

Draft Environmental Assessment

Satala Operations Building Replacement

American Samoa Power Authority

FEMA-1859-DR-AS, PW 146

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FEMA

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Appendix B Draft Environmental Assessment Notice of Availability Distribution List

APE	Area of Potential Effects
ASCMP	American Samoa Coastal Management Program
ASDOC	American Samoa Department of Commerce
ASEPA	American Samoa Environmental Protection Agency
ASG	American Samoa Government
ASHPO	American Samoa Historic Preservation Officer
ASPA	American Samoa Power Authority
BMP's	best management practices
CFR	Code of Federal Regulations
CO	carbon monoxide
CZMA	Coastal Zone Management Act
EA	Environmental Assessment
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
<i>g</i>	gravitational force
GCR	General Conformity Rule
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NRHP	National Register of Historic Places
NO _x	nitrogen oxides
O ₃	ozone
PA	Public Assistance
PM _{2.5}	particulate matter less than 2.5 micrometers in diameter
PM ₁₀	particulate matter less than 10 micrometers in diameter
PNRS	Project Notification and Review System
RCRA	Resources Conversation Recovery Act
SF	square feet
SFHA	Special Flood Hazard Area
SO ₂	sulfur dioxide

TOFR	Territorial Office of Fiscal Reform
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

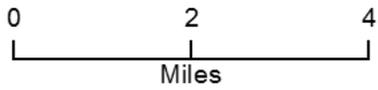
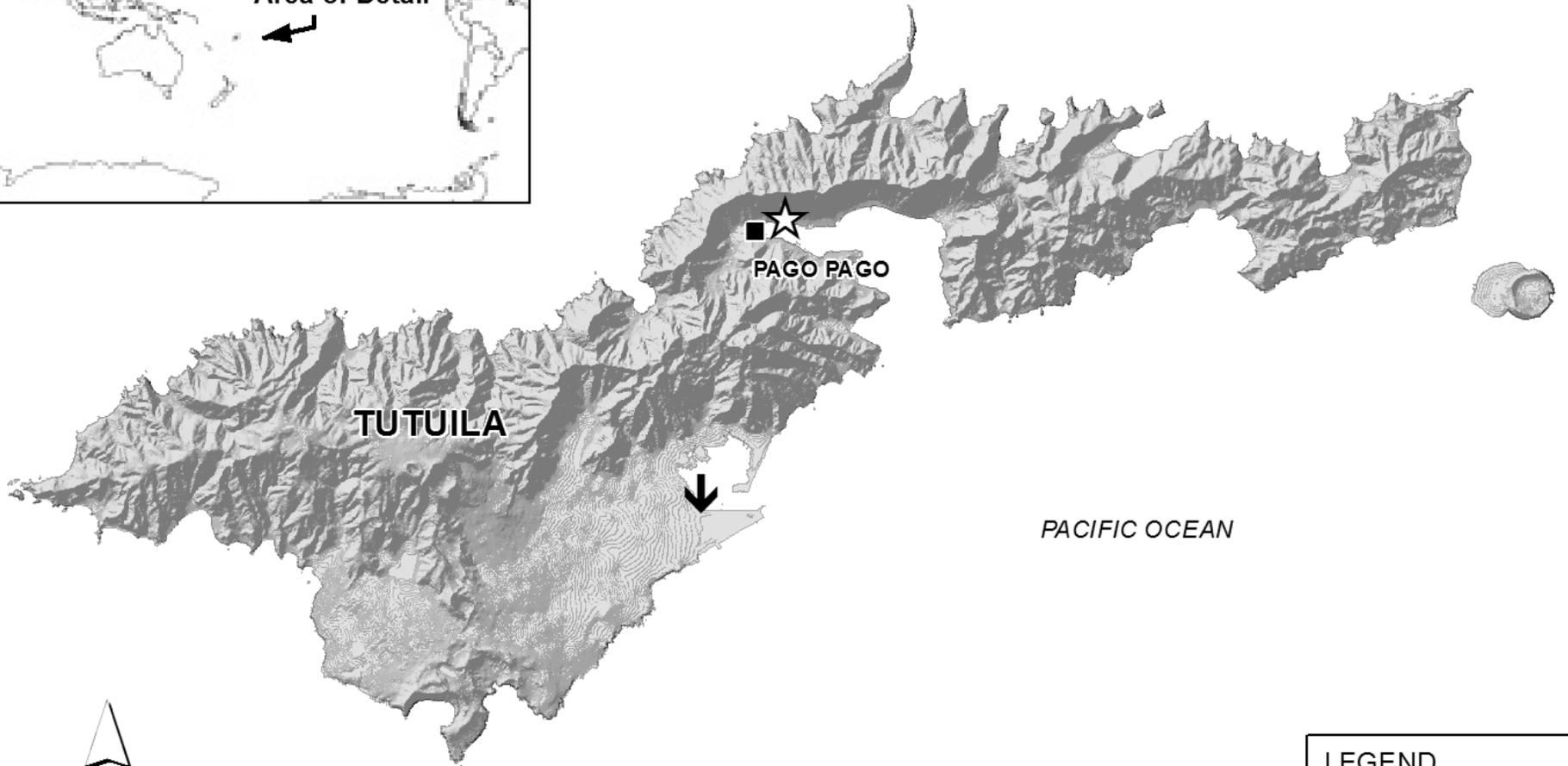
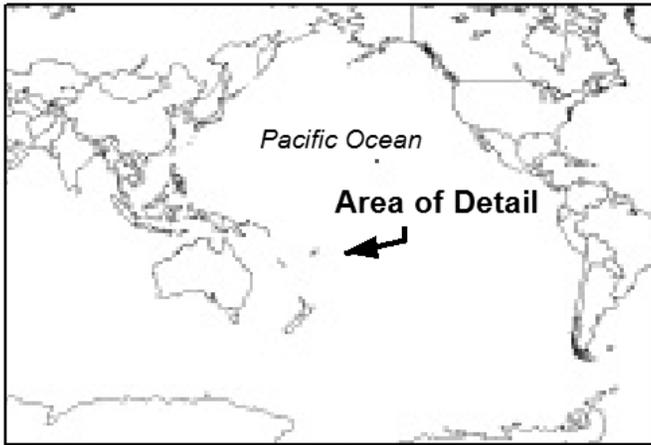
The American Samoa Power Authority (ASPA) has applied, through the American Samoa Government's Territorial Office of Fiscal Reform (TOFR), to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) for funds to restore the function of ASPA's Satala operations building. This facility was destroyed as a result of the earthquake, tsunami, and flooding, which occurred on September 29, 2009, and was declared presidential disaster FEMA-1859-DR-AS. FEMA is proposing to provide financial assistance to restore the function of the Satala operations building through its Public Assistance (PA) program pursuant to Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, and its implementing regulations codified at Title 44 of the Code of Federal Regulations (CFR) Part 206.

FEMA has prepared this Environmental Assessment (EA) to evaluate the impacts of the proposed project. The EA has been prepared according to the requirements of the National Environmental Policy Act (NEPA), Public Law 91-90, as amended; the Council on Environmental Quality's regulations implementing NEPA (40 CFR Parts 1500 et seq.); and FEMA's implementing regulations (44 CFR Part 10).

The EA process provides steps and procedures to evaluate the potential environmental, social, and economic impacts of a project and its alternatives, as well as an opportunity for the public and local, state/territorial, and other federal agencies to provide input through scoping and review of the Draft EA. These potential impacts are measured by their context and intensity, as defined in the Council on Environmental Quality's regulations.

The objective of FEMA's PA Program, is to provide supplemental federal disaster grant assistance for debris removal; emergency protective measures; and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain private nonprofit organizations. ASPA's Satala operations building was destroyed as a result of FEMA-1859-AS-DR. Therefore, the purpose of the action is to provide PA program funding to ASPA to restore the function served by the Satala operations building.

ASPA's Satala operations building was a metal and concrete, two-story building with a footprint of approximately 7000 square feet (SF). The upper story added approximately 3000 SF. The operations building was sited next to ASPA's Satala diesel-fuel power plant, in the Village of Satala, on the Island of Tutuila, American Samoa (Figure 1). The operations building housed several ASPA departments or divisions including human resources, accounting, legal, administration, operations, and procurement. In addition to the ASPA staff who worked at the operations building, ASPA customers visited the operations building, primarily to pay bills. ASPA employees who worked at the Satala operations building are currently sharing space in existing (currently overcrowded) ASPA facilities, working in non-office environments (e.g., conference rooms), or operating in temporary/leased facilities (e.g., the operations container associated with the temporary generators at the Satala power plant site). In addition to working in undersized, inappropriate, or temporary facilities, ASPA employees who previously worked in the Satala power plant are not centrally located, which creates inefficiencies and additional financial burden. Therefore, action is needed to restore the function provided by ASPA's Satala operations building.



LEGEND

- ☆ Original Location
- ↓ New Location

DR-1859-AS

FEDERAL EMERGENCY MANAGEMENT AGENCY
PW-146 ASPA Operations Building

FIGURE 1
Vicinity Map

3.1 ALTERNATIVES NOT CARRIED FORWARD

The original site of the Satala operations building was in a Special Flood Hazard Area (SFHA) designated Zone VE on FEMA's Flood Insurance Rate Map (FIRM). Zone VE represents an area subject to inundation by the 1-percent-annual-chance flood event (i.e., the "100-year flood") with additional hazards due to storm-induced velocity wave action (i.e., coastal flooding). FEMA's regulation that implements Executive Order (EO) 11988 on Floodplain Management (44 CFR Part 9) prohibits new construction in a coastal high hazard zone (which includes Zone VE). Specifically 44 CFR 9.11(d)(1) states "[t]here shall be...no new construction in a coastal high hazard area, except for (i) a functionally dependent use; or (ii) a structure or facility which facilitates an open space use". The Satala operations building does not meet either of these exceptions. In a memorandum of June 2, 2009, Mr. James A. Walke, Acting Assistant Administrator for FEMA's Disaster Assistance Directorate, provided clarification regarding this prohibition that "new construction" includes replacement of a structure or facility that has been "totally destroyed" (including when repair costs would equal or exceed 90 percent of replacement costs). Because the Satala operations building was, by definition, totally destroyed, FEMA is prohibited from providing financial assistance to ASPA to reconstruct the facility in Zone VE. Therefore, this alternative was dismissed from further consideration.

ASPA inventoried its facilities to determine if the Satala operations building function could be restored by using existing buildings. However, existing ASPA facilities were already being used above capacity to house staff and services from the Satala operations building. Thus, use of existing ASPA facilities was not considered a reasonable alternative and was dismissed from further consideration.

ASPA considered constructing a replacement facility in a new location with the following criteria: (1) the property was owned by the American Samoa Government (ASG), (2) the property was proximate to other ASPA facilities, and (3) the property was not in a coastal high hazard zone. The only site which met these criteria was ASPA's Tafuna power plant complex, as shown in Figure 1.

3.2 ALTERNATIVES CARRIED FORWARD

3.2.1 Alternative 1: No Action

Under NEPA the inclusion of a No Action Alternative is required in the environmental analysis and documentation. The No Action Alternative is defined as maintaining the status quo with no FEMA funding for any alternative action. The No Action Alternative is used to evaluate the effects of not providing eligible assistance for the project, thus providing a benchmark against which the "action alternatives" can be evaluated. For the purpose of this alternative, it is assumed that ASPA would be unable to implement the project for lack of federal assistance. Therefore, under the No Action Alternative, the existing Satala operation building site would be left in its current state. ASPA employees who previously worked at the Satala operations building would continue to share space in overcrowded ASPA facilities, work in non-office environments, or operate in temporary facilities. Without a centralized operations building, efficiency of ASPA staff and their functions would be reduced, likely resulting in increased costs and decreased productivity.

3.2.2 Alternative 2: Replace Facility at Tafuna (Proposed Action)

As described above, ASPA proposes to construct a replacement facility for the Satala operations building at its Tafuna power plant complex in the village of Tafuna, Tualauta County. The new operations building is proposed to be a one-story building with an approximate footprint of 13,000 SF. Excavations for footings are expected to be approximately 5 feet below ground surface. Approximately 30 parking spaces would be constructed for ASPA staff and customers. The operations building would likely house the following ASPA departments: human resources, accounting, legal, administration, operations, and procurement; these are subject to change during the design process. The building would also include appurtenant facilities such as restrooms, storage spaces for mechanical and electrical equipment, and kitchens/break rooms. Photovoltaic panels with a capacity of 175 kilowatts are being considered for the roof of the new building. A smaller, second story is also under consideration.

The proposed location of the new operations building and parking lot is within an area of approximately 31,000 SF in the southeast corner of the ASPA Tafuna power plant complex, as shown in Figures 2 and 3. This area is currently used for storage of used materials and equipment, supplies, containers, an improvised office trailer, a shed that is currently used for the assembly of septic tanks, and a shed that is currently used for the assembly of wastewater manholes. All salvageable materials and equipment would be sold to commercial vendors. All non-salvageable items would be relocated to the existing scrap pile in the ASPA Tafuna power plant complex. The two sheds currently used for assembly of septic tanks and wastewater manholes would be demolished and reconstructed in the western portion of the complex, as shown in Figure 2.

The 7000-square-foot concrete slab which formed the foundation of the Satala operations building would be abandoned.

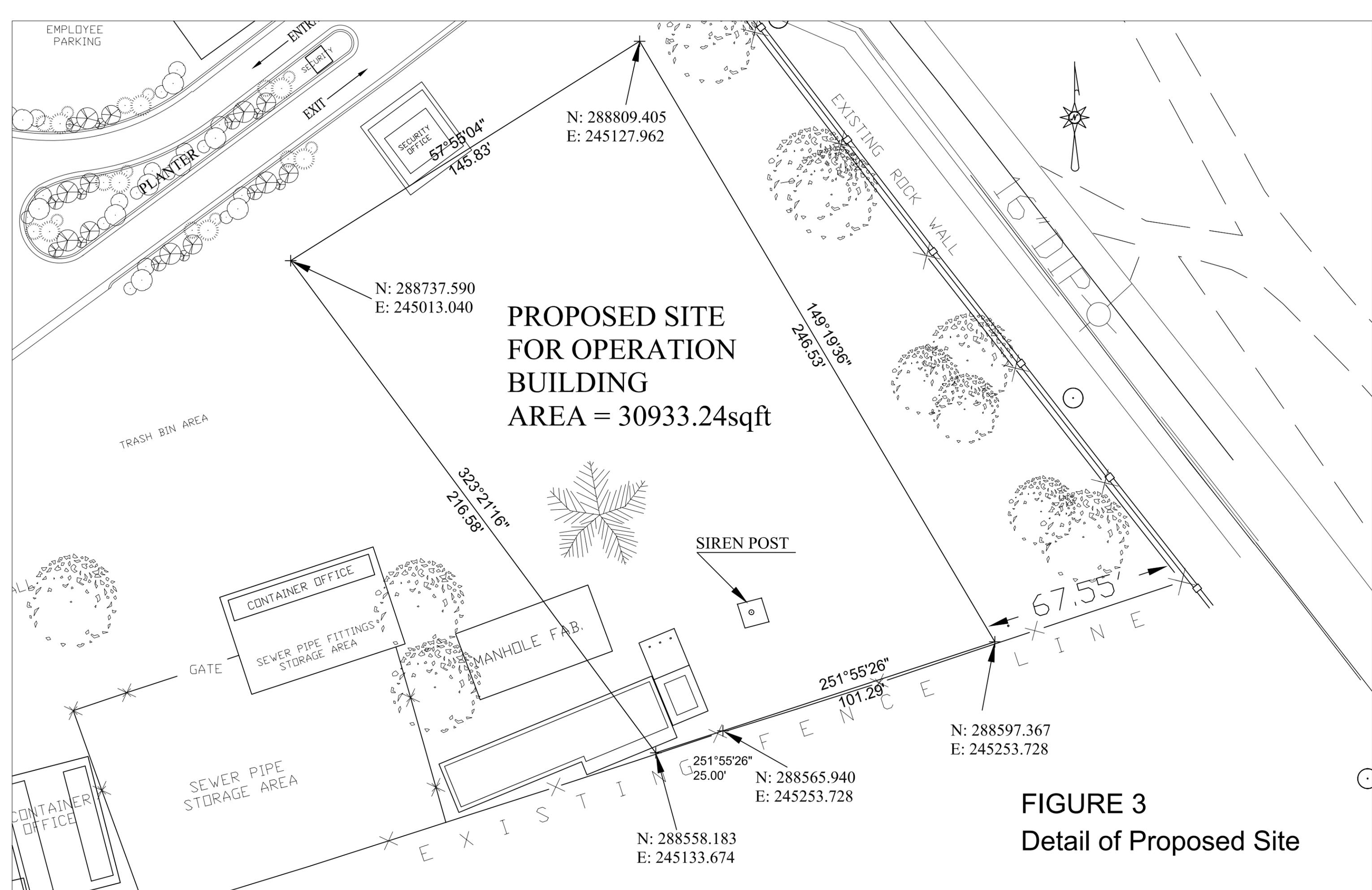


FIGURE 3
Detail of Proposed Site

This section describes existing conditions in the project area, evaluates the potential for the two alternatives to result in direct and indirect impacts on the environment, and discusses mitigation measures to avoid or minimize these impacts. This section focuses on the environmental resources for which some level of impact may result: geology, seismicity, and soils; air quality; water resources; biological resources; cultural resources; socioeconomics and public safety; transportation; noise; and visual resources.

4.1 GEOLOGY, SEISMICITY, AND SOILS

4.1.1 Geology and Soils

Tutuila is of volcanic origin and is characterized by steep mountainsides, small valleys, and a narrow coastal fringe of relatively level land. The island is a narrow mountain range consisting of basic igneous rock, mainly basalt, with small amounts of andesite and trachyte. The mountains extend approximately 20 miles from east to west. Landslides are common on steep slopes, especially in areas saturated by heavy rainfall, lacking in deep-rooted vegetation, and comprised of unstable soils.

ASPA's Tafuna power plant complex is located on the largest flat area of the island, the Tafuna-Leone Plain. This plateau is mostly composed of lava flows, pyroclastic deposits (ash, cinder, and breccia), and reefs that were covered from the flows. Soils in the area consist of Ili'ili which is extremely stony mucky clay loam and Pavaiai which is stony clay loam (U.S. Department of Agriculture 1983). The soils are characterized as having a small amount of organic content in the surface horizon and many fine roots; being very hard and porous; and having many pebbles, stones, and cobbles for surface textures. The soils are formed from volcanic ash and are underlain with lava. Depths are typically between 9 to 38 inches. The subsoil may be stony in places. Slopes for these soils range from mild to steep (3 to 40 percent), and these soils are highly absorbent and fairly stable because of the intertwined root structure.

4.1.1.1 *Alternative 1: No Action*

Under the No Action Alternative, the geologic conditions and soils at the proposed site would remain the same as under existing conditions. No ground-disturbing activities would occur, so the No Action Alternative would have no direct effects to geology or soils. The proposed site would be left as an unimproved area which would be susceptible to limited erosion from storm runoff.

4.1.1.2 *Alternative 2: Proposed Action*

The Proposed Action has a low potential for soil erosion during construction activities because of the flat topography of the proposed site and the characteristics of the soil. To further minimize the potential for soil erosion, ASPA would be responsible for implementing best management practices (BMPs) such as covering soil piles, watering down access roads during dry periods, and installing sediment fencing during periods of heavy rains. ASPA would ensure that all construction activities would comply with two American Samoa Environmental Protection Agency (ASEPA) documents: American Samoa Erosion & Sediment Control Field Guide (ASEPA and ASCZMP 2011) and Guidance Manual for Runoff Control (ASG and ASEPA 2001)

Because the site is flat and not adjacent to any steep slopes, the Proposed Action would not change the risk of landslides or be affected by landslides. No impact to soils or geology would occur at the pre-disaster site because the original foundation would remain intact.

4.1.2 Seismicity

FEMA classifies the island of Tutuila as Seismic Zone 3, which means it will experience earthquake ground shaking of approximately 0.2g peak horizontal acceleration (where g is the unit used to express gravitational force) and has a 1 in 500 chance per year of sustaining light to moderate building damage (i.e., a 10-percent probability of experiencing ground shaking of at least 0.2g every 50 years). This Seismic Zone 3 designation considers all probable earthquake sources affecting American Samoa, local and distant, and translates their effects into different estimates of ground shaking.

Most earthquakes that are felt in American Samoa originate from the Tonga Trench, approximately 100 miles southwest of Tutuila. The Tonga Trench is located where the Pacific and Australian tectonic plates collide. The trench is considered an area of high seismic activity and generates large but distant earthquakes that are felt on Tutuila. Such earthquakes can be precursors to volcanic activity but generally do not present a seismic threat to the islands.

The only active volcano in the immediate vicinity of American Samoa is the submarine volcano Vanilulu'u, located approximately 100 miles east of Tutuila. The Ofu-Olosega volcano last erupted in 1866, and the other volcanoes in the region have been silent for thousands of years. No active volcanoes exist on the island; however, many craters are still visible on the landscape.

Most tsunamis (huge water waves caused by earthquakes) that affect Tutuila are generated by fault movements along the Pacific Rim in the Aleutian Islands, South America, the Tonga Trench, and other distant locations. In 1868 and 1960, tsunamis originating in Chile caused damage in the Samoan Islands. The tsunami that hit Tutuila in 2009 and destroyed ASPA's Satala operations building was a result of an earthquake that occurred along the Tonga Trench.

The National Oceanic and Atmospheric Administration National Weather Service operates the Pacific Tsunami Warning Center, which monitors sudden earth movements throughout the Pacific Basin. Warnings are broadcast by the news media on radio and television. Subsequent to the 2009 tsunami, warning sirens have been installed around the island.

4.1.2.1 *Alternative 1: No Action*

Under the No Action Alternative, existing seismic hazards would remain.

4.1.2.2 *Alternative 2: Proposed Action*

Under the Proposed Action, the potential for earthquakes remains unchanged. An earthquake of 0.2g is unlikely to affect the proposed site. In addition, the proposed building would be appropriately designed and constructed to current building standards set by the National Earthquake Hazard Reduction Program for local site conditions (including soil type). The proposed structure would be constructed to adhere to the relevant local building codes with respect to seismic safety to minimize potential effects due to strong ground shaking.

The risk of a tsunami impacting the proposed site would be drastically reduced compared to the pre-disaster site. The Tafuna power plant complex is approximately 0.5 mile inland and approximately 40 feet higher in vertical elevation than the Satala operations building site.

4.2 AIR QUALITY

The Clean Air Act was enacted to regulate air emissions from area, stationary, and mobile sources. This law authorized the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The six criteria pollutants regulated by the Clean Air Act are carbon monoxide (CO), lead, nitrogen oxides (NO_x), ozone (O₃), particulate matter (less than 10 micrometers in diameter [PM₁₀] and less than 2.5 micrometers in diameter [PM_{2.5}]), and sulfur dioxide (SO₂). Air quality management areas are designated as “attainment,” “nonattainment,” or “unclassified” for each individual pollutant depending on whether or not they exceed one or more NAAQS. Areas that have been redesignated from nonattainment to attainment are called “maintenance” areas.

Prior to approval of any federal action, the General Conformity Rule (GCR) of the Clean Air Act states that a “a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a federal action would equal or exceed” (40 CFR 51.853 b) any of the threshold screening rates specified in the GCR.

American Samoa is classified as being in attainment or is unclassified for all criteria pollutants (USEPA 2012). Therefore, under the GCR, conformity determination requirements do not apply to projects in American Samoa.

Most land uses surrounding the Tafuna power plant complex are industrial and not considered sensitive receptors. However, there are some residences, an American Samoa Department of Health medical clinic, and a few retail stores in the vicinity. These are considered sensitive receptors for air quality impacts.

4.2.1 Alternative 1: No Action

Under the No Action Alternative, no effects to air quality would occur.

4.2.2 Alternative 2: Proposed Action

Implementation of the Proposed Action would result in temporary, localized impacts to air quality. These impacts include temporary increases of fugitive dust (PM₁₀ and PM_{2.5}) and combustion emissions (CO, NO_x, PM₁₀, PM_{2.5}, SO₂, and volatile organic compounds [O₃ precursors]). Fugitive dust emissions would be generated by vehicle movement over unpaved areas, dirt tracked onto paved areas from unpaved areas, and particulate matter that is suspended during demolition and construction. Combustion emissions would be generated from the operation of equipment during the demolition and construction processes. As these impacts would be temporary and localized, implementation of the Proposed Action would not cause or contribute to a violation of NAAQS.

To minimize temporary air quality impacts to sensitive receptors in the vicinity, ASPA would employ BMPs to limit fugitive dust and combustion emissions: maintaining and covering soil piles and staged materials; covering the loads of haul vehicles containing fill, cut, demolition

debris, and construction materials; keeping construction/demolition equipment properly tuned; minimizing idling of construction/demolition equipment when not in use; and watering down the project area during dry periods.

There would be no long-term, adverse impacts on air quality; no new permanent air emission sources would be constructed. If the photovoltaic panels are installed on the roof of the new building, they are anticipated to generate sufficient power for the new building, resulting in zero net energy use.

4.3 WATER RESOURCES

Tutuila experiences an average annual rainfall of approximately 200 inches. The heaviest rainfall occurs from December to March, during which time typhoons are common. Rainfall occurs about half of the days of the year.

Surface water formations in Tafuna Village and the surrounding area are sparse, as it is one of the drier parts of the island. Several drainages flow west to east across the Tafuna-Leone Plain into Pala Lagoon and the Pacific Ocean. The only semi-perennial drainages are Mapusagatuia, Taumata, and Vaitele Streams, which are all at least 0.25 mile from the Tafuna power plant complex. Other unnamed drainages on the Tafuna-Leone Plain form when high-precipitation events cause flash flooding, but none of these are in the immediate vicinity of the Tafuna power plant complex. Groundwater is the principal source of domestic and industrial water supply, as it is more abundant and has a higher quality than surface water.

4.3.1 Coastal Zone Management

The Coastal Zone Management Act (CZMA) makes federal funds available to preserve, protect, develop, and, where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs as well as the fish and wildlife using those habitats. The CZMA makes federal financial assistance available to any coastal state or territory that is willing to develop and implement a comprehensive coastal management program. The act applies to all actions within a designated coastal zone and requires that any federal agency activity that affects the coastal zone is consistent, to the maximum extent practicable, with approved state or territory coastal zone management programs.

The entire island of Tutuila and the sea within 3 miles of the shoreline are within the coastal zone designated by the American Samoa Coastal Management Program (ASCMP). The ASCMP is part of the American Samoa Department of Commerce (ASDOC). American Samoa faces coastal concerns of fishery habitat loss, coastal hazards (such as hurricanes, flooding, and erosion), marine debris, and solid waste. To help mitigate the effects of human activity, the ASCMP oversees all construction and earth-moving activities on the island. The federal consistency provisions of the CZMA require that all federally funded, licensed, or permitted projects affecting the coastal zone of American Samoa be conducted in a manner that is consistent with the federally approved ASCMP. To determine consistency with the ASCMP, all projects involving ground disturbance require that a land use permit application is submitted for review under the Project Notification and Review System (PNRS). Although ASDOC is the primary permitting agency for the process, the PNRS is comprised on various ASG agencies and evaluates land use permit applications for compliance with other environmental regulations,

building codes, infrastructure/utility requirements, historic preservation regulations, and public health codes.

4.3.1.1 *Alternative 1: No Action*

Under the No Action Alternative, no facilities would be built and existing facilities would not be improved. Therefore, this alternative would not impact the coastal zone and would not require a federal consistency determination.

4.3.1.2 *Alternative 2: Proposed Action*

Because FEMA would be providing financial assistance under this alternative (as opposed to directly taking action), ASPA would be responsible for obtaining a federal consistency certification from ASDOC confirming that the Proposed Action is consistent with the ASCMP. ASPA would achieve this through obtaining a land use permit through the PNRS process. Impacts to coastal resources would be minimized by the application of the mitigation measures described in Section 4.1.1.2 of this EA.

4.3.2 Floodplain Management

EO 11988, Floodplain Management, requires federal agencies to avoid, to the extent possible, the short- and long-term adverse impacts associated with the occupancy and modification of floodplains (i.e., the SFHA). FEMA's regulations for complying with EO 11988 are found in 44 CFR Part 9, Floodplain Management and Protection of Wetlands. As described in Section 3.1 of this EA, the original site of the Satala operations building was in Zone VE, a SFHA, according to FEMA FIRM 6000010077C, July 17, 2006. The entire Tafuna power plant complex is within Zone X (unshaded) according to FEMA FIRM 600010086C, July 17, 2006. Zone X designates areas of minimal flood hazard, which are outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood (i.e., the "500-year flood").

4.3.2.1 *Alternative 1: No Action*

Under the No Action Alternative, no activities would occur which would impact the floodplain or require compliance with EO 11988 or 44 CFR Part 9.

4.3.2.2 *Alternative 2: Proposed Action*

Abandoning the concrete slab associated with the disaster-damaged building is not an action which has the potential to affect the floodplain. Thus, EO 11988 and 44 CFR Part 9 are not applicable to this component of the Proposed Action.

As described above, the Tafuna power plant complex is outside the SFHA. Thus, the Proposed Action would replace the disaster-damaged building (which was in Zone VE as described above) with a building that is outside of the floodplain. The sites of the septic tank and wastewater manholes assembly sheds are within Zone X and proposed to be relocated to sites within Zone X. Because this zone is not within the SFHA and there are no impacts to the SFHA, the Proposed Action complies with EO 11988 and 44 CFR Part 9.

4.3.3 Water Quality

ASEPA maintains programs to monitor and protect water quality. ASEPA has identified three major concerns for surface water quality on Tutuila: (1) sediment, generated by improper land use practices, that enters streams and coastal waters after heavy rains; (2) nutrient enrichment from human and animal wastes in populated areas; and (3) contamination in Pago Pago Harbor.

Potential groundwater contamination is another concern on Tutuila. Groundwater is the principal source of domestic and industrial water supply because it is more abundant and has a higher quality than surface water (CSREES 2004). However, the volcanic soil and bedrock of the island are highly permeable and do not act as good filters. Therefore, the groundwater is easily threatened by surface contaminants.

4.3.3.1 *Alternative 1: No Action*

The No Action Alternative would not result in changes to existing surface water or groundwater quality.

4.3.3.2 *Alternative 2: Proposed Action*

In the short term, the demolition and construction associated with implementation of the Proposed Action could adversely affect surface water quality by increasing erosion which could result in increased sedimentation into waterways. However, there are no surface waters within range of the project area that would be impacted by demolition or construction activities. Nonetheless, ASPA would employ the BMPs and ASG requirements described in Section 4.1.1.2 of this EA, which would minimize any potential effects to surface waters. To minimize the potential to affect groundwater during demolition and construction, ASPA would be responsible for ensuring that all equipment fueling and maintenance activities occur on impervious services, checking all equipment for potential leaks of fuel or lubricants, having appropriate equipment and planning in place in the event of a spill, and, in the unlikely event of a spill or leak, cleaning up and properly disposing of all potential contaminants in coordination with ASEPA.

In the long term, the Proposed Action would cause negligible effects to groundwater quality and quantity. The old equipment and other materials that are currently stored on the proposed Tafuna operations building site have the potential to leach fuels, lubricants, or heavy metals into groundwater. Removing these items would alleviate this possibility of contamination. The buildings associated with the proposed action would increase the amount of impervious surfaces on the Tafuna-Leone Plain, thereby decreasing the area available for groundwater recharge. However, compared to the size of the plateau, the addition of an approximately 13,000 SF building and slight increases in the sizes of the septic tank and wastewater manhole assembly sheds would result in negligible effects to groundwater recharge.

4.4 BIOLOGICAL RESOURCES

Biodiversity of terrestrial species in Tutuila is low due to the island's volcanic origin and remote location but the surrounding marine environment is extremely diverse (Craig 2002). The main vegetation type found on Tutuila is that of a tropical rainforest, but many nonnative plants have out-competed native plants in disturbed environments (Whistler 1995) or have been purposefully planted as ornamentals. This situation is especially true at the Tafuna power plant complex, which is a highly disturbed, industrial complex with minimal vegetation, dominated by

maintained, ornamental, nonnative plant species. The area surrounding the Tafuna power plant complex is also highly disturbed and primarily made up of ornamental nonnative and invasive nonnative plant species. Although a narrow ring around the island contains shallow coastal habitats that support coral reef ecosystems and deepwater habitat outside of the reef, the project area is approximately 0.5 mile inland and is not near any major drainages that flow to marine habitats.

4.4.1 Threatened and Endangered Species

The Endangered Species Act (ESA) establishes a program to conserve, protect, and restore threatened and endangered plants and animals and their habitats. Section 7 of the ESA specifically charges federal agencies with the responsibility of using their authority to conserve threatened and endangered species. All federal agencies must ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a threatened or endangered species or result in the destruction or modification of critical habitat for these species.

FEMA obtained information concerning species that are listed as endangered or threatened or proposed for listing as endangered or threatened under the ESA that may occur in American Samoa from the U.S. Fish and Wildlife Service (USFWS). According to USFWS (2012), three species of sea turtles and one avian species that are federally listed as threatened or endangered have the potential to occur in the vicinity of American Samoa, as presented in Table 1. The sea turtles are under USFWS’s jurisdiction for their use of terrestrial nesting habitats and under the jurisdiction of the National Marine Fisheries Service (NMFS) for their use of off-shore and in open ocean habitats. Avian species are under the jurisdiction of USFWS. No other species protected under the ESA are known or expected to occur in American Samoa, and no critical habitat has been designated or proposed.

**Table 1
Protected Species with Potential to Occur in the Project Area**

Scientific Name	Common Name	Federal Status	Preferred Habitats	Likelihood of Occurrence in Project Area
<i>Chelonia mydas</i>	Green sea turtle	T	Open ocean. Nests in sandy beaches.	None. No deepwater, coral, sandy beach, or sea grass bed habitat in the project area.
<i>Dermochelys coriacea</i>	Leatherback sea turtle	E	Open ocean. Nests in sandy beaches.	None. No deepwater, coral, sandy beach, or sea grass bed habitat in the project area.
<i>Eretmochelys imbricata</i>	Hawksbill sea turtle	E	Open ocean. Nests in sandy beaches.	None. No deepwater, coral, sandy beach, or sea grass bed habitat in the project area.
<i>Puffinus auricularis newelli</i>	Newell’s Townsend’s shearwater	T	Open ocean. Nests in steep, mountainous terrain.	None. No pelagic or mountainous habitat in the project area.

T = threatened, E = endangered

4.4.1.1 *Alternative 1: No Action*

Under the No Action Alternative, no activities would occur which would impact species protected by the ESA or require review under Section 7 of the ESA.

4.4.1.2 *Alternative 2: Proposed Action*

As shown in Table 1, the Tafuna power plant complex does not provide habitat for sea turtles or the Newell's Townsend's shearwater. Thus, none of these species would be directly affected from implementation of the Proposed Action. As described in Section 4.3 of this EA, there are no surface waters within range of the project area which could carry sediment, demolition debris, construction supplies, or other materials into coral reef, sea grass bed, or pelagic ecosystems potentially containing habitat for sea turtles or the Newell's Townsend's shearwater. Thus, indirect effects to these species would also be avoided. FEMA has determined that the Proposed Action would not affect proposed or listed threatened or endangered species or proposed or designated critical habitat and therefore is in compliance with Section 7 of the ESA. Therefore, consultation with USFWS and NMFS is not required.

4.4.2 **Executive Order 13112: Invasive Species**

EO 13112 was issued to prevent the introduction of invasive species and to provide for their control. Federal agencies may not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to the guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.

As described in Section 4.4 of this EA, invasive nonnative species are found on several properties in the immediate vicinity of the Tafuna power plant complex.

4.4.2.1 *Alternative 1: No Action*

No activities would occur under the No Action Alternative which would affect invasive species populations. Thus, EO 13112 is not applicable.

4.4.2.2 *Alternative 2: Proposed Action*

Although some areas surrounding the Tafuna power plant complex are dominated by invasive species, ASPA maintains vegetation on the Tafuna power plant complex so that invasive species from off-site have not colonized the Tafuna power plant complex except where desired (i.e., planting ornamental vegetation). ASPA would ensure that any imported fill, construction/demolition equipment, and construction supplies are free of invasive species before entering or exiting the project area. After construction is complete, ASPA would ensure that any revegetation efforts would not include planting invasive species and that areas subject to disturbance as a result of the Proposed Action would be maintained to avoid the spread of invasive species. Implementation of these measures would meet FEMA's EO 13112 compliance responsibilities.

4.4.3 Executive Order 11990: Protection of Wetlands

EO 11990 requires federal agencies to take action to minimize the destruction or modification of wetlands by considering both direct and indirect impacts to wetlands that may result from federally funded actions. FEMA's regulations for complying with EO 11990 are found in 44 CFR Part 9, Floodplain Management and Protection of Wetlands.

Types of wetlands that occur in American Samoa include saltwater and freshwater swamps and marshes, cultivated and ruderal wetlands, and perennial streams. Site reconnaissance conducted in August 2011, December 2011, and April 2012 provided no evidence that wetlands exist within the Tafuna power plant complex.

4.4.3.1 *Alternative 1: No Action*

No activities would occur under the No Action Alternative which would result in direct or indirect effects to wetlands. EO 11990 and 44 CFR Part 9 are not applicable.

4.4.3.2 *Alternative 2: Proposed Action*

No wetlands are present in any of the areas proposed for construction or demolition or within the vicinity of these sites. Thus, implementation of the Proposed Action would not result in direct or indirect impacts to wetlands. Therefore, the Proposed Action complies with EO 11990 and 44 CFR Part 9.

4.4.4 Executive Order 13089: Coral Reef Protection

EO 13089 requires federal agencies to ensure that actions they authorize, fund, or implement will not degrade the conditions of coral reef ecosystems. As described in Section 4.4 of this EA, much of Tutuila is surrounded by a fringing coral reef.

Coral reefs surrounding Tutuila are impacted by poor water quality. Natural phenomena such as hurricanes and disease have always taken their toll on reefs, but their effects are exacerbated by human activities in the ocean and on land. Besides destructive fishing practices and coral collecting, impacts come from sediments eroded from agricultural and construction operations, sewage, and other effluents.

4.4.4.1 *Alternative 1: No Action*

Under the No Action Alternative, no impacts would occur to coral reef ecosystems. EO 13089 is not applicable.

4.4.4.2 *Alternative 2: Proposed Action*

Under the Proposed Action, no impacts would occur to coral reefs around the island. As described in Section 4.3 of this EA, there are no surface waters within range of the project area which could carry sediment, demolition debris, construction supplies, or other materials into marine habitats potentially containing coral reef ecosystems. Nonetheless, ASPA would employ the BMPs and follow ASG requirements described in Section 4.1.1.2 of this EA, which would minimize any potential effects to coral reef ecosystems. In addition, ASPA would ensure that coral is not a component of fill materials and is not used in concrete mixes associated with the Proposed Action unless from a permitted source. The Proposed Action complies with EO 13089.

4.5 HISTORIC PROPERTIES

Consideration of impacts to historic properties is mandated under Section 106 of the National Historic Preservation Act (NHPA). Requirements include identifying significant historic properties that may be affected by a federal undertaking and mitigating adverse effects to those resources.

On August 30, 2011, FEMA archaeologist Aaron Fogel (Registered Professional Archaeologist) conducted a pedestrian survey of the areas proposed for demolition and construction and the immediate vicinity. The survey identified an apparently intact star mound in the southwest corner of the Tafuna power plant complex and a possible star mound in the center-southern portion of the complex, as shown in Figure 2. Star mounds were usually built of earth and stone with multiple arms or rays extending outward. The mounds are believed to have been used by individuals mainly for pigeon catching, but other rituals or activities may also be associated with these features. Neither potential star mound has been formally evaluated for eligibility to the National Register of Historic Places (NRHP).

The survey results indicated that the potential for other historic properties to exist in the project area or vicinity are very low. All buildings in the project vicinity are modern and lack characteristics which would make them eligible to the NRHP. In addition, most of the project area had been land-leveled, graded, and subjected to heavy disturbance by activities related to use of the space as a construction, maintenance, and storage yard.

4.5.1 Alternative 1: No Action

Under the No Action Alternative, no impacts to historic properties would occur, and no activities would occur which would require review under Section 106 of the NHPA.

4.5.2 Alternative 2: Proposed Action

FEMA consulted with the American Samoa Historic Preservation Officer (ASHPO) by letter of September 8, 2011 (Appendix A). In this letter, FEMA described the Proposed Action (Undertaking) and defined the Area of Potential Effects (APE). For the purposes of the Undertaking, FEMA considered both potential star mounds as eligible for the NRHP.

The Undertaking would not involve demolition, construction, equipment/materials staging, or other actions that would directly affect the potential star mounds. To ensure that construction/demolition crews would not inadvertently disturb the potential star mounds, ASPA would be required to install and maintain brightly colored fencing/taping around both potential star mounds and inform all construction personnel of the historic importance of the potential star mounds and to remain outside of the fencing/taping at all times. Because of the highly disturbed nature of the APE and existence of modern structures in the immediate proximity of the potential star mounds, relocating the operations building, septic tank construction shed, and wastewater manhole fabrication shed would not result in indirect adverse effects to the potential star mounds.

Although low, the potential to discover unexpected subsurface historic properties exists. Therefore, ASPA would be responsible for halting work in the event of an unanticipated discovery during construction and notifying TOFR and FEMA as soon as practicable. If FEMA determines that the discovery has the potential to be a significant historic property, FEMA would require ASPA to stop all construction in the vicinity of the discovery and to take all reasonable

measures to avoid or minimize harm to the property until FEMA concludes consultation with ASHPO.

With implementation of the aforementioned measures, FEMA determined that the Undertaking would not adversely affect historic properties. ASHPO concurred with FEMA's determinations by letter of January 12, 2012 (Appendix A). Thus, the Proposed Action is in compliance with Section 106 of the NHPA.

4.6 SOCIOECONOMICS AND PUBLIC SAFETY

According to the Census of American Samoa (U.S. Department of Commerce Census Bureau, 2003)¹, the population of Tualauta County is 22,025, which is 38 percent of the population of American Samoa (57,291). The Census indicates that 51 percent of the county population is male, and 87 percent is ethnic Samoan. The median age is 21 years, with 59 percent of the county population aged 16 or older and 52 percent of this age group in the labor force. The primary industry for the employed population is manufacturing (36 percent), followed by education, health, and social services (14 percent) and retail trade (12 percent). Other industries represented by large sections of the work force include public administration (8 percent); construction (7 percent); and transportation, warehousing, and utilities (6 percent).

The county has 3,875 housing units and the average household size is 6 people. The median household income is \$18,213 and almost 60 percent of families are below the federal poverty level. The median home cost is \$39,075; 42 percent of households have no vehicles.

Although less than 3 percent of the county's population 5 years of age and older do not speak English, 73 percent of this age group speaks Samoan more frequently than English while at home. More than 87 percent of the county's population 25 years of age and older have at least a 9th grade education.

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, directs federal agencies to make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high adverse human health, environmental, economic, and social effects of its programs, policies, and activities on minority and low-income populations. The population of American Samoa is generally highly homogeneous regarding ethnicity and income levels. Nonetheless, the majority of Tualauta County residents identify themselves as ethnic Samoan and the majority of Tualauta County families are below the poverty level. Therefore, the project area can be considered a minority and low-income community for the purposes of this EO.

Potential public safety hazards include hazardous, explosive, reactive, or other dangerous materials that pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed. The Resource Conservation and Recovery Act (RCRA) provides USEPA the authority to control hazardous wastes from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of such wastes. RCRA also sets forth a framework for the management of nonhazardous, but potentially dangerous, and other solid wastes. In addition, the Hazardous Materials Branch of ASEPA regulates the importation, storage and disposal of

¹ At the time this EA was prepared, no specific data were available for the 2010 census. Therefore the detailed 2000 census data were used.

hazardous materials and waste. ASEPA may prohibit such generation, transportation, storage or disposal if it is determined that these activities will endanger public health and safety or the environment or where such activities are not performed in accordance with the regulations set forth in Title 24 of the American Samoa Code Annotated (ASEPA 2011).

4.6.1 Alternative 1: No Action

The No Action Alternative does not involve any activity subject to EO 12898 compliance. No public safety impacts with respect to hazardous or other dangerous wastes would occur.

4.6.2 Alternative 2: Proposed Action

Under the Proposed Action, the community immediately surrounding the construction area may be temporarily impacted by noise and traffic; however, the area is a storage yard so these activities are common in the area. The Proposed Action would move the operations building outside of the flood zone and provide a centralized location for ASPA. This would improve operating efficiency and reduce the risk of future damages to the building which may reduce costs to the power customers in the community. No substantial adverse environmental impacts have been identified in this EA. Therefore, the Proposed Action would not cause disproportionately high adverse human health, environmental, economic, or social effects on low-income or minority populations and would comply with EO 12898.

Construction activities would involve the limited transportation, storage, usage and disposal of hazardous, explosive, reactive, or other dangerous materials on a temporary basis. Small quantities of these materials, such as gasoline and diesel fuel, would be used to power equipment during construction and maintenance activities. All construction activities involving the transportation, usage, and disposal of regulated materials would be subject to federal and local health and safety requirements. ASPA would be required to prepare a Minor Spill Response Plan that presents the procedures and protocols utilized in the event of a spill resulting from the activities associated with demolition and construction. The plan would be reviewed and approved by ASEPA's Hazardous Materials Branch prior to notice to proceed for project construction. Adherence to this plan would ensure that the Proposed Action would not result in an adverse public safety effect due to hazardous or other regulated dangerous materials.

4.7 TRANSPORTATION

Highway 1 is the main arterial road that connects the east and west sides of the island; it is approximately 1 mile north of Tafuna at its closest point. Another arterial passes the Tafuna power plant complex; this road provides access to Nu'uuli to the north, the Pago Pago International Airport to the east, and Ili'ili to the west. This arterial is one of the most heavily used roads on Tutuila. Turn lanes for traffic to enter the Tafuna power plant complex from the arterial already exist. Many secondary roads traverse Tafuna to provide access to residential, commercial, and industrial areas within and around the village and to provide alternative routes to reach Highway 1.

4.7.1 Alternative 1: No Action

Under the No Action Alternative, no changes would occur to transportation along the arterial road or secondary roads in the village of Tafuna.

4.7.2 Alternative 2: Proposed Action

Implementation of the Proposed Action would result in temporary, minor impacts to transportation during construction. Construction vehicles entering and exiting the Tafuna power plant complex would increase traffic along Tafuna's main arterial. However, this increase would be negligible compared to the number of vehicles that currently use this arterial and enter/exit the Tafuna power plant complex. Post-construction impacts would also be negligible based on the slight increase in ASPA employee and customer traffic accessing the proposed operations building site.

To ensure impacts to traffic and circulation are reduced to the maximum extent practicable, ASPA would stage construction equipment, materials, and vehicles so as to minimize vehicle trips and hindrances to traffic flow. In coordination with the American Samoa Department of Public Works, ASPA would review traffic patterns to determine if and when traffic restrictions or other measures would be required during construction.

4.8 NOISE

Commonly defined as unwanted and/or unwelcome sound, noise is federally regulated by the Noise Control Act. Although the Noise Control Act tasks the USEPA to prepare guidelines for acceptable ambient noise levels, it only charges those federal agencies that operate noise-producing facilities or equipment to implement noise standards. By the nature of its mission, FEMA does not have regulations defining noise.

Some land uses are considered more sensitive to noise than others. Noise-sensitive receptors are located at land uses associated with indoor and outdoor activities that may be subject to auditory interference, stress, injury, or other detriment resulting from noise. These land uses often include residences, hotels, hospitals, nursing homes, educational facilities, libraries, and parks. Noise in and around the project area is at a very high level and consists of various industrial activities (including power generation from turbines), vehicle traffic, and (at times) airport operations. Nonetheless, there are some residences, an American Samoa Department of Health medical clinic, and a few retail stores in the vicinity. These are considered sensitive receptors for noise.

4.8.1 Alternative 1: No Action

Under the No Action Alternative, noise would remain at current levels.

4.8.2 Alternative 2: Proposed Action

Construction and demolition noise would be negligible compared to the high level of noise that already exists in and around the proposed operations building site. Furthermore, the type of noise generated during construction and demolition would be consistent with the industrial and vehicle-related noise sources that currently exist. Vehicle noise associated with operations of the facility would similarly be negligible and consistent with existing sources.

To minimize effects to ASPA employees and customers during construction and demolition, ASPA would be responsible for implementing the following measures to reduce noise levels and their effects to the extent practicable:

- All noise-producing project equipment and vehicles using internal combustion engines (including haul trucks) would be fitted with mufflers, air-inlet silencers, where appropriate,

and any other appropriate shrouds, shields, or other noise-reducing features. These devices would be maintained in good operating condition so as to meet or exceed original factory specifications. Mobile or fixed “package” equipment (e.g., arc welders or air compressors) would be equipped with the shrouds and noise control features that are readily available for that type of equipment.

- All mobile or fixed noise-producing equipment used on the project that is regulated for noise output by a local, state/territorial, or federal agency would comply with such regulation while used in the course of project activity.
- All workers exposed to noise levels above 80 decibels would be provided with personal protective equipment for hearing protection (i.e., earplugs and/or earmuffs). Areas where noise levels are routinely expected to exceed 75 decibels would be clearly posted with signs stating “Hearing Protection Required in this Area.”

4.9 VISUAL RESOURCES

Viewers of the proposed site include ASPA employees and customers and motorists/passengers driving on the main arterial road through Tafuna. The viewshed of the proposed site consists of industrial parts and supplies, trailers, sheds, shipping containers, and debris. Views in the general project vicinity are similar and typical of industrial facilities (e.g., corrugated metal buildings, shipping containers, debris).

4.9.1 Alternative 1: No Action

Under the No Action Alternative, no impacts would occur to visual resources and the site would remain in its current state.

4.9.2 Alternative 2: Proposed Action

During demolition and construction, the visual character of the proposed site would not change from existing conditions. Stockpiled parts and supplies would be replaced with building materials, lean-tos and other makeshift buildings/trailers would be replaced with buildings under construction, and existing debris piles would be replaced with building debris. With construction complete, the proposed operations building would have a beneficial visual impact compared to current conditions.

4.10 CUMULATIVE IMPACTS

The Council on Environmental Quality defines a cumulative impact as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions...” (40 CFR Part 1508.7). ASPA’s Tafuna power plant complex is potentially one of five alternatives considered for construction of a power plant to replace the Satala power plant destroyed by the 2009 disaster. Because the alternative selection process is speculative at this time and FEMA will address the Satala power plant replacement in a separate NEPA document, any potential cumulative impacts will be considered in the Satala power plant replacement NEPA document. FEMA is not aware of any other planned residential or commercial developments, industrial activity, or public projects in the vicinity of the proposed site in the near future. The project area and vicinity are highly developed, and the existing encroachment of commercial and industrial facilities on the area

makes new development in the project area unlikely. No cumulative impacts are expected to result.

FEMA is the federal agency responsible for conducting the NEPA compliance process for this project. It is the federal agency's responsibility to expedite the preparation and review of NEPA documents in a way that is responsive to the needs of American Samoa residents while meeting the spirit and intent of NEPA and complying with all NEPA provisions.

FEMA, with the assistance of ASPA and TOFR, conducted an informal scoping program at the beginning of the NEPA review process. ASPA, TOFR, and FEMA met with representatives of the following agencies and organizations to gather their input on this project: ASDOC, ASEPA, ASHPO, the American Samoa Department of Marine and Wildlife Resources, and the American Samoa Department of Public Works.

TOFR and FEMA will circulate a Draft EA for a 2-week public comment period. The public will be notified of the Draft EA availability via direct mailings to known interested parties (Appendix B), the FEMA website, and publication of a notice in the *Samoa News*. During the public comment period, FEMA will accept written comments on the Draft EA addressed to FEMA Region IX EHP, ASPA Operations Building Draft EA, 1111 Broadway, Suite 1200, Oakland, California 94607 or fema-rix-ehp-documents@fema.dhs.gov. At the end of this period, FEMA will review the comments and consider them in the decision-making process before notifying the public of its final determination.

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Federal Emergency Management Agency

- Morgan Griffin, Deputy Regional Environmental Officer
- Aaron Fogel, Historic Preservation Specialist
- Daniel Langmaid, Environmental Specialist
- Carl Nagata, Civil Engineer
- Amy Weinhouse, Attorney-Advisor
- Deborah Greenside, Attorney-Advisor

Appendix A
Interagency Consultations



FEMA

September 8, 2011

Mr. David Herdrich
Historic Preservation Officer
American Samoa Historic Preservation Office
Executive Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Re: Satala Operations Building
FEMA-1859-DR-AS, PW 146
Subgrantee: American Samoa Power Authority

Dear Mr. Herdrich:

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to provide financial assistance to the American Samoa Power Authority (ASPA), through the Territorial Office of Fiscal Reform / American Samoa Disaster Relief Office (TOFR/ASDRO), to restore the function of its Operations Building at the Power Plant in Satala, Tutuila, American Samoa (Undertaking). The Operations Building and its contents were "substantially destroyed" (i.e., repair costs would have exceeded 50 percent of the replacement costs) during the earthquake, tsunami, and flooding designated a Presidentially declared disaster (FEMA-1859-DR-AS). This letter serves as FEMA's request for consultation with your office in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations.

Description of the Undertaking

The Undertaking would result in the demolition of the existing Operations Building at the Satala Power Plant, replacement of the building's contents, and reconstruction of the Operations Building. (The locations of the Operations Building and the Power Plant have no dependency; thus FEMA will meet its Section 106 compliance requirements on the restoration of the Satala Power Plant by consulting with your office separately.) FEMA has already initiated consultation with your office regarding demolition of the existing facilities at the Satala Power Plant by letter of August 4, 2011. Replacement of the Operations Building's contents does not meet the definition of an Undertaking with the potential to affect historic properties. Therefore, for the purposes of this project (PW 146), the Undertaking involves the replacement of the Operations Building.

The pre-disaster location of the Operations Building was in FEMA Flood Zone VE, defined as an area within the 100-year floodplain with velocity hazard (wave action). In compliance with the National Flood Insurance Program, Executive Order (EO) 11988 on Floodplain Management, and FEMA's EO 11988 implementing regulations, ASPA has proposed to construct the Operations Building at its Tafuna Power Plant complex, which is outside of the 100-year floodplain.

The new Operations Building is proposed to be a two-story building with a footprint of 5000 square feet (SF). ASPA would like to keep open the option to increase the size of the facility to as large as a 10,000 SF footprint. Excavations for footings are expected to be approximately 5 feet below ground surface. Approximately 30 parking spaces will also be constructed for ASPA staff and customers. The Operations Building would likely house the following ASPA departments: human resources, accounting, legal, administration, operations, and procurement; but these are subject to change during the design process.

The proposed location of the new Operations Building and parking lot is within a 31,000 SF area in the southeast corner of the ASPA Tafuna Power Plant complex, as shown in Figure 1 (enclosed). This area is currently used for storage of used materials and equipment, supplies, containers, a vacant office trailer, a shed that is currently used during the assembly of septic tanks, and a shed that is currently used during the assembly of manholes. All salvageable materials and equipment will be sold to commercial vendors. All non-salvageable items will be relocated to the existing scrap pile in the ASPA Tafuna Power Plant complex. The sheds currently used for assembly of septic tanks and manholes will be demolished replaced with a single shed and fabrication area constructed in the western portion of the complex within the Warehouse Storage Area, as shown in Figure 2 (enclosed) and designated Septic Tank Construction Shed and Wastewater Manhole Fabrication Area. Construction associated with the shed and fabrication area will be slab-on-grade and not require footings.

Area of Potential Effects

The area of potential effects (APE) for ground-disturbing activities (including materials and equipment staging) is defined by the two areas where construction of the Operations Building (southeast corner of complex) and construction of the Septic Tank Construction Shed and Wastewater Manhole Fabrication Area (western portion of complex within the Warehouse Storage Area) would occur. A larger APE, to include visual and other indirect effects, is roughly defined as the southern portion of the ASPA Tafuna Power Plant complex.

Identification and Evaluation

On August 30, 2011, FEMA archaeologist Aaron Fogel (RPA) visited the ASPA Tafuna Power Plant complex and performed a pedestrian survey of the APE. Before and after conducting the

pedestrian survey, Mr. Fogel discussed with you the Undertaking and the general potential for historic properties to occur in the APE.

According to ASPA personnel, most of the APE had been land-leveled and graded in the past. The pedestrian survey confirmed that most of the area encompassed in the APE has been subject to heavy disturbance by recent and on-going activities related to the use of the property as a construction, maintenance, and storage yard. The ground surface proposed for construction had little vegetation with approximately 60 percent visibility. These sites were primarily covered by cinder fill material deposited during previous construction episodes with areas of concrete indicating past slab-on-grade construction. Due to the high level of ground disturbance associated with the APE and the lack of documented prehistoric habitation sites on the Tafuna plain, the likelihood of significant subsurface historic properties existing in the APE is low.

The sheds proposed for demolition are modern, appear to have been frequently modified, and are obviously not eligible for the National Register of Historic Places (NRHP). Existing buildings in the APE, including the Security Office, the Container Offices, the Engineering Building, the T&D Training Facility, and Storage Buildings within the Warehouse Storage Area, similarly lack characteristics which would make them eligible for the NRHP.

An apparently intact star mound is located in the southwest corner of the complex, and a possible star mound is located in the center of the southern portion of the complex. Both potential star mounds are shown on Figure 2. Neither potential star mound has been formally evaluated for eligibility to the NRHP, but both potential star mounds will be considered eligible for the purposes of this Undertaking.

Determination of Effect

Although low, the potential to discover unexpected subsurface historic properties exists. Therefore, ASPA would be responsible for halting work in the event of an unanticipated discovery during construction and notifying TOFR/ASDRO and FEMA as soon as practicable. If FEMA determined that the discovery had the potential to be significantly historic, FEMA would require ASPA to stop all construction in the vicinity of the discovery and to take all reasonable measures to avoid or minimize harm to the property until FEMA concludes consultation with your office.

The Undertaking involves no construction, equipment/materials staging, or other actions that would directly affect the potential star mounds. To ensure that construction crews would not inadvertently disturb the potential star mounds, ASPA would be required to install and maintain brightly colored fencing/taping around both potential star mounds and inform all construction personnel of the historic importance of the potential star mounds and to remain outside of the fencing/taping at all times. Because of the highly disturbed nature of the APE and existence of modern structures in the immediate proximity of the potential star mounds, siting the Operations

Mr. David Herdrich
September 8, 2011
Page 4

Building, Septic Tank Construction Shed, and Wastewater Manhole Fabrication Area would not result in adverse effects to the potential star mounds.

With implementation of the aforementioned measures, FEMA has determined that the Undertaking would not adversely affect historic properties.

Conclusion

FEMA requests your review and comment on these findings. Unless your office objects to FEMA's determination within 30 days of receipt of this request, FEMA may implement the Undertaking. If you have any questions regarding this request, please do not hesitate to contact Mr. Morgan Griffin, Deputy Environmental Officer, at (510) 627-7033, morgan.griffin@dhs.gov, or the letterhead address.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alessandro Amaglio', followed by the word 'for' written in a cursive style.

Alessandro Amaglio
Environmental Officer

Attachments

cc: Andra Samoa, ASPA
Blanche "Lulu" Barber, TOFR/ASDRO
Salu Tuigamala, TOFR/ASDRO



Hon. Togiola T. A. Tulafono
Governor

Faoa A. Sunia
Lieutenant Governor

Executive Offices of the Governor
American Samoa Historic Preservation Office
American Samoa Government
Pago Pago, American Samoa 96799

David J. Herdrich
Historic Preservation Officer

Phone: (684) 699-2316
Fax: (684) 699-2276

January 12, 2012

54-12HP

Mr. Alessandro Amaglio
Environmental Officer
U.S. Department of Homeland Security
Region IX
111 Broadway, Suite 1200
Oakland, CA 94607-4052

Re: Satala Power Operations Building FEMA – 1849 – DR –AS, PW#146
Subgrantee: American Samoa Power Authority

Dear Mr. Amaglio:

Thank you for your letter of September 8, 2011 concerning the FEMA funded Satala Operations Building undertaking (FEMA DR-1859-AS, PW #146) at Tafuna, Tutuila, American Samoa. I have reviewed your letter and the determinations therein. I offer the following comments.

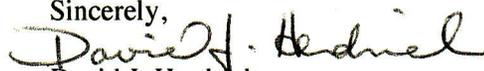
I concur with FEMA's determination of the Area of Potential Effect for the proposed undertaking.

I also concur with your determination of no adverse effect to because the APE has been previously disturbed and it is unlikely that there are any buried historic properties within the APE. I also concur with your determination that nearby star mounds that are likely eligible for the National Register of Historic Places with not be adversely affected because the locations the proposed structures are far enough away from the star mounds to avoid any effect.

Thank you for your time and attention. This correspondence was provided upon the request of Federal Emergency Management Agency in order to assist FEMA with its Section 106 responsibilities under the National Historic Preservation Act of 1966, as amended.

If you have any questions concerning this correspondence please do not hesitate to contact me at (684) 699-2316.

Sincerely,


David J. Herdrich
Historic Preservation Officer

cc: Paula Falk Creech, American Samoa and Micronesia Program Manager, NPS

Appendix B

Draft Environmental Assessment Notice of Availability Distribution List

Distribution List
Notice of Availability — Draft Environmental Assessment
Satala Operations Building Replacement
FEMA-1859-DR-AS, PW 146

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