



DRAFT

Environmental Assessment

for the Construction, Operation and Maintenance of a
New Hangar and Administrative Support Facility

U.S. Customs and Border Protection
Office of Air and Marine
Caribbean Air and Marine Branch
Aguadilla, Puerto Rico

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Homeland
Security



DRAFT
ENVIRONMENTAL ASSESSMENT
NEW HANGAR AND ADMINISTRATIVE SUPPORT FACILITY
FOR
UNITED STATES CUSTOMS AND BORDER PROTECTION
OFFICE OF AIR AND MARINE
AGUADILLA, PUERTO RICO

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ENVIRONMENTAL ASSESSMENT

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1 INTRODUCTION

This document summarizes the potential environmental impacts and proposed mitigation measures for the proposed new hangar and administrative support facility that will serve the operations of the Office of Air and Marine (OAM) of the U.S. Customs and Border Protection (CBP) at the Rafael Hernández International Airport (RHIA), also known as the "Borinquen Airport", at Aguadilla, Puerto Rico. CBP is a federal law enforcement agency of the U.S. Department of Homeland Security (DHS).

The mission of the OAM is to protect the American people and the Nation's critical infrastructure by using air and marine forces to detect, interdict and prevent acts of terrorism and the unlawful movement of people, illegal drugs, and other contraband toward or across the borders of the United States. Air and Marine Interdiction Agents are endowed with the authority to enforce Title 8 (Aliens and Nationality) and Title 19 (Customs) of the United States Code (USC) in addition to the general law enforcement powers bestowed upon federal law enforcement agents.

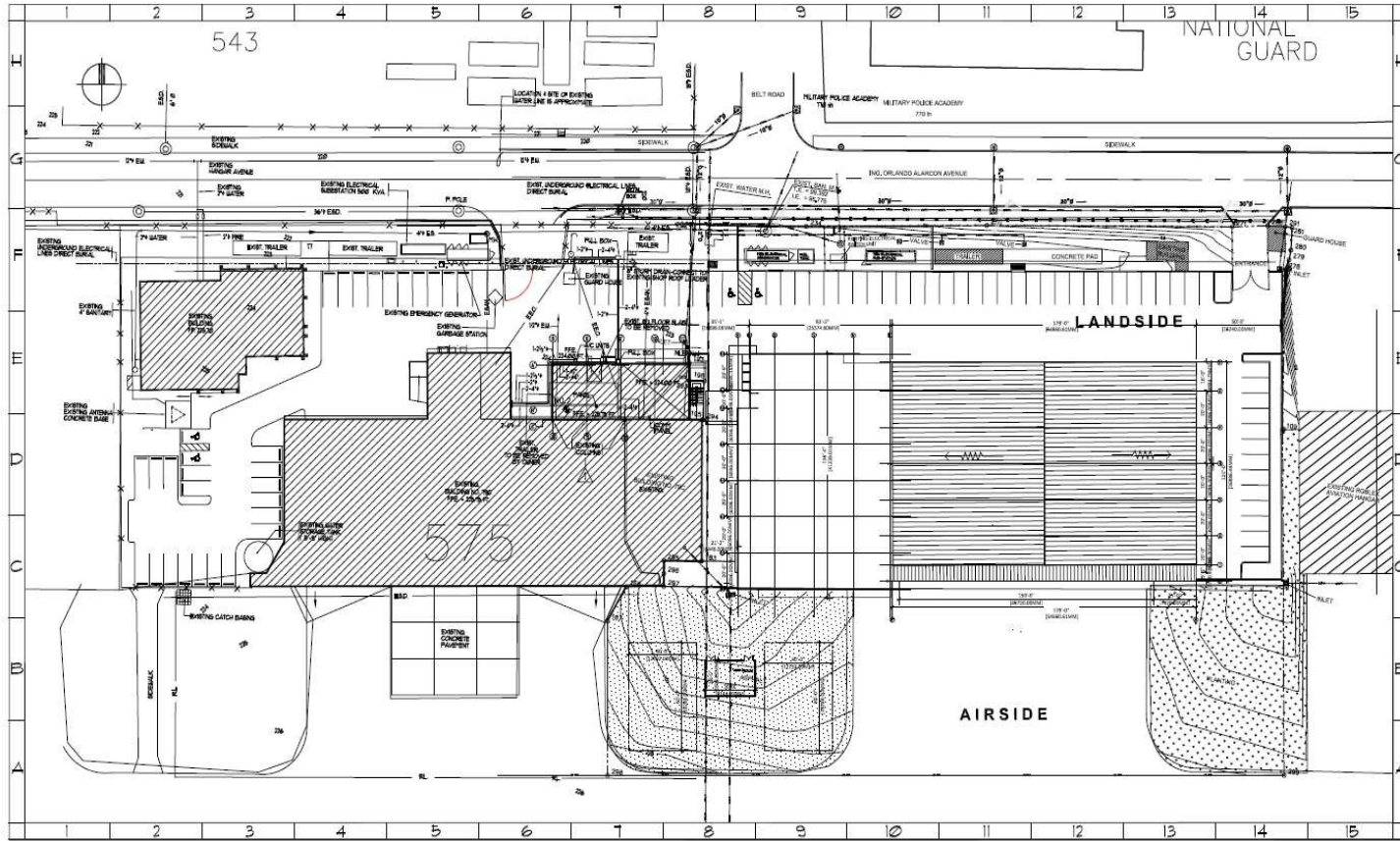
Existing facilities for OAM's Caribbean Air and Marine Branch (CAMB), also known as the Aguadilla Air Unit, do not adequately support mission requirements, which have recently increased due to increased illegal activities around Puerto Rico. Present OAM operational needs exceed the current capacity of the existing facilities. The new hangar and administrative support building will address these needs. The new hangar and support facility will adjoin the existing CBP facilities at Aguadilla. A location plan for the site is presented as **Figure 1-1**, while a site plan showing the existing CBP location is shown as **Figure 1-2**.

Details on the proposed action, impacts and mitigation measures will be presented in the following sections of this report.



**ENVIRONMENTAL ASSESSMENT
NEW CBP HANGAR AND ADMINISTRATIVE BUILDING**

**Figure 1-1
Location Plan**



**ENVIRONMENTAL ASSESSMENT
NEW CBP HANGAR AND ADMINISTRATIVE BUILDING**

**Figure 1-2
Site Plan**

2 PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action

The proposed action consists of the construction of a Maintenance Hangar with an approximate floor area of 20,000 square feet (SF)(1,858 square meters), an Administrative Hangar Support Building with approximate floor area of 10,000 SF (929 square meters), an open hangar area with fifteen (15) parking spaces, extension of existing infrastructure (principally electric and water service facilities), and associated site and access modifications.

The Maintenance Hangar will be designed to accommodate the largest four (4) aircraft at one time. The number of law enforcement officers that the building is capable of supporting is 40.

The entire project (referred to as the New Hangar Facility) will occupy an area of approximately 136,000 SF (12,600 square meters), in an area adjacent to the existing runway and the existing CAMB facilities. This is roughly half of a rectangular parcel currently occupied by CBP with other facilities including various buildings and a hangar built by the US military in 1942. Site orientation is practically square with the compass headings, east to west along an axis that is parallel to the runway. The airside faces south toward the runway and its vehicular and pedestrian access is from the north of the site.

2.2 Alternatives Considered

All the alternatives for the proposed action still under consideration, including the "Preferred Alternative" and the "No Action" alternatives, are discussed in this section. A total of four (4) alternative configurations for the proposed project were initially identified as feasible for the project. These will be discussed below. The No-Action alternative and other alternatives discarded from consideration will also be discussed. Due to the size of the drawings, illustrations presenting the various alternatives are presented as attachments to this document.

2.2.1 *Alternative A*

Alternative A, presented in **Attachment A**, consists of a 20,000 SF hangar and a two-story Administrative Building with an approximate total floor area of 12,900 SF, both located within a single structure, connected to the existing building via a bridge with approximate area of 330 SF.

2.2.2 *Alternative B*

Alternative B, presented in **Attachment B**, also consists of a 20,000 SF hangar and a two-story Administrative Building with an approximate total floor area of 12,900 SF, but located in separate structures, and connected to the existing building via a bridge with approximate area of 95 SF.

2.2.3 *Alternative C*

Alternative C, presented in **Attachment C**, consists of a 20,000 SF hangar and a single story Administrative Building with an approximate total floor area of 10,950 SF, and incorporates an inner courtyard.

2.2.4 *Alternative D*

Alternative D, presented in **Attachment D**, consists of a 20,000 SF hangar and a single story Administrative Building with an approximate total floor area of 10,500 SF, omitting the inner courtyard.

2.2.5 *No Action Alternative*

The proposed project would not be constructed under the "No Action" alternative. As has been noted, the existing facilities do not adequately support mission requirements, which have increased during the recent past due to increased illegal activities around Puerto Rico. Not undertaking the proposed project would hinder the ability of the CBP OAM to fulfill its assigned mission. This would increase the vulnerability of Puerto Rico, and the Nation as a whole, to illegal activities and terrorist actions. For this reason, "No Action" is not a viable alternative in the present case.

2.2.6 *Other Alternatives Eliminated from Consideration*

Theoretically, additional locations, such as other airfields in Puerto Rico could have been considered for the proposed project. However, the proposed project is meant to augment the capabilities of the OAM's Caribbean Air and Marine Branch (CAMB), which is located in Aguadilla. Other locations would fragment the capabilities of the CAMB. For this reason, the proposed project must be located in Aguadilla, next to the existing CAMB facilities.

2.3 Selected Alternative

After an evaluation of the four feasible alternatives, a modified version of Alternative D was selected for implementation. The selected alternative, presented in **Attachment E**, consists of a hangar with a one-story 11,800 SF (1,102 m²) attached support building. The selected alternative includes all of the changes to the design program developed during partnering sessions with GSA/CBP.

The hangar will be a pre-engineered structural steel framed building, with sheathed with a combination of concrete masonry units ("blocks") and cold rolled metal, and an insulated metal roof on reinforced concrete spread footings. The types of aircraft and aircraft mix that will populate the hangar were taken into consideration by the project designers to establish the height and area requirements in an efficient and cost effective manner.

The support building will have a poured-in-place reinforced concrete structure with reinforced concrete and concrete masonry units ("blocks") exterior walls, and reinforced concrete roof and spread footings. During the design review phase of the project, it was determined that this alternative was both the most cost effective and the quickest to build. During the time required for the pre-engineered hangar to be fabricated and shipped to the site, the contractor can complete concrete work for the support building, thereby shortening the total time of construction substantially.

2.4 Summary Table

A summary of alternatives considered for the project is presented in **Table 2-1**.

**TABLE 2-1
DESCRIPTION OF ALTERNATIVES**

ALTERNATIVE	NO ACTION	A	B	C	D	SELECTED
DESCRIPTION	No new construction. CBP CAMB operations would continue in existing deficient facilities, hindering ability to fulfill assigned mission	20,000 SF hangar and two-story Administrative Building with floor area of 12,900 SF, within a single structure, connected to the existing building via 330 SF bridge Attachment A	20,000 SF hangar and two-story Administrative Building with total floor area of 12,900 SF, located in separate structures, connected to the existing building via 95 SF bridge Attachment B	20,000 SF hangar and single story Administrative Building with floor area of 10,950 SF, incorporating an inner courtyard. Attachment C	20,000 SF hangar and single story Administrative Building with floor area of 10,500 SF, omitting the inner courtyard. Attachment D	20,000 SF pre-engineered steel hangar with a one storied reinforced concrete and CMU 11,800 SF attached support building. Attachment E

3 AFFECTED ENVIRONMENT AND CONSEQUENCES

3.1 Preliminary Impact Analysis

This section of the EA describes the natural and human environment that exists within the project area, and the potential impacts of the Proposed Action as outlined in Section 2.0 of this document. Only those parameters with the potential to be affected by the Proposed Action are discussed, as required by the Council for Environmental Quality (CEQ), regulations, 40 CFR 1501.7.

The impact analysis presented in this EA is based upon existing regulatory standards, scientific, and environmental knowledge and best professional judgment. Some topics are limited in scope due to the lack of direct effect from the proposed project on the resource, or because that particular resource is not located within the proposed project location.

Impacts (consequences or effects) can be either beneficial or adverse, and can be either directly related to the action or indirectly caused by the action. Direct impacts are those effects that are caused by the action and occur at the same time and place (40 CFR 1508.8). Indirect impacts are those effects that are caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). In addition, impacts may be classified as temporary (*e.g.*, lasting the duration of construction), short-term (*e.g.*, up to 3 years), and long-term (*e.g.*, greater than 3 years in duration). The magnitude of adverse impacts can range from negligible to major, as described below:

- **Negligible impacts** have effects would be at or below the level of detection, with no perceptible consequences.
- **Minor impacts** have detectable, but localized effects, with little consequences to the sustainability of the affected resources. Mitigation measures, if needed to offset adverse effects, would be simple and easily achievable.
- **Moderate impacts** are those with effects that are readily detectable, long-term, but localized and measurable. Mitigation measures, if required to offset adverse effects, may be greater in scope than those required for minor impacts, but reasonably achievable.
- **Major impacts** are those with effects that are obvious, long-term, and with substantial consequences on a regional scale. Mitigation measures to offset adverse effects are always required, extensive, and their success may not necessarily be guaranteed.

3.1.1 Mitigation

Mitigation measures are meant to reduce environmental impacts of the proposed action. Mitigation measures may include:

- Rectifying an impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating an impact over time by preservation and maintenance operations during the life of the action.
- Compensating for an impact by replacing or providing substitute resources or environments.

In the case of temporary construction impacts, Best Management Practices (BMPs) may be used to minimize the impact of proposed construction activities. BMPs are designed to avoid, remedy, or reduce adverse impacts during construction of the project.

3.2 Land Use

3.2.1 Affected Environment

The proposed project site is located on the grounds of the Rafael Hernández International Airport (RHIA), also known as “Borinquen Airport” in Aguadilla Puerto Rico. The site adjoins existing CAMB facilities, and neighboring facilities are hangars, air terminals and other facilities related to the operation of the airport.

Land use in Puerto Rico is managed under a two component system, set by the Puerto Rico Planning Board. The first component is classification (*clasificación*), which divides land in three major classes: urban land, rustic land, and land suitable for development (“*urbanizable*”) with some subclasses for special conditions. The project site is classified as “SRC”- (*suelo rústico común*), as is the rest of the RHIA complex. The second component is qualification (*calificación*), which current regulations use as a synonym for zoning, and is meant to designate land uses. Under this zoning system, the project site is classified as DT-G (*Dotacional general*), which is land that is meant for institutional, infrastructure or similar uses. Copies of land classification and qualification maps for the project area are presented in **Attachment F**.

3.2.2 Consequences

The proposed project is highly compatible with existing and proposed land uses at the project site. For this reason, no adverse effects on land use are expected.

3.3 Geology and Soils

3.3.1 Affected Environment

Geological formations in the project area are classified by the United States Geological Survey (USGS) as Aymamón Limestone (Taz), which consists of pale orange to bright yellow chalk interbedded with pale orange to white limestone, typical of karstic terrain.

The Natural Resources Conservation Service (NRCS) classifies soils in terms of taxonomy and other soils science characteristics. The information on the website indicates, however, that the soils survey of the area has not been completed. Some information on soils is presented in the "General Soil Map" of the Soil Survey of Mayaguez Area of 1975, which identifies the soil of Aguadilla as belonging to the "Bejucos-Jobos association". These soils are characterized as being "strongly leached soils that have a tight, dominant clayey subsoil". The specific project area was not, however, surveyed in detail at the time because it was occupied by Ramey Air Force Base.

During the geotechnical study for the proposed project, six borings were carried out to depths of 20 to 26 feet below the existing grade. These revealed that soils at the site are consistent with the description in the geologic map (Karst topography), with the upper portion of the soil profile (6 to 15 feet) made up of silty clay with various amounts and combinations of sand and limestone fragments.

Copies of the portions of the USGS geological map and the NRCS map are presented as **Attachment G** to this document.

3.3.2 Consequences

The only impact of the proposed alternative is that approximately 4,000 square meters of the paved area which adjoins the runway and existing CBP complex would be used to construct the proposed facilities. The presence of adjacent facilities indicates that, from a geological and soils standpoint, the site is suitable for the construction of the proposed project. A geotechnical survey will be performed to determine site-specific engineering information for design.

3.4 Vegetation

3.4.1 Affected Environment

Natural systems in the project area were affected by the construction of the air force base, runway and subsequent expansions and modifications. Within the existing CBP compound, vegetation has been totally eliminated, save for two ornamental planting strips, which will not be affected by the proposed project. The area where the proposed project is to be located is totally paved and devoid of any vegetation. Please refer to **Figure 3-1**, which illustrates the project site.

3.4.2 Consequences

The proposed project would have no adverse impacts on vegetation.

3.5 Wildlife and Aquatic Resources

3.5.1 Affected Environment

The project area is part of the runway and associated facilities of the airport, and is totally paved. During a biological inspection, no animal species of any kind were observed within the proposed project site. No aquatic resources are present in the area.



**ENVIRONMENTAL ASSESSMENT
NEW CBP HANGAR AND ADMINISTRATIVE BUILDING**

**Figure 3-1
Proposed Project Site**

3.5.2 Consequences

No wildlife or aquatic resources would be adversely affected by the proposed project.

3.6 Threatened and Endangered Species

3.6.1 Affected Environment

The original ecosystems present in the area of the proposed project have been eliminated, principally due to the construction of the air force base and subsequent modifications, but also due to the previous agricultural activities at the site. No traces of the original flora and fauna remain in the site where the proposed project is to be located.

3.6.2 Consequences

No threatened or endangered species would be adversely affected by the proposed project.

3.7 Hydrology and Groundwater

3.7.1 Affected Environment

Hydrology of the Aguadilla region is typical of karst areas and is characterized by few surface-water drainage features. Rio Camuy and Rio Guajataca, both located over two miles from the project site are the only two perennial streams. Quebrada de los Cedros, the only other surface-drainage feature of significant size, is located at some distance northeast from the project site, is an ephemeral stream. Runoff in the project site and its vicinity is conveyed by a storm sewer system which eventually discharges to the ocean.

The water-table aquifer in the Aguadilla region is comprised of rocks of the Aymamón Limestone and the Los Puertos Formation. The Aymamón is the most important part of the aquifer in the north because the Los Puertos lies below the freshwater/saline-water interface near the coast. The estimated freshwater-saturated thickness of the water-table aquifer ranges from zero at the southern limit of the aquifer to over 600 feet, south of Isabela.

Illustrations of water resources and groundwater data are presented in **Attachment H**.

3.7.2 Consequences

The proposed project is not expected to adversely affect surface or groundwater resources in the area.

3.8 Surface Waters and Waters of the United States

3.8.1 Affected Environment

The RHIA is located within the Río Guajataca watershed (see **Attachment H**), but no surface water bodies or wetlands are present in the vicinity of the project site. Runoff from the site drains through storm sewers and natural channels that eventually discharge to the ocean. Any materials that may be conveyed by runoff have the potential of affecting quality of receiving waters.

3.8.2 Consequences

The required earthwork for the proposed project has the potential to affect water quality during its construction stage. There may be temporary adverse impacts from the site, during and shortly after rain events. These effects may include a temporary increase in erosion and sedimentation during construction. Such potential impacts would be minimized by the implementation of Best Management Practices (BMPs), that will be determined as part of detailed design, and summarized in the Plan for Control of Erosion and Sedimentation (CES plan) that is required as part of the Consolidated General Permit for Construction Activities (CGP), which is issued by the Puerto Rico Environmental Quality Board (EQB), as well as in the Stormwater Pollution Prevention Plan (SWPPP) which is required to comply with the requirements of the Construction General Permit (CGP) issued by the U.S. Environmental Protection Agency (EPA). Once construction is completed, the project area will be stabilized by pavement and the new construction and the risk of pollution from sedimentation associated with construction will be eliminated.

Water quality during the operation of the expanded facility may be adversely affected by releases of fuels, lubricants and other pollutants that may eventually be conveyed by runoff. This risk is present in the current CBP operation and is not expected to materially increase as a result of the proposed project. The existing site-specific Spill Prevention, Control and Countermeasure Plan (SPCCP) for the SBP site would be revised to reflect changes in configuration in order to minimize the risk of an accidental discharge to surface or groundwater.

Runoff from the proposed project site (as well as most other activities at Borinquen Airport) is regulated by the EPA as “stormwater discharges associated with industrial activity.” Applicable requirements for air transportation facilities are presented in Sector S1 of the EPA’s Multi-Sector General Permit (MSGP) for stormwater associated with industrial activities. These requirements include submittal of a Notice of Intent (NOI) for coverage under the MSGP and the preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP), incorporating structural and non-structural best management practices (BMPs) aimed at reducing the risk of stormwater pollution. The NOI and SWPPP for the CBP site must be revised to reflect the changes in configuration resulting from the proposed project. Proper implementation of the BMPs prescribed by the SWPPP will minimize the risk of stormwater pollution associated with the operation of the new facilities.

3.9 Floodplains

3.9.1 Affected Environment

The National Flood Insurance Act of 1968, as amended (42 U.S.C. 4001, *et seq.*); and the Flood Disaster Protection Act of 1973 (PL 93-234, 87 Stat. 975); Executive Order (EO) 11988, Floodplain Management; require that each Federal agency take actions to reduce the risk of flood loss, minimize the impact of floods on human safety, health and welfare, and preserve the beneficial values which floodplains serve. EO 11988 requires that agencies evaluate the potential effects of actions within a floodplain and to avoid floodplains unless the agency determines there is no practicable alternative. The project site is classified by FEMA under unshaded flood zone X, which is defined as a minimal risk area, outside the 1-percent (100 year) and 0.2-percent (500-

year) annual-chance floodplains. A copy of the applicable portion of the FEMA map is presented in **Attachment I**.

3.9.2 Consequences

Floodplains would not be adversely affected by the proposed project and no significant risk of flooding exists at the proposed project site.

3.10 Air Quality

3.10.1 Affected Environment

There are no major stationary air emission sources in the vicinity of the project. There are emissions from mobile sources, such as aircraft and motor vehicles, and there are some minor stationary sources. The project area is not classified as a non-attainment area for any of the parameters covered by the National Ambient Air Quality Standards (NAAQS).

3.10.2 Consequences

The emissions of air pollutants would occur during construction from the use of equipment (combustible emissions) and the disturbance of soils (fugitive dust). Best management practices would be implemented during construction, as required by EQB regulations to minimize the potential effects of fugitive dust emissions. The requirements of the fugitive dust emission section of the EQB CGP will be strictly complied with. Thus, any effects from air emissions during proposed construction activities would be temporary and minor.

No significant changes in current air emission levels are to be expected after the proposed project begins operations.

3.11 Noise

3.11.1 Affected Environment

The Noise Pollution and Abatement Act (“NCA”) of 1972 directs federal agencies to comply with federal, state, and local noise control regulations. Noise is defined as unwanted sound, indicating that perceived noise impacts are inherently subjective. There are health consequences of elevated sound levels. Elevated workplace or other noise can cause hearing impairment, hypertension, ischemic heart disease, annoyance, sleep disturbance, and decreased school performance. The impact of noise is sufficient to impair hearing over the course of a lifetime. Elevated noise levels can create stress, increase workplace accident rates, and stimulate aggression and other anti-social behaviors.

The proposed project site adjoins an airport runway and is thus subject to significant noise levels from aircraft operations, both those of CBP and those from other operators. People generally acclimate to the usual background noise, but will be disturbed by new noises. For this reason, it is important to avoid unnecessary noises.

3.11.2 Consequences

During the construction phase of the project, noise levels in the project site may temporarily increase due to the use of construction equipment. However, this noise impact would normally occur only during working hours. It is also anticipated that large construction equipment would not be in constant use for 8 hours on any given day. Because temporary construction noise levels would occur only for short periods, short term adverse impacts resulting from noise of construction activities should not be significant.

No significant changes in current noise levels are to be expected after the proposed project begins operations.

3.12 Cultural and Structural Resources

3.12.1 Affected Environment

The proposed project is located at the northwest corner of the Rafael Hernández International Airport (BQN), the former Ramey Air Force Base; an area that corresponds to barrio Maleza Baja of Aguadilla. The project site is located on the paved area that adjoins the runway and the existing CBP facilities. This area has been disturbed by construction of the Air Force base and subsequent airport-related facilities, as well as by its previous agricultural uses. As part of the scope of work of the present project, a cultural and structural resources assessment was performed for the project site.

The cultural and structural resources survey concluded that the presence of any significant cultural resources is extremely improbable, and that no special measures are required to protect cultural and structural resources. The proposed project is not anticipated to have any adverse effect on cultural resources.

3.12.2 Consequences

For these reasons, the study concluded that the probability of any significant cultural resources being present at the project site is extremely low, and no special measures are required for cultural and structural resources protection.

3.13 Climate

3.13.1 Affected Environment

Aguadilla is located within the tropical zone of Puerto Rico, characterized by an annual average temperature higher than 74° Fahrenheit. According to the records of the Isabela Weather Station, which is located closest to the project site, the average annual temperature is 77.6°F. The warmest month is August with an average daily temperature of 80.2°F and the coldest is January with an average temperature of 73.6° F. Margaret Howarth (1934) divided Puerto Rico into rainfall regions. Aguadilla belongs to the Sub humid Region. The average annual precipitation at Campamento Mora in Isabela, the closest station, is 56.54 inches. The wettest month is November with an average of 6.99 inches and the driest is March with only 2.90 inches of rain. The project site, as well as all of Puerto Rico, is in a hurricane prone area. **Attachment J** includes rainfall and temperature data for the Isabela station.

3.13.2 Consequences

The proposed project is not expected to have any consequences or impacts on climate. Structures will be designed to resist expected hurricane force winds, as required by applicable codes and CBP/GSA guidelines.

3.14 Utilities and Infrastructure

3.14.1 Affected Environment

Potable water is supplied to the property by the Puerto Rico Aqueduct and Sewer Authority (PRASA) via the Ramey filtration plant. Capacity is reported as 3.0 million gallons per day (MGD), compared to an average demand of 2.0 MGD and a peak day demand of 2.5 MGD. The airport's current water distribution system is connected to two fourteen-inch cast iron mains that serve the entire property. Twelve-inch and eight-inch cast iron pipes branch out from the fourteen-inch mains to serve the north side of the airport and adjacent areas, with a twelve-inch pipe serving the buildings and an eight-inch pipe serving the fire hydrant system.

Wastewater disposal is provided to the project site by sanitary sewer lines which run on the street in front of the property, and connect to a trunk line that links the former base to the PRASA Aguadilla regional wastewater plant. The plant has a capacity of 8 million gallons per day (MGD), and is currently receiving less than 4.0 MGD.

Electric service is provided by the Puerto Rico Electric Power Authority (PREPA). Three substations distributed around the airport property provide most of the power. No power is generated on the property proper, except through occasional use of emergency generators. The distribution system consists of an overhead primary line of 4160/2400v with step-down transformers to a secondary voltage of 120/240v. The system is a three wire Delta System. In addition to the overhead lines, there is also a 38 kV underground line. PREPA's power capacity for the RHIA site is reported as 22,000 kVA versus an average demand of 7,000 kVA, and a peak demand of 7,500 kVA.

Commercial telephone service is provided to the airport by the Puerto Rico Telephone Company (PRTC). A main telephone station is located at the airport behind the Coast guard facilities.

3.14.2 Consequences

The existing infrastructure can easily supply the needs of the proposed project. No adverse consequences are anticipated.

3.15 Roadways/Traffic

3.15.1 Affected Environment

The proposed project site will be located next to the existing CBP OAM facilities in Aguadilla, which faces Orlando Alarcón Avenue. This connects to highways PR-110 (on the east) and PR-107 (on the west), which in turn connect to main highway PR-2, which provide access to the north and southwest of Puerto Rico, respectively. Traffic volume on Alarcón Avenue and highways PR-110 and PR-107 is heavy during peak hours of the day.

3.15.2 Consequences

Movement of personnel, materials and equipment will create a short-term, minor impact to roadways and traffic in the vicinity of the project during construction. A staging area inside of the CBP complex will be established to store materials and equipment during construction, so traffic will not be affected. Deliveries and equipment transport will be scheduled for off-peak hours whenever possible in order to reduce the extent of traffic disruption.

Operation of the expanded facility is not expected to increase traffic since the new project is intended to improve the existing facility, and major staffing increases are not planned. Access to the site for all vehicular and pedestrian traffic is from the north off of Ingeniero Orlando Alarcón Avenue. Two highly visible access control points currently exist at the CBP site will remain in operation during construction and after the new facilities are completed. No significant noise control measures would be required aside from the planned landscaping and security barriers currently in place because the new facilities would be located approximately 86 feet (26 meters) from Ingeniero Orlando Alarcón Avenue. The site is bounded to the east and west by other aviation facilities and hangars and to the south by the airfield. There are currently 24 parking spaces on the site. The project alternatives propose 29 additional spaces to be located in the existing paved area to the north of the site including two handicap spaces to meet accessible code requirements for van accessible stalls. Thirteen new spaces are also planned for the east side of the new hangar, and approximately twenty new spaces, including two handicapped stalls are planned for the area where the temporary office trailers are currently located once these are removed. Regular parking spaces will be a minimum 8.5' wide and 18' long.

3.16 Aesthetic and Visual Resources

3.16.1 Affected Environment

The proposed project site adjoins the existing CBP complex and is surrounded by aviation-related structures, primarily hangars built during the 1940s in a straightforward military style. Other more recent structures include the existing CBP facilities. All structures feature essentially utilitarian designs with no particular architectural style or significance.

3.16.2 Consequences

The proposed new hangar and support facilities will follow the existing utilitarian style of the surrounding structures. Still, some architectural treatment will be provided to improve aesthetic perceptions. In summary, since the new facilities will follow the same utilitarian style of its vicinity, no significant effects on visual resources and aesthetics will occur.

3.17 Hazardous and Toxic Substances

3.17.1 Affected Environment

A search of the EPA's Envirofacts Database indicated that there are eleven hazardous waste generators and one discharger covered by the NPDES permit system within a 1-mile radius of the project site. No sites in the EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), which contains information on potential hazardous

waste sites and remedial activities, and no sites on the EPA's National Priorities List (NPL or "Superfund") are located within a 1-mile radius of the proposed project site. No evidence of hazardous wastes or materials (*e.g.*, drums, soil staining) were observed at the proposed project site during the September 2013 environmental site visit. A copy of the Envirofacts printout is presented as **Attachment K** to this report.

3.17.2 Consequences

During construction of the proposed project, a potential exists for petroleum, oil, and lubricants (POL) contamination, due to storage of these materials for maintenance and refueling of vehicles and construction equipment. The BMP which will be prescribed in the SWPPP for the construction phase of the project will include measures (such as the use of primary and secondary containment measures, and prompt cleanup of any releases) to reduce the risk of such contamination. Portable sanitary facilities would be provided during construction activities and waste products would be collected and disposed of by licensed contractors. Disposal contractors would use only established roads to transport equipment and supplies, and all waste would be disposed of in compliance with Federal, state, and local regulations. These measures will serve to minimize the risk of any pollutant releases during construction.

Petroleum, oil and maintenance chemicals will be used as part of the facility's operations. The operation and maintenance of aircraft, emergency generators, and associated equipment present the potential risk of accidental releases. For this reason, the risk is not expected to materially increase as a result of the proposed project. This risk can be reduced by the implementation of BMPs. As noted in previous sections of this document, the existing site-specific Spill Prevention, Control and Countermeasure Plan (SPCC plan) and Stormwater Pollution Prevention Plan (SWPPP) should be revised to reflect changes in configuration resulting from the proposed project. Proper implementation of these measures will minimize the risk of releases.

3.18 Socioeconomics

3.18.1 Affected Environment

The U.S. Census Bureau reports that Aguadilla has 10,556 employees in 811 establishments, with an annual payroll of \$243,399,000. Per capita income in Aguadilla is \$7,908.00, lower than the average for Puerto Rico (\$10,355.00). More than 51.5% of the adult population lives below the poverty line, well over the Island's average of 34.7%. The former Ramey AFB is a major center of economic activity in the area. In addition to the activities at the RHIA, there are a number of major industries and commercial activities present at the site. Although the current recession and the elimination of Section 936 of the U.S. Tax Code have had adverse effects on the local economy (as is the case of Puerto Rico as a whole), due to its unique mix of facilities, the area is expected to continue to be an economic hub, not only for Western Puerto Rico, but for the island as a whole. Socioeconomic information for Aguadilla is presented in **Attachment L** to this document.

3.18.2 Consequences

Construction of the proposed project is expected to have a temporary favorable effect on the local economy, since a number of temporary construction jobs will be created and construction service

providers will purchase goods from local merchants. No significant economic effects are expected to occur after the proposed project begins operation.

3.19 Environmental Justice and Protection of Children

3.19.1 Affected Environment

Executive Order (EO, 1994) 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”, requires all Federal agencies to identify and address disproportionately high and adverse effect of its programs, policies, and activities on minority and low-income populations. The discussion in Section 3.18.1 of this document identified that over 51.1% of the adult population in Aguadilla live below the poverty line.

President Clinton also issued EO 13045, “Protection of Children from Environmental Health Risks and Safety Risks” in 1997. This requires that Federal agencies “identify and assess environmental health risks and safety risks that may disproportionately affect children”; and “ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.” This EO was prompted by the recognition that children, still undergoing physiological growth and development, are more sensitive to adverse environmental health and safety risks than adults. Approximately 23.7% of the total population of Aguadilla is composed of persons below 18 years of age.

3.19.2 Consequences

The proposed project is located on the grounds of the RHIA, and there will be no displacement of any population required for its implementation. Adverse environmental effects will be temporary and limited to the immediate vicinity of the site. As such, the proposed project will not result in any adverse impacts to minority or low-income populations or children. After the proposed project becomes operational, children and low income populations, who are at the greatest risk, will benefit from increased protection from drug traffic and criminal activity in general, due to the greater efficiency of CBP operations. This is a significant benefit, and the primary reason for implementing the proposed project.

3.20 Human Health and Safety

3.20.1 Affected Environment

Potential effects on human health and safety may occur in a variety of forms, such as exposure to chemicals, extreme temperatures, weather, and physical security and safety. Human health factors are generally driven by factors that differ substantially by geographic area. Factors in the project area that could adversely affect human health and safety include automobile accidents, extreme weather (*e.g.*, hurricanes, intense rain, and high temperatures), earthquakes, workplace accidents, criminal activities (*e.g.*, theft, vandalism), and terrorist activities.

3.20.2 Consequences

There is little potential for CBP personnel, other airport personnel, or the general public to be at risk from a human health and safety aspect as a result of the proposed project. Any active

construction site has the potential for safety risks to construction personnel. These can be minimized through strict adherence to occupational safety and health regulations, use of adequate personal protective equipment, and good construction practices. Buffer zones will be established around all work areas to exclude non-construction related personnel. Deliveries of major equipment and components will be scheduled, inasmuch as possible, for off-peak hours, in order to reduce the extent of traffic disruption and potential risk of accidents. Access to the construction site will also be restricted by means of the existing CBP checkpoints. For this reason, risks to human health and safety during construction are considered to be minimal.

During the operational phase of the project, potential effects on human health and safety will be minimized by ensuring the new facilities strictly comply with all requirements of applicable construction and safety codes. Structural design will be based on the provisions of the 2011 Puerto Rico Building Code, except that, in the case of hurricane winds, the more stringent requirements of ASCE 7-05 will be used where applicable. Fire safety will be provided by strict adherence to the requirements of the Puerto Rico building code and applicable NFPA standards. Electrical systems will be designed in accordance with requirements of the National Electrical Code (NEC) and the PREPA Supplementary Conditions to the NEC. From a security standpoint, the new facilities will comply with the vulnerability level of protection required by the Department of Justice. Building systems/components shall be designed to meet levels of protection applicable to aviation facilities.

Finally, operations of aircraft and other equipment in the new hangar will be conducted in accordance with applicable FAA and CBP safety regulations. For all of these reasons, risks to human health and safety during operation are considered to be negligible.

3.21 Sustainability

3.21.1 Affected Environment

Executive Order (EO) 13423 (2007), "Strengthening Federal Environmental, Energy, and Transportation Management", sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, renewable energy, sustainable buildings, electronics stewardship, fleets, and water conservation. CBP has implemented practices throughout the agency to: 1) improve energy efficiency and reduce greenhouse gas emissions, 2) implement renewable energy projects, 3) reduce water consumption, 4) incorporate sustainable environmental practices such as recycling and the purchase of recycled-content products, and 5) reduce the quantity of toxic and hazardous materials used and disposed of by the agency.

The EPA and 16 federal agencies also signed a memorandum of understanding (MOU), "Federal Leadership in High Performance and Sustainable Buildings", that committed the signatories to design, construct, and operate their facilities in an energy-efficient and sustainable manner. The MOU establishes a series of Guiding Principles, which are meant to be incorporated in new facilities.

3.21.2 Consequences

Design of the project will take into account the requirements of both cited EO's. The facility will be designed to comply with the energy standard prescribed in ASHRAE Standard 90.1-2004, and,

if feasible, attain an even lower consumption without a resulting increase in life-cycle cost. In addition, the proposed project will be registered through the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) green building rating system, in order to attain LEED certified ratings. For this project, a goal of LEED Silver certification has been established. In summary, as a result of these measures, the proposed project is expected to be a highly energy efficient and sustainable building.

3.21.3 Summary Table

A summary of impacts for each component of the environment is presented in **Table 3-1**.

**TABLE 3-1
SUMMARY OF IMPACTS**

Affected Environment	No Action Alternative	Selected Alternative	Alt. A	Alt. B	Alt. C	Alt. D
Land Use	No construction on project area, therefore, no impacts	Compatible with current land use (airport, related facilities and existing CBP complex)	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Geology and Soils	No direct impacts on soils	Approximately 4,000 SM of the paved area adjoining the existing CBP complex would be used to construct the proposed facilities. No other impacts on soils.	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Vegetation	No direct impacts on vegetation	No direct impact. Proposed site is paved and no vegetation is present	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Wildlife and Aquatic Resources	No impacts	No direct impacts. No wildlife or aquatic resources are present in the proposed project site	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Threatened and Endangered Species	No impacts.	No direct impacts. No threatened or endangered species present in the proposed project site	Same as Selected	Same as Selected	Same as Selected	Same as Selected

Hydrology and Groundwater	No impacts	No direct impacts. Hydrology and groundwater will not be affected by proposed project.	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Surface Waters and Waters of the United States	No impacts	Temporary impacts from construction site stormwater runoff during and shortly after rain events. Implementation of CES and SWPP plans incorporating BMP's will minimize these impacts.	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Floodplains	No impacts	No floodplains will be impacted	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Air Quality	No impacts	Temporary, minor impacts during construction, due to emissions from construction equipment and disturbance of soils (fugitive dust). BMP's will be implemented to reduce impacts.	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Noise	No impacts	Temporary minor increase in noise levels due to the use of construction equipment.	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Cultural and Structural Resources	No impacts	No significant cultural or structural resources are present at the project site. No impacts anticipated.	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Climate	No impacts	No impacts anticipated	Same as Selected	Same as Selected	Same as Selected	Same as Selected

Utilities and Infrastructure	No impacts	Existing infrastructure can easily supply proposed project. No adverse impacts anticipated	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Roadways and Traffic	No impacts	During construction, temporary minor impacts due to transportation of equipment, materials and supplies, minimized by proper scheduling. No additional impacts expected during operation.	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Aesthetic and Visual Resources	No impacts	New facilities will follow the same utilitarian style of vicinity, no significant effects on visual resources and aesthetics anticipated	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Hazardous and Toxic Substances	No impacts	No evidence of hazardous waste at proposed project site. Temporary risk of releases during construction minimized through BMP's and SPCC implementation. No significant additional risk during operation	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Socioeconomics	No impacts	During construction, temporary favorable impact due to economic activity generated by project	Same as Selected	Same as Selected	Same as Selected	Same as Selected

Environmental Justice and Protection of Children	No impacts	No adverse impacts anticipated. Increased protection from drug traffic and criminal activity in general from greater efficiency of CBP operations after new project becomes operational.	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Human Health and Safety	No impacts	Temporary risk of accidents during construction. Minimized by strict compliance with OSHA regulations and good working practices. No significant additional risk during operation.	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Sustainability and Greening	No impacts	Favorable impact during operation. Proposed LEED Silver Certification will result in highly sustainable new facilities..	Same as Selected	Same as Selected	Same as Selected	Same as Selected
Cumulative Impacts	No impacts	No significant cumulative impacts have been identified for proposed project	Same as Selected	Same as Selected	Same as Selected	Same as Selected

4 CUMULATIVE IMPACTS

The regulations that implement NEPA define cumulative impacts as an “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time by various agencies (Federal, state, and local), private entities, or individuals.

An assessment of cumulative impacts is required to properly assess the environmental impacts of a proposed action. This requires considering expected environmental effects from the combined impacts of past, current, and reasonably foreseeable future activities that may affect any part of the human or biological environment affected by the Proposed Action.

A review of proposed project records for the RHIA area was conducted as part of the cumulative impacts review process. Projects in Puerto Rico that may have a significant impact on the environment are required to undergo an environmental review process that is managed by the Puerto Rico Environmental Quality Board (EQB). Projects that are expected to result in major environmental impacts are required to prepare an Environmental Impact Statement (EIS) as part of their planning process. A review of EIS documents for the years 2008 to 2012 was conducted using the PREQB website. The review showed that no major projects that would impact the RHIA area have been presented during the review period.

The proposed project location is part of the operational area of the RHIA. The possibility of future projects in the immediate vicinity of the CBP site was evaluated as part of the cumulative impacts analysis. Any such future projects would be facilities related to the operation of the airport, such as new hangars and aircraft service, which would be compatible with the present land use and activities at the RHIA. The environmental impacts of any such projects would be minor and essentially limited to the construction phase, as is the case of the proposed project.

No significant cumulative impacts have been identified as a result of this cumulative impacts review. It is possible that, in the distant future, some major project that may affect the RHIA and its vicinity may be proposed, but the nature and extent of such future projects cannot be predicted at the present time. The overall environmental impacts of the proposed project are expected to be minimal. It is, therefore, unlikely that it will significantly contribute to cumulative adverse impacts in the area.

5 MITIGATION SUMMARY

5.1 General

It is CBP's policy to reduce impacts through a sequence of avoidance, minimization, mitigation, and compensation. This section describes those measures that would be implemented to reduce or eliminate potential adverse impacts to the human and natural environment during design, construction, and operation of the project. Many of these measures have been incorporated as standard operating procedures by CBP on past projects. Mitigation measures will be presented for each stage of the project and for each resource category potentially affected.

5.2 Project Planning and Design

Sustainability and environmental considerations have been taken into account at all times during the conceptualization, planning, and design of the proposed project. The general idea is to avoid any actions that may affect the environment whenever possible.

The proposed project is located in an area where the environment has already been affected through past development, including the existing CAMB facilities. For this reason, no alterations to natural systems will result from the proposed project. The scope of work of the proposed project is specifically aimed at attaining an environmentally friendly and sustainable facility. The project will be designed to comply with current Federal standards, which include provisions for minimizing energy consumption, also known as the "Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings." The design, construction, and operation of the facility will adhere to the guideline provided by the "CBP High Performance Sustainable Buildings Handbook." The design will also follow guidelines from the USGBC LEED program to attain LEED Silver certification. In summary, as a result of these measures, the proposed project is expected to be a highly energy efficient and sustainable building.

Avoidance of environmental impacts through conscientious planning and design is one of the key ways of reducing the overall environmental impacts of the proposed project.

5.3 General Construction Activities

All construction activities will comply with the requirements of DHS Directive 025-01 for Sustainable Practices for Environmental, Energy, and Transportation Management.

The project construction perimeter will be clearly demarcated. No disturbance outside that perimeter will be allowed. The area within the designated perimeter to be disturbed at a given time will be minimized by proper staging of work and coordinating deliveries of materials and equipment to only those needed for effective project implementation.

A General Permit for Construction activities will be obtained from the Puerto Rico Environmental Quality Board (EQB). A detailed environmental control plan will be prepared and implemented as part of the requirements for this permit. The environmental control plan will include a plan for the control of erosion and sediments (CES plan), a plan for the minimization and control of fugitive dust emissions, a management plan for construction-related solid wastes and a recycling plan for wastes generated during the construction stage. A Notice of Intent (NOI) certifying that the permit's effluent limits and other requirements will be in compliance must also be filed by the

contractor in order to secure coverage under the EPA Construction General permit for stormwater. A stormwater pollution prevention plan (SWPPP) will also be prepared and implemented for the project site to comply with the CGP requirements.

Other general mitigation measures that will be applied during construction include but are not limited to:

- At the start of construction, construction personnel will receive general training on environmental protection measures, as well as project specific training on how to comply with the requirements of the CES, SWPP and SPCC plans.
- Contamination of ground and surface waters will be avoided by storing any water that has been contaminated with construction materials, oils, equipment residue, etc., in closed containers onsite until removed for disposal. Storage tanks must have proper air space (to avoid rainfall-induced overtopping), be on-ground containers, and be located in upland areas instead of washes.
- Remediation activities will be conducted in compliance with applicable EPA and EQB requirements in the event any contamination of soil or water resources occurs during construction.
- Drip pans under will be placed under parked equipment and containment zones will be established when refueling vehicles or equipment.
- Lighting impacts that may disturb neighbors or airport operations during the night will be avoided, by conducting construction and maintenance activities during daylight hours whenever possible. If night lighting is unavoidable: 1) minimize the number of lights used, 2) place lights on poles pointed down toward the ground, with shields on lights to prevent light from going up into sky, or out laterally into the vicinity.
- The movement of construction, maintenance and delivery vehicles on the surrounding roads will be conducted at off-peak hours whenever possible to reduce traffic impacts.
- Demolition or other activities that can generate significant levels of noise will be conducted during regular working hours.

5.4 Soils

Prevention of erosion and sedimentation will be a key consideration during construction activities. A CES plan will be prepared that will incorporate techniques to decrease erosion and sedimentation. Construction work will be staged to ensure that the amount of exposed soil is maintained at a minimum. Excess soils from construction activities will be used on-site whenever possible. Materials such as sand, gravel or topsoil to be used in construction will be obtained, whenever possible, from existing developed or previously used sources that are known to be clean. Use of materials from undisturbed areas will be avoided.

5.5 Water Resources

Standard construction procedures will be implemented to minimize the potential for erosion and sedimentation during construction. All work will cease during heavy rains and would not resume

until conditions are suitable for the movement of equipment and material. No refueling or storage of fuels, lubricants or construction chemicals will take place within 100 feet of storm drains, whenever possible. The risk of contamination of runoff will be reduced by limiting all equipment maintenance, staging, servicing, and dispensing of fuel, oil, and other components to designated areas. A stormwater pollution prevention plan (SWPPP) will be implemented as required by the EPA CGP to reduce the stormwater pollutant load both during construction and operations. Implementation of the SWPPP includes the implementation of a Spill Prevention Control and Countermeasures Plan (SPCC) that specifically covers fuels, petroleum products and construction chemicals. Construction personnel will receive training on pollution prevention and on the requirements of the SPCCP, SWPPP and CES Plan at the start of construction.

5.6 Air Quality

Construction activities can generate substantial air pollution in the form of fugitive dust emissions. A site-specific fugitive dust control plan will be prepared in compliance with the requirements for the EQB Consolidated General Permit. Measures to be used to control fugitive dust emissions include:

- Moistening soils by controlled sprinkling before grading or excavation.
- Properly staging work so that areas where earthwork is conducted at a given time have manageable sizes; (3) scheduling work so that time frames between dust-generating activities (earthwork) and final solutions (paving) are minimized.
- Keeping soil and aggregate piles moist by controlled periodic spraying.
- Covering soil and aggregate piles with tarps when not in use.
- Using covers on haul trucks to prevent windblown dust.

More specific measures will be presented in the Fugitive Dust section of the site-specific Environmental Control Plan that will be prepared prior to the start of construction as required by the EQB Consolidated General Permit.

5.7 Solid and Hazardous Wastes

Proper management of construction wastes is a key component of pollution prevention. A site-specific solid waste control plan will be prepared in compliance with the solid waste requirements of the EQB Consolidated General Permit. The objective of the plan will be to minimize waste generation at the source. Reuse and recycling will be conducted whenever possible to minimize the amount of materials sent to landfills when waste generation cannot be avoided. Paper and cardboard, wood scrap, recyclable metals and general putrescible wastes will be managed individually whenever feasible. Wastes will be stored in closed containers suitable for each type of waste. Construction rubbish and debris will be preferentially sent to a facility where the materials can be processed for reuse as aggregate and/or fill. Each type of waste will be collected at regular intervals to avoid accumulation of excess wastes on site.

Hazardous waste generation will be minimized by controlling the amount of construction chemicals used on the project. Whenever possible, non-hazardous chemicals or physical methods will be used instead of hazardous chemicals. For example, mechanical scarification can be used

instead of acid etching to prepare a concrete surface for plastering or top coating. Whenever possible, paints and coatings should be water-based. Use of solvent-based paints should be avoided. Any construction chemicals required should be maintained in closed containers, placed in portable dikes or other secondary containment, and should be used in controlled amounts. If any construction related hazardous or special wastes are generated despite these measures, the wastes should be accumulated in adequate containers and disposed of in accordance to applicable laws and regulations.

More specific measures for solid and hazardous wastes will be presented in the site specific Environmental Control Plan that will be prepared prior to the start of construction, as part of the EQB Consolidated General Permit.

5.8 Noise

All construction equipment used at the project will comply with applicable noise level standards in order to mitigate noise impacts during the construction phase of the project. Personnel will be provided with protective equipment to protect hearing. Any activities that will generate significant noise levels (*e.g.*, demolition) will only be conducted during regular working hours.

5.9 Cultural and Structural Resources

The Cultural and Structural Resources Investigation conducted for the proposed project concluded that the probability of any significant cultural resources being present at the project site is extremely low. Work will cease in the immediate area of finding any artifacts of cultural or archeological significance during construction activities. Concerned agencies (the Institute of Puerto Rican Culture and the State Historic Preservation Office) will be notified so the appropriate actions to prevent the loss of significant cultural or scientific values can be determined and implemented.

6 CONSULTATION AND COORDINATION

6.1 General

Both the NEPA process and the equivalent Puerto Rico environmental review process include requirements for interagency coordination and public participation in planning and project development decision making. This section presents the way in which these requirements will be complied with for the subject project.

6.2 Agency Coordination and Consultation

Prior to the preparation of this EA, a description of proposed action and alternatives (DOPAA) was prepared and circulated to concerned agencies, notifying of the proposed action and requesting comments and suggestions on potential environmental impacts and areas of concern. This draft EA will also be circulated to concerned agencies, for review and comments. Comments on the EA will be requested from the following agencies:

- Puerto Rico Environmental Quality Board
- Puerto Rico Department of Natural and Environmental Resources
- Puerto Rico Department of Health
- Puerto Rico Ports Authority
- Puerto Rico Planning Board
- Puerto Rico Permits Management Office (OGPe)
- Puerto Rico Department of Transportation and Public Works
- Puerto Rico Department of Economic Development and Commerce
- Puerto Rico Tourism Company
- Puerto Rico Aqueduct and Sewer Authority
- Puerto Rico Electric Power Authority
- Municipality of Aguadilla
- University of Puerto Rico, Aguadilla Campus
- Caribbean Environmental Protection Division, U.S. Environmental Protection Agency
- Caribbean Ecological Field Office, U.S. Fish & Wildlife Service
- Federal Aviation Administration, SJU ACT

A complete Cultural and Structural Resources Investigation has also been submitted to the Puerto Rico State Historic Preservation Office (SHPO) and the Terrestrial Archaeology Program of the Institute of Puerto Rican Culture (ICPR) for review and comment.

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References appear in the order these are cited or used in the text of the EA.

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8 ABBREVIATIONS AND ACRONYMS

AMF	Air and Marine Facilities Program Management Office, CBP
ASCE	American Society of Civil Engineers
BMP	Best Management Practice
BQN	IATA airport code for RHIA
CAMB	Caribbean Air and Marine Branch, CBP
CBP	U.S. Customs and Border Protection
CEFO	Caribbean Ecological Field Office of USFWS
CEPD	Caribbean Environmental Protection Division of USEPA
CEQ	U.S. Council for Environmental Quality
CERCLIS	EPA Comprehensive Environmental Response, Compensation and Liability (list of contaminated sites)
CES	Control of Erosion and Sedimentation
CFR	Code of Federal Regulations
CGP	Consolidated General Permit
CMU	Concrete Masonry Units (“blocks”)
DHS	Department of Homeland Security
DOPAA	Description of Proposed Action and Alternatives
DP-G	“Dotacional General”-zoning qualification in Puerto Rico
DTOP	Puerto Rico Department of Transportation and Public Services Works
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EQB	Puerto Rico Environmental and Quality Board
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
GSA	U.S. General Services Administration
IATA	International Air Transport Association
ICAO	United Nations’ International Civil Aviation Organization
ICPR	Spanish acronym for Institute of PR Culture
kVA	Kilovolt ampere

kV	Kilovolt
kW	Kilowatt
LEED	Leadership in Energy and Environmental Design
m ²	Square meter (equivalent to 10.7633 square feet)
m	Meter (equivalent to 3.2808 feet)
MGD	Million gallons per day
MOU	Memorandum of Understanding
MSGP	EPA's Multi-Sector General Permit for Stormwater
NAAQS	National Ambient Air Quality Standards
NCA	Noise Pollution and Abatement Act of 1972 (also known as the Noise Control Act of 1972)
NRCS	National Resources Conservation Service, U.S. Department of Agriculture
NEC	National Electrical Code
NFPA	National Fire Protection Association
NOI	Notice of Intent
NPDES	EPA's National Pollution Discharge Elimination System, system of permits for discharge to water bodies
NPL	EPA's National Priorities List, also known as "Superfund List", shows major contaminated sites
OAM	Office of Air and Marine, CBP
OGPe	PR Office of Permits Management, issues construction permits
OSHA	U.S. Occupational Safety and Health Administration
PR	Puerto Rico
PR-(number)	Puerto Rico Highway, <i>e.g.</i> PR-2
PRBC	Puerto Rico Building Code, now based on the 2011 International Building Code
PRDNER	Puerto Rico Department of Natural and Environment Resources
PRDOH	Puerto Rico Department of Health
PROSHA	Puerto Rico Office of Safety and Health Administration
PRPA	Puerto Rico Ports Authority
PRPB	Puerto Rico Planning Board
PRTC	Puerto Rico Telephone Company
PRTC	Puerto Rico Tourism Company

PRASA	Puerto Rico Aqueduct and Sewer Authority
PREPA	Puerto Rico Electric Power Authority
SHPO	State Historic Preservation Office
Taz	USGS acronym for Aymamón limestone
TJBQ	ICAO Airport code for RHIA
RHIA	Rafael Hernández (“Borinquen”) International Airport
SF	Square foot
SRC	“Suelo rústico común”- land use classification in Puerto Rico
SPCCP	Spill Control and Countermeasure Plan
SWPPP	Stormwater Pollution Prevention Plan
UPR	University of Puerto Rico
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGBC	United States Green Building Council
USGS	U.S. Geological Survey

9 LIST OF PREPARERS

JOSE A. MARTI, Principal Investigator for EA Preparation

Education: Civil Engineer, 1976, University of Puerto Rico. Graduate Studies in Sanitary and Structural Engineering, 1977, University of Puerto Rico. Master of Science in Environmental Engineering, Northeastern University, Boston, MA, 1978. *Diplôme de Français* (4 year program), Alliance Française de Puerto Rico, 2007. **Registrations:** Registered professional engineer in Puerto Rico (#7927) and Massachusetts (#33544). Licensed Professional Planner in Puerto Rico (#682). **Certifications:** Diplomate (DEE), American Academy of Environmental Engineers and Scientists (AAEES). Diplomate (DWrE), American Academy of Water Resources Engineers (*first person in Puerto Rico with this certification*). Environmental Engineering Subspecialty Certification in Sustainability, AAEES, 2010 (*one of first 18 engineers in the world with this certification*). 35 years of experience in environmental engineering and planning, Prepared or managed preparation of multiple EA's and EIS for all types of projects.

SARA J. ARROYO, EA Preparation and Review

Education: Bachelor in Environmental Design and Master of Architecture, University of Puerto Rico. **Registrations:** Registered Architect in Puerto Rico. Licensed Professional Planner, Puerto Rico. Over 20 years of experience in environmental planning and permitting, Worked in preparation of multiple EA's and EIS and in regulatory analyses for all types of projects.

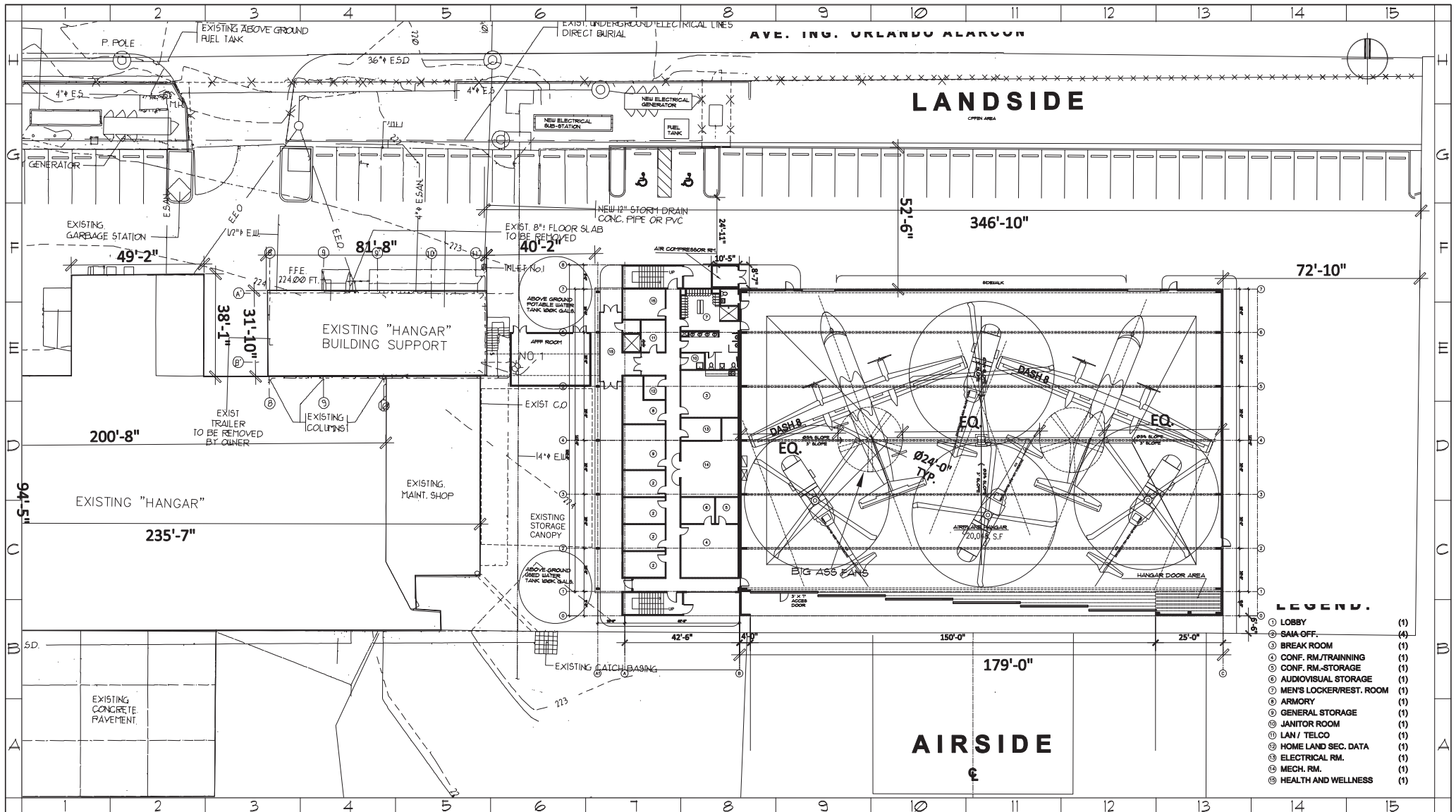
ARMANDO J. MARTI, Cultural Resources Investigations

Education: Bachelor of Arts with majors in Anthropology and Psychology, Boston University. Master of Arts in Puerto Rican Studies (major in archaeology and ethnohistory), Caribbean Advanced Studies Center San Juan. Doctoral studies, graduate archaeology program of the University of Seville. PhD (major in Puerto Rican and Caribbean History), Caribbean Advanced Studies Center, San Juan. Over 20 years of experience in multiple archaeological and cultural resources investigations for infrastructure, industrial and residential projects. Worked for 5 years in the Puerto Rico State Historic Preservation Office (SHPO), reaching the position of State Archaeologist for Puerto Rico. Currently serves as Professor of History at Interamerican University of Puerto Rico.

ATTACHMENTS

- A- Alternative A
- B- Alternative B
- C Alternative C
- D Alternative D
- E Selected Alternative
- F- Land Use and Zoning Maps
- G- USGS and NRCS Geology and Soils Maps
- H- Water Resources and Groundwater Data
- I- FEMA Firmette (floodplain information)
- J- Climate Data
- K- EPA Envirofacts Report
- L- Socioeconomic Summary for Aguadilla

Attachment A
ALTERNATIVE A



REV. NO.	DATE	REVISION DESCRIPTION	MADE BY	CAD BY	APP'D BY

ENGINEER	PROFESSIONAL SEAL	ARCHITECT

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 T: 787-754-8114, 8115, 8116 Fax: 787-754-8111
www.mga.com

IMPORTANT NOTE
 All structural specifications and other data are prepared by the architect and the contractor shall be responsible for the accuracy and completeness of the same. The contractor shall be responsible for the accuracy and completeness of the same. The contractor shall be responsible for the accuracy and completeness of the same.

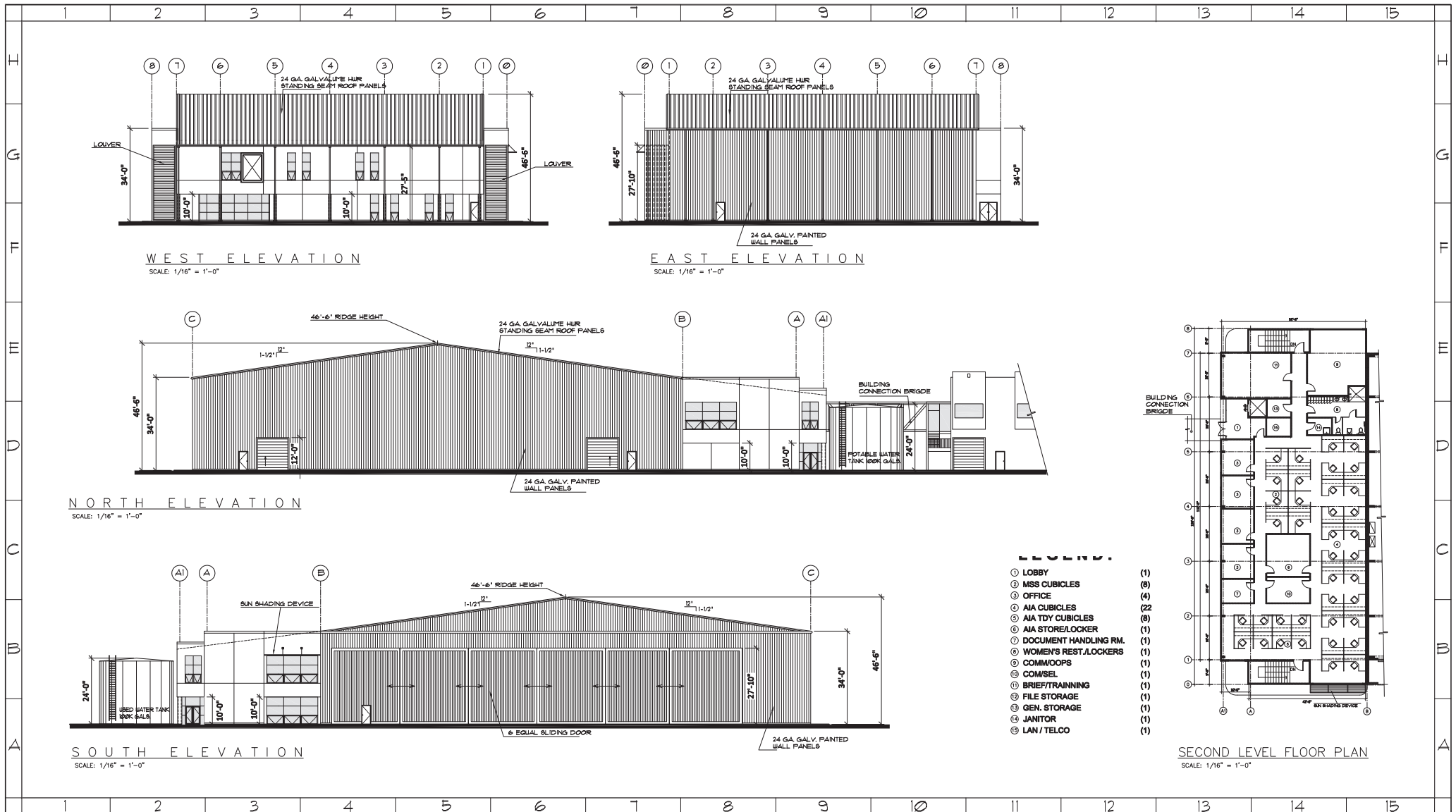
PROJECT:
NEW MAINTENANCE HANGAR AND ADMINISTRATIVE BUILDING
 AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064

CLIENT:
 GSA Public Buildings Service
 Office Of Design & Construction Programs

DRAWING TITLE:
 FLOOR PLAN (OPTION A)

DRAWING NUM:
 A1.0

DRAWN BY: CDPC	CHECKED BY:	APPROVED BY:	SHEET NUM:
SCALE: 1/8" = 1'-0"	DATE: JUNE 26 2013	ISSUE: FOR REVIEW	PROJ# SET OF:



WEST ELEVATION
SCALE: 1/16" = 1'-0"

EAST ELEVATION
SCALE: 1/16" = 1'-0"

NORTH ELEVATION
SCALE: 1/16" = 1'-0"

SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

SECOND LEVEL FLOOR PLAN
SCALE: 1/16" = 1'-0"

- LEGEND**
- ① LOBBY (1)
 - ② MSS CUBICLES (8)
 - ③ OFFICE (4)
 - ④ AIA CUBICLES (22)
 - ⑤ AIA TDY CUBICLES (8)
 - ⑥ AIA STORE/LOCKER (1)
 - ⑦ DOCUMENT HANDLING RM. (1)
 - ⑧ WOMEN'S REST./LOCKERS (1)
 - ⑨ COMMONS (1)
 - ⑩ COM/SEL (1)
 - ⑪ BRIEF/TRAINING (1)
 - ⑫ FILE STORAGE (1)
 - ⑬ GEN. STORAGE (1)
 - ⑭ JANITOR (1)
 - ⑮ LAN / TELCO (1)

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 AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064

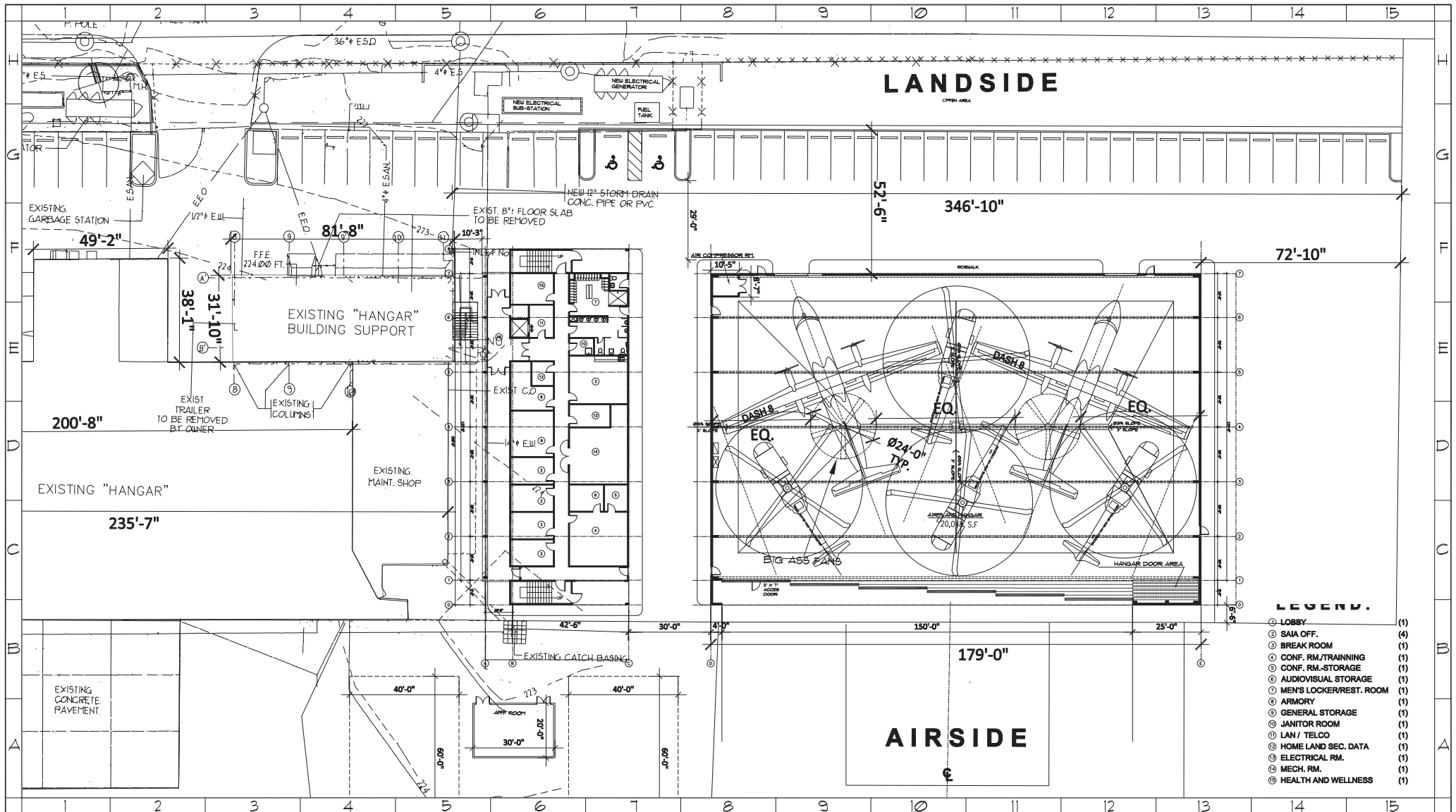
CLIENT: **GSA Public Buildings Service**
 Office Of Design & Construction Programs

DRAWING TITLE: **ELEVATIONS AND SECOND LEVEL FLOOR PLAN (OPTIONAL A)**

DRAWN BY: CDPC CHECKED BY: APPROVED BY: SHEET NO.: **A2.0**

SCALE: 1/16" = 1'-0" DATE: JUNE 26 2013 ISSUE: FOR REVIEW PROJ# SET OF: -

Attachment B
ALTERNATIVE B



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ENGINEER	PROFESSIONAL SEAL	ARCHITECT

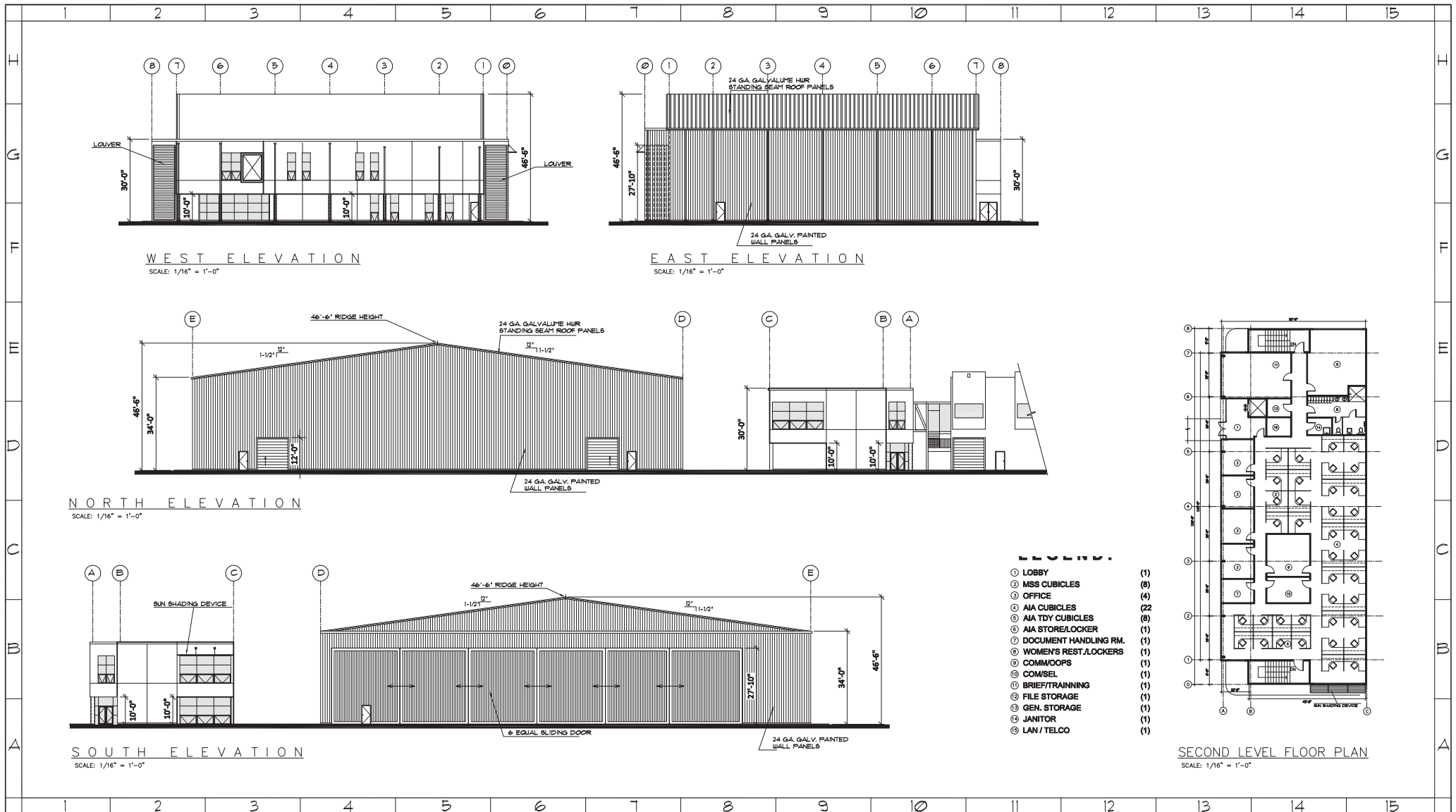

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 www.mgaconsultants.com

IMPORTANT NOTE
 All structural specifications and other requirements contained herein are subject to change without notice. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities.

PROJECT:
NEW MAINTENANCE HANGAR AND ADMINISTRATIVE BUILDING
 AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064

CLIENT:
GSA Public Buildings Service
 Office Of Design & Construction Programs

DRAWING TITLE:		DRAWING NUM:	
FLOOR PLAN (OPTION B)		A1.0	
CAD FILE: AHAI0-001-BDUG			
DRAWN BY: CDPC	CHECKED BY:	APPROVED BY:	SHEET NUM:
SCALE: 1/8" = 1'-0"	DATE: JUNE 26 2013	ISSUE: FOR REVIEW	PRG01 SET OF:



WEST ELEVATION
SCALE: 1/16" = 1'-0"

EAST ELEVATION
SCALE: 1/16" = 1'-0"

NORTH ELEVATION
SCALE: 1/16" = 1'-0"

SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

SECOND LEVEL FLOOR PLAN
SCALE: 1/16" = 1'-0"

- LEGEND**
- ① LOBBY (1)
 - ② MSS CUBICLES (8)
 - ③ OFFICE (4)
 - ④ AIA CUBICLES (22)
 - ⑤ AIA TDY CUBICLES (8)
 - ⑥ AIA STORE/LOCKER (1)
 - ⑦ DOCUMENT HANDLING RM. (1)
 - ⑧ WOMEN'S REST./LOCKERS (1)
 - ⑨ COMMONS (1)
 - ⑩ COM/SEL (1)
 - ⑪ BRIEF/TRAINING (1)
 - ⑫ FILE STORAGE (1)
 - ⑬ GEN. STORAGE (1)
 - ⑭ JANITOR (1)
 - ⑮ LAN / TELCO (1)

REV. NO.	DATE	REVISION DESCRIPTION	MADE BY	CAD BY	APP'D BY

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IMPORTANT NOTE
 All structural specifications and other requirements mentioned in the drawings are the property of the client. The contractor shall be responsible for obtaining all necessary permits, licenses, and approvals from the appropriate authorities. The contractor shall also be responsible for obtaining all necessary insurance and bonds required by the applicable laws and regulations.

PROJECT: **NEW MAINTENANCE HANGAR AND ADMINISTRATIVE BUILDING**
 AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064

CLIENT: **GSA Public Buildings Service**
 Office Of Design & Construction Programs

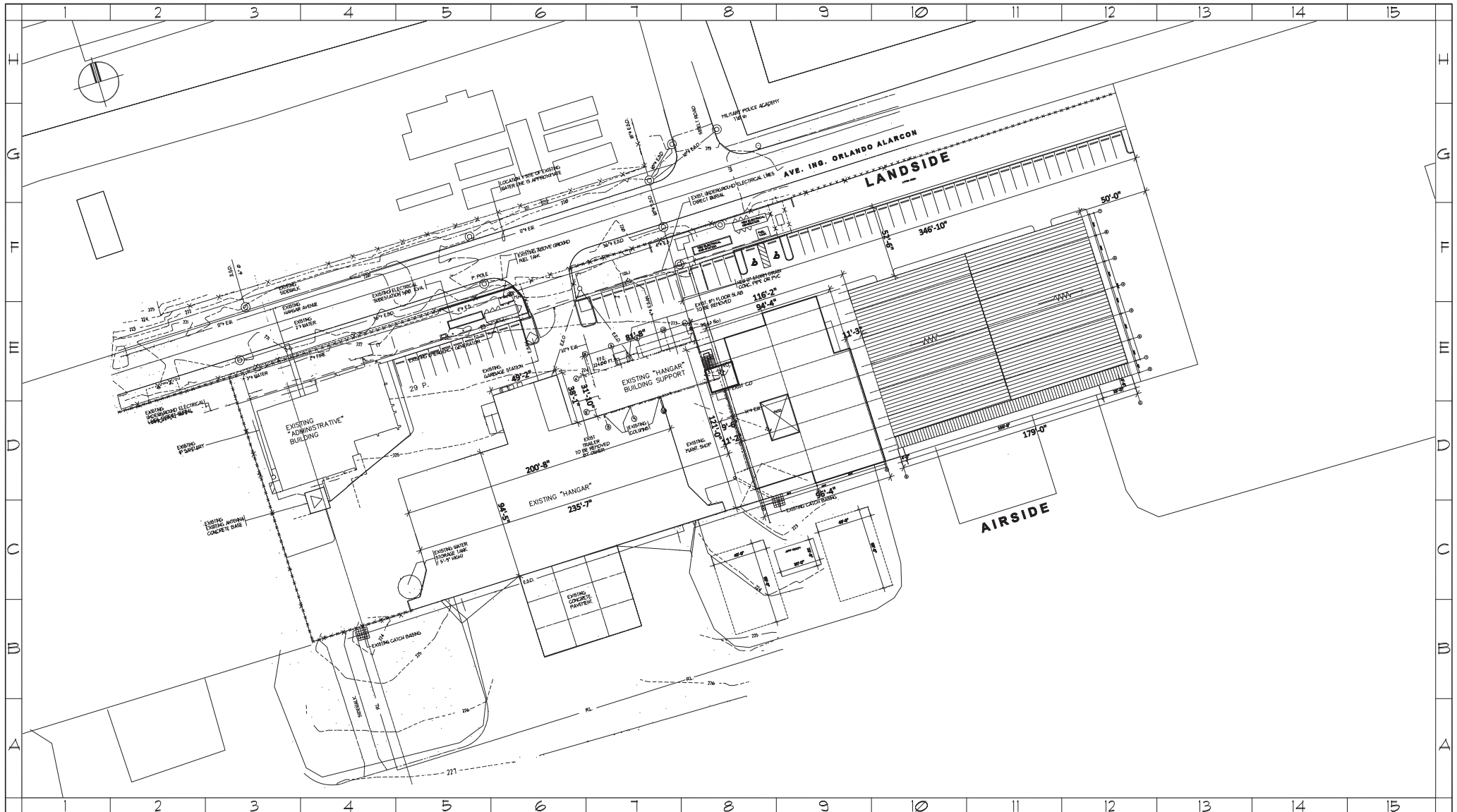
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 CHECKED BY: _____
 DATE: JUNE 26 2013

APPROVED BY: _____
 ISSUE: FOR REVIEW

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Attachment C
ALTERNATIVE C



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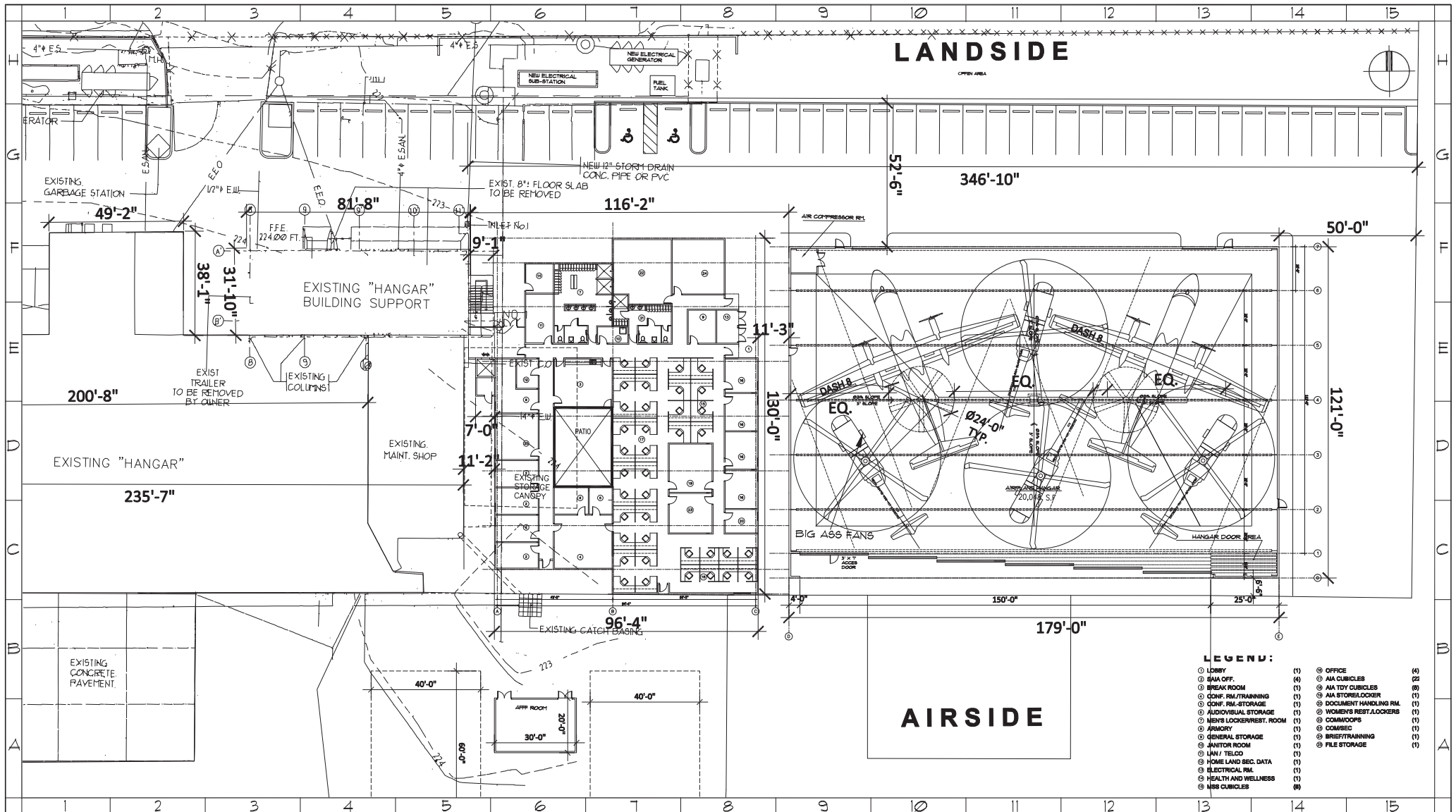
IMPORTANT NOTE

All structural specifications and dimensions referenced by the architect are the property of the architect. All structural specifications and dimensions referenced by the contractor are the property of the contractor. All structural specifications and dimensions referenced by the engineer are the property of the engineer. All structural specifications and dimensions referenced by the architect, contractor, and engineer are the property of the architect, contractor, and engineer.

PROJECT: **NEW MAINTENANCE HANGAR AND ADMINISTRATIVE BUILDING**
AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064

CLIENT: **GSA Public Buildings Service**
 Office Of Design & Construction Programs

DRAWING TITLE: SITE PLAN (OPTION-C)		DRAWING NUM: G1.0	
CAD FILE: AHAI0-Opt-C.DWG	DRAWN BY: CDPC	CHECKED BY:	APPROVED BY:
SCALE: 1/32" = 1'-0"	DATE: JUNE 26 2013	ISSUE: FOR REVIEW	SHEET NUM: 1 OF 1



LEGEND:

⊙ LOBBY	(1)	⊙ OFFICE	(4)
⊙ SNA OFF.	(4)	⊙ AIA CUBICLES	(2)
⊙ BREAK ROOM	(1)	⊙ AIA TOY CUBICLES	(8)
⊙ CONF. RM./TRAINING	(1)	⊙ AIA STORELOCKER	(1)
⊙ CONF. RM.-STORAGE	(1)	⊙ DOCUMENT HANDLING RM.	(1)
⊙ AUDIOVISUAL STORAGE	(1)	⊙ WOMEN'S REST/LOCKERS	(1)
⊙ NEWS LOCKER/REST. ROOM	(1)	⊙ COMMONS	(1)
⊙ ARMORY	(1)	⊙ COMSEC	(1)
⊙ GENERAL STORAGE	(1)	⊙ BRIEF/TRAINING	(1)
⊙ JANITOR ROOM	(1)	⊙ FILE STORAGE	(1)
⊙ LAUNY TELCO	(1)		
⊙ HOME LAND SEC. DATA	(1)		
⊙ ELECTRICAL RM.	(1)		
⊙ HEALTH AND WELLNESS	(1)		
⊙ MISS CUBICLES	(8)		

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ENGINEER: _____ PROFESSIONAL SEAL: _____ ARCHITECT: _____

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PROJECT:
NEW MAINTENANCE HANGAR AND ADMINISTRATIVE BUILDING
 AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064

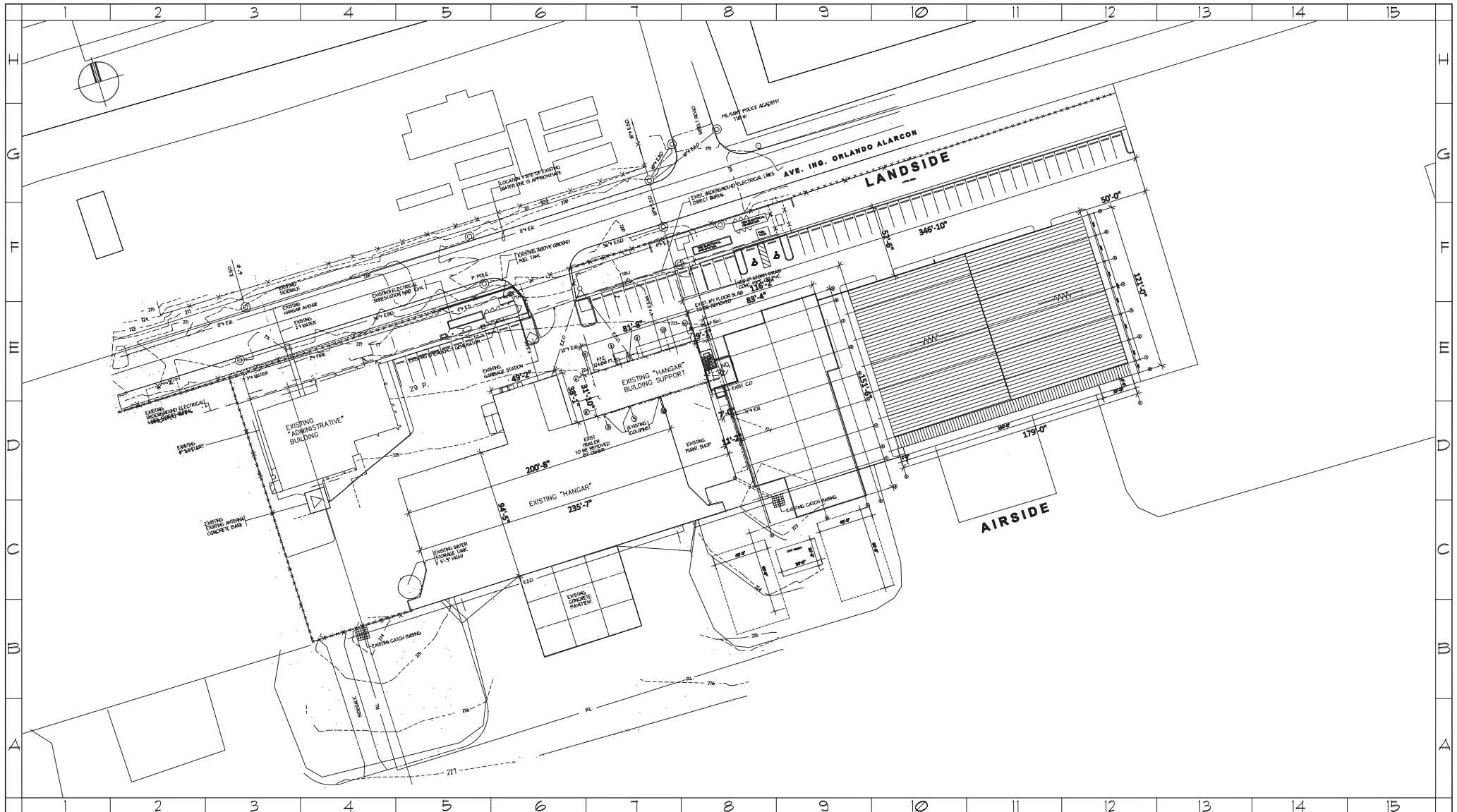
CLIENT:
 GSA Public Buildings Service
 Office Of Design & Construction Programs

DRAWING TITLE:
 GENERAL FLOOR PLAN (OPTION-C)

DRAWING N.P.I.:
 A1.0

DRAWN BY: CDPC	CHECKED BY:	APPROVED BY:	SHEET N.P.I.
SCALE: 1/8" = 1'-0"	DATE: JUNE 26 2013	ISSUE: FOR REVIEW	FRONT SET OF:

Attachment D
ALTERNATIVE D




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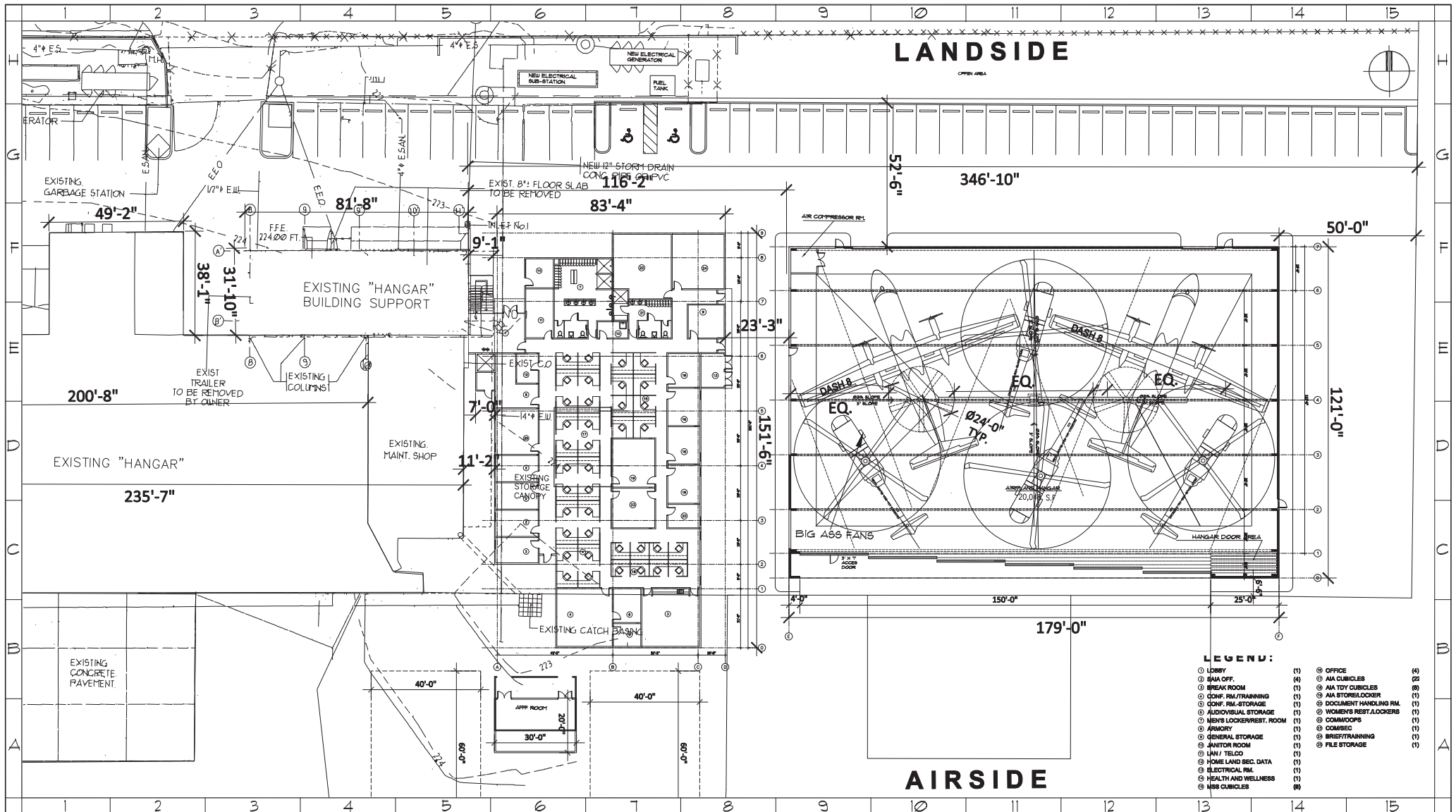
ENGINEER	PROFESSIONAL SEAL	ARCHITECT


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IMPORTANT NOTE
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PROJECT:
NEW MAINTENANCE HANGAR AND ADMINISTRATIVE BUILDING
 AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064
CLIENT:
GSA Public Buildings Service
 Office Of Design & Construction Programs

DRAWING TITLE:		DRAWING N.P.I.:	
SITE PLAN (OPTION-D)			
CAD FILE: AHAI0-001-D2.DWG			
DRAWN BY: CDC	CHECKED BY:	APPROVED BY:	SHEET N.P.I.:
SCALE: 1/32" = 1'-0"	DATE: JUNE 26 2013	ISSUE: FOR REVIEW	PROJECT SET OF:



LEGEND:

⊙ LOBBY	(1)	⊙ OFFICE	(4)
⊙ SNA OFF.	(4)	⊙ AIA CUBICLES	(2)
⊙ BREAK ROOM	(1)	⊙ AIA TOY CUBICLES	(8)
⊙ CONF. RM./TRAINING	(1)	⊙ AIA STORELOCKER	(1)
⊙ CONF. RM./STORAGE	(1)	⊙ DOCUMENT HANDLING RM.	(1)
⊙ AUDIOVISUAL STORAGE	(1)	⊙ WOMEN'S REST/LOCKERS	(1)
⊙ NEWS LOCKER/REST. ROOM	(1)	⊙ COMMONS	(1)
⊙ ARMORY	(1)	⊙ COMSEC	(1)
⊙ GENERAL STORAGE	(1)	⊙ BRIEF/TRAINING	(1)
⊙ JANITOR ROOM	(1)	⊙ FILE STORAGE	(1)
⊙ LANY TELCO	(1)		
⊙ HOME LAND SEC. DATA	(1)		
⊙ ELECTRICAL RM.	(1)		
⊙ HEALTH AND WELLNESS	(1)		
⊙ MISS CUBICLES	(8)		

REV. NO.	DATE	REVISION DESCRIPTION	MADE BY	CAD BY	APP'D BY
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ENGINEER: _____ PROFESSIONAL SEAL: _____ ARCHITECT: _____

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 www.mgaconsultants.com

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 All structural steelwork and other materials furnished by the contractor shall be subject to inspection and approval by the architect. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities. The architect shall not be responsible for the contractor's failure to obtain such permits and approvals.

PROJECT: **NEW MAINTENANCE HANGAR AND ADMINISTRATIVE BUILDING**
 AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064

CLIENT: **GSA Public Buildings Service**
 Office Of Design & Construction Programs

DRAWING TITLE: **GENERAL FLOOR PLAN (OPTION-D)**
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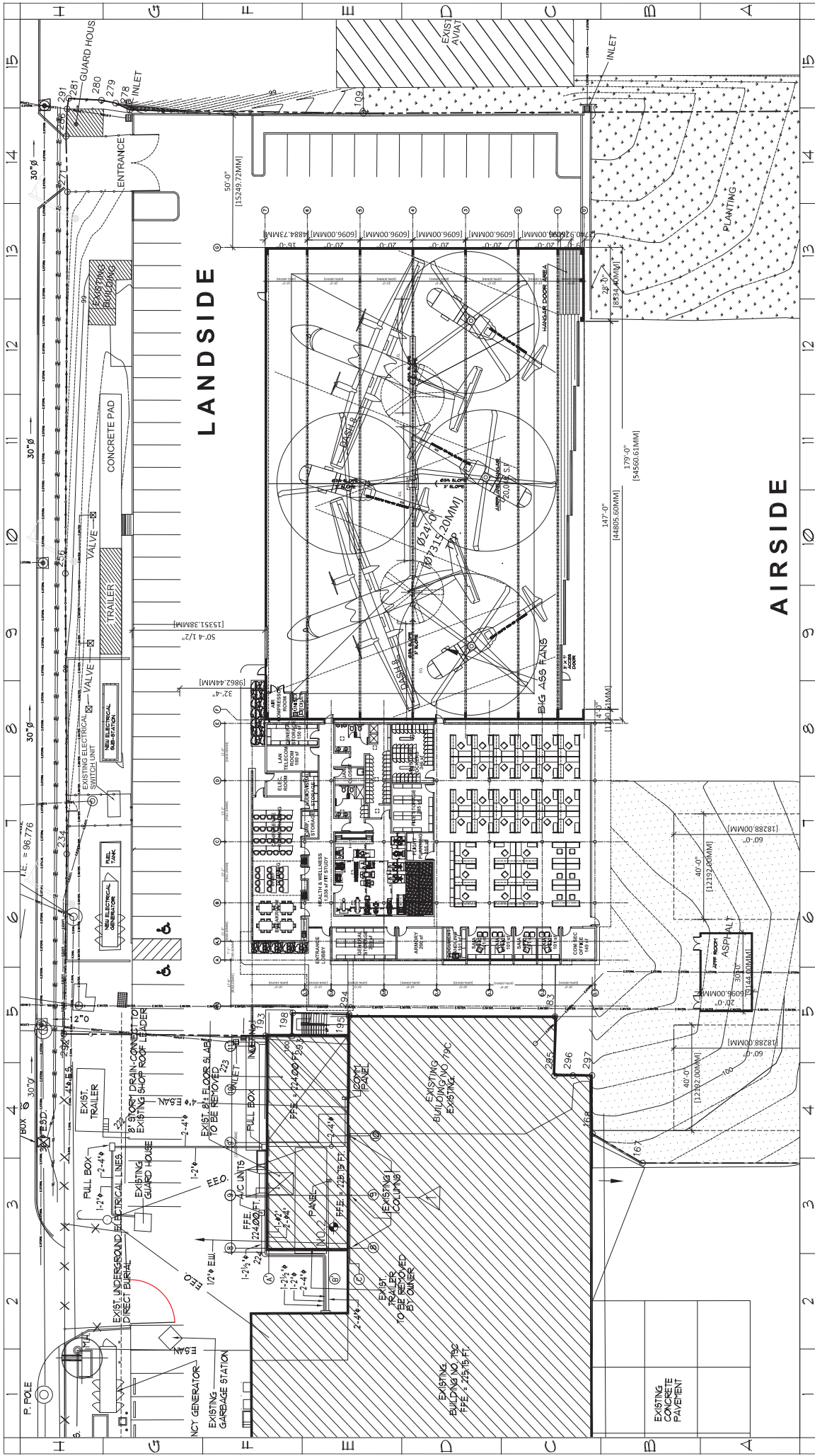
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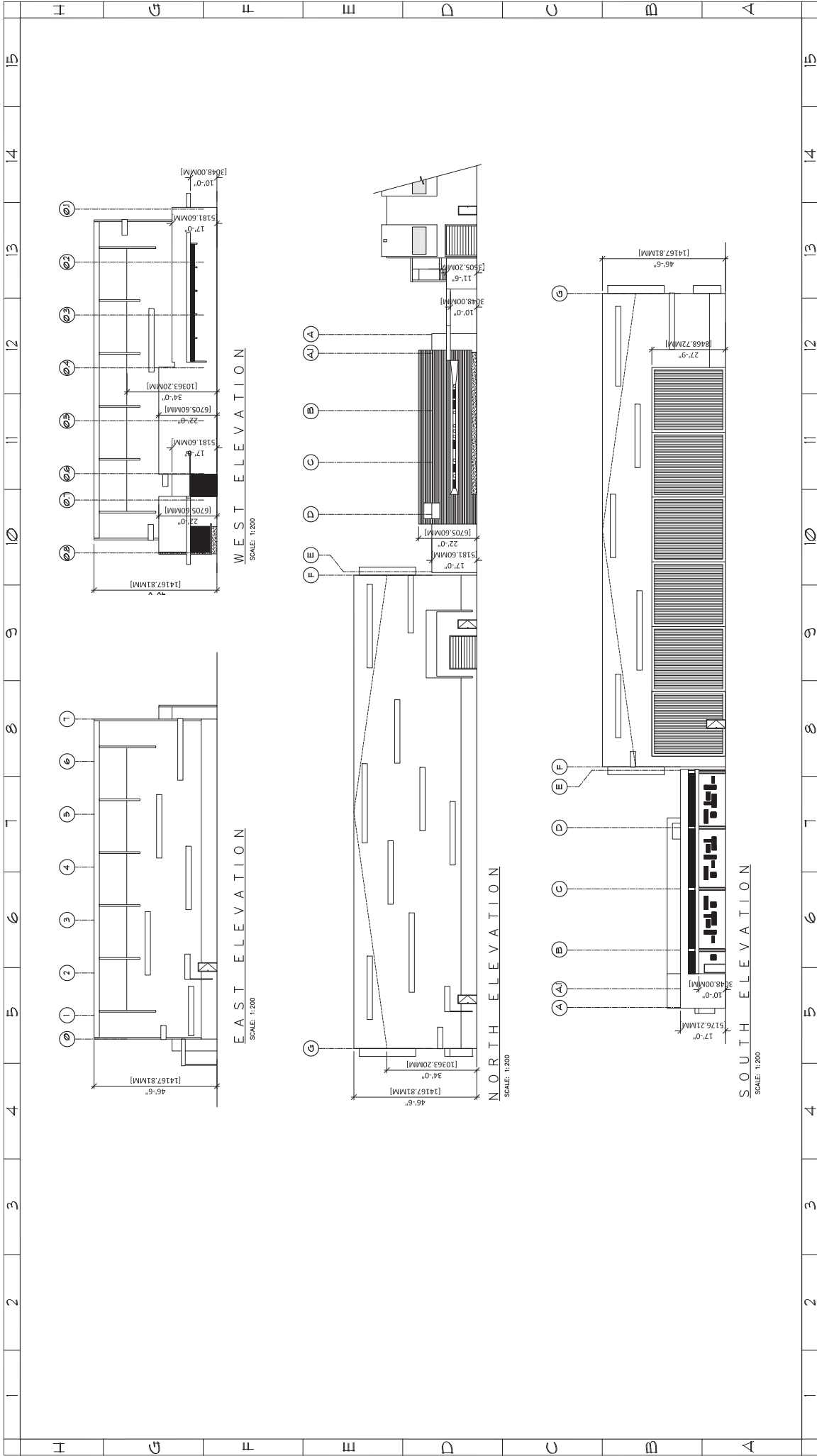
Attachment E

SELECTED ALTERNATIVE



REV. NO.	DATE	REVISION DESCRIPTION

ENGINEER	
PROFESSIONAL SEAL:	
ARCHITECT:	
 BGA CONSULTANTS INC. 1050 P.R. Highway, Suite 100 San Juan, P.R. 00911 T: (787) 747-7331 F: (787) 747-3631 www.bga.com	
PROJECT:	NEW MAINTENANCE HANGAR AND ADMINISTRATIVE BUILDING AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064 CLIENT: GSA Public Buildings Service Office Of Design & Construction Programs
DRAWING TITLE:	FLOOR PLAN
	FINAL DESIGN CONCEPT
	CAD FILE: AH4A4D11m-001-D210.dwg
DESIGNED BY:	CPDC
CHECKED BY:	
APPROVED BY:	SHEET NO. 1
SCALE:	SCALE: 1:1250
DATE:	DATE: DEC 2013
FOR REVIEW:	PROJECT SET OF:



REV. NO.	DATE	REVISION DESCRIPTION	DESIGNED BY	CHECKED BY	DATE	FOR REVIEW

ENGINEER

ARCHITECT
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 San Francisco, CA 94103
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 F: 415.774.8801
 www.hga.com

PROFESSIONAL SEAL:

PROJECT:
**NEW MAINTENANCE HANGAR
 AND ADMINISTRATIVE BUILDING**
 AGUADILLA, PUERTO RICO **CONTRACT #: GS-00P-12-CY-C-0064**

CLIENT:
GSA Public Buildings Service
 Office Of Design & Construction Programs

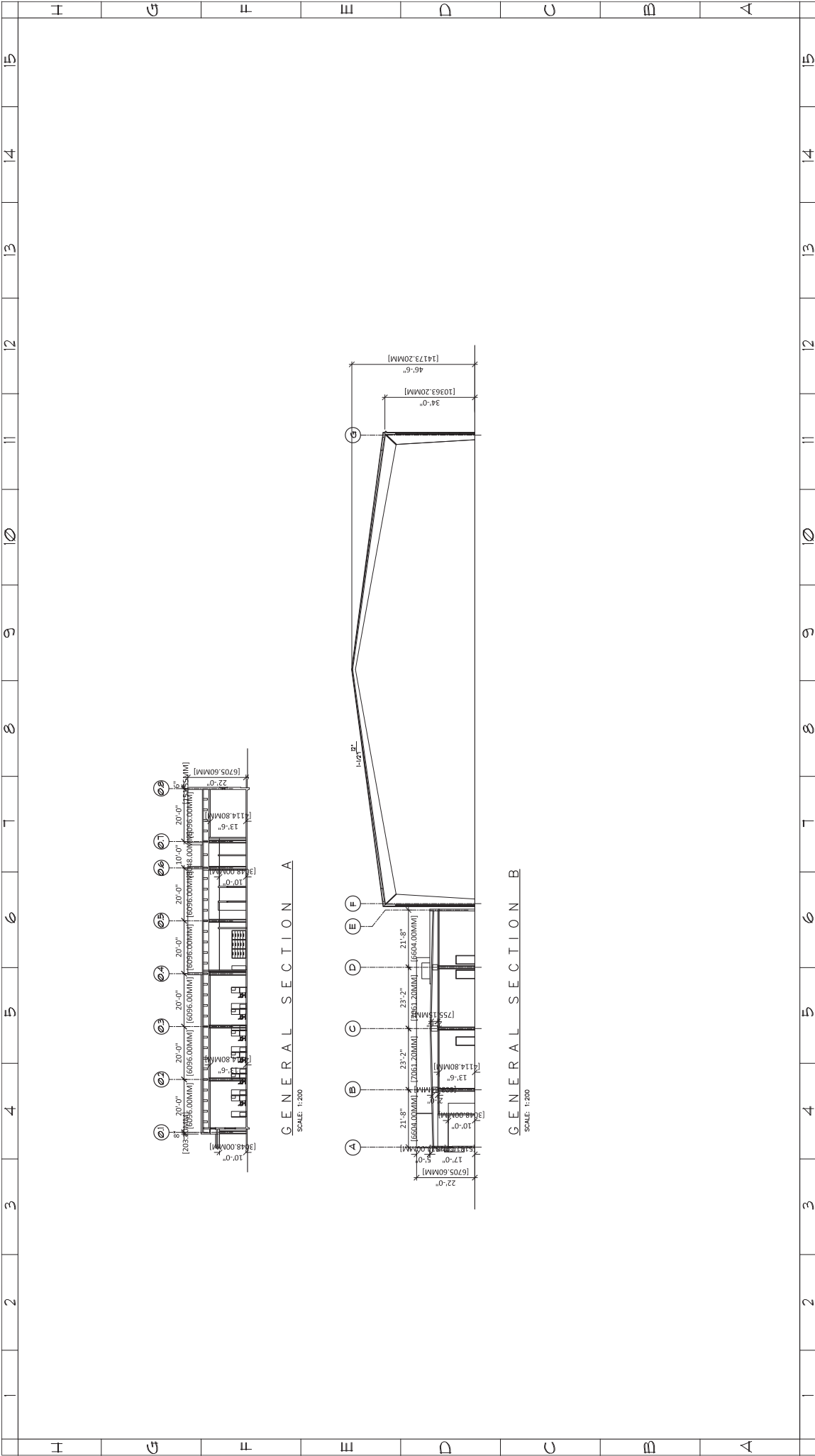
DRAWING TITLE:
ELEVATIONS
 Final Concept Submission
 CAD FILE: AH440D1m-001-0221a

DRAWN BY: AH440D1m-001-0221a
CHECKED BY:
SCALE: AS SHOWN
DATE: DEC 2013

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A4.2

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REV. NO.	DATE	REVISION DESCRIPTION	DESIGNED BY (CDD BY) (PDD BY)

ENGINEER

PROFESSIONAL SEAL:

ARCHITECT:

HGA CONSULTANTS, INC.
1000 Highway 100, Suite 200
San Juan, Puerto Rico 00909
Tel: (787) 754-1000
Fax: (787) 754-1001
www.hga.com

PROJECT:
NEW MAINTENANCE HANGAR
AND ADMINISTRATIVE BUILDING
AGUADILLA, PUERTO RICO CONTRACT #: GS-00P-12-CY-C-0064

CLIENT:
GSA Public Buildings Service
Office Of Design & Construction Programs

DRAWING TITLE:
GENERAL SECTIONS
Final Concept Submission

CAD FILE: AH440D1111-001-021111

DRAWN BY: CDPC

CHECKED BY: CDPC

SCALE: AS SHOWN

APPROVED BY:

DATE: DEC 2013

FOR REVIEW:



IMPORTANT NOTE:
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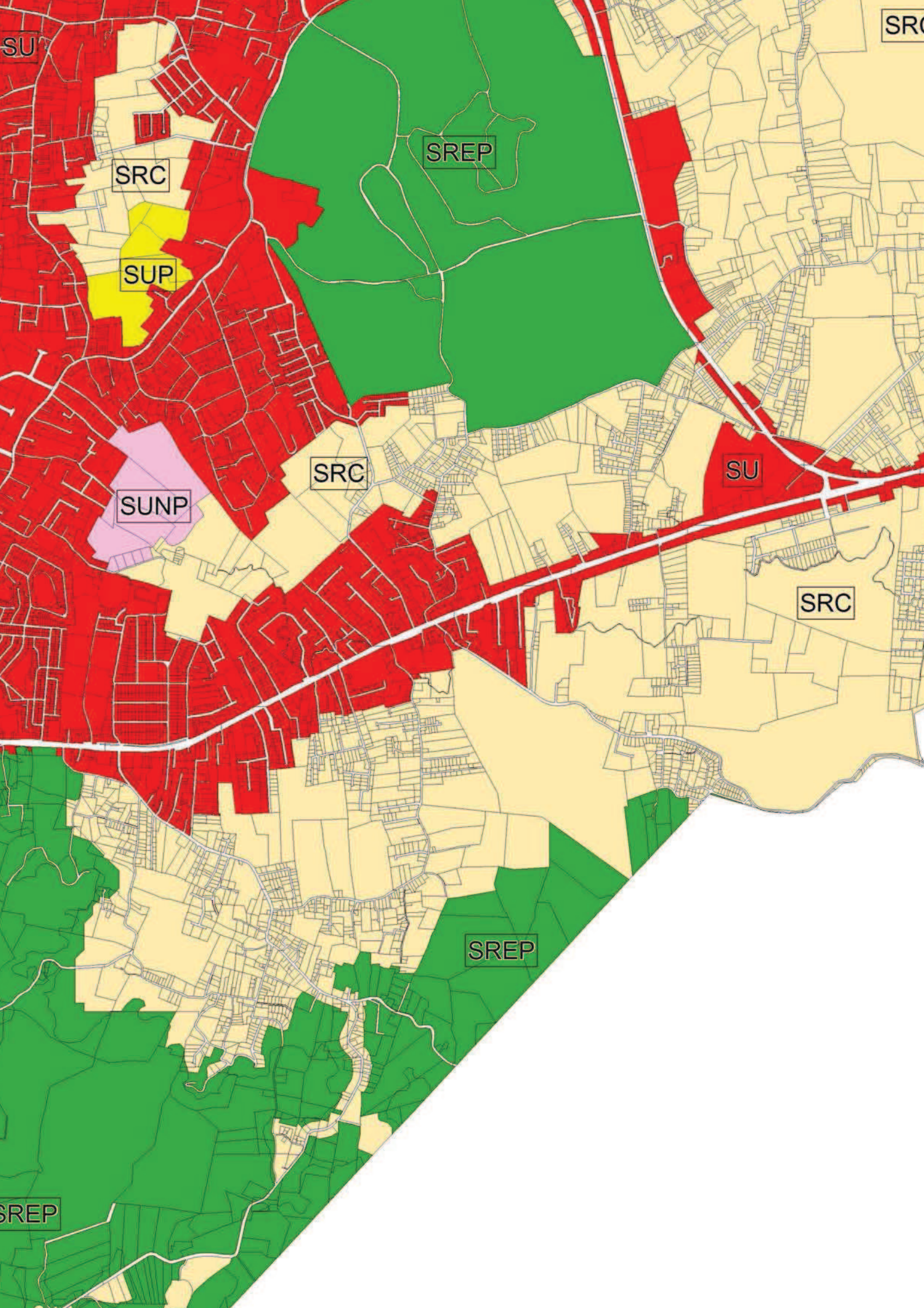
IMPORTANT NOTE:
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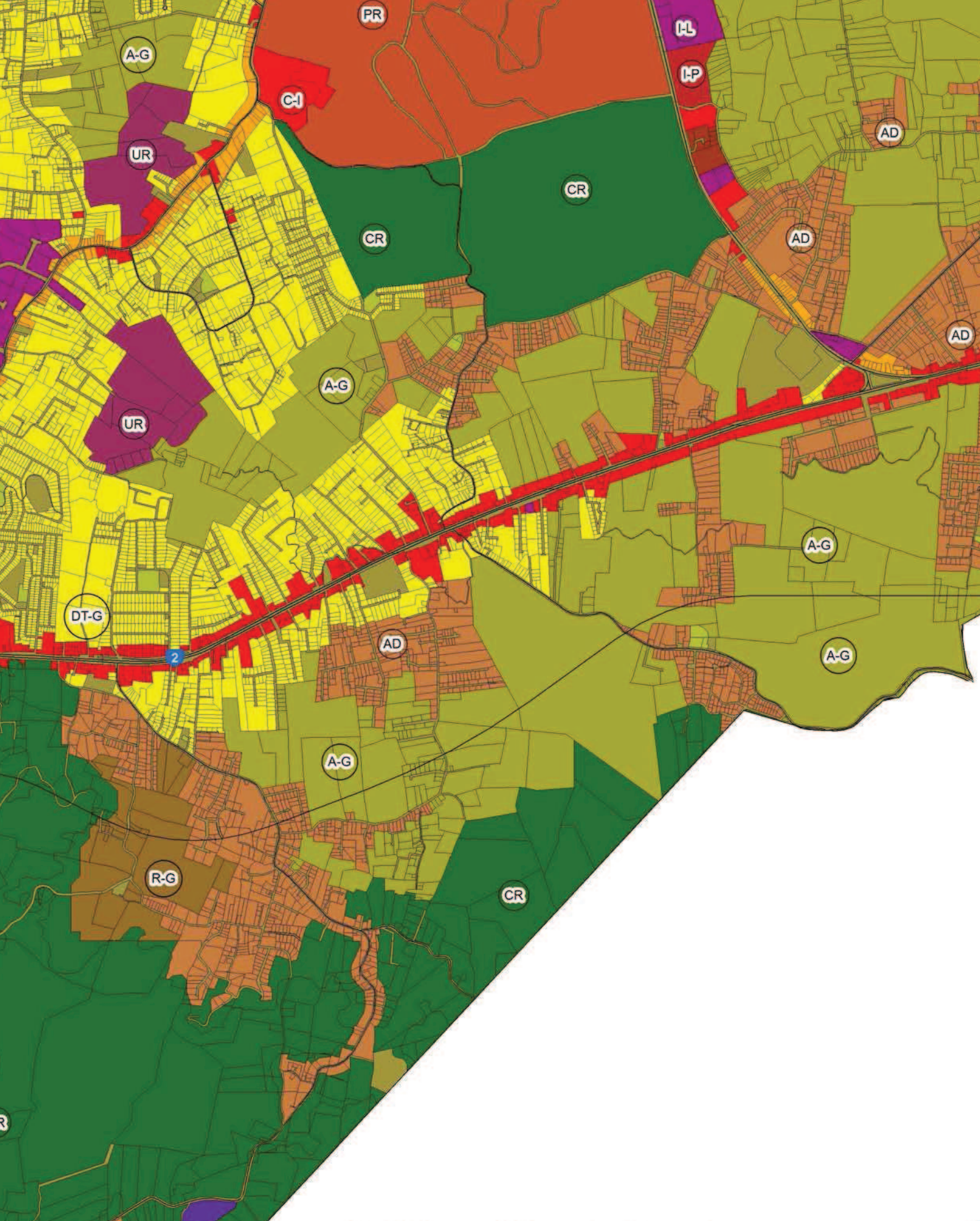
REV. NO.	DATE	REVISION DESCRIPTION	DESIGNED BY (CDD BY) (PDD BY)

DRAWING NO.: DRAWING NO. 1
SHEET NO.: A4.3
PROJECT SET OF: PROJECT SET OF 1

Attachment F

-LAND USE AND ZONING MAPS





Calificación de Suelo

-  A-G, Agrícola General
-  AD, Área Desarrollada

Attachment G

USGS AND NRCS GEOLOGY AND SOILS MAPS



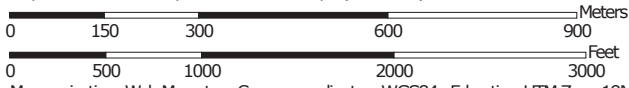
GEOLOGIC MAP OF THE AGUADILLA QUADRANGLE, PUERTO RICO
By
WALTER H. STONE
1942

Puerto Rico (Aguadilla quad)
map 1

Custom Soil Resource Report Soil Map



Map Scale: 1:12,000 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

Attachment H

WATER RESOURCES AND GROUNDWATER DATA

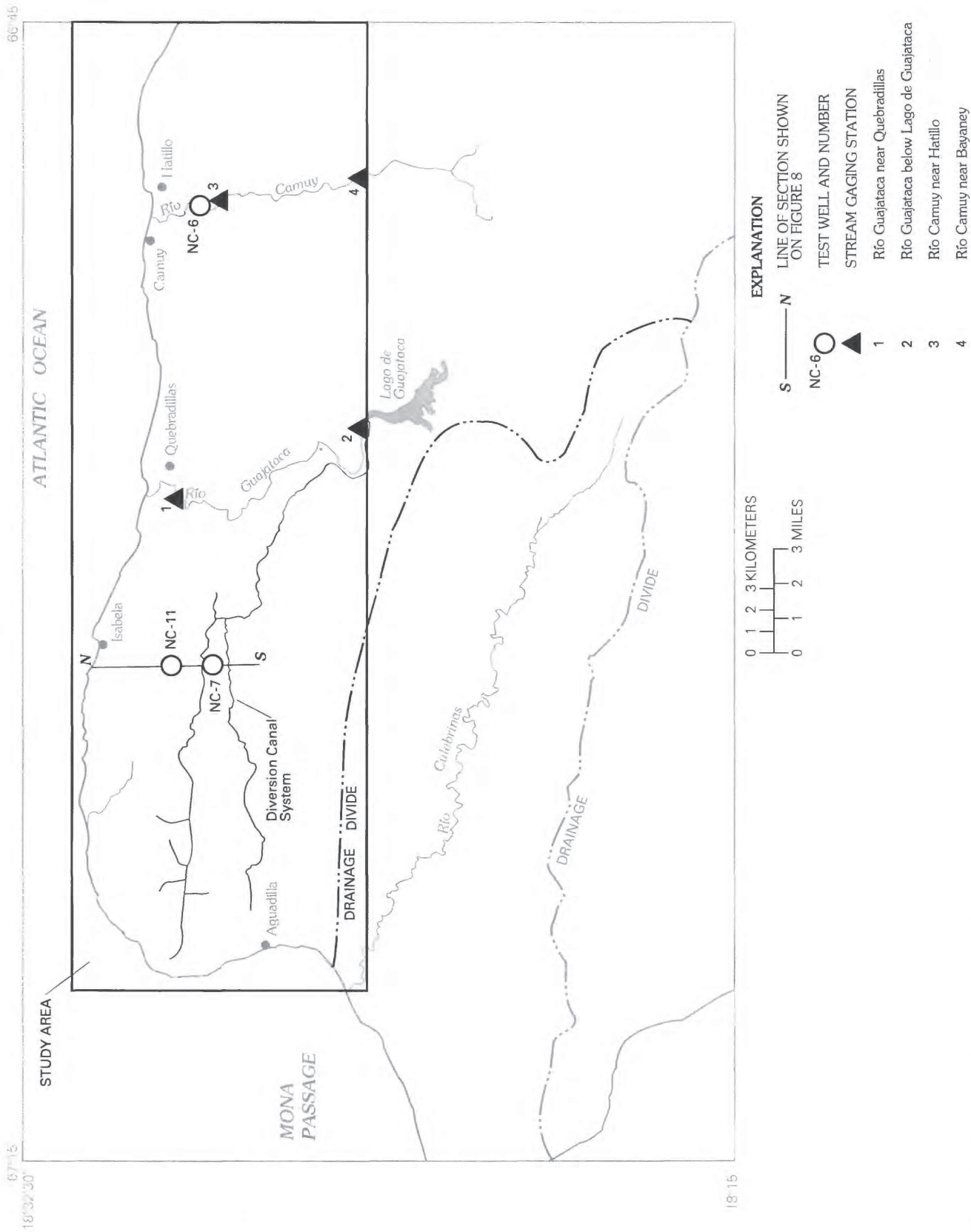


Figure 2. The Aguadilla to Río Camuy study area.

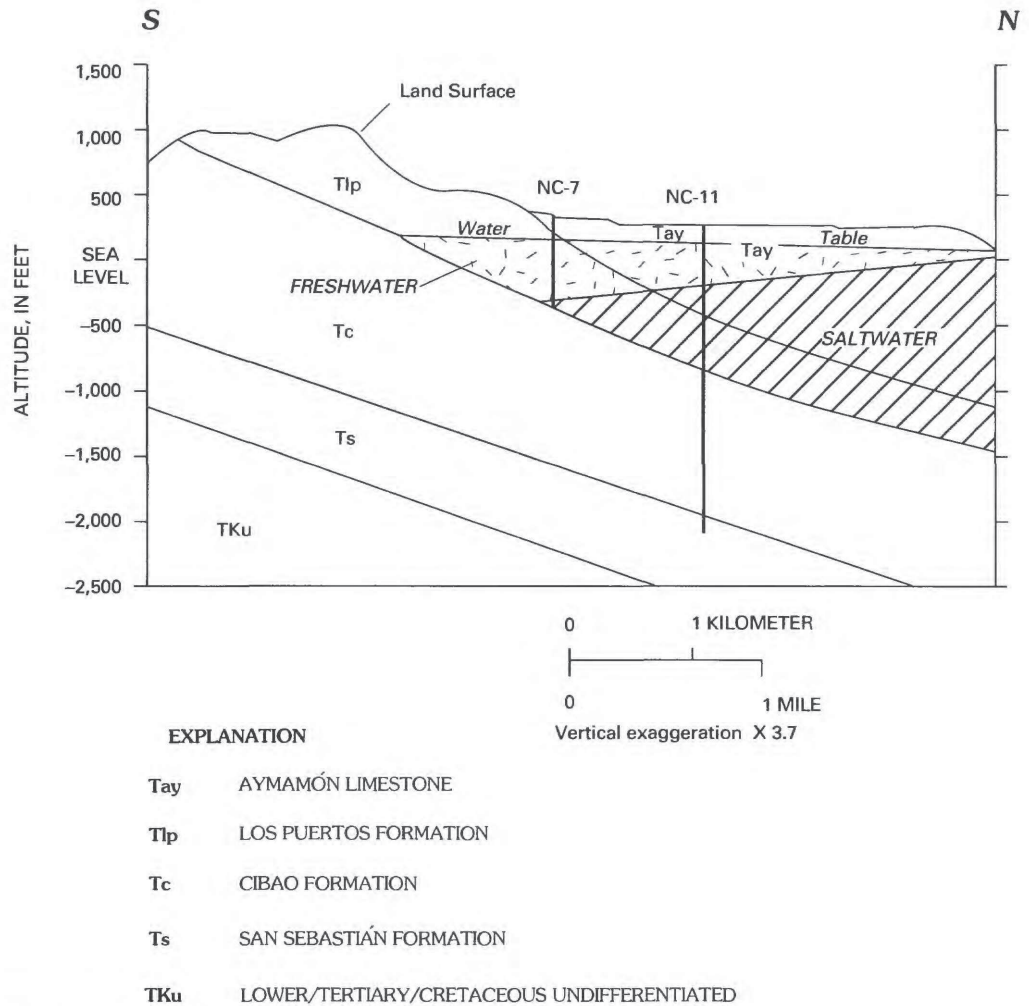


Figure 8. Generalized hydrogeologic section near Isabela.

Attachment I

FEMA FIRMETTE (FLOODPLAIN INFORMATION)

UNIDENTIFIED FLOOD PROVISIONS AS APPLICABLE TO THIS CONTRACTING
 part of the National Flood Insurance Program at 1-800-638-6662.



MAP SCALE
 1" = 1000'

For complete map details, please refer to the Commonwealth of Puerto Rico and
 its respective agencies, such as the Commonwealth Planning Agency and the
 respective study report for the jurisdiction.
 To determine if flood insurance is available in this community, contact your insurance
 agent or call the National Flood Insurance Program at 1-800-638-6662.



MAP SCALE
 1" = 10,000'



NATIONAL FLOOD INSURANCE PROGRAM
 FEDERAL EMERGENCY MANAGEMENT AGENCY

PANEL 0133J

FIRM
 FLOOD INSURANCE RATE MAP
 COMMONWEALTH OF
 PUERTO RICO
 AND MUNICIPALITIES

PANEL 135 OF 2160

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTINUE: NUMBER: SCALE: SHEETS: 72000C0135J 10000' 1

Note to User: This Map Number should refer to the
 most recent edition of this map. The Commonwealth's
 Flood Insurance Study is available for purchase from the
 respective jurisdiction.



MAP NUMBER
 72000C0135J

MAP REVISED
 NOVEMBER 18, 2009

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It
 was extracted using FIRM On-Line. This map does not reflect changes
 that have been made to the data on file.
 For more information on the National Flood Insurance Program, please visit the
 Program Flood Maps web site at www.nfip.fema.gov

415000 FT
 67°07'30"
 18°30'00"

410000 FT

46°00'00" N

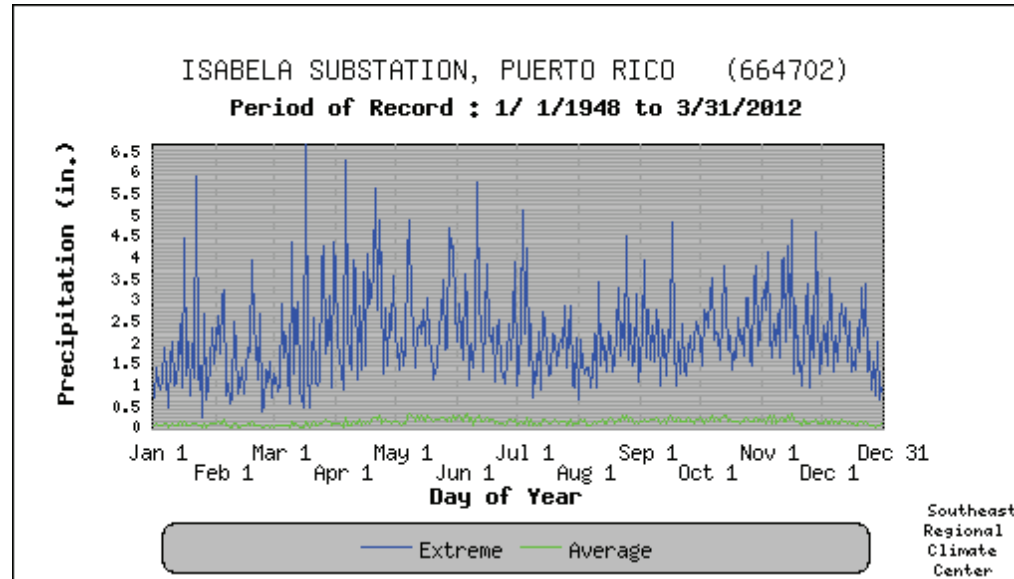
45°00'00" N



Attachment J
CLIMATE DATA

ISABELA SUBSTATION, PUERTO RICO

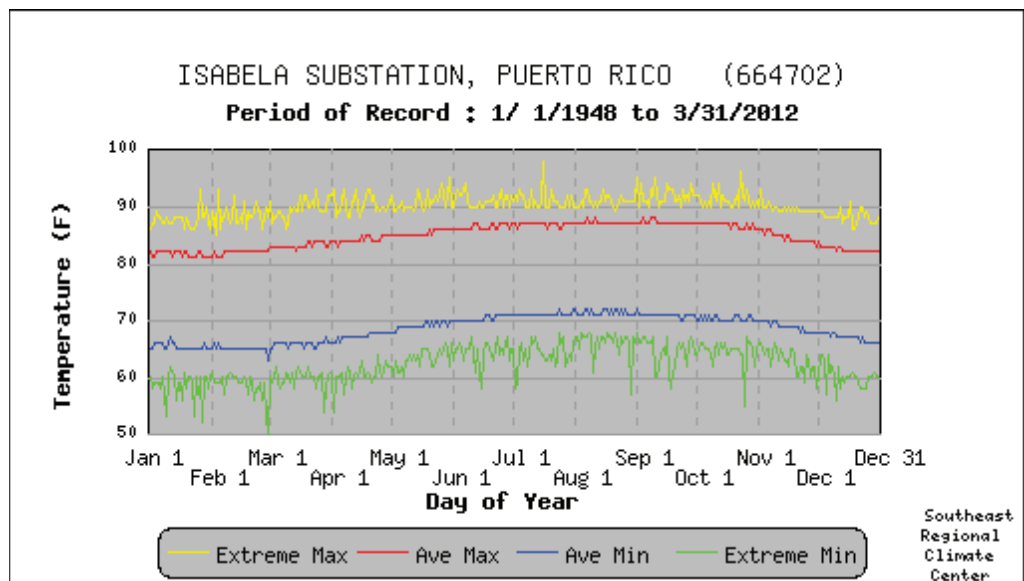
POR - Daily Precipitation Average and Extreme



- - Extreme is the greatest daily precipitation recorded for the day of the year.
- - Average is the average of all daily precipitation recorded for the day of the year.

ISABELA SUBSTATION, PUERTO RICO

POR - Daily Temperature Averages and Extremes



- - Extreme Max. is the maximum of all daily maximum temperatures recorded for the day of the year.
- - Ave. Max. is the average of all daily maximum temperatures recorded for the day of the year.
- - Ave. Min. is the average of all daily minimum temperatures recorded for the day of the year.
- - Extreme Min. is the minimum of all daily minimum temperatures recorded for the day of the year.

Attachment K

EPA ENVIROFACTS REPORT

Attachment L

SOCIOECONOMIC SUMMARY FOR AGUADILLA



Estado Libre Asociado de Puerto Rico
OFICINA DEL CONTRALOR
Municipio de Aguadilla
INDICADORES SOCIOECONÓMICOS*

Extensión territorial del Municipio:

35.57 Millas ²

Posición en extensión #47 / 78

Dirección en Internet de OCPR: <http://www.ocpr.gov.pr>

I. Información General	Unidad	Censo 2000	Censo 2010	Puerto Rico Censo 2010
Población***	Habitantes	64,685	60,949	3,725,789
Densidad poblacional	Habitantes/m ²	1,819	1,713	1,089
Población menor de 18 años ****	Por ciento	32.0	23.7	24.2
Población entre 18 y 65 años****	Por ciento	58.1	60.9	61.2
Población mayor de 65 años****	Por ciento	9.9	15.4	14.6
II. Características de la Población	Unidad	Censo 2000	Censo 2010	Puerto Rico Censo 2010
Ingreso per cápita****	Dólares	\$ 3,722	\$ 7,908	\$ 10,355
Población debajo del nivel de pobreza (Individuos 18 años o más)****	Por ciento	65.3	51.5	34.7
Población 25 años o más graduada de escuela superior o más****	Por ciento	47.1	77.8	67.6
III. Encuesta de Grupo Trabajador (Departamento del Trabajo y Recursos Humanos)	Unidad	Año natural 2011	Año natural 2012	Cambio Porcentual
Grupo trabajador	En miles	19,800	19,600	-1.0
Empleo total	En miles	16,600	16,600	0.0
Desempleo	En miles	3,200	3,000	-6.3
Tasa de desempleo	Por ciento	16.3	15.3	-6.1
IV. Gobierno Municipal	Unidad	Año fiscal 2009-10	Año fiscal 2010-11	Año fiscal 2011-12
Finanzas:				
Ingreso total, según los presupuestos aprobados:	Dólares	\$ 30,000,000	\$ 27,711,219	\$ 27,876,007
Patentes municipales	Dólares	\$ 9,500,000	\$ 8,300,000	\$ 7,500,000
Contribución sobre la propiedad	Dólares	\$ 9,151,349	\$ 8,925,491	\$ 8,931,286
Otros ingresos	Dólares	\$ 11,348,651	\$ 10,485,728	\$ 11,444,721
Gastos corrientes, según los presupuestos aprobados	Dólares	\$ 11,803,798	\$ 17,395,987	\$ 17,650,935
Nómina	Dólares	\$ 18,196,202	\$ 10,315,232	\$ 10,225,072
Según los estados financieros auditados:				
Exceso (deficiencia) de ingresos sobre gastos del año fiscal	Dólares	\$ 1,227,036	\$ 346,176	-\$ 673,073
Superávit o (déficit) al cierre del año fiscal	Dólares	\$ 11,727,026	\$ 11,984,591	\$ 10,220,728
Importe fondos federales recibidos	Dólares	\$ 2,761,447	\$ 3,482,302	\$ 13,488,179
Ingreso Impuesto sobre Venta y Uso (IVU)	Dólares	\$ 3,670,110	\$ 3,044,717	\$ 3,508,085
Deuda pública municipal, según el B.G.F.**	Dólares	\$ 71,949,468	\$ 74,368,454	\$ 73,370,000
Según certificado por el Municipio:				
Empleo total del Municipio	Personas	1,155	1,110	727
De confianza	Personas	42	43	36
Regulares	Personas	616	611	536
Transitorios	Personas	14	16	69
Irregulares	Personas	483	440	86

*Véanse en nuestra página de Internet las definiciones de términos de los Indicadores de Municipios.

** B.G.F.= Banco Gubernamental de Fomento para Puerto Rico

N/D= no disponible

N/A= no aplica

*** Para los datos actualizados de población puede acceder a la página del U.S. Census Bureau <http://www.census.gov/popest/index.html>

**** Datos del 2010 son del American Community Survey - US Census

Revisado: 9 de agosto de 2013