the project accordingly. This will ensure compliance with Executive Orders 11990 and 11988 for protection of wetlands and river floodplains, eliminate the need for a US Army Corps of Engineers Permit and any required compensatory mitigation for wetland impacts which would have to be included in the overall project costs. This will also leave the existing bed and bank of the Quebrada Cataño in its natural state.

The property has another undeveloped section of some 21 acres, the Quebrada Cataño runs diagonally through this parcel and any future residential development should include the quebrada as a linear green space and incorporated into the design.

With regards to federally listed species, you have determined that the Puerto Rican boa (*Chilabothrus inornatus*), and the guajón (*Eleutherodactylus cooki*) can be found within the project

action area. The determination that the project may affect but is not likely to adversely affect these species is based on following the Fish and Wildlife Service established conservation measures for both species. Please remember that these conservation measures have reporting requirements that should be followed by the grantee.

We have reviewed the information provided in your letter and our files and concur with your determination that the proposed action may affect, but is not likely to adversely affect, the above referenced species. No adverse impacts to designated critical habitat are anticipated.

In view of this, we believe that requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

Thank you for the opportunity to comment on this action, if you have any questions, please contact Felix Lopez of my staff at (305) 304-1128.

Sincerely,

LOURDES MENA

Digitally signed by LOURDES MENA
Date: 2024.11.06 21:38:09 -04'00'

Lourdes Mena
Field Supervisor

fhl
cc:
DNER, San Juan
PRPB, San Juan
COR3, San Juan
COE, San Juan

From:	Lopez, Felix
To:	environmentcdbg
Cc:	Roman, Damaris
Subject:	Re: [EXTERNAL] RE: SF-HDI-00012 Laderas de Palmas
Date:	Tuesday, February 11, 2025 9:41:56 AM
Attachments:	image003.png

Thank you for the new information, and redesign of the project, we appreciate the developer's effort in minimizing impacts to the wetlands and giving the existing quebrada sufficient space. The developer should ensure that the contractor knows the project limits. The proposed toe of the fill should be clearly marked with silt fencing prior to any start of earth movement.

We have no additional comments under Fish and Wildlife Coordination Act, and have concluded consultation under the Endangered Species Act.

If you need assistance, please contact me at my email or mobile below. If you are sending a request for technical assistance or Section 7 consultation, please contact us at Caribbean_es@fws.gov or call 786 244 0081 during working hours.

Felix Lopez
Deputy Field Supervisor
US Fish and Wildlife Service
Caribbean Ecological Services FO

Cell phone number has changed to 305 304 1128

For project evaluations, please visit our Consultation Guidelines website.

No one knows what we do, but we are the only ones that can do it and we do it well.....

From: environmentcdbg <environmentcdbg@vivienda.pr.gov>
Sent: Monday, February 10, 2025 2:04 PM
To: Lopez, Felix <felix_lopez@fws.gov>
Cc: Caribbean ES, FW4 <Caribbean_ES@fws.gov>
Subject: [EXTERNAL] RE: SF-HDI-00012 Laderas de Palmas

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Greetings Mr. López,

We apologize for the delayed response.

Attached please find the designers redesign for the CDBG-MIT Single-Family Housing Mitigation Program, **SF-HDI-00012** project, due to the possible impact of approximately 2.8 acres of riverine.

Should you need any further information, please let us know.

Sincerely,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION

Disaster Recovery Office

environmentcdbg@vivienda.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: infocdbg@vivienda.pr.gov

DEPARTAMENTO DE LA VIVIENDA

GOBIERNO DE PUERTO RICO

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From: Roman, Damaris <damaris_roman@fws.gov>
Sent: Thursday, November 7, 2024 11:25 AM
To: environmentcdbg <environmentcdbg@vivienda.pr.gov>; Santa D. Ramirez Lebron <sramirez@vivienda.pr.gov>
Cc: Lopez, Felix <felix_lopez@fws.gov>; Antonio.Hernandez@hfcg-pr.com; Roberto Mendez Martinez <robert.mendez@drna.pr.gov>; Rose Ortíz Diaz <Ortiz_R@jp.pr.gov>; Ortiz, Wilfrido G <wilfrido.g.ortiz@hud.gov>; Nazario Jiménez, Nancy (AAPP) <nnazariojimenez@cor3.pr.gov>; Colon, Nelson R CIV USARMY CESAJ (USA) <nelson.r.colon@usace.army.mil>; Juan C. Perez-Bofill <jcperez@vivienda.pr.gov>; Angel G. Lopez-Guzman <a.lopez@vivienda.pr.gov>
Subject: SF-HDI-00012 Laderas de Palmas

Good Morning

See attached file regarding the referenced project. Should you have any questions, contact Félix López at (305) 304-1128 or via email at felix_lopez@fws.gov or caribbean_es@fws.gov

Thanks

***** If you need assistance, please contact me at emails or mobile below. If you are sending a request for technical assistance or Section 7 consultation, please contact us at Caribbean_es@fws.gov*****

Need a project evaluation? Please visit our Consultation Guidelines website.

Cordially,

Damaris Román Ruíz

Biological Science Technician
US Fish and Wildlife Service
Caribbean Ecological Service Field Office
P.O Box 491/Road 301 km 5.1
Boqueron PR 00622

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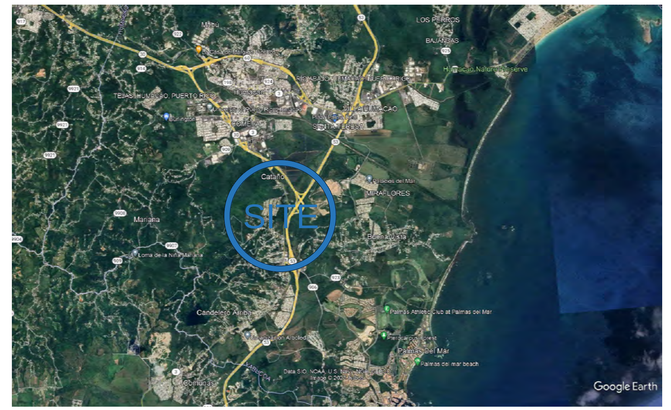
Exhibit 5

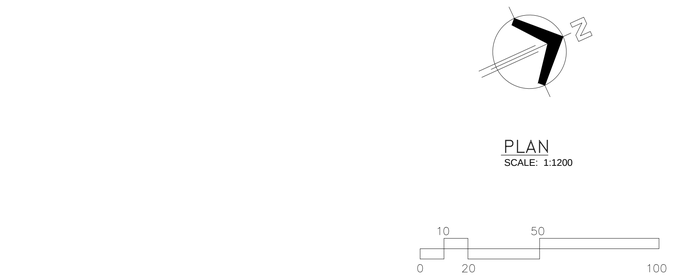
Site Photos

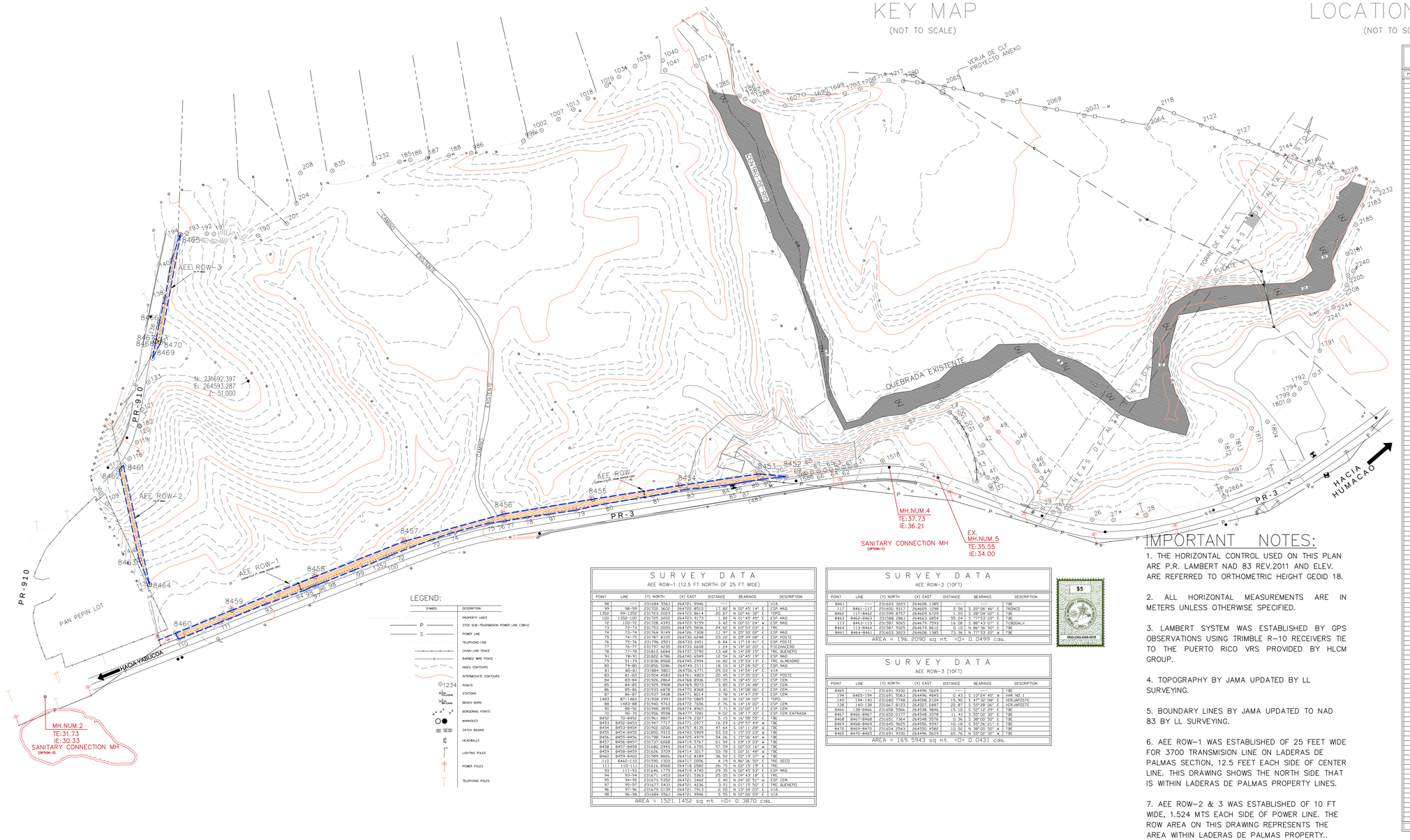
Exhibit 4: 8 Step Process: Survey Plan



KEY MAP
(NOT TO SCALE)

LOCATION MAP
(NOT TO SCALE)





LEGEND:

SYMBOL	DESCRIPTION
P	PROPERTY LINES
S	3700 SUB-TRANSMISION POWER LINE (38KV)
	POWER LINE
	TELEPHONE LINE
	CHAIN LINK FENCE
	BARBED WIRE FENCE
	INDEX CONTOURS
	INTERMEDIATE CONTOURS
1234	POINTS
	STATIONS
	BENCH MARK
	BORDERING POINTS
	MANHOLES
	CATCH BASINS
	HEADWALLS
	LIGHTING POLES
	POWER POLES
	TELEPHONE POLES

SURVEY DATA
AEE ROW-1 (12.5 FT NORTH OF 25 FT WIDE)

POINT	LINE	(Y) NORTH	(X) EAST	DISTANCE	BEARINGS	DESCRIPTION
98	----	231684.5561	264721.9946	----	----	V1A
99	98-99	231707.3602	264722.8510	17.80	N 02°45'14" E	ESP. MAS.
1352	99-1352	231723.2023	264723.8614	20.87	N 02°46'32" E	TOPO
100	1352-100	231725.0202	264723.9173	1.82	N 03°43'45" E	ESP. MAS.
72	100-72	231728.4393	264723.9159	3.42	N 00°01'24" E	ESP. MAS.
73	72-73	231753.0020	264725.3976	24.62	N 03°23'03" E	ESP. MAS.
74	73-74	231764.9149	264726.7308	11.97	N 05°20'02" E	ESP. MAS.
75	74-75	231787.8105	264730.6248	23.22	N 09°39'20" E	TRE. QUENEPO
76	75-76	231796.2521	264733.2451	8.84	N 17°14'41" E	ESP. POSTE
77	76-77	231797.4235	264733.6508	1.24	N 19°29'29" E	FLECHACERO
78	77-78	231810.6684	264737.0790	13.68	N 14°28'15" E	TRE. QUENEPO
79	78-79	231821.6786	264740.6949	12.56	N 16°45'19" E	ESP. POSTE
80	79-80	231838.8568	264745.3994	16.82	N 15°53'13" E	TRE. ALMENDRO
81	80-81	231856.5186	264749.2111	18.10	N 12°09'26" E	V1A
82	81-82	231904.4183	264761.4803	20.45	N 13°26'04" E	ESP. POSTE
83	82-83	231926.2864	264768.8936	23.05	N 18°45'31" E	ESP. CEM.
84	83-84	231926.9968	264769.9073	3.85	N 11°16'48" E	ESP. CEM.
85	84-85	231933.6878	264770.8368	3.81	N 14°08'26" E	ESP. CEM.
86	85-86	231953.6878	264775.6868	20.45	N 13°26'04" E	ESP. CEM.
87	86-87	231957.3969	264776.8014	3.88	N 16°34'28" E	ESP. CEM.
1483	87-1483	231938.2993	264772.7865	1.00	N 16°34'28" E	ESP. CEM.
88	1483-88	231940.1955	264773.1955	2.00	N 11°16'48" E	ESP. CEM.
89	88-89	231946.7005	264774.8969	7.71	N 10°04'27" E	ESP. CEM.
70	90-70	231956.9958	264777.7281	9.02	N 18°17'30" E	ESP. CEM. ENTRADA
8452	70-8452	231961.8827	264778.2387	5.15	N 14°58'59" E	TRE.
8453	8452-8453	231947.7917	264771.0977	16.29	E 29°57'49" E	V1A
8454	8453-8454	231930.0206	264757.8135	47.64	S 36°11'28" E	V1A
8455	8454-8455	231850.9310	264743.5969	53.03	S 15°33'23" E	V1A
8456	8455-8456	231796.7444	264729.4979	54.06	S 15°36'05" E	V1A
8457	8456-8457	231737.6068	264719.5767	61.94	S 09°13'03" E	TRE. SECO
8458	8457-8458	231680.2945	264716.6755	57.59	S 03°05'16" E	V1A
8459	8458-8459	231626.3709	264714.3017	53.78	S 02°31'48" E	V1A
8460	8459-8460	231589.8826	264712.8189	36.52	S 02°39'37" E	V1A
110	8460-110	231590.1303	264717.0056	4.19	N 86°36'50" E	TRE. SECO
111	110-111	231616.8568	264718.0582	26.75	N 02°15'19" E	TRE. SECO
93	111-93	231646.1775	264719.4740	29.35	N 02°45'53" E	ESP. MAS.
94	93-94	231671.1453	264721.5363	25.05	N 04°43'18" E	V1A
95	94-95	231673.5352	264721.3462	2.40	N 04°38'51" E	ESP. CEM.
97	95-97	231677.0431	264721.4236	3.51	N 01°15'50" E	TRE. QUENEPO
96	97-96	231679.0139	264721.7913	2.00	N 10°34'03" E	V1A
98	96-98	231684.5561	264721.9946	5.55	N 02°06'03" E	V1A

AREA = 1521.1452 sq mt. =Ω= 0.3870 cda.

SURVEY DATA
AEE ROW-2 (10FT)

POINT	LINE	(Y) NORTH	(X) EAST	DISTANCE	BEARINGS	DESCRIPTION
8461	----	231603.3023	264608.1385	----	----	TBE
117	8461-117	231650.9317	264609.1098	47.58	S 02°05'46" E	TUBOGALV.
8462	117-8462	231599.8757	264609.6729	1.20	S 28°04'02" E	TBE
8463	8462-8463	231588.3961	264663.6854	55.24	S 77°53'22" E	TBE
113	8463-113	231587.9265	264679.7593	16.08	S 88°43'07" E	TUBOGALV.
8464	113-8464	231587.5825	264679.8612	0.10	N 86°43'07" E	TBE
8461	8464-8461	231603.3023	264608.1385	73.36	N 77°53'22" W	TBE

AREA = 196.2090 sq mt. =Ω= 0.0499 cda.

SURVEY DATA
AEE ROW-3 (10FT)

POINT	LINE	(Y) NORTH	(X) EAST	DISTANCE	BEARINGS	DESCRIPTION
8465	----	231691.9330	264496.5629	----	----	TBE
134	8465-134	231691.5063	264496.4845	0.43	S 10°04'45" W	VAR.NO.1
140	134-140	231680.7748	264508.2104	15.90	S 47°38'08" E	VER.JAPOSTE
138	140-138	231667.8123	264527.0487	22.87	S 56°08'25" E	VER.JAPOSTE
8466	138-8466	231658.5566	264538.9846	15.10	S 52°12'29" E	TBE
8467	8466-8467	231650.0177	264548.3378	11.41	S 55°00'30" E	TBE
8468	8467-8468	231651.7364	264548.5516	0.36	S 38°00'00" E	TBE
8469	8468-8469	231645.9625	264556.9297	10.18	S 55°26'21" E	TBE
8470	8469-8470	231654.2543	264550.4582	10.52	N 38°00'00" W	TBE
8465	8470-8465	231691.9330	264496.5629	65.76	N 55°00'30" W	TBE

AREA = 169.5943 sq mt. =Ω= 0.0431 cda.

SURVEY DATA

POINT	LINE	(Y) NORTH	(X) EAST	DISTANCE	BEARINGS	DESCRIPTION
1799	----	232559.6653	264861.1450	----	----	TUB.V.
1801	1799-1801	232255.1496	264863.1371	4.94	S 23°48'17" E	TUB.V.
1804	1801-1804	232238.3434	264869.2979	17.90	S 20°07'59" E	VERJA. POSTE
1811	1804-1811	232227.9944	264868.8421	10.36	S 02°31'20" W	VERJA. POSTE
1813	1811-1813	232215.4283	264868.1073	12.59	S 03°20'47" W	V1A
1812	1813-1812	232208.0690	264867.9178	7.36	S 01°28'31" W	VERJA. POSTE
2597	1812-2597	232031.3488	264889.5803	20.51	S 24°13'26" W	TEL. TUBO
2664	2597-2664	232196.0389	264899.2247	11.31	S 58°30'03" E	PP. WOOD
29	2664-29	232148.6114	264895.9778	48.38	S 11°09'57" W	YUGAMAS
27	29-27	232129.8757	264884.6129	19.49	S 15°58'45" W	V1A
26	27-26	232118.3379	264879.0638	12.77	S 25°45'56" W	TRE.
25	26-25	232100.3473	264866.1973	20.16	S 38°45'06" W	TRE.
24	25-24	232094.0926	264860.5038	8.64	S 43°37'04" W	TRE.
23	24-23	232094.0926	264860.5038	0.00	S 43°37'04" W	TRE.
44	43-44	232100.3621	264843.8280	18.36	N 76°22'23" W	TRE.
45	44-45	232100.2165	264838.5157	5.25	S 81°49'49" W	TRE.
46	45-46	232100.0411	264835.4184	3.20	S 86°51'41" W	TRE.
48	46-48	232097.0084	264818.4073	17.26	S 79°50'47" W	TRE.
49	48-49	232088.9806	264807.7733	13.34	S 53°00'36" W	TRE.
58	49-58	232081.1832	264799.9377	11.06	S 45°07'58" W	TRE.
42	58-42	232017.2594	264811.3054	64.05	S 10°35'16" E	TUB. GAL.
41	42-41	232011.7997	264809.9901	19.45	S 73°41'45" E	TUB. GAL.
38	41-38	232011.1270	264835.2079	5.06	S 82°39'15" E	VER.JAHOR
37	38-37	232011.1377	264837.1256	1.92	N 89°40'53" E	VER.JAHOR
34	37-34	232064.9008	264879.5066	9.83	S 50°49'18" W	MURO
33	34-33	232067.3877	264823.8903	6.13	N 66°16'50" W	MURO
32	33-32	232069.3961	264817.2499	6.93	N 73°24'20" W	MURO
31	32-31	232071.0269	264801.8563	15.48	N 83°48'20" W	MURO
50	31-50	232070.9107	264796.9001	4.97	S 85°38'50" W	MURO
51	50-51	232069.8953	264790.7074	6.27	S 79°38'00" W	MURO
52	51-52	232069.1009	264789.6068	3.20	S 75°37'48" W	MURO
53	52-53	232067.3700	264785.0683	4.86	S 69°07'25" W	MURO
55	53-55	232061.9541	264778.9957	8.14	S 49°16'19" W	TRE. ALMENDRO
57	55-57	232040.0930	264782.5849	22.15	S 09°19'26" E	TRE.
1518	57-1518	232018.4561	264794.6205	24.75	S 29°03'17" E	TRE. COLINDANCIA. ROBLE
21	1518-21	232002.9234	264790.7291	16.01	S 14°00'46" W	MURO-HOR
61	21-61	231995.3351	264789.7812	7.71	S 14°47'49" W	ESP. CEM.
62	61-62	231995.6391	264788.6003	3.88	S 17°43'07" W	ESP. CEM.
63	62-63	231990.1018	264787.4748	5.90	S 11°04'09" W	ESP. CEM.
64	63-64	231988.2872	264786.6781	3.81	S 12°04'37" W	ESP. CEM.
65	64-65	231984.7825	264785.5273	3.96	S 16°21'51" W	ESP. CEM.
66	65-66	231981.0451	264784.5447	3.86	S 14°43'37" W	ESP. CEM.
67	66-67	231977.3398	264783.2690	3.92	S 18°39'40" W	ESP. CEM.
68	67-68	231973.7002	264782.4929	3.72	S 12°02'29" W	ESP. CEM.
1586	68-1586	231932.2679	264780.1972	1.45	S 11°39'54" W	TOPO
69	1586-69	231969.9891	264781.7083	2.32	S 12°06'31" W	ESP. CEM.
70	69-70	231956.9058	264777.7281	13.62	S 16°58'59" W	ESP. CEM. ENTRADA
90	70-90	231948.3895	264774.8965	9.02	S 18°17'30" W	ESP. CEM.
88	90-88	231940.9763	264772.7656	7.71	S 10°04'27" W	ESP. CEM.
1483	88-1483	231938.6991	264772.0865	2.76	S 14°14'00" W	TOPO
87	1483-87	231937.3408	264771.8014	1.50	S 19°34'28" W	ESP. CEM.
86	87-86	231933.6878	264770.8368	3.78	S 14°47'29" W	ESP. CEM.
85	86-85	231909.9968	264769.9073	3.81	S 15°49'06" W	ESP. CEM.
84	85-84	231926.2864	264768.8936	3.85	S 15°16'48" W	ESP. CEM.
83	84-83	231904.4183	264761.4803	23.05	S 18°45'31" W	ESP. POSTE
82	83-82	231884.5801	264756.6771	20.45	S 13°26'05" W	V1A
81	82-81	231886.5586	264749.2111	21.13	S 19°29'29" W	ESP. MAS.
80	81-80	231838.8568	264745.3994	18.10	S 12°09'26" W	TRE. ALMENDRO
79	80-79	231821.6786	264740.6949	16.82	S 15°53'13" W	TRE. QUENEPO
78	79-78	231810.6684	264737.0790	11.94	S 16°45'19" W	ESP. POSTE
77	78-77	231797.4235	264733.6508	13.68	S 14°28'15" W	FLECHACERO
76	77-76	231796.2521	264733.2451	1.24	S 19°29'29" W	TRE. QUENEPO
75	76-75	231787.8105	264730.6248	8.84	S 17°14'41" W	ESP. POSTE
74	75-74	231764.9149	264726.7308	23.22	S 09°39'20" W	TRE. QUENEPO
73	74-73	231753.0020	264725.3836	11.97	S 05°20'02" W	TRE.
72	73-72	231728.4393	264723.9159	24.62	S 03°23'03" W	ESP. MAS.
100	72-100	231725.0202	264723.9173	3.42	S 00°01'24" E	ESP. MAS.
1352	100-1352	231723.2023	264723.8614	1.82	S 03°43'45" W	TOPO
99	1352-99	231707.3602	264722.8510	20.87	S 02°46'32" W	ESP. MAS.
98	99-98	231684.5561	264721.9946	17.80	S 02°45'14" W	V1A
96	98-96	231679.0139	264721.7913	5.55	S 02°06'03" W	V1A
97	96-97	231677.0431	264721.4236	2.00	S 10°34'03" W	TRE. QUENEPO
95	97-95	231673.5352	264721.3462	3.51	S 01°15'50" W	ESP. CEM.
94	95-94	231671.1453	264721.5363	2.40	S 04°38'51" W	V1A
93	94-93	231646.1775	264719.4740	25.05	S 04°43'18" W	ESP. MAS.
111	93-111	231616.8568	264718.0582	29.35	S 02°45'53" W	V1A
110	111-110	231590.1303	264717.0056	26.75	S 02°15'19" W	TRE. SECO
113	110-113	231587.9265	264679.7593	37.31	S 89°36'50" W	TUBOGALV.
114	113-114	231588.4333	264657.1045	22.66	N 88°43'07" W	TBE
109	114-109	231584.8969	264625.0991	32.20	N 83°41'41" W	ESPEJO MADERA
116	109-116	231584.2543	264618.0025	7.13	S 84°49'33" W	VER.JAPOSTE
117	116-117	231603.9017	264609.1098	18.90	N 28°04'02" W	TRONCO
118	117-118	231608.4986	264606.0352	8.17	N 02°06'46" W	BAMBU
119	118-119	231616.4183	264599.0352	10.57	N 41°29'39" W	ESP. MADERA
120	119-120	231621.7377	264591.1303	9.53	N 56°01'57" W	ESP. MADERA
182	120-182	231640.1911	264590.8743	0.58	N 29°27'21" E	ESP. MADERA
121	182-121	231627.5274	264582.3157	10.09	N 58°03'23" W	ESP. MADERA
122	121-122	231637.5714	264581.1211	16.58	N 52°19'16" W	ESP. MADERA
136	122-136	231656.5347	264541.5920	33.42	N 55°26'21" W	ESP. MADERA
138	136-138	231667.8123	264527.0487	18.36	N 52°12'29" W	VER.JAPOSTE
140	138-140	231680.7748	264508.2104	22.87	N 55°26'06" W	VER.JAPOSTE
134	140-134	231691.5063	264496.4845	15.90	N 47°38'08" W	VER.JAPOSTE
192	134-192	231695.7598	264497.2661	4.32	N 10°24'45" E	ESP. MADERA
193	192-193	231706.5055	264500.4908	11.17	N 20°32'03" E	TUBOGALV.
191	192-191	231710.3068	264504.4124	4.05	N 26°49'09" E	ESP. MADERA
190	191-190	231734.0569	264516.2693	26.54	N 26°30'20" E	ESP. MADERA
201	190-201	231752.6275	264516.8890	18.43	N 01°31'38" W	TRE.
204	201-204	231790.7203	264513.6993	38.14	N 05°07'09" W	TRE.
208	204-208	231792.1203	264498.4995	15.44	N 58°01'23" W	V1A
835	208-835	231792.1203	264498.4995	0.00	N 58°01'23" W	TRONCO
1232	835-1232	231825.5097	264506.5961	25.14	N 75°05'35" W	TUBE.
185	1232-185	231869.5606	264511.3672	15.50	N 20°07'38" E	TUB. GALV.
186	185-186	231905.9393	264510.9394	6.42	N 01°47'07" W	TUB. GALV.
187	186-187	231845.5603	264516.2039	10.25	N 18°33'47" E	TRE. ALMENDRO
188	187-188	231898.1334	264504.5813	13.18	N 17°28'42" E	TRE. SECO
986	188-986	231870.8684	264524.3657	13.41	N 18°15'50" E	CBL. ESPEGUE
996	986-996	231890.5912	264530.8739	20.72	N 18°18'19" E	CBL. ESPEGUE
1002	996-1002	231914.8860	264529.4180	12.56	N 05°44'20" E	TRE. COL.
1007	1002-1007	231936.9446	264527.5905	12.20	N 04°04'48" E	CBL. ESPEGUE
1013	1007-1013	231937.4488	264526.0264	10.62	N 08°25'15" E	CBL. ESPEGUE
1018	1013-1018	231959.0883	264523.5742	11.93	N 10°05'02" E	CBL. ESPEGUE
1019	1018-1019	231961.5595	264521.2416	13.66	N 09°50'09" E	CBL. BAMBUA
1034	1019-1034	231976.5519	264519.5218	9.04	N 09°06'42" E	CBL. ALMENDRO
1039	1034-1039	231981.9402	264517.6629	11.66	N 09°10'19" E	CBL. ALMENDRO
1040	1039-1040	231988.4510	264515.5403	16.94	N 13°14'44" E	CBL. BAMBUA
1041	1040-1041	231997.2535	264507.3881	5.96	S 78°35'34" E	CBL. BAMBUA
1074	1041-1074	232035.8029	264530.8029	18.99	N 57°29'47" E	TRE. SECO
1285	1074-1285	232018.7358	264551.5696	19.05	N 80°04'39" E	TRE. COLINDANCIA
1286	1285-1286	232031.6167	264559.9944	15.39	N 58°37'11" E	TRE. COLINDANCIA
1287	1286-1287	232033.8447	264562.9895	3.73	N 53°21'17" E	TRE. COLINDANCIA
1288	1287-1288	232038.1893	264566.2503	5.49	N 37°43'23" E	TRE. COLINDANCIA
1607	1288-1607	232054.0351	264576.6503	18.87	N 33°04'24" E	TRE. COLINDANCIA. BAMBU
1690	1607-1690	232103.4214	264580.1626	16.37	N 13°09'09" E	TRE. COLINDANCIA. MANGO
1699	1690-1699	232080.5692	264581.2511	10.16	N 04°27'09" E	TRE. COLINDANCIA
1703	1699-1703	232095.5664	264584.7802	9.67	N 21°25'41" E	TRE. COLINDANCIA
1706	1703-1706	232099.1621	264586.0986	9.69	N 07°48'42" E	TRE. COLINDANCIA
1714	1706-1714	232106.7675	264586.4425	7.71	N 07°33'20" E	TRE. COLINDANCIA
1717	1714-1717	232116.8569	264588.7967	10.26	N 13°15'38" E	TRE. COLINDANCIA
1720	1717-1720	232126.5494	264591.5494	10.06	N 15°35'09" E	TRE. COLINDANCIA
2065	1720-2065	232145.5435	264605.9046	24.89	N 32°27'26" E	CBL. POSTE
2067	2065-2067	232159.8757	264628.1873	26.36	N 59°30'01" E	CBL. ESPEGUE
2069	2067-2069	232195.0652	264642.9385	25.67	N 35°04'50" E	CBL. ESPEGUE
2071	2069-2071	232204.6100	264679.1794	37.45	N 74°58'29" E	CBL. VIGA
2064	2071-2064	232246.6100	264679.1794	39.21	N 35°11'48" E	CBL. VIGA
2118	2064-2118	232270.0417	264711.4795	13.14	N 67°10'51" E	CBL. ESPEGUE
2122	2118-2122	232276.0412	264690.9837	27.09	N 45°44'55" E	CLY. TREE
2127	2122-2127	232301.6243	264706.3019	21.30	N 49°18'59" E	TREC COLINDANCIA. FLAMB
2144	2127-2144	232310.8240	264725.8403	27.08	N 45°07'39" E	TREC COLINDANCIA. MEATO
2146	2144-2146	232331.0263	264746.2031	28.68	N 44°39'59" E	TREC COLINDANCIA. MEATO
2154	2146-2154	232339.6243	264754.9046	14.05	N 39°20'00" E	TREC COLINDANCIA
2228	2154-2228	232376.9554	264769.4334	21.90	N 43°08'43" E	CBL. VIA TREN
2183	2228-2183	232344.0874	264774.7786	12.86	S 23°34'41" E	CBL. VIGA
2185	2183-2185	232333.5408	264783.7879	12.38	S 46°41'30" E	CBL. VIA TREN
2191	2185-2191	232323.8328	264797.5523	18.11	S 49°29'06" E	CBL. VIA TREN
2240	2191-2240	232302.7769	264808.3084	10.83	S 64°24'13" E	CBL. VIA TREN
2205	2240-2205	232318.7212	264809.5154	4.24	S 16°14'13" S	TREC COLINDANCIA
2206	2205-2206	232315.5400	264814.5538	5.95	S 57°53'41" E	TREC COLINDANCIA
2244	2206-2244	232302.8816	264823.3633	15.47	S 34°42'38" E	TREC COLINDANCIA
2241	2244-2241	232298.1956	264834.1601	4.69	S 09°46'02" E	TREC COLINDANCIA
1791	2241-1791	232284.5536	264843.4867	23.66	S 54°46'59" E	TREC
3	1791-3	232275.5407	264855.4634	14.93	S 53°20'37" E	TUBOSV4
1792	3-1792	232258.1728	264857.6202	7.20	S 17°26'03" E	TUB. GALV.
1794	1792-1794	232258.1232	264859.3410	4.96	S 20°18'36" E	TUB. GALV.
1799	1794-1799	232059.6653	264861.1450	4.81	S 22°01'54" E	TUB. V

AREA = 160063.7194 sq mt. =Ω= 40.7246 cdas.

IMPORTANT NOTES:

1. THE HORIZONTAL CONTROL USED ON THIS PLAN ARE P.R. LAMBERT NAD 83 REV.2011 AND ELEV. ARE REFERRED TO ORTHOMETRIC HEIGHT GEOID 18.

2. ALL HORIZONTAL MEASUREMENTS ARE IN METERS UNLESS OTHERWISE SPECIFIED.

3. LAMBERT SYSTEM WAS ESTABLISHED BY GPS OBSERVATIONS USING TRIMBLE R–10 RECEIVERS TIE TO THE PUERTO RICO VRS PROVIDED BY HLCM GROUP.

4. TOPOGRAPHY BY JAMA UPDATED BY LL SURVEYING.

5. BOUNDARY LINES BY JAMA UPDATED TO NAD 83 BY LL SURVEYING.

6. AEE ROW–1 WAS ESTABLISHED OF 25 FEET WIDE FOR 3700 TRANSMISION LINE ON LADERAS DE PALMAS SECTION, 12.5 FEET EACH SIDE OF CENTER LINE. THIS DRAWING SHOWS THE NORTH SIDE THAT IS WITHIN LADERAS DE PALMAS PROPERTY LINES.

7. AEE ROW–2 & 3 WAS ESTABLISHED OF 10 FT WIDE, 1.524 MTS EACH SIDE OF POWER LINE. THE ROW AREA ON THIS DRAWING REPRESENTS THE AREA WITHIN LADERAS DE PALMAS PROPERTY..

LL SURVEYING GROUP
URB GRAN VISTA 2
23 PLAZA 3
GURABO, P.R. 00778
llsurveyinggroup@gmail.com
(787) 507–3896

SYMBOL	DATE	BY
	9-OCT-23	

WORKING DRAWINGS FOR THE CONSTRUCTION OF THE

LADERAS DE PALMAS
URBAN COMPLEX

BO. CATANO PR-3 HUMACAO PUERTO RICO

TOPOGRAPHY PLAN
AEE ROW

Project:

Drawing by: PL
Revised by: EL

1 of 00

T-1

Exhibit 5: 8 Step Process: Early Notice Publication

GOBIERNO DE PUERTO RICO
Departamento de Recursos Naturales y Ambientales

NOTA ACLARATORIA
EXPLANATORY NOTE

Según Anuncio pautado el lunes, 30 de sept de 2024, dirigido a Notificación de propuesta de adopción del Reglamento para el Manejo, la Disposición de Neumáticos Desechados y para Establecer las Tarifas (Reglamento) y la celebración de la vista pública. / *Notice of proposed adoption of the Regulations for the Management and Disposal of Waste Tires and for Establishing Tariffs and holding of a public hearing;* debió leer / *should have read:*

Fecha / Date: 1 noviembre / november 1, 2024

Hora / Time: 10: 00 AM – 11:00 AM

Disculpen los inconvenientes que haya esto causado. / *Sorry for the inconvenience this has caused.*

Autorizado por la Oficina del Contralor Electoral: OCE-SA-2024-11814.
Authorized by the Office of the Electoral Comptroller: OCE-SA-2024-11814.

Roberto Méndez Martínez
Secretario Interino
Departamento de Recursos Naturales y Ambientales

DRNA

DEPARTAMENTO DE SECRETARÍA MUNICIPAL
GOBIERNO DE PUERTO RICO
MUNICIPIO AUTÓNOMO DE SAN SEBASTIÁN

AVISO DE SUBASTA
SM-24-25-09
FIESTAS DE PUEBLO 2025

La Junta de Subastas del Municipio Autónomo de San Sebastián, Puerto Rico aceptará proposiciones en sobres cerrados hasta el día miercoles, **16 DE OCTUBRE DE 2024,** hasta las 2:00pm, en el Salón de Sesiones de la Legislatura Municipal para lo siguiente:

RENGLON #1-ARRENDAMIENTO DE PREDIOS

Arrendamiento del predio para la celebración de las **Fiestas de Pueblo 2025** que se llevarán a cabo **desde el 16 hasta el 19 de enero de 2025.** Las mismas se estarán celebrando en los predios del **Coliseo Luis Aymat Cardona y Estadio Juan José "Titi" Beniquez del Municipio Autónomo de San Sebastián.** Las especificaciones, condiciones y ordenanza estarán disponibles, libre de costo, en la Oficina de Secretaría Municipal, estas podrán ser solicitadas comunicándose al teléfono 787-896-2300 Ext. 170 con la Sra. Nancy Padilla o por correo electrónico secmunsubastas@gmail.com

El día de la subasta, los licitadores interesados en participar deberán incluir en su propuesta una fianza del 10% de la oferta a presentar, la cual podrá ser prestada en cheque certificado, giro postal o garantía de una aseguradora reconocida y autorizada a realizar negocios en Puerto Rico, pagadera al Municipio Autónomo de San Sebastián, la cual será retenida como garantía de que la persona o empresa agraciada de la subasta cumpla con los requisitos, términos y condiciones establecidos durante los días de fiesta. Dicha fianza será devuelta al finalizar las fiestas, de haber cumplido con todos los requisitos de la subasta y ordenanza.

El licitador agraciado tendrá un plazo de 24 horas a partir del recibo de la Notificación de Adjudicación para que deposite la totalidad de la oferta sometida en cheque certificado o efectivo, de no cumplir, la Junta de Subastas puede declarar automáticamente nula la subasta. No se aceptarán proposiciones que vengan acompañadas de condiciones o pretendan comprometer una futura decisión de la Junta de Subastas.

RENGLON #2-ESPECTACULO DE FUEGOS ARTIFICALES

Espectáculo de Fuegos Artificiales durante los días de las Fiestas de Pueblo mencionados en el primer renglón, las especificaciones, condiciones y ordenanza estarán disponibles en la Oficina de Secretaría Municipal, podrán ser solicitadas por teléfono o por el correo electrónico mencionado. **Para este renglón la fianza será de un 5% del total de la oferta presentada.**

Las ofertas de ambos renglones deben ser sometidas individuales en sobres cerrados e identificarlos en la parte frontal de cada sobre. **Los licitadores deberán radicar sus proposiciones para la subasta y demás documentos en un original y dos copias**. La Junta de Subastas se reserva el derecho de aceptar o rechazar una o todas las proposiciones y podrá imponer condiciones al momento de tomar la acción de adjudicar, aunque las mismas no estén contempladas en este Aviso.

Claudio J. Cardona Acevedo
Presidente
Junta de Subastas

Adaliz Cardona Padua
Secretaria Interina
Junta de Subastas

Autorizado por la Oficina del Contralor Electoral OCE SA-2023-00277

PO BOX 1603, CALLE PADRE FELICIANO NUM. 3 SAN SEBASTIAN, PR

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aviso público

Aviso Preliminar y Revisión Pública de una Actividad Propuesta en un humedal

Laderas de Palmas
SF-HDI-00012

Para: Todas las partes interesadas, grupos e individuos

Este aviso notifica que el Departamento de la Vivienda de Puerto Rico (Vivienda, en adelante) determinó que la siguiente acción propuesta bajo el Programa de Mitigación de Viviendas Unifamiliares, Subvención en Bloque para el Desarrollo Comunitario – Mitigación (CDBG-MIT), número de subvenciónB-18-DP-72-0002, está ubicado en un humedal. Vivienda identificará y evaluará alternativas prácticas para realizar la acción propuesta dentro del humedal y los posibles impactos en el humedal debido a la acción propuesta, según estipulado en la Orden Ejecutiva 11990, de acuerdo con las regulaciones de HUD en 24 CFR 55.20 Subparte C - Procedimientos para tomar determinaciones sobre el manejo del valle inundable y la protección de humedales. El proyecto propuesto, **SF-HDI-00012**, se encuentra dentro de un municipio que sufrió daños debido a los huracanes Irma y María, y está localizado en la carretera PR-3 km 33.7, barrio Cataño, Humacao, PR 00791; 18.120370, -65.822607. La extensión del humedal se determinó utilizando la información disponible en el mapa del Inventario Nacional de Humedales (NWI, por sus siglas en inglés) y visitas de campo para estudiar la hidrología, la presencia de suelos hídricos y la presencia de vegetación asociada a humedales. El proyecto consiste en la construcción de 100 unidades de vivienda unifamiliar, en un predio con cabida de 39.54 acres, de los cuales la huella de impacto del proyecto ocupa 18.44 acres. Además, se propone la construcción de facilidades (áreas verdes), calles, aceras y una charca de retención. Las casas a construirse serán de un nivel, tres cuartos, dos baños, sala, cocina, comedor y una marquesina para un vehículo. La residencia será resiliente a eventos atmosféricos mediante la instalación de paneles fotovoltaicos, baterías de almacenaje de energía, ventilación cruzada, abanicos, equipos eficientes y cisterna de agua. Dentro de la propiedad, pero fuera de la huella de impacto del proyecto, se ubica la Quebrada Cataño identificada como humedal ribereño (R2UBH) con una cabida de aproximadamente 2.04 acres y un humedal boscoso arbustivo de agua dulce (PFO3A) con una cabida aproximada de 0.24 acres, según el NWI. Esta quebrada (humedal) recolecta las aguas de escorrentías provenientes del sector Cataño, las cuales discurren hasta el Río Humacao. La flora y fauna que bordea a la quebrada (humedal) son especies de sucesión secundaria temprana que sirve de refugio para especies de fauna, en su mayoría aves comúnmente avistadas en asentamientos urbanos. Las áreas de humedal representan áreas de conservación que aportan biodiversidad al sector donde ubica el proyecto. El total de acres de humedales en la propiedad es de 2.28 acres, según el mapa del NWI.

Este aviso tiene tres propósitos principales. Primero, las personas que puedan verse afectadas por actividades en el humedal y aquellos que tengan interés en la protección del ambiente natural deben recibir la oportunidad de expresar sus preocupaciones y proveer información sobre estas áreas. Se exhorta a la comunidad a ofrecer o recomendar ubicaciones alternas fuera del humedal, métodos alternos para cumplir con el propósito del proyecto, y métodos para minimizar y mitigar los impactos en el humedal. Segundo, un programa adecuado de avisos públicos puede ser una herramienta importante para la educación pública. La divulgación de información y solicitud de comentarios públicos sobre humedales puede facilitar y mejorar los esfuerzos federales para reducir los riesgos e impactos asociados con la ocupación y alteración de estas áreas especiales. Tercero, como materia de justicia, cuando el gobierno federal determina participar en acciones ubicadas en el humedal, debe informárselo a quienes puedan ser expuestos a un riesgo mayor o similar al presente.

Comentarios por escrito deben ser recibidos por Vivienda en la siguiente dirección en o antes de 16 de octubre de 2024: Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918-8461, y (787)274-2527 ext. 4320, Atención: Santa Ramírez, Especialista en Permisos y Cumplimiento Ambiental. Una descripción completa del proyecto está disponible para revisión de 8:30 a.m. a 4:00 p.m. en el Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918. Los comentarios también pueden enviarse por correo electrónico a environmentcdbg@vivienda.pr.gov.

Fecha: 1 de octubre de 2024

Lcdo. William O. Rodríguez Rodríguez
Secretario del Departamento de la Vivienda

Autorizado por la Oficina del Contralor Electoral OCE-SA-2023-00076

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public notice

Early Notice and Public Review of a Proposed Activity in a Wetland

Laderas de Palmas
SF-HDI-00012

To: All Interested Parties, Groups & Individuals

This is to give notice that the Puerto Rico Department of Housing (PRDOH) has determined that the following proposed action under the Single-Family Housing Mitigation Program, Community Development Block Grant – Mitigation (CDBG-MIT), Grant number B-18-DP-72-0002, is located in a wetland. PRDOH will be identifying and evaluating practicable alternatives to locating the action within the wetland and the potential impacts on the wetland from the proposed action, as required by Executive Order 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C - Procedures for Making Determinations on Floodplain Management and Protection of Wetlands. The proposed project, **SF-HDI-00012**, is within a municipality with structures damaged by Hurricanes Irma and María and it's located at PR-3 Road Km 33.7, Cataño Ward, Humacao, PR 00791; 18.120370, -65.822607. The extent of the wetland was determined using information available in the National Wetlands Inventory Map (NWI) and field visits to study hydrology, presence of hydric soils, and vegetation associated with wetlands. The project consists in the construction of 100 single-family housing units on a site covering 39.54 acres, of which the project's impact footprint occupies 18.44 acres. Additionally, the proposal includes the construction of neighborhood facilities (green areas), streets, sidewalks, and a retention pond. The houses to be built will be one level, with three bedrooms, two bathrooms, living room, kitchen, dining room, and a carport for one vehicle. The residences will be resilient to weather events through the installation of photovoltaic panels, energy storage batteries, cross ventilation, fans, efficient appliances, and a water cistern. Within the property, but outside the project's impact footprint, is Quebrada Cataño identified as a riverine wetland (R2UBH) covering approximately 2.04 acres, and a freshwater forested shrub wetland (PFO3A) covering approximately 0.24 acres, according to the NWI Map. This stream (wetland) collects runoff water from the Cataño Sector, which flows to the Humacao River. The flora and fauna surrounding the stream (wetland) are species of early secondary succession that serve as a refuge for fauna species, mainly birds commonly seen in urban settlements. Wetland areas represent conservation areas that contribute biodiversity to the sector where the project is located. The total wetland acres on the property are 2.28 acres, according to the NWI Map.

There are three primary purposes for this notice. First, people who may be affected by activities in the wetland and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Commenters are encouraged to offer alternative sites outside of the wetland, alternative methods to serve the same project purpose, and methods to minimize and mitigate project impacts on the wetland. Second, an adequate public notice program can be an important public educational tool. The dissemination of information and request for public comment about wetlands can facilitate and enhance Federal efforts to reduce the risks and impacts associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in the wetland, it must inform those who may be put at greater or continued risk.

Written comments must be received by PRDOH at the following address on or before October 16, 2024: Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918-8461, and (787)274-2527 ext. 4320, Attention: Santa Ramírez, Permits and Environmental Compliance Specialist. A full description of the project may also be reviewed from 8:30 am to 4:00 pm at the Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918. Comments may also be submitted via email at environmentcdbg@vivienda.pr.gov.

Date: October 1, 2024

William O. Rodríguez Rodríguez, Esq.
Secretary of the Department of Housing

Authorized by the Office of the Electoral Comptroller OCE-SA-2023-00076

Exhibit 6: 8 Step Process : PRDOH Validation Letter

Validation Letter

November 6, 2024

To whom it may concern,

A comment was received through the Permits and Environmental Compliance Division e-mail: environmentcdbg@vivienda.pr.gov, for the project ***Laderas de Palmas*** (SF-HDI-00012), as part of the CDBG-MIT Single-Family Housing Mitigation Program, on October 2, 2024 by the USFWS Ecologist, Contaminants Specialist and Alt. Regional Emergency Coordinator, Félix López. The email received requested additional documentation regarding the project. As a response, maps, study of flora and fauna, technical proposal, and the USFWS informal consult package was provided on October 15, 2024. The Early Notice and Public Review of a Proposed Activity in a Wetland was published in the *Primera Hora* newspaper of Puerto Rico on October 1, 2024, with a comment period that concluded on October 16, 2024. An additional 15 days were granted; however, no comments were received.

Cordially,

Permits and Environmental Compliance Division
Disaster Recovery Office
environmentcdbg@vivienda.pr.gov | 787.274.2527 ext. 4320

From:	environmentcdbg
To:	Lopez, Felix
Cc:	Cruz-Burgos, Jose; Ortiz, Wilfrido G; Santa D. Ramirez Lebron
Subject:	RE: Public Notice – Early Notice and Public Review of a Proposed Activity in a Wetland_PRDOH Case SF-HDI-00012
Date:	Tuesday, October 15, 2024 4:36:08 PM
Attachments:	image001.png image002.png

Greetings Mr. López,

We acknowledge receipt of your comment.

As requested, attached please find the project's additional documentation including maps, study of flora and fauna, technical proposal and the informal consult package sent to the USFWS.

SF-HDI-00012_Requested Additional Information

Cc to this email is Santa Ramírez, which is the designated Certifying Officer for this specific case.

Should you have any other questions or concerns, please don't hesitate to reach us back again.

Sincerely,

Permits and Environmental Compliance Division
Disaster Recovery Office
environmentcdbg@vivienda.pr.gov | 787.274.2527
Visit us: recuperacion.pr.gov
Contact us: infocdbg@vivienda.pr.gov

cid:image001.png@01D93D6C.52EA7640

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CONFIDENTIALITY NOTE: This electronic transmission contains information belonging to the Puerto Rico Housing Deparment, which is confidential and/or legally privileged. If you are not the intended recipient, please immediately advise the sender by reply e-mail or telephone that this message has been inadvertently transmitted to you and delete this e-mail from your system. If you have received this transmission in error, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of the information is strictly prohibited. Unauthorized use, dissemination, distribution or reproduction of this message by other than the intended recipient is strictly prohibited and may be unlawful. 2

From: Lopez, Felix <felix_lopez@fws.gov>

Sent: Wednesday, October 2, 2024 12:45 PM
To: environmentcdbg <environmentcdbg@vivienda.pr.gov>
Cc: Cruz-Burgos, Jose <jose_cruz-burgos@fws.gov>; Ortiz, Wilfrido G <wilfrido.g.ortiz@hud.gov>
Subject: Public Notice – Early Notice and Public Review of a Proposed Activity in a Wetland_PRDOH Case SF-HDI-00012

In order to provide substantive comments regarding this project, please provide any documentation such as site plans, EA, fauna/flora studies, etc for the project.

If you need assistance, please contact me at my email or mobile below. If you are sending a request for technical assistance or Section 7 consultation, please contact us at Caribbean_es@fws.gov or call 786 244 0081 during working hours.

Felix Lopez
Ecologist, Contaminants Specialist, and Alt. Regional Emergency Coordinator
US Fish and Wildlife Service
Caribbean Ecological Services FO

Cell phone number has changed to 305 304 1128

For project evaluations, please visit our Consultation Guidelines website.

No one knows what we do, but we are the only ones that can do it and we do it well.....

From: environmentcdbg <environmentcdbg@vivienda.pr.gov>
Sent: Tuesday, October 1, 2024 10:04 AM
To: Jose.A.CedenoMaldonado@hud.gov <Jose.A.CedenoMaldonado@hud.gov>; Mahon, Donna M <Donna.M.Mahon@hud.gov>; Caribbean ES, FW4 <Caribbean_ES@fws.gov>; Mena, Lourdes <Lourdes_Mena@fws.gov>; Rodriguez.elias@epa.gov <Rodriguez.elias@epa.gov>; Guerrero.carmen@epa.gov <Guerrero.carmen@epa.gov>; PublicMail.CESAJ-CC@usace.army.mil <PublicMail.CESAJ-CC@usace.army.mil>; Rich.Okulski@noaa.gov <Rich.Okulski@noaa.gov>; Noah.Silverman@noaa.gov <Noah.Silverman@noaa.gov>; nmfs.ser.esa.consultations@noaa.gov <nmfs.ser.esa.consultations@noaa.gov>; FEMA-R4EHP@fema.dhs.gov <FEMA-R4EHP@fema.dhs.gov>; carubio@prshpo.pr.gov <carubio@prshpo.pr.gov>; comunicaciones@ddec.pr.gov <comunicaciones@ddec.pr.gov>; secretario@ddec.pr.gov <secretario@ddec.pr.gov>; jannira.colon@ddec.pr.gov <jannira.colon@ddec.pr.gov>; Rivera_r1@jp.pr.gov <Rivera_r1@jp.pr.gov>; comentarios@jp.pr.gov <comentarios@jp.pr.gov>; pmzc@drna.pr.gov <pmzc@drna.pr.gov>; eortega@drna.pr.gov <eortega@drna.pr.gov>; ayudaciudadano@drna.pr.gov <ayudaciudadano@drna.pr.gov>; anais.rodriguez@drna.pr.gov <anais.rodriguez@drna.pr.gov>
Subject: [EXTERNAL] Public Notice – Early Notice and Public Review of a Proposed Activity in a Wetland_PRDOH Case SF-HDI-00012

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Concerned agencies,

Enclosed please find a Public Notice – Early Notice and Public Review of a Proposed Activity in a Wetland the Puerto Rico Department of Housing (as the Responsible Entity) published as part of HUD's requirements for the release of CDBG-MIT funds to undertake the project *Laderas de Palmas* (SF-HDI-00012). The Early Notice was published in the *Primera Hora* newspaper of Puerto Rico on October 1, 2024.

Respectfully,

Permits and Environmental Compliance Division

Disaster Recovery Office

environmentcdbg@vivienda.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: infocdbg@vivienda.pr.gov

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Exhibit 7: 8 Step Process : USFWS Letter- Permits and Environmental Compliance

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Bayamón | Mayagüez | Maricao | Río Grande | St Croix
P.O. Box 491
Boquerón, Puerto Rico 00622

In Reply Refer To:
FWS/R4/CESFO/72069-054

Submitted via electronic mail: environmentcdbg@vivienda.pr.gov

Ms. Santa Rodríguez
Permits and Environmental Compliance Division
Disaster Recovery Office
PR Department of Housing

Re: SF-HDI-00012 Laderas de Palmas,
Humacao, Puerto Rico

Dear Ms. Rodríguez:

This is in reply to the above referenced housing development to be financed under the Single Family Housing Mitigation of the Community Development Block Grants. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

The project is in a 39 acre site, of which the proposed project will occupy about18 acres. An estimated 100 single family houses will be built. The Quebrada Cataño, a tributary to the Humacao River, runs along the eastern boundary of the proposed development. About 2.8 acres of riverine wetlands will be impacted by the project. These wetland impacts are associated with the toe of the fill and storm water detention pond. We believe that all wetland impacts can be eliminated if housing units 1, 17, 18, 33 and 34 are eliminated and the detention pond be redesigned to include a riser and discharge into the quebrada at a 45 degree angle in direction of the flow.

The project designer HF Engineering should redesign the project accordingly. This will ensure compliance with Executive Orders 11990 and 11988 for protection of wetlands and river floodplains, eliminate the need for a US Army Corps of Engineers Permit and any required compensatory mitigation for wetland impacts which would have to be included in the overall project costs. This will also leave the existing bed and bank of the Quebrada Cataño in its natural state.

The property has another undeveloped section of some 21 acres, the Quebrada Cataño runs diagonally through this parcel and any future residential development should include the quebrada as a linear green space and incorporated into the design.

With regards to federally listed species, you have determined that the Puerto Rican boa (*Chilabothrus inornatus*), and the guajón (*Eleutherodactylus cooki*) can be found within the project

action area. The determination that the project may affect but is not likely to adversely affect these species is based on following the Fish and Wildlife Service established conservation measures for both species. Please remember that these conservation measures have reporting requirements that should be followed by the grantee.

We have reviewed the information provided in your letter and our files and concur with your determination that the proposed action may affect, but is not likely to adversely affect, the above referenced species. No adverse impacts to designated critical habitat are anticipated.

In view of this, we believe that requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

Thank you for the opportunity to comment on this action, if you have any questions, please contact Felix Lopez of my staff at (305) 304-1128.

Sincerely,

LOURDES MENA

Digitally signed by LOURDES MENA
Date: 2024.11.06 21:38:09 -04'00'

Lourdes Mena
Field Supervisor

fhl
cc:
DNER, San Juan
PRPB, San Juan
COR3, San Juan
COE, San Juan

Exhibit 8: 8 Step Process: Response to USFWS Comments

February 5, 2025

Lourdes Mena
Field Supervisor
Fish and Wildlife Service
Caribbean Ecological Service Field Office
PO Box 491
Boquerón, Puerto Rico 00622

Subject: **Response to Comments**
SF**-HDI-00012**
Laderas de Palma, Humacao, PR

Dear Ms. Mena,

On November 6, 2024, we received your letter in response to our consultation, as per the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. and its amendments). In that letter, the agency concurs with the determination that the project may affect but is not likely to adversely affect, the Puerto Rican boa (*Chilabothrus inornatus*) and the guajón (*Eleutherodactylus cooki*). This determination is based on compliance with the conservation measures established by the Fish and Wildlife Service (FWS) for both species.

Additionally, your letter mentions that the project could impact approximately 2.8 acres of riverine wetlands. These impacts are related to the filling area and the stormwater detention pond. You also indicated that the implications for the wetlands could be eliminated if housing units 1, 17, 18, 33, and 34 are removed and the detention pond is redesigned to include a riser and discharge water toward the stream at a 45-degree angle in the direction of the flow.

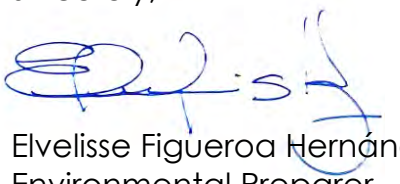
Following your recommendations, we have redesigned the project, removing six residences. The detention pond has been relocated outside the wetland area delineated in the National Wetland Inventory Map (NWI). The impact area is now at a minimum distance of 20.9 feet from the nearest point of the project to the wetlands. With these design changes, the natural bed and bank of the Quebrada Cataño are preserved, as required by the FWS.

With the project redesign, we believe we have adequately addressed the recommendations provided in your letter. Therefore, we respectfully request your agency's final endorsement to continue with the required evaluation and

permitting processes for the project so that construction can begin. The updated design overlaid on the NWI map is attached to this letter.

If you have any questions or need additional information, please feel free to contact me at 787-528-3322 or greenprojectpr@gmail.com.

Sincerely,



Elvelisse Figueroa Hernández
Environmental Preparer
Green project Environmental Consultants, LLC

Yo, Ingeniero Antonio F. Hernandez-Cruz, licencia número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias y que están en conformidad con los Códigos de Edificación vigentes de "Puerto Rico Codes 2018". También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además que, en la preparación de estos planos y especificaciones, se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 del 15 de mayo de 1938, según enmendada; Ley Núm. 96 del 6 de julio de 1978, según enmendada, según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe y cualquier otra autoridad competente". También certifico que, los planos están en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Archivo Gráfico de Puerto Rico, en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y certifico que cumple con los Códigos de Edificabilidad vigentes del "Puerto Rico Codes".

SHEET TITLE:
PROPOSED GENERAL SITE PLAN

STATUS:
ADVANCED DRAWINGS

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CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Antonio.hernandez@hfegroup.com LAS LOMAS 2KV. - 787 SAN PATRICIO AVE. - SAN JUAN PR. 00921
T.787.792.2687 M.787.509.5818 FOSTA, ICPR2020-425 CAM-0182 - PMI 2M-3000257-0906

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—101

SHEET NO:	TOTAL:
.	.

PLAN
SCALE = 1:500

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Bayamón | Mayagüez | Maricao | Río Grande | St Croix
P.O. Box 491
Boquerón, Puerto Rico 00622

In Reply Refer To:
FWS/R4/CESFO/72069-054

Submitted via electronic mail: environmentcdbg@vivienda.pr.gov

Ms. Santa Rodríguez
Permits and Environmental Compliance Division
Disaster Recovery Office
PR Department of Housing

Re: SF-HDI-00012 Laderas de Palmas,
Humacao, Puerto Rico

Dear Ms. Rodríguez:

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The project designer HF Engineering should redesign the project accordingly. This will ensure compliance with Executive Orders 11990 and 11988 for protection of wetlands and river floodplains, eliminate the need for a US Army Corps of Engineers Permit and any required compensatory mitigation for wetland impacts which would have to be included in the overall project costs. This will also leave the existing bed and bank of the Quebrada Cataño in its natural state.

The property has another undeveloped section of some 21 acres, the Quebrada Cataño runs diagonally through this parcel and any future residential development should include the quebrada as a linear green space and incorporated into the design.

With regards to federally listed species, you have determined that the Puerto Rican boa (*Chilabothrus inornatus*), and the guajón (*Eleutherodactylus cooki*) can be found within the project

action area. The determination that the project may affect but is not likely to adversely affect these species is based on following the Fish and Wildlife Service established conservation measures for both species. Please remember that these conservation measures have reporting requirements that should be followed by the grantee.

We have reviewed the information provided in your letter and our files and concur with your determination that the proposed action may affect, but is not likely to adversely affect, the above referenced species. No adverse impacts to designated critical habitat are anticipated.

In view of this, we believe that requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

Thank you for the opportunity to comment on this action, if you have any questions, please contact Felix Lopez of my staff at (305) 304-1128.

Sincerely,

LOURDES MENA

Digitally signed by LOURDES MENA
Date: 2024.11.06 21:38:09 -04'00'

Lourdes Mena
Field Supervisor

fhl
cc:
DNER, San Juan
PRPB, San Juan
COR3, San Juan
COE, San Juan

Exhibit 9: 8 Step Process: Project Site Plans

Yo, Ingeniero Antonio F. Hernandez-Cruz, licencia número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias y que están en conformidad con los Códigos de Edificación vigentes de "Puerto Rico Codes 2018". También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además que, en la preparación de estos planos y especificaciones, se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 del 15 de mayo de 1938, según enmendada; Ley Núm. 96 del 6 de julio de 1978, según enmendada, según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe y cualquier otra autoridad competente". También certifico que, los planos están en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Archivo Gráfico de Puerto Rico, en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y certifico que cumple con los Códigos de Edificabilidad vigentes del "Puerto Rico Codes".

SHEET TITLE:
PROPOSED GENERAL SITE PLAN

STATUS:
ADVANCED DRAWINGS

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J. C. A. CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E:	AS SHOWN
S. C. A. L. E:	AS SHOWN
DRAWING:	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Antonio.hernandez@hfegroup.com LAS LOMAS 2KV. - 787.644.PATRICIO AVE. - SAN JUAN PR. 00921
T.787.792.2647 M.787.501.6138 P.O.BOX 429535 ST.CAYEY PR. 00737 T.787.792.2647 M.787.501.6138 P.O.BOX 429535 ST.CAYEY PR. 00737

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—101

SHEET NO: .

TOTAL: .

Exhibit 10: 8 Step Process : Letter to FWS

February 5, 2025

Lourdes Mena
Field Supervisor
Fish and Wildlife Service
Caribbean Ecological Service Field Office
PO Box 491
Boquerón, Puerto Rico 00622

Subject: **Response to Comments**
SF**-HDI-00012**
Laderas de Palma, Humacao, PR

Dear Ms. Mena,

On November 6, 2024, we received your letter in response to our consultation, as per the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. and its amendments). In that letter, the agency concurs with the determination that the project may affect but is not likely to adversely affect, the Puerto Rican boa (*Chilabothrus inornatus*) and the guajón (*Eleutherodactylus cooki*). This determination is based on compliance with the conservation measures established by the Fish and Wildlife Service (FWS) for both species.

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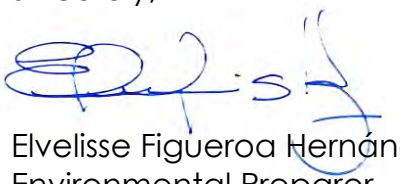
With the project redesign, we believe we have adequately addressed the recommendations provided in your letter. Therefore, we respectfully request your agency's final endorsement to continue with the required evaluation and

permitting processes for the project so that construction can begin. The updated design overlaid on the NWI map is attached to this letter.

If you have any questions or need additional information, please feel free to contact me at 787-528-3322 or greenprojectpr@gmail.com.

Sincerely,



Elvelisse Figueroa Hernández
Environmental Preparer
Green project Environmental Consultants, LLC

Exhibit 12: 8 Step Process: Laderas de Palma Original Footprint (Site Plans)

Yo, Antonio F. Hernández-Cruz, Ingeniero con Licencia 19102, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 119 de 30 de junio de 1976, según enmendada, y la Ley Núm. 45 de 18 de julio de 1978, según enmendada; según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

PLAN

SCALE = 1:500

0 10 20 30 40 50

SHEET TITLE:
PROPOSED GENERAL SITE PLAN

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.E.C.S. (H.F. Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR USED WITHOUT WRITTEN CONSENT OF H.F.E.C.S. IN WHOLE. IT SHALL BE RETURNED TO H.F.E.C.S. UPON THE REQUEST BY THIS OFFICE.

J. C. A. CONSULTA:	.
AAA NO.:	.
ACT NO.:	.
ARPE NO.:	.
D. A. T. E.:	AS SHOWN
S. C. A. L. E.:	AS SHOWN
DRAWING:	1045•

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Antonio.hernandez@hfegroup.com LAS LOMAS 2KV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T.787.792.2607 M.787.501.6138 FOSTA, AZORES 425 SAN ISIDRO - PMB 288 - 3000 CR 3 SUR

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—101

SHEET NO:	TOTAL:
.	.

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

Exhibit 15

Wild and Scenic Rivers Map

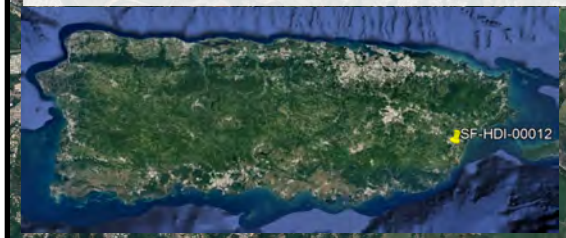
Laderas de Palmas

SF-HDI-00012

Wild and Scenic Rivers Image

Laderas de Palmas (SF-HDI-00012)
PR-3 Km. 33.7 Bo. Cataño, Humacao, PR 00791
Lat:18.120370, Long :-65.822607

Green PRojects
Environmental Consultants



Legend

- Distance (7.86 miles)
- Project Limit
- SF-HDI-00012

National Wild and Scenic River Line

7.86 miles

6 mi

N

Google Earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2025 Maxar Technologies
Image © 2025 Airbus

https://www.arcgis.com/apps/mapviewer/index.html?layers=a37eb56966cc4b11b69909e288414e53

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

Exhibit 16

YAG Construction Group Permit SR-40-0976

Laderas de Palmas

SF-HDI-00012

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTALES

NOV 0 7 2023

YAC Construction Group Corp.
Sra. Marielexys Cestary
PO Box 3445
Juncos, PR 00777

Estimada señora Cestary:

Modificación de Permiso
Servicios de Recolección y Transportación de Desperdicios No Peligrosos (DS-1)
YAC Construction Group Corp. (SR-40-0976)
Juncos, Puerto Rico

El Departamento de Recursos Naturales y Ambientales (en adelante, DRNA) le incluye la modificación del permiso antes mencionado, el cual permanecerá vigente hasta el **30 de agosto de 2025.**

De no estar conforme con las condiciones o términos bajo los cuales se concede el permiso incluido, podrá solicitar su revisión ante la Oficina del Secretario del DRNA. Para ello, se le concede veinte (20) días, contados a partir de la notificación.

Una vez transcurrido este término sin que se haya solicitado revisión, el permiso advendrá final. En caso de solicitar revisión, el permiso no se considerará final, hasta tanto el DRNA evalúe sus comentarios y emita su determinación final.

De necesitar información adicional, puede comunicarse con la que suscribe, al número de teléfono (787) 285-7997.

Cordialmente,

Vanessa Del Moral Rosario
Directora
Oficina Regional de Humacao

anejo

NOV 0 7 2023

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTALES

Permiso DS-1

SERVICIOS DE RECOLECCIÓN Y TRANSPORTACIÓN DE DESPERDICIOS NO PELIGROSOS

SECCIÓN I – INFORMACIÓN GENERAL

Nombre de la Instalación	:	**YAC Construction Group Corp.**
Número de Permiso	:	**SR-40-0976 (Modificación)**
Dirección Física	:	**Carr. PR-198 Km 2.4 Bo. Ceiba Norte, Juncos, Puerto Rico**
Dirección Postal	:	**PO Box 3445 Juncos, Puerto Rico 00777**
Nombre del Dueño o Representante Autorizado:		**Sra. Marielexys Cestary**
Número de Teléfono	:	**787-712-3444**

SECCIÓN II - TIPO DE DESPERDICIOS Y LUGAR DE DISPOSICIÓN FINAL AUTORIZADOS EN EL PERMISO

Los residuales autorizados a recolectar o transportar son desperdicios sólidos no peligrosos, tales como **escombros de construcción / demolición, residuales de asfalto y sobrante de tierra, desperdicios domésticos y comerciales, y material vegetativo.** Estos desperdicios serán acarreados hacia las siguientes instalaciones de desperdicios sólidos no peligrosos para su manejo, procesamiento y/o disposición final: Sistemas de **Relleno Sanitario de Toa Baja** (IDF-70-0031)**, Sistema de Relleno Sanitario de Juncos** (IDF-40-0012), **Peñuelas Valley Landfill** (IDF-57-0020)**, El Coquí Landfill** (IDF-36-0016), **Ponce Landfill** (IDF-58-0008), **Salinas Landfill** (IDF-63-0001), **Cantera El Tuque Inc.** (IP-58-0237) **en Ponce, Estación Transbordo de Caguas** (ET-13-0001), **Estación Transbordo San Juan** (ET-65-0057) .

Esta modificación consiste en la inclusión de unidades vehiculares, añadir el acarreo de desperdicios sólidos no peligrosos tales como domésticos, comerciales y material vegetativo y añadir las instalaciones de desperdicios sólidos no peligrosos operadas por la empresa EC Waste, LLC.

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SECCIÓN III – DESCRIPCIÓN DE LOS VEHÍCULOS AUTORIZADOS EN EL PERMISO

Tipo de Vehículo	Marca	Año	Tablilla
Camión Tumba	Mack CV700	2003	TV-2327
Camión Tumba	Sterling LT950	2004	TV-2325
Camión Tumba	Mack CV700	2007	TV-2326
Arrastre	Summit Traile	2000	53012-A
Arrastre	Trail King	2000	161854-A

SECCIÓN IV – CONDICIONES DEL PERMISO

El Departamento de Recursos Naturales y Ambientales (en adelante, DRNA) impondrá en los permisos otorgados bajo el Reglamento para el Manejo de Desperdicios Sólidos No Peligrosos (en adelante, Reglamento), los términos y condiciones que se enumeran a continuación, con los que estará de acuerdo el solicitante al aceptar el permiso:

1. El poseedor del permiso cumplirá con todas las condiciones. Cualquier incumplimiento constituirá una violación a este Reglamento, por lo que el DRNA podrá llevar acciones para obligarlo a cumplir.

2. El DRNA podrá modificar o revocar un permiso *motu proprio*, o a solicitud del poseedor del permiso. Si en un término de veinte (20) días calendario, a partir del recibo de este permiso, el poseedor no solicita la revocación, se entenderá que acepta las condiciones impuestas al mismo.

3. El DRNA podrá solicitar al poseedor de un permiso que, dentro de un término razonable, provea cualquier información para determinar si existe causa para modificar o revocar, o para determinar si se está cumpliendo con sus términos.

4. Si el poseedor del permiso se percata de haber sometido alguna información incorrecta, lo notificará inmediatamente al DRNA, y brindará la información completa y correcta dentro del término de cinco (5) días a partir del hallazgo.

5. El permiso para operar un servicio de recolección o transportación no será transferible.

6. El dueño u operador de un servicio de recolección o transportación someterá una solicitud de renovación, por lo menos, sesenta (60) días antes de la fecha de expiración del permiso para operar.

7. Si la solicitud de renovación se somete sesenta (60) días o más antes de la fecha de expiración del permiso, el mismo continuará vigente hasta la fecha de emisión del nuevo permiso y el poseedor continuará cumpliendo con todas las condiciones del permiso existente.

8. Según la Resolución RI-11-11-7 del 26 de septiembre de 2011, toda solicitud de renovación de un permiso de operación que se presente desde el día cincuenta y nueve (59) hasta la fecha de vencimiento del permiso tendrá el efecto de dejar sin vigencia el permiso existente una vez expirado.

Además, dicha renovación conllevará un aumento en el cargo de un veinticinco por ciento (25%) sobre la cantidad correspondiente. Si la parte interesa continuar operando, deberá presentar una solicitud de permiso de operación temporal.

9. Toda modificación de permiso o información suplementaria requerida por el DRNA deberá ser firmada y certificada por el dueño, o en el caso de una corporación, por el presidente, vicepresidente u oficial de más alto rango con oficinas en Puerto Rico o un representante debidamente autorizado, por escrito, por uno de los funcionarios antes mencionados. En el caso de municipios u otras entidades no corporativas, deberá ser firmada y certificada por un oficial responsable o equivalente.

10. El poseedor del permiso deberá rotular el vehículo autorizado con el número del permiso otorgado, nombre de la empresa, y número de teléfono, en ambos lados del vehículo. Los números y letras no serán menores de dos (2) pulgadas de alto y no serán susceptibles a ser removidos, excepto por destrucción.

11. Ninguna persona transportará desperdicios sólidos no peligrosos en forma tal que puedan derramarse o descargarse en una vía pública. Todos los vehículos que se usen para transportar desperdicios sólidos no peligrosos estarán diseñados de forma tal que el desperdicio quede completamente tapado.

12. Ninguna persona ocasionará o permitirá la recolección o transportación de desperdicios sólidos no peligrosos sin antes tomar todas las medidas para evitar fuegos, explosiones, olores objetables y atracción de vectores, y evitar que éstos resulten desagradables a la vista.

13. Ninguna persona ocasionará o permitirá la disposición de desperdicios sólidos no peligrosos en sitio alguno que no sea una instalación autorizada por el DRNA para manejar este tipo de desperdicio mediante un permiso expedido, de acuerdo con la reglamentación ambiental.

14. El poseedor de este permiso sólo podrá transportar los desperdicios sólidos no peligrosos indicados en la Sección II hasta las instalaciones de disposición final indicadas en dicha sección.

15. El poseedor de este permiso deberá cumplir a cabalidad con el Plan de Operación sometido con la solicitud de permiso. El Plan de Operación aprobado formará parte de este permiso.

16. El poseedor de este permiso permitirá a un funcionario del DRNA, debidamente identificado, entrar a su local para examinar, investigar o inspeccionar los equipos, vehículos, instalaciones y documentos relacionados con este permiso en días y horas razonables. Se apercibe al poseedor de este permiso que, si negare el acceso o le impide realizar una inspección a un funcionario del DRNA debidamente identificado, está sujeto a las sanciones y acciones administrativas y legales pertinentes, según las disposiciones de la Ley 416 del 22 de septiembre de 2004, según enmendada, conocida como la Ley sobre Política Pública Ambiental.

17. Deberá conservar, en todo momento, copia de este permiso y el Plan de Operación en los vehículos autorizados bajo este permiso.

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SECCIÓN V – APROBACIÓN Y VIGENCIA DEL PERMISO

El Departamento de Recursos Naturales y Ambientales (en adelante, DRNA) autoriza a **YAC Construction Group Corp.**, localizado en el **Municipio de Juncos**, a operar un servicio de recolección o transportación de desperdicios no peligrosos en las zonas y puntos establecidos en el Plan de Operación sometido. Este permiso tendrá una vigencia de tres (3) años, a partir de la fecha de otorgamiento. **Este permiso vence el 30 de agosto de 2025.**

Este permiso está condicionado a que la entidad autorizada demuestre, a satisfacción del DRNA, que la actividad de recolección o transportación está y permanecerá en cumplimiento con todos los reglamentos aplicables y con el Plan de Operación y Emergencia aprobado por el DRNA, y conlleva la aceptación de las condiciones presentadas en este permiso.

El DRNA podrá suspender o revocar este permiso de operación si se comprueba que se ha incurrido en alguna violación de las reglas o reglamentos vigentes y que no se esté cumpliendo con las condiciones estipuladas en este permiso.

El DRNA se reserva el derecho de intervenir con el servicio de recolección o transportación en otros aspectos no cubiertos en la autorización.

SECCIÓN VI – APERCIBIMIENTO

De conformidad con la Sección 5.4 de la Ley Núm. 38-2017, conocida como Ley de Procedimiento Administrativo Uniforme del Gobierno de Puerto Rico, se le apercibe que: "*Toda persona a la que una agencia deniegue la concesión de una licencia, franquicia, permiso, endoso, autorización o gestión similar, tendrá derecho a impugnar la determinación de la agencia por medio de un procedimiento adjudicativo, según se establezca en la ley especial de que se trate y en el Capítulo III de dicha Ley*".

Otorgado en San Juan, Puerto Rico el 7 noviembre 2023.

DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTALES

María V. Rodríguez

María V. Rodríguez Muñoz
Directora
Área Control Contaminación de Terreno
Secretaría Auxiliar de Cumplimiento Ambiental

Exhibit 16b

ESTADO LIBRE ASOCIADO DE PUERTO RICO
MUNICIPIO AUTÓNOMO DE JUNCOS
OFICINA DE DESPERDICIOS SÓLIDOS

15 de julio de 2024

A Quien Corresponda:

Reciba un cordial saludo de parte de la Administración Municipal de Juncos, al cual uno el mío propio.

El Municipio de Juncos no tiene objeción en que la Compañía **YAC CONSTRUCTION GROUP CORP.**, deposite en nuestro vertedero Desperdicios Sólidos NO PELIGROSO. El Municipio de Juncos se reserva el derecho de aceptar o rechazar cualquier tipo de material a depositar en los predios del Vertedero. Con número de Plan Operacional IDF-40-0012.

Que el precio establecido por el depósito es $30.00 por tonelada.

Que es responsabilidad del DEPOSITANTE respetar las indicaciones del MUNICIPIO y ofrecerá información veraz especifica relacionada con el origen y naturaleza de la carga. Expresamente se prohíbe el depósito de chatarras, baterías, gomas, y cualquier material o sustancia considerada toxica. Además, deberá mantener las pólizas de seguro al día en cuanto a responsabilidad pública se refiere de todos los equipos de su propiedad que entren al Vertedero Municipal de Juncos y libera al Municipio de Juncos de toda responsabilidad en cuanto a los daños a terceros por sus empleados, funcionarios o agentes.

Para información adicional puede comunicarse al (787)333-6085, con el señor Victor A. Carrión Pabellón, Director Interino, Oficina de Desperdicios Sólidos.

Cordialmente,

Victor A. Carrión Pabellón
Director Interino

Exhibit 16c

HUMACAO
CIUDAD AUTÓNOMA
CAPITAL DEL ESTE
DE PUERTO RICO

ROSAMAR TRUJILLO PLUMEY
ALCALDESA

25 de febrero de 2025

Rebuider PR, LLC y/o Antonio Hernandez
1526 Ave. Ponce De León Urb. Caribe
San Juan, PR 00926-2706

Solicitud:	**Endoso Laderas de Palmas**
Solicitante:	**Rebuilders PR, LLC**
Dirección:	**Carretera PR-3, Km. 33.7**
	Barrio Cataño, Humacao, PR

Estimados señores:

Hemos recibido su solicitud de evaluación y certificación de calificación de los terrenos en los cuales se construirá el proyecto residencial Laderas de Palmas en la Carretera PR-3, Km 33.7, Barrio Cataño del Municipio Autónomo de Humacao.

Conforme a la Primera Revisión Parcial del Plan de Ordenación Territorial de Humacao del 8 de febrero de 2008, esta parcela se encuentra clasificada como Suelo Urbano (SU); y cuenta con una calificación de Residencial Uno (R-1); según la Hoja Núm. 304 y 329, del Mapa de Calificación, con vigencia del 30 de octubre de 2010 y 25 de septiembre de 2011, respectivamente. Bajo la nueva nomenclatura del *Reglamento Conjunto para la Evaluación y Expedición de Permisos Relacionados al Desarrollo, Usos de Terreno y Operación de Negocios*, con vigencia del 16 de junio de 2023; este distrito es equivalente a Residencial de Baja Densidad (R-B). El Plan de Usos de Terrenos de 2015 clasifica estos terrenos como Suelo Urbano.

El distrito Residencial de Baja Densidad se establece para identificar áreas para futuro crecimiento urbano y para preservar el carácter residencial de áreas desarrolladas o que puedan desarrollarse en donde se permitirán diferentes tipos de viviendas. El Municipio de Humacao se encuentra trabajando con la Primera Revisión Integral del Plan de Ordenación Territorial, en la cual se revisarán las calificaciones actuales, el comportamiento existente de los usos del suelo y los impactos que podrían tener realizar cambios de calificación en el sector. Los terrenos objeto de consulta fueron evaluados y estamos considerando un cambio de calificación a Residencial Intermedio. Este se justifica por la necesidad de viviendas y por el carácter del proyecto propuesto ser compatible con los usos urbanos en el entorno, tales como: Urb. Miradero, Urb. Villas de Candelero y Urb. Parques de Candelero. El proceso de Revisión Integral se encuentra en curso por lo cual las modificaciones a la reglamentación y mapas de ordenación territorial aún deben pasar

HUMACAO
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CAPITAL DEL ESTE
DE PUERTO RICO

por vistas públicas y las correspondientes autorizaciones de la Legislatura Municipal, la Junta de Planificación, la Fortaleza y el Departamento de Estado.
Este proyecto se perfila como de gran beneficio para la ciudad de Humacao, ya que proporcionará vivienda nueva en áreas urbanas y fomentará nueva actividad económica. No tenemos objeción al proyecto, siempre y cuando cumpla con los requisitos y regulaciones vigentes que le son aplicables.

De requerir información adicional, puede comunicarse con esta servidora al número telefónico 787-852-3066 ext. 3160.

Cordialmente,

Zugeily Donato Ramos, MSEM, MP, PPL
Directora

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

Exhibit 17

PRASA's Letter and Approved Plans

Laderas de Palmas

SF-HDI-00012

21 de octubre de 2024

Lcdo. Félix Rivera Torres
Secretario Auxiliar
Oficina de Gerencia de Permisos (OGPe)
PO BOX 41179
San Juan, Puerto Rico 00940-1179

Lcdo. Félix Rivera Torres:

AAA-RE-23-36-0020 HUMACAO – LADERAS DE PALMAS CDBG-MIT
CARR. PR-3, KM. 84.0
129 UNIDADES EQUIVALENTES
OGPE: 2023-503622-SRI-304920
APROBACIÓN DE PLANOS

El proyecto de epígrafe ha sometido a la consideración de esta Autoridad los planos para la construcción de los sistemas de distribución de acueducto y alcantarillado sanitario De acuerdo al memorial explicativo el proyecto propuesto consiste del desarrollo de un complejo residencial de 112 unidades de vivienda.

Deseamos informarle que los planos para los sistemas de agua y alcantarillado sanitario del proyecto sometidos por el Ing. Antonio F. Hernandez (Licencia 19102 PE) han sido aprobados por esta Autoridad, sujeto a las siguientes condiciones:

Sistema de Distribución de Agua

1. La interconexión para el servicio de agua será de 4" de diámetro y se localizará según se indica en los planos aprobados. El punto de conexión será en la válvula de la tubería de 8" de diámetro localizada en la Carr. PR-3. El endoso de TODAS las unidades de este proyecto estará condicionado a que se realicen los trabajos
2. La (s) interconexión (s) para el servicio de agua mencionada (s) en la condición número 1 se subdividirá (n) en 112 acometidas de ½" de diámetro.
3. El cargo por incorporación del proyecto al sistema de acueductos de esta Autoridad será de $5,914.20, o el costo vigente al momento de la inspección e incorporación del proyecto.
4. El dueño del proyecto suplirá e instalará (los) contador(es) de ½" y los accesorios requeridos para la instalación de los contadores. El dueño o constructor del proyecto suplirá e instalará la(s) caja(s) de hierro fundido con marco y tapa de hierro fundido del tamaño "standard" para la protección de cada contador. Esta(s) caja(s) y demás accesorios de dicha(s) instalación(es) pasará a la propiedad de esta Autoridad.
5. Las cajas de contador serán instaladas fuera del área de rodaje, estacionamiento o rampas de acceso. Además, las mismas deberán estar instaladas fuera del límite de la propiedad. No se permitirán la instalación de más de una acometida en una misma trinchera.
6. Las cajas de contadores serán instaladas a no menos de 5 pies de distancia de todo equipo eléctrico (seguridad). Cualquier situación que no permita el cumplimiento de esta distancia deberá ser consultada con esta oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados.

7. Las cajas para la protección de cada contador se instalarán en el espacio reservado para siempre entre el sardinel y la acera. En caso de que no existiera, dicha caja será instalada en la acera o en cualquier otro sitio accesible aceptado por la Autoridad.
8. Las cajas de contador deberán ser protegidas con una base de hormigón con dimensiones de 21" X 18" X 4". Las llaves de paso serán protegidas por su respectiva protección de hormigón de 12" X12"X4".
9. Resaltamos que todas las llaves de paso, válvulas tirafondo, válvulas auxiliares, hidrantes serán provistos de sus respectivas protecciones de hormigón.
10. Las nuevas instalaciones no podrán ser conectadas hasta tanto se realice la desinfección y se emitan los resultados de la misma.
11. La tubería para el servicio de acueductos será instalada a una profundidad mínima de 0.75 metros, medido desde la superficie del pavimento hasta la parte superior del tubo y a una distancia de 1.5 metros del sardinel.
12. La distancia entre las instalaciones de servicio de agua y las instalaciones eléctricas será mayor o igual a 5 pies. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados y abonados.
13. La distancia entre las instalaciones de servicio de agua y las instalaciones pluviales será mayor o igual a 5 pies. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados y nuestros abonados.
14. La distancia entre la acometida de alcantarillado sanitario y la acometida de servicio de agua será mayor o igual a 5 pies, no se permitirá la instalación de ambas acometidas en la misma excavación. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados y abonados.
15. Se instalarán ventosas de aire en todos los puntos altos de la tubería donde se creen picos por cambios de dirección, según sea necesario. La localización de las mismas se determinará en el terreno.
16. Deberá instalar bloque de acodalamiento ("TRHUST BLOCK") en hormigón en cada cambio de dirección de la tubería a ser instalada.
17. Deberán instalarse aditamentos anti-hurtos a las bocas de incendio propuestas dentro del proyecto.
18. Se dejara un espacio de al menos 3" entre la loza de protección de hormigón y la tornillería de la base del hidrante.
19. Las pieza de conexión a utilizarse para la instalación de acometidas, serán tipo "flare" o rosca en caso de ser cobre flexible tipo "K", o rosca en caso de construirse en bronce. No se permitirán conexiones realizadas con piezas soldadas.
20. **Todas las acometidas de ½" se instalarán con abrazadera y llave de incorporación**.
21. Todas las conexiones serán realizadas por un maestro plomero, o bajo la supervisión de este.
22. Se deberá instalar una cinta detectable sobre la tubería de agua, igual o similar a la manufacturada por la compañía "REEF INDUSTRIES INC". Dicha cinta deberá estar localizada sobre y paralela a la tubería, a una profundidad de 0.30 metros (12"), bajo la superficie del terreno.
23. Todas las piezas como "TEE", válvula, tapón, etc. serán de hierro fundido.
24. Las piezas de conexión de hierro fundido se ajustarán a las especificaciones AWWA-C-110-54 o AWWA-C100-54, excepto las curvas de 45° y codos de 90°, las cuales deberán ajustarse específicamente a los requisitos de las segundas de estas especificaciones. Además, en caso que

dichas piezas se instalen de un diámetro igual o mayor de 8", las mismas serán con junta mecánica ("Mechanical Joint") y se ajustarán a las especificaciones del ASA-A-21.11 y ASA-A-21.10, según enmendadas y en vigor actualmente.

25. Las válvulas para las líneas de cañería serán de doble compuerta de hierro fundido con asientos de bronce ("cast iron body, bronze mounted") para 150 libras de presión, juntas de campana y tuerca cuadrada para su operación. Todas las válvulas se ajustarán a las especificaciones adoptadas por la "American Water Works Association", AWWA.
26. Las acometidas para el servicio de agua serán de diámetro y material indicado en los planos aprobados y se localizará según se indica en los planos. Sus extremos quedarán a 10" de profundidad de la superficie terminada de la acera y consistirán de llave de incorporación, tubería de material aceptable y aprobado por esta Autoridad, con sus uniones especiales ("adapters"), yugo ("meter yoke box") de un modelo y especificaciones aprobadas por la Autoridad. Las cajas de hierro fundido deberán estar provistas de cerradura de diseño previamente de bronce y de diseño aprobado, a una distancia aproximada de un (1) pie dentro del límite del solar. Esta(s) llave(s) de paso deberá(n) ser provista(s) de una protección de hormigón con dimensiones 8"x8"x4".
27. La tubería de polivynil (PVC) a instalarse tiene que cumplir con todos los requisitos de las especificaciones de la "American Society for Testing & Materials" (ASTM-D-2241) en vigor actualmente.
28. Será necesario realizar excavaciones exploratorias según lo solicite el inspector de la AAA., para poder verificar la profundidad y material de la tubería. Deberá dejar provista una excavación abierta para que personal de esta Autoridad verifique las instalaciones realizadas en el mismo.
29. La tubería de servicio de agua deberá instalarse al lado contrario de las utilidades eléctricas, telefonía o CATV.
30. El proponente o dueño deberá notificar por escrito a esta oficina cuando comience la construcción de las obras.
31. Cualquier cambio que sea necesario a lo indicado en este plano o en su carta de aprobación, relacionado al sistema de agua potable, deberá ser consultado y evaluado con esta oficina previa a su implementación.
32. Para la aceptación final del proyecto el mismo deberá estar pavimentado cuando se realice la validación final.
33. El contratista o desarrollador presentará evidencia del pago de conexión al sistema, previo al endoso final del proyecto.
34. Antes de proceder a la instalación de la tubería, el urbanizador suministrará a la Autoridad de Acueductos y Alcantarillado, un certificado del fabricante de la misma incluyendo las piezas de conexión, haciendo constar que la inspección y todas las pruebas requeridas en las antes mencionadas especificaciones han sido debidamente efectuadas en la fábrica habiéndose llenado todos los requisitos exigidos en dichas especificaciones.
35. La AAA se reserva el derecho de requerir cualquier cambio pertinente que por omisión o error involuntario no se haya incluido en el proyecto y a su juicio sea necesario para el buen funcionamiento del sistema de acueductos.
36. La Autoridad será responsable de la conservación de cada acometida hasta los contadores, incluyendo éstos. El dueño del proyecto será responsable de la operación y conservación de toda la instalación más allá de los contadores.
37. Se resalta el hecho que solo en los ramales en donde se prevé futuros desarrollos podrán dejarse tapones finales en las líneas. Aquellas líneas finales a puntos donde no se espera desarrollo adicional deberá considerarse la instalación de la última acometida de servicio al tapón final, para evitar puntos "muertos".

Sistema de Alcantarillado Sanitario

38. El punto de conexión para este proyecto será la línea sanitaria de 8" de diámetro existente en la PR-3. La conexión será realizada mediante "dog-house"
39. Los registros de inspección a instalarse en el sistema de alcantarillado sanitario deberán ser cubiertos con un anticorrosivo (epoxy), igual o similar al denominado "Concresive 305".
40. El tope de los registros sanitarios a ser instalados fuera de la zona de rodaje deberán ser instalados al menos 0.30 metros sobre el nivel del terreno.
41. Toda tubería que no llene los requisitos de las pruebas, será reparada por el contratista y sometida a prueba hasta que sea aprobada definitivamente por el inspector de la Oficina de Proyectos Públicos y Privados.
42. La infiltración o exfiltración de agua en las tuberías no será mayor de 50 galones por pulgada de diámetro por milla de longitud en 24 horas. El contratista proveerá los medios según lo requiera el inspector de A.A.A., para llevar a cabo las pruebas de tuberías sanitarias.
43. El dueño o contratista deberá estar preparado con personal y equipo adecuado para realizar las pruebas de nivelación al sistema sanitario propuesto. La misma deberá cumplir en terreno con las pendientes profundidades de los registros adecuadas según Capítulo IV incisos 4.06 y 4.15.01 estipulado en el Manual de Normas de Diseño de esta autoridad.
44. Para aceptar finalmente el proyecto el mismo deberá estar pavimentado cuando se realice la validación final.
45. La distancia entre las instalaciones de servicio de alcantarillado sanitario y las instalaciones eléctricas (pedestales eléctricos, transformadores, postes, etc.) será mayor o igual a 5 pies. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados.
46. La distancia entre las instalaciones de servicio de agua y las instalaciones de alcantarillado sanitario será mayor o igual a 5 pies. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados.
47. Los registros de limpieza serán instalados fuera del área de rodaje o rampas de acceso vehicular.
48. La A.A.A. se reserva el derecho de requerir cualquier cambio pertinente que por omisión o error involuntario no se haya incluido en el proyecto y a su juicio, sea necesario para el buen funcionamiento del sistema de alcantarillado sanitario.
49. Cualquier cambio que sea necesario a lo indicado en este plano o en su carta de aprobación, relacionado al sistema de alcantarillado sanitario, deberá ser consultado y evaluado con esta oficina para aprobación, previo a su construcción y/o desarrollo.

Condiciones Generales

50. El urbanizador tiene que notificar a la Oficina Regional de Caguas de Proyectos Públicos y Privados de esta Autoridad tan pronto se comiencen las obras de acueductos y/o alcantarillado sanitario en el referido proyecto.
51. Antes de proceder al traspaso de los sistemas de distribución de agua y/o alcantarillado sanitario a esta Agencia, el urbanizador tiene que suministrar un inventario completo de dichos sistemas, así como un plano de inscripción final del proyecto y también tiene que legalizar la cesión de servidumbre de paso y terrenos adquiridos, si las hubiese.
52. La A.A.A. se reserva el derecho de requerir cualquier cambio pertinente u obra de mejora que por omisión involuntaria no se haya incluido en el proyecto y a su juicio, sea necesario para el buen funcionamiento del (de los) sistema(s) de agua potable y alcantarillado sanitario. . Esto incluye

obras construidas que no estén en acuerdo con las Normas de la Autoridad y que su efecto sea en detrimento de los sistemas a ser instalados.

53. Si existiera una cañería de la Autoridad de Acueductos y Alcantarillados en uso, a la cual por su situación lógicamente debería conectarse el sistema de distribución de agua y alcantarillado sanitario, según fuera el caso del referido proyecto y dicha cañería fuera inadecuada a los fines de proveer medios eficientes de servicio, o si la misma no existiera, la Autoridad no vendrá obligada en forma alguna a facilitar libre de costo el debido funcionamiento de dichos sistemas.

54. Las instalaciones para los servicios de agua y/o alcantarillado sanitario no podrán ponerse en uso hasta tanto sean terminadas y aprobadas por esta Autoridad.

55. El dueño del proyecto deberá instalar equipos de conservación de agua iguales o similares a los "AFC" (Salva-agua), "UFO" o "ECO". El aditamento cerrará instantáneamente el flujo cuando el usuario remueva la mano del agua. El aditamento tiene que detener el goteo causado por llaves y zapatillas defectuosas. La pérdida efectiva será de 0.0 GPM y el flujo del aditamento no será mayor de 1.5 GPM. Los inodoros deberán ser de no más de 1.6 galones por descarga.

56. Los pagos de los cargos por conexión, cargos especiales por agua de construcción y los cargos de desinfección de cañerías se harán en las Oficinas Comerciales correspondientes. La oficina de Proyectos Públicos y Privados determinará la cantidad de dinero a pagar mediante una notificación a la Agencia Comercial con copia para el desarrollador. Los pagos se harán con cheques certificados o giros a favor de la AAA. La Agencia Comercial será responsable de recibir el pago efectuado por el desarrollador, expedir un recibo al contratista según la *"Notificación de Cobro a la Agencia Comercial"*. El desarrollador deberá presentar la evidencia de pago y entregar este formulario firmado por el Oficial Receptor en original junto con dos copias del cheque certificado o giro. La Agencia Comercial adjuntará el recibo del cajero electrónico.

Vigencia & Disposiciones Generales

57. Esta aprobación del referido proyecto será efectiva por un término de dos (2) años a partir de la fecha de esta comunicación: al cabo del cual, de no haberse comenzado la construcción de las obras de acueductos y/o alcantarillado sanitario, el proponente tiene que someter nuevamente el proyecto a la consideración de esta Autoridad, tan pronto esté en condiciones de ejecutar dichas obras, de todo lo cual queda apercibido del interesado.

58. Una vez se inactive este proyecto por más de dos años, la aprobación del mismo quedará sin efecto. La inactividad del proyecto se refiere a que no se reflejen acciones en el expediente de trabajo de la AAA.

59. El dueño del proyecto, el ingeniero que certificó los planos para la instalación de los sistemas de acueducto y alcantarillado sanitario, el inspector designado por el dueño y el contratista deberán cumplir con el "*Reglamento de Certificación y Planos de Construcción",* adoptado por esta Autoridad de acuerdo con la Ley número 7 del 19 de julio de 1985.

60. Las cartas de recomendaciones vigentes y las condiciones indicadas en las mismas, serán parte de la aprobación de este proyecto. Los dueños del proyecto serán responsables de cumplir con estas condiciones y cualquier omisión nuestra, en esta aprobación, no los releva de realizarlas. Para todos los efectos, se considerarán como incluidas en esta aprobación.

61. Todas las bocas de incendio del proyecto se les proveerá un sistema anti-hurto para evitar el uso clandestino de las mismas. Las bocas de incendio deberán ser protegidas contra accidentes o impactos mediante la instalación mínima de tubos de hierro dúctil de 4" de diámetro rellenos de cemento.

62. Todas las conexiones, (temporeras o permanentes) se solicitarán a la Oficina de Proyectos Públicos y Privados.

63. Los pagos de los cargos por conexión, cargos especiales por agua de construcción y los cargos de desinfección de cañerías se harán en las Oficinas Comerciales correspondientes. Las facturas relacionadas a dichos cargos serán emitidas por la oficina de Proyectos Públicos y Privados. La evidencia de pago será el recibo emitido por la Oficina Comercial.

Servicios temporeros durante la construcción

64. El método de provisión de agua de construcción deberá ser propuesto por el desarrollador y aprobado por la Oficina de Proyectos Públicos y Privados antes de iniciar la construcción del proyecto. Resaltamos que cualquier persona que hiciera uso del servicio de agua o alcantarillado sin que medie un servicio registrado con la Autoridad, será responsable del pago de los servicios utilizados, del cumplimiento con las normas o reglamentos aplicables y las disposiciones del *Código sobre Tomas o Descargas Clandestinas, Hurto de Agua, Manipulación de Contadores u otros Accesorios Propiedad de la Autoridad de Acueductos y Alcantarillados*.

65. Para la provisión de estos servicios, siempre prevalecerá el método de lectura sobre cualquier método donde el consumo tenga que ser estimado.

66. La(s) acometida(s) temporera(s) para agua durante el proceso de agua de construcción deberán ser solicitadas formalmente a la Oficina de Proyectos Públicos y Privados (PPP), antes de iniciar las obras de construcción del proyecto. La Oficina de PPP emitirá la factura relacionada al trabajo de conexión de dicha acometida, así como la autorización de conexión, y la autorización para registrar temporeramente el servicio solicitado.

67. Deberá solicitar un servicio aparte para las oficinas temporeras del proyecto.

68. Proyectos que por su configuración, no puedan suministrar el agua de construcción con un método de lectura, estarán sujetos al pago por unidad establecido para dichos fines al momento de que se emita el endoso final para permiso de uso. Destacamos que el método de provisión de agua de construcción deberá ser propuesto por el desarrollador y aprobado por la Oficina de Proyectos Públicos y Privados antes de iniciar la construcción del proyecto.

Inspección de Obras

69. Deberá someter a las Oficinas de Proyectos Públicos y Privados dos (2) copias del "set" de planos aprobados (sello de la AAA incluido) en tamaño 24" x 36", antes del inicio de construcción del proyecto.

70. Deberá solicitar una reunión pre-construcción antes de solicitar la primera inspección del proyecto. A la misma debe asistir el inspector designado por el dueño, y el representante del dueño.

71. El inspector designado en la forma de AAA-881 será responsable de cumplir con las disposiciones de la sección 4.0 del Reglamento para permisos de planos de la AAA.

72. El inspector designado, según indicado en la AAA-881, será responsable de someter ante esta Oficina reportes rutinarios de las obras realizadas y fotos de las tuberías instaladas. Estos reportes deberán ser sellados y firmados por el inspector.

73. Las solicitudes para inspección deberán realizarse por escrito a nuestras Oficinas y deberán ser precedidas por el informe del inspector designado por el dueño. Los informes de inspección deben detallar los elementos o pruebas realizadas así como el resultado de las mismas. En el caso de pruebas se debe describir el método utilizado para realizar la misma. Asimismo, se deben incluir fotografías de los elementos inspeccionados.

74. El inspector designado deberá someter copia de los informes de inspección del proyecto que correspondan a la instalación de las líneas del sistema de distribución de agua o alcantarillado sanitario del proyecto, cuando se vaya a solicitar el endoso de las unidades individuales. Este informe debe tener el sello y la firma del inspector designado en original.

75. Deberá proveerse una excavación en todas las acometidas para verificar la profundidad de las tuberías y tipo de material antes de pavimentar la calle de acceso y del proyecto.

76. El inspector designado deberá estar presente en las inspecciones.

77. Se debe coordinar las excavaciones en todo el proyecto de construcción con la oficina de Coordinación de Excavaciones, teléfono 764-4900, adscrita a la Comisión de Servicio Público.

Cambios al Plano Aprobado

78. Se deberá presentar un plano revisado donde se indique cualquier cambio del sistema de agua y sanitario. Estos cambios al plano inicialmente aprobado, deberán ser aprobados antes de proceder con los mismos. Toda solicitud para enmienda de un plano aprobado deberá incluir: un memorial explicativo discutiendo los cambios, los formularios AAA-1294 (Certificación del Diseñador) y AAA-972 (Solicitud de aprobación de planos de construcción)

79. Cualquier cambio/enmienda al plano originalmente aprobado deberá ser presentado a través de una petición de servicio para tales fines a través de la Oficina de Gerencia de Permisos (OGPe). Esta Oficina no validara obras que no cumplan con las Normas de esta Autoridad y/o cuenten previamente con nuestra aprobación.

80. De surgir alguna diferencia entre lo indicado en el plano y este documento prevalecerá lo que indique este documento y/o lo que determine esta Oficina.

81. Cualquier sistema de recolección de aguas de lluvia propuesta, deberá ser presentado para evaluación de esta Autoridad. En relación a estos sistemas resaltamos que:

    a. Dichas aguas no podrán ser mezcladas con las aguas del sistema de agua potable, servida por la AAA.

    b. Se deberá proveer un mecanismo para que esta Autoridad pueda facturar por la porción de esta agua, que por su naturaleza, se proponga disponer al sistema de alcantarillado sanitario de la AAA.

Otros

82. El diseñador deberá someter una copia del plano digital en formado ArcView (.shp), Microstation (.dng) o Autocad (.dwg). Además deberá incluir las coordenadas State Plane NAD83.

83. Como parte del proceso de endoso y aceptación final del proyecto deberán ser remitidos a nuestra Oficina los siguientes formularios: Formulario AAA-177 (Informe de Terminación de Obra), Formulario AAA-1268 (Documento de Cesión y Traspaso), Formulario AAA-1351 (Declaración y Certificación), Formulario AAA-1294-A (Certificación del Contratista) y la Certificación Final del Inspector Designado.

84. El trámite para constituir las servidumbres de paso que sean necesarias deberá haber sido finalizado antes de solicitar el/los endoso(s) final(es) para permiso de uso relacionados al proyecto.

85. El desarrollador deberá entregar un desglose de los largos de tubería instalados en el proyecto para los sistemas de agua y/o alcantarillados. En adición proveerá un listado de todas las bocas de incendio dentro del proyecto con su localización exacta y un estimado de las obras hidráulicas. Esto será un requisito para poder emitir la carta de Aceptación Final.

86. El dueño del proyecto tendrá que obtener de la oficina de Proyectos Públicos y Privados, la carta de Aceptación Final una vez sea inspeccionado y completado el proyecto en su totalidad para poder obtener el servicio.

87. El desarrollador, urbanizador o dueño del proyecto será responsable de toda obra de

infraestructura de acueductos y alcantarillado hasta tanto, no haya obtenido una aceptación final de parte de la AAA. Toda deficiencia encontrada en los sistemas de distribución de agua y alcantarillado sanitario será de entera responsabilidad de los mismos y deberá ser corregida.

Condiciones Especificas

88. La aceptación final de este proyecto estará condicionada a que el desarrollador complete satisfactoriamente los tramites de servidumbres de paso y tramites de dedicación a uso publico de las calles donde discurre infraestructura de la Autoridad. De lo contrario será responsable de la operación y mantenimiento de la misma.

89. Trabajos a ser realizados por el dueño :

El desarrollo propuesto será suplido de la Estación de bomba EB Terminal sur. Dicha estación en la actualidad tiene limitaciones en su gradiente hidráulica. Lo cual impide que la estación de bombas EB Catano tenga succión adecuada debido a su altura en relación con EB Terminal Sur. La integración del desarrollo propuesto al sistema afectaría de manera adversa esta situación. Luego de consultar con el área operacional, entendemos que la mejor opción para viabilizar el proyecto seria la instalación de una estación de bombas en las inmediaciones del proyecto la cual serviría para proporcionar servicio al proyecto y brindar mejor succión a EB Catano.

1. El informe del análisis realizado y diseño de las mejoras propuestas que resulten necesarias para garantizar la capacidad adecuada para manejar la demanda existente y la demanda adicional que representará el proyecto deberá ser sometido ante la oficina de PPP para aprobación.

Cordialmente;

Ing. Ricardo Velázquez Medina
Gerente Técnico Región Este
Proyectos Públicos y Privados

C: Dueño/Proponente, Expediente, Archivo de Lectura

PROJECT:

LADERAS DE PALMAS CDBG-MIT

AAA-RE-23-36-0020
2023-503622-SRI-304920
CARRETERA PR-3 KM 84.0
BO. CATAÑO
HUMACAO, PR 00791

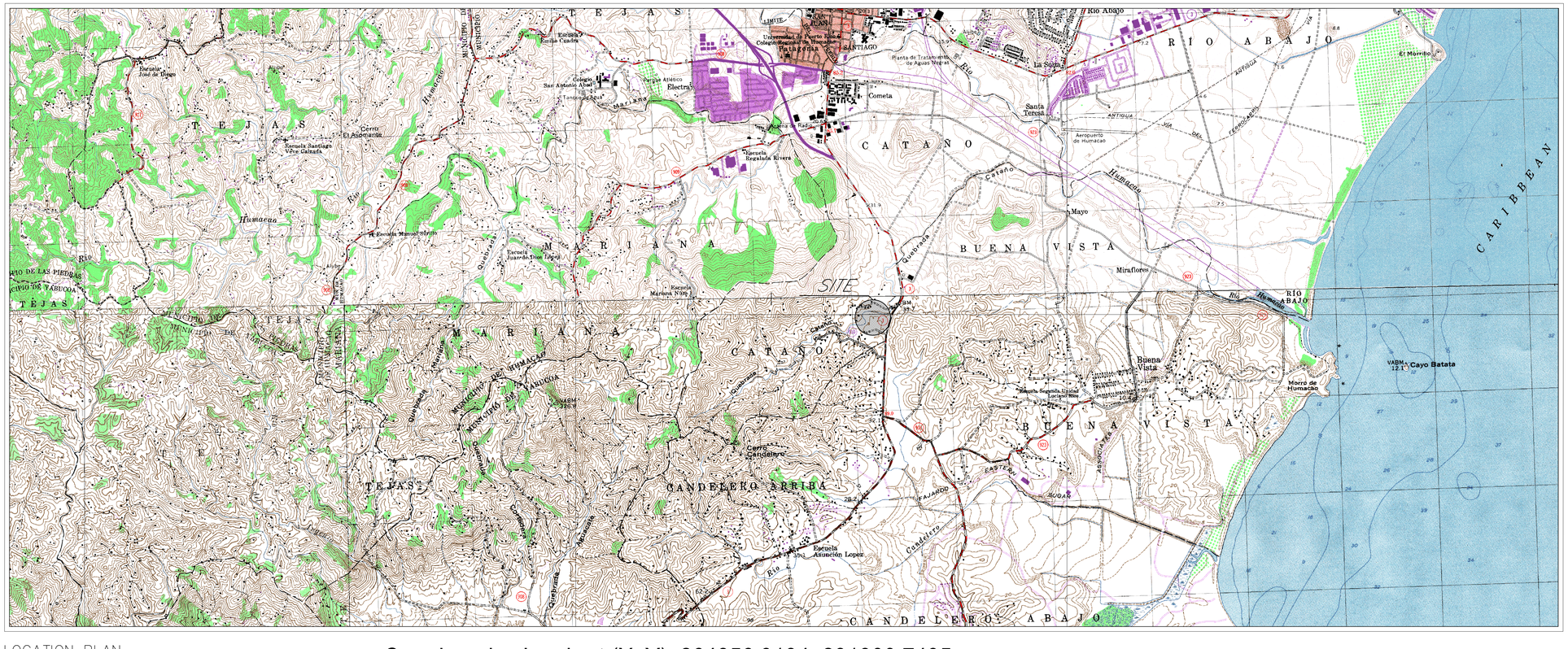
OWNER:

REBUILDERS PR, LLC

TELEPHONE: 939-347-0046
P.O. BOX 192484
SAN JUAN, PUERTO RICO 00919

INDEX OF DRAWINGS

TITLE OF SHEET	SHEET ID.
PROPOSED WATER DISTRIBUTION SITE PLAN	201
PROPOSED WATER DISTRIBUTION DETAILS	202
PROPOSED SANITARY SEWER SITE PLAN	301
PROPOSED SANITARY SEWER PROFILES	302
PROPOSED SANITARY SEWER DETAILS	303

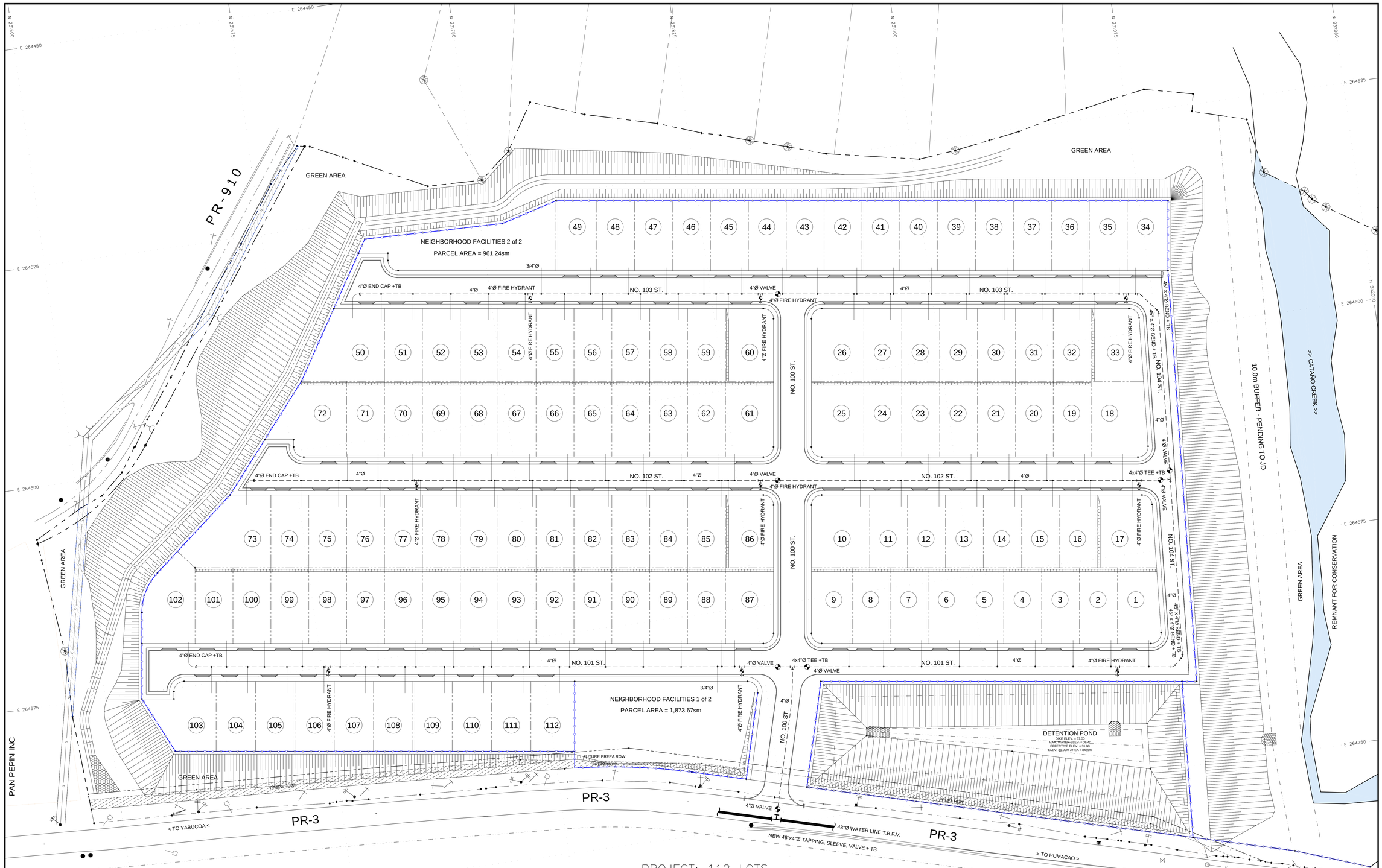


LOCATION PLAN
SCALE: 1=20,000

Coordenadas Lambert (X, Y) 264856.9134, 231900.7495

GOBIERNO DE PUERTO RICO
Autoridad de Acueductos y Alcantarillados
PLANO APROBADO
Aprobado y condicionado según carta:
21 de octubre de 2024
Firma _____
Gerencia de Proyectos
REGIÓN Este

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Antonio.Hernandez@hfcg-pr.com LAS LOMAS DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T: 787-724-3827 F: 787-724-3947 M: 787-501-8136 POSTAL ADDRESS: 425 CARR 693 - PMB 269 - DORADO PR 00646



PROJECT: 112 LOTS

PROJECT SUMMARY & LENGTH OF PIPES TABLE

LOCATION	6"Ø PVC	4"Ø PVC
NEW PRASA WATER LINES / PUBLIC ROADS	- 0 -	~ 1,169
LENGTH (M)	- 0 -	~ 1,169

PROPOSED WATER METERS AND HYDRANTS

NEW 3/4"Ø WATER METERS UNDER THIS PROJECT	2 - 3/4"Ø METERS
NEW 1/2"Ø WATER METERS UNDER THIS PROJECT	112 - 1/2"Ø METERS
NEW 4"Ø FIRE HYDRANTS UNDER THIS PROJECT	9 - 4"Ø HYDRANTS
NEW 6"Ø FIRE HYDRANTS UNDER THIS PROJECT	0 - 6"Ø HYDRANTS

LEGEND:

- 6"ø P.V.C. S.D.R.–14 FOR 200 PSI TO BE INSTALLED
- 4"ø P.V.C. S.D.R.–14 FOR 200 PSI TO BE INSTALLED
- EXISTING WATER LINES , ø AS INDICATED
- VALVES TO BE INSTALLED, ø AS INDICATED
- EXISTING VALVES OR PROPOSED BY OTHERS
- MULTIPLE PLUG TO BE INSTALLED
- FIRE HYDRANT TYPE P.R. TO BE INSTALLED, DIAM. AS INDICATED (LOCATE AT PLANTING AREA)
- 1/2"ø COPPER TYPE K SERVICE CONNECTION

Yo, Ingeniero Antonio F. Hernandez-Cruz, licencia número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones correspondientes y que están en conformidad con los Códigos de Edificación vigentes de "Puerto Rico Codes 2018". También certifico que archivado con dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes en la Administración de Reglamentos y Permisos Públicos con jurisdicción. Certifico, además que, en la preparación de estos planos y especificaciones, no he cometido catástrofe con lo dispuesto en la Ley 14-2004, según enmendada, Ley 173 del 12 de agosto de 1988, según enmendada, Ley 76 del 5 de junio de 2000, Ley Núm. 319 del 15 de mayo de 1948, según enmendada, Ley Núm. 95 del 9 de julio de 1975, según enmendada, según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hace previsible por desconocimiento o por negligencia de mi parte así, sin aviso y emplazado, y por estas personas con el conocimiento, me hacen responsable de cualquier violación de las leyes y reglamentos que rigen el ejercicio de mi profesión como ciudadano". También certifico que, los planos están en conformidad con Planes Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Archivo Gráfico de Puerto Rico, Mapa Oficial de Carreteras de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y certifico que cumple con los Códigos de Edificabilidad vigentes del "Puerto Rico Codes".

240524

SUBMITTED FOR AGENCIES APPROVAL:
MAY 24, 2024
SET: 1/22
REV.: .

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046
CIAPR (EDE) STAMPS FOR PE:19,102
1045-2301-230908_2458-1744-3431-8573
1045-2402-240209_5768-9424-8604-1134

ANTONIO F. HERNANDEZ CRUZ
INGENIERO LICENCIADO
LIC. 19102
PUERTO RICO

GOBIERNO DE PUERTO RICO
Administración de Reglamentos y Permisos
PLANO APROBADO
Aprobado y condicionado según carta:
21 de octubre de 2024
Firma
Gerencia de Proyectos
REGIÓN Este

SHEET TITLE:
PROPOSED WATER DISTRIBUTION SITE PLAN

J. C. A.: .
CONSULTA: .
AAA NO.: .
ACT NO.: .
ARPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045*

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.C.C. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REUSED OR DISCLOSED WITHOUT WRITTEN CONSENT. UPON REQUEST IN WRITING, IT SHALL BE RETURNED TO H.F.C.C. UPON THE REQUEST BY THIS OFFICE.

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

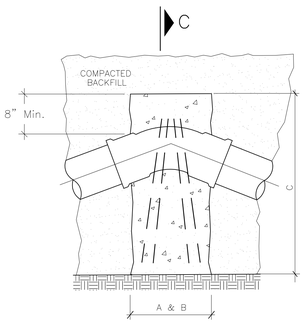
HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Address: hernandez@hfegr.com 1243 LOMAS DRV. - 787 SAN PATRICIO AVE. - SAN JUAN PR. 00921
T: 787-782-2847 F: 787-720-2847 M: 787-561-6136 PSC#: 4,429,533 CSP: 6,995 BIE: 19,102 - 3,000,376,984

PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

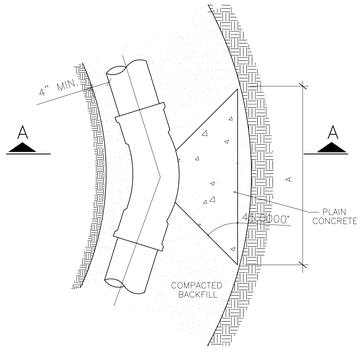
SHEET IDENTIFICATION:
C–201

SHEET NO: .
TOTAL: .



PLAN

NOT TO SCALE



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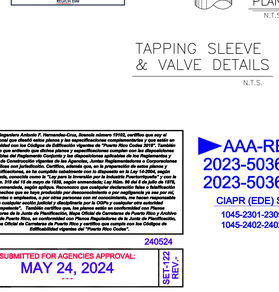


SECTION "C–C"

NOT TO SCALE

SECTION "A–A"

NOT TO SCALE

THRUST BLOCK FOR HORIZONTAL AND VERTICAL BENDS

THRUST BLOCK FOR HORIZONTAL BENDS

11–1/4°

PIPE ø	A (in)	B (in)	C (in)
4	6	6	4
6	8	8	6

22–1/2°

PIPE ø	A (in)	B (in)	C (in)
4	6	7	4
6	8	11	6

90° , TEES & PLUGS

PIPE ø	A (in)	B (FT)	C (FT)
4	6	14 in	8in
6	8	21 in	13in

45° & WYES

PIPE ø	A (in)	B (FT)	C (in)
4	6	10 in	4
6	8	16 in	8

THRUST BLOCK FOR VERTICAL BENDS (GRAVITY BLOCKS)

11–1/4°

PIPE ø	A, B & C (FT)	REBAR	TIES
4	18 in	2 # 3	4 # 3
6	22 in	2 # 3	4 # 3

22–1/2°

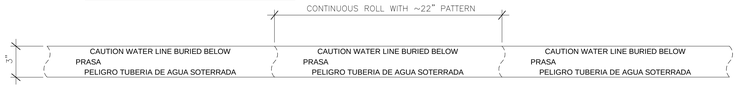
PIPE ø	A, B & C (FT)	REBAR	TIES
4	21 in	2 # 3	4 # 3
6	27 in	2 # 3	4 # 3

45°

PIPE ø	A, B & C (FT)	REBAR	TIES
4	26 in	2 # 3	4 # 3
6	3.00	3 # 3	4 # 3

3" DETECTABLE MARKING TAPE DETAIL

NOT TO SCALE

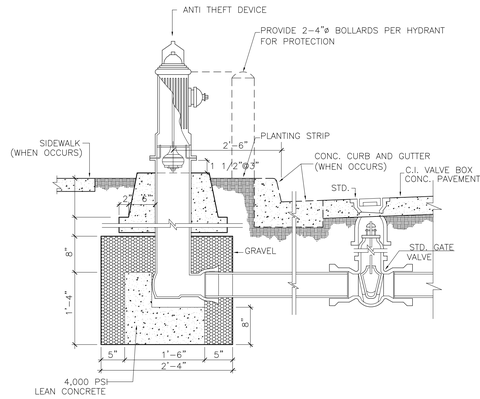


COLOR: BLUE

MATERIAL:
- 5.0 Mil Overall Thickness
- 0.80 Mil Polypropylene Film Thickness
- 0.35 Mil Solid Aluminum Foil Core
- 3.75 Mil Polyethylene Film Thickness
- Reverse Printed Polypropylene Structure
- Diagionally Striped Design (Patented)
- Acid, Akali, Chemical, and Oil Resistant
- Direct Burial Rated

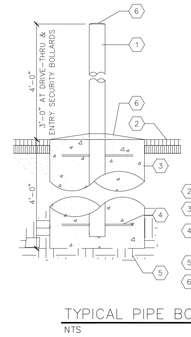
PRINT COLOR: BLACK

MANUFACTURER: PRO–LINE SAFETY PRODUCTS (https://prolinesafety.com)



FIRE HYDRANT LOCATED AT PLANTING STRIP CROSS SECTION AND ELEVATION

NOT TO SCALE

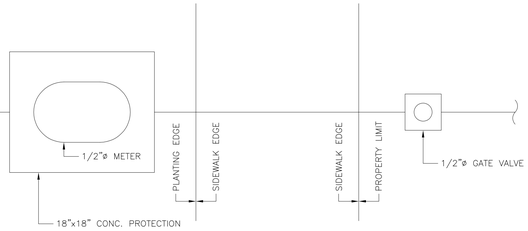


KEYED NOTES

1. 6"ø STANDARD STL. PIPE CONCRETE FILLED IN RECEIVING LOCATIONS INCLUDING UTILITIES, TRASH ENCLOSURE, AND SPRINKLER RISERS; 4"ø STL. PIPE CONCRETE FILLED AT DRIVE–THRU CANOPY ISLAND AND FRONT WALK. PROVIDE 1/4" WELDED CLOSURE PLATE AT BOTTOM. ALL STEEL TO BE RUST FREE AND PRIME COATED. BOLLARDS ON WALK TO RECEIVE GRAY POLYETHYLENE COVER. ALL OTHERS TO RECEIVE A YELLOW COVER (FROM IDEAL SHIELD – 313–842–7290).
2. TOP OF PAVEMENT.
3. 24"ø CONCRETE FOUNDATION. USE SONOTUBE FORM.
4. 3/8"ø WELDED HOOPS. 18"ø TOP, BOTTOM, AND CENTER.
5. SOLID UNDISTURBED SOIL.
6. PROVIDE PITCH, SMOOTH CONCRETE FINISH.

TYPICAL PIPE BOLLARD

NTS

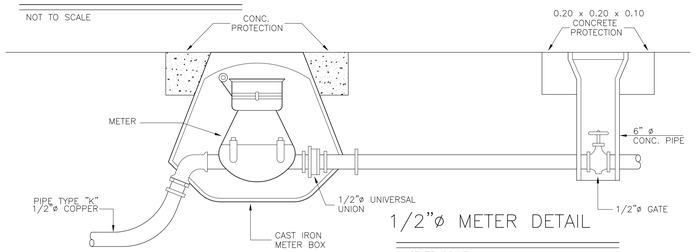


TYPICAL PIPE BOLLARD & HYDRANT PLAN

NTS

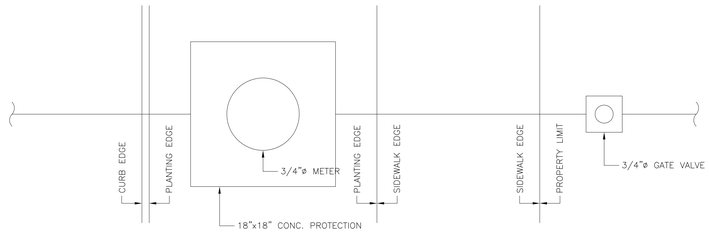
1/2"ø METER PLAN

NOT TO SCALE



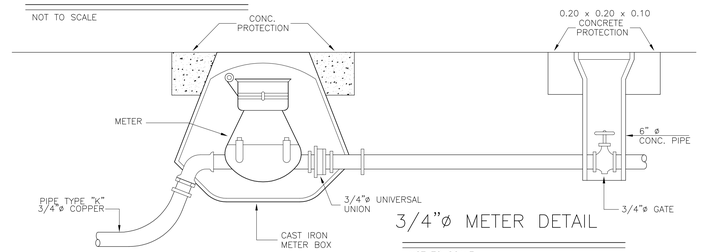
1/2"ø METER DETAIL

NOT TO SCALE



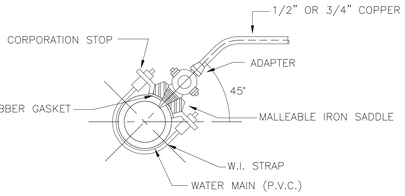
3/4"ø METER PLAN

NOT TO SCALE



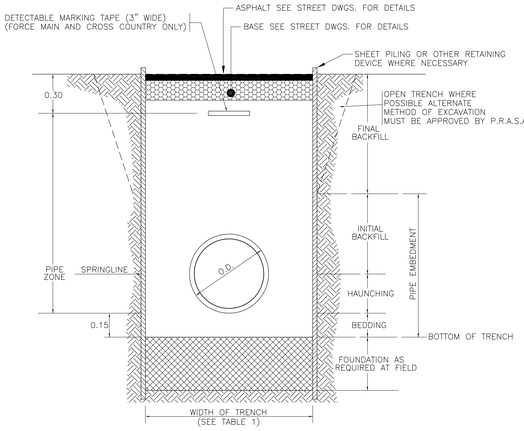
3/4"ø METER DETAIL

NOT TO SCALE



SERVICE STRAP CONNECTION WITH CORPORATION STOP

NOT TO SCALE



TRENCH DETAILS FOR P.V.C. PIPE

NOT TO SCALE

TABLE 1 WIDTH OF TRENCH	
DIAMETER (INCHES)	*WIDTH OF TRENCH AT TOP OF PIPE (INCHES)
4"–15"	O.D. + 24"
16"–27"	O.D. + 36"

NOTE:

* WHENEVER MOVABLE SHEET PILING OR OTHER TRENCH PROTECTION IS USED BELOW THE TOP OF THE PIPE,THE CLEAR DISTANCE BETWEEN THE OUTSIDE FACE OF THE PIPE AND THE MOVABLE TRENCH SUPPORT SHALL BE NOT LESS THAN 2–1/2" X OUTSIDE PIPE DIAMETER.

NOTE:

FOUNDATION AND BEDDING:

1) BACKFILL COMPACTED TO 95% OF MAXIMUM DESNSITY AS PER ASTM D–2049 FOR GRANULAR SOILS.
2) FILL MATERIAL SHALL BE PLACED IN 0.20 mt. LAYERS.

HAUNCHING

1) SAME MATERIALS AS FOR FOUNDATION AND BEDDING.
2) FILL MATERIAL SHALL BE PLACED IN 0.20 mt. LAYERS.

INITIAL AND FINAL BACKFILL–UNDER ROADS,STREETS,WALKS,APRONS AND OTHERS IMPROVED SURFACES:

1) BACKFILL COMPACTED TO 95% OF MAXIMUM DESNSITY AS PER ASTM D–2049 FOR GRANULAR SOILS.

2) FILL MATERIAL SHALL BE PLACED IN 0.20 mt. LAYERS.
1) BACKFILL COMPACTED TO 95% OF MAXIMUM DESNSITY AS PER ASTM D–2049 FOR GRANULAR SOILS. ROLLING EQUIPMENT NOT ALLOWED FOR WORKING BACKFILL MATERIAL IN THE INITIAL BACKFILL SECTOR.

NOTES:

1 – A DETECTABLE TAPE SHALL BE PROVIDED OVER THE P.V.C. PIPE, EQUAL OR SIMILAR TO THE "REEF INDUSTRIES INC." PRODUCT THIS DETECTABLE TAPE SHALL BE INSTALLED 0.30 BEYOND THE FINISHED ELEVATIONS.

2 – THE CONTRACTOR SHALL INSTALL WATER CLOSETS THAT USE 1.6 GAL/FLUSH EQUAL OR SIMILAR TO "UFO". ANY EQUIPMENT USED SHALL BE SUBMITTED FOR THE OWNER APPROVAL.

3 – A THRUST BLOCK SHALL BE PROVIDED FOR EACH BEND, TEE, WYE, REDUCER, INCREASER OR MULTIPLE PLUG.

4 – THE WATER MAIN SHALL BE INSTALLED WITH A MINIMUM SOIL COVER OF ONE METER. IF THIS COVER IS NOT PROVIDED A CONCRETE PROTECTION SHALL BE PROVIDED.

5 – CROSSING OF WATER MAIN WITH THE SANITARY SEWER SHALL COMPLY WITH THE PRASA STANDARD (SEE SANITARY SEWER DETAILS)

6– THE WATER METER BOXES MUST BE INSTALLED OUT OF THE ROADWAY, PARKING OR MOTOR VEHICLES ACCESS RAMPS.

7– THE WATER METER BOXES MUST BE INSTALLED OUT OF PROPERTY LIMITS.

8– THE WATER METER BOXES MUST BE INSTALLED AT A SAFE AND ADEQUATE DISTANCE FROM ELECTRIC EQUIPMENT.

9– THE FITTINGS USED TO INSTALL THE WATER METER MUST BE THREADED OR FLARED TYPE, WELDED FITTINGS ARE NOT ALLOWED FOR THE METER INSTALLATION.

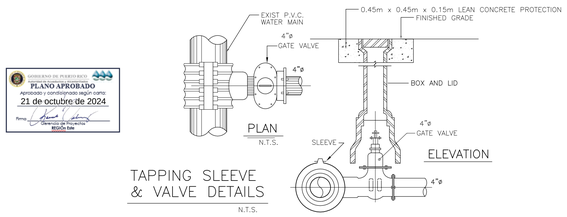
10–THE DISTANCE BETWEEN THE WATER SERVICE CONNECTION AND THE SANITARY SEWER CONNECTION MUST BE MORE OR EQUAL THAN 5'–0". THE INSTALLATION OF BOTH SERVICES IN THE SAME TRENCH IS NOT PERMITTED.

11–FIRE HYDRANTS MUST BE INSTALLED AT A SAFE AND ADEQUATE DISTANCE FROM ELECTRIC EQUIPMENT.

12– THE WATER METERS BOX MUST BE CALIBRATED IN CUBIC METERS.

13–CONTRACTOR IS RESPONSABLE FOR THE AAA CLORINATION AND DESINFECTION FEES.

14–CONTRACTOR IS RESPONSABLE FOR THE AAA "CONSTRUCTION WATER" FEES.



TAPPING SLEEVE & VALVE DETAILS

N.T.S.

GOBIERNO DE PUERTO RICO
PLANO APROBADO
Aprobado y cumplimentado según consta
21 de octubre de 2024
Firma
Director de Proyectos
ROCIO Date

Yo, Ingeniero Antonio F. Hernandez-Cruz, Exacto número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarios y que estos se conformidad con los Código de Edificación vigentes de "Puerto Rico Codes 2018". También certifico que estos planos y especificaciones cumplen con todas las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas que tengan jurisdicción sobre la obra a ser construida según se muestra en estos planos y especificaciones, en la exención solamente con el disputado en la Ley 164-2009, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 313 del 15 de mayo de 1998, según enmendada; Ley Núm. 85 del 9 de julio de 1975, según enmendada, según aplique. No conozco que cualquier declaración falsa o fraudulenta de mi parte sobre el cumplimiento de estos planos con el Reglamento Conjunto, así como sus vigentes y aplicados, y por otras personas con mi conocimiento, me hacen responsable de cualquier sanción pública y disciplinaria por la OGPe y cualquier otra autoridad gubernamental. Certifico que estos planos cumplen con los Reglamentos de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Archivo Gráfico de Puerto Rico, en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y certifico que cumplo con los Código de Edificabilidad vigentes del "Puerto Rico Codes".

240524

SUBMITTED FOR AGENCIES APPROVAL:
MAY 24, 2024

SET 1/22 REV 2

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046
CIAPR (EDE) STAMPS FOR PE:19,102
1045-2301-230908_2458-1744-3431-8573
1045-2402-240209_5788-9424-8604-1134

ANTONIO F. HERNANDEZ-CRUZ
INGENIERO LICENCIADO
LIC. 19102
PUERTO RICO

SHEET TITLE:
PROPOSED WATER DISTRIBUTION DETAILS

J. C. A.: .
CONSULTA: .
AAA NO.: .
ACT NO.: .
ARPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045*

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.H.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, DISCLOSED OR USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF H.F.H.C.S. UPON THE REQUEST BY THIS OFFICE.

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT

HF ENGINEERING CONSULTING GROUP, PSC
Adonis.hernandez@hfeng.com LAS LOMAS 2 DC: , 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T. 787-782-2087 / 787-276-3641 M. 787-397-8118 POSTAL ADDRESS: 40 CAMINO REAL - PMB 28 - COMO PR 00934

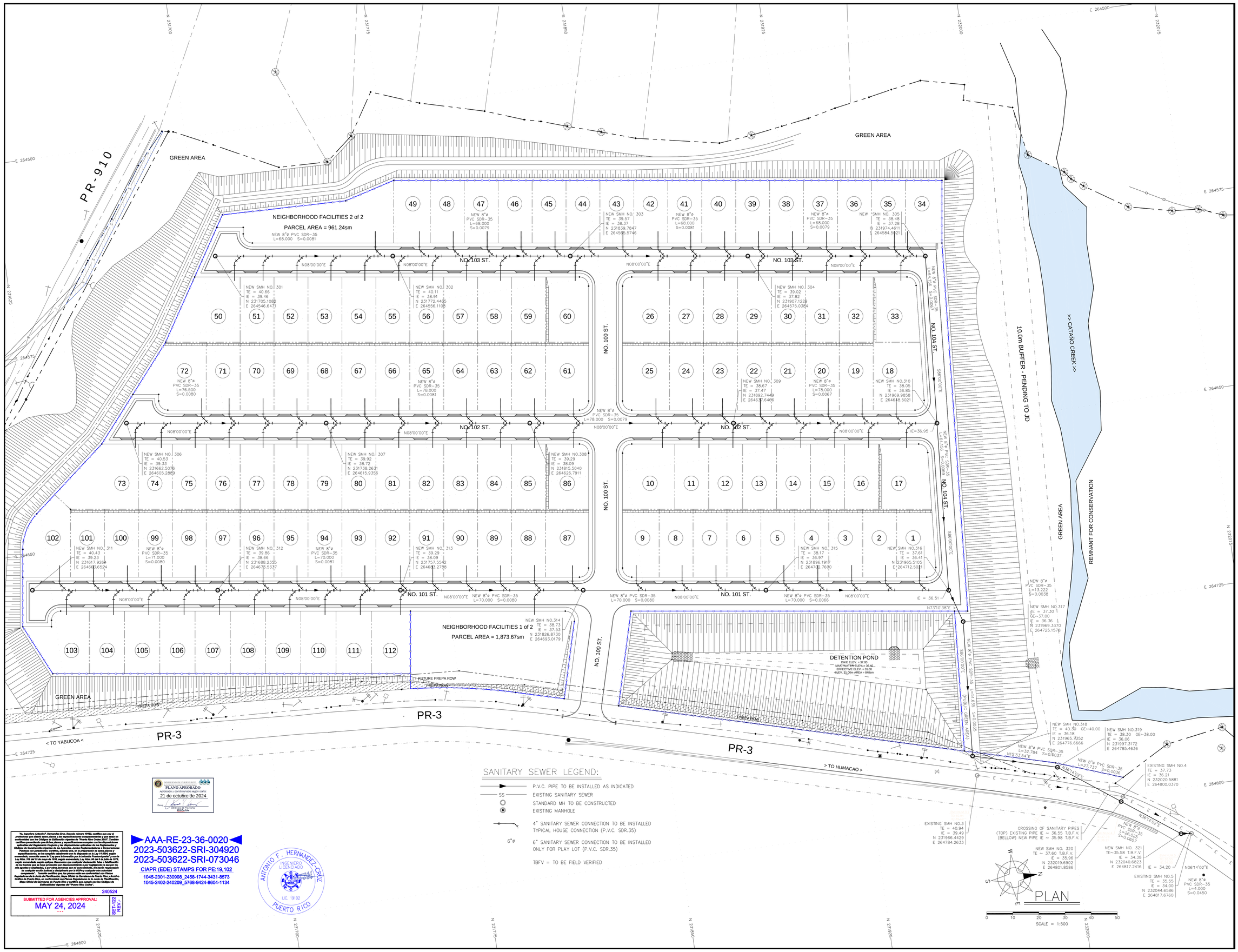
PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919–2484

SHEET IDENTIFICATION:
C–202

SHEET NO: .

TOTAL: .



SANITARY SEWER LEGEND:

- P.V.C. PIPE TO BE INSTALLED AS INDICATED
- SS — EXISTING SANITARY SEWER
- STANDARD MH TO BE CONSTRUCTED
- EXISTING MANHOLE
- 4" SANITARY SEWER CONNECTION TO BE INSTALLED TYPICAL HOUSE CONNECTION (P.V.C. SDR.35)
- 6"ø 6" SANITARY SEWER CONNECTION TO BE INSTALLED ONLY FOR PLAY LOT (P.V.C. SDR.35)
- TBFV = TO BE FIELD VERIFIED

PLAN
SCALE = 1:500

GOBIERNO DE PUERTO RICO
Junta de Planificación
PLANO APROBADO
Aprobado y comprobado según copia
21 de octubre de 2024
Firma
Secretario de Planificación
REGIÓN Este

Yo, Ingeniero Antonio F. Hernandez-Cruz, licencia número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones correspondientes y que estos se conforman con los Códigos de Edificación vigentes de "Puerto Rico Code 2018". También certifico que estos planos y las especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con jurisdicción sobre el Proyecto. Además, certifico que estos planos y especificaciones, en su conjunto, cumplen con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 310 del 15 de mayo de 1938, según enmendada; Ley Núm. 85 del 8 de julio de 1975, según enmendada, según aplique. No conozco que cualquier declaración falsa o falsificación de lo aquí expuesto me haga incurrir en responsabilidad civil o criminal. Por lo tanto, en mi más cabal carácter profesional y por este medio autorizo con el conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe y cualquier otra autoridad gubernamental. Firmado en la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Archivo Gráfico de Puerto Rico, en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y certifico que cumple con los Códigos de Edificabilidad vigentes del "Puerto Rico Code".
240524

SUBMITTED FOR AGENCIES APPROVAL:
MAY 24, 2024
SHEET #22 REV.0

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046
CIAPR (EDE) STAMPS FOR PE:19,102
1045-2301-230908_2458-1744-3431-8573
1045-2402-240209_5788-9424-8604-1134

ANTONIO F. HERNANDEZ-CRUZ
INGENIERO LICENCIADO
LIC. 19102
PUERTO RICO

SHEET TITLE:
PROPOSED SANITARY SEWER SITE PLAN

J. C. A.: .
CONSULT.: .
AAA NO.: .
ACT NO.: .
APPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045-

STATUS: ADVANCED DRAWINGS

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REVISIONS

NUMBER	DATE	BY	DESCRIPTION

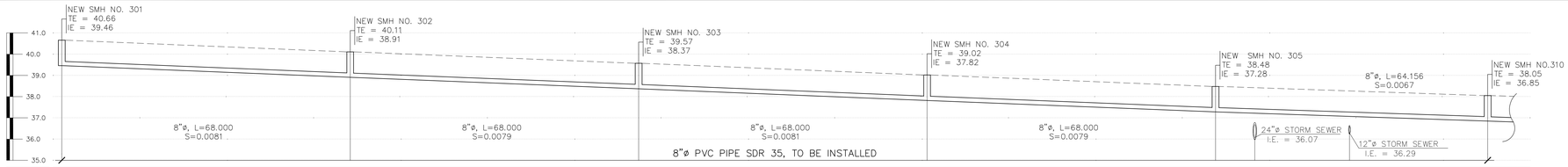
HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Antonio.Hernandez@hfegroup.com LAS LOMAS DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T: 787-792-2007 F: 787-792-2047 M: 787-525-4106 POSTAL ADDRESS: PO BOX 192484 - SAN JUAN PR 00919-2484

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C-301

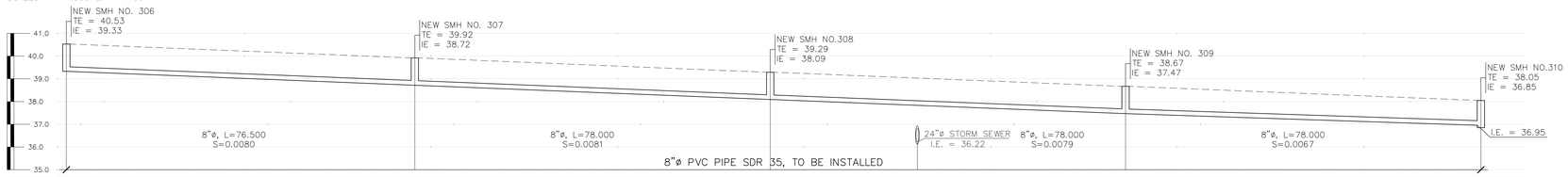
SHEET NO: .
TOTAL: .



DISTANCES	STATION	1+00.000	1+68.000	2+36.000	3+04.000	3+72.000	4+36.156
	PARTIAL	0.000	68.000	68.000	68.000	68.000	64.156
ELEVATIONS	INVERT	39.46	38.91	38.37	37.82	37.28	36.85
	TOP	40.66	40.11	39.57	39.02	38.48	38.05

PROFILE FROM NEW SMH NO. 301 TO NEW SMH NO.310

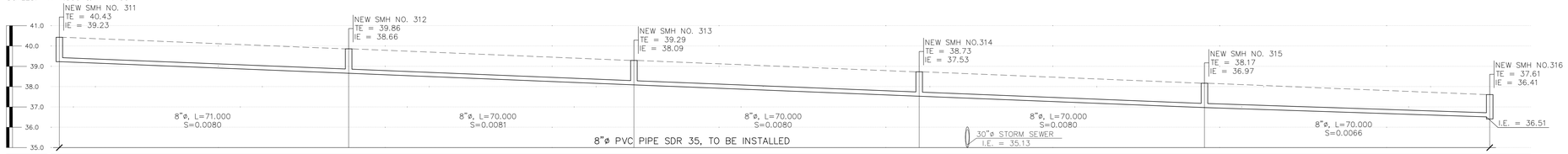
SCALES: H 1:500 & V 1:100



DISTANCES	STATION	1+00.000	1+76.500	2+54.500	3+32.500	4+10.500
	PARTIAL	0.000	76.500	78.000	78.000	78.000
ELEVATIONS	INVERT	39.33	38.72	38.09	37.47	36.95 36.85
	TOP	40.53	39.92	39.29	38.67	38.05

PROFILE FROM NEW SMH NO. 306 TO NEW SMH NO.310

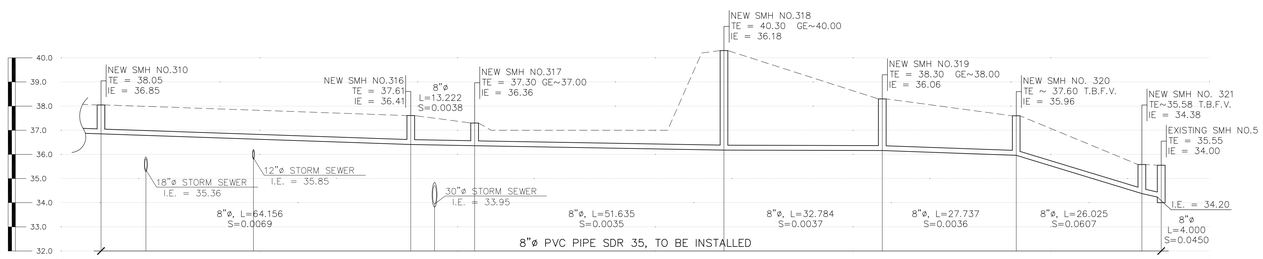
SCALES: H 1:500 & V 1:100



DISTANCES	STATION	1+00.000	1+71.000	2+41.000	3+11.000	3+81.000	4+51.000
	PARTIAL	0.000	71.000	70.000	70.000	70.000	70.000
ELEVATIONS	INVERT	39.23	38.66	38.09	37.53	36.97	36.51 36.41
	TOP	40.43	39.86	39.29	38.73	38.17	37.61

PROFILE FROM NEW SMH NO. 311 TO NEW SMH NO.316

SCALES: H 1:500 & V 1:100



DISTANCES	STATION	4+36.156	5+00.312	5+13.534	5+65.169	5+97.953	6+25.690	6+51.715	6+55.715
	PARTIAL	0.000	64.156	13.222	51.635	32.784	27.737	26.025	4.000
ELEVATIONS	INVERT	36.85	36.41	36.36	36.18	36.06	35.96	34.38 34.00	34.00
	TOP	38.05	37.61	37.30	40.30	38.30	37.60	35.58	35.55

PROFILE FROM NEW SMH NO.310 TO EXISTING SMH NO.5

SCALES: H 1:500 & V 1:100

GOBIERNO DE PUERTO RICO
PLANO APROBADO
Aprobado y condicionado según corre
21 de octubre de 2024
Firma:
Director de Proyectos
Región Este

Yo, Ingeniero Antonio F. Hernandez-Cruz, licencia número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias y que están en conformidad con los Códigos de Edificación vigentes de "Puerto Rico Codes 2018". También certifico que estos planos y las especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además que, en la preparación de estos planos y especificaciones, se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada (Ley Núm. 14 de 14 de enero de 2004, según enmendada) y la Ley Orgánica de la Ley Núm. 319 del 15 de mayo de 1938, según enmendada (Ley Núm. 45 del 4 de julio de 1975, según enmendada, según aplique. Reconozco que cualquier declaración falsa o falsificación de mi parte, de mis empleados, subcontratistas, agentes o cualquier otra persona bajo mi dirección y supervisión, y por otras personas con el consentimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe y cualquier otra autoridad competente". También certifico que, los planos están en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Anejos de la Ley Núm. 88 de 9 de julio de 1968, según enmendada (Ley de Vías Públicas) y el Mapa Oficial de Carreteras de Puerto Rico y certifico que cumplo con los Códigos de Edificabilidad vigentes del "Puerto Rico Codes".

240524

SUBMITTED FOR AGENCIES APPROVAL:
MAY 24, 2024
SET-02
REV.-

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046
CIAPR (EDE) STAMPS FOR PE:19,102
1045-2301-230908_2458-1744-3431-8573
1045-2402-240209_5768-8424-8604-1134

ANTONIO F. HERNANDEZ-CRUZ
INGENIERO
LICENCIADO
LIC. 19102
PUERTO RICO

SHEET TITLE:
PROPOSED SANITARY SEWER PROFILES

J. C. A.: .
CONSULTR.: .
AAA NO.: .
ACT NO.: .
APPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045-*

STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.H.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN AUTHORIZATION. IT SHALL BE RETURNED TO H.F.H.C.S. UPON THE REQUEST BY THIS OFFICE.

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

HF ENGINEERING CONSULTING GROUP, PSC
ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
Adanfer.hernandez@hfegroup.com LAS LOMAS DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T: 787-792-2047 F: 787-793-3047 M: 787-501-9139 POSTAL ADDRESS: RD CARR 861 - PMB 39 - TOA BAJA PR 00949

PROJECT:
LADERAS DE PALMAS CDB—MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C—302

SHEET NO: .
TOTAL: .

SANITARY SEWER NOTES:

1- SANITARY SEWER PIPE SHALL BE 8" DIA. POLYVINIL CHLORIDE PIPE, S.D.R. 35 WITH RUBBER GASKET JOINT.

2- CONTRACTOR IS RISPONSABLE FOR THE AAA IMPACT FEES.

3- ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE SPECIFICATIONS OF P.R.A.S.A.,AND SHALL ADHERE WITH THE ADDITIONAL CONDITIONS INDICATED IN THE WRITTEN APPROVAL BY P.R.A.S.A. IN CASE OF CONFLICT WITH DRAWINGS, P.R.A.S.A. WRITTEN CONDITIONS SHALL PREVAIL.

4- ALL PIPES,FITTINGS,RELATED MATERIALS AND CONSTRUCTION PROCEDURES SHALL CONFORM TO P.R.A.S.A. SPECIFICATIONS.

5- A DETECTABLE PLASTIC WARNING RIBBON SHALL DE PLACED OVER THE P.V.C. PIPING TO BE INSTALLED AS PART OF THE SANITARY SEWER SYSTEM. RIBBON SHALL BE AS MANUFACTURED BY REEF INDUSTRIES,INC. OR APPROVED EQUAL.SAID RIBBON SHALL BE INSTALLED DIRECTLY ABOVE THE SANITARY SEWER SYSTEM AT TWELVE(12) INCHES BENEATH FINISHED GRADE.

6- ALL INTERIOR SURFACES OF SANITARY SEWER MANHOLES SHALL BE COATED WITH CEILGARD 663, DURAKOTE OR APPROVED EQUAL. DRY FILM THICKNESS SHALL BE 40 MILS.

7- ALL ELEVATIONS AND DISTANCES ARE EXPRESSED IN METERS.

8- CARTESIAN COORDINATES REFERRED TO LAMBERT COORDINATE SYSTEM, METERS ARE USED.

9- ELEVATIONS REFERRED TO MEAN SEA LEVEL, PUERTO RICO DATUM PLANE, METERS.

10- THE DISTANCE BETWEEN THE WATER SERVICE CONNECTION AND THE SANITARY SEWER CONNECTION MUST BE MORE OR EQUAL THAN 5'-0". THE INSTALLATION OF BOTH SERVICES IN THE SAME TRENCH IS NOT PERMITTED.

11- SANITARY CLEAN OUTS MUST BE INSTALLED OUT OF THE ROADWAY.

12- THE INFILTRATION AND OUTFLOW OF WATER IN THE SEWER COULD NOT BE MORE THAN 50 GALLONS PER INCH OF DIAMETER PER MILE OF LENGTH IN CONTINUOUS 24 HOURS. THE CONTRACTOR SHALL PAY AND PERFORM THE INFILTRATION AN OUTFLOW TEST AS REQUIRED BY THE PRASA ENGINEER. THE SEWER THAT NOT ACCOMPLISH WITH THIS PARAMETER SHALL BE IMPROVED OR REINSTALLED BY THE CONTRACTOR AND THE SHALL BE PERFORMED UNTIL THE PRASA ENGINEERS APPROVED IT.

SISTEMA DE ALCANTARILLADO SANITARIO

LOS REGISTROS SANITARIOS SERAN PINTADOS EN SU INTERIOR CON PINTURA EPOXICA IGUAL O SIMILAR AL DENOMINADO CEILGUARD 663 O DURALKOTE.

LA DISTANCIA ENTRE LA ACOMETIDA DE ALCANTARILLADO SANITARIO Y LA ACOMETIDA DE SERVICIO DE AGUA SERA MAYOR O IGUAL A 5 PIES, NO SE PERMITIRA LA INSTALACION DE AMBAS ACOMETIDAS EN LA MISMA EXCAVACION.

ESTA AUTORIDAD SERA RESPONSABLE DEL SISTEMA ALCANTARILLADO SANITARIO HASTA EL REGISTRO DE INSPECCION SANITARIO ROTULADO PRASA C.O. EN EL PLANO, EL DUEÑO O LA ASOCIACION DE RESIDENTES DEL PROYECTO SERA RESPONSABLE DE TODA INSTALACION SANITARIA DESPUES DEL REFERIDO REGISTRO.

EN CASO DE QUE LOS REGISTROS DE INSPECCION SEAN INSTALADOS EN AREAS INUNDABLES EL MARCO Y TAPA DE ACCESO DEBERA SER DE TIPO HERMETICO "WATERTHIGHT".

NO SE PERMITIRA EL USO DE REGISTROS SANITARIOS FUNDIDOS EN SITIO. SE DEBERA UTILIZAR REGISTROS PREFABRICADOS POR UN MANUFACTURERO AUTORIZADO. SE DEBERA SOMETER EVIDENCIA DE LA ORDEN DE COMPRA O LA CERTIFICACION DEL FABRICANTE DE LOS MISMOS.

PARA ACEPTAR FINALMENTE EL PROYECTO EL MISMO DEBERA ESTAR PAVIMENTADO CUANDO SE REALICE LA VALIDACION FINAL.

LAS ACOMETIDAS SANITARIAS SERAN INSTALADAS A UNA DISTANCIA RAZONABLE Y SEGURA DE TODO EQUIPO ELECTRICO.

LA INFILTRACION O EXFILTRACION DE AGUA EN LAS TUBERIAS NO SERA MAYOR DE 50 GALONES PRO PULGADA DE DIAMETRO POR MILLA DE LONGITUD EN 24 HRS. EL CONTRATISTA PROVEERA LOS MEDIOS SEGUN LO REQUIERA EL INSPECTOR DE LA A.A.A. PARA LLEVAR A CABO LAS PRUEBAS DE TUBERIAS SANITARIAS.

TODA TUBERIA QUE NO LLENE LOS REQUISITOS DE LAS PRUEBAS, SERA REPARADA POR EL CONTRATISTA Y SOMETIDA Y SOMETIDA A PRUEBA HASTA QUE SEA APROBADA DEFINITIVAMENTE POR EL INSPECTOR DE LA A.A.A.

LA A.A.A. SE RESERVA EL DERECHO DE REQUERIR CUALQUIER CAMBIO PERTINENTE QUE PRO OMISION O ERROR INVOLUNTARIO NO SE HAYA INCLUIDO EN EL PROYECTO Y A SU JUICIO, SEA NECESARIO PARA EL BUEN FUNCIONAMIENTO DEL SISTEMA DE ALCANTARILLADO SANITARIO.

TODAS LAS DISTANCIAS ESTAN EXPRESADAS EN METROS, A MENOS QUE SE ESPECIFIQUE OTRA UNIDAD.

CUALQUIER CAMBIO QUE SEA NECESARIO A LO INDICADO EN ESTE PLANO O EN SU CARTA DE APROBACION, RELACIONADO AL SISTEMA DE ALCANTARILLADO SANITARIO, DEBERA SER CONSULTADO Y EVALUADO CON ESTA OFICINA PARA APROBACION, PREVIA A SU CONSTRUCCION Y/O DESARROLLO.

EN EL DROP-MH LA ABRAZADERA SERA EN ALUMINIO. LAS TUERCAS Y ARANDELAS TIENEN QUE SER ACERO INOXIDABLE.

GOBIERNO DE PUERTO RICO
PLANO APROBADO
Aprobado y condicionado según carta:
21 de octubre de 2024
Firma:
Comisionado(a) de Distrito
REGION Este

Yo, Ingeniero Antonio F. Hernandez-Cruz, Licencia número 19102, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias y que estos se ajustan a las disposiciones aplicables del Reglamento Conjunto de Permisos para Obras Públicas con jurisdicción. Certifico, además que, en la preparación de estos planos y especificaciones, se ha cumplido estrictamente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 313 del 11 de mayo de 1936, según enmendada; Ley Núm. 94 del 9 de julio de 1976, según enmendada, conocida como la "Ley para Prohibir el Uso de Productos de Hierro o Acero de los Inactos que se Haya producido por desencostalamiento o por negligencia ya sea por el, más agentes o empleados, y por otras personas con el conocimiento, en hacer responsable económicamente a la persona que ocasione el daño, según dispone el Código Civil vigente". También certifico que, los planos están en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y Archivo Gráfico de Puerto Rico, en conformidad con Planos Reguladores de la Junta de Planificación, Mapa Oficial de Carreteras de Puerto Rico y certifico que cumplo con los Códigos de Edificabilidad vigentes del "Puerto Rico Codes".

240524

SUBMITTED FOR AGENCIES APPROVAL:
MAY 24, 2024
SET: 1/24 REV.:

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046
CIAPR (EDE) STAMPS FOR PE:19,102
1045-2301-230908_2458-1744-3431-8573
1045-2402-240209_5768-9424-8604-1134

ANTONIO F. HERNANDEZ-CRUZ
INGENIERO LICENCIADO
LIC. 19102
PUERTO RICO

NOTES:

1-MINIMUM CONCRETE COMPRESSIVE STRENGTH IN ALL SECTIONS SHALL BE 3,000 PSI.

2-ALL SECTIONS ARE MADE IN ACCORDANCE WITH ASTM C-478 IN ANY HEIGHT REQUIRED AND P.R.A.S.A. RE-QUIREMENTS.

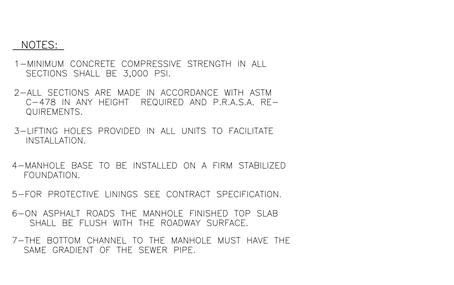
3-LIFTING HOLES PROVIDED IN ALL UNITS TO FACILITATE INSTALLATION.

4-MANHOLE BASE TO BE INSTALLED ON A FIRM STABILIZED FOUNDATION.

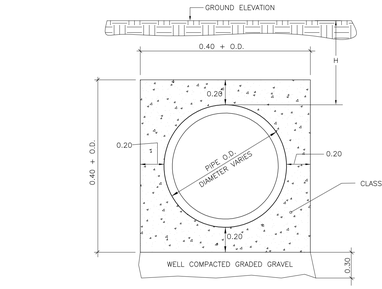
5-FOR PROTECTIVE LININGS SEE CONTRACT SPECIFICATION.

6-ON ASPHALT ROADS THE MANHOLE FINISHED TOP SLAB SHALL BE FLUSH WITH THE ROADWAY SURFACE.

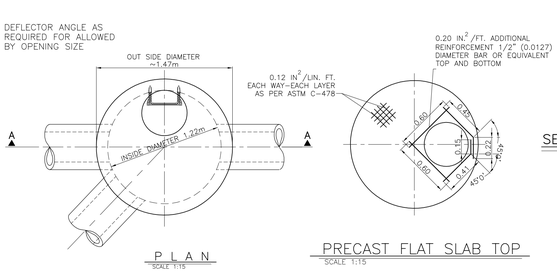
7-THE BOTTOM CHANNEL TO THE MANHOLE MUST HAVE THE SAME GRADIENT OF THE SEWER PIPE.



SECTION A-A
SCALE 1:20



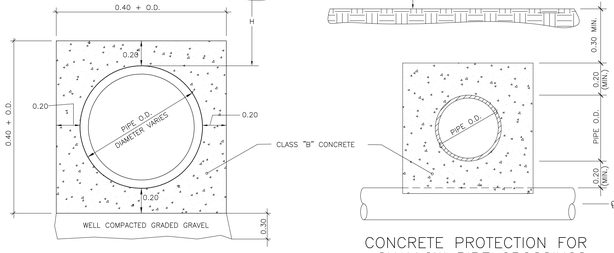
MANHOLE CONNECTION DETAIL
SCALE 1:20



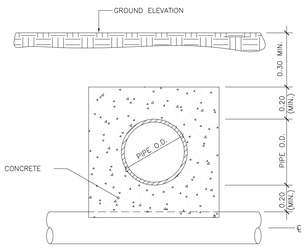
PLAN
SCALE 1:15

PRECAST FLAT SLAB TOP
SCALE 1:15

DETAILS OF PRE-CAST MANHOLES
NOT TO SCALE

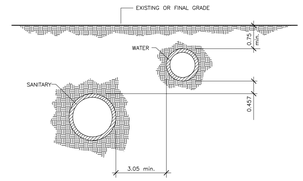


CONCRETE PROTECTION DETAIL
N.T.S.

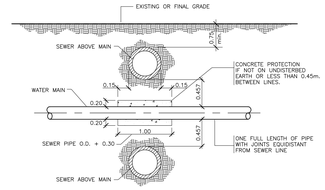


CONCRETE PROTECTION FOR SHALLOW PIPE CROSSINGS
NOT TO SCALE

NOTES:
THIS ENCASEMENT IS REQUIRED UNDER STREAMS AND ROAD CROSSING AND WHEN "H" IS LESS THAN 0.75 MTS. WHEN SPECIFIED IN THE DRAWING OR WHEN REQUIRED BY THE ENGINEER.

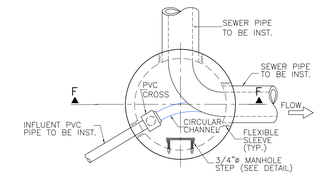


PARALLEL INSTALLATION
N.T.S.

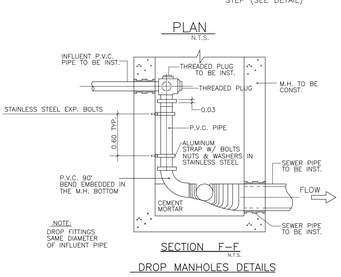


CROSSING INSTALLATION
N.T.S.

SEPARATION OF WATER & SEWER MAINS

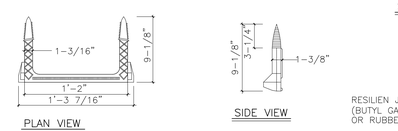


PLAN
N.T.S.



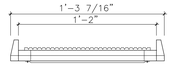
SECTION F-F
N.T.S.

DROP MANHOLES DETAILS

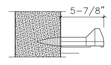


PLAN VIEW

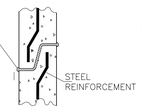
SIDE VIEW



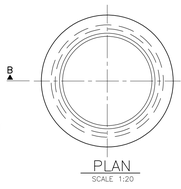
FRONT VIEW



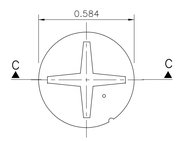
ANCHORAGE DETAIL CONC. WALL



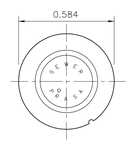
DETAIL "E"
NOT TO SCALE
TYPICAL JOINT DETAIL
CONCRETE AND ROUND RUBBER IN ACCORDANCE WITH A.S.T.M. SPEC. C-361 OR BUTYL JOINT



PLAN
SCALE 1:20

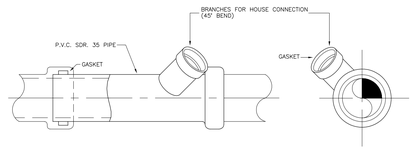


BOTTOM VIEW OF COVER
N.T.S.

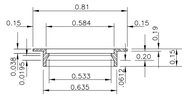


TOP VIEW OF COVER
N.T.S.

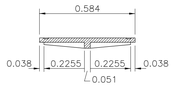
PLASTIC LADDER RUNGS DETAIL
NOT TO SCALE



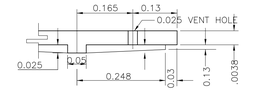
DETAIL SHOWING POSITION OF BRANCHES FOR HOUSE CONNECTIONS
NOT TO SCALE



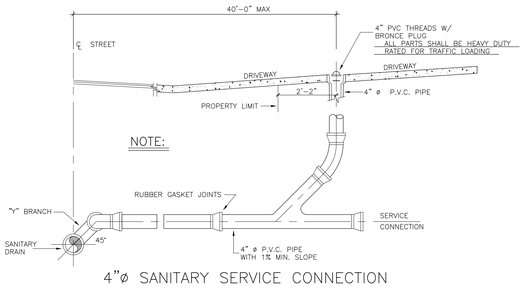
SECTION B-B
N.T.S.



SECTION C-C
N.T.S.



SECTION SHOWING VENT. HOLE
N.T.S.



4"ø SANITARY SERVICE CONNECTION FOR ALL RESIDENTIAL UNITS
NOT TO SCALE

SECTION "D"

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE:
PROPOSED SANITARY SEWER DETAILS

J. C. A. .
CONSULT. .
AAA NO.: .
ACT NO.: .
APPE NO.: .
D. A. T. E.: AS SHOWN
S. C. A. L. E.: AS SHOWN
DRAWING: 1045*

STATUS:
ADVANCED DRAWINGS

THIS DRAWING REPRESTS THE DESIGN EFFORT OF H.F.A.C.S. (HF Engineering Consulting Group, PSC) AND THEIR CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THIS OFFICE AND SHALL NOT BE COPIED, DISCLOSED OR USED WITHOUT WRITTEN CONSENT. ALL DRAWINGS SHALL BE RETURNED TO H.F.A.C.S. UPON THE REQUEST BY THIS OFFICE.

ANTONIO F. HERNANDEZ-CRUZ, PE
PRESIDENT
HF ENGINEERING CONSULTING GROUP, PSC
Andres.Hernandez@hfegroup.com LAS LOMAS DEV. - 787 SAN PATRICIO AVE. - SAN JUAN PR 00921
T: 787-792-2621 F: 787-792-2647 M: 787-501-4145 POSTAL ADDRESS: 425 CAMS 685 - PMB 288 - GUAYNABO PR 00966

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION:
C-303

SHEET NO: .
TOTAL: .

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

Exhibit 18

"APS" RB Model

Laderas de Palmas

SF-HDI-00012

MUNICIPIO AUTÓNOMO DE HUMACAO

Número de Caso:
2023-APS-005487

Aprobación de Plano Seguro

RB

Datos de Aprobación

De conformidad con las disposiciones legales y reglamentarias vigentes, se expide la presente Aprobación de Plano Seguro, según certificado por y a nombre del dueño aquí especificado:

Dueño

Rebuilders PR LLC

642 Ave. San Patricio, San Juan, Puerto Rico, 00920

Certificado Por

Jose Garcia Lic. No. 16339

PMB 749, 1353 Ave. Vigoreaux
Guaynabo, 00966

Estimado de Costo

Costo original: 86108.00 $ (USD)

Costo revisado: 108245.50 $ (USD)

Atributos

Área bruta de piso: 1264.00 pies cuadrados

Área de ocupación: 1264.00 pies cuadrados

Tipo de proyecto: Una planta

Cantidad de estacionamientos: 1

Tipo de estacionamiento: Impedidos

Material de la(s) estructura(s): Hormigón Armado y Bloques

Este Plano Seguro **SI** está autorizado para uso general, a un costo de $0.00.

Condiciones Generales

Aviso

El Plano Seguro ha sido aprobado como etapa adelantada a la ulterior presentación de la solicitud de permiso de construcción que el uso de tal plano conlleva. Bajo ninguna circunstancia deberá interpretarse que esta aprobación autorice iniciar obras de construcción de clase alguna, ni el uso del Plano Seguro sin el consentimiento del proyectista.

Aprobación de Plano Seguro

Firma y Sellos

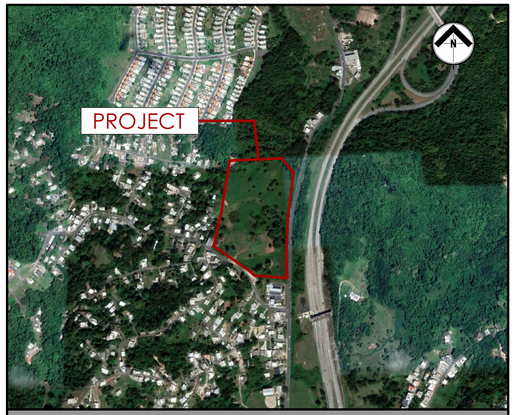
Fecha de Expedición:

22-04-2024

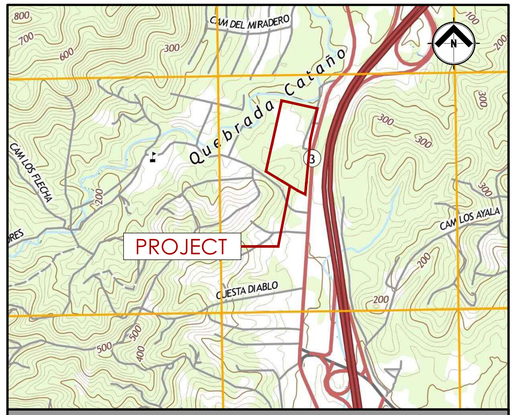
Teófilo Berrios Ramos

Director Oficina de Permisos del Municipio Autónomo de Humacao

SBP
SINGLE BUSINESS PORTAL

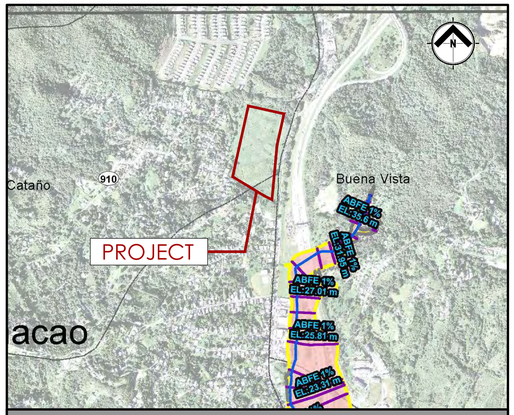


AERIAL VIEW



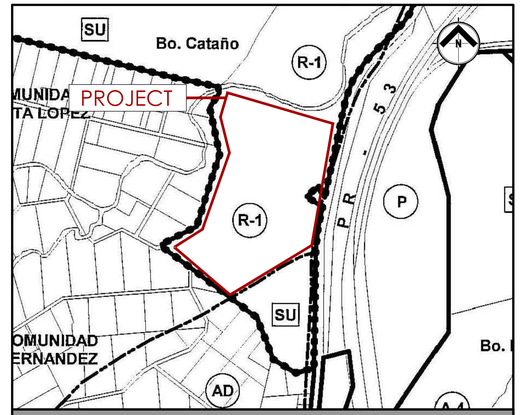
LOCATION MAP

PUNTA GUAYANÉS QUADRANGLE, 2018



FLOOD MAP

PANEL 72000C1805J



ZONING MAP

MAPA DE CALIFICACIÓN DEL TERRITORIO
GOBIERNO MUNICIPAL DE HUMACAO; HOJA NUM. 329

CONSTRUCTION DOCUMENTS FOR:

CDBG-MIT-RFP-2022-04

LADERAS DE PALMAS

MODEL RB

HUMACAO, PUERTO RICO

2023/08/25

DRAWING INDEX

SHEET	SHEET TITLE
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G-002	ADA GENERALDETAILS
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A-101	FLOOR PLANS
A-201	ELEVATIONS AND SECTIONS
A-401	BLOW-UPS
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A-700	3D VIEWS
STRUCTURAL DRAWINGS	
S-1	FOUNDATION AND ROOF STRUCTURAL PLAN
S-2	SECTIONS
S-3	GENERAL NOTES AND DETAILS
PLUMBING DRAWINGS	
P-1	PLUMBING SANITARY & POTABLE WATER PLAN
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E-101	ELECTRICAL FLOOR PLANS
E-102	TELECOMMUNICATION FLOOR PLANS
E-103	ELECTRICAL NOTES AND DETAILS
E-104	PV ONE LINE DIAGRAM AND DETAILS

REBUILDERS PR, LLC

arkitekts
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REV.	DATE:	DESCRIPTION:	BY:

NOTE:

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CERTIFIED

CONSTRUCTION DRAWINGS FOR:

LADERAS DE PALMAS
(MODELO RB)

HUMACAO, PR

TITLE:

TITLE SHEET

PROJ MANAGER: J.G.	DATE: 2023/08/25
DRAWN BY: JOTA	SHEET NO.: G000
SCALE: AS SHOWN	
PROJECT NO.: 23-19	

PLOT DATE: Friday, August 25, 2023 11:42:09 AM FILE NAME: N:\DESIGN 2023\23-19_LADERAS DE PALMAS\01 DWG\01_ARCHITECTURAL\D-CD\G000_TITLE SHEET_23-19_LADERAS_CD.DWG

ABBREVIATIONS

∠	ANGLE	F.O	FACE OF	O.A	OVERALL
⊏	CHANNEL	F.O.C	FACE OF CONCRETE	O.S.A	OUTSIDE SUPPLY AIR
℄	CENTER LINE	F.O.F	FACE OF FINISH	O.F.	OVERFLOW
∅	DIAMETER	F.O.M	FACE OF MASONRY	PROJ	PROJECTION
⊑	PLATE	F.O.S	FACE OF STUDS	PVC	POLY VINYL CHLORIDE
⊥	PERPENDICULAR	F.H	FLAT HEAD/FIRE HYDRANT	PAR	PARALLEL
ABV	ABOVE	FIN	FINISH, FINISHED	PART	PARTIAL
A.F.F	ABOVE FINISHED FLOOR	F.F.E	FINISH FLOOR ELEVATION	P.R.B.C.	PUERTO RICO BUILDING CODE
A.S.C	ABOVE SUSPENDED CEILING	F.F.L	FINISH FLOOR LINE	PERF	PERFORATE, PERFORATED
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	F.A	FIRE ALARM	P LAM	PLASTIC LAMINATE
		F.R	FIRE-RATED	PL	PLATE
		F.E.C	FIRE EXTINGUISHER CABINET	PLUM	PLUMBING
ACC	ACCESS	F.H.C	FIRE HOSE CABINET	PT	POINT
A.P	ACCESS PANEL	F.H.V	FIRE HOSE VALVE	PROP	PROPERTY
AC	ACOUSTIC, ACOUSTICAL	FLG	FLASHING	P.S	POINT OF SWITCH
ADD'L	ADDITIONAL	F.C	FLEXIBLE CONNECTION	P.L	PROPERTY LINE
ADH	ADHESIVE	FLR, FL	FLOOR, FLOORING	PC	PRECAST
ADJ	ADJUSTABLE	FL CO	FLOOR CLEANOUT	PLATF	PLATFORM
AGG	AGGREGATE	F.D	FLOOR DRAIN	Q.T	QUARRY TILE
ALT	ALTERNATE	FLUOR	FLUORESCENT		
AL, ALUM	ALUMINUM	F.A.I	FRESH AIR INTAKE	RT	RIGHT
A.B	ANCHOR BOLT	F.S	FLOOR SINK	RAD, R	RADIUS
ANCH	ANCHOR	F.B.O	FURNISHED BY OTHERS	REF	REFERENCE
ANOD	ANODIZED	F.W.	FOUNDATION WALL	REFL	REFLECT, REFLECTED, REFLECTIVE, REFLECTOR
ARCH	ARCHITECT, ARCHITECTURAL	GALV	GALVANIZED		
A/E	ARCHITECT/ENGINEER	G.S.M	GALVANIZED SHEET METAL	RES	RESILIENT
AD	AREA DRAIN	GL	GLASS, GLAZING	REINF	REINFORCING
AUTO	AUTOMATIC	G.B	GRAB BAR	REV	REVISION, REVISIONS, REVISED, REVERSE
AUX	AUXILIARY	GRN	GRANITE		
APPROX	APPROXIMATE	GYP	GYPSUM	R.O.W	RIGHT-OF-WAY
		GEN	GENERAL	R	RISER, RADIUS
B.P	BACK PLASTER/PLASTERED	GRD	GROUND	R.D	ROOF DRAIN
BM	BEAM	G.F.R.C	GLASS FIBER REINFORCED CONCRETE	RFG	ROOFING
BEL	BELOW			RM	ROOM
BTW	BETWEEN			R.O	ROUGH OPENING
BVL	BEVELED	HH	HANDHOLE	R.B	RUBBER BASE
BLKG	BLOCKING	HDW	HARDWARE	REQ'D	REQUIRED
BD	BOARD	HDR	HEADER	RD	ROAD
B.R.S	BLAST RELIEF SHAFT	H.D	HEAVY DUTY	R.W.	RETAINING WALL
B.S	BOTH SIDES	HT	HEIGHT		
BOT, BTM	BOTTOM	HX	HEXAGONAL	SECT	SECTION
BRZ	BRONZE	H.M	HOLLOW METAL	SHT	SHEET
BLDG	BUILDING	HORIZ	HORIZONTAL	SIM	SIMILAR
B.M	BENCHMARK	H.B	HOSE BIBB	S.F.C.P.	SMOOTH FINISH CEMENT & PLASTER
BLVD, BL	BOULEVARD	H.W.P	HIGH WORKING POINT	S	SOUTH
		H.P	HIGH POINT	SPEC	SPECIFICATION, SPECIFICATIONS
CAB	CABINET	H.D.P.M	HIGH DENSITY POLYETHELENE MEMBRANE	SQ	SQUARE
C.I	CAST IRON			STD	STANDARD
C.I.P	CAST-IN-PLACE (CONCRETE)	I.B.C.	INTERNATIONAL BUILDING CODE	STA	STATION (ALIGNMENT)
C.B	CATCH BASIN	I.D	INSIDE DIAMETER	STL	STEEL
CLG	CEILING	INSUL	INSULATE, INSULATED, INSULATION	STRUCT	STRUCTURAL
CHAM	CHAMFER			SYM	SYMMETRY, SYMMETRICAL
CLR	CLEAR, CLEARANCE	INT	INTERIOR	S.S	STAINLESS STEEL
C.C.T.V	CLOSED CIRCUIT T.V, CAMERA	INV	INVERT	SCHED	SCHEDULE
COL	COLUMN	INCL	INCLUDING	SPKR	SPEAKER
COMPO	COMPOSITION				
CONC	CONCRETE	J.C	JANITOR'S CLOSET	T.D.D	TELECOMMUNICATION DEVICE FOR THE DEAF
C.M.U	CONCRETE MASONRY UNIT	JT	JOINT	TEL	TELEPHONE
C.O	CONVENIENCE OUTLET, CLEAN OUT	J.F	JOINT FILLER	TV	TELEVISION
		kg	KILOGRAM	T.V.M	TICKET VENDING MACHINE
CONST	CONSTRUCTION	kPa	KILO PASCAL	THK	THICK, THICKNESS
CONT	CONTINUE, CONTINUOUS	K.O.P	KNOCKOUT PANEL	T.O.S	TOP OF STEEL
C.J	CONTROL JOINT			T.O.C	TOP OF CONCRETE CURB
CPR	COPPER	LVL	LEVEL	T.O.W	TOP OF WALL
C.G	CORNER GUARD	LTG	LIGHTING	T	TREAD
C.L	CHAIN LINK	LAM	LAMINATE, LAMINATED	TYP	TYPICAL
C.R	CARD READER	LAV	LAVATORY	T.O.P	TOP OF PARAPET
CEM	CEMENT	LT	LIGHT	T.O.A.	TOP OF ARCADE
CER	CERAMIC	LW	LIGHTWEIGHT		& COMMUNICATIONS
		L.P	LOW POINT	T.D	TRENCH DRAIN
		L.W.P	LOWER WORKING POINT		
		L	LENGTH		
		LIN	LINEAR	UR	URINAL
DEG OR °	DEGREE	LONGIT	LONGITUDINAL	U.N.O	UNLESS NOTED OTHERWISE
DET	DETAIL			U.W.P	UPPER WORKING POINT
DIAG	DIAGONAL	m	METERS		
DIA	DIAMETER	m^2	SQUARE METERS	V.C.T	VINYL COMPOSITION TILE
DIM	DIMENSION	mm	MILLIMETERS	VENT	VENTILATION
DIV	DIVISION	MH	MANHOLE	VERT	VERTICAL
DR	DOOR	MFR	MANUFACTURER	VEST	VESTIBULE
DTA	DOVETAIL ANCHOR	M.O	MASONRY OPENING	V.M.S	VARIABLE MESSAGE SIGN
DTS	DOVETAIL ANCHOR SLOT	MACH	MACHINE		
DWG	DRAWING	MAX	MAXIMUM	W.S.P	WET STAND PIPE
D.F	DRINKING FOUNTAIN	MECH	MECHANIC, MECHANICAL	W.T	WATER TABLE
DN	DOWN	MED	MEDIUM	WP	WATERPROOFING
D.I	DRAIN INLET	MTL, MET	METAL	W.W.M	WELDED WIRE MESH
		MIN	MINIMUM	W.W.F	WELDED WIRE FABRIC
EA	EACH	MIR	MIRROR	W	WEST, WIDTH
E	EAST	MISC	MISCELLANEOUS	W/O	WITHOUT
EJECT	EJECTOR	MTD	MOUNT, MOUNTED	WD	WOOD
ELECT	ELECTRIC, ELECTRICAL	MTG	MOUNTING	W.P	WORKING POINT
EL	ELEVATION	MEZZ	MEZZANINE	W/	WITH
ELEV	ELEVATOR				
EMERG	EMERGENCY	N.R.C	NOISE REDUCTION COEFFICIENT		
E.M.P	EMERGENCY MANAGEMENT PANEL	NOM	NOMINAL		
		N/R	NON-RATED		
		N/A	NOT APPLICABLE		
EQ	EQUAL	NO., #	NUMBER		
EQUIP	EQUIPMENT	N	NORTH		
ESC	ESCALATOR	N.I.C	NOT IN CONTRACT		
E TEL	EMERGENCY TELEPHONE	N.T.S	NOT TO SCALE		
E.T.S	EMERGENCY TRIP SWITCH/STATION	O/	OVER		
EXH	EXHAUST	O.A.I	OUTSIDE AIR INTAKE		
EXIST (E)	EXISTING	OBS	OBSCURE		
		O.C	ON CENTER, CENTERS		
E.B	EXPANSION BOLT	OP	OPAQUE		
EXP	EXPOSED, EXPANSION	OPNG	OPENING		
EXT	EXTERIOR	OPP	OPPOSITE		
		O.D	OUTSIDE DIAMETER		

GENERAL SYMBOLS AND LEGEND

TILE

PLYWOOD

METAL

GLAZING

STAINLESS STEEL OR ALUMINUM

STEEL

EARTH

CONCRETE

PRECAST CONCRETE

CONCRETE MASONRY UNIT

GRANITE

INSULATION PANEL

MARBLE

COMPACTED FILL

EXISTING STRUCTURE

GYPSUM WALL

GRAPHIC SCALE (0 1 2 3 4ft.)

FHC — FIRE HOSE CABINET

1-001 — ROOM IDENTIFICATION

AXIS — AXIS OR STRUCTURAL GRID

1 — DOOR IDENTIFICATION

A — WINDOW IDENTIFICATION

SECTION DESIGNATION W1 / DRAWING WHERE BLDG. SECTION APPEARS A0.00 — BUILDING SECTION MARK

WALL SECTION DESIGNATION A-300 / DRAWING WHERE WALL SECTION APPEARS A — WALL SECTION

SECTION DESIGNATION W1 / SECTION / SCALE: 1"=1'-0" / A5.01N / A5.00 / DWG. NUMBER ON WHICH SECTION ARE IDENTIFIED — BUILDING SECTION TITLE

NEW GRID IDENTIFICATION 1 / EXISTING GRID IDENTIFICATION A

ELEVATION DESIGNATION 1 / DRAWING WHERE BLDG, ELEV APPEARS A0.00 — EXTERIOR BLDG. ELEVATION MARK

DETAIL NUMBER 1 / DRAWING WHERE DETAIL APPEARS A0.00 — DETAIL MARK

DETAIL / SCALE: 1"=1'-0" / A5.01 / 1 / A0.00 — DETAIL TITLE

DWG. NUMBER ON WHICH DETAIL ARE IDENTIFIED

INTERIOR ELEV. NUMBER 2 / DRAWING WHERE INT. ELEV. ARE SHOWN 3 / ZONE GROUP X / A-1.0 / 1 4 — INTERIOR ELEVATION MARKS

F.F.E. 0'-0" — FIN. FLOOR ELEVATION

LEVEL MARK

EL. 0'-4" OR +4" — NEW SPOT ELEVATION (FEET OR METERS)

EL. 10'-0" — EXISTING SPOT ELEVATION (FEET OR METERS)

NORTH SYMBOL

PROJECT LIMIT

FINISH LIMIT

1 — REVISION MARK

XX — CEILING HEIGHT ABOVE FIN. FLOOR

P-1 / A-10.06 — WALL TYPE IDENTIFICATION

DOOR IDENTIFICATION

KEY NOTE

SADDLE

GENERAL NOTES:

1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL CONTRACT REQUIREMENTS, MATERIALS, WORKMANSHIP AND SHOP DRAWINGS.
2. ALL DIMENSIONS OTHER THAN PURELY ARCHITECTURAL DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS SHALL BE FIELD COORDINATED BY THE CONTRACTOR WITH ALL OTHER DISCIPLINE DRAWINGS, AND ANY INCONSISTENCIES REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
3. CONTRACTOR SHALL VERIFY ALL PROPOSED AND EXISTING DIMENSIONS AND ELEVATIONS IN THE FIELD. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD. NOTIFY THE ARCHITECT IMMEDIATELY AND BEFORE PROCEEDING WITH RELEVANT ASPECT OF THE WORK OF ANY LAYOUT CONDITION THAT IS NOT CONSISTENT WITH THE DRAWINGS OR THAT WILL IMPAIR LAYOUTS OR ATTACHMENTS OF FINISHES.
4. DO NOT SCALE DRAWINGS. USE INDICATED OR CALCULATED DIMENSIONS AND ELEVATIONS IN THE FIELD. NOTIFY THE ARCHITECT IMMEDIATELY AND BEFORE PROCEEDING WITH RELEVANT ASPECT OF THE WORK OF ANY LAYOUT CONDITIONS THAT ARE NOT CONSISTENT WITH, OR MISSING FROM, THE DRAWINGS OR THAT WILL IMPAIR LAYOUT.
5. DIMENSIONING FORMAT FOR THE ARCHITECTURAL DRAWINGS IS:
   - A. DIMENSIONS FOR PRECAST OR PREFABRICATED ELEMENTS ARE TO THE FACE OF THE ELEMENT UNLESS OTHERWISE NOTED.
   - B. DIMENSIONS FOR MASONRY ARE NOMINAL UNLESS OTHERWISE INDICATED.
   - C. CRITICAL CLEAR DIMENSIONS, FINISH OPENING DIMENSIONS REQUIRED ARE INDICATED AND ARE TO FINISH FACE OF ELEMENT.
6. REFER TO STRUCTURAL DRAWINGS FOR DIMENSIONS AND LAYOUT OF STRUCTURAL CONCRETE.
7. SEE STRUCTURAL DRAWINGS FOR STRUCTURAL STEEL SIZES, ALL CONCRETE REINFORCEMENT, UNIT MASONRY REINFORCEMENT, STEEL LINTEL SIZES, RELIEVING ANGLE SIZES, CONCRETE FILLED LINTEL BLOCK AND ALL OTHER REQUIREMENTS FOR LOAD CARRYING MEMBERS. STRUCTURAL DRAWINGS SHALL GOVERN FOR LOAD CARRYING MEMBERS.
8. REFER ALSO TO LANDSCAPING, STRUCTURAL, PLUMBING, FIRE PROTECTION, MECHANICAL AND ELECTRICAL DRAWINGS AND APPROVED SHOP DRAWINGS FOR LOCATION AND DIMENSIONS OF CHASES, INSERTS, OPENING, SLEEVES, DEPRESSIONS AND ATTACHMENT REQUIREMENTS.
9. REFER TO STRUCTURAL DRAWINGS FOR PENETRATIONS OF STRUCTURAL ELEMENTS. REFER ALSO TO MECHANICAL, PLUMBING, ELECTRICAL, AND FIRE PROTECTION DRAWINGS FOR SLEEVE PENETRATIONS, AND EMBEDMENTS REQUIRED FOR THESE SYSTEMS. THE CONTRACTOR IS TO COORDINATE ALL EMBEDMENTS AND PENETRATIONS.
10. PROVIDE ALL ACCESS PANELS AS REQUIRED BY APPLICABLE CODES AND AS REQUIRED FOR MECHANICAL EQUIPMENT, WHETHER OR NOT SHOWN ON DRAWINGS, ALL ACCESS PANELS SHALL BE FLUSH WITH ADJACENT FINISH SURFACES.
11. SEE MECHANICAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL DRAWINGS FOR EQUIPMENT REQUIRING HOUSEKEEPING PADS. SEE STRUCTURAL DRAWINGS FOR TYPICAL HOUSEKEEPING PAD DETAILS AND REINFORCEMENT.
12. COORDINATE PLACEMENT OF ALL CEILING ELEMENTS WITH MECHANICAL, ELECTRICAL, AND INSTALLER.
13. CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF ALL SLAB AND WALL OPENINGS INCLUDING BUT NOT LIMITED TO OPENINGS IN ELECTRICAL CLOSETS, CONTROL ROOMS, MACHINE ROOMS, ETC., PER EQUIPMENT MANUFACTURER RECOMMENDATIONS.
14. BACK-KEYING REFERENCES ARE NOT INTENDED TO GIVE QUANTITY OF LOCATIONS IN WHICH A PARTICULAR DETAIL OCCURS, BUT ARE TO AID CONTRACTOR IN FINDING SAMPLE LOCATION (S) IN WHICH A PARTICULAR DETAIL OCCURS.
15. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH WORK.
16. DETAILED DRAWINGS AND LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS.
17. ALL EXPOSED CORNERS AT CAST IN PLACE CONCRETE ARE TO RECEIVE CONTINUOUS 20MM CHAMFER, CHAMFER TO BE OMITTED WHERE CMU OR OTHER ADJACENT MATERIAL ABUTS CORNER.
18. ALL PENETRATIONS THRU RATED WALLS OR FLOORS SHALL BE PROTECTED AND/OR SEALED WITH MATERIAL OF THE SAME FIRE RATING AS THE PENETRATED WALLS OR FLOORS.
19. HANDRAILS AND GRAPHIC BANDS, HORIZONTAL CONCRETE JOINTS, CEILINGS AND DUCT ENCLOSURES SHALL RUN PARALLEL TO THE FLOOR, ALL VERTICAL JOINTS AND RUSTICATION IN THE TILE CLADDING, CONCRETE AND C.M.U. SHALL BE TRUE VERTICAL.
20. PROVIDE ISOLATION BETWEEN DISSIMILAR METALS (TYPICAL).
21. ALL STEEL ITEMS SHALL BE GALV. DOUBLE DIP (U.N.O.).
22. ALL WOOD ITEMS SHALL BE FIRE RETARDANT TREATED (FLAME SPREAD: 25 OR LESS PER A.S.T.M. E-84).
23. ANCHORS INDICATED BY MFR IDENTIFICATION ARE TO ESTABLISH ANCHOR TYPE, MATERIAL AND LOAD CAPACITY.
24. SHIM MEMBERS AT CONCRETE SURFACES AS REQUIRED.
25. PROVIDE SLOTTED HOLES IN METAL MEMBERS FOR ADJUSTMENT.
26. ALL EXPOSED AREAS SUBJECT TO FOOT TRAFFIC SHALL BE SLIP RESISTANT, COEFFICIENT OF FRICTION 0.6 MIN. WET & DRY. (ASTM C-1028) OR AS PER DESIGN CRITERIA.
27. C.M.U. OPENINGS AND WALLS MUST BE LAID PLUMB AND TRUE.
28. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL WORK SHOWN ON THE PLANS, WHETHER OR NOT ADEQUATELY DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS.
29. THE CONTRACTOR IS RESPONSIBLE TO FINISH WHATEVER IS NECESSARY TO ENSURE COMPLETE AND PROPERLY FUNCTIONING SYSTEM, REGARDLESS OF WHETHER OR NOT SHOWN IN THE CONTRACT DOCUMENTS.
30. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CORRECT MATERIALS AND EQUIPMENT IF THEY HAVE NOT BEEN SIZED PROPERLY AT NOT ADDITIONAL COST, IN ORDER TO ACHIEVE THIS PURPOSE.

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HUMACAO, PR

TITLE:

ABBREAVIATIONS, GENERAL NOTES, SYMBOLS & LEGEND

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SCALE: AS SHOWN	
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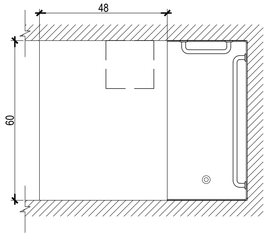
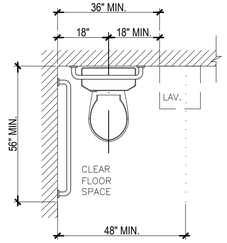
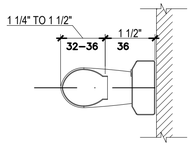
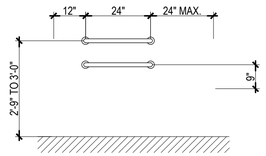


CLEAR FLOOR SPACE
WITH IN-TUB SEAT (SHOWER OR TUB)

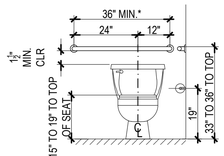




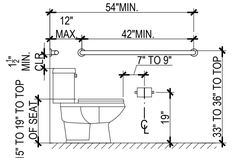
GRAB BAR



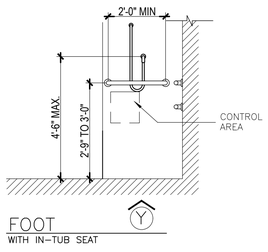
BATHTUB BACK (X)
WITH IN-TUB SEAT



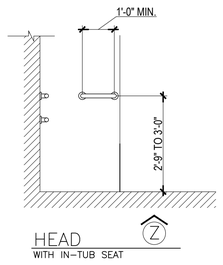
REAR WALL ELEV.



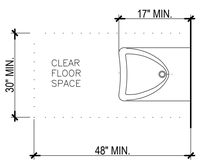
SIDE WALL ELEV.

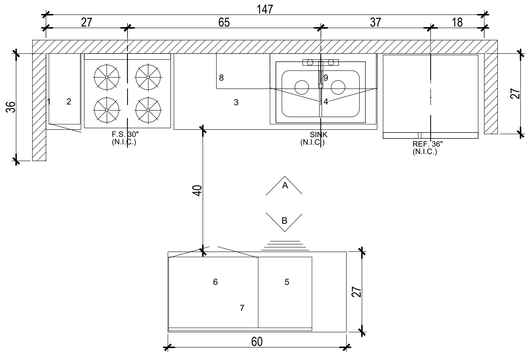


FOOT (Y)
WITH IN-TUB SEAT

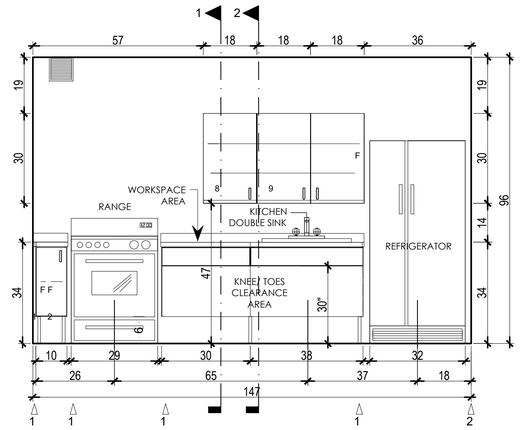


HEAD (Z)
WITH IN-TUB SEAT





ADA KITCHEN H/C FLOOR PLAN
NOT TO SCALE



ELEVATION A
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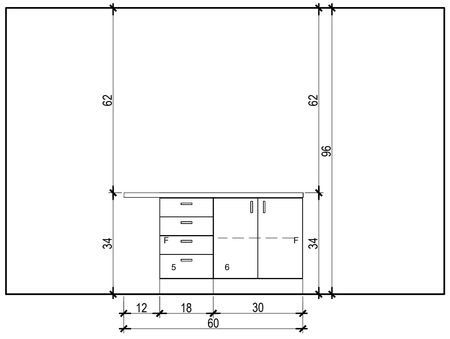
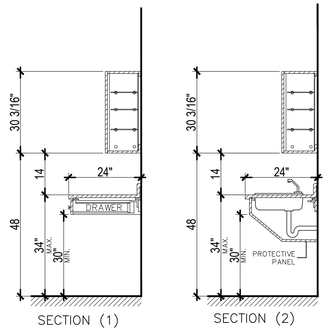
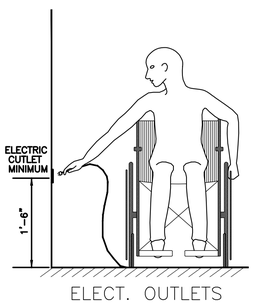


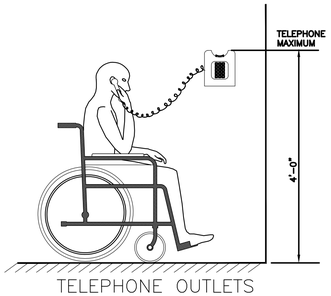
ELEVATION B
NOT TO SCALE



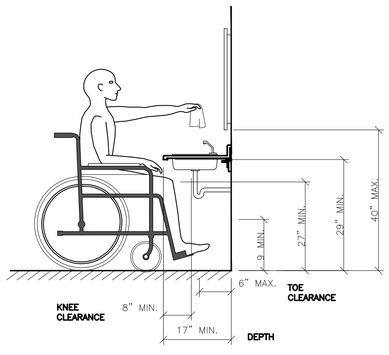
KITCHEN DETAILS
NOT TO SCALE

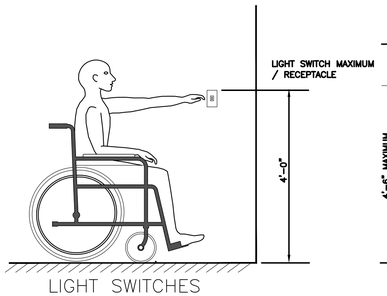


ELECT. OUTLETS

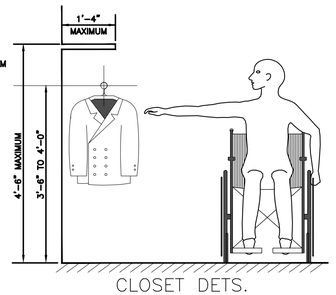


TELEPHONE OUTLETS





LIGHT SWITCHES



CLOSET DETS.

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PMB 749, 1353 AVE. LUIS VIGOREAUX
GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:

NOTE:

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CERTIFIED

Yo, José E. Rodriguez Guzmán, lic 14976, certifico que soy el profesional que, diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la [Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

LADERAS DE PALMAS
(MODELO RB)

HUMACAO, PR

TITLE:

ADA GENERAL DETAILS

PROJ MANAGER: J.G.	DATE: 2023/08/25
DRAWN BY: JOTA	SHEET NO.: G002
SCALE: AS SHOWN	
PROJECT NO.: 23-19	

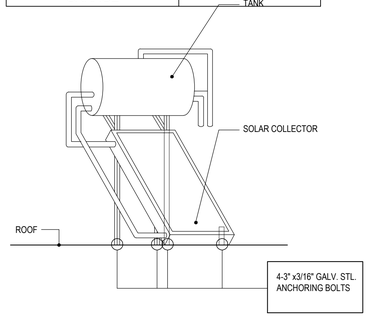
PLOT DATE: Friday, August 25, 2023 11:42:18 AM FILE NAME: N:\DESIGN 2023\23-19_LADERAS DE PALMAS\01.DWG\01. ARCHITECTURAL\D-CD\G003_ADADETAILS_23-19_LADERAS_CD.DWG

GENERAL NOTES

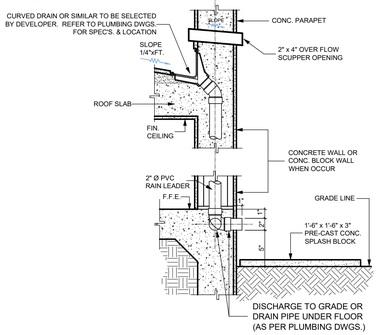
1. THIS PLANS ARE INTENDED TO BE USED AS A MIRROR IMAGE. SEE SITE PLAN.
2. PROVIDE SPLASH BLOCK AT ALL DOWNSPOUTS.
3. ALL CONCRETE SURFACES TO BE CEMENT PLASTER & PAINT FINISH (1 COAT PRIMER, 2COATS PAINT) UNLESS OTHERWISE NOTED.

AREA CALCULATIONS

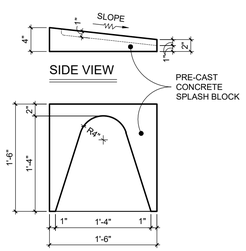
SPACE	AREA (SQ.FT.)
DINING ROOM	107.9
LIVING ROOM	249.7
KITCHEN	97.8
BEDROOM 1	110.1
BEDROOM 2	110.1
MASTER BEDROOM	182.0
WALK-IN CLOSET	19.8
HALLWAY	70.9
LAUNDRY	18.3
BATHROOM 1	49.4
BATHROOM 2	44.7
PORCH	83.6
WALLS	119.8
TOTAL	**1267.0**
GARAGE	274.0



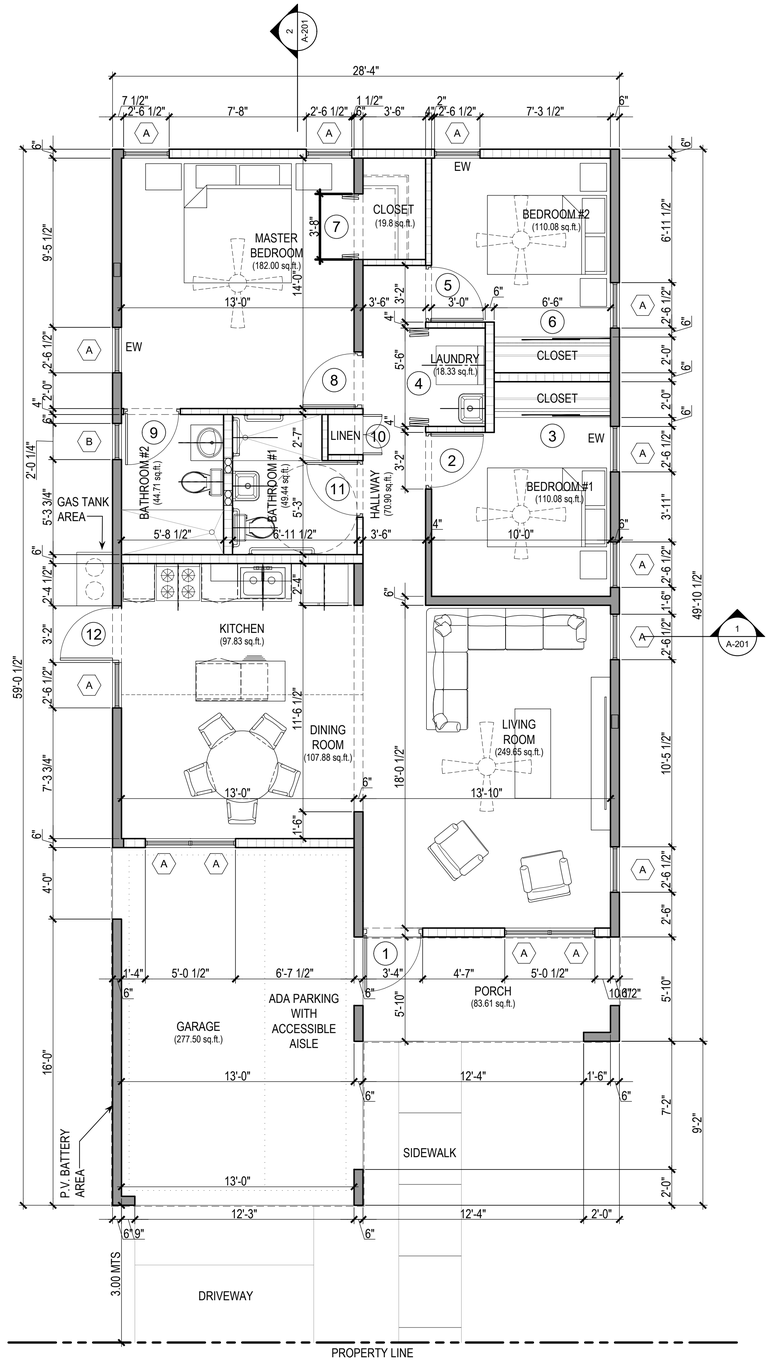
1 SOLAR HEATER ANCHORING DET.
SCALE:NTS



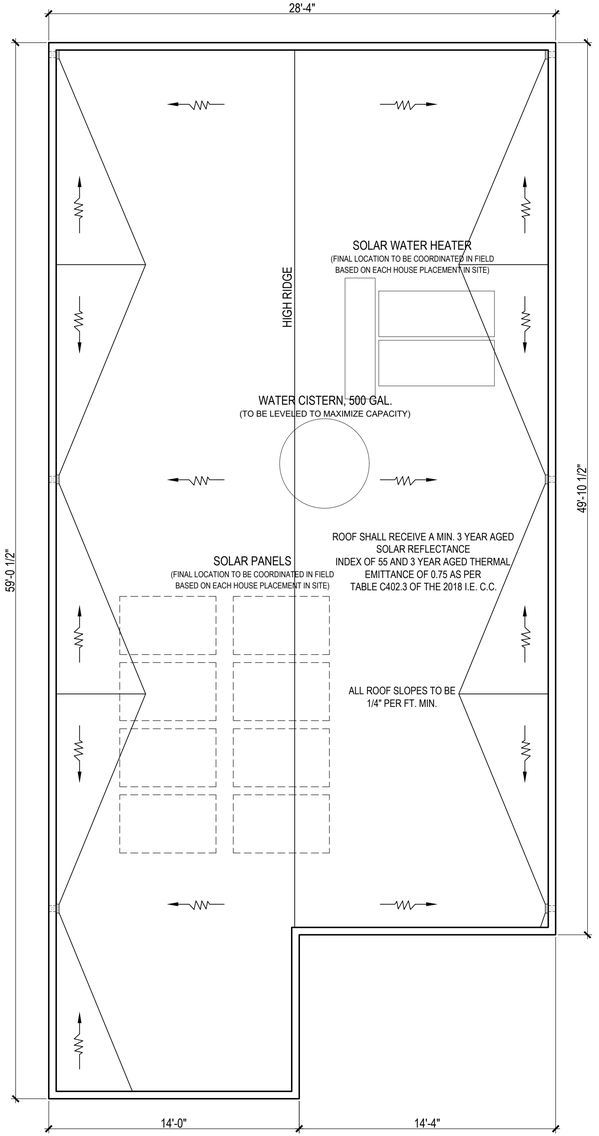
2 ROOF DRAINAGE DET.
SCALE:NTS



3 SPLASH BLOCK DET.
SCALE:NTS



GROUND FLOOR PLAN
SCALE:1/4"



ROOF PLAN
SCALE:1/4"

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GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:

NOTE:

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CERTIFIED

CONSTRUCTION DRAWINGS FOR:

LADERAS DE PALMAS
(MODELO RB)

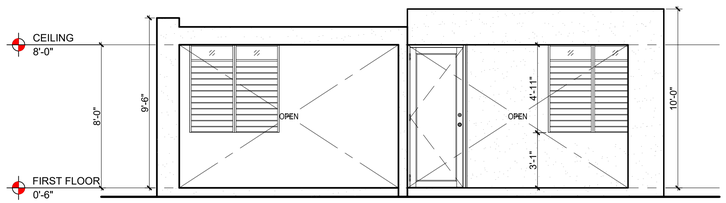
HUMACAO, PR

TITLE:

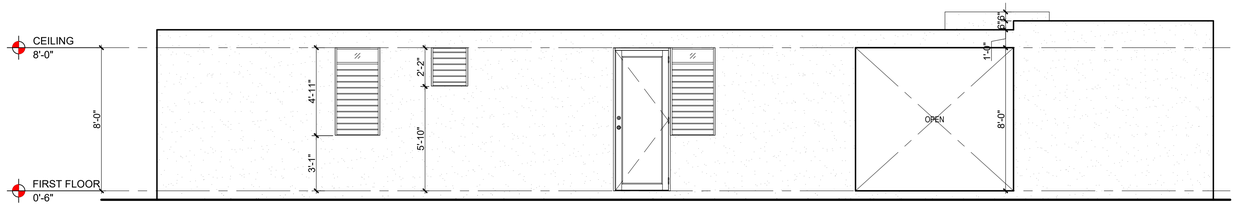
FLOOR PLANS

PROJ MANAGER: J.G.	DATE: 2023/08/25
DRAWN BY: JOTA	SHEET NO.: A-101
SCALE: AS SHOWN	
PROJECT NO.: 23-19	

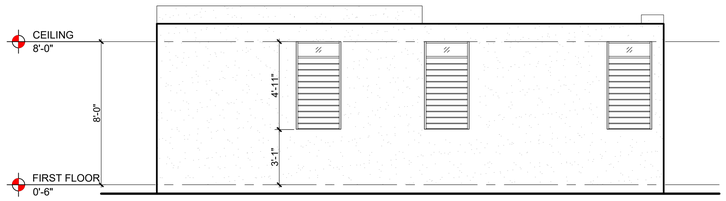
PLOT DATE: Friday, August 25, 2023 11:59:02 AM FILE NAME: N:\DESIGN 2023\23-19_LADERAS DE PALMAS\01 DWG\01_ARCHITECTURAL\D-CIVA101_GROUND FLOOR_23-19_LADERAS_CD.DWG



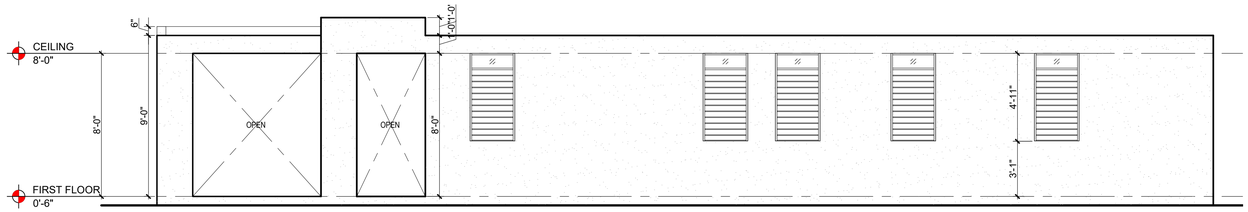
FRONT ELEVATION
SCALE: 1/4"



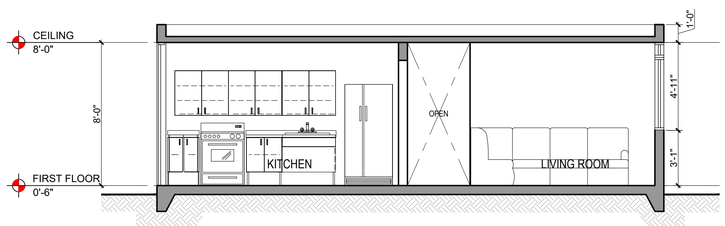
LEFT ELEVATION
SCALE: 1/4"



REAR ELEVATION
SCALE: 1/4"

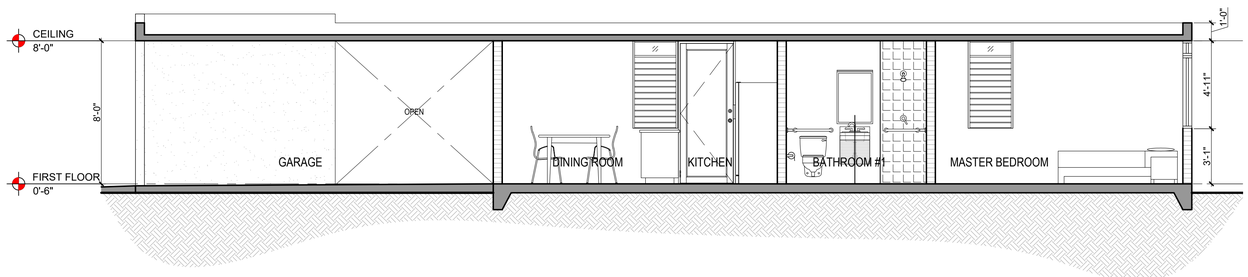


RIGHT ELEVATION
SCALE: 1/4"



SHORT SECTION
SCALE: 1/4"

1
A-201



LONG SECTION
SCALE: 1/4"

2
A-201

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PMB 749, 1353 AVE. LUIS VIGOREAUX
GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:

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CERTIFIED

CONSTRUCTION DRAWINGS FOR:

LADERAS DE PALMAS
(MODELO RB)

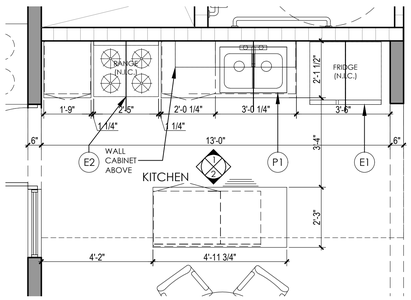
HUMACAO, PR

TITLE:

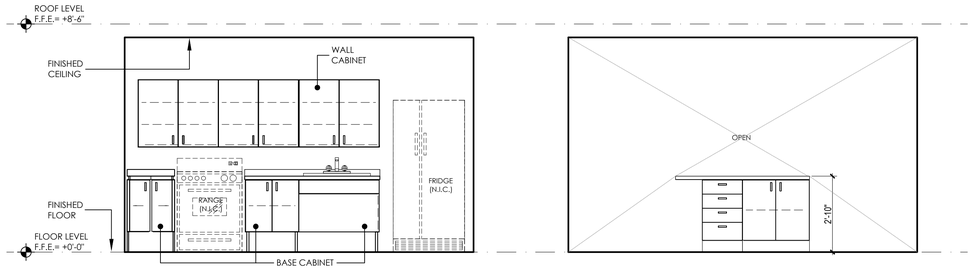
ELEVATION & SECTIONS

PROJ MANAGER: J.G.	DATE: 2023/08/25
DRAWN BY: JOTA	SHEET NO.: A-201
SCALE: AS SHOWN	
PROJECT NO.: 23-19	

PLOT DATE: Friday, August 25, 2023 11:42:14 AM FILE NAME: N:\DESIGN 2023\23-19_LADERAS DE PALMAS\01 DWG\01_ARCHITECTURAL\D-CD\A201_ELEVATIONS_23-19_LADERAS_CD.DWG



KITCHEN BLOW-UP PLAN (1/A401)
SCALE: 3/8"=1'-0"



ELEVATION MK'D "1"
SCALE: 3/8"=1'-0"

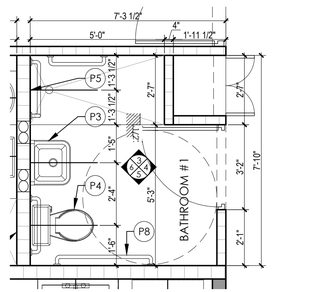
ELEVATION MK'D "2"
SCALE: 3/8"=1'-0"

BATHROOM FIXTURE SCHEDULE (SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION)		
MK'D	DESCRIPTION	MODEL
P1	KITCHEN DOUBLE SINK	
P2	UTILITY SINK (WALL MOUNTED)	
P3	LAVATORY TOP COUNTER	
P4	TOILET (WATER CLOSET)	
P5	SHOWER TRIMS & HARDWARE (INDOOR)	
P6	MIRROR	

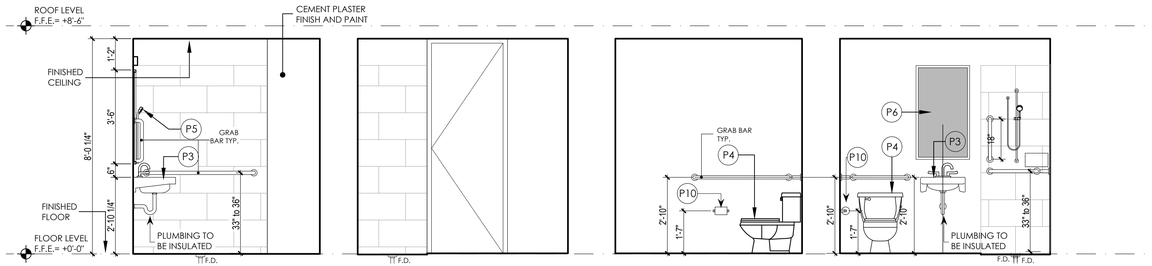
NOTE: ALL BATHROOM FIXTURES & ACCESORIES BY DEVELOPER

NOTES:

* FINAL FLOORS AND WALLS TILES FINISH STYLE AND COLOR TO BE SELECTED BY OWNER.
* ALL KITCHEN AND BATHROOMS COUNTER TOP HEIGHTS TO BE @ 37" A.F.F. GENERAL CONTRACTOR SHALL COORDINATE WITH SUPPLIER FOR NECESSARY ADJUSTMENTS.
* FINAL KITCHEN LAYOUT AND DESIGN TO BE SUBMITTED BY KITCHEN SUBCONTRACTOR AND INTERIOR DESIGN.



BATHROOM #1 BLOW-UP PLAN (3/A401)
SCALE: 3/8"=1'-0"

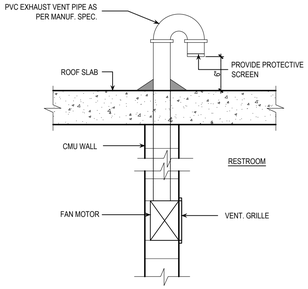


ELEVATION MK'D "3"
SCALE: 3/8"=1'-0"

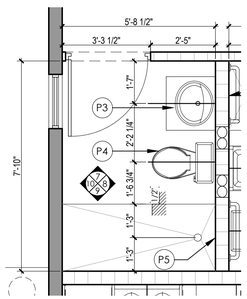
ELEVATION MK'D "4"
SCALE: 3/8"=1'-0"

ELEVATION MK'D "5"
SCALE: 3/8"=1'-0"

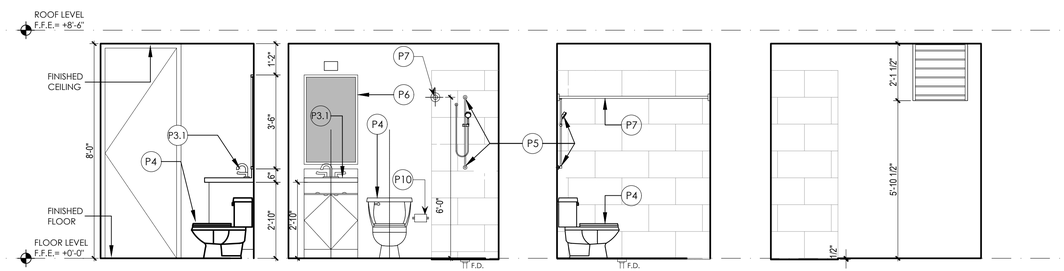
ELEVATION MK'D "6"
SCALE: 3/8"=1'-0"



TYPICAL EXHAUST FAN DET. (1/A-3)
SCALE:NTS



BATHROOM #2 BLOW-UP PLAN (4/A401)
SCALE: 3/8"=1'-0"



ELEVATION MK'D "7"
SCALE: 3/8"=1'-0"

ELEV. MK'D "8"
SCALE: 3/8"=1'-0"

ELEVATION MK'D "9"
SCALE: 3/8"=1'-0"

ELEVATION MK'D "10"
SCALE: 3/8"=1'-0"

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REV.	DATE:	DESCRIPTION:	BY:

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CERTIFIED

CONSTRUCTION DRAWINGS FOR:

LADERAS DE PALMAS
(MODELO RB)

HUMACAO, PR

TITLE:

KITCHEN, LAUNDRY AND BATHROOM'S #1 & #2 BLOW-UPS PLANS AND ELEVATIONS

PROJ MANAGER: J.G.	DATE: 2023/08/25
DRAWN BY: JOTA	SHEET NO.: A-401
SCALE: AS SHOWN	
PROJECT NO.: 23-19	

PLOT DATE: Friday, August 25, 2023 11:42:16 AM FILE NAME: N:\DESIGN 2023\23-19_LADERAS DE PALMAS\91 DWG\01. ARCHITECTURAL\D-CD\A401_BLOW-UPS_23-19_CD.DWG

DOOR SCHEDULE

DOOR No.	ROOM NAME	DOOR SIZE (WxH)	DOOR PER UNIT	No. OF UNITS	FRAME TYPE	FRAME GLASS (WxH)	FRAME LOUVER (WxH)	FRAME GAGE	FRAME LABEL	FRAME MET.	FRAME GAGE	FRAME WIDTH x DEPTH	FRAME HEAD	FRAME JAMB	SADDLE	HARDWARE GROUP	REMARKS	DOOR No.
	GROUND FLOOR																GROUND FLOOR	
1	ENTRANCE - PORCH	3'-4" x 8'-0"	1	1	AG	-	-	-	-	-	-	-	-	-	-	-	SWING	1
2	BEDROOM # 1	3'-2" x 8'-0"	1	1	W												SWING	2
3	BEDROOM # 1 CLOSET	6'-6" x 8'-0"	1	1	WLS												SLIDING	3
4	LAUNDRY	5'-6" x 8'-0"	1	1	W												SWING	4
5	BEDROOM # 2	3'-0" x 8'-0"	1	1	W												SWING	5
6	BEDROOM # 2 CLOSET	6'-6" x 8'-0"	1	1	WLS												SLIDING	6
7	MASTER BEDROOM CLOSET	3'-8" x 8'-0"	4	1	WLF												FOLDING	7
8	MASTER BEDROOM	3'-0" x 8'-0"	1	1	W												SWING	8
9	BATHROOM # 2	3'-3" x 8'-0"	1	1	W												SWING	9
10	LINEN	2'-3" x 8'-0"	2	1	W												SLIDING	10
11	BATHROOM #1	3'-2" x 8'-0"	1	1	W												SWING	11
12	KITCHEN	3'-2" x 8'-0"	1	1	AG												SWING	12

CONTRACTOR & SUPPLIER MUST VERIFY ALL MAJOR OPENINGS & SHOP DRAWINGS BEFORE WINDOW & DOOR SCHEDULE IS APPROVED FOR CONSTRUCTION.

WINDOW SCHEDULE

WINDOW MK'D.	ROOM NAME	WINDOW SIZE W	WINDOW SIZE H	WINDOWS PER UNIT	No. OF UNITS	MATERIAL	REMARKS
	GROUND FLOOR						
A	LIVING ROOM	5'-0 1/2"	4'-10 3/4"	2	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
A	LIVING ROOM	5'-0 1/2"	4'-10 3/4"	1	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
A	KITCHEN	5'-0 1/2"	4'-10 3/4"	1	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
A	DINING ROOM	5'-0 1/2"	4'-10 3/4"	2	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
A	BEDROOM #1	5'-0 1/2"	4'-10 3/4"	1	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
A	BEDROOM #2	5'-0 1/2"	4'-10 3/4"	1	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
A	BEDROOM #2	5'-0 1/2"	4'-10 3/4"	1	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
A	MASTER BEDROOM	5'-0 1/2"	4'-10 3/4"	1	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
A	MASTER BEDROOM	5'-0 1/2"	4'-10 3/4"	1	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
A	MASTER BEDROOM	5'-0 1/2"	4'-10 3/4"	1	1	ALUM. / GLASS	@ 3'-1 1/4" F.F.E. - FIXED & SINGLE HUNG
B	BATHROOM #2	2'-0 1/2"	2'-1 1/2"	1	1	ALUM. / GLASS	@ 5'-10 1/2" F.F.E. - AWNING

NOTES:

1. ALL SURFACES TO BE CEMENT PLASTER & PAINT FINISH (1 COAT PRIMER, 2COATS PAINT) UNLESS OTHERWISE NOTED.
2. PROVIDE ON ALL AREAS UNDERNEATH CONC. SLAB.

FRAME NOTES:

1. FRAME ANCHORING DEVICE SHALL BE SUBMITTED FOR APPROVAL BY OWNER OR ENGINEER.
2. FOR FRAMES & FRAME CONCRETE ANCHORS SEE SPECIFICATIONS.
3. ALL FRAME & ANCHORING COMPONENTS SHALL COMPLY WITH ALL APPLICABLE CODES.

DOOR NOTE:

1. ALL DOORS HARDWARE, LOCKING, THRESHOLD, ETC., SHALL BE AS PER MANUFACTURES SPECIFICATIONS. G.C. TO SUBMIT SHOP DWGS. FOR DEVELOPERS FINAL APPROVAL.

WINDOW NOTES:

1. ALL GLAZING TO BE SAFETY GLASS FOR DOORS & WINDOWS.
2. ALL WINDOWS TO BE ALUMINIUM WITH BAKED ENAMEL FINISH, COLOR TO BE SELECTED BY ARCHITECT OR DEVELOPER.
3. ALL WINDOW & DOOR TYPE COMPONENTS, MATERIALS & HARDWARE SHALL COMPLY W/ALL REGLAMENTARY CODES & STANDARDS.
4. ALL WINDOW & DOOR TYPE COMPONENTS, MATERIALS & HARDWARE TO BE SELECTED BY DEVELOPER & CONTRACTOR & SHALL COMPLY WITH ALL APPLICABLE CODES & STANDARDS.
5. THE EXACT WINDOW LOCATION WILL BE COORDINATED DURING THE CONSTRUCTION PHASE BETWEEN THE DEVELOPER, CONTRACTOR AND ARCHITECT.
6. ALL WINDOWS & DOORS SHALL COMPLY W/ ALL APPLICABLE CODES & STANDARDS AND BE SELECTED BY ARCHITECT / OWNER.

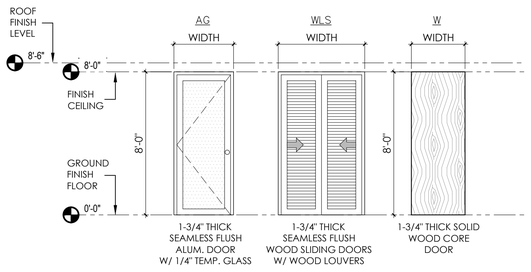
INTERIOR ROOM FINISH SCHEDULE

RM. MK'D	FLOOR: 24" x 24" CERAMIC TILE TO BE SELECTED BY OWNER	FLOOR: 4" x 4" CERAMIC TILE TO BE SELECTED BY OWNER	FLOOR: BROOM CEMENT FINISH	BASE: CERAMIC TILE TO BE SELECTED BY OWNER	WALL: SMOOTH CEMENT PLASTER W/ 2 COAT INT. & EXT. ACRYLIC PAINT FINISH	WALL: TILES @ SHOWER STALL. REFER TO ELEVATION	CEILING: SMOOTH CEMENT PLASTER W/ 2 COAT INT. ACRYLIC PAINT FINISH	REMARKS
F1	●			●	●		●	
F2		●			●	●	●	SEE BATHROOM DETAILS
F3			●				●	

VENTILATION CALCULATIONS

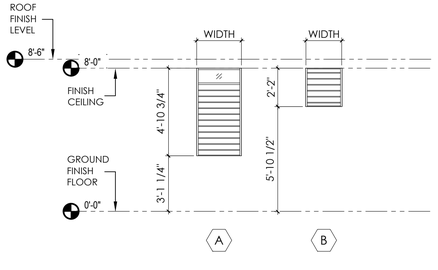
SPACE	AREA	OPERABLE WINDOWS & DOORS AT SPACE	VENTILATION AREA REQUIRED	VENTILATION AREA PROPOSED	REMARKS
MASTER BEDROOM	182.0 SF	A.A.A	25.5 SF	27.3 SF	
BEDROOM 1	110.1 SF	A.A	15.4 SF	18.2 SF	
BEDROOM 2	110.1 SF	A.A	15.4 SF	18.2 SF	
LIVING ROOM/ DINING ROOM/ KITCHEN	455.4 SF	A.A.A.A.A.A.A	63.70 SF	63.7 SF	

• VENTILATION CALCULATIONS AS PER PUERTO RICO ENERGY CONSERVATION CODE 2018, SECTION R401.2.1



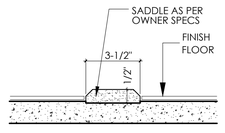
DOOR'S ELEVATIONS

SCALE: 1/4" = 1'-0"



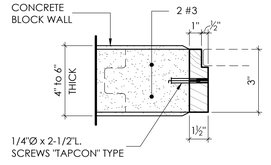
WINDOW'S ELEVATIONS

SCALE: 1/4" = 1'-0"

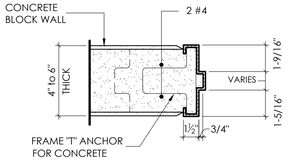


(CONDITION OCCURS @ ENTRY)

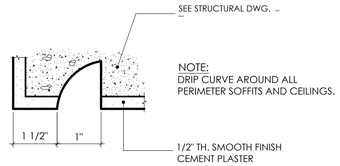
SADDLE DETAIL — N.T.S. — 1 / A501



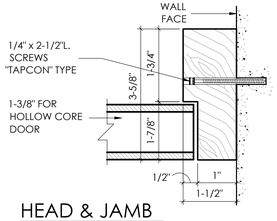
TYP. WOOD FRAME ANCHOR DETAIL — N.T.S. — 2 / A501



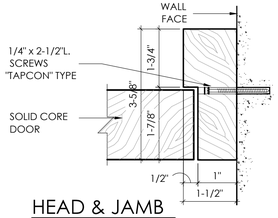
TYP. METAL FRAME ANCHOR DETAIL — N.T.S. — 3 / A501



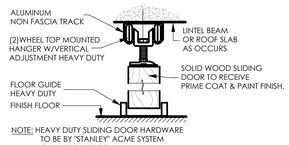
TYP. DRIP DETAIL — N.T.S. — 4 / A501



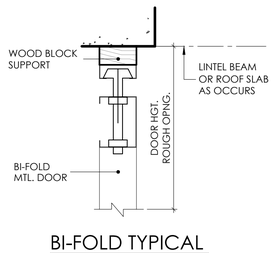
HEAD & JAMB DOOR FRAME PLAN — N.T.S. — 5 / A501



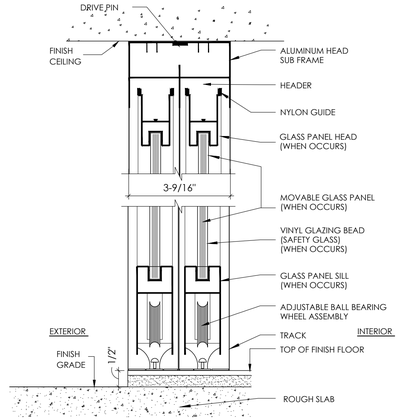
HEAD & JAMB DOOR FRAME PLAN — N.T.S. — 6 / A501



SLIDING WOOD DOOR DETAIL — N.T.S. — 7 / A501



BI-FOLD TYPICAL HEAD DETAIL — N.T.S. — 8 / A501



SLIDING DOOR DETAIL — N.T.S. — 9 / A501

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GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:

NOTE:

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CERTIFIED

CONSTRUCTION DRAWINGS FOR:

LADERAS DE PALMAS
(MODELO RB)

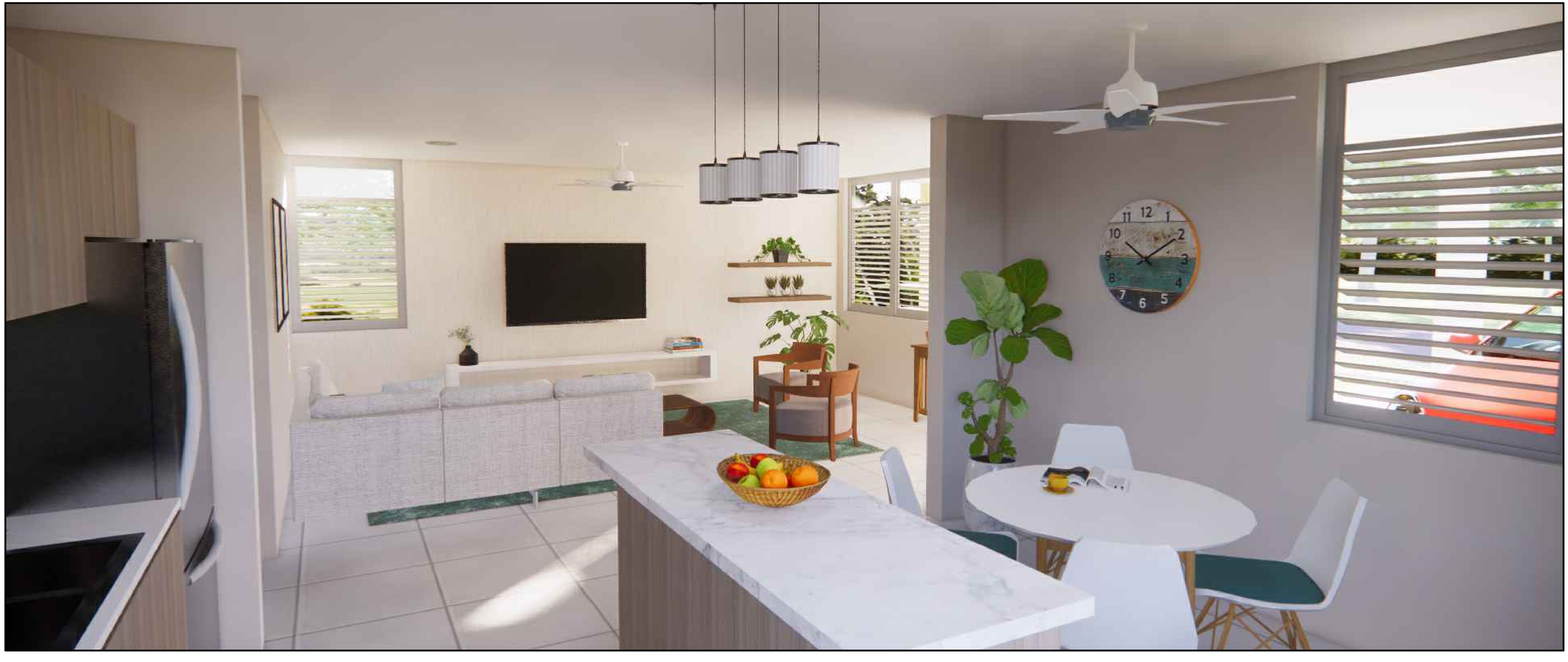
HUMACAO, PR

TITLE:

DOOR'S & WINDOW'S SCHEDULE'S AND ELEVATIONS

PROJ MANAGER:	DATE:
J.G.	2023/08/25
DRAWN BY:	SHEET NO.:
JOTA	A-501
SCALE: AS SHOWN	
PROJECT NO.: 23-19	

PLOT DATE: Friday, August 25, 2023 11:42:19 AM FILE NAME: N:\DESIGN 2023\23-19_LADERAS DE PALMAS\01 DWG\01. ARCHITECTURAL\D-CD\A501_DOORS&WINDOWSSCHTD_23-19_CD.DWG



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CERTIFIED

CONSTRUCTION DRAWINGS FOR:

LADERAS DE PALMAS

(MODELO RB)

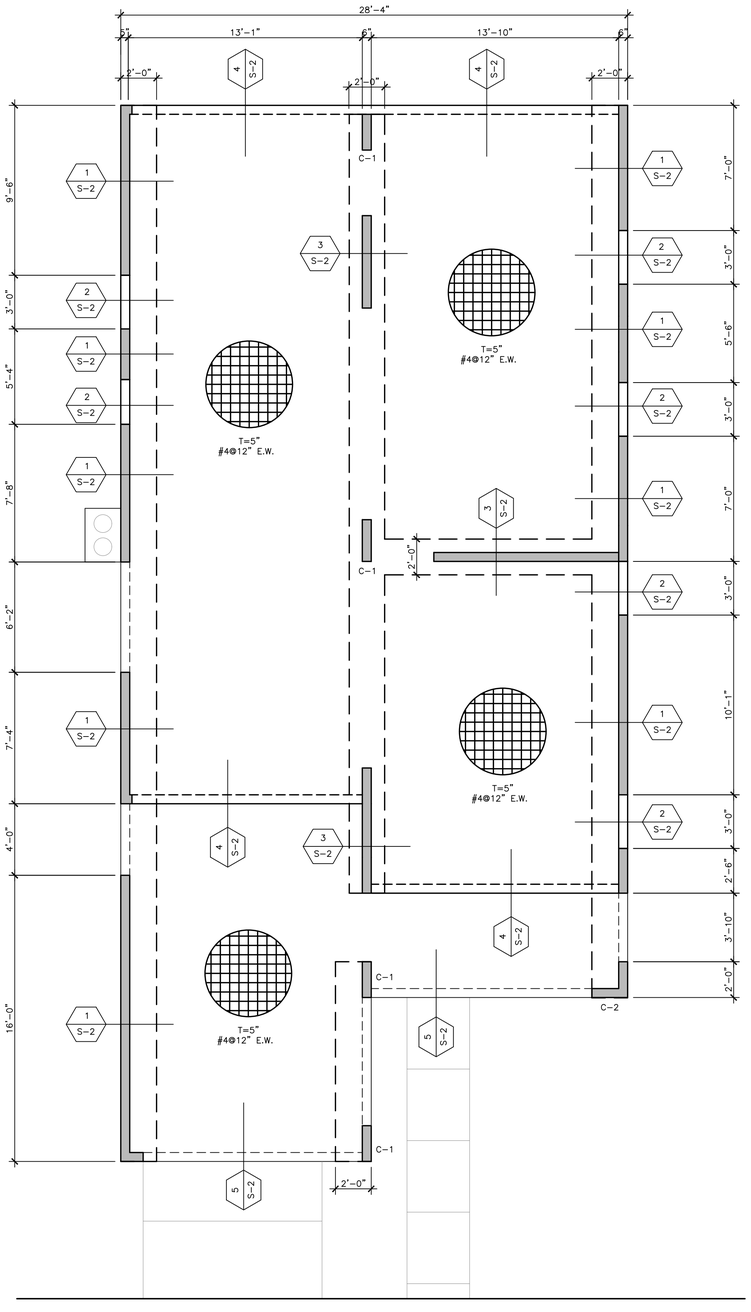
HUMACAO, PR

TITLE:

3D VIEWS

PROJ MANAGER: J.G.	DATE: 2023/08/25
DRAWN BY: JOTA	SHEET NO.: A700
SCALE: AS SHOWN	
PROJECT NO.: 23-19	

PLOT DATE: Friday, August 25, 2023 11:42:13 AM FILE NAME: N:\DESIGN 2023\23-19_LADERAS DE PALMAS\01 DWG\01 ARCHITECTURAL\D-COVA700_3DVIEWS_23-19_LADERAS_CD.DWG

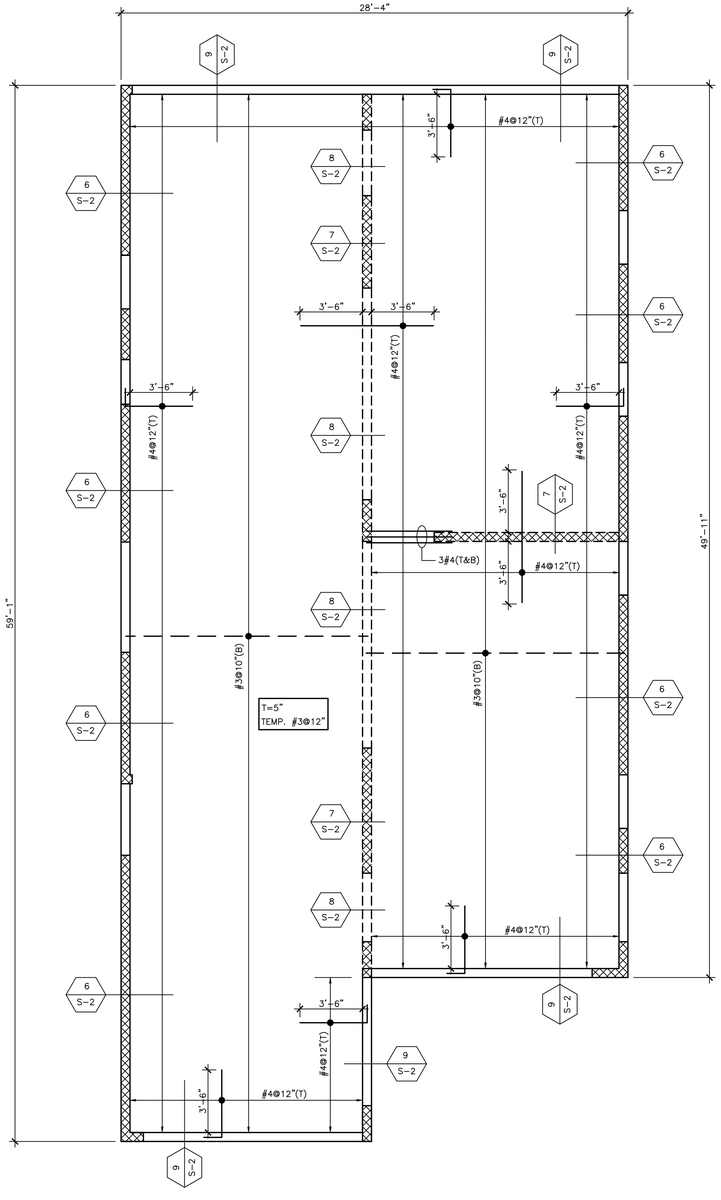


FOUNDATION PLAN

SCALE: 1/4"=1'-0"

LEGEND:

	DENOTES WALL BELOW ONLY
	DENOTES WALL ABOVE ONLY
	DENOTES WALL BELOW AND ABOVE ONLY
B	BOTTOM REINFORCEMENT
T	TOP REINFORCEMENT
E.W.	EACH WAY



ROOF STRUCTURAL PLAN

SCALE: 1/4"=1'-0"

LEGEND:

	DENOTES WALL BELOW ONLY
	DENOTES WALL ABOVE ONLY
	DENOTES WALL BELOW AND ABOVE ONLY
B	BOTTOM REINFORCEMENT
T	TOP REINFORCEMENT
E.W.	EACH WAY

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REV.	DATE:	DESCRIPTION:	BY:

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CERTIFIED

Yo, José García Casañuela, Ic 18338, certifico que soy el profesional que, diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendado, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la [Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de Julio de 1976, según enmendada; según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

SCHEMATIC DRAWINGS FOR:

MODELO RB

PUERTO RICO

TITLE:

FOUNDATION AND ROOF STRUCTURAL PLAN

PROJ MANAGER: J.R.	DATE:
DRAWN BY: R.B.	SHEET NO.: S-1
SCALE: AS SHOWN	
PROJECT NO.: 23-41	

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CIVIL ENGINEER & STRUCTURAL CONSULTANTS
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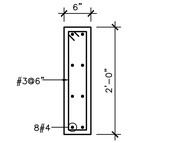
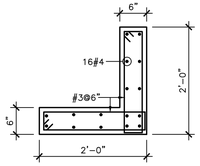
TEL / FAX (787) 998-4493



COLUMN MK'D.C-1

SCALE: 3/4"=1'-0"



COLUMN MK'D.C-1

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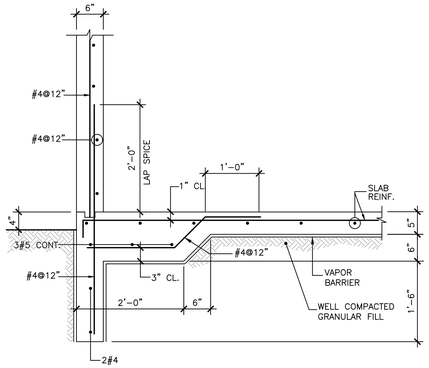

SECTION MK'D. 1 S-2

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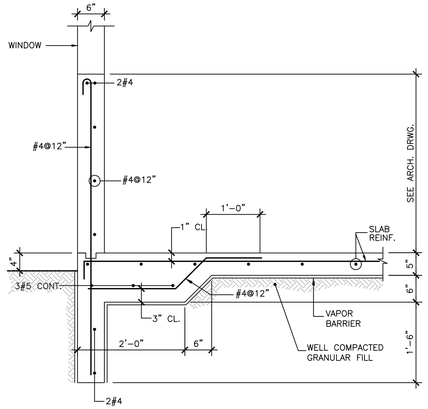

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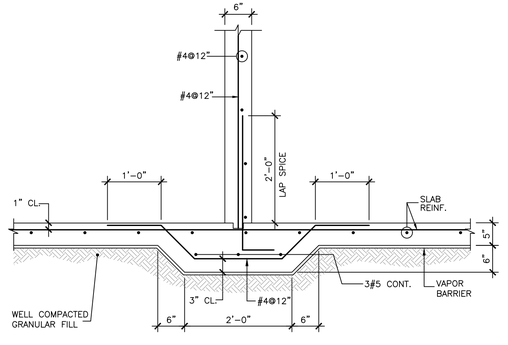
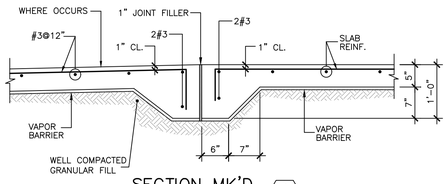


SECTION MK'D. 3 S-2

SCALE: 3/4"=1'-0"

SECTION MK'D. 4 S-2

SCALE: 3/4"=1'-0"



SECTION MK'D. 5 S-2

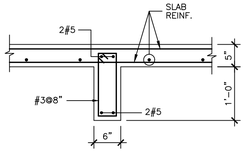
SCALE: 3/4"=1'-0"

SECTION MK'D. 6 S-2

SCALE: 3/4"=1'-0"

SECTION MK'D. 7 S-2

SCALE: 3/4"=1'-0"



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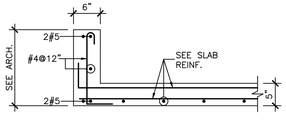
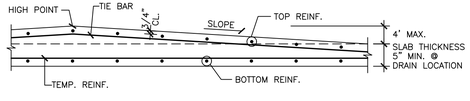


SECTION MK'D. 9 S-2

SCALE: 3/4"=1'-0"

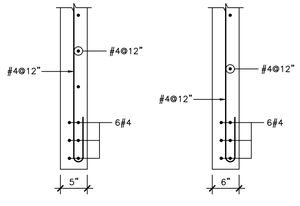


REINF. PLACING DETAIL ON ROOF SLAB SLOPED FOR DRAINAGE

SCALE: 3/4"=1'-0"

NOTES:

1. TOP BARS SHALL BE RAISED PARALLEL TO SLOPE SURFACE TO PROVIDE A MINIMUM 3/4" CONC. COVER TO TOP REINF.
2. SEE NOTE FOR TEMP. REINF PERPENDICULAR TO MAIN REINF.
3. 30 GAL./C.Y. MAXIMUM WATER CONTENT IN CONC. MIX.



WALL END DETAIL

SCALE 3/4"=1'-0"

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PMB 749, 1353 AVE. LUIS VIGOREAUX
GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:

NOTE:

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SCHEMATIC DRAWINGS FOR:

MODELO RB

PUERTO RICO

TITLE:

SECTIONS

PROJ MANAGER: J.R.	DATE:
DRAWN BY: R.B.	SHEET NO.: S-2
SCALE: AS SHOWN	
PROJECT NO.: 23-41	

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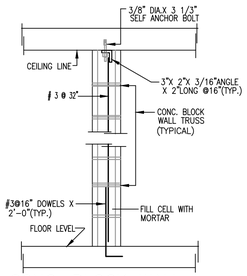
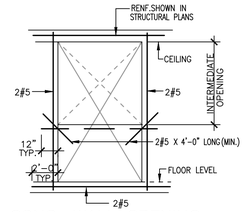


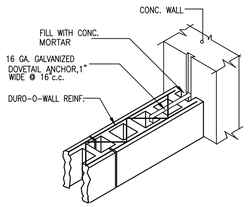
CONC. BLOCK WALL REINFORCEMENT DETAIL

NOT TO SCALE



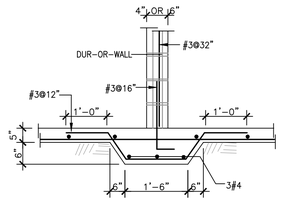
CONC. WALL OPENING REINFORCEMENT

NOT TO SCALE



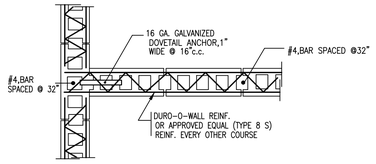
BLOCK WALL TO CONC. WALL ANCHORAGE

NOT TO SCALE



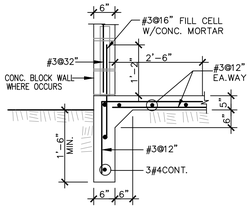
TYPICAL WALL BLOCK WALL FOOTING DETAIL

NOT TO SCALE



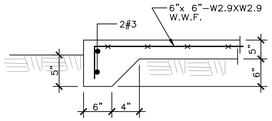
WALL OR SLAB SPLICE DETAIL REINFORCEMENT DETAIL

NOT TO SCALE



SECTION MK'D 1 SN-1

NOT TO SCALE



SECTION MK'D 2 SN-1

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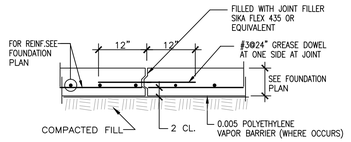
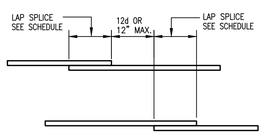


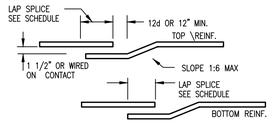
TYPICAL CONSTRUCTION JOINT AT SLAB ON GROUND

NOT TO SCALE



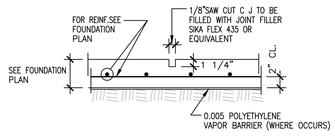
WALL OR SLAB SPLICE DETAIL

NOT TO SCALE



BEAM SPLICE DETAIL

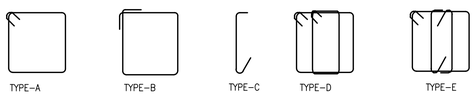
NOT TO SCALE



TYPICAL CONTROL JOINT

NOT TO SCALE

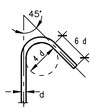
LAP SPLICE SCHEDULE						
TENSION DEVELOPMENT LENGTH (in)						
BAR SIZE	f'c= 3,000 P.S.I.		f'c= 4,000 P.S.I.		f'c= 5,000 P.S.I.	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
# 3	29	22	23	18	22	17
# 4	38	29	33	25	29	22
# 5	47	36	40	31	35	27
# 6	56	43	49	38	44	34
# 7	81	62	69	53	62	48
# 8	94	72	79	61	72	55
# 9	105	81	90	69	79	61
# 10	118	91	101	78	90	69
# 11	131	101	112	86	100	77



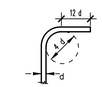
TRANVERSE REINFORCEMENT DETAIL,S

NOTES:

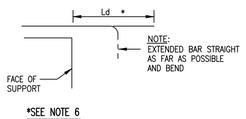
1) TYPE B HOOKS SHALL BE USED WHEN THE DESIGNATION LETTER IS OMITED IN BEAM DETAILS.
2) EXCEPT WHERE OTHERWISE INDICATED THE FIRST HOOK AT EACH END SHALL BE PLACED AT 2" FROM THE FACE OF SUPPORT.



TYPE B & C BEAM HOOKS, COL. CONFINEMENT TIES AND BEAM-COLUMN JOINT TIES.



TYPE B & C BEAM HOOKS AND REGULAR COLUMN TIES



*SEE NOTE 6

STRUCTURAL NOTES:

THE FOLLOWING NOTES SHALL APPLY TO ALL STRUCTURAL PLANS UNLESS OTHERWISE SHOWN THEREIN. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEERS OF ANY DISCREPANCY AND/OR OMISSION WITH RESPECT TO THE ARCH, ELECTRICAL, MECHANICAL AND PLUMBING DRAWINGS.

A - CONCRETE NOTES:

1 - THE MINIMUM COMPRESSIVE STRENGTH OF CONCRETE REQUIRED AT 28 DAYS, AS SHOWN BY A.S.T.M. STANDARD CYLINDER TESTS, SHALL BE
- a) WALLS---------- 4000 Psi
- b) STRUCTURAL SLAB---------- 3500 Psi
- c) BEAMS---------- 3500 Psi
- D) FOOTING & SLAB ON GROUND ---------- 4000 Psi

2 - MAXIMUM ALLOWED WATER TO CEMENT RATIO SHALL BE:
- a) WALL & BEAMS & SLAB ON GROUND 0.62
- b) STRUT FLOOR & ROOF SLAB 0.62
- c) WALL WITH f'c 5000 Psi USE 0.50

3 - ALL CONCRETE WALLS AND SLABS SHALL BE CASTED MONOLITHICALLY.

4 - CONCRETE PROTECTION FOR STEEL BARS:
- a) CONCRETE DEPOSITED AGAINST SOIL ---------- 3"
- b) STRUCTURAL SLABS ----------3/4"
- c) BEAMS AND COLUMNS _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 1/2"
- d) WALLS, UNLESS OTHERWISE NOTED _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3/4"

5 - ROOF SLAB THICKNESS SHALL BE AS SHOW IN THE STRUCTURAL ROOF PLAN, IT SHALL BE INCREASED TO CONFORM TO THE ROOF'S DRAINAGE.

B - REINFORCING STEEL NOTES:

1 - ALL REINFORCING STEEL BARS SHALL CONSIST OF NEW BILLET DEFORMED STEEL BARS CONFORMED TO A.S.T.M. A - 615 -, GRADE 60
2 - BARS MARKED (T) SHALL BE PLACED AT THE TOP OF THE SLABS; BARS MARKED (B) SHALL BE PLACED AT THE BOTTOM OF THE SLABS.
3 - PROVIDE 2 #5 BARS AT THE CORNERS AND OPENINGS OF EVERY CONCRETE WALLS, EXCEPT AS OTHERWISE NOTED.
4 - THE MINIMUM REINFORCEMENT FOR 6" CONCRETE WALLS SHALL CONSIST OF #3 AT 12" VERTICALLY AND #4 AT 12" HORIZONTALLY.
5 - ALL REINFORCING WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH A.S.T.M. A - 185 SPECIFICATION.
6 - TEMPERATURE REINFORCEMENT SHALL BE PROVIDED IN ALL ONE - WAY SLABS NORMAL TO THE PRICIPAL REINFORCEMENT IN ACCORDANCE WITH A.C.I. 318 - 14 BUILDING CODE:.
7 - MASONRY WALLS REINFORCEMENT SHALL BE EQUAL OR SIMILAR TO DUR-O-WALL TRUSS DESIGN SAID REINF. SHALL BE INSTALLED IN THE FIRST AND SECOND BED JOINTS, (8" APART); IMMEDIATELY ABOVE LINTELS AND SILLS; AT OPENINGS; AND AT 16" VERTICAL INTERVALS ELSEWHERE.
8 - BEAM REINF. SHALL BE PLACED IN THE SPECIFIED POSITIONS AND WITH A MAXIMUM VARIATION IN DISTANCE "D" OF ± 1/4 ".
9 - COLUMNS AND WALLS DOWELS SHALL CONSIST OF THE SAME SIZE AND NUMBER AS THEIR VERTICAL REINFORCEMENT.
10 - ALL WELDING PERFORMED ON STEEL BARS SHALL CONFORM TO 'RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL METAL INSERTS AND CONNECTIONS IN REINF. CONC. CONSTRUCTION', (AWS D 12.1).

C - FOUNDATION SYSTEM (SEE DESIGN CRITERIA)

1 - THE FOUNDATION SYSTEM HAS BEEN DESIGNED FOLLOWING THE ASSUMPTION OF SOIL BEARING CAPACITY OF 2,500 PSF. SEE SOIL REPORT BY: THE CONTRACTOR SHALL VERIFY THE SOIL BEARING CAPACITY USED FOR THE DESIGN OF THE FOUNDATION SYSTEM, PRIOR TO ANY PLACEMENT OF CONCRETE.
2 - THE SOIL INVESTIGATION REPORT IS PART OF THESE NOTES AND ITS RECOMMENDATIONS MUST BE CAREFULLY OBSERVED.
3 - FILL UNDER THE GROUND FLOOR SHALL BE COMMPACTED AS TO ATTAIN 90% OF ITS MODIFIED DENSITY A.S.T.M. 1557 - 70T).

D - STRUCTURAL STEEL NOTES:

1 - ALL STRUCTURAL STEEL SECTIONS SHALL BE ACCORDING TO A.S.T.M. 1-36 STANDARD FOR STRUCTURAL STEEL THE SPECIFIED YIELD POINT SHALL BE 36,000.0 P.S.I.
2 - ALL WELDING SHALL CONFORM TO THE SPECIFICATIONS OFTHE AMERICAN WELDING SOCIETY. ELECTRODES SHALL CONSIST OF THE E 70 xx TYPE, EXCEPT AS OTHERWISE NOTED.
3 - ALL TESTING AND INSPECTION OF WELDIN G SHALL BE DONE IN ACCORDANCE WITH SECTIONS 601 THROUGH 607 OF THE A.W.S. DL 0 -05 CODE FOR WELDING IN BUILDING CONSTRUCTION.
4 - ALL STEEL BOLTS SHALL CONFORM TO A.S.T.M. A-325 FRICTION BOLTS, UNLESS OTHERWISE NOTED.
5 - THE FOLLOWIMNG ADDITIONAL SPECIFICATIONS GOVERN THE DESIGN, FABRICATION AND ERECTION OF THESE STRUCTURES
- a) AMERICAN INSTITUTE OF STEEL CONSTRUCTION _(LATEST EDITION)
- b) STANDARD SPECIFICATION FOR OPEN WEB STEEL JOISTS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ (LATEST EDITION)
- c) STANDARD SPECIFICATIONS FOR LONG SPAN STEEL JOISTS _ _ _ _ _ _ _ _ _ _ _ _ _ _ (LATEST EDITION)
- d) STANDARD SPECIFICATIONS FOR DEEP LONG SPAN STEEL JOISTS _ _ _ _ _ _ _ _ _ _ _ _(LATEST EDITION)

6 - SHOP DRAWINGS FOR ALL THE STRUCTURAL STEEL SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR HIS APPROVAL, PRIOR TO ANY CONSTRUCTION.

E - DESIGN DATA

1 - CODES:
- a) A.C.I. CODE - 318 - 2016 EDITION
- b) MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED COCRETE STRUCTURES, A.C.I. 31G - LATEST EDITION.
- c) PUERTO RICO BUILDING CODE 2018.
- d) A.I.S.C. MANUAL, 2016 EDITION.
- e) INTERNATIONAL BUILDING CODE 2018

F - GENERAL NOTES:

1 - OPENINGS ON THE STRUCTUAL SLABS THAT ARE NOT SHOWN ON THE STRUCTURAL PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER FOR PERTINENT CONSIDERATIONS.
2 - ALL REINFORCING BARS AND STIRRUPS SHALL BE ACCURATELY PLACEDAND SECURELY WIRED TO PREVENT DISLOCATIONS FROM PROPER POSITION, WHENEVER METAL CHAIRS ARE USED,THEIR LEGS SHALL BE PLASTIC TIPPED.
3 - HORIZONTAL MOVEMENT OF ANY EQUIPMENT OVER THE STRUCTURA L FLOORS ON ROOFAND ITS TEMPORARYAND/OR DEFINITE LOCATIONS MUST BE PREVIOUS LY APPROVED BY THE ENGINEER TOAVOID OVERLOADING OR IMPAIRMENT OF THE STRUCTURE. THE SAME PRECAUTIONS SHALL BE TAKEN FOR THE PILING OF CONSTRUCTION MATERIALS.
4 - CONSTRUCTION JOINTS AT SLABS ON GROUND, AS SHOWN ON THIS SHEET, SHALL BE PROVIDED AT THE COLUMNS CENTER LINES, AND POURING OF CONCRETE IN RESULTING PANELS SHALL BE DONE FOLLOWING CHECKER BOARD PATTERD.
5 - OTHER CONSTRUCTION JOINTS SHALL BE CONSTRUCTED AS FOLLOWS: ROUGHEN SURFACE WITH A WIRE BRUSH AND STREAM OF WATER BEFORE CONCRETE SETS TO EXPOSE 3/8" OF THE COARSE AGGREGATE MOISTEN ROGH SURFACE BEFORE CASTING THE NEW CONCRETE VIBRATE THOROUGHLY AT JOINT.
6 - NO SPLICES IN REINFORCEMENT SHALL BE MADE EXCEPT AS SHOWN IN PLANS. 'TEMPERATURE REINF'. AND BARS MARKED 'CONTINUOUS' SHALL BE SPLICED WHERE NECESSARY, A MINIMUM OF 36 BARS DIAMETERS BUT NOT LESS THAN 1'-6" W.W.F. SHALL BE LAPPED AT LEAST 6"(IN)
7 - ANY LINE DRAWN FROM ANY BOTTOM EDGE OF A FOOTING, HAVING A SLOPE OF 1 VERTICALLY AND 2 HORIZONTALLY, SHALL LIE ENTIRELY ON UNDISTURBED SOIL OF AN ALLOWABLE BEARING PRESSURE AS SPECIFIED IN NOTE #C-1.
8 - LAP LENGTHS NOT SPECIFIED ON THE DRAWINGS SHALL CONSIST OF 24 BARS DIAMETERS FOR A - 615 - 40 STEEL OR 36 BARS DIAMETERS FOR A - 615-60.
9 - IN TWO-WAY SLABS, THE SHORTER BARS SHALL BE PLACED 3/4" CLEAR FROM THE TOP OR BOTTOM SURFACES, THE LONGER BARS SHALL BE PLACED IN CONTACT WITH THEM.
10 - THE TOP OF EVERY FOUNDATION WALL LOCATED BELOW A WINDOW OR DOOR OPENING SHALBE ADDITIONALLY REINFORCED WITH 2 #5 BAR, 4'-0" LONGER THAN THE WIDTH OF SAID OPENING.
11 - CONDUITS AND PIPE EMBEDDED IN CONCRETE SHALL FOLLOW THE REQUIREMENTS OF SECTION 6.3 OF THE A.C.I. BUILDING CODE.
12 - THE GENERAL CONTRACTOR SHALL PROVIDE THE NECESARY LATERAL SHORING IN ORDER TO ASSURE THE STABILITY OF THE STRUCTURE, OR PORTIONS THEREOF, DURING THE CONSTRUCTION PROCESS.
13 - THE GENERAL CONTRACTOR SHALL TAKE INTO ACCOUNT THE DEFORMATIONS OF THE FORMS AND/OR SHORING SYSTEM, IN ORDER TO INTRO- DUCE THE NECESSARY CAMBER TO OFF-SET THEM.
14 - ALL OPENINGS AT SLABS ON GROUND SHALL BE REINFORCED WITH AN ADDITIONAL LAYER OF 6 X 6 - W 2.9 X W 2.9 W.W.F.; SAID LAYER SHALL EXTEND FOR 25" BEYOND THE OPENING'S EDGES.
15 - THE CONTRACTOR SHALL BE EXTREMELLY CAREFUL WITH THE POURING OF CONC. AT OVERHANG; HE SHALL ASSURE THAT THE POSITION OF THE 'TOP' REINF. BARS IS NOT LOWERED BY HIS WORKMEN DURING SAID OPERATION.
16 - THE GENERAL CONTRACTOR MUST SUBMITT A SCHEDULE OF CONCRETE POURING., SHOWING THE PROPOSED CONST. JOINTS. HE SHALL COMPLY WITH A.C.I. 318-14 SECTION 6.4.
17 - THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO COMMENCING WORK. THE ENGINEER / ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES WHICH MAY EXIST.

G - DESIGN CRITERIA:

1 - ROOF LIVE LOAD _ _ _ _ _ _ _ _ _ _ _40 P.S.F.
2- FLOOR LIVE LOAD- - - - - - - - - - - - 40 P.S.F. (BASIC FLOOR AREA)
3 - EARTH QUAKE LOAD ------ AS PER IBC - 18 BUILDING CODE
SEISMIC CATEGORY: E
SPECTRAL ACCELERATIONS: Sd=0.97, S1=0.39
4 - WIND LOAD _ _ _ _ _ _ _ _ _ _ _ _ AS PER P.R. BUILDING CODE 2018
WIND SPEED: 165 MPH
EXPOSSURE CATEGORY: C
5- SOIL BEARING CAPACITY- ----------2,500 P.S.F.
SOIL IMPROVEMENT BY: SEE SOIL REPORT
THE CONTRACTOR SHALL SUBMIT SOIL IMPROVEMENT METHOD FOR EVALUATION AND APPROVAL.

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PMB 749, 1353 AVE. LUIS VIGOREAUX
GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:

NOTE

The general contractor shall verify all dimensions, levels and conditions at the site prior to the commencement of work, any discrepancies, errors or omissions on the plans shall be notified to the architect before commencement of any work, so that corrections can be made. If for any reason these said errors, ommissions etc. are not notified to the architect, the general contractor shall be solely responsible. All designs, drawings and copies issued by the architect are property of the architect, and cannot be used or reproduced in any other manner or place, except for the purpose of its design intent. If for any reason part or all of the architect's design is used without his/her consent, the parties involved shall pay the architects fees as required in full. At no time shall the general contractor utilize for construction any drawing issued to him/her prior to construction unless signed and sealed by both "OGPe" (regulations and permits administration) and the architect.

CERTIFIED

Yo, Carlos J. Quinones Maymí, lic 18892, certifico que soy el profesional que, diseñó estos planos y las especificaciones complementarias. También,certifico que entiendo que dichos planos y especificaciones cumplen con lasdisposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la Ley para la Inversión por la Industria Puertorriqueña y con la (Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 56 de 6 de julio de 1978, según enmendada; según aplique). Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia yo sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

SCHEMATIC DRAWINGS FOR:

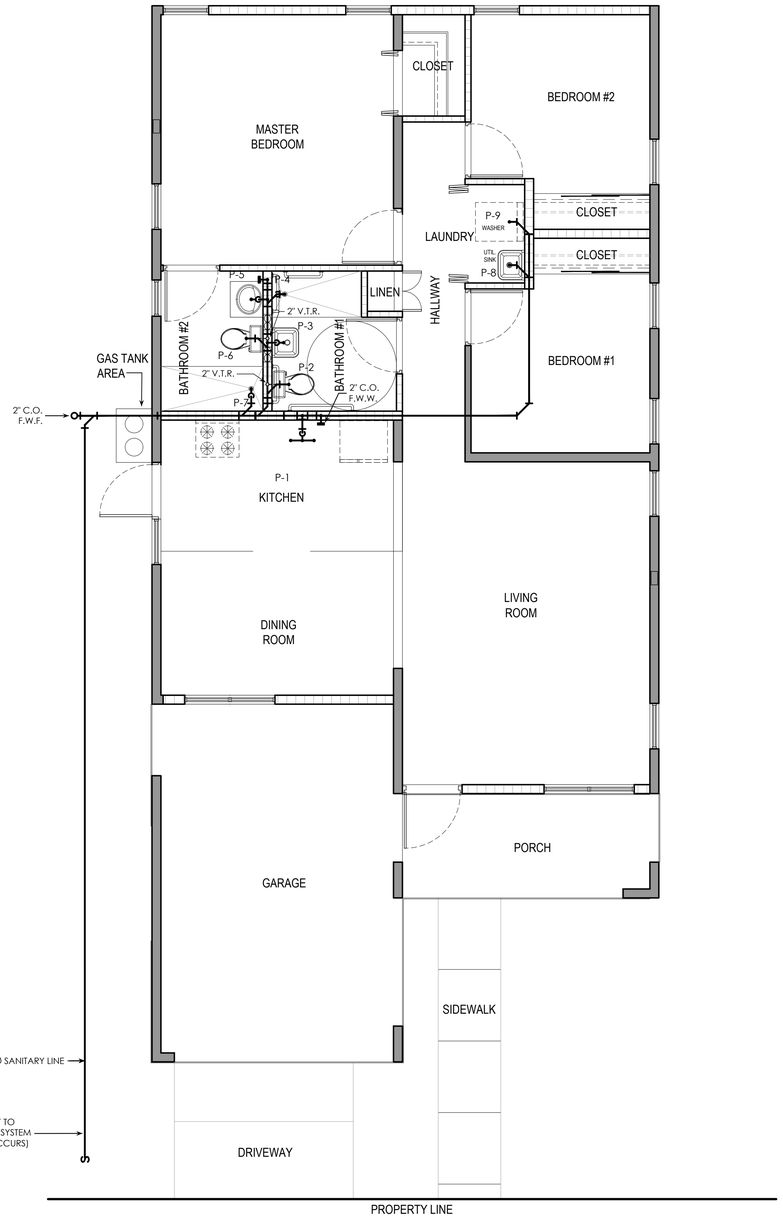
MODELO RB

PUERTO RICO

TITLE:

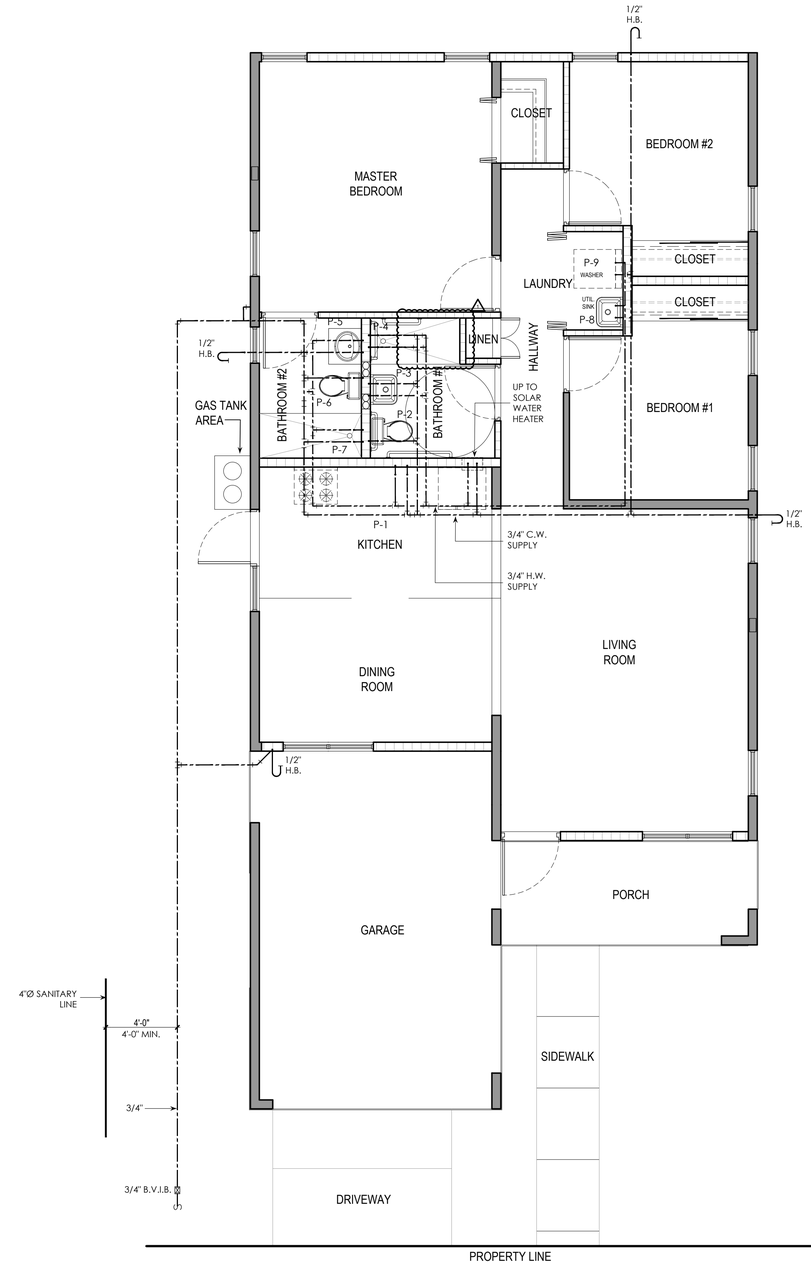
GENERAL NOTES AND DETAILS

PROJ MANAGER: R.B.	DATE:
DRAWN BY: R.B.	SHEET NO.: SN-1
SCALE: AS SHOWN	
PROJECT NO.: 23-41	



PLUMBING SANITARY LAYOUT AT FLOOR PLAN

SCALE: 1/4"=1'-0"



PLUMBING POTABLE WATER LAYOUT AT FLOOR PLAN

SCALE: 1/4"=1'-0"

arkitekts
jota—arkitekt, llc
ARCHITECTS ◆ PLANNERS ◆ CONSULTANTS
TEL. (787) 240-6000
PMB 749, 1353 AVE. LUIS VIGOREAUX
GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:
1	20/10/08	CONSTRUCTION PHASE CHANGES	J.H.T.

NOTE:

The general contractor shall verify all dimensions, levels and conditions at the site prior to the commencement of work. any discrepancies, errors or omissions on the plans shall be notified to the architect before commencement of any work, so that corrections can be made. if for any reason these said errors, ommissions etc. are not notified to the architect, the general contractor shall be solely responsible.

All designs, drawings and copies issued by the architect are property of the architect, and cannot be used or reproduced in any other manner or place, except for the purpose of its design intent.

If for any reason part or all of the architect's design is used without his/her consent, the parties involved shall pay the architects fees as required in full.

At no time shall the general contractor utilize for construction any drawing issued to him/her prior to construction unless signed and sealed by both "OGPe" (regulations and permits administration) and the architect.

CERTIFIED

CONSTRUCTION DRAWINGS FOR:

LADERAS DE PALMAS
(MODELO RB)

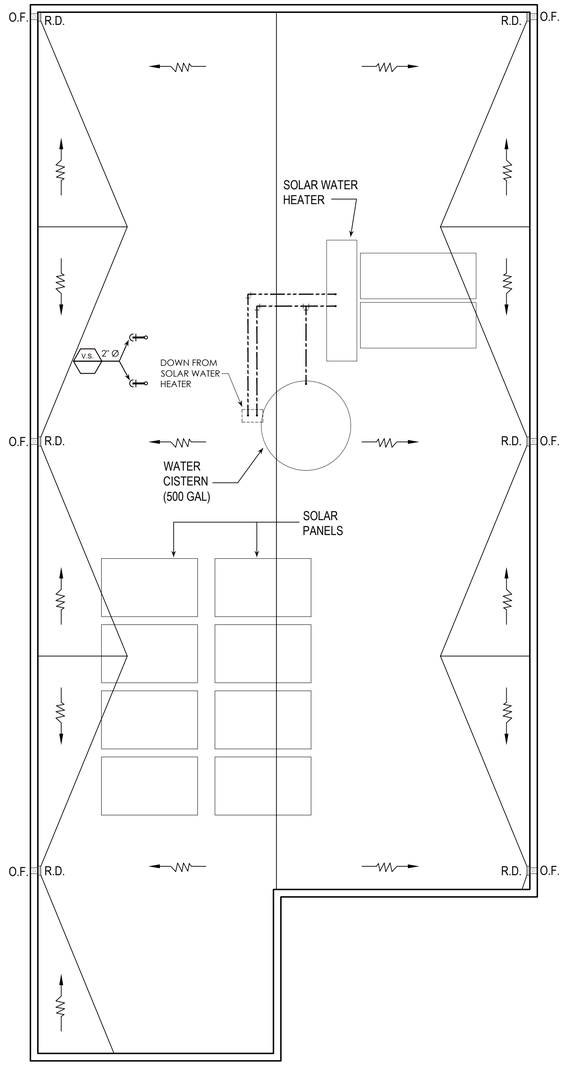
HUMACAO, PR

TITLE:

PLUMBING SANITARY & WATER POTABLE LAYOUT FLOOR PLANS

PROJ MANAGER: J.G.	DATE: 2023/08/25
DRAWN BY: JOTA	SHEET NO.: P-1
SCALE: AS SHOWN	
PROJECT NO.: 23-19	

PLOT DATE: Friday, August 25, 2023 11:42:11 AM FILE NAME: N:\DESIGN 2023\23-19_LADERAS DE PALMAS\01 DWG\06_MECH -PLUMP-1_LADERAS DE PALMAS_CD.DWG



ROOF DRAINAGE LAYOUT PLAN

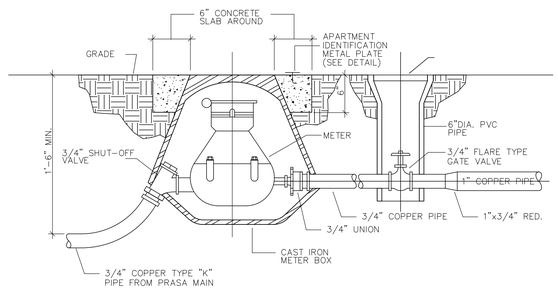
SCALE: 1/4"=1'-0"

LEGEND

- WASTE OR SOIL PIPING
- S.D. STORM DRAINAGE PIPING
- COLD WATER PIPING
- HOT WATER PIPING
- VENT PIPING
- C.O. CLEAN OUT FLUSH W/WALL
- C.O. CLEAN OUT FLUSH W/FLOOR OR FIN. GRADE
- R.D. ROOF DRAIN
- F.D. FLOOR DRAIN
- A.C. AIR CHAMBER
- 2"Ø W.S. WASTE STACK (NO. AT SIDE INDICATES DIA. OF PIPE)
- 3"Ø S.S. SOIL STACK (NO. AT SIDE INDICATES DIA. OF PIPE)
- 2"Ø V.S. VENT STACK (NO. AT SIDE INDICATES DIA. OF PIPE)
- 2"Ø S.V. STACK VENT (NO. AT SIDE INDICATES DIA. OF PIPE)
- 3"Ø R.L. RAIN LEADER (NO. AT SIDE INDICATES DIA OF PIPE)

GENERAL NOTES

1. ALL PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE LOCAL BUILDING CODE, THE NATIONAL PLUMBING CODE, (AND THE INTERNATIONAL PLUMBING CODE.
2. ALL PLUMBING MATERIAL SHALL BE AS INDICATED IN THE SPECIFICATIONS ISSUED FOR THIS PROJECT, EXCEPT AS OTHERWISE NOTED OR CALLED FOR ON THE DRAWINGS.
3. ALL VALVES SHALL BE PROVIDED WITH ACCESS IN THE WALL ON FLOOR FOR OPERATION AND MAINTENANCE ACCESS DOORS SHALL BE AS SPECIFIED OR REQUIRED BY THE ARCHITECT.
4. LONG SWEEP BENDS OR LONG SWEEP FITTINGS SHALL BE PROVIDED AT THE BASE OF ALL STACKS.
5. ALL HORIZONTAL PORTIONS OF SOIL & WASTE STACKS & BRANCHES, SHALL SLOPE 1/4" PER FT., EXCEPT AS OTHERRWISE SHOWN.
6. ALL PIPES SHALL BE ADEQUATELY SUPPORTED ON HANGERS OR CARRIERS AS REQUIRED. HANGERS SHALL BE PLACED 8 GT. APART FOR SIZES UP TO 4" AND 10 FT. APART ON SIZES LARGER THAN 4" EXCEPT THAT CAST IRON SOIL PIPE SHALL BE SUPPORTED AT EACH LENGTH VERTICAL RISERS AND STACKS SHALL BE SUPPORTED AT EACH FLOOR LEVEL WITH RISER CLAMPS, EXCEPT AS OTHERRWISE NOTED.
7. THE SIZES GIVEN IN FIXTURE SCHEDULE ARE MINIMUM AND SHALL BE USED EXCEPT THAT IN SOME CASES THEY SHALL BE INCREASES AS SHOWN ON ISOMETRICS OR AS REQUIRED BY THE PLUMBING CODE.
8. THE PLUMBING OCNTRACTOR SHALL PROVIDE ROUGHING-IN AND INSTALL ALL PLUMBING FIXTURES AND/OR EQUIPMENT WHICH IS SUPPLIED BY OTHERS.
9. ALL POTABLE WATER LINE SHALL BE C.P.V.C. OR V.E.G.A. TYPE

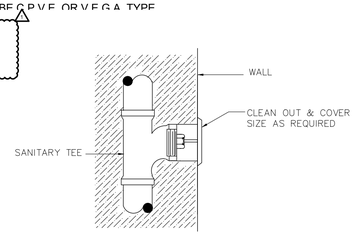


WATER METER & BOX INSTALLATION DET.

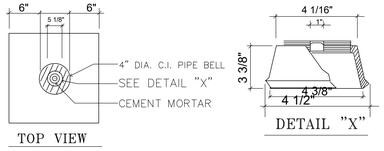
DIMENSION MARKED	VALVE SIZE							
	3"	2 1/2"	2"	1 1/2"	1 1/4"	1"	3/4"	1/2"
A	13	13	11	11	11	8	8	8
B	6	6	5	5	5	4	4	4
C	9	9	8	8	8	6	6	6
ACCSESS COVER SIZE	AS REQUIRED							

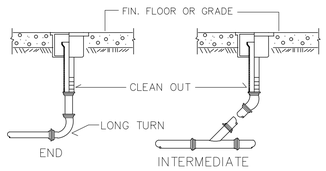
NOTE:

VALVES 2 1/2" & SMALLER SHALL BE EQUAL TO NIBCO MODEL 590-Y-66 ; FOR 3" VALVE USE NIBCO MODEL 590-Y-66; OR APROVED EQUAL.



CLEANOUT FLUSH W/WALL





CLEAN OUT DETAIL

N.T.S.

arkitekts
jota—arkitekt, llc
ARCHITECTS ◆ PLANNERS ◆ CONSULTANTS
TEL. (787) 240-6000
PMB 749, 1353 AVE. LUIS VIGOREAUX
GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:
1	20/10/08	CONSTRUCTION PHASE CHANGES	J.H.T.

NOTE:

The general contractor shall verify all dimensions, levels and conditions at the site prior to the commencement of work. any discrepancies, errors or omissions on the plans shall be notified to the architect before commencement of any work, so that corrections can be made. if for any reason these said errors, ommissions etc. are not notified to the architect, the general contractor shall be solely responsible.

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CERTIFIED

CONSTRUCTION DRAWINGS FOR:

LADERAS DE PALMAS

(MODELO RB)

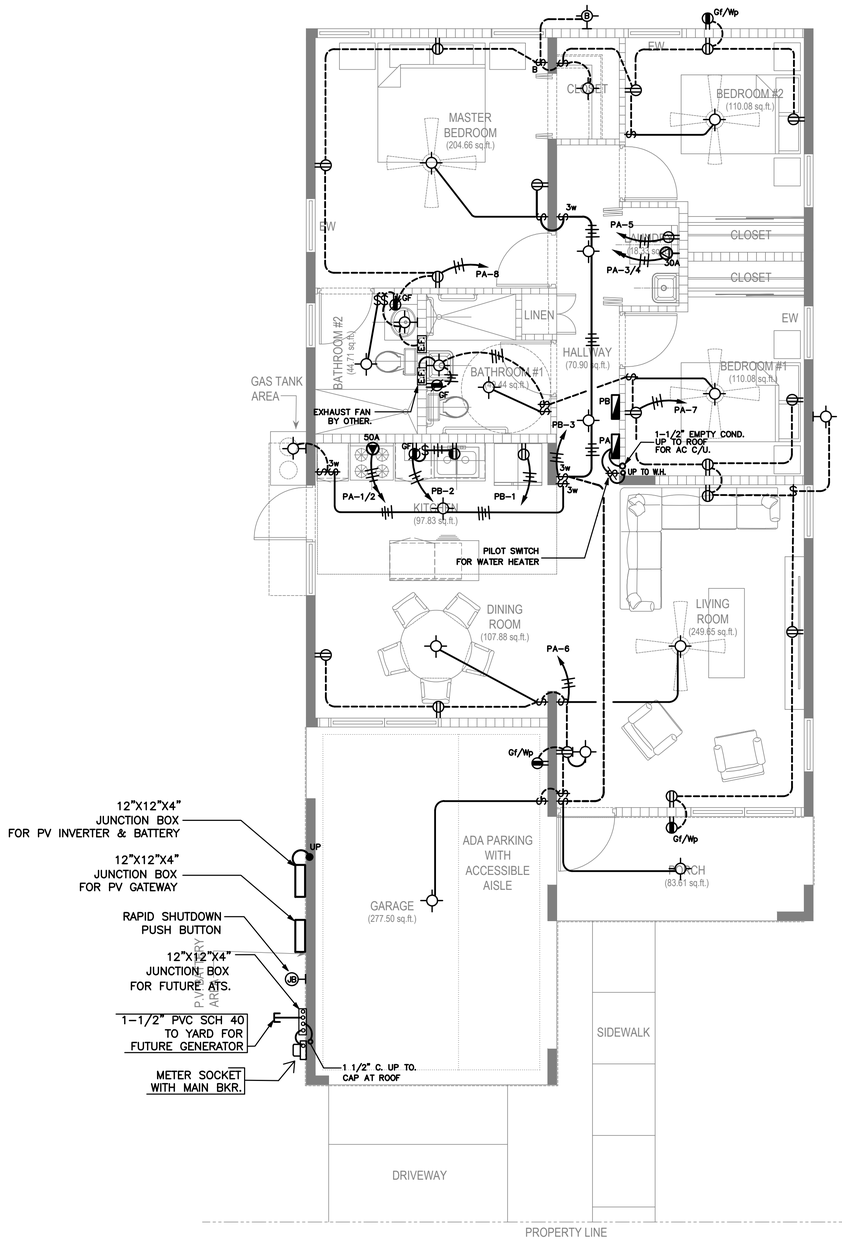
HUMACAO, PR

TITLE:

ROOF DRAINAGE LAYOUT PLAN

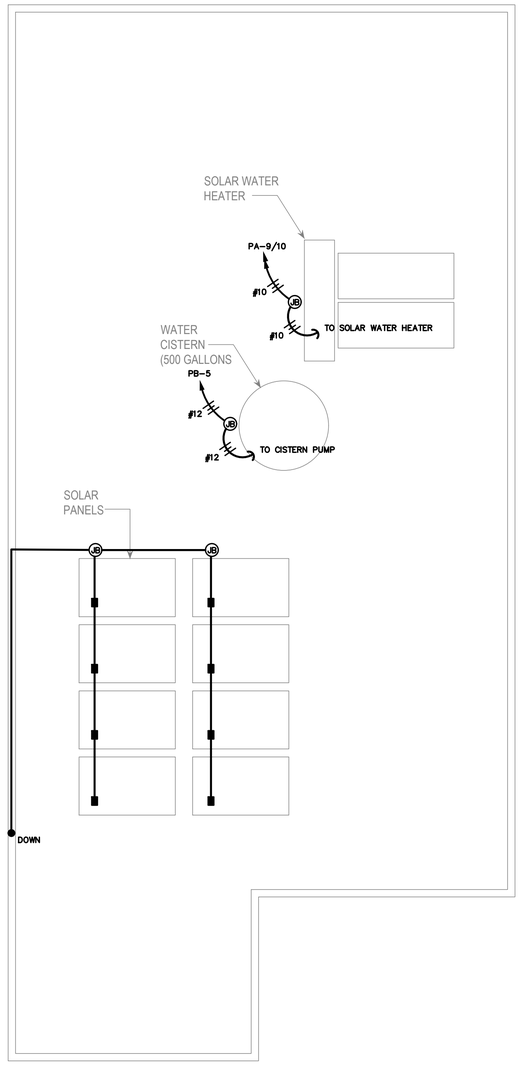
PROJ MANAGER: J.G.	DATE: 2023/08/25
DRAWN BY: JOTA	SHEET NO.: P-2
SCALE: AS SHOWN	
PROJECT NO.: 23-19	

PLOT DATE: Friday, August 25, 2023 11:42:17 AM FILE NAME: N:\DESIGN 2023\23-19_LADERAS DE PALMAS\01 DWGS\05. MECH.-PLUMP-1_LADERAS DE PALMAS_CD.DWG



GROUND FLOOR PLAN

SCALE:1/4"



ROOF PLAN

SCALE:1/4"

arkitekts
jota—arkitekt, llc
ARCHITECTS o PLANNERS o CONSULTANTS
TEL. (787) 240-6000
PMB 749, 1353 AVE. LUIS VIGOREAUX
GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:

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CERTIFIED

EDUARDO CHARDON CASALS
ELECTRICAL ENGINEER
LIC. NO 15346

CALLE METRO #314 PARED DEL SOL
DORADO, PUERTO RICO 00646
TEL. 791-1852

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la [Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mi, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

SCHEMATIC DRAWINGS FOR:

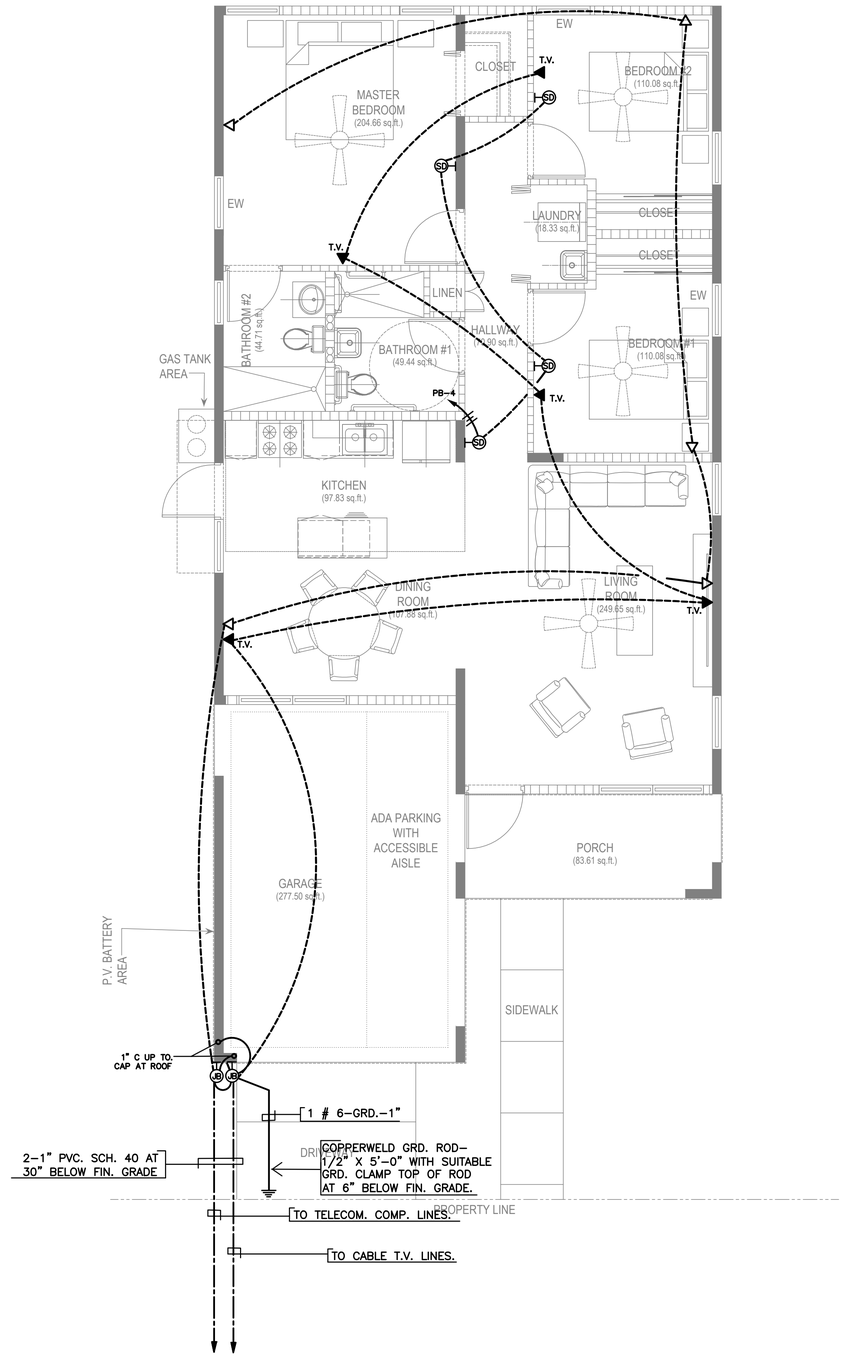
MODELO RB

TITLE:

ELECTRICAL FLOOR PLANS

PROJ MANAGER: J.R.	DATE: 2023
DRAWN BY: JOTA	SHEET NO.: E-101
SCALE: AS SHOWN	
PROJECT NO.:	

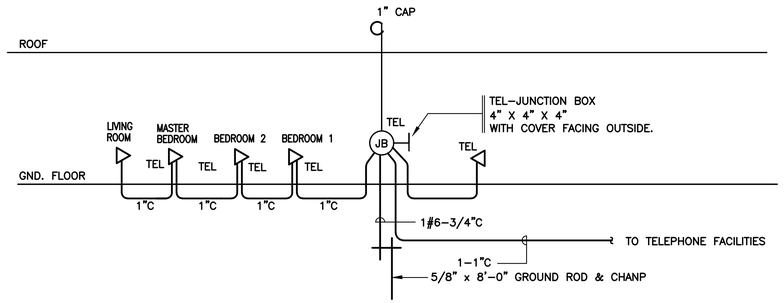
PLOT DATE: Sunday, August 20, 2023 1:48:46 PM FILE NAME:



TELECOMMUNICATION FLOOR PLAN

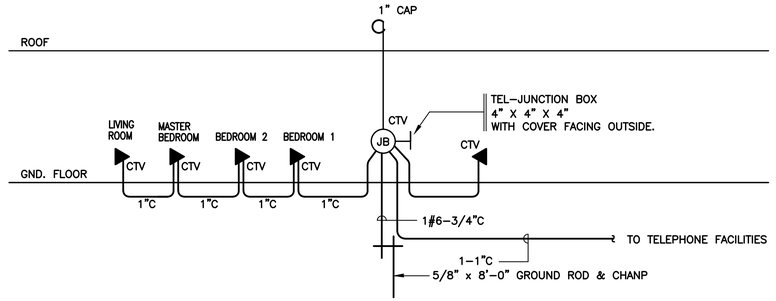
SCALE:1/4"

0 1' 2' 5' 10'



TELEPHONE DIAGRAM

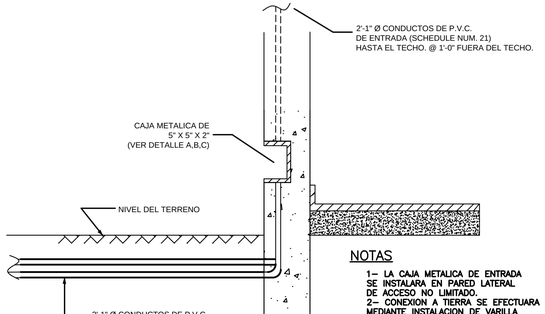
N.T.S.



CABLE T.V. DIAGRAM

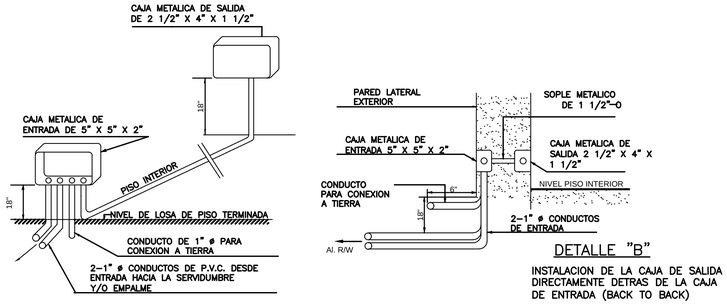
N.T.S.

*Room sequence may vary depending on Alternative Positioning of outside utility boxes.



NOTAS

1- LA CAJA METALICA DE ENTRADA SE INSTALARA EN PARED LATERAL DE ACCESO NO LIMITADO.
2- CONEXION A TIERRA SE EFECTUARA MEDIANTE INSTALACION DE VARILLA DE 8' X 5/8"-Ø EN COBRE.
3- TODO EL SISTEMA ESTARA VINCULA- DO A TIERRA EN TODO SUS PUNTOS.
4- TODO CONDUCTO DE 1"ø P.V.C. SERA SCHEDULE NUM. 21



DETALLE "B"

INSTALACION DE LA CAJA DE SALIDA DIRECTAMENTE DETRAS DE LA CAJA DE ENTRADA (BACK TO BACK)

TELEPHONE DETAILS

N.T.S.

arkitekts
jota-arkitekt, llc
ARCHITECTS o PLANNERS o CONSULTANTS
TEL. (787) 240-6000
PMB 749, 1353 AVE. LUIS VIGOREAUX
GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:

NOTE:

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CERTIFIED

EDUARDO CHARDON CASALS
ELECTRICAL ENGINEERS
LIC. NO 15346

CALLE METRO @14 PASEO DEL SOL
DORADO, PUERTO RICO 00646
TEL. 787-1020

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Publicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la [Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mi, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

SCHEMATIC DRAWINGS FOR:

MODELO RB

TITLE:

TELECOMMUNICATION FLOOR PLANS

PROJ MANAGER: J.R.	DATE: 2023
DRAWN BY: JOTA	SHEET NO.: E-101
SCALE: AS SHOWN	
PROJECT NO.:	

PLOT DATE: Sunday, August 20, 2023 1:48:26 PM FILE NAME: D:\DIBUJOS\ARQ. JOSE EVENCIO\CASAS DE MANOLETE\PROGRAMA FEMA INTERES SOCIAL\MODELO RB (PR REBUILDERS)\MODELO RB_MIT PROGRAM - STANDARD\E101_GROUND FLOOR_MODEL RB_SD.DWG

① GENERAL NOTES:

1. ---- UNLESS OTHERWISE INDICATED ALL WIRES AND CABLES SHALL BE #12 AWG. UNLESS OTHERWISE INDICATED ALL WIRES AND CABLES SHALL BE COPPER. UP TO #10 AWG USE WIRE. ALL LARGER SIZES SHALL BE CABLE CONTROL CABLES TO BE #14 AWG MIN SIZES.

2. ---- ALL WIRES & CABLES SHALL BE THWN/THHN–600V. INSULATION.

3. ---- PROVIDE GROUND WIRE IN ALL THE CONDUITS–600V. INSULATION.

4. ---- PROVIDE A #12 AWG GREEN CABLE JUMPER BETWEEN THE RECEPTACLE GROUNDING SCREW AND THE OUTLET BOX GROUNDING SCREW.

5. ---- ALL CONDUITS SHALL BE EMT WHEN INSTALLED ABOVE HUNG CEILING. ALL OTHER CONDUITS SHALL BE PVC SCH–40 INSTALLED IN CONCRETE.

6. ---- UNLESS OTHERWISE INDICATED ALL CONDUITS SHALL BE 3/4" IN DIAMETER.

7. ---- ALL UNDERGROUND CONDUIT COUPLING SHALL BE WATERTIGHT AN EXPANSION JOINT COUPLING OF THE REQUIRED TYPE AND SIZE SHALL BE PROVIDED WHENEVER A CONDUIT CROSSES AN EXPANSION JOINT.

8. ---- THE CONTRACTOR MUST MAKE SURE THAT THE ENTIRE SYSTEM HAS GROUND CONTINUITY.

9. ---- PROVIDE PLASTIC CONDUIT DIVIDERS IN ALL THE UNDERGROUND CONDUITS RUNS. THE MAXIMUN DISTANCE BETWEEN THE DIVIDERS NOT TO EXCEED 4'–0".

10. ---- ALL THE ELECTRIC INSTALLATION MUST BE DONE IN A NEAT AND WORKMANLIKE MANNER, ACCORDING TO THE LAST EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.) THE PUERTO RICO ELECTRICAL POWER AUTHORITY LATEST STANDARDS AND THE P.R. TELEPHONE COMPANY LATEST PRACTICE.

11. ---- ALL OUTLETS SHALL HAVE THEIR OWN INDEPENDENT OUTLET BOX WITH ITS APPROPIATE RAISED COVER, COVER PLATE AND FITTINGS. MINIMUM SIZE OF OUTLET BOX TO BE 4" SQUARE BY 1 1/2 DEEP EXACT SIZE OF OUTLET BOX TO BE DETERMINED ACCORDING TO THE MAXIMUN NUMBER OF CONDUCTORS IN THE BOX PER N.E.C. ARTICLES 370–SECTION 6.

12. ---- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL THE POWER AND CONTROL INTERCONNECTIONS AMONG ALL THE DIFFERENT PARTS OF THE AIR CONDITIONING SYSTEMS (FAN COILS/AHU'S, CONDENSING UNITS, THERMOSTATS, ETC.) THE CONTRACTOR SHALL ALSO PROVIDE ALL THE STARTING AND DISCONNECT EQUIPMENT FOR SAID SYSTEMS.

13. ---- THE CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME ACQUAINTED WITH THE EXISTING FIELD CONDITIONS IT SHALL BE THE DIRECT RESPONSABILITY OF THE CONTRACTOR TO BRING PROMPTLY TO THE ATTENTION OF THE ENGINEER ANY DISCREPANCIES BETWEEN THE EXISTING FIELD CONDITIONS AND THOSE THAT WERE USED FOR DESIGN PURPOSES THIS SHALL BE DONE BEFORE THE CONTRACTOR SUBMITS HIS BID SO THAT THE RECEIVED THE SUBMITTAL OF THE BID BY THE CONTRACTOR WILL BE HELD AS PROOF THAT THE CONTRACTOR UNDERSTANDS THROUGHLY AND COMPLETELY THE SCOPE OF THE WORK INVOLVED HAS FAMILIARIZED HIMSELF WITH THE EXISTING FIELD CONDITIONS AND HAS INCLUDED IN HIS BID ALL THE NECESSARY ITEMS TO CARRY OUT THE ELECTRICAL WORK NO ALLOWANCE WILL BE PERMITTED ON THIS MATTER AFTER THE BIDS ARE RECEIVED.

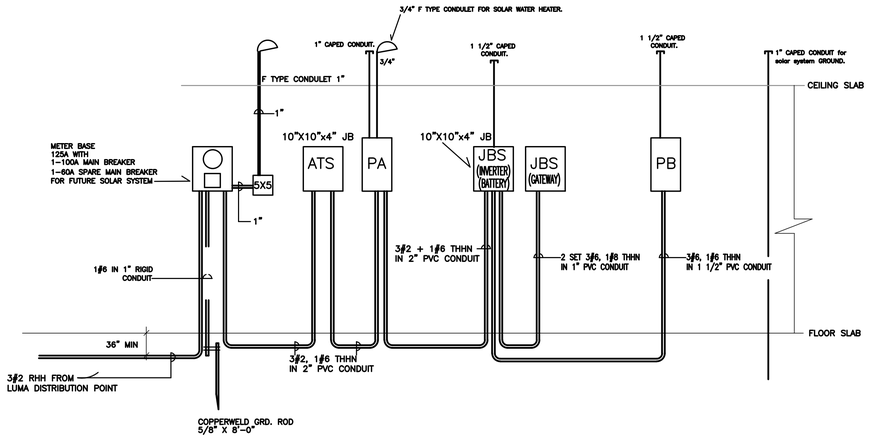
14. ---- ALL THE SWITCHES AND RECEPTACLES SHALL BE WHITE COLORED WITH WHITE COLORED BAKELITE COVER PLATES EXCEPT THE WEATHERPROOF OUTLETS WHICH SHALL HAVE THEIR STANDARD GRAY COVER PLATES.

PREPA COMMUNICATION NOTICE 16–01

1) LA BASE DEL MEDIDOR PARA TODA UNIDAD DE VIVIENDA TIENE QUE PROVEER ESPACIO PARA LA INSTALACION DE UN INTERRUPTOR (BREAKER) DE DOS POLOS DE 60A, PARA LA CONEXION FUTURA DE UN SISTEMA DE GENERACION DE ENERGIA CON FUENTES RENOVABLE.
2) INSTALACION DE UNA CAJA DE EMPALME (JUNCTION BOX) DE 5"x5"x2–1/2" CONECTADA A LA BASE DEL MEDIDOR POR UN CONDUCTO DE PVC DE 1" DE DIAMETRO VACIO. SE REQUIERE QUE ESTA CAJA DE EMPALME TENGA UNA CUBIERTA A PRUEBA DE AGUA PARA UN INTERRUPTOR FUTURO. ESTA SE TIENE QUE LOCALIZAR EN EL INTERIOR, ACCESIBLE AL PERSONAL DE LA AUTORIDAD.
3) INSTALACION DE UN CONDUCTO DE PVC DE 1" DE DIAMETRO VACIO, DESDE LA CAJA DE EMPALME DE 5"x5"x2–1/2" HASTA LA PARTE DEL TECHO DONDE SE UBICARIA EL SISTEMA DE GENERACION DE ENERGIA CON FUENTES RENOVABLE, DEJANDO 6" DE CONDUCTO SOBRE EL NIVEL DE TECHO. ESTE CONDUCTO SE INSTALARA CON UN CABLE DE TRACCION (PULL WIRE) PARA LA INSTALACION FUTURA DE CABLES, Y SE DEJARA DEBIDAMENTE TAPADO Y SELLADO.
4) (OPCIONAL) INSTALACION DE UN CONDUCTO DE PVC DE 1/2" DE DIAMETRO VACIO DESDE EL TECHO HASTA EL NIVEL DE TIERRA, PARA INSTALACION FUTURA DEL SISTEMA DE CONEXION A TIERRA, QUE SE DEJARA DEBIDAMENTE TAPADO Y SELLADO.

NOTE:

CONTRACTOR IS RESPONSIBLE FOR THE ELECTRICAL INSTALLATION TO COMPLY WITH THE LATEST NATIONAL ELECTRICAL CODE, NETPR AND LUMA CONSTRUCTION STANDARDS. ALL CONDUCTORS MUST BE COPPER. ALL DEVICES MUST BE GROUNDED. DEVICES TO BE LEVITON, HUBBELL OR SIMILAR. REBRANDED OR NON-UL LISTED DEVICES ARE NOT PERMITTED.



SINGLE LINE DIAGRAM

① (PA) PANELBOARD SCHEDULE

PANELBOARD DESIGNATION	CKT. NO.	BREAKER FRAME	BREAKER SIZE	BREAKER POLES	DESCRIPTION	CONDUCTOR SIZE & CONDUIT
(PA)– 1PH–3W– 120/240V– 125AMPS BUS BARS FLUSH MTD. GRD. BAR 10000 AMP SYM. INT. CAP. GE, EATON OR SQUARE D 24 SPACES PANELBOARD	C–1,2	100	50	2	RANGE	3#6 & 1#10 CU, 1" PVC SCH 40
	C–3,4	100	30	2	DRYER	4#10 CU, 3/4" PVC
	C–5	100	20	1	WASHER	3#12 CU, 3/4" PVC
	C–6,7,8	100	20	1	LIGHTING & RECEPTACLES	3#12 CU, 3/4" PVC
	C–9/10	100	30	2	SOLAR WH	4#10 CU, 3/4" PVC
	C–11/12	100	50	2	CRITICAL LOADS LOADCENTER PB	4#6 CU, 1 1/2" PVC
	C–13/14	100	30	2	MASTER BED. A/C	3#10 CU, 3/4" PVC
	C–13/14	100	20	2	BEDROOM #1. A/C	3#12 CU, 3/4" PVC
	C–15/16	100	20	2	BEDROOM #2. A/C	3#12 CU, 3/4" PVC
	C–17	100	20	1	LIGHTING & RECEPTACLES	3#12 CU, 3/4" PVC
	C–18,19	100	20	1	SPARE	3#12 CU, 3/4" PVC
	C–20–24	100			SPACE	

① (PB) PANELBOARD SCHEDULE

PANELBOARD DESIGNATION	CKT. NO.	BREAKER FRAME	BREAKER SIZE	BREAKER POLES	DESCRIPTION	CONDUCTOR SIZE & CONDUIT
(PB)– 1PH–3W– 120/240V– 125AMPS BUS BARS FLUSH MTD. GRD. BAR 10000 AMP SYM. INT. CAP. GE, EATON OR SQUARE D 24 SPACES PANELBOARD	C–1	100	20	1	REFRIGERATOR	3#12 CU, 3/4" PVC
	C–2	100	20	1	RECEPTACLES(KITCHEN)	3#12 CU, 3/4" PVC
	C–3	100	20	1	LIGHTING & RECEPTACLE	3#12 CU, 3/4" PVC
	C–4	100	20	1	SMOKE DETECTOR	3#12 CU, 3/4" PVC
	C–5	100	20	1	WATER PUMP (CISTERN)	3#12 CU, 3/4" PVC

* THROUGH TYPE 2 ARC FAULT CIRCUIT INTERRUPTER.

SYMBOL LEGEND

- 15A–125V TAMPER RESISTANT DUPLEX RECEPTACLE LEVITON PART. No. T53205000 (ITEM T5320–W) WITH THERMOPLASTIC NYLON WALLPLATE LEVITON No. 80703122000 (80703–W).
- 15A–125V TAMPER RESISTANT GFCI RECEPTACLE LEVITON PART. No. W7599012000 (ITEM W7599–TRW) WITH THERMOPLASTIC NYLON WALLPLATE LEVITON No. OPJ26022000 (PJ26–W).
- WP — DENOTES WEATHER RESISTANT COVER PLATE WITH THERMOPLASTIC NYLON WALLPLATE LEVITON No. 04976003000 (4976–W).
- $ — 15A–120V TOGGLE SWITCH LEVITON No. 01451218000 (1451–WCP) WITH NYLON WALPLATE LEVITON No. OOPJ1022000 (PJ1–W).
- $ — 15A–120V DUPLEX STYLE SINGLE–POLE AC COMBINATION SWITCH LEVITON No. 05224021000 (5224–ZW) WITH NYLON WALLPLATE LEVITON No. 80703122000 (80703–W).
- $ 3W — 15A–120V TOGGLE FRAMED 3W SWITCH LEVITON No. 01453588000 (1453–WCP) WITH NYLON COVER PLATE No. OOPJ1022000 (PJ1–W).
- $ 3W — DEPENDING ON SWITCH COMBINATION USE 2 GANG TOGGLE, 2 GANG–DUPLEX OR 2 GANG, 1 TOGGLE, 1–DUPLEX THERMOPLASTIC NYLON COVER PLATES. LEVITON No. OOPJ2902000 (PJ2–W) No. 80705902000 (80705–W) OR No. OPJ82902000 (PJ82–W)
- CEILING MOUNT OUTLET CONCRETE BOX. SEE LUMINAIRE SCHEDULE BELOW.
- WALL MOUNT OUTLET BOX. SEE LUMINAIRE SCHEDULE BELOW.
- 30 AMP. 250V FLUSH MTG. RECEPTACLE LEVITON PART. No. 05207961000 (5207) WITH STAINLESS STEEL WALLPLATE LEVITON No. 84004004000 (84004–40)
- 50 AMP. 250V FLUSH MTG. RECEPTACLE LEVITON PART. No. 05206961000 (5206) WITH STAINLESS STEEL WALLPLATE LEVITON No. 84004004000 (84004–40)
- TELEPHONE 4"X4" OUTLET BOX WITH BLANK COVER PLATE. LEVITON No. OPJ13002000 (PJ13–W)
- CTV 4"X4" OUTLET BOX WITH BLANK COVER PLATE. LEVITON No. OPJ13002000 (PJ13–W)
- GE LOADCENTER 24 SPACES, 120/240V – TLM 1212CCU 125A
- (J) 4"X4" JUNCTION BOX WITH NYLON COVER PLATE
- (SD) SMOKE DETECTOR 120V SIMILAR OR EQUAL TO PIREX 4618
- FLOOR SLAB CONDUIT OF SPECIFIED DIAMETER
- WALL OR CEILING CONDUIT OF SPECIFIED DIAMETER
- PILOT LIGHT SWITCH, 240V 30A HUBBELL PART NO. HBL–3032–PL.

LUMINAIRE SCHEDULE

- 52" ENERGY STAR CEILING FAN, LUMENCIA LL52 1032 ES WH
- ①1 CEILING MOUNTED LIGHT FIXTURE. ENERGY STAR NUVO 62–1210
- ①2 CEILING MOUNTED LIGHT FIXTURE. ENERGY STAR NUVO 62–1664
- ①3 CEILING MOUNTED PUCK LIGHT FIXTURE. ENERGY STAR NUVO 62–1581
- ①4 WALL MOUNTED LIGHT FIXTURE. ENERGY STAR NUVO 62–1388

NOTE: Provide Arc Fault Circuit Interrupter protection for all 20A circuits as required by latest NEC. Provide GFCI Breaker Protection for washers as required by NEC.

Notes:
1. Conduits in contact with earth must be PVC, imbedded in concrete use PVC. Use RGS when exposed. Follow NEC grounding codes and fill ratios as applicable. Minimum size 3/4" PVC. Use UL or ETL listed conduit only.
2. Conductors must be copper stranded UL or ETL Listed.

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jota–arkitekt, llc
ARCHITECTS o PLANNERS o CONSULTANTS
TEL. (787) 240–6000
PMB 749, 1353 AVE. LUIS VIGOREAUX
GUAYNABO, P.R. 00966
email : info@jotapr.com

REV.	DATE:	DESCRIPTION:	BY:

NOTE:

The general contractor shall verify all dimensions, levels and conditions at the site prior to the commencement of work. any discrepancies, errors or omissions on the plans shall be notified to the architect before commencement of any work, so that corrections can be made. if for any reason these said errors, ommissions etc. are not notified to the architect, the general contractor shall be solely responsible.

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If for any reason part or all of the architect's design is used without his/her consent, the parties involved shall pay the architects fees as required in full.

At no time shall the general contractor utilize for construction any drawing issued to him/her prior to construction unless signed and sealed by both "OGPe" (regulations and permits administration) and the architect.

CERTIFIED

EDUARDO CHARDON CASALS
ELECTRICAL ENGINEERS
LIC. NO 15346
CALLE METRO #214 PARCO DEL SOL
DORADO, PUERTO RICO 00646
TEL. 791–1920

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la [Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mi, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

SCHEMATIC DRAWINGS FOR:

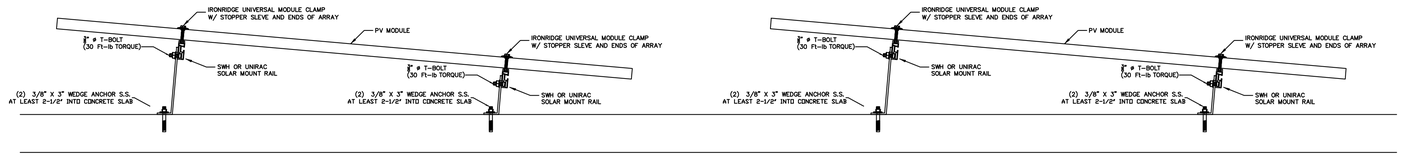
MODELO RB

TITLE:

ELECTRICAL NOTES AND DETAILS

PROJ MANAGER: J.R.	DATE: 2023
DRAWN BY: JOTA	SHEET NO.: E-103
SCALE: AS SHOWN	
PROJECT NO.:	

PLOT DATE: Sunday, August 20, 2023 1:48:03 PM FILE NAME: D:\DIBUJOS\ARQ. JOSE EVENCIO\CASAS DE MANOLETE\PROGRAMA INTERES SOCIAL\MODELO RB (PR REBUILDERS)\MODELO RB_MIT PROGRAM - STANDARD\E101_GROUND FLOOR_MODEL RB_SD.DWG

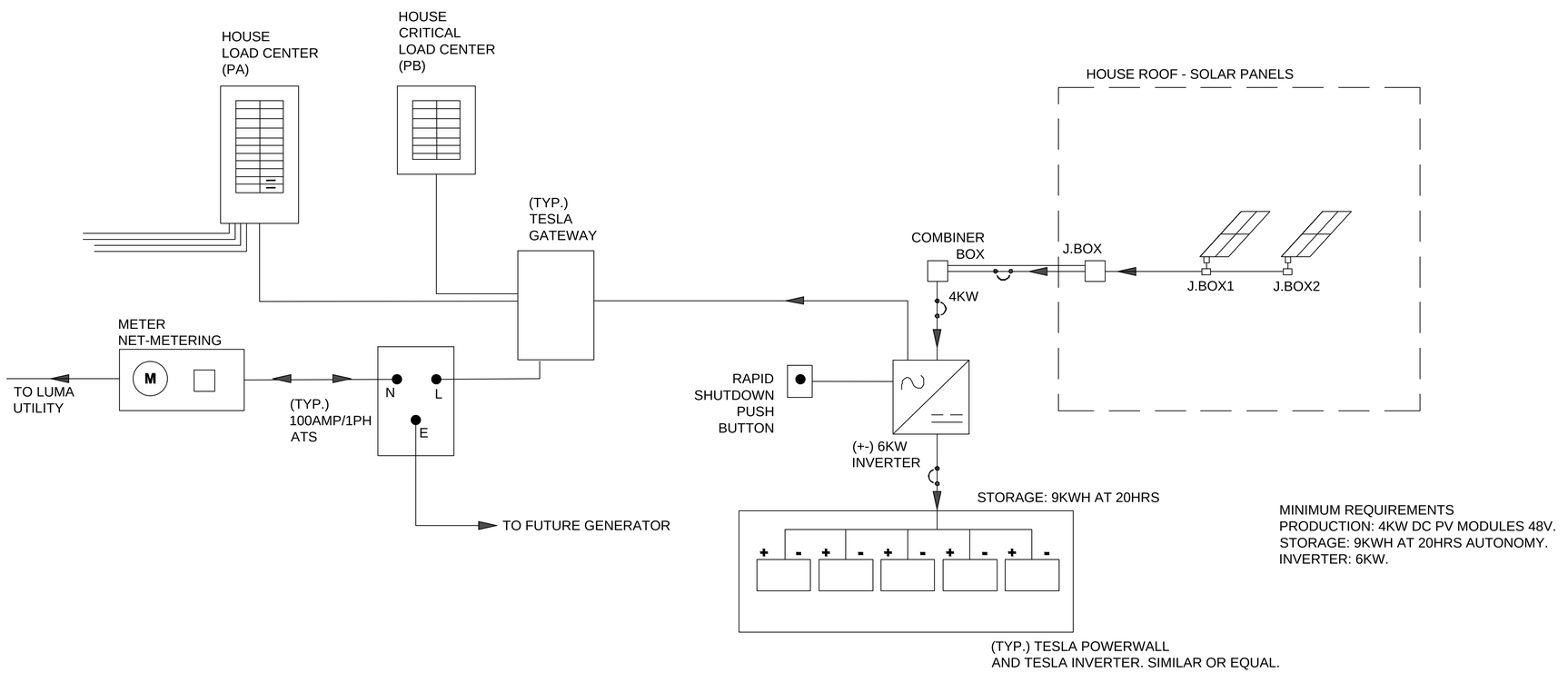


5° TILT - TYPICAL ANCHORING & RACKING DETAIL

NOT TO SCALE

ANCHORING NOTES:

1. ALL ROOF PERFORATION SHALL FILLED WITH CONSTRUTION SEALANT EQUAL OR SIMILAR TO SIKAFLEX 1A.
2. ROOF ATTACHMENT EQUAL SIMILAR HILTI STAINLESS STEEL KWIK BOLT 3 EXPANSION 3/8" X 3-1/2" ANCHOR AND SHALL EMBEDDED AT LEAST 2-1/2" INTO EXISTING CONCRETE SLAB .



MINIMUM REQUIREMENTS
PRODUCTION: 4KW DC PV MODULES 48V.
STORAGE: 9KWH AT 20HRS AUTONOMY.
INVERTER: 6KW.

TYPICAL PV - ONE LINE DIAGRAM

SCALE:N.T.S.

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REV.	DATE:	DESCRIPTION:	BY:

NOTE:

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TEL. 791-1992

Yo, Ing. Eduardo Chardon Casals, lic 15346, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Publicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la [Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada; según aplique]. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

SCHEMATIC DRAWINGS FOR:

MODELO RB

TITLE:

PV ONE LINE DIAGRAM AND DETAILS.

PROJ MANAGER: J.R.	DATE: 2023
DRAWN BY: JOTA	SHEET NO.: E-104
SCALE: AS SHOWN	
PROJECT NO.:	

PLOT DATE: Sunday, August 20, 2023 1:47:37 PM FILE NAME: D:\DIBUJOS\ARQ. JOSE EVENCIO\CASAS DE MANOLETE\PROGRAMA FEMA INTERES SOCIAL\MODELO RB (PR REBUILDERS)\MODELO RB_MIT PROGRAM - STANDARD\E101_GROUND FLOOR_MODEL RB_SD.DWG

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

Exhibit 19

Field Inspection

Laderas de Palmas

SF-HDI-00012

Field Visit Checklist & Site Evaluation								
Project Name:	Laderas de Palma			Latitude	18.120370			
First Name:	Carlos	Last Name:	Aldarondo	Longitude	-65.822607			
Street Address	PR-3, Km. 33.7 Cataño Ward			Apt/Suite				
City:	Humacao			State:	PR	Zip:	00791	
Date of Visit:	06/02/2024		Field Visit Conducted By:	Gamaliel Rivera Rivera				

EXISTING ENVIRONMENTAL CONDITIONS ON & AROUND SITE		
Levee/Flood Control Structures (Levees, T-walls, pumping stations, etc.)		
Observations	Site Specific	Area
No Apply	No Apply	No Apply
Toxic Chemicals & Radioactive Materials		
Petroleum or Chemical Storage		
	Site Specific	Area
Is there any evidence or indication of an underground storage tank (UST) may be located on site?	There No evidence or indication of an underground storage tank (UST) may be located on site	No Apply
If yes, are they in use?	Not Apply	No Apply
Are there any out-of-service underground fuel tanks?	There No out of service underground fuel tanks on the site	No Apply
Is there any evidence that any AST on the property are leaking?	There No AST on the property	No Apply
Polychlorinated Biphenyls (PCB): N/A		
	Site Specific	Area
Is there any evidence or indication of leaking electrical equipment (transformer - ground or pole mounted, capacitor, or hydraulic equipment) present on site?	There is no evidence or indication of leaking electrical equipment (transformer - ground or pole mounted, capacitor, or hydraulic equipment) present on site	No Apply

Hazardous Operations		
	Site Specific	Area
Is there any evidence of manufacturing operations utilizing or producing hazardous substances at or in close proximity to the site?	There No evidence of manufacturing operations utilizing or producing hazardous substances at or in close proximity to the site	No Apply
Is there any evidence or indication that past operations located on or in close proximity to the property used hazardous substances or radiological materials that may have been released into the environment?	There no evidence or indication that past operations located on or in close proximity to the property used hazardous substances or radiological materials that may have been released into the environment	No Apply

Notes/Observations:

The only manufacturing operation close proximity to the site are:

1. Pan Pepin Company: Pan Pepin is a privately held bread manufacturer and distributor based in Puerto Rico.

2. Empire Gas Company: Empire Gas Company is a full-service propane company proud to be serving Puerto Rico's propane industry since 1967

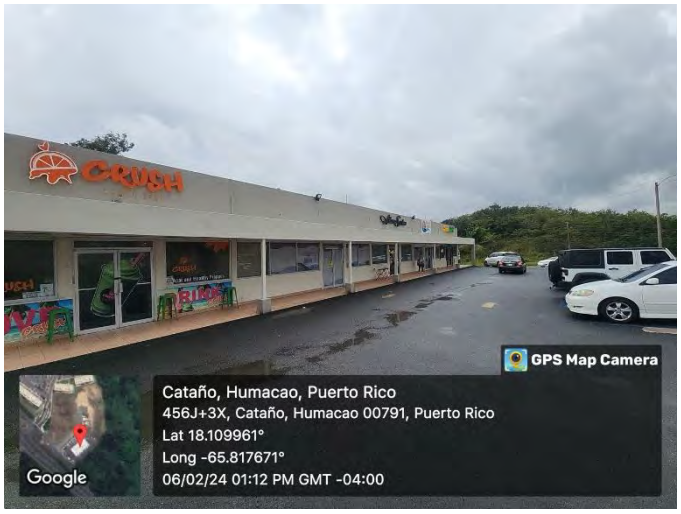
SITE PHOTOGRAPHS	Laderas de Palmas
Lat: 18.120370, Lon: -65.822670	

NEPAssist Map	Laderas de Palmas
Lat: 18.120370, Lon: -65.822670	

INSPECTION PHOTOGRAPHS	Laderas de Palma- Site Photos
Lat: 18.120370, Lon: -65.822670	

Recreational Area-Near the Project

Commercial Area



Telecommunication Towers

Industries Near to Project Area Site

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

Exhibit 20

Project Permits and Endorsements (20a @ 20h)

Laderas de Palmas

SF-HDI-00012

Exhibit 20 a

ESTADO LIBRE ASOCIADO DE PUERTO RICO
Oficina del Gobernador
JUNTA DE PLANIFICACIÓN

28 de enero de 2005

Séptima Extensión a la
Consulta Número 2000-51-0202-JPU

RESOLUCIÓN

Seta Limited Paternship S.E., por conducto del ingeniero José A. Meléndez, amparándose en la reglamentación vigente, sometió a la consideración de esta Junta de Planificación la Consulta Número 2000-51-0202-JPU para la ubicación de un proyecto residencial unifamiliar en una finca con cabida de 40.65 cuerdas que radica en la Carretera Estatal Número 3, kilómetro 33.7 en los Barrios Cataño y Buena Vista del Municipio de Humacao.

Para considerar los planteamientos y pruebas de las partes interesadas en la consulta que nos ocupa se celebró una vista pública el día 13 de octubre de 2004, a las 10:00 AM en el Salón de Subastas de la Casa Alcaldía del Municipio de Humacao.

De expediente del caso de la prueba documental y testifical aportada se llega a las siguientes:

DETERMINACIONES DE HECHOS

1. El predio objeto de consulta tiene una cabida de 40.6529 cuerdas, y radica en la Carretera Estatal Número 3, kilómetro 33.7, en el Barrio Cataño del Municipio de Humacao. Está delimitado: por el Norte, con la Sucesión Juan M. Beltrán, Sucesión Juan Rivera y por Alejandrino Ortiz en el noroeste; por el Sur, con la finca segregada de Umpierre & Rodríguez SE, con la Carretera Estatal Número 910, y por la Iglesia Católica, y Evaristo Silva por el Suroeste; por el Oeste, con Gervasio Rivera Ortiz, Evaristo Silva, Comunidad Rural Pepita López, Sucesión de Juan M. Beltrán; y por el Este, con la Carretera Estatal Número 3 y con parcelas de Iván García, Adelaida Rivera y Alfonso Cruz Díaz.

2. El desarrollo propuesto originalmente consistía de un proyecto de doscientos cincuenta y cinco (255) unidades de vivienda, en solares con cabidas mínimas de trescientos veinticinco (325) metros cuadrados, el cual ocuparía aproximadamente cuarenta (40) cuerdas de una finca con una cabida total de ochenta y cuatro (84) cuerdas. Este desarrollo contemplaba la canalización y relocalización de la Quebrada Cataño, lo cual no fue recomendado por el Departamento de Recursos Naturales y Ambientales, por lo que la parte proponente rediseñó el proyecto.

3. El proyecto según rediseñado, propone la ubicación de un desarrollo residencial unifamiliar que consiste en 154 unidades de vivienda en solares con cabida mínima de 325 metros cuadrados. El proyecto contará con acceso controlado y facilidades recreativas, incluyendo áreas de juego para niños, cancha de baloncesto, áreas verdes y gazebo. El mismo ubica en 23.9318 cuerdas de la totalidad de la finca, dejando en su estado natural 4.3260 cuerdas, donde se encuentra el cauce de la Quebrada Cataño y el ecosistema del

Estado Libre Asociado de Puerto Rico
OFICINA DEL GOBERNADOR
JUNTA DE PLANIFICACION

Bosque de Galería, según fue requerido por el Departamento de Recursos Naturales y Ambientales (DRNA).

4. El área aledaña al predio objeto de consulta muestra un comportamiento mayormente residencial. Dicho predio colinda con un Distrito AD – Área Desarrollada. En dicho sector ubican las Comunidades Pepita López, Fernández y la Urbanización Miradero.

5. El Plan Territorial del Municipio de Humacao fue aprobado el 7 de febrero de 2003. De otra parte, el Municipio de Humacao y el Gobierno Central otorgaron un convenio el 20 de octubre de 2004, en el cual se le transfirieron las Jerarquías I a IV de ordenación territorial a dicho municipio.

6. El predio objeto de consulta ubica en una zona no inundable, según las Hojas Número 30-C, con vigencia de 30 de octubre de 1987, y Número 45-A, con vigencia de 1 de junio de 1999, del Mapa de Zonas Susceptibles a Inundaciones de Puerto Rico.

7. La parte proponente indicó que durante la construcción del proyecto se generarán desperdicios sólidos no peligrosos como madera, hormigón, cartón, y varilla. Dichos desperdicios serán depositados en contenedores ubicados en el área del proyecto, y serán removidos por una compañía privada. Durante la operación se generarán desperdicios sólidos no peligrosos domésticos, los cuales serán recogidos por el municipio. Además, tendrán un área de reciclaje para cumplir con las reglamentaciones sobre reciclaje.

8. La parte proponente indicó que el acceso vehicular propuesto para el proyecto será a través de la Carretera Estatal Número 3.

9. En cuanto al aspecto de infraestructura lo enumeramos a continuación:

   a. La Autoridad de Carreteras y Transportación (ACT), en carta de 29 de marzo de 2000, emitió sus requerimientos en relación a la propuesta.

      La parte proponente indicó durante la vista pública que cumplirán con las condiciones establecidas por la ACT, y que se cumplirá con el estudio de ruido solicitado en dicha comunicación cuando se preparen los planos finales.

   b. La Autoridad de Energía Eléctrica (AEE), mediante comunicación de 28 de marzo de 2000, expresó no tener objeción a la aprobación del desarrollo propuesto. No obstante, realizará un estudio para indicarle a la parte proponente el punto de conexión y las aportaciones a las que estará sujeto el proyecto para mejorar el sistema eléctrico existente. Además, indicó que el proponente deberá someter la carga en KVA que absorberá el proyecto y un itinerario de las fechas en que entrará la nueva carga a nuestro sistema; y mostrar y respetar las servidumbres de paso de líneas eléctricas que afectan al proyecto

   c. La Autoridad de Acueductos y Alcantarillados (AAA) en carta del 27 de diciembre de 2002 hace referencia a la carta del 8 de junio de 2001, en la cual indicaba las condiciones establecidas por la AAA para prestar los servicios de agua y alcantarillado sanitario al proyecto de referencia; y que la referida carta tendría vigencia de un (1) año adicional, a partir de la presente comunicación.

En la carta del 8 de junio de 2001, la AAA indicó que para poder prestar el servicio de agua a este proyecto los dueños del mismo deberán hincar y desarrollar un pozo profundo de 100 gpm. con todos los requisitos de la A.A.A. y las Agencias. Otra alternativa sería esperar por las mejoras a realizarse en la Planta de Filtros de Río Blanco incluyendo el embalse. Luego de esto, se podrían conectar a la cañería de 6" de diámetro, existente frente al lugar del proyecto. Además, indicó que los dueños del proyecto deberán aportar a esa Autoridad la cantidad de mil dólares ($1,000.00) por cada unidad de vivienda, o su equivalente a conectarse y hacer uso del sistema de distribución de agua para mejoras a dicho sistema.

En cuanto al servicio de alcantarillado sanitario, indicó que el servicio podrá ser prestado mediante conexión a la troncal existente cerca del lugar del proyecto. Además, indicó las aportaciones correspondientes con las cuales deberá cumplir el dueño.

La parte proponente indicó que el sistema de agua potable será conectado al sistema existente en la Carr. PR-3, construido a aproximadamente quinientos (500) metros frente al proyecto y que el sistema sanitario será conectado a la troncal sanitaria instalada en el predio.

10. El Instituto de Cultura Puertorriqueña (ICP), en su carta del 6 de abril de 2000, indicó que el proponente deberá radicar en la División de Arqueología de dicho Instituto, una solicitud de evaluación arqueológica para efectos de endoso.

11. El Departamento de Recursos Naturales y Ambientales (DRNA) emitió sus comentarios a través de varias cartas. Mediante comunicación del 7 de diciembre de 2001, expresó lo siguiente:

"La evaluación ambiental sometida es de nuestra conformidad en principio. El Departamento de Recursos Naturales y Ambientales no recomienda el desvío y canalización propuesta de la Quebrada Cataño. A lo largo de la Quebrada Cataño ubica un bosque de Galería (Bosque impresionante) y una serie de humedales ribereños asociados al cuerpo de agua. Entendemos que desviar dicha quebrada y destruir el bosque de Galería y los humedales ribereños conlleva un impacto considerable a estos ecosistemas sensitivos.

El Departamento de Recursos Naturales y Ambientales no tiene objeción a la etapa de ubicación del proyecto propuesto, siempre y cuando cumpla con las siguientes condiciones:

- El bosque de Galería y los humedales ribereños asociados a la Quebrada Cataño deberán permanecer inalterados. Se recomienda dejar una zona de amortiguamiento no menor de 5 metros a partir del límite exterior del bosque. A tales efectos, se deberá rediseñar el proyecto de forma tal que la segregación de solares no afecte estos ecosistemas sensitivos.

  De requerir acceso a través de la quebrada para llegar a los solares del noroeste del predio, el proponente deberá someter en etapa subsiguiente, los planos y cómputos hidrológicos hidráulicos que determinaron el diseño de la obra. Dichos cómputos deberán estar basados en una tormenta con un periodo de recurrencia de 100 años.

- Deberá cumplir con las disposiciones del Reglamento de Planificación Núm. 25 (Reglamento de Siembra, Corte y

Forestación de Puerto Rico), el Reglamento dispone, entre, entre otras cosas, que al momento de someter el [proyecto ante la consideración de la Administración de Reglamentos y Permisos se deberá someter un documento que incluya la información presentada en el anejo de esta comunicación.

- Deberán obtener de la Junta de Calidad Ambiental el Permiso para el Control de Erosión y Sedimentación para minimizar la erosión hacia los cuerpos de agua cercanos al proyecto. Además, se deberá obtener cualquier permiso requerido por esa Agencia para realizar el proyecto o actividad.
- Deberá aplicar las disposiciones del Reglamento de Planificación Núm. 3 (Reglamento de Lotificación y Urbanización)."

Posterior a esta comunicación, el 16 de enero 2003, el DRNA emitió otra carta indicando que la parte proponente sometió unos planos modificados del proyecto propuesto, los cuales atienden los señalamientos incluidos en la carta del 7 de diciembre de 2001. Indica que los cambios hechos al proyecto permiten el desarrollo del proyecto, garantizando la protección de la Quebrada Cataño, el Bosque de Galería y los humedales ribereños asociados a la quebrada, por lo cual no tienen objeción a las obras modificadas. Añaden que el resto de los señalamientos de la carta del 7 de diciembre de 2002 continúan vigentes.

12. El Departamento de Agricultura mediante comunicación del 19 de diciembre de 2003 sometió sus comentarios, e hizo un resumen de sus comunicaciones anteriores referentes a la consulta. En dicha carta expresó lo siguiente:

"Esta propuesta ha sido objeto de evaluación por este Departamento en varias ocasiones. A continuación un orden cronológico de nuestros comentarios.

a. En comunicación del 27 de marzo de 2000 (adjunto copia), este Departamento recomendó objetar la segregación de 255 predios de 325 metros cuadrados en esta misma finca, debido al potencial agrícola que mostraban los terrenos.

b. En comunicación del 4 de junio de 2003 (adjunto copia), este Departamento reitera su posición y recomienda objetar la consulta. Es a solicitud de reconsideración por la parte proponente. En la ocasión se enmienda el proyecto inicial, reduciendo la cantidad de predios a 151 y manteniendo la cabida original de estos.

c. En comunicación del 8 de octubre de 2003 (adjunto copia), este Departamento no emite comentario al respecto, amparándose en la Ley de Procedimiento Administrativo Uniforme (Ley 170 del 12 de agosto de 1988), artículo 2165, donde se establece que una agencia no tiene obligación de aceptar, revisar evaluar o comentar una segunda reconsideración. No obstante, en reunión sostenida con la parte proponente el 14 de agosto de 2003, se recomienda que se radique una nueva consulta ante las agencias reguladoras.

d. Recientemente, se realizó un nuevo estudio de la

consulta y en comunicación del 18 de diciembre de 2003 (adjunto copia), este Departamento recomendó no objetar la consulta 03XF2-CET00-04705 en la misma finca, debido a que una alta porción de la finca principal fue expropiada para la construcción de la PR-53, reduciendo la cabida de estos terrenos a 23.0 cuerdas aproximadas. Además, la finca se encuentra segregada físicamente por varios proyectos y sectores residenciales.

Luego de una revisión de nuestros, expedientes, así como la documentación suministrada, entendemos que las condiciones descritas en nuestra comunicación del 16 de diciembre de 2003, no han variado. Por lo tanto, este Departamento reitera su recomendación de no objetar la consulta".

13. El Municipio de Humacao mediante comunicación del 27 de octubre de 2004 expresó lo siguiente:

"En cartas enviadas los días 25 de septiembre de 2000 y 14 de noviembre de 2002, el Municipio Autónomo de Humacao le comunicó a la Junta de Planificación su endoso al proyecto residencial Laderas de Palmas en la Carretera PR-910, Km. 0.1 en el Bo. Cataño de este Municipio Autónomo.

Estamos corrigiendo la información sobre la calificación de la finca objeto de esta consulta. En ambas cartas se indica que la calificación es A-4, cuando lo correcto es CR-2 (conservación de recursos 2). Aún cuando este distrito no provee para el desarrollo de urbanizaciones, es colindante con un distrito AD (área desarrollada); por lo que puede ser considerado como Desarrollo Extenso sin que eso represente una variación, como lo dispone la Sección 81.02(1) del Reglamento de Planificación Núm. 4.

Le recordamos que próximamente estaremos llevando a cabo las vistas públicas para la revisión parcial el Plan de Ordenación de este Municipio Autónomo. [...]"

14. El Cuerpo de Ingenieros del Ejército de los Estados Unidos, mediante comunicación con fecha de 20 de octubre de 2004, expresó lo siguiente:

"The information submitted indicates that the proposed Project may require a Department of the Army (DA) permit in accordance with Section 404 of the Clean Water Act, as it seems to involve the discharge of dredge or fill material into waters of the United States, specifically, the Cataño Creek. [...]

We recommend the applicant to perform a jurisdictional determination (JD) to delineate the location and extent of the jurisdictional areas at the proposed site. [...] Be advised that the Corps of Engineers (Corps) will have the final say in the jurisdictional determination, and when the same is finished, it shall be submitted to this office for approval. Once the study is submitted to this office, the Corps will conduct a field visit to ground-truth the findings and limits of the JD.

[...] Commencement of works prior to a Department of Army authorization would constitute a violation of Federal laws and subject to possible enforcement action."

15. El Servicio de Pesca y Vida Silvestre mediante comunicación del 19 de enero de 2005, indicó lo siguiente:

"[...] According to the enclosed site map there are 10 residential lots that will border Cataño creek; that are immediately adjacent to the 5 meter buffer zone required DNRE for channel maintenance or located in possible wetlands associated to the creek. Constructing these lots could have direct or indirect impacts on the existing creek. The lots are within the creek's floodplain and could alter the flood patterns in the area.

Given the importance and sensitivity of this gallery forest, we recommend that the 10 lots bordering the creek be eliminated and the area incorporated into the project as a linear park and woodland. "

16. La inversión estimada del proyecto es de aproximadamente 25 millones de dólares, los cuales serán financiados mediante financiamiento privado.

17. Dicho proyecto se espera que genere en su fase de construcción 100 empleos directos y 80 empleos indirectos, y tendrá una duración de aproximadamente dos (2) años. Durante la fase de operación se espera se genere unos 6 empleos directos.

18. La asistencia y participación de los residentes vecinos del sector fue escasa. Únicamente participó el Sr. Víctor Almodóvar Santana, residente del Barrio Cataño, colindante del proyecto. El Sr. Almodóvar expresó preocupación sobre cuál será el punto de conexión sanitario, le preocupa que vaya a ser frente a su casa, y le preocupa que vayan a instalar bombas de aguas al lado de su propiedad; se opone a que hagan conexiones al lado de su propiedad. No obstante, no se opone a la construcción.

La parte proponente indicó que no se tiene conocimiento de cuál será el punto preciso de conexión, pero será por la Carr. PR-3, no cruzando la Quebrada Cataño.

19. La Junta de Calidad Ambiental (JCA) en carta de 8 de octubre de 2004 indicó que, luego de evaluar el documento ambiental sometido para el proyecto de referencia, entiende que dicha instrumentalidad ha cumplido con la fase de evaluar el posible impacto ambiental de la acción propuesta, conforme al Artículo 4(c) de la Ley sobre Política Pública Ambiental, Ley Núm. 9 de 18 de junio de 1970, según enmendada; y emitió sus recomendaciones.

En armonía con las anteriores determinaciones de hechos se llega a las siguientes:

CONCLUSIONES DE DERECHO

1. La Junta de Planificación es el organismo facultado por ley para guiar el desarrollo integral del país y hacer las determinaciones sobre los usos de terrenos en Puerto Rico, Artículos 4 y 11, inciso 14 de la Ley Núm. 75 de 24 de junio de 1975, según enmendada, 23 L.P.R.A. secciones 62 y 62j (14).

2. La sección 2.00(7) del Reglamento de Procedimientos Adjudicativos de la Junta de Planificación, con vigencia del 12 de noviembre de 1999 establece que la consulta de ubicación es el mecanismo mediante el cual la Junta evalúa, pasa juicio y toma la determinación que estime pertinente, sobre propuestos usos de terrenos que no son permitidos ministerialmente por la reglamentación aplicable en áreas zonificadas, pero que las disposiciones reglamentarias proveen para que se consideren por la Junta.

3. El predio objeto de la consulta está calificado como Conservación de Recursos Dos (CR-2) según el Mapa de Calificación de Suelos del Plan Territorial del Municipio de Humacao; sin embargo, los parámetros para el desarrollo propuesto son los de un Distrito Residencial Tres (R-3), según notificado en el edicto convocando a la audiencia pública.

4. Entre los usos permitidos en el Distrito CR-2, conforme a la sección 3.35.02 del Reglamento de Ordenación del Plan Territorial de Humacao, no se contemplan los proyectos residenciales unifamiliares como el propuesto mediante la presente consulta. Sin embargo, se contemplan los desarrollos extensos de conformidad con las disposiciones de las secciones 10.01, 10.03 y 11.02 de dicho Reglamento.

5. La Sección 14.01 sobre definiciones del Reglamento de Ordenación del Plan Territorial de Humacao, establece la definición de Desarrollo Extenso:

"Comprende los desarrollos residenciales para veinte (20) o mas familias o solares en pueblos o áreas con una población urbana censal menor de diez mil (10,000) personas; treinta (30) o más familias o solares en pueblos o áreas con una población urbana censal entre diez mil (10,000) a cuarenta mil (40,000) personas y cuarenta (40) o más familias en solares en pueblos o áreas con una población urbana censal sobre cuarenta mil (40,000) personas, conforme a los resultados del último Censo Poblacional, o el desarrollo de facilidades comerciales, industriales, institucionales o recreativos que excedan veinte mil (20,000) pies cuadrados de construcción o en terrenos que excedan cuatro mil (4,000) metros cuadrados"

El proyecto que nos ocupa, de índole residencial, es un desarrollo extenso por definición puesto que propone el desarrollo de 154 unidades de vivienda.

6. La Sección 10.01.03 del mencionado Reglamento, establece los criterios mínimos que debe presentar y demostrar la parte proponente para ser evaluados por la Junta al momento de tomar la determinación en cuanto al proyecto de desarrollo extenso propuesto. Los mismos serán discutidos a continuación:

A. Conformidad del uso propuesto y su intensidad con el Plan de Usos de Terrenos hasta donde éste haya sido adoptado o estudiado y el Plan Territorial.

De la Determinación de Hechos Número 5 surge que el Municipio de Humacao cuenta con un Plan Territorial. El Memorial del Plan Territorial en su Título IV establece las Políticas y Objetivos del Plan, entre las cuales se indica que el Plan promoverá, entre otros, lo siguiente:

1. Conservación y uso adecuado de áreas agrícolas, pecuarias, de pesca, madereras o de minería, actualmente en utilización o con potencial de desarrollo para dicho uso.

   El proyecto propuesto cuenta con el endoso del Departamento de Agricultura, pues los terrenos se encuentran segregados físicamente por varios proyectos y sectores residenciales y su localización no afecta actividad agrícola alguna.

2. Protección de recursos de agua superficiales y subterráneos, y su cuenca inmediata, así como los sistemas ecológicos, hábitats de fauna y flora en peligro de extinción, otros sistemas y recursos naturales de valor ecológico.

La propuesta contempla conservar en su estado natural un área de 4.3260 cuerdas donde se encuentra el cauce de la Quebrada Cataño y el ecosistema del Bosque de Galería, según fue requerido por el Departamento de Recursos Naturales y Ambientales (DRNA). Además, en los terrenos objeto de consulta no hay presente especies en peligro de extinción, según comentarios del Servicio de Pesca y Vida Silvestre.

3. Conservación de áreas abiertas para la recreación y disfrute de los habitantes o con potencial de desarrollo para dicho uso.

   El proyecto contempla el desarrollo de facilidades recreativas, incluyendo áreas verdes.

4. Conservación y protección de áreas abiertas por razones de seguridad o salud pública, tales como áreas inundables, deslizables o sensibles a movimientos sísmicos.

   Los terrenos objeto de consulta ubican fuera de zona inundable, y no son deslizables, por lo cual no se presenta un riesgo a la seguridad pública.

5. Conservación de áreas abiertas para permitir el futuro ensanche de áreas urbanas para atender las necesidades de futuras generaciones.

   El predio objeto de consulta colinda por el Oeste y el Sur, con un área desarrollada; hacia el Norte con la Urbanización Miradero; y hacia el Este con la Carretera Estatal Número 3; por lo cual el mismo es un bolsillo de terreno vacante, que no constituye un espacio abierto.

6. Protección, defensa y conservación de estructuras de interés o valor histórico o arquitectónico, cultural, y arqueológico.

   La parte proponente deberá obtener el endoso del Instituto de Cultura Puertorriqueña y cumplir con sus requerimientos.

7. Coordinación e integración de los aspectos físicos-espaciales con las estrategias de desarrollo económico, social u ambiental diseñadas por el Municipio.

   El Municipio de Humacao endosó el proyecto propuesto e indicó que las mejoras propuestas por los desarrolladores ayudarán a mejorar la infraestructura que sirve a la comunidad de Cataño.

B. Disponibilidad, programación y mejoras propuestas por el proyecto a la infraestructura del sector en que ubica.

   De la Determinación de Hechos Número 10 surge que el proyecto cuenta con la infraestructura física necesaria para cubrir las necesidades del mismo.

C. La forma en que el proyecto propicia el desarrollo integral del sector y mantiene o mejora las condiciones existentes.

El proyecto propuesto propicia el desarrollo integral del sector, toda vez que el mismo ubica adyacente a un área desarrollada y armoniza con el comportamiento residencial que impera en sus inmediaciones.

D. La viabilidad, adecuacidad y conveniencia del uso propuesto.

A nuestro juicio el proyecto es viable desde la perspectiva de infraestructura, conveniente y adecuado toda vez que armoniza con el comportamiento del área donde se propone su desarrollo.

7. La sección 10.03 del Reglamento de Ordenación del Plan Territorial de Humacao, establece los proyectos de desarrollos extensos a considerarse por la Junta. En lo pertinente la sección 10.03.01 indica que la Junta de Planificación podrá considerar proyectos de desarrollos extensos, solos o combinados, independientemente del distrito en que se propongan.

8. La sección 10.03.02 del referido Reglamento, establece otros criterios con los que deberá cumplir un desarrollo residencial extenso como el que nos ocupa. Los mismos serán señalados y discutidos por separado a continuación:

a. Los terrenos en los cuales se propone la urbanización estarán adyacentes o dentro del ámbito de expansión urbana del Municipio correspondiente, dentro de una zona de interés turístico o un área desarrollada. La Junta podrá considerar este tipo de desarrollo fuera del área de expansión urbana, cuando se demuestre que exista o pueda proveerse la infraestructura necesaria para servir el proyecto.

Según la Determinación de Hechos Número 4, el proyecto propuesto colinda con un Distrito AD, terrenos en los cuales ubican las Comunidades Pepita López y Fernández. Además, el área cuenta con la infraestructura necesaria para servir la necesidad del proyecto.

b. La densidad propuesta alcanzará los mínimos y no excederá los máximos establecidos en el Plan de Usos De Terrenos correspondiente.

El Plan Territorial de Humacao, no establece unos topes mínimos o máximos de densidad con los que deberá cumplir un proyecto residencial para poder ser aprobado. Por tal razón, este inciso no aplica al caso que nos ocupa.

c. Se celebrará vista pública con notificación a los dueños de los terrenos circundantes cuando el desarrollo residencial extenso tenga acceso a una calle municipal con un rodaje menor de 8.00 metros y por la cual accesen más de diez (10) estructuras residenciales en una distancia de doscientos cincuenta (250) metros, medidos desde las entradas al proyecto.

En este caso se celebró vista pública con notificación a los vecinos circundantes.

d. Si la infraestructura necesaria para atender las necesidades del proyecto propuesto y mitigar sus efectos directos e indirectos está disponible o puede proveerse.

Existe en el área circundante la infraestructura necesaria para proveer los servicios básicos, según se desprende de la Determinación de Hechos Número 10.

e. El proyecto podrá incluir el desarrollo de una o más estructuras principales en un mismo solar si se propone segregar el mismo.

El proyecto propone el desarrollo de 154 unidades de vivienda en solares con cabida mínima de 325 metros cuadrados, en conformidad con la densidad poblacional permitida en un Distrito R-3.

f. Se podrá dispensar de los requerimientos de este Reglamento cuando se trate de desarrollos para vivienda pública y las circunstancias así lo justifiquen.

El proyecto propuesto es uno residencial de índole privado, por lo cual no le aplica esta disposición. ..

ACUERDO

Esta consulta de ubicación ha sido examinada y analizada por esta Junta a la luz de la información suministrada por el proponente, de las disposiciones de leyes, reglamentos y normas de planificación vigentes, y del resultado del estudio desde el punto de vista ambiental. También se ha dado consideración a las proyecciones poblacionales y a la disponibilidad de terrenos apropiados para la construcción de viviendas y otros usos en el área que comprende el proyecto propuesto.

Dicha consulta fue considerada por esta Junta de Planificación, quien acordó que es viable el desarrollo de los terrenos anteriormente descritos para el uso propuesto, condicionado a los siguientes señalamientos y recomendaciones, los cuales habrán de tomarse en consideración al prepararse y someterse la próxima etapa en el trámite del proyecto, etapa que será determinada por la Administración de Reglamentos y Permisos:

1. Se aprueba la ubicación de un proyecto residencial unifamiliar que consiste en el desarrollo de 144 unidades de vivienda en solares con cabida mínima de 325 metros cuadrados. El proyecto contará con acceso controlado y facilidades recreativas, incluyendo áreas de juego para niños, cancha de baloncesto, áreas verdes y gazebo. El mismo ubica en 23.9318 cuerdas de la totalidad de la finca, dejando en su estado natural 4.3260 cuerdas, donde se encuentra el cauce de la Quebrada Cataño y el ecosistema del Bosque de Galería, según fue requerido por el Departamento de Recursos Naturales y Ambientales (DRNA).

2. Están excluidos de la aprobación de la propuesta los solares número 147, 146, 127, 126, 109, 108, 107, 106, 105, y 104.

3. La Administración de Reglamentos y Permisos determinará cuál será la próxima etapa en el trámite del proyecto, la cual deberá cumplir con todas las disposiciones de leyes, reglamentos y normas de planificación vigentes y aplicables, así como con las normas de dicha Administración.

4. Se cumplirá con los requerimientos de las agencias concernidas, incluyendo la Autoridad de Desperdicios Sólidos y con las siguientes recomendaciones de la Junta de Calidad Ambiental:

a. Previo a dar comienzo a las actividades propuestas o efectuar algún movimiento de tierra, deben obtener de esta Junta los siguientes permisos:

   1. Permiso Fuente de Emisión (PFE) para el polvo fugitivo durante la fase de construcción.
   2. Para realizar una Actividad Generante de Desperdicios Sólidos (Formulario DS-3).
   3. Permiso para el Control de la Erosión y Prevención de la Sedimentación.

b. Durante las fases de construcción y operación del proyecto, deberán tomar las medidas necesarias para evitar que residuos de sustancias orgánicas e inorgánicas tales como: aceites, combustible u otras sustancias químicas, puedan ser arrastradas por la escorrentía y ganen acceso a cualquier cuerpo de agua, al área de humedal cercano al proyecto o al sistema pluvial.

c. No se permitirá la quema de árboles y arbustos, ni la quema de basura durante el proceso de limpieza de los predios en construcción.

d. Deberán mantener los camiones de carga que se utilicen para transportar material, desechos de relleno y/o de construcción cubiertos con toldos, mientras estén en movimiento para evitar generación de emisiones de particulado.

e. Deberán solicitar y obtener los correspondientes permisos del Departamento de Recursos Naturales y Ambientales para las actividades de movimiento de tierra propuestas.

f. Coordinar con la Autoridad de Acueductos y Alcantarillados (AAA) para la conexión de las aguas usadas a ser generadas en el proyecto propuesto, de manera que la planta de tratamiento de aguas usadas a la cual planean conectarse, las líneas y troncales estén en condiciones de aceptar la descarga de las aguas usadas a ser generadas durante la fase operacional del proyecto. Esto incluye obtener todos los permisos necesarios de dicha agencia, previo a su conexión.

g. Cumplir con las recomendaciones y los requisitos emitidos por las agencias consultadas:

   1. Autoridad de Energía Eléctrica en las comunicaciones del 28 de marzo de 2000;
   2. Autoridad de Acueductos y Alcantarillados en comunicación del 8 de junio de 2001;
   3. Gobierno Municipal de Humacao, en comunicación del 14 de noviembre de 2002;
   4. Departamento de Recursos Naturales y Ambientales en la comunicación del 16 de enero de 2003.

h. Deberá considerarse los comentarios vertidos por el Departamento de Agricultura en su comunicación

del 27 de marzo de 2000, donde es objetada la Consulta de Referencia, así como los de cualquier otra agencia, entidades o personas consultadas.

i. Deberán evitar localizar facilidades o estructuras para recoger o transportar sustancias que representan un riesgo de contaminación del agua subterránea, a una distancia menor de 1500 pies de cualquier pozo de extracción de agua potable. De ser necesario se deberán implementar controles adicionales a los comúnmente requeridos para asegurar la mayor protección del recurso de agua subterránea.

j. Deberá cumplir con las disposiciones del Reglamento de Planificación Número 25 (Reglamento de Siembra, Corte y Forestación para Puerto Rico).

k. Si durante el desarrollo de las diferentes fases del proyecto se encuentran depósitos arqueológicos, los mismos deberán ser informados inmediatamente al Instituto de Cultura Puertorriqueña.

l. El almacenaje, manejo y disposición de los desperdicios sólidos a generarse durante las fases de construcción y operación del proyecto, debe realizarse en conformidad con la reglamentación vigente.

m. Durante las fase de construcción del proyecto, se debe cumplir con el Reglamento para el Control de la Contaminación por Ruido, en lo relacionado al nivel de sonido máximo permitido".

5. Cumplir con los requerimientos del Cuerpo de Ingenieros, el Servicio de Pesca y Vida Silvestre y con el Departamento de Recursos Naturales y Ambientales en cuanto al área de humedales y el Bosque de Galería.

6. Se cumplirá con las disposiciones reglamentarias de los Reglamentos Número 3, 21 y 25 y con el Reglamento de Ordenación del Plan Territorial de Humacao.

7. El proyecto propuesto tendrá parámetros de diseño conforme a un Distrito R-3.

Los señalamientos anteriores se han hecho de la información disponible en estos momentos. No obstante, la Administración de Reglamentos y Permisos podrá hacer requerimientos adicionales que sean necesarios en el futuro, bien sea por situaciones que se desconocen ahora o imprevistas que pudieran surgir durante el desarrollo del proyecto en sus distintas etapas.

A base de las Determinaciones de Hechos y Conclusiones de Derecho y tomando en consideración lo anteriormente expuesto, en virtud de las disposiciones de las leyes, reglamentos y normas de planificación vigentes, esta Junta de Planificación de Puerto Rico, mediante la presente Extensión, **APRUEBA** la Consulta Número 2000-51-0202-JPU para la ubicación de un proyecto residencial unifamiliar en los Barrios Cataño y Buena Vista del Municipio de Humacao.

DISPONIENDOSE que: (1) la acción tomada por esta Junta sobre la consulta no implica la aprobación de la etapa subsiguiente correspondiente, la cual deberá someterse a la consideración de la Administración de Reglamentos y Permisos dentro del periodo de

vigencia de este informe; (2) esta aprobación tendrá una vigencia de un (1) año a partir de la fecha de notificación de este informe; (3) de no someterse la etapa subsiguiente en la Administración de Reglamentos y Permisos dentro del término de vigencia establecido la consulta quedará AUTOMATICAMENTE ARCHIVADA para todos los efectos legales; y (4) se dispone que, cualquier cambio en la cabida de los terrenos como resultado de una revisión de la mensura, que se mantenga dentro de un 5% de la cabida informada en la presente consulta, se podrá corregir en los planos correspondientes sin que medie una resolución expresa de esta Junta a tales fines.

DISPONIENDOSE, además, que cualquier parte afectada por esta Resolución podrá radicar una **Moción o Solicitud de Reconsideración** en la Secretaría de esta Junta dentro de un término de veinte (20) días contados a partir del archivo en autos de la notificación de esta Resolución. El solicitante deberá enviar copia de tal escrito por correo certificado y acuse de recibo a todas las partes que hayan intervenido en los procedimientos y a la Administración de Reglamentos y Permisos. Los interventores tendrán diez (10) días naturales contados a partir de la notificación para expresarse sobre la Solicitud de Reconsideración. Si no lo hicieren dentro del término establecido, se entenderá que renuncian a su derecho de réplica.

La Junta dentro de los quince (15) días de haberse presentado dicha Solicitud de Reconsideración deberá considerarla. Si la rechazare de plano o no actuare dentro de los quince (15) días, el término para solicitar recurso de Revisión Judicial comenzará a correr nuevamente desde que se notifique dicha denegatoria o desde que expiren esos quince (15) días, según sea el caso. Si la Junta acoge la Solicitud de Reconsideración deberá resolver la misma dentro de los noventa (90) días siguientes a la radicación de dicha solicitud. El término de treinta (30) días para solicitar Revisión Judicial comenzará a contarse desde la fecha en que se archiva en autos una copia de la notificación de la Resolución de la Junta resolviendo definitivamente la Solicitud de Reconsideración, cuya resolución deberá ser emitida y archivada en autos.

Si la Junta dejare de tomar alguna acción con relación a la Solicitud de Reconsideración dentro de los noventa (90) días de haber sido acogida bajo estudio, perderá jurisdicción sobre la misma y el término para solicitar la Revisión Judicial empezará a contarse a partir de la expiración de dicho término de noventa (90) días, salvo que la Junta, por justa causa y dentro de esos noventa (90) días prorrogue el término para resolver por un período que no excederá de treinta (30) días adicionales.

De no optarse por el procedimiento de Solicitud de Reconsideración antes expuesto, la parte afectada podrá, dentro del término de treinta (30) días, contados a partir de la fecha del archivo en autos de esta Resolución, de así interesarlo, presentar Recurso de Revisión Judicial ante el Tribunal de Circuito de Apelaciones, lo anterior, en virtud de lo dispuesto en la Sección 3.15 de la Ley Núm. 170 del 12 de agosto de 1988, según enmendada.

Notifíquese: A las partes cuyos nombres y direcciones se mencionan a continuación: SETA Limited, D.E., PO Box 3853, San Juan, PR 00936; Ing. José A. Meléndez, 117 Ave. De Diego, San Francisco, San Juan, PR 00927; Ing. Jorge Cintrón, 37 Tornasol, Urb. Muñoz Rivera, Guaynabo, PR 00969; Ing. José López Matos, PMB 215 #5900 Isla Verde Ave. L-2, Carolina, PR 00979-4901; Eleuterio Rivera, PO Box 814, Humacao, PR PR 00792; Juan Rivera Beltrán, HC-02 Box 11005, Humacao, PR 00792; Umpierre y Rodríguez, Cond. Condado Plaza Apto. 5A, 1351 Ave. Magdalena, Condado, Santurce, PR 00907; Adelaida Rivera, Carr. #3 Buzón #6, Bo. Cataño, Humacao, PR 00791; Sucn. Juan Beltrán, Urb. Torimar, Calle Cerez #145, Guaynabo, PR 00965; Víctor Almodóvar, HC-02 Box 11080, Humacao, PR 00792; Erasmo Almodóvar, HC-02 Box 1108, Humacao, PR 00792; Carmen Lidia Matta, HC-0259, Humacao, PR 00792; Encarnación Montañés, HC-02 Box 1160, Humacao, PR 00792; Gervasio Rivera Ortiz, HC-02 Box 11061, Humacao, PR 00792; Irma Silva, HC-02 Box 11061, Humacao, PR 00792;

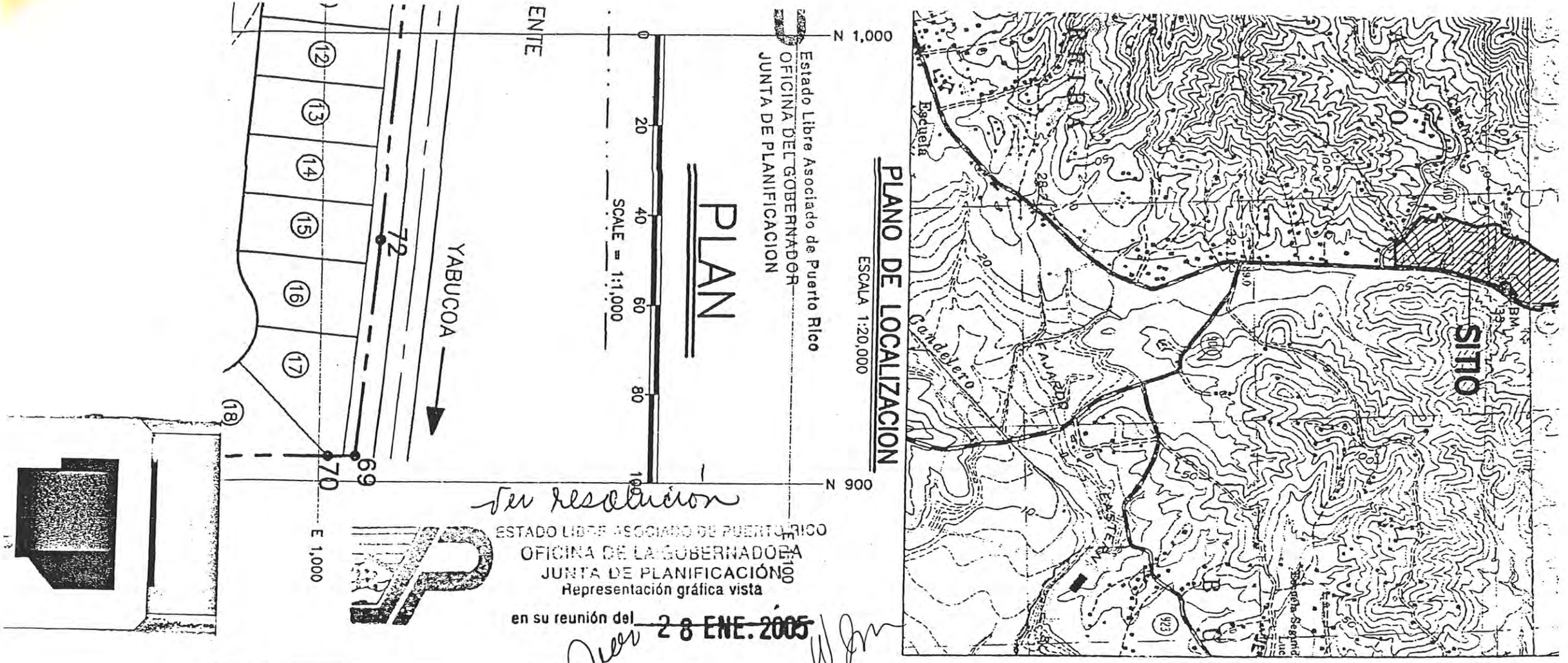
Evaristo Silva, HC-02 Box 11061, Humacao, PR 00792; Parroquia Dulce Nombre de Jesús, PO Box 9087, Humacao, PR 00792-9087 Notifíquese además, copia de cortesía a todas las personas cuyos nombres y direcciones obran en el expediente administrativo.

Ángel D. Rodríguez
Presidente

CERTIFICO: Que he notificado copia fiel y exacta de la presente resolución, bajo mi firma y el sello oficial de esta Junta, a todas las partes mencionadas en el notifíquese, habiendo archivado el original en autos.

En San Juan, Puerto Rico, hoy 11 MAR 2005

Carmen Torres Meléndez
Secretaria



Ver resolución

ESTADO LIBRE ASOCIADO DE PUERTO RICO
OFICINA DE LA GOBERNADORA
JUNTA DE PLANIFICACIÓN
Representación gráfica vista
en su reunión del 28 ENE. 2005

PROYECTO:

LADERAS DE PALMAS

CONSULTA NUM. 2000-51-0202-JPU

DUEÑO:

SETA LIMITED S.E.

ING. ENRIQUE CASTILLO

TEL. 787 765- 4202
FAX 787-767-3376

TITULO:

ESQUEMA CONCEPTUAL

DIBUJO NUM.	
HOJA NUM	
TOTAL	
FECHA:	SEPT
SCALE 1:1,000	

Exhibit 20b

ESTADO LIBRE ASOCIADO DE PUERTO RICO/ OFICINA DE LA GOBERNADORA
JUNTA DE CALIDAD AMBIENTAL

8 de octubre de 2004 DADA: 2165-04

Sr. Edwin Crespo Soler
Director, Subprograma Consultas Sobre Usos de Terrenos
Junta de Planificación
P.O. Box 41119
San Juan, Puerto Rico. 00940-1119

COPIA FIEL Y EXACTA
AREA ASESORAMIENTO CIENTIFICO
0438-08
FIRMA
8 de mayo de 2008

ASUNTO: **DN 01-0867(JP) / 2000-51-0202-JPU**
PROYECTO RESIDENCIAL UNIFAMILIAR
"LADERAS DE PALMAS"
CARR. #3, KM. 33.7, BO. CATAÑO
HUMACAO, PUERTO RICO

Estimado señor Crespo:

Hacemos referencia a los documentos recibidos el 28 de septiembre de 2004, con relación al proyecto de referencia. El mismo consiste en el desarrollo de 155 unidades de vivienda en solares con cabida de 325 metros cuadrados en un área de 23.0 cuerdas de una finca con cabida total de 40.653 cuerdas. Este proyecto fue rediseñado, originalmente consistía en el desarrollo de 255 unidades de vivienda. Este rediseño dejará un remanente de 18 cuerdas para la protección de la Quebrada Cataño, el Bosque de Galería y los humedales asociados al cuerpo de agua antes mencionado.

Entendemos que al presentar el documento ambiental su instrumentalidad ha cumplido con el Artículo 4 (c) de la Ley sobre Política Pública Ambiental, Ley Número 9 del 18 de junio de 1970. No obstante, para una mejor realización de la acción propuesta esta Junta emite las siguientes recomendaciones:

1. Previo a dar comienzo a las actividades propuestas o efectuar algún movimiento de tierra, deben obtener de esta Junta los siguientes permisos:

   a. Permiso Fuente de Emisión (PFE) para el polvo fugitivo durante la fase de construcción.
   b. Para realizar una Actividad Generante de Desperdicios Sólidos (Formulario DS-3).
   c. Permiso para el Control de la Erosión y Prevención de la Sedimentación.

2. Durante las fases de construcción y operación del proyecto, deberán tomar las medidas necesarias para evitar que residuos de sustancias orgánicas e inorgánicas tales como: aceites, combustibles u otras sustancias químicas, puedan ser arrastradas por la escorrentía y ganen acceso a cualquier cuerpo de agua, al área de humedal cercano al proyecto o al sistema pluvial.

3. No se permitirá la quema de árboles y arbustos, ni la quema de basura durante el proceso de limpieza de los predios en construcción.

4. Deberán mantener los camiones de carga que se utilicen para transportar material, desechos de relleno y/o de construcción cubiertos con toldos, mientras estén en movimiento para evitar generación de emisiones de particulado.

5. Deberán solicitar y obtener los correspondientes permisos del Departamento de Recursos Naturales y Ambientales para las actividades de movimiento de tierra propuestas.

6. Coordinar con la Autoridad de Acueductos y Alcantarillados (AAA) para la conexión de las aguas usadas a ser generadas en el proyecto propuesto, de manera que la planta de tratamiento de aguas usadas a la cual planean conectarse, las líneas y troncales estén en condiciones de aceptar la descarga de las aguas usadas a ser generadas durante la fase operacional del proyecto. Esto incluye obtener todos los permisos necesarios de dicha agencia, previo a su conexión.

7. Cumplir con las recomendaciones y los requisitos emitidos por las agencias consultadas:

   a. Autoridad de Energía Eléctrica en las comunicaciones del 28 de marzo de 2000;
   b. Autoridad de Acueductos y Alcantarillados en comunicación del 8 de junio de 2001;
   c. Gobierno Municipal de Humacao, en comunicación del 14 de noviembre de 2002;
   d. Departamento de Recursos Naturales y Ambientales en la comunicación del 16 de enero de 2003.

8. Deberá considerarse los comentarios vertidos por el Departamento de Agricultura en su comunicación del 27 de marzo de 2000, donde es objetada la Consulta de Referencia, así como los de cualquier otra agencia, entidades o personas consultadas.

9. Deberán evitar localizar facilidades o estructuras para recoger o transportar sustancias que representan un riesgo de contaminación del agua subterránea, a una distancia menor de 1500 pies de cualquier pozo de extracción de agua potable. De ser necesario se deberán implementar controles adicionales a los comúnmente requeridos para asegurar la mayor protección del recurso de agua subterránea.

10. Deberá cumplir con las disposiciones del Reglamento de Planificación Número 25 (Reglamento de Siembra, Corte y Forestación para Puerto Rico).

11. Si durante el desarrollo de las diferentes fases del proyecto se encuentran depósitos arqueológicos, los mismos deberán ser informados inmediatamente al Instituto de Cultura Puertorriqueña.

12. El almacenaje, manejo y disposición de los desperdicios sólidos a generarse durante las fases de construcción y operación del proyecto, debe realizarse en conformidad con la reglamentación vigente.

COPIA FIEL Y EXACTA
AREA ASESORAMIENTO CIENTIFICO
8-mayo-08
FIRMA
0438-08

13. Durante las fase de construcción del proyecto, se debe cumplir con el Reglamento para el Control de la Contaminación por Ruido, en lo relacionado al nivel de sonido máximo permitido.

Aprovecho la ocasión para exhortarle a seguir cooperando con nosotros en la importante tarea de la protección ambiental en nuestra Isla.

Cordialmente,

Lcdo. Esteban Mujica Cotto
Presidente

Exhibit 20c

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DE DESARROLLO ECONÓMICO Y COMERCIO

CASO NÚM.:
2023-506359-PRR-013228

RESOLUCIÓN SOBRE REAPERTURA

DESCRIPCIÓN Y LOCALIZACIÓN:

Rebuilders PR, LLC. representada por Elvelisse Figueroa Hernández, amparándose en las disposiciones de la reglamentación vigente, radicó el 21 de agosto de 2023 ante la consideración de esta Oficina de Gerencia de Permisos (OGPe) una solicitud de Prorroga para un proyecto ubicado en la siguiente dirección:

Dirección Física
Carretera PR-3, Km. 33.7 Bo. Cataño y Buena Vista

Municipio:
Humacao, Puerto Rico 00791

Número(s) de Catastro
329-000-005-61

Distrito de Calificación
R-I (Residencial Intermedio)

Clasificación:
Suelo Urbano (SU)

Dueño (s)
Rebuilders PR, LLC

Proponente
Elvelisse Figueroa Hernández

Referencia Anteriores
06DX2-CET00-02988
06MT2-CET00-12320
08PO2-CET00-05653

DESCRIPCION DE LA SOLICITUD

Se propone una solicitud de reapertura al Permiso de Obra de Urbanización autorizada mediante el Caso Núm. 08PO2-CET00-05653 para la construcción de Obras de Infraestructura: Calles, Aceras, Sistema Pluvial, Sistema de Agua, Sistema Sanitario y Sistema Eléctrico de un proyecto localizada en la Carretera PR-3, Km. 33.7, Barrio Cataño y Buena Vista del Municipio de Humacao

DETERMINACIONES DE HECHO

1. Mediante el caso 06MT2-CET00-12320 y con fecha del 2.de enero de.2007 se aprobó el Movimiento de Tierra para Proyecto de 132 Solares Unifamiliares.
2. Posteriormente, mediante el caso 06DX2-CET00-02988, y con fecha del 24 de marzo de 2008, se aprobó un Desarrollo Residencial para 136 Unidades de Vivienda de tres y cuatro dormitorios, Calles, Área Recreativa, Áreas Verdes, Charca
3. Finalmente, y mediante el caso Núm. 08PO2-CET00-05653 y con fecha del 5 de agosto de 2008 se aprobó un Permiso para la construcción de Obras de Infraestructura: Calles, Aceras, Sistema Pluvial, Sistema de Agua, Sistema Sanitario y Sistema Eléctrico de un proyecto localizada en la Carretera PR-3, Km. 33.7, Barrio Cataño y Buena Vista del Municipio de Humacao.
4. La aprobación del caso 08PO2-CET00-05653 conto con una vigencia de tres (3) años a partir de su notificación. La misma se encuentra vencida.
5. Ahora, se solicita la reapertura del trámite 08PO2-CET00-05653 para la construcción de Obras de Infraestructura.
6. Mediante Memorial fechado el 16 de agosto de 2023 se justifica la solicitud de Reapertura indicándose los siguiente:
   - Este proyecto fue propuesto originalmente por Seta Limited Partnership, S.E., quien obtuvo las aprobaciones que se enumeran.
   - No empece a todos los esfuerzos realizados, el proyecto tuvo que ser paralizado debido a la falta de recursos económicos. Este proyecto, al igual que muchos otros ya atendidos por esta Junta Adjudicativa, se vio afectado por la crisis económica que sufrió el País durante los años 2009 al 2010.
   - Con el propósito de viabilizar la consecución de este proyecto, Rebuilders presentó una propuesta ante el Departamento de la Vivienda bajo el programa Single Family Housing Development Initiatives, Comunity Development Block Grant- Mitigation (CDBG-MIT-RFP-2022-04). Esta fue aprobada para el desarrollo de 100 unidades. Asimismo, se tramitaron las solicitudes de recomendación de infraestructura a los fines de actualizar los endosos correspondientes.
   - Desde el punto de vista de uso de terrenos, el proyecto mantiene su viabilidad y no representa variación alguna a los planos con respecto a las condiciones bajo las cuales se aprobó el Permiso de Urbanización para el Proyecto. Además, el Proyecto se mantiene dentro de la misma huella de impacto aprobada en el cumplimiento ambiental y la misma densidad de uso.
   - La finca ostenta una calificación de Residencial Intermedio (R-I) según el mapa de calificación del Municipio de Humacao con vigencia al 25 de septiembre de 2011. Este distrito se establece para identificar áreas residenciales desarrolladas o que puedan desarrollarse y en donde se

permitirán diferentes tipos de viviendas. Según el Plan de Usos de Terrenos, el catastro presenta una clasificación de Suelo Urbano (60%) y Suelo Rustico Común (40%).

- El 20 de julio de 2023, el Departamento de la Vivienda notificó su determinación de asignar fondos del programa Single Family Housing Development Initiatives, Comunity Development Block Grant- Mitigation (CDBG-MIT-RFP-2022-04) para la construcción de 100 unidades.

- El desarrollo propuesto es conforme con las políticas públicas vigentes de uso de los terrenos toda vez que el predio ostenta una calificación R-I. Incluso, los usos en el sector resultan en armonía al desarrollo propuesto.

CONCLUSIONES DE DERECHO

1. La Ley Núm. 161-2009, conocida como la "*Ley para la Reforma del Proceso de Permisos de Puerto Rico*" se aprobó con el fin de establecer el marco legal y administrativo que regirá en la solicitud, evaluación, concesión y denegación de permisos que inciden en el desarrollo económico de Puerto Rico.
2. Mediante la Ley de Municipios Autónomos, Ley Núm. 81 de 30 de agosto de 1991, según enmendada conocida como la Ley de Municipios Autónomos, (Artículo 13.004), autorizó a los municipios a adoptar Planes de Ordenación de conformidad con lo dispuesto en el Capítulo XIII de la misma.
3. De un análisis de las disposiciones legales y reglamentarias pertinentes, concluimos que el Reglamento Conjunto para la Evaluación y Expedición de Permisos relacionados al Desarrollo, Uso de Terrenos y Operación de Negocios, vigente el 16 de junio de 2023 (en adelante "Reglamento Conjunto") son los cuerpos reglamentarios de aplicación a la solicitud de lotificación presentada.
4. El Reglamento Conjunto de Permisos para Obras de Construcción y Usos de Terrenos (Reglamento Conjunto), tiene el propósito de detallar el sistema integrado de permisos relacionado al desarrollo y uso de terrenos, conforme a la política pública esbozada en la Ley Núm. 161 a través de normas claras, objetivas y uniformes para el manejo ágil y eficaz de procesos, consolidando en un solo lugar, en un orden lógico y sin duplicación innecesaria, todas las reglas aplicables a los mismos, (Reglamento Conjunto).

ACUERDO

Por la presente, tomando en consideración lo anteriormente expuesto, y en virtud de las facultades conferidas mediante las leyes, normas y órdenes administrativas vigentes, la Junta Adjudicativa de la Oficina de Gerencia de Permisos, **AUTORIZA** la solicitud de reapertura presentada al amparo del caso número 2023-506359-PRR-013228 para el proyecto para la construcción de Obras de Infraestructura: Calles, Aceras, Sistema Pluvial, Sistema de Agua, Sistema Sanitario y Sistema Eléctrico de un proyecto localizada en la Carretera PR-3, Km. 33.7, Barrio Cataño y Buena Vista del Municipio de Humacao

Una parte adversamente afectada por una actuación, determinación final o resolución de la OGPe podrá presentar una solicitud de revisión administrativa ante la División de Revisiones Administrativas, dentro del término jurisdiccional de veinte (20) días contados a partir de la fecha de archivo en autos, de copia de la notificación de la actuación, determinación final o resolución. Presentada la solicitud de revisión administrativa, la división correspondiente de la Oficina de Gerencia de Permisos, el Profesional Autorizado, o el Municipio Autónomo con Jerarquía de la I a la V, elevará a la División de Revisiones Administrativas de la OGPe copia certificada del expediente del caso, dentro de los diez (10) días naturales siguientes a la radicación de la moción.

La parte recurrente utilizará el mecanismo que proveerá el Portal "Single Business Portal" al presentar el recurso electrónicamente ante la División de Revisiones Administrativas para notificar simultáneamente a la Oficina de Gerencia de Permisos, a la Junta Adjudicativa, los Municipios Autónomos con la Jerarquía de la I a la V, o al Profesional Autorizado, según aplique. Además, la parte recurrente notificará copia de la solicitud de revisión administrativa, por correo certificado con acuse de recibo u mediante otro mecanismo dispuesto por reglamento, a las partes, incluyendo a la OGPe, y a los interventores, dentro del término de cuarenta y ocho (48) horas desde la presentación de la solicitud. La oportuna notificación es un requisito de carácter jurisdiccional y su cumplimiento deberá ser certificado y evidenciado oportunamente ante la División de Revisiones Administrativas.

El Juez Administrativo de la División de Revisiones Administrativas tendrá un término de quince (15) días para determinar si acoge la misma. Si en este término se denegase o no se emitiese una determinación a esos fines, en cuyo caso se entenderá rechazada de plano, perderá jurisdicción sobre la misma y comenzará a decursar el término de treinta (30) días para recurrir al Tribunal de Apelaciones desde que se notifique la denegatoria o desde que expiren esos quince (15) días, según sea el caso.

La División de Revisiones Administrativas dispondrá de las solicitudes acogidas ante su consideración dentro de un período de noventa (90) días naturales desde su presentación. Dicho término podrá ser

prorrogado por treinta (30) días adicionales contados a partir de la fecha de vencimiento, en casos excepcionales. Si la División de Revisiones Administrativas no adjudicara la solicitud dentro del término aquí dispuesto, dicho foro perderá jurisdicción sobre la misma y comenzará a decursar el término de treinta (30) días para recurrir al Tribunal de Apelaciones. Las resoluciones de la División de Revisiones Administrativas serán consideradas determinaciones finales de la Oficina de Gerencia de Permisos.

La presentación de una solicitud de revisión administrativa no es un requisito jurisdiccional previo a la presentación de una solicitud de revisión de decisión administrativa ante el Tribunal de Apelaciones. No obstante, su oportuna presentación paralizará los términos para recurrir ante dicho Tribunal.

Cualquier parte adversamente afectada por una determinación final, permiso o resolución de la Oficina de Gerencia de Permisos podrá presentar una solicitud de revisión ante el Tribunal de Apelaciones, dentro de un término de treinta (30) días contados a partir de la fecha del archivo en autos de la copia de la notificación de la determinación final, permiso o resolución de la agencia o a partir de la fecha aplicable cuando el término para solicitar la revisión judicial haya sido interrumpido mediante la presentación oportuna de una solicitud de revisión administrativa. La parte notificará la presentación de la solicitud de revisión a la agencia y a todas las partes dentro del término para solicitar dicha revisión. La notificación podrá hacerse por correo.

La vigencia de la presente Resolución será de un (1) año a partir de su notificación, según dispuesto en el Reglamento Conjunto paras la Evaluación y Expedición de Permisos Relacionados al Desarrollo, Uso de Terrenos y Operación de Negocios, vigente del 16 de junio de 2023 (Reglamento Conjunto 2023

FIRMAS Y SELLOS

NOTIFÍQUESE: A las partes cuyos nombres y direcciones se mencionan a continuación:
Rebuilders PR, LLC. p/c Elvelisse Figueroa Hernández, info@rebuilderspr.com

CERTIFICO: Que la Junta Adjudicativa de la OGPe en su reunión de 30 de noviembre de 2023 acordó lo aquí expuesto.

En San Juan, Puerto Rico hoy 9 de enero de 2024

Por:

LCDO. FÉLIX RIVERA TORRES
SECRETARIO AUXILIAR
OFICINA GERENCIA DE PERMISOS
DEPARTAMENTO DE DESARROLLO
ECONÓMICO Y COMERCIO

CERTIFICO: Que he notificado copia fiel y exacta de la presente Resolución, bajo mi firma, a todas las partes antes indicadas.

En Hatillo, Puerto Rico hoy JAN 11 2024

SRA. CAROLINE CASTILLO DOMENA
ÁREA DE SECRETARIA

OFICINA DE GERENCIA DE PERMISOS
GOBIERNO DE PUERTO RICO

NUM. CASO
2023-506359-PRR-301146

RESOLUCION SOBRE SOLICTUD DE PRÓRROGA

DATOS DE LOCALIZACIÓN

Rebuilders P.R., LLC, representada por Elvelisse Figueroa Hernández, amparándose en las disposiciones de la reglamentación vigente, radicó el 8 de enero de 2025 ante la consideración de la Oficina de Gerencia de Permisos (OGPe), una solicitud prórroga para un proyecto ubicado en la siguiente dirección:

Dirección Física
Carretera PR-3, km 33.7 Bo. Cataño y Buena Vista Humacao, Puerto Rico 00791

Número(s) de Catastro
329-000-005-61

Calificación
R-I

Clasificación
PUT – SU

Dueño(s)
Rebuilders PR, LLC

Casos de Referencia
06DX2-CET00-02988
08PO2- CET00-05653
06MT2-CET00-12320
2023-506359-PRR-013228

DETERMINACIONES DE HECHO

1. Mediante el caso 06MT2-CET00-12320 y con fecha del 2 de enero de 2007 se aprobó el movimiento de tierra para un proyecto de 132 unidades unifamiliares.
2. Posteriormente, mediante el caso 06DX2-CET00-02988, y con fecha del 24 de marzo de 2008, se aprobó un desarrollo residencial para 136 unidades de vivienda de tres y cuatro dormitorios, calles, área recreativa, áreas verdes y charca de retención.
3. La Administración de Reglamentos y Permisos (ARPE) mediante Caso No. 08PO2- CET00-05653 emitió el 5 de agosto del 2008, la autorización para la construcción de obras de infraestructura: calles, aceras, sistema pluvial, sistema de agua potable, sistema sanitario y sistema eléctrico para un proyecto localizado en la Carretera PR-3, km 33.7 Bo. Cataño y Buena Vista del municipio de Humacao.
4. Para el proyecto mencionado, una solicitud de reapertura (2023-506359-PRR-013228) fue aprobada el 9 de enero de 2024, otorgando una vigencia de un (1) año.
5. Ahora, la parte proponente solicita una prórroga al Permiso de Urbanización, caso número 08PO2- CET00-05653 y justifica su propuesta mediante el siguiente memorial con fecha del 8 de enero de 2025:

   "De conformidad con los deberes conferidos a la Junta Adjudicativa en virtud de la Ley para la Reforma del Proceso de Permisos de Puerto Rico (Ley Núm. 161 de 1 de diciembre de 2009, según enmendada) y el Reglamento Conjunto para la Evaluación y Expedición de Permisos Relacionados al Desarrollo, Uso de Terrenos y Operación de Negocios (Reglamento Núm. 9473 de 16 de junio de 2023) se presenta esta solicitud de prorroga a las obras de urbanización autorizadas en la reapertura del Permiso 08PO2- CET00-05653 (Anejo 1) aprobada el 9 de enero de 2024 y notificada el 11 de enero de 2024 (Anejo 2) para proyecto residencial Laderas de Palmas. Este desarrollo fue aprobado en una finca correspondiente al catastro 329-000-005-61 y ubica en la carretera PR-3 Km. 33,7 en el [barrio] Cataño y Buena Vista, del término municipal de Humacao.

   El 20 de julio de 2023, el Departamento de la Vivienda notificó su determinación de asignar fondos del programa Single Family Housing Development Initiatives, Comunity Development Block Grant- Mitigation (CDBG-MIT-RFP-2022-04) para la construcción de 100 unidades (Anejo 3).

   Actualmente este Proyecto está siendo evaluado por el Departamento de la Vivienda de Puerto Rico (PRDOH, por sus siglas en ingles). Específicamente, el cumplimiento con 24 CFR Part 58 (Environmental Assesment Determination and Compliance Findings for HUD-assisted Projects). Hasta tanto no se complete la evaluación del Proyecto por PRDOH no se pueden comenzar las obras autorizadas en la reapertura del permiso de urbanización debido a que representan una acción limitante ("Choice limiting Action") para el desembolso de los fondos.

   No obstante, y como evidencia de que el proyecto está siendo evaluado por PRDOH se anejan endoso de SHPO, NRCS y publicación de aviso público (Anejo 4) requerido para a la evaluación de los 8 pasos (8 Step Process).

   A tales efectos, solicitamos se apruebe una prórroga de un año adicional para comenzar las obras autorizadas en la resolución sobre reapertura 2023-506359-PRR-013228."
6. No hay evidencias sobre solicitudes de intervención o querellas al proyecto presentado en el expediente digital.

CONCLUSIONES DE DERECHO

1. La Ley Núm. 161 – 2009, según enmendada conocida como Ley para la Reforma del Proceso de Permisos de Puerto Rico tiene como propósito establecer el marco legal y administrativo que regirá la solicitud, evaluación, concesión y denegación de permisos por el Gobierno de Puerto Rico, de conformidad con esta Ley y con la Sección 2.13 de la Ley de Procedimiento Administrativo Uniforme del Gobierno de Puerto Rico, Ley Núm. 38-2017, según

Departamento de Desarrollo Económico y Comercio
Oficina de Gerencia de Permisos
P.O. Box 41179 San Juan, Puerto Rico 00940

enmendada, el 16 de junio de 2023, fue adoptado el Reglamento Conjunto para la Evaluación y Expedición de Permisos Relacionados al Desarrollo, Uso de Terrenos y Operación de Negocios, Reglamento Núm. 9473 del 16 de junio de 2023 ("Reglamento Conjunto").

2. La Ley 161-2009, supra, según enmendada, conocida como la Ley para la Reforma del Proceso de Permisos de Puerto Rico, en su Artículo 6.3 - Facultades, deberes y funciones, dispone, entre otras cosas, lo siguiente:

> *"La Junta Adjudicativa de la OGPe tendrá los siguientes deberes, facultades y funciones generales, además de aquéllos conferidos por esta Ley, o por cualquier otra ley:*
>
> *a) evaluar y adjudicar solicitudes de carácter discrecional;*
>
> *b) evaluar y adjudicar asuntos en áreas no calificadas. En estos casos las determinaciones no establecerán una política general o definirán política pública, quedando esta responsabilidad en jurisdicción exclusiva de la Junta de Planificación; …".*

3. El referido artículo dispone, además, las funciones que la Junta Adjudicativa podrá delegar algunas funciones. Por tanto, mediante la Resolución JA-2017-001, expedida el 8 de mayo de 2017, la Junta Adjudicativa de la OGPe delegó al Director Ejecutivo (ahora Secretario Auxiliar) la facultad de evaluar y adjudicar las siguientes solicitudes:

   - *Todas las consultas de ubicación y enmiendas a estas en aquellos casos que no conlleve un cambio de calificación indirecto.*
   - *Todas las variaciones donde el uso solicitado no conlleven el expendio de bebidas alcohólicas; no generen polvo, ruido, emisiones atmosféricas; no manejen, usen o vendan explosivos o venta de armas o que estén ubicados en Suelos Rústicos Especialmente Protegidos (SREP).*
   - *Todas las variaciones en lotificaciones que no conlleven más de un cincuenta por ciento (50%) de variación en la cabida permitida, excepto aquellas en terrenos clasificados como Suelo Rústico Especialmente Protegido (SREP).*

4. El Reglamento Conjunto vigente dispone en su REGLA 2.2.5 *TÉRMINOS DE VIGENCIA DE LAS DETERMINACIONES FINALES*

   a. Toda determinación final sobre cualquier consulta o recomendación relacionada a un proyecto de construcción, quedará sin efecto si:

      1. Dentro del término de dos (2) años, contado a partir de haberse notificado la misma, no se obtuviera el correspondiente permiso de construcción; o

      2. Luego de haberse obtenido el correspondiente permiso de construcción, las obras autorizadas en éste no se comenzarán dentro del término de dos (2) años a partir de la fecha de su notificación.

      3. El término indicado de dos (2) años contados a partir de la notificación de aprobación para obtener el correspondiente Permiso de Construcción no aplicará en los casos en que exista una querella y como resultado de la investigación de la misma, según establecido en la Regla 11.2.3 y Regla 11.2.4 en el Tomo XI de este Reglamento, realizada por el Auditor de Permisos o la persona delegada, se concluyera que las alegaciones de dicha querella son ciertas, por lo que la radicación de la solicitud de permiso o permisos que apliquen, será a partir de sesenta (60) días de la notificación de aprobación para la obtención del Permiso de Construcción.

      4. Proyectos a ser realizado en etapas (fases) de construcción:

         a) Una vez completada una fase, la siguiente fase deberá iniciarse conforme se establezca en la Consulta, pero dentro del término de cinco (5) años de completada la fase anterior.

         b) De no iniciarse la siguiente fase dentro del término dispuesto, podrá presentar una reapertura de la Consulta y actualizar las recomendaciones aplicables.

   b. Toda determinación final en que se autorice cualquier uso quedará sin efecto si dentro del término de dos (2) años de haberse notificado la misma no se hubiere obtenido el correspondiente permiso único.

   c. Toda determinación final en que se autorice un uso temporero tendrá una vigencia máxima de seis (6) meses. No se permite la extensión o prórroga de este tipo de permiso por términos consecutivos que sobrepasen los seis (6) meses.

   d. La expedición de un permiso de construcción tendrá un término de dos (2) años para comenzar las mismas y se mantendrá vigente durante el tiempo necesario para concluir dichas obras, lo cual incluye las casetas de construcción u oficinas para la venta de un proyecto.

   e. Todas las recomendaciones y autorizaciones de obras incidentales que se emitan como parte de una solicitud de permiso ante la OGPe, tendrán la misma vigencia que el permiso para la cual fue emitido.

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f. Cualquier enmienda a una determinación final, excepto en el caso de las Consultas, no tendrá los efectos de extender los términos de vigencia.

5. En su REGLA 2.2.6 PRÓRROGA A LA VIGENCIA DE PERMISO DE CONSTRUCCIÓN dispone:

   a. Los términos de vigencia indicados se considerarán definitivos para todos los efectos legales. Sin embargo, los mismos podrán ser prorrogados a petición de la parte interesada cuando no se considere la petición de prórroga se someta con anticipación a la fecha de expiración del permiso de construcción expedido.

   b. Se deberá señalar los motivos en que se basa la petición y será acompañada de una certificación del proyectista y especialistas, si algunos, a los efectos de que el proyecto de construcción aún continúa conforme con las leyes y reglamentos aplicables.

6. La sección 2.2.3.16, PRÓRROGA A LA VIGENCIA DE CONSULTAS APROBADAS, del Reglamento Conjunto vigente dispone:

   a. La Junta Adjudicativa de la OGPe o el Municipio Autónomo con Jerarquía de la I a la III podrá conceder prórroga a la vigencia de una consulta, excepto a las relacionadas a un centro comercial de cien mil o más pies cuadrados de áreas netas de ventas y almacén, siempre que:

      1. La petición de prórroga se radique antes de la fecha de expiración de la consulta.

      2. Se señalen los motivos en que se basa la petición.

      3. Se evidencie el progreso alcanzado en la preparación de los documentos y planos que el caso requiera.

   b. Solamente se concederán hasta tres (3) prórrogas de un (1) año, cuando se justifique.

7. La Sección 2.2.3.17, Solicitud de Reapertura de la Consulta Aprobada, del Reglamento Conjunto vigente dispone:

   La Junta Adjudicativa de la OGPe o Municipio con Jerarquía de la I a la III podrá autorizar solamente una (1) reapertura de una consulta cuando se cumpla con lo siguiente:

   a. La solicitud deberá ser sometida dentro de un (1) año, contado a partir de la fecha en que la consulta perdió vigencia; Disponiéndose que transcurrido dicho término, se deberá someter una consulta nueva.

   b. Se expliquen los fundamentos que justifique la reapertura.

   c. Se notifique la solicitud a todas las partes reconocidas en el procedimiento de la consulta originalmente aprobada.

   d. La autorización de una reapertura no conlleva un nuevo proceso de revisión.

8. En relación al caso ante nuestra consideración, la parte proponente solicita una **Prórroga** para el desarrollo residencial, obras de urbanización en el Municipio de Humacao.

ACUERDO

Por la presente, tomando en consideración lo anteriormente expuesto, y en virtud de las facultades conferidas mediante las leyes, normas y órdenes administrativas vigentes, la Junta Adjudicativa de la OGPe adoptó un acuerdo **FAVORABLE**, a la solicitud de prórroga presentada al amparo del caso Núm. **2023-506359-PRR-301146** para las obras de Urbanización en el Municipio de Humacao. De ninguna manera se entiende que esta autorización implica la otorgación de variaciones que no fueran adjudicadas en la radicación original. La parte proponente tendrá que actualizar las correspondientes recomendaciones y endosos.

Una parte adversamente afectada por una actuación, determinación final o resolución de la OGPe, podrá presentar una solicitud de revisión administrativa ante la División de Revisiones Administrativas, dentro del término jurisdiccional de veinte (20) días contados a partir de la fecha de archivo en autos, de copia de la notificación de la actuación, determinación final o resolución. Presentada la solicitud de revisión administrativa, la división correspondiente de la Oficina de Gerencia de Permisos, el Profesional Autorizado, o el Municipio Autónomo con Jerarquía de la I a la V, elevará a la División de Revisiones Administrativas de la OGPe copia certificada del expediente del caso, dentro de los diez (10) días naturales siguientes a la radicación de la moción.

La parte recurrente utilizará el mecanismo que proveerá el Sistema Unificado de Información al presentar el recurso electrónicamente ante la División de Revisiones Administrativas para notificar simultáneamente a la Oficina de Gerencia de Permisos, a la Junta Adjudicativa, los Municipios Autónomos con la Jerarquía de la I a la V, o al Profesional Autorizado, según aplique. Además, la parte recurrente notificará copia de la solicitud de revisión administrativa, por correo certificado con acuse de recibo u mediante otro mecanismo dispuesto por reglamento, a las partes, incluyendo a la OGPe, y a los interventores, dentro del término de cuarenta y ocho (48) horas desde la presentación de la solicitud. La oportuna notificación es un requisito de carácter jurisdiccional y su cumplimiento deberá ser certificado y evidenciado oportunamente ante la División de Revisiones Administrativas.

La División de Revisiones Administrativas tendrá un término de quince (15) días para determinar si acoge la misma. Si en este término se denegase o no se emitiese una determinación a esos fines, en cuyo caso se entenderá rechazada

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de plano, perderá jurisdicción sobre la misma y comenzará a decursar el término de treinta (30) días para recurrir al Tribunal de Apelaciones desde que se notifique la denegatoria o desde que expiren esos quince (15) días, según sea el caso.

La División de Revisiones Administrativas dispondrá de las solicitudes acogidas ante su consideración dentro de un periodo de noventa (90) días naturales desde su presentación. Dicho término podrá ser prorrogado por treinta (30) días adicionales contados a partir de la fecha de vencimiento, en casos excepcionales. Si la División de Revisiones Administrativas no adjudicara la solicitud dentro del término aquí dispuesto, dicho foro perderá jurisdicción sobre la misma y comenzará a decursar el término de treinta (30) días para recurrir al Tribunal de Apelaciones. Las resoluciones de la División de Revisiones Administrativas serán consideradas determinaciones finales de la Oficina de Gerencia de Permisos.

La presentación de una solicitud de revisión administrativa no es un requisito jurisdiccional previo a la presentación de una solicitud de revisión de decisión administrativa ante el Tribunal de Apelaciones. No obstante, su oportuna presentación paralizará los términos para recurrir ante dicho Tribunal.

Cualquier parte adversamente afectada por una determinación final, permiso o resolución de la Oficina de Gerencia de Permisos podrá presentar una solicitud de revisión ante el Tribunal de Apelaciones, dentro de un término de treinta (30) días contados a partir de la fecha del archivo en autos de la copia de la notificación de la determinación final, permiso o resolución de la agencia o a partir de la fecha aplicable cuando el término para solicitar la revisión judicial haya sido interrumpido mediante la presentación oportuna de una solicitud de revisión administrativa. La parte notificará la presentación de la solicitud de revisión a la agencia y a todas las partes dentro del término para solicitar dicha revisión. La notificación podrá hacerse por correo.

Firmas y Sellos

NOTIFIQUESE: A las partes cuyo nombre y dirección se mencionan a continuación en esta solicitud: Rebuilders P.R., LLC, representada por Elvelisse Figueroa Hernández, greenprojectpr@gmail.com

CERTIFICO: Que la Junta Adjudicativa en su reunión del 15 de mayo de 2025 acordó lo aquí expuesto

En San Juan, Puerto Rico hoy, 19 de mayo de 2025.

SR. NORBERTO ALMODÓVAR VÉLEZ
PRESIDENTE JUNTA ADJUDICATIVA
DEPARTAMENTO DE DESARROLLO ECONÓMICO Y COMERCIO
OFICINA DE GERENCIA DE PERMISOS

CERTIFICO: Que he notificado copia fiel y exacta de la presente Resolución, bajo mi firma, a todas las partes mencionadas en el Notifíquese.

En San Juan, Puerto Rico hoy, 19 de mayo de 2025.

SRA. YOLANDA SANTIAGO GONZÁLEZ
DIRECTORA DE SECRETARÍA
Y SERVICIO AL CLIENTE

GOBIERNO DE PUERTO RICO
AUTORIDAD DE ACUEDUCTOS Y ALCANTARILLADOS I INFRAESTRUCTURA I PROYECTOS PÚBLICOS Y PRIVADOS ESTE

21 de octubre de 2024

Lcdo. Félix Rivera Torres
Secretario Auxiliar
Oficina de Gerencia de Permisos (OGPe)
PO BOX 41179
San Juan, Puerto Rico 00940-1179

Lcdo. Félix Rivera Torres:

AAA-RE-23-36-0020 HUMACAO – LADERAS DE PALMAS CDBG-MIT
CARR. PR-3, KM. 84.0
129 UNIDADES EQUIVALENTES
OGPE: 2023-503622-SRI-304920
APROBACIÓN DE PLANOS

El proyecto de epígrafe ha sometido a la consideración de esta Autoridad los planos para la construcción de los sistemas de distribución de acueducto y alcantarillado sanitario De acuerdo al memorial explicativo el proyecto propuesto consiste del desarrollo de un complejo residencial de 112 unidades de vivienda.

Deseamos informarle que los planos para los sistemas de agua y alcantarillado sanitario del proyecto sometidos por el Ing. Antonio F. Hernandez (Licencia 19102 PE) han sido aprobados por esta Autoridad, sujeto a las siguientes condiciones:

Sistema de Distribución de Agua

1. La interconexión para el servicio de agua será de 4" de diámetro y se localizará según se indica en los planos aprobados. El punto de conexión será en la válvula de la tubería de 8" de diámetro localizada en la Carr. PR-3. El endoso de TODAS las unidades de este proyecto estará condicionado a que se realicen los trabajos
2. La (s) interconexión (s) para el servicio de agua mencionada (s) en la condición número 1 se subdividirá (n) en 112 acometidas de ½" de diámetro.
3. El cargo por incorporación del proyecto al sistema de acueductos de esta Autoridad será de $5,914.20, o el costo vigente al momento de la inspección e incorporación del proyecto.
4. El dueño del proyecto suplirá e instalará (los) contador(es) de ½" y los accesorios requeridos para la instalación de los contadores. El dueño o constructor del proyecto suplirá e instalará la(s) caja(s) de hierro fundido con marco y tapa de hierro fundido del tamaño "standard" para la protección de cada contador. Esta(s) caja(s) y demás accesorios de dicha(s) instalación(es) pasará a la propiedad de esta Autoridad.
5. Las cajas de contador serán instaladas fuera del área de rodaje, estacionamiento o rampas de acceso. Además, las mismas deberán estar instaladas fuera del límite de la propiedad. No se permitirán la instalación de más de una acometida en una misma trinchera.
6. Las cajas de contadores serán instaladas a no menos de 5 pies de distancia de todo equipo eléctrico (seguridad). Cualquier situación que no permita el cumplimiento de esta distancia deberá ser consultada con esta oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados.

7. Las cajas para la protección de cada contador se instalarán en el espacio reservado para siempre entre el sardinel y la acera. En caso de que no existiera, dicha caja será instalada en la acera o en cualquier otro sitio accesible aceptado por la Autoridad.
8. Las cajas de contador deberán ser protegidas con una base de hormigón con dimensiones de 21" X 18" X 4". Las llaves de paso serán protegidas por su respectiva protección de hormigón de 12" X12"X4".
9. Resaltamos que todas las llaves de paso, válvulas tirafondo, válvulas auxiliares, hidrantes serán provistos de sus respectivas protecciones de hormigón.
10. Las nuevas instalaciones no podrán ser conectadas hasta tanto se realice la desinfección y se emitan los resultados de la misma.
11. La tubería para el servicio de acueductos será instalada a una profundidad mínima de 0.75 metros, medido desde la superficie del pavimento hasta la parte superior del tubo y a una distancia de 1.5 metros del sardinel.
12. La distancia entre las instalaciones de servicio de agua y las instalaciones eléctricas será mayor o igual a 5 pies. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados y abonados.
13. La distancia entre las instalaciones de servicio de agua y las instalaciones pluviales será mayor o igual a 5 pies. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados y nuestros abonados.
14. La distancia entre la acometida de alcantarillado sanitario y la acometida de servicio de agua será mayor o igual a 5 pies, no se permitirá la instalación de ambas acometidas en la misma excavación. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados y abonados.
15. Se instalarán ventosas de aire en todos los puntos altos de la tubería donde se creen picos por cambios de dirección, según sea necesario. La localización de las mismas se determinará en el terreno.
16. Deberá instalar bloque de acodalamiento ("TRHUST BLOCK") en hormigón en cada cambio de dirección de la tubería a ser instalada.
17. Deberán instalarse aditamentos anti-hurtos a las bocas de incendio propuestas dentro del proyecto.
18. Se dejara un espacio de al menos 3" entre la loza de protección de hormigón y la tornillería de la base del hidrante.
19. Las pieza de conexión a utilizarse para la instalación de acometidas, serán tipo "flare" o rosca en caso de ser cobre flexible tipo "K", o rosca en caso de construirse en bronce. No se permitirán conexiones realizadas con piezas soldadas.
20. **Todas las acometidas de ½" se instalarán con abrazadera y llave de incorporación**.
21. Todas las conexiones serán realizadas por un maestro plomero, o bajo la supervisión de este.
22. Se deberá instalar una cinta detectable sobre la tubería de agua, igual o similar a la manufacturada por la compañía "REEF INDUSTRIES INC". Dicha cinta deberá estar localizada sobre y paralela a la tubería, a una profundidad de 0.30 metros (12"), bajo la superficie del terreno.
23. Todas las piezas como "TEE", válvula, tapón, etc. serán de hierro fundido.
24. Las piezas de conexión de hierro fundido se ajustarán a las especificaciones AWWA-C-110-54 o AWWA-C100-54, excepto las curvas de 45° y codos de 90°, las cuales deberán ajustarse específicamente a los requisitos de las segundas de estas especificaciones. Además, en caso que

dichas piezas se instalen de un diámetro igual o mayor de 8", las mismas serán con junta mecánica ("Mechanical Joint") y se ajustarán a las especificaciones del ASA-A-21.11 y ASA-A-21.10, según enmendadas y en vigor actualmente.

25. Las válvulas para las líneas de cañería serán de doble compuerta de hierro fundido con asientos de bronce ("cast iron body, bronze mounted") para 150 libras de presión, juntas de campana y tuerca cuadrada para su operación. Todas las válvulas se ajustarán a las especificaciones adoptadas por la "American Water Works Association", AWWA.
26. Las acometidas para el servicio de agua serán de diámetro y material indicado en los planos aprobados y se localizará según se indica en los planos. Sus extremos quedarán a 10" de profundidad de la superficie terminada de la acera y consistirán de llave de incorporación, tubería de material aceptable y aprobado por esta Autoridad, con sus uniones especiales ("adapters"), yugo ("meter yoke box") de un modelo y especificaciones aprobadas por la Autoridad. Las cajas de hierro fundido deberán estar provistas de cerradura de diseño previamente de bronce y de diseño aprobado, a una distancia aproximada de un (1) pie dentro del límite del solar. Esta(s) llave(s) de paso deberá(n) ser provista(s) de una protección de hormigón con dimensiones 8"x8"x4".
27. La tubería de polivynil (PVC) a instalarse tiene que cumplir con todos los requisitos de las especificaciones de la "American Society for Testing & Materials" (ASTM-D-2241) en vigor actualmente.
28. Será necesario realizar excavaciones exploratorias según lo solicite el inspector de la AAA., para poder verificar la profundidad y material de la tubería. Deberá dejar provista una excavación abierta para que personal de esta Autoridad verifique las instalaciones realizadas en el mismo.
29. La tubería de servicio de agua deberá instalarse al lado contrario de las utilidades eléctricas, telefonía o CATV.
30. El proponente o dueño deberá notificar por escrito a esta oficina cuando comience la construcción de las obras.
31. Cualquier cambio que sea necesario a lo indicado en este plano o en su carta de aprobación, relacionado al sistema de agua potable, deberá ser consultado y evaluado con esta oficina previa a su implementación.
32. Para la aceptación final del proyecto el mismo deberá estar pavimentado cuando se realice la validación final.
33. El contratista o desarrollador presentará evidencia del pago de conexión al sistema, previo al endoso final del proyecto.
34. Antes de proceder a la instalación de la tubería, el urbanizador suministrará a la Autoridad de Acueductos y Alcantarillado, un certificado del fabricante de la misma incluyendo las piezas de conexión, haciendo constar que la inspección y todas las pruebas requeridas en las antes mencionadas especificaciones han sido debidamente efectuadas en la fábrica habiéndose llenado todos los requisitos exigidos en dichas especificaciones.
35. La AAA se reserva el derecho de requerir cualquier cambio pertinente que por omisión o error involuntario no se haya incluido en el proyecto y a su juicio sea necesario para el buen funcionamiento del sistema de acueductos.
36. La Autoridad será responsable de la conservación de cada acometida hasta los contadores, incluyendo éstos. El dueño del proyecto será responsable de la operación y conservación de toda la instalación más allá de los contadores.
37. Se resalta el hecho que solo en los ramales en donde se prevé futuros desarrollos podrán dejarse tapones finales en las líneas. Aquellas líneas finales a puntos donde no se espera desarrollo adicional deberá considerarse la instalación de la última acometida de servicio al tapón final, para evitar puntos "muertos".

Sistema de Alcantarillado Sanitario

38. El punto de conexión para este proyecto será la línea sanitaria de 8" de diámetro existente en la PR-3. La conexión será realizada mediante "dog-house"
39. Los registros de inspección a instalarse en el sistema de alcantarillado sanitario deberán ser cubiertos con un anticorrosivo (epoxy), igual o similar al denominado "Concresive 305".
40. El tope de los registros sanitarios a ser instalados fuera de la zona de rodaje deberán ser instalados al menos 0.30 metros sobre el nivel del terreno.
41. Toda tubería que no llene los requisitos de las pruebas, será reparada por el contratista y sometida a prueba hasta que sea aprobada definitivamente por el inspector de la Oficina de Proyectos Públicos y Privados.
42. La infiltración o exfiltración de agua en las tuberías no será mayor de 50 galones por pulgada de diámetro por milla de longitud en 24 horas. El contratista proveerá los medios según lo requiera el inspector de A.A.A., para llevar a cabo las pruebas de tuberías sanitarias.
43. El dueño o contratista deberá estar preparado con personal y equipo adecuado para realizar las pruebas de nivelación al sistema sanitario propuesto. La misma deberá cumplir en terreno con las pendientes profundidades de los registros adecuadas según Capítulo IV incisos 4.06 y 4.15.01 estipulado en el Manual de Normas de Diseño de esta autoridad.
44. Para aceptar finalmente el proyecto el mismo deberá estar pavimentado cuando se realice la validación final.
45. La distancia entre las instalaciones de servicio de alcantarillado sanitario y las instalaciones eléctricas (pedestales eléctricos, transformadores, postes, etc.) será mayor o igual a 5 pies. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados.
46. La distancia entre las instalaciones de servicio de agua y las instalaciones de alcantarillado sanitario será mayor o igual a 5 pies. Cualquier situación que no permitiese el cumplimiento de esta distancia, deberá ser consultada con esta Oficina para aprobar alternativas que garanticen la seguridad de nuestros empleados.
47. Los registros de limpieza serán instalados fuera del área de rodaje o rampas de acceso vehicular.
48. La A.A.A. se reserva el derecho de requerir cualquier cambio pertinente que por omisión o error involuntario no se haya incluido en el proyecto y a su juicio, sea necesario para el buen funcionamiento del sistema de alcantarillado sanitario.
49. Cualquier cambio que sea necesario a lo indicado en este plano o en su carta de aprobación, relacionado al sistema de alcantarillado sanitario, deberá ser consultado y evaluado con esta oficina para aprobación, previo a su construcción y/o desarrollo.

Condiciones Generales

50. El urbanizador tiene que notificar a la Oficina Regional de Caguas de Proyectos Públicos y Privados de esta Autoridad tan pronto se comiencen las obras de acueductos y/o alcantarillado sanitario en el referido proyecto.
51. Antes de proceder al traspaso de los sistemas de distribución de agua y/o alcantarillado sanitario a esta Agencia, el urbanizador tiene que suministrar un inventario completo de dichos sistemas, así como un plano de inscripción final del proyecto y también tiene que legalizar la cesión de servidumbre de paso y terrenos adquiridos, si las hubiese.
52. La A.A.A. se reserva el derecho de requerir cualquier cambio pertinente u obra de mejora que por omisión involuntaria no se haya incluido en el proyecto y a su juicio, sea necesario para el buen funcionamiento del (de los) sistema(s) de agua potable y alcantarillado sanitario. . Esto incluye

obras construidas que no estén en acuerdo con las Normas de la Autoridad y que su efecto sea en detrimento de los sistemas a ser instalados.

53. Si existiera una cañería de la Autoridad de Acueductos y Alcantarillados en uso, a la cual por su situación lógicamente debería conectarse el sistema de distribución de agua y alcantarillado sanitario, según fuera el caso del referido proyecto y dicha cañería fuera inadecuada a los fines de proveer medios eficientes de servicio, o si la misma no existiera, la Autoridad no vendrá obligada en forma alguna a facilitar libre de costo el debido funcionamiento de dichos sistemas.

54. Las instalaciones para los servicios de agua y/o alcantarillado sanitario no podrán ponerse en uso hasta tanto sean terminadas y aprobadas por esta Autoridad.

55. El dueño del proyecto deberá instalar equipos de conservación de agua iguales o similares a los "AFC" (Salva-agua), "UFO" o "ECO". El aditamento cerrará instantáneamente el flujo cuando el usuario remueva la mano del agua. El aditamento tiene que detener el goteo causado por llaves y zapatillas defectuosas. La pérdida efectiva será de 0.0 GPM y el flujo del aditamento no será mayor de 1.5 GPM. Los inodoros deberán ser de no más de 1.6 galones por descarga.

56. Los pagos de los cargos por conexión, cargos especiales por agua de construcción y los cargos de desinfección de cañerías se harán en las Oficinas Comerciales correspondientes. La oficina de Proyectos Públicos y Privados determinará la cantidad de dinero a pagar mediante una notificación a la Agencia Comercial con copia para el desarrollador. Los pagos se harán con cheques certificados o giros a favor de la AAA. La Agencia Comercial será responsable de recibir el pago efectuado por el desarrollador, expedir un recibo al contratista según la *"Notificación de Cobro a la Agencia Comercial"*. El desarrollador deberá presentar la evidencia de pago y entregar este formulario firmado por el Oficial Receptor en original junto con dos copias del cheque certificado o giro. La Agencia Comercial adjuntará el recibo del cajero electrónico.

Vigencia & Disposiciones Generales

57. Esta aprobación del referido proyecto será efectiva por un término de dos (2) años a partir de la fecha de esta comunicación: al cabo del cual, de no haberse comenzado la construcción de las obras de acueductos y/o alcantarillado sanitario, el proponente tiene que someter nuevamente el proyecto a la consideración de esta Autoridad, tan pronto esté en condiciones de ejecutar dichas obras, de todo lo cual queda apercibido del interesado.

58. Una vez se inactive este proyecto por más de dos años, la aprobación del mismo quedará sin efecto. La inactividad del proyecto se refiere a que no se reflejen acciones en el expediente de trabajo de la AAA.

59. El dueño del proyecto, el ingeniero que certificó los planos para la instalación de los sistemas de acueducto y alcantarillado sanitario, el inspector designado por el dueño y el contratista deberán cumplir con el "*Reglamento de Certificación y Planos de Construcción",* adoptado por esta Autoridad de acuerdo con la Ley número 7 del 19 de julio de 1985.

60. Las cartas de recomendaciones vigentes y las condiciones indicadas en las mismas, serán parte de la aprobación de este proyecto. Los dueños del proyecto serán responsables de cumplir con estas condiciones y cualquier omisión nuestra, en esta aprobación, no los releva de realizarlas. Para todos los efectos, se considerarán como incluidas en esta aprobación.

61. Todas las bocas de incendio del proyecto se les proveerá un sistema anti-hurto para evitar el uso clandestino de las mismas. Las bocas de incendio deberán ser protegidas contra accidentes o impactos mediante la instalación mínima de tubos de hierro dúctil de 4" de diámetro rellenos de cemento.

62. Todas las conexiones, (temporeras o permanentes) se solicitarán a la Oficina de Proyectos Públicos y Privados.

63. Los pagos de los cargos por conexión, cargos especiales por agua de construcción y los cargos de desinfección de cañerías se harán en las Oficinas Comerciales correspondientes. Las facturas relacionadas a dichos cargos serán emitidas por la oficina de Proyectos Públicos y Privados. La evidencia de pago será el recibo emitido por la Oficina Comercial.

Servicios temporeros durante la construcción

64. El método de provisión de agua de construcción deberá ser propuesto por el desarrollador y aprobado por la Oficina de Proyectos Públicos y Privados antes de iniciar la construcción del proyecto. Resaltamos que cualquier persona que hiciera uso del servicio de agua o alcantarillado sin que medie un servicio registrado con la Autoridad, será responsable del pago de los servicios utilizados, del cumplimiento con las normas o reglamentos aplicables y las disposiciones del *Código sobre Tomas o Descargas Clandestinas, Hurto de Agua, Manipulación de Contadores u otros Accesorios Propiedad de la Autoridad de Acueductos y Alcantarillados*.

65. Para la provisión de estos servicios, siempre prevalecerá el método de lectura sobre cualquier método donde el consumo tenga que ser estimado.

66. La(s) acometida(s) temporera(s) para agua durante el proceso de agua de construcción deberán ser solicitadas formalmente a la Oficina de Proyectos Públicos y Privados (PPP), antes de iniciar las obras de construcción del proyecto. La Oficina de PPP emitirá la factura relacionada al trabajo de conexión de dicha acometida, así como la autorización de conexión, y la autorización para registrar temporeramente el servicio solicitado.

67. Deberá solicitar un servicio aparte para las oficinas temporeras del proyecto.

68. Proyectos que por su configuración, no puedan suministrar el agua de construcción con un método de lectura, estarán sujetos al pago por unidad establecido para dichos fines al momento de que se emita el endoso final para permiso de uso. Destacamos que el método de provisión de agua de construcción deberá ser propuesto por el desarrollador y aprobado por la Oficina de Proyectos Públicos y Privados antes de iniciar la construcción del proyecto.

Inspección de Obras

69. Deberá someter a las Oficinas de Proyectos Públicos y Privados dos (2) copias del "set" de planos aprobados (sello de la AAA incluido) en tamaño 24" x 36", antes del inicio de construcción del proyecto.

70. Deberá solicitar una reunión pre-construcción antes de solicitar la primera inspección del proyecto. A la misma debe asistir el inspector designado por el dueño, y el representante del dueño.

71. El inspector designado en la forma de AAA-881 será responsable de cumplir con las disposiciones de la sección 4.0 del Reglamento para permisos de planos de la AAA.

72. El inspector designado, según indicado en la AAA-881, será responsable de someter ante esta Oficina reportes rutinarios de las obras realizadas y fotos de las tuberías instaladas. Estos reportes deberán ser sellados y firmados por el inspector.

73. Las solicitudes para inspección deberán realizarse por escrito a nuestras Oficinas y deberán ser precedidas por el informe del inspector designado por el dueño. Los informes de inspección deben detallar los elementos o pruebas realizadas así como el resultado de las mismas. En el caso de pruebas se debe describir el método utilizado para realizar la misma. Asimismo, se deben incluir fotografías de los elementos inspeccionados.

74. El inspector designado deberá someter copia de los informes de inspección del proyecto que correspondan a la instalación de las líneas del sistema de distribución de agua o alcantarillado sanitario del proyecto, cuando se vaya a solicitar el endoso de las unidades individuales. Este informe debe tener el sello y la firma del inspector designado en original.

75. Deberá proveerse una excavación en todas las acometidas para verificar la profundidad de las tuberías y tipo de material antes de pavimentar la calle de acceso y del proyecto.

76. El inspector designado deberá estar presente en las inspecciones.

77. Se debe coordinar las excavaciones en todo el proyecto de construcción con la oficina de Coordinación de Excavaciones, teléfono 764-4900, adscrita a la Comisión de Servicio Público.

Cambios al Plano Aprobado

78. Se deberá presentar un plano revisado donde se indique cualquier cambio del sistema de agua y sanitario. Estos cambios al plano inicialmente aprobado, deberán ser aprobados antes de proceder con los mismos. Toda solicitud para enmienda de un plano aprobado deberá incluir: un memorial explicativo discutiendo los cambios, los formularios AAA-1294 (Certificación del Diseñador) y AAA-972 (Solicitud de aprobación de planos de construcción)

79. Cualquier cambio/enmienda al plano originalmente aprobado deberá ser presentado a través de una petición de servicio para tales fines a través de la Oficina de Gerencia de Permisos (OGPe). Esta Oficina no validara obras que no cumplan con las Normas de esta Autoridad y/o cuenten previamente con nuestra aprobación.

80. De surgir alguna diferencia entre lo indicado en el plano y este documento prevalecerá lo que indique este documento y/o lo que determine esta Oficina.

81. Cualquier sistema de recolección de aguas de lluvia propuesta, deberá ser presentado para evaluación de esta Autoridad. En relación a estos sistemas resaltamos que:

    a. Dichas aguas no podrán ser mezcladas con las aguas del sistema de agua potable, servida por la AAA.

    b. Se deberá proveer un mecanismo para que esta Autoridad pueda facturar por la porción de esta agua, que por su naturaleza, se proponga disponer al sistema de alcantarillado sanitario de la AAA.

Otros

82. El diseñador deberá someter una copia del plano digital en formado ArcView (.shp), Microstation (.dng) o Autocad (.dwg). Además deberá incluir las coordenadas State Plane NAD83.

83. Como parte del proceso de endoso y aceptación final del proyecto deberán ser remitidos a nuestra Oficina los siguientes formularios: Formulario AAA-177 (Informe de Terminación de Obra), Formulario AAA-1268 (Documento de Cesión y Traspaso), Formulario AAA-1351 (Declaración y Certificación), Formulario AAA-1294-A (Certificación del Contratista) y la Certificación Final del Inspector Designado.

84. El trámite para constituir las servidumbres de paso que sean necesarias deberá haber sido finalizado antes de solicitar el/los endoso(s) final(es) para permiso de uso relacionados al proyecto.

85. El desarrollador deberá entregar un desglose de los largos de tubería instalados en el proyecto para los sistemas de agua y/o alcantarillados. En adición proveerá un listado de todas las bocas de incendio dentro del proyecto con su localización exacta y un estimado de las obras hidráulicas. Esto será un requisito para poder emitir la carta de Aceptación Final.

86. El dueño del proyecto tendrá que obtener de la oficina de Proyectos Públicos y Privados, la carta de Aceptación Final una vez sea inspeccionado y completado el proyecto en su totalidad para poder obtener el servicio.

87. El desarrollador, urbanizador o dueño del proyecto será responsable de toda obra de

infraestructura de acueductos y alcantarillado hasta tanto, no haya obtenido una aceptación final de parte de la AAA. Toda deficiencia encontrada en los sistemas de distribución de agua y alcantarillado sanitario será de entera responsabilidad de los mismos y deberá ser corregida.

Condiciones Especificas

88. La aceptación final de este proyecto estará condicionada a que el desarrollador complete satisfactoriamente los tramites de servidumbres de paso y tramites de dedicación a uso publico de las calles donde discurre infraestructura de la Autoridad. De lo contrario será responsable de la operación y mantenimiento de la misma.

89. Trabajos a ser realizados por el dueño :

El desarrollo propuesto será suplido de la Estación de bomba EB Terminal sur. Dicha estación en la actualidad tiene limitaciones en su gradiente hidráulica. Lo cual impide que la estación de bombas EB Catano tenga succión adecuada debido a su altura en relación con EB Terminal Sur. La integración del desarrollo propuesto al sistema afectaría de manera adversa esta situación. Luego de consultar con el área operacional, entendemos que la mejor opción para viabilizar el proyecto seria la instalación de una estación de bombas en las inmediaciones del proyecto la cual serviría para proporcionar servicio al proyecto y brindar mejor succión a EB Catano.

1. El informe del análisis realizado y diseño de las mejoras propuestas que resulten necesarias para garantizar la capacidad adecuada para manejar la demanda existente y la demanda adicional que representará el proyecto deberá ser sometido ante la oficina de PPP para aprobación.

Cordialmente;

Ing. Ricardo Velázquez Medina
Gerente Técnico Región Este
Proyectos Públicos y Privados

C: Dueño/Proponente, Expediente, Archivo de Lectura

Exhibit 20f

ESTADO LIBRE ASOCIADO DE PUERTO RICO
Oficina de Gerencia de Permisos

Recibo de Pago

PERMISO: 2023-503622-SRI-314669

DESCRIPCIÓN	CANTIDAD	NÚM. RECIBO	FECHA DE ENVÍO
Costo Base del Trámite	$15.00		03-20-2025

Total: $15.00

Exhibit 20g

GOBIERNO DE PUERTO RICO
Departamento de Desarrollo Económico y Comercio
Oficina de Gerencia de Permisos

Número de Caso:
2023-503622-SRI-305091

Recomendaciones

Laderas de Palmas CDBG-MIT

Datos de Localización

De acuerdo a la información suministrada se propone una actividad: Privada en:

Dirección Física

BO CATAÑO , CARR 3 KM.HM 83.9, PR,
PUERTO RICO, 00000
Humacao Puerto Rico, 00919

Número(s) de Catastro

329-000-005-61

Calificación

Distrito(s) de Calificación: R-I (56%), A-4 (40%), DT-G (4%)

Distrito en el Mapa de Inundabilidad: X

Tipo de Suelo: TeE (39.5%), CdC2 (32.7%), DaC (21.7%), PaE2 (6.0%), Me (0.2%)

Casos de Referencia

NETPR 2023-RI-0329

Dueño

Rebuilders PR, LLC

Certificado por

Ingeniero : EDUARDO CHARDON CASALS, Lic. No. 15346

Cabida

Cabida según escritura: 292426.42 metros cuadrados

Infraestructura

NETPR 2023-RI-0329_OGPE2023-503622-SRI-305091_El Negociado de Telecomunicaciones (NET), incluyó en el expediente digital la Aprobación Final de Planos de Construcción con fecha de 22 de julio de 2024, bajo el código de OGPE2023-503622-SRI-305091 (NETPR 2023-RI-0329). Este documento es vinculante y está vigente en toda su extensión. En específico, el dueño o su representante constituirán, mediante Plano de Inscripción y Escritura, la Servidumbre de Infraestructura Soterrada de Telecomunicaciones, en estricto cumplimiento con las disposiciones del Reglamento para Endosos de Planos de Infraestructura y Servidumbres para Facilidades de Telecomunicaciones y Televisión por Cable del NET, Reglamento 7393, revisado. Cuando la obra esté parcial o totalmente construida, presentará una Solicitud de Inspección, para la Certificación de Obras Construidas (COC). La COC es un requisito mandatorio, para solicitar el Permiso de Uso. La COC debe tramitarse ante el NET, pero a través de la OGPe. Asimismo, la COC será requerida antes de la otorgación de la Escritura para la Constitución de Servidumbre. La Escritura para la Constitución de Servidumbre, se otorgará previo a la aprobación del plano de inscripción del proyecto, por la OGPe. De ser necesaria una Relocalización de Planta, se exige el estricto cumplimiento con la sección 3.09 del Reglamento 7393, revisado. El NET ejercerá la autoridad delegada, evaluará cada fase inconclusa del proceso de permisos, y cuando sea necesario, solicitará información adicional. El NET auditará el cumplimiento de todo requisito aplicable a la otorgación de autorizaciones con la facultad disponible para iniciar procedimientos administrativos. En el descargue de los deberes delegados, el NET pasará juicio en torno a la veracidad de los hechos que surjan de los expedientes administrativos; y, a solicitud de parte, con la previa inspección, aceptará o señalará desviaciones a corregirse. Se notificarán las acciones administrativas que correspondan, de acuerdo con la etapa del Proyecto en referencia.

Condiciones Especiales

NINGUNA

Recomendaciones

Laderas de Palmas CDBG-MIT

Condiciones Generales

Esta recomendación es solamente aplicable a la situación de hechos y los datos según presentados y evaluados en el caso. La OGPe se reserva el derecho de reevaluar, variar o modificar el mismo en cualquier momento anterior a la emisión del permiso o la acción administrativa correspondiente por parte de la agencia solicitante o proponente cuando surja nueva información oficial específica estableciendo que el derecho aplicable o las condiciones ambientales en el predio han cambiado sustancialmente, o cuando la recomendación original se emitió bajo premisas falsas o fraudulentas.

Las vigencias de las diferentes agencias del proceso de recomendación serán las establecidas en los comunicados que estas emiten conforme a sus reglamentos.

Firma / Sellos

Fecha de Expedición:

22/JUL/2024

Lcdo. Félix E. Rivera Torres
Secretario Auxiliar
Departamento de Desarrollo Económico y Comercio de Puerto Rico
Oficina de Gerencia de Permisos

Lcdo. Félix E. Rivera Torres

Secretario Auxiliar de la OGPe

Exhibit 20h

MUNICIPIO AUTÓNOMO DE HUMACAO

Número de Caso:
2023-APS-005487

Aprobación de Plano Seguro

RB

Datos de Aprobación

De conformidad con las disposiciones legales y reglamentarias vigentes, se expide la presente Aprobación de Plano Seguro, según certificado por y a nombre del dueño aquí especificado:

Dueño

Rebuilders PR LLC

642 Ave. San Patricio, San Juan, Puerto Rico, 00920

Certificado Por

Jose Garcia Lic. No. 16339

PMB 749, 1353 Ave. Vigoreaux
Guaynabo, 00966

Estimado de Costo

Costo original: 86108.00 $ (USD)

Costo revisado: 108245.50 $ (USD)

Atributos

Área bruta de piso: 1264.00 pies cuadrados

Área de ocupación: 1264.00 pies cuadrados

Tipo de proyecto: Una planta

Cantidad de estacionamientos: 1

Tipo de estacionamiento: Impedidos

Material de la(s) estructura(s): Hormigón Armado y Bloques

Este Plano Seguro **SI** está autorizado para uso general, a un costo de $0.00.

Condiciones Generales

Aviso

El Plano Seguro ha sido aprobado como etapa adelantada a la ulterior presentación de la solicitud de permiso de construcción que el uso de tal plano conlleva. Bajo ninguna circunstancia deberá interpretarse que esta aprobación autorice iniciar obras de construcción de clase alguna, ni el uso del Plano Seguro sin el consentimiento del proyectista.

Aprobación de Plano Seguro

Firma y Sellos

Fecha de Expedición:

22-04-2024

Teófilo Berrios Ramos

Director Oficina de Permisos del Municipio Autónomo de Humacao

SBP
SINGLE BUSINESS PORTAL

Exhibit 20I

HUMACAO
CIUDAD AUTÓNOMA
CAPITAL DEL ESTE
DE PUERTO RICO

ROSAMAR TRUJILLO PLUMEY
ALCALDESA

25 de febrero de 2025

Rebuider PR, LLC y/o Antonio Hernandez
1526 Ave. Ponce De León Urb. Caribe
San Juan, PR 00926-2706

Solicitud:	**Endoso Laderas de Palmas**
Solicitante:	**Rebuilders PR, LLC**
Dirección:	**Carretera PR-3, Km. 33.7** **Barrio Cataño, Humacao, PR**

Estimados señores:

Hemos recibido su solicitud de evaluación y certificación de calificación de los terrenos en los cuales se construirá el proyecto residencial Laderas de Palmas en la Carretera PR-3, Km 33.7, Barrio Cataño del Municipio Autónomo de Humacao.

Conforme a la Primera Revisión Parcial del Plan de Ordenación Territorial de Humacao del 8 de febrero de 2008, esta parcela se encuentra clasificada como Suelo Urbano (SU); y cuenta con una calificación de Residencial Uno (R-1); según la Hoja Núm. 304 y 329, del Mapa de Calificación, con vigencia del 30 de octubre de 2010 y 25 de septiembre de 2011, respectivamente. Bajo la nueva nomenclatura del *Reglamento Conjunto para la Evaluación y Expedición de Permisos Relacionados al Desarrollo, Usos de Terreno y Operación de Negocios*, con vigencia del 16 de junio de 2023; este distrito es equivalente a Residencial de Baja Densidad (R-B). El Plan de Usos de Terrenos de 2015 clasifica estos terrenos como Suelo Urbano.

El distrito Residencial de Baja Densidad se establece para identificar áreas para futuro crecimiento urbano y para preservar el carácter residencial de áreas desarrolladas o que puedan desarrollarse en donde se permitirán diferentes tipos de viviendas. El Municipio de Humacao se encuentra trabajando con la Primera Revisión Integral del Plan de Ordenación Territorial, en la cual se revisarán las calificaciones actuales, el comportamiento existente de los usos del suelo y los impactos que podrían tener realizar cambios de calificación en el sector. Los terrenos objeto de consulta fueron evaluados y estamos considerando un cambio de calificación a Residencial Intermedio. Este se justifica por la necesidad de viviendas y por el carácter del proyecto propuesto ser compatible con los usos urbanos en el entorno, tales como: Urb. Miradero, Urb. Villas de Candelero y Urb. Parques de Candelero. El proceso de Revisión Integral se encuentra en curso por lo cual las modificaciones a la reglamentación y mapas de ordenación territorial aún deben pasar

HUMACAO
CIUDAD AUTÓNOMA
CAPITAL DEL ESTE
DE PUERTO RICO

por vistas públicas y las correspondientes autorizaciones de la Legislatura Municipal, la Junta de Planificación, la Fortaleza y el Departamento de Estado.
Este proyecto se perfila como de gran beneficio para la ciudad de Humacao, ya que proporcionará vivienda nueva en áreas urbanas y fomentará nueva actividad económica. No tenemos objeción al proyecto, siempre y cuando cumpla con los requisitos y regulaciones vigentes que le son aplicables.

De requerir información adicional, puede comunicarse con esta servidora al número telefónico 787-852-3066 ext. 3160.

Cordialmente,

Zugeily Donato Ramos, MSEM, MP, PPL
Directora

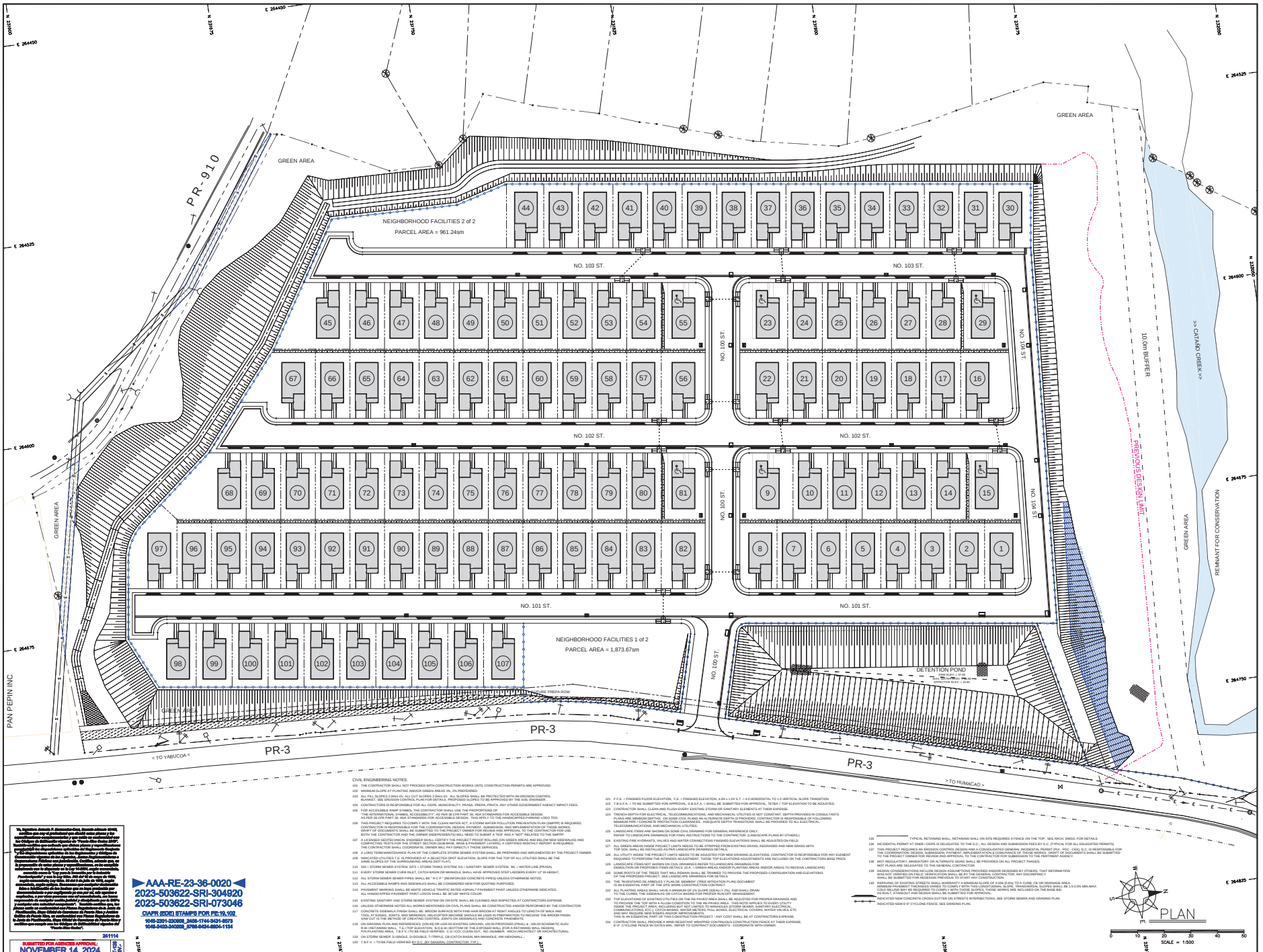
Environmental Assessment Determinations and Compliance Findings for HUD-Assisted Projects
24 CFR Part 58

Exhibit 21

Projects Drawings

Laderas de Palmas

SF-HDI-00012



CIVIL ENGINEERING NOTES:

101 THE CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION WORKS UNTIL CONSTRUCTION PERMITS ARE APPROVED.
102 MINIMUM SLOPE AT PLANTING AND/OR GREEN AREAS 2%, 3% PREFERRED.
103 ALL FILL SLOPES 2.0mH:1V, ALL CUT SLOPES 2.0mH:1V . ALL SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. SEE EROSION CONTROL PLAN FOR DETAILS. PROPOSED SLOPES TO BE APPROVED BY THE SOIL ENGINEER.
104 CONTRACTORS IS RESPONSIBLE FOR ALL OSPE, MUNICIPALITY, PRASA, PREPA, PRHTA, ANY OTHER GOVERNMENT AGENCY IMPACT FEES.
105 FOR ACCESSIBLE RAMP SYMBOL THE CONTRACTOR SHALL USE THE PROPORTIONS OF "THE INTERNATIONAL SYMBOL ACCESSIBILITY", AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN. AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN. THIS APPLY TO THE HANDICAPPED/PARKING LOGO TOO.
106 THIS PROJECT REQUIRES TO COMPLY WITH THE CLEAN WATER ACT, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, DESIGN, PAYMENT, SUBMISSION, AND IMPLEMENTATION OF THOSE WORKS. DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR USE. BOTH THE CONTRACTOR AND THE OWNER (INDEPENDENTS) WILL NEED TO SUBMIT A "NOI" AND A "NOT" RELATED TO THE SWPPP.
107 A LICENSED GEOTECHNICAL ENGINEER SHALL CERTIFY THE PROJECT PROOF ROLLING (ON GREEN AREAS AND BELOW NEW SIDEWALKS) AND COMPACTION TESTS (ON ROADWAYS AND PARKING AREAS). THE CONTRACTOR SHALL HIRE A CERTIFIED MONTHLY REPORT IS REQUIRED. THE CONTRACTOR SHALL COORDINATE, OWNER WILL PAY DIRECTLY THOSE SERVICES.
108 A LONG TERM MAINTENANCE PLAN OF THE COMPLETE STORM SYSTEM SHALL BE PREPARED AND IMPLEMENTED BY THE PROJECT OWNER.
109 INDICATED UTILITIES T. E. IS PROVIDED AT A SELECTED SPOT ELEVATION. SLOPE FOR THE TOP OF ALL UTILITIES SHALL BE THE SAME AS THE ADJACENT FINISHED GRADE, U.N.O.
110 S/S = STORM SEWER SYSTEM, SITE = STORM TANKS SYSTEM, SS = SANITARY SEWER SYSTEM, WL = WATER LINE (PRASA)
111 EVERY STORM SEWER CURB INLET, CATCH BASIN OR MANHOLE SHALL HAVE APPROVED STEP LADDERS EVERY 12" IN HEIGHT.
112 ALL STORM SEWER SEWER PIPES SHALL BE " R C P " (REINFORCED CONCRETE PIPE)) UNLESS OTHERWISE NOTED.
113 ALL ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE CONSIDERED NEW FOR QUOTING PURPOSES.
114 PAVEMENT MARKING SHALL BE WHITE VEHICLE TRAFFIC RATED ASPHALT PAVEMENT PAINT UNLESS OTHERWISE INDICATED. ALL HANDICAPPED PAVEMENT PAINT LOGOS SHALL BE 36"x36" WHITE COLOR.
115 EXISTING SANITARY AND STORM SEWER SYSTEM ON ON-SITE SHALL BE CLEANED AND INSPECTED AT CONTRACTORS EXPENSE.
116 UNLESS OTHERWISE NOTED ALL WORKS MENTIONED ON CIVIL PLANS SHALL BE CONSTRUCTED AND/OR PERFORMED BY THE CONTRACTOR.
117 CONCRETE SIDEWALK FINISH SHALL BE: BROOM SURFACE WITH FINE-HAIR BROOM AT RIGHT ANGLES TO LENGTH OF WALK AND TOOL AT EDGES, JOINTS, AND MARKINGS. HELICOPTER MACHINE SHOULD BE USED IN PREPARATION TO RECEIVE THE BROOM FINISH. SAW CUT IS THE METHOD OF CREATING CONTROL JOINTS ON SIDEWALKS AND CONCRETE PAVEMENTS.
118 ON GRADING PLAN AND REFERENCED, 2(00.00) OR x(00.00) EXISTING GRADING, 2(00.00) PROPOSED (FINAL) & +(00.00 SCHEMATIC ELEV.
119 ON STORM SEWER S=SINGLE, D=DOUBLE, T=TRIPLE, CB=CATCH BASIN, MH=MANHOLE, HW=HEADWALL...
120 T.B.F.V. = TO BE FIELD VERIFIED BY G.C. (BY GENERAL CONTRACTOR, TYP.).
121 F.F.E. = FINISHED FLOOR ELEVATION, F.E. = FINISHED ELEVATION, 4.0H x 1.0V S.T. = 4.0 HORIZONTAL TO 1.0 VERTICAL SLOPE TRANSITION.
122 T.B.S.F.A. = TO BE SUBMITTED FOR APPROVAL, S.B.S.F.A. = SHALL BE SUBMITTED FOR APPROVAL, TETBA = TOP ELEVATION TO BE ADJUSTED.
123 CONTRACTOR SHALL CLEAN AND FLUSH EVERY EXISTING STORM OR SANITARY ELEMENTS AT THEIR EXPENSE.
124 TRENCH DEPTH FOR ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES IS NOT CONSTANT, DEPTH PROVIDED IN CONSULTANTS PLANS ARE MINIMUM DEPTHS. ON SOME CIVIL PLANS AN ALTERNATE DEPTH IS PROVIDED, CONTRACTOR IS RESPONSIBLE OF FOLLOWING: MINIMUM PIPE / CONCRETE PROTECTION CLEARANCES. ADEQUATE DEPTH TRANSITIONS SHALL BE PROVIDED TO ALL ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES.
125 LANDSCAPE ITEMS ARE SHOWN ON SOME CIVIL DRAWING FOR GENERAL REFERENCE ONLY. REFER TO LANDSCAPE DRAWINGS FOR FINAL INSTRUCTIONS TO THE CONTRACTOR. (LANDSCAPE PLANS BY OTHERS.)
126 EXISTING FIRE HYDRANTS, VALVES AND WATER CONNECTIONS FINISHED ELEVATIONS SHALL BE ADJUSTED ON FIELD.
127 ALL GREEN AREAS INSIDE PROJECT LIMITS NEEDS TO BE STRIPPED FROM EXISTING GRASS, REGRADED AND NEW GRASS WITH TOP SOIL SHALL BE INSTALLED AS PER LANDSCAPE DRAWINGS DETAILS.
128 ALL UTILITY INSIDE THE PROJECT LIMITS NEEDS TO BE ADJUSTED FOR NEW GRADING ELEVATIONS, CONTRACTOR IS RESPONSIBLE FOR ANY ELEMENT REQUIRED TO PERFORM THE INTENDED ADJUSTMENT; THOSE TOP ELEVATIONS ADJUSTMENTS ARE INCLUDED ON THE CONTRACTORS BASE PRICE.
129 LANDSCAPE ITEMS NOT SHOWN ON CIVIL DRAWINGS REFER TO LANDSCAPE DRAWINGS FOR DEMOLITION OR PROPOSED ITEMS DETAILS. (S.A. = GREEN AREAS AND/OR PLANTING AREAS AND/OR AREAS TO RECEIVE LANDSCAPE)
130 CONTRACTOR SHALL REVIEW ALL CIVIL, LANDSCAPE, AND ELECTRICAL PLANS TO PROVIDE THE PROPOSED CONFIGURATION AND ELEVATIONS OF THE PROPOSED PROJECT. THE LANDSCAPE DRAWINGS FOR DETAILS.
131 THE "INVENTARIO DE ARBOLES Y PLAN DE SIEMBRA" (TREE MITIGATION PLAN) DOCUMENT IS AN ESSENTIAL PART OF THE SITE WORK CONSTRUCTION CONTRACT.
132 ALL PLANTING AREAS SHALL HAVE A MINIMUM OF 1% SLOPE (IDEALLY 2%) AND SHALL DRAIN TO THE CURBS, THE SIDEWALKS OR CATCH BASINS FOR PROPER RUNOFF MANAGEMENT.
133 TOP ELEVATIONS OF EXISTING UTILITIES ON THE RE-PAVED AREA SHALL BE ADJUSTED FOR PROPER DRAINAGE AND TO PROVIDE THE TOP WITH A FLUSH CONDITION TO THE RE-PAVED AREA. THIS NOTE APPLIES TO EVERY UTILITY INSIDE THE PROJECT AREA, INCLUDING BUT NOT LIMITED TO MANHOLES (STORM SEWER, SANITARY ELECTRICAL, TELECOMMUNICATIONS, ETC.), VALVES, VALVE BOXES, PULL BOXES, ELECTRICAL COVERS, WATER VALVES, ETC. AND MAY REQUIRE NEW ROSETA AND/OR IMPROVEMENTS. THIS IS AN ESSENTIAL PART OF THIS CONSTRUCTION PROJECT - ANY COST SHALL BE AT CONTRACTORS EXPENSE.
134 CONTRACTOR SHALL PROVIDE A WIND RESISTANT WRAPPED CONTINUOUS CONSTRUCTION FENCE AT THEIR EXPENSE. 6'-0" CYCLONE FENCE W/ GATES MIN.; REFER TO CONTRACT DOCUMENTS - COORDINATE WITH OWNER.
135 _____ TYPICAL RETAINING WALL, RETAINING WALL ON SITE REQUIRES A FENCE ON THE TOP; SEE ARCH. DWGS. FOR DETAILS.
136 INCIDENTAL PERMIT AT ENER / OSPE IS DELEGATED TO THE G.C.; ALL DESIGN AND SUBMISSION FEES BY G.C. (TYPICAL FOR ALL DELEGATED PERMITS)
137 THIS PROJECT REQUIRES AN EROSION CONTROL DESIGN AND A CONSOLIDATED GENERAL INCIDENTAL PERMIT (PG - PCC - CES), G.C. IS RESPONSIBLE FOR THE PREPARATION OF ALL DOCUMENTS AND PAYMENT OF ALL FEES. DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR SUBMISSION TO THE PERTINENT AGENCY.
138 NOT REGULATORY, MANDATORY OR ALTERNATE SIGNS SHALL BE PROVIDED ON ALL PROJECT PHASES. NOT PLANS ARE DELEGATED TO THE GENERAL CONTRACTOR.
139 DESIGN CONSIDERATIONS INCLUDE DESIGN ASSUMPTIONS PROVIDED AND/OR DESIGNED BY OTHERS, THAT INFORMATION WAS NOT VERIFIED ON FIELD; VERIFICATION SHALL BE BY THE GENERAL CONTRACTOR, ANY DISCREPANCY SHALL BE SUBMITTED FOR REDESIGN PREVIOUS TO START ANY CONSTRUCTION.
140 REPAVING OF EXISTING STREETS SHALL WARRANTY A MINIMUM SLOPE OF 0.036 (0.8%) TO A CURB, CB OR DRAINAGE AREA. MAXIMUM PAVEMENT THICKNESS WHICH DOES NOT COMPLY WITH THIS CONDITIONAL SLOPE, TRANSVERSAL SLOPES SHALL BE 1.5-2.0% MIN./MAX. SLOPE MEASUREMENT SHALL BE DONE ON SITE. ALL EXISTING CURBS AND SIDEWALKS AFFECTED BY THE WORKS ARE INCLUDED ON THIS BASE BID AS BUILT, STAKEOUT AND DESIGN SHALL BE SUBMITTED FOR APPROVAL.

INDICATED NEW CONCRETE CROSS GUTTER ON STREETS IN INTERSECTIONS, SEE STORM SEWER AND GRADING PLAN.
INDICATED NEW 6'-0" CYCLONE FENCE, SEE GRADING PLAN.

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046
CIAPR (SIDE) STAMPS FOR PE:19,102
1049-2301-230908_2408-1744-2421-8573
1049-2402-240208_6788-0424-8924-1134

SUBMITTED FOR AGENCIES APPROVAL
NOVEMBER 14, 2024
ID: SP-HDL-00012

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE: PROPOSED GENERAL SITE PLAN

STATUS: ADVANCED DRAWINGS

J. C. C. A. :	
CONSULTA:	
AAA NO.:	
ACT NO.:	
ARPE NO.:	
D A T E:	AS SHOWN
S C A L E:	AS SHOWN
DRAWING:	1045*

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.E.S. LLC. AND IS THE PROPERTY OF THE SAME. ANY MODIFICATIONS MADE BY CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF H.F.A.E.S. LLC. AND SHALL NOT BE USED IN WHOLE OR IN PART, EXCEPT AS EXPRESSLY PERMITTED BY H.F.A.E.S. LLC. UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.A.E.S. UPON THE REQUEST BY THE OWNER.

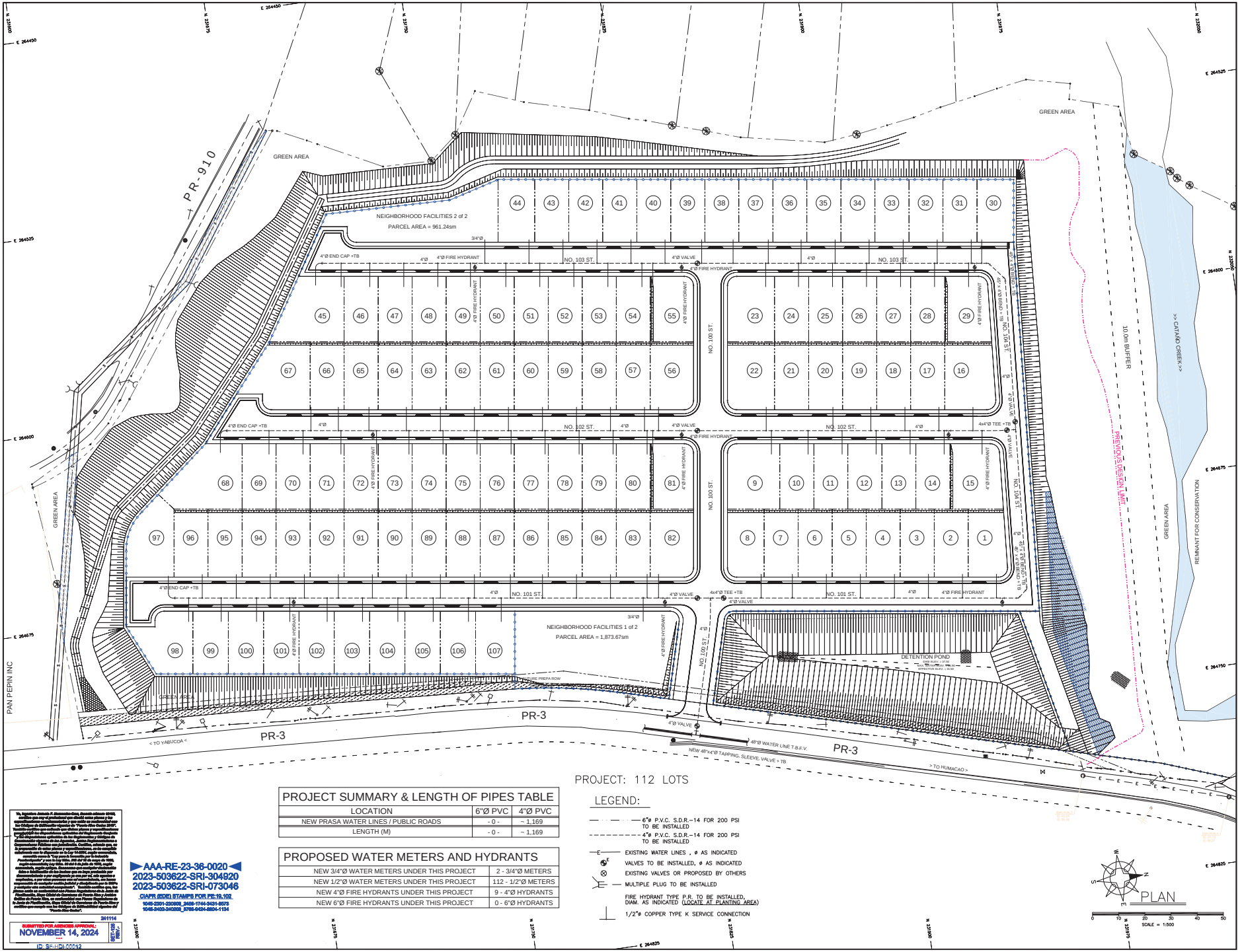
ANTONIO F. HERNANDEZ-CRUZ, PE
President
HF ENGINEERING CONSULTING GROUP, PSC
Ingeniería Mecánica, Eléctrica, Civil, Estructural, Plomería, Protección contra Incendios, Aire Acondicionado

PROJECT: LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
PO BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: C–101

SHEET NO: .
TOTAL: .



PROJECT: 112 LOTS

PROJECT SUMMARY & LENGTH OF PIPES TABLE		
LOCATION	6"Ø PVC	4"Ø PVC
NEW PRASA WATER LINES / PUBLIC ROADS	- 0 -	~ 1,169
LENGTH (M)	- 0 -	~ 1,169

PROPOSED WATER METERS AND HYDRANTS	
NEW 3/4"Ø WATER METERS UNDER THIS PROJECT	2 - 3/4"Ø METERS
NEW 1/2"Ø WATER METERS UNDER THIS PROJECT	112 - 1/2"Ø METERS
NEW 4"Ø FIRE HYDRANTS UNDER THIS PROJECT	9 - 4"Ø HYDRANTS
NEW 6"Ø FIRE HYDRANTS UNDER THIS PROJECT	0 - 6"Ø HYDRANTS

LEGEND:

- 6"ø P.V.C. S.D.R.-14 FOR 200 PSI TO BE INSTALLED
- 4"ø P.V.C. S.D.R.-14 FOR 200 PSI TO BE INSTALLED
- EXISTING WATER LINES , ø AS INDICATED
- VALVES TO BE INSTALLED, ø AS INDICATED
- EXISTING VALVES OR PROPOSED BY OTHERS
- MULTIPLE PLUG TO BE INSTALLED
- FIRE HYDRANT TYPE P.R. TO BE INSTALLED, DIAM. AS INDICATED (LOCATE AT PLANTING AREA)
- 1/2"ø COPPER TYPE K SERVICE CONNECTION

PLAN
SCALE = 1:500

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046
CIAPR (SIDE) STAMPS FOR PE:19,102
1045-2301-230908_2408-1744-2421-8573
1045-2403-240308_8765-8424-8804-1134

SUBMITTED FOR AGENCIES APPROVAL
NOVEMBER 14, 2024
ID: SP-HDL-00012

SHEET TITLE: PROPOSED WATER DISTRIBUTION SITE PLAN

STATUS: ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.C.E. ENGINEERING CONSULTING GROUP, PSC AND THE LAND SURVEYORS AND CONSULTANTS WHO IS ISSUED FOR PERMIT ONLY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THE ENGINEER AND SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT. ALL RIGHTS RESERVED. IF PARTIES UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO HFACE UPON THE REQUEST BY THE OWNER.

J. C. A. CONSULTK:	
AAA NO.:	
ACT NO.:	
APPE NO.:	
D A T E:	AS SHOWN
S C A L E:	AS SHOWN
DRAWING:	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

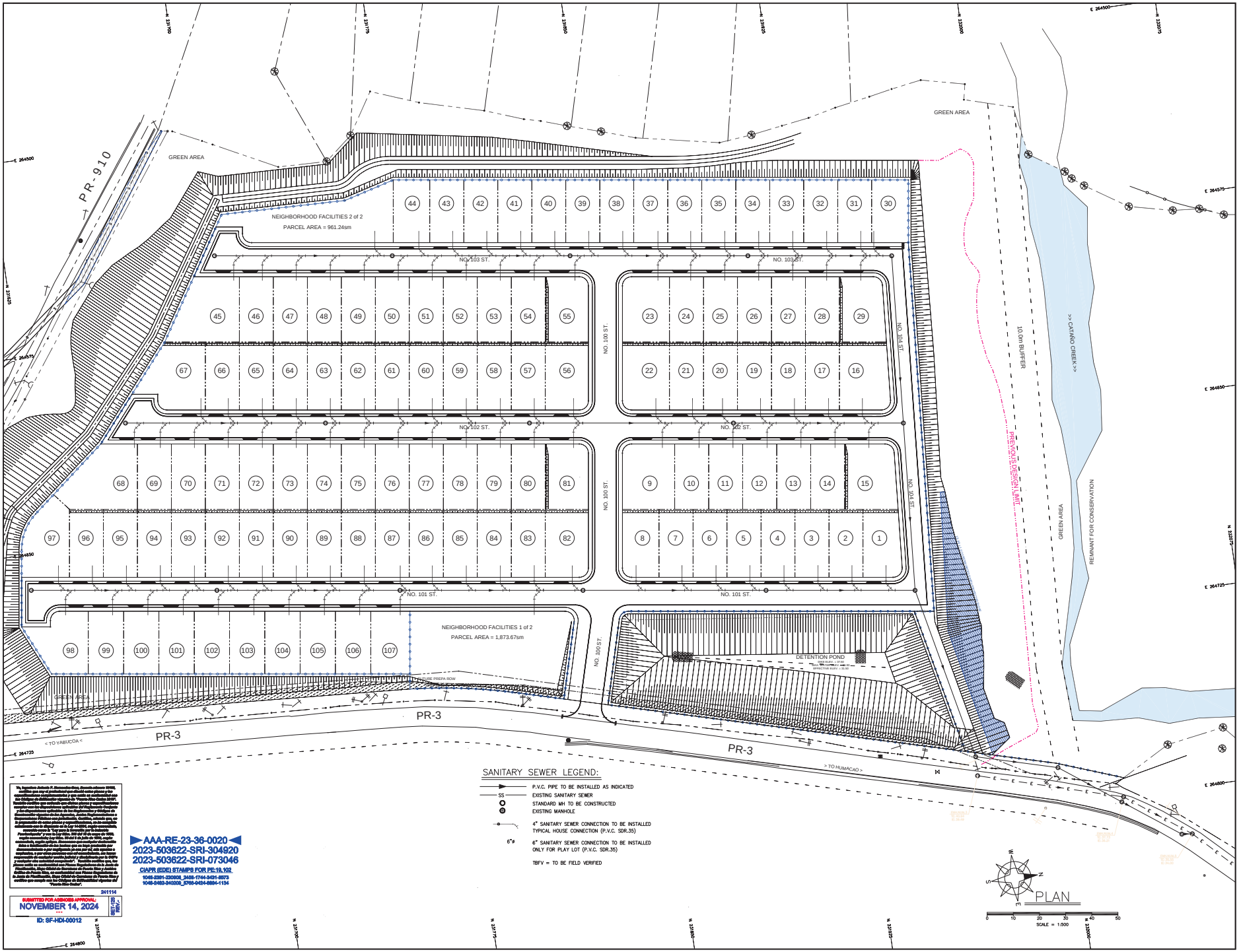
ANTONIO F. HERNANDEZ-CRUZ, PE
President
HF ENGINEERING CONSULTING GROUP, PSC
Consulting Engineers, Land Surveyors, Architects and Environmental Scientists

PROJECT:
LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: C-201

SHEET NO: .
TOTAL: .



SANITARY SEWER LEGEND:

- P.V.C. PIPE TO BE INSTALLED AS INDICATED
- SS — EXISTING SANITARY SEWER
- STANDARD MH TO BE CONSTRUCTED
- EXISTING MANHOLE
- 4" SANITARY SEWER CONNECTION TO BE INSTALLED TYPICAL HOUSE CONNECTION (P.V.C. SDR.35)
- 6" SANITARY SEWER CONNECTION TO BE INSTALLED ONLY FOR PLAY LOT (P.V.C. SDR.35)
- TBFV = TO BE FIELD VERIFIED

PLAN
SCALE = 1:500

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046
CAPR (EDE) STAMPS FOR PE:19,102
1048-2301-2200208_0408-1744-3401-8573
1048-3403-3402208_8768-2424-8884-1134

241114

SUBMITTED FOR AGENCIES APPROVAL
NOVEMBER 14, 2024
ID: SF-HDI-00012

SHEET TITLE: PROPOSED SANITARY SEWER SITE PLAN

STATUS: ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.C.E. ENGINEERING CONSULTING GROUP, PSC AND THE CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF H.F.A.C.E. ENGINEERING CONSULTING GROUP, PSC AND SHALL NOT BE COPIED, REPRODUCED OR MODIFIED UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.A.C.E. UPON THE REQUEST BY THE OWNER.

J. C. A.	:
CONSULTA:	:
AAA NO.:	:
ACT NO.:	:
ARPE NO.:	:
DATE:	AS SHOWN
SCALE	AS SHOWN
DRAWING.	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

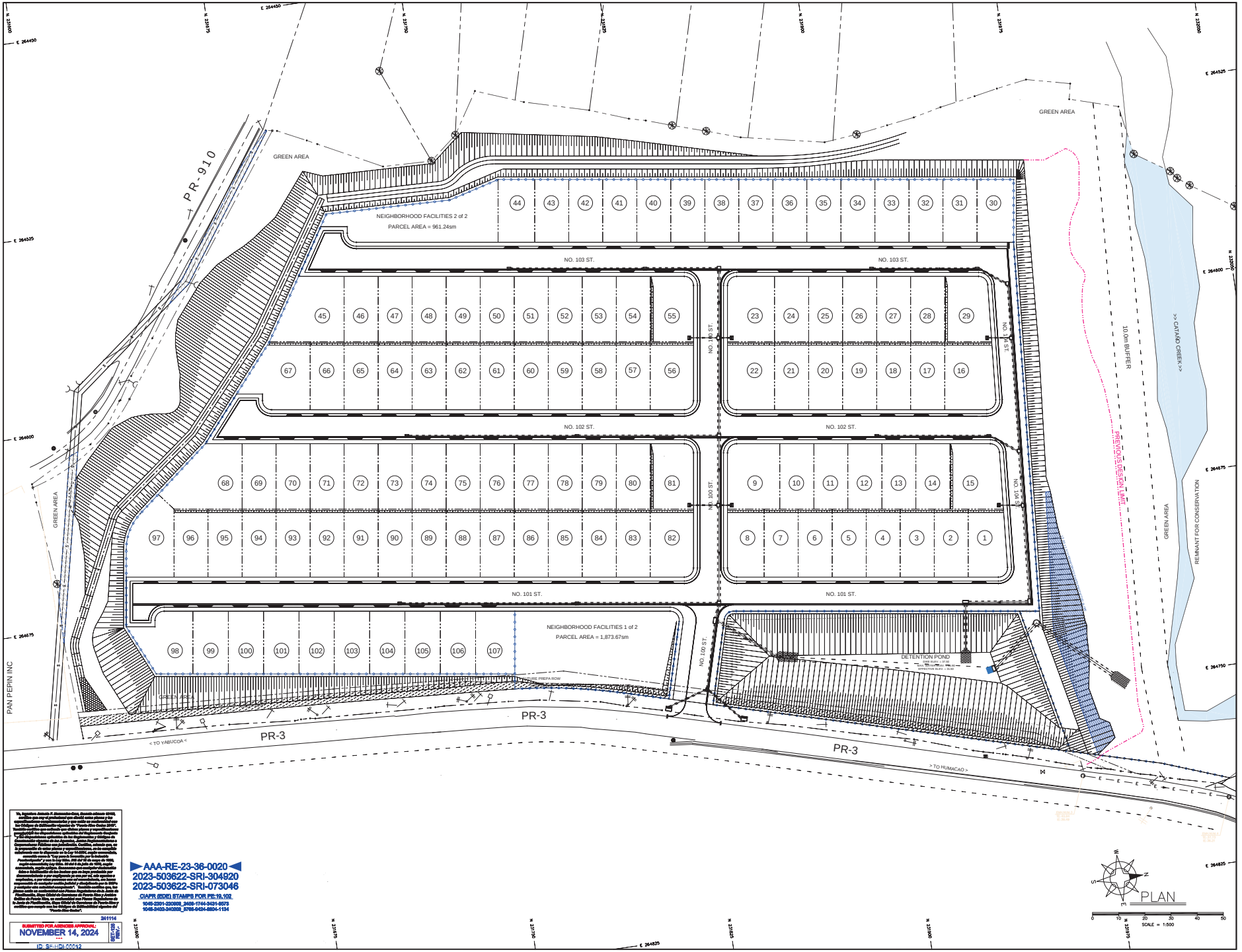
ANTONIO F. HERNANDEZ-CRUZ, PE
President
H.F. ENGINEERING CONSULTING GROUP, PSC
Ingeniería civil, ingeniería eléctrica, ingeniería mecánica, ingeniería de sistemas, ingeniería ambiental, ingeniería industrial, ingeniería de manufactura, ingeniería de telecomunicaciones, ingeniería de control

PROJECT: LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: C-301

SHEET NO: .
TOTAL: .



AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046

CIAPR (SIDE) STAMPS FOR PE:19,102

SUBMITTED FOR AGENCIES APPROVAL
NOVEMBER 14, 2024

ID: SF-HDL-00012

SHEET TITLE: PROPOSED STORM SEWER SITE PLAN

STATUS: ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.C.E. LLC AND IS PROVIDED TO THE OWNER AND HIS CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF H.F.A.C.E. LLC AND SHALL NOT BE REUSED, REPRODUCED OR PUBLISHED UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.A.C.E. UPON THE REQUEST BY THE OWNER.

J. C. A. CONSULTS.	
AAA NO.:	
ACT NO.:	
APPE NO.:	
D A T E:	AS SHOWN
S C A L E:	AS SHOWN
DRAWING:	1045*

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

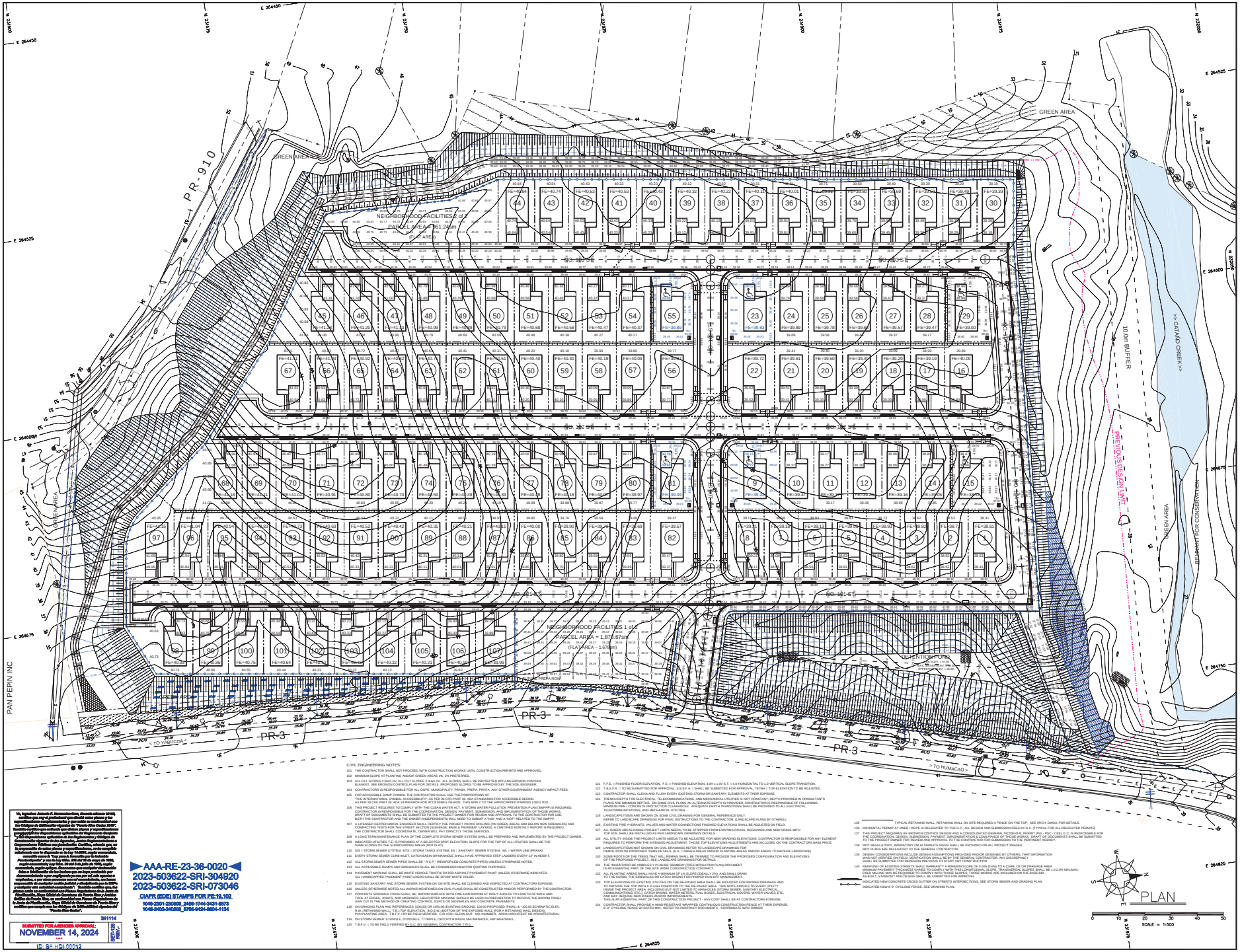
ANTONIO F. HERNANDEZ-CRUZ, PE
President
HF ENGINEERING CONSULTING GROUP, PSC

PROJECT: LADERAS DE PALMAS CDB-MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: C-401

SHEET NO: .
TOTAL: .



CIVIL ENGINEERING NOTES

101 THE CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION WORKS UNTIL CONSTRUCTION PERMITS ARE APPROVED.
102 MINIMUM SLOPE AT PLANTING AND/OR GREEN AREAS 2%, 3% PREFERRED.
103 ALL FILL SLOPES 2.0mH:1V, ALL CUT SLOPES 2.0mH:1V . ALL SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. SEE EROSION CONTROL PLAN FOR DETAILS. PROPOSED SLOPES TO BE APPROVED BY THE SOIL ENGINEER.
104 CONTRACTORS IS RESPONSIBLE FOR ALL OSPE, MUNICIPALITY, PRASA, PREPA, PRHTA, ANY OTHER GOVERNMENT AGENCY IMPACT FEES.
105 FOR ACCESSIBLE RAMP SYMBOL THE CONTRACTOR SHALL USE THE PROPORTIONS OF "THE INTERNATIONAL SYMBOL ACCESSIBILITY", AS PER 28 CFR PART 36; ADA STANDARDS FOR ACCESSIBLE DESIGN. AS PER 28 CFR PART 36; ADA STANDARDS FOR ACCESSIBLE DESIGN. THIS APPLY TO THE HANDICAPPED/PARKING LOGO TOO.
106 THIS PROJECT REQUIRES TO COMPLY WITH THE CLEAN WATER ACT, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, DESIGN, PAYMENT, SUBMISSION, AND IMPLEMENTATION OF THOSE WORKS. DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR USE.
107 A LICENSED GEOTECHNICAL ENGINEER SHALL CERTIFY THE PROJECT PROOF ROLLING (ON GREEN AREAS AND BELOW NEW SIDEWALKS) AND COMPACTION TESTS. THE CONTRACTOR SHALL SUBMIT TO THE OWNER'S REPRESENTATIVE A CERTIFIED MONTHLY REPORT IS REQUIRED. THE CONTRACTOR SHALL COORDINATE, OWNER WILL PAY DIRECTLY THOSE SERVICES.
108 A LONG TERM MAINTENANCE PLAN OF THE COMPLETE STORM SEWER SYSTEM SHALL BE PREPARED AND IMPLEMENTED BY THE PROJECT OWNER.
109 INDICATED UTILITIES T.B. IS PROVIDED AT A SELECTED SPOT ELEVATION. SLOPE FOR THE TOP OF ALL UTILITIES SHALL BE THE SAME AS THE FINISHED GRADE, UNLESS OTHERWISE NOTED.
110 S/S= STORM SEWER SYSTEM, SAS = SANITARY SEWER SYSTEM, WL = WATER LINE (PVASH)
111 EVERY STORM SEWER CURB INLET, CATCH BASIN OR MANHOLE SHALL HAVE APPROVED STEP LADDERS EVERY 12" IN HEIGHT.
112 ALL STORM SEWER SEWER PIPES SHALL BE " R C P " (REINFORCED CONCRETE PIPE) UNLESS OTHERWISE NOTED.
113 ALL ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE CONSIDERED NEW FOR QUOTING PURPOSES.
114 PAVEMENT MARKING SHALL BE WHITE VEHICLE TRAFFIC RATED ASPHALT PAVEMENT PAINT UNLESS OTHERWISE INDICATED. ALL HANDICAPPED PAVEMENT PAINT LOGOS SHALL BE 36"x36" WHITE COLOR.
115 EXISTING SANITARY AND STORM SEWER SYSTEM ON ON-SITE SHALL BE CLEANED AND INSPECTED AT CONTRACTORS EXPENSE.
116 UNLESS OTHERWISE NOTED ALL WORKS MENTIONED ON CIVIL PLANS SHALL BE CONSTRUCTED AND/OR PERFORMED BY THE CONTRACTOR.
117 CONCRETE SIDEWALK FINISH SHALL BE: BROOM SURFACE WITH FINE-HAIR BROOM AT RIGHT ANGLES TO LENGTH OF WALK AND TOOL AT EDGES, JOINTS, AND MARKINGS. HELICOPTER MACHINE SHOULD BE USED IN PREPARATION TO RECEIVE THE BROOM FINISH. SAW CUT IS THE METHOD OF CREATING CONTROL JOINTS ON SIDEWALKS AND CONCRETE PAVEMENTS.
118 ON GRADING PLAN AND REFERENCED, 2(60.00) OR 4(60.00) EXISTING GRADING, 3(60.00) PROPOSED (FINAL) & ~60.00 SCHEMATIC ELEV.
119 ON STORM SEWER S/SINGLE, D/DOUBLE, T/TRIPLE, CB/CATCH BASIN, MH/ MANHOLE, HW/HEADWALL...
120 T.B.F.V. = TO BE FIELD VERIFIED BY G.C. (BY GENERAL CONTRACTOR, TYP.).
121 F.F. E. = FINISHED FLOOR ELEVATION, F.E. = FINISHED ELEVATION, 4.0H x 1.0V S.T. = 4.0 HORIZONTAL TO 1.0 VERTICAL SLOPE TRANSITION.
122 T.B.S.F.A. = TO BE SUBMITTED FOR APPROVAL, S.B.S.F.A. = SHALL BE SUBMITTED FOR APPROVAL, TETBA = TOP ELEVATION TO BE ADJUSTED.
123 CONTRACTOR SHALL CLEAN AND FLUSH EVERY EXISTING STORM OR SANITARY ELEMENTS AT THEIR EXPENSE.
124 TRENCH DEPTH FOR ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES IS NOT CONSTANT, DEPTH PROVIDED IN CONSULTANTS PLANS ARE MINIMUM DEPTHS. ON SOME CIVIL PLANS AN ALTERNATE DEPTH IS PROVIDED, CONTRACTOR IS RESPONSIBLE OF FOLLOWING: MINIMUM PIPE / CONCRETE PROTECTION CLEARANCES. ADEQUATE DEPTH TRANSITIONS SHALL BE PROVIDED TO ALL ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES.
125 LANDSCAPE ITEMS ARE SHOWN ON SOME CIVIL DRAWING FOR GENERAL REFERENCE ONLY. REFER TO LANDSCAPE DRAWINGS FOR FINAL INSTRUCTIONS TO THE CONTRACTOR. (LANDSCAPE PLANS BY OTHERS.)
126 EXISTING FIRE HYDRANTS, VALVES AND WATER CONNECTIONS FINISHED ELEVATIONS SHALL BE ADJUSTED ON FIELD.
127 ALL GREEN AREAS INSIDE PROJECT LIMITS NEEDS TO BE STRIPPED FROM EXISTING GRASS, REGRADED AND NEW GRASS WITH TOP SOIL SHALL BE INSTALLED AS PER LANDSCAPE DRAWINGS DETAILS.
128 ALL UTILITY INSIDE THE PROJECT LIMITS NEEDS TO BE ADJUSTED FOR NEW GRADING ELEVATIONS, CONTRACTOR IS RESPONSIBLE FOR ANY ELEMENT REQUIRED TO PERFORM THE INTENDED ADJUSTMENT; THOSE TOP ELEVATIONS ADJUSTMENTS ARE INCLUDED ON THE CONTRACTORS BASE PRICE.
129 LANDSCAPE ITEMS NOT SHOWN ON CIVIL DRAWINGS REFER TO LANDSCAPE DRAWINGS FOR DEMOLITION OR PROPOSED ITEMS DETAILS. (I.A. = GREEN AREAS AND/OR PLANTING AREAS AND/OR AREAS TO RECEIVE LANDSCAPE)
130 ON THE PROPOSED PROJECT, SEE LANDSCAPE DRAWINGS FOR DETAILS PROVIDE THE PROPOSED CONFIGURATION AND ELEVATIONS OF THE PROPOSED PROJECT, SEE LANDSCAPE DRAWINGS FOR DETAILS.
131 THE "REINSTARO DE ARBOLES Y PLAN DE SIEMBRA" (TREE MITIGATION PLAN) DOCUMENT IS AN ESSENTIAL PART OF THE SITE WORK CONSTRUCTION CONTRACT
132 ALL PLANTING AREAS SHALL HAVE A MINIMUM OF 1% SLOPE (IDEALLY 2%) ,AND SHALL DRAIN TO THE CURBS, THE SIDEWALKS OR CATCH BASINS FOR PROPER RUNOFF MANAGEMENT
133 TOP ELEVATIONS OF EXISTING UTILITIES ON THE RE-PAVED AREA SHALL BE ADJUSTED FOR PROPER DRAINAGE AND TO PROVIDE THE TOP WITH A FLUSH CONDITION TO THE RE-PAVED AREA. THIS NOTE APPLIES TO EVERY UTILITY INSIDE THE PROJECT AREA, INCLUDING BUT NOT LIMITED TO MANHOLES (STORM SEWER, SANITARY ELECTRICAL, TELEPHONE, CABLE TV, WATER, GAS), VALVES, VAULTS, PULL BOXES, ELECTRICAL COVERS, WATER VALVES, ETC. AND MAY REQUIRE NEW ROSETA AND/OR IMPROVEMENTS. THIS IS AN ESSENTIAL PART OF THIS CONSTRUCTION PROJECT - ANY COST SHALL BE AT CONTRACTORS EXPENSE.
134 CONTRACTOR SHALL PROVIDE A WIND RESISTANT WRAPPED CONTINUOUS CONSTRUCTION FENCE AT THEIR EXPENSE. 6'-0" CYCLONE FENCE W/ GATES MIN., REFER TO CONTRACT DOCUMENTS - COORDINATE WITH OWNER.
135 TYPICAL RETAINING WALL, RETAINING WALL ON SITE REQUIRES A FENCE ON THE TOP, SEE ARCH. DWGS. FOR DETAILS.
136 INCIDENTAL PERMIT AT ENER / OSPE IS DELEGATED TO THE G.C., ALL DESIGN AND SUBMISSION FEES BY G.C. (TYPICAL FOR ALL DELEGATED PERMITS)
137 THIS PROJECT REQUIRES AN EROSION CONTROL DESIGN AND A CONSOLIDATED GENERAL INCIDENTAL PERMIT (PI) - PCC - CEG), G.C. IS RESPONSIBLE FOR THE PREPARATION OF ALL DOCUMENTS AND PAYMENT OF ALL FEES. DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR SUBMISSION TO THE PERTINENT AGENCY.
138 NOT REGULATORY, MANDATORY OR ALTERNATE SIGNS SHALL BE PROVIDED ON ALL PROJECT PHASES. NOT PLANS ARE DELEGATED TO THE GENERAL CONTRACTOR
139 DESIGN CONSIDERATIONS INCLUDE DESIGN ASSUMPTIONS PROVIDED AND/OR DESIGNED BY OTHERS, THAT INFORMATION WAS NOT VERIFIED ON FIELD, VERIFICATION SHALL BE BY THE GENERAL CONTRACTOR, ANY DISCREPANCY SHALL BE SUBMITTED FOR REDESIGN PREVIOUS TO START ANY CONSTRUCTION.
140 REPAVING OF EXISTING STREETS SHALL WARRANTY A MINIMUM SLOPE OF 0.036 (0.5%) TO A CURB, CB OR DRAINAGE AREA. DESIGN MEASUREMENTS PROCESSES WHICH DO NOT COMPLY WITH THIS CONDITIONAL SLOPE, TRANSVERSAL SLOPES SHALL BE 1.5-2.0% MIN./MAX. COLD MILLING MAY BE REQUIRED TO ACHIEVE THIS SLOPE. ALL SIDEWALK WORKS ARE INCLUDED ON THIS BASE BID AS BUILT, STAKEOUT AND DESIGN SHALL BE SUBMITTED FOR APPROVAL.

INDICATED NEW CONCRETE CROSS GUTTER ON STREETS IN INTERSECTIONS. SEE STORM SEWER AND GRADING PLAN.
INDICATED NEW 6'-0" CYCLONE FENCE, SEE GRADING PLAN.

Yo, hereby Antonio F. Hernandez-Cruz, licensed engineer #8108, certify on my professional use should some errors or omissions be found in the plans, specifications, or reports signed and sealed by me, I shall be responsible only for the items that I have personally prepared or supervised. Should another engineer, professional engineer, or professional corporation alter the plans, specifications, or reports signed and sealed by me, I shall not be responsible for the items altered by others. Yo, Antonio Hernandez-Cruz, ingeniero licenciado #8108, certifico que, si se encuentran errores u omisiones en los planos, especificaciones, o informes firmados y sellados por mi persona, solo seré responsable de los artículos que yo haya preparado o supervisado personalmente. Si otro ingeniero, ingeniero profesional o corporación profesional altera los planos, especificaciones o informes firmados y sellados por mi persona, no seré responsable de los artículos alterados por otros.

261114

SUBMITTED FOR AGENCIES APPROVAL
NOVEMBER 14, 2024

ID: SF-HDL-00012

AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046

CIAPR (SIDE) STAMPS FOR PE:19,102

1045-2301-230908_2408-1744-2421-8573
1045-2402-240208_6765-2424-2824-1134

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

SHEET TITLE: PROPOSED FINAL GRADING SITE PLAN

J. C. A. CONSULTS:	
AAA NO.:	
ACT NO.:	
ARPE NO.:	
D A T E:	AS SHOWN
S C A L E:	AS SHOWN
DRAWING:	1045*

STATUS: ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.C.S. AND ITS CONSULTANTS AND IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF H.F.A.C.S. AND ITS CONSULTANTS AND IS NOT TO BE REPRODUCED OR PUBLISHED UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.A.C.S. UPON THE REQUEST BY THIS OFFICE.

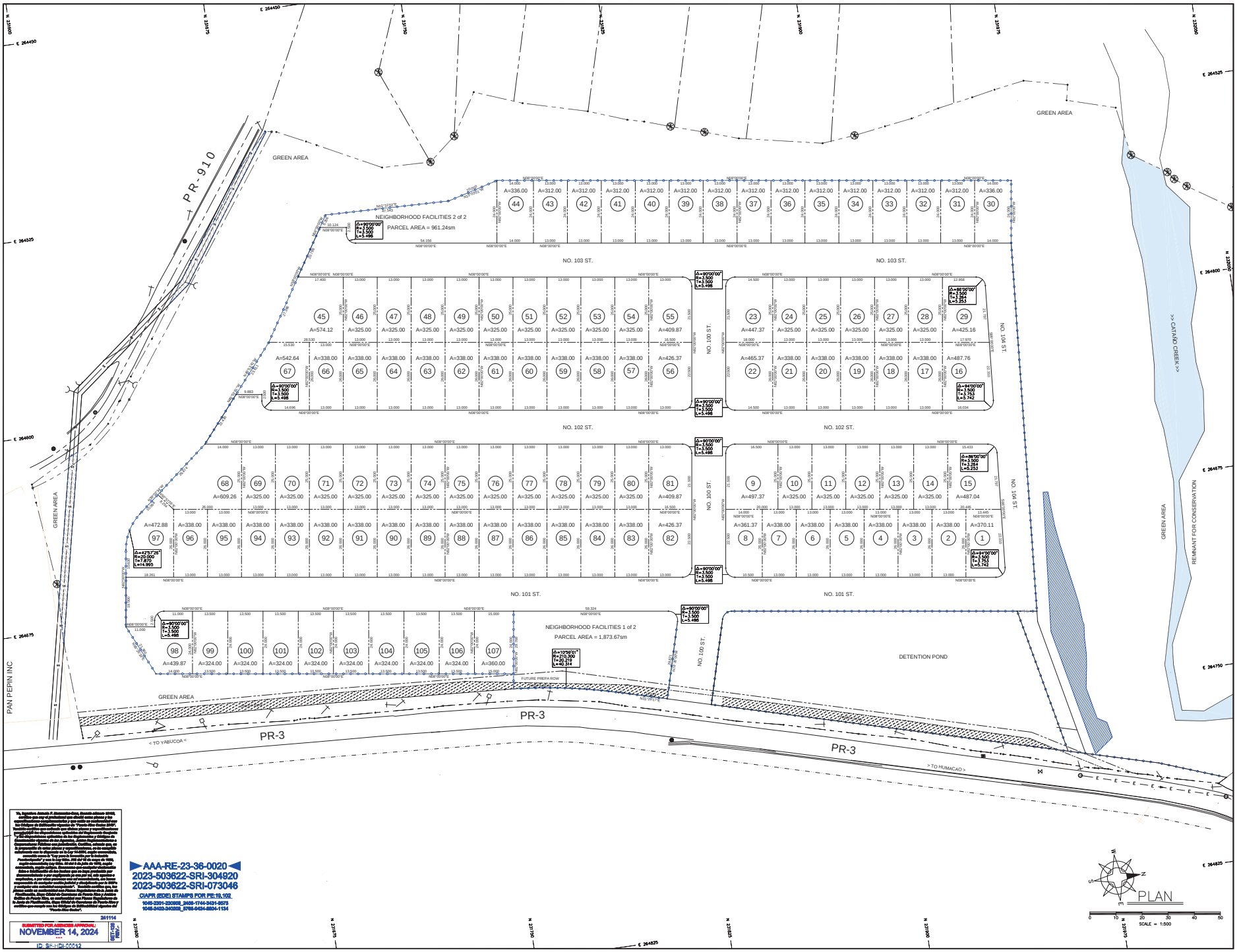
ANTONIO F. HERNANDEZ-CRUZ, PE
President
HF ENGINEERING CONSULTING GROUP, PSC
Consulting Engineers, Land Surveyors, Environmental Scientists
Ingenieros Consultores, Agrimensores, Ambientalistas

PROJECT: LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919–2484

SHEET IDENTIFICATION: C–501

SHEET NO: .
TOTAL: .



AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046

CIAPR (SIDE) STAMPS FOR PE:19,102

SUBMITTED FOR AGENCIES APPROVAL
NOVEMBER 14, 2024

ID: SF-HDL-00012

REVISIONS			
NUMBER	DATE	BY	DESCRIPTION

ANTONIO F. HERNANDEZ-CRUZ, PE
President
HF ENGINEERING CONSULTING GROUP, PSC
Consulting Engineers, Land Surveyors, Environmental Scientists
Planners and Project Management Professionals

SHEET TITLE: PROPOSED LOT DISTRIBUTION SITE PLAN

STATUS: ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE GENERAL EFFORT OF H.F.A.C.E. CONSULTANTS TO ACCOMPLISH THE REQUIREMENTS OF THE PROJECT. THE DRAWING IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF H.F.A.C.E. CONSULTANTS AND SHALL NOT BE USED, REPRODUCED OR SUBMITTED UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.A.C.E. UPON THE REQUEST BY THE OWNER.

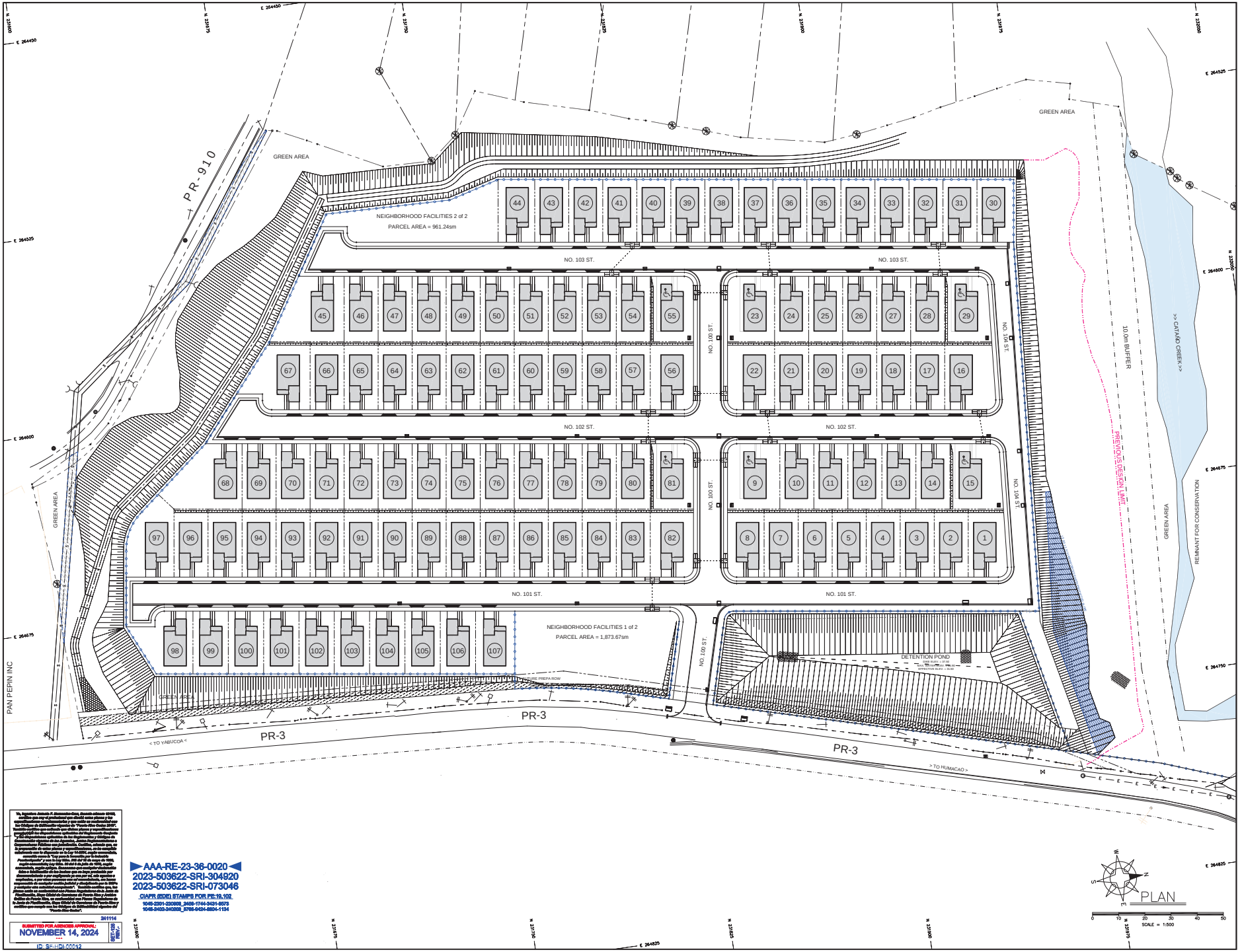
J. C. A. CONSULTA:	
AAA NO.:	
H.F.A.C.E. NO.:	
ACT NO.:	
ARPE NO.:	
D A T E:	AS SHOWN
S C A L E:	AS SHOWN
DRAWING:	1045*

PROJECT: LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER: LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET IDENTIFICATION: C–601

SHEET NO: . TOTAL: .



AAA-RE-23-36-0020
2023-503622-SRI-304920
2023-503622-SRI-073046

CAPR (SIDE) STAMPS FOR PE:19,102

SUBMITTED FOR AGENCIES APPROVAL
NOVEMBER 14, 2024

ID: SF-HDL-00012

REVISIONS

NUMBER	DATE	BY	DESCRIPTION

ANTONIO F. HERNANDEZ-CRUZ, PE
President
HF ENGINEERING CONSULTING GROUP, PSC

PROJECT:
LADERAS DE PALMAS CDB–MIT
CATAÑO & CANDELERO ARRIBA WARDS, MUNICIPALITY OF HUMACAO PR

OWNER:
LADERAS DE PALMAS LLC
P O BOX 192484, SAN JUAN, P. R. 00919-2484

SHEET TITLE:
PROPOSED MODEL SELECTION SITE PLAN

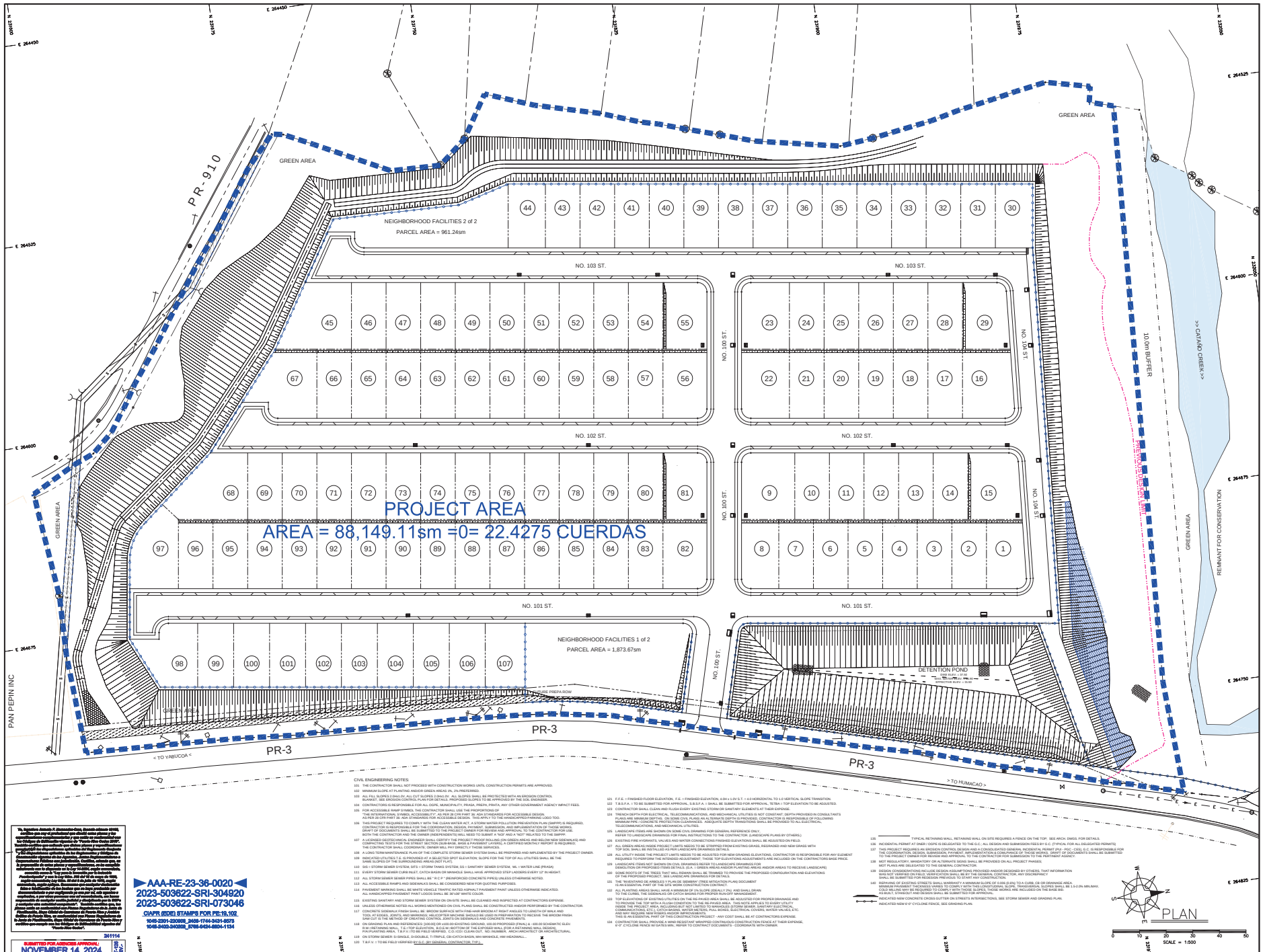
STATUS:
ADVANCED DRAWINGS

THIS DRAWING DEPICTS THE DESIGN EFFORT OF H.F.A.C.E. LLC AS REQUESTED BY THE OWNER. ALL THE INFORMATION CONTAINED HEREIN IS ISSUED FOR REVIEW SOLELY AS AN INSTRUMENT OF THE SERVICES BEING RENDERED. IT REMAINS THE PROPERTY OF THE CONSULTANTS AND SHALL NOT BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THE CONSULTANTS UNLESS PERMISSION IS GRANTED IN WRITING. IT SHALL BE RETURNED TO H.F.A.C.E. UPON THE REQUEST BY THE OWNER.

J. C. A. CONSULTA:	
AAA NO.:	
ACT NO.:	
APPE NO.:	
D A T E:	AS SHOWN
S C A L E:	AS SHOWN
DRAWING:	1045*

SHEET IDENTIFICATION:
C–701

SHEET NO: .
TOTAL: .



CIVIL ENGINEERING NOTES:

101 THE CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION WORKS UNTIL CONSTRUCTION PERMITS ARE APPROVED.
102 MINIMUM SLOPE AT PLANTING AND/OR GREEN AREAS 2%, 3% PREFERRED.
103 ALL FILL SLOPES 2.0mH:1V, ALL CUT SLOPES 2.0mH:1V . ALL SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. SEE EROSION CONTROL PLAN FOR DETAILS. PROPOSED SLOPES TO BE APPROVED BY THE SOIL ENGINEER.
104 CONTRACTORS IS RESPONSIBLE FOR ALL OSPE, MUNICIPALITY, PRASA, PREPA, PRHTA, ANY OTHER GOVERNMENT AGENCY IMPACT FEES.
105 FOR ACCESSIBLE RAMP SYMBOL THE CONTRACTOR SHALL USE THE PROPORTIONS OF "THE INTERNATIONAL SYMBOL ACCESSIBILITY", AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN. AS PER 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN. THIS APPLY TO THE HANDICAPPED PARKING LOGO TOO.
106 THIS PROJECT REQUIRES TO COMPLY WITH THE CLEAN WATER ACT, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, DESIGN, PAYMENT, SUBMISSION, AND IMPLEMENTATION OF THOSE WORKS. DRAFT OF DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR USE. BOTH THE CONTRACTOR AND THE OWNER (INDEPENDENTLY) WILL NEED TO SUBMIT A "NOI" AND A "NOT" RELATED TO THE SWPPP.
107 A LICENSED GEOTECHNICAL ENGINEER SHALL CERTIFY THE PROJECT PROOF ROLLING (ON GREEN AREAS AND BELOW NEW SIDEWALKS) AND COMPACTION TESTS (ON ROADWAYS AND PARKING AREAS). THE CONTRACTOR SHALL PROVIDE A CERTIFIED MONTHLY REPORT IS REQUIRED. THE CONTRACTOR SHALL COORDINATE; OWNER WILL PAY DIRECTLY THOSE SERVICES.
108 A LONG TERM MAINTENANCE PLAN OF THE COMPLETE STORM SEWER SYSTEM SHALL BE PREPARED AND IMPLEMENTED BY THE PROJECT OWNER.
109 INDICATED UTILITIES T. E. IS PROVIDED AT A SELECTED SPOT ELEVATION. SLOPE FOR THE TOP OF ALL UTILITIES SHALL BE THE SAME AS THE SURROUNDING GROUND, UNLESS NOTED.
110 Sds = STORM SEWER SYSTEM, SITS = STORM TANKS SYSTEM, SS = SANITARY SEWER SYSTEM, WL = WATER LINE,(PRASA)
111 EVERY STORM SEWER CURB INLET, CATCH BASIN OR MANHOLE SHALL HAVE APPROVED STEP LADDERS EVERY 12" IN HEIGHT.
112 ALL STORM SEWER SEWER PIPES SHALL BE " R C P " (REINFORCED CONCRETE PIPE)(UNLESS OTHERWISE NOTED.
113 ALL ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE CONSIDERED NEW FOR QUOTING PURPOSES.
114 PAVEMENT MARKING SHALL BE WHITE VEHICLE TRAFFIC RATED ASPHALT PAVEMENT PAINT UNLESS OTHERWISE INDICATED. ALL HANDICAPPED PAVEMENT PAINT LOGOS SHALL BE 36"x36" WHITE COLOR.
115 EXISTING SANITARY AND STORM SEWER SYSTEM ON ON-SITE SHALL BE CLEANED AND INSPECTED AT CONTRACTORS EXPENSE.
116 UNLESS OTHERWISE NOTED ALL WORKS MENTIONED ON CIVIL PLANS SHALL BE CONSTRUCTED AND/OR PERFORMED BY THE CONTRACTOR.
117 CONCRETE SIDEWALK FINISH SHALL BE BROOM SURFACE WITH FINE-HAIR BROOM AT RIGHT ANGLES TO LENGTH OF WALK AND TOOL AT EDGES, JOINTS, AND MARKINGS. HELICOPTER MACHINE SHOULD BE USED IN PREPARATION TO RECEIVE THE BROOM FINISH. SAW CUT IS THE METHOD OF CREATING CONTROL JOINTS ON SIDEWALKS AND CONCRETE PAVEMENTS.
118 ON GRADING PLAN AND REFERENCED: [XX.00] OR x[XX.00] EXISTING GRADING, [XX.00] PROPOSED (FINAL), [-XX.00] SCHEMATIC ELEV.
119 ON STORM SEWER: S=SINGLE, D=DOUBLE, T=TRIPLE, CB=CATCH BASIN, MH=MANHOLE, HW=HEADWALL...
120 T.B.F.V. = TO BE FIELD VERIFIED BY G.C. (BY GENERAL CONTRACTOR, TYP.).
121 F.F.E. = FINISHED FLOOR ELEVATION, F.E. = FINISHED ELEVATION, 4.0H x 1.0V S.T. = 4.0 HORIZONTAL TO 1.0 VERTICAL SLOPE TRANSITION.
122 T.B.S.F.A. = TO BE SUBMITTED FOR APPROVAL, S.B.S.F.A. = SHALL BE SUBMITTED FOR APPROVAL, TETBA = TOP ELEVATION TO BE ADJUSTED.
123 CONTRACTOR SHALL CLEAN AND FLUSH EVERY EXISTING STORM OR SANITARY ELEMENTS AT THEIR EXPENSE.
124 TRENCH DEPTH FOR ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES IS NOT CONSTANT, DEPTH PROVIDED IN CONSULTANTS PLANS ARE MINIMUM DEPTHS, ON SOME CIVIL PLANS AN ALTERNATE DEPTH IS PROVIDED, CONTRACTOR IS RESPONSIBLE OF FOLLOWING MINIMUM PIPE / CONCRETE PROTECTION CLEARANCES. ADEQUATE DEPTH TRANSITIONS SHALL BE PROVIDED TO ALL ELECTRICAL, TELECOMMUNICATIONS, AND MECHANICAL UTILITIES.
125 LANDSCAPE ITEMS ARE SHOWN ON SOME CIVIL DRAWING FOR GENERAL REFERENCE ONLY. REFER TO LANDSCAPE DRAWINGS FOR FINAL INSTRUCTIONS TO THE CONTRACTOR. (LANDSCAPE PLANS BY OTHERS.)
126 EXISTING FIRE HYDRANTS, VALVES AND WATER CONNECTIONS FINISHED ELEVATIONS SHALL BE ADJUSTED ON FIELD.
127 ALL GREEN AREAS INSIDE PROJECT LIMITS NEEDS TO BE STRIPPED FROM EXISTING GRASS, REGRADED AND NEW GRASS WITH TOP SOIL SHALL BE INSTALLED AS PER LANDSCAPE DRAWINGS DETAILS.
128 ALL UTILITY INSIDE THE PROJECT LIMITS NEEDS TO BE ADJUSTED FOR NEW GRADING ELEVATIONS, CONTRACTOR IS RESPONSIBLE FOR ANY ELEMENT REQUIRED TO PERFORM THE INTENDED ADJUSTMENT; THOSE TOP ELEVATIONS ADJUSTMENTS ARE INCLUDED ON THE CONTRACTORS BASE PRICE.
129 LANDSCAPE ITEMS NOT SHOWN ON CIVIL DRAWINGS REFER TO LANDSCAPE DRAWINGS FOR DEMOLITION OR PROPOSED ITEMS DETAILS. (S.A. = GREEN AREAS AND/OR PLANTING AREA. AND/OR AREAS TO RECEIVE LANDSCAPE)
130 GRADING PLAN AND REFERENCED: [XX.00] OR x[XX.00] EXISTING GRADING, [XX.00] PROVIDE THE PROPOSED CONFIGURATION AND ELEVATIONS OF THE PROPOSED PROJECT. SEE LANDSCAPE DRAWINGS FOR DETAILS.
131 THE "INVENTARIO DE ARBOLES Y PLAN DE SIEMBRA" (TREE MITIGATION PLAN) DOCUMENT IS AN ESSENTIAL PART OF THE SITE WORK CONSTRUCTION CONTRACT.
132 ALL PLANTING AREAS SHALL HAVE A MINIMUM OF 1% SLOPE (IDEALLY 2%) ,AND SHALL DRAIN TO THE CURBS, THE SIDEWALKS OR CATCH BASINS FOR PROPER RUNOFF MANAGEMENT.
133 TOP ELEVATIONS OF EXISTING UTILITIES ON THE RE-PAVED AREA SHALL BE ADJUSTED FOR PROPER DRAINAGE AND TO PROVIDE THE TOP WITH A FLUSH CONDITION TO THE RE-PAVED AREA. THIS NOTE APPLIES TO EVERY UTILITY INSIDE THE PROJECT AREA, INCLUDING BUT NOT LIMITED TO MANHOLES (STORM SEWER, SANITARY ELECTRICAL, TELECOMMUNICATIONS, ETC.), VALVE BOXES, PULL BOXES, ELECTRICAL COVERS, WATER VALVES, ETC. AND MAY REQUIRE NEW ROSETA AND/OR IMPROVEMENTS. THIS IS AN ESSENTIAL PART OF THIS CONSTRUCTION PROJECT - ANY COST SHALL BE AT CONTRACTORS EXPENSE.
134 CONTRACTOR SHALL PROVIDE A WIND RESISTANT WRAPPED CONTINUOUS CONSTRUCTION FENCE AT THEIR EXPENSE. 6'-0" CYCLONE FENCE W/ GATES MIN.; REFER TO CONTRACT DOCUMENTS - COORDINATE WITH OWNER.
135 _____ TYPICAL RETAINING WALL, RETAINING WALL ON SITE REQUIRES A FENCE ON THE TOP; SEE ARCH. DWGS. FOR DETAILS.
136 INCIDENTAL PERMIT AT ENER / OSPE IS DELEGATED TO THE G.C.; ALL DESIGN AND SUBMISSION FEES BY G.C. (TYPICAL FOR ALL DELEGATED PERMITS)
137 THIS PROJECT REQUIRES AN EROSION CONTROL DESIGN AND A CONSOLIDATED GENERAL INCIDENTAL PERMIT (PG - PGC - CEG), G.C. IS RESPONSIBLE FOR THE PREPARATION OF ALL DOCUMENTS AND PAYMENT OF ALL FEES REQUIRED FOR THE PERMIT. ALL DOCUMENTS SHALL BE SUBMITTED TO THE PROJECT OWNER FOR REVIEW AND APPROVAL TO THE CONTRACTOR FOR SUBMISSION TO THE PERTINENT AGENCY.
138 NOT REGULATORY, MANDATORY OR ALTERNATE SIGNS SHALL BE PROVIDED ON ALL PROJECT PHASES. NOT PLANS ARE DELEGATED TO THE GENERAL CONTRACTOR.
139 DESIGN CONSIDERATIONS INCLUDE DESIGN ASSUMPTIONS PROVIDED AND/OR DESIGNED BY OTHERS, THAT INFORMATION WAS NOT VERIFIED ON FIELD; VERIFICATION SHALL BE BY THE GENERAL CONTRACTOR, ANY DISCREPANCY SHALL BE SUBMITTED FOR REDESIGN PREVIOUS TO START ANY CONSTRUCTION.
140 REPAVING OF EXISTING STREETS SHALL WARRANTY A MINIMUM SLOPE OF 0.036 (0.6%) TO A CURB, CB OR DRAINAGE AREA. IF THE PAVEMENT THICKNESS PROVIDED IS NOT TO COMPLY WITH THIS CONDITIONAL SLOPE, TRANSVERSAL SLOPES SHALL BE 1.5-2.0% MIN./MAX. SOLID MILL PAVEMENT THICKNESS SHALL BE VERIFIED ON FIELD BY G.C. ANY ADDITIONAL WORKS ARE INCLUDED ON THIS BASE BID AS BUILT, STAKEOUT AND DESIGN SHALL BE SUBMITTED FOR APPROVAL.

INDICATED NEW CONCRETE CROSS GUTTER ON STREETS IN INTERSECTIONS, SEE STORM SEWER AND GRADING PLAN.
INDICATED NEW 6'-0" CYCLONE FENCE, SEE GRADING PLAN.

Yo, Jonathan Amaldo F. Hernandez-Cruz, Ingeniero colegiado bajo mi juramento profesional que declaro que estoy en cumplimiento con las disposiciones de la Ley Núm. 173 de 12 de agosto de 1988, según enmendada, que establece la Política Pública del Gobierno de Puerto Rico sobre el desarrollo económico mediante la participación de la empresa privada y la iniciativa individual, y que, en consecuencia, delego en mi persona la responsabilidad de cumplir con todas las disposiciones de dicha Ley, según aplicables a mi profesión. Certifico, además que, la información que he suministrado en el presente documento es correcta y completa a mi mejor conocimiento. Asimismo, certifico que, he cumplido con todas las disposiciones de la Ley Núm. 84 de 18 de junio de 2002, según enmendada, conocida como la Ley de Ética Gubernamental del Gobierno de Puerto Rico y Ley Núm. 1 de 3 de enero de 2012, según enmendada, conocida como la Ley de Ética Gubernamental de Puerto Rico de 2011. Para constancia de lo antes expuesto, suscribo la presente en San Juan, Puerto Rico, a [illegible]. Firmado: