



**U.S. Department of Housing and Urban Development**

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

### **Project Information**

**Project Name:** Coliseo Angel Mercado

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

**Grant Recipient** (if different than Responsible Entity): Municipality of Sabana Granda

**State/Local Identifier:** PR-CRP-000745

**Preparer:** Genevieve Kaiser

**Certifying Officer Name and Title:** Juan Carlos Pérez-Bofill - Director, Disaster Recovery CDBG-DR; Aldo Rivera, Permits and Environmental Compliance Director; Ángel G. López Guzmán - Deputy Director, Permits and Environmental Compliance Specialist; Sally Z. Acevedo-Cosme - Permits and Environmental Compliance Specialist; Pedro de León Rodríguez - Permits and Environmental Compliance Specialist; María T. Torres-Bregón - Permits and Environmental Compliance Manager; Ivelisse Lorenzo Torres - Permits and Environmental Compliance Specialist; Santa Ramírez Lebrón - Permits and Environmental Compliance Specialist; Janette I. Cambrelen - Permits and Environmental Compliance Specialist; Limary Vélez Marrero - Permits and Environmental Compliance Specialist; Mónica Machuca Ríos - Permits and Environmental Compliance Specialist

**Consultant** (if applicable): Tetra Tech, Inc.

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

**Project Location:** Coordinates, Street Address, Municipio, PR (Provide additional information on the project located beyond the address as necessary for the scope of the project)

Project will be located at Ave. Quilichini, Sabana Grande PR 00637, coordinates -66.959490 18.072633, cadaster # 335-057-068-14.

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

The Municipality of Sabana Grande proposes the demolition of the existing structure except the steel frame. The new Municipal Coliseum will be built in this structure. It will have capacity for six hundred seats, dressing rooms for both teams, an area for referees, radio transmission booth, and a first aid medical services area. It will have an area with a boxing ring that can also be used as a stage for events such as school graduations. It will have an outdoor open space to offer aerobic and Zumba classes. The upper floor will be used for table tennis. It will have a storage area for visitors. The parking area will be on an existing parking lot north of the coliseum and will be expanded with additional parking spaces to the west of the building. New pavement, gravel, and pavers for sidewalks will be created around the building. New sanitary piping also will be installed See Appendix B, Figure 1, Project Area Map, and Figure 2, Project Design.

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

The funds requested are for the reconstruction of the coliseum, which suffered significant damage during Hurricane Maria. If the project is not carried out, the municipality would lack a facility that allows hosting large-scale events such as town assemblies, graduations, sports events, among others. Additionally, a spacious venue like this has been used to set up collection centers for storing aid in case of events like hurricanes or earthquakes.

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

The project is currently unused due to the damages caused by Hurricanes Maria and Fiona. The property is occupied by the damaged structure, which cannot safely be used. It represents an area that could be subject to blight, unauthorized uses, safety issues to the public and would not make the best use of the property.

**Funding Information**

Grant Number	HUD Program	Funding Amount
B-17-DM-72-0001 B-18-DP-72-0001 B-19-DP-78-0002 B-18-DE-72-0001	CDBG-DR	11,938,162,230

**Estimated Total HUD Funded Amount: \$2,500,000.00**

**Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$5,287,236.00**



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

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

<b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6</b>		
<b>Airport Hazards</b>  24 CFR Part 51 Subpart D	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>Requirements of 24 CFR Part 51 Subpart D prohibit incompatible land uses on property within runway protection zones, clear zones, and accident potential zones. Projects require additional review if they are within 2,500 feet of a civil airport or 15,000 feet of a military airport.</p> <p>The project would not involve incompatible uses, such as construction of new homes, substantial rehabilitation of existing homes, acquisition of undeveloped land, activities that significantly prolong the physical or economic life of existing incompatible facilities or change uses of the facilities to incompatible uses, activities that significantly increase density or number of people at the site, or activities that introduce explosive, flammable, or toxic materials to the area.</p> <p>The civil airport nearest to the project area (Eugenio María de Hostos in Mayagüez) is approximately 98,680 feet away, and the nearest military (and civil) airfield (Luis Muñoz Marín International Airport located in San Juan) is approximately 376,941 feet away.</p> <p>Therefore, this topic complies with the regulation.</p>

		See Appendix A, Airport Hazards Worksheet, and Appendix B, Figure , Airports Map.
<b>Coastal Barrier Resources</b>  Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>According to the US Fish and Wildlife Service Coastal Barrier Resources mapping, the project is not located in any coastal barrier zone of Puerto Rico. The nearest unit is Ensenada las Pargas (Unit PR-61), approximately 9.6 miles south of the project.</p> <p>The Coastal Barriers Resources System contains two types of mapped units: System Units and Otherwise Protected Areas (OPAs). The nearest OPA is Cayo don Luis (PR-63P), approximately 7.6 miles south of the project. Most new federal expenditures and financial assistance, including federal flood insurance, are prohibited within System Units, while the only federal spending prohibitions within OPAs is on federal flood insurance. Since this project is not in an OPA or CBRS zone, it has no restrictions in this regard.</p> <p>Therefore, this topic complies with the regulation.</p> <p>See Appendix A, Coastal Barrier Resources Worksheet, and Appendix B, Figure 3, Coastal Barrier Resources Map.</p>
<b>Flood Insurance</b>  Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>A portion of the project area is in the 100-year Special Flood Hazard Area (SFHA), as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel Number 72000C1580J, revised on November 18, 2009. Approximately 0.5 acre of the project area is within the 1 percent chance of annual flood (the 100-year floodplain), and approximately 1.9 acres are in the area with 0.2 percent chance of annual flood (the 500-year floodplain).</p> <p>All areas within the Commonwealth of Puerto Rico are eligible for NFIP policies. Flood Insurance is required when a project involves repairs, rehabilitation, or construction of an insurable structure in the</p>

		<p>100-year floodplain. The Municipal Coliseum structure is the only insurable structure on the project site. It is not within the 100-year floodplain and would not require flood insurance. No other insurable structures would be constructed in the project area.</p> <p>The project is in compliance with flood insurance requirements.</p> <p>See Appendix A, Flood Insurance Worksheet, and Appendix B, Figure 4, National Flood Hazard Layer FIRMETTE Map.</p>
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 &amp; 58.5</b>		
<b>Clean Air</b>  Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The project does not include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities or five or more dwelling units. The project would continue to be used as a public coliseum.</p> <p>According to the EPA's Green Book (Current Nonattainment Counties for All Criteria Pollutants), the project site is not located in a non-attainment area.</p> <p>Therefore, this topic complies with the regulation.</p> <p>See Appendix A, Air Quality Worksheet.</p>
<b>Coastal Zone Management</b>  Coastal Zone Management Act, sections 307(c) & (d)	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The Project site is not located in a Coastal Zone; it is approximately 6.2 miles north of the coastal zone.</p> <p>Therefore, this topic complies with the regulation.</p> <p>See Appendix A, Coastal Zone Management Act Worksheet, and Appendix B, Figure 5, Coastal Zone Map.</p>
<b>Contamination and Toxic Substances</b>  24 CFR Part 50.3(i) & 58.5(i)(2)	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>HUD policy requires the project site and adjacent areas to be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances where a hazard could affect health and safety of</p>

		<p>occupants of the property or conflict with intended use of the property.</p> <p>The USEPA's Facility Registry Service (FRS) geospatial database of facilities or locations subject to environmental regulation or of environmental interest was reviewed within the applicable search distances to identify sites that could affect the project site. No Brownfields (ACRES), Superfund (NPL), or Superfund Enterprise Management System (SEMS) listings were within 1 mile of the project site. The project site is within 3,000 feet of seven Resource Conservation and Recovery Act (RCRA) Hazardous Waste listings and one Toxics Release Inventory (TRI) listing, and one Toxic Substances Control Act (TSCA) listing. USEPA's Superfund, Envirofacts, and Enforcement and Compliance History Online (ECHO) reports were reviewed for more detailed information on statuses of these facilities.</p> <p>The seven RCRA sites are: Henkel Puerto Rico Inc. at 9 V Quilinchini Avenue, Sabana Grande Wastewater Treatment Plant at PR-2 KM 182.6 INT, Shell Service Station 1740 Sabana Grande at G Martinez 2, Esso Standard Oil Co. P.R. CO-370 at PR-121 65<sup>TH</sup> Infanteria 7, Prasa – Sabana Grande Filter Plant at PR-364 KM 0.6 INT, Total Petroleum Puerto Rico Corp. Service Station 104302 at V Quilinchini Avenue #26, and Total Petroleum Puerto Rico Corp. Service Station 310290 at Avenue Francisco Quinones #32. The one TRI listing and one TSCA listing are both for Henkel Puerto Rico Inc. at 9 V Quilinchini Avenue. These sites do not have any releases reported or any EPA formal or informal action reported for the last five years in EPA's Enforcement and Compliance History Online (ECHO) Detailed Facility Reports and would not generate toxic, hazardous, or radioactive substances that could affect the health and safety of project occupants or conflict with the intended use of the project site.</p>
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<p><b>Endangered Species</b></p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>Per the Official Species List from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website, the Rican Boa can be found in the area but there are no critical habitats at this location. The nearest critical habitat to the project site is approximately 8,425 feet northeast of the Project site. The Project will have no potential to affect species or habitats due to the nature of the activities involved in the project. Based on the nature of the project, scope of work, information available, and a careful analysis of the Project Site, and IPaC species list, it was determined that there would be No Effect for any of the listed species.</p> <p>The proposed activities are covered by the USFWS Blanket Clearance Letter for Federally sponsored projects, Housing and Urban Development of January 14 of 2013, Items 5 and 6. If a Puerto Rican Boa is encountered, work will cease until it moves</p>

		<p>off the site or, failing that, the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers will be notified for safe capture and relocation of the animal, in accordance with the USFWS Puerto Rican Boa Conservation Measures guidelines and the July 27, 2023 Amended Programmatic Biological Opinion.</p> <p>The project complies with the Endangered Species Act.</p> <p>See Appendix A, Endangered Species Act Worksheet, and Appendix B, Figure 7, Critical Habitat Map, and Appendix D, Endangered Species (including the IPaC Report).</p>
<p><b>Explosive and Flammable Hazards</b></p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The proposed Project does not include a hazardous facility that mainly stores, handles, or processes flammable or combustible chemicals such as bulk fuel storage. Planned activities at the project area do not include installation of storage tanks.</p> <p>The scope of the proposed project does not include development, construction, conversion, or rehabilitation activities that would increase residential densities. The project would not introduce new housing. The increased use of the site could introduce sensitive public uses that could be exposed to explosive or flammable hazards.</p> <p>A desktop aerial photograph review revealed several apparent aboveground storage tanks (AST) within 1 mile of the project site. The municipality investigated the tanks near the project's location. One tank is located at the site of Henkel PR, and it is a 400,000-gallon water tank used for firefighting, with well water. Three tanks near CCL de Puerto Rico contain water, with capacities of 200,000 gallons, 200,000 gallons, and 50,000 gallons, respectively. An AST located at Pepsi's Distribution Center, is a water tank currently out of use. Because all of these tanks contain water, calculation of an acceptable</p>

		<p>separation distance (ASD) for these ASTs was not required.</p> <p>This project complies with the Explosive and Flammable Hazards requirements.</p> <p>See Appendix A, Explosive and Flammable Hazards Worksheet, and Appendix B, Figure 8, Explosive and Flammable Hazards Map.</p>
<p><b>Farmlands Protection</b></p> <p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The project does not include any activities that could convert agricultural land to non-agricultural use.</p> <p>According to the U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, the project site is not situated on farmland soils and is not protected under the Farmland Protection Policy Act.</p> <p>Therefore, this topic complies with the regulation.</p> <p>See Appendix A, Farmlands Protection Worksheet, and Appendix B, Figure 9, Farmland Protection Map.</p>
<p><b>Floodplain Management</b></p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes    No</p> <p><input checked="" type="checkbox"/>    <input type="checkbox"/></p>	<p>A portion of the project area is in the 100-year Special Flood Hazard Area (SFHA), as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel Number 72000C1580J, revised on November 18, 2009. Approximately 0.5 acre of the project area is within the 1 percent chance of annual flood (the 100-year floodplain), and approximately 1.9 acres are in the area with 0.2 percent chance of annual flood (the 500-year floodplain).</p> <p>The project involves the demolition of the existing structure except the steel frame. The new Municipal Coliseum will be built in this structure, with parking and an outdoor open space. The project would not increase the impervious surface in the project area, and the structure would not be within the 100-year floodplain. This project is not considered a critical action under 24 CFR Part 55. In accordance with 24 CFR Part 55,</p>

		<p>an 8-step floodplain analysis identified no practicable alternatives to the proposed project. An early public notice was published on September 1, 2023. A final public notice was published on December 7, 2023.</p> <p>The Project is in compliance with floodplain management requirements.</p> <p>See Appendix A, Floodplain Management Worksheet, Appendix B Figure 4, National Flood Hazard Layer FIRMETTE Map, Figure 10, Advisory Base Flood Elevation (ABFE) Map, and Appendix E, Floodplain Management</p>
<p><b>Historic Preservation</b></p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the area of potential effect (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 has at least 10 previously recorded archaeological resources within an 0.5-mile radius of the APE. The review revealed that the project area is not within the boundaries of a National Register of Historic Places eligible or listed Traditional Urban Center or Historic District. One National Register-listed property was identified within 0.5 mile. The review made the determination that no archaeological sites and/or NRHP listed/eligible historic properties would be affected within the direct or indirect APE.</p> <p>Consultation with SHPO regarding the proposed Project and a determination that no historic properties would be affected was initiated with a letter to that office dated December 21, 2023. On January 3, 2024, SHPO concluded that its records support the finding of "no historic properties affected within the project's area of potential effects."</p>



		<p>The Project is in compliance with the National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800.</p> <p>See Appendix A, Historic Preservation Worksheet and Appendix D, Historic Preservation.</p>
<p><b>Noise Abatement and Control</b></p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>HUD guidance at 24 CFR Part 51 requires review of potential noise generators in the vicinity of a project site, including major roadways within 1,000 feet, railroads within 3,000 feet, and military or Federal Aviation Administration-regulated airfields within 15 miles. According to the HUD Noise Guidebook, the acceptable day/night noise level (DNL) is 65 decibels (dB). The purpose of this review is to ascertain the impacts of existing noise sources in the area on new residents or other sensitive receptors.</p> <p>The proposed project does not involve establishment of new residences, an increase in residents, or introduction of other noise-sensitive uses. The project does not require further evaluation under HUD's noise regulation.</p> <p>Therefore, the project complies with the regulation.</p> <p>See Appendix A, Noise Worksheet.</p>
<p><b>Sole Source Aquifers</b></p> <p>Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>There are no EPA sole source aquifers in Puerto Rico. The project is in compliance with Sole Source Aquifer requirements.</p> <p>See Appendix A, Sole Source Aquifers Worksheet.</p>
<p><b>Wetlands Protection</b></p> <p>Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>According to the National Wetlands Inventory (NWI) database, the project area is not within or adjacent to wetlands. The nearest wetland is a freshwater pond approximately 960 feet south of the project site. The project is in compliance with Wetlands Protection requirements.</p> <p>See Appendix A, Wetlands Worksheet, and Appendix B, Figure 11, Wetlands Map.</p>

<p><b>Wild and Scenic Rivers</b></p> <p>Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>No federally-designated Wild and Scenic Rivers are within or in the immediate vicinity of the project area. The nearest designated Wild and Scenic River is approximately 81.5 miles northeast of the project area. The project is in compliance with Wild and Scenic Rivers requirements.</p> <p>See Appendix A, Wetlands Worksheet, and Appendix B, Figure 12, Wild and Scenic Rivers Map.</p>
<p><b>ENVIRONMENTAL JUSTICE</b></p>		
<p><b>Environmental Justice</b></p> <p>Executive Order 12898</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>Environmental justice is assurance of protection of the environment and human health equally for all people regardless of race, color, national origin, or income. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations," requires HUD to consider how federally assisted projects may exert disproportionately high and adverse human health or environmental effects on minority and low-income populations.</p> <p>The project would not generate adverse resource or health effects or adversely impact residential, commercial, or community facilities or services that may be of importance to environmental justice communities. The project would not disproportionately generate adverse environmental impacts on environmental justice communities. The project would benefit all populations in the project area by providing recreational facilities to the population of Sabana Grande at a rehabilitated facility that could not be used without the project because of flood damage.</p> <p>The Project is in compliance with Executive Order 12898.</p> <p>See Appendix A, Environmental Justice Worksheet.</p>

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

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

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>LAND DEVELOPMENT</b>		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	Because the Project-related activities would occur within existing Municipal Coliseum property and would involve activities to restore the property for recreational uses similar to its prior use. The land use is consistent with the surrounding recreational complex, that includes the Rafael D. Milán Baseball Park to the northwest, on which it is situated. No changes in zoning, easements, or land use are anticipated.
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	The project area is developed, graded, and relatively flat. The project would involve ground disturbance to extend the existing footprint of the building to the west and south. Additional ground disturbance would occur to expand the existing parking lot to the north and adding parking spaces to the west of the building. New pavement, gravel, and pavers for sidewalks will be created around the building. An exterior gym with fixed equipment will be relocated to the southwest corner of the building. To avoid potential impact to water bodies from sediment transport during construction, the contractor shall prepare and implement an Erosion and Sedimentation Control Plan (CES Plan) and a Stormwater Pollution Prevention Plan (SWPPP).

Hazards and Nuisances including Site Safety and Noise	2	<p>The project site is in an urbanized area. The project would involve demolition, excavation, site clearance and construction. Hazards and nuisances would be short-term and limited to the demolition and construction period. The hazards typically associated with construction activities would be present, temporary site safety issues and noise.</p> <p>Underground natural gas pipelines would be identified and marked. Any excavation near these pipelines would be conducted with appropriate BMPs. Excavation for the project is not expected to disturb these pipelines. Traffic control signing and adequate fencing around construction areas while construction activities are undertaken would protect the public from hazards and nuisances. Signs will be posted informing of the construction of the project, and public access will be restricted by security fences.</p> <p>Noise impacts would be addressed by conducting construction and demolition activities in accordance with local noise regulations and proper construction equipment maintenance. Noise disturbance missions from the equipment used would be minimized by restricting the contractor's working hours to daytime hours, from 7:00 AM to 4:00 PM, Monday through Friday.</p>
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Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>SOCIOECONOMIC</b>		
Employment and Income Patterns	1	Both the construction and operation of the project, would generate new direct and indirect employment that would have a positive impact on income and employment in the municipality.
Demographic Character Changes, Displacement	2	The project would not involve demographic changes or displacements. It is and will be a public facility.
Environmental Justice	2	The project would not alter the Environmental Justice composition of the population in the area surrounding the project area. There are currently no residents at the project site, and the project would not increase the population that could be exposed to environmental hazards. No environmental hazards were identified on or surrounding the project site that could disproportionately environmental justice populations.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>COMMUNITY FACILITIES AND SERVICES</b>		
Educational and Cultural Facilities	2	The project would not involve new residents. The project would not result in any change to regional or local area educational and cultural facilities or increase demand for them.

Commercial Facilities	1	Access to nearby commercial facilities would be maintained throughout construction. Agencies, neighboring businesses, and the public in general would be informed in advance of any needed street closures. The project would not directly affect nearby commercial facilities. Increased public use of the project area could indirectly benefit businesses by increasing visits in the area.
Health Care and Social Services	2	Health care and social services facilities would not be impacted by the proposed project. Access for emergency service providers would be maintained. The project would not increase demand for health care and social services facilities.
Solid Waste Disposal / Recycling	2	The project involves demolition and removal of the existing building, except for the steel frame. The general contractor would manage implementation of the anticipated waste disposal methods. The Project would comply with the provisions of the “Reglamento para la Reducción, Reutilización y Reciclaje de Desperdicios Sólidos (Reglamento Núm. 6825 del 2004)”, as amended, and with all Department of Natural and Environmental Resources (DNER) requirements. Recycling recovered construction debris materials where possible would minimize generation of solid waste so that daily capacities of landfills and other solid waste facilities would not be exceeded. Once the project is completed, the generation of domestic solid waste will increase. Both solid waste disposal and recycling will be collected and managed by the Municipality and would not require an increase in capacity within the Municipality.
Waste Water / Sanitary Sewers	2	New wastewater sanitary piping would be provided, which will result in an improvement to the infrastructure and better service. Sanitary sewer discharges would increase once the new Municipal Coliseum is operational but will be connected to the existing sanitary systems in the area. The facility would not require an increase in capacity for the Puerto Rico Aqueduct and Sewer Authority (PRASA). All work will be done in coordination with the Puerto Rico Aqueduct and Sewer Authority (PRASA).
Water Supply	2	Improvements to the infrastructure for potable water at the new facility would provide greater performance and efficiency in service. Once the project is completed, there will be an increase in potable water consumption. The Center will be connected to the existing system, and all work will be done in coordination with PRASA. The facility would not require an increase in capacity for the PRASA. Increase in demand for potable water from the project would be minor relative to the current demand for these services in the area.
Public Safety - Police, Fire and Emergency Medical	2	Traffic may have to be rerouted temporarily during construction. Emergency services would be notified of traffic control changes ahead of time, and access by emergency vehicles always would be allowed within the work zone. Increased use of the project area due to increased capacity could result in a minor increase demand for these services.

Parks, Open Space and Recreation	1	The proposed project would not adversely affect any existing parks, open space, or recreational activities. It also would not increase use of those existing facilities. The project would increase and improve the levels of recreation available in the municipality. The increase in public visitation at new Municipal Coliseum could generate increased visitation to nearby parks and recreation areas but would not require an increase in the capacity of these facilities to accommodate them.
Transportation and Accessibility	2	The proposed project would result in minor temporary traffic increases and access issues during construction. Traffic may be rerouted temporarily or lane closures may be implemented to direct traffic away from construction activities. A traffic and transportation management plan would be implemented to address those short-term traffic effects and to provide the safest routes during construction. Emergency services would be notified of traffic control changes ahead of time, and access by emergency vehicles always would be allowed within the work zone. When the project is completed, there will be a slight increase in traffic because the expanded facility will have employees and visitors. However, traffic should flow normally in the area, as the increase is not significant, and the center will provide parking.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>NATURAL FEATURES</b>		
Unique Natural Features, Water Resources	2	The project will not affect a unique natural features or water resources. The project site is developed with an abandoned coliseum complex within an urban area.
Vegetation, Wildlife	2	The proposed project activities would be mostly within the existing building footprint and parking areas. Vegetation on the southern portion of the property, which includes planted grass, would be used as an open area for to aerobic and Zumba classes. The entire project site has been previously disturbed. The project would not significantly affect native vegetation. Additionally, the proposed project would not impact wildlife or wildlife habitat.
Other Factors		No other factors were identified that would be affected by the proposed project.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>CLIMATE AND ENERGY</b>		
Climate Change Impacts	2	Because the project is a rehabilitation of an existing developed area that is mostly covered with buildings, asphalt, concrete slabs, fences, stairs, ramps, and sidewalks, there would be no changes to the site configuration or structure that would specifically address the

Environmental Assessment Factor	Impact Code	Impact Evaluation
		<p>possibility and uncertainty of rising sea levels or the possibility of increases in rainfall intensity.</p> <p>The ABFE has most current estimates of flooding. Increased rainfall due to climate change could increase the area subject to flooding. Although a portion of the project is within the floodplain, the Municipal Coliseum structure would not be in the floodplain. The project design would not change the area's urban heat island effects or stormwater runoff.</p> <p>The project utilities would be upgraded with new energy efficient equipment that would result in a lower carbon footprint for the rehabilitated area.</p>
Energy Efficiency	2	The expanded facility would increase energy consumption because due to anticipated increased use. However, the electrical system will be upgraded and be energy efficient.

**Additional Studies Performed:**

N/A

**Field Inspection (Date and completed by):**

N/A

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

Puerto Rico State Historic Preservation Office

FAA, National Plan for Integrated Airport Systems:

[www.faa.gov/airports/planning\\_capacity/npias/reports/NPIAS-Report-2017-2021-Appendix-B-Part6.pdf](http://www.faa.gov/airports/planning_capacity/npias/reports/NPIAS-Report-2017-2021-Appendix-B-Part6.pdf)

John H. Chafee Coastal Barrier Resources System, Puerto Rico map.

[www.fws.gov/CBRA/Maps/Locator/PR.pdf](http://www.fws.gov/CBRA/Maps/Locator/PR.pdf)

National Wild and Scenic Rivers System: [www.rivers.gov/puerto-rico.php](http://www.rivers.gov/puerto-rico.php)

Puerto Rico Community Development Block Grant Disaster Recovery Action Plan, July 2018.

[www.cdbg-dr.pr.gov/en/action-plan/](http://www.cdbg-dr.pr.gov/en/action-plan/)

Programmatic Agreement among the Federal Emergency Management Agency, the Puerto Rico State Historic Preservation Office and the Central Office for Recovery, Reconstruction and Resilience – amended to include the Puerto Rico Department of Housing.

US Environmental Protection Agency, National Ambient Air Quality Standards, Nonattainment Areas for Criteria Pollutants (Green Book):

[www3.epa.gov/airquality/greenbook/anayo\\_pr.html](http://www3.epa.gov/airquality/greenbook/anayo_pr.html)

US EPA, Environmental Topics, Air Topics: [www.epa.gov/environmental-topics/air-topics](http://www.epa.gov/environmental-topics/air-topics)

US Fish and Wildlife Service, Environmental Conservation Online System:

<https://ecos.fws.gov/ecp/report/species-listings-by-state?stateAbbrev=PR&stateName=Puerto%20Rico&statusCategory=Listed>

Federal Emergency Management Agency, Flood Mapping Service:

<https://msc.fema.gov/portal/home> (compilation of numerous maps)

US Fish and Wildlife Service, National Wetlands Inventory:

[www.fws.gov/wetlands/data/mapper.html](http://www.fws.gov/wetlands/data/mapper.html) (compilation of numerous maps)

Puerto Rico Coastal Zone Management Program Plan, September 2009.  
US EPA, Sole Source Aquifers. Esri HERE, Garmin, NOAA, USGS, EPA.

**List of Permits Obtained:**

N/A

**Public Outreach [24 CFR 50.23 & 58.43]:**

In accordance with 24 CFR Part 55, an early public notice of an activity in the floodplain was published on September 1, 2023, and a final public notice was published on December 7, 2023, in El Vocero newspaper. A combined Notice of Finding of No Significant Impact (FONSI) and Notice of Intent to Request Release of Funds (NOIRROF) will be published in a local newspaper. Copies of that public notice also will be sent to all known interested parties.

**Cumulative Impact Analysis [24 CFR 58.32]:**

The project area is part of larger, ongoing infrastructure improvements to address unsatisfied needs as a result of Hurricane Maria; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses. The municipality assessed locations in the urban center that warranted improvements to maximize their potential. Examples include the ongoing environmental process for remodeling our Public Square, transforming the Old Luis Muñoz Rivera School into an Artistic and Cultural Development Center, enhancing the Municipal Gymnasium, and the current Coliseum Ángel Mercado project. The demolition of the existing Coliseo Angel Mercado and replacing it with the new Municipal Coliseum project would contribute to these beneficial impacts. Adding six hundred seats, dressing rooms for both teams, an area for referees, radio transmission booth, and a first aid medical services area, a boxing ring that can also be used as a stage for events such as school graduations, and an upper floor that will be used for table tennis could potentially attract additional development in the area as more people use the facilities. However, in the immediate future, it would serve a need for a public recreation and gathering facility that has been unavailable since it received storm damage from Hurricane Maria. Short-term impacts during construction would be mitigated by through the measures detailed in the table below and would not contribute to construction impacts surrounding the project area. The project will not contribute to adverse cumulative impacts.

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

No other alternatives were considered feasible for the design or location of the new Municipal Coliseum except for the proposed project. Relocation of the coliseum to an alternate location would not provide the central location required for the municipal gathering place. Relocation would not resolve the problem of the existing large vacant, damaged, and unsafe Coliseo Angel Mercado structure. Alternate reconstruction designs or capacities would not meet the recreational needs of the municipality, and alternate reconstruction methods, including demolition and reconstruction of the structural supports, would be prohibitively expensive.

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

The No Action Alternative is considered unfeasible because it does not resolve the problem of a large vacant, damaged, and unsafe Coliseo Angel Mercado structure. It would not provide a



needed facility for hosting large-scale events such as town assemblies, graduations, sports events, and providing aid during events like hurricanes or earthquakes.

### **Summary of Findings and Conclusions:**

The project involves reconstruction of the Coliseo Angel Mercado on Quilichini Avenue in Sabana Grande. The project is in a 100-year floodplain and will result in disturbance of the floodplain. The project would not increase the impervious surface in the project area, and the structure would not be within the 100-year floodplain. In accordance with 24 CFR Part 55, an 8-step floodplain analysis identified no practicable alternatives to the proposed project. no changes to flood volume or base flood elevation as a result of the project. The infrastructure improvements within the project area will not result in additional flooding risk to other properties in the vicinity. Completion of this environmental review and associated consultation confirms that the proposed project would not have a significant environmental impact and that further assessment is not necessary. HUD funding of the proposed action will not have a significant impact on the quality of the human environment. The project would provide a community gathering, sports, and recreation facility and would replace a vacant, damaged, unsafe, and unusable facility in the city center.

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

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

Law, Authority, or Factor	Mitigation Measure
Contamination and Toxic Substances, 24 CFR Part 50.3(i) & 58.5(i)(2)	Asbestos and lead studies will be conducted prior to demolition in accordance with state regulations. If these materials are identified at levels at or above EPA and Puerto Rico regulatory levels, the contaminated surfaces or substrates would be abated or removed. The firm providing the abatement services would be certified as an abatement firm by the Puerto Rico Department of Natural and Environmental Resources (DRNA).
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	If a Puerto Rican Boa is encountered, work will cease until it moves off the site or, failing that, the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers will be notified for safe capture and relocation of the animal, in accordance with the USFW Puerto Rican Boa Conservation Measures guidelines and the July 27, 2023 Amended Programmatic Biological Opinion.

Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	To avoid potential impact to water bodies from sediment transport during construction, the contractor shall prepare and implement an Erosion and Sedimentation Control Plan (CES Plan) and a Stormwater Pollution Prevention Plan (SWPPP).
Hazards and Nuisances including Site Safety and Noise	<p>Underground natural gas pipelines would be identified and marked. Any excavation near these pipelines would be conducted with appropriate BMPs. Excavation for the project is not expected to disturb these pipelines. Traffic control signing and adequate fencing around construction areas while construction activities are undertaken would protect the public from hazards and nuisances. Signs will be posted informing of the construction of the project, and public access will be restricted by security fences.</p> <p>Noise impacts would be addressed by conducting construction and demolition activities in accordance with local noise regulations and proper construction equipment maintenance. Noise disturbance missions from the equipment used would be minimized by restricting the contractor's working hours to daytime hours, from 7:00 AM to 4:00 PM, Monday through Friday.</p>
Solid Waste Disposal / Recycling	In accordance with Puerto Rico Law No. 70 of September 18, 1992, as amended, known as “Law for the Reduction and Recycling of Solid Wastes in Puerto Rico”, recycling recovered construction debris materials where possible would minimize generation of solid waste so that daily capacities of landfills and other solid waste facilities would not be exceeded.
Waste Water / Sanitary Sewers	All wastewater and sanitary sewer work will be done in coordination with the Puerto Rico Aqueduct and Sewer Authority (PRASA).
Water Supply	All work potable water supply activities will be done in coordination with PRASA.
Public Safety - Police, Fire and Emergency Medical	Emergency services would be notified of traffic control changes ahead of time, and access by emergency vehicles always would be allowed within the work zone.
Transportation and Accessibility	A traffic and transportation management plan would be implemented to address those short-term traffic effects and to provide the safest routes during construction.
Energy Efficiency	The electrical system will be upgraded and be energy efficient to offset the increase in energy consumption that would result from renewed use of the facility.


**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:  Date: May 6, 2024

Name/Title/Organization: Genevieve Kaiser/Senior Environmental Planner/Tetra Tech, Inc.

Certifying Officer Signature:  Date: May 7, 2024

Name/Title: I. Lorenzo, Permits and Environmental Compliance Specialist

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

# **Appendix A**

## **Worksheets**



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## Airport Hazards (CEST and EA) – PARTNER

[https://www.hudexchange.info/environmental\\_review/airport\\_hazards](https://www.hudexchange.info/environmental_review/airport_hazards)

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

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*

☐ Yes → *Continue to Question 2.*

- 2. Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?**

☐ Yes, project is in an APZ → *Continue to Question 3.*

☐ Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*

☐ No, project is not within an APZ or RPZ/CZ

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

- 3. Is the project in conformance with DOD guidelines for APZ?**

☐ Yes, project is consistent with DOD guidelines without further action.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

☐ No, the project cannot be brought into conformance with DOD guidelines and has not been approved. → *Project cannot proceed at this location.*

**If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

[Click here to enter text.](#)

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

### **Worksheet Summary**

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

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

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

Requirements of 24 CFR Part 51 Subpart D prohibit incompatible land uses on property within runway protection zones, clear zones, and accident potential zones. Projects require additional review if they are within 2,500 feet of a civil airport or 15,000 feet of a military airport.

The project would not involve incompatible uses, such as construction of new homes, substantial rehabilitation of existing homes, acquisition of undeveloped land, activities that significantly prolong the physical or economic life of existing incompatible facilities or change uses of the facilities to incompatible uses, activities that significantly increase density or number of people at the site, or activities that introduce explosive, flammable, or toxic materials to the area.

The civil airport nearest to the project area (Eugenio María de Hostos in Mayagüez) is approximately 98,680 feet away, and the nearest military (and civil) airfield (Luis Muñoz Marín International Airport located in San Juan) is approximately 376,941 feet away.

Therefore, this topic complies with the regulation.

See the attached Appendix B, Figure , Airports Map.



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## Coastal Barrier Resources (CEST and EA) – PARTNER

[https://www.hudexchange.info/environmental\\_review/coastal\\_barrier\\_resources](https://www.hudexchange.info/environmental_review/coastal_barrier_resources)

Projects located in the following states must complete this form.

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

### 1. Is the project located in a CBRS Unit?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.*

☐ Yes → *Continue to 2.*

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

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

☐ Consultation with the FWS

☐ Cancel the project

### Worksheet Summary

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

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

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

According to the US Fish and Wildlife Service Coastal Barrier Resources mapping, the project is not located in any coastal barrier zone of Puerto Rico. The nearest unit is Ensenada las Pargas (Unit PR 61), approximately 9.6 miles south of the project.

The Coastal Barriers Resources System contains two types of mapped units: System Units and Otherwise Protected Areas (OPAs). The nearest OPA is Cayo don Luis (PR 63P), approximately 7.6 miles south of the



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project. Most new federal expenditures and financial assistance, including federal flood insurance, are prohibited within System Units, while the only federal spending prohibitions within OPAs is on federal flood insurance. Since this project is not in an OPA or CBRS zone, it has no restrictions in this regard.

Therefore, this topic complies with the regulation.

See Appendix B, Figure 3, Coastal Barrier Resources Map.





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## Flood Insurance (CEST and EA) – PARTNER

[https://www.hudexchange.info/environmental\\_review/flood\\_insurance](https://www.hudexchange.info/environmental_review/flood_insurance)

**1. Does this project involve mortgage insurance, refinance, acquisition, repairs, rehabilitation, or construction of a structure, mobile home, or insurable personal property?**

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

→ *Continue to the Worksheet Summary.*

☒ Yes → *Continue to Question 2.*

**2. Provide a FEMA/FIRM map showing the site.**

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).

**Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?**

☒ No → *Continue to the Worksheet Summary.*

☐ Yes → *Continue to Question 3.*

**3. Is the community participating in the National Flood Insurance Program or has less than one year passed since FEMA notification of Special Flood Hazards?**

☐ Yes, the community is participating in the National Flood Insurance Program.  
Flood insurance is required. Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.

→ *Continue to the Worksheet Summary.*

☐ Yes, less than one year has passed since FEMA notification of Special Flood Hazards.  
If less than one year has passed since notification of Special Flood Hazards, no flood Insurance is required.

→ *Continue to the Worksheet Summary.*

☐ No. The community is not participating, or its participation has been suspended.  
Federal assistance may not be used at this location. Cancel the project at this location.

### **Worksheet Summary**

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

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

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

A portion of the project area is in the 100 year Special Flood Hazard Area (SFHA), as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel Number 72000C1580J, revised on November 18, 2009. Approximately 0.5 acre of the project area is within the 1 percent chance of annual flood (the 100 year floodplain), and approximately 1.9 acres are in the area with 0.2 percent chance of annual flood (the 500 year floodplain).

All areas within the Commonwealth of Puerto Rico are eligible for NFIP policies. Flood Insurance is required when a project involves repairs, rehabilitation, or construction of an insurable structure. The Municipality of Sabana Grande would obtain flood insurance for the new Municipal Coliseum and would maintain this insurance for the life of the facility. The Municipal Coliseum structure is not within the 100 year floodplain and would not require flood insurance. No other insurable structures would be constructed in the project area.

The project is in compliance with flood insurance requirements.

See the attached Community Status Book Report, Communities Participating in the National Flood Program and Appendix B, Figure 4, National Flood Hazard Layer FIRMETTE Map.



# Community Status Book Report

## Communities Participating in the National Flood Program



PUERTO RICO

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal	CRS Entry Date	Curr Eff Date	Curr Class	% Disc SFHA	% Disc Non SFHA
720034#	AUTONOMOUS MUNICIPALITY OF GUAYNABO	GUAYNABO MUNICIPIO		11/18/09	11/18/09	02/01/13	No					
720100#	BAYAMON, MUNICIPALITY OF	BAYAMO'N MUNICIPIO		08/01/78	11/18/09	08/01/78	No					
	USE THE COMMONWEALTH OF PUERTO RICO [720000] FIRM											
720102J	CAROLINA, MUNICIPALITY OF	CAROLINA MUNICIPIO		11/18/09	11/18/09	05/22/15	No					
720101#	PONCE, MUNICIPALITY OF	PONCE MUNICIPIO		08/01/78	11/18/09	09/24/99	No	10/01/09	10/01/09	9	05%	05%
	USE PUERTO RICO FIRM (720000) DATED 6-2-99, PANELS 160, 217, 218, 219, 221, 222,223,224,276,277,281,282, and 284.											
720000#	PUERTO RICO, COMMONWEALTH OF	ADJUNTAS MUNICIPIO		08/01/78	11/18/09	08/01/78	No					
	All areas within the Commonwealth of Puerto Rico are eligible for NFIP policies. If the property is not located in one of the 4 jurisdictions listed above use this CID.											

Summary:

Total In Flood Program	5
Total In Emergency Program	0
Total In the Regular Program	5
Total In Regular Program with No Special Flood Hazard	0
Total In Regular Program But Minimally Flood Prone	0

Legend:

- (E) Indicates Entry In Emergency Program
- NSFHA No Special Flood Hazard Area - All Zone C
- (>) Date of Current Effective Map is after the Date of This Report
- N/A Not Applicable At This Time
- (S) Suspended Community
- (W) Withdrawn Community
- (M) No Elevation Determined - All Zone A, C and X
- (L) Original FIRM by Letter - All Zone A, C and X



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## Air Quality (CEST and EA) – PARTNER

[https://www.hudexchange.info/environmental\\_review/air\\_quality](https://www.hudexchange.info/environmental_review/air_quality)

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

☐ Yes → Continue to Question 2.

☒ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide any documents used to make your determination.

2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?

Follow the link below to determine compliance status of project county or air quality management district:

<http://www.epa.gov/oaqps001/greenbk/>

☐ No, project's county or air quality management district is in attainment status for all criteria pollutants

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

☐ Yes, project's management district or county is in non attainment or maintenance status for one or more criteria pollutants. → Continue to Question 3.

3. Determine the estimated emissions levels of your project for each of those criteria pollutants that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis* or *threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?

☐ No, the project will not exceed *de minimis* or threshold emissions levels or screening levels

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Explain how you determined that the project would not exceed *de minimis* or threshold emissions.

☐ Yes, the project exceeds *de minimis* emissions levels or screening levels.

→ Continue to Question 4. Explain how you determined that the project would not exceed *de minimis* or threshold emissions in the Worksheet Summary.

4. **For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

[Click here to enter text.](#)

#### **Worksheet Summary**

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

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

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

The project does not include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities or five or more dwelling units. The project would continue to be used as a public coliseum. According to the EPA's Green Book (Current Nonattainment Counties for All Criteria Pollutants), the project site is not located in a non attainment area.

Therefore, this topic complies with the regulation.

See the attached Criteria Pollutant Nonattainment Summary Report.



You are here: [EPA Home](#) > [Green Book](#) > >[National Area and County-Level Multi-Pollutant Information](#) >[Criteria Pollutant Nonattainment Summary Report](#)

## Criteria Pollutant Nonattainment Summary Report

Data is current as of September 30, 2023

The NO<sub>2</sub> nonattainment area became a maintenance area on September 22, 1998. 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. All Carbon Monoxide areas were redesignated to maintenance areas as of September 27, 2010.

Mouse over the underlined number of counties to see the area name; click to see the associated counties.

[View Report Footnotes](#)

[Download National Dataset: dbf](#) | [xls](#) | [Data dictionary \(PDF\)](#)

State(s)	General Area Name	8-Hour Ozone (2015)			8-Hour Ozone (2008)			PM-2.5 (2012)			PM-2.5 (2006)			PM-2.5 (1997)			PM-10 (1987)			SO2 (2010)			SO2 (1971)			LEAD (2008)		
		2010 Pop.	No. Ctys	Cat./Class	2010 Pop.	No. Ctys	Cat./Class	2010 Pop.	No. Ctys	Cat./Class	2010 Pop.	No. Ctys	Cat./Class	2010 Pop.	No. Ctys	Cat./Class	2010 Pop.	No. Ctys	Cat./Class	2010 Pop.	No. Ctys	Cat./Class	2010 Pop.	No. Ctys	Cat./Class	2010 Pop.	No. Ctys	Cat./Class
AK	Fairbanks										87	1	Ser															
AZ	Douglas/Paul Spur (Cochise County)																17	1	Mod									
AZ	Hayden/Miami																11	2	Mod	5	2	NonAtt	5	1	NonAtt	5	2	NonAtt
AZ	Nogales																15	2	Mod	15	1	NonAtt						
AZ	Phoenix-Mesa	3,945	3	Mod	3,850	2	Mod										3,853	2	Ser									
AZ	Rillito (Pima County)																1	1	Mod									
AZ	West Pinal										52	1	Mod				283	1	Ser									
AZ	Yuma	87	1	Mar													101	1	Mod									
CA	Amador and Calaveras Cos (Central Mountain Cos)	46	1	Mar																								
CA	Chico	38	1	Mar	46	1	Mar																					
CA	Imperial County	220	1	Mar	220	1	Mar																					
CA	Los Angeles-South Coast Air Basin	175	1	Mar	175	1	Mod	154	1	Mod	154	1	Mod															
CA		15,703	4	Ext	15,719	4	Ext	15,716	4	Ser	15,716	4	Ser	15,716	4	Mod										9,437	1	NonAtt
		1	1	Ser	1	1	Sev5																					
		1	2	Mod	3	2	Mod																					
CA	Mariposa and Tuolumne Cos (Southern Mountain Cos)	55	1	Mar																								
		18	1	Mod	18	1	Mod																					
CA	Mono County																0	1	Mod									
CA	Nevada County (Western Part)	82	1	Ser	82	1	Ser																					
CA	Owens Valley																7	1	Ser									

		8-Hour Ozone (2015)			8-Hour Ozone (2008)			PM-2.5 (2012)			PM-2.5 (2006)			PM-2.5 (1997)			PM-10 (1987)			SO2 (2010)			SO2 (1971)			LEAD (2008)		
CA	Plumas County							6	1	Ser																		
CA	Sacramento Metro	2,240	6	Ser	2,241	6	Sev5				2,206	5	Mod															
CA	San Diego	3,077	1	Sev5	3,095	1	Sev5																					
CA	San Francisco-Bay Area	6,969	9	Mar	6,973	9	Mar				6,971	9	Mod															
CA	San Joaquin Valley	95	1	Ser	95	1	Sev5																					
		3,842	8	Ext	3,842	8	Ext	3,842	8	Ser	3,842	8	Ser	3,842	8	Ser	126	1	Ser									
CA	San Luis Obispo	1	1	Mar	2	1	Mar																					
CA	Searles Valley																4	1	Mod									
CA	Southeast Desert Modified AQMA																258	1	Ser									
		425	1	Sev5	426	1	Ext										237	1	Mod									
		867	2	Sev5	868	2	Sev5																					
CA	Tuscan Buttes	0	1	Mar	0	1	Mar																					
CA	Ventura County	821	1	Ser	823	1	Ser																					
CA	Yuba City	0	1	Mar																								
CO	Denver-Boulder-Greeley-Ft. Collins-Loveland	3,331	9	Mod	3,330	9	Sev5																					
CT	Greater Connecticut	1,629	5	Mod	1,629	5	Ser																					
DC-MD-VA	Washington	5,136	15	Mod																								
GU	Piti-Cabras																6	1	NonAtt		1	1	NonAtt					
GU	Tanguisson Power Plant																				1	1	NonAtt					
IA	Muscatine County																30	1	NonAtt									
ID	Pocatello																1	2	Mod									
IL-IN-WI	Chicago-Joliet-Napier	9,075	11	Mod																								
IN	Fort Wayne-Huntington-Auburn																21	1	NonAtt									
KS	Salina																							0	1	NonAtt		
KY	Henderson-Webster Counties																7	2	NonAtt									
KY-IN	Louisville	1,061	<sup>5</sup> [Split]	Mod																								
LA	Evangeline Parish																0	1	NonAtt									
LA	New Orleans																36	1	NonAtt									

		8-Hour Ozone (2015)			8-Hour Ozone (2008)			PM-2.5 (2012)			PM-2.5 (2006)			PM-2.5 (1997)			PM-10 (1987)			SO2 (2010)			SO2 (1971)			LEAD (2008)		
MA-NH	Boston-Worcester-Manchester				17	1	Mar																					
MD	Baltimore	2,663	6	Mod	2,663	6	Mod												990	2	NonAtt							
MI	Allegan County	47	1	Mod																								
MI	Benton Harbor	157	1	Mod																								
MI	Detroit-Ann Arbor																		254	1	NonAtt							
																			52	1	NonAtt							
MI	Muskegon	147	1	Mod																								
MN	Minneapolis-St. Paul																								9	1	NonAtt	
MO	Iron, Dent, and Reynolds Counties																								0	3	NonAtt	
MO	New Madrid County																		0	1	NonAtt							
MO-IL	St. Louis																		0	1	NonAtt							
		2,488	8	Mod																					5	1	NonAtt	
MT	Billings/Laurel																					7	1	NonAtt				
MT	Lame Deer																1	1	Mod									
MT	Polson (Lake County)																4	1	Mod									
MT	Ronan (Lake County)																3	1	Mod									
NV	Las Vegas	1,892	1	Mod																								
NY	Jamestown				135	1	Mar																					
NY	St. Lawrence County																		12	1	NonAtt							
NY-NJ-CT	New York-N. New Jersey-Long Island	20,217	24	Mod	20,217	24	Sev5									1,586	1	Mod										
OH	Canton-Massillon																								6	1	NonAtt	
OH	Cleveland-Akron-Elyria	2,780	7	Mod																								
OH-KY-IN	Cincinnati-Middletown-Wilmington	1,929	7 [Split]	Mod																								
OR	Klamath Falls										47	1	Mod															
PA	Clearfield and Indiana Counties																		93	2	NonAtt							
PA	Lancaster				519	1	Mar																					
PA	Pittsburgh-New Castle				2,356	7	Mar	1,223	1	Mod	21	1	Mod	21	1	Mod			15	1	NonAtt				18	1	NonAtt	
																			127	1	NonAtt	5	1	NonAtt		29	1	NonAtt
PA	Reading																								19	1	NonAtt	
					411	1	Mar																					
PA	Warren County																		18	1	NonAtt							



		8-Hour Ozone (2015)			8-Hour Ozone (2008)			PM-2.5 (2012)			PM-2.5 (2006)			PM-2.5 (1997)			PM-10 (1987)			SO2 (2010)			SO2 (1971)			LEAD (2008)		
PA-NJ	Allentown-Bethlehem-Easton				712	3	Mar														109	1	NonAtt					
PA-NJ-DE-MD	Philadelphia-Wilmington-Atlantic City				197	1	Mar																					
		7,437	16	Mod	7,437	16	Mar																					
PR	Arecibo																							32	1	NonAtt		
PR	Guayama-Salinas																	23	1	NonAtt								
PR	San Juan																	275	5	NonAtt								
TN	Johnson City-Kingsport-Bristol																	15	1	NonAtt								
TX	Dallas-Fort Worth	6,202	9	Mod	6,280	10	Sev5																					
TX	Fairfield																	4	2	NonAtt								
TX	Houston-Sugar Land-Baytown	5,773	6	Mod	5,892	8	Sev5																					
TX	Howard County																	0	1	NonAtt								
TX	Hutchinson County																	15	1	NonAtt								
TX	Mount Pleasant																	0	1	NonAtt								
TX	Navarro County																	2	1	NonAtt								
TX	San Antonio	1,715	1	Mod																								
TX	Tatum																	2	2	NonAtt								
TX-NM	El Paso-Las Cruces															3	1	Mod										
		813	2	Mar												649	1	Mod										
UT	Provo	516	1	Mar						518	1	Ser																
UT	Salt Lake City	1,616	4	Mod						1,665	5	Ser									1,030	1	NonAtt					
UT	Tooele County																				58	1	NonAtt					
UT	Uinta Basin	47	2	Mar																								
VA	Giles County																	0	1	NonAtt								
WA	Whatcom County																	0	1	NonAtt								
WI	Milwaukee-Racine	1,648	5	Mod																								
WI	Sheboygan	68	1	Mod																								
WV-OH	Parkersburg-Marietta																	4	2	NonAtt								
WY	Upper Green River Basin				11	3	Mar																					

The area population is displayed in 1000's. 'Cat.' is Category.

**Area Name:**

The "State(s) Area Name" column contains a common or general name for the nonattainment areas on the row, but may not reflect the exact name of any area on the row. This column cannot be exact since the nonattainment area for one pollutant may not contain the same counties, cities, or states as the nonattainment area for another pollutant on the same row. to see the area name or click on them to see the associated counties. The abbreviations listed in the "State(s)" column reflect all states identified in row. However, some states on a row may be nonattainment for some pollutants and not for others in the general area.

**Split Area:**

'Split' in the No. Ctys column indicates that the multi-state area has states that have been redesignated but the area does not become a maintenance area until all states in the area are redesignated. The whole area population is displayed in this report. Clicking on a "Split" No. Ctys will display information for the state(s) that have not been redesignated.

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

## Coastal Zone Management Act (CEST and EA) – PARTNER

[https://www.onecpd.info/environmental\\_review/coastal\\_zone\\_management](https://www.onecpd.info/environmental_review/coastal_zone_management)

Projects located in the following states must complete this form.

Alabama	Florida	Louisiana	Mississippi	Ohio	Texas
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands
American Samoa	Guam	Maryland	New Jersey	Pennsylvania	Virginia
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin
Delaware	Indiana	Minnesota	Northern Mariana Islands	South Carolina	

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

☐ Yes → Continue to Question 2.

☒ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.

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

☐ Yes → Continue to Question 3.

☐ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

**3. Has this project been determined to be consistent with the State Coastal Management Program?**

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

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

☐ No → Project cannot proceed at this location.

### **Worksheet Summary**

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

- Map panel numbers and dates

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

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

The Project site is not located in a Coastal Zone; it is approximately 6.2 miles north of the coastal zone.

Therefore, this topic complies with the regulation.

See Appendix B, Figure 5, Coastal Zone Map



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

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

[https://www.hudexchange.info/programs/environmental\\_review/site\\_contamination](https://www.hudexchange.info/programs/environmental_review/site_contamination)

**1. How was site contamination evaluated? <sup>1</sup> Select all that apply.**

- ☐ ASTM Phase I ESA
- ☐ ASTM Phase II ESA
- ☐ Remediation or clean up plan
- ☐ ASTM Vapor Encroachment Screening
- ☒ None of the above

→ Provide documentation and reports and include an explanation of how site contamination was evaluated in the Worksheet Summary.  
Continue to Question 2.

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

- ☒ No → Explain below.

The USEPA's Facility Registry Service (FRS) geospatial database of facilities or locations subject to environmental regulation or of environmental interest was reviewed within the applicable search distances to identify sites that could affect the project site. This review showed there no records of releases reported or any EPA formal or informal action reported for the last five years for any sites listed within 3,000 feet of the project site. None of the listed sites would generate toxic, hazardous, or radioactive substances that could affect the health and safety of project occupants or conflict with the intended use of the project site.

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

- ☒ Yes → Describe the findings, including any recognized environmental conditions (RECs), in Worksheet Summary below. Continue to Question 3.

---

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

**3. Can adverse environmental impacts be mitigated?**

☐ Adverse environmental impacts cannot feasibly be mitigated → HUD assistance may not be used for the project at this site. Project cannot proceed at this location.

☐ Yes, adverse environmental impacts can be eliminated through mitigation.  
→ *Provide all mitigation requirements<sup>2</sup> and documents. Continue to Question 4.*

**4. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls<sup>3</sup>, or use of institutional controls<sup>4</sup>.**

[Click here to enter text.](#)

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

- ☐ Complete removal  
☐ Risk based corrective action (RBCA)

→ *Continue to the Worksheet Summary.*

**Worksheet Summary**

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

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

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

HUD policy requires the project site and adjacent areas to be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances where a hazard could affect health and safety of occupants of the property or conflict with intended use of the property. The USEPA's Facility Registry Service (FRS) geospatial database of facilities or locations subject to environmental regulation or of environmental interest was reviewed within the applicable search distances to identify sites that could affect the project site. No Brownfields (ACRES), Superfund (NPL), or Superfund Enterprise Management System (SEMS) listings were within 1 mile of the project site. The project site is within 3,000 feet of seven Resource Conservation and Recovery Act (RCRA) Hazardous

---

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

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

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

Waste listings and one Toxics Release Inventory (TRI) listing, and one Toxic Substances Control Act (TSCA) listing. USEPA's Superfund, Envirofacts, and Enforcement and Compliance History Online (ECHO) reports were reviewed for more detailed information on statuses of these facilities.

The seven RCRA sites are: Henkel Puerto Rico Inc. at 9 V Quilinchini Avenue, Sabana Grande Wastewater Treatment Plant at PR 2 KM 182.6 INT, Shell Service Station 1740 Sabana Grande at G Martinez 2, Esso Standard Oil Co. P.R. CO 370 at PR 121 65TH Infanteria 7, Prasa – Sabana Grande Filter Plant at PR 364 KM 0.6 INT, Total Petroleum Puerto Rico Corp. Service Station 104302 at V Quilinchini Avenue #26, and Total Petroleum Puerto Rico Corp. Service Station 310290 at Avenue Francisco Quinones #32. The one TRI listing and one TSCA listing are both for Henkel Puerto Rico Inc. at 9 V Quilinchini Avenue. These sites do not have any releases reported or any EPA formal or informal action reported for the last five years in EPA's Enforcement and Compliance History Online (ECHO) Detailed Facility Reports and would not generate toxic, hazardous, or radioactive substances that could affect the health and safety of project occupants or conflict with the intended use of the project site.

It is estimated that the existing coliseum was constructed in approximately 1985 when the use of lead based paint and asbestos in construction materials was no longer standard. By 1985, use of these materials were restricted. However, asbestos and lead studies will be conducted prior to demolition in accordance with state regulations. If these materials are identified at levels at or above EPA and Puerto Rico regulatory levels, the contaminated surfaces or substrates would be abated or removed. The firm providing the abatement services would be certified as an abatement firm by the Puerto Rico Department of Natural and Environmental Resources (DRNA).

This project complies with the regulation. See Appendix B, Figure 6, Contamination and Toxic Substances Map, and Appendix C, Contamination and Toxic Substances



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

## Endangered Species Act (CEST and EA) – PARTNER

[https://www.hudexchange.info/environmental\\_review/endangered\\_species](https://www.hudexchange.info/environmental_review/endangered_species)

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

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

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

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

**Explain your determination:**

The proposed activities are covered by the USFWS Blanket Clearance Letter for Federally sponsored projects, Housing and Urban Development of January 14 of 2013, Items 5 and 6.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☐ Yes, the activities involved in the project have the potential to affect species and/or habitats. →  
*Continue to Question 2.*

### 2. Are federally listed species or designated critical habitats present in the action area?

Obtain a list of protected species from the Services. This information is available on the [FWS Website](#).

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

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.*

☐ Yes, there are federally listed species or designated critical habitats present in the action area. →  
*Continue to Question 3.*

### 3. Recommend one of the following effects that the project will have on federally listed species or designated critical habitat:



☐ No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

☐ May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ Partner entities should not contact the Services directly. *If the RE/HUD agrees with this recommendation, they will have to complete Informal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

☐ Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ Partner entities should not contact the Services directly. *If the RE/HUD agrees with this recommendation, they will have to complete Formal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

### **Worksheet Summary**

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

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

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

Per the Official Species List from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website, the Rican Boa can be found in the area but there are no critical habitats at this location. The Project will have no potential to affect species or habitats due to the nature of the activities involved in the project. Based on the nature of the project, scope of work, information available, and a careful analysis of the Project Site, and IPaC species list, it was determined that there would be No Effect for any of the listed species.

The proposed activities are covered by the USFWS Blanket Clearance Letter for Federally sponsored projects, Housing and Urban Development of January 14 of 2013, Items 5 and 6. If a Puerto Rican Boa is encountered, work will cease until it moves off the site or, failing that, the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers will be notified for safe capture and relocation of the animal, in accordance with the USFWS Puerto Rican Boa Conservation Measures guidelines and the July 27, 2023 Amended Programmatic Biological Opinion.

he project complies with the Endangered Species Act

See Appendix B, Figure 7, Critical Habitat Map, and Appendix D, Endangered Species (including the IPaC report).



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

**Explosive and Flammable Hazards (CEST and EA) – PARTNER**

[https://www.hudexchange.info/environmental\\_review/explosive\\_and\\_flammable\\_facilities](https://www.hudexchange.info/environmental_review/explosive_and_flammable_facilities)

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

☒ No

→ Continue to Question 2.

☐ Yes

**Explain:**

[Click here to enter text.](#)

→ Continue to Question 5.

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

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

☐ Yes → Continue to Question 3.

- 3. Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers:**

- Of more than 100 gallon capacity, containing common liquid industrial fuels OR
- Of any capacity, containing hazardous liquids or gases that are not common liquid industrial fuels?

☐ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.

☐ Yes → Continue to Question 4.

- 4. Is the Separation Distance from the project acceptable based on standards in the Regulation?**

Please visit HUD's website for information on calculating Acceptable Separation Distance.

☐ Yes

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

Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the "assessed tank."

☐ No

→ Continue to Question 6.

*Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the “assessed tank.”*

**5. Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?**

Please visit HUD’s website for information on calculating Acceptable Separation Distance.

☐ Yes

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

*Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.*

☐ No

→ Continue to Question 6.

*Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.*

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

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

[Click here to enter text.](#)

**Worksheet Summary**

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

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

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

The proposed Project does not include a hazardous facility that mainly stores, handles, or processes flammable or combustible chemicals such as bulk fuel storage. Planned activities at the project area do not include installation of storage tanks.

The scope of the proposed project does not include development, construction, conversion, or rehabilitation activities that would increase residential densities. The project would not introduce new

housing. The increased use of the site could introduce sensitive public uses that could be exposed to explosive or flammable hazards.

A desktop aerial photograph review revealed several apparent aboveground storage tanks (AST) within 1 mile of the project site. The municipality investigated the tanks near the project's location. One tank is located at the site of Henkel PR, and it is a 400,000 gallon water tank used for firefighting, with well water. Three tanks in the quadrant of CCL de Puerto Rico's contain water, with capacities of 200,000 gallons, 200,000 gallons, and 50,000 gallons, respectively. An AST located at Pepsi's Distribution Center, is a water tank currently out of use. Because all of these tanks contain water, calculation of an acceptable separation distance (ASD) for these ASTs was not required.

This project complies with the Explosive and Flammable Hazards requirements.

See Appendix B, Figure 8, Explosive and Flammable Hazards Map.

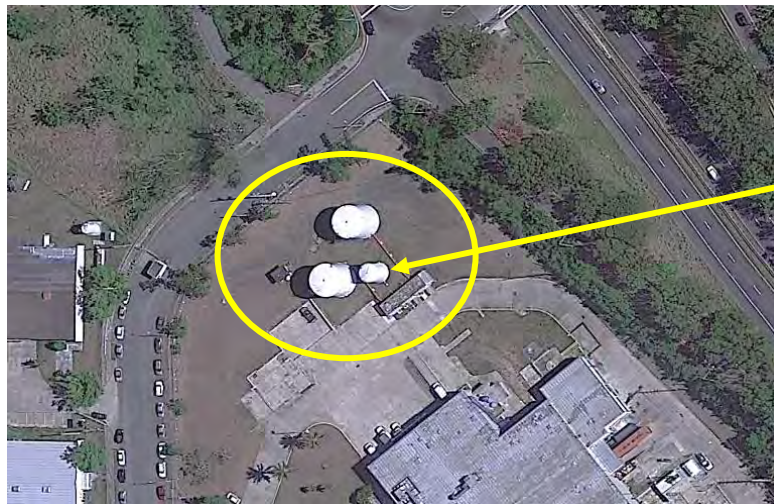
8 de noviembre de 2023

Sr. José A. Cuevas García  
Vicealcalde  
Municipio de Sabana Grande

Estimado señor Cuevas:

Sirva esta misiva para facilitar la información solicitada de los tres (3) tanques propiedad de CCL Puerto Rico, Inc. ubicados en nuestros predios. A continuación, la información relacionada:

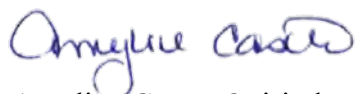
Tanques de Almacenamiento de Agua					
Contenido	Capacidad (gls.)	Diámetro (pies)	Altura (pies)	Año de fabricación	Manufacturero
Agua del Sistema de Incendio	200,000	33	32	1980	Alonso y Carus
Agua del Sistema de Incendio	200,000	33	32	1980	Alonso y Carus
Agua (Fuera de Servicio)	50,000	19	24	1980	Alonso y Carus



Fuera de servicio

Estamos a su disposición para clarificar cualquier duda con lo anterior.

Cordialmente,



Amyline Castro Quirindongo  
Oficial de Salud y Seguridad  
CCL Puerto Rico, Inc.

RE: [EXT] CARTA DEL SR. JOS[E A. CUEVAS GARC[IA, VICEALCALDE, MUNICIPIO DE SABANA GRANDE

Carlos Rodriguez <carlos.rodriguez@henkel.com>

Wed 11/08/2023 3:18 PM

To: Maritza Vazquez Delgado <mvazquez@munsabgde.com>

Cc: Jorge Rivera <jorge.rivera@henkel.com>; Hector Ramos <hector.ramos@henkel.com>

 1 attachments (1,006 K8)

Respuesta de Henkel CARTA A ING. CARLOS RODRÍGUEZ HENKEL P.R. SOLICITANDO INFORM.pdf;

Saludos Sr. Cuebas;

El tanque marcado en el recuadro de Henkel es de agua para uso en caso de incendio, el tanque es de 400,000 gal y es de agua de pozo.

Dudas me deja saber, adjunto documento original con información adjunta.

Carlos Rodríguez

Manufacturing Manager

**Henkel Puerto Rico, Inc. | Quilinchini Avenue #9, Sabana Grande, PR 00637**

Office: +1 787-264-7509/ Mobile: 939-292-3148

[carlos.rodriguez@henkel.com](mailto:carlos.rodriguez@henkel.com)

[www.henkel-northamerica.com](http://www.henkel-northamerica.com)

**From:** Maritza Vazquez Delgado <mvazquez@munsabgde.com>

**Sent:** Wednesday, November 8, 2023 2:53 PM

**To:** Carlos Rodriguez <carlos.rodriguez@henkel.com>

**Subject:** [EXT] CARTA DEL SR. JOS[E A. CUEVAS GARC[IA, VICEALCALDE, MUNICIPIO DE SABANA GRANDE

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This message is from an EXTERNAL SENDER – be CAUTIOUS, particularly with links and attachments

Saludos.

Adjunto carta del Sr. José A. Cuevas García, Vicealcalde del Municipio de Sabana Grande, solicitando información.

Gracias por su colaboración.

*Maritza I. Vázquez Delgado*

*Secretaria*

*Oficina del Vicealcalde*

*Municipio de Sabana Grande*

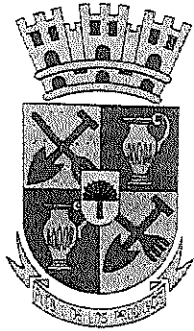
*Apartado 356*

*Sabana Grande, Puerto Rico*

*Tel. 787-873-2060, Ext. 2088*

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*Estado Libre Asociado de Puerto Rico*  
*Gobierno Municipal de Sabana Grande*

PO Box 356, Sabana Grande, PR 00637  
Tel. 787.873.2060

8 de noviembre de 2023

Ing. Carlos Rodríguez  
Henkel P.R.  
Sabana Grande, Puerto Rico

Estimado Ingeniero Rodríguez:

Reciba un saludo cordial de parte de este servidor.

En primera instancia quiero agradecer su disponibilidad y cordialidad en la llamada que tuvimos durante la tarde de hoy. Tal y como lo ha petitionado, someto vía e-mail la información que requieren las agencias ambientales para el proceso de permisología de lo que sería nuestro nuevo coliseo, el cual ubica en la entrada del pueblo.

Someto el mapa con el cuadrante correspondiente a la Henkel y el e-mail mediante el cual nos han solicitado la información indicada y marcada en un cuadrante. Específicamente nos solicitan el volumen de dicho tanque o tanques, qué contiene(n) el(los) mismos y si dicho componente es un material inflamable, explosivo o algún combustible.

Agradecería puedan proveer dicha información a la mayor brevedad posible, ya que la misma es indispensable para la obtención de permisos.

Recalcamos siempre nuestra disposición y agradecimiento para con tan importante empresa.

Cordialmente,

  
José A. Cuevas García  
Vicealcalde

Fwd: Sabana Grande | PR-CRP-000745 | ERR-Technical Assistance

Griselle Nazario <gnazario@munsabgde.com>

Tue 11/7/2023 5:12 AM

To: Jose Cuevas <jacuevas@munsabgde.com>

Obtener Outlook para Android

---

**From:** MonroigRamos, Gilberto <G.MONROIGRAMOS@tetrattech.com>

**Sent:** Tuesday, November 7, 2023 9:09:35 AM

**To:** Griselle Nazario <gnazario@munsabgde.com>

**Cc:** ConnorCerezo, Christina <Christina.ConnorCerezo@tetrattech.com>; Espada, Deborah <Deborah.Espada@tetrattech.com>; Torres, Leira <LEIRA.TORRES@tetrattech.com>

**Subject:** Sabana Grande | PR-CRP-000745 | ERR-Technical Assistance

Saludos Griselle,

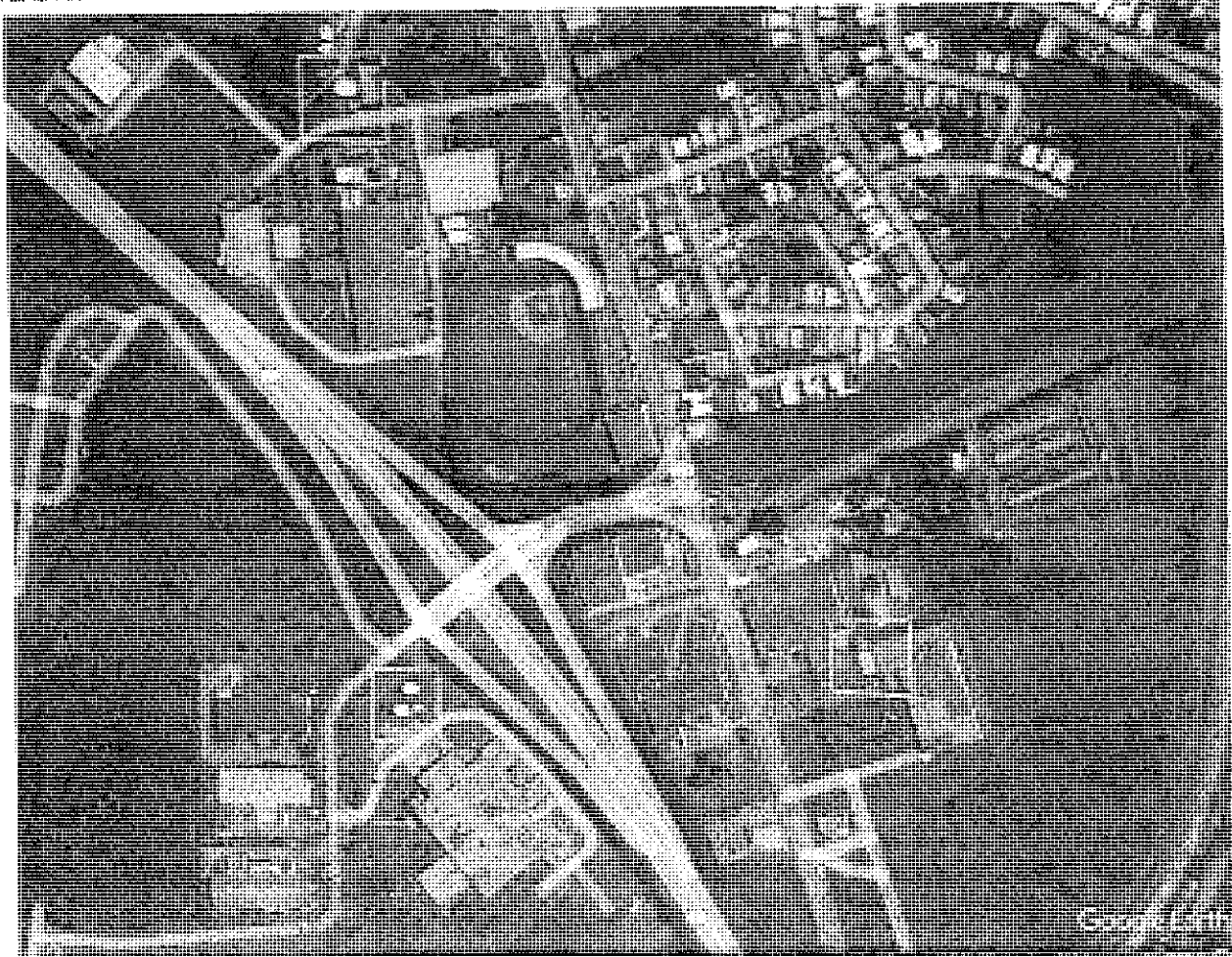
Como parte de la asistencia técnica para la preparación de los documentos del ERR del proyecto 745 el equipo ambiental de Tetra Tech solicita la siguiente información.

- ¿Que sucedería si el proyecto no se ejecuta?
- ¿El proyecto se encuentra actualmente en uso? ¿Que tipo de uso?
- ¿Se consideraron algunas alternativas al proyecto?
- ¿Hay otro proyecto cercano que al combinarse con el proyecto propuesto pueda tener un efecto acumulativo en algún recurso?
- Hay varios tanques sobre la superficie cercanos a la localización del proyecto. (ver el mapa a continuación) lo marcado en rojo es el sitio del proyecto, el verde marca la localización de los tanques. Cual es el volumen de estos tanques? Al parecer parecieran tanques como de 10,000 a 20,000 galones. ¿Que contienen estos tanques? Materiales inflamables, explosivos o algún combustible?

11/8/23, 2:46 PM

Tanque de agua de incendio 400,000 gals

Mat - Jose Cuevas - Outlook



Gilberto J. Monroig Ramos, BSCE | Project Assistant  
Mobile (787) 595-2319 | [g.monroigramos@tetrattech.com](mailto:g.monroigramos@tetrattech.com)

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**TETRA TECH**







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

## Farmlands Protection (CEST and EA) - PARTNER

[https://www.hudexchange.info/environmental\\_review/farmlands\\_protection](https://www.hudexchange.info/environmental_review/farmlands_protection)

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

☐ Yes → *Continue to Question 2.*

☒ No

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

**2. Does “important farmland,” including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?**

You may use the links below to determine important farmland occurs on the project site:

- Utilize USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- Check with your city or county’s planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center <http://offices.sc.egov.usda.gov/locator/app?agency=nrcs> or your NRCS state soil scientist [http://soils.usda.gov/contact/state\\_offices/](http://soils.usda.gov/contact/state_offices/) for assistance

☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☐ Yes → *Continue to Question 3.*

**3. Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.**

- Complete form [AD-1006, “Farmland Conversion Impact Rating”](#) and contact the state soil scientist before sending it to the local NRCS District Conservationist.
- Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD 1006 to the USDA NRCS State Soil Scientist or his/her designee informing them of your determination.

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

☐ Project will proceed with mitigation.

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

[Click here to enter text.](#)

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

☐ Project will proceed without mitigation.

**Explain why mitigation will not be made here:**

[Click here to enter text.](#)

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

### **Worksheet Summary**

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

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

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

The project does not include any activities that could convert agricultural land to non agricultural use. According to the U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, the project site is not situated on farmland soils and is not protected under the Farmland Protection Policy Act.

Therefore, this topic complies with the regulation.

See Appendix A, Figure 9, Farmland Protection Map



## Floodplain Management (CEST and EA) – PARTNER

[https://www.hudexchange.info/environmental\\_review/floodplain\\_management](https://www.hudexchange.info/environmental_review/floodplain_management)

1. Does [24 CFR 55.12\(c\)](#) exempt this project from compliance with HUD's floodplain management regulations in Part 55?

☐ Yes

Provide the applicable citation at 24 CFR 55.12(c) here. If project is exempt under 55.12(c)(6) or (8), provide supporting documentation.

[Click here to enter text.](#)

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

☒ No → Continue to Question 2.

2. Provide a FEMA/FIRM map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).

Does your project occur in a floodplain?

☐ No → Continue to the Worksheet Summary below.

☒ Yes

Select the applicable floodplain using the FEMA map or the best available information:

☐ Floodway → Continue to Question 3, Floodways

☐ Coastal High Hazard Area (V Zone) → Continue to Question 4, Coastal High Hazard Areas

☒ 500 year floodplain (B Zone or shaded X Zone) → Continue to Question 5, 500-year Floodplains

☒ 100 year floodplain (A Zone) → The 8-Step Process is required. Continue to Question 6, 8-Step Process

3. **Floodways**

Is this a functionally dependent use?

☐ Yes

The 8 Step Process is required. Work with HUD or the RE to assist with the 8 Step Process.

→ Continue to Worksheet Summary.

☐ No → *Federal assistance may not be used at this location unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

**4. Coastal High Hazard Area**

**Is this a critical action such as a hospital, nursing home, fire station, or police station?**

☐ Yes → *Critical actions are prohibited in coastal high hazard areas unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

☐ No

**Does this action include new construction that is not a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster?**

☐ Yes, there is new construction of something that is not a functionally dependent use.

New construction must be designed to FEMA standards for V Zones at 44 CFR 60.3(e) (24 CFR 55.1(c)(3)(i)).

→ *Continue to Question 6, 8-Step Process*

☐ No, this action concerns only existing construction.

Existing construction must have met FEMA elevation and construction standards for a coastal high hazard area or other standards applicable at the time of construction.

→ *Continue to Question 6, 8-Step Process*

**5. 500-year Floodplain**

**Is this a critical action?**

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

☐ Yes → *Continue to Question 6, 8-Step Process*

**6. 8-Step Process.**

**Is this 8-Step Process required? Select one of the following options:**

☒ 8 Step Process applies.

This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD's elevation requirements.

→ *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*

☐ 5 Step Process is applicable per 55.12(a)(1 4).

**Provide the applicable citation at 24 CFR 55.12(a) here.**

[Click here to enter text.](#)

→ *Work with the RE/HUD to assist with the 5-Step Process. Continue to Worksheet Summary.*

☐ 8 Step Process is inapplicable per 55.12(b)(1 5).

**Provide the applicable citation at 24 CFR 55.12(b) here.**

[Click here to enter text.](#)

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

**Worksheet Summary**



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

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

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

A portion of the project area is in the 100 year Special Flood Hazard Area (SFHA), as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel Number 72000C1580J, revised on November 18, 2009. Approximately 0.5 acre of the project area is within the 1 percent chance of annual flood (the 100 year floodplain), and approximately 1.9 acres are in the area with 0.2 percent chance of annual flood (the 500 year floodplain).

The project involves the demolition of the existing structure except the steel frame. The new Municipal Coliseum will be built in this structure, with parking and an outdoor open space. The project would not increase the impervious surface in the project area. This project is not considered a critical action under 24 CFR Part 55. In accordance with 24 CFR Part 55, an 8 step floodplain analysis identified no practicable alternatives to the proposed project. An early public notice was published on September 1, 2023. A final public notice was published on December 7, 2023.

The Project is in compliance with floodplain management requirements.

See Appendix A Figure 4, National Flood Hazard Layer FIRMETTE Map, and Figure 10, Advisory Base Flood Elevation (ABFE) Map, and Appendix E, Floodplain Management (including the 8 Step Analysis and Notices).



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

## Historic Preservation (CEST and EA) – PARTNER

[https://www.hudexchange.info/environmental\\_review/historic\\_preservation](https://www.hudexchange.info/environmental_review/historic_preservation)

### Threshold

#### Is Section 106 review required for your project?

- ☐ No, because a Programmatic Agreement states that all activities included in this project are exempt. (See the [PA Database](#) to find applicable PAs.)

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

[Click here to enter text.](#)

→ *Continue to the Worksheet Summary.*

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

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

[Click here to enter text.](#)

→ *Continue to the Worksheet Summary.*

- ☒ Yes, because the project includes activities with potential to cause effects (direct or indirect). → *Continue to Step 1.*

#### **The Section 106 Process**

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

Step 1: Initiate consultation

Step 2: Identify and evaluate historic properties

Step 3: Assess effects of the project on historic properties

Step 4: Resolve any adverse effects

**Only RE or HUD staff may initiate the Section 106 consultation process. Partner entities may gather information, including from SHPO records, identify and evaluate historic properties, and make initial assessments of effects of the project on properties listed in or eligible for the National Register of Historic Place. Partners should then provide their RE or HUD with all of their analysis and documentation so that they may initiate consultation.**

#### **Step 1 - Initiate Consultation**

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal

Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

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

**List all organizations and individuals that you believe may have an interest in the project here:**

Puerto Rico State Historic Preservation Officer

→ *Continue to Step 2.*

## **Step 2 - Identify and Evaluate Historic Properties**

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

Based on this definition and the nature and scope of the Undertaking, the Program has determined that the direct APE for this project is around coordinates 18.072633, 66.959490 and the visual APE is the viewshed of the proposed project. Several adjacent properties are part of the visual APE and a baseball field with a running track. See Appendix D for maps and documentation.

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

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

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

See Appendix D for the analysis of the historic properties potentially affected, along with all correspondence with the State Historic Preservation Officer (SHPO).

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the area of potential effect (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 has at least 10 previously recorded archaeological resources within an 0.5 mile radius of the APE. The review revealed that the project area is not within the boundaries of a National Register of Historic Places eligible or listed Traditional Urban Center or Historic District. One National Register listed property was identified within 0.5 mile. The review made the determination that no archaeological sites and/or NRHP listed/eligible historic properties would be affected within the direct or indirect APE.

Consultation with SHPO regarding the proposed Project and a determination that no historic properties would be affected was initiated with a letter to that office dated December 21, 2023. On January 3, 2024, SHPO concluded that its records support the finding of "no historic properties affected within the project's area of potential effects."

The Project is in compliance with the National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800.

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

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

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

☐ Yes → *Provide survey(s) and report(s) and continue to Step 3.*

Additional notes:

[Click here to enter text.](#)

☒ No → *Continue to Step 3.*

**Step 3 - Assess Effects of the Project on Historic Properties**

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

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

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

☒ No Historic Properties Affected

**Document reason for finding:**

☐ No historic properties present.

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

☐ No Adverse Effect

**Document reason for finding and provide any comments below.**

Comments may include recommendations for mitigation, monitoring, a plan for unanticipated discoveries, etc.

[Click here to enter text.](#)

☐ Adverse Effect

**Document reason for finding:**

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

Criteria of Adverse Effect: [36 CFR 800.5](#)]

[Click here to enter text.](#)

**Provide any comments below:**

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

[Click here to enter text.](#)

*Remember to provide all documentation that justifies your National Register Status determination and recommendations along with this worksheet.*



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

## Noise (EA Level Reviews) – PARTNER

[https://www.hudexchange.info/programs/environmental\\_review/noise\\_abatement\\_and\\_control](https://www.hudexchange.info/programs/environmental_review/noise_abatement_and_control)

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

- ☐ New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

→ Continue to Question 2.

- ☐ Rehabilitation of an existing residential property

NOTE: For major or substantial rehabilitation in Normally Unacceptable zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. For major rehabilitation in Unacceptable zones, HUD strongly encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.

→ Continue to Question 2.

- ☒ None of the above

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

**2. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).**

**Indicate the findings of the Preliminary Screening below:**

- ☐ There are no noise generators found within the threshold distances above.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing the location of the project relative to any noise generators.

- ☐ Noise generators were found within the threshold distances.

→ Continue to Question 3.

**3. Complete the Noise Assessment Guidelines to quantify the noise exposure. Indicate the findings of the Noise Assessment below:**

- ☐ Acceptable (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

**Indicate noise level here:** Click here to enter text.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide noise analysis, including noise level and data used to complete the analysis.

☐ Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in 24 CFR 51.105(a))

**Indicate noise level here:** [Click here to enter text.](#)

If project is rehabilitation:

→ Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.

If project is new construction:

**Is the project in a largely undeveloped area<sup>1</sup>?**

☐ No

☐ Yes → **The project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i).**

→ Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.

☐ Unacceptable: (Above 75 decibels)

**Indicate noise level here:** [Click here to enter text.](#)

If project is rehabilitation:

HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels. Consider converting this property to a non-residential use compatible with high noise levels.

→ Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.

If project is new construction:

**The project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). Work with HUD or the RE to either complete an EIS or obtain a waiver signed by the appropriate authority.**

→ Continue to Question 4.

**4. HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Work with the RE/HUD on the development of the mitigation measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

☐ Mitigation as follows will be implemented:

[Click here to enter text.](#)

→ Provide drawings, specifications, and other materials as needed to describe the project's noise mitigation measures.

Continue to the Worksheet Summary.

☐ No mitigation is necessary.

---

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

**Explain why mitigation will not be made here:**

[Click here to enter text.](#)

→ *Continue to the Worksheet Summary.*

**Worksheet Summary**

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

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

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

HUD guidance at 24 CFR Part 51 requires review of potential noise generators in the vicinity of a project site, including major roadways within 1,000 feet, railroads within 3,000 feet, and military or Federal Aviation Administration regulated airfields within 15 miles. According to the HUD Noise Guidebook, the acceptable day/night noise level (DNL) is 65 decibels (dB). The purpose of this review is to ascertain the impacts of existing noise sources in the area on new residents or other sensitive receptors.

The proposed project does not involve establishment of new residences, an increase in residents, or introduction of other noise sensitive uses. The project does not require further evaluation under HUD's noise regulation.

Therefore, the project complies with the regulation.





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

## Sole Source Aquifers (CEST and EA) - PARTNER

[https://www.hudexchange.info/environmental\\_review/sole\\_source\\_aquifers](https://www.hudexchange.info/environmental_review/sole_source_aquifers)

### 1. Is the project located on a sole source aquifer (SSA)<sup>1</sup>?

☒ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project or jurisdiction in relation to the nearest SSA.

☐ Yes → Continue to Question 2.

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

☐ Yes → The review is in compliance with this section. Continue to the Worksheet Summary below.

☐ No → Continue to Question 3.

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

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

☐ Yes → Continue to Question 4.

☐ No → Continue to Question 5.

### 4. Does your MOU or working agreement exclude your project from further review?

☐ Yes → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.

☐ No → Continue to Question 5.

### 5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?

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

---

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

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

### **Worksheet Summary**

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

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

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

There are no EPA sole source aquifers in Puerto Rico. The project is in compliance with Sole Source Aquifer requirements.



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

## Wetlands (CEST and EA) – Partner

[https://www.hudexchange.info/environmental\\_review/wetlands\\_protection](https://www.hudexchange.info/environmental_review/wetlands_protection)

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

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

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

☒ Yes → *Continue to Question 2.*

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

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*

☐ Yes → *Work with HUD or the RE to assist with the 8-Step Process.* *Continue to Question 3.*

**3. Does Section 55.12 state that the 8-Step Process is not required?**

☐ No, the 8 Step Process applies.

This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD's elevation requirements.

→ *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*

☐ 5 Step Process is applicable per 55.12(a).

**Provide the applicable citation at 24 CFR 55.12(a) here.**

[Click here to enter text.](#)

→ *Work with the RE/HUD to assist with the 5-Step Process. This project may require mitigation or alternations. Continue to Worksheet Summary.*

☐ 8 Step Process is inapplicable per 55.12(b).

**Provide the applicable citation at 24 CFR 55.12(b) here.**

[Click here to enter text.](#)

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

☐ 8 Step Process is inapplicable per 55.12(c).

**Provide the applicable citation at 24 CFR 55.12(c) here.**

Click here to enter text.

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

### **Worksheet Summary**

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

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

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

According to the National Wetlands Inventory (NWI) database, the project area is not within or adjacent to wetlands. The nearest wetland is a freshwater pond approximately 960 feet south of the project site. The project is in compliance with Wetlands Protection requirements. See Appendix B, Figure 11, Wetlands Map.



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WASHINGTON, DC 20410 1000

## Wild and Scenic Rivers (CEST and EA) – PARTNER

[https://www.hudexchange.info/environmental/review/wild\\_and\\_scenic\\_rivers](https://www.hudexchange.info/environmental/review/wild_and_scenic_rivers)

### 1. Is your project within proximity of a Wild and Scenic River, Study River, or Nationwide Rivers Inventory River?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation used to make your determination.*

☐ Yes → *Continue to Question 2.*

### 2. Could the project do *any* of the following?

- Have a direct and adverse effect within Wild and Scenic River Boundaries,
- Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
- Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consult with the appropriate federal/state/local/tribal Managing Agency(s), pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

#### Select one:

☐ The Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

☐ The Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *The RE/HUD must work with the Managing Agency to identify mitigation measures to mitigate the impact or effect of the project on the river.*

### Worksheet Summary

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

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

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

No federally designated Wild and Scenic Rivers are within or in the immediate vicinity of the project area. The nearest designated Wild and Scenic River is approximately 81.5 miles northeast of the project area. The project is in compliance with Wild and Scenic Rivers requirements.

See Appendix B, Figure 1 , Wild and Scenic River Map.



## Environmental Justice (CEST and EA) – PARTNER

[https://www.hudexchange.info/environmental\\_review/environmental\\_justice](https://www.hudexchange.info/environmental_review/environmental_justice)

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

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

☐ Yes → *Continue to Question 2.*

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

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

☐ Yes

**Explain:**

[Click here to enter text.](#)

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

☐ No

**Explain:**

[Click here to enter text.](#)

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

### **Worksheet Summary**

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

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

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

Environmental justice is assurance of protection of the environment and human health equally for all people regardless of race, color, national origin, or income. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low income Populations," requires HUD to consider how federally assisted projects may exert disproportionately high and adverse human health or environmental effects on minority and low income populations.

The project would not generate adverse resource or health effects or adversely impact residential, commercial, or community facilities or services that may be of importance to environmental justice communities. The project would not disproportionately generate adverse environmental impacts on environmental justice communities. The project would benefit all populations in the project area by providing recreational facilities to the population of Sabana Grande at a rehabilitated facility that could not be used without the project because of flood damage.

The Project is in compliance with Executive Order 12898.



## **Appendix B**

### **Maps**

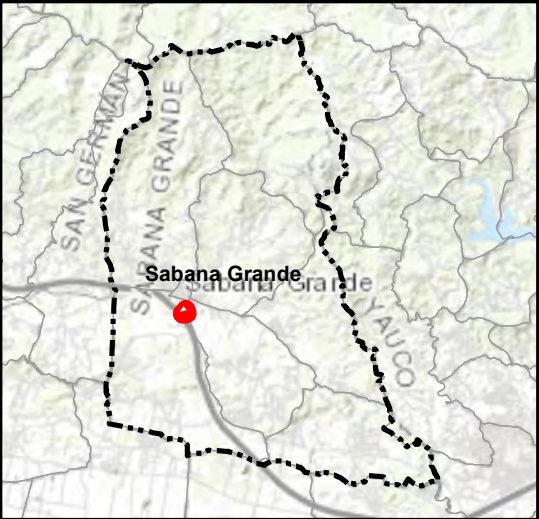




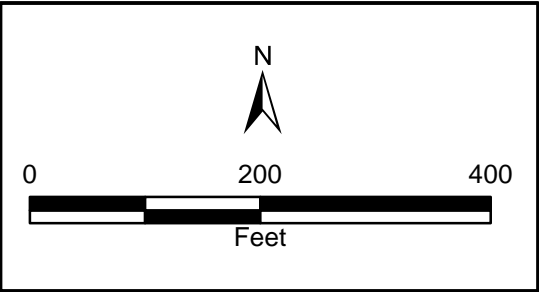
**Legend**

- 18.072633, -66.959490
- Project Area

**PUERTO RICO**



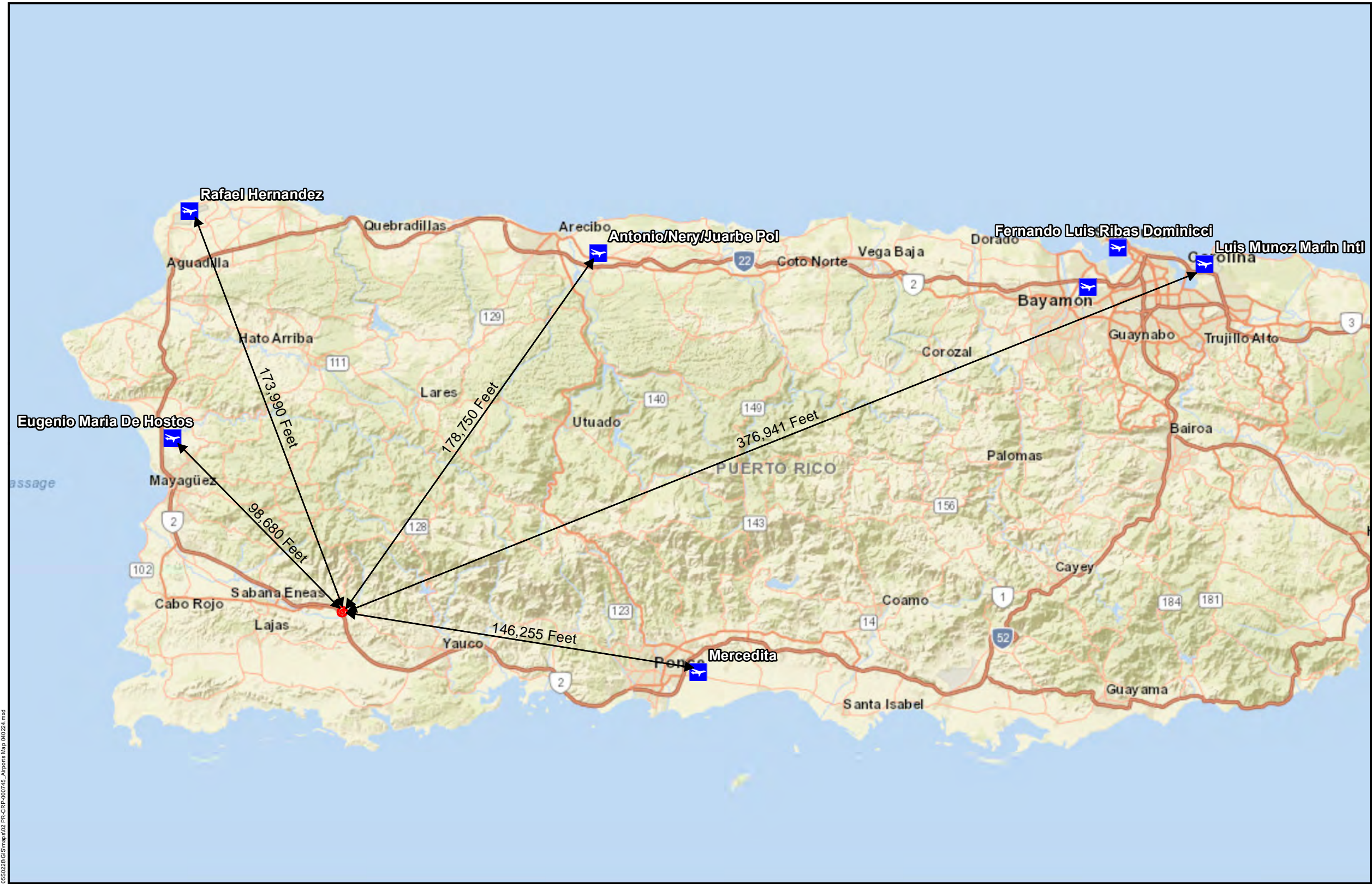
**Figure 1. Project Area Map**  
**Coliseo Angel Mercado, Sabana Grande**  
Applicant ID: PR-CRP-000745  
Project Coordinates: 18.072633, -66.959490  
Address: Ave. Quilichini  
Sabana Grande, PR 00627



Source: Source: CRIM 2014  
(<https://catastro.crimpr.net/cdprpc/>).  
ESRI 2023.

Author: Genevieve Kaiser Date: 5/6/2024

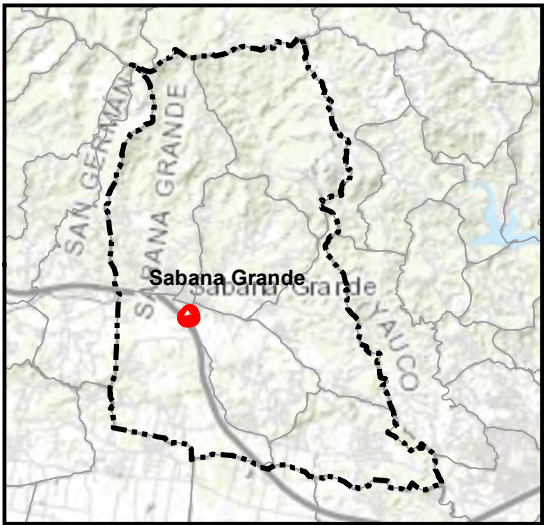




**Legend**

-  Airports
-  Project Area

**PUERTO RICO**



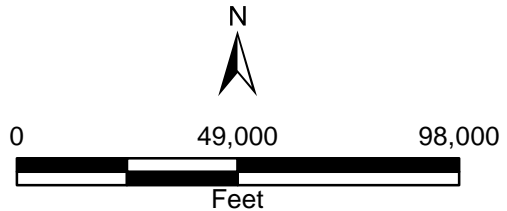
**Figure 2. Airports Map**  
**Coliseo Ángel Mercado, Sabana Grande**

**Applicant ID:** PR-CRP-000745  
**Project Coordinates:** 18.072633, -66.959490  
**Address:** Ave. Quilichini  
Sabana Grande, PR 00627

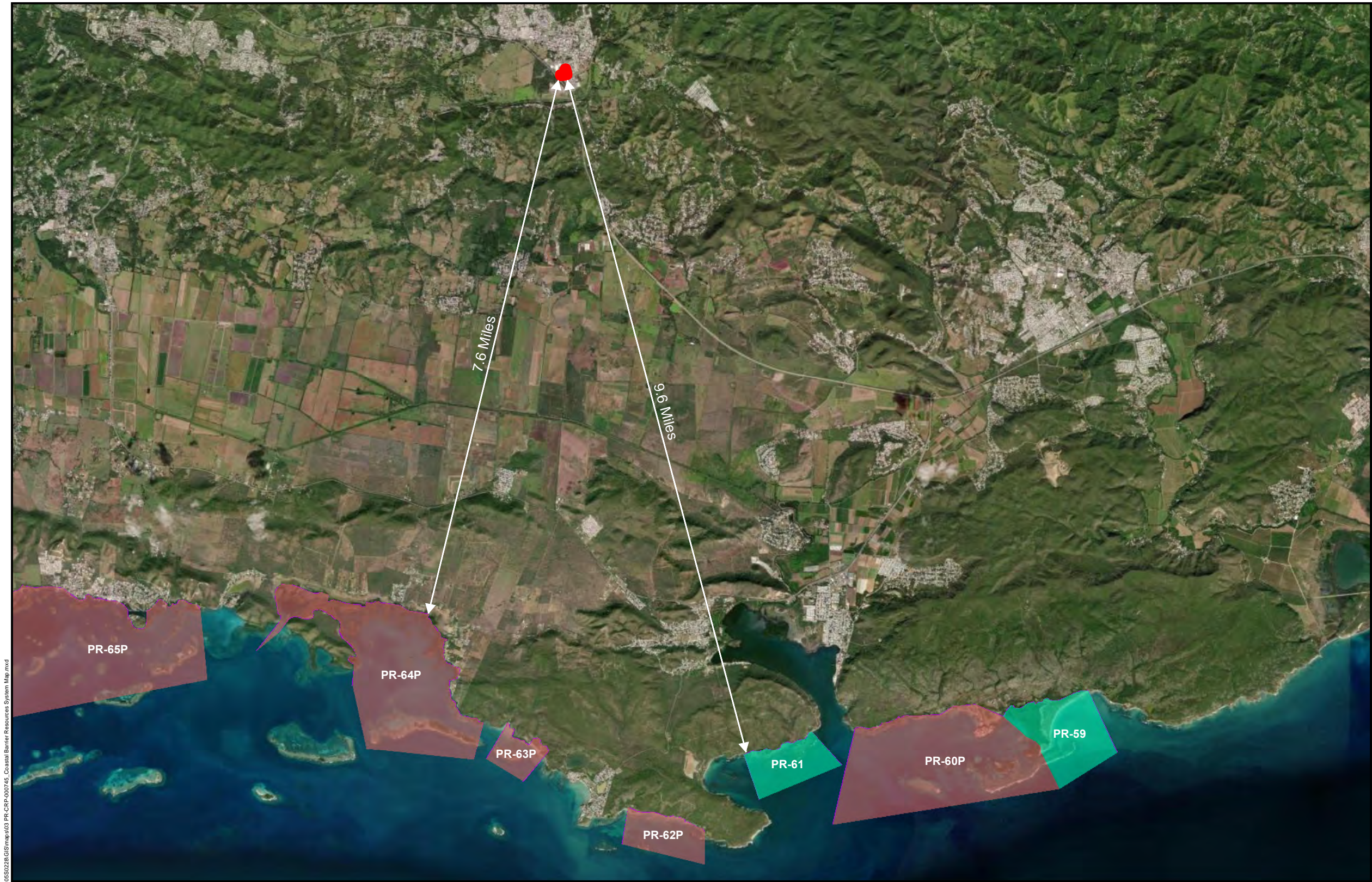


Source: CRIM 2014  
(<https://catastro.crimpr.net/cdprpc/>).  
Federal Aviation Administration (FAA)  
National Transportation Atlas 2022.  
ESRI 2022.

Author: Genevieve Kaiser  
Date: 4/2/2024



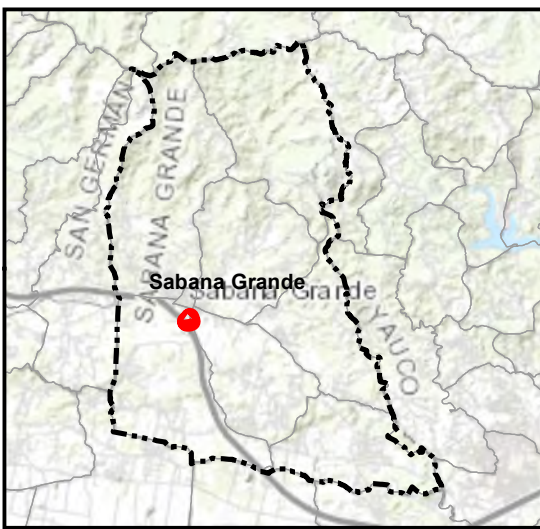




**Legend**

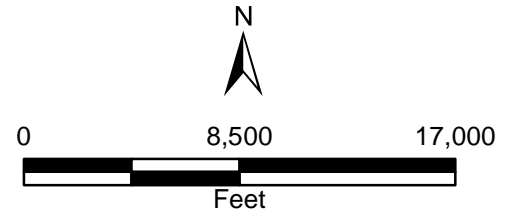
- Project Area
- Coastal Barrier Resources System Unit
- Otherwise Protected Area
- Coastal Barrier Resources System Buffer Zone


**PUERTO RICO**



**Figure 3. Coastal Barrier Resources System Map  
Coliseo Ángel Mercado, Sabana Grande**

**Applicant ID:** PR-CRP-000745  
**Project Coordinates:** 18.072633, -66.959490  
**Address:** Ave. Quilichini  
Sabana Grande, PR 00627



**TETRA TECH**

Source: Source: USFWS 2019 (<https://fwspprimary.wim.usgs.gov/CBRSMapper-v2/#layersPanel>). CRIM 2014 (<https://catastro.crimpr.net/cdprpc/>). ESRI 2022.

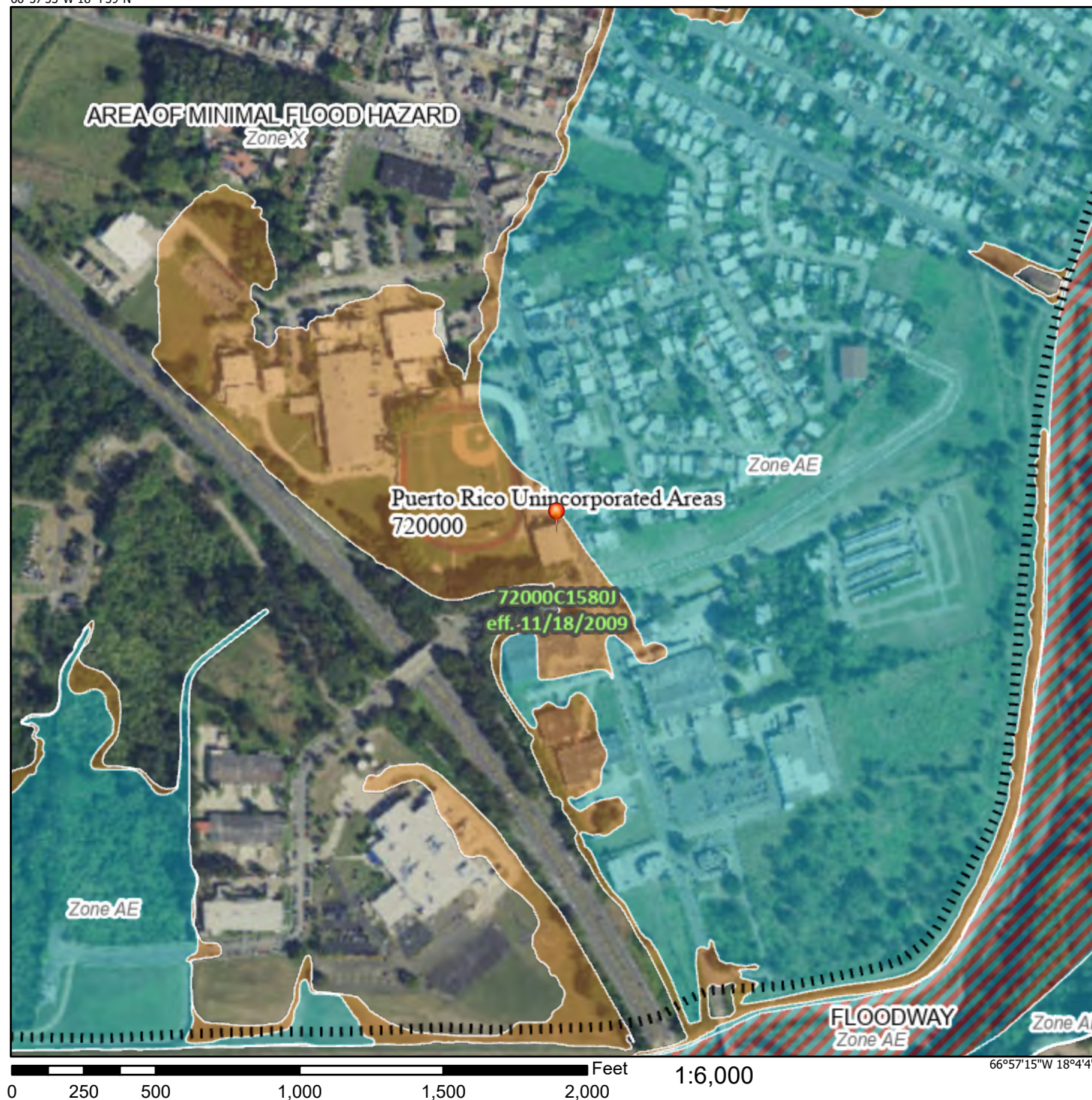
Author: Genevieve Kaiser	Date: 10/26/2023
--------------------------	------------------

File Path: C:\projects\TTIDR\_PRCRP\_City\_Revitalization\_Pkg\_10552228\GIS\maps\03 PR-CRP-000745\_Coastal Barrier Resources System Map.mxd



**Figure 4.**  
**National Flood Hazard Layer FIRMette**

66°57'53"W 18°4'39"N



## Legend

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

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



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **3/31/2022 at 5:59 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



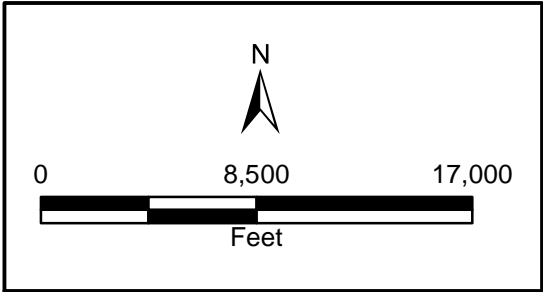
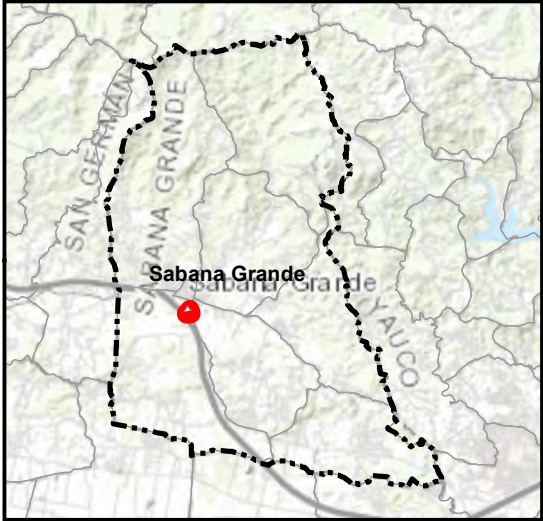


**Legend**

Project Area

Coastal Zone Management Act  
Land Boundary

**PUERTO RICO**



**Figure 5. Coastal Zone Map**  
**Coliseo Angel Mercado, Sabana Grande**  
**Applicant ID: PR-CRP-000745**  
**Project Coordinates: 18.072633, -66.959490**  
**Address: Ave. Quilichini**  
**Sabana Grande, PR 00627**

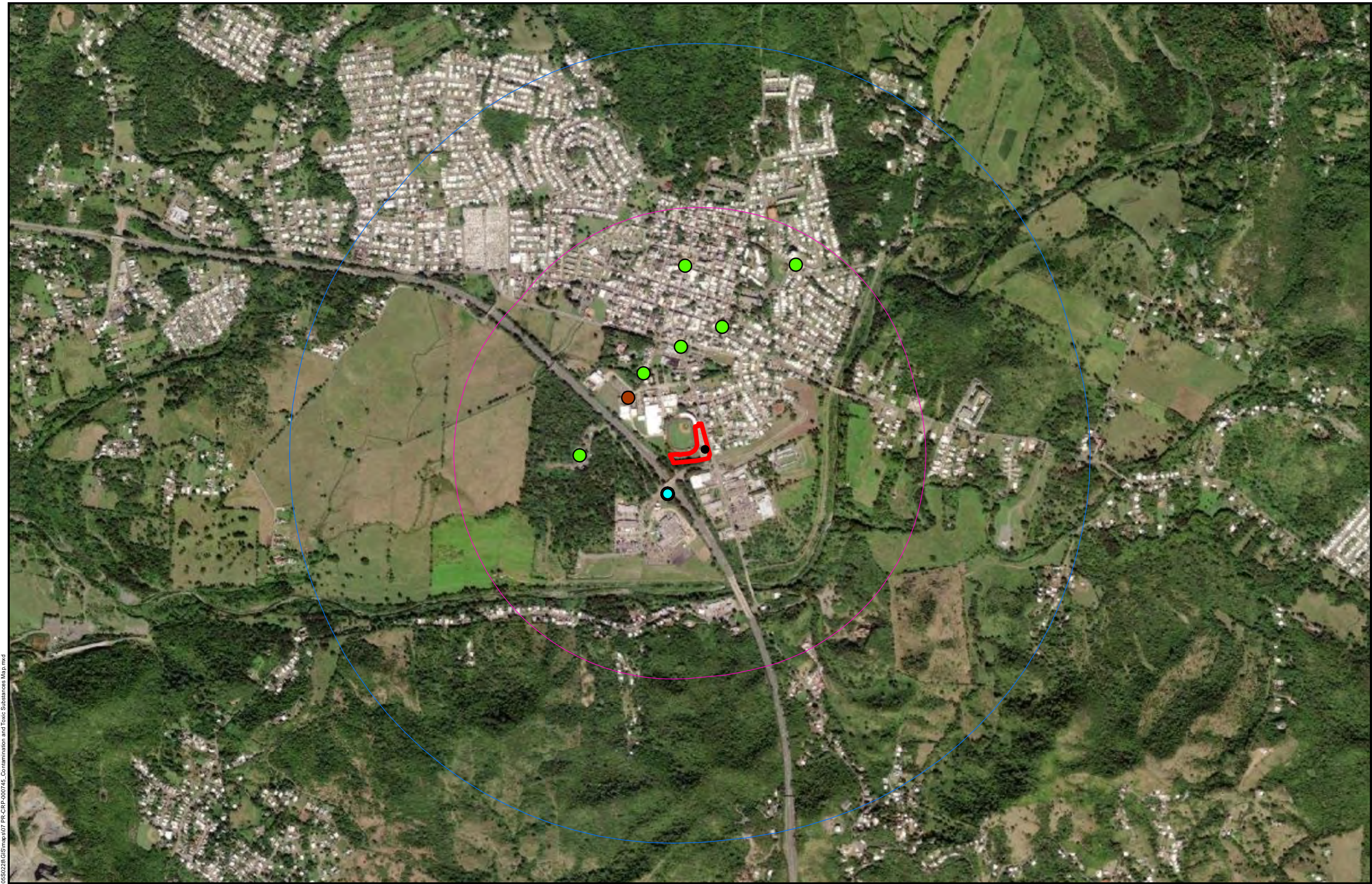
Source: CRIM 2014  
(<https://catastro.crimpr.net/cdprpc/>), Puerto Rico  
Department of Natural and Environmental  
Resources 2010 (<https://www.arcgis.com/home/item.html?id=1d0eff6661f340dcabb0e9928d01ec57>).  
ESRI 2022.

Author: Genevieve  
Kaiser

Date: 11/1/2023

File Path: C:\projects\Tetra Tech\PR-CRP-000745\Map.mxd

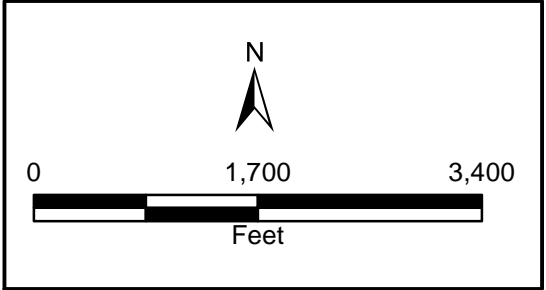
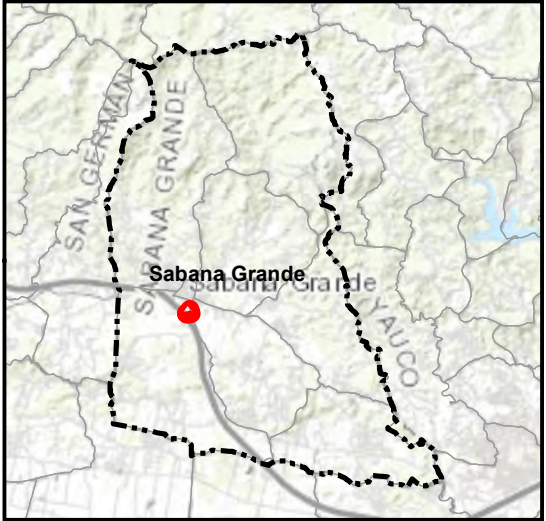




**Legend**

- 18.072633, -66.959490
- NPL Superfund Sites
- Non-NPL Superfund Sites
- Brownfields Sites
- TRI Sites
- TSCA Sites
- RCRA Sites
- Project Area
- 3,000-Foot Project Buffer
- 1-Mile Project Buffer

**PUERTO RICO**



**Figure 6. Contamination and Toxic Substances Map  
Coliseo Ángel Mercado, Sabana Grande**

**Applicant ID:** PR-CRP-000745  
**Project Coordinates:** 18.072633, -66.959490  
**Address:** Ave. Quilichini  
Sabana Grande, PR 00627

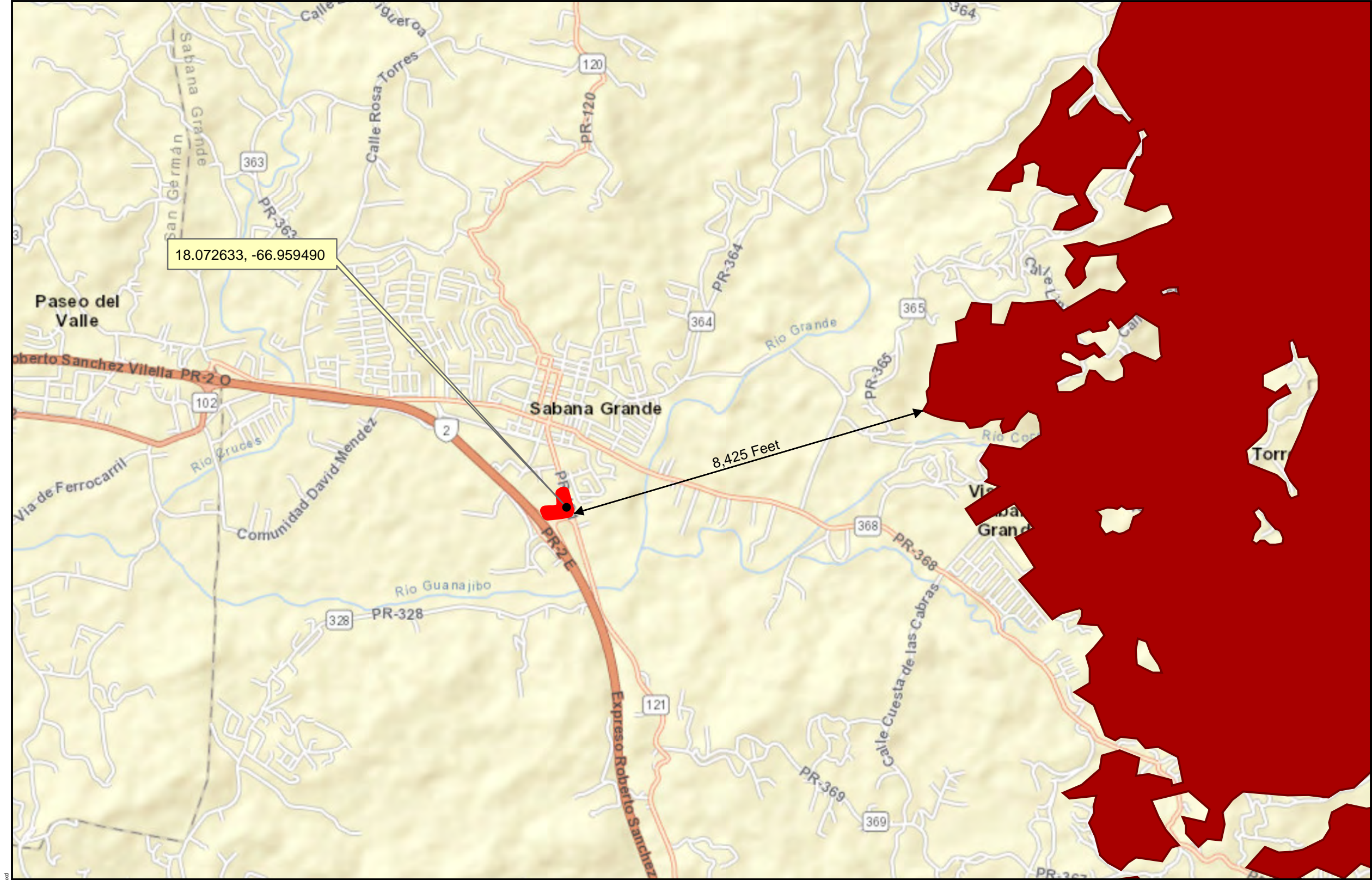


Source: CRIM 2014.  
(<https://catastro.crimpr.net/cdprpc/>)  
U.S. Environmental Protection Agency  
(<https://edg.epa.gov/data/>). ESRI 2023.

Author: Genevieve Kaiser      Date: 5/6/2024

File Path: C:\projects\TTDR\_PRCRP-000745\PR-CRP-000745\_Contamination and Toxic Substances Map.mxd





- Legend**
- 18.072633, -66.959490
  - Project Area
  - Critical Habitat - Polygon Features - Final
  - Critical Habitat - Linear Features - Final
  - Critical Habitat - Polygon Features - Proposed
  - Critical Habitat - Linear Features - Proposed



**TETRA TECH**

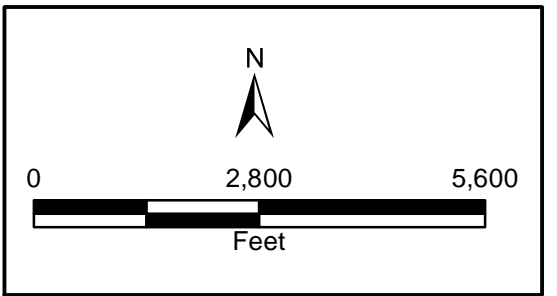
Source: CRIM 2014  
(<https://catastro.crimpr.net/cdprpc/>). U.S.  
Fish and Wildlife Service 2022 ([https://  
services.arcgis.com/  
QVENGd4Pbd4LUkLV/arcgis/rest/  
services/USFWS\\_Critical\\_Habitat/  
FeatureServer](https://services.arcgis.com/QVENGd4Pbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/FeatureServer)). ESRI 2022.

Author: Genevieve  
Kaiser

Date: 5/6/2024

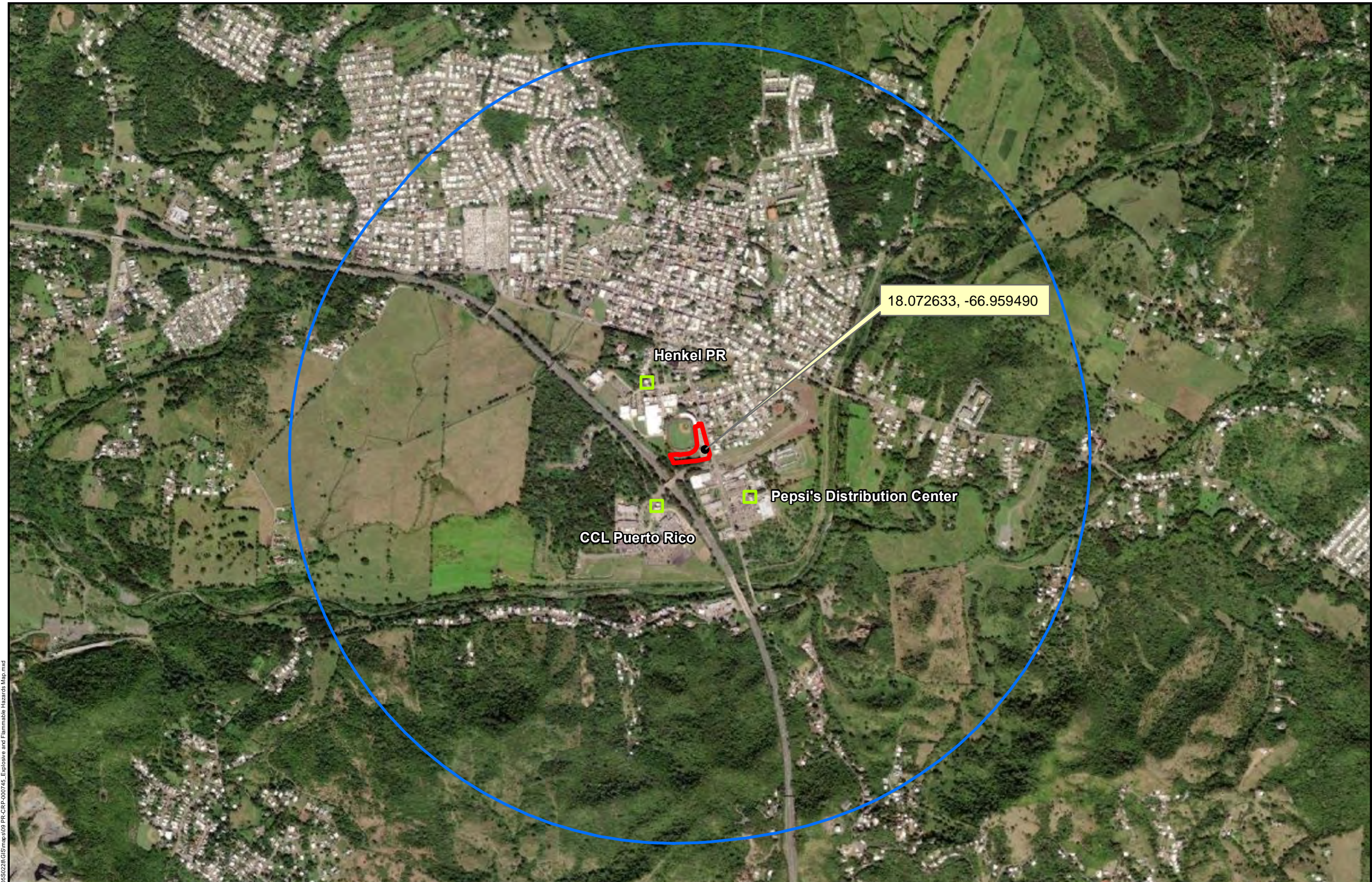
**Figure 7. Critical Habitat for Threatened & Endangered Species [USFWS]  
Coliseo Ángel Mercado, Sabana Grande**

**Applicant ID:** PR-CRP-000745  
**Project Coordinates:** 18.072633, -66.959490  
**Address:** Ave. Quilichini  
Sabana Grande, PR 00627






File Path: C:\projects\PR-CRP-000745\_Critical\_Habitat\_Map.mxd





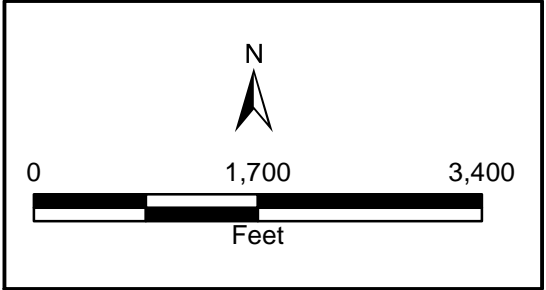
**Legend**

-  Project Area
-  1-Mile Project Buffer
-  Aboveground Storage Tanks



**Figure 8. Explosive and Flammable Hazards Map  
Coliseo Ángel Mercado, Sabana Grande**

**Applicant ID:** PR-CRP-000745  
**Project Coordinates:** 18.072633, -66.959490  
**Address:** Ave. Quilichini  
Sabana Grande, PR 00627



File Path: C:\projects\TTDR\_PRCRP\_City Realization\_Pkg\_10552228\GIS\maps\08 PR-CRP-000745\_Explosive and Flammable Hazards Map.mxd

**TETRA TECH**

Source: CRIM 2014.  
(<https://catastro.crimpr.net/cdprpc/>)  
ESRI 2023.

Author: Genevieve Kaiser

Date: 5/6/2024





**Legend**

● 18.072633, -66.959490

PR-CRP-000745

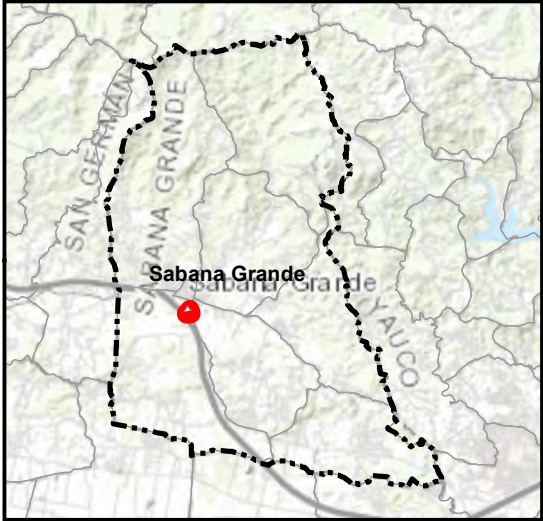
**Soil Type**

All areas are prime farmland

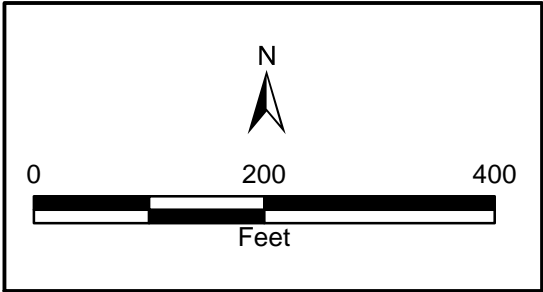
Not prime farmland

Prime farmland if drained

**PUERTO RICO**



**Figure 9. Farmland Protection Map**  
**Coliseo Ángel Mercado, Sabana Grande**  
**Applicant ID: PR-CRP-000745**  
**Project Coordinates: 18.072633, -66.959490**  
**Address: Ave. Quilichini**  
**Sabana Grande, PR 00627**



**TETRA TECH**

Source: U.S. Department of Agriculture  
Natural Resources Conservation Service  
(<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>). CRIM 2014  
(<https://catastro.crimpr.net/cdprpc/>).  
ESRI 2023.

Author: Genevieve Kaiser	Date: 5/6/2024
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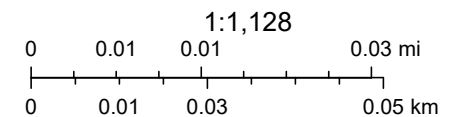
File Path: C:\projects\TTTDR\_PRCRP-000745 Farmland Protection Map.mxd



# Figure 10. Advisory Base Flood Elevation (ABFE) Map



6/19/2023, 6:29:12 PM



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, PRPB; FEMA

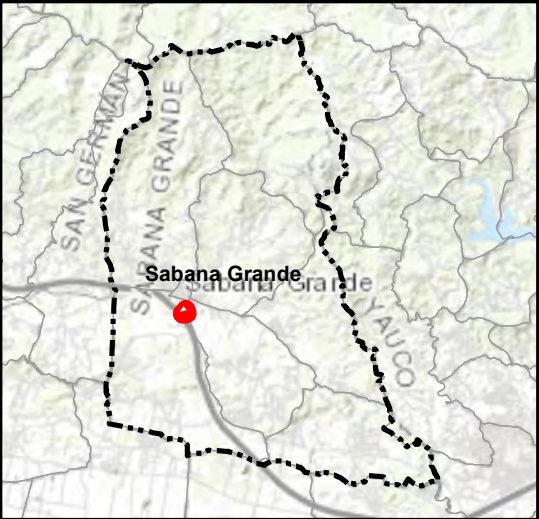




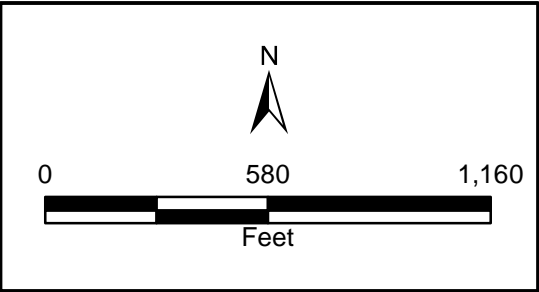
**Legend**

- 18.072633, -66.959490
- Project Area
- Wetlands**
  - Freshwater Pond
  - Riverine

**PUERTO RICO**



**Figure 11. Wetlands Map**  
**Coliseo Ángel Mercado, Sabana Grande**  
**Applicant ID: PR-CRP-000745**  
**Project Coordinates:**  
**Address: Ave. Quilichini**  
**Sabana Grande, PR 00627**



Source: CRIM 2014.  
(<https://catastro.crimpr.net/cdprpc/>)  
U.S. Fish and Wildlife Service, National  
Wetlands Inventory 2019 (<https://www.fws.gov/wetlands/Data/DataDownload.html>). ESRI 2022.

Author: Genevieve Kaiser Date: 5/6/2024



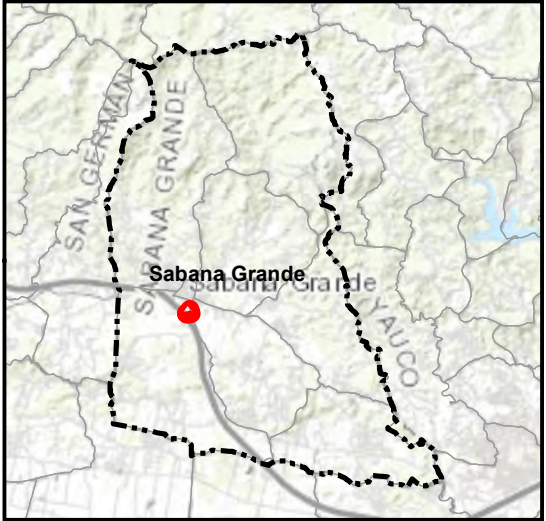


**Legend**

— National Wild and Scenic Rivers

■ Project Area

**PUERTO RICO**



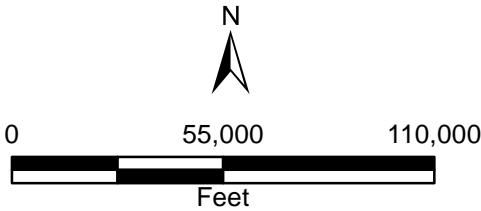
**Figure 12. Wild and Scenic Rivers Map  
Coliseo Ángel Mercado, Sabana Grande**

**Applicant ID:** PR-CRP-000745  
**Project Coordinates:** 18.072633, -66.959490  
**Address:** Ave. Quilichini  
Sabana Grande, PR 00637



Source: CRIM 2014  
(<https://catastro.crimpr.net/cdprpc/>). US  
Forest Service 2019 (<http://data.fs.usda.gov/geodata/edw/datasets.php>).  
ESRI 2023.

Author: Genevieve Kaiser Date: 5/6/2024



## **Appendix C**

### **Contamination and Toxic Substances**



# Detailed Facility Report

## Facility Summary

HENKEL PUERTO RICO INC

9 V QUILINCHINI AVE, SABANA GRANDE, PR 00637

FRS (Facility Registry Service) ID: 110000307793

EPA Region: 02

Latitude: 18.071036

Longitude: -66.960911

Locational Data Source: TRIS

Industries: Chemical Manufacturing

Indian Country: N

## Enforcement and Compliance Summary

Statute	CAA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--
Statute	EPCRA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	08/25/2023
Compliance Status	--
Qtrs in Noncompliance (of 12)	--
Qtrs with Significant Violation	--
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)	--



Statute	RCRA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	06/27/2019
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)	--
Statute	TSCA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	08/25/2023
Compliance Status	--
Qtrs in Noncompliance (of 12)	--
Qtrs with Significant Violation	--
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 Minor (PR0000007212170024)

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PRD982274383), Active LQG, (PRD090506239)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details  
Known Data Problems <<https://epa.gov/resources/echo-data/known-data-problems>>

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): 00747LCTTPNO9VQ

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

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110000307793					N	18.071036	-66.960911
ICIS-Air	CAA	PR0000007212170024	Minor Emissions	Operating	CAANSPS, CAANSR, CAASIP		N	18.073028	-66.961278
TRI	EP313	00747LCTTPNO9VQ	Toxics Release Inventory	Last Reported for 2022			N	18.071036	-66.960911
RCRAInfo	RCRA	PRD982274383	Other	Inactive ( )			N		
RCRAInfo	RCRA	PRD090506239	LQG	Active (H )			N	18.075633	-66.961631
TSCA	TSCA	TSCA6425					N		
TSCA	TSCA	200002765					N		
TSCA	TSCA	100606311					N		
TSCA	TSCA	200002225					N		



Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110000307793	HENKEL PUERTO RICO INC	9 V QUILINCHINI AVE, SABANA GRANDE, PR 00637	Sabana Grande Municipio
ICIS-Air	CAA	PR0000007212170024	HENKEL PUERTO RICO (SABANA GRANDE)	GUILINCHINI #9, SABANA GRANDE, PR 00708	Sabana Grande Municipio
TRI	EP313	00747LCTTPNO9VQ	HENKEL PUERTO RICO INC	QUILICHINI AVE # 9, SABANA GRANDE, PR 00637	Sabana Grande Municipio
RCRAInfo	RCRA	PRD982274383	LOCTITE PUERTO RICO INC	ROAD 121 KM 0.3, SABANA GRANDE, PR 00747	Sabana Grande Municipio
RCRAInfo	RCRA	PRD090506239	HENKEL PUERTO RICO INC	9 VICENTE QUILICHINI AVENUE, SABANA GRANDE, PR 00637	Sabana Grande Municipio
TSCA	TSCA	TSCA6425	HENKEL PUERTO RICO INC	9 V. QUILINCHINI AVENUE, SABANA GRANDE, PR 637	
TSCA	TSCA	200002765	LOCTITE CORPORATION PUERTO RICO INC.	9 V. QUILINCHINI AVENUE, SABANA GRANDE, PR 00637	
TSCA	TSCA	100606311	HENKEL PUERTO RICO INC	9 V. QUILINCHINI AVENUE, SABANA GRANDE, PR 00637	
TSCA	TSCA	200002225	LOCTITE PUERTO RICO, INC.	9 V. QUILLINCHINI AVENUE, SABANA GRANDE, PR 00637	

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-Air	PR0000007212170024	2891	Adhesives And Sealants

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
TRI	00747LCTTPNO9VQ	325520	Adhesive Manufacturing
ICIS-Air	PR0000007212170024	325520	Adhesive Manufacturing
RCRAInfo	PRD090506239	325520	Adhesive Manufacturing

Facility Tribe Information

No data records returned

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
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Enforcement and Compliance

RCRA (Hazardous Waste (Resource Conservation and Recovery Act ) Compliance Pipeline (Compliance Monitoring >> Violations >> Enforcement Actions) (10 Years)

This table shows how violations relate to compliance monitoring (CM) activities and enforcement. Currently available for RCRA only. Full CM history available below.

No data records returned

There are no relationships to display in the RCRA Compliance Pipeline table for this facility. Scroll down to view compliance monitoring history.

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	PR0000007212170024	ICIS-Air	Inspection/Evaluation	PCE On-Site	EPA	02/01/2024	
EPCRA	00747LCTTPNO9VQ	ICIS	Inspection/Evaluation	Late/Non Reporter	EPA	08/25/2023	
RCRA	PRD090506239	RCRAInfo/ICIS	Inspection/Evaluation	Compliance Evaluation Inspection	EPA	06/27/2019	No Violations Or Compliance Issues Were Found
TSCA	200002225	ICIS	Inspection/Evaluation	Exemption, Export, Import, Inventory Rule, Premanufacture Notice, Records, Significant New Use Rule	EPA	08/25/2023	

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

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CAA	PR0000007212170024	No	02/10/2024	0	02/09/2024
RCRA	PRD982274383	No	02/10/2024	0	02/09/2024
RCRA	PRD090506239	No	02/10/2024	0	02/09/2024

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: PR0000007212170024)		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	01/01-03/31/24
	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: PRD090506239)		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	01/01-03/31/24
	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											
RCRA (Source ID: PRD982274383)		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	01/01-03/31/24

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+
	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

No data records returned

Statute	System	Source ID	Type of Action	Lead Agency	Date
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Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

No data records returned

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
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## Environmental Conditions

### Watersheds

No data records returned

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?
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### Assessed Waters From Latest State Submission (ATTAINS)

No data records returned

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
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### Air Quality Nonattainment Areas

No data records returned

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

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

No data records returned

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

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

Chemical Name	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Acrylic acid	--	--	--	A	A	A	--	A	A	A
Cumene hydroperoxide	--	--	--	A	A	A	--	--	A	A
Diisocyanates	A	A	A	A	A	A	A	A	--	--
Toluene diisocyanate (mixed isomers)	--	--	--	--	--	--	A	A	A	A
Toluene-2,4-diisocyanate	A	A	A	A	A	A	--	--	--	--

### e-Manifest Hazardous Waste History (Public)

#### Hazardous Waste Shipped in Kilograms by Year (Through 11/11/2023)

Source ID	Waste Description	2021	2022	2023	2024
PRD090506239	Hazardous Waste	18,842	18,668	30,099	--
PRD090506239	Acute Hazardous Waste	0	0	0	--
PRD090506239	Pharmaceutical Hazardous Waste	0	0	0	--

Pharmaceutical Hazardous Waste is excluded from the Hazardous and Acute Hazardous Waste quantities shown above because Pharmaceutical Waste is managed under 40 CFR part 266 subpart P <<https://www.epa.gov/hwgenerators/final-rule-management-standards-hazardous-waste-pharmaceuticals-and-amendment-p075>>.

# 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

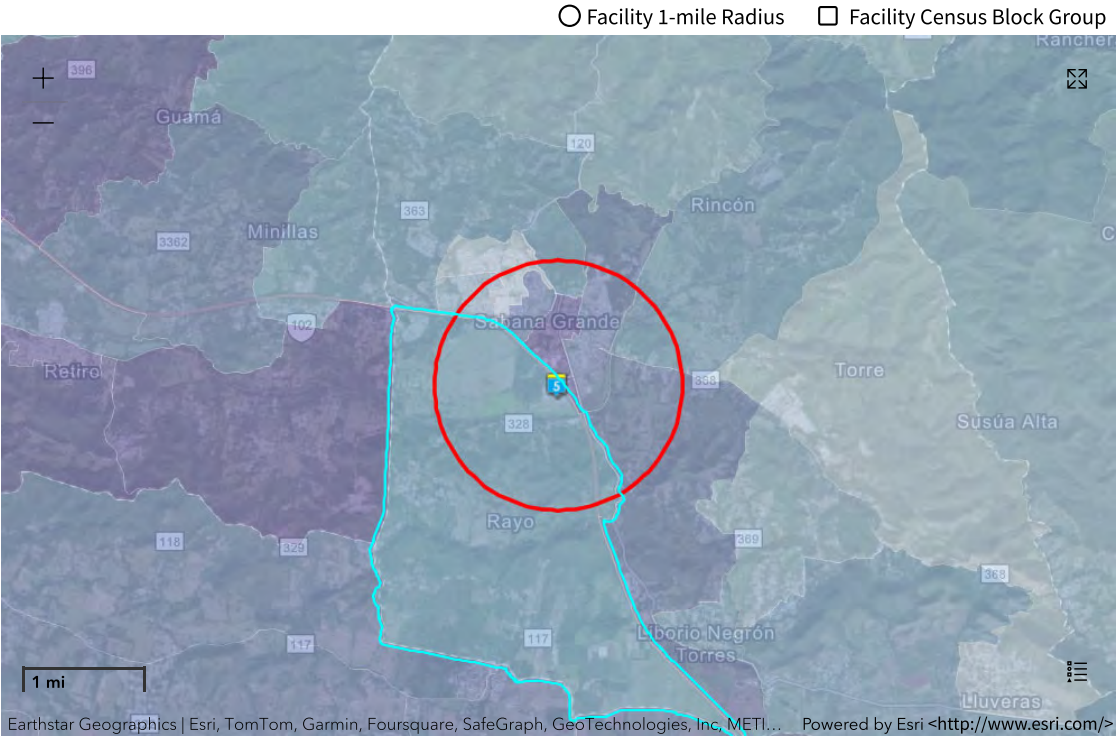
☐ Environmental Justice ☒ Supplemental

### Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 721219607002	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	5	7
Particulate Matter 2.5	0	--
Ozone	0	--
Diesel Particulate Matter	5	6
Air Toxics Cancer Risk	36	38
Air Toxics Respiratory Hazard Index	37	40
Toxic Releases to Air	78	<div><div></div></div> 84
Traffic Proximity	<div><div></div></div> 96	<div><div></div></div> 99
Lead Paint	<div><div></div></div> 88	<div><div></div></div> 97
Risk Management Plan (RMP) Facility Proximity	41	54
Hazardous Waste Proximity	<div><div></div></div> 97	<div><div></div></div> 99
Superfund Proximity	<div><div></div></div> 99	<div><div></div></div> 99
Underground Storage Tanks (UST)	0	<div><div></div></div> 99
Wastewater Discharge	<div><div></div></div> 98	<div><div></div></div> 99



## 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 this methodology, see the DFR Data Dictionary <<https://epa.gov/help/reports/dfr-data-dictionary#demographic>>.

General Statistics (U.S. Census)	
Total Persons	6,666
Population Density	2,175/sq.mi.
Housing Units in Area	3,120
General Statistics (ACS (American Community Survey))	
Total Persons	6,154
Percent People of Color	99%
Households in Area	1,907
Households on Public Assistance	136
Persons With Low Income	4,536
Percent With Low Income	74%
Geography	
Radius of Selected Area	1 mi.

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	423 (6%)
Minors 17 years and younger	1,575 (24%)
Adults 18 years and older	5,091 (76%)
Seniors 65 years and older	1,466 (22%)
Race Breakdown (U.S. Census) - Persons (%)	
White	5,896 (88%)
African-American	331 (5%)
Hispanic-Origin	6,640 (100%)
Asian/Pacific Islander	8 (0%)
American Indian	37 (1%)
Other/Multiracial	394 (6%)

Geography	
Center Latitude	18.071036
Center Longitude	-66.960911
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than \$15,000	814 (42.66%)
\$15,000 - \$25,000	345 (18.08%)
\$25,000 - \$50,000	447 (23.43%)
\$50,000 - \$75,000	190 (9.96%)
Greater than \$75,000	112 (5.87%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	730 (17.04%)
9th through 12th Grade	344 (8.03%)
High School Diploma	1,402 (32.72%)
Some College/2-year	380 (8.87%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,026 (23.94%)



# Detailed Facility Report

## Facility Summary

SABANA GRANDE WASTEWATER TREATMENT PLANT

PR-2 KM 182.6 INT, SABANA GRANDE, PR 00637

FRS (Facility Registry Service) ID: 110000561678

EPA Region: 02

Latitude: 18.072417

Longitude: -66.96425

Locational Data Source: RMP

Industries: Utilities

Indian Country: N

## Enforcement and Compliance Summary

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

## Regulatory Information

**Clean Air Act (CAA):** No Information

**Clean Water Act (CWA):** No Information

**Resource Conservation and Recovery Act (RCRA):** Inactive Other, (PRD000691477)

**Safe Drinking Water Act (SDWA):** No Information

Go To Enforcement/Compliance Details

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

## Other Regulatory Reports

**Air Emissions Inventory (EIS):** No Information

**Greenhouse Gas Emissions (eGGRT):** No Information

**Toxic Releases (TRI):** No Information

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

## Facility/System Characteristics

### Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110000561678					N	18.072417	-66.96425
ICIS		2656914					N	18.075301	-66.964625
RMP	CAA	100000125474					N	18.072417	-66.96425
RCRAInfo	RCRA	PRD000691477	Other	Inactive ( )			N	18.079987	-66.978635

## Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110000561678	SABANA GRANDE WASTEWATER TREATMENT PLANT	PR-2 KM 182.6 INT, SABANA GRANDE, PR 00637	Sabana Grande Municipio
ICIS		2656914	PRASA SABANA GRANDE WWTP	STATE RD #2 KM 182.6, SANBANA GRANDE, PR 00722	Sabana Grande Municipio
RMP	CAA	100000125474	SABANA GRANDE WASTEWATER TREATMENT PLANT	CARRETERA 2 KM. 182.6, SABANA GRANDE, PR 00637	Sabana Grande Municipio
RCRAInfo	RCRA	PRD000691477	SABANA GRANDE STP	STATE RD 2 KM 215.0, SABANA GRANDE, PR 00747	Sabana Grande Municipio

## Facility SIC (Standard Industrial Classification) Codes

No data records returned			
System	Identifier	SIC Code	SIC Description

## Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RMP	100000125474	22132	Sewage Treatment Facilities
RCRAInfo	PRD000691477	22132	Sewage Treatment Facilities

## Facility Tribe Information

No data records returned			
Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

## Enforcement and Compliance

### Compliance Monitoring History

Last 5 Years

No data records returned							
Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

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

## Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRD000691477	No	02/10/2024	0	02/09/2024

## 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+
RCRA (Source ID: PRD000691477)		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	01/01-03/31/24
	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

No data records returned

Statute	System	Source ID	Type of Action	Lead Agency	Date
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Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

No data records returned

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
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## Environmental Conditions

### Watersheds

No data records returned

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?
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### Assessed Waters From Latest State Submission (ATTAINS)

No data records returned

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
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### Air Quality Nonattainment Areas

No data records returned

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

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

No data records returned

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers
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### Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year ⓘ

No data records returned

Chemical Name
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## 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: 721219607002	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	5	7
Particulate Matter 2.5	0	--

☐ Facility 1-mile Radius

☐ Facility Census Block Group





Census Block Group ID: 721219607002	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Ozone	0	--
Diesel Particulate Matter	5	6
Air Toxics Cancer Risk	36	38
Air Toxics Respiratory Hazard Index	37	40
Toxic Releases to Air	78	84
Traffic Proximity	96	99
Lead Paint	88	97
Risk Management Plan (RMP) Facility Proximity	41	54
Hazardous Waste Proximity	97	99
Superfund Proximity	99	99
Underground Storage Tanks (UST)	0	99
Wastewater Discharge	98	99



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 this methodology, see the DFR Data Dictionary <<https://epa.gov/help/reports/dfr-data-dictionary#demographic>>.

General Statistics (U.S. Census)	
Total Persons	8,241
Population Density	2,630/sq.mi.
Housing Units in Area	3,723
General Statistics (ACS (American Community Survey))	
Total Persons	7,875
Percent People of Color	100%
Households in Area	2,406
Households on Public Assistance	160
Persons With Low Income	5,693
Percent With Low Income	72%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.072417
Center Longitude	-66.96425
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than \$15,000	955 (39.69%)
\$15,000 - \$25,000	418 (17.37%)
\$25,000 - \$50,000	599 (24.9%)
\$50,000 - \$75,000	285 (11.85%)
Greater than \$75,000	149 (6.19%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	510 (6%)
Minors 17 years and younger	1,999 (24%)
Adults 18 years and older	6,242 (76%)
Seniors 65 years and older	1,623 (20%)
Race Breakdown (U.S. Census) - Persons (%)	
White	7,269 (88%)
African-American	408 (5%)
Hispanic-Origin	8,205 (100%)
Asian/Pacific Islander	8 (0%)
American Indian	44 (1%)
Other/Multiracial	512 (6%)
Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	792 (15.04%)
9th through 12th Grade	411 (7.81%)
High School Diploma	1,645 (31.24%)
Some College/2-year	470 (8.93%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,390 (26.4%)





# Detailed Facility Report

## Facility Summary

SHELL SS 1740 SABANA GRANDE

G MARTINEZ 2, SABANA GRANDE, PR 00637

FRS (Facility Registry Service) ID: 110004892705

EPA Region: 02

Latitude: 18.079264

Longitude: -66.960245

Locational Data Source: RCRAINFO

Industries: --

Indian Country: N

## Enforcement and Compliance Summary

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

## Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PRR000003996)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

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

## Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

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

## Facility/System Characteristics

### Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004892705					N	18.079264	-66.960245
ICIS		1400002782					N	18.076667	-66.960556
RCRAInfo	RCRA	PRR000003996	Other	Inactive ( )			N	18.079264	-66.960245

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110004892705	SHELL SS 1740 SABANA GRANDE	G MARTINEZ 2, SABANA GRANDE, PR 00637	Sabana Grande Municipio
ICIS		1400002782	SHELL #1740 (204129)	G. MARTINEZ #2, SABANA GRANDE, PR 00637	Sabana Grande Municipio
RCRAInfo	RCRA	PRR000003996	SHELL SS 1740 SABANA GRANDE	G MARTINEZ 2, SABANA GRANDE, PR 00637	Sabana Grande Municipio

Facility SIC (Standard Industrial Classification) Codes

No data records returned			
System	Identifier	SIC Code	SIC Description

Facility NAICS (North American Industry Classification System) Codes

No data records returned			
System	Identifier	NAICS Code	NAICS Description

Facility Tribe Information

No data records returned			
Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

No data records returned							
Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

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

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000003996	No	02/10/2024	0	02/09/2024

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+
RCRA (Source ID: PRR000003996)		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	01/01-03/31/24
	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

No data records returned					
Statute	System	Source ID	Type of Action	Lead Agency	Date

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

Formal Enforcement Actions

Last 5 Years

No data records returned															
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

Environmental Conditions

Watersheds

No data records returned						
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?

Assessed Waters From Latest State Submission (ATTAINS)

No data records returned

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
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Air Quality Nonattainment Areas

No data records returned				
Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

Pollutants

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

No data records returned								
TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

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

No data records returned	
Chemical Name	

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

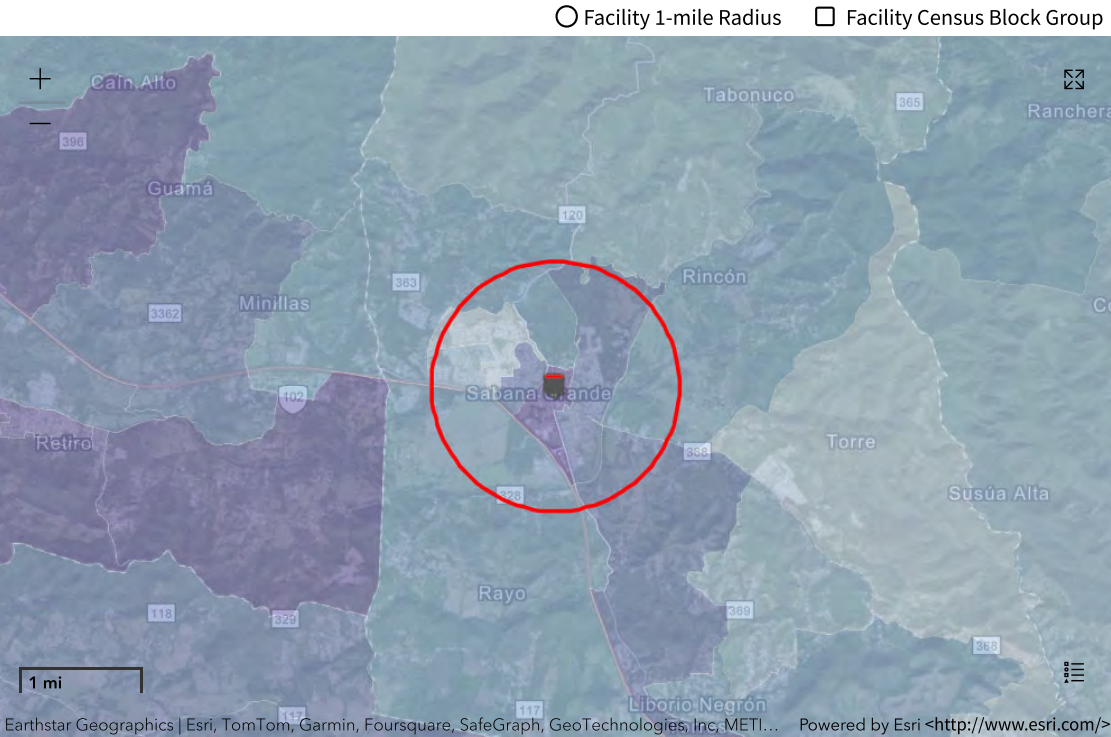
☐ Environmental Justice ☒ Supplemental

Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 721219605001	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	7	7
Particulate Matter 2.5	0	--
Ozone	0	--
Diesel Particulate Matter	6	6
Air Toxics Cancer Risk	38	38
Air Toxics Respiratory Hazard Index	40	40
Toxic Releases to Air	84 ⓘ	87 ⓘ
Traffic Proximity	99 ⓘ	99 ⓘ
Lead Paint	97 ⓘ	97 ⓘ
Risk Management Plan (RMP) Facility Proximity	54	65
Hazardous Waste Proximity	99 ⓘ	99 ⓘ
Superfund Proximity	99 ⓘ	99 ⓘ
Underground Storage Tanks (UST)	99 ⓘ	99 ⓘ
Wastewater Discharge	99 ⓘ	99 ⓘ



## 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 this methodology, see the DFR Data Dictionary <<https://epa.gov/help/reports/dfr-data-dictionary#demographic>>.

General Statistics (U.S. Census)	
Total Persons	9,080
Population Density	2,964/sq.mi.
Housing Units in Area	4,019

General Statistics (ACS (American Community Survey))	
Total Persons	10,023
Percent People of Color	100%
Households in Area	3,017
Households on Public Assistance	211
Persons With Low Income	7,177
Percent With Low Income	72%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.079264
Center Longitude	-66.960245
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than \$15,000	1,149 (38.08%)
\$15,000 - \$25,000	544 (18.03%)
\$25,000 - \$50,000	740 (24.53%)
\$50,000 - \$75,000	397 (13.16%)
Greater than \$75,000	187 (6.2%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	605 (7%)
Minors 17 years and younger	2,307 (25%)
Adults 18 years and older	6,773 (75%)
Seniors 65 years and older	1,646 (18%)

Race Breakdown (U.S. Census) - Persons (%)	
White	7,980 (88%)
African-American	463 (5%)
Hispanic-Origin	9,036 (100%)
Asian/Pacific Islander	8 (0%)
American Indian	46 (1%)
Other/Multiracial	583 (6%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	879 (13.34%)
9th through 12th Grade	436 (6.62%)
High School Diploma	2,083 (31.61%)
Some College/2-year	606 (9.2%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,819 (27.61%)



# Detailed Facility Report

## Facility Summary

ESSO STANDARD OIL CO PR CO-370

PR-121 65TH INFANTERIA 7, SABANA GRANDE, PR 00637

FRS (Facility Registry Service) ID: 110004895105

EPA Region: 02

Latitude: 18.076339

Longitude: -66.960406

Locational Data Source: RCRAINFO

Industries: --

Indian Country: N

## Enforcement and Compliance Summary

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

## Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRR000011395)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

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

## Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

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

## Facility/System Characteristics

### Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004895105					N	18.076339	-66.960406
ICIS		600006855					N	18.074167	-66.96
RCRAInfo	RCRA	PRR000011395	VSQG	Active (H )			N	18.076339	-66.960406

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110004895105	ESSO STANDARD OIL CO PR CO-370	PR-121 65TH INFANTERIA 7, SABANA GRANDE, PR 00637	Sabana Grande Municipio
ICIS		600006855	ESSO S/S CO-370	65 INF., CARR. 121, SABANA GRANDE, PR 00637	Sabana Grande Municipio
RCRAInfo	RCRA	PRR000011395	ESSO STANDARD OIL CO PR CO-370	CARR 121 65TH INFANTERIA 7, SABANA GRANDE, PR 00637	Sabana Grande Municipio

Facility SIC (Standard Industrial Classification) Codes

No data records returned			
System	Identifier	SIC Code	SIC Description

Facility NAICS (North American Industry Classification System) Codes

No data records returned			
System	Identifier	NAICS Code	NAICS Description

Facility Tribe Information

No data records returned			
Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

No data records returned							
Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

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

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000011395	No	02/10/2024	0	02/09/2024

Three-Year Compliance History by Month

Select Timeframe:														
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
			Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36*
RCRA (Source ID: PRR000011395)			04/01-04/30/23	05/01-05/31/23	06/01-06/30/23	07/01-07/31/23	08/01-08/31/23	09/01-09/30/23	10/01-10/31/23	11/01-11/30/23	12/01-12/31/23	01/01-01/31/24	02/01-02/29/24	03/01-03/31/24
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	--
	Violation	Agency												

Informal Enforcement Actions

Last 5 Years

No data records returned					
Statute	System	Source ID	Type of Action	Lead Agency	Date

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

Formal Enforcement Actions

Last 5 Years

No data records returned															
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

Environmental Conditions

Watersheds

No data records returned						
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?



Assessed Waters From Latest State Submission (ATTAINS)

No data records returned

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
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Air Quality Nonattainment Areas

No data records returned				
Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

Pollutants

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

No data records returned								
TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

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

No data records returned	
Chemical Name	

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

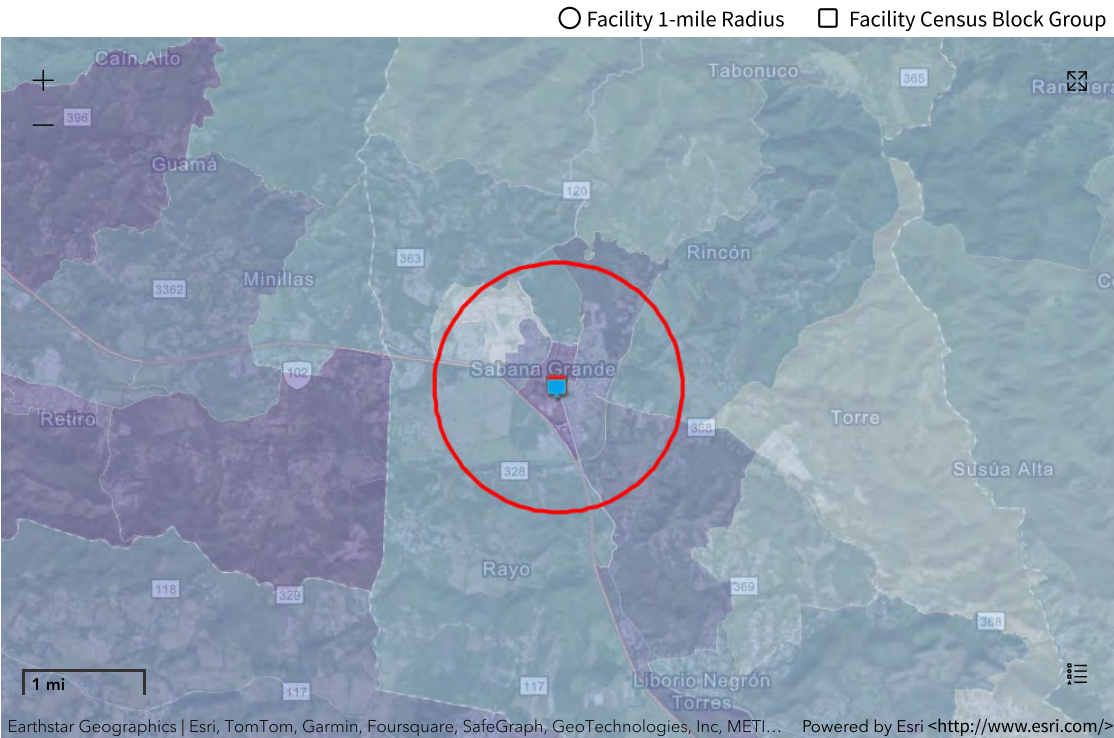
☐ Environmental Justice ☒ Supplemental

Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 721219606001	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	0	--
Ozone	0	--
Diesel Particulate Matter	5	6
Air Toxics Cancer Risk	35	38
Air Toxics Respiratory Hazard Index	35	40
Toxic Releases to Air	76	📍 84
Traffic Proximity	📍 97	📍 99
Lead Paint	📍 83	📍 97
Risk Management Plan (RMP) Facility Proximity	45	54
Hazardous Waste Proximity	📍 98	📍 99
Superfund Proximity	📍 99	📍 99
Underground Storage Tanks (UST)	📍 95	📍 99
Wastewater Discharge	📍 95	📍 99



## 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 this methodology, see the DFR Data Dictionary <<https://epa.gov/help/reports/dfr-data-dictionary#demographic>>.

General Statistics (U.S. Census)	
Total Persons	8,763
Population Density	2,825/sq.mi.
Housing Units in Area	3,898

General Statistics (ACS (American Community Survey))	
Total Persons	8,935
Percent People of Color	100%
Households in Area	2,707
Households on Public Assistance	188
Persons With Low Income	6,419
Percent With Low Income	72%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.076339
Center Longitude	-66.960406
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than \$15,000	1,056 (39%)
\$15,000 - \$25,000	481 (17.76%)
\$25,000 - \$50,000	661 (24.41%)
\$50,000 - \$75,000	343 (12.67%)
Greater than \$75,000	167 (6.17%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	581 (7%)
Minors 17 years and younger	2,219 (25%)
Adults 18 years and older	6,544 (75%)
Seniors 65 years and older	1,615 (18%)

Race Breakdown (U.S. Census) - Persons (%)	
White	7,718 (88%)
African-American	446 (5%)
Hispanic-Origin	8,722 (100%)
Asian/Pacific Islander	8 (0%)
American Indian	45 (1%)
Other/Multiracial	545 (6%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	838 (14.14%)
9th through 12th Grade	416 (7.02%)
High School Diploma	1,874 (31.61%)
Some College/2-year	538 (9.08%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,602 (27.02%)





# Detailed Facility Report

## Facility Summary

PRASA - SABANA GRANDE FILTER PLT

PR-364 KM 0.6 INT, SABANA GRANDE, PR 00637

FRS (Facility Registry Service) ID: 110012220202

EPA Region: 02

Latitude: 18.079301

Longitude: -66.956035

Locational Data Source: FRS

Industries: --

Indian Country: N

## Enforcement and Compliance Summary

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

## Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PRR000014514)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

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

## Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

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

## Facility/System Characteristics

### Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110012220202					N	18.079301	-66.956035
RCRAInfo	RCRA	PRR000014514	Other	Inactive ( )			N	18.079301	-66.956035

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110012220202	PRASA - SABANA GRANDE FILTER PLT	PR-364 KM 0.6 INT, SABANA GRANDE, PR 00637	Sabana Grande Municipio
RCRAInfo	RCRA	PRR000014514	PRASA - SABANA GRANDE FILTER PLT	PR 364 KM 0.6 INT, SABANA GRANDE, PR 00637	Sabana Grande Municipio

Facility SIC (Standard Industrial Classification) Codes

No data records returned			
System	Identifier	SIC Code	SIC Description

Facility NAICS (North American Industry Classification System) Codes

No data records returned			
System	Identifier	NAICS Code	NAICS Description

Facility Tribe Information

No data records returned			
Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

No data records returned							
Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

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

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000014514	No	02/10/2024	0	02/09/2024

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+
RCRA (Source ID: PRR000014514)		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	01/01-03/31/24
	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

No data records returned					
Statute	System	Source ID	Type of Action	Lead Agency	Date

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

Formal Enforcement Actions

Last 5 Years

No data records returned															
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

Environmental Conditions

Watersheds

No data records returned							
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?	

Assessed Waters From Latest State Submission (ATTAINS)

No data records returned										
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

Air Quality Nonattainment Areas

No data records returned

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

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

No data records returned

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

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

No data records returned

Chemical Name
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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

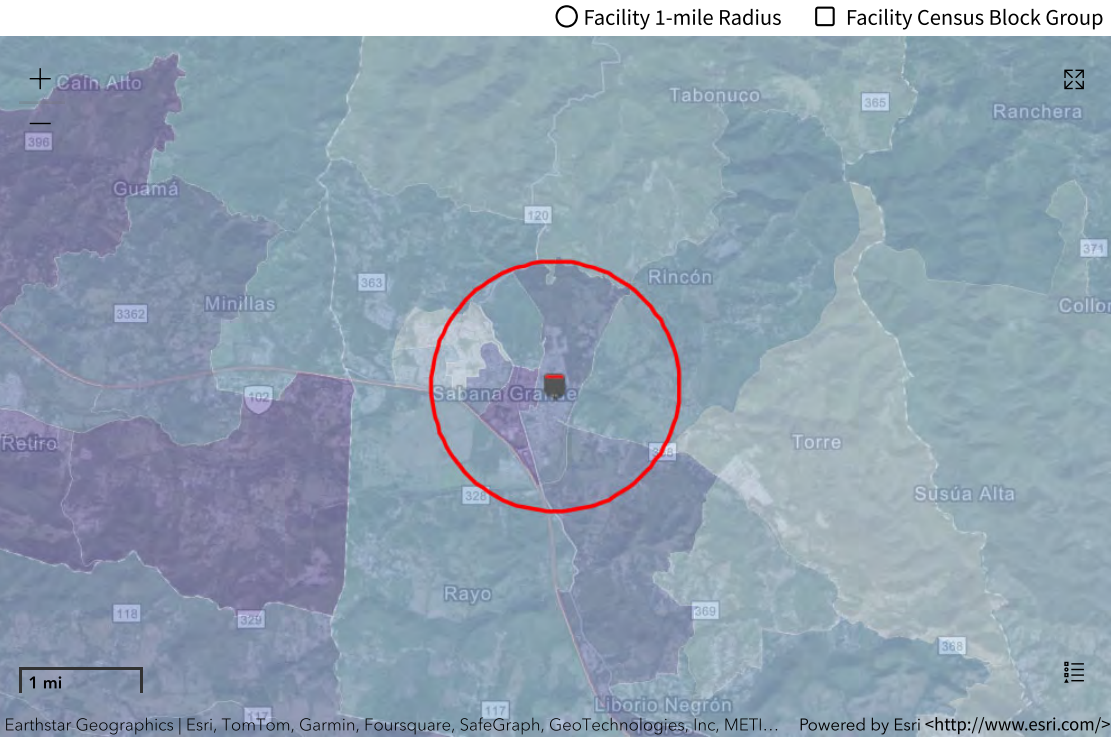
Index Type ☐ Environmental Justice ☒ Supplemental

Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 721219606001	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	0	--
Ozone	0	--
Diesel Particulate Matter	5	6
Air Toxics Cancer Risk	35	38
Air Toxics Respiratory Hazard Index	35	40
Toxic Releases to Air	76	87 ⓘ
Traffic Proximity	97 ⓘ	99 ⓘ
Lead Paint	83 ⓘ	97 ⓘ
Risk Management Plan (RMP) Facility Proximity	45	65
Hazardous Waste Proximity	98 ⓘ	99 ⓘ
Superfund Proximity	99 ⓘ	99 ⓘ
Underground Storage Tanks (UST)	95 ⓘ	99 ⓘ
Wastewater Discharge	95 ⓘ	99 ⓘ



## 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 this methodology, see the DFR Data Dictionary <<https://epa.gov/help/reports/dfr-data-dictionary#demographic>>.

General Statistics (U.S. Census)	
Total Persons	7,872
Population Density	2,575/sq.mi.
Housing Units in Area	3,522

General Statistics (ACS (American Community Survey))	
Total Persons	8,276
Percent People of Color	100%
Households in Area	2,499
Households on Public Assistance	189
Persons With Low Income	5,998
Percent With Low Income	72%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.079301
Center Longitude	-66.956035
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than \$15,000	1,009 (40.34%)
\$15,000 - \$25,000	465 (18.59%)
\$25,000 - \$50,000	575 (22.99%)
\$50,000 - \$75,000	300 (12%)
Greater than \$75,000	152 (6.08%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	535 (7%)
Minors 17 years and younger	2,002 (25%)
Adults 18 years and older	5,870 (75%)
Seniors 65 years and older	1,490 (19%)

Race Breakdown (U.S. Census) - Persons (%)	
White	6,944 (88%)
African-American	404 (5%)
Hispanic-Origin	7,833 (100%)
Asian/Pacific Islander	8 (0%)
American Indian	42 (1%)
Other/Multiracial	475 (6%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	795 (14.22%)
9th through 12th Grade	367 (6.56%)
High School Diploma	1,846 (33.01%)
Some College/2-year	519 (9.28%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,452 (25.97%)



# Detailed Facility Report

## Facility Summary

TOTAL PETROLEUM PUERTO RICO CORP-SERVICE STATION 104302

AVE QUILINCHINI #26, SABANA GRANDE, PR 00637

FRS (Facility Registry Service) ID: 110042423945

EPA Region: 02

Latitude: 18.075385

Longitude: -66.961826

Locational Data Source: RCRAINFO

Industries: Gasoline Stations

Indian Country: N

## Enforcement and Compliance Summary

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

## Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRR000023069)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

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

## Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

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

## Facility/System Characteristics

### Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110042423945					N	18.075385	-66.961826
RCRAInfo	RCRA	PRR000023069	VSQG	Active (H )			N	18.075385	-66.961826

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110042423945	TOTAL PETROLEUM PUERTO RICO CORP-SERVICE STATION 104302	AVE QUILINCHINI #26, SABANA GRANDE, PR 00637	Sabana Grande Municipio
RCRAInfo	RCRA	PRR000023069	TOTAL PETROLEUM PUERTO RICO CORP-SERVICE STATION 104302	AVE QUILINCHINI #26, SABANA GRANDE, PR 00637	Sabana Grande Municipio

Facility SIC (Standard Industrial Classification) Codes

No data records returned			
System	Identifier	SIC Code	SIC Description

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RCRAInfo	PRR000023069	44711	Gasoline Stations with Convenience Stores
RCRAInfo	PRR000023069	44719	Other Gasoline Stations

Facility Tribe Information

No data records returned			
Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

No data records returned							
Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

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

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000023069	No	02/10/2024	0	02/09/2024

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+
RCRA (Source ID: PRR000023069)		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	01/01-03/31/24
	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

No data records returned					
Statute	System	Source ID	Type of Action	Lead Agency	Date

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

Formal Enforcement Actions

Last 5 Years

No data records returned															
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

Environmental Conditions

Watersheds

No data records returned						
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?

Assessed Waters From Latest State Submission (ATTAINS)

No data records returned

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
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Air Quality Nonattainment Areas

No data records returned				
Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

Pollutants

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

No data records returned								
TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

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

No data records returned	
Chemical Name	

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

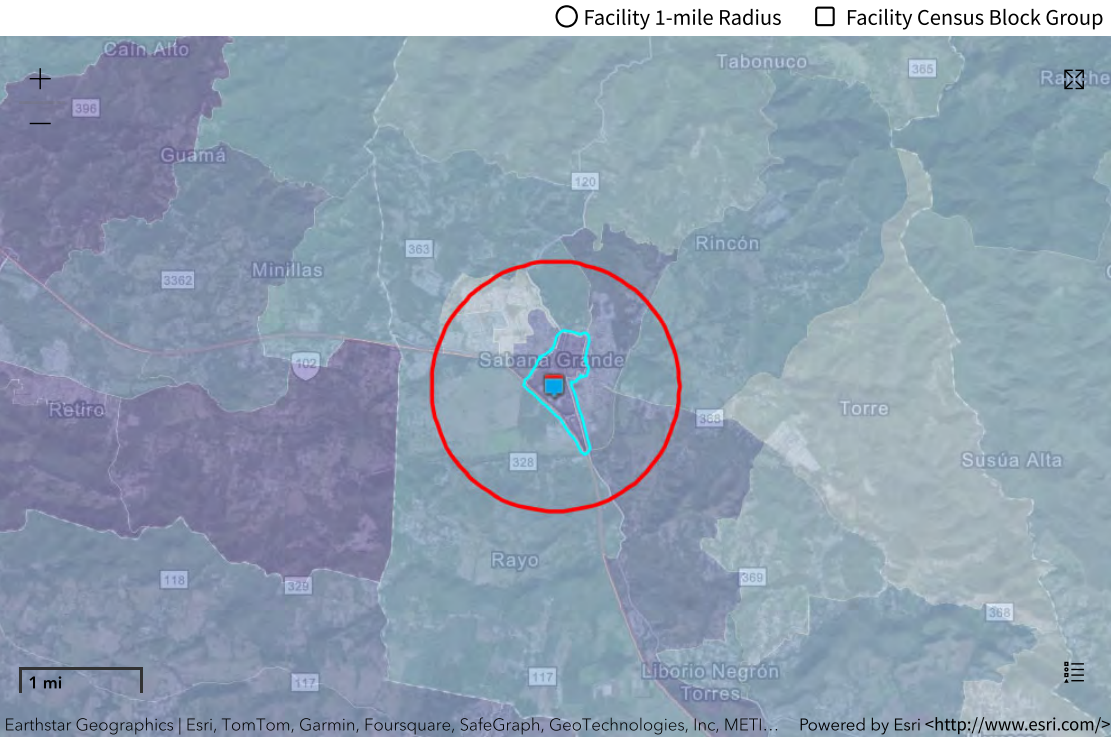
☐ Environmental Justice ☒ Supplemental

Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 721219605001	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	7	7
Particulate Matter 2.5	0	--
Ozone	0	--
Diesel Particulate Matter	6	6
Air Toxics Cancer Risk	38	38
Air Toxics Respiratory Hazard Index	40	40
Toxic Releases to Air	84	84
Traffic Proximity	99	99
Lead Paint	97	97
Risk Management Plan (RMP) Facility Proximity	54	54
Hazardous Waste Proximity	99	99
Superfund Proximity	99	99
Underground Storage Tanks (UST)	99	99
Wastewater Discharge	99	99



## 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 this methodology, see the DFR Data Dictionary <<https://epa.gov/help/reports/dfr-data-dictionary#demographic>>.

General Statistics (U.S. Census)	
Total Persons	8,883
Population Density	2,755/sq.mi.
Housing Units in Area	3,950

General Statistics (ACS (American Community Survey))	
Total Persons	8,951
Percent People of Color	100%
Households in Area	2,719
Households on Public Assistance	184
Persons With Low Income	6,415
Percent With Low Income	72%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.075385
Center Longitude	-66.961826
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than \$15,000	1,052 (38.69%)
\$15,000 - \$25,000	476 (17.51%)
\$25,000 - \$50,000	674 (24.79%)
\$50,000 - \$75,000	349 (12.84%)
Greater than \$75,000	168 (6.18%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	589 (7%)
Minors 17 years and younger	2,243 (25%)
Adults 18 years and older	6,640 (75%)
Seniors 65 years and older	1,640 (18%)

Race Breakdown (U.S. Census) - Persons (%)	
White	7,821 (88%)
African-American	455 (5%)
Hispanic-Origin	8,841 (100%)
Asian/Pacific Islander	8 (0%)
American Indian	45 (1%)
Other/Multiracial	553 (6%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	842 (14.22%)
9th through 12th Grade	424 (7.16%)
High School Diploma	1,855 (31.33%)
Some College/2-year	532 (8.98%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,611 (27.21%)





# Detailed Facility Report

## Facility Summary

TOTAL PETROLEUM PUERTO RICO CORP-SERVICE STATION 310290

AVE FRANCISCO M QUINONES #32, SABANA GRANDE, PR 00637

FRS (Facility Registry Service) ID: 110042423954

EPA Region: 02

Latitude: 18.07706

Longitude: -66.95884

Locational Data Source: FRS

Industries: Gasoline Stations

Indian Country: N

## Enforcement and Compliance Summary

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

## Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRR000023077)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

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

## Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

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

## Facility/System Characteristics

### Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110042423954					N	18.07706	-66.95884
RCRAInfo	RCRA	PRR000023077	VSQG	Active (H )			N	18.078078	-66.961715

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110042423954	TOTAL PETROLEUM PUERTO RICO CORP-SERVICE STATION 310290	AVE FRANCISCO M QUINONES #32, SABANA GRANDE, PR 00637	Sabana Grande Municipio
RCRAInfo	RCRA	PRR000023077	TOTAL PETROLEUM PUERTO RICO CORP-SERVICE STATION 310290	AVE FRANCISCO M QUINONES #32, SABANA GRANDE, PR 00637	Sabana Grande Municipio

Facility SIC (Standard Industrial Classification) Codes

No data records returned			
System	Identifier	SIC Code	SIC Description

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RCRAInfo	PRR000023077	44711	Gasoline Stations with Convenience Stores
RCRAInfo	PRR000023077	44719	Other Gasoline Stations

Facility Tribe Information

No data records returned			
Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

No data records returned							
Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

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

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000023077	No	02/10/2024	0	02/09/2024

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+
RCRA (Source ID: PRR000023077)		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	01/01-03/31/24
	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

No data records returned					
Statute	System	Source ID	Type of Action	Lead Agency	Date

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

Formal Enforcement Actions

Last 5 Years

No data records returned															
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

Environmental Conditions

Watersheds

No data records returned						
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?

Assessed Waters From Latest State Submission (ATTAINS)

No data records returned

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
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Air Quality Nonattainment Areas

No data records returned

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

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

No data records returned

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

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

No data records returned

Chemical Name
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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

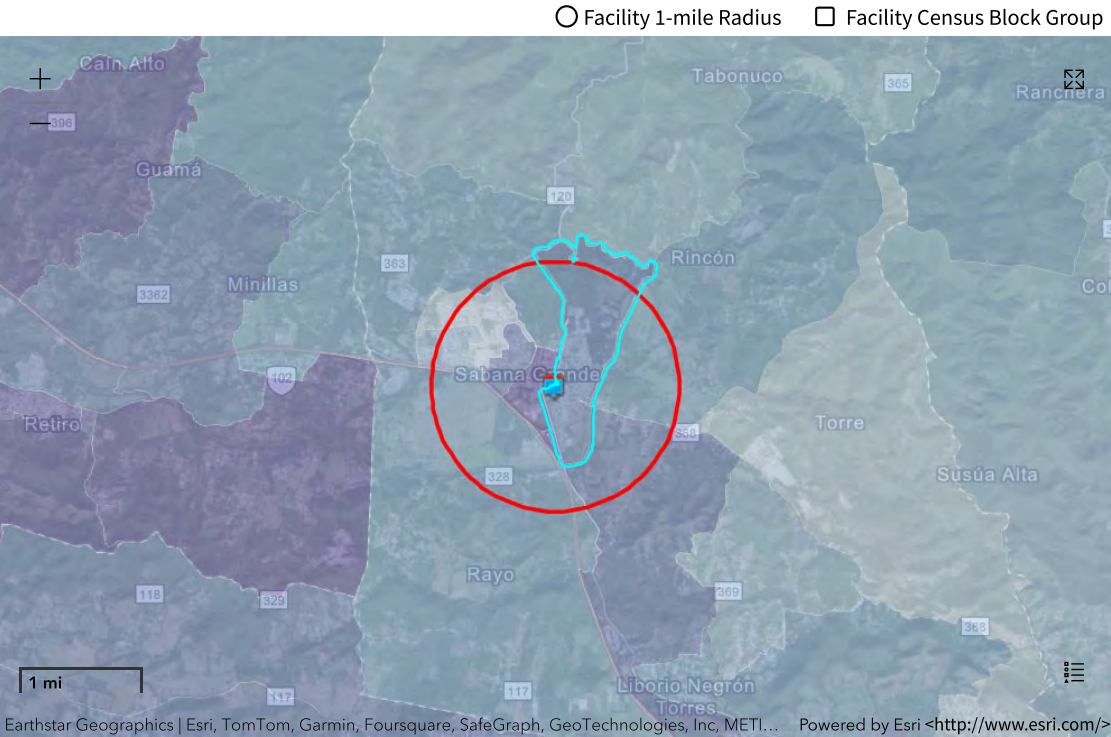
Index Type ☐ Environmental Justice ☒ Supplemental

Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 721219606001	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	0	--
Ozone	0	--
Diesel Particulate Matter	5	6
Air Toxics Cancer Risk	35	38
Air Toxics Respiratory Hazard Index	35	40
Toxic Releases to Air	76	87 ⓘ
Traffic Proximity	97 ⓘ	99 ⓘ
Lead Paint	83 ⓘ	97 ⓘ
Risk Management Plan (RMP) Facility Proximity	45	65
Hazardous Waste Proximity	98 ⓘ	99 ⓘ
Superfund Proximity	99 ⓘ	99 ⓘ
Underground Storage Tanks (UST)	95 ⓘ	99 ⓘ
Wastewater Discharge	95 ⓘ	99 ⓘ



## 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 this methodology, see the DFR Data Dictionary <<https://epa.gov/help/reports/dfr-data-dictionary#demographic>>.

General Statistics (U.S. Census)	
Total Persons	8,466
Population Density	2,655/sq.mi.
Housing Units in Area	3,774

General Statistics (ACS (American Community Survey))	
Total Persons	8,661
Percent People of Color	100%
Households in Area	2,622
Households on Public Assistance	186
Persons With Low Income	6,247
Percent With Low Income	72%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.07706
Center Longitude	-66.95884
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than \$15,000	1,035 (39.5%)
\$15,000 - \$25,000	474 (18.09%)
\$25,000 - \$50,000	627 (23.93%)
\$50,000 - \$75,000	324 (12.37%)
Greater than \$75,000	160 (6.11%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	565 (7%)
Minors 17 years and younger	2,145 (25%)
Adults 18 years and older	6,321 (75%)
Seniors 65 years and older	1,578 (19%)

Race Breakdown (U.S. Census) - Persons (%)	
White	7,456 (88%)
African-American	428 (5%)
Hispanic-Origin	8,425 (100%)
Asian/Pacific Islander	8 (0%)
American Indian	46 (1%)
Other/Multiracial	529 (6%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	824 (14.24%)
9th through 12th Grade	399 (6.9%)
High School Diploma	1,856 (32.08%)
Some College/2-year	529 (9.14%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,541 (26.63%)

## **Appendix D**

### **Endangered Species**



## Self-Certification

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

### Endangered Species Act Certification

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

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

Puerto Rico Department of Housing (PRDOH) certifies the following project, **Coliseo Angel Mercado(PR-CRP-000745)**, consisting of the demolition of the existing structure except the steel frame and construction of the new Municipal Coliseum will be built in this structure. It will have capacity for six hundred seats, dressing rooms for both teams, an area for referees, radio transmission booth, and a first aid medical services area. It will have an area where a boxing ring that can also be used as a stage for community events. It will have an outdoor open space to offer aerobic and Zumba classes. The upper floor will be used for Table Tennis. It will have a storage area for visitors and a parking area. The project located at State Road PR-121, Ave. Quilichini, Sabana Grande, PR 00637, coordinates 18.072633, -66.959490; complies with:

Check	Project Criteria
<input type="checkbox"/>	1. Street resurfacing.
<input type="checkbox"/>	2. Construction of gutters and sidewalks along existing roads.
<input type="checkbox"/>	3. Reconstruction or emergency repairs of existing buildings, facilities, and homes.
<input type="checkbox"/>	4. Rehabilitation of existing occupied single-family homes, and buildings; provided that equipment storage or staging areas are not located on vacant property harboring a wetland and/or forested vegetation and that the lighting associated to the new facilities is not visible directly or indirectly from a beach.

<input checked="" type="checkbox"/>	5. Demolition of dilapidated single-family homes or buildings; provided that the demolition debris is disposed in certified receiving facilities; equipment storage or staging areas are not located on vacant property harboring a wetland and/or forested vegetation.
<input checked="" type="checkbox"/>	6. Rebuilding of demolished single-family homes or buildings, provided that the new construction is within the existing footprint of the previous structure and/or within pre-existing grassed or paved areas, and that the lighting associated to the new facilities are not visible directly or indirectly from a beach.
<input type="checkbox"/>	7. Activities within existing Right of Ways (ROWs) of roads, bridges, and highways, when limited to actions that do not involve cutting native vegetation or mayor earth moving; and are not located within, or adjacent to, drainages, wetlands, or aquatic systems. These activities include the installation of potable water and sanitary pipelines.
<input type="checkbox"/>	8. Improvements to existing recreational facilities, including the installation of roofs to existing basketball courts, provided that the lighting associated to the facilities are not visible directly or indirectly from the beach.
<input type="checkbox"/>	9. Construction of electric underground systems in existing towns and communities, provided that the property is not a wetland area and the lighting associated to the facilities are not visible directly or indirectly from the beach.
<input type="checkbox"/>	10. Construction of facilities on vacant properties covered with grasses in urban areas, provided that the lighting associated to the facilities are not visible directly or indirectly from the beach.
<input type="checkbox"/>	11. Construction of houses, buildings or acquiring lands in urban areas covered by grass for relocation of low-income families and/or facilities that have been affected by weather conditions.



Ángel G. López-Guzmán  
Deputy Director  
Permits and Environmental Compliance Division

Office of Disaster Recovery

**Address:** P.O. Box 21365 San Juan, PR 00928

**Telephone and Ext:** 787-274-2527 ext. 4320

**Email:** [environmentcdbq@vivienda.pr.gov](mailto:environmentcdbq@vivienda.pr.gov)

Feb. 7, 2024

Date



## **Attachment 1**

Location Map

Critical Habitat Map

Wetlands Map

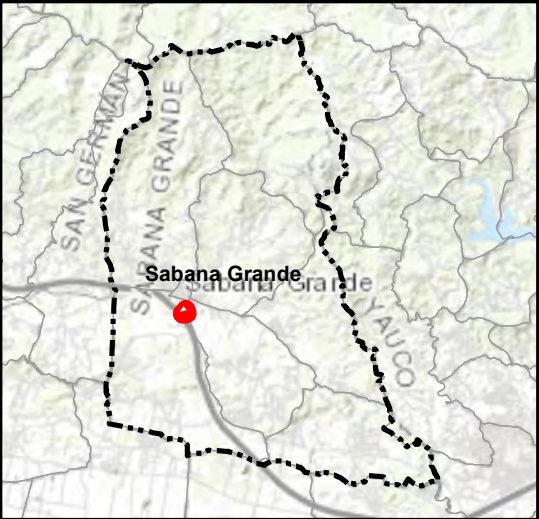




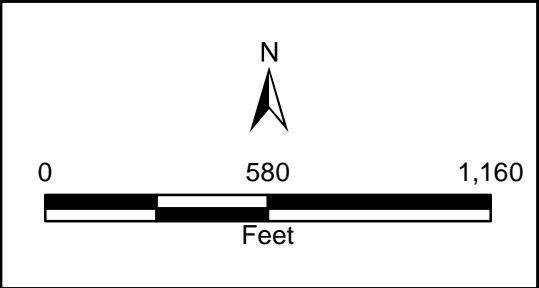
Legend

- 18.072633, -66.959490
- Project Area

PUERTO RICO



**Project Location**  
**Coliseo Ángel Mercado, Sabana Grande**  
Applicant ID: PR-CRP-000745  
Project Coordinates:  
Address: Ave. Quilichini  
Sabana Grande, PR 00627





Source: Source: CRIM 2014  
(<https://catastro.crimpr.net/cdprpc/>).  
ESRI 2023.

Author: Genevieve Kaiser

Date: 5/6/2024

File Path: C:\projects\PR-CRP-000745 - Project Location.mxd





U.S. Fish and Wildlife Service

# National Wetlands Inventory

PR-CRP-000745 Coliseo Angel Mercado



December 28, 2023

## Wetlands

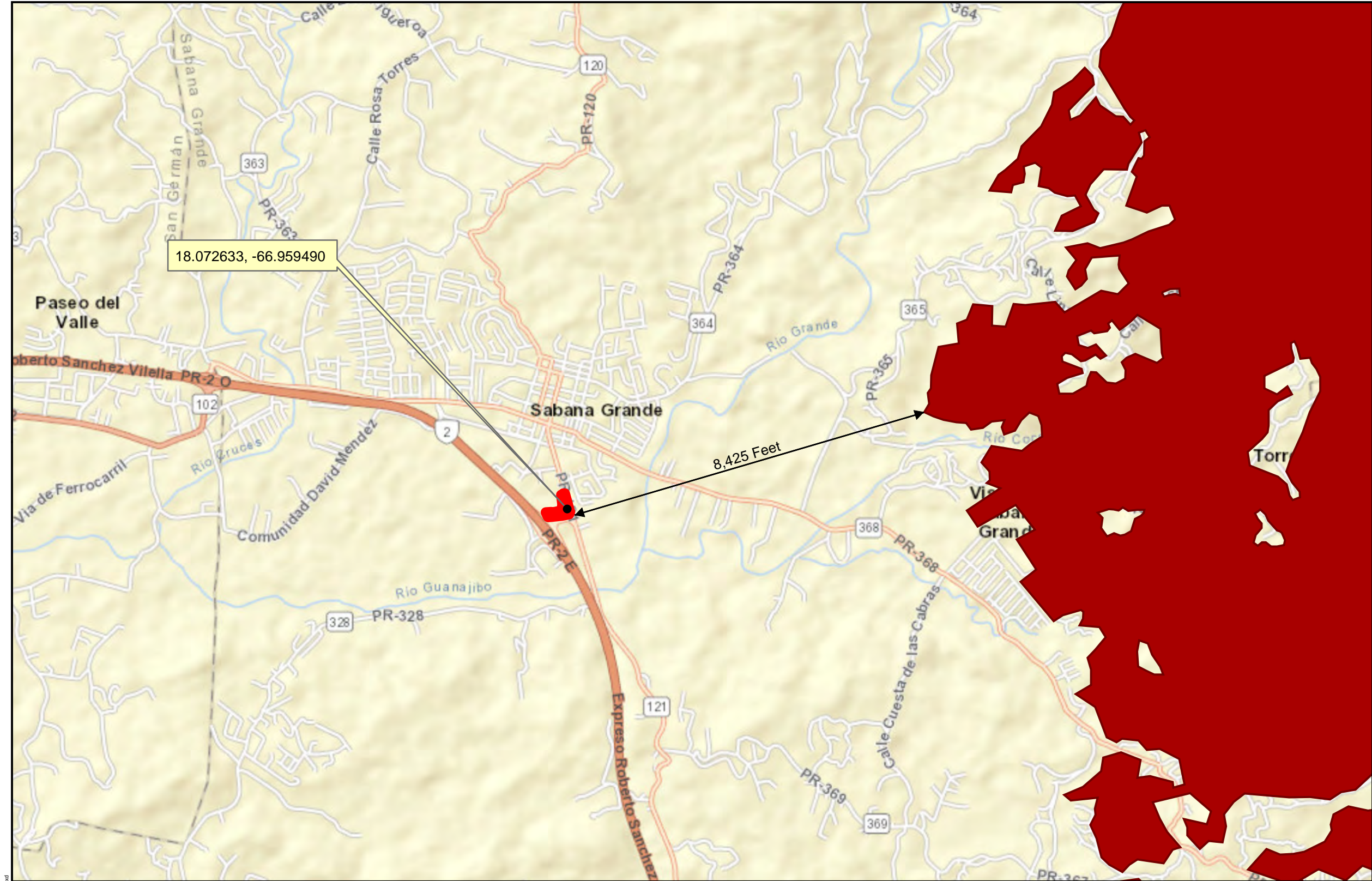
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

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





**Legend**

- 18.072633, -66.959490
- Project Area
- Critical Habitat - Polygon Features - Final
- Critical Habitat - Linear Features - Final
- Critical Habitat - Polygon Features - Proposed
- Critical Habitat - Linear Features - Proposed

**PUERTO RICO**

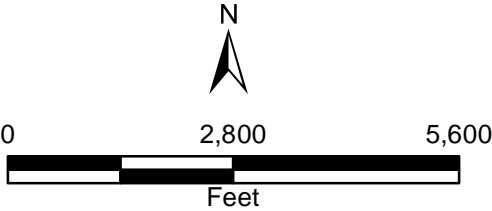


Source: CRIM 2014  
(<https://catastro.crimpr.net/cdprpc/>). U.S.  
Fish and Wildlife Service 2022 ([https://  
services.arcgis.com/  
QVENGd4Pbd4LUkLV/arcgis/rest/  
services/USFWS\\_Critical\\_Habitat/  
FeatureServer](https://services.arcgis.com/QVENGd4Pbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/FeatureServer)). ESRI 2022.

Author: Genevieve Kaiser Date: 5/6/2024

**Critical Habitat for Threatened & Endangered Species [USFWS] Coliseo  
Ángel Mercado, Sabana Grande**

**Applicant ID:** PR-CRP-000745  
**Project Coordinates:** 18.072633, -66.959490  
**Address:** Ave. Quilichini  
Sabana Grande, PR 00627



## **Attachment 2**

### IPaC Report



# IPaC resource list

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

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

## Location

Sabana Grande County, Puerto Rico



## Local office

Caribbean Ecological Services Field Office

☎ (787) 834-1600

📅 (787) 851-7440

✉ [CARIBBEAN\\_ES@FWS.GOV](mailto:CARIBBEAN_ES@FWS.GOV)

MAILING ADDRESS

Post Office Box 491

Boqueron, PR 00622-0491

PHYSICAL ADDRESS

Office Park I

State Road #2 Km 156.5, Suite 303}

Mayaguez, PR 00680

NOT FOR CONSULTATION

# Endangered species

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

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

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

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

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

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

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

2. [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.

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

## Reptiles

NAME	STATUS
<b>Puerto Rican Boa</b> <i>Chilabothrus inornatus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6628">https://ecos.fws.gov/ecp/species/6628</a>	Endangered

## Critical habitats

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

There are no critical habitats at this location.

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

## Bald & Golden Eagles

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

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>



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

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

The potential for eagle presence is derived from data provided by the [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). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

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

The Migratory Bird Resource List is comprised of 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 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. Please contact your local Fish and Wildlife Service Field Office if you have questions.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

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.

---

1. The [Migratory Birds Treaty Act](#) of 1918.

## 2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

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

The [data](#) in this location indicates there are no migratory [birds of conservation concern](#) expected to occur in this area.

There may be migratory birds in your project area, but we don't have any survey data available to provide further direction. For additional information, please refer to the links above for recommendations to minimize impacts to migratory birds or contact your local FWS office.

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

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

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

The Migratory Bird Resource List is comprised of 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 to 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.

## Facilities

### National Wildlife Refuge lands

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 at this location.



# Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

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](#).

This location did not intersect any wetlands mapped by NWI.

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

### Data limitations

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

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

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

### Data exclusions

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

**Data precautions**

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

NOT FOR CONSULTATION

## **Attachment 3**

### Conservation Measures



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

### Conservation Measures for the Puerto Rican boa (*Chilabothrus inornatus*)

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

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





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

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

#### Conservation Measures:

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

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

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

- José Cruz-Burgos, Endangered Species Coordinator
  - Email: [jose\\_cruz-burgos@fws.gov](mailto:jose_cruz-burgos@fws.gov)
  - Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
  - Email: [jan\\_zegarra@fws.gov](mailto:jan_zegarra@fws.gov)
  - Office phone (786) 933-1451

# **Appendix E**

## **Floodplain**

## **Management**

**EXECUTIVE ORDER 11988 – FLOODPLAIN MANAGEMENT EIGHT-STEP PROCESS**  
**U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT**  
**COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RELIEF (CDBG-DR)**  
**PROGRAM**

**FLOODPLAIN MANAGEMENT 8-STEP DECISION-MAKING PROCESS**

Project: "Coliseo Ángel Mercado", Municipality of Sabana Grande, Puerto Rico

Project No. PR-CRP-000866, Grant No. B-18-DM-72-0001, B-18-DP-72-0001

Decision Process for Executive Order 11988 as Provided by 24 CFR §55.20

**Step 1: *Determine whether the action is located in a Floodplain or Wetland.***

The proposed project, PR-CRP-000866, is located at PR-121 Road, Quilichini Avenue, Sabana Grande, PR 00637; coordinates 18.072633, -66.959490. The proposed activity is situated in in a combined flood zone X and zone A with dimensions of 0.26 acres. The objective of the project consists in the demolition of the existing structure except the steel frame. The new Municipal Coliseum will be built in this structure. It will have capacity for six hundred seats, dressing rooms for both teams, an area for referees, radio transmission booth, and a first aid medical service area. Also, it will have an area with a boxing ring, that can also be used as a stage for events, such as school graduations and will have an outdoor open space to offer aerobic and Zumba classes. The upper floor will be used for table tennis. Finally, it will have a storage area for visitors and a parking area. There will not be acquisition of private land and no new construction on previously undisturbed areas addressed by this notice.

The floodplains in the project area can be found at Flood Insurance Rate Map (FIRM) 72000C1580J, revised on November 18, 2009, as indicated on the FEMA Flood Map Service Center at <https://msc.fema.gov/portal/home>.

The project is not located directly adjacent to an estuarine wetland. The wetland in the project area can be found at National Wetlands Inventory at <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>.

Refer to Attachment 1 for FIRMette, ABFE Map and Wetland Map.

This analysis will consider impacts to the floodplain along with concerns for loss of life or property; if applicable.



***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" newspaper of Puerto Rico on September 1<sup>st</sup>, 2023. The notice targeted local residents, including those in the floodplain. The notice was also sent to interested Federal, and State agencies to be interested in such notices. The required fifteen (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, total number of floodplain acres involved, and the responsible entity contact for information as well as a website and the location and hours of the office at which a full description of the proposed action can be viewed. No comments were received. No opposition to the proposed project was expressed by the commentators. Attachment 2 includes copy of the public notice.

***Step 3: Identify and evaluate practicable alternatives.***

The Municipality of Sabana Grande have considered the following alternatives:  
Alternative 1: Locate the Project Within the Floodplain. – The proposed action is according to zoning. Besides, the proposed project will not exceed the existing developed footprint and will maintain the present use of the facility. The proponent considers that the project most likely will not have a significant impact on the actual runoff water behavior during weather events.

Alternative 2: Locate the Project Outside of the Floodplain. - The Municipality of Sabana Grande did not identify an alternative site to develop the proposed project, because the main purpose of the project is to provide sport and recreational alternatives to residents of this community.

Alternative 3: No action taken. - The proposed project will not be developed, and the facility will not be enhanced.

***Step 4: Identify Potential Direct and Indirect Impacts of Associated with Floodplain Development.***

The Municipality of Sabana Grande selected Alternative 1 because the needed traffic and sidewalk improvements. The proposed project will also provide recreational alternatives to low- and moderate-income communities surrounding the area. Alternative 1 will have no impact to the floodplain. The city of Sabana Grande is a member of the National Flood Insurance Program and structures located in the flood zone must comply with the PR flood regulations. The design and installation of a storm water management system will also minimize potential damage to the property as a result of the flooding. No wetlands will be affected.

Construction debris will be collected and disposed at a certified dump site or other authorized facility to manage wastes. Project activities will not impact wetlands. The proposed project will be connected to the existing infrastructure systems, minimize adverse impacts on the environment and will help preserve the present functions and values like water quality, erosion control and flora & fauna habitat in the facility.

### **Step 5: Mitigate Adverse Impacts**

It is the Municipality of Sabana Grande determination that there is no practicable alternative for locating the project outside the flood zone.

The highest priority of this review is to prevent the loss of life. No loss of life will be generated as part of the proposed actions. On the contrary, the proposed works would not only generate a positive impact to the actual floodplain in benefit of the community and the people's life.

In order to preserve property, flood insurance will also be acquired and maintained in order to mitigate flood damage.

The site design chosen as an alternative 1 at Step 3 reduced floodplain impacts and prevented new construction from occurring in the floodplain considering provisions for draining. The construction will have minimal effects on water resources. Impacts to the floodplain will also be limited due to construction occurring within the previously developed site.

### **Step 6: Re-Evaluate Alternatives**

It is the Municipality of Sabana Grande determination that there is no practicable alternative for locating the project outside the flood zone. This is due to:

- 1) The need to provide recreational and sport activities within the community.
- 2) Procure to not displace residents from their community.
- 3) The ability to mitigate and minimize impacts on human health, public property, and floodplain values.
- 4) The People of Puerto Rico and the Municipality of Sabana Grande are the owners of the proposed project site. No additional cost due to land acquisition will be incurred upon nor will ownership issues needed to be solved.
- 5) The proposed project, as designed, will have minimal adverse impacts on the floodplain functions and values.
- 6) The proposed project will improve existing site's conditions, and infrastructure.

7) The proposed project will enhance current recreational and outdoor sports options for the people of Sabana Grande.

8) The proposed project will help to prevent further deterioration of the site and to improve traffic safety.

9) The proposed site is expected to improve the accessibility of visitors to the City of Sabana Grande.

**Step 7: *Determination of No Practicable Alternative***

PRDOH determined that there is no practicable alternative for locating the project in the flood zone. The notice will explain the reasons why the project must be located in the floodplain, the alternatives considered at Steps 3 and 6, and describe impacts and mitigation measures at Steps 4 and 5 to be taken to minimize adverse impacts and preserve natural and beneficial floodplain values. The draft Final Notice is included in Attachment 3.

**Step 8: *Implement the Proposed Action***

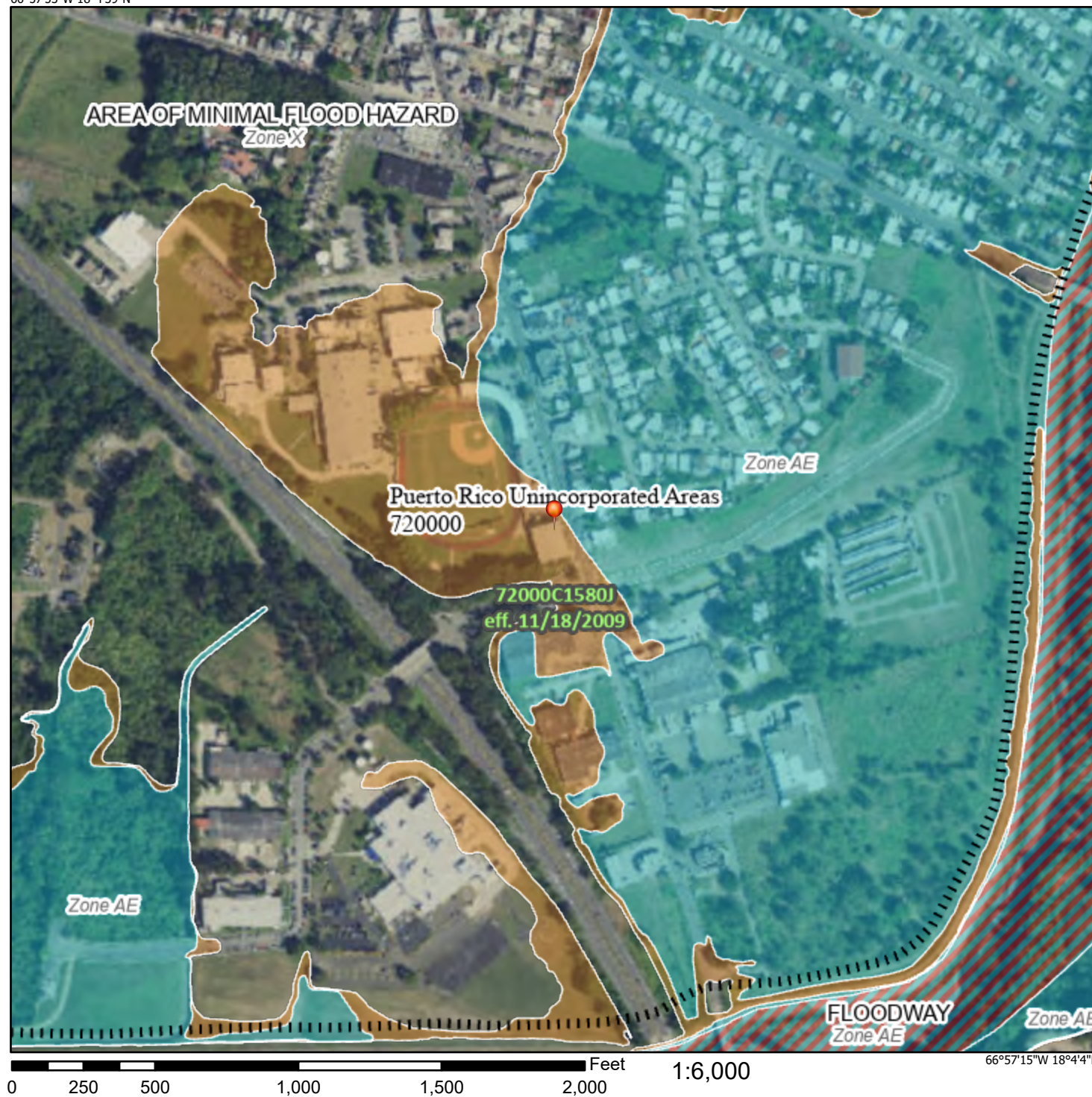
The Municipality of Sabana Grande will assure that this project as described above, is appropriately executed and necessary language will be included in all agreements with participating parties. The Municipality of Sabana Grande will also take an active role in monitoring the construction process to ensure no unnecessary impacts occur nor unnecessary risks are taken. The flood insurance requirement for the life any insurable property will maintained by the Municipality of Sabana Grande.

## **Attachment 1**

### Maps

**Figure 5.**  
**National Flood Hazard Layer FIRMette**

66°57'53"W 18°4'39"N



## Legend

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

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



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **3/31/2022 at 5:59 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

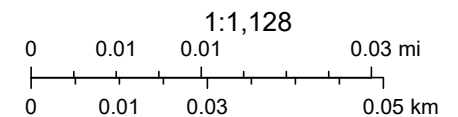


# Mapa Niveles de Inundación Base Recomendados

Coliseo Ángel Mercado, Sabana Grande  
Applicant ID: PR-CRP-000745  
Project Coordinates: 18.072633, -66.959490  
Address: Ave. Quilichini  
Sabana Grande, PR 00627



6/19/2023, 6:29:12 PM



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, PRPB; FEMA

## **Attachment 2**

Step 2 Early Notice and Public Review of a  
Proposed  
Activity in the 100-Year Floodplain



## aviso público

### Aviso Preliminar y Revisión Pública de una Actividad Propuesta en una Llanura Aluvial de 100 años

Coliseo Ángel Mercado  
PR-CRP-000745

Para: Todas las partes interesadas, grupos e individuos

Este aviso notifica que el Departamento de la Vivienda de Puerto Rico (Vivienda, en adelante) ha determinado que la siguiente acción propuesta bajo el Programa de Revitalización de la Ciudad, Subvención en Bloque para el Desarrollo Comunitario – Recuperación ante Desastres (CDBG-DR), número de subvención B-17-DM-72-0001 y B-18-DP-72-0001, está ubicado en una llanura de inundación de 100 años. Vivienda está evaluando e identificando alternativas viables para realizar la acción propuesta y el impacto potencial en la llanura de inundación debido a la acción propuesta, según establecido por la Orden Ejecutiva 11988, de acuerdo con las regulaciones de HUD en 24 CFR 55.20 Subparte C – Procedimientos para tomar determinaciones sobre el manejo de llanuras aluviales y la protección de humedales. El proyecto propuesto, **PR-CRP-000745**, se encuentra dentro de un municipio que sufrió daños debido a los huracanes Irma y María, y está localizado en la carretera PR-121, Ave. Quilichini, Sabana Grande, PR 00637; coordenadas 18.072633, -66.959490. La actividad propuesta está situada en una llanura aluvial combinada, zona X y zona A con una cabida de 0.26 acres. El área del proyecto se encuentra en el Flood Insurance Rate Map (FIRM) 72000C1580J, revisado el 18 de noviembre de 2009, según indicado en la página del Centro de Servicios de Mapas de Inundaciones en <https://msc.fema.gov/portal/home>.

El objetivo del proyecto consiste en la demolición de la estructura existente excepto el marco de acero. El nuevo Coliseo Municipal se construirá en esta estructura. Tendrá capacidad para seiscientos asientos, vestuarios para ambos equipos, un área para árbitros, cabina de transmisión de radio y un área de servicios médicos de primeros auxilios. Además, contará con un área con un cuadrilátero, que también se utilizará como escenario para eventos, como graduaciones escolares y tendrá un espacio abierto al aire libre para ofrecer clases de ejercicios aeróbicos y zumba. El piso superior se utilizará para tenis de mesa. Finalmente, contará con un área de almacenaje para visitantes y un área de estacionamiento. No habrá nuevas construcciones en áreas no perturbadas.

Este aviso tiene tres propósitos principales. En primer lugar, las personas que puedan verse afectadas por las actividades en las llanuras aluviales y las que tengan interés en la protección del ambiente natural deben tener la oportunidad de expresar sus inquietudes y proveer información sobre estas áreas. Se exhorta a la comunidad a ofrecer ubicaciones alternas fuera de las llanuras aluviales, métodos alternos para cumplir el mismo propósito del proyecto y métodos para minimizar y mitigar los impactos. Segundo, un programa adecuado de avisos públicos puede ser una herramienta importante para la educación pública. La divulgación de información sobre las llanuras aluviales 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 determine participar en acciones ubicadas en las llanuras aluviales, debe informárselo a quienes puedan ser expuestos a un riesgo mayor o similar al presente.

Vivienda considerará todos los comentarios recibidos o antes de Septiembre 16, 2023. Pueden enviar los comentarios de forma impresa a la siguiente dirección: Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918-8461, Atención: Ivelisse Lorenzo-Torres, Especialista en Permisos y Cumplimiento Ambiental. Una descripción completa del proyecto está disponible al público 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. El número para obtener información es (787)274-2527 ext. 6654. Como alternativa, también pueden enviar los comentarios a Vivienda por medio electrónico a [environmentcdbg@vivienda.pr.gov](mailto:environmentcdbg@vivienda.pr.gov).

Fecha: 1 de septiembre de 2023



DEPARTAMENTO DE LA  
VIVIENDA



## public notice

### Early Notice and Public Review of a Proposed Activity in the 100-Year Floodplain

Coliseum Ángel Mercado  
PR-CRP-000745

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 PRDOH Community Development Block Grant – Disaster Recovery (CDBG-DR), City Revitalization Program, Grant number B-17-DM-72-0001 & B-18-DP-72-0001, is located in the 100-year floodplain. PRDOH will be identifying and evaluating practicable alternatives to locate the action in the floodplain and the potential impacts on the floodplain from the proposed action, as required by the Executive Order 11988, 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, **PR-CRP-000745**, is within a municipality with structures damaged by Hurricanes Irma and María and it is located at PR-121 Road, Quilichini Avenue, Sabana Grande, PR 00637; coordinates 18.072633, -66.959490. The proposed activity is situated in a combined flood zone X and zone A with dimensions of 0.26 acres. The floodplains in the project area can be found at Flood Insurance Rate Map (FIRM) 72000C1580J, revised on November 18, 2009, as indicated on the FEMA Flood Map Service Center at <https://msc.fema.gov/portal/home>.

The objective of the project consists in the demolition of the existing structure except the steel frame. The new Municipal Coliseum will be built in this structure. It will have capacity for six hundred seats, dressing rooms for both teams, an area for referees, radio transmission booth, and a first aid medical service area. Also, it will have an area with a boxing ring, that can also be used as a stage for events, such as school graduations and will have an outdoor open space to offer aerobic and Zumba classes. The upper floor will be used for table tennis. Finally, it will have a storage area for visitors and a parking area.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains 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 floodplains, alternative methods to serve the same project purpose, and methods to minimize and mitigate impacts. Second, an adequate public notice program can be an important public education tool. The dissemination of information and request for public comment about floodplains 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 floodplains, it must inform those who may be put at greater or continued risk.

PRDOH will consider all comments received on or before September 16, 2023. Written comments can be sent to the following address: Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Building, Río Piedras, PR 00918-8461, Attention: Ivelisse Lorenzo-Torres, Permits and Environmental Compliance Specialist. A complete description of the project is available to the public for review from 8:30 AM to 4:00 PM at the Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Building, Río Piedras, PR 00918. The number to get information is (787)274-2527 ext. 6654. In the alternative, comments may also be sent to PRDOH by email at [environmentcdbg@vivienda.pr.gov](mailto:environmentcdbg@vivienda.pr.gov).

Date: September 1, 2023



DEPARTMENT OF  
HOUSING



presente edicto, podrán solicitar comparecer al Tribunal a alegar lo que en derecho proceda. Deberá presentar su alegación responsive a través del Sistema Unificado de manejo y Administración de Casos (SUMAC), el cual puede acceder utilizando la siguiente dirección electrónica: <https://tribunalelectronico.ramajudicial.pr>, salvo que se represente por derecho propio, en cuyo caso deberá presentar su alegación responsive a la Secretaría del Tribunal, notificando copia de la misma al abogado de la parte Peticionaria y al LCDO JOSE V. DIAZ TEJERA, al P.O. BOX 423, TRUJILLO ALTO PR 00977; y su email es diaz.tejera.lawfirm@yahoo.com. 787-755-3440. Se le apercibe que, de no contestar la PETICIÓN dentro del término aquí estipulado, se le anotará la rebeldía y se dictará sentencia sin más citarle ni oírle. Expedido, bajo mi firma y sello del Tribunal de Primera Instancia Sala de Bayamón, Puerto Rico, hoy 14 de julio de 2023 LCda. Karelly Zayas Robles Secretaria Regional Secretario(a) General Por Maricruz Aponte Alicia Secretario(a) Auxiliar

MR-18536

### EDICTO – AVISO A ACREEDORES DE HUMBERTO JORGE UGOBONO ALÉ SOBRE FORMACIÓN DE INVENTARIO EN SEDE NOTARIAL

ESTADOS UNIDOS DE AMÉRICA) EL PRESIDENTE DE LOS ESTADOS UNIDOS S. SS: EL ESTADO LIBRE ASOCIADO DE PUERTO RICO) ACREEDORES DEL CAUSANTE HUMBERTO JORGE UGOBONO ALÉ POR LA PRESENTE, se le notifica que se ha iniciado la preparación del inventario en sede notarial del causal relicto del causante Humberto Jorge Ugobono Alé. Se le requiere que toda reclamación, junta a sus correspondientes comprobantes bajo juramento, sea presentada y dirigida a los peticionarios por conducto de su abogado a la siguiente dirección: EL ESTADO LIBRE ASOCIADO DE PUERTO RICO) ACREEDORES DEL CAUSANTE HUMBERTO JORGE UGOBONO ALÉ, al P.O. BOX 423, TRUJILLO ALTO PR 00977; y su email es diaz.tejera.lawfirm@yahoo.com. 787-755-3440. Se le apercibe que, de no contestar la PETICIÓN dentro del término aquí estipulado, se le anotará la rebeldía y se dictará sentencia sin más citarle ni oírle. Expedido, bajo mi firma y sello del Tribunal de Primera Instancia Sala de Bayamón, Puerto Rico, hoy 17 de julio de 2023 LCda. LAURA I. SANTA SANCHEZ Secretario(a) General Por Nelida Ocasio Ortega Secretario(a) Auxiliar del Tribunal

SS-18488 SUMMONS BY PUBLICATION, CARE AND PROTECTION, TERMINATION OF PARENTAL RIGHTS, et al. Number: 22CP0165FI, Trial Court of Massachusetts, Juvenile Court Department, Commonwealth of Massachusetts, Worcester County Juvenile Court, 100 Elm Street, Fitchburg, MA 01420. 978-345-7620.

### TO: Carlos Javier Mendez Rodriguez

A Petition has been presented to this court by DCF (Leominster), seeking, as to the following child, Yafelishka Y. Mendez Garcia, that said child be found in need of care and protection and committed to the Department of Children and Families. The court may dispense the rights of the person(s) named herein to receive notice of or to consent to any legal proceeding affecting the adoption, custody, or guardianship of any other disposition of the child named herein, if it finds that the child is in need of care and protection and that the best interests of the child would be served by said disposition. You are hereby ORDERED to appear in this court, at the court address set forth above, on the following date and time: 10/11/2023 at 08:30 AM Pre Trial Conference (CRI/CV) You may bring an attorney with you. If you have a right to an attorney and if the court determines that you are indigent, the court will appoint an attorney to represent you. If you fail to appear, the court may proceed on that date and any date thereafter to a trial on the merits and adjudication of this matter. For further information call the Office of the Clerk-Magistrate at 978-345-7620. WITNESS: Hon. Mary Beth Keating, FIRST JUSTICE, DATE ISSUED: 08/23/2023, Brendan J. Moran, Clerk-Magistrate

MR-18535 ESTADO LIBRE ASOCIADO DE PUERTO RICO TRIBUNAL DE PRIMERA INSTANCIA SALA SUPERIOR DE BAYAMON

### MIGUEL ANGEL

BAEZ BAEZ

PETICIONARIA

VS.

EXPARTE

CIVIL NUM. 682023CV00393 SALA 605 SOBRE EXPEDIENTE DE DOMINIO EMPLAZAMIENTO POR EDICTO ESTADOS UNIDOS DE AMERICA) EL PRESIDENTE DE LOS ESTADOS UNIDOS DE AMERICA) EL ESTADO LIBRE ASOCIADO DE PUERTO RICO) A: AVISO A CUALQUIER PERSONA CON INTERES, O PERSONAS DESCONOCIDAS, JANE DOE Y JANE DOE Y RICHARD ROE. Por la presente se le emplaza y notifica que la parte peticionaria MIGUEL ANGEL BAEZ BAEZ, ha presentado una petición para que se declare su favor el dominio de la siguiente finca: RUSTICA: SOLAR NUMERO SIETE (7) Predio de terreno situado en el Barrio Mamey del término Municipal de Guaynabo, Puerto Rico, con una cabida de trescientos cuarenta y ocho punto siete siete tres cuatros metros cuadrados (348.7734 m.c.) equivalentes a cero punto cero ocho nueve siete cuerdas (0.0897 CDAS.), equivalentes a dos hectáreas, catorce áreas y veintinueve centiáreas. En colindancias: por el NORTE, con Calle Municipal Flamboyan, por el SUR con Michelle García Rosado y Yomaris Baez; por el ESTE, con el Solar Número Ocho (8); y por el OESTE, con el Solar Número Seis (6). No consta inscrita en el Registro de la Propiedad, Catastro Número 171-001-940-72-000 Este edicto se publicará en tres (3) ocasiones dentro del término de veinte (20) días en un periódico de circulación general en Puerto Rico. En el plazo y término de veinte (20) días a partir de la última publicación del presente edicto, podrán solicitar comparecer al Tribunal a alegar lo que en derecho proceda. Deberá presentar su alegación responsive a través del Sistema Unificado de manejo y Administración de Casos (SUMAC), el cual puede acceder utilizando la siguiente dirección electrónica: <https://tribunalelectronico.ramajudicial.pr>, salvo que se represente por derecho propio, en cuyo caso deberá presentar su alegación responsive a la Secretaría del Tribunal, notificando copia de la misma al abogado de la parte Peticionaria y al LCDO JOSE V. DIAZ TEJERA, al P.O. BOX 423, TRUJILLO ALTO PR 00977; y su email es diaz.tejera.lawfirm@yahoo.com. 787-755-3440. Se le apercibe que, de no contestar la PETICIÓN dentro del término aquí estipulado, se le anotará la rebeldía y se dictará sentencia sin más citarle ni oírle. Expedido, bajo mi firma y sello del Tribunal de Primera Instancia Sala de Bayamón, Puerto Rico, hoy 17 de julio de 2023 LCda. LAURA I. SANTA SANCHEZ Secretario(a) General Por Nelida Ocasio Ortega Secretario(a) Auxiliar del Tribunal

MR-18884 ESTADO LIBRE ASOCIADO DE PUERTO RICO TRIBUNAL DE PRIMERA INSTANCIA SALA DE BAYAMON

### FIRSTBANK

PURTO RICO

Parte Demandante

VS.

### SUCESIÓN DE

EVELYN MARTINEZ

DIAZ, COMPUESTA

POR HECTOR

MANUEL MARTINEZ

MALDONADO T/C/C

HECTOR MANUEL

MARTINEZ T/C/C

HECTOR MARTINEZ

MALDONADO Y

EFFRAIN MARRERO

VIDAL; ALEXANDRO

RODRIGUEZ RAMOS

Parte Demandada

CIVIL NUM. TA2022CV00656 SOBRE: COBRO DE DINERO Y EJECUCIÓN DE HIPOTECA. EDICTO DE SUBASTA (ESTADOS UNIDOS DE AMERICA) EL ESTADO LIBRE

## **Attachment 3**

Step 7 Final Notice and Public Explanation of a  
Proposed Activity in a 100-Year Floodplain and  
Wetland



30 días contados a partir de la publicación por edicto de esta notificación, dirijo a usted esta notificación que se considerará hecha en la fecha de la publicación de este edicto. Copia de esta notificación ha sido archivada en los autos de este caso, con fecha de el 01 de DICIEMBRE de 2023 En SAN JUAN, Puerto Rico, el 01 de DICIEMBRE de 2023 GRISELDA RODRIGUEZ COLLADO Nombre del (de la) Secretario(a) IVERONICA AGOSTO NUÑEZ Nombre y Firma del (de la) Secretario(a) Auxiliar del Tribunal

MR-19547 ESTADO LIBRE ASOCIADO DE PUERTO RICO TRIBUNAL DE PRIMERA INSTANCIA SALA MUNICIPAL DE BAYAMON

**PLANADAS LLC.**  
Demandante  
VS.

Llama a Clasificados de  
**EL VOCERO**  
**787-724-1485**

## THUNDER LENDOR MERCADO, ALEXANDRA SOLIS MARTINEZ, LA SOCIEDAD LEGAL DE GANANCIAS COMPUESTA POR ELLOS Y/O CUALQUIER OCUPANTE DESCONOCIDO

CIVIL NUM. BY2023CV06150 SOBRE: DESAHUCIO EN PRECARIO Y COBRO DE DINERO EMPLAZAMIENTO POR EDICTO ESTADOS UNIDOS DE AMERICA) EL PRESIDENTE DE LOS ESTADOS UNIDOS J. S.S. EL ESTADO LIBRE ASOCIADO DE PUERTO RICO) A: THUNDER LENDOR MERCADO, ALEXANDRA SOLIS MARTINEZ, la sociedad legal de ganancias y cualquier ocupante desconocido. Por la presente se le notifica que la parte demandante de epígrafe ha presentado ante este Honorable Tribunal una demanda sobre Desahucio. Por la presente se le emplaza y re-

quiera para que presente su alegación responsive en el caso de apigarte dentro de los treinta (30) días siguientes a la publicación de este edicto, excluyéndose el día de la publicación. Usted deberá presentar su alegación responsive a través del sistema Unificado de Manejo y Administración de Casos el cual puede acceder utilizando la siguiente dirección electrónica: <https://unired.ramajudicial.pr>, salvo que se represente por derecho propio, en cuyo caso deberá presentar su alegación responsive radicando el original de su contestación ante el Honorable Tribunal de Primera Instancia, Sala de Bayamon y notificando con copia al Lcdo. Erick M. Quintana Acevedo con oficina en la Avenida Betances D-3 Urb. Hermanas Ovília, Bayamon, Puerto Rico, 00960, teléfono (787) 995-1188. En el recurso legal la parte demandante solicita el desahucio de su propiedad la cual ubica en la Calle Pablo Rivera, Apartamento C(3), Barrio Halo Tejas, Bayamon Puerto Rico. Se le apercibe que si dejare de contestar se dicara contra usted sentencia en rebeldía

concediéndose el remedio solicitado en la demanda, sin más citarle ni oírle. Expedido bajo firma y sello de este Tribunal, en Bayamon, Puerto Rico, Hoy 29 de noviembre de 2023. Lcda. Laura I. Santa Sanchez SECRETARIO POR: MARILYN COLON SEC. AUX TRIB I

MR-19635 ESTADO LIBRE ASOCIADO DE PUERTO RICO TRIBUNAL DE PRIMERA INSTANCIA CENTRO JUDICIAL DE SAN JUAN SALA SUPERIOR DE SAN JUAN SALA SUPERIOR DE SESIONES SALON 603

**P & P GETAWAYS, LLC.**  
Demandante

**INES MARIA CRUZ VAZQUEZ Y OTROS**  
Demandado(a)

Caso Num.: SJ2023CV08919 Sobre: COBRO DE DINERO - ORDINARIO OVIDIO E. ZAYAS PEREZ OVIDIO ZAYAS PEREZ@HOTMAIL.COM NOTIFICACION DE SENTENCIA POR EDICTO (Nombre de las partes que se le notifican la sentencia por edicto) A: INES MARIA CRUZ VAZQUEZ, FU-

LANO DE TAL; SUTANO DE TAL EL SECRETARIO(A) que suscribe la notifica a usted que el 01 de DICIEMBRE de 2023, este Tribunal ha dictado Sentencia, Sentencia Parcial o Resolución en este caso, que ha sido debidamente registrada y archivada en autos donde podrá usted enterarse detalladamente de los términos de la misma. Esta notificación se publicará una sola vez en un periódico de circulación general en la Isla de Puerto Rico, dentro de los 10 días siguientes a su notificación. Y, siendo o representando usted una parte en el procedimiento sujeta a los términos de la Sentencia, Sentencia Parcial o Resolución, de la cual puede establecerse recurso de revisión o apelación dentro del término de 30 días contados a partir de la publicación por edicto de esta notificación, dirijo a usted esta notificación que se considerará hecha en la fecha de la publicación de este edicto. Copia de esta notificación ha sido archivada en los autos de este caso, con fecha de 04 de DICIEMBRE de 2023 En SAN JUAN, Puerto Rico, el 04 de DICIEMBRE de 2023 GRISELDA RODRIGUEZ COLLADO

Nombre del (de la) Secretario(a) LUCRECIA PAGAN MORALES Nombre y Firma del (de la) Secretario(a) Auxiliar del Tribunal

MR-19632 ESTADO LIBRE ASOCIADO DE PUERTO RICO TRIBUNAL DE PRIMERA INSTANCIA CENTRO JUDICIAL DE SAN JUAN SALA SUPERIOR DE SAN JUAN SALA SUPERIOR DE SESIONES SALON 505 CIVIL

**INFORMATION SYSTEMS AND NETWORKS CORPORATION**  
Demandante

**FULANO Y MENGANA DE TAL**  
Demandado(a)

Caso Num.: SJ2023CV07635 Sobre: CANCELACION O RESTITUCION DE PAGARE EXTRAORDINARIO GENESIS LORRAINE QUINONES ACEVEDO GQUINONES@VNBLEGAL.COM NOTIFICACION DE SENTENCIA POR EDICTO (Nombre de las partes que se le notifican la sentencia por edicto) A: FU-

LANO DE TAL Y MENGANA DE TAL EL SECRETARIO(A) que suscribe la notifica a usted que el 29 de NOVIEMBRE de 2023, este Tribunal ha dictado Sentencia, Sentencia Parcial o Resolución en este caso, que ha sido debidamente registrada y archivada en autos donde podrá usted enterarse detalladamente de los términos de la misma. Esta notificación se publicará una sola vez en un periódico de circulación general en la Isla de Puerto Rico, dentro de los 10 días siguientes a su notificación. Y, siendo o representando usted una parte en el procedimiento sujeta a los términos de la Sentencia, Sentencia Parcial o Resolución, de la cual puede establecerse recurso de revisión o apelación dentro del término de 30 días contados a partir de la publicación por edicto de esta notificación, dirijo a usted esta notificación que se considerará hecha en la fecha de la publicación de este edicto. Copia de esta notificación ha sido archivada en los autos de este caso, con fecha de 30 de NOVIEMBRE de 2023 En SAN JUAN, Puerto Rico, el 30 de NOVIEMBRE de 2023 GRISELDA RODRIGUEZ COL-

LADO Nombre del (de la) Secretario(a) IVERONICA AGOSTO NUÑEZ Nombre y Firma del (de la) Secretario(a) Auxiliar del Tribunal

LB-2317 ESTADO LIBRE ASOCIADO DE PUERTO RICO TRIBUNAL DE PRIMERA INSTANCIA SALA SUPERIOR DE CAGUAS

**FIRSTBANK PUERTO RICO**  
Demandante

**RAPHAEL RAMSES PEREZ CASTRO; IRMA CASTRO DEYNES**  
Demandados

CIVIL NUM. CG2023CV03639 (705) SOBRE: COBRO DE DINERO Y EJECUCION DE HIPOTECA EMPLAZAMIENTO POR EDICTO ESTADOS UNIDOS DE AMERICA. El Presidente de los Estados Unidos El Estado Libre Asociado de Puerto Rico A: RAPHAEL RAMSES PEREZ CASTRO e IRMA CASTRO DEYNES Urbanización Villa Caribe, Solar

## aviso público

Aviso Final y Explicación Pública de una Actividad Propuesta en un Valle Inundable de 100 Años y 500 Años

Coliseo Ángel Mercado  
PR-CRP-000745

Para: Todas las partes interesadas, grupos e individuos

Este aviso notifica que el Departamento de la Vivienda de Puerto Rico (Vivienda) completó una evaluación según establece la Orden Ejecutiva 11988, de acuerdo con los reglamentos de HUD en 24 CFR 55.20 Subparte C - Procedimientos para Hacer Determinaciones Sobre el Manejo del Valle Inundable y la Protección de Humedales. La actividad está subvencionada con fondos del Programa de Revitalización de la Ciudad, Subvención en Bloque para el Desarrollo Comunitario - Recuperación ante Desastres (CDBG-DR), números de subvención B-77-DM-72-0001 y B-18-DP-72-0001. El proyecto propuesto, **PR-CRP-000745**, está localizado en la carretera PR-121, ave. Quilichini, Sabana Grande, PR 00637, coordenadas 18.072633, -66.959490. El objetivo del proyecto consiste en la demolición de la estructura existente excepto el marco de acero. El nuevo Coliseo Municipal se construirá en esta estructura. Tendrá capacidad para seiscientos asientos, vestuarios para ambos equipos, un área para árbitros, cabina de transmisión de radio y un área de servicios médicos de primeros auxilios. Además, contará con un área con un cuadrilátero, que también se utilizará como escenario para eventos como graduaciones escolares y tendrá un espacio al aire libre para ofrecer clases de ejercicios aeróbicos y zumba. El piso superior se utilizará para tenis de mesa. Finalmente, contará con un área de almacenaje para visitantes y una zona de estacionamiento. La actividad propuesta está situada en un tipo de zona de inundación diversa con una cabida de 0.26 acres. El área del proyecto está parcialmente ubicada en un valle inundable de 100 años, zona de inundación A y ubicado en un valle inundable de 500 años, zona X. El área del proyecto se encuentra en el mapa de niveles de inundación base (ABFE, por sus siglas en inglés), como se indica en el Nivel de Inundación Base Recomendado de FEMA Puerto Rico en Puerto Rico Advisory Base Flood Elevations (ABFE's) | FEMA Region II Hub ([argis.com](https://argis.com)).

Vivienda ha considerado las siguientes alternativas y medidas de mitigación para minimizar los impactos adversos y restaurar y preservar los valores naturales y beneficiosos: (1) ubicar el proyecto dentro del valle inundable de acuerdo con la zonificación, (2) ubicar el proyecto fuera del valle inundable, y (3) no tomar ninguna acción. La alternativa 1 se considera una opción viable ya que no excederá la huella desarrollada existente y mantendrá el uso actual del área. El proponente considera que el proyecto no tendrá un impacto significativo en el comportamiento del agua de escorrentía durante eventos climáticos. Las alternativas (2) y (3) no son factibles ya que la construcción necesaria para reemplazar las instalaciones recreativas y deportivas para la comunidad es específica del sitio. El terreno del proyecto se encuentra dentro del área urbana poblada. Las emisiones fugitivas serán controladas durante la construcción del proyecto. El uso propuesto está en armonía con el área de desarrollo circundante.

Vivienda reevaluó las alternativas para construir en los valles inundables y determinó que no cuenta con alternativas prácticas. La documentación ambiental que evidencia el cumplimiento de los pasos 3 a 6 de la Orden Ejecutiva 11988, está disponible para inspección, revisión y reproducción de parte del público, de ser solicitado, en el horario y lugar indicado en el último párrafo sobre recibo de comentarios de este aviso.

Este aviso tiene tres propósitos principales. Primero, las personas que pueden verse afectadas por actividades en los valles inundables y aquellos que tengan interés en la protección del ambiente natural deben recibir la oportunidad de expresar sus inquietudes y proveer información sobre estas áreas. Segundo, un programa adecuado de avisos públicos puede ser una importante herramienta de educación pública. La divulgación de información y solicitud de comentarios sobre los valles inundables 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 determine participar en acciones ubicadas en los valles inundables, debe informárselo a quienes puedan ser expuestos a un riesgo mayor o similar al presente.

Vivienda considerará todos los comentarios recibidos en o antes del 22 de diciembre de 2023. Pueden enviar los comentarios de forma impresa a la siguiente dirección: Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918-8461. Atención: Ivellisse Lorenzo-Torres, Especialista en Permisos y Cumplimiento Ambiental. Una descripción completa del proyecto está disponible al público 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. El número para obtener información es (787) 274-2527, ext. 4320. Como alternativa, también pueden enviar los comentarios a Vivienda por medio electrónico a [environmentcdobg@vivienda.pr.gov](mailto:environmentcdobg@vivienda.pr.gov).

Fecha: 7 de diciembre de 2023

Lcda. William O. Rodríguez Rodríguez  
Secretario del Departamento de la Vivienda

DEPARTAMENTO DE LA  
**VIVIENDA**

## public notice

Final Notice and Public Explanation of a Proposed Activity in a 100-Year and 500-Year Floodplain

Coliseo Ángel Mercado  
PR-CRP-000745

To All Interested Parties, Groups and Individuals:

This is to give notice that the Puerto Rico Department of Housing (PRDOH) has conducted an evaluation as required by the Executive Order 11988, in accordance with HUD regulations set forth in 24 CFR 55.20 Subpart C - Procedures for Making Determinations on Floodplain Management and Wetlands Protection. The activity is funded under the Community Development Block Grant - Disaster Recovery (CDBG-DR), City Revitalization Program, grant numbers B-77-DM-72-0001 and B-18-DP-72-0001. The proposed project, **PR-CRP-000745**, is located by PR-121 Road, Quilichini Avenue, Sabana Grande, PR 00637, coordinates 18.072633, -66.959490. The objective of the project consists in the demolition of the existing structure except the steel frame. The new Municipal Coliseum will be built in this structure. It will have capacity for six hundred seats, dressing rooms for both teams, an area for referees, radio transmission booth, and a first aid medical service area. Also, it will have an area with a boxing ring, that can also be used as a stage for events, such as school graduations and will have an outdoor open space to offer aerobic and Zumba classes. The upper floor will be used for table tennis. Finally, it will have a storage area for visitors and a parking area. The proposed activity is situated in a diverse flood zone type with total dimensions of 0.26 acres. The project area is partially located in a 100-year floodplain, flood zone A and located in a 500-year floodplain, zone X. The floodplains in the project area can be found at Advisory Base Flood Elevation (ABFE), as indicated on the FEMA Puerto Rico Advisory Base Flood Elevation at Puerto Rico Advisory Base Flood Elevations (ABFE's) | FEMA Region II Hub ([argis.com](https://argis.com)).

PRDOH has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values: (1) locate the project within the floodplain according to zoning, (2) locate the project outside of the floodplain, and (3) take no action. Alternative 1 is considered a viable option since it will not exceed the existing developed footprint and will maintain the present use of the area. The proponent considers that the project will not have a significant impact on the actual runoff water behavior during weather events. Alternatives (2) and (3) are not feasible since the needed construction for replacement of recreational and sport facility for the community is site specific. The project land lies within the populated urban area. Fugitive emissions will be controlled during the construction of the project. The proposed use is in harmony with the surrounding developments area.

PRDOH has reevaluated the alternatives to building in the floodplains and has determined that it has no practicable alternative. Environmental files that document compliance with steps 3 through 6 of 24 Executive Order 11988 are available for public inspection, review and copying upon request at the times and location delineated in the last paragraph of this notice for receipt of comments.

There are three primary purposes for this notice. First, people who may be affected by activities in the floodplains 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. Second, an adequate public notice program can be an important public education tool. The dissemination of information and request for public comment about the floodplains 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 floodplains, it must inform those who may be put at greater or continued risk.

PRDOH will consider all comments received on or before December 22, 2023. Written comments can be sent to the following address: Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918-8461. Attention: Ivellisse Lorenzo-Torres, Permits and Environmental Compliance Specialist. A complete description of the project is available to the public for review from 8:30 a. m. to 4:00 p. m. at the Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918. The number to get information is (787) 274-2527, ext. 4320. In the alternative, comments may also be sent to PRDOH by email to [environmentcdobg@vivienda.pr.gov](mailto:environmentcdobg@vivienda.pr.gov).

Date: December 7, 2023

William O. Rodríguez Rodríguez, Esq.  
Secretary of the Department of Housing

DEPARTMENT OF  
**HOUSING**



## Andrea Curbelo-Marty

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**From:** environmentcdbg <environmentcdbg@vivienda.pr.gov>  
**Sent:** Thursday, December 7, 2023 2:57 PM  
**To:** Jose.A.CedenoMaldonado@hud.gov; Mahon, Donna M; Caribbean\_es@fws.gov; Edwin\_muniz@fws.gov; Rodriguez.elias@epa.gov; Guerrero.carmen@epa.gov; PublicMail.CESAJ-CC@usace.army.mil; Rich.Okulski@noaa.gov; Noah.Silverman@noaa.gov; nmfs.ser.esa consultations@noaa.gov; FEMA-R4EHP@fema.dhs.gov; carubio@prshpo.pr.gov; comunicaciones@ddec.pr.gov; secretario@ddec.pr.gov; jannira.colon@ddec.pr.gov; Rivera\_r1@jp.pr.gov; comentarios@jp.pr.gov; pmzc@drna.pr.gov; eortega@drna.pr.gov; ayudaciudadano@drna.pr.gov; anais.rodriguez@drna.pr.gov  
**Subject:** Public Notice – Final Notice and Public Explanation of a Proposed Activity in the 100-Year and 500-Year Floodplain\_PRDOH Case PR-CRP-000745  
**Attachments:** Final Notice\_El Vocero\_PR-CRP-000745.pdf

Concerned agencies,

Enclosed please find a **Public Notice – Final Notice and Public Explanation of a Proposed Activity in the 100-Year and 500-Year Floodplain** the Puerto Rico Department of Housing (as the Responsible Entity) published as part of HUD's requirements for the release of CDBG-DR funds to undertake the project *Coliseo Ángel Mercado* (PR-CRP-000745). The Final Notice was published in the *El Vocero* newspaper of Puerto Rico on December 7, 2023.

Respectfully,

### Permits and Environmental Compliance Division

Office of Disaster Recovery

[environmentcdbg@vivienda.pr.gov](mailto:environmentcdbg@vivienda.pr.gov) | 787.274.2527

Visit us: [www.cdbg-dr.pr.gov](http://www.cdbg-dr.pr.gov)

DEPARTAMENTO DE LA  
**VIVIENDA**



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## Andrea Curbelo-Marty

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**From:** Kenneth M. Garcia-De Leon  
**Sent:** Tuesday, December 26, 2023 10:32 AM  
**To:** environmentcdbg  
**Subject:** RE: Comentarios - Aviso Final PR-CRP-000745

Saludos

Por correo postal no llegaron comentarios para mencionado proyecto.

Atentamente

**Kenneth M. García De León**  
Especialista en Control de Documentos / Operaciones  
Oficina Recuperación de Desastres  
[kgarcia@vivienda.pr.gov](mailto:kgarcia@vivienda.pr.gov) | 787.274.2527 Ext. 4013  
Visitanos: [recuperacion.pr.gov](http://recuperacion.pr.gov)  
Contactanos: [infocdbg@vivienda.pr.gov](mailto:infocdbg@vivienda.pr.gov)



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**From:** environmentcdbg <environmentcdbg@vivienda.pr.gov>  
**Sent:** Tuesday, December 26, 2023 9:59 AM  
**To:** Kenneth M. Garcia-De Leon <kgarcia@vivienda.pr.gov>  
**Subject:** Comentarios - Aviso Final PR-CRP-000745

Saludos Kenneth,

Con respecto a la publicación del Aviso Final y Explicación Pública de una Actividad Propuesta en un valle inundable de 100 años y 500 años (Paso 7) para el proyecto **Coliseo Ángel Mercado (PR-CRP-000745)** ¿habrá llegado algún comentario a través del correo postal? De ser así, por favor nos lo hace llegar.

Cordialmente,

## Permits and Environmental Compliance Division

Disaster Recovery Office

[environmentcdbg@vivienda.pr.gov](mailto:environmentcdbg@vivienda.pr.gov) | 787.274.2527

Visit us: [recuperacion.pr.gov](http://recuperacion.pr.gov)

Contact us: [infocdbg@vivienda.pr.gov](mailto:infocdbg@vivienda.pr.gov)

**DEPARTAMENTO DE LA  
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# **Appendix F**

## **Historic**

## **Resources**



**GOVERNMENT OF PUERTO RICO**  
STATE HISTORIC PRESERVATION OFFICE

Executive Director | Carlos A. Rubio-Cancela | [carubio@prshpo.pr.gov](mailto:carubio@prshpo.pr.gov)

January 03, 2024

**Lauren Bair Poche**

HORNE - Architectural Historian Manager  
10000 Perkins Rowe, Suite 610 Bldg G  
Baton Rouge, LA 70810

SHPO: 12-21-23-02 PUERTO RICO DISASTER RECOVERY, CDBG-DR CITY  
REVITALIZATION PROGRAM (CRP), PR-CRP-000745, COLISEO ÁNGEL MERCADO  
PROJECT, SABANA GRANDE, PUERTO RICO


Dear Ms. Poche,

Our Office has received and reviewed the above referenced project in accordance with 54 USC 306108 (commonly known as Section 106 of the *National Historic Preservation Act, as amended*) and 36 CFR Part 800: *Protection of Historic Properties* from the Advisory Council on Historic Preservation.

Our records support your finding of **no historic properties affected** within the project's area of potential effects.

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

Sincerely,

  
Fo

Carlos A. Rubio-Cancela  
State Historic Preservation Officer  
CARC/GMO/LGC







October 20, 2022

**Arch. Carlos A. Rubio Cancela**

Executive Director

State Historic Preservation Officer

Cuartel de Ballajá Bldg.

San Juan, Puerto Rico

**Re: Authorization to Submit Documents**

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 registry review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

In line 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,

Juan C. Pérez Bofill, P.E. M.Eng

Director of Disaster Recovery

CDBG DR-MIT

December 21, 2023

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

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

### **Section 106 NHPA Effect Determination Submittal for PR-CRP-000745: Coliseo Angel Mercado Project, Sabana Grande, Puerto Rico – *No Historic Properties Affected***

Dear Architect Rubio Cancela,

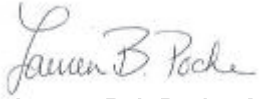
On February 9, 2018, an allocation of Community Development Block Grant - Disaster Recovery (CDBG-DR) funds was approved by the United States Department of Housing and Urban Development (HUD) under the Federal Register Volume 83, No. 28, 83 FR 5844, to assist the Commonwealth of Puerto Rico in meeting unmet needs in the wake of Hurricanes Irma and Maria. On August 14, 2018, an additional \$8.22 billion recovery allocation was allocated to Puerto Rico under the Federal Register Volume 83, No. 157, 83 FR 40314. With these funding allocations, the Puerto Rico Department of Housing (PRDOH) aims to lead a comprehensive and transparent recovery for the benefit of Puerto Rico residents. To faithfully comply with HUD's environmental requirements, the Puerto Rico Department of Housing contracted Horne Federal, LLC (HORNE) to provide environmental records review services that will support the Department's objectives Puerto Rico Housing (PRDOH) for CDBG-DR.

On behalf of PRDOH and the subrecipient, the Municipality of Sabana Grande, we are submitting documentation for the proposed Coliseo Angel Mercado Project in the municipality of Sabana Grande. The project area is south of the National Register of Historic Places eligible Sabana Grande Traditional Urban Center. The proposed project consists of the demolition of the existing building exterior, save for the steel structure and the construction of a new exterior for the building with a different design. The new building will extend out from the current footprint to the west and south. An exterior gym will be relocated to the southwest corner of the building. New pavement, gravel, and sidewalk pavers will be installed around the building. Maximum ground disturbing activities are not anticipated to exceed four feet below the current ground surface.

The full scope of the project is described in detail within the submitted documentation, which includes mapping, photographs, and the 100% design plans. Based on the provided documentation, the Program requests a concurrence with a determination that no historic properties affected is appropriate for this undertaking.

Please contact me with any questions or concerns by email at [lauren.poche@horne.com](mailto:lauren.poche@horne.com) or phone at 225-405-7676.


Kindest regards,



**Lauren Bair Poche. M.A.**

Architectural Historian, EHP Senior Manager

Attachments

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>CITY REVITALIZATION PROGRAM (CITY-REV)</b> <b>Section 106 NHPA Effect Determination</b>		
<b>Subrecipient: Municipio de Sabana Grande</b>		
<b>Project Name: Coliseo Angel Mercado</b>		<b>Project ID: PR-CRP-000745</b>

<b>Project Location:</b> Ave. Quilichini, Sabana Grande PR 00637	
<b>Project Coordinates:</b> 18.072633, -66.959490	
<b>TPID (Número de Catastro):</b> 335-057-068-14	
<b>Type of Undertaking:</b> <input type="checkbox"/> Substantial Repair <input checked="" type="checkbox"/> New Construction	
<b>Construction Date (AH est.):</b> c.1985	<b>Property Size (acres):</b> 0.26 acres

<b>SOI-Qualified Architect/Architectural Historian:</b> Maria F. Lopez Schmid
<b>Date Reviewed:</b> August 21, 2023 / September 25, 2023. / December 8, 2023.
<b>SOI-Qualified Archaeologist:</b> Roberto G. Muñoz-Pando, PhD
<b>Date Reviewed:</b> August 23, 2023/ September 29, 2023 / December 8, 2023.


In compliance with Section 106 of the National Historic Preservation Act (NHPA), the Program is responsible for identifying historic properties listed in the NRHP and any properties not listed that would be considered eligible for listing that are located within the geographic area of potential effects (APE) of the proposed project and assessing the potential effects of its undertakings on these historic properties.

### Project Description (Undertaking)

The proposed project consists of the rehabilitation of the Coliseo Municipal Ángel Mercado Vega in the Municipality of Sabana Grande. The building (coordinates 18.072633, -66.959490) is located at the urban block limited by Vicente Quilichini Avenue (PR-121 Road) to the east and Martínez Vega Street to the south, and PR-2 expressway to the southwest. The coliseum building is on the recreational complex that includes the Rafael D. Milán Baseball Park to the northwest. The proposed activity is on 0.26 acres and is situated in a combined flood zone X and zone A.

The undertaking for the project consists of the demolition of the existing building exterior, except for the steel frame structure, and the construction of a new building envelope with a different design. The new design extends the existing footprint of the building to the west and south with a curved plan to accommodate the expanded building program. The parking area will be on an existing parking lot north of the coliseum and will be expanded with additional parking spaces to the west of the building. New pavement, gravel, and pavers for sidewalks will be created around the building. An exterior gym with fixed equipment will be relocated to the southwest corner of the building. Maximum ground disturbing activities throughout this project will not exceed 4 feet below ground.

The new municipal coliseum will house a basketball court that will have capacity for six hundred seats. The new facilities will include the basketball court on the first level, an entrance lobby area, seating area for spectators, public bathrooms, storage area for visitors, a

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM CITY REVITALIZATION PROGRAM (CITY-REV) Section 106 NHPA Effect Determination		
Subrecipient: Municipio de Sabana Grande		
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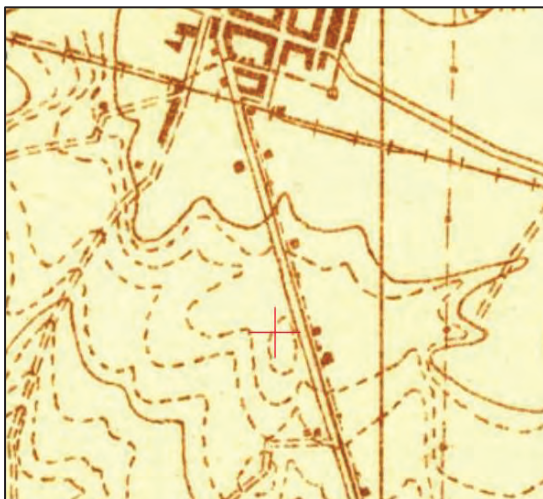
concession booth, offices, locker rooms for both teams with bathrooms, a designated area for referees, a radio transmission booth, and a first aid medical service area. Also, the building will have an area with a boxing ring, that can be used as a stage for events, such as school graduations. The upper level will have space for table tennis games. An outdoor open space can be used to offer Aerobic and Zumba classes.

### Area of Potential Effects

As defined in 36 CFR §800.16(d), the area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on this definition and the nature and scope of the Undertaking, the Program has determined that the direct APE for this project is around coordinates 18.072633, -66.959490 and is 0.12 miles wide by 0.11 miles long. The visual APE is the viewshed of the proposed project. The viewshed will include adjacent streets surrounding the property and is 0.15 miles wide by 0.14 miles long. To the north the viewshed ends with the Rafael D. Millán Baseball Park, to the east with the properties on the east side of Avenida Vicente Quilichini, to the west with expressway PR-2, and to the south with the commercial properties south of Martinez Vega Street.


### History of Use of the Site

The project site was empty according to the 1937 and the 1941 USGS topographic maps of the area shown below. By this time, Road PR-121 connected the town of Sabana Grande south of town with Road PR-102 which crossed town from east to west. Road PR-121 contained some buildings dotted along the road, but around the site itself they existed only on the east side of the road. These maps also show that the railroad laid north of the site and traversed from east to west just south of the center of Sabana Grande at this time.



**Figures 1 & 2.** Detail of the 1937 and 1941 USGS topographic maps of the area.



PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM CITY REVITALIZATION PROGRAM (CITY-REV) Section 106 NHPA Effect Determination		
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During the 1950s the *Tren de Circumvalación* ceased operations and these topographic maps from 1956 and 1966, shown below, do not depict the train tracks. The 1956 topographic map shows that the site is still empty, and more buildings, probably commercial, appear on the east side of PR-121. By 1966, the topographic map shows the Athletic Park racetracks drawn along with a building or spectator stands west of the PR-121 road. A residential subdivision on this 1966 map appears to the east of the PR-121 road expanding the town of Sabana Grande further south.




**Figures 3 & 4.** Detail of the 1956 and 1966 USGS topographic maps of the area.

The racetracks and a rectangular covered spectator building are present in the 1975 aerial image, shown below left, which is the earliest available for the area so the track can be dated to c1970. There is a faint footprint where the municipal coliseum is located, but the project building is not present on this aerial. The current existing buildings for the Rafael Milán Baseball Park and the Angel Mercado Vega Coliseum appear in the 1993 aerial image, shown below right, but not in the 1975 one. Therefore, the estimated date for the buildings is c1985.



**Figures 3 & 4.** Detail of the 1975 and 1993 aerial images showing the site.

By 1975 the Expressway PR-2 west of the site, was built along with the bridge and accesses to

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM CITY REVITALIZATION PROGRAM (CITY-REV) Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
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Project Name: Coliseo Angel Mercado	Project ID: PR-CRP-000745	

Sabana Grande located southwest of the site. Judging by the topographic maps and aerial photos available, the first building on the project site is the Angel Mercado Vega Coliseum.

### 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 the project area has no previously recorded archaeological resources within a quarter mile radius of the APE.

There has been one cultural resource survey conducted within a quarter mile radius of the APE. The study was conducted in 2002 by Miguel Rodríguez, it was a Phase 1A-1B study called "Corredor del Oeste Conversión a Expreso de la PR-2 entre Mayaguez y Ponce" is located 0.13 miles southwest of the project area, the SHPO and IPRC codes are MY0044 and 08-29-02-02, this study yielded negative results for the presence of archaeological materials.


Considering the previous findings of no archaeological sites within a quarter mile of the project area, the possibility of archaeological findings in the area can be considered low to moderate. There is limited information about the archaeology and prehistory of the municipality of Sabana Grande. The APE seems to be in an already impacted zone by the construction of the Coliseum and the surrounding commercial buildings, making the probability of finding new and intact archaeological sites in the area low.

### 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 a National Register of Historic Places eligible or listed Traditional Urban Center or Historic District. The Sabana Grande Traditional Urban Center is located 0.25 miles northwest of the building location. Additionally, there are **no** National Register listed properties within the quarter-mile radius from the project. No listed properties will be affected by the renovations from this undertaking.

### Building Description

The existing building that houses the Coliseo Municipal Ángel Mercado Vega abuts an urban area south of the town of Sabana Grande. The recreational complex block includes a baseball park and stadium to the northwest, a parking area to the east, the coliseum to the southeast, and green area to the south. This block is surrounded by commercial buildings to

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM CITY REVITALIZATION PROGRAM (CITY-REV) Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
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the north, south, and east, an industrial complex for chemical manufacturing to the northwest and the expressway PR-2 to the west. The expressway runs northwest to southeast and borders the town of Sabana Grande on the south side. The coliseum lot is at the corner of PR-121 road and the PR-2 exit on Martínez Vega Street that signals the entrance to town. The Sabana Grande Traditional Urban Center is located 0.25 miles north of the coliseum, which is surrounded by residential subdivisions. The Guanajibo River runs north south to the east of the outskirts of town.

The estimated date of construction for the Coliseo Municipal is 1985 since the building is present in a 1993 aerial image but is absent from a 1977 aerial image. The coliseum is a rectangular shaped building that is oriented northwest to southeast. The building has a concrete slab on grade foundation, a concrete lower portion, and a metal top portion with a front gable corrugated metal roof over a metal structure. The exterior siding has standing seam metal panels atop concrete columns and beams with rough texture concrete blocks in between the concrete structure profile. The façade is oriented to the north in front of the parking lot. Two sets of double metal entrance doors are centered equidistant to each other. A ticket window with metal grilles and metal awning is on the left side of the façade. Above the concrete portion, three sets of six metal jalousie windows span the center upper metal portion. The building suffered damage during the storm event and two sets of metal windows are missing, one on the right side and another one on the left side of the façade including the metal siding panels on the top left side. The façade retains the manufacturers sign with the name "DEAN" on the gable top in black letters.

The building's east elevation faces route PR-121 and the concrete lower portion contains a painted mural. A set of double metal doors is on the left side, and standing seam metal panels are on the top portion interrupted by six sets of five metal jalousie windows. The rear elevation has a concrete lower portion with five sets of four short metal jalousie windows. The lower portion on this elevation projects from the building and has a concrete second level on the right side with the same metal windows above. The upper metal portion has two sets of five metal jalousie windows on the recessed left side. Lastly, the west elevation has the concrete lower portion with a set with double metal doors on the right side. The upper metal portion has six sets of five metal jalousie windows. The left side corner near the façade appears damaged with a few standing seam metal panels missing.

The Coliseo Municipal is a manufactured building by the company Dean Steel Buildings based in Fort Meyers, Florida. The company has been in the building contracting business for over 50 years when in 1972 they began fabricating their system of metal buildings. Dean Steel Buildings are marketed throughout the Southeastern United States, the Caribbean, Central, and South America.

The Coliseo Municipal Ángel Mercado Vega building is a modern metal structure made from

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM CITY REVITALIZATION PROGRAM (CITY-REV) Section 106 NHPA Effect Determination	
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prefabricated components and it **does not** comply with eligibility requirements for listing to the National Register of Historic Places.


## Determination

The following historic properties have been identified within the APE:

- Direct Effect:  
No archaeological sites and/or NRHP listed/eligible historic properties will be affected within the direct APE.
- Indirect Effect:  
No archaeological sites and/or NRHP listed/eligible historic properties will be affected within the indirect APE.

Based on the results of our historic property identification efforts, the Program has determined that project actions will not affect any historic properties.

Considering that there are no previous findings of archaeological sites within 0.25 miles of the project area, the possibility of other archaeological findings in the area can be considered low to moderate.

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM CITY REVITALIZATION PROGRAM (CITY-REV) Section 106 NHPA Effect Determination		
Subrecipient: Municipio de Sabana Grande		
Project Name: Coliseo Angel Mercado		Project ID: PR-CRP-000745

**Recommendation** *(Please keep on same page as SHPO Staff Section)*

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 applicable)

**This Section is to be Completed by SHPO Staff Only**

The Puerto Rico State Historic Preservation Office has reviewed the above information and:	
<input type="checkbox"/> <b>Concurs</b> with the information provided. <input type="checkbox"/> <b>Does not concur</b> with the information provided.	
<b>Comments:</b>          	
Carlos Rubio-Cancela State Historic Preservation Officer	Date:

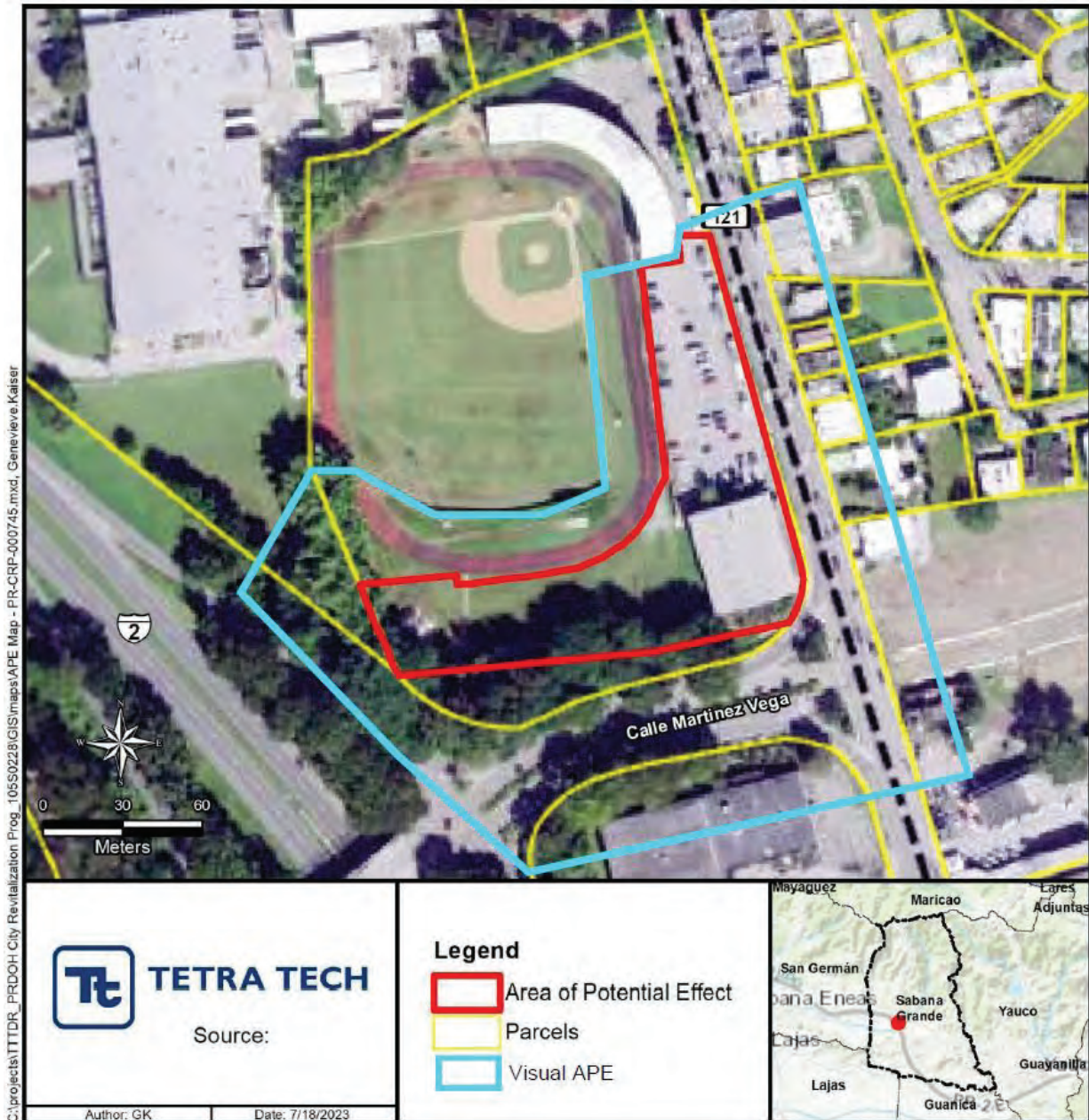


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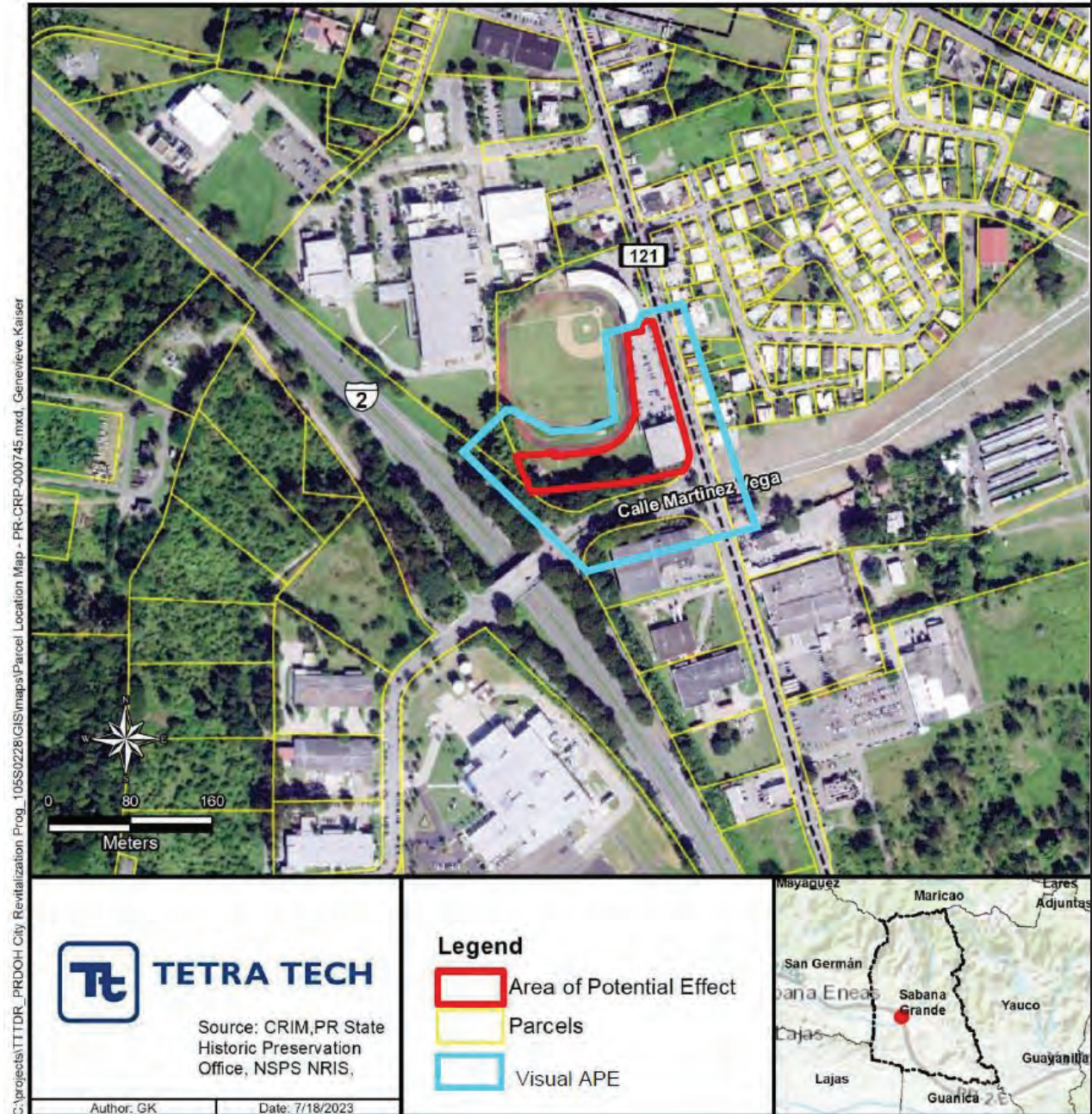
Project ID: PR-CRP-000745

### Project (Parcel) Location – Area of Potential Effect Map (Aerial)





## Project (Parcel) Location - Aerial Map



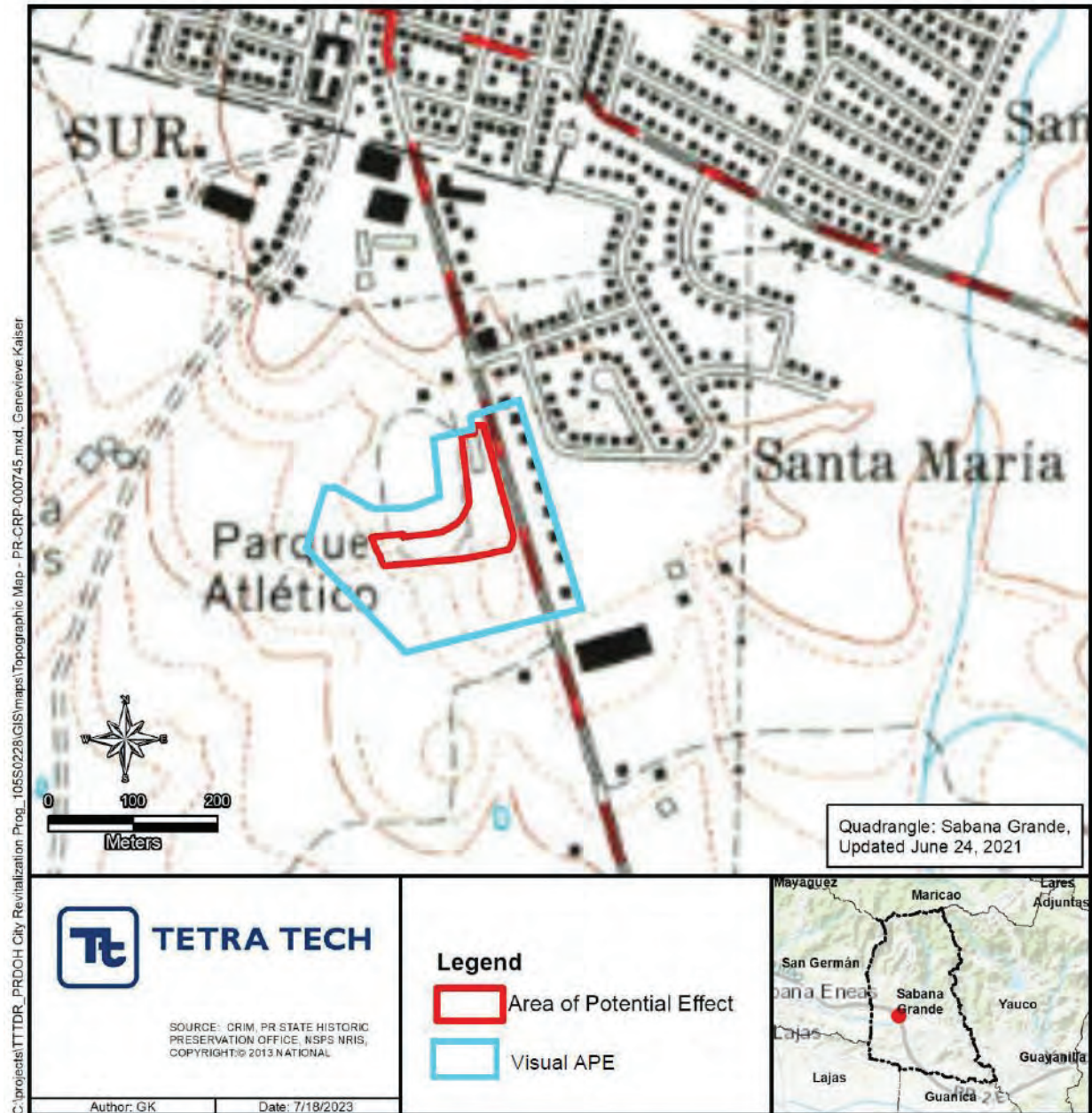


Subrecipient: Municipio de Sabana Grande

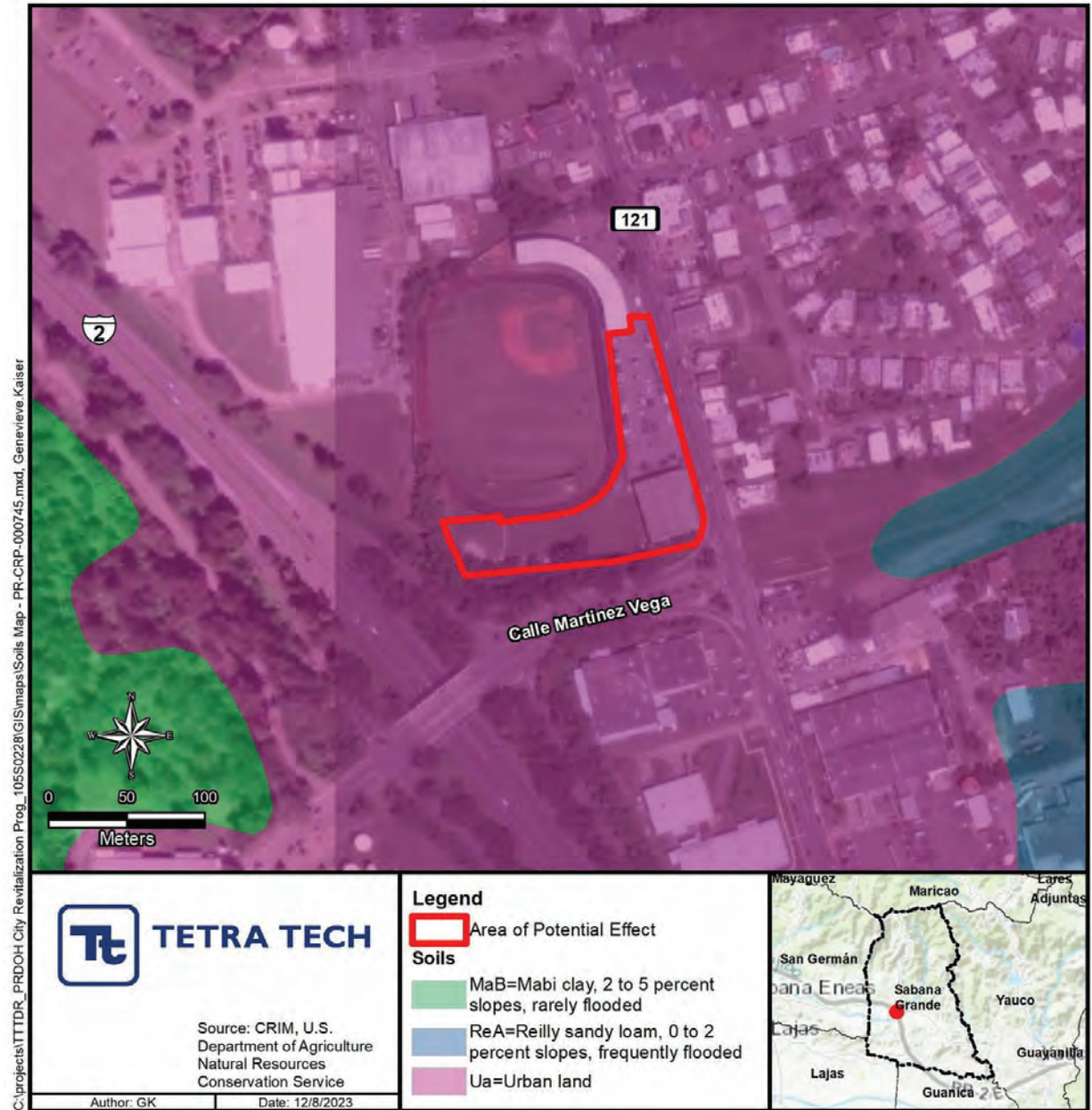
Project Name: Coliseo Angel Mercado

Project ID: PR-CRP-000745

Project (Parcel) Location - USGS Topographic Map (1965)

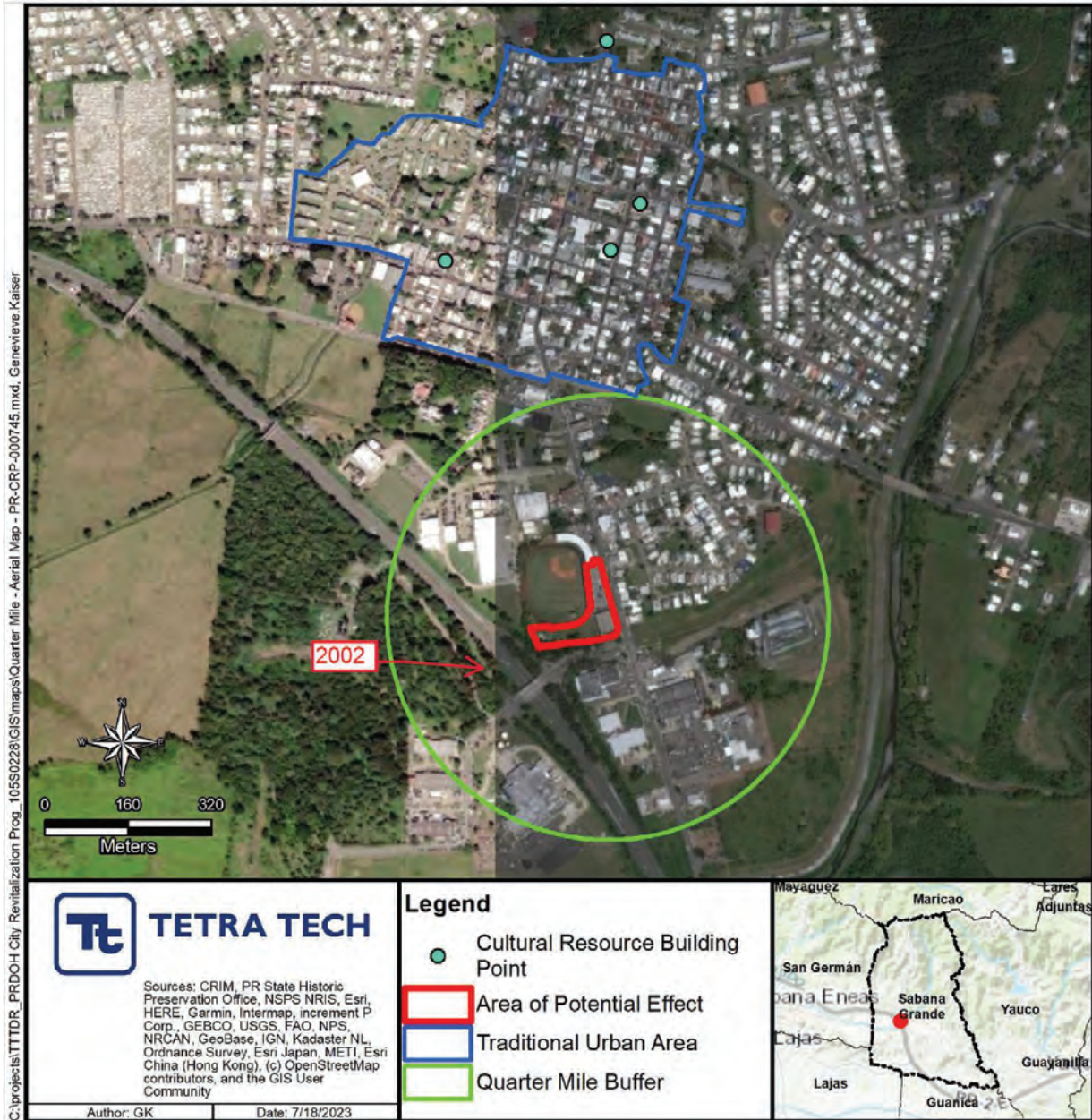


Project (Parcel) Location – Soils Map (Only if Archaeology Review is Required)





Project (Parcel) Location with Previous Investigations - Aerial Map



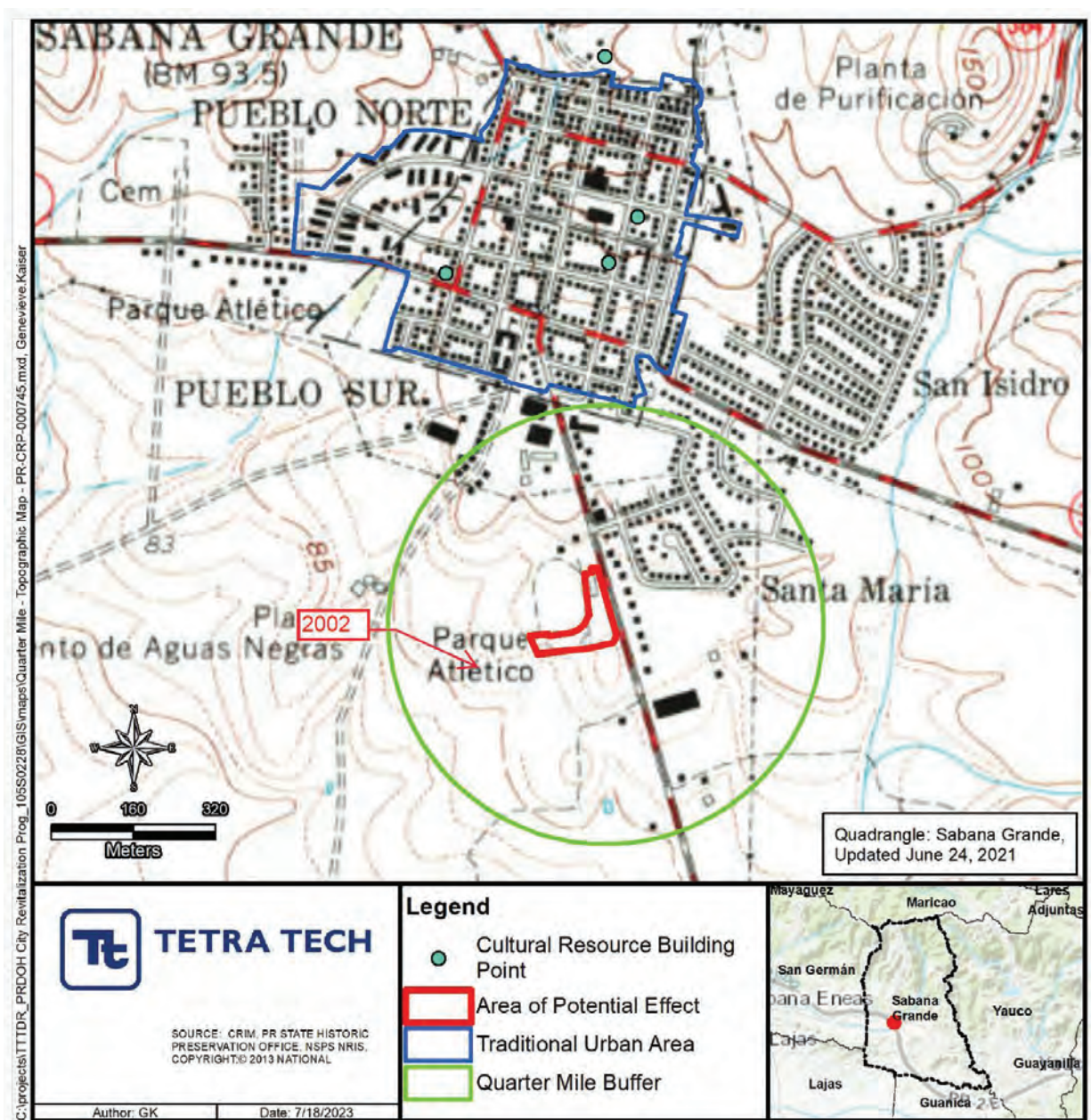


Subrecipient: Municipio de Sabana Grande

Project Name: Coliseo Angel Mercado

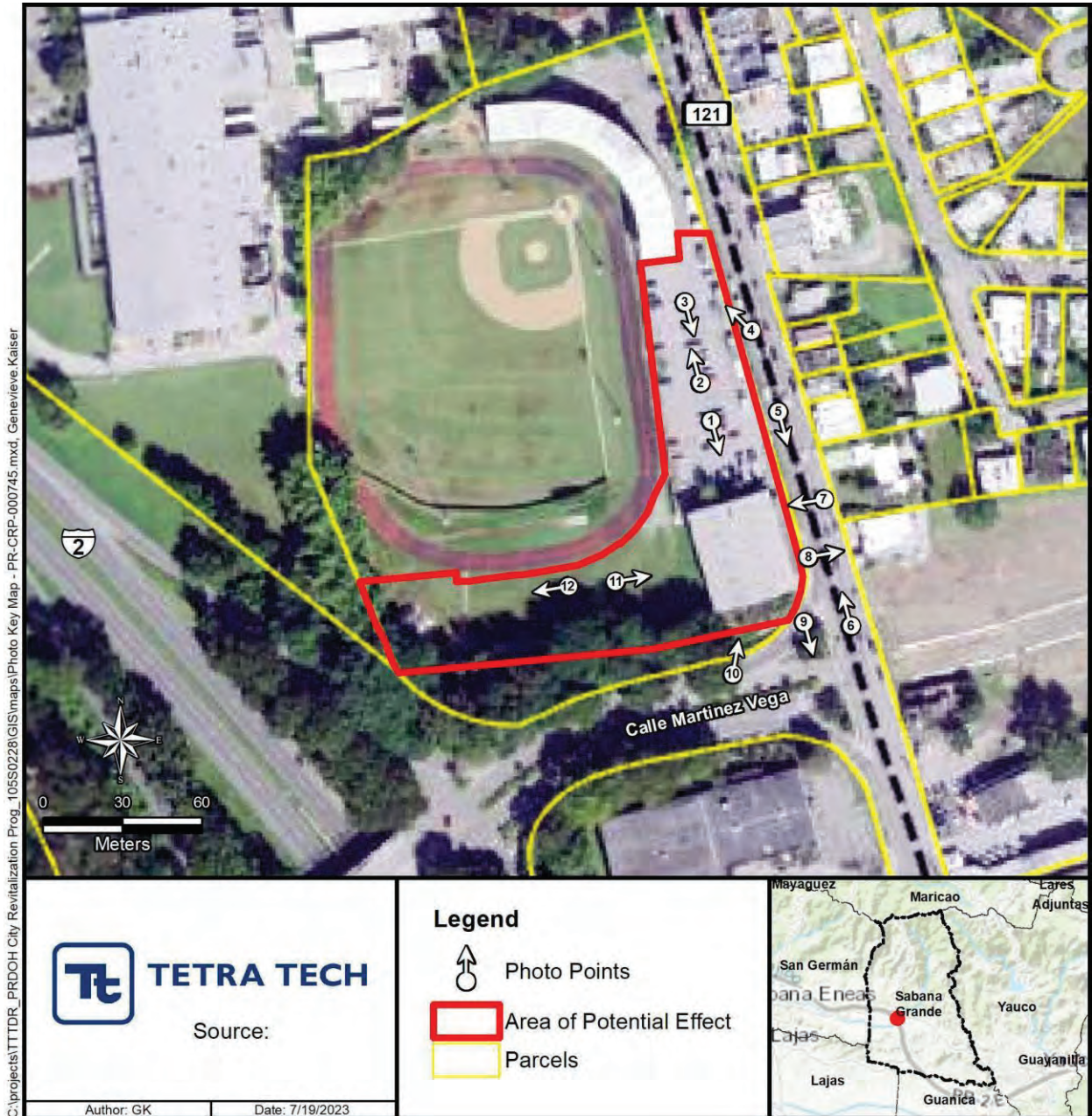
Project ID: PR-CRP-000745

Project (Parcel) Location with Previously Recorded Cultural Resources





### Photograph Key



Subrecipient: Municipio de Sabana Grande

Project Name: Coliseo Angel Mercado

Project ID: PR-CRP-000745



Photo # 1:

**Description (include direction):** Building Façade, view to the southwest.

**Date:** July 19 2023.



Photo # 2:

**Description (include direction):** Looking away from building façade, view to the northeast.

**Date:** July 19 2023.



Subrecipient: Municipio de Sabana Grande

Project Name: Coliseo Angel Mercado

Project ID: PR-CRP-000745



**Photo # 3:**

**Description (include direction):** North side parking area, view to the southwest.

**Date:** July 19 2023.



**Photo # 4:**

**Description (include direction):** Baseball stadium building, view to the northwest.

**Date:** July 19 2023.



Subrecipient: Municipio de Sabana Grande

Project Name: Coliseo Angel Mercado

Project ID: PR-CRP-000745



Photo # 5:

**Description (include direction):** Street view from PR-121, view to the southwest.

Date: July 19 2023.



Photo # 6:

**Description (include direction):** Street view from PR-121, view to the northeast.

Date: July 19 2023.

Subrecipient: Municipio de Sabana Grande

Project Name: Coliseo Angel Mercado

Project ID: PR-CRP-000745



**Photo # 7:**

**Description (include direction):** Building's east elevation, view to the west.

**Date:** July 19 2023.



**Photo # 8:**

**Description (include direction):** Looking away from building, view to the east.

**Date:** July 19 2023.



Subrecipient: Municipio de Sabana Grande

Project Name: Coliseo Angel Mercado

Project ID: PR-CRP-000745



**Photo # 9:**

**Description (include direction):** Looking away from building, view to the southwest.

**Date:** July 19 2023.



**Photo # 10:**

**Description (include direction):** Building's rear elevation, view to the northeast.

**Date:** July 19 2023.

Subrecipient: Municipio de Sabana Grande

Project Name: Coliseo Angel Mercado

Project ID: PR-CRP-000745



Photo # 11:

Description (include direction): Building's west elevation, view to the east.

Date: July 19 2023.



Photo # 12:

Description (include direction): Looking away from building, view to the west.

Date: July 19 2023.



COMMONWEALTH OF PUERTO RICO  
MUNICIPAL GOVERNMENT OF SABANA GRANDE  
OFFICE OF THE MAYOR  
HON. MARCOS VALENTÍN  
MAYOR

**IMPROVEMENTS AND EXPANSION  
MUNICIPAL COLISEUM  
ANGEL MERCADO VEGA  
Bo. PUEBLO, SABANA GRANDE, PUERTO RICO.**

DANILO SALAZAR  
P.E.

PO BOX 008136, SAN JUAN, P.R. 009100-0136, PHNONE (787) 614-9591

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02	SI-1 SURVEY & TOPOGRAPHY PLAN ARCHITECTURE DRAWINGS
03	SI-2 SITE PLAN
04	D-1 DEMOLITION PLAN
05	A-1 PROPOSED GROUND FLOOR PLAN
06	A-2 BLEACHERS LAYOUT
07	A-3 ROOF DRAINAGE PLAN
08	A-4 ELEVATIONS
09	A-5 SECTIONS
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12	A-8 CAFETERIA - TIKET - TRANSMISSION ROOM DETAILS
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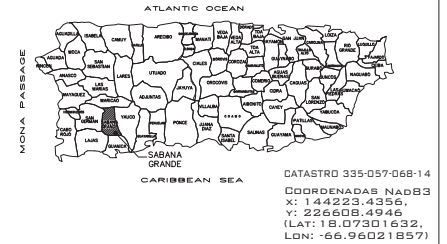
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23	S-302 STRUCTURAL SECTIONS & DETAILS
24	S-303 STRUCTURAL SECTIONS & DETAILS
25	S-304 STRUCTURAL SECTIONS & DETAILS
26	S-305 STRUCTURAL SECTIONS & DETAILS
27	ES-1 LEGEND AND NOTES
28	ES-2 ELECTRICAL SITE PLAN
29	ES-3 SINGLE LINE POWER RISER DIAGRAM
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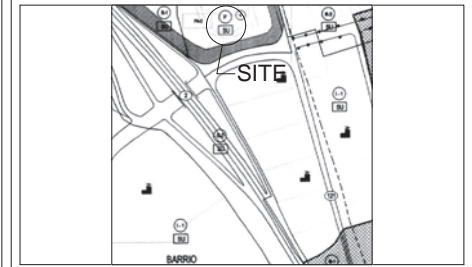
DWG.NO.	DESCRIPTION
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59	VAC-101 SECOND LEVEL PLAN VAC LAYOUT
60	VAC-102 ROOF PLAN VAC LAYOUT
61	VAC-201 VAC SCHEDULES
62	VAC-202 VAC CONTROL & DIAGRAMS
63	VAC-300 VAC DETAILS
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LOCATION MAP

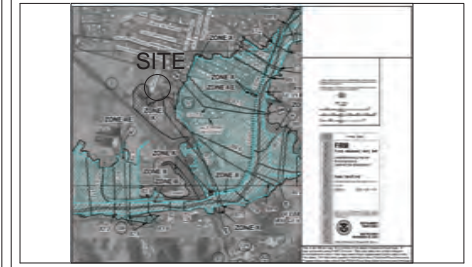


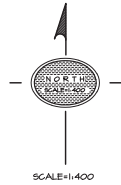
CALIFICATION MAP

SABANA GRANDE MAPA 18  
VIGENCIA 08 MAY 2008



FLOOD MAP MAP 72000C1580J ZONA "X"





HORIZONTAL & VERTICAL CONTROL				
STA. NO.	COORDINATES	ELEVATION	REMARKS	
	NORTH	EAST		
STA.1	226546.1751	144272.7030	88.22	STEEL NAIL
STA.2	226570.3410	144253.3575	88.30	STEEL ROD
STA.84	226573.9991	144273.7292	88.33	STEEL NAIL
STA.85	226611.1720	144273.4810	88.39	STEEL NAIL
STA.86	226646.0303	144273.7269	88.28	STEEL NAIL
STA.94	226589.3338	144305.2789	88.50	STEEL NAIL

BASEBALL STADIUM



LEGEND:	
	- POINT CONTROL
	- LIGHTNING POLE
	- ELECTRIC POLE
	- PROPERTY LINE
	- EASEMENT LINE
	- POND BORDER LINE
	- CENTER LINE
	- 10 MT. CONTOUR LINE
	- 5.0 MT. CONTOUR LINE
	- FENCE LINE
	- BARBORED WIRE LINE
	- ROAD LINE
	- SIDEWALK LINE
	- STRUCTURE LINE
	- SWALE LINE
	- CATV BOX
	- TELEPHONE POLE
	- SIGN
	- WATER VALVE
	- HYDRANT
	- TELEPHONE MAINHOLE
	- ELECTRIC BOX
	- CLEAN OUT
	- SIAMSE FIRE SPIGOT
	- ELECTRIC CONNECTION
	- MAIN HOLE
	- INLET
	- ELECTRIC BOX
	- TREE
	- WATER METER
	- STOP BOX
	- VALVE

- NOTES:
1. ALL DISTANCES ARE EXPRESSED IN METERS, UNLESS OTHERWISE NOTED.
  2. FIELDWORK PERFORMED ON JULY, 2020.
  3. HORIZONTAL DATUM WAS REFERRED TO THE P.A. LAMONT SYSTEM NAD-83 (GEOIDAL).
  4. VERTICAL DATUM WAS REFERRED TO PRIOR ELEVATION.



SCALE:	1:400	DRAWN:	
DATE:	JULY, 2020		
DRAWN:	PLS G. ROSARIO		
REVIEW:	PLS G. ROSARIO		
FILE FILE:	SALAZAR-CANHA-56265		
ACAD FILE:	SALAZAR-CANHA-56266		

SURVEY & TOPOGRAPHY PLAN  
SABANA GRANDE MUNICIPAL FACILITIES  
PR-121, KM-0.6, RAYO WARD  
SABANA GRANDE,  
PUERTO RICO

GILBERTO ROSARIO ROLÓN  
Lic. 150486  
Professional land surveyors  
& consultants  
P.O. BOX 3280  
CAGUAS, P.R. 00725  
TEL. 787-962-3472  
www.romsurveying.com  
rom.psc@gmail.com  
romsurveying@hotmail.com

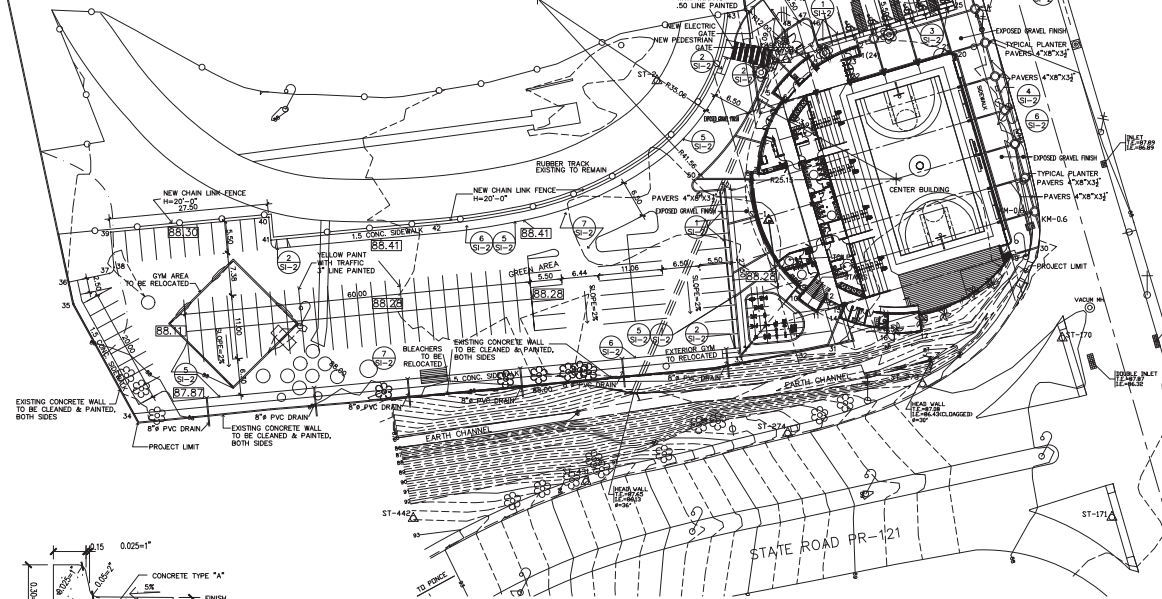


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### HORIZONTAL & VERTICAL CONTROL

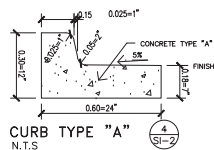
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	NORTH	EAST		
STA.1	226546.1751	144272.7030	88.22	STEEL NAIL
STA.2	226570.3410	144283.3076	88.30	STEEL NAIL
STA.84	226573.9991	144275.7292	88.33	STEEL NAIL
STA.85	226611.7202	144273.4810	88.39	STEEL NAIL
STA.86	226646.0381	144273.7269	88.39	STEEL NAIL
STA.94	226589.3336	144305.2789	88.50	STEEL NAIL

BASEBALL STADIUM

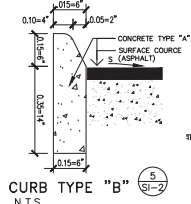


### SITE PLAN

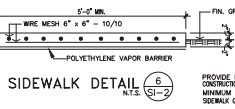
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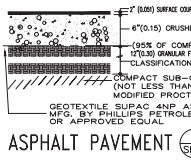
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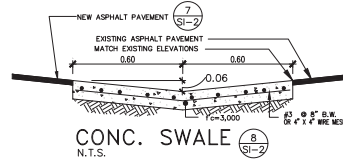
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N.T.S.



SIDEWALK DETAIL  
N.T.S.



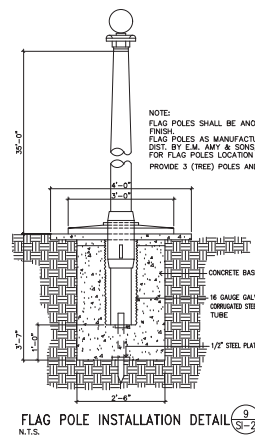
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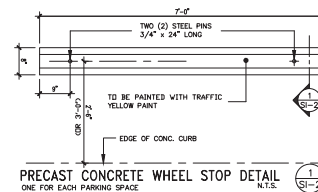
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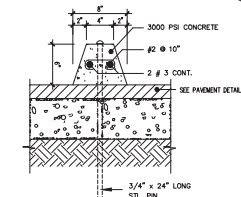
STANDARD HANDICAPPED  
PARKING SIGN  
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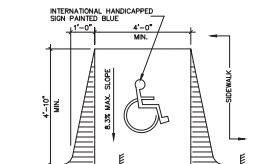
FLAG POLE INSTALLATION DETAIL  
N.T.S.



PRECAST CONCRETE WHEEL STOP DETAIL  
ONE FOR EACH PARKING SPACE  
N.T.S.



SECTION DETAIL  
N.T.S.



PLAN VIEW  
HANDICAPPED RAMP DET.  
N.T.S.

### BUILDING SURVEY DATA

POINT	X COORDS	Y COORDS	DISTANCE	BEARINGS	DESCRIPTION
1	144288.5932	226574.7633			
2	144288.1333	226576.3226	1.6254	N 16423°48' W	to be established
3	144280.7719	226573.8899	8.2575	S 8304°12' E	to be established
4	144279.4818	226574.3664	2.0828	N 3642°31' E	to be established
5	144275.4840	226568.2543	8.5634	S 44427°35' W	to be established
6	144275.1833	226567.0202	2.0828	S 34440°48' E	to be established
7	144270.0864	226554.3033	13.4517	S 18437°43' W	to be established
8	144269.6800	226554.3705	1.1195	S 34440°48' E	to be established
9	144278.8233	226533.9182	22.4118	S 2448°28' E	to be established
10	144277.7884	226533.6563	1.6256	S 34440°48' E	to be established
11	144281.0413	226530.3722	3.9665	S 54405°28' E	to be established
12	144282.5165	226532.8045	2.8447	N 3141°12' E	to be established
13	144280.7333	226531.1963	3.9665	S 6508°11' E	to be established
14	144284.9070	226529.2638	2.0828	S 2145°31' W	to be established
15	144283.1572	226527.3835	8.4330	S 7745°27' E	to be established
16	144283.1092	226526.6286	0.7564	S 3438°3' W	to be established
17	144299.3176	226526.8549	6.3770	N 84459°27' E	to be established
18	144288.8392	226529.7588	2.8444	N 9441°3' W	to be established
19	144314.7283	226540.1088	18.8628	N 56455°13' E	to be established
20	144305.1187	226574.3062	36.1192	N 15452°46' W	to be established
21	144303.9183	226575.4604	1.3139	N 8640°34' W	to be established
22	144287.0661	226570.5016	17.5666	S 73481°12' W	to be established
23	144286.0336	226574.0104	3.6576	N 16423°48' W	to be established
24	144288.5404	226574.7633	3.9260	N 75402°28' E	to be established

### CENTER OF CIRCLE BUILDING

POINT	X COORDS	Y COORDS	DISTANCE	BEARINGS	DESCRIPTION
1	144284.7938	226553.5411			to be established

AREA = 0.0000 SQ.Mts. = 0.0000 CDAS.

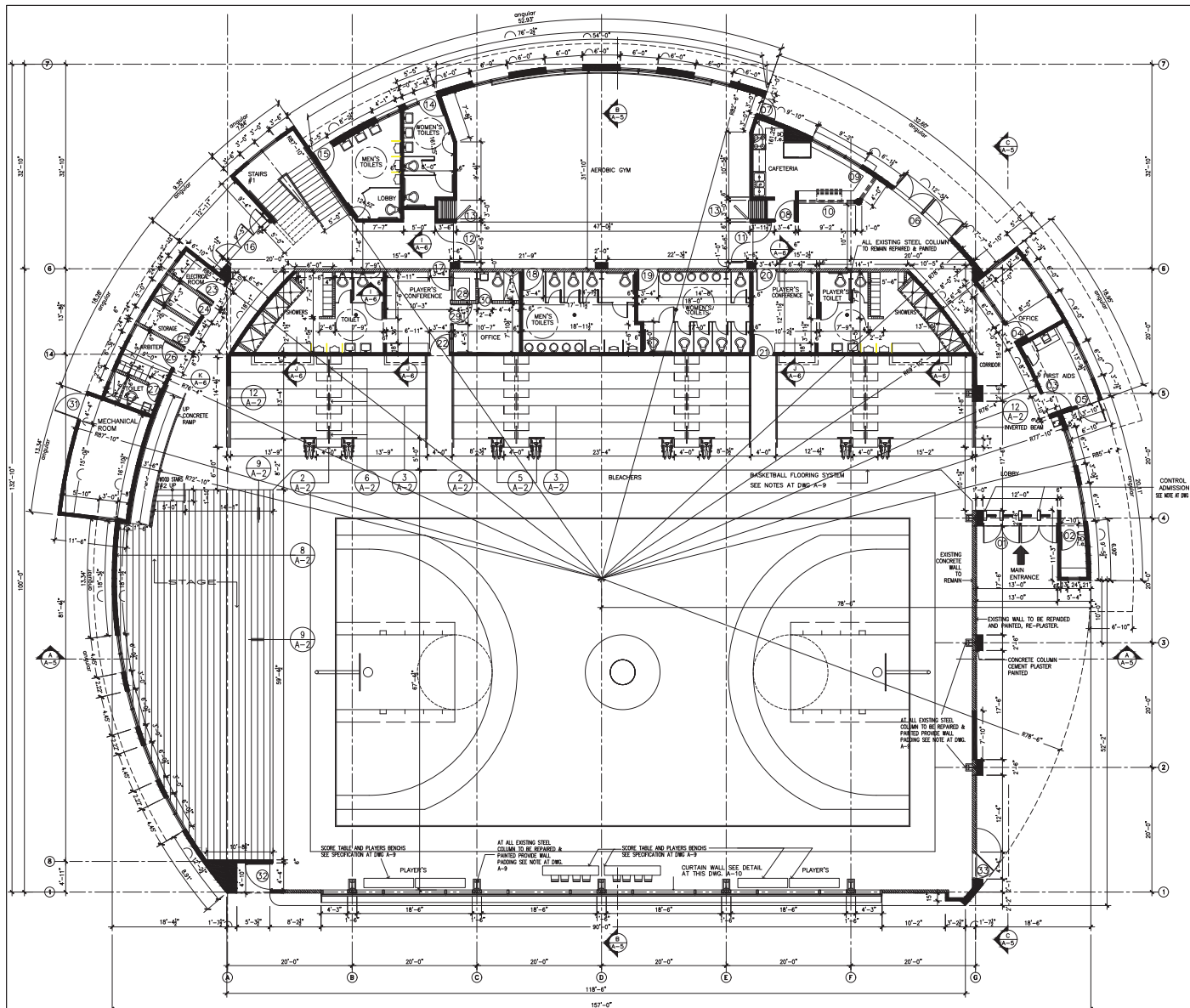
### SITE SURVEY DATA

POINT	X COORDS	Y COORDS	DISTANCE	BEARINGS	DESCRIPTION
25	144304.7658	226583.4069	10.2065	N 16422°36' W	to be established
26	144302.4967	226594.4063	1.3385	N 25306°40' E	to be established
27	144303.2862	226594.7314	0.8538	N 67437°18' E	to be established
28	144307.2920	226592.8336	4.4240	S 64453°2' E	to be established
29	144318.4300	226591.4220	52.8432	S 14451°20' E	to be established
30	144283.0590	226524.5392	40.0948	S 65451°51' W	to be established
31	144278.2636	226523.5690	4.8932	S 78437°45' W	to be established
32	144267.7488	226522.5754	10.5613	S 84437°9' W	to be established
33	144162.7932	226512.8878	105.4023	S 38443°7' W	to be established
34	144152.3391	226531.7103	21.7060	S 28447°29' W	to be established
35	144151.5331	226535.4723	3.8474	N 15403°33' W	to be established
36	144108.5339	226538.9721	7.1596	N 77454°22' E	to be established
37	144159.3200	226538.0437	1.3290	N 36410°46' E	to be established
38	144108.7465	226544.1313	6.1144	N 44257°0' W	to be established
39	144186.1253	226546.7105	27.5000	N 84437°9' E	to be established
40	144186.5004	226542.7281	4.0000	S 4422°55' E	to be established
41	144215.2087	226545.4327	28.8354	N 84437°9' E	to be established
42	144265.6387	226582.0785	62.3370	N 53489°40' E	to be established
43	144273.1681	226580.2485	8.1713	N 67410°23' E	to be established
44	144281.2648	226576.5970	11.8404	S 4348°10' E	to be established
45	144280.1307	226580.4749	4.0404	N 14418°10' W	to be established
46	144278.6015	226581.0169	1.6224	N 70429°1' W	to be established
47	144275.9556	226579.3380	3.0999	S 57412°35' W	to be established
48	144273.2608	226575.6776	4.2692	S 36445°50' W	to be established
49	144259.8102	226553.1441	38.2428	S 3005°1' W	to be established
50	144260.7052	226551.0405	2.2865	S 2344°17' E	to be established
51	144265.0288	226551.4473	4.3417	N 84437°9' E	to be established
52	144335.6772	226584.6213	46.3371	N 44418°52' W	to be established









## GROUND FLOOR PLAN

SCALE 1/8"=1'-0"

YO, ING. DANILO SALAZAR P.E., LIC. 5582 CERTIFICADO QUE SON EL PROFESIONAL QUE DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS, HANBEY CERTIFICADO QUE DISEÑO ESTOS PLANOS Y ESPECIFICACIONES COMPLETOS CON LAS DISPOSICIONES APPLICABLES DEL REGLAMENTO CONJUNTO Y LAS DISPOSICIONES APPLICABLES DE LOS REGLAMENTOS Y CÓDIGOS DE LAS MUNICIPALIDADES, JUNTO A LAS DISPOSICIONES O DISPOSICIONES PARALELAS CON JURISDICCIÓN, RECONOCIENDO QUE CUALQUIER DEBERÁN HACER O TENDRÁN DE LOS DISEÑOS QUE SE HAN PRODUCIDO SIN CONOCIMIENTO O POR RESERVA EN SEA POR AL NO RESERVA O APLICADO, O POR OTRAS PERSONAS O INCONVENIENTES, NO HAN PRODUCIDO SE CUALQUIER ACCIÓN JURÍDICA, Y DISCIPLINARIA POR LA OTRA Y OTRAS AUTORIDADES COMPETENTES, NECESARIAS, PARA SU LÍMITE, A LA TENDRÁN SE LA PARTICIPACIÓN EN LOS PROCEDIMIENTOS DE CERTIFICACIÓN PROFESIONAL DE LA OTRA.

## GENERAL NOTES

- CONTRACTOR SHALL REVIEW PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND AREA OF CONSTRUCTION CAREFULLY TO ENSURE FULL UNDERSTANDING OF EXACT SCOPE OF WORK. THE DESIGNER OR OWNER REPRESENTATIVE WILL BE AVAILABLE TO REVIEW ALL WORK ON SITE AND RESOLVE ANY UNCLEAR ITEMS.
- CONTRACTOR AND ALL SUBCONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD AND NOTIFY THE DESIGNER OR OWNER REPRESENTATIVE OF ANY DISCREPANCIES WITH THE CONSTRUCTION DOCUMENTS BEFORE BEGINS. NO CHANGES SHALL BE MADE TO ANY PLAN WITHOUT PRIOR COMMENT OF THE DESIGNER.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE JOB SITE ACCORDING TO THE DOCUMENTS, NOTES AND DIMENSIONS ON ARCHITECTURAL PLANS SHALL BE CHECKED AND VERIFIED WITH CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND ANY OTHER DRAWINGS INCLUDED IN THE CONTRACT DOCUMENTS. IN CASE OF ANY DOUBT, ERROR, OMISSION OR DISCREPANCIES IN ANY DRAWING, NOTES, DIMENSIONS AND/OR SPECIFICATIONS CONTRACTOR SHALL NOTIFY THE DESIGNER PRIOR TO PRECEEDING WITH THE WORK.
- DO NOT SCALE DRAWINGS, DIMENSIONS GOVERN.
- CONTRACTOR SHALL USE, INSTALL OR APPLY SPECIFIED PRODUCTS OR APPROVED SUBSTITUTES.
- ALL MATERIALS, METHODS OF INSTALLATION AND FINISHING OF CONSTRUCTION SYSTEMS (PARTITIONS, CEILINGS, DOORS, FRAMES, AND FLOOR ETC.) SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR THE EXPECTED USE.
- CONTRACTOR SHALL MAKE PROVISIONS UPON CONTRACT AWARD TO ORDER FROM SUPPLIERS ALL ITEMS SPECIFIED IN CONSTRUCTION DOCUMENTS OR APPROVED SUBSTITUTES AND THAT ARE NOT IN STOCK IN PUERTO RICO IN ORDER TO AVOID DELAYS.
- REVIEW AND APPROVAL OF CONSTRUCTION WORK, ITEMS, AND PRODUCTS SUBMITTED DO NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS WHICH MAY EXIST IN THE PERFORMED WORK.
- CONTRACTOR SHALL TAKE MAXIMUM PRECAUTIONS IN ORDER TO PREVENT DAMAGE TO EQUIPMENT OR ADJACENT PROPERTY AND AVOID INJURIES TO PERSONNEL AND PEOPLE.
- CONTRACTOR SHALL REPLACE AND/OR REPAIR PAVEMENT, STRUCTURES OR EQUIPMENT DETERIORATED OR DAMAGED IN ANY WAY BY THE CONSTRUCTION PROCESS WHETHER OR NOT SPECIFICALLY STATED IN THE DRAWINGS.
- CONTRACTOR SHALL PROVIDE ALL ELECTRICAL, MECHANICAL, AND OTHER CONNECTIONS AS REQUIRED FOR ALL ITEMS SPECIFIED OR CALLED FOR TO BE RELOCATED WHETHER SPECIFICALLY MENTIONED OR NOT IN THE DRAWINGS.
- CONTRACTOR MUST BE AWARE AND INFORMED ABOUT GOVERNMENTAL AGENCIES REGULATIONS, PERMITS AND REQUIREMENTS CONCERNING THE WORK TO BE DONE.
- CONTRACTOR SHALL NOTIFY DESIGNER OR OWNER REPRESENTATIVE OF ANY UNFORESEEN JOB CONDITIONS WHICH MIGHT AFFECT PROJECT COSTS, EXTRA WORK AND/OR COSTS MUST BE APPROVED IN WRITING PRIOR TO CONSTRUCTION OF SUCH WORK.
- CONTRACTOR SHALL OBTAIN FULL KNOWLEDGE BY PERSONAL AND CAREFUL EXAMINATION OF ALL EXISTING CONDITIONS AT THE SITE AND ALL REQUIREMENTS OF THE SPECIFICATIONS AND DRAWINGS. THE CONTRACTOR HEREBY ACCEPTS ALL SUCH CONDITIONS AND REQUIREMENTS AND HEREBY ASSUMES ALL RESPONSIBILITY AND COST RESULTING FROM HIS/HER FAILURE TO OBTAIN KNOWLEDGE OF ANY OF THEM.
- IT IS UNDERSTOOD THAT WHILE NOT EVERY DETAIL OF THE WORK IS SHOWN ON THE DRAWINGS OR SPECIFICATIONS, THE WORK INCLUDES ITEMS INFERRABLE FROM THE CONTRACT DOCUMENTS. THE OWNER SHALL NOT BE HOLD RESPONSIBLE FOR THE ABSENCE OF ANY DETAIL. THE CONTRACTOR MAY REQUIRE FOR ANY CONSTRUCTION WHICH MAY BE FOUND NECESSARY AS THE WORK PROGRESSES. IF ANY ITEM OR SYSTEM IS EITHER SHOWN OR SPECIFIED, ALL MATERIAL AND EQUIPMENT NORMALLY FURNISHED WITH SUCH ITEMS OR SYSTEMS AND/OR NEEDED TO MAKE A COMPLETE OPERATION INSTALLATION, SHALL BE PROVIDED WHETHER MENTIONED OR NOT, OMITTING ONLY SUCH PARTS AS ARE SPECIFICALLY EXCEPTED.
- CONTRACTOR AND HIS SUBCONTRACTORS SHALL TURN THE PROJECT OVER TO OWNER, FREE FROM ALL CONSTRUCTION DEBRIS.
- DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS PREPARED BY THE ARCHITECT AND HIS CONSULTANTS FOR THIS PROJECT ARE INSTRUMENTS OF THE ARCHITECTS SERVICE FOR USE SOLELY WITH RESPECT TO THIS PROJECT AND UNLESS OTHERWISE PROVIDED, THE ARCHITECT SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHTS, COPIES OF ARCHITECTURAL DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS FOR INFORMATION AND REFERENCE ARE PROHIBITED UNLESS EXPRESSLY AUTHORIZED BY SANTOS MELENDEZ CONSULTING ENGINEERS, P.S.C.
- THE ARCHITECT WILL SELECT THE PAINT'S COLORS FROM STANDARD COLORS AVAILABLE BY GLENN. THE PAINTING CONTRACTOR PART MUST NOT GET ALL DETAILING BIDDING AS PROPOSED OR NEW CONSTRUCTION.
- THE BIDDING CONTRACTOR SHALL INCLUDE ON HIS BID ANY ITEM TO APPLY A TREATMENT TO CONTROL OF TERMITES, INCLUDING SUBTERRANEAN AND DRY WOOD TERMITES.
- THE CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES AND SHALL REPAIR ALL SUCH DAMAGE AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER.
- TREATMENT ROOF APPLY TO NEW BUILDING, PROPOSED TYPE "DANOSOSA"
- ALL AREA AFFECTED BY LAND MACHINERY, TRUCKS, CRANES OR VEHICLES WILL BE REPAIRED IN FULL, ALL HOLES OR BE COMPLETED OR SINKAGES COMPACTED AND COVERED AND RETURNED TO ITS FORMER STATE OR IMPROVED.

## ARCHITECTURAL LEGEND.

- |  |  |  |  |
|--|--|--|--|
|  | Existing Concrete Wall, Column, or Concrete Block Wall |  | Fire Extinguishers Provide 6 units Change in Floor Level Indicated in Inches |
|  | New Concrete Block Wall                                |  | N.I.C. Not Included in Cost  |
|  | Cement Plaster And Paint                               |  | A.F.F. Above Finished Floor Level  |
|  | New Concrete Wall or Column                            |  | F.F. Finished Floor Elevation  |
|  | Cement Plaster And Paint                               |  | D.F. Drinking Fountains  |
|  | Door Identification number                             |  |  |
|  | Window Identification number                           |  |  |
|  | Detail Number  |  |  |
|  | Page Number Where Detail is Shown                      |  |  |
|  | Section Number   |  |  |
|  | Page Number Where Section is Shown                     |  |  |

DANILO SALAZAR  
P.E.

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Drawn by : Montilla García

Checked by

Date  
9 FEB 2023

No. Revision Date By

Project  
IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

GROUND  
FLOOR PLAN

Scale  
1/8"=1'-0"

File Name

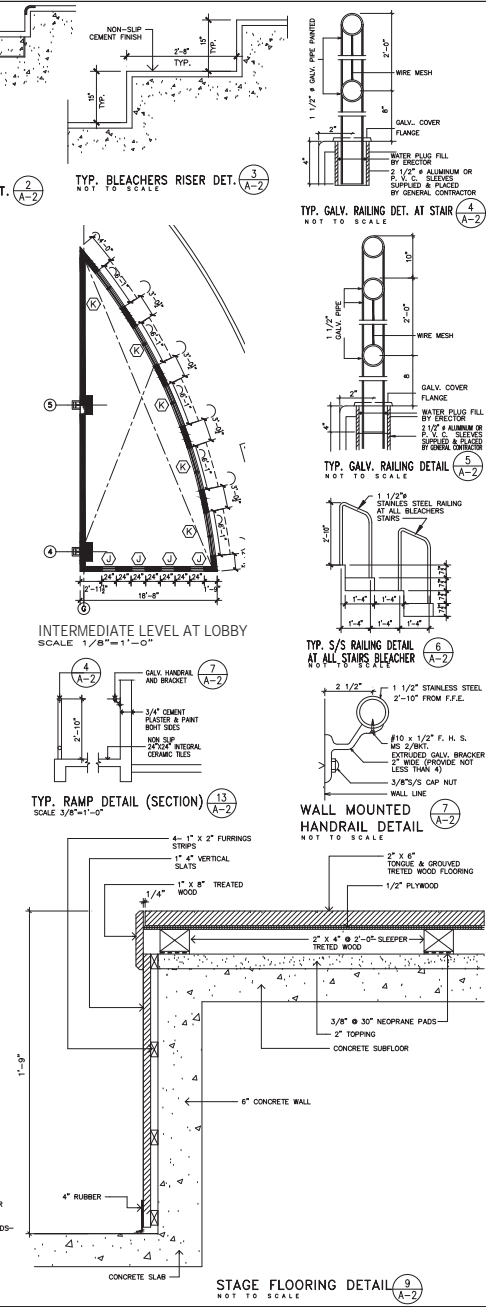
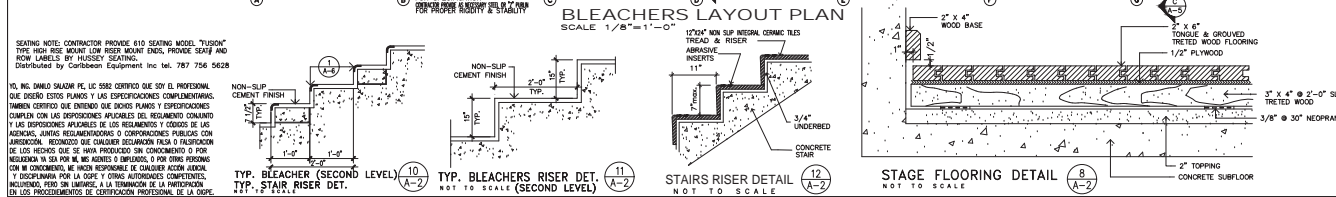
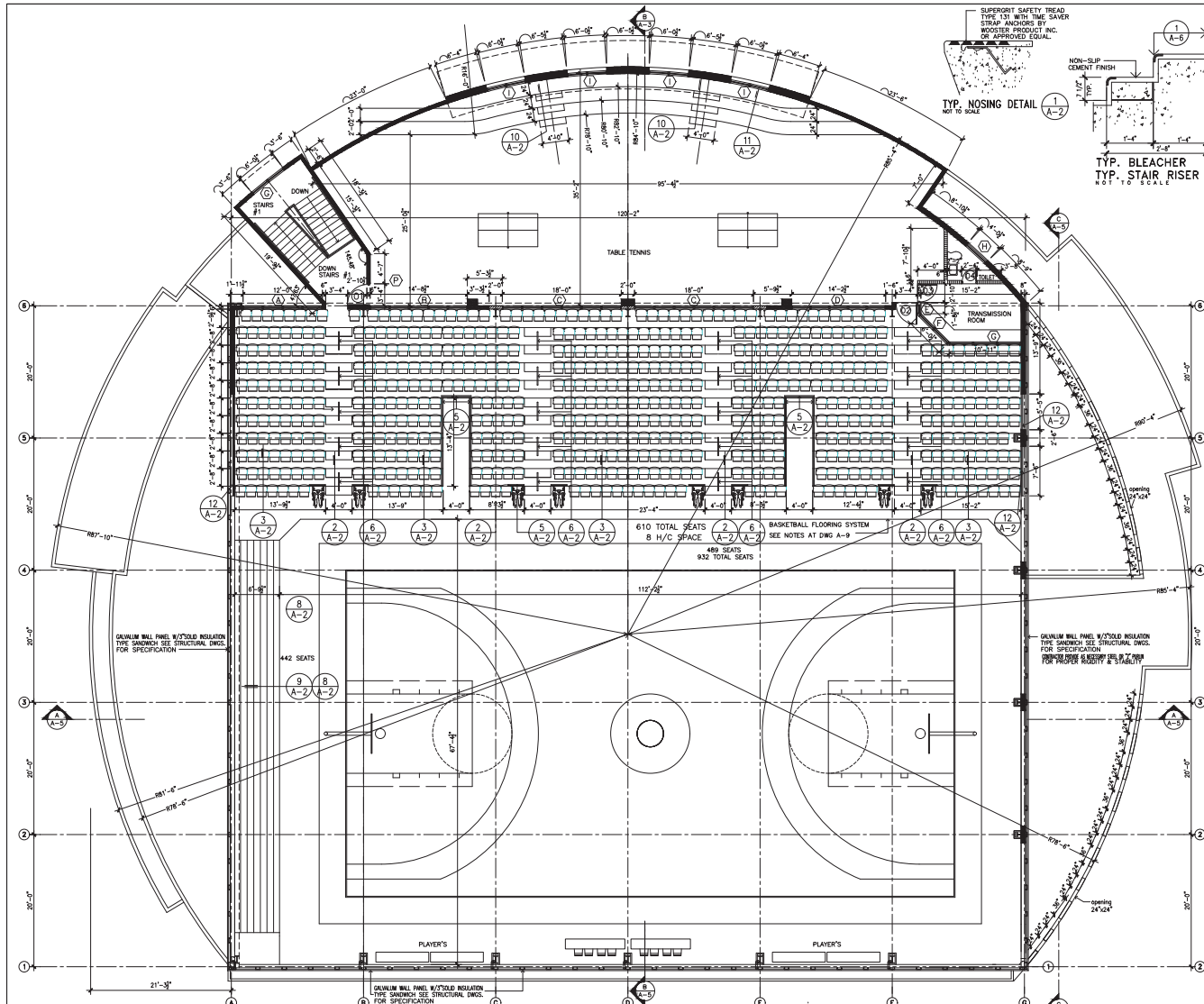
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A-1

Sheet Number

04



DANILO SALAZAR

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Drawn by : Montilla Garcia

Checked by

Date

No. Revision Date By

09 FEB 2023

Project

IMPROVEMENTS & EXPANSION

MUNICIPAL COLISEUM

ANGEL MERCADO VEGA

Bo. PUEBLO

SABANA GRANDE, PUERTO RICO

Drawing Title

SECOND LEVEL BLEACHERS LAYOUT

Scale

1/8"=1'-0"

File Name

FILE-NAME

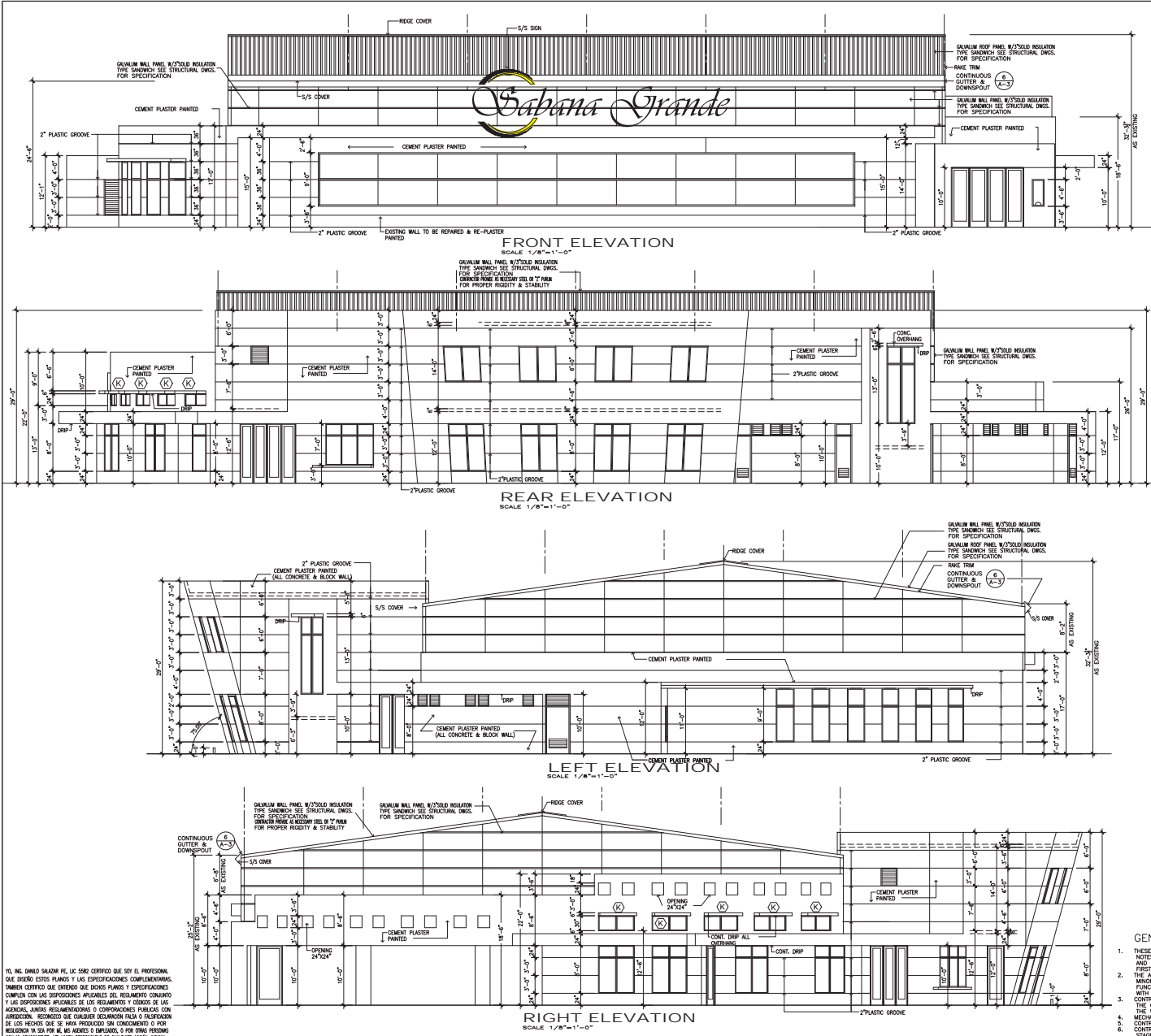
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A-2

Sheet Number

05





AREA OR SPACE		FINISHING SCHEDULE										
		FLOOR	BASE	WALLS	CEILING							
LOBBY MULTIUSED												
MAIN ENTRANCE COURT												
BIGBELL & VOLLEYBALL COURT												
JANITOR												
TOILET												
CORRIDOR												
BLEACHERS												
STAIRS/RAMP												
STORAGE												
CAFETERIA												
MULTIUSED SALON												
TABLE TENNIS ROOM												
TRANSMISSION ROOM												

- NOTE: ALL EXTERIOR SIDEWALK: EXPOSED GRAVEL FINISH
- DESCRIPTION
- A 8"x8" X1/2" QUARRY TILES 11 SUN GLO BY SUMMITVILLE TILES INC. COMERCIAL ADOLFO S. PAGON
- B CEMENT POLISHED NONSLIP APPLY SLOCON GRABBER (SPARKLING) OR ALUMINUM OXIDE AT 1/4" TO 1/2" PSF; TROWEL LIGHTLY.
- C 24"x24" INTEGRAL CERAMIC TILES
- D 2"x2" INTEGRAL CERAMIC TILES EQUAL TO "AMERICAN OLEAN" BY IMAGINATION
- E 8"x4" X1/2" QUARRY TILES 11 SUN GLO BY SUMMITVILLE TILES INC. COMERCIAL ADOLFO S. PAGON
- F 4" X 24" INTEGRAL CERAMIC TILES CEMENT POLISHED NONSLIP APPLY SLOCON GRABBER (SPARKLING) OR ALUMINUM OXIDE AT 1/4" TO 1/2" PSF; TROWEL LIGHTLY.
- H SMOOTH CEMENT PLASTER
- I GLAZED TILES EQUAL TO "AMERICAN OLEAN" BY IMAGINATION TELL 743-7578
- J 6"x6" GLAZED TILES BULLNOSE A3602 BRIGHT MAIZE (TOP)
- K 6"x6" GLAZED TILES 43 SEAGULL GRAY
- L 6"x6" GLAZED TILES COVE A3601 BRIGHT MAIZE (BOTTOM)
- M PAINT GLODDEN CITY BY PLAYWORLD SYSTEMS CITY PARK ID. 2,200 SQUARE FEET APPROXIMATE
- Professional Pvc Vinyl Flooring  
Weil Sport Floor  
Fabric Platform  
Thickness  
5mm  
Color: GREEN MATTE

- PAINTING NOTES:
- MASONRY SURFACES:
- 1-SURFACE MUST BE DRY CLEAN AND FREE OF ALL CONTAMINANTS. REMOVE DUST AND DIRT WITH STIFF BRISTLE OR WIRE BRUSHES AND COMPRESSED AIR. REMOVE OIL AND GREASE WITH SOLVENTS SUCH AS MINERAL SPIRITS OR XYLENE IN COMPLIANCE WITH SSPC, SP-1-82. SOLVENT CLEANING.
- 2-APPLY ONE COAT OF "GOLD - GUARD" ALKALI RESISTANT PRIMER NO.1012
- 3-APPLY TWO COATS OF "SHRED" HOUSE MASONRY & FINISH (GUSE-ON FORMULA NO.3035)
- METAL SURFACES:
- 1-SURFACE MUST BE DRY CLEAN AND FREE OF ALL CONTAMINANTS. REMOVE DUST AND DIRT WITH STIFF BRISTLE OR WIRE BRUSHES AND COMPRESSED AIR. REMOVE OIL AND GREASE WITH SOLVENTS SUCH AS MINERAL SPIRITS OR XYLENE IN COMPLIANCE WITH SSPC, SP-1-82. SOLVENT CLEANING.
- 2-APPLY ONE COAT OF "GOLD - GUARD RUSTMASTER" ALKALI METAL PRIMER NO. 590 SERIES.
- 3-APPLY TWO COATS OF "GOLD - GUARD" ALKALI INDUSTRIAL ENAMEL NO.4550 SERIES.

- GENERAL NOTES:
1. THESE PLANS HAVE BEEN CAREFULLY PREPARED FOR THIS PROJECT. SPECIAL ATTENTION SHALL BE GIVEN TO THE NOTES AND INDICATIONS INCLUDED IN THE DRAWINGS. THESE NOTES ARE INTENDED AS A GUIDE TO THE CONTRACTOR AND SHALL BE FOLLOWED CLOSELY WHENEVER POSSIBLE. ANY DEVIATION FROM THESE NOTES SHALL BE DISCUSSED FIRST WITH PROJECT ARCHITECT OR/AND PROJECT ENGINEER.
2. THE ATTENTION OF DRAWING IS TO CALL FOR FINISHED WORK. COMPLETED, TESTED AND READY FOR OPERATION. MINOR DETAILS NOT SHOWN OR SPECIFIED, BUT NECESSARY FOR THE PROPER INSTALLATION AND FOR FUNCTIONING AND OPERATION OF SYSTEM SHALL FORM PART OF THE WORK TO BE DONE BY THE CONTRACTOR WITH THE APPROVAL OF THE ARCHITECT OR/AND ENGINEER OF THE PROJECT.
3. CONTRACTOR SHALL VERIFY STRUCTURES (IF EXIST) AND EXISTING SITE AND ACQUAINT HIMSELF WITH THE CONDITIONS AS THEY ACTUALLY EXIST AND VERIFY DIMENSIONS, LOCATION AND DETAILS REQUIRED TO COMPLETE THE WORK. IN CASE OF DOUBT OR DISCREPANCY CONSULT TO THE ARCHITECT OR/AND ENGINEER OF THE PROJECT.
4. MECHANICAL PLANS SHALL BE COORDINATES WITH STRUCTURAL PLANS AND ALL OTHER PERTINENT DATA.
5. CONTRACTOR SHALL LEAVE THE PROJECT CLEAN AND FREE OF ANY GARBAGE PRODUCED DURING THE CONSTRUCTION STAGE.

DANILO SALAZAR  
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Drawn by : Montilla Garcia

Checked by

10 FEB 2023

No. Revision Date By

Project

IMPROVEMENTS & EXPANSION  
MUNICIPAL COLISEUM

ANGEL MERCADO VEGA  
Bo. PUEBLO  
SABANA GRANDE, PUERTO RICO

Drawing Title

ELEVATIONS

Scale

1/8"=1'-0"

File Name

FILE-NAME

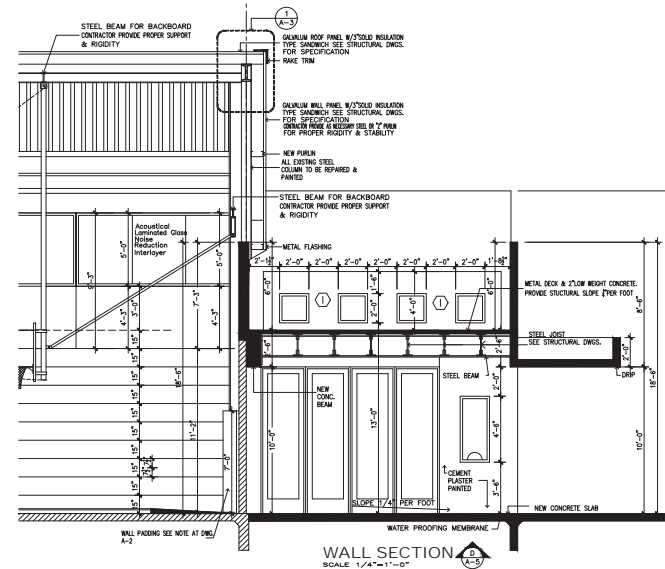
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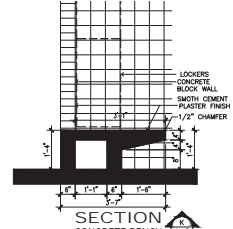
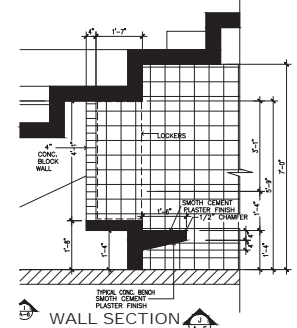
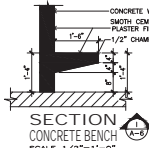
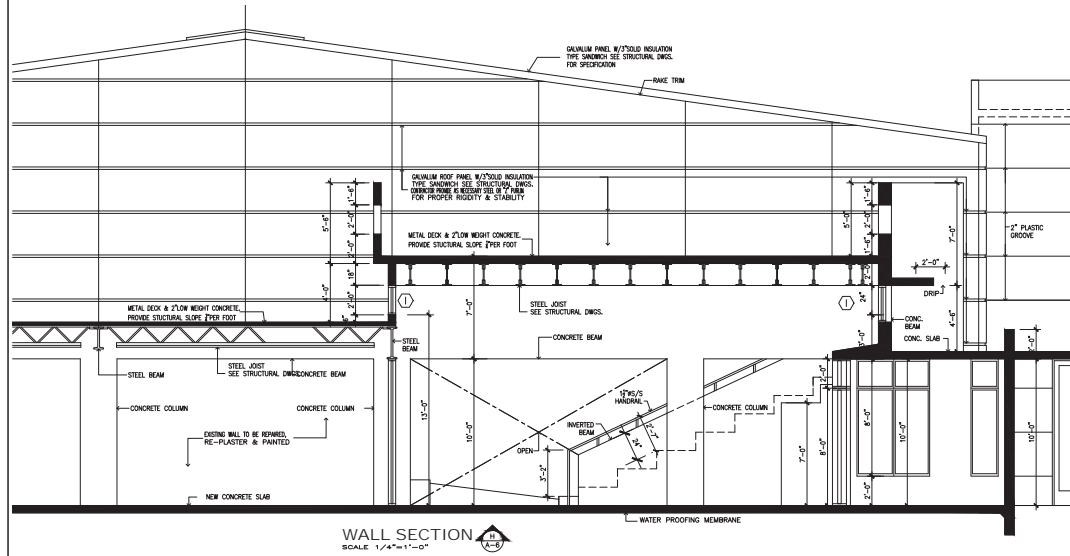
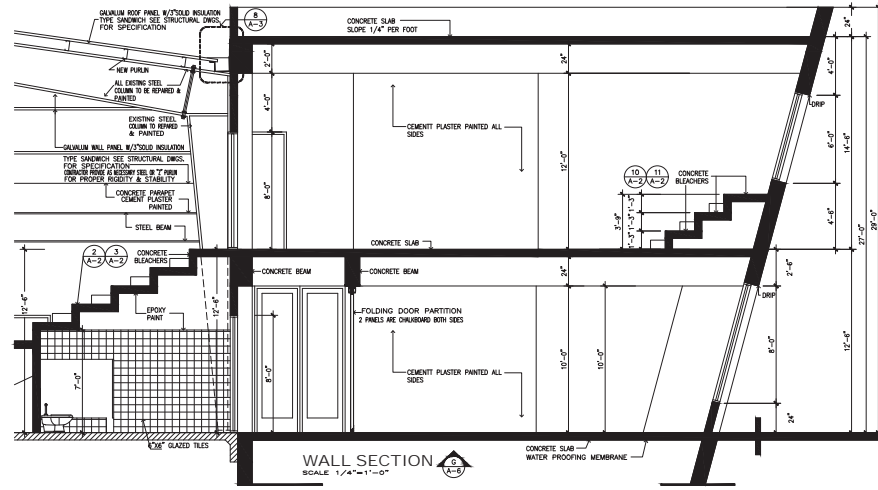
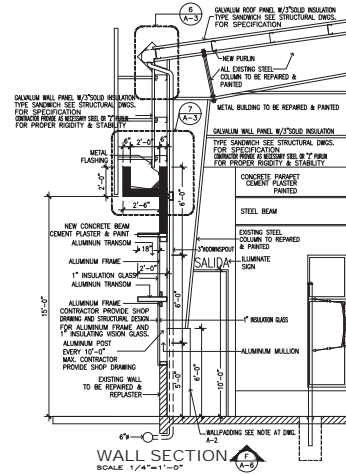
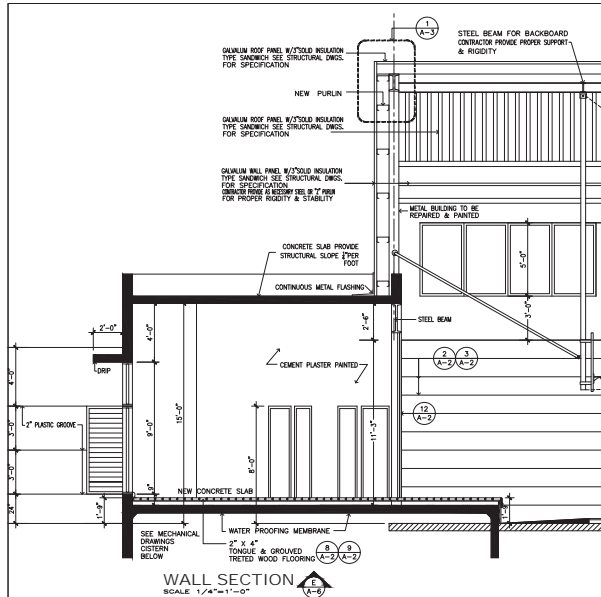
Sheet Number

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09



YO, ING. DANIL SALAZAR P.E. LE SACR CERTIFICADO QUE SOY EL PROFESIONAL QUE DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS. DAMIER CERTIFICADO QUE ENTENDI QUE DICHOS PLANOS Y ESPECIFICACIONES CUMPLEN CON LAS DISPOSICIONES RELEVANTES DEL REGLAMENTO CONSUMIDOR Y LAS DISPOSICIONES APPLICABLES DE LOS REGLAMENTOS Y CODIGOS DE LAS INGENIERIAS, JUNTO A RECOMENDACIONES O CORRECCIONES PUBLICADAS CON JURISDICCION. RECONOZCO QUE CUALQUIER DESVIACION PUEDE O PUEDE OCURRIR POR MI O POR ALGUNO DE LOS AGENTES O EMPLEADOS, O POR OTRAS PERSONAS POR MI ENCARGO, ME HAN REPARADO O CONSIDERO QUE HAN REPARADO Y DESEMPEÑAN POR LA CORTE Y OTROS ATRIBUCIONES COMPETENTES. RECONOZCO QUE SI HAN REPARADO O CONSIDERO QUE HAN REPARADO EN LOS PROCEDIMIENTOS DE CERTIFICACION PROFESIONAL DE LA CORTE.

DANILO SALAZAR  
P.E.

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Drawn by : Montilla Garcia

Checked by

Date  
10 FEB 2023

No. Revision Date By

Project  
IMPROVEMENTS  
& EXPANSION  
MUNICIPAL COLISEUM  
ANGEL  
MERCADO VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

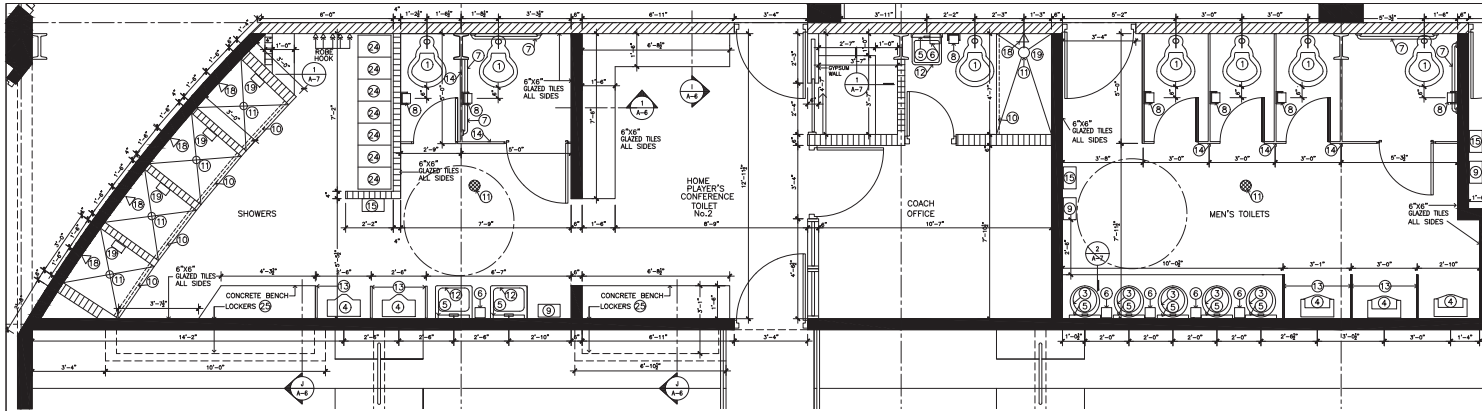
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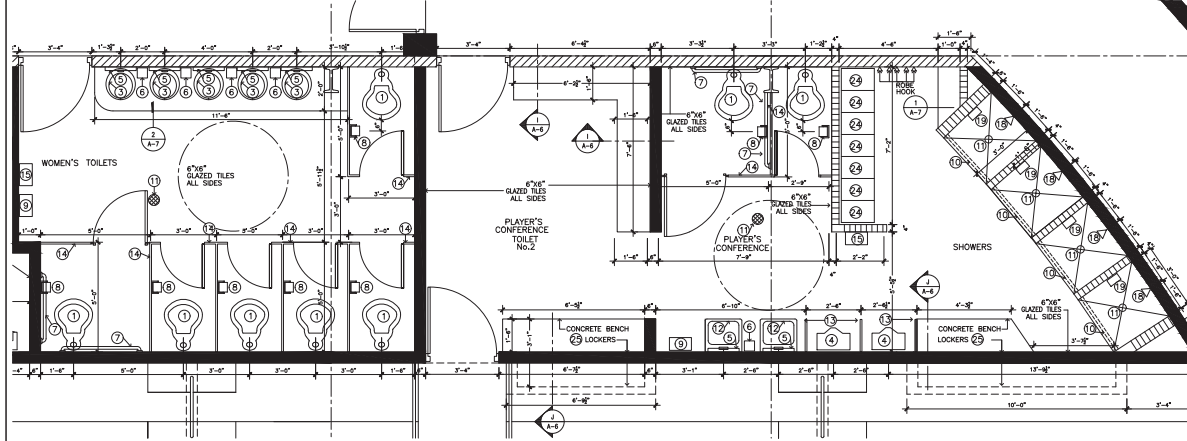
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10



PLAYER'S CONFERENCE & TOILET (HOME)  
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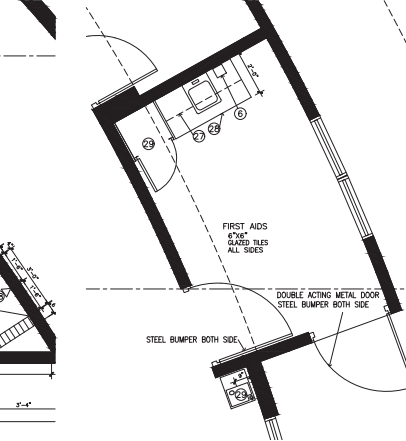
MEN'S TOILET  
SCALE 3/8"=1'-0"

ARBITER'S TOILET  
SCALE 3/8"=1'-0"



WOMEN'S TOILET  
SCALE 3/8"=1'-0"

PLAYER'S CONFERENCE & TOILET (VISITOR)  
SCALE 3/8"=1'-0"



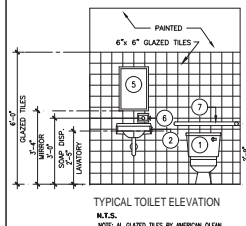
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#### TOILETS FIXTURES LEGEND

- ① WATER CLOSET FLUSH VALVE CAT. 9468218 NEW ELDERLY CHDT TOP SPUD COLOR WHT. AMERICAN STANDARD.
- ② WHEELCHAIR LAVATORY 9140.013 AMERICAN STANDARD.
- ③ OVAL LAVATORY CAT. 3302.05 AMERICAN STANDARD.
- ④ URINAL VITREOUS CHINA CAT. 6501.010 WASHBROOK URINAL TOP SPUD COLOR WHT. AMERICAN STANDARD.
- ⑤ MIRROR 18"x24" (3'-4" A.F.F.): 8-282 BORBICK
- ⑥ 304 LIQUID SOAP DISPENSER 20 GA. TYPE 304 S.S. MCKINNEY 8-27-07 A.F.F.
- ⑦ GRAB BAR HORIZONTAL TWO-WALL BMS 36"x54" 8-68137 BORBICK
- ⑧ SANITARY PAPER HOLDER (8" 24" A.F.F.): 8-288 BORBICK
- ⑨ Bidet: Tivaria Automatic Hand Dryer - Stainless Steel 115V AC, 15 Amp, 50/60 Hz, 1725 Watts
- ⑩ CURTAIN ROD 268 ORNAMENTAL, SHC. ROD BY MC KINNEY
- ⑪ FLOOR & SHOWER DRAIN JAY R. SMITH MFG. CO. ROUND TOP 20301-BB
- ⑫ LAVATORY ROYALTY No. 0194.019 AMERICAN STANDARD.
- ⑬ URINAL SCREEN 18"x42" SERIE 1A-E.S. ENTRANCE SCREEN TAMCOR TRULLULLO ALTO CORP.
- ⑭ TOILET PARTITION TYPE 1A-F FULL FLUSH TAMCOR TRULLULLO ALTO CORP.
- ⑮ TOWEL DISPENSER & WASTE MC KINNEY BY MC KINNEY
- ⑯ Locker Bench Hardwood Top Steel Tube Pedestal Bolt Down Style 72"x3-1/2"x17" Item #: TRC150000 BY Global Industrial
- ⑰ Halsey Taylor WCM&F's PV Barrier Free & GPH Water Cooler (Refrigerated Drinking Fountain)-STAINLESS STEEL PANEL
- ⑱ SHOWER HEAD & ACCESSORIES BY MCKINNEY (800/541-1073) OR SIMILAR.
- ⑲ HEAVY DUTY SOAP DISH & GRAB BAR 1070 BY MCKINNEY (800/541-1073) OR SIMILAR.
- ⑳ R006-L FOLDING SHOWER SEAT 304 SATIN FINISH 5/5 BY AMERICAN SPECIALTIES INC. PHONE (914) 476-9000
- ㉑ JANITORIAL UTILITY SHELF 224/232 30" BY MCKINNEY (717-3467551).
- ㉒ EXHAUST HOOD (V) ALL 5/5 KITCHEN HOOD EQUIPPED W/FILTERS
- ㉓ LAMPOR PROOF LIGHTS SIZE AS PER PLAN EQUIPPED W/ANALOG TIME PREVENTION SYSTEM.
- ㉔ COOKTOP JF6060V 36" BY GENERAL ELECTRIC CO.
- ㉕ Hollowell AWK282-2MR Gpm/Gpm/Locker Double Top 12x18x36 Approximate PART NUMBER HEL15446-145, Provide 18 Style Tubs into Global Industrial PHONE 1.888.277.6995
- ㉖ Hollowell Home Team Locker, 1 Wide Unassembled, 15" W x 15" D x 48" H, Dark Blue Body / Light Gray Door PART NUMBER HEL15446-145, Provide 18 Style Tubs into Global Industrial PHONE 1.888.277.6995
- ㉗ 4'-0" x 3'-0" THREE COMPARTMENT SINK W/TYPING 4'-0" x 12" 5/5 SUPERIOR RACK
- ㉘ HIGH CABINET K24HB-SK24B BY BUCHANAN LAB. FURNITURE
- ㉙ BASE CABINET 08-42H-SH INCLUDES SINK SUPPORTS BY BUCHANAN LAB. FURNITURE
- ㉚ WALL CABINET E47L-SL-47 BY BUCHANAN LAB. FURNITURE

NOTE: ALL GLAZED TILES BY AMERICAN CLEAM  
(\*) BY JOHN HANCOCK & ASSOCIATES INC.  
244 PONCE DE LEON AV. SAN JUAN, P.R. 00906  
TEL. 724-2929 FAX 723-2445

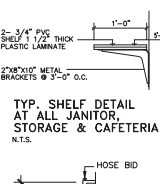
GENERAL NOTES FOR TOILETS PARTITIONS :  
DESIGNER/CONTRACTOR SHALL VERIFY FIELD DIMENSIONS BEFORE ORDERING TOILET PARTITIONS. ALSO SHOP DWG ARE REQUIRED FOR ARCHITECT APPROVAL BEFORE ORDER IS PLACED FOR FABRICATION.



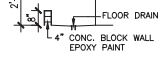
TYPICAL TOILET ELEVATION  
N.T.S.  
NOTE: ALL GLAZED TILES BY AMERICAN CLEAM

YO, INC. DANILLO SALAZAR, P.E., LIC. 5582 CERTIFICADO QUE SOY EL PROFESIONAL QUE DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS. TAMBIEN CERTIFICADO QUE DISEÑO QUE DISEÑO PLANOS Y ESPECIFICACIONES CUMPLEN CON LAS DISPOSICIONES APPLICABLES DEL REGLAMENTO COMUNITARIO Y LAS DISPOSICIONES APPLICABLES DE LOS REGLAMENTOS Y ORDENOS DE LAS AGENCIAS, JANTINE REGULACIONES O COMPROMISOS PUBLICOS CON AUTORIZACION. RECONOZCO QUE CUALQUIER RECLAMACION HACIA O RECLAMACION DE LOS DISEÑOS QUE SE HAYA PRODUcido SIN CONSENTIMIENTO O POR RECLAMACION VA SEA POR MI O POR MI AGENTE O EMPLEADO, O POR OTRAS PERSONAS, CON O SIN CONSENTIMIENTO, ME HAN PRODUcido DE CUALQUIER AGENTE, AGENTE, Y DISPONERAN POR LA OTRA Y OTRAS AUTOMATICO COMPETENTES, RECLAMACION, FERO, SIN LIMITARSE, A LA TERMINACION DE LA PROSECUCION EN LOS PROCEDIMIENTOS DE CERTIFICACION PROFESIONAL DE LA OTRA.

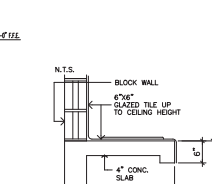
TYPICAL DETAIL FOR ALL STORAGE (UNDER STAIRS) AND JANITOR  
SCALE 3/4"=1'-0"



TYP. SHELF DETAIL AT ALL JANITOR, STORAGE & CAFETERIA  
N.T.S.



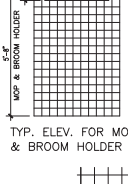
TYPICAL FLOOR SINK FOR ALL JANITOR  
N.T.S.



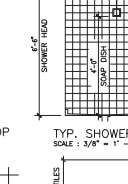
TYPICAL CONCRETE COUNTER FOR LAVATORY  
SCALE: 3/4"=1'-0"



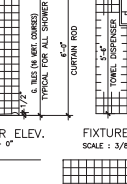
CERAMIC TILE CONDITIONS  
N.T.S.  
PROVIDE 6"x6" GLAZED TILES UP TO 6'-0" AT ALL TOILETS/STAIRS



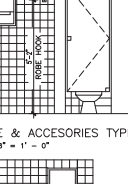
TYP. ELEV. FOR MOP & BROOM HOLDER  
N.T.S.



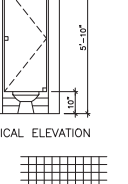
TYP. SHOWER ELEV.  
SCALE: 3/8"=1'-0"



FIXTURE & ACCESSORIES TYPICAL ELEVATION  
SCALE: 3/8"=1'-0"



TOWEL DISPENSER  
N.T.S.



TYP. ELEV. URINAL & URINAL SCREEN  
SCALE: 3/8"=1'-0"

DANILO SALAZAR  
P.E.

PO BOX 008136, SAN JUAN, P.R. 009100-0136, PHONE (787) 614-9591

Drawn by : Montilla Garcia

Checked by

Date 14 FEB 2023

Revision Date By

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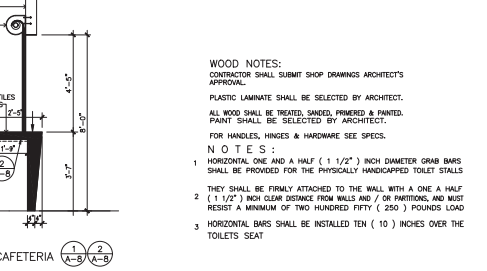
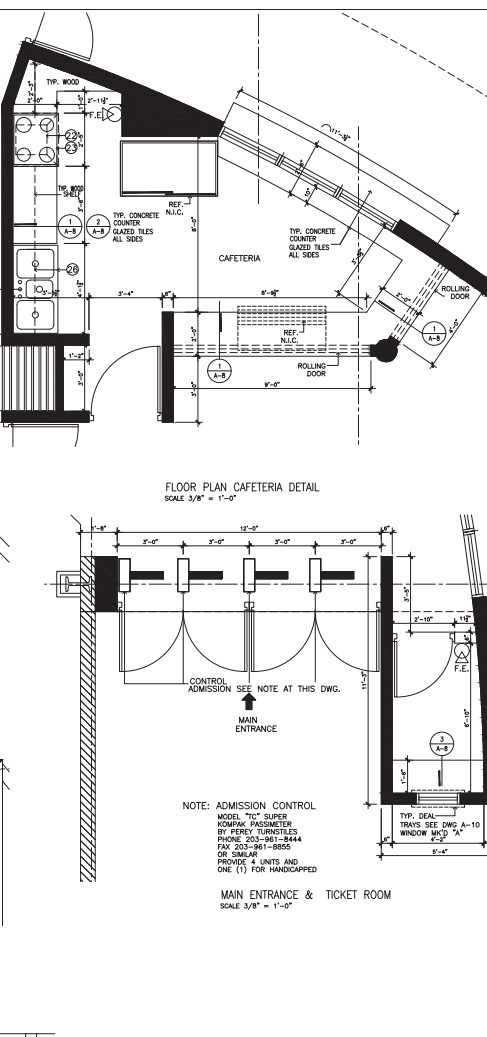
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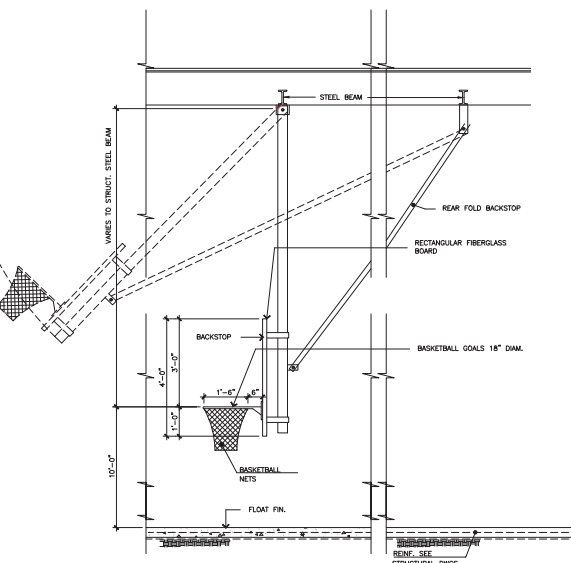
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Sheet Number 12





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YO, ING. DARWIS SAAVEDRA PÉREZ, LC 5582 CERTIFICO QUE SOY EL PROFESIONAL QUE DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS. TAMBIÉN CERTIFICO QUE ENTENDI QUE DICHO PLANOS Y ESPECIFICACIONES CUMPLEN CON LAS DISPOSICIONES APLICABLES DEL REGLAMENTO CONSTRUCCIÓN CIVIL, CÓDIGO DE OBRAS PÚBLICAS Y REGLAMENTO DE LAS LEYES, JUNTAS REGLAMENTADORAS O CORPORACIONES PÚBLICAS COMO AUSENTE, RECONOZCO QUE CUALQUIER DECLARACIÓN FALSA O FALSIFICACIÓN DE LOS HECHOS QUE SE HAYA PRODUCIDO SIN CONOCIMIENTO O POR NEGLIGENCIA YA SEA POR MÍ, MIS AGENTES O EMPLEADOS, O POR OTRAS PERSONAS CON SU CONOCIMIENTO, ME HACEN RESPONSABLE DE CUALQUIER ACCIÓN JUDICIAL Y DISCIPLINARIA POR LA DOTE Y OTRAS AUTORIDADES COMPETENTES, QUE SE DERIVEN DE LOS HECHOS ANTERIORES, Y ME OBLIGO A COOPERAR EN LOS PROCEDIMIENTOS DE CERTIFICACIÓN PREVISTOS, DE LA LEY.

14



Drawn by : Malileen Pearson

Checked by:  
Eng. Wilfredo Rodriguez

Date  
21 September 2020

No. Revision Date By

Project

IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE  
PUERTO RICO

Drawing Title

STRUCTURAL  
NOTES

Scale  
AS SHOWN

File Name  
19001-JR-101.DWG

Drawing Number

S-001

Sheet Number

15

GENERAL NOTES:

1. THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

2. SPECIFICATIONS NOTED ON THESE DRAWINGS SHALL BE OF THE LATEST EDITION.

3. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK.

4. NO OPENINGS, OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS, SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

5. NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBER SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.

6. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPROVED UPON STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.

7. HORIZONTAL MOVEMENT OF ANY HEAVY EQUIPMENT OR STRUCTURAL FLOORS OR ROOF AND ITS TEMPORARY AND/OR DEFINITE LOCATIONS MUST BE PREVIOUSLY APPROVED BY THE ENGINEER SO AS NOT TO OVERLOAD THE STRUCTURE OR IN ANY OTHER WAY IMPAIR THE STRUCTURE. SAME PRECAUTION SHALL BE TAKEN FOR THE PLING OF CONSTRUCTIONS MATERIALS.

8. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE STRUCTURE IS CONSTRUCTED. CONSTRUCTION METHODS AND/OR SEQUENCES, OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.

9. ALL STRUCTURES HAVE BEEN DESIGNED ACCORDING TO FINAL BEHAVIOR AND CORRECTIONS. HOWEVER, DURING ERECTION OF SAME, CERTAIN CONDITIONS CAN ARISE FOR WHICH THE BEHAVIOR OF THE STRUCTURE HAS NOT BEEN DURING DESIGN. THEREFORE, THE CONTRACTOR SHOULD PROVIDE AT ALL TIME ADEQUATE SHORING AND RESTORING UNTIL THE DESIGN CONDITIONS HAVE BEEN MET. IF THERE IS ANY DOUBT DURING ANY PHASE OF THE CONSTRUCTION, PLEASE CONSULT AND/OR NOTIFY THE STRUCTURAL ENGINEER.

10. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.

11. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

12. CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.

13. THE CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY OF RECORD REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC. UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE PROFESSIONAL OF RECORD OF SUCH DEVIATION AT THE TIME OF SUBMISSION, AND THE PROFESSIONAL OF RECORD HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.

14. WHERE "OWNER" IS MENTIONED IN PLANS IT IS TO BE UNDERSTOOD EITHER OWNER OR HIS AUTHORIZED REPRESENTATIVE.

15. CONTRACTOR SHALL SUBMIT FOR OWNER'S APPROVAL, REVISION AND DETAILS OF CONSTRUCTION JOINTS IN SLABS AND BEAMS, AND IN ANY OTHER STRUCTURAL MEMBERS.

16. CONTRACTOR MUST VERIFY ALL DIMENSIONS ON STRUCTURAL PLANS AGAINST THE DIMENSIONS ON ARCHITECTURAL PLANS BEFORE LAYING OUT THE WORK.

17. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING FIELD CONDITIONS PRIOR TO STARTING CONSTRUCTION. IF ANY DISCREPANCY ARISES IN THE STRUCTURAL AND ARCHITECTURAL PLANS, THE ARCHITECTS AND ENGINEERS SHALL BE NOTIFIED IMMEDIATELY.

18. CONTRACTOR MUST PROVIDE, SET AND VERIFY DIMENSIONS AND LOCATION OF ALL ANCHORS, INSERTS BOLTS, SLEEVES, CONDUITS, ETC., SHOWN OR NOTED IN ARCHITECTURAL AND/OR MECHANICAL AND PLUMBING PLANS BEFORE THE CONCRETE IS POURED.

19. PROVISIONS FOR DETAILS NOT SPECIFICALLY DRAWN SHALL BE MADE BY THE CONTRACTOR IN ACCORDANCE WITH THE LATEST VERSION OF THE AC BUILDING CODE AND/OR AISI SPECIFICATIONS AND CLARIFIED WITH THE STRUCTURAL ENGINEER.

20. ALL DETAILS, SECTIONS AND NOTES SHOWN ON DRAWINGS AND INTENDED TO BE TYPICAL, SHALL APPLY TO SIMILAR STRUCTURES ELSEWHERE UNLESS NOTED OTHERWISE.

21. IN CASE OF DOUBT IN THE INTERPRETATION OF ANY ASPECT OF THESE STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS, THE STRUCTURAL ENGINEER SHALL BE CONSULTED.

22. NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN OR OMITTED ON THE DRAWINGS.

REFERENCES:

1. AMERICAN CONCRETE INSTITUTE (ACI)

2. INTERNATIONAL BUILDING CODE, 2018 (IBC)

3. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

4. CONCRETE REINFORCING STEEL INSTITUTE (CRSI)

5. AMERICAN WELDING SOCIETY (AWS)

6. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

7. STEEL DECK INSTITUTE (SDI)

8. PUERTO RICO BUILDING CODE, 2018

DESIGN LOADS:

1. WIND, LATERAL LOADS : ASCE 7-16

A) VELOCITY (3-SECOND GUST WIND SPEED) : 161 mph

2. EPOSURE CATEGORY : C

3. STRUCTURE CLASS : I

4. TOPOGRAPHIC CATEGORY : II

5. SEISMIC LATERAL LOADS : ASCE 7-16

6. LIVE LOADS : 30 psf

A) ROOF

B) FIXED SEAT (BLEACHER) : 100 psf

1. ALL CONCRETE SHALL DEVELOP A MINIMUM 28 DAYS COMPRESSIVE STRENGTH AS FOLLOWS:

A) FOUNDATIONS 3,500 PSI

B) CONC. PEDESTAL 4,000 PSI

C) SLAB ON GRADE 4,000 PSI

D) WALLS 4,000 PSI

E) COLUMNS 4,000 PSI

2. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I.

3. ALL REINFORCING BARS SHALL BE HIGH TENSILE DEFORMED MEETING ASTM A-615 GRADE 60, UNLESS NOTED OTHERWISE ON SPECS AND/OR DRAWINGS.

4. CONTINUOUS WIRE REINFORCING (JOINT REINFORCING) SHALL BE GALVANIZED TRUSS TYPE FABRICATED UNITS WITH A SINGLE PAIR OF 9 GAUGE SIDE RODS AND 9 GAUGE CONTINUOUS DIAGONAL CROSS RODS FABRICATED FROM COLD-DRAWN STEEL WIRE COMPLYING WITH ASTM A-82.

5. STEEL SHALL CONFORM TO THE FOLLOWING GRADES:

A) ROLLED STEEL SHAPES, PLATES AND BARS (UNO) ASTM A-992

B) ROLLED STEEL SHAPES, PLATES AND BARS (UNO) ASTM A-36

C) STRUCTURAL TUBE (Fy=46 KSI) ASTM A-500

D) STEEL PIPE (Fy=35 KSI) ASTM A-53

E) ANCHOR RODS AND UNFINISHED BOLTS ASTM A-307

F) BOLTS, NUTS AND WASHERS ASTM A-1554

G) WELDING ELECTRODES (E333, CLASS E7018XX) ASTM A-223

H) OUTROGERS (Fy = 50 KSI) ASTM A-572

FOUNDATIONS:

2. THE FOUNDATION HAS BEEN DESIGNED WITH AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF. THE ASSUMED BEARING CAPACITY SHALL BE VERIFIED BY THE SOIL CONSULTANT BEFORE THE CONTRACTOR MAY START PLACING THE FOUNDATION. IN THE EVENT THAT UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED, AND FOUNDATIONS SHALL NOT BE PLACED UNTIL DIRECTION IS RECEIVED FROM THE ENGINEER.

3. FOOTINGS MAY BE POURED INTO AN EARTH-FORMED TRENCH IF SOIL CONDITIONS PERMIT.

4. ALL BEARING MATERIAL SHALL BE INSPECTED BY THE ENGINEERING INSPECTOR PRIOR TO CONCRETE PLACEMENT. THE INSPECTOR SHALL INSURE THAT THE BEARING MATERIAL IS TO THE SATISFACTION OF THE BEARING MATERIAL FOOTING INSPECTOR SHALL BE ADJUSTED TO THE SATISFACTION OF THE INSPECTOR SHALL BE THE OWNER'S REPRESENTATIVE AT THE PROJECT SITE, AND AS SUCH WILL BE RESPONSIBLE TO HIM.

5. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE.

6. WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL.

7. FOUNDATION WORK SHALL BE SUBJECT TO QUALITY ASSURANCE TESTING AND INSPECTION, AS PER TECHNICAL SPECIFICATIONS FOR THE PROJECT.

8. ALL BACKFILL SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY.

9. ALL EXCAVATIONS AND BACKFILLS SHALL BE INSPECTED FOR COMPLIANCE WITH THE SURVEY REPORT RECOMMENDATIONS.

10. CONTRACTOR SHALL PROVIDE FOR PROPER DRAINAGE OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER, DEW, ETC. SUCH ACTIVITIES SHALL NOT CAUSE DAMAGE TO ADJACENT STRUCTURES.

11. CONTRACTOR SHALL PROVIDE FOR THE INSTALLATION AND DESIG OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED TO SAFELY AND ACCURATELY RETAIN EXCAVATIONS, EARTH BANKS ANY EXISTING STRUCTURES.

12. FOOTINGS SHALL BE PLACED ACCORDING TO DEPTH SHOWN IN THE STRUCTURAL DRAWINGS. ALL FOUNDATION BASES SHALL BE INSPECTED WHEN THE DEPTH INDICATED HAS BEEN ACHIEVED. THE GEOTECHNICAL ENGINEER WILL DETERMINE THE SUITABILITY OF THE SOIL AT THIS LEVEL FOR THE PROPOSED IMPOSED LOADS AND MAY INSTRUCT FURTHER EXCAVATION UNTIL A SATISFACTION BEARING SURFACE IS ATTAINED. THE GEOTECHNICAL ENGINEER SHALL GIVE THE FINAL APPROVAL FOR ANY CHANGES IN FOOTING DEPTH, AND SHALL ONE WRITTEN NOTIFICATION TO THE ARCHITECT AND ENGINEER. NO FOOTING SHALL BE CAST WITHOUT THE GEOTECHNICAL ENGINEER.

CAST-IN-PLACE REINFORCED CONCRETE:

1. CONTRACTOR SHALL SUBMIT, PRIOR TO INSTALLATION ALL REINFORCING STEEL SHOP DRAWINGS, SHOP DRAWINGS SHALL BE SEALED & SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN PUERTO RICO.

2. CONCRETE ITEMS AND REINFORCEMENT SHALL BE ERECTED IN STRICT ACCORDANCE WITH OWNER APPROVED SHOP AND ERECTION DRAWINGS FOLLOWING THE DETAILS SHOWN ON PLANS.

3. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PRODUCE CORRECTLY ALIGNED CONCRETE AND REINFORCEMENT THINGS, THE ELASTIC DEFORMATION OF THE STRUCTURAL MEMBERS.

4. AT HORIZONTAL JOINTS IN WALLS AND COLUMNS, THE LOWER SURFACE SHALL BE THOROUGHLY CLEANED AND ALL WEAR OR LOOSE CONCRETE REMOVED FROM THERE BEFORE POURING THE UPPER PORTION. THE SURFACE SHALL BE COVERED WITH PLASTER OR OTHERWISE WITHOUT A VISUAL EXAMINATION AND APPROVAL BY THE INSPECTOR.

5. NO DEFECTIVE CONCRETE SHALL BE CORRECTED OR COVERED WITH MORTAR, PLASTER ETC. WITHOUT THE INSPECTOR'S APPROVAL.

6. SLUMP OF CONCRETE SHALL NOT EXCEED 4" UNLESS A HIGH-RANGE WATER-REDUCING ADMIXTURE IS USED. THE SLUMP OF CONCRETE PRIOR TO ADDITION OF A HIGH-RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 4". THE SLUMP OF CONCRETE CONTAINING A HIGH-RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 10".

7. CONCRETE SHALL BE NON-AIR ENTRAINED. AIR CONTENT SHALL BE BETWEEN 0 AND 3.5 PERCENT.

8. THE NOMINAL MAXIMUM AGGREGATE SIZE SHALL BE OF 3/4".

9. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR REVIEW WELL IN ADVANCE OF CONCRETE PLACEMENT. CONCRETE MIX DESIGN SHALL INCLUDE ALL STRENGTH DATA NECESSARY TO SHOW COMPLIANCE WITH THE PROJECT SPECIFICATIONS FOR BATCHING, BLENDED, PROPORTIONING, MIXING METHOD AND SHALL BE CERTIFIED BY A REGISTERED LICENSED ENGINEER. PHYSICAL TESTS RESULTS FOR COARSE AND FINE AGGREGATES SHALL BE SUBMITTED CERTIFIED BY A REGISTERED ENGINEER.

10. MINIMUM CONCRETE COVER, UNLESS NOTED OTHERWISE: UNIFORM SURFACE IN CONTACT WITH THE GROUND, 3 IN. FORMED SURFACES EXPOSED TO EARTH OR WEATHER: #6 BARS AND LARGER 1-1/2 IN. #5 BARS AND SMALLER 1-1/2 IN. FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER: BEAMS, COLUMNS AND COLUMNS 1-1/2 IN. SLABS, WALLS AND JOISTS: #11 BARS AND SMALLER 3/4 IN. #14 AND #18 BARS 1-1/2 IN.

11. ALL REINFORCING SHALL BE DETAIL, FABRICATED AND PLACED, IN ACCORDANCE WITH AC DETAILING MANUAL (SP-66) AND THE MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION" BY THE CRSI.

12. ALL REINFORCING SHALL BE SUPPORTED IN FORMS USING STEEL CHAIRS, SPACED WITH NECESSARY ACCESSORIES AND SHALL BE SECURELY WIRE TOGETHER, IN ACCORDANCE WITH CRSI "MANUAL OF STANDARD PRACTICE".

13. ALL SLAB AND CORRESPONDING BEAMS, CURBS, OR APRONS SHALL BE POURED MONOLITHICALLY.

14. BAR PLATES, AND RODS, SURF ANGLE, ETC., BELOW GRADE, SHALL BE COVERED WITH A MINIMUM OF 3" CONCRETE.

15. CONCRETE WORK SHALL BE SUBJECT TO QUALITY ASSURANCE TESTING AND INSPECTIONS, AND SHALL BE PLACED WITH THE TOP & BOTTOM REINFORCEMENT, UNLESS SPECIFICALLY PERMITTED U.S.O. OTHERWISE, CONTRACTORS OF CONCRETE OR PIPES SHALL BE AVOIDED EXCEPT WHERE DETAILED OPENINGS ARE PROVIDED.

16. ALL SYMBOLS AND STRESSES AS WELL AS CONCRETE WORK SHALL CONFORM TO THE STANDARD OF THE LATEST VERSION OF THE AC BUILDING CODE.

17. ALL REINFORCING, SLEEVES, CONDUITS, INSERTS AND BOLTS SHALL BE WELL SECURED AND IN PLACE BEFORE CONCRETE IS POURED.

18. FOR CONSTRUCTION JOINTS IN STRUCTURAL MEMBERS A VERTICAL BULKHEAD AND KEY JOINT MUST BE PROVIDED.

19. LAP SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE, UNLESS NOTED OTHERWISE, WHERE CLASSES ARE NOT CALLED OUT ON DRAWINGS, USE CLASS "B" SPLICE.

SPICES TABLE (GRADE 60)					
BAR SIZE	F <sub>y</sub> (KSI)	TENSION		COMPRESSION	
		TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	3,000	22"	28"	12"	12"
#4	4,000	18"	24"	12"	12"
#5	5,000	17"	22"	12"	12"
#6	6,000	17"	22"	12"	12"
#7	7,000	17"	22"	12"	12"
#8	8,000	17"	22"	12"	12"
#9	9,000	17"	22"	12"	12"
#10	10,000	17"	22"	12"	12"
#11	11,000	17"	22"	12"	12"
#12	12,000	17"	22"	12"	12"
#13	13,000	17"	22"	12"	12"
#14	14,000	17"	22"	12"	12"
#15	15,000	17"	22"	12"	12"
#16	16,000	17"	22"	12"	12"
#17	17,000	17"	22"	12"	12"
#18	18,000	17"	22"	12"	12"
#19	19,000	17"	22"	12"	12"
#20	20,000	17"	22"	12"	12"
#21	21,000	17"	22"	12"	12"
#22	22,000	17"	22"	12"	12"
#23	23,000	17"	22"	12"	12"
#24	24,000	17"	22"	12"	12"
#25	25,000	17"	22"	12"	12"
#26	26,000	17"	22"	12"	12"
#27	27,000	17"	22"	12"	12"
#28	28,000	17"	22"	12"	12"
#29	29,000	17"	22"	12"	12"
#30	30,000	17"	22"	12"	12"
#31	31,000	17"	22"	12"	12"
#32	32,000	17"	22"	12"	12"
#33	33,000	17"	22"	12"	12"
#34	34,000	17"	22"	12"	12"
#35	35,000	17"	22"	12"	12"
#36	36,000	17"	22"	12"	12"
#37	37,000	17"	22"	12"	12"
#38	38,000	17"	22"	12"	12"
#39	39,000	17"	22"	12"	12"
#40	40,000	17"	22"	12"	12"
#41	41,000	17"	22"	12"	12"
#42	42,000	17"	22"	12"	12"
#43	43,000	17"	22"	12"	12"
#44	44,000	17"	22"	12"	12"
#45	45,000	17"	22"	12"	12"
#46	46,000	17"	22"	12"	12"
#47	47,000	17"	22"	12"	12"
#48	48,000	17"	22"	12"	12"
#49	49,000	17"	22"	12"	12"
#50	50,000	17"	22"	12"	12"
#51	51,000	17"	22"	12"	12"
#52	52,000	17"	22"	12"	12"
#53	53,000	17"	22"	12"	12"
#54	54,000	17"	22"	12"	12"
#55	55,000	17"	22"	12"	12"
#56	56,000	17"	22"	12"	12"
#57	57,000	17"	22"	12"	12"
#58	58,000	17"	22"	12"	12"
#59	59,000	17"	22"	12"	12"
#60	60,000	17"	22"	12"	12"
#61	61,000	17"	22"	12"	12"
#62	62,000	17"	22"	12"	12"
#63	63,000	17"	22"	12"	12"
#64	64,000	17"	22"	12"	12"
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#67	67,000	17"	22"	12"	12"
#68	68,000	17"	22"	12"	12"
#69	69,000	17"	22"	12"	12"
#70	70,000	17"	22"	12"	12"
#71	71,000	17"	22"	12"	12"
#72	72,000	17"	22"	12"	12"
#73	73,000	17"	22"	12"	12"
#74	74,000	17"	22"	12"	12"
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#84	84,000	17"	22"	12"	12"
#85	85,000	17"	22"	12"	12"
#86	86,000	17"	22"	12"	12"
#87	87,000	17"	22"	12"	12"
#88	88,000	17"	22"	12"	12"
#89	89,000	17"	22"	12"	12"
#90	90,000	17"	22"	12"	12"
#91	91,000	17"	22"	12"	12"
#92	92,000	17"	22"	12"	12"
#93	93,000	17"	22"	12"	12"
#94	94,000	17"	22"	12"	12"
#95	95,000	17"	22"	12"	12"
#96	96,000	17"	22"	12"	12"
#97	97,000	17"	22"	12"	12"
#98	98,000	17"	22"	12"	12"
#99	99,000	17"	22"	12"	12"
#100	100,000	17"	22"	12"	12"

20. ALL OPENINGS IN CONCRETE WALLS SHALL BE REINFORCED AROUND WITH 2 #6 BARS PLACED 24 INCHES FROM THE FACE AND EXTENDING 24 INCHES BEYOND CORNERS, UNLESS OTHERWISE SPECIFIED IN PLANS.

21. TEMPERATURE REINFORCEMENT SHALL BE PROVIDED IN ALL ONE WAY SLAB NORMAL TO THE PRINCIPAL REINFORCEMENT IN ACCORDANCE WITH LATEST VERSION OF THE AC BUILDING CODE.

22. ALL ONE WAY SLAB TEMPERATURE REINFORCEMENT SHALL BE AS FOLLOWS: (UNLESS NOTED OTHERWISE, UNLESS NOTED OTHERWISE, 0.18% OF SECTIONAL AREA (INCLUDING INTEGRAL TOPPING).

23. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL MESH, WHICHEVER IS GREATER.

24. SLAB ON GROUND, AS INDICATED ON DRAWINGS.

25. FOR CONCRETE FORMWORK, SURFACE FINISHING, REVELED CORNERS AND DRIPS, SEE ARCHITECTURAL PLANS.

26. PLACEMENT OF CONCRETE SHALL CONFORM TO AC STANDARD 304 AND PROJECT SPECIFICATIONS.

27. PROVIDE DOWELS IN PEDESTAL AND/OR WALL FOOTINGS EQUAL TO GRADE, SPACING, SIZE AND NUMBER AS REQUIRED. NAIL ANCHORS SHALL BE PLACED 24 INCHES FROM THE FACE AND EXTENDING 24 INCHES BEYOND CORNERS, UNLESS OTHERWISE SPECIFIED IN PLANS.

28. CONCRETE SHALL NOT BE DROPPED DURING REINFORCING STEEL SO AS TO CAUSE SEGREGATION OF AGGREGATES IN SUCH CASES, HOPPERS OR VERTICAL CHUTES OR TRUNKS SHALL BE USED. THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED THE ABOVE REQUIREMENTS.

29. THE SIZE OF NAILS AND SIMILAR FASTENERS DRIVEN INTO CONCRETE SHALL BE SUCH AS NOT TO CRACK OR IMPAIR IT. HOWEVER, IF THE CONCRETE IS DAMAGED, IT SHALL BE PROPERLY REPAIRED AFTER REMOVING THE DAMAGED PORTION AND SUITABLE JOINT SURFACE ARE PROVIDED.

30. ALL CAST IN PLACE REINFORCED CONCRETE STRUCTURAL MEMBERS SHALL BE PROPERLY CURED IN ACCORDANCE WITH THE LATEST VERSION OF THE ACI CODE, CHAPTER V AND ACI 308.

31. ALL LAPPING, BENDING AND PLACING OR REINFORCEMENT SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE ACI BUILDING CODE, UNLESS OTHERWISE SPECIFIED.

32. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.

33. ALL NEGATIVE REINFORCEMENT (TOP REIN) AND POSITIVE REINFORCEMENT (BOTTOM REIN) IN SLABS AND BEAMS SHALL BE EXTENDED BEYOND THE CENTER LINE OF THE END SUPPORTS IN ACCORDANCE WITH THE LATEST VERSION OF THE ACI BUILDING CODE, UNLESS OTHERWISE SPECIFIED.

34. WELDING OF REINFORCEMENT SHALL BE WITH LOW HYDROGEN ELECTRODES IN CONFORMANCE WITH "REINFORCING STEEL WELDING CODE" AND RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL" BOTH BY THE AWS (AWS D12.1 & AWS D1.4 RESPECTIVELY).

35. ALL FORMWORK FOR FLEXURAL MEMBERS SHALL BE BUILT WITH A CAMBER CORRESPONDING TO ITS NON DEFORMATION PLUS THE STRUCTURE DEAD LOAD DEFORMATIONS. IN DETERMINING THE AMOUNT OF CAMBER, THE CONTRACTOR SHALL HAVE THE ASSISTANCE OF THE DESIGNER WHERE SO REQUESTED.

36. NO JOINT, OPENING, SLOT OR GROOVE OTHER THAN THAT SHOWN ON DRAWINGS SHALL BE PERMITTED WITHOUT PREVIOUS APPROVAL BY THE ENGINEER. ALL CONSTRUCTION JOINT SURFACES SHALL BE CLEANED AND ROUGHENED IMMEDIATELY BEFORE CONCRETE AND TREATED AS INSTRUCTED IN THE ACI MANUAL OF CONCRETE PRACTICE.

37. CONDUIT OF PIPE SIZE (O.D.) SHALL NOT EXCEED 30 PERCENT OF TOTAL SLAB THICKNESS AND SHALL BE PLACED WITH THE TOP & BOTTOM REINFORCEMENT, UNLESS SPECIFICALLY PERMITTED U.S.O. OTHERWISE, CONTRACTORS OF CONCRETE OR PIPES SHALL BE AVOIDED EXCEPT WHERE DETAILED OPENINGS ARE PROVIDED.

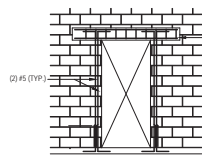
38. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCEMENT BAR WHICH MAY CAUSE CRACKING IN CONCRETE IS NOT PERMITTED U.S.O. OTHERWISE, CONTRACTORS OF CONCRETE OR PIPES SHALL BE AVOIDED EXCEPT WHERE DETAILED OPENINGS ARE PROVIDED.

39. WATER-CEMENT RATIO REQUIREMENTS FOR DIFFERENT COMpressive STRENGTHS OF CONCRETE:

COMPRESSIVE STRENGTH AT 28 DAYS (KSI)	WATER-CEMENT RATIO BY WEIGHT
3,000	0.53
4,000	0.47
5,000	0.41
6,000	0.37
7,000	0.33
8,000	0.30
9,000	0.27
10,000	0.25
11,000	0.23
12,000	0.21
13,000	0.19
14,000	0.17
15,000	0.15
16,000	0.14
17,000	0.13
18,000	0.12
19,000	0.11
20,000	0.10
21,000	0.09
22,000	0.08
23,000	0.07
24,000	0.06
25,000	0.05
26,000	0.04
27,000	0.03
28,000	0.02
29,000	0.01
30,000	0.00

40. END HOOKS FOR ALL GRADES

BAR SIZE	FINISHED BARS	100' HOOKS	90' HOOKS
#3	3"	3"	3"
#4	4"	4"	4"
#5	5"	5"	5"
#6	6"	6"	6"
#7	7"	7"	7"
#8	8"	8"	8"
#9	9"	9"	9"
#10	10"	10"	10"
#11	11"	11"	11"
#12	12"	12"	12"
#13	13"	13"	13"
#14	14"	14"	14"
#15	15"	15"	15"
#16	16"	16"	16"
#17	17"	17"	17"
#18	18"	18"	18"
#19	19"	19"	19"
#20	20"	20"	20"
#21	21"	21"	21"
#22	22"	22"	22"
#23	23"	23"	23"
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#25	25"	25"	25"
#26	26"	26"	26"
#27	27"	27"	27"
#28			

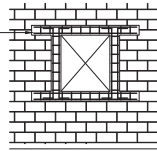


@ DOOR

**OPENING NOTES:**

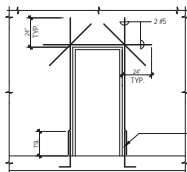
1. LINTEL SHALL EXTEND UNTIL IT BEARS ON 1/2 OF UNJOINT CMU (MIN. 8").
2. LINTELS FOR OPENINGS LARGER THAN 6'-0" SHALL BE SHORED.
3. CMU CELLS ADJACENT TO OPENINGS SHALL BE FULLY GROUTED, AND REINFORCED.
4. HORIZONTAL JOINT REINFORCEMENT SHALL BE #4 @ 8" IN 2 JOINTS ABOVE LINTELS AND BELOW SILL. ADDITIONAL REINFORCEMENT SHALL EXTEND 2'-0" BEYOND OPENINGS.

(FOR DIMENSIONS REFER TO ARCH. DWGS.)

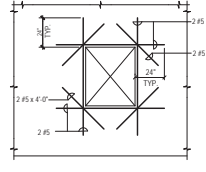


@ WINDOW

**TYPICAL REINF. DETAIL @ CMU OPENINGS**  
SCALE: N.T.S.

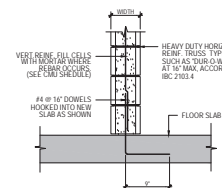


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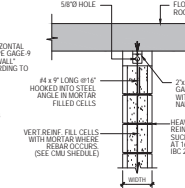


@ WINDOW

**TYPICAL REINF. DETAIL @ CONCRETE WALL OPENINGS**  
SCALE: 1/4"=1'-0"

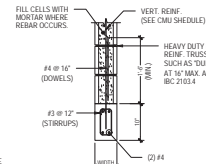


ABOVE FLOOR SLAB

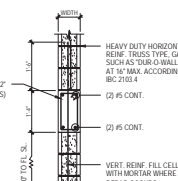


BELOW ROOF SLAB

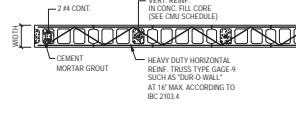
**TYPICAL BLOCK WALL ANCHORAGE DETAIL**  
SCALE: 1'-1'-0"



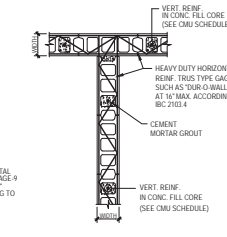
**TYPICAL BOND BEAM DETAIL**  
SCALE: 3/4"=1'-0"



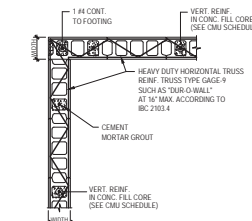
**TYPICAL TIE BEAM DETAIL**  
SCALE: 3/4"=1'-0"



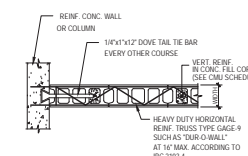
**TYPICAL SIDES OF DOORS & ENDS OF CMU WALLS REINF. DETAIL**  
SCALE: 3/4"=1'-0"



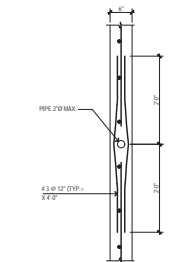
**TYPICAL CMU WALLS @ INTER. REINF. DETAIL**  
SCALE: 3/4"=1'-0"



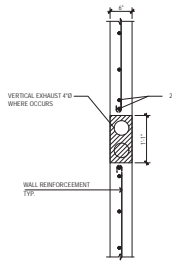
**TYPICAL CMU WALLS @ CORNER REINF. DETAIL**  
SCALE: 3/4"=1'-0"



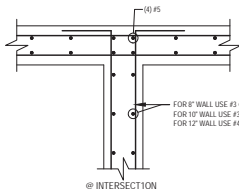
**TYPICAL CMU WALL ANCHORAGE TO CONC. WALL/COLUMN DETAIL**  
SCALE: 3/4"=1'-0"



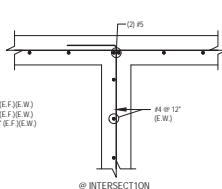
**TYP. REINF. AT VERTICAL PIPES**  
SCALE: 3/4"=1'-0"



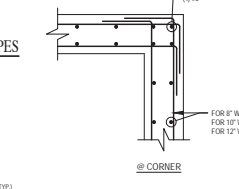
**TYP. REINF. AT VERTICAL PIPES**  
SCALE: 3/4"=1'-0"



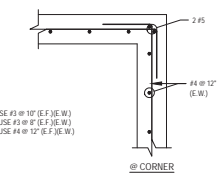
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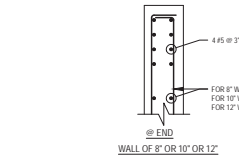
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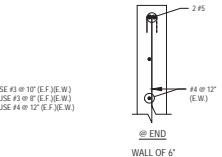
@ CORNER



@ CORNER

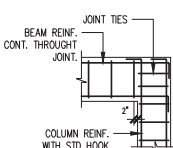


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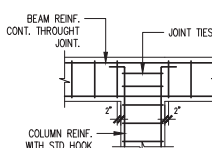


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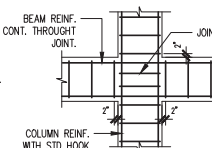
**TYPICAL REINF. CONC. WALLS DETAIL**  
SCALE: 1'-1'-0"



COLUMN REINF. WITH STD. HOOK

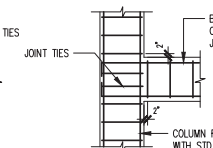


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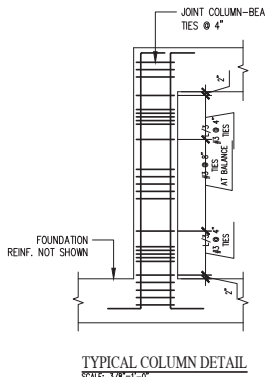


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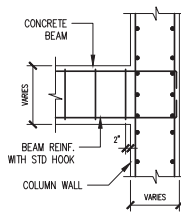
**TYPICAL COLUMNS AND BEAMS JOINTS**  
SCALE: 3/8"=1'-0"



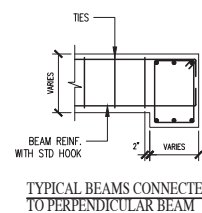
COLUMN REINF. WITH STD. HOOK



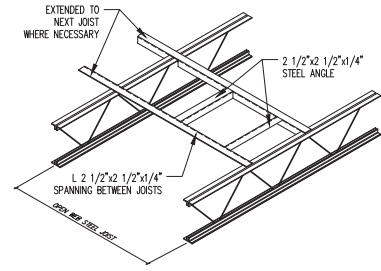
TYPICAL COLUMN DETAIL



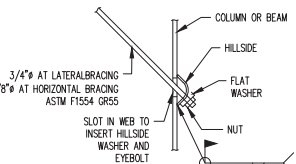
**TYPICAL BEAMS CONNECTED TO PERPENDICULAR BEAM**  
SCALE: 1/2"=1'-0"



**TYPICAL BEAMS CONNECTED TO PERPENDICULAR WALL**  
SCALE: 1/2"=1'-0"



**TYP. STEEL FRAME FOR MECHANICAL SUPPORT**  
SCALE: N.T.S.



**TYP. CONNECTION FOR ROD BRACING DETAIL**  
SCALE: 1-1/2"=1'-0"

CMU SCHEDULE	
WIDTH	VERTICAL REINF.
4"	#4 @ 24"
6"	#4 @ 18"
8"	#4 @ 18"

Drawn by : Malleen Pearson

Checked by: Eng. Wilfredo Rodriguez

Date 21 September 2020

No.	Revision	Date	By

**Project**  
IMPROVEMENTS & EXPANSION  
MUNICIPAL COLISEUM  
**ANGEL MERCADO VEGA**  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

**Drawing Title**  
STRUCTURAL MISCELLANEOUS

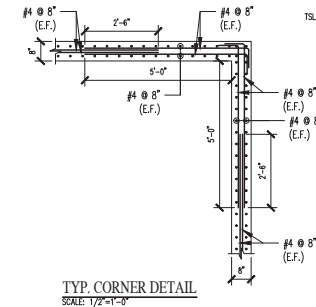
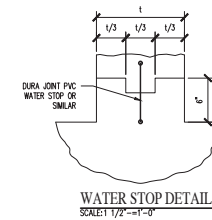
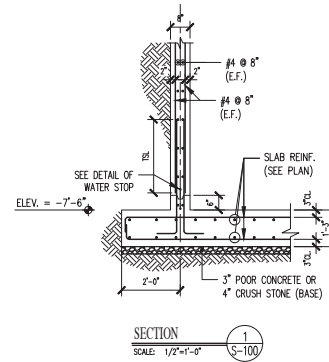
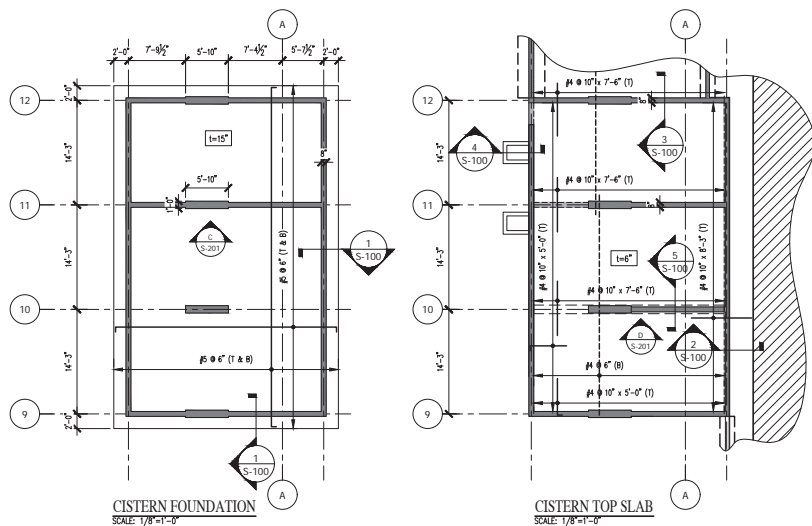
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AS SHOWN

**File Name**  
19001-JR-101.DWG

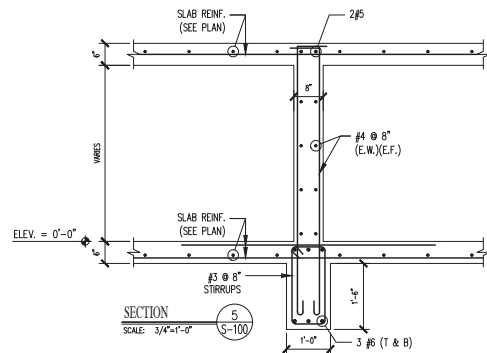
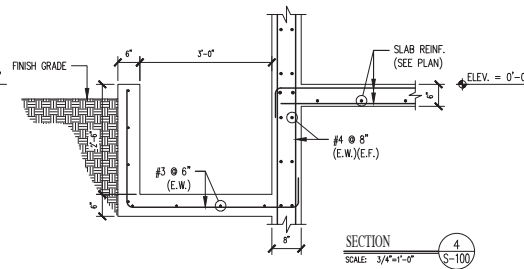
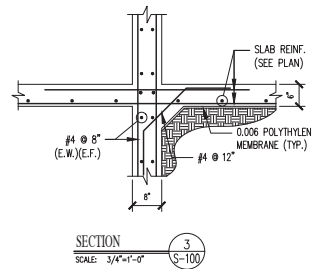
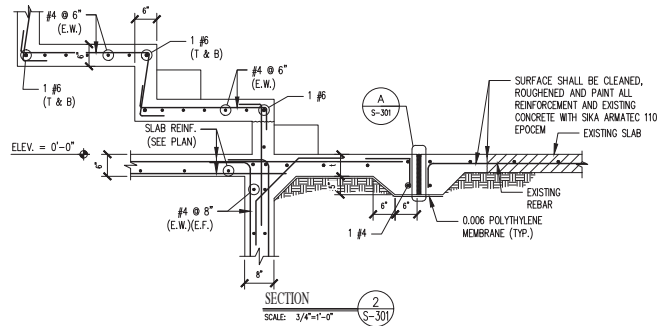
**Drawing Number**  
**S-002**

**Sheet Number**  
**16**





- LEGEND:**
- R/C COLUMN OR WALL ABOVE & BELOW
  - R/C COLUMN OR WALL BELOW ONLY
  - R/C COLUMN OR WALL ABOVE ONLY
  - SLAB THICKNESS
  - (T & B) TOP & BOTTOM
  - E.W. EACH WAY
  - E.F. EACH FACE
  - TSL TENSION SPICE LENGTH



**DANILO SALAZAR**  
**P.E.**

PO BOX 008136, SAN JUAN, P.R. 009100-0136, PHONE (787) 614-9591

Drawn by : Malleen Pearson

Checked by:  
Eng. Wilfredo Rodriguez

Date  
21 September 2020

No.	Revision	Date	By

**Project**  
IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
**ANGEL  
MERCADO  
VEGA**  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

**STRUCTURAL  
CISTERN PLANS,  
SECTIONS & DETAILS**

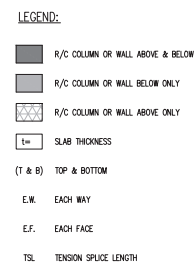
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File Name  
19001-JR-101.DWG

Drawing Number  
**S-100**

Sheet Number

**17**



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No.	Revision	Date	By
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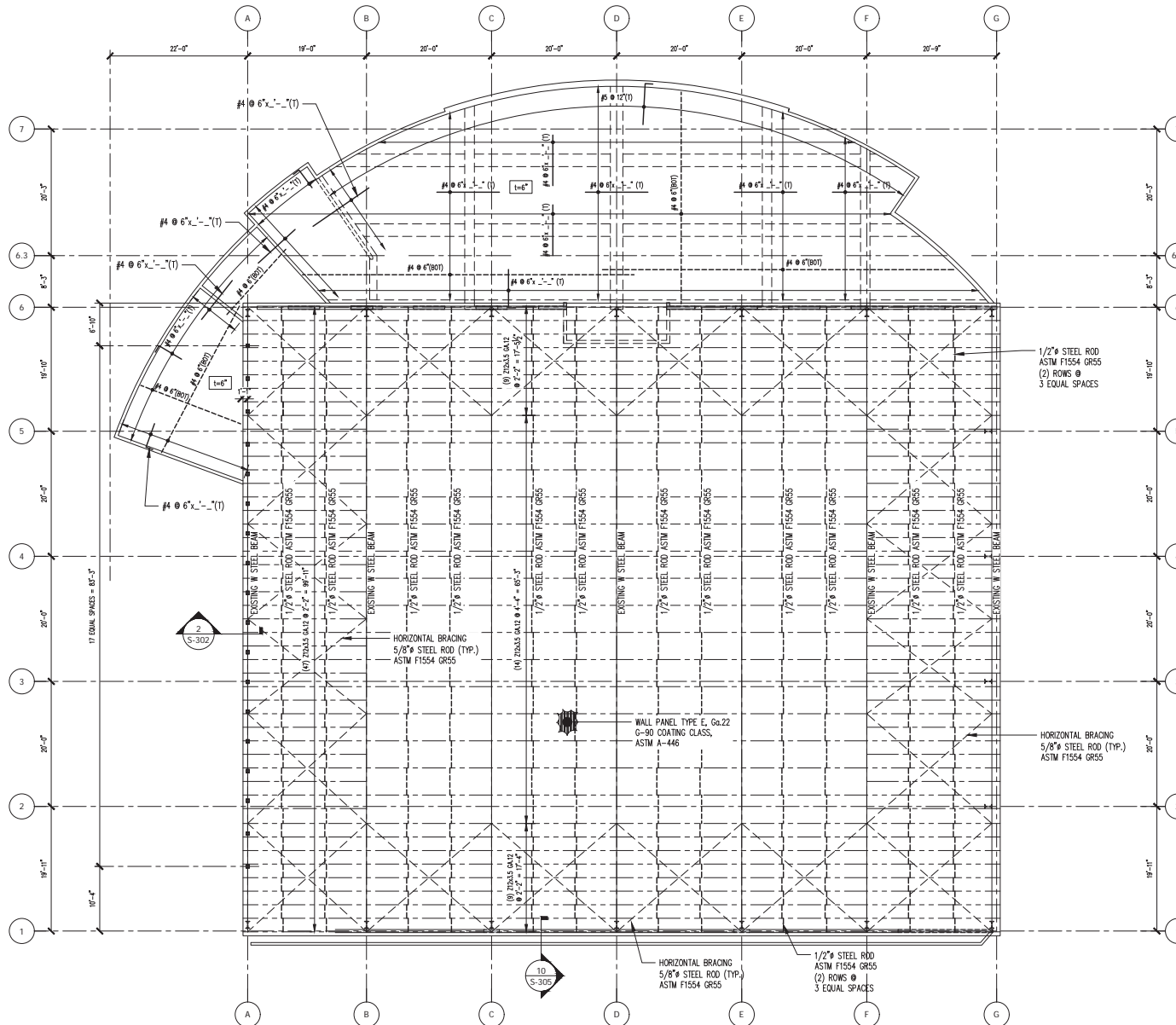
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Sheet Number

18

SCALE: 1/8"=1'-0"





# LEGEND:

- R/C COLUMN OR WALL ABOVE & BELOW
- R/C COLUMN OR WALL BELOW ONLY
- R/C COLUMN OR WALL ABOVE ONLY
- SLAB THICKNESS
- (T & B) TOP & BOTTOM
- E.W. EACH WAY
- E.F. EACH FACE
- TSL TENSION SPLICE LENGTH

**DANILO SALAZAR**  
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Drawn by : Malleen Pearson

Checked by:  
Eng. Wilfredo Rodriguez

Date  
21 September 2020

No.	Revision	Date	By

Project  
IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

STRUCTURAL  
ROOF PLAN

Scale  
1/8"=1'-0"

File Name  
19001-JR-101.DWG

Drawing Number

**S-103**

Sheet Number

**20**

STRUCTURAL ROOF PLAN



Drawn by : Malileen Pearson

Checked by:  
Eng. Wilfredo Rodriguez

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21 September 2020

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MUNICIPAL  
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ANGEL  
MERCADO  
VEGA  
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PUERTO RICO

Drawing Title

STRUCTURAL  
ROOF PLAN

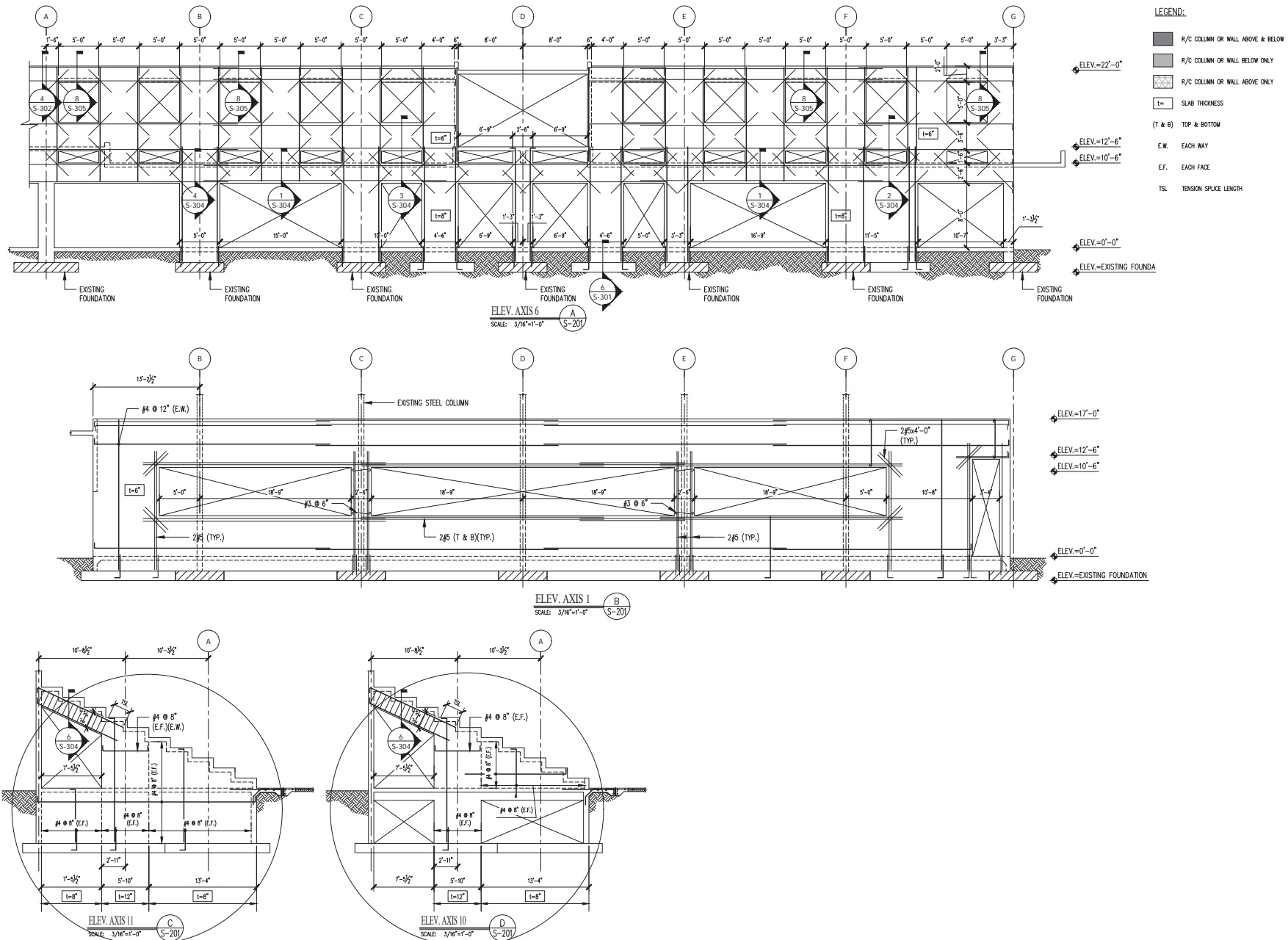
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File Name  
19001-JR-101.DWG

Drawing Number  
**S-201**

Sheet Number

**21**



Drawn by : Malleen Pearson

Checked by:  
Eng. Wilfredo Rodriguez

Date  
21 September 2020

No.	Revision	Date	By

Project  
**IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM**

**ANGEL  
MERCADO  
VEGA**  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title  
**STRUCTURAL  
SECTIONS & DETAILS**

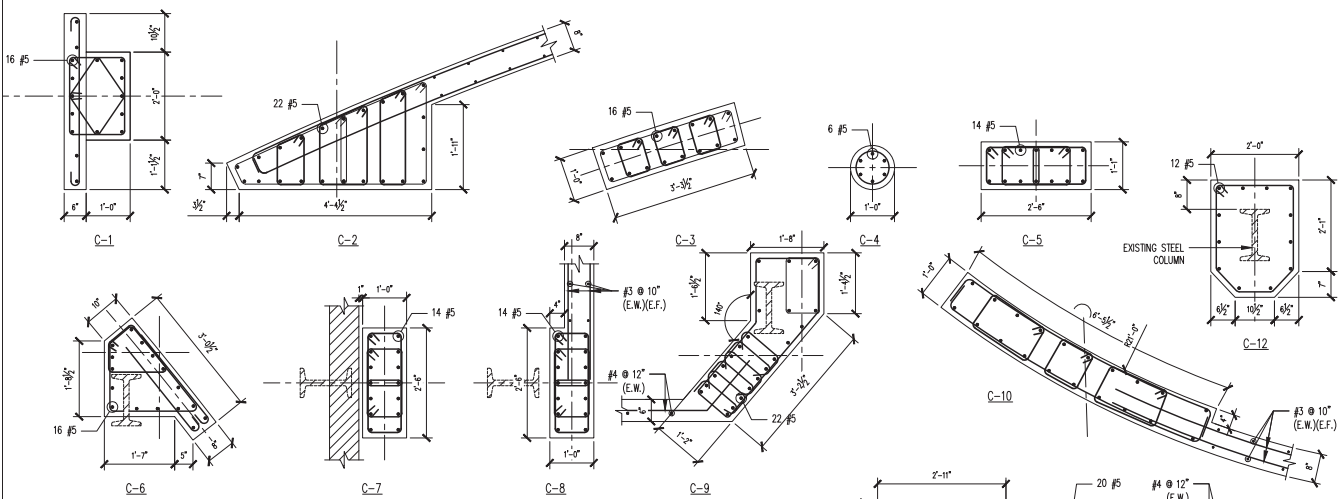
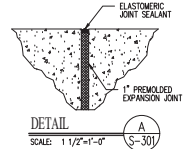
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Drawing Number  
**S-301**

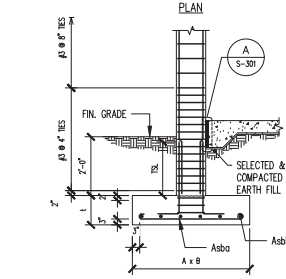
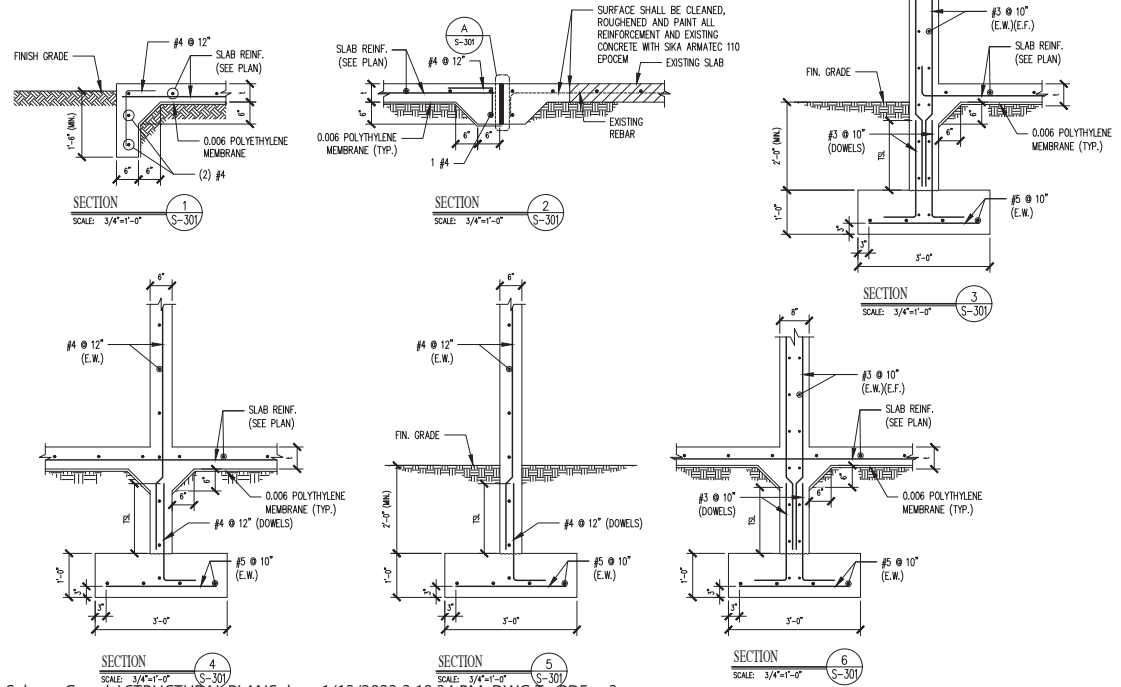
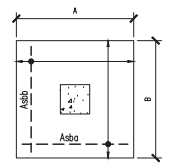
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**22**

- LEGEND:**
- R/C COLUMN OR WALL ABOVE & BELOW
  - R/C COLUMN OR WALL BELOW ONLY
  - R/C COLUMN OR WALL ABOVE ONLY
  - SLAB THICKNESS
  - (T & B) TOP & BOTTOM
  - E.W. EACH WAY
  - E.F. EACH FACE
  - TSL TENSION SPICE LENGTH



NOTE:  
FOR COLUMNS TIES SEE TYPICAL COLUMN DETAIL AT S-002.

**TYPICAL COLUMN DETAIL**  
SCALE: 3/4"=1'-0"



FOOTING SCHEDULE						
WFO	DIMENSION		SIZE REINFORCEMENT		REMARKS	
	A	B	Asba	Asbb		
F-1	8'-0"	3'-0"	12"	#5 @ 10"	#5 @ 10"	
F-2	8'-0"	4'-0"	12"	#5 @ 10"	#5 @ 10"	
F-3	8'-0"	5'-0"	12"	#5 @ 10"	#5 @ 10"	
F-4	7'-0"	5'-0"	12"	#5 @ 10"	#5 @ 10"	

**FOOTING SCHEDULE & COLUMN ELEVATION**  
SCALE: 1/2"=1'-0"

Drawn by : Malleen Pearson

Checked by:  
Eng. Wilfredo Rodriguez

Date  
21 September 2020

No. Revision Date By

Project  
IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title  
  
STRUCTURAL  
SECTIONS & DETAILS

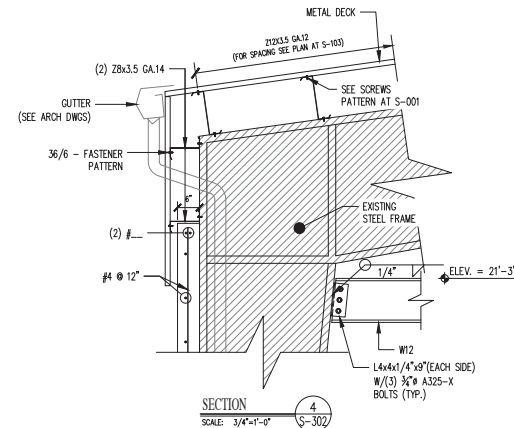
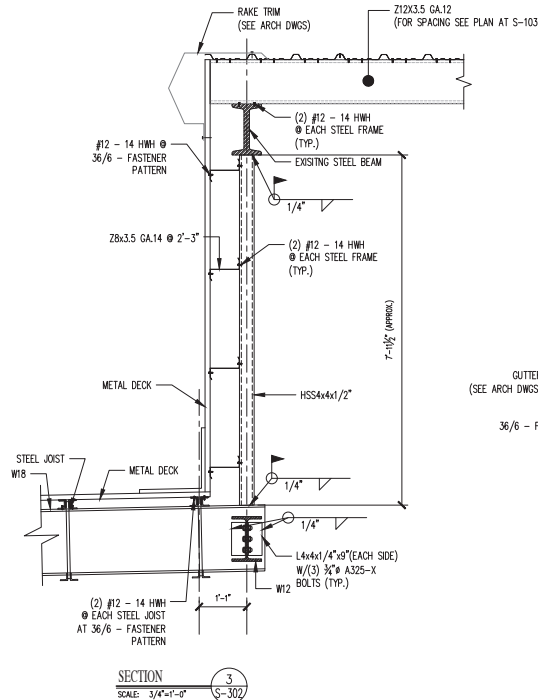
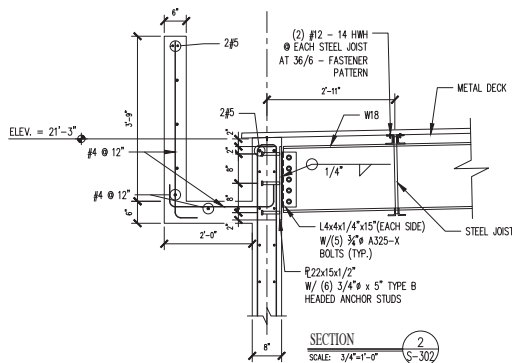
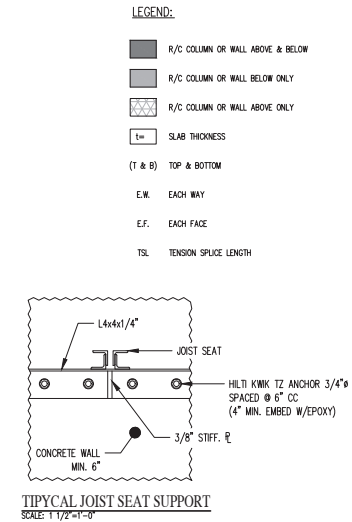
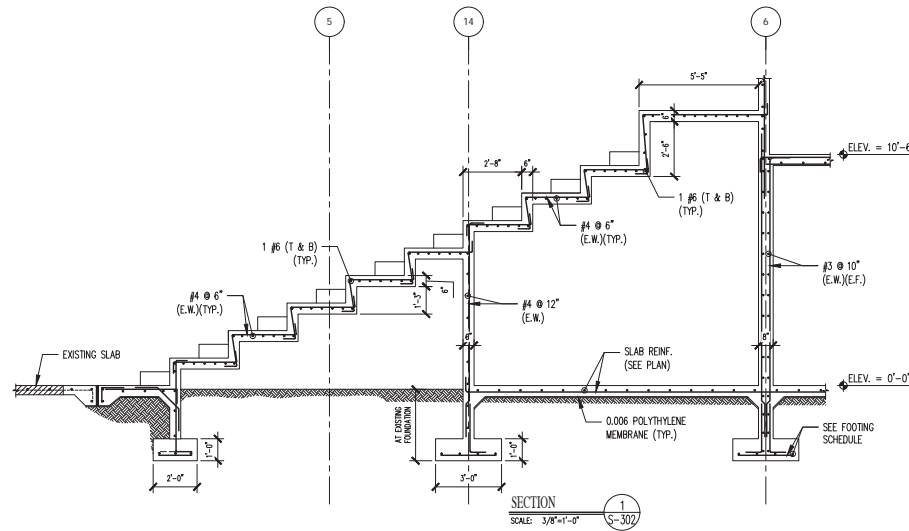
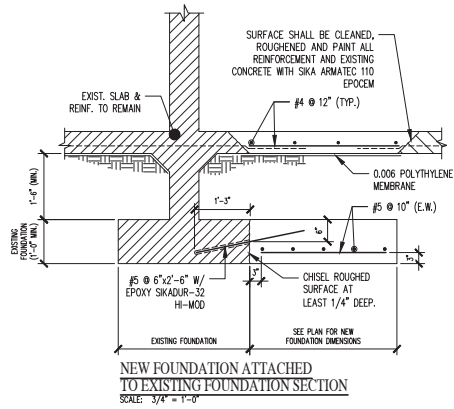
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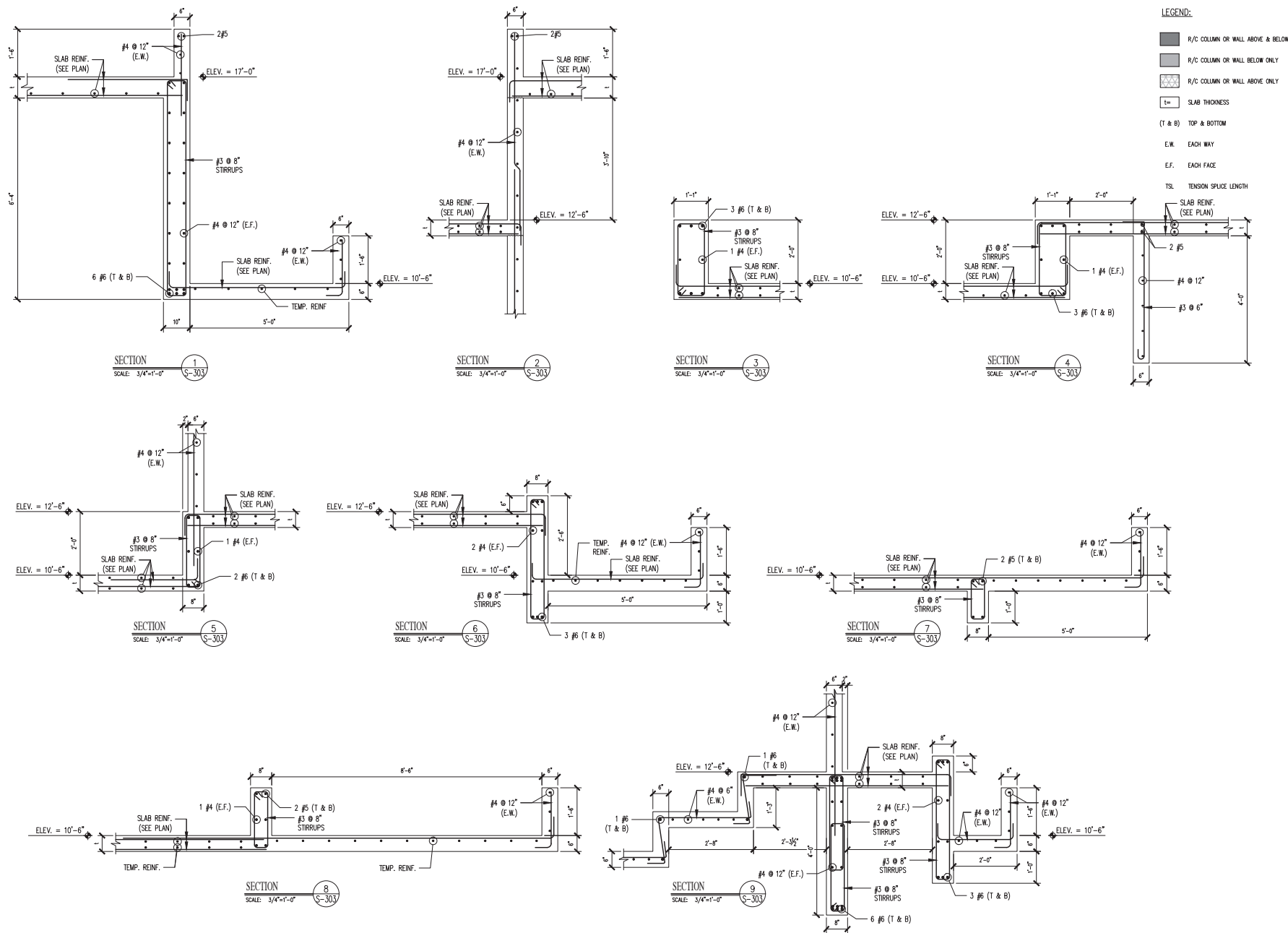
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Drawing Number  
**S-302**

Sheet Number

**23**





**DANILO SALAZAR**  
**P.E.**

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Drawn by : Malileen Pearson

Checked by:  
Eng. Wilfredo Rodriguez

Date  
21 September 2020

No.	Revision	Date	By

**Project**  
IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
**ANGEL MERCADO  
VEGA**  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

**Drawing Title**  
STRUCTURAL  
SECTIONS & DETAILS

**Scale**  
AS SHOWN

**File Name**  
19001-JR-101.DWG

**Drawing Number**  
**S-303**

**Sheet Number**

**24**



Drawn by : Malileen Pearson

Checked by:  
Eng. Wilfredo Rodriguez

Date  
21 September 2020

No.	Revision	Date	By

Project  
IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title  
  
STRUCTURAL  
SECTIONS & DETAILS

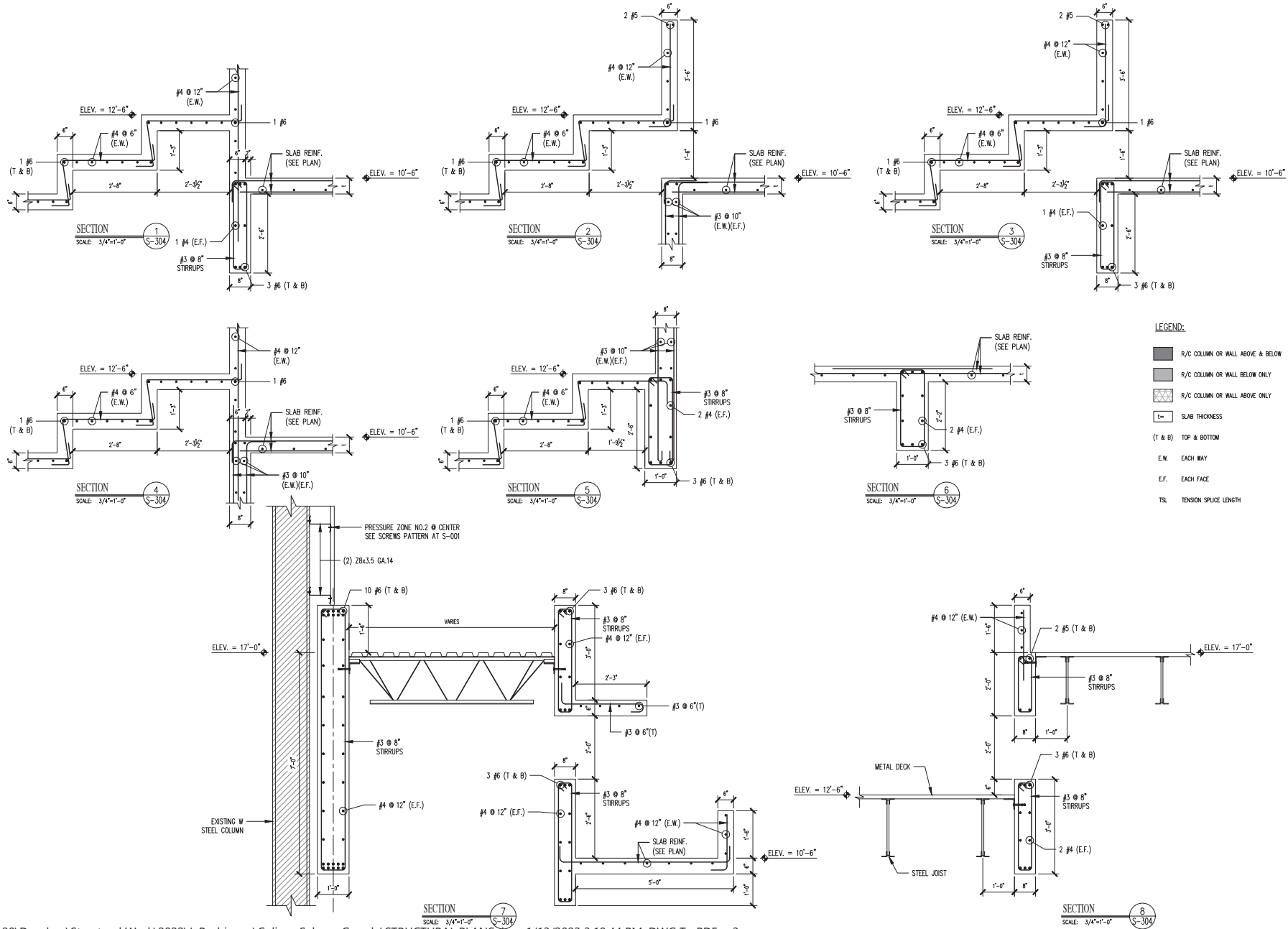
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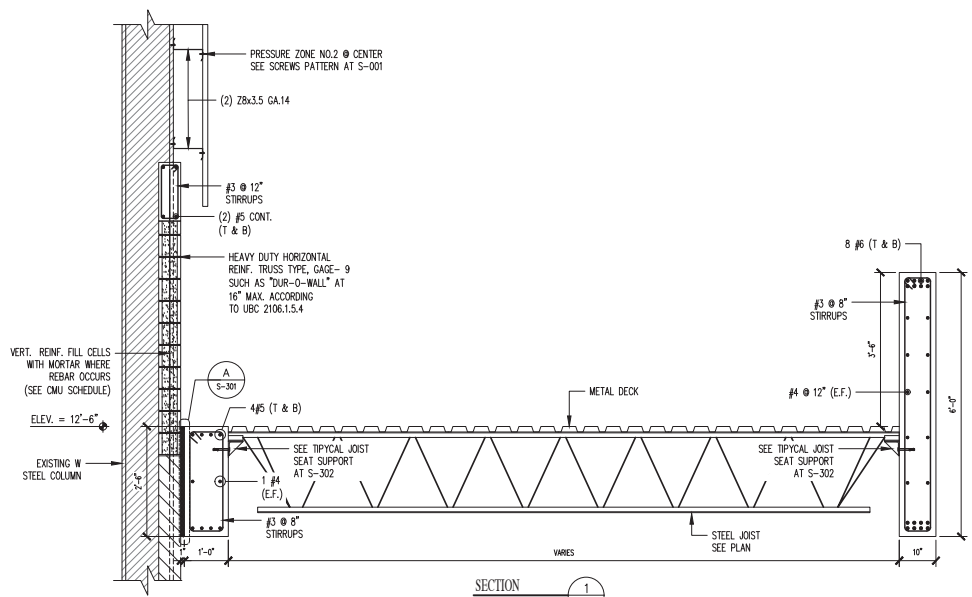
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**S-304**

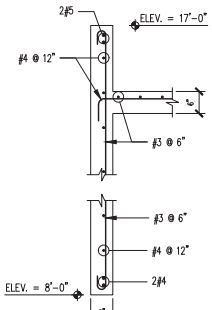
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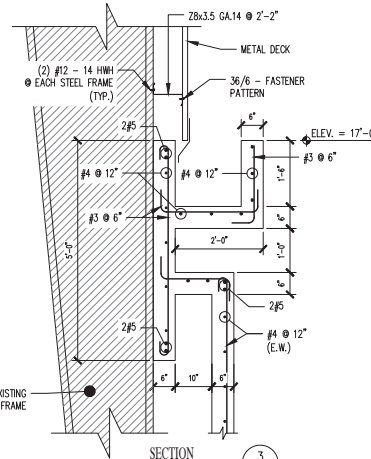




SECTION 1  
SCALE: 3/4"=1'-0"  
S-305

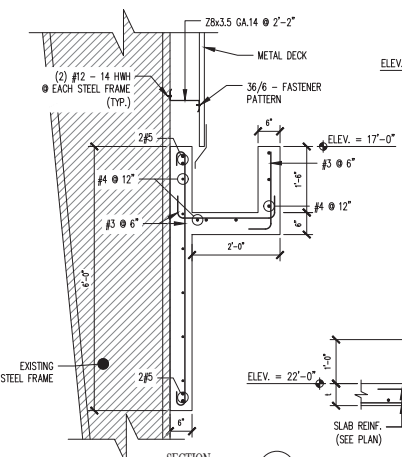


SECTION 2  
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S-305

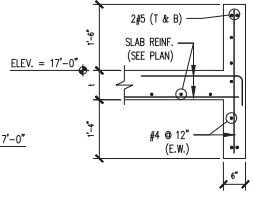


SECTION 3  
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S-305

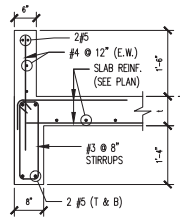
- LEGEND:
- R/C COLUMN OR WALL ABOVE & BELOW
  - R/C COLUMN OR WALL BELOW ONLY
  - R/C COLUMN OR WALL ABOVE ONLY
  - SLAB THICKNESS
  - (T & B) TOP & BOTTOM
  - E.W. EACH WAY
  - E.F. EACH FACE
  - TSL TENSION SPLICE LENGTH



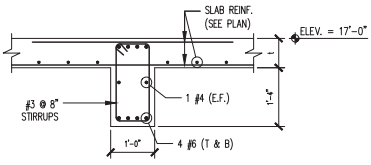
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SCALE: 3/4"=1'-0"  
S-305



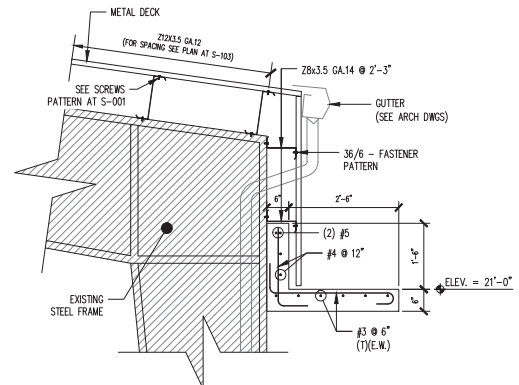
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S-305



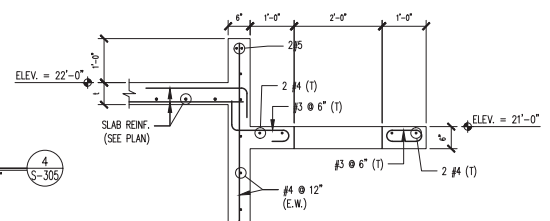
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S-305



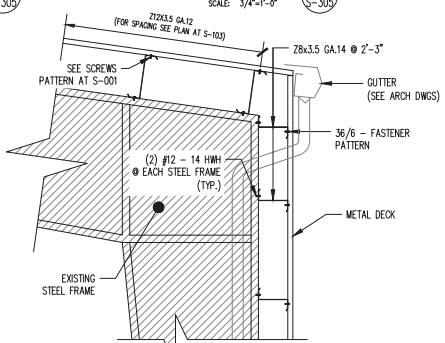
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SCALE: 3/4"=1'-0"  
S-305



SECTION 8  
SCALE: 3/4"=1'-0"  
S-305



SECTION 9  
SCALE: 3/4"=1'-0"  
S-305



SECTION 10  
SCALE: 3/4"=1'-0"  
S-305

**DANILO SALAZAR**  
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Drawn by : Malleen Pearson

Checked by: Eng. Wilfredo Rodriguez

Date 21 September 2020

No.	Revision	Date	By

Project  
**IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM**

**ANGEL  
MERCADO  
VEGA**  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

**STRUCTURAL  
SECTIONS & DETAILS**

Scale  
AS SHOWN

File Name  
19001-JR-101.DWG

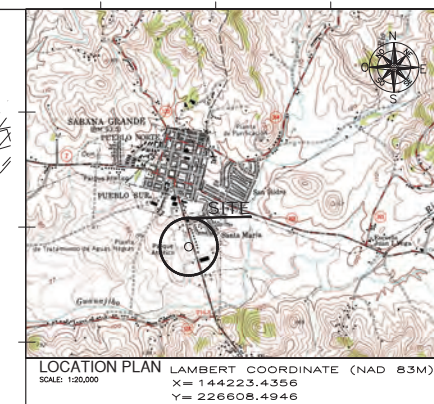
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Sheet Number

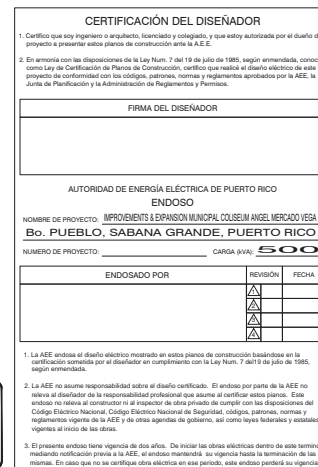
**26**







FEEDER SCHEDULE			REMARKS
NO.	DESCRIPTION		
①	NEW UNDERGROUND PRIMARY LINE TO BE INSTALLED 400' 3/2" 400 COOPER, 15 KV, CABLE SHALE, THRU 100' REGULATION LOOPS ABOUT A 1 1/4" THIN-2, SPEC. NEUTRAL GROUND, 100' 3/2" 400 COOPER, 15 KV, CABLE SHALE, THRU 100' REGULATION LOOPS ABOUT A 1 1/4" THIN-2, SPEC. NEUTRAL GROUND. NOTE NO. 1, (DRC ES-1).		
②	3 SETS (400/350 MM THIN-2, 90'-C & 100/2/0 THIN-2, 90'-C IN 3" PVC SCH. 40).		
③	400/2 THIN-2, 90'-C & 100/2 THIN-2, 90'-C IN 2" PVC SCH. 40.		
④	400/2 THIN-2, 90'-C & 100/2 THIN-2, 90'-C IN 1 1/2" PVC SCH. 40.		
⑤	400/3/0 THIN-2, 90'-C & 100/3 THIN-2, 90'-C IN 3" PVC SCH. 40.		
⑥	400/3/0 THIN-2, 90'-C & 100/3 THIN-2, 90'-C IN 3" PVC SCH. 40.		
⑦	300/3 THIN-2, 90'-C & 100/3 THIN-2, 90'-C AND IN 1 1/2" PVC SCH. 40.		

[illegible]

OGPE: XXXX-XXXXXX-XXX-XXXXXX  
P.O. BOX 41179  
SAN JUAN P.R. 00940-1179  
notificacion@ogpe.pr.gov

W ES-1.

DWG BY: RAMON DURAN  
LIC: 12858 P.E.

**R.D.**  
RAMON A. DURAN, P.E.  
CONSULTING ENGINEER

P.O. BOX 8708  
SAN JUAN, P.R. 00906-0808  
TEL: 786-4444  
FAX: 786-4444

CONSULTING AND DESIGN, SUITE 201  
1000 W. 10TH AVENUE, SUITE 201  
SAN JUAN, P.R. 00906-0808  
TEL: 786-4444  
FAX: 786-4444

DANILO SALAZAR

W  
A

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Drawn by : Montilla Garcia

Checked by	
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Date  
DECEMBER 2020

No.	Revision	Date	By
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Project	
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IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
ANGEL  
MERCADO  
VEGA

Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title
---------------

ELECTRICAL  
SITE PLAN

Scale  
AS SHOWN

File Name
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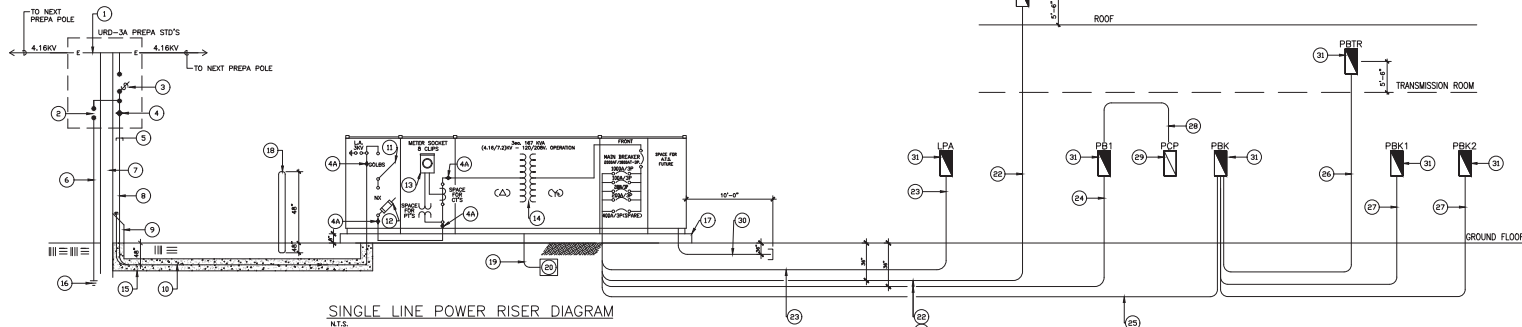
Drawing Number

ES-2

Sheet Number

28





SINGLE LINE POWER RISER DIAGRAM  
N.T.S.

### SINGLE LINE RISER DIAGRAM LEGEND:

- 1- EXISTING AERIAL PRIMARY DISTRIBUTION LINE  
3PH, 4W #XXX ACSR TO REMAIN.
- 2- 3-3 KV, LIGHTNING ARRESTER POLYMER INSULATOR RISER POLE.
- 3- 3 COTOUT 200 AMPS, 15 KV, 10,000 AIC MIN. 125 KV, BIL  
WITH 150E FUSE LINK.
- 4- 15 KV FEEDER TERMINATION WITH OUTDOOR STRESS CONES 15 KV,  
SILICONE RUBBER.
- 4A- SAME AS (4) EXCEPT INDOOR.
- 5- "OZ" SEALING BUSHING. PREPA URD-5
- 6- 1#4 BARE COOPER GROUND
- 7- NEW CONCRETE POLE TO BE INSTALL, ADD URD-3A, URD-4, URD-5, 2(CP-C5)  
M16-3 PREPA STD. APPLY IMPORTANT NOTE No.5, DWG ES-1.
- 8- PRIMARY RISER 4.16KV 3#2 COPPER, 15KV CABLE SHIELDED TRXLPE INSULATION LLDP  
JACKETED AND 1#2 XHHW-2 GROUNDED NEUTRAL 600 VOLTS, IN 4"Ø  
PVC SCH 80 AND 1 SPARE 4"Ø PVC SCH 80 CAPPED AT BOTH END.
- 9- URD-4, PREPA STD.
- 10- SAME AS (8) EXCEPT PVC SCH-40.
- 11- OUTSIDE GAND OPERATED DISCONNECTING SWITCH DEVICES 600 AMPS., CONTINUOUS,  
15 KV, 95KV, BIL, 40 KAIC.
- 12- SAME AS (4) EXCEPT INDOOR AND 90E FUSES.
- 13- METERING EQUIPMENT PRIMARY CTS/PTS (BY PREPA)
- 14- PAD MOUNTED TRANSCLASURE 3-167KVA OIL FILLED TRANSFORMER. TYPE CONNECTION  
500 KVA TOTAL PRIMARY (4.16/7.2)KV TO 120/208 VOLTS, 60 HZ, (Δ-Y) 4-2  
1/2" TAPS BELOW RATED, PRIMARY VOLTAGE NON PCB, STAINLESS STEEL TANK.  
WITH LOSSES IMPROVED. WITH BONDING JUMPER 1W#250 MCM THHN 600V.
- 15- CONCRETE ENCASEMENT.

- 16- GROUND ROD 5/8" X 8'-0" COPPER BOND THERMO-CADWELD CONNECTOR.
- 17- 8" CONCRETE PAD.
- 18- 4"Ø RIGID GALV. STEEL CAPPED END FOR SUBSTATION AND GENERATOR PROTECTION.
- 19- 1-2"Ø PVC SCH 40.
- 20- OIL DRAIN CONCRETE BOX. APPENDIX-28. APPLY DETAIL DWG. ES-4.
- 21- MAIN SECONDARY BREAKER 2000AF/1800AT AMPS, 3 POLES 240 VOLTS, 100 K.A.I.C.
- 22- 3 SETS (4W#350 MCM THWN-2, 90°-C & 1W#2/0 THWN-2, 90°-C IN 3"Ø PVC SCH. 40).
- 23- 4W#2 THWN-2, 90°-C & 1W#6 THWN-2, 90°-C. IN 2"Ø PVC SCH. 40.
- 24- 4W# 2/0 THWN-2, 90°-C & 1W#6 THWN-2, 90°-C IN 2"Ø PVC SCH. 40.
- 25- 4W# 3/0 THWN-2, 90°-C & 1W#6 THWN-2, 90°-C IN 3"Ø PVC SCH. 40.
- 26- SECONDARY FEEDER 4W#4 THHN, 90°-C & 1W#6 THHN GND IN 2"Ø PVC SCH. 40.
- 27- SECONDARY FEEDER 3W#2 THHN, 90°-C & 1W#6 THHN GND IN 2"Ø PVC SCH. 40.
- 28- APPLY DWG E-15.
- 29- APPLY DWG E-15.
- 30- 4 SPARE - 4"Ø PVC SCH. 40 & 2-1"Ø PVC SCH 40, 36" BELOW FINISH GRADE.
- 31- PANELBOARD DEAD FRONT 5'-6" CENTER LINE (SEE PANELBOARD SCHEDULE, DWG E-13)

### CERTIFICACION:

YO, RAMON A. DURAN FERNANDEZ, LIC-12858 P.E., CERTIFICO QUE SOY EL PROFESIONAL, QUE [DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS, TAMBIÉN CERTIFICO QUE ENTENDIENDO QUE DICHS PLANOS Y ESPECIFICACIONES CUMPLEN CON LAS DISPOSICIONES APLICABLES DEL REGLAMENTO CONJUNTO Y LAS DISPOSICIONES APLICABLES DE LOS REGLAMENTOS Y CÓDIGOS DE CONSTRUCCIÓN VIGENTES, JUNTAS REGLAMENTARIAS O CORPORACIONES PÚBLICAS CON JURISDICCION CERTIFICO, ADEMÁS, QUE EN LA PREPARACION DE ESTOS PLANOS Y ESPECIFICACIONES SE HA CUMPLIDO CABALMENTE CON LO DISPUESTO EN LA LEY NÚM. 14 DE 6 DE ENERO DE 2004, SEGÚN ENMIENDADA, CONOCIDA COMO LA LEY PARA LA INVERSIÓN POR LA INDUSTRIA PUERTORRIQUEÑA Y CON LA LEY NÚM. 319 DE 15 DE MAYO DE 1938, SEGÚN ENMIENDADA; LA LEY NÚM. 6 DE 6 JULIO DE 1978, SEGÚN ENMIENDADA, 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 OJPE.

OJPE: XXXX-XXXXXX-XXX-XXXXXX  
P.O. BOX 41179  
SAN JUAN P.R. 00940-1179  
notificacion@ojpe.pr.gov



CERTIFICACIÓN DEL DISEÑADOR		
1. Certifico que soy ingeniero o arquitecto, licenciado y colegiado, y que estoy autorizado por el dueño del proyecto a presentar estos planos de construcción ante la A.E.E.		
2. En armonía con las disposiciones de la Ley Núm. 7 del 18 de julio de 1985, según enmendada, conocida como Ley de Certificación de Planos de Construcción, certifico que realicé el diseño eléctrico de este proyecto de conformidad con los códigos, patrones, normas y reglamentos aprobados por la AEE, la Junta de Planificación y la Administración de Reglamentos y Permisos.		
FIRMA DEL DISEÑADOR		
AUTORIDAD DE ENERGÍA ELÉCTRICA DE PUERTO RICO ENDOSO		
NOMBRE DE PROYECTO: IMPROVEMENTS & EXPANSION MUNICIPAL COLISEUM ANGEL MERCADO VEGA Bo. PUEBLO, SABANA GRANDE, PUERTO RICO		
NUMERO DE PROYECTO: _____		CARGA (KVA): <b>500</b>
ENDOSADO POR	REVISOR	FECHA
	Δ	
	Δ	
	Δ	
	Δ	
1. La AEE endosa el diseño eléctrico mostrado en estos planos de construcción basándose en la certificación sometida por el diseñador en cumplimiento con la Ley Núm. 7 del 18 de julio de 1985, según enmendada.		
2. La AEE no asume responsabilidad sobre el diseño certificado. El endoso por parte de la AEE no libera al diseñador de la responsabilidad profesional que asume al certificar estos planos. Este endoso no libera al constructor ni al inspector de obra privada de cumplir con las disposiciones del Código Eléctrico Nacional, Código Eléctrico Nacional de Seguridad, códigos, patrones, normas y reglamentos vigentes de la AEE y de otras agencias de gobierno, así como leyes federales y estatales, vigentes al inicio de las obras.		
3. El presente endoso tiene vigencia de dos años. De iniciar las obras eléctricas dentro de este término, mediante notificación previa a la AEE, el endoso mantendrá su vigencia hasta la terminación de las mismas. En caso que no se certifique obra eléctrica en ese periodo, este endoso perderá su vigencia.		

DANILO SALAZAR  
P.E.

PO BOX 008136, SAN JUAN, P.R. 00910-0136, PHONE (787) 614-5991

Drawn by : Montilla García

Checked by

Date  
DECEMBER 2020

No. Revision Date By

Project  
IMPROVEMENTS  
& EXPANSION MUNICIPAL  
COLISEUM  
ANGEL  
MERCADO  
VEGA

Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title  
SINGLE LINE POWER  
RISER DIAGRAM

Scale

AS SHOWN

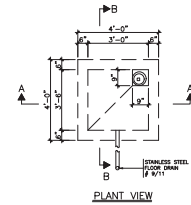
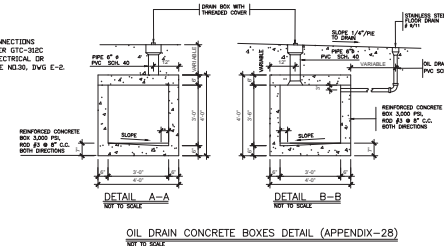
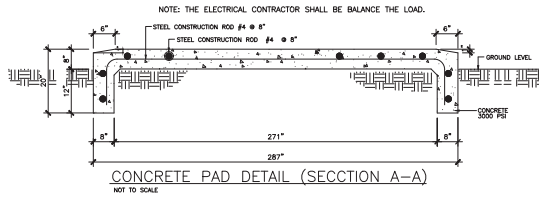
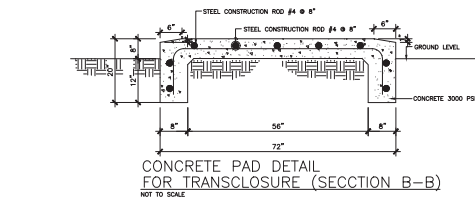
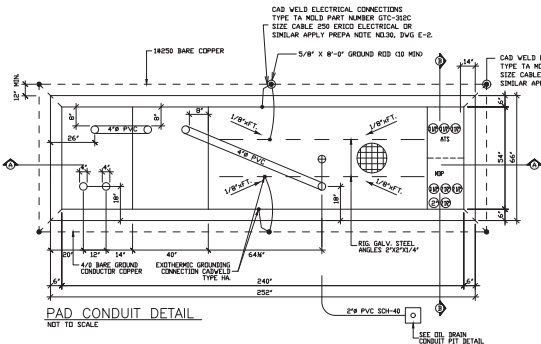
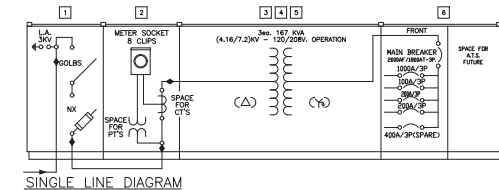
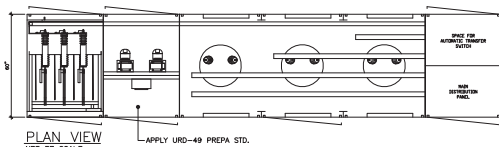
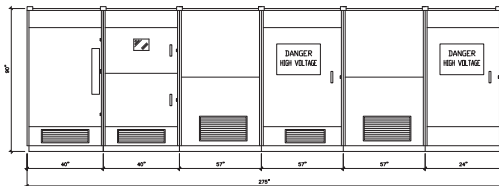
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ES-3

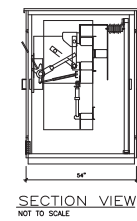
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CLUB	QTY.	MANUFACTURER	DESCRIPTION
1	3	MC GRAW	POWER FUSES: 5M-200, 150 AMPERES, TYPE "C" FUSE LINK.
	3	GE	LIGHTNING ARRESTERS DISTRIBUTION TYPE 3 KV
	1	ASFA	PRIMARY METERING CABINET
2	1	ANCHOR	8 CLIPS METER SOCKET *
			EMPTY SECTION FOR (O.U.S.C. TRANSFORMERS)
3	4	ASFA	3000/167 KVA PRIMARY VOLTAGE 4.16/7.2KV SECONDARY VOLTAGE 120/208 VOLTS OPERATION SECONDARY COPPER BUS BARS 2000 AMPS.
4	1	ASFA UL LISTED E54041E WITH WESTINGHOUSE BREAKERS	PANEL: MD2 AMES MAIN BREAKER 30000/1600AT-3P. KALC 100000 SERVICE SPCL. KALC TYPE
			DESCRIPTION MAIN BRK. FRAME CUTT AMPS. POLES FRAMES 1 100 3 1000 1 100 3 1000 1 200 3 200 1 200 3 200 1 400 3 400 (SPARE)

\* COORDINATION METER WITH PREPA OFFICE.



- NOTES:
- 1- OUTDOOR PAD MOUNTED TRANSCLASURE.
  - 2- MATERIAL SHALL BE TYPE 304 STAINLESS STEEL GAUGE #14.
  - 3- FINISH: CHEMICALLY CLEANED ONE COAT OF PHOSPHATIZED PRIMER AND TWO COATS OF LIGHT GRAY ENAMEL AND JST.
  - 4- BUS BARS SHALL BE SILVER PLATED COPPER FOR 600 AMPS. AND ABOVE AS PER CODE REQUIREMENTS.
  - 5- CLEARANCES SHALL BE ALLOWED FOR 15 KV (95 KV BIL) AS PER P.E.A.P.A. STANDARDS.
  - 6- ONE SPARE FUSE SHALL BE SUPPLIED FOR EACH FUSE HOLDER.
  - 7- CONSTRUCTION WILL BE FREE STANDING, GROUNDED, SELF SUPPORTING AND OF THE LABYRINTH TYPE TO PREVENT WATER SEEPING.
  - 8- INCOMING CUBICLE WILL BE MECHANICALLY INTERLOCKED TO PREVENT THE OPENING OF THE DOOR PRIOR TO TURN OFF THE SWITCH.

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OGPE: XXXX-XXXXXX-XXX-XXXXXX  
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NUMERO DE PROYECTO: _____		CARGA (NÚM.): 500
ENDOSADO POR	REVISOR	FECHA
1. La AEE endosa el diseño eléctrico mostrado en estos planos de construcción basándose en la certificación sometida por el diseñador en cumplimiento con la Ley Núm. 7 del 16 de julio de 1985, según enmendada.		
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Drawn by: Montilla García

Checked by

Date: DECEMBER 2020

No. Revision Date By

Project

IMPROVEMENTS & EXPANSION MUNICIPAL COLISEUM ANGEL MERCADO VEGA

Bo. PUEBLO SABANA GRANDE, PUERTO RICO

Drawing Title

TRANSCLASURE DETAILS

Scale

AS SHOWN

File Name

Drawing Number

ES-4

Sheet Number

30

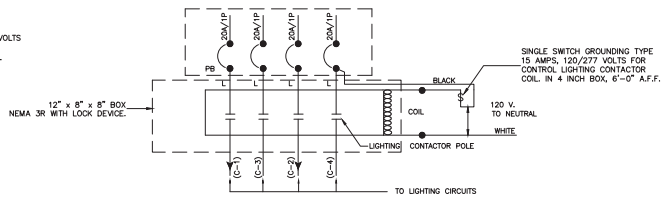
## LEGEND:

	LED LIGHTING FIXTURE = SWITCH TO SWITCH "A" = LIGHT FIXTURE TYPE "A" (APPLY LUMINAIRES SCHEDULE, DWG. E-1).
	PENDANT LIGHTING FIXTURE 4 INCH SQUARE BOX SEAL TIGHT, 26" - 0" A.F.F.. (APPLY INSTALLATION DETAIL, DWG. E-1).
	WALL OUTLET FOR LIGHTING FIXTURE 4 INCH ROUND BOX WATERPROOF, 11"-0" A.F.F. (EXCEPT OTHERWISE INDICATE, DWG. E-1)
	CEILING OUTLET FOR LIGHTING 4 INCH BOX. (SEE LUMINAIRE SCHEDULE, DWG. E-1)
	SMOKE DETECTOR, 60 HZ. 7"-6" A.F.F. (SEE FIRE ALARM SYSTEM DIAGRAM, DWG. E-9).
	SINGLE SWITCH GROUNDING TYPE 20 AMPS, 120/277 VOLTS, 4 INCH BOX WITH RAISER COVER CAT. NO. 770 RACO OR SIMILAR, 48" A.F.F. LETTER INDICATES OUTLET TO BE CONTROLLED, 48" A.F.F.
	SAME AS ABOVE EXCEPT DUPLEX LETTER INDICATES OUTLET TO BE CONTROLLED.
	SAME AS ABOVE EXCEPT PILOT LIGHT.
	SAME AS ABOVE EXCEPT PILOT LIGHT.
	SAME AS ABOVE EXCEPT PILOT LIGHT.
	SAME AS ABOVE EXCEPT LIGHT EXEPT TWO POLES, 20 AMPS, 120/277 VOLTS. CAT. NO. HBL1532PL HUBBELL OR SIMILAR FOR CONTROL FAN COIL.
	LIGHTING CONTACTOR 30 AMPS, 4 POLE, 240 VOLTS, COILS 120 VOLTS. IN 12" x 8" x 8" BOX, NEMA 3R, AND SINGLE SWITCH FOR CONTROL LIGHTING CONTACTOR, WEATHERPROOF.
	DUPLEX GROUNDING CONV. RECEPTACLE 20 AMPS, 125 VOLTS, TAMPER RESISTANT 4 INCH SO. BOX WITH RAISER COVER CAT. NO. 770 RACO OR SIMILAR 18" A.F.F.
	GF= GROUND FAULT WP= WATER PROOF VP= VAPORFITE
	SAME AS ABOVE EXCEPT GROUND FAULT 42" A.F.F.
	SAME AS ABOVE EXCEPT, WATERPROOF AND GROUND FAULT.
	SAME AS ABOVE EXCEPT TWO RECEPTACLE.
	SAME AS ABOVE EXCEPT BOX CAT. NO. B2527 AND COVER CAT. NO. 53925 HUBBELL OR SIMILAR.
	POWER RECEPTACLE GROUNDING TYPE 1PH, 50 AMPS, 250 VOLTS.
	RECEPTACLE TWIST-LOCK 20 AMPS, 16 3W, 240 VOLTS., AT CEILING.
	COMBINATION EXIT LIGHT WITH POWER PACK AND EMERGENCY LIGHT 4 INCH OCTAGONAL BOX. (SEE LUMINAIRES SCHEDULE, DWG. E-1).
	EMERGENCY LIGHT WITH POWER PACK 4 INCH OCTAGONAL BOX. (SEE LUMINAIRES SCHEDULE, DWG. E-1).
	TELEPHONE OUTLET 4 INCH SO. BOX AT 18" A.F.F.
	MANUAL STARTERS PUSH BUTTON (RUN & STOP), FOR MOTOR CONTROL, GAME AREA. 60" A.F.F. GE. OR SIMILAR.
	MULTIPLE LIGHTING CONTACTOR 60 HZ., 30A, 120 VOLTS, SQUARE "D", WITH COIL 120 V. CAT. NO. LIG 1200 V02 ENCLOSURE NEMA-1. (N ELECTRICAL ROOM LOCATION). (APPLY LPA, DWG E-13).
	TIME SWITCH, 40A, 2 POLES, 120 VOLTS, WITH MECHANICAL BACK-UP 5"-6" A.F.F. INTERMATIC OR SIMILAR, FOR CONTROL, (C-203PB). WHEN APPLY, (ON-6:00 P.M. / OFF-6:00 A.M.)
	NEW PANELBOARD, DEAD FRONT 120/208 VOLTS, 5"-6" A.F.F. (SEE PANELBOARD SCHEDULE, DWG. E-13).
	HEAVY DUTY SAFETY SWITCH SINGLE THROW DEAD FRONT 120/208 VOLTS 3PH, 4W, NEMA 4/4X WITH AMPERAGE AS INDICATED BY INSIDE NUMBER. (APPLY SAFETY SWITCH SCHEDULE, DWG. E-13).
	TERMINAL TELEPHONE CABINET 4"-0" A.F.F. CENTER LINE SURFACE MOUNTED, 36" x 36" x 6" IN WOOD PANEL 8"-0" x 4"-0" WITH GROUND BAR 5/8" x 8"-0" COPPERWELD.
	4" x 4" x 2" JUNCTION BOX, GAME AREA.
	5" x 5" x 2" JUNCTION BOX, 42" A.F.F. WATER PROOF.
	14" x 14" x 4" JUNCTION BOX.

	CONDUIT UP
	CONDUIT DOWN
	CONDUIT IN FLOOR AND WALL.
	CONDUIT IN CONCRETE SLAB AND WALL.
	CONDUIT EMT PER CEILING.
	1 1/2" CONDUIT IN FLOOR AND WALL FOR USE TELEPHONE LINE. (EXCEPT OTHERWISE INDICATED).
	CONDUIT RIGID GALVANIZED.
	1" CONDUIT IN FLOOR AND WALL FOR USE COMPUTER, CABLE T.V. LINE. (EXCEPT OTHERWISE INDICATED).
	2" PVC SCH 40 CONDUIT IN FLOOR AND WALL FOR SOUND LINE.
	FLEXIBLE STEEL CONDUIT (GREEN FIELD)
	CONDUIT RUN TO PANEL, ARROW INDICATE NUMBER OF CIRCUITS, NUMBERS INDICATED CIRCUITS AND LINES INDICATE NUMBER OF WIRES LONG CROSS BARS INDICATE HOT CONDUCTOR, SHORT CROSS BARS INDICATED NEUTRAL CONDUCTOR. IN ADDITION TO WIRES SHOWN, EACH CONDUIT SHALL CONTAIN A GREEN GROUNDING WIRE #12 MIN. SIZE.

## ABBREVIATIONS:

A.F.F.	— ABOVE FINISH FLOOR.
G.F.	— GROUND FAULT.
WP	— WATERPROOF.
R.G.S.	— RIGID GALVANIZED STEEL.
MPLC	— MULTIPLE LIGHTING CONTACTOR.
TTC	— TERMINAL TELEPHONE CABINET.
WH	— WATER HEATER.
C	— CIRCUIT
SD	— SMOKE DETECTOR



LIGHTING CONTACTOR INSTALLATION TYPICAL

LUMINAIRE SCHEDULE									
TYPE	DESCRIPTION CAT. NO.	VOLT.	LAMPS		TYPE	MANUFACTURER	MOUNTING	REMARKS	
			NO	WATTS					
A	61123-UFOHIBA1A- 100UNVDB80	120	1	100	LED 5000K W/REFLECTOR	SYLVANIA	PENDANT	① ② ③	
B	74377-VAPOR1B- 040UNVDB80-48EC-GR	120	1	40	LED	SYLVANIA	SURFACE	① ② ③	
C	60356 VAPOR1B- 065UNVDB80-96EC-GR	120	1	65	LED	SYLVANIA	SURFACE		
D	60159-CANOPY3A/ 040UNV740/10SS/BZ	120	1	40	LED	SYLVANIA	SURFACE	②	
EMX	60759 EXTCOMB01A/RDVTHS /LV/WH/EM	277	2	12	LED	LITHONIA	WALL		
EM	EMLIGHT-1B/30VTR/S/WH	120	2	3	LED	SYLVANIA	WALL		
K	SNMLPAK 1N/015UNV740 /NC/BZ/P	120	1	15	LED	SYLVANIA	WALL	11 FT. AFF. PHOTOCELL	③
N	747377-VAPOR1B- 040UNVDB80-48EC-GR	120	1	40	LED	SYLVANIA	PENDANT	③	

## REMARKS:

- ① IP65 DRIVER.
- ② LED LAMPS 120V. AND  
DRIVER BALLAST.
- ③ PENDANT.
- ④ EMERGENCY BALLAST  
FP54/HO, TS SYLVANIA, 1400 LUMENS
- ⑤ LAST LOCATION COORDINATE WITH ARCHITECT.

## IMPORTANT NOTES:

- 1) ALL CONDUIT PER CONCRETE SLAB SHALL BE PVC SCH 40 AND  
ALL CONDUIT RUNNING UNDERGROUND SHALL BE PVC SCH 40  
2) ALL EXPOSED CONDUIT SHALL BE PVC SCH 80 CONDUIT OR R.G.S.
- \* 3) THE CONTRACTOR COORDINATE VOLTAGE CONNECTION WITH  
MANUFACTURE BALLAST DRIVER WIRE.
- 4) ALL CIRCUIT LIGHTING OF THE BASKETBALL COURT TO RUM  
THROUGH (M.F.L.C.).

## GENERAL NOTES:

- 1- UNLESS OTHERWISE INDICATED ALL WIRES AND CABLES SHALL BE #12 AWG.
- 2- UP TO #10 AWG USE WIRE, ALL LARGER SIZES BE CABLE.
- 3- ALL WIRE SHALL BE 600 VOLTS INSULATION THIN-STRANDED WIRES.
- 4- UNLESS OTHERWISE INDICATED, ALL WIRES AND CABLES SHALL BE COPPER.
- 5- PROVIDE GROUND WIRE IN ALL THE CONDUITS THAT ARE INDICATED TO BE PVC.  
SCHEDULE 40.
- 6- PROVIDE #12 AWG GREEN JUMPER BETWEEN RECEPTACLE GROUNDING SCREW AND  
OUTLET BOX GROUNDING SCREW.
- 7- UNLESS OTHERWISE INDICATED ALL CONDUITS SHALL BE EMT PER CEILING,  
FOR UNDERGROUND, CONCRETE SLAB, AND WALL CONDUIT USE PVC  
SCHEDULE 40.
- 8- UNLESS OTHERWISE INDICATED ALL CONDUITS SHALL BE 3/4" DIAMETER MINIMUM.
- 9- ALL UNDERGROUND CONDUIT COUPLINGS SHALL BE WATERTIGHT.
- 10- PROVIDE EXPANSION JOINT COUPLINGS OF THE REQUIRED TYPE AND SIZE  
WHENEVER A CONDUIT CROSSES AN EXPANSION JOINT.
- 11- PROVIDE CONDUIT PLASTIC DRIVERS IN ALL UNDERGROUND CONDUIT RUNS.  
MAXIMUM DISTANCE BETWEEN DRIVERS TO BE 4'-0".
- 12- CONTRACTOR MUST MAKE SURE THAT THE ENTIRE ELECTRICAL SYSTEM HAS GROUND  
CONTINUITY.
- 13- ALL THE ELECTRICAL INSTALLATION SHALL BE DONE IN A NEAT AND WORKMANLIKE  
MANNER, ACCORDING TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE,  
THE PUERTO RICO ELECTRICAL POWER AUTHORITY LATEST STANDARDS AND PUERTO  
RICO TELEPHONE COMPANY OR COMMUNICATIONS AUTHORITY PATEST PRACTICES.
- 14- ALL OUTLETS SHALL HAVE ITS OWN INDEPENDENT OUTLET BOX 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 MAXIMUM NUMBER OF CONDUCTORS IN THE  
BOX PER N.E.C. ARTICLE 314-SECTION 16A.
- 15- THE CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME ACQUAINTED WITH THE  
EXISTING FIELD CONDITIONS, IF SHALL BE THE DIRECT RESPONSIBILITY 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 PURPOSE. THIS SHALL BE DONE BEFORE THE CONTRACTOR  
SUBMITS HIS BID, SO THAT THE ENGINEER CAN RENDER A DECISION ON THE  
MATTER BEFORE THE BIDS ARE RECEIVED. THE SUBMITTAL OF THE BID BY THE  
CONTRACTOR WILL BE HELD AS PROOF THAT THE CONTRACTOR UNDERSTANDS  
THOROUGHLY AND COMPLETELY AS THE SCOPE, THE WORK INVOLVED, HAS  
FAMILIARIZED HIMSELF WITH THE EXISTING FIELD CONDITIONS AND HAS INCLUDED ON  
HIS ALL THE NECESSARY ITEMS TO CARRY OUT THE ELECTRICAL WORK, NO  
ALLOWANCE WILL BE PERMITTED ON THIS MATTER AFTER THE BIDS ARE RECEIVED.
- 16- ALL SWITCHES AND RECEPTACLE SHALL BE IVORY COLORED WITH IVORY BAKELITE  
PLATES.
- 17- THE DIMENSIONS OF THE ELECTRICAL CABINET WILL BE SUBJECT TO THE RULES  
AND REGULATIONS OF P.R.
- 18- PROVIDE ELECTRICAL 6" WIDE YELLOW IDENTITY TAPE FOR UNDERGROUND CABLES  
THE TAPE SHALL BE PERMANENTLY PRINTED WITH CONTINUOUS BLACK LETTERS 1  
1/4" x 5/8" WITH THE WORDS "PELIGRO-PELIGRO" ON THE EDITION.
- 19- PROVIDE #10 WIRE ON ALL 20 AMP CIRCUIT 75 FEET OF LONGER.
- 20- ALL PANELS SWITCHES, STARTERS, CONTROL DEVICES AND MISC ELECTRICAL  
EQUIPMENTS SHALL BE CLEARLY MARKED WITH ENGRAVED PLASTIC NAMEPLATES FOR  
EASY IDENTIFICATION AND SAFETY. ALL PANELBOARD CIRCUITS SHALL BE PROPERLY  
IDENTIFIED WITH TYPE WRITTEN PLASTIC PROTECTED IDENTIFICATION ON SUITABLE  
CARDS WHICH SHALL BE MOUNTED INTO CORRESPONDING PANELBOARD DOORS.
- 21- FURNISHED AND INSTALL ALL TELEPHONE CONDUITS AS SHOWN ON DRAWINGS.  
PROVIDE PULL STING IN ALL CONDUITS (FISH WIRE).
- 22- CONTRACTOR SHALL BALANCE ALL LOADS.
- 23- ALL EXPOSED CONDUIT SHALL BE RIGID GALVANIZED STEEL.
- 24- ALL PANELS, METERS, SAFETY SWITCHES, ETC., SHALL BE LA BELED SO AS TO IDENTIFY  
THEIR USE AND VOLTAGE, IN AN ACCEPTED AND APPROVED MANNER.
- 25- USE "LIQUID TIGHT" FLEXIBLE METALLIC CONDUIT FOR ALL MOTOR AND/OR GENERATOR  
CONNECTION.
- 26- EXPANSION FITTINGS SHALL BE USED FOR EVERY CONDUIT CROSSING BUILDING EXPANSION  
JOINTS.

## CERTIFICACION:

YO, RAMON A. DURAN FERNANDEZ, LIC-12858 P.E., CERTIFICO QUE SOY EL PROFESIONAL, QUE [DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS, TAMBIÉN CERTIFICO QUE  
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OTRAS PERSONAS CON MI CONOCIMIENTO, ME HACEN RESPONSABLE DE CUALQUIER ACCION JUDICIAL Y DISCIPLINARIA POR LA OJPE.

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& EXPANSION  
MUNICIPAL  
COLISEUM  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

ELECTRICAL  
LEGEND AND NOTES

Scale

AS SHOWN

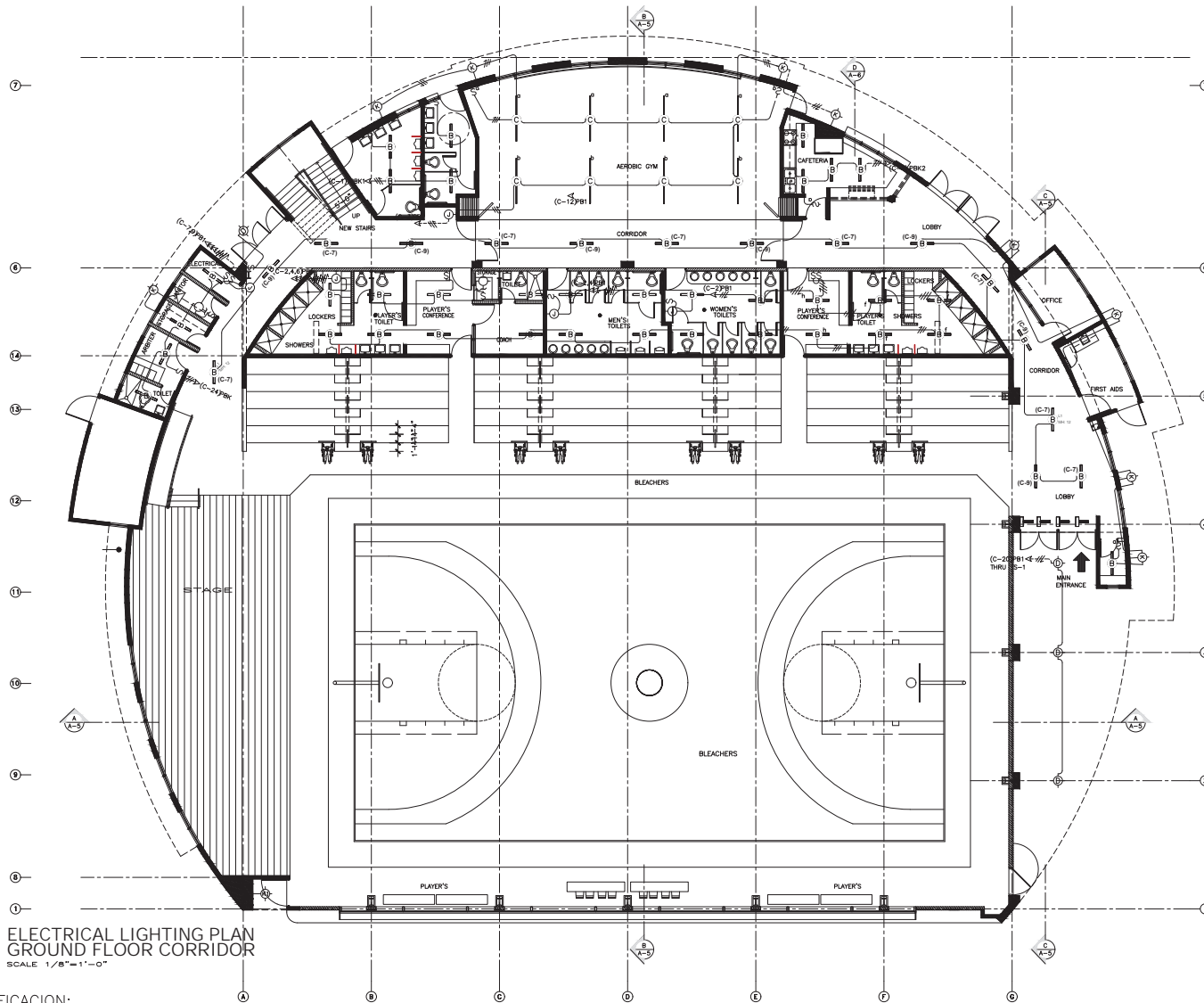
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E-1

Sheet Number

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& EXPANSION  
MUNICIPAL COLISEUM  
**ANGEL MERCADO VEGA**  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

**ELECTRICAL  
LIGHTING PLAN  
GROUND FLOOR  
CORRIDOR**

Scale  
AS SHOWN

File Name

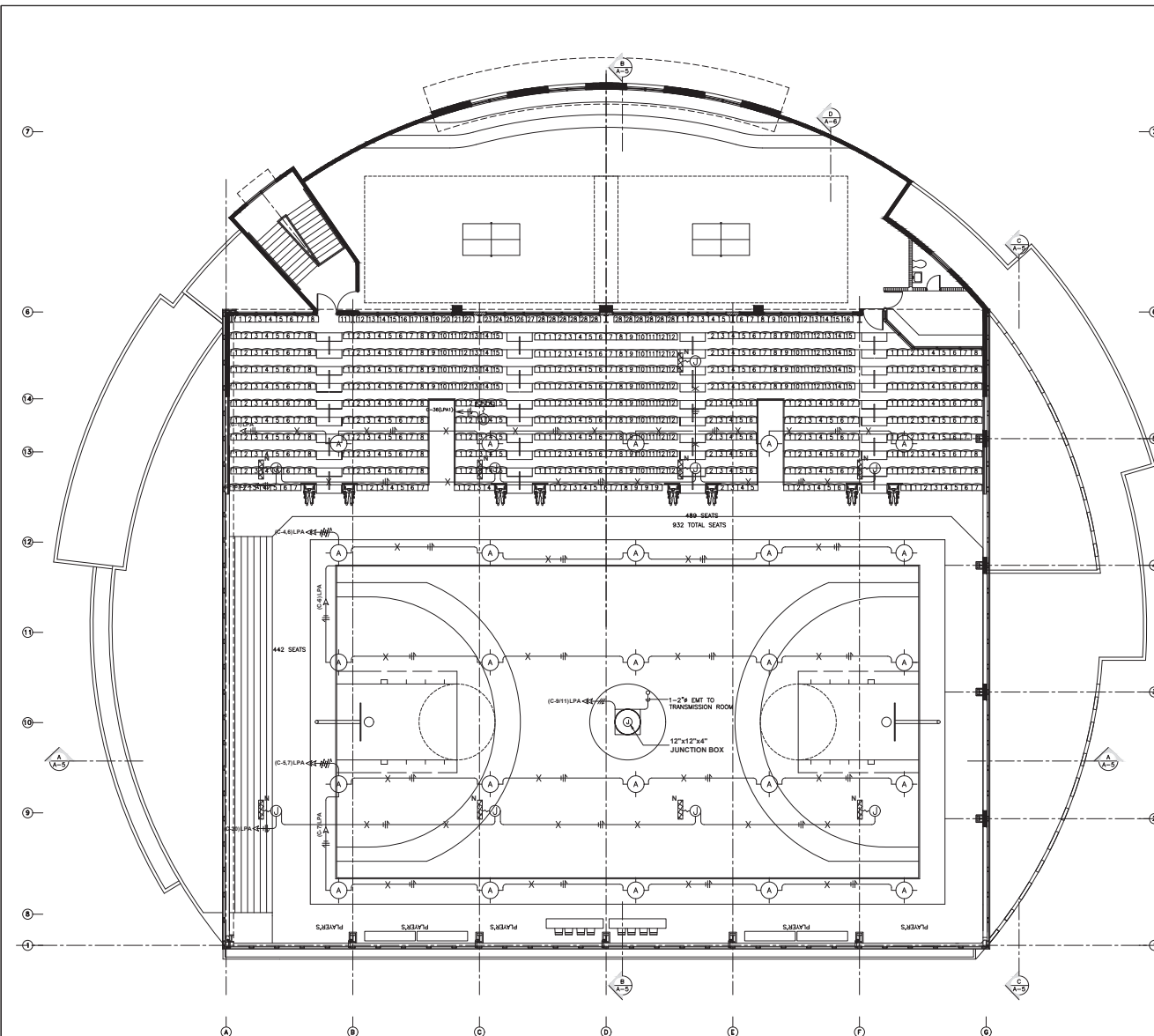
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Sheet Number

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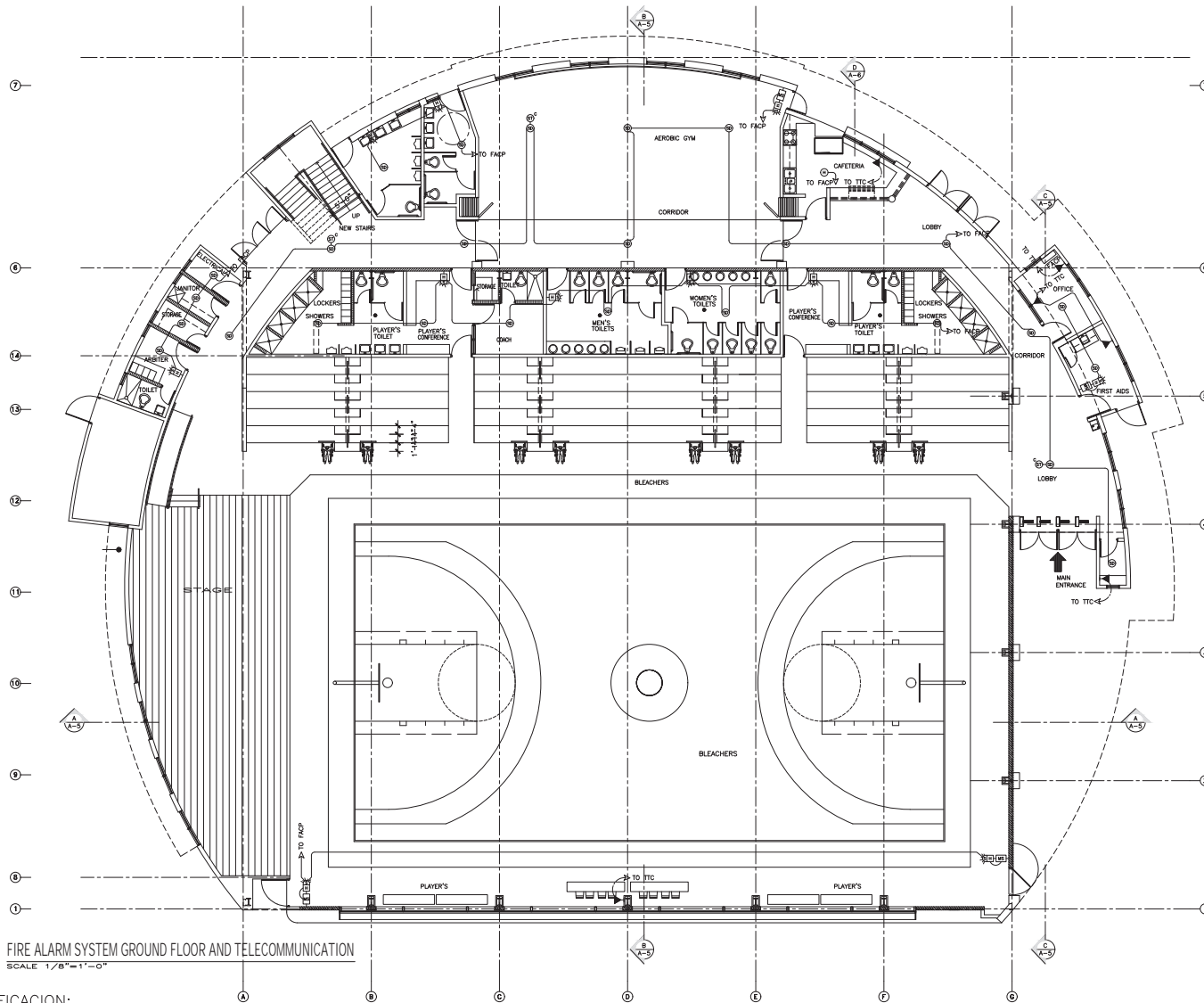
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IMPROVEMENTS & EXPANSION MUNICIPAL COLISEUM <b>ANGEL MERCADO VEGA</b> Bo. PUEBLO SABANA GRANDE, PUERTO RICO			
Drawing Title			
<b>ELECTRICAL LIGHTING PLAN SECOND FLOOR</b>			
Scale AS SHOWN			
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<b>E-3</b>			
Sheet Number			
<b>33</b>			





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COLISEUM  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title  
FIRE ALARM  
SYSTEM  
GROUND FLOOR  
AND TELECOMMUNICATION

Scale  
AS SHOWN

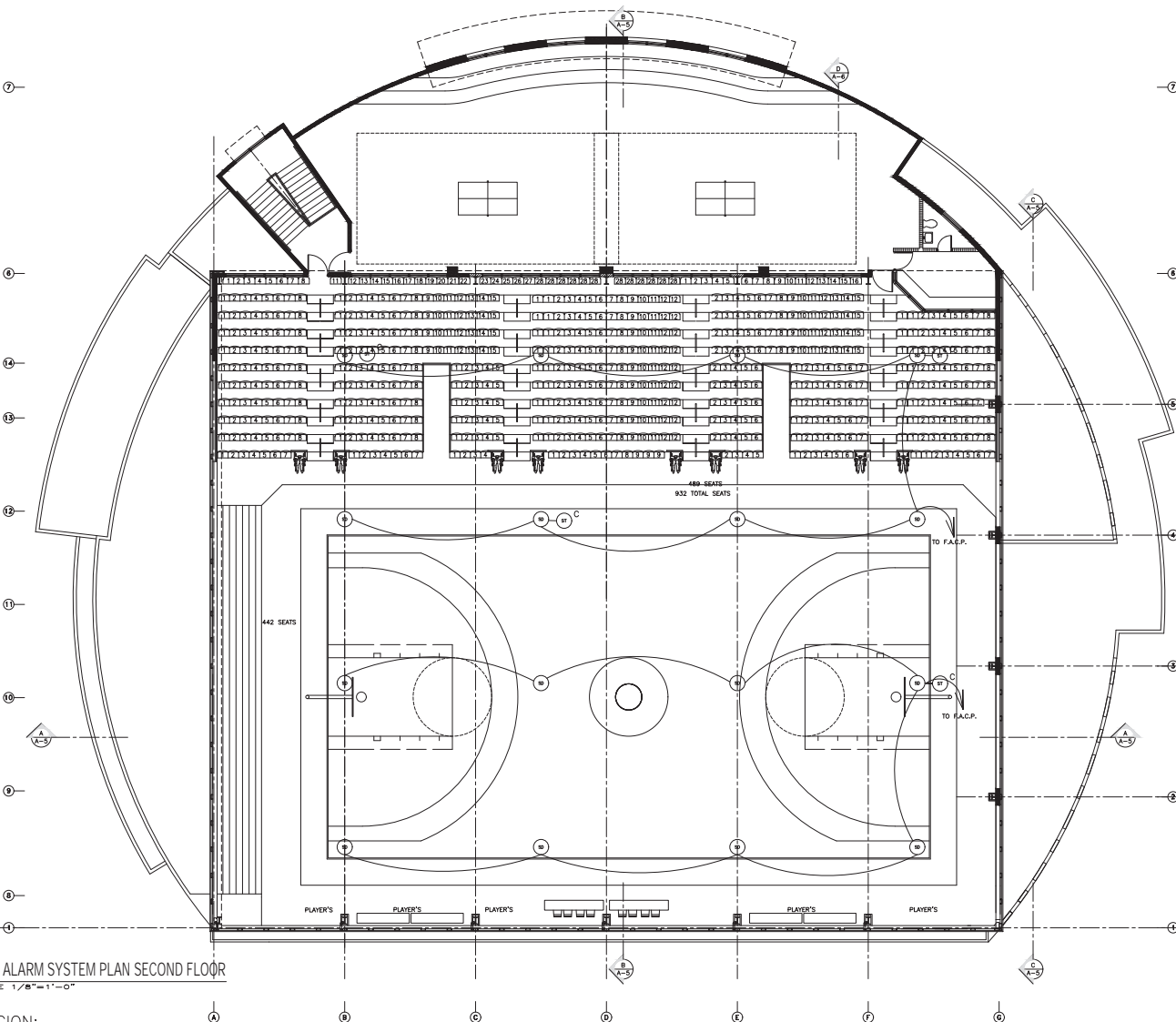
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Sheet Number

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& EXPANSION  
MUNICIPAL COLISEUM  
ANGEL  
MERCADO VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

FIRE ALARM  
SYSTEM PLAN  
SECOND FLOOR

Scale

AS SHOWN

File Name

Drawing Number

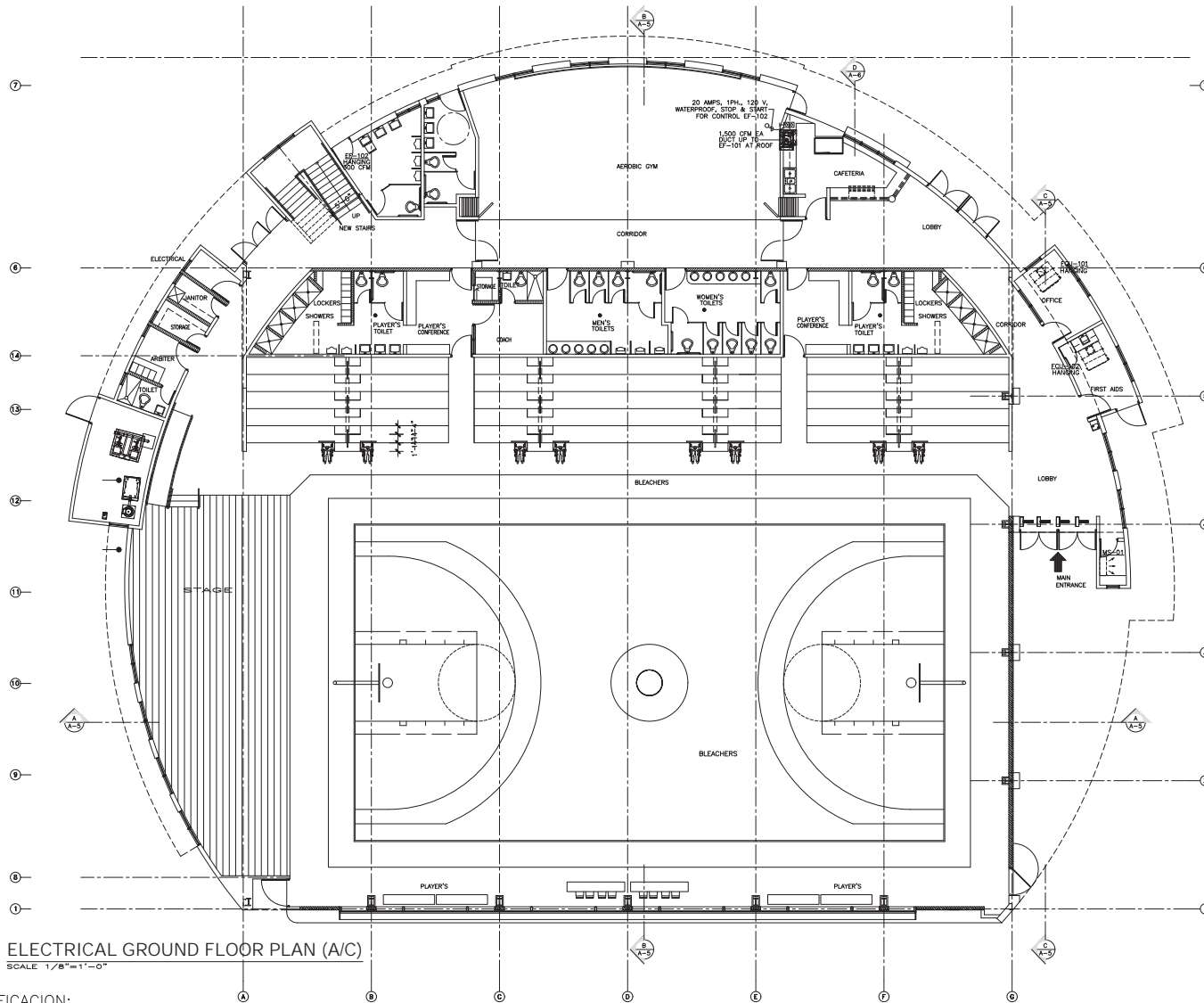
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Sheet Number

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MUNICIPAL  
COLISEUM  
**ANGEL  
MERCADO  
VEGA**  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

**ELECTRICAL  
GROUND FLOOR PLAN  
(A/C)**

Scale  
AS SHOWN

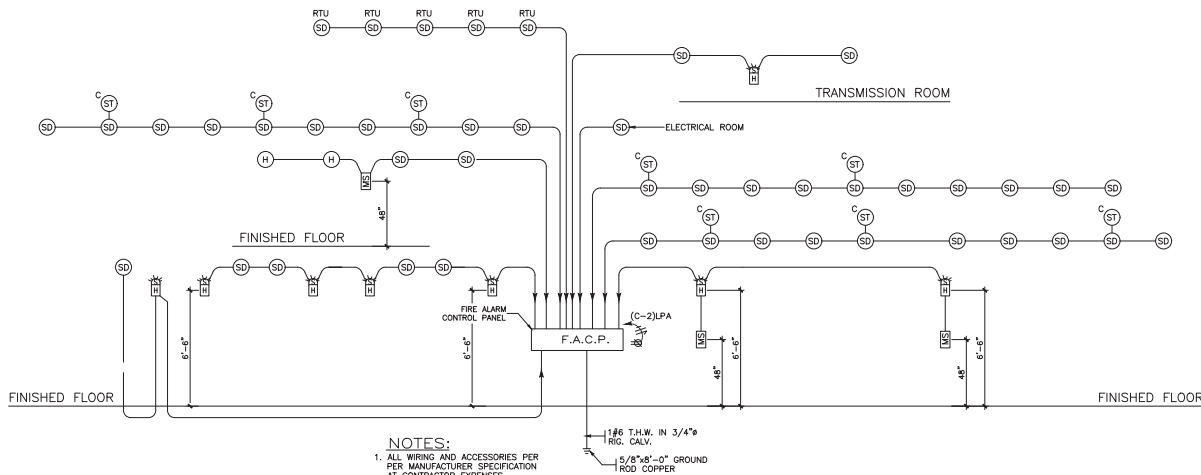
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Drawing Number

E-8

Sheet Number

38



- NOTES:
1. ALL WIRING AND ACCESSORIES PER PER MANUFACTURER SPECIFICATION AT CONTRACTOR EXPENSES.
  2. TRU= ROOF TOP UNIT.

## FIRE ALARM SYSTEM DIAGRAM

N.T.S.

## FIRE ALARM SYSTEM DETECTION LEGEND:

- CONDUIT 1"ø. (USE 4" x 4" x 2 1/8" BOX WITH KNOCKOUTS OF 1").
- CEILING TYPE PHOTOMETRY ADDRESSABLE INTELLIGENT SMOKE DETECTOR EQUAL TO HONEYWELL, INC. MODEL NO. TCS06B1076 INSTALLED IN A 4" x 4" x 2 1/8" OCTAGONAL ELECTRICAL BOX WITH KNOCKOUTS OF 1".
- FIRE ALARM ADDRESSABLE INTELLIGENT PANEL EQUAL TO HONEYWELL MODEL XLS-140-2 (E) WITH INITIAL CAPACITY FOR 2000 INITIATING POINTS. PANEL BACKBOX SHALL BE INSTALLED SURFACE OR FLUSH AT 4'-0" A.F.F. CENTERED.
- HORN STROBE EQUAL TO HONEYWELL MODEL NO. P2R INSTALLED IN 4" SQUARE ELECTRICAL BOX AT BOX AT 80" A.F.F.
- PULL STATION XLS-278 WITH COVER LOCAL CAT. NO. S46401007 COVER FOR PULL STATION HORNE 48" A.F.F., FOR PULL STATION PROTECTOR.
- CEILING SPEAKER AND STROBES CAT. No. SP2C24115 USE W/ACCESSORY BACK BOX SKIRT. AND SO. BOX 4"x4"x2 1/8" SPECTRACLEAR OR SIMILAR.
- 4" X 4" X 2 1/8" JUNCTION BOX. (LAST LOCATION COORDINATE WITH MECHANICAL ENGINEER.

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ANGEL  
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VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

FIRE ALARM  
SYSTEM DIAGRAM

Scale

AS SHOWN

File Name

Drawing Number

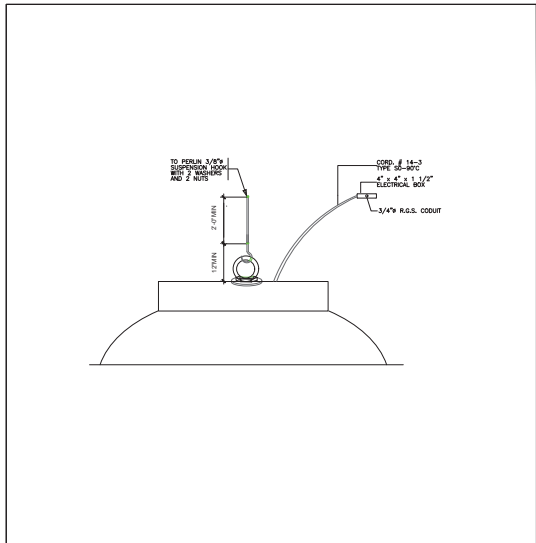
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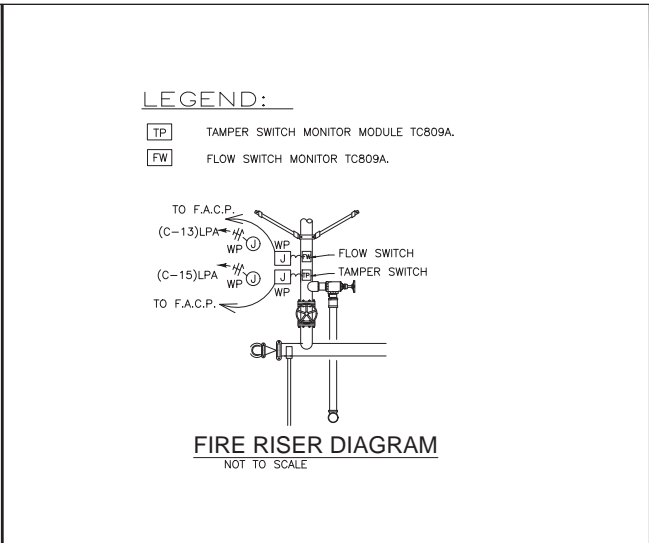
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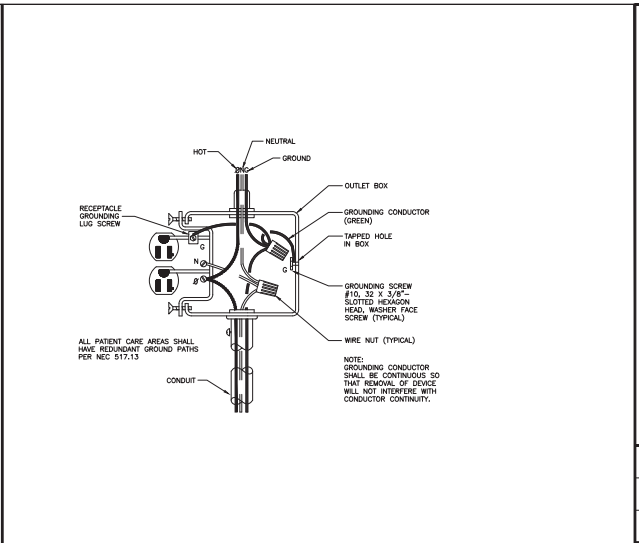




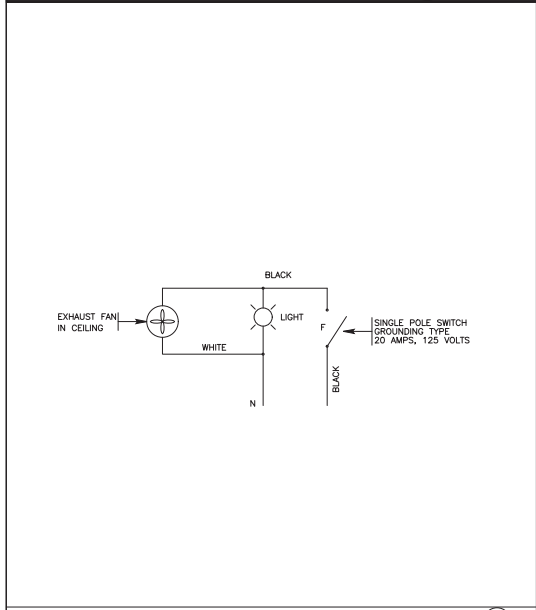
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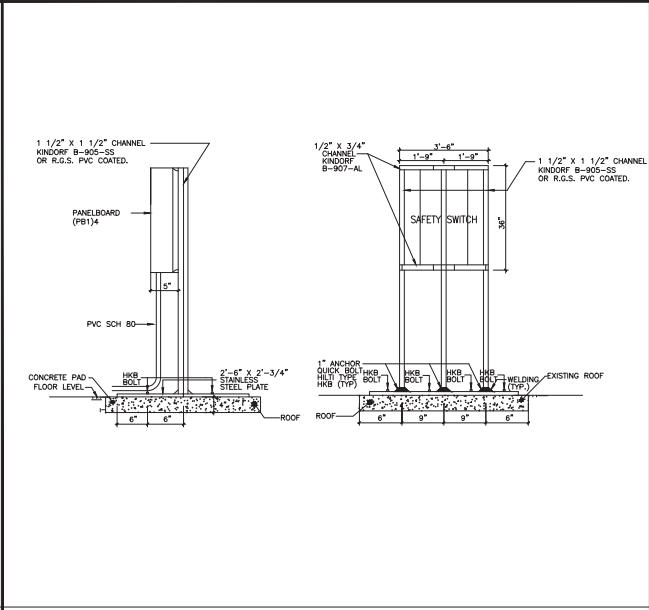
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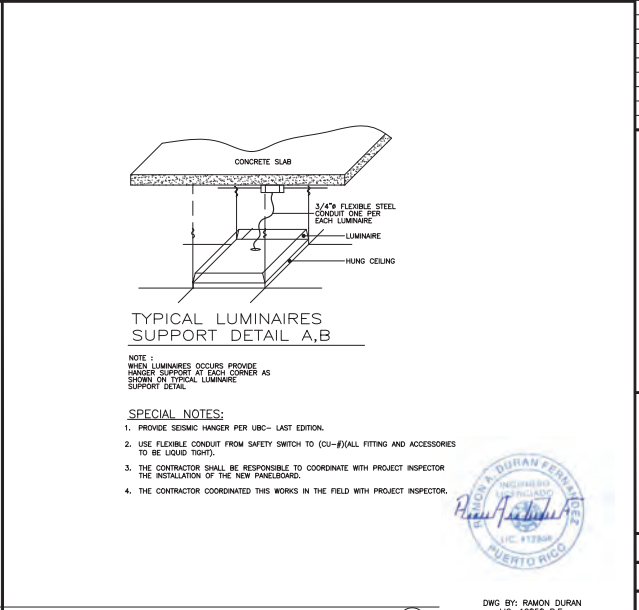
RECEPTACLE GROUNDING DETAIL (3)



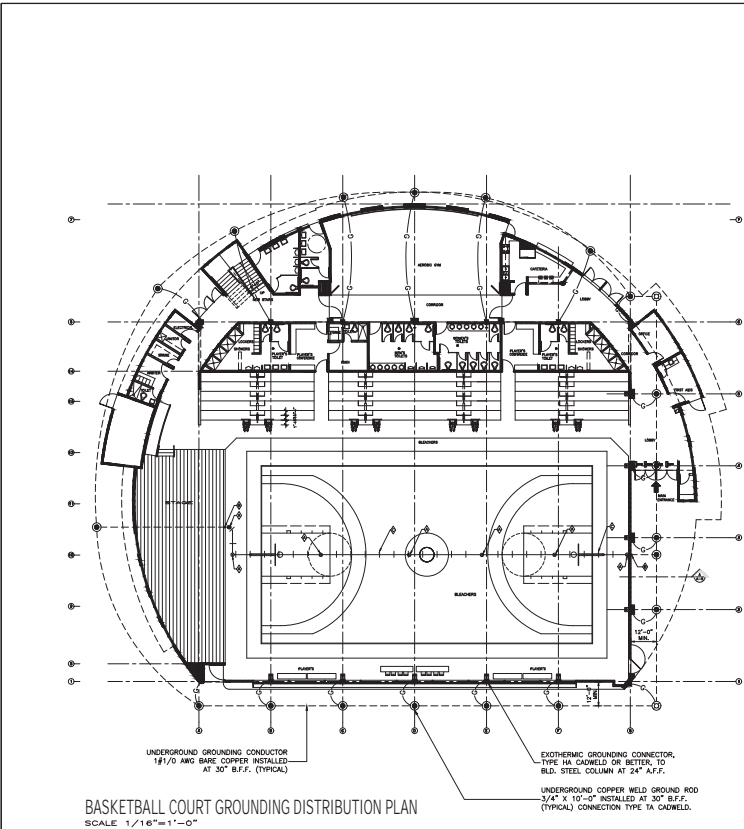
EXHAUST FAN AND BATHROOM LIGHT WIRING DIAGRAM (TRANSMISSION ROOM) (4)



MOUNTING DETAILS "A" (ON ROOF)



TYPICAL LUMINAIRE SUPPORT DETAIL "A,B" (5)



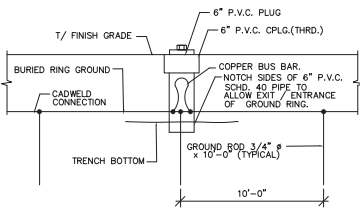
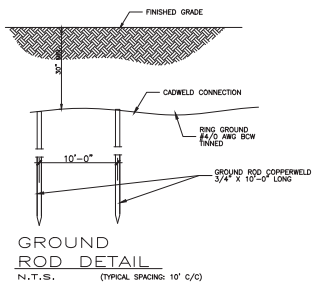
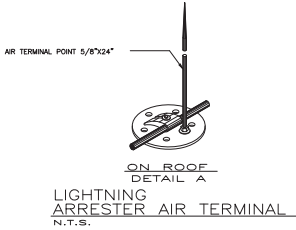
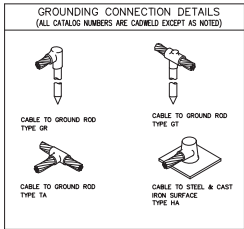
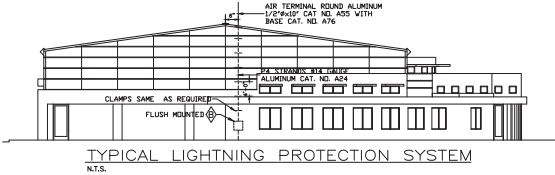
# CERTIFICACION:

YO, RAMON A. DURAN FERNANDEZ, LIC.12858 P.E., CERTIFICO QUE SOY EL PROFESIONAL, QUE [DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS, TAMBIEN CERTIFICO QUE ENTENDIENDO QUE DICHO PLANOS Y ESPECIFICACIONES CUMPLEN CON LAS DISPOSICIONES APLICABLES DEL REGLAMENTO CONJUNTO Y LAS DISPOSICIONES APLICABLES DE LOS REGLAMENTOS Y CODIGOS DE CONSTRUCCION VIGENTES, JUNTAS REGLAMENTADORAS O CORPORACIONES PUBLICAS CON JURISDICCION, CERTIFICO, ADAMAS, QUE EN LA PREPARACION DE ESTOS PLANOS Y ESPECIFICACIONES SE HA CUMPLIDO CABALMENTE CON LO DISPUESTO EN LA LEY N.º 14 DE 9 DE ENERO DE 2004, SEGUN ENMIENDADA, CONOCIDA COMO LA LEY PARA LA INVERSION POR LA INDUSTRIA PUERTORRIQUEÑA Y CON LA LEY N.º 319 DE 15 DE MAYO DE 1938, SEGUN ENMIENDADA; LA LEY N.º 36 DE 6 JULIO DE 1978, SEGUN ENMIENDADA, SEGUN APLIQUE], RECONOZCO QUE CUALQUIER DECLARACION FALSA O FALSIFICACION 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 ACCION JUDICIAL Y DISCIPLINARIA POR LA OJPE.

## DETAIL "B"

N.T.S.

OGPE: XXXX-XXXXXX-XXX-XXXXXX  
P.O. BOX 41179  
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- LEGEND:**
- UNDERGROUND GROUNDING CONDUCTOR #4/0 AWG BARE TINNED COPPER INSTALLED AT 30" B.F.F.
  - UNDERGROUND GROUNDING CONDUCTOR 1/8" AWG BARE TINNED COPPER INSTALLED AT 30" B.F.F.
  - GROUNDING ROD COPPER WELD 3/4" x 10'-0" (APPLY GROUNDING NOTE #8, DWG E-6)
  - INSPECTION TEST PORT
  - AIR TERMINAL POINT 5/8"x24" No. A 24 ON ROOF.

- GROUNDING NOTES:**
- ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADCWELD OR THERMOWELD).
  - ALL EXTERIOR GROUND CONDUCTORS SHALL BE #4/0 AWG BARE TIN PLATED COPPER.
  - GROUND RODS SHALL BE COPPER CLAD STEEL 3/4" DIAMETER, 10 FEET LONG AND SHALL BE DRIVEN VERTICAL WITH THEIR TOPS 30" BELOW FINAL GRADE.
  - ALL BRANCH CIRCUITS SHALL CARRY A FULL SIZED GROUND CONDUCTOR (UNLESS NOTED OTHERWISE).
  - GROUND EQUIPMENTS INSIDE BUILDING ACCORDING TO MANUFACTURER RECOMMENDATIONS.
  - THE GROUND ROD AND RING GROUND SHALL BE INSTALLED 2 FEET MINIMUM AWAY FROM THE BUILDING AS INDICATED ON THE GROUNDING PLAN.
  - ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH CORROSION RESISTANT MATERIAL.
  - RESISTANCE TEST WILL BE SUBMITTED BY CERTIFIED ENGINEER. MEASUREMENT MUST NOT EXCEED 5 OHMS.
  - CONTRACTOR TO CONNECT HALO LOOP DROPS TO EXTERIOR GROUND LOOP.
  - FOR EXISTING GROUND SYSTEM PRIOR TO CONSTRUCTION, THE CONTRACTOR SHOULD VERIFY AND CERTIFY THAT IT DOES NOT EXCEED 5 OHMS. IF NOT, CONTRACTOR SHOULD BUILD AS SPECIFIED.

- NOTES:**
- APPLY DETAIL "A"
  - APPLY DETAIL "B"
  - USE STEEL STRUT PS-620-3/8" CLAMPS PS-1134 AND STANDARD BOLTS, NUTS WASHERS SAME AS REQUIRED. USE STEEL STRAP EACH 4FT LONG.



DANILO SALAZAR  
P.E.

Drawn by : Montilla Garcia

Checked by

Date 21 SEPT 2022

No. Revision Date By

Project  
IMPROVEMENTS & EXPANSION  
MUNICIPAL COLISEUM  
ANGEL MERCADO VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

ELECTRICAL  
ARRESTER

Scale AS SHOWN

File Name

Drawing Number

E-12

Sheet Number

42

P A N E L B O A R D   S C H E D U L E															
DESIGNATION	MAINS			BREAKERS			WIRING	CONDUIT		LOAD (AMPS)			REMARKS		
	TYPE	CAP. AMPS	VOLT	CIRCUITS	POLES	TRIP	SIZE	TYPE	SIZE	TYPE	#A	#B		#C	
(PBAC)	VOLTAGE: 120/208V. PHASE (S) 3PH NO. WIRES: 4W SPACES: 30 MOUNTING: SURFACE CAPACITY: 800 AMPS A.I.C.: 35,000 MIN. G.E. CHALL. 507" OR SIMILAR BOLT-ON BREAKER TYPE: NEMA 3R	M.B.	120/208	1/3/5	3	125	2	THHN	2"	PVC	100	100	100	RTU-101	(SS-1)
				2/4/6	3	175	1/0	THHN	2"	PVC	123	123	123	RTU-102	(SS-1)
				7/9/11	3	175	1/0	THHN	2"	PVC	123	123	123	RTU-103	(SS-1)
				8/10/12	3	175	1/0	THHN	2"	PVC	123	123	123	RTU-104	(SS-1)
				13/15/17	3	175	1/0	THHN	2"	PVC	123	123	123	RTU-105	(SS-1)
				14/16	2	20	10	THHN	3/4"	PVC	7	7	7	CU-101	(SS-2)
				15/17	2	20	10	THHN	3/4"	PVC	7	7	7	CU-102	(SS-2)
				18/20	2	20	10	THHN	3/4"	PVC	11	11	11	CU-201	(SS-2)
				19/21	1	20	10	THHN	3/4"	PVC	10	10	10	RECEPTACLE	(SS-2)
				22/24	2	20	10	THHN	3/4"	PVC	7	7	7	EF-103	(SS-3)
ON ROOF	6A (TOTAL): 620 AMPS 6B (TOTAL): 628 AMPS 6C (TOTAL): 622 AMPS	M.B.	120/208	23/25	2	20	10	THHN	3/4"	PVC	5	5	5	CU-01	(SS-2)
				26/27/28/29/30	1	20	10	THHN	3/4"	PVC	—	—	—	DRY-101 TO RTU-105	(SS-2)

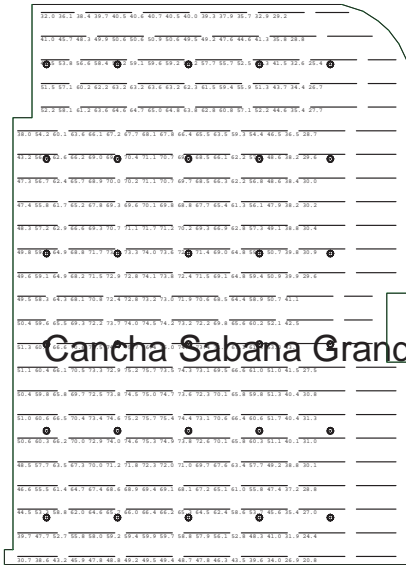
PANELBOARD SCHEDULE														
DESIGNATION	MAINS			BREAKERS			WIRING		CONDUIT		LOAD (AMPS)		LOAD DESCRIPTION	REMARKS
	TYPE	CAP. AMPS	VOLT	CIRCUITS	POLES	TRIP	SIZE	TYPE	SIZE	TYPE	#A	#B		
PBTR	M.L.	125	120/208											
	VOLTAGE: 120/208V.													
	PHASE (S) 3PH													
	NO. WIRES: 4W													
	SPACES: 24													
	MOUNTING: SURFACE													
	CAPACITY: 125 AMPS													
	A.I.C.: 10,000 MIN.													
	G.E. CHALL. 507" OR SIMILAR													
	WITH LOCK DEVICE													
BOLT-ON BREAKER														
TYPE: NEMA 1														
				1	1	20	12	THHN	3/4"	PVC	2	--	--	LIGHTING
				3.5	1	20	12	THHN	3/4"	PVC	--	2	3	RECEPTACLE
				2.4	1	20	12	THHN	3/4"	PVC	10	--	--	RECEPTACLE
				6	1	20	12	THHN	3/4"	PVC	10	--	--	EMERGENCY & EXIT LIGHT
				9/11	2	20	12	THHN	3/4"	PVC	--	2	2	FU-201
				8,10,7	1	20	--	--	--	--	--	--	--	SPACE
				13 10 24	--	--	--	--	--	--	--	--	--	SPACE
				12	1	20	10	THHN	3/4"	PVC	--	--	13	HO-TR

P A N E L B O A R D   S C H E D U L E													
DESIGNATION	MAINS			BREAKERS			☑ WIRING	*# CONDUIT		LOAD (AMPS)		LOAD DESCRIPTION	REMARKS
	TYPE	CAP. AMPS	VOLT	CIRCUITS	POLES	TRIP	SIZE	TYPE	SIZE	TYPE	#A		
PBK	M.L.	225	120/208										
	VOLTAGE: 120/208V. PHASE (S) 3PH NO. WIRES: 4W SPACES: 24 MOUNTING: SURFACE CAPACITY: 400 AMPS A.I.C.: 22,000 MIN. G.E. CHALL. 507" OR SIMILAR WITH LOCK DEVICE BOLT-ON BREAKER TYPE: NEMA 1												
	1/3	2	100	2"	THHN	2"	PVC	80	73	-		PBK1	
	4/6	2	100	2"	THHN	2"	PVC	-	73	80	PBK2		
	8.75/172	3	80	4"	THHN	3"	PVC	12	14	18	PBK3		
	2,5/7,11	1	20	-	-	-	-	-	-	-	-	SPARE	
	7.11	1	20	3/4"	THHN	3/4"	PVC	4	-	4	RECEPTACLE		
	13.17	1	20	3/4"	THHN	3/4"	PVC	6	-	6	RECEPTACLE		
	14.16,18	1	20	3/4"	THHN	3/4"	PVC	4	3	3	RECEPTACLE		
	9	1	20	3/4"	THHN	3/4"	PVC	-	-	-	EMERGENCY LIGHT		
24	1	20	3/4"	THHN	3/4"	PVC	-	-	1	LIGHTING			
LOCATION	6A (TOTAL): 106 AMPS 6B (TOTAL): 163 AMPS 6C (TOTAL): 112 AMPS												
ELECTRICAL ROOM													

PANELBOARD SCHEDULE														
DESIGNATION	MAINS			BREAKERS		WIRING		CONDUIT		LOAD DESCRIPTION			REMARKS	
	TYPE	CAP. AMPS	VOLT	CIRCUITS	POLES	TRIP	SIZE	TYPE	SIZE	#A	#B			
PBK1	VOLTAGE: 120/208 V. PHASE (S) 1 φ NO. WIRES: 3W SPACES: 16 MOUNTING: FLUSH CAPACITY: 600 AMPS A.I.C.: 10,000 MIN MANUFACT. CHALL. 50 "D" OR SIMILAR BOLT-ON BREAKER TYPE: NEMA 1	M.L.	125	120/208	1	1	20	12	THHN	3/4"	EMT	2	—	LIGHTING
					2,4	1	20	12	THHN	3/4"	EMT	5	5	RECEPTACLE
					5/7	2	50	6	THHN	1"	PVC	50	50	RECEPTACLE RANGE
					6,8	1	20	10	THHN	3/4"	PVC	3	10	RECEPTACLE REFRIGERATOR
					9	1	20	12	THHN	3/4"	PVC	5	9	RECEPTACLE
					3	1	20	10	THHN	1"	PVC	—	—	EMERGENCY & EXIT LIGHT
					10	1	20	12	THHN	3/4"	PVC	10	—	DISPOSAL
					11/13	2	20	12	THHN	3/4"	PVC	8	8	EF-101
					12	1	20	12	THHN	3/4"	EMT	—	—	SPARE
					LOCATION									
CAFETERIA No.1	6A (TOTAL): 83 AMPS 6B (TOTAL): 82 AMPS													

PANELBOARD SCHEDULE														
DESIGNATION	MAINS			BREAKERS			WIRING		CONDUIT		LOAD		REMARKS	
	TYPE	CAP. AMPS	VOLT	CIRCUITS	POLES	TRIP	SIZE	TYPE	SIZE	#A	#B	DESCRIPTION		
PBK2	VOLTAGE: 120/208 V. PHASE (S) 1 # NO. WIRES: 3W SPACES: 16 MOUNTING: FLUSH CAPACITY: 600 AMPS A.I.C.: 10,000 MIN MANUFACT. CHALL 50 "D" OR SIMILAR BOLT-ON BREAKER TYPE: NEMA 1	M.L.	125	120/208	1	1	20	12	THHN	3/4"	EMT	2	—	LIGHTING
					2.4	1	20	12	THHN	3/4"	EMT	5	5	RECEPTACLE
					5/7	2	50	6	THHN	1"	PVC	50	50	RECEPTACLE RANGE
					6.8	1	20	12	THHN	3/4"	PVC	3	10	RECEPTACLE REFRIGERATOR
					9	1	20	12	THHN	3/4"	PVC	5	9	RECEPTACLE
					3	1	20	10	THHN	1"	PVC	—	—	EMERGENCY & EXIT LIGHT
					10	1	20	12	THHN	3/4"	PVC	10	—	DISPOSAL
					11/13	2	20	12	THHN	3/4"	PVC	8	8	EF-102
					12	1	20	12	THHN	3/4"	EMT	—	—	SPARE
					LOCATION									
CAFETERIA No.2	6A (TOTAL): 83 AMPS 6B (TOTAL): 82 AMPS													

PANELBOARD SCHEDULE																
DESIGNATION	MAINS			BREAKERS			WIRING			CONDUIT			LOAD (AMPS)			REMARKS
	TYPE	CAP. AMPS	VOLT	CIRCUITS	POLES	TRIP	SIZE	TYPE	SIZE	TYPE	#A	#B	#C	LOAD DESCRIPTION		
PB1	VOLTAGE: 120/208 V PHASE (S) 3PH W. WIRE: 4# SPACES: 42 MOUNTING: FLUSH CAPACITY: 225 AMPS A.L.C.: 22,000 MIN. MANUFACT: GE, SQ "D" OR SIMILAR TYPEPENNA 1 BOLT-ON BREAKER			1,5,5	1	20	12	THHN	3/4"	PVC	—	5	—	—	LIGHTING SPARE	
	2,6,6	1	20	12	THHN	3/4"	PVC	3	2	3	—	—	—	LIGHTING		
	7,8,11	1	20	12	THHN	3/4"	PVC	3	3	4	—	—	—	LIGHTING		
	8,10,12	1	20	12	THHN	3/4"	PVC	—	—	—	—	—	—	EMERGENCY E-EXIT		
	13,15,17	1	20	10	THHN	3/4"	PVC	13	13	13	—	—	—	HD-1 HD-3	HD-2	
	14,16,18	1	20	10	THHN	3/4"	PVC	13	10	10	—	—	—	HD-4 & RECEPTACLE		
	19,21,23	1	20	10	THHN	3/4"	PVC	3	11	11	—	—	—	RECEPTACLE		
	20	1	20	12	THHN	3/4"	PVC	2	—	—	—	—	—	LIGHTING	TS-1	
	22,24	1	20	12	THHN	3/4"	PVC	—	6	6	—	—	—	RECEPTACLE		
	25,27,29	1	20	12	THHN	3/4"	PVC	5	8	8	—	—	—	RECEPTACLE		
	30	1	20	12	THHN	3/4"	PVC	6	—	—	—	—	—	RECEPTACLE		
	31,33	2	20	12	THHN	3/4"	EMT	2	2	2	—	—	—	FOL-101 FOL-102		
32/34	2	20	10	THHN	3/4"	R.G.S.	10	10	—	—	—	—	MOTOR #1			
35/37	2	20	10	THHN	3/4"	R.G.S.	10	10	—	10	—	—	MOTOR #2			
38/40/42	3	100	2	THHN	2"	PVC	65	65	65	—	—	—	PCP			
LOCATION	#A(TOTAL): 135 AMPS			39	1	20	12	THHN	3/4"	PVC	—	4	—	PUMP ROOM		
	#C(TOTAL): 135 AMPS			41	—	—	10	13	3/4"	PVC	—	—	—	ELECTRICAL ROOM		



Cancha Sabana Grande8482.png

Luminaire Schedule					
Symbol	Qty	Label	Delivered Lumens	Lum. Watts	Description
⊙	30	L1	N.A.	241.3	61132 - UFOHIBA1A-240UNVD850
					LLF
					0.920

Calculation Summary							
Label	CalcType	Units	Avg	Max Min		Avg/Min	Max/Min
Room_1_Workplane	Illuminance	Fc	58.11	76.4	20.8	2.79	3.67

CERTIFICACION:

YO, RAMON A. DURAN FERNANDEZ, LIC.12858 P.E., CERTIFICO QUE SOY EL PROFESIONAL, QUE [DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS, TAMBIÉN CERTIFICO QUE ENTENDIENDO QUE DICHO PLANOS Y ESPECIFICACIONES CUMPLEN CON LAS DISPOSICIONES APLICABLES DEL REGLAMENTO CONJUNTO Y LAS DISPOSICIONES APLICABLES DE LOS REGLAMENTOS Y CODIGOS DE CONSTRUCCION VIGENTES, JUNTAS REGLAMENTADORAS O CORPORACIONES PUBLICAS CON JURISDICCION. CERTIFICO, ADAMAS, QUE EN LA PREPARACION DE ESTOS PLANOS Y ESPECIFICACIONES SE HA CUMPLIDO CABALMENTE CON LO DISPUESTO EN LA LEY NÚM. 14 DE 9 DE ENERO DE 2004, SEGÚN ENMIENDADA, CONOCIDA COMO LA LEY PARA LA INVERSIÓN POR LA INDUSTRIA PUERTORRIQUEÑA Y CON LA LEY NÚM. 319 DE 15 DE MAYO DE 1938, SEGÚN ENMIENDADA; LA LEY NÚM.96 DE 6 JULIO DE 1978, SEGÚN ENMIENDADA, SEGÚN APLIQUE], RECONOZCO QUE CUALQUIER DECLARACION FALSA O FALSIFICACION 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 ACCION JUDICIAL Y DISCIPLINARIA POR LA OTRA.

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P.O. BOX 41179  
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DANILO SALAZAR

P. E.

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Drawn by : Montilla Garcia

Checked by

Date  
21 SEPT 2022

No.    Revision    Date    By

Project

IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title

LIGHTING  
LAYOUT

Scale  
AS SHOWN

File Name

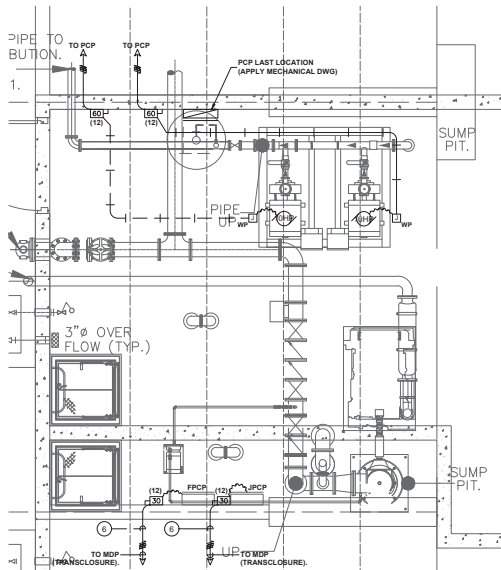
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E-14

Sheet Number

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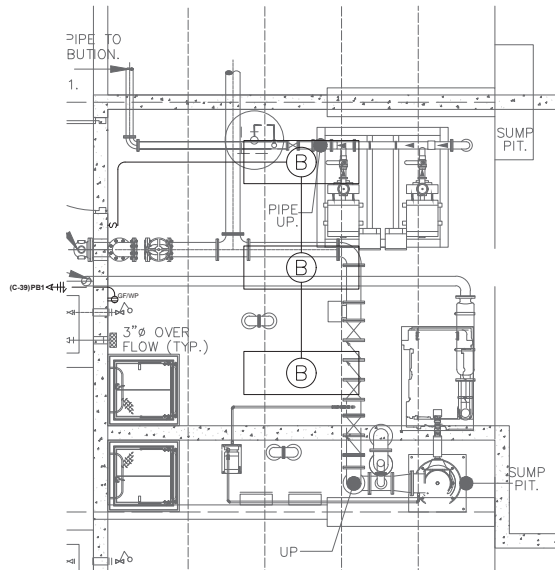




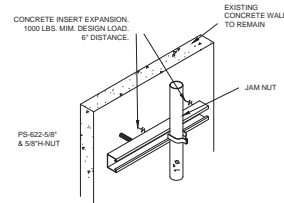
ELECTRICAL POWER PUMP ROOM  
SCALE: N.T.S.

### LEGEND (PUMP ROOM)

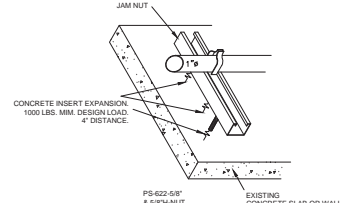
- ⑥ CEILING OUTLET WITH LED FIXTURE INSIDE LETTER INDICATES FIXTURE AS PER LIGHTING SCHEDULE, DWG E-1.
- ⑦ CEILING OUTLET WITH EMERGENCY AND EXIT LIGHT FIXTURE AS PER LIGHTING SCHEDULE, DWG E-1.
- ⑧ HEAT DETECTOR CAT. NO. 4088-9613 AND BASE CAT. NO. 4088-9788 SIMPLY OR SIMILAR TO F.A.C.P.
- ⑨ SPECIFICATION GRADE DUPLEX RECEPTACLES 20 APMS, TAMPER RESISTANT 125 VAC, GND TYPE ARROW HART CAT. NO. 5735 WITH PLATE, CAT. NO. 93101 18" A.F.F.
- ⑩ SPECIFICATION GRADE SINGLE POLE INTERCHANGEABLE TYPE SWITCH 20 AMPS 120/277 V. ARROW HART CAT. NO. 07-81 WITH MOUNTING STRAP TWO OPENING, CAT. NO. T-1346, PLATE CAT. NO. 97021 AND GASKET 4"-6" A.S.E. WITH METAL OR S.S. PLATE.
- ⑪ CONDUIT EXPOSED RIGID STEEL PVC COATED OR CONCEALED ON CONCRETE SLAB.
- ⑫ CONDUIT CONCEALED CEILING SLAB DASHED LINES INDICATES NO. OF WIRES NOT INDICATED WIRES SHALL BE TWO NO. 12 T.H.W.N.
- ⑬ CONDUIT CONCEALED ON WALL OR FLOOR, (EXCEPT OTHERWISE INDICATED).
- ⑭ FIRE PUMP CONTROLLER (SPECS BY OTHER).
- ⑮ JOCKEY PUMP CONTROLLER (SPECS BY OTHER).
- ⑯ PUMP MOTOR 10HP, 3PH, 240 VOLTS, SPECS BY OTHER.
- ⑰ UNFUSED DISCONNECT SWITCH-60A, 3P., 600 V, NEMA 12.
- ⑱ PUMPS CONTROL PANEL. (SPECS. BY OTHER).
- ⑲ 5"x5/2" PVC JUNCTION BOX, AT CEILING.
- ⑳ CONDUIT-UP
- ㉑ CONDUIT-DOWN
- ㉒ CONDUIT EXPOSED PVC SCH. 80, (SEE SINGLE LINE POWER DIAGRAM, DWG E-1)
- ㉓ CONDUIT CONCEALED IN WALL OR FLOOR.
- ㉔ FLEXIBLE CONDUIT SEALTIGHT WITH CONNECTION SEALTIGHT.
- ㉕ CONDUIT RUN TO PANEL ARROW INDICATE NUMBER OF CIRCUITS, NUMBERS INDICATED CIRCUITS AND LINES INDICATE NUMBER OF WIRES LONG CROSS BARS INDICATE HOT CONDUCTOR, SHORT CROSS BARS INDICATE NEUTRAL CONDUCTOR, IN ADDITION TO WIRES SHOWN, EACH CONDUIT SHALL CONTAIN A GREEN GROUNDING WIRE #12 MIN. SIZE.



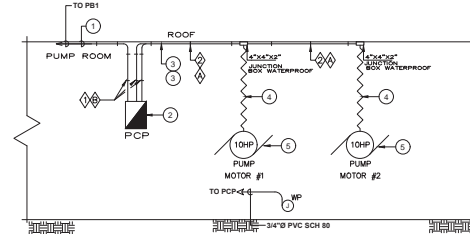
ELECTRICAL LIGHTIN AND POWER PUMP ROOM  
SCALE: N.T.S.



DETAIL "A" (TYPICAL)  
N.T.S. (VERTICAL WALL) (WHEN APPLY)



DETAIL "B" (TYPICAL)  
N.T.S. (HORIZONTAL BELOW WALL)



RISER DIAGRAM PUMP ROOM (WATER)  
NOT TO SCALE

### RISER DIAGRAM PUMP ROOM (WATER):

- 1 SECONDARY FEEDER 4W# 2 THHN, 90 °C & 1W#6 THHN, GND. IN 2" RGS PVC COATED.
- 2 PUMPS CONTROL PANEL DEAD FRONT, 3PH, 4W, 240/120 VOLTS. AT 5'-6" A.F.F. (FOR DESCRIPTION APPLY, MECHANICAL DWG).
- 3 SECONDARY FEEDER 3W#8 THHN, 90 °C & 1W#10 THHN, GND. IN 1" RGS PVC COATED.
- 4 SECONDARY FEEDER 3W#8 THHN, 90 °C & 1W#10 THHN, GND. IN 1" SEAL TIGHT CONDUIT..
- 5 PUMP 10HP, 230 V., 3ø WITH HORSE POWER AS INDICATED BY INSIDE NUMBER. BRANCH CIRCUIT PROTECTION 30A/3P, 240 VOLTS. (FOR DESCRIPTION APPLY MECHANICAL DWG).
- 6 3W#8 THHN-2, 90 °C & 8 THWN-2, 90 °C GND IN 2" PVC SCH. 40, 36 BELOW FINISH GRADE.

### NOTES:

- ① APPLY DETAIL "A", DWG ES-3.
- ② APPLY DETAIL "B", DWG ES-3.
- ③ EXISTING CONCRETE SLAB OR WALL TO BE DRILL FOR INSTALLATION OF ELECTRICAL CONDUIT. COORDINATE THIS ELECTRICAL WORKS WITH THE FIELD WITH PROJECT INSPECTOR.
- ④ USE STEEL STRUT PS-621-10" CLAMPS PS-1132 AND STANDARD BOLTS, NUTS, WASHERS SAME AS REQUIRED. (SEE DETAIL "A" & "B").



DWG BY: RAMON DURAN  
LIC: 12858 P.E.



### CERTIFICACION:

YO, RAMON A. DURAN FERNANDEZ, LIC:12858 P.E., CERTIFICO QUE SOY EL PROFESIONAL, QUE [DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS, TAMBIÉN CERTIFICO QUE ENTENDIENDO QUE DICHO PLANOS Y ESPECIFICACIONES CUMPLEN CON LAS DISPOSICIONES APLICABLES DEL REGLAMENTO CONJUNTO Y LAS DISPOSICIONES APLICABLES DE LOS REGLAMENTOS Y CODIGOS DE CONSTRUCCION VIGENTES, JUNTAS REGLAMENTARIAS O CORPORACIONES PUBLICAS CON JURISDICCION, CERTIFICO, ADAMAS, QUE EN LA PREPARACION DE ESTOS PLANOS Y ESPECIFICACIONES SE HA CUMPLIDO CABALMENTE CON LO DISPUESTO EN LA LEY N.º 14 DE 8 DE ENERO DE 2004, SEGUN ENMIENDADA, CONOCIDA COMO LA LEY PARA LA INVERSION POR LA INDUSTRIA PUERTORRIQUENA Y CON LA LEY N.º 319 DE 15 DE MAYO DE 1938, SEGUN ENMIENDADA; LA LEY N.º 36 DE 6 JULIO DE 1978, SEGUN ENMIENDADA, SEGUN APLIQUE], RECONOZCO QUE CUALQUIER DECLARACION FALSA O FALSIFICACION DE LOS HECHOS QUE SE HAN PRODUCIDO VA A SER CONSIDERADO POR NEGLENCIA YA SEA POR MI, MIS AGENTES O EMPLEADOS, O POR OTRAS PERSONAS CON MI CONOCIMIENTO, ME HACEN RESPONSABLE DE CUALQUIER ACCION JUDICIAL Y DISCIPLINARIA POR LA OJPE.

OJPE: XXXX-XXXXXX-XXX-XXXXXX  
P.O. BOX 41179  
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DANILO SALAZAR

P.E.

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Drawn by : Montilla Garcia

Checked by

Date 21 SEPT 2022

No. Revision Date By

Project  
IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO

Drawing Title  
ELECTRICAL  
PUMP ROOM

Scale  
AS SHOWN

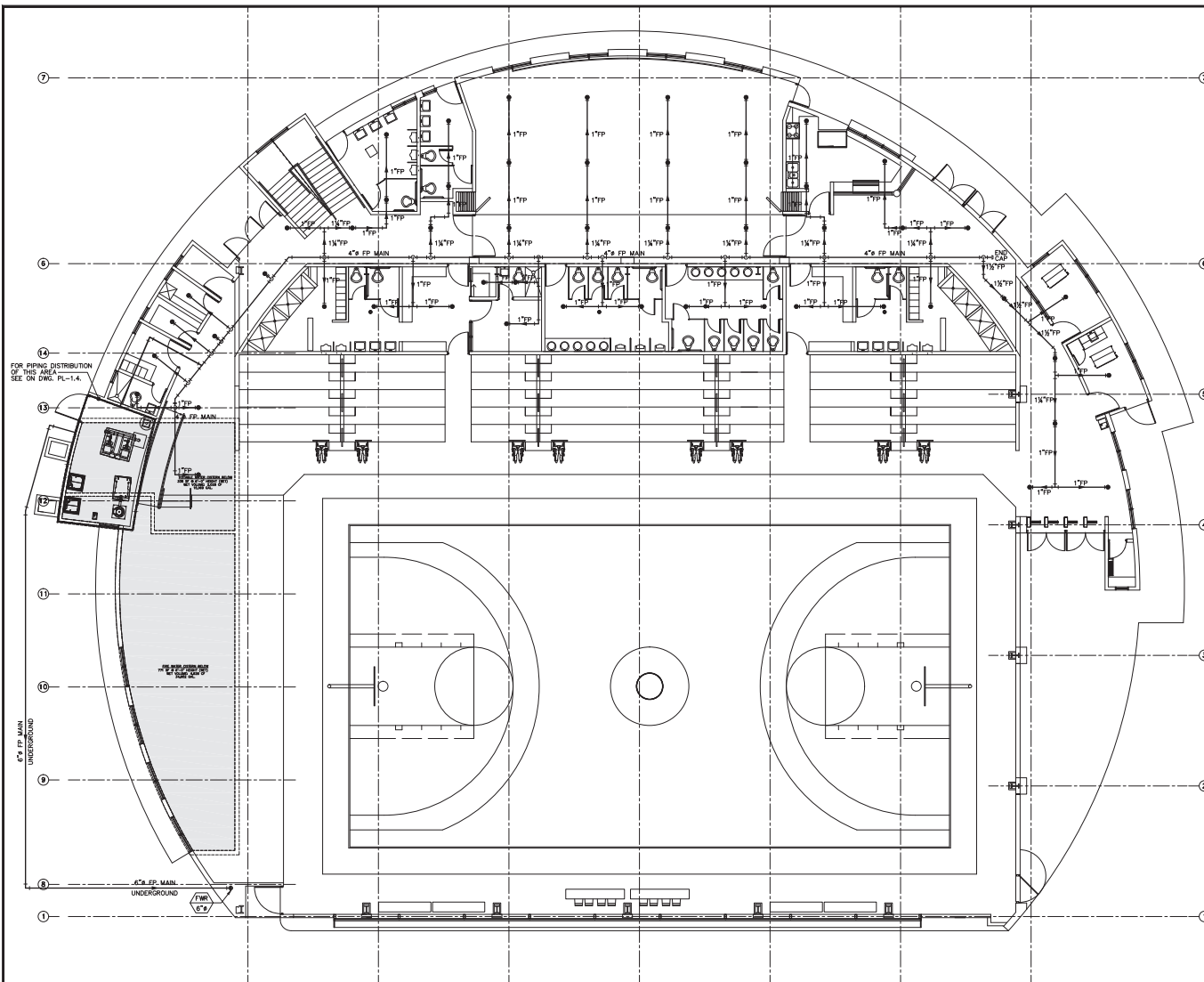
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Drawing Number

E-15

Sheet Number

45



GROUND FLOOR PLAN-FIRE PROTECTION LAYOUT  
SCALE: 1/8"=1'-0"

# LEGEND:

- FIRE PROTECTION PIPE
- UP RIGHT TYPE SPRINKLER
- PENDANT TYPE SPRINKLER
- FIRE PROTECTION RISER IDENTIFICATION
- FIRE PROTECTION DRAIN RISER IDENTIFICATION
- STANDPIPE
- STANDPIPE WITH FLOOR CONTROL & DRAIN VALVE
- FIRE HOSE CABINET
- FIRE DEPT. SAMESE
- FLOW CONTROL VALVE
- FIRE HOSE CABINET
- THRUST BLOCK
- FIRE RATED PARTITION

## NOTES:

1. THE FIRE PROTECTION SYSTEM SHOWN ON THE BID DRAWINGS IS TO ESTABLISH THE SCOPE OF WORK TO BE PERFORMED. THE INSTALLING CONTRACTOR MUST BE FULLY RESPONSIBLE FOR THE FINAL HYDRAULIC DESIGN AND PIPING LAYOUT. SHOP DRAWINGS COMPLETE CONSIDERATION OF ELEVATIONS AND COMPLIANCE WITH THE STANDARDS AND CODES REFERENCED IN THESE NOTES.
2. CONTRACTOR SHALL COORDINATE SUBMIT SHOP DRAWINGS OF EQUIPMENT, MATERIAL, PIPING LAYOUT ACCESSORIES, CONTROL & INSTALLATION AND SHALL INCLUDE COMPUTER PRINT-OUT OF HYDRAULICS CALCULATIONS FOR APPROVAL. IN ADDITION, CONTRACTOR SHALL PROVIDE TESTING OF THE INSTALLATION TO COMPLY WITH THE NFPA.
3. FOR EXACT LOCATION OF SPRINKLER HEADS PLEASE REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
4. PIPES OR CONDUITS CROSSING FIRE RATED PARTITION AND CONCRETE FLOOR MUST BE FIRESTOP AS PER DETAIL IN DRWG. FP-200.



JOSE L. MARRERO SICAUDO  
INGENIERO  
LICENCIADO  
PUERTO RICO  
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Tel. (787) 374-8728 • Fax: (787) 772-8131  
Email: jlmarrero@ps.com

"Yo, Jose Luis Marrero Sicaudo, con nombre de licencia #10000, soy un profesional que declaro que he leído y he aprobado las especificaciones complementarias. También declaro que entiendo que dichos planos y especificaciones cumplen con las disposiciones legales del Reglamento General y las disposiciones técnicas de las Reglamentaciones 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 cabalmente con lo dispuesto en la Ley Núm. 19 de 8 de enero de 2004, según enmendada, conocida como la Ley para la Inversión por la Industria Puertorriqueña, y con la Ley Núm. 379 de 18 de mayo de 1998, según enmendada, Ley Núm. 28 de 8 de julio de 1978, según enmendada, según aplicable. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desenvolvimiento o por negligencia de uno por mí, una agencia o instituciones, o por otra persona con mi consentimiento, me hacen responsable de cualquier acción penal y civil que se produzca por la COPE."

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Checked by  
JOSE LUIS MARRERO

Date  
DECEMBER 2022

No. Revision Date By

No.	Revision	Date	By

Project

**IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM**  
**ANGEL  
MERCADO  
VEGA**  
**Bo. PUEBLO**  
**SABANA GRANDE,  
PUERTO RICO**

Drawing Title

**GROUND FLOOR PLAN-  
FIRE PROTECTION  
LAYOUT**

Scale  
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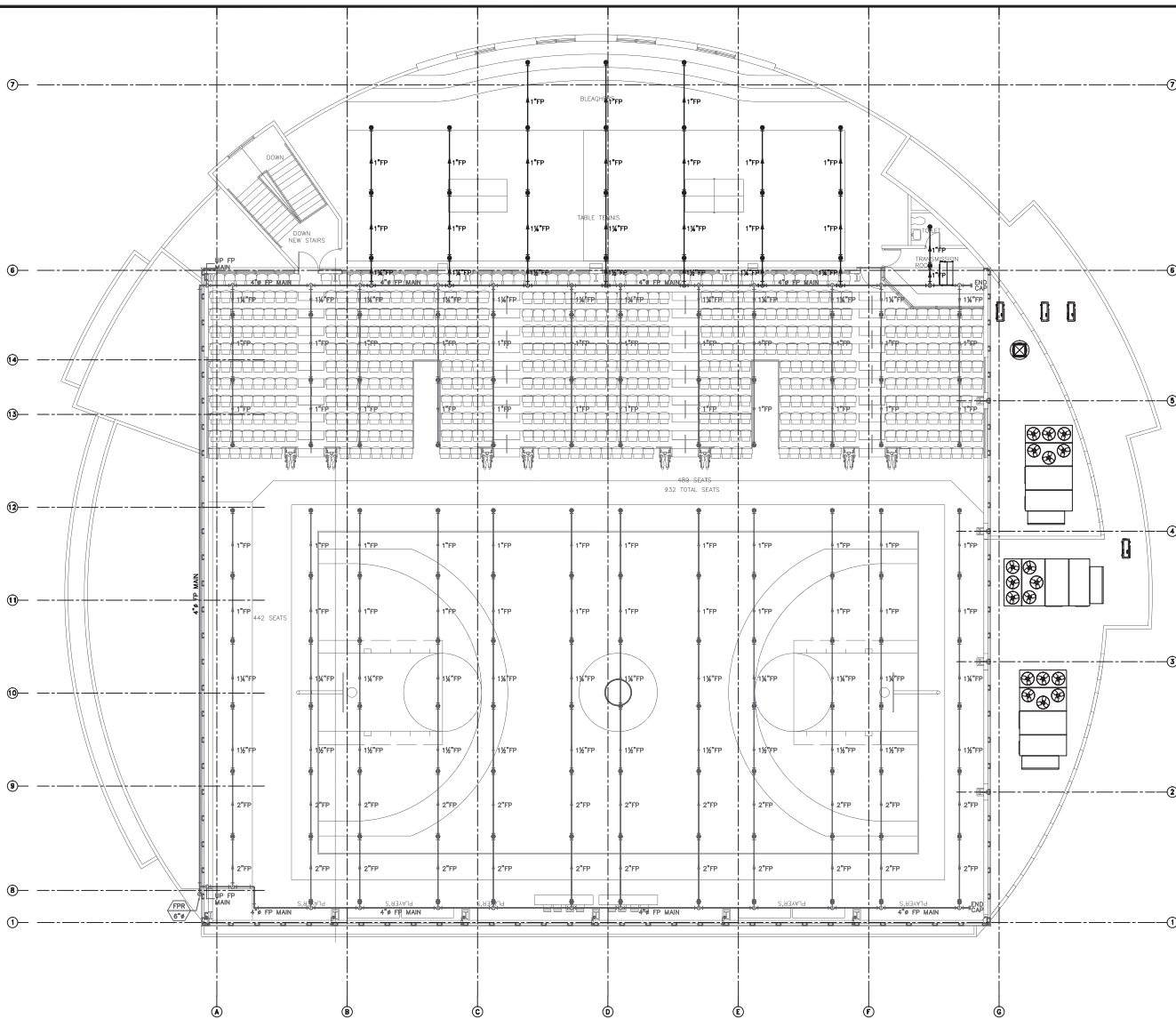
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20-061

Drawing Number

FP-100

Sheet Number

46



- LEGEND:**
- FIRE PROTECTION PIPE
  - UP RIGHT TYPE SPRINKLER
  - PENDANT TYPE SPRINKLER
  - FWR FIRE PROTECTION RISER IDENTIFICATION
  - DR FIRE PROTECTION DRAIN RISER IDENTIFICATION
  - A STANDPIPE
  - B STANDPIPE WITH FLOOR CONTROL & SHAM VALVE
  - FIRE HOSE CABINET
  - FIRE DEPT. SHAMSE
  - FCV FLOW CONTROL VALVE
  - FHC FIRE HOSE CABINET
  - TB THRUST BLOCK
  - == FIRE RATED PARTITION

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SECOND FLOOR PLAN-FIRE PROTECTION LAYOUT  
SCALE: 1/8"=1'-0"



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"Yo, Jose Luis Marrero Sicardo, con licencia de Ingeniero en Puerto Rico, certifico que soy un profesional que emito esta planilla y las especificaciones complementarias. También certifico que entiendo que dicha planilla y especificaciones cumplen con las disposiciones aplicables del reglamento técnico y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones. Pondero con juramento. Certifico además que he prestado los servicios profesionales y especificaciones he sido cumplidos cabalmente con lo dispuesto en la Ley Núm. 15 de 8 de enero de 2004, según enmendada, conocida como la Ley para la inversión por la industria Puerto-riqueña y con la Ley Núm. 219 de 18 de mayo de 1998, según enmendada, Ley Núm. 28 de 8 de julio de 1978, según enmendada, según Reglamentos, Resoluciones que cualquier declaración falsa o falsificación de las fechas que se haya producido por desconocimiento o por negligencia ya sea por mí, esta agencia o empleado, o por otros personas con mi consentimiento, sea requerido legalmente sea cualquier acción judicial y disciplinaria por la Corte".

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Drawn by : J. Hernandez

Checked by  
JOSE LUIS MARRERO

Date  
DECEMBER 2022

No.	Revision	Date	By

Project

**IMPROVEMENTS  
& EXPANSION  
MUNICIPAL COLISEUM  
ANGEL MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO**

Drawing Title  
**SECOND FLOOR PLAN-  
FIRE PROTECTION  
LAYOUT**

Scale  
1/8"=1'-0"

File Name  
20-061

Drawing Number

FP-101

Sheet Number

47

# FIRE PROTECTION HYDRAULIC CRITERIA

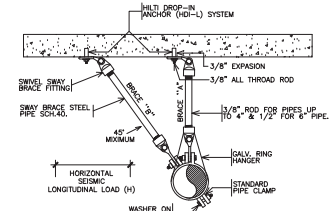
AREA	OCCUPANCY CLASSIFICATION	SERVED BY	DESIGN AREA (SQ.FT)	DENSITY (GPM/SQ.FT)	MAX. AREA FOR SPRINKLER (SQ.FT)	TEMPERATURE RATING	MAX. AREA COVERAGE	STANDPIPE
OFFICE, CLASSROOM, KITCHEN CORRIDOR, PARENTS ROOMS, STORAGE, RECEPTION & LAUNDRY AREAS	LIGHT HAZARD	EXISTING MAIN PIPE	1,500	0.10	130	165° F	52,000 S.F.	CLASS III
MECHANICAL, ELECTRICAL ROOMS, STORAGE ROOMS, MAINTENANCE ROOMS, ADMINISTRATION AREAS & CLOSET	ORDINARY HAZARD I	EXISTING PIPE	1,500	0.15	130	165° F	52,000 S.F.	CLASS III

## PRELIMINARY HYDRAULIC CALCULATIONS

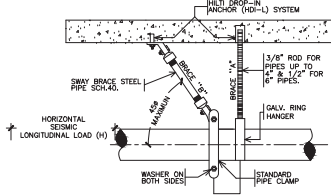
AREA (SQ.FT)	DENSITY (GPM/SQ.FT)	HYDRAULIC SAFETY FACTOR (FS)	REQUIRED FLOW (GPM)	RESIDUAL PRESSURE (PSI)	DYNAMIC HEAD LOSS (PSI)	REQUIRED PRESSURE (PSI)
1,500	0.20	15	0.20x1,500x1.15=345.0	100	10	170

### NOTES:

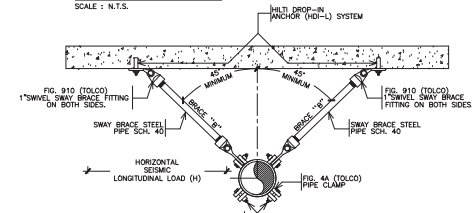
- EACH FLOOR SHALL BE FULLY SPRINKLERED.
- PROVIDE SPRINKLER DENSITIES AS PER CRITERIA SCHEDULE ON THIS SHEET.
- PROVIDE PROTECTION AT BOTTOM & TOP OF ALL ELEVATOR SHAFTS.
- CALCULATION SHALL INCLUDE A 250 GPM HOSE STREAM ALLOWANCE



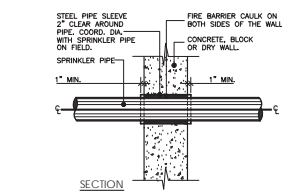
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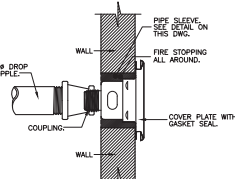
LONGITUDINAL BRACES  
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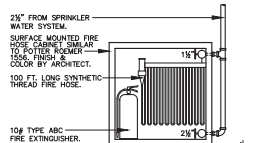
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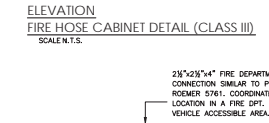
SECTION  
SPRINKLER PIPE THROUGH WALL  
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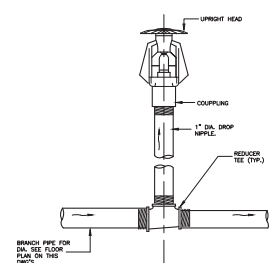
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SIDEWALL CONCEALED  
SPRINKLER INSTALLATION DETAIL  
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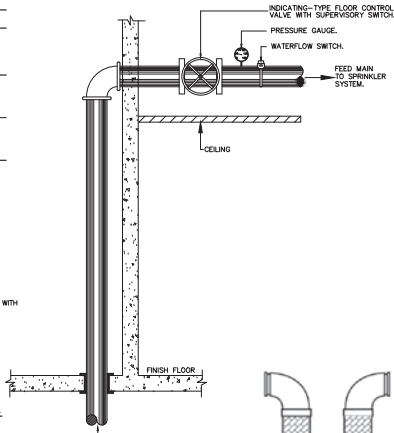
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FIRE HOSE CABINET DETAIL (CLASS III)  
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ELEVATION  
FIRE DEPARTMENT CONNECTION DETAIL  
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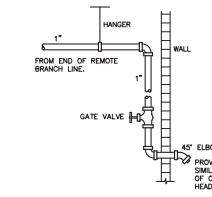
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TYPICAL UPRIGHT SPRINKLER INSTALLATION DETAIL  
SCALE: 1\"/>



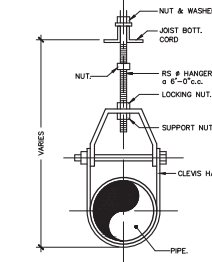
STANDPIPE INSTALLATION DETAIL  
SCALE: 1\"/>



ELEVATION  
FLEXIBLE PIPING SEISMIC SEPARATION DETAIL  
SCALE: 1\"/>



ELEVATION  
INSPECTOR TEST POINT DETAIL  
SCALE: 1\"/>



NOTES:  
1. SPACING OF HANGER SHALL BE AS PER NFPA 13  
2. PROVIDE SEISMIC BRACING AS PER UBC-1997  
3. HANGERS SHALL COMPLY WITH NFPA-13  
ELEVATION  
PIPE HANGER DETAIL  
SCALE: 1\"/>

## FIRE PROTECTION SYSTEM SPECIFICATION

### SPRINKLER SYSTEM

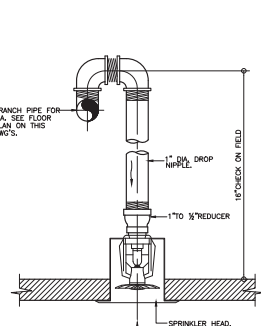
- IN GENERAL, INCLUDING THE FOLLOWINGS: PROVIDE AND INSTALL A COMPLETE SPRINKLER PROTECTION SYSTEM WHERE INDICATED ON THE DRAWINGS INCLUDING ALL PIPE, FITTINGS, VALVES, HANGERS, PENDENT SPRINKLERS, ETC. SHALL BE INSTALLED AS PER NFPA REQUIREMENTS, PAMPHLET NO. 13.
- SPRINKLER LOCATIONS AS INDICATED, PIPING RUNS & DIAMETERS ARE TO BE LAID OUT & SIZED AS PER SPRINKLER CONTRACTOR'S SHOP DRAWINGS WHICH MUST BE SUBMITTED & APPROVED BY A/E PRIOR TO ANY FABRICATION & INSTALLATION COMMENCING.
- CONTRACTOR SHALL SUBMIT A FINAL SHOP DRAWINGS WITH HYDRAULIC CALCULATIONS FOR THE SYSTEM TO PROVIDE COVERAGE USING SPRINKLER FOR 33 FT. HEIGHT BUILDING AND MAXIMUM STORAGE HEIGHT OF 22 FT FOR COMMODITY CLASS 3
- DESIGN CRITERIA:
  - INSTALLATION SHALL CONFORM TO NFPA PAMPHLET 13--LATEST EDITION
  - INSTALLING CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH HYDRAULIC CALCULATION, PROVIDE SPRINKLER PROTECTION WITH A WATER FLOW DENSITY OF 0.20 GPM PER SQUARE FOOT OVER ENTIRE AREA NOT TO EXCEED 3,000 SQ. FT.
  - ALL SPRINKLERS TO BE 165° F CEILING SPRINKLERS FOR EXPOSED PIPING AREAS
  - MAXIMUM SPRINKLER HEAD SPACING SHALL BE 130 SQ. FT. PER HEAD
  - ALL EQUIPMENT TO BE UL LISTED, FM APPROVED
- EXPOSED PIPING BOTH INTERIOR AND EXTERIOR TO BE PAINTED ONE COAT OF PRIMER AND ONE FINISH COAT, FINAL COLOR TO BE DETERMINED BY ARCHITECT.
- GENERAL EQUIPMENT AND MATERIALS SPECIFICATIONS: ALL VALVES, HANGERS, SPRINKLERS, ACCESSORIES, AND ALL RELATED EQUIPMENT AND MATERIALS SHALL BE UL LISTED & FM APPROVED.
- TESTS: THE CONTRACTOR TEST THE ENTIRE SPRINKLER SYSTEM AT HIS OWN EXPENSE, IN THE MANNER REQUIRED AND IN THE PRESENCE OF THE REPRESENTATIVES OF THE LOCAL GOVERNING BODIES HAVING JURISDICTION, THE INSURANCE RATING ORGANIZATION, AND ALL OTHER AUTHORITIES HAVING JURISDICTION. CERTIFICATES OF APPROVAL SHALL BE OBTAINED FROM THE AUTHORITIES AND DELIVERED TO THE OWNER BEFORE FINAL ACCEPTANCE.
- DRAWINGS AND INFORMATION REQUIRED: FIVE (5) COPIES OF SHOP DRAWINGS OF PIPING, SLEEVE AND HANGERS LOCATIONS, ETC. SHALL BE SUBMITTED TO THE OWNER AND THEIR APPROVAL SECURED BEFORE THE WORK IS ASSEMBLED AND INSTALLED.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF EQUIPMENT, MATERIAL, PIPING LAYOUT ACCESSORIES, CONTROL, & INSTALLATION AND SHALL INCLUDE COMPUTER PRINT-OUT OF HYDRAULIC CALCULATIONS FOR APPROVAL. IN ADDITION, CONTRACTOR SHALL PROVIDE TESTING OF THE INSTALLATION TO COMPLY WITH THE NFPA.

- THE FIRE PROTECTION SYSTEM SHOWN ON THE BLD DRAWINGS IS TO ESTABLISH THE SCOPE OF WORK TO BE PERFORMED. THE INSTALLING CONTRACTOR MUST BE FULLY RESPONSIBLE FOR THE FINAL HYDRAULIC DESIGN AND PIPING LAYOUT, SHOP DRAWINGS, HYDRAULICALLY ELIMINATION OF INTERFERENCES, COMPLETE CONSIDERATION OF ELEVATIONS, AND WALL CROSSING AND COMPLIANCE WITH NFPA REQUIREMENTS FOR SHOP DRAWINGS. ALSO, THE CONTRACTOR SHALL VERIFY THE EXISTING WATER STATIC AND RESIDUAL PRESSURES AND GPM AT THE NEAREST WATER HYDRANT AND SHALL SUBMIT PRESSURE-FLOW CHART OF THIS SYSTEM.

- THE WORK SHALL BE CERTIFIED BY A LICENSED ENGINEER IN PUERTO RICO AND AN ACTIVE MEMBER OF THE COLLEGE OF ENGINEERS AND SURVEYORS OF PUERTO RICO (COPRO), EITHER OR IN THE REGULAR PAYROLL OF THE INSTALLING CONTRACTOR OR UNDER SPECIFIC CONTRACT FOR THE ENGINEERING WORK INVOLVED. THE OWNER RESERVES THE RIGHT TO REQUIRE PROOF OF EITHER CONDITIONS.

- ALL COMPUTATIONS AND FINAL SHOP DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER'S INSURANCE AGENCY REPRESENTATIVE FOR FINAL APPROVAL.



ELEVATION  
ADJUSTABLE CONCEALED PENDANT  
SPRINKLER INSTALLATION DETAIL  
SCALE: 1\"/>

- UNDER ANY CIRCUMSTANCES CHANGE ORDERS SHALL NOT BE CONSIDERED UNLESS IT IS A CHANGE OF FIELD CONDITIONS AFTER THE AWARD OF THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITS TO THE SITE PRIOR TO THE AWARD OF THE CONTRACT.
- AN ALARM CHECK VALVE OR OTHER LISTED WATERFLOW DETECTING ALARM SHALL BE PROVIDED WITH ALL THE NECESSARY ATTACHMENTS REQUIRED TO GIVE AN ALARM.
- ALL WORK TO BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NFPA STANDARDS, THE REQUIREMENTS OF FACTORY MUTUAL AND THE SPECIFICATIONS ISSUED FOR THIS PROJECT.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A FULLY TESTED OPERATIONAL SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS DESCRIBED ON CONTRACT DOCUMENTS. WORK REQUIRED BUT NOT SHOWN ON DRAWINGS TO ACHIEVE SUCH A SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL VISIT THE JOB SITE AND DETERMINE THE EXISTING CONDITIONS AND LIMITATIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE SUBMISSION OF A BID SHALL BE CONSIDERED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND CONDITION VERIFIED. IF ANY DISCREPANCIES SHALL ARISE, THEY SHALL BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO THE SUBMISSION OF THE BID.
- ALL MATERIAL AND EQUIPMENT SHALL WITHSTAND A WORKING PRESSURE OF NOT LESS THAN 175 PSI.
- HANGERS SPACING TO BE AS PER N.F.P.A. 13.
- SPRINKLER PIPING TO BE PAINTED WITH ONE COAT OF INDUSTRIAL PRIMER AND ONE COAT OF FINISH EMAL. TAGS PLACARDS TO BE FURNISHED AND INSTALLED AS PER CODES REQUIREMENTS.
- ALL EQUIPMENT AND MATERIAL TO BE UL LISTED AND FACTORY MUTUAL APPROVED.
- SYSTEM TO BE HYDROSTATICALLY TESTED AT 200 PSI FOR A PERIOD OF TWO HOURS. TEST PRESSURE SHALL NOT VARY MORE THAN 5 PSI.
- PROVIDE PROTECTION OF PIPING AGAINST DAMAGE FROM EARTHQUAKE AS DESCRIBED AND SPECIFIED BY IBC-2009 AND NFPA STANDARDS.
- CONTRACTOR SHALL COMPLY WITH OWNER'S FIRE PROTECTION STANDARDS.
- PIPING:
  - ALL INTERIOR PIPING SHALL BE BLACK STEEL PIPE ASTM-A53 SCH. AS PER NFPA.
  - FITTINGS SHOULD BE 175 LB. CLASS (MINIMUM).
- SPRINKLER HEAD:
  - ALL SPRINKLER SHALL BE 1/2" ORIFICE 175L.P.T. 165 F RATING BRACE UPRIGHT FOR EXPOSED PIPING AREAS AND CHROME PENDANT IN AREAS WITH CEILING.
  - PROVIDE GUARDS WHERE REQUIRED
  - PROVIDE SPARE HEADS EQUAL 1% OF THE TOTAL NUMBER OF HEADS INSTALLED UNDER THIS CONTRACT.
  - SPRINKLER IN PROCESS ROOMS SHALL HAVE COVER PLATE WITH GASKET SEAL ASSEMBLY FOR DUST FREE ENVIRONMENT.
- CONTRACTOR SHALL COORDINATE THE SYSTEM SHUTDOWN WITH THE FIRE DEPARTMENT AND PROVIDE OTHER TEMPORARY SAFETY SYSTEMS TO AVOID ANY FIRE SITUATION ON THE PROJECT.
- CONTRACTOR SHALL PROVIDE A FLOW SWITCH IN THE MAIN SUPPLY FIRE PIPE CONNECTED TO THE BUILDING'S FIRE ALARM SYSTEM AND SIGNALING TO A VISUAL AND AUDIBLE 24 HOURS SUPERVISED ALARM.
- TRUST-BLOCKS SHALL BE PROVIDED AT FIRE MAINS.
- THE CONTRACTOR SHALL COORDINATE THE SPRINKLER HEAD LAYOUT WITH FINAL ARCHITECTURAL CEILING LAYOUT.
- ALL FIRE MAINS & VALVE AT MECHANICAL ROOM SHALL BE PROVIDED WITH SUPERVISORY TAMPER SWITCHES AS PER NFPA STANDARDS.

Contributing Area	Area	Area	Area	Area
Contributing Area	Area	Area	Area	Area
Contributing Area	Area	Area	Area	Area
Contributing Area	Area	Area	Area	Area
Contributing Area	Area	Area	Area	Area

Protective Areas and Maximum Sprinkler Head Spacing Allowed by Sprinkler Code

Light Hazard

Contributing Area

Area

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Drawn by : J. Hernandez

Checked by JOSE LUIS MARRERO

Date DECEMBER 2022

No. Revision Date By

**IMPROVEMENTS & EXPANSION MUNICIPAL COLISEUM**  
**ANGEL MERCADO VEGA**  
**Bo. PUEBLO SABANA GRANDE, PUERTO RICO**

Drawing Title  
**FIRE PROTECCION DETAILS & NOTES**

Scale N.T.S.

File Name 20-061

Drawing Number

FP-200

Sheet Number

48

"Yo, José Luis Marrero, Sencillito, con licencia de Ingeniero #14771 certifico que soy un profesional que diseño estos planos y las especificaciones correspondientes. También certifico que entiendo que dichos planos y especificaciones cumplen con los reglamentos aplicables del momento correspondiente a las disposiciones aprobadas por las Legislaturas y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con competencias. Certifico que estos planos y especificaciones se han cumplido cabalmente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según sus enmiendas, conforme a la Ley para la Inversión por la Industria Puertorriqueña y con la Ley Núm. 279 de 18 de mayo de 1938, según sus enmiendas, Ley Núm. 80 de 8 de julio de 1978, según sus enmiendas, según aplicable. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia es una falta, una falta de negligencia, o por otra parte por mi consentimiento, una falta reconocida de culpable negligencia y/o negligencia por la Corte."

JOSE LUIS MARRERO

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**DANILO SALAZAR**  
**P.E.**

Checked by	JOSE LUIS MARRERO
Date	DECEMBER 2022

[illegible]

Drawing Title  
**SECOND FLOOR PLAN-  
POTABLE WATER  
LAYOUT**

File Name  
20-061

Drawing Number
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PL-103

Sheet Number

52





Drawn by : J. Hernandez

Checked by  
JOSE LUIS MARRERO

Date  
DECEMBER 2022

No. Revision Date By

Project

**IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM**  
**ANGEL  
MERCADO  
VEGA**  
**Bo. PUEBLO**  
**SABANA GRANDE,  
PUERTO RICO**

Drawing Title  
**CISTERN POTABLE WATER  
FIRE PROTECTION-  
PIPING LAYOUT**

Scale  
1/4"=1'-0"

File Name  
20-061

Drawing Number

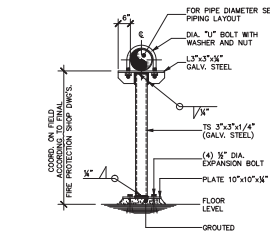
**PL-105**

Sheet Number

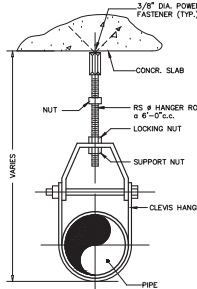
**54**

# **EQUIPMENT DESCRIPTION**

- (1) DOUBLE CHECK VALVE (BACKFLOW PROTECTION) FLANGED.
- (2) FLOAT VALVE
- (3) FIRE WATER CISTERN, 35,531 GALS.
- (4) LADDER RUNGS.
- (5) 4" VENTILATION PIPE C.S.
- (6) 4" DIA. STEEL PIPE (FLANGED).
- (7) PIPE SLEEVE
- (8) CONCENTRIC REDUCER (FLANGED).
- (9) FIRE PUMP DIESEL ENGINE.
- (10) DIESEL ENGINE EXHAUST PIPE WITH FIRE PROOF INSULATION AND RAIN GAP AT END OF STACK SIZED AS PER PUMP'S MANUFACTURER RECOMMENDATIONS. (WELDED CONNECTION).
- (11) DIESEL ENGINE EXHAUST MUFFLER WITH FIRE PROOF INSULATION (WELDED CONNECTION).
- (12) ADJUSTABLE CLEVIS HANGER (FOR DIESEL ENGINE EXHAUST PIPE-ONE EVERY 4'-0" (HEAVY DUTY)).
- (13) CONCRETE BASE FOR FIRE PUMP DIESEL ENGINE-SHAL BE CONSTRUCTED AS PER NATIONAL HYDRAULIC INSTITUTE.
- (14) SWING CHECK VALVE (FLANGED).
- (15) 1 1/4" DIA. STEEL PIPE (THREADED).
- (16) 1 1/4" DIA. 90° ELBOW (THREADED).
- (17) 1 1/4" DIA. GATE VALVE (THREADED).
- (18) POTABLE WATER CISTERN 16,035.6 GALS.
- (19) JOCKEY PUMP-10 GPM AT 85 PSI, 3HP.
- (20) 1 1/4" DIA. SWING CHECK VALVE (THREADED).
- (21) FIRE PUMP CONTROL PANEL AT 5'-4" TOP LEVEL FROM FINISHED FLOOR.
- (22) JOCKEY PUMP CONTROL PANEL AT 5'-4" TOP LEVEL FROM FINISHED FLOOR.
- (23) 6" LISTED OS&Y GATE VALVE.
- (24) HEAVY DUTY 34"x34" NON-SLIP ALUMINUM ACCESS DOOR WITH SLAM LOCK DEVICE.
- (25) VERTICAL TURBINE FIRE PUMP-500 GPM AT 170 PSI, INSTALLED ACCORDING WITH NATIONAL HYDRAULIC INSTITUTE AND NFPA STANDARDS.
- (26) 3" OVERFLOW & BRONZE WIRE MESH.
- (27) STRAINER
- (28) BALL VALVE
- (29) LEVELS SENSORS EQUAL TO HANCOCK CONTROLS, SUPPLIED BY LDC (787) 728-2880.
- (30) 6" DIA. STEEL PIPE (FLANGED).

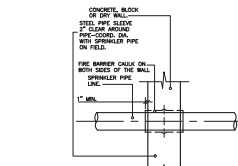


PIPE SUPPORT DETAIL (WHERE NEEDED).  
SCALE: 1/4"=1'-0"

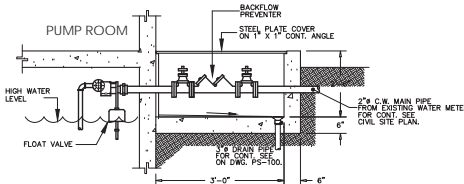


PIPE HANGER DETAIL  
SCALE: 3/8"=1'-0"

- (31) 3" DIA. OVERFLOW.
- (32) UNIVERSAL UNION.
- (33) 2" DIA. PVC AWWA C-900 SDR-14 POTABLE WATER PIPE FROM MAIN WATER PIPE.
- (34) POPPET FOOT VALVE, FITTING WATER TIGHT.
- (35) GATE VALVE.
- (36) POTABLE WATER PUMP: CLOSE COUPLED PUMP (2) 75 GPM @ 200 FT TDH, 10 HP, 208/240V, PROVIDE VSD FOR PUMP MOTOR.
- (37) HYDROFONIC TANK, 100 GAL.
- (38) COMBINATION PRESSURE REGULATING NON-SLAM CHECK VALVE.
- (39) INDIVIDUAL PUMP TEMPERATURE PROBE.
- (40) INDIVIDUAL PUMP PURGE VALVE.
- (41) FLOW SENSOR.
- (42) FLEXIBLE CONNECTION.
- (43) FLOW CONTROL.
- (44) CHECK VALVE.
- (45) FLOW SWITCH.
- (46) SKID MOUNTED PRESSURE BOOSTER SYSTEM GRUNDOS MODEL CHEAD-2 NOT USED.
- (47) DINK DIESEL TANK, 300 GALS. BY ALONSO & CARUS. ELEVATE TANK AS REQUIRED FOR GRAVITY OPERATION. FINAL TANK CAPACITY SHALL BE AS PER NFPA-20. TANK SUPPORT STRUCTURE.
- (48) BY-PASS.
- (49) PS-1 OFF-TOP PRESSURE SWITCH.
- (50) PS-2 LOW SYSTEM/HIGH SYSTEM PRESS. SWITCH.
- (51) PG PRESSURE GAUGE.
- (52) FS FLOW SENSOR.
- (53) NC NORMALLY CLOSE.
- (54) NO NORMALLY OPEN.
- (55) PP POTABLE WATER PUMP.



ELEVATION  
PIPE THROUGH WALL  
TYPICAL INSTALLATION DETAIL  
SCALE: 3/8"=1'-0"



BACKFLOW PREVENTER  
STEEL PLATE COVER ON 1" X 1" CONT. ANGLE  
SCALE: 3/8"=1'-0"

## **CISTERN NOTES**

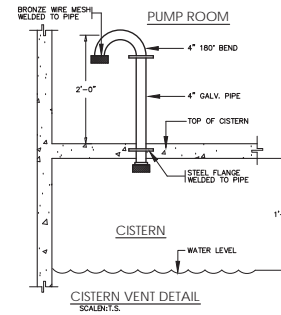
1. THESE DETAILS INDICATE GENERAL ARRANGEMENT AND ARE SCHEMATIC ONLY.
2. ABOVE SYSTEM COMPONENTS ARE TO BE FACTORY ASSEMBLED & MOUNTED ON SINGLE STRUCTURAL BASE.
3. WATER PRESSURE BOOSTER SYSTEM (EQUIPMENT & CONTROLS) SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS, WITH OWNER'S AND/OR OWNER'S REPRESENTATIVE APPROVAL.
4. APPLY ON ALL INTERIOR FACES OF CISTERN SKID GUARD NO.62 BY SIKKA CHEMICAL CORP. APPLY AS PER MANUFACTURER'S RECOMMENDATIONS.
5. ON EXTERIOR FACES OF ALL UNDERGROUND WALLS AND SLABS, INSTALL BITUMINOUS DAMPROOFING AS MFG. BY EMULSIFIED PRODUCT INC.
6. INSTALL AT BOTTOM SLAB AND FOOTING A VAPOR BARRIER.
7. ALL CONTROL WIRING IN THE PUMP ROOM AND CISTERN SHALL BE IN ACCORDANCE W/ THE NATIONAL ELECTRICAL CODE LATEST EDITION.
8. FOR EXACT LOCATION OF CISTERN SEE ARCHITECTURAL DRAWINGS.
9. PRESSURE BOOSTER SYSTEM SHALL BE SIMILAR TO SYROFLO SKID MOUNTED TRIPLEX PUMPING MODEL IRON HEART.
10. EQUIPMENT CONCRETE BASES SHOWN ARE TO ESTABLISH SCOPE OF WORK ONLY. CONTRACTOR SHALL COORDINATE WITH SHOP DRAWINGS.
11. POTABLE WATER PUMPS SHALL BE CONNECTED TO EMERGENCY POWER SEE ELECTRICAL DWG'S.

## **PLUMBING LEGEND:**

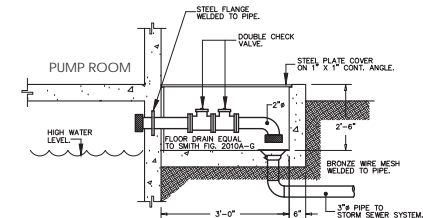
- COLD POTABLE WATER LINE
- HOT POTABLE WATER LINE
- SANITARY SEWER LINE
- SANITARY VENTILATION LINE
- INDICATES COLD WATER RISKY DESIGNATION AND SIZE
- INDICATES HOT WATER SUPPLY RISKY DESIGNATION AND SIZE
- INDICATES HOT WATER RETURN RISKY DESIGNATION AND SIZE
- INDICATES SANITARY STACK DESIGNATION AND SIZE
- INDICATES WASTE STACK DESIGNATION AND SIZE
- INDICATES RAIN LEADER STACK DESIGNATION AND SIZE
- INDICATES SANITARY VENTILATION STACK DESIGNATION AND SIZE
- INDICATES PLUMBING FUTURE DESIGNATION SEE SCHEDULE POINT OF CONNECTION

## **PLUMBING ABBREVIATIONS:**

- C.W. COLD WATER
- HWS HOT WATER SUPPLY
- HWR HOT WATER RETURN
- (TYP.) TYPICAL
- VS VENT STACK
- WCO WALL CLEAN OUT
- FCD FLOOR CLEAN OUT
- GCO GROUND CLEAN OUT
- WH WATER HEATER
- FL FLOOR DRAIN
- V VENTILATION
- H.B. HOSE BIBB
- (E) EXISTING



CISTERN VENT DETAIL  
SCALE: 3/8"=1'-0"



CISTERN OVERFLOW DETAIL  
SCALE: 3/8"=1'-0"



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"Yo, Jose Luis Marrero, Sencero, con honores de Ingeniero Profesional, que soy un profesional que ejerzo mi profesión en esta planta y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones técnicas del Reglamento de Construcción y las Reglamentaciones de las Reglamentaciones y Códigos de Construcción 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 marzo de 2004, según enmendada, conocida como la Ley para la Inspección por la Industria Puertorriqueña y con la Ley Núm. 219 de 13 de mayo de 1935, según enmendada, Ley Núm. 261 de 8 de julio de 1975, según enmendada, según aplicable. Asimismo, que cualquier declaración falsa o falsificación de los hechos que se haya producido por descuido o negligencia o por mala fe por mí, mis agentes o empleados, o por otra persona por mi consentimiento, sea hecha responsable de cualquier acción penal y civil por la CISPRA."



- 1 POTABLE WATER & RAINWATER CISTERN.  
CAST-IN-PLACE CONCRETE.
- 2 CENTRIFUGAL PUMP  
CLOSE COUPLED PUMP: 275 GPM  
@ 200 FT TDH. 10 HP, 208/240/60  
HPS. 1000 RPM FOR PUMP MOTORS.
- 3 10 GAL. HYDROPHOBIC TANK.
- 4 EXISTING 2" COLD WATER CISTERN FEED LINE (CON-  
TAINER). (CON. SEE PLUMBING DWG'S).
- 5 2" SUPPLY LINE TO SYSTEM (COOPER).
- 6 2" RELIEF VALVE (PLUMBING DWG'S).
- 7 2" DRAIN PIPE (PVC).
- 8 (FOR CONT. SEE PLUMBING DWG'S).
- 9 FLOAT VALVE.
- 10 BALL VALVE (BRONZE BODY).
- 11 UNIVERSAL UNION.
- 12 STRAINER.
- 13 CHECK VALVE.
- 14 PURGE VALVE.
- 15 PRESSURE REGULATING NON-SLAM CHECK VALVE.
- 16 3" OVER FLOW (PVC).
- 17 10" LINE FILTER (5 Mc).
- 18 10" LINE FILTER (50 Mc).
- 19 IN-LINE VALVE.
- 20 RAINWATER FROM ROOF DRAIN.
- 21 ROTARY RAINWATER FILTER  
SMITHING INC. RH9520-06.
- 22 SWOOSHING INLET  
SMITH INC. RH9520SL.

- (22) FLOATING FILTERS AND HOSES  
SMITH FIG. RH9332F-2.
- (23) MULTI-FUNCTION OVERFLOW DEVICE  
SMITH FIG. RH93300K.
- (24) 6" OVER FLOW (PVC)
- (25) 8" IRON PIPE (PVC)  
(FOR CONT. SEE PLUMBING DWG'S).
- (26) DOUBLE CHECK VALVE (BACKFLOW PREVENTION).
- (27) DOUBLE POPPET FOOT VALVE
- (28) WATER LEVEL REGULATOR
- (29) 2" BY-PASS
- (30) PRESSURE GAUGE
- (31) PRESSURE SWITCH
- (32) PRESSURE INDICATOR
- (33) FLOW SENSOR
- (34) LOW WATER SWITCH
- (NO) NORMALLY OPEN
- (NC) NORMALLY CLOSED



2. THESE DETAILS INDICATE GENERAL ARRANGEMENT AND ARE SCHEMATIC ONLY.
3. ABOVE SYSTEM COMPONENTS ARE TO BE FACTORY ASSEMBLED & MOUNTED ON SINGLE STRUCTURAL BEAM.
4. WATER PRESSURE BOOSTER SYSTEM (EQUIPMENT & CONTROLS) SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS, WITH OWNER'S AND/OR OWNER'S REPRESENTATIVE APPROVAL.
5. APPLY ON ALL INTERIOR FACES OF CISTERN SIKAGURU NO.62 BY Sika Chemical Corp., APPLY AS PER MANUFACTURER'S RECOMMENDATIONS
6. ON EXTERIOR FACES OF ALL UNDERGROUND WALLS & BASES, INSTALL BITUMINOUS DAMPROOFING AS MFG. BY ENLISHED PRODUCT INC.
7. INSTALL AT BOTTOM SLAB AND FOOTING A VAPOR BARRIER.
8. ALL CONTROL WIRING IN THE PUMP ROOM AND CISTERN SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, LATEST EDITION.
9. FOR EXACT LOCATION OF CISTERN SEE CIVIL DRAWINGS.
10. EQUIPMENT CONCRETE BASES SHOWN ARE TO ESTABLISH SCOPE OF WORK ONLY. CONTRACTOR SHALL COORDINATE WITH SHOP DRAWINGS.
11. RAINWATER CISTERN NOT USED FOR POTABLE WATER.
12. THE WATER SUPPLY SYSTEM FROM A RAINWATER TANK MUST BE CLEARLY MARKED AT INTERVALS NOT EXCEEDING 24 INCH WITH CONTRASTING COLORED WORDING "RAINWATER" OR "RAINWATER OUTLET". THE RAINWATER TANK WITH A LABEL OR A RAINWATER TAP IDENTIFIED BY A GREEN COLORED BANDER UP BY THE LETTERS "W".
13. WHERE A WATER OUTLET IS SUPPLIED WITH RAINWATER INDICATED BY A MARKS "RAINWATER" OR "RAINWATER OUTLET" SHALL BE IDENTIFIED "RAINWATER".

POTABLE WATER CONTENTS RESERVE (GALLONS/GALL)	15.100
FILLING PIPE SIZE (IN)	3
PIPE AREA (F <sup>2</sup> )	0.02
WATER VELOCITY (FPS)	11.6
FILLING WATER FLOW (GPM)	100
FILLING DURATION (HRS)	23

REINFORCED CONCRETE RESERVE PROVIDED (MM)	54.002
FILLING PIPE SIZE (MM)	2
PIPE AREA (F <sup>2</sup> )	0.00
DATE OF VELOCITY (F <sup>2</sup> )	11.0
FILLING WATER FLOW (GPM)	100
FILLING DURATION (HR)	0.4

POTABLE WATER RESERVE	
TOTAL SPECIATION	1.000
WATER REQUIREMENTS (GAL/DAYER)	5
TOTAL DAILY WATER REQUIREMENTS (GAL/DAY)	6.000
CERTAIN DURATION (DAYS)	2.0
POTABLE WATER CERTAIN RESERVE REQUIRED (GAL)	12.000

FIRE PROTECTION STANDPIPE	
STANDPIPE CLASS SELECTION:	3
# OF STANDPIPES	1
CALCULATED WATER FLOW (GPM)	500
WATER FLOW REQUIRED (GPM)	500
WATER RESERVE REQUIRED PER STANDPIPE CALCULATION (GAL.)	15,000
1 = CLASS 1 (2" DIAMETER CONNECTION) 2 = CLASS 2 (1 1/2" DIAMETER CONNECTION) 3 = CLASS 3 (1" DIAMETER CONNECTION)	

FIRE PROTECTION SPRINKLER	
HAZARD CLASS SELECTION:	2
DENSITY (GPM/FT <sup>2</sup> )	0.15
AREA OF SPRINKLER OPERATION (SF)	1,500
WATER FLOW REQUIRED (GPM)	900
WATER RESERVE REQUIRED PER SPRINKLER CALCULATION (GAL.)	30,000
1 = "NO SPRINKLER" 2 = "LIGHT HAZARD" 3 = "MODERATE HAZARD" 4 = "SEVERE HAZARD"	

FIRE PROTECTION REQUIREMENTS	
FIRE WATER RESERVE REQUIRED, MOST RESTRICTED (GAL):	10,575
FIRE WATER FLOW REQUIRED, MOST RESTRICTED (GPM):	500



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ALL PLUMBING WORK SHALL BE IN STRICT ACCORDANCE WITH THE DEPARTMENT OF PUBLIC WORKS, LOCAL BUILDING CODE, THE NATIONAL PLUMBING CODE AND THE SPECIFICATIONS ISSUED FOR THIS PROJECT.

2. CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPE DIAMETER UP TO 4".

3. THE CONTRACTOR SHALL FURNISH AND SET IN PLACE BEFORE CONCRETE POURING THE NECESSARY PLUMBING FITTINGS, BRANCHES, AND DETAILS. THESE SLEEVES SHALL BE AS PER THE SPECIFICATIONS.

4. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PIPING TO AVOID ANY INTERFERENCE WITH PIPING AND/OR EQUIPMENT INSTALLED BY OTHER CONTRACTORS.

5. FOR FITTINGS AND/OR EQUIPMENT NOT LISTED IN THE SCHEDULE, SEE THE SPECIFICATIONS.

6. CLEANOUTS SHALL BE PLACED AS SHOWN ON DRAWINGS.

7. THE CONTRACTOR SHALL VERIFY IN FIELD ALL INVERT ELEVATIONS AND SHALL MAKE ANY NECESSARY ADJUSTMENT AS REQUIRED BY FIELD CONDITIONS AND AS REQUIRED, TO OBTAIN THE PROPER SLOPES.

8. IF IT IS THE INTENTION OF THE DRAWINGS TO CALL FOR FINISHED WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY DETAILS NOT SHOWN OR SPECIFIED, BUT NECESSARY FOR THE PROPER INSTALLATION AND FOR FUNCTIONING OF THE SYSTEM. THE SYSTEM SHALL FORM PART OF THE WORK TO BE DONE BY THE CONTRACTOR.

9. ROODERS SHALL VISIT THE SITE AND ACQUAINT THEMSELVES WITH THE CONDITIONS, AS THEY ACTUALLY EXIST. THE CONTRACTOR SHALL VERIFY THE CONDITIONS AND DETAILS REQUIRED TO COMPLETE THE WORK, WHICH WILL BE THE ONLY BASIS FOR THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PROJECT AREA WILL IN NO WAY RELIEVE THE SUCCESSFUL BIDDER OF FURNISHING THE MATERIAL, LABOR, EQUIPMENT, AND TOOLS REQUIRED FOR THE COMPLETION OF THE CONTRACT. VISITS TO THE PROJECT AREA SHALL BE ARRANGED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.

10. PROVIDE ACCESS FOR OPERATION AND MAINTENANCE TO EVERY PLUMBING VALVE. ACCESS SHALL BE AS REQUIRED BY ARCHITECT.

11. THE CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE LAYOUT OF THE PLUMBING WORK TO COMPLY WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF THE WORK.

12. CONTRACTOR SHALL LOCATE IN FULLY ACCESSIBLE POSITIONS ALL EQUIPMENT WHICH MAY BE OPERATED, OR SERVED, OR OTHERWISE USED BY OTHERS.

13. INSTALL WATER HAMMER ARRESTER AS SHOWN.

14. ALL UNDERGROUND COPPER PIPING SHALL BE TYPE "ASTM B-88, DIAMETER AS INDICATED.

15. ALL COPPER PIPING ABOVE FINISH FLOOR ELEVATION SHALL BE TYPE "ASTM B-88, DIAMETER AS INDICATED.

16. ALL WASTE, SANITARY AND STORM DRAINAGE SHALL BE PVC SCH-40.

17. ALL PIPE SHALL BE CONCEALED IN FLOOR TYPINGS, WALL OR CHASES UNLESS OTHERWISE NOTED.

18. LONG SLEEP RUNS OR LONG STRAIGHT FITTINGS SHALL BE PROVIDED AT THE BASE AS EACH STAGE.

19. CLEANOUTS SHALL NOT BE MORE THAN 100 FEET APART

20. THE PLUMBING CONTRACTOR SHALL COORDINATE HIS/HER PORTION OF THE WORK WITH THE GENERAL CONTRACTOR AND SHALL PROVIDE SLEEVES AT SLABS OR BEANS FOR PIPER LAYOUT AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SAME.

21. ALL FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER SPECIFICATIONS.

22. SIZES SHOWN IN FUTURES SCHEDULES ARE MINIMUM AND SHALL BE INCREASED AS NECESSARY TO COMPLY WITH CODE REQUIREMENTS OR AS SHOWN ON DRAWINGS.

23. SINGLE AND DOUBLE TEES AND QUATER BENDS SHALL BE USED IN LINES ONLY WHERE THE DIRECTION OF FLOW IS FROM THE HORIZONTAL TO THE VERTICAL.

24. ALL HORIZONTAL PORTIONS OF STOK STACKS AND BRANCHES SHALL HAVE MINIMUM SLOPE OF 1/8" PER FOOT. MINIMUM SLOPE SHALL BE 1/8" DIAMETER OR LESS, 1/8" PER FOOT FOR PIPES 4" OR LARGER IN DIAMETER.

25. THE PLUMBING CONTRACTOR SHALL COORDINATE HIS/HER WORK IN ORDER TO AVOID ANY INTERFERENCE WITH THE WORK OF OTHER CONTRACTORS AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SAME.

26. WATER HAMMER ARRESTER SHALL BE INSTALLED IN ALL WATER DISTRIBUTION BRANCHES WHEREVER INDICATED ON THE DRAWINGS AS PER THE MANUFACTURER SPECIFICATIONS. THE FOLLOWING ARE THE SERIES 5000, MODELS AS SHOWN ON LOGGING.

27. WATER HAMMER ARRESTERS INSTALLED ON WALLS SHALL BE PROVIDED WITH 12" X 12" FRAME WITH HINGES LOCKED 2000. MODEL JAY 4. SUTHT 1/2" GALV-28-SLWTH ITS BOTTOM AT 18" ABOVE FINISH FLOOR ELEVATION.

28. THE WATER-LOCKED UNDERGROUND OR BELOW FLOOR SLABS SHALL BE INSTALLED AT A MINIMUM 18" OR CONCRETE BOX WITH 9" X 9" X 1/2" SMITH ACCESS DOOR FLG 405-1.

29. PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY SERVICES AND/OR CONNECTIONS REQUIRED FOR ALL PLUMBING FITTINGS AND/OR EQUIPMENT SHOWN ON THE DRAWINGS.

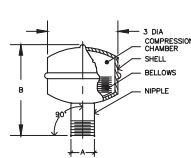
30. PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY ROUGHING IN AND SHALL INSTALL THE PLUMBING FITTINGS INDICATED ON THESE DRAWINGS.





31. WHENEVER REQUIRED OR NEEDED, THE PLUMBING CONTRACTOR SHALL PREPARE AND SUBMIT THE NECESSARY SHOP DRAWINGS FOR THE APPROVAL OF THE ARCHITECT.

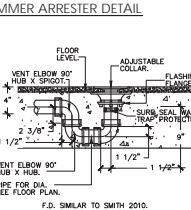
32. BEFORE STARTING CONSTRUCTION, THE PLUMBING CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATIONS OF EXISTING PIPE LINES TO REMAIN IN USE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT FOR HIS/HER APPROVED BY THE ARCHITECT. DRAWINGS SHALL BE NOTIFIED TO THE ARCHITECT FOR REVISION AND/OR CLARIFICATION.

33. ALL EXPOSED HOT WATER LINES SHALL BE INSULATED WITH 1-1/2" THICK MATERIAL WITH A MINIMUM R-VALUE OF 8.0. INSULATION SHALL BE EXCLUDED 0.2520 TO 1.50, NOH PER HOUR AT MAXIMUM TEMPERATURE OF 72°

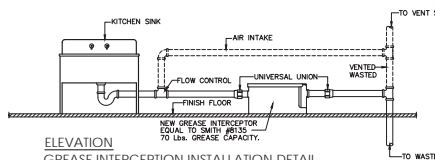
34. FITTINGS, FITTINGS, ACCESSORIES, MATERIAL AND ALL PLUMBING PRODUCTS TO BE AS PER SPECIFICATIONS ON THESE DRAWINGS AND CONTRACT SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SAME.



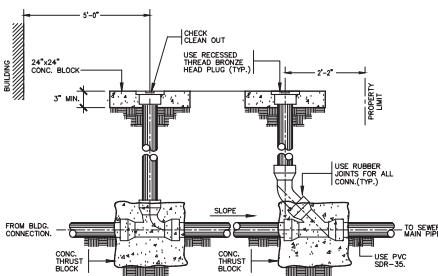
WATER HAMMER ARRESTER						
SYMBOL	J.R. SMITH MODEL	MAX. FIXTURE UNITS	DIMENSIONS		ACCESS DOOR, J.R. SMITH	ACCESS DOOR SIZE.
			A	B		
	5005	1-11	3/4	4	FIG. 4735-NB-U	8" X 8"
	5010	12-32	1	5	FIG. 4735-NB-U	10" X 10"
	5020	33-60	1	6	FIG. 4735-NB-U	12" X 12"
	5030	61-113	1	7	FIG. 4735-NB-U	15" X 15"



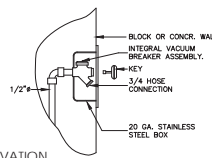
ELEVATION  
FLOOR DRAIN WITH TRAP PRIMER INSTALLATION DETAIL  
SCALE : N.T.S.



ELEVATION  
GREASE INTERCEPTION INSTALLATION DETAIL  
SCALE : N.T.S.

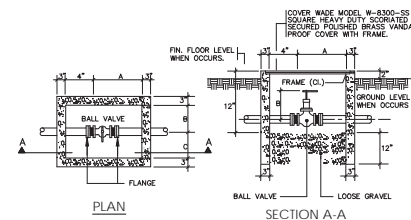


ELEVATION  
CLEAN OUT INSTALLATION DETAIL  
SCALE : N.T.S.



ELEVATION  
WALL HOSE BIBB INSTALLATION DETAIL  
SCALE : N.T.S.

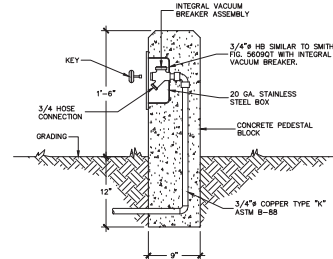
DESIGNATION	DESCRIPTIONS	LOCATIONS	UNIT WASTE OR SOL.	VENT SIZE	WATER SUPPLY		FIXTURES		REMARKS
					COLD	HOT	COLD	HOT	
P-1	WATER CLOSET FLUSH VALVE	BATHROOM	3"	2"	1"	-	1"	-	SEE ARCH. DWGS. FOR SPECS.
P-1H	WATER CLOSET HANDICAPPED FLUSH VALVE	BATHROOM	3"	2"	1"	-	1"	-	SEE ARCH. DWGS. FOR SPECS.
P-2	WASH SINK	BATHROOM	1 1/2"	1 1/2"	1/2"	-	1/2"	-	SEE ARCH. DWGS. FOR SPECS.
P-2H	WASH SINK HANDICAPPED	BATHROOM	1 1/2"	1 1/2"	1/2"	-	1/2"	-	SEE ARCH. DWGS. FOR SPECS.
P-3	SHOWER	SHOWER ROOM	2"	1 1/2"	1/2"	1/2"	1/2"	1/2"	SEE ARCH. DWGS. FOR SPECS.
P-4	URINAL	BATHROOM	2"	2"	3/4"	-	3/4"	-	SEE ARCH. DWGS. FOR SPECS.
P-5	JANITOR SINK	JANITOR ROOM	3"	1 1/2"	1/2"	-	1/2"	-	SEE ARCH. DWGS. FOR SPECS.
P-6	KITCHEN SINK	SNACK BAR	2"	1 1/2"	1/2"	-	1/2"	-	SEE ARCH. DWGS. FOR SPECS.
P-7	WATER COOLER	LOBBY	1 1/2"	1 1/2"	1/2"	-	1/2"	-	SEE ARCH. DWGS. FOR SPECS.
P-8	SERVICE SINK	SNACK BAR	2"	1 1/2"	1/2"	-	1/2"	-	SEE ARCH. DWGS. FOR SPECS.
F.D.-1	FLOOR DRAIN	SEE PLUMBING DWGS.	2"	-	-	-	-	-	SMITH FIG. 2015-U-G W/RAIP PRIMER
F.D.-2	FLOOR DRAIN	SEE PLUMBING DWGS.	3"	-	-	-	-	-	SMITH FIG. 2210
F.C.O.	FLOOR CLEANOUT	SEE PLUMBING DWGS.	AS SHOWN	-	-	-	-	-	SMITH FIG. 4040-U
W.C.O.	WALL CLEANOUT	SEE PLUMBING DWGS.	AS SHOWN	-	-	-	-	-	SMITH FIG. 4472-U
G.C.O.	GROUND CLEANOUT	SEE PLUMBING DWGS.	AS SHOWN	-	-	-	-	-	EQUAL TO SMITH FIG. 4361-U IN 18" O.D. CONC. PAD.



VALVE BOX SCHEDULE								
DIMENSIONS MARKED	VALVE SIZE (IN INCHES)							
	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"
ACCESS COVER SIZE	AS REQUIRED							

NOTE: VALVES 2 1/2" & SMALLER SHALL BE EQUAL  
TO NIBCO MODEL 595-Y-66, FOR 3" VALVE USE  
NIBCO MODEL 590-Y-66 OR APPROVED EQUAL.

VALVE BOX DETAIL  
SCALE : N.T.S.



ELEVATION  
NON-POTABLE WATER HOSE BIBB RECESSED IN  
CONCRETE PEDESTAL BLOCK INSTALLATION DETAIL  
SCALE : N.T.S.

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[illegible]

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No.	Revision	Date	By
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Project

**IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM  
ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO**

Drawing Title

**PLUMBING  
DETAILS, NOTES  
& SCHEDULES**

Scale  
1/8" = 1' - 0"

File Name

Drawing Num

PL-200

Sheet Number

56



Drawn by : J. Hernandez

Checked by  
JOSE LUIS MARRERO

Date  
DECEMBER 2022

No. Revision Date By

Project

**IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM**  
**ANGEL  
MERCADO  
VEGA**  
**Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO**

Drawing Title  
**GROUND FLOOR PLAN-  
VAC LAYOUT**

Scale  
1/8"=1'-0"

File Name

20-061

Drawing Number

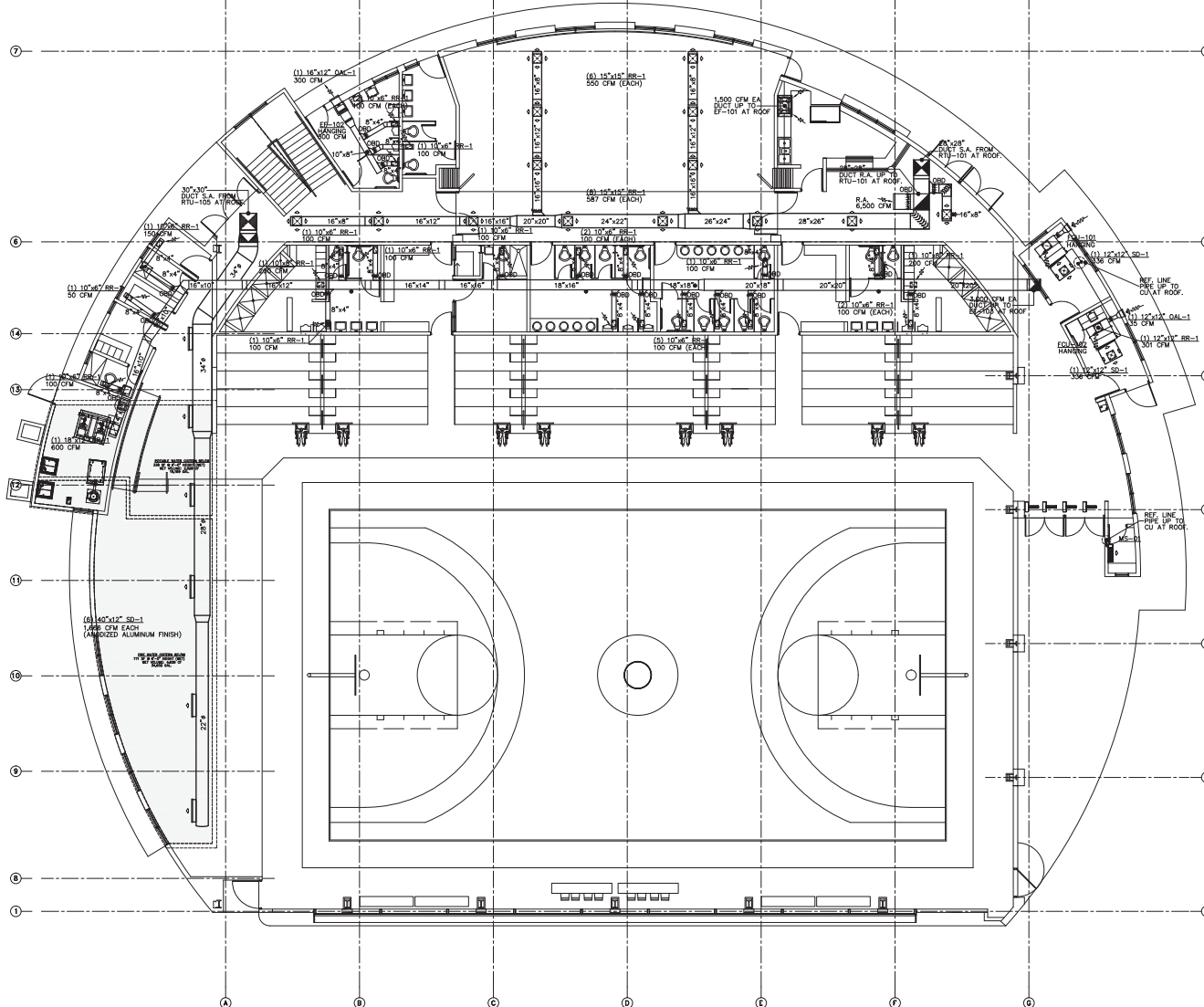
VAC-100

Sheet Number

57

**ABBREVIATIONS:**

EF	EXHAUST FAN	O.B.D.	OPPOSED BLADE DAMPER
CFM	CUBIC FEET PER MINUTE	TC	TEMPERATURE CONTROL
S.A.	SUPPLY AIR	TS	TEMPERATURE SENSOR
R.A.	RETURN AIR	(E)	EXISTING
O.A.	OUTSIDE AIR	(N)	NEW
PGU	PACKAGE UNIT	CU	CONDENSING UNIT
SD	SUPPLY DIFFUSER	RR	RETURN REGISTER
RR	RETURN REGISTER	N	NICK
OAL	OUTSIDE AIR LOUVER	CONC.	CONCRETE
LCM	LOCAL CONTROL MODULE	(TYP.)	TYPICAL
GCM	GENERAL CONTROL MODULE	SD	SMOKE DETECTOR
FCU	FAN COIL UNIT	DFD	DUCT FIRE DAMPER
DWG	DRAWING	PTAC	PACKAGED TERMINAL AIR CONDITIONERS
FLEX.	FLEXIBLE	(MC)	MASTER CONTROL
CONN.	CONNECTION	TC	TEMPERATURE CONTROLLER
AHU	AIR HANDLING UNIT	PC	POINT OF CONNECTION
		FD	FIRE DAMPER



GROUND FLOOR PLAN-VAC LAYOUT  
SCALE: 1/8"=1'-0"



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"Yo, Jose Luis Marrero Sordani, con número de licencia #14871, certifico que soy el profesional que diseñó este plano y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplirán con las disposiciones aplicables del Reglamento General 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. 19 de 8 de enero de 2004, según enmendada, conocida como la Ley para la Inversión por la Industria Productiva y con la Ley Núm. 379 de 18 de mayo de 1993, según enmendada, Ley Núm. 80 de 8 de julio de 1978, según enmendada, según aplicable. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia es de mi exclusiva responsabilidad, o por otra persona con mi consentimiento, sea quien responsable de cualquier acción judicial y enjuiciamiento por la C.O.P.E."

Drawn by : J. Hernandez

Checked by  
JOSE LUIS MARRERO  
Date  
DECEMBER 2022

No. Revision Date By

Project

**IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM**  
**ANGEL MERCADO  
VEGA**  
**Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO**

Drawing Title  
**SECONS LEVEL PLAN-  
VAC LAYOUT**

Scale  
1/8"=1'-0"

File Name  
20-061

Drawing Number

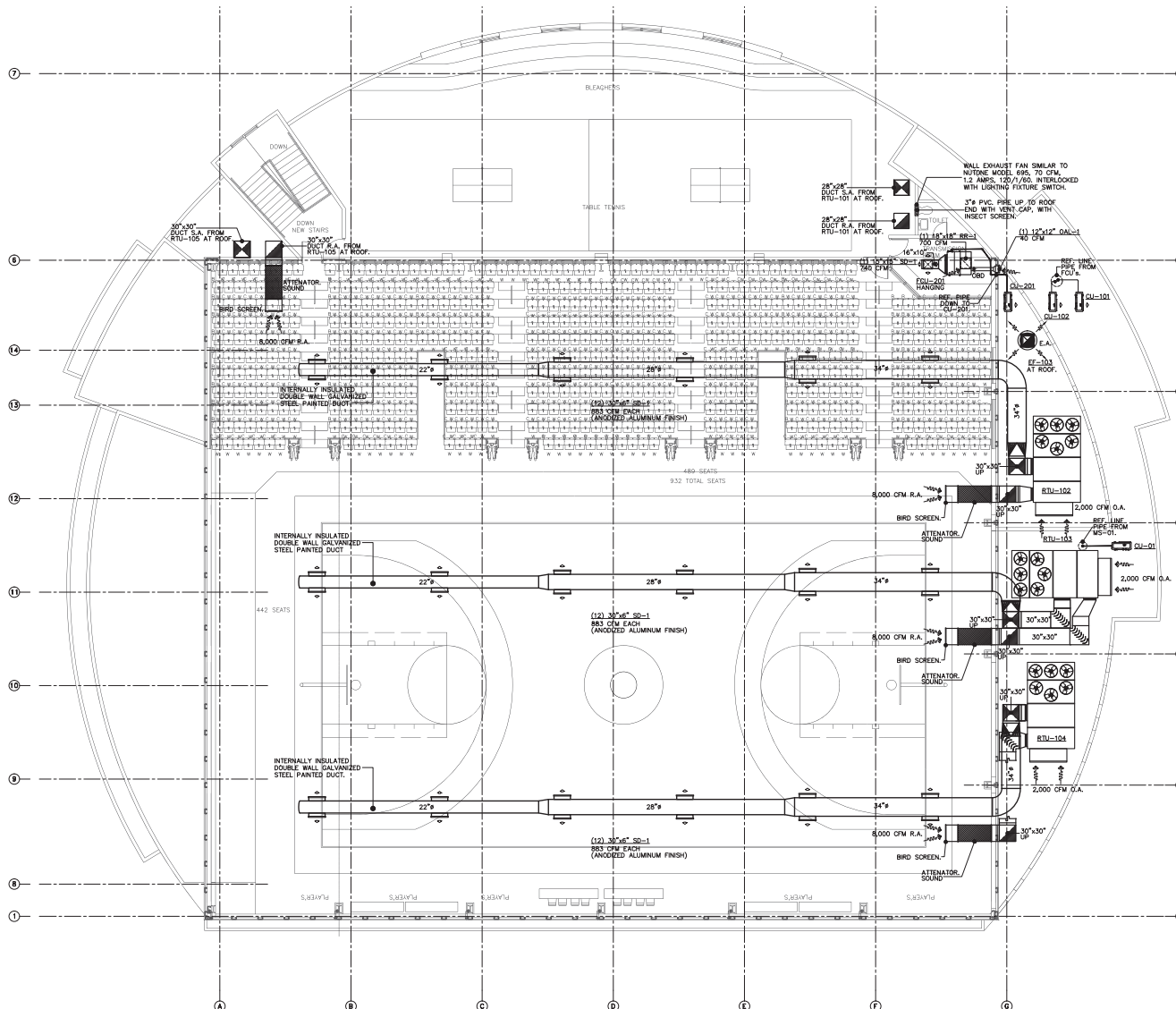
VAC-101

Sheet Number

58

**ABBREVIATIONS:**

EF	EXHAUST FAN	O.B.D.	OPPOSED BLADE DAMPER
CFM	CUBIC FEET PER MINUTE	TC	TEMPERATURE CONTROL
S.A.	SUPPLY AIR	TS	TEMPERATURE SENSOR
R.A.	RETURN AIR	(E)	EXISTING
O.A.	OUTSIDE AIR	(N)	NEW
PGU	PACKAGE UNIT	CU	CONDENSING UNIT
SD	SUPPLY DIFFUSER	RR	RETURN REGISTER
RR	RETURN REGISTER	H	HICK
OAL	OUTSIDE AIR LOUVER	CONC.	CONCRETE
LCM	LOCAL CONTROL MODULE	(TYP.)	TYPICAL
GOM	GENERAL CONTROL MODULE	GM	SMOKE DETECTOR
TYP.	TYPICAL	DFD	DUCT FIRE DAMPER
FCU	FAN COOL UNIT	PTAC	PACKAGED TERMINAL AIR CONDITIONERS
DWG	DRAWING	(MC)	MASTER CONTROL
FLEX.	FLEXIBLE	(T)	TEMPERATURE CONTROLLER
CONN.	CONNECTION	(P)	POINT OF CONNECTION
AHU	AIR HANDLING UNIT	FD	FIRE DAMPER



SECOND LEVEL PLAN-VAC LAYOUT  
SCALE: 1/8"=1'-0"



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# VAC NOTES:

## GENERAL:

1. BIDDERS SHALL VISIT THE BUILDING AND ACQUAINT THEMSELVES WITH THE CONDITIONS AS THEY ACTUALLY EXIST. VISITING AND INVESTIGATION ARE NECESSARILY REQUIRED TO COMPLETE THE WORK. FAILURE TO VISIT THE PROJECT AREA WILL IN NO WAY RELIEVE THE SUCCESSFUL BIDDER OF THE OBLIGATION TO FURNISH THE WORK. ALL WORK REQUIRED FOR THE COMPLETION OF THE CONTRACT. VISIT TO THE PROJECT AREA SHALL BE ARRANGED THROUGH THE BUILDING MANAGER.
2. CONTRACTOR SHALL PROVIDE SUITABLE VIBRATION ISOLATION FOR THE SYSTEM AS RECOMMENDED BY MANUFACTURER OF EQUIPMENT SPECIFIED OR PROVIDED.
3. CONTRACTOR SHALL FURNISH AND INSTALL PIPING VALVES, SENSORS, CONTROL SYSTEMS AND ANY OTHER ITEM REQUIRED FOR THE FUNCTIONING AND OPERATION OF THE SYSTEM SHALL FORM PART OF THE WORK TO BE DONE BY THE CONTRACTOR.
4. IT IS THE INTENTION OF THE DRAWINGS TO CALL FOR FINISHED WORK, COMPLETE, TESTED AND READY FOR OPERATION. MINOR DETAILS NOT SHOWN OR SPECIFIED, BUT NECESSARY FOR THE PROPER INSTALLATION AND FOR FUNCTIONING AND OPERATION OF THE SYSTEM SHALL FORM PART OF THE WORK TO BE DONE BY THE CONTRACTOR.
5. CONTRACTOR SHALL PAINT ALL PIPING, PIPE INSULATION, FITTINGS, VALVES AND ALL EQUIPMENT TO BE INSTALLED.
6. THE CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE DUCT AND PIPING ARRANGEMENTS AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF THE WORK.
4. ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED WITH THE APPROVAL OF THE OWNER IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND THE SPECIFICATIONS ISSUED FOR THIS PROJECT.
8. CONTRACTOR SHALL LOCATE IN FULLY ACCESSIBLE POSITIONS ALL EQUIPMENT WHICH MUST BE SERVICED, OPERATED, OR MAINTAINED. CONTRACTOR IS RESPONSIBLE OF COMPLY WITH EACH EQUIPMENT MANUFACTURER RECOMMENDED CLEARANCE.
9. IN CASE OF DISCREPANCY BETWEEN THE EQUIPMENT SPECIFIED AND THE EQUIPMENT SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL ARRANGE FOR THE PROPER INSTALLATION OF THE EQUIPMENT.
10. CONTRACTOR SHALL FURNISH AND INSTALL AIR CONDITIONING EQUIPMENT, DUCTS, INSULATION, PIPING VALVES, SENSORS, CONTROL SYSTEMS AND ANY OTHER ITEMS REQUIRED FOR THE PROPER FUNCTIONING AND OPERATION OF THE SYSTEM.
11. MECHANICAL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES.
12. THE MECHANICAL CONTRACTOR SHALL THOROUGHLY EXAMINE ALL AREAS WHERE EQUIPMENT, DUCTWORK, AND PIPING WILL BE INSTALLED AND WILL REPORT ANY CONDITION THAT, IN HIS OPINION, PREVENTS THE PROPER INSTALLATION OF THE MECHANICAL WORK.
13. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTION TO ALL MECHANICAL EQUIPMENT.
14. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL ORDINANCES. IN CASE OF DISCREPANCY BETWEEN THE DRAWINGS/SPECIFICATIONS AND THE CODES AND ORDINANCES, THE HIGHEST STANDARD SHALL APPLY. THE MECHANICAL CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM STANDARD WITHOUT ANY EXTRA COST.
15. THE MECHANICAL CONTRACTOR SHALL REQUIRE AND PAY FOR ALL PERMITS, FEES AND INSPECTIONS NECESSARY TO COMPLETE THE MECHANICAL WORK.
16. THE MECHANICAL CONTRACTOR SHALL UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY OWNER AND WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE MATERIALS AND WORKMANSHIP.
17. THE MECHANICAL CONTRACTOR SHALL COORDINATE CONCRETE SLABS PENETRATION WORKS WITH OWNER, STRUCTURAL ENGINEER AND ARCHITECTURAL DRAWINGS. SEAL PENETRATIONS AND PROVIDE FIRE DAMPERS AS REQUIRED.
18. ALL MATERIAL AND SPECIALTIES REQUIRED FOR THIS WORK SHALL BE NEW (UNLESS OTHERWISE INDICATED), OF FIRST-CLASS QUALITY AND SHALL BE FURNISHED, DELIVERED, DIRECTED, CONNECTED AND FINISHED IN EVERY DETAIL, AND SHALL BE SO SELECTED AND ARRANGED AS TO FIT PROPERLY INTO THE BUILDING SPACES. DURING STORAGE ON THE JOB SITE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP PIPE ENDS PLUGGED OR CAPPED TO PREVENT DIRT OR MOISTURE ENTERING THE PIPE.
19. ROOF "R" VALUE SHALL BE A MINIMUM OF 15.0 HR-SF-57/BTU.

## INSULATION:

1. ALL INSULATION REQUIRED FOR THE WORK SHALL BE NEW, OF THE FIRST - CLASS QUALITY AND SHALL BE FINISHED, DELIVERED, DIRECTED AND FINISHED IN EVERY DETAIL. ALL INSULATION SHALL HAVE A COMPOSITE FIRE HAZARD RATING AS TESTED BY ASTM E-84, NFPA 255, OR UL 723, NOT TO EXCEED 25 FLAME SPREAD AND NO SMOKE DEVELOPED. ACCESSORIES SHALL HAVE THE SAME COMPONENT RATINGS. ALL INSULATING MATERIAL SHALL HAVE A LABEL INDICATING COMPLIANCE WITH THE ABOVE RATING.
2. EXPOSED AIR DUCT INSULATION SHALL BE 2" THICK INSUL-MAKLE R-8 (6 INCH") RIGID FIBERGLASS DUCT INSULATION WITH A FACTORY APPLIED FOL-SCRM-KRAFT (75K) VAPOR BARRIER FACING. COVER ALL INSULATION WITH GLASS FIBRIC MESH USING FOETER SEALFAS MASTIC. INSULATION SHALL HAVE A "K" FACTOR=0.22 BTU-IN/HR-FT<sup>2</sup>-°F @ 75F.
3. CONCEALED AIR DUCT INSULATION SHALL BE 1 1/2" THICK INSUL-MAKLE R-8 SERIES MICROGLITE FIBER GLASS BLANKET WITH A FACTORY APPLIED FOL-SCRM-KRAFT (75K) VAPOR BARRIER FACING. INSULATION SHALL HAVE A "K" FACTOR= 0.31 BTU-IN/HR-FT<sup>2</sup> @ 75F.
4. CHILLED WATER PIPING INSULATION MATERIAL SHALL BE PRE-FORM PHENOLIC FOAM PIPE INSULATION USE AN ALUMINUM JACKET SECURELY ATTACHED IN ALL WEATHER EXPOSED PIPE RUNS AND FITTINGS.
5. AFTER THE INSTALLATION OF PIPING AND BEFORE APPLYING THE INSULATION, THE CONTRACTOR MUST CLEAN ALL PIPING THOROUGHLY AND APPLY TWO COATS OF ANTI CORROSIVE PAINT AS MANUFACTURED BY PORTER #7100.
6. INDOOR DUCTS HANDLING OUTDOOR AIR INSULATION MATERIAL: SAME AS EXPOSED AIR DUCTS INSULATION SHALL NOT BE APPLIED UNTIL ALL SURFACES ARE CLEAN AND DRY.
7. ALL MATERIAL USED FOR DUCTWORK INSULATION SHALL HAVE A FLAME SPREAD INDEX NOT EXCEEDING 25 SMOKE DEVELOPED AND FUEL CONTRIBUTED NOT TO EXCEED 50 WHEN MEASURED AS DETERMINE BY ASTM E-162.
8. INSULATION SHALL BE FURNISHED WITH A FACTORY APPLIED FSK VAPOR BARRIER FACING AND SHALL HAVE AN AVERAGE THERMAL CONDUCTIVITY NOT EXCEED 0.25 BTU-IN/50/FT<sup>2</sup>-°F.
9. PROVIDE INTERNAL ACOUSTICAL LINING TO ALL FOUTS FASGAS.

## AIR DISTRIBUTION:

1. DUCTWORK SHELL BE AS FOLLOWS:
  - A- DUCT MATERIAL - SHALL BE GALVANIZED SHEET METAL, AND MANUFACTURED AND BUILT IN ACCORDANCE WITH LATEST EDITION OF THE AIR DUCT CONSTRUCTION STANDARDS OF SMACNA FOR THE APPLICABLE PRESSURE CLASS.
  - B- DUCT WORKMANSHIP - ALL DUCTWORK SHALL BE CONSTRUCTED AND DIRECTED IN A NORMANLIKE MANNER. DUCTS SHALL BE STRAIGHT AND SMOOTH ON THE INSIDE WITH NEATLY FINISHED JOINTS, AIRTIGHT, AND SHALL BE FREE FROM VIBRATION UNDER ALL CONDITIONS OF OPERATION. THE INTERNAL ENDS OF SLP JOINTS SHALL BE MADE IN THE DIRECTION OF AIR FLOW. CHANGES IN DIMENSIONS AND SHARP OF DUCTS SHALL BE GRADUAL. ALL DUCT SIZES SHALL FALL WITHIN THE LIMITING DIMENSIONS INDICATED ON THE DRAWINGS UNLESS OTHERWISE APPROVED. CURVED ELBOWS, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS, SHALL HAVE A CENTER LINE RADIUS EQUAL TO 1 1/2 TIMES THE WIDTH OF THE DUCT. AIR TUNING SHALL BE INSTALLED IN ALL ABRUPT ELBOWS AND SHALL CONSIST OF CURVED METAL BLADES OR VANES, ARRANGED TO PERMIT THE AIR TO MAKE THE TURNS WITHOUT APPRECIABLE TURBULENCE. THEY SHALL BE THE MANUFACTURER'S STANDARD PRODUCT AND SHALL BE QUOTED WHEN THE SYSTEM IS IN OPERATION. CONFIGURATION OF DUCTS SHALL BE AS INDICATED ON DRAWINGS. DUCT HANGER SHALL BE AS INDICATED ON DRAWINGS.
2. INSTALLATION OF DUCTS SHALL BE BY MEANS OF ANGULAR TRAPICEE AND ROD ACCORDING TO "SMACNA" RECOMMENDATIONS. IF STRAP ARE USED WITH DUCTWORK LESS THAN 24" WIDE, IT SHALL BE ATTACHED TO THE DUCT BY TWO SELF-TAPPING SCREWS. HANGERS AND STRAPS SHALL BE ATTACHED TO THE BEAM BY EXPANSION SHELDS OR BY GUN NAILS. SOCKS, HANGERS AND STRAPS SHALL BE ATTACHED TO THE BEAM BY EXPANSION SHELDS OR BY GUN NAILS.
3. ALL CONCEALED DUCTWORK AND PLenums ABOVE THE SECOND FLOOR CEILINGS SHALL BE INSULATED.
4. ALL DUCT WORK EQUIPMENT AND PIPING SHALL BE PROVIDED WITH SEISMIC RESTRAINTS IN ACCORDANCE WITH U.S.C.-1997 & H.F.F.A. STANDARDS.
5. ALL SHEETMETAL DUCTWORK SEAMS & JOINTS MUST BE SEALED WITH HIGH PRESSURE DUCT SEALER AS MANUFACTURED BY HENKOTA MINING & MANUFACTURE CO. MODEL EC-800 OR APPROVED EQUAL. AIR LEAKS MUST BE 5% OR LESS. TEST DUCTWORK BEFORE FINAL CONNECTION TO A/HV & AIR DISTRIBUTION.
6. FOR EXACT LOCATION OF CEILING DIFFUSERS REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
7. THE CONTRACTOR MUST FURNISHED & INSTALL U/L APPROVED FIRE DAMPER WITH 10 GAUGE METAL SLEEVE AND EJECT ACCESS DOOR WITH LATEST EDITION ON DRAWINGS, AS REQUIRED BY LOCAL BUILDING CODES, OR AS REQUIRED BY N.F.P.A. FIRE DAMPERS SHALL BE CURTAIN TYPE AS MANUFACTURED BY RUSON MODEL 1002 STYLE C OR APPROVED EQUAL.
8. PROVIDE SMOKE DETECTORS AS PER N.F.P.A. 90A.
9. EXPOSED SUPPLY & RETURN DUCTS SERVING SOUND SENSITIVE AREAS SHALL BE DOUBLE WALL, PAINTED AND INTERNALLY INSULATED.
10. ALL EXPOSED DUCTWORK SHALL BE PAINTED AS PER ARCHITECT'S COLOR CODING.
11. CONTRACTOR SHALL BE RESPONSIBLE OF SUBMIT DUCTWORK SHOP DWG. FOR APPROVAL. NO CHANGE ORDER WILL BE ALLOWED FOR DUCTS MODIFICATIONS RESULTING FROM NON-COORDINATED SHOP DRAWINGS.
12. CONNECTION FROM DUCT TO A/C UNIT SHALL BE MADE WITH A CANVAS CONNECTOR. CANVAS CONNECTION SHALL BE NEOPRENE-COATED GLASS FABRIC AS MANUFACTURED BY VENT FABRIC (VEN FLEX) GDS DRYLOPP OF EQUAL MOUNTED ON ANGLE FRAMES SECURELY FASTENED TO DUCTS AND EQUIPMENT WITH ACCESSORIES TO PREVENT COLLAPSE AT UP TO 10 IN. OF NEGATIVE PRESSURE. CANVAS CONNECTOR SHALL BE AIR TIGHT (NO LEAKAGE OR INFILTRATION) AT INDICATED PRESSURE CLASS.
13. PLenum SUPPLY AND RETURN AREA SHALL COMPLY WITH NFPA-90A.
14. CONTRACTOR SHALL BE RESPONSIBLE OF RETURN AIR PLenum SEGREGATION AND PROVIDE REQUIRED AIR PASSAGES FOR PROPER A/C SYSTEM FUNCTIONING.
15. ALL OUTSIDE AIR INTAKES SHALL BE PROVIDED WITH A 30% EFF. DISPOSABLE FILTERS.
16. PROVIDE 1" THICK INTERNAL ACOUSTICAL LINING TO FIRST 10'-0" OF SUPPLY & RETURN DUCTWORK. SIMILAR TO SCHULLER PERMAFOSTICS.
17. COORDINATE DUCT ROUTE WITH SPRINKLERS AND ALL OTHER TRADES. RE-ROUTE AS REQUIRED AT NO EXTRA COST TO THE OWNER.
18. GRILLES AND DIFFUSERS SHALL BE AS MANUFACTURE BY "METALMARE", "BARBER COLMAN", "TUTTLE & BAILEY", "ANEMOSTAT" OR "TUTUS". EACH IS TO BE FITTED BY AN AIR STREIGHTENER AND VOLUME DAMPER.
19. ALL DUCT DIMENSIONS SHOWN ARE NET INTERNAL.

## HVAC EQUIPMENT:

1. ALL AIR CONDITIONING EQUIPMENT SHALL BE INSTALLED IN A NORMANLIKE MANNER MEETING THE ACCEPTED STANDARDS OF THE AIR CONDITIONING INDUSTRY. THE WORK SHALL BE DONE BY SKILLED A/C CRAFTSMEN.
2. MAINTENANCE AND SERVICE CLEARANCES SHALL BE MAINTAIN TO EACH MECHANICAL EQUIPMENT AS PER MANUFACTURERS RECOMMENDATIONS.
3. MECHANICAL EQUIPMENT AT ROOF SHALL BE ANCHORED TO WITHSTAND HURRICANE FORCE WINDS AS PER APPLICABLE CODES.
4. PROVIDE CORROSION PROTECTION TO ALL WEATHER EXPOSED MECH. EQUIPMENT BY MEANS OF FIELD APPLIED PRODUCT. SUBMITT FOR APPROVAL.
5. EQUIPMENT START-UP SHALL BE PERFORMED BY EQUIPMENT MANUFACTURER.
6. ALL EQUIPMENT OFFERED UNDER THESE SPECIFICATIONS SHALL BE LIMITED TO PRODUCTS REGULARLY PRODUCED AND RECOMMENDED FOR SERVICE, IN ACCORDANCE WITH ENGINEERING DATA, RATINGS, OR OTHER COMPREHENSIVE LITERATURE MADE AVAILABLE TO THE PUBLIC AND IN EFFECT AT THE TIME OF OPENING OF BIDS.
7. EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE OF MANUFACTURE'S INSTRUCTIONS FOR THE TYPE AND CAPACITY OF EACH PRICE OF EQUIPMENT USE. COORDINATE MECHANICAL EQUIPMENT CONCRETE PADS WITH FINAL EQUIPMENT ARRANGEMENT.
8. CONTRACTOR SHALL BE RESPONSIBLE OF VERIFY ELECTRICAL CONNECTION AT FIELD POINT TO EQUIPMENT PURCHASE.

## BALANCING:

1. THE A/C CONTRACTOR SHALL PROVIDE AIR AND HYDRONIC SYSTEM BALANCING.
2. PERFORM AIR & HYDRONIC BALANCING BY A INDEPENDENT NEBB OR AARE CERTIFIED AIR BALANCE CORP. OWNER SHALL ACCURATELY BALANCE THE AIR SYSTEMS TO PROVIDE AIR QUALITIES INDICATED ON THE DRAWINGS AND IN THIS SPECIFICATION. OPERATE AUTOMATIC CONTROL SYSTEM AND VARY SET POINTS DURING BALANCING. THE FINAL READING AND ADJUSTMENT SHALL BE PERFORMED WITH THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
3. PRESSURIZATION LEAKAGE AND INFILTRATION TEST SHALL BE PERFORMED PER SMACNA STANDARDS AND TECHNICAL SPECIFICATIONS.
4. THE AIR DISTRIBUTION SYSTEM AND DEVICES SHALL BE BALANCED FOR PROPER AIR FLOW. TEST DATA OF THE BALANCING OF THE SYSTEMS SHALL BE SUBMIT TO THE ARCHITECT FOR REVIEW. ALL AIR QUANTITIES SHALL BE SET TO WITHIN 10% OF THE LISTED QUANTITIES. DEFLECTION VANES SHALL BE SET TO ELIMINATE ANY EXCESSIVE AIR MOVEMENT IN THE AREA.
5. THE AIR SIDE BALANCING SHALL INCLUDE:
  1. RECORD MOTOR FULL LOAD AMPS AND ACTUAL OPERATING AMPERAGE.
  2. RECORD SUPPLY, RETURN AND OUTSIDE AIR TEMPERATURES.
  3. MAKE PITOT TUBE TRAVERSE OF MAIN SUPPLY DUCT AND OBTAIN DESIGN CFM AT FAN AND FAN RPM.
  4. RECORD SYSTEM STATIC PRESSURES, RETURN AND DISCHARGE.
  5. FIVE (5) COPIES OF BALANCING REPORTS CONTAINING THE DATA MENTIONED ABOVE AND SHALL BE GIVEN TO THE OWNER'S REPRESENTATIVE.
6. BALANCING WORK SHALL FULLY COMPLY WITH A.A.B.C. OR N.E.B.B.

## REFRIGERANT PIPING:

1. REFRIGERANT PIPING MATERIAL SHALL BE TYPE "M" COPPER TUBING, HARD DRAWN WITH WROUGHT COPPER SOLDER TYPE FITTINGS SUITABLE FOR CONNECTION WITH SILVER SOLDER.
2. REFRIGERANT PIPING INSULATION MATERIAL: SHALL BE CLOSED CELL ELASTOMERIC 1/2" THICK ALL PIPE SIZES. 1/4-1/2" @ 75°F. PROTECT INSULATION FROM SOLAR UV RADIATION.
3. GLOBE VALVE SHALL BE CONSTRUCTED OF FORGED BRASS AND SHALL BE OF THE BACKSEATING TYPE SUITABLE FOR 500 PSI.
4. CHECK VALVES SHALL BE CONSTRUCTED OF FORGED BRASS SUITABLE FOR 500 PSI.
5. SOLENOID VALVES, SHALL BE CONSTRUCTED OF FORGED BRASS SUITABLE FOR 400 PSI.
6. REFRIGERANT STRAINERS, SHALL BE CONSTRUCTED OF FORGED BRASS SUITABLE FOR 500 PSI. PROVIDE 100 MESH STRAINER.
7. MOISTURE INDICATOR, SHALL BE CONSTRUCTED OF FORGED BRASS WITH OPTICAL GLASS SUITABLE FOR 500 PSI.
8. FILTER DRANS, SHALL BE CONSTRUCTED OF STEEL WITH STEEL COVER REPLACEABLE FILTER DRAIN COVER.
9. ALL ELBOWS SHALL BE OF THE LONG RADIUS TYPE.
10. CONTRACTOR SHALL BE RESPONSIBLE OF SUBMIT REFRIGERANT LINE SHOP DWG. FOR APPROVAL. NO CHANGE ORDER WILL BE ALLOWED FOR A/C SYSTEMS MODIFICATIONS RESULTING FROM NON-COORDINATED SHOP DRAWINGS.
11. REFRIGERANT LINE SIZING SHALL BE DONE BY EQUIPMENT MANUFACTURER.

## AUTOMATIC CONTROL SYSTEM:

1. ALL CONTROLLERS SHALL BE FLUSH MOUNTED. ELECTRICAL CONDUITS SHALL RUN INSIDE WALLS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE CONDUITS AND WIRING FOR THE POWER OF THE LOW FROM THE NEAREST POWER SOURCE.
3. ALL VERTICAL CONTROL CONDUITS MUST RUN CONCEALED INSIDE WALLS AND HORIZONTAL CONTROL IN THE PLenum BETWEEN REFLECTED CEILING AND BOTTOM OF STRUCTURAL SLAB.
4. ROOM CONDITIONS ARE: 74.0-77.0 @ 55-58 DB FOR ALL AREAS. COORDINATE LOCATION OF TEMPERATURE CONTROLLERS AT FIELD WITH OWNER.
5. PROVIDE VANDAL PROOF COVER FOR ALL TEMPERATURE CONTROLLERS.
6. PLASTIC PIPING IS NOT ALLOWED IN RETURN PLenum AREAS.
7. ALL MOTORS SHALL BE PROVIDED WITH ITS REQUIRED STARTERS FOR THE PROPER ELECTRICAL CONNECTION OF THE EQUIPMENT. COORDINATE WITH ELECTRICAL CONSULTANT.

## CONDENSATE DRAIN:

1. COOLING COIL CONDENSATE DRIP PIPING MATERIAL: SHALL BE EXTERIOR ELASTOMERIC 3/4" PVC.
2. COOLING COIL CONDENSATE DRIP PIPING MATERIAL RUNNING IN RETURN AIR PLenums SHALL BE TYPE "M" COPPER.
3. CONDENSATE DRAIN PIPING INSULATION MATERIAL: SHALL BE CLOSED CELL ELASTOMERIC 3/4" THICK ALL PIPE SIZES. 1/4-1/2" @ 75°F.
4. CONTRACTOR SHALL PROVIDE INDIRECTLY CONNECTED CONDENSATE DRAIN TO A/C UNITS. COORDINATE WITH PLUMBING DRAWINGS.
5. PROVIDE CONDENSATE DRAIN PUMP FOR A/C EQUIPMENT IF REQUIRED PIPE SLOPE IS NOT ATTAINED.
6. CONTRACTOR SHALL BE RESPONSIBLE OF CONNECT 1" INSULATED PVC PIPE FOR EQUIPMENT CONDENSATE DRAIN AND CONNECT TO SANITARY SEWER SYSTEM.

## ABBREVIATIONS:

EF	EXHAUST FAN	O.B.D.	OPPOSED BLADE DAMPER
CFM	CUBIC FEET PER MINUTE	TC	TEMPERATURE CONTROL
S.A.	SUPPLY AIR	TS	TEMPERATURE SENSOR
A.A.	RETURN AIR	(E)	EXISTING
O.A.	OUTSIDE AIR	(N)	NEW
PCU	PACKAGE UNIT	(C)	CONDENSING UNIT
SD	SUPPLY DIFFUSER	RR	RETURN REGISTER
RR	RETURN REGISTER	H	NICK
OAL	OUTSIDE AIR LOUVER	CONE	CONCRETE
LOM	LOCAL CONTROL MODULE	(TYP.)	TYPICAL
GM	GENERAL CONTROL MODULE	SD	SMOKE DETECTOR
TYP.	TYPICAL	DFD	DUCT FIRE DAMPER
FCU	FAN COOL UNIT	(MC)	MASTER CONTROL
DWG	DRAWING	(T)	TEMPERATURE CONTROLLER
FLEX.	FLEXIBLE	(P)	POINT OF CONNECTION
CONN.	CONNECTION	FD	FIRE DAMPER
AHU	AIR HANDLING UNIT		

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Drawn by : J. Hernandez

Checked by  
**JOSE LUIS MARRERO**

Date  
**DECEMBER 2022**

No. Revision Date By

Project

**IMPROVEMENTS  
& EXPANSION  
MUNICIPAL  
COLISEUM**  
**ANGEL  
MERCADO  
VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO**

Drawing Title

**VAC  
NOTES**

Scale  
**N.T.S.**

File Name  
**20-061**

Drawing Number

**VAC-200**

Sheet Number

**60**

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"Yo, José Luis Marrero Sicard, con nombre de licencia #14773 certifico que soy un profesional que diseño entre planos y las especificaciones correspondientes. También certifico que entiendo que dichos planos y especificaciones han sido revisados y aprobados por el ingeniero profesional y registrado en la Ley de la Ingeniería y el Código de Construcción Reglamentarios de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con competencia. Certifico, además, que en la preparación de estos planos y especificaciones he sido cuidadosamente con lo dispuesto en la Ley Núm. 14 de 8 de enero de 2004, según enmendada, conocida como la Ley para la Inversión por el Instituto Puertorriqueño" y con la Ley Núm. 179 de 15 de mayo de 1935, según enmendada, Ley Núm. 28 de 8 de julio de 1978, según enmendada, según aplicable. Reconozco que cualquier declaración hecha o falsificación de los hechos que se haya producido por desconocimiento o por negligencia es una falta, una agresión al regulador, o por otra parte penalizada con mi consentimiento, una falta de reconocimiento de culpabilidad, según aplicable y enunciarla por la Corte."



# PACKAGED ROOF TOP UNIT SCHEDULE

UNIT. No.	AREA SERVED	UNIT LOAD (MBH)		TOTAL (CFM)	OUTSIDE (CFM)	ELECTRICAL DATA				COMPRESSOR (c.c.)	WEIGHT (LBS.)	REFR.	EFF. (EER)	MODEL NO.	MANUFACTURER	REMARKS	
		TOTAL	SENS.			V-PH-HZ	MCA	MOP	QTY								
RTU-101	AEROBIC GYM	236.0	188.8	8,000	1,500	208/3/60	102.6	125	1	30.1	225	2,148	R-410	14.0	50HC-E24C105-DA200	CARRIER	CP,D,E,PH,U,L,S
RTU-102	COUSEO	282.0	225.6	10,000	2,000	208/3/60	151.6	175	1	48.1	245	2,193	R-410	14.0	50HC-E28C105-DA200	CARRIER	CP,D,E,PH,U,L,S
RTU-103	COUSEO	282.0	225.6	10,000	2,000	208/3/60	151.6	175	1	33.3	239	2,193	R-410	14.0	50HC-E28C105-DA200	CARRIER	CP,D,E,PH,U,L,S
RTU-104	COUSEO	282.0	225.6	10,000	2,000	208/3/60	151.6	175	1	33.3	239	2,193	R-410	14.0	50HC-E28C105-DA200	CARRIER	CP,D,E,PH,U,L,S
RTU-105	COUSEO	282.0	225.6	10,000	2,000	208/3/60	151.6	175	1	48.1	245	2,193	R-410	14.0	50HC-E28C105-DA200	CARRIER	CP,D,E,PH,U,L,S

REMARKS: (CP), E-COATED AL/CU. (D) 254mm UVC LIGHT (FIELD INSTALLED). (E), ELECTRICAL CONVENIENCE OUTLET 115v GFI. (PH), PHASE MONITOR. (H), HUMID-MIZER (ADAPTIVE DEHUMIDIFICATION SYSTEM). (S), 2-SPEED INDOOR FAN (VFD).

NOTE: CONTRACTOR SHALL BE RESPONSIBLE OF VERIFY ELECTRICAL CONNECTION AT FIELD PRIOR TO EQUIPMENT PURCHASE.

# EXHAUST & MAKEUP FAN SCHEDULE

TAG. NO.	LOCATION	TYPE	DRIVE	CFM	S.P. IN W.G.	H.P.	ELECT.	MODEL NO.	MANUFACTURER	CONTROLLED WITH	ROOF/WALL OPENING	REMARKS
EF-101	ROOF	CENT.	BELT	1,500	1.5	1.0	208/1/60	165ACMB-HP	COOK	TIMER	20"x20"	B, V, S
EF-102	CEILING	CENT.	BELT	300	2.0	0.75	115/1/60	1200C	COOK	TIMER	-	B, S
EF-103	ROOF	CENT.	BELT	3,000	0.5	0.75	208/1/60	180 ACB	COOK	TIMER	26"x26"	B, S
EF-104A Ø 104L	ROOF	CENT.	BELT	10,000	0.25	3	208/1/60	300 ACB	COOK	TIMER	31½"x31½"	B, S

REMARKS: (B), GRAVITY BACKFIGHT DAMPER. (E), EPOXY PAINT PROTECTION. (SP), SPEED CONTROL. (G), GREASE TROUGH. (V), VENTED EXTENSION. (S), STARTER (T), 24/7 PROGRAMMABLE TIME CLOCK LOCATED NEXT TO ELECTRICAL PANEL. (PL), PILOT LIGHT SWITCH LOCATED INSIDE ROOM. (F), FIBER GLASS CONSTRUCTION.

NOTE: 1) CONTRACTOR SHALL BE RESPONSIBLE OF VERIFY ELECTRICAL CONNECTION AT FIELD PRIOR TO EQUIPMENT PURCHASE.  
2) PROVIDE START/STOP SWITCH FOR FAN OPERATION. COORDINATE LOCATION AT FIELD.

# VRF INDOOR (FCU) UNITS SCHEDULES

TAG. NO.	AREA SERVED	UNIT LOAD (MBH)		TOTAL AIR (CFM)	OUTSIDE AIR (CFM)	ELECTRICAL DATA				FAN MOTOR	REFR.	MANUFACTURER MODEL	REMARKS
		TOTAL	SENS.			VOLTS/PH/HZ	MCA	MFA	KVA				
FCU-101	OFFICE	12.0	9.6	335	35	208/1/60	0.8	15	0.050	0.6	R-410A	DAIKIN FTKS32PMA	F1,S,U,I,B,V.
FCU-102	FIRST AIDS	12.0	9.6	335	35	208/1/60	0.8	15	0.050	0.6	R-410A	DAIKIN FTKS32PMA	F1,S,U,I,B,V.
FCU-201	TRANSMISSION ROOM	24.0	19.2	740	40	208/1/60	1.4	15	0.125	1.1	R-410A	DAIKIN FTKS63PMA	F1,S,U,I,B,V.

REMARKS: (F0), FILTER FRAME WITH 35% EFF. (F1), LONG LIFE REPLACEMENT FILTER 50%. (F2), HIGH EFFICIENCY FILTER 85%. (F3), HIGH EFFICIENCY FILTER 90%. (S), SET THE EXTERNAL STATIC PRESSURE TO "HIGH STATIC PRESSURE". (C), PAINTED, COLOR BY ARCHITECT. (P), DRAIN PUMP KIT. (H), AIR SUCCTION CANVAS W/ HALF PANEL. (BV), BV-SERIES BALL VALVES. (WT), REMOTE CONTROLLER WIRE. (RT), REMOTE CONTROLLER WIRELESS.

NOTE: 1) VERIFY ELECTRICAL CONNECTION AND VOLTAGE AT FIELD PRIOR TO EQUIPMENT PURCHASE.  
2) CONTRACTOR SHALL BE RESPONSIBLE OF SUBMIT REFRIGERANT LINE SHOP Dwg. FOR APPROVAL. NO CHANGE ORDER WILL BE ALLOWED FOR A/C SYSTEMS MODIFICATIONS RESULTING FROM NON-COORDINATED SHOP DRAWINGS.  
3) REFRIGERANT LINE SIZING SHALL BE DONE BY EQUIPMENT MANUFACTURER.  
4) START UP SHALL BE DONE BY EQUIPMENT MANUFACTURER.

# VRF OUTDOOR (CU) UNITS SCHEDULES

DRAWING SYMBOL	T. CAPACITY MBH	COMPRESSOR (CU)		OUTDOOR FAN			MCA	MAX. FUSE/CB AMP	MANUFACTURER MODEL
		VOLTS/PH/HZ	RLA	FLA	W	FLA			
CU-101	12	208/1/60	6.3	0.32	53	15.5	20	20	DAIKIN FTKS32PMA
CU-102	12	208/1/60	6.3	0.32	53	15.5	20	20	DAIKIN FTKS32PMA
CU-201	24	208/1/60	10.3	0.40	66	19.8	20	20	DAIKIN FTKS71PMA

NOTE: 1) VERIFY ELECTRICAL CONNECTION AND VOLTAGE AT FIELD PRIOR TO EQUIPMENT PURCHASE.  
2) REFRIGERANT LINE SIZING SHALL BE DONE BY EQUIPMENT MANUFACTURER.

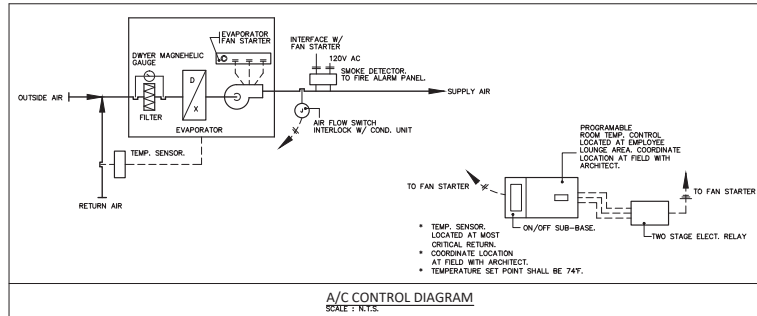
# VRF MS & CU UNITS SCHEDULES

DRAWING SYMBOL	T. CAPACITY	COMPRESSOR (CU)		OUTDOOR FAN		INDOOR FAN (MS)		MCA	MAX FUSE/CB AMP	MANUFACTURER MODEL
	MBH	VOLTS/PH/HZ	RLA	FLA	W	FLA	W			
(MS & CU)-01	9	208/1/60	3.5	0.20	31	0.14	38	12.0	15	DAIKIN FTKS25PMA

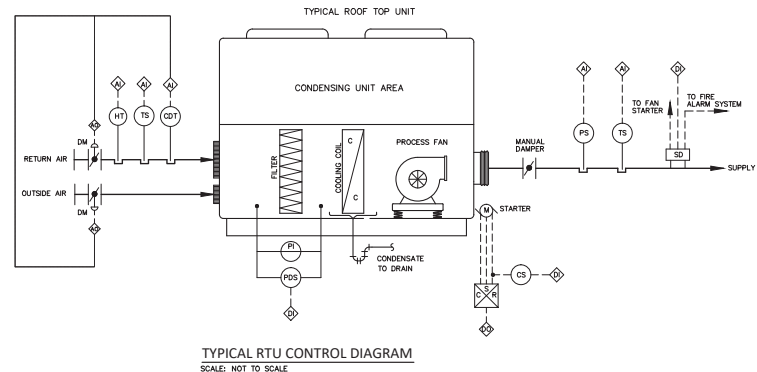
NOTE: 1) VERIFY ELECTRICAL CONNECTION AND VOLTAGE AT FIELD PRIOR TO EQUIPMENT PURCHASE.  
2) REFRIGERANT LINE SIZING SHALL BE DONE BY EQUIPMENT MANUFACTURER.

# ELECTRICAL REQUIREMENTS FOR AUTOMATIC CONTROL SYSTEM

- ELECTRICAL CONTRACTOR SHALL PROVIDE DEDICATED 120 VOLT CONNECTION FOR CONTROL SYSTEM IN THE FOLLOWING AREAS:  
INDOOR MECHANICAL ROOMS OR MECHANICAL CLOSETS  
INDOOR PUMP ROOMS  
NEAR CHILLER PLANT  
NEAR COOLING TOWERS  
NEAR CEILING MOUNTED AIR HANDLING UNITS  
NEAR CEILING MOUNTED FAN COIL UNITS  
NEAR TEMPERATURE OR HUMIDITY TRANSMITTERS  
NEAR LOCAL CONTROL MODULES  
NEAR GENERAL CONTROL MODULE  
NEAR MOTORIZED DAMPERS  
NEAR PRESSURE DIFFERENTIAL SWITCH  
NEAR SMOKE DETECTORS  
NEAR VAV BOXES  
NEAR CONTROL VALVES
- CONTROL SYSTEM CONTRACTOR SHALL BE RESPONSIBLE OF PROVIDE ELECTRICAL CONNECTION FROM THE JUNCTION PROVIDED TO THE CONTROL EQUIPMENT.



NOTE: Exhaust and supply fans airflow and hood dimensions shall be revised as per final kitchen equipment layout. The information provided regarding kitchen ventilation shall be used for coordination purposes only.



# AIR TERMINALS SCHEDULE

DESIG.	TYPE	MODEL	MANUFACTURER	REMARK
SD-1	SUPPLY DIFFUSER	5000	METAL AIRE	ALUMINUM CONSTRUCTION
SD-2	HIGH CAPACITY SUPPLY OUTLETS	RLD-60		
RR-1	RETURN/EXHAUST REGISTER	RHD		
RR-2	HEAVY DUTY RETURN GRILLE	HRH		
DAL-1	OUTSIDE AIR LOUVER	QAL2 F		

\*PROVIDE TR TRANSITION IF REQUIRED.



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"Yo, Jose Luis Marrero SANCHEZ, con número de licencia #14873 certifico que soy el profesional que diseñó este plano y las especificaciones complementarias. También certifico que entiendo que dicho plano y las especificaciones cumplen con las disposiciones aplicables del Reglamento de Construcción y las Reglamentaciones 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. 19 de 8 de enero de 2004, según enmendada, conocida como la Ley para la Inversión por la Industria Productiva y con la Ley Núm. 179 de 15 de mayo de 1935, según enmendada, Ley Núm. 80 de 8 de julio de 1978, según enmendada, según aplicable. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia es una falta, una negligencia o impropiedad, o por otra conducta con mi consentimiento, me hacen responsable de cualquier acción penal y disciplinaria por la Corte."

**DANILO SALAZAR**  
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Drawn by : J. Hernandez

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Date  
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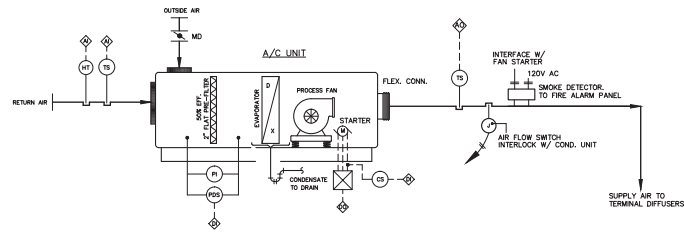
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## SEQUENCE OF OPERATION

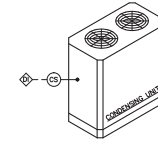
1. A NEW MICROPROCESSOR BASED BUILDING AUTOMATION SYSTEM (BAS) SHALL EXECUTE ALL CONTROL OPERATION ASSOCIATED WITH AIR CONDITIONING AND VENTILATION EQUIPMENT.
2. THE NEW BAS SYSTEM SHALL BE INTELLIGENT AUTOMATION SYSTEM (I/A SYSTEM) BY INVENSYS. BUILDING SYSTEM CONTROL SHALL INCLUDE A LEAST ONE GLOBAL CONTROL MODULE (GCM).
3. THE GCM SHALL BE CAPABLE OF FUTURE COMMUNICATION VIA ETHERNET, ECHOLIN, OR REMOTE MODEM.
4. NOT USED
5. SYSTEM SHALL BE MODULAR TO PERMIT EASY EXPANSION BY SIMPLY ADDING MORE CONTROLLERS.
6. SPECIFIED CONTROL SHALL BE LEAST INVENSYS BUILDING SYSTEM (I/A SYSTEM) CAPABLE OF COMMUNICATION WITH BACNET, LOWWORK, LOWMARK, NIBBOSU/OXBORO AND APPROXIMATELY 600 THIRD PARTY PROPRIETARY PROTOCOL.
7. THE INTELLIGENT AUTOMATION SYSTEM SHALL BE OPEN & INTER OPERABLE WITH LOWMARK, LOWWORK AND BACNET NONE INTER OPERABLE SYSTEM WILL BE NOT ACCEPTABLE. CONTACT CONNICO FOR MORE INFORMATION.
8. NOT USED
9. ON COMMAND TO START THE A/C SYSTEM SHALL START.
10. RETURN DUCT TEMPERATURE SENSOR SHALL PROVIDE SIGNAL TO GENERAL CONTROL MODULE (GCM)
11. A SMOKE DETECTOR LOCATED AT THE SUPPLY DUCT, SHALL STOP THE FAN UPON SENSING SMOKE.
12. A DIFFERENTIAL PRESSURE SWITCH ACROSS THE FILTER TO ACTUATE AN ALARM WHEN THE PRESSURE DROP ACROSS THE FILTER REACHES HIGH VALUE.
13. A RELATIVE HUMIDITY TRANSMITTER LOCATED AT THE RETURN DUCT SHALL BE CONNECTED TO THE GENERAL CONTROL MODULE THROUGH AN ANALOG INPUT DEVICES RETURN RELATIVE HUMIDITY SHALL BE INDICATED AT THE GCM.
14. NOT USED
15. A TEMPERATURE SENSOR LOCATED AT FAN INLET SHALL BE CONNECTED TO THE LOCAL CONTROL MODULE THROUGH AN ANALOG INPUT DEVICES. COOLING COIL LEAVING TEMPERATURE SHALL BE INDICATED AT THE GCM.
16. COOLING COIL LEAVING AIR TEMPERATURE SHALL BE CONTROLLED CONSTANT BASED ON THE SPECIFIED TEMPERATURE IN THE AHU SCHEDULE.
17. RETURN AIR TEMPERATURE AND HUMIDITY SHALL MODULATE ELECTRIC HEATING COIL TO ATTAIN DESIGN PARAMETER.
18. A CURRENT SENSOR LOCATED AT EF'S SHALL BE CONNECTED TO THE LOCAL CONTROL MODULE TO INDICATED FAN STATUS.

## LEGEND

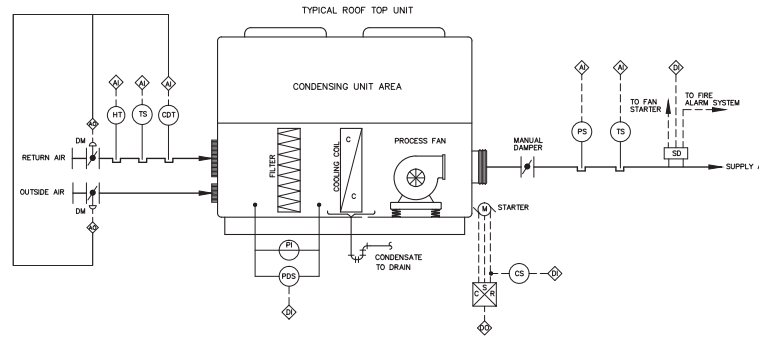
(CS)	CURRENT SENSOR	(AO)	ANALOG OUTPUT	(FF)	FINAL FILTER	(ER)	EXHAUST REGISTER
(DM)	DAMPER MOTOR	(AI)	ANALOG INPUT	(PF)	PRE FILTER	(H)	HOOD
(FI)	FLOW INDICATOR	(DO)	DIGITAL OUTPUT	(SF)	SUPPLY FAN	(AS)	ACID STORAGE
(FT)	FLOW TRANSMITTER	(DI)	DIGITAL INPUT	(RA)	RETURN AIR	(CFM)	CUBIC FEET PER MINUTE
(HS)	HAND SWITCH	-----	ELECTRICAL SIGNAL	(OA)	OUTSIDE AIR	(EF)	EXHAUST FAN
(HT)	HUMIDITY TRANSMITTER	(SD)	SMOKE DETECTOR	(EA)	EXHAUST AIR	(SR)	SUPPLY REGISTER
(HI)	HUMIDITY INDICATOR	(MD)	MANUAL DAMPER	(AHU)	AIR HANDLING UNIT	(E)	EXISTING
(PDS)	PRESSURE DIFFERENTIAL SWITCH	(X)	SENSING RELAY	(RH)	RE-HEAT COIL	(N)	NEW
(PI)	PRESSURE INDICATOR	(HFT)	HEPA FILTER TERMINAL	(CU)	CONDENSING UNIT	(AMD)	AIR MONITOR DEVICE
(TS)	TEMPERATURE SENSOR	(FH)	FUME HOOD	(RR)	RETURN REGISTER	(CH)	CANOPY HOOD
(VFD)	VARIABLE FREQUENCY DRIVE	(RM)	REFRIGERATION MACHINE	---	DUCTWORK	(CC)	COOLING COIL
(MD)	MANUAL DAMPER	(X)	VARIABLE FREQUENCY DRIVE	(GV)	GATE VALVE	(U)	UNIVERSAL UNION
(PS)	PRESSURE SENSOR	(AV)	AUTOMATIC AIR VENT	(PR)	PRES. REGULATOR	(BV)	BUTTERFLY VALVE
(LCM)	LOCAL CONTROL MODULE						
(GCM)	GENERAL CONTROL MODULE						



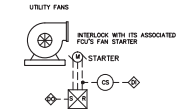
TYPICAL A/C UNITS CONTROL DIAGRAM  
SCALE: NOT TO SCALE



TYPICAL CU CONTROL DIAGRAM  
SCALE: N.T.S.

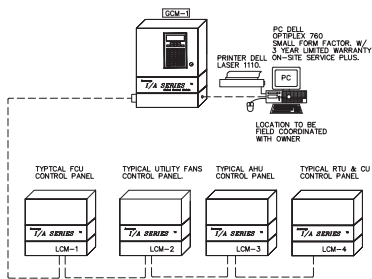


TYPICAL PCU CONTROL DIAGRAM  
SCALE: NOT TO SCALE



TYPICAL UTILITY FANS CONTROL DIAGRAM  
SCALE: N.T.S.

GENERAL CONTROL MODULE. LOCATION SHALL BE COORDINATED WITH OWNER'S REPRESENTATIVES.



CONTROL SYSTEM ARCHITECTURE  
SCALE: N.T.S.

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& EXPANSION  
MUNICIPAL  
COLISEUM  
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VEGA  
Bo. PUEBLO  
SABANA GRANDE,  
PUERTO RICO**

Drawing Title  
**VAC CONTROLS  
AND DIAGRAMS**

Scale  
N.T.S.

File Name  
20-061

Drawing Number

VAC-202

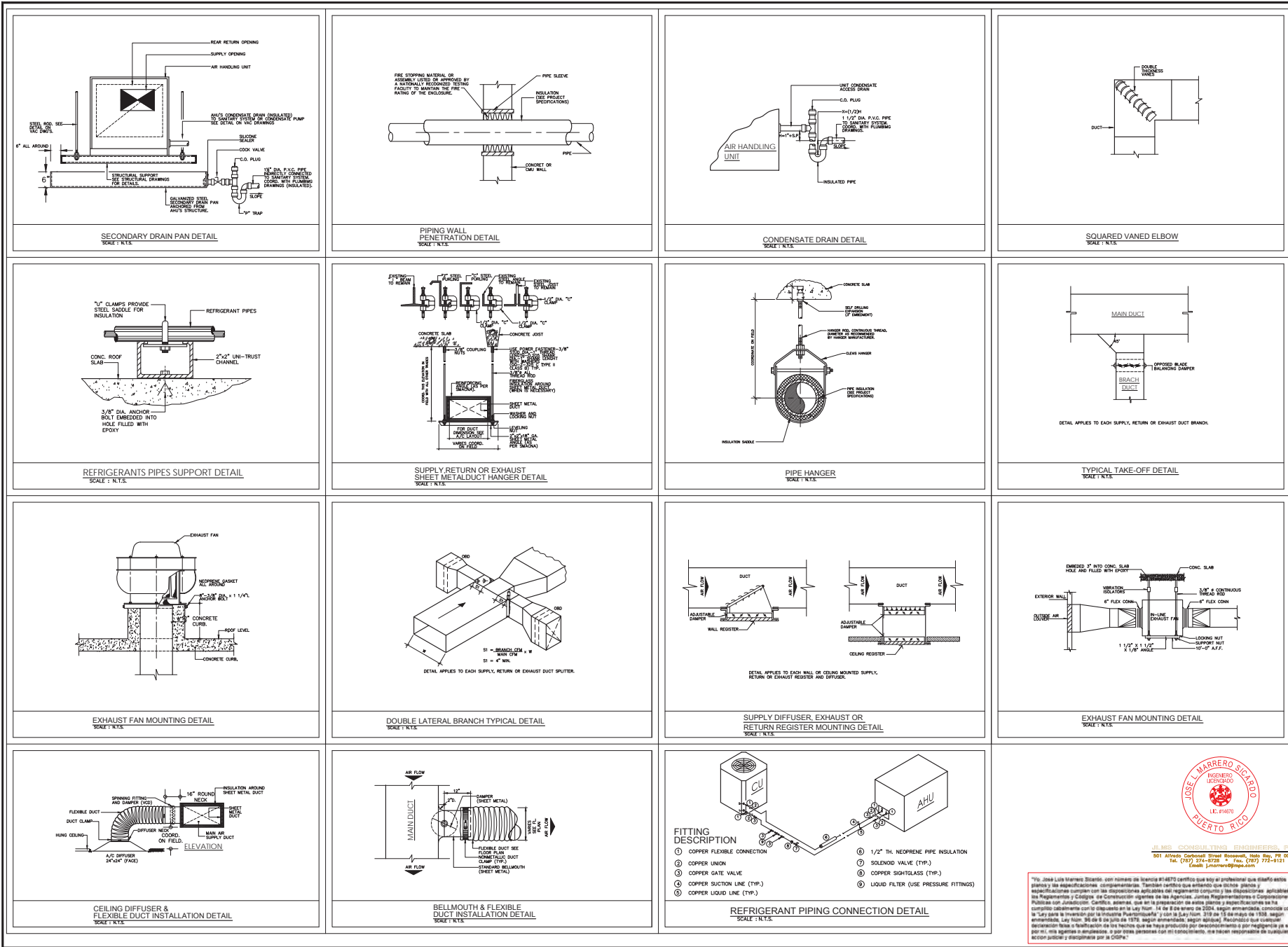
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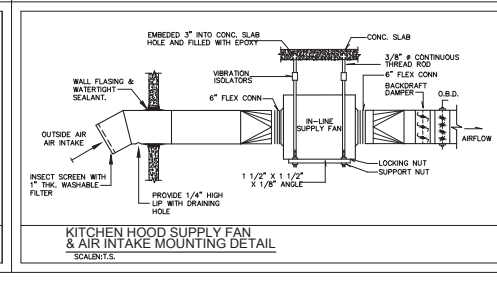
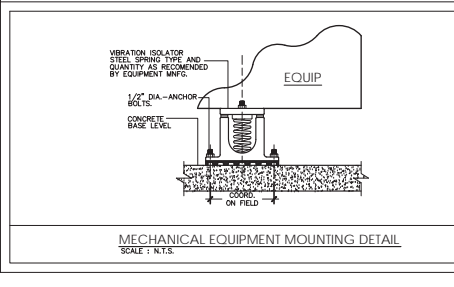
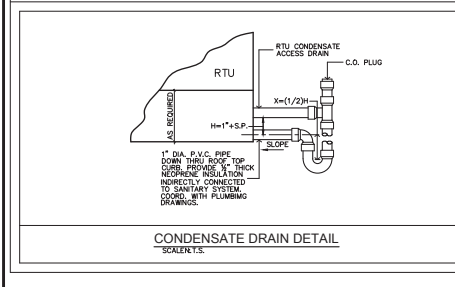
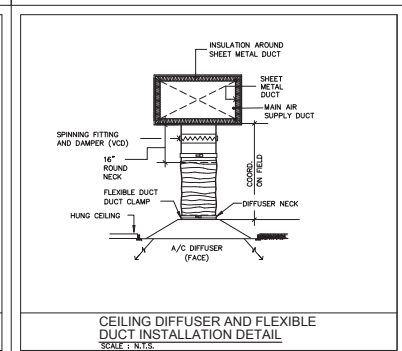
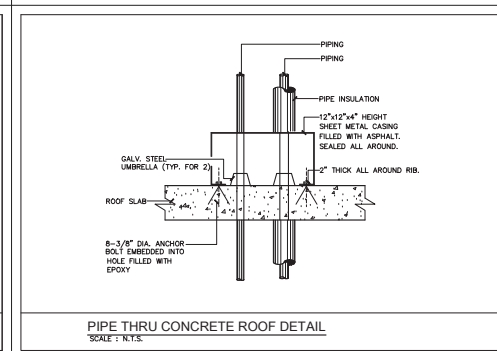
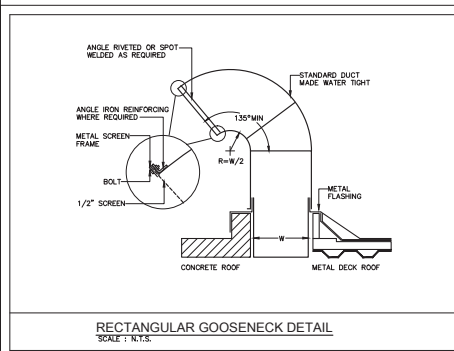
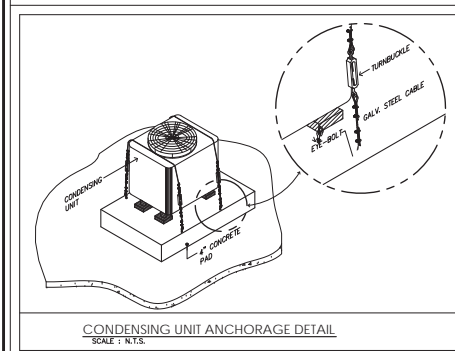
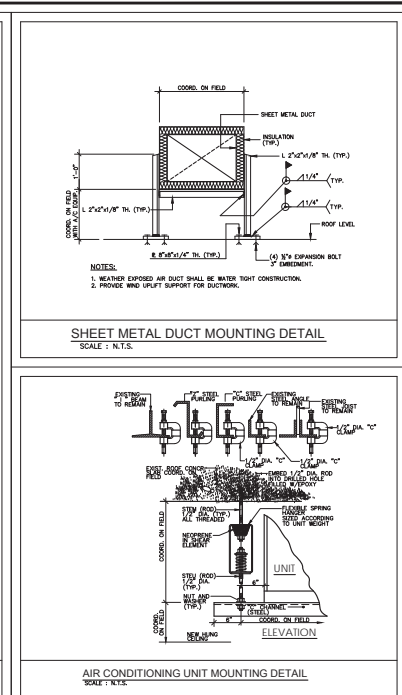
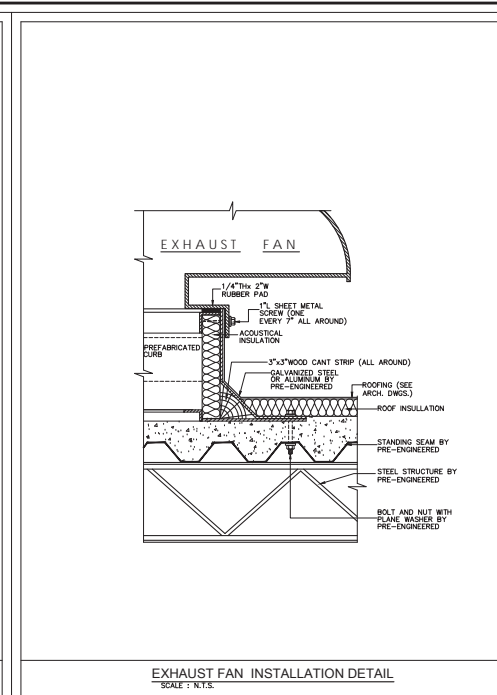
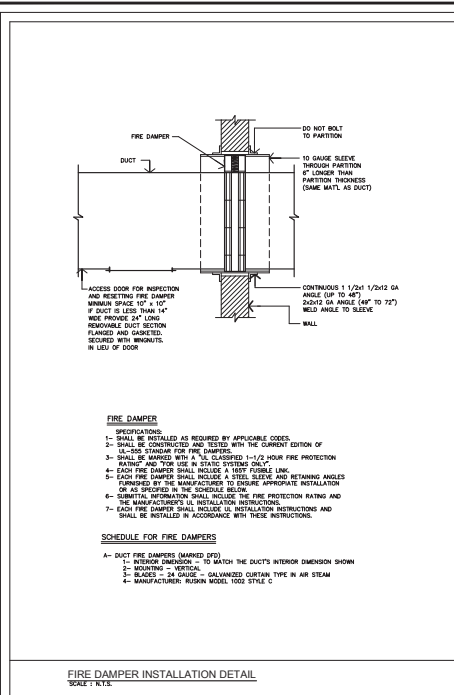
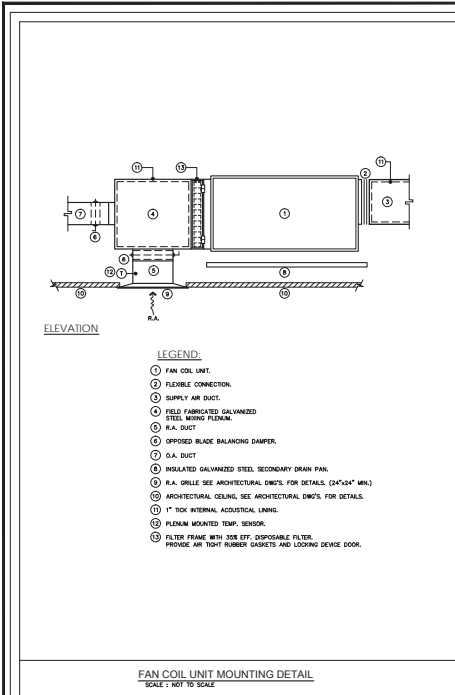
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Drawn by : J. Hernandez  
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 JOSE LUIS MARRERO  
 Date  
 DECEMBER 2022  
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**IMPROVEMENTS & EXPANSION MUNICIPAL COLISEUM**  
**ANGEL MERCADO VEGA**  
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**SABANA GRANDE, PUERTO RICO**  
 Drawing Title  
**VAC DETAILS**

Scale  
 N.T.S.  
 File Name  
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 Drawing Number  
 VAC-300  
 Sheet Number  
 64

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**JOSE L. MARRERO SICARDO**  
INGENIERO  
LICENCIADO  
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**DANILO SALAZAR**  
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Drawn by : J. Hernandez

Checked by  
JOSE LUIS MARRERO

Date  
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**VAC DETAILS**

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