



August 9, 2016

Mr. James Bouquet, P.E.  
Engineering Director  
**CITY OF KEY WEST**  
3140 Flagler Avenue  
Key West, Florida 33040

Subject: **SUMMARY REPORT OF HISTORICAL ENVIRONMENTAL ASSESSMENTS  
KEY WEST DIESEL PLANT PROPERTY**  
101-111 GERALDINE STREET  
KEY WEST, FLORIDA 33040  
AMEC FOSTER WHEELER PROJECT NUMBER 6783-16-2825

Dear Mr. Bouquet

In accordance with our with our proposal dated March 31, 2016, Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) has prepared a Summary Report of Historical Environmental Assessments for the Key West Diesel Plant Property (the Property) located in Key West, Florida. Amec Foster Wheeler understands the City of Key West is considering acquiring a portion of the Key West Diesel Plant Property for redevelopment (the Site). Amec Foster Wheeler reviewed historical environmental assessments completed at the Key West Diesel Plant Property by various consultants from 1991 to 2015.

#### **EXECUTIVE SUMMARY**

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) has prepared a Summary Report of Historical Environmental Assessments for the Key West Diesel Plant Property (the Property) located in Key West, Florida. Amec Foster Wheeler understands the City of Key West is considering acquiring a portion of the Key West Diesel Plant Property that consists of the three buildings (the Site) located at the western portion of the Property.

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Amec Foster Wheeler reviewed historical environmental assessments completed at the Key West Diesel Plant Property by various consultants from 1991 to 2015. Based on the review of historical environmental site assessment reports:

- The Property was first developed and operated as a manufactured gas plant from 1884 to 1889. From approximately 1890 until the 1950/1960s, the Property operated as an electrical power plant using dynamo engines, boilers and oil tanks for the generation of electricity. The engines were fueled using diesel from aboveground storage tanks at the Property. The property is unoccupied with the exception of an electrical substation installed at the former location of the manufactured gas plant that is currently in operation.
- Soil polynuclear aromatic hydrocarbons (PAHs), Total Recoverable Petroleum Hydrocarbons (TRPHs), and metals (arsenic, barium, and lead) impact are present at depths ranging from 1 to 4 feet below grade at the Property including the Site.
- Groundwater Volatile Organic Compounds and PAH impacts are defined with the exception of the northeastern edge of the plume at the eastern portion of the Property and appears to be stable with limited likely migration. Groundwater VOC, PAH and TRPH impacts were not detected at the Site located at the southwestern portion of the Property. The FDEP issued a Site Rehabilitation Completion Order with Conditions (SRCO-C) in April 2016 for the petroleum hydrocarbon discharge (February 2012) at the Property.
- The SRCO-C released KEYS Energy Services from any further obligation to conduct site rehabilitation at the Property except for the conditions outlined in the SRCO-C. FDEP's restrictive covenant for the Property does not allow the use of groundwater under the Property. Restrictions contained in the covenant run with the land and with the title of the Property in order to ensure the perpetual nature of these restrictions. The owner of property shall reference these restrictions in any subsequent lease or deed of conveyance.
- Limited soil assessment had been conducted in the past beneath the sub slabs of the three onsite buildings. Therefore, if planned renovations and/or demolition of the buildings will disturb the soil, additional soil assessment may be required to further define the extent of potential soil impacts. In addition, a soil and groundwater management plan would need to be developed for the Site. The management plan will ensure proposed soil disturbance activities are performed in accordance with existing land use controls and that residual groundwater impact at the Site is not disturbed by site development activities. Any potential soil impact encountered beneath the buildings could be addressed through source removals during scheduled construction activities to minimize cost.



- Water contained in concrete-lined pits surrounding former generators at the Site does not appear to be hazardous based on March 2014 laboratory analytical results. However, additional testing of the water may be required in order to properly dispose of the water once a site development plan has been finalized for the Site due to the age of the existing test results.
- Building components in the three buildings at the Site contain regulated quantities of asbestos (above 1%). The identified Asbestos Containing Materials (ACM) should be removed or properly addressed by a licensed Asbestos Abatement contractor prior to renovation or demolition activities.
- Building components and structures in the three buildings at the Site have paint or coatings that contain lead concentrations in excess of 1.0 mg/cm<sup>2</sup>, as established by the Lead-Based Paint Poisoning Prevention Act, Section 302 and the HUD guidelines. Where leaded coatings will be disturbed, potentially resulting in airborne lead that could exceed the OSHA lead Action Level, lead abatement should be performed by certified lead abatement contractors prior to renovation activities. If only demolition services will be performed, a lead abatement inspector may be required to oversee the demolition activities.
- Ball park estimated costs for additional site assessment (if warranted) and recommended abatement activities (asbestos and lead) are provided below:
  - If planned renovations and/or demolition of the buildings will disturb soil, additional soil assessment may be required to further define the extent of potential soil impacts. Additional site assessment costs (if required) is estimated to be between \$35,000 to \$50,000. A cost to remove and properly dispose of any impacted soil that may be identified cannot be provided at this time. Typical costs to remove and dispose of petroleum hydrocarbon impacted soil ranges from \$125 to \$175/ton.
  - The abatement of asbestos containing materials identified in the three onsite buildings is estimated to cost between \$10,000 to \$15,000, based on PM Environmental Inc's Pre-Renovation Asbestos Containing Material Survey (July 2013) that estimated the presence of 2,250 sq. ft. of asbestos containing material.
  - Based on PSI's Lead-Based Paint Survey (July 2013) an estimate for lead abatement is difficult to provide without additional information regarding planned renovations for the buildings. Lead abatement costs could exceed \$75,000 based on the results of PSI's survey. Additional information regarding planned renovations and/or planned uses for the Site could be used to refine the abatement estimate. Alternatively, a supplementary



Lead-Based Paint Survey to quantify the amount of lead containing finishes would assist in providing a cost estimate for abatement.

## **PROPERTY AND SITE DESCRIPTION**

The Key West Diesel Plant Property is located at 101 - 111 Geraldine Street, Key West in Monroe County, Florida. A topographic map identifying the Property location and the Site is presented as **Figure 1** and an aerial map illustrating the Property is presented as **Figure 2**. Note that the Site is located on the southwestern portion of the Property. Adjacent to the north of the Property is Angela Street followed by residential properties, to the east are residential properties followed by Emma Street, to the south is Geraldine Street followed by residential properties, and to the West a parking lot. The Property consists of eight parcels including parcel numbers 13950, 13960, 13970, 13900, 13910, 13870, 13860 and 13830. The property is approximately 0.78 acres in size. The Property includes three buildings covering an area of approximately 13,300 square foot located at the western portion of the Property, and a 459 square foot blacksmith shop and a 945 square foot machine shop both located in the eastern portion of the Property. An electrical substation constructed in the late 2000s is located on the southeastern portion of the Property.

The City of Key West is considering acquiring a portion of the Property referred to as the Site that consists of the three buildings located at the western portion of the Property. The Site includes the following addresses and parcel numbers; 100 Angela Street (13950), 709 Fort Street (13950), and 101 Geraldine Street (13950) and the Fort Street Extension right-of-way (ROW). A copy of a City of Key West Executive Summary presenting details of the Site is included in **Attachment A**. Monroe County Property Appraisers records for the three parcels of the Site are included in **Attachment B**. A layout of the Property and the Site is presented as **Figure 3**. The Property is owned by the KEYS Energy Services. Photographs of the Site taken by Amec Foster Wheeler during a site visit on May 18, 2016 are included as **Attachment C**.

## **PROPERTY AND SITE BACKGROUND**

Available historical information indicate that the Property was first developed and operated as a manufactured gas plant from 1884 to 1889 by Key West Gas and Electric Co (KWGE). The property began to operate as an electrical power plant in approximately 1890 until the 1950/1960s using dynamo engines, boilers, and oil tanks for the generation of electricity. The engines were fueled by four diesel Aboveground Storage Tanks (ASTs) that included a 27,000 gallon steel tank, a 25,000 gallon concrete tank (portions of the tank below grade), a 12,000 gallon steel tank and a 500 gallon tank that were all located on the



northeastern portion of the Property. A containment wall surrounded the 25,000 gallon and the 27,000 gallon ASTs. Six 25,000 gallon crude oil tanks were located at the southeastern portion of the Property. Fuel was distributed from the tanks to the plant building through underground piping. A cement groundwater pit approximately 20 feet deep that was used for cooling water for the diesel generators was located in the central portion of the Property east of the plant building (three buildings located at the Site). Although the majority of operations at the Property ceased by the late 1960s, a high speed diesel generator that was located on a concrete pad in the vicinity of the fuel tanks remained in operation until the 1970s. An electrical substation currently in operation at the Property is installed at the location of the former manufactured gas plant. The old and inactive electrical plant contained in the three buildings (plant building) occupy the portion of the Property referred to as the Site (parcels 13950, 13960 and 13970). The dynamo engines that used diesel fuel are still present in the old plant building.

Several site assessments were conducted at the Property by various environmental consultants and the State of Florida/USEPA from 1991 through 2012. In July 2013, PM Environmental Inc., (PM) completed a Phase I Environmental Site Assessment (ESA) at the Property. A summary of historical assessments documented in PM's Phase I ESA dated July 26, 2013 indicate that a release was identified in March 1991, based on the presence of free phase hydrocarbons within a concrete lined pit located east of the main building. In addition, free product was identified in one monitoring well (MW-7) that was located to the northwest of the concrete lined pit. As a result of the presence of free product, the former ASTs and the concrete lined pit were emptied, cleaned, and removed in August 1992. A total of approximately 30,000 gallons of free product/impacted groundwater and 3,850 cubic yards of impacted soil were removed from the Property during decommissioning activities. The soil was properly disposed of at an off-site facility. The extent and location of the excavation was not documented in previous reports. Approximately 100 gallons of free product was removed from MW-7 between 1991 and 1992. Subsequent groundwater sampling between 1992 and 1995 did not identify free product at monitoring well MW-7. Groundwater sampling in 1994 and 1995 did not indicate polynuclear aromatic hydrocarbons (PAHs) or Total Recoverable Petroleum Hydrocarbons (TRPHs) concentrations above applicable Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Levels (GCTLs) in the area of the former ASTs and former concrete pit. The FDEP issued a Site Rehabilitation Completion Order (SRCO) dated July 27, 1995 for the March 1991 release.

In August 2012, an investigation to further assess the historical operations at the Property and to determine if the Property qualified as a Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) site was completed on behalf



of the FDEP. Soil and groundwater analytical results indicated PAHs, arsenic, and lead concentrations above FDEP Soil Cleanup Target Levels (SCTLs) in shallow soil samples to the southwest of the machine shop building. In addition, the results indicated isopropyl benzene and PAHs concentrations were above FDEP GCTLs in groundwater samples from the central portion of the Property. Sediment sampling from a storm water catch basin to the south of the Property, across Fort Street, indicated lead concentration above FDEP Sediment Quality Assessment Guidelines. Based on the concentrations of contaminants identified at the Property, the facility did not qualify as a CERCLIS site and no additional CERCLIS investigation was recommended. The documented contamination was referred to the FDEP for additional investigation.

PM's July 26, 2013 Phase I ESA reported the following Recognized Environmental Conditions (RECs) at the Property:

- August 2012 investigation activities on behalf of the FDEP to further assess the historical operations at the subject property documented PAHs, arsenic, and lead concentrations above FDEP SCTLs in shallow soil samples to the southwest of the machine shop building. In addition, isopropyl benzene and PAHs concentrations were above FDEP GCTLs. The contamination appeared to be associated with former operations at the subject property.
- Operation of the Property as a manufactured gas plant (MGP) from approximately 1884 until 1889. Operations of MGPs typically involved the gasification of combustible materials such as coal, wood, or oil. A former retort room (processing area) and a former gasometer (storage container for gas) were identified on the eastern portion of the Property. The by-products of the gasification process typically included petroleum products and/or hazardous substances, including coal tars. The potential existed for a release to have occurred in association with the operation of the former MGP.
- The presence of six former 25,000-gallon crude oil ASTs along the southern property boundary between at least 1912 and 1926 documented in Sanborn maps. In addition, two former crude oil ASTs were identified to the east of the main building. Limited sampling that had been conducted in these areas were not adequate to assess the potential for leaks, spills, and/or overfills that may have occurred in association with these former ASTs; therefore, the potential existed for subsurface contamination to be present.
- Operation of power plant that utilized petroleum products as a fuel source, from approximately 1890 until the 1950s/1960s at the Property. There was a potential for leaks and/or spills to have occurred in association with the operation of the turbine generators and/or other equipment within the plant buildings and at various portions of the Property. The integrity of the floor beneath the generators is unknown and potentially may have subsurface impact present.



- Former machine shops identified on the Property within the southwestern portion of the main building and within the machine shop. Machine shop operations typically involve the use of hazardous substances and/or petroleum products. This time period preceded major environmental regulations and current waste management and disposal procedures. The historical waste management practices associated with the former machine shop operations are unknown and may be a source of subsurface contamination.

The following adjoining and nearby RECs were also identified by PM during the Phase I ESA.

- The north adjoining properties were formerly part of the Truman Annex, which was a part of Naval Air Station Key West, from at least 1892 until 1971. Sanborn maps document the property was occupied by U.S. governmental land dating back to at least 1892. The historic usage of these properties associated with the former military base is unknown from at least 1892 until 1958. There was a potential for operations to have included the use of petroleum products and/or hazardous substances, and/or the occurrence of landfilling activities.
- The south adjoining properties, identified as 110-118 Geraldine Street, was historically occupied by a Standard Oil bulk petroleum plant. There was a potential for leaks, spills, and/or overfills associated with the operation of a former bulk petroleum plant to have resulted in migration of contamination onto the Property.
- The west adjoining property was historically occupied by U.S. governmental land from at least 1892 until 1926. Specifically, a governmental slip had been identified directly west of the property in 1892. Based on previous investigations on the Property, this property was filled in the 1890s or early 1990s. There was a potential for the fill materials to have originated from a contaminated property. As such there was a potential for migration of contamination onto the Property.

Subsequent to the Phase I ESA, PM completed a Phase II ESA (October 8, 2013), which consisted of advancing 16 soil borings (SB-1 through SB-16), installing 10 temporary monitoring wells (TMW-1, TMW-4, TMW-5D, TMW-6D, TMW-7 through TMW-11, and TMW-14) at the Property and collecting soil and groundwater samples for laboratory analysis to investigate the RECs identified in PM's Phase I ESA. Seven out of the 16 soil borings and 3 out of the 10 temporary wells were installed at the plant building at the Site to assess the impact of the plant operations. Results of the PM Phase II ESA indicated concentrations of PAHs (benz(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene), TRPHs, and metals (arsenic, barium, and lead) in the soil above the FDEP SCTLs at the Property and the Site. Five locations at the Site exhibited soil impact. The soil impacts were detected at depths ranging from 1 to 4 feet below grade. The Phase II ESA analytical results indicated concentrations of Volatile Organic Compounds (VOCs), PAHs, and



TRPHs in the groundwater above the applicable FDEP GCTLs and Natural Attenuation Default Concentrations (NADCs) at the Property but not at the Site. Three samples collected at the plant building located at the Site did not exhibit groundwater impact. Figures (Figure 3 and Figure 4, Phase II ESA October 8, 2013) prepared by PM presenting the sample locations with soil and groundwater analytical results are included in **Attachment D**.

From January 2014 through July 2015, PM completed a Site Assessment Report (SAR), (March 10, 2014), a Supplemental SAR (August 25, 2014), and one year of Natural Attenuation Monitoring (NAM) (July 10, 2015) activities based on our review of the history of the Property. The contaminants detected in the soil and groundwater were consistent with the historical use of the property as a gas and electric plant. In addition, the contaminants detected were consistent with previously documented soil and groundwater impacts.

Based on PM's discussions with FDEP documented in the August 25, 2014 SSAR and an FDEP email dated October 31, 2014, the soil impacts were considered a secondary issue due to the abundance of sand and limerock (possible vugular, or oolitic in composition) on the Property. As such, additional soil assessment to delineate the horizontal and vertical extent of the soil impact was not conducted during the supplemental site assessments activities.

The SAR and SSAR assessment activities included the installation of seven permanent monitoring wells and collection of groundwater samples for laboratory analysis of VOCs, PAHs, and TRPHs to further define the contaminants of concern identified in the groundwater during the Phase II ESA. The SAR and SSAR groundwater sampling events indicated that VOC and PAH groundwater impacts are defined at the eastern portion of the Property, with the exception of the northeastern edge of the plume. Additional off property assessment to define the northeastern edge of the plume was not performed with the concurrence of the FDEP (August 26, 2014 memo). Copies of the FDEP correspondences are included in **Attachment E**.

Following one year of NAM approved by FDEP and completed by PM, groundwater analytical results indicated that plumes of VOC analytes and PAH analytes present largely at the eastern portion of the Property appeared to be stable. Groundwater TRPH concentrations detected above the applicable FDEP GCTL during the assessment activities reduced to concentrations below the FDEP GCTL during the subsequent NAM events. Volatile Organic Compound analytes exhibiting concentrations above the applicable FDEP GCTL following one year of NAM include chloromethane (plume at





northeastern portion of the Property), isopropyl benzene, 1,2,3-trimethylbenzene, 1,2,4-trimethylbenzene 1,3,5-trimethylbenzene (plume at the eastern portion of the Property). Polynuclear Aromatic analytes exhibiting concentrations above the applicable FDEP GCTL following one year of NAM include benzo(a)pyrene, acenaphthalene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, naphthalene and 1-methylnaphthalene (plume at the eastern portion of the Property). PM concluded that the impacted groundwater plume is stable with limited likely migration of contaminated groundwater to the northeast portion of the Property. Figures (Figure 3 to Figure 5, 4<sup>th</sup> Quarter, 1<sup>st</sup> Year NAM, July 10, 2015) prepared by PM presenting the groundwater analytical results and contaminant plumes are included in **Attachment D**. The FDEP approved a Declaration of Restrictive Covenant (DRC) and issued a Site Rehabilitation Completion Order with Conditions (SRCO-C) on April 26, 2016 for the documented impact at the Property for the discharge dated of February 20, 2012. A copy of the SRCO-C is included in **Attachment F**. The monitoring wells utilized for the natural attenuation monitoring program were properly abandoned in June 2016 as detailed in a Monitoring Well Abandonment Report (June 17, 2016) prepared by PM.

#### **SUBSURFACE GEOLOGY AND HYDROGEOLOGY**

Key West is located in the Oolite Keys geomorphologic feature of the Southern or Distal Zone geomorphologic province. The lower Florida Keys are an extension of the same oolitic limestone lithology underlying Miami and much of the southeastern Florida. The Keys represent coral reef colonies which built up during the Pleistocene Epoch as a result of fluctuations in sea level. The last major drop in sea level exposed the ancient reefs which make up the Keys today.

The Pleistocene Age deposits underlying the Property include, in descending order, the Miami Limestone (Miami Oolite) and the Key Largo Limestone. The Pleistocene deposits are underlain, in descending order, by the Hawthorn Group (Miocene age) and the Suwannee Limestone (Oligocene age).

The Miami Limestone (5 to 35 feet thick) is composed of white-cream to pale orange, crystalline, granular, and porous to cavernous oolitic limestone. The ooliths may be up to 2.0 millimeters (mm) in diameter. The existence and plentitude of corals and other marine fossils indicates deposition in a marine environment. The oolitic limestone is honeycombed with solution holes, giving it an extremely high permeability. Porosity generally increases with depth. The solution holes may connect with channels open to the ocean. This interconnection would allow for interchange of rainwater to the ocean and sea water into the oolitic limestone. The oolitic limestone in Key West extends to a depth of about 200 feet.



The coralline Key Largo Limestone underlies the Miami Limestone in the lower (oolite) keys. The Key Largo Limestone is a white to tan limestone, consisting of lime-sand, coral skeletal remains and invertebrate shells, marine plant and algal debris. The thickness of the Key Largo Limestone varies irregularly from 75 to over 200 feet.

The Hawthorn Group includes the Arcadia and Peace River Formations. The Hawthorn Group consists primarily of interbedded carbonates (limestone, dolostone), quartz sands and clays. The Hawthorn is considered to be a confining unit that is approximately 900 feet thick in the Key West area. The Suwannee Limestone is composed of highly fossiliferous, cream colored limestone and is found approximately 1,300 feet below grade in the Key West area.

The Miami and Key Largo Limestones together comprise the surficial aquifer on the island. A freshwater lens exists on the western half of the island. No measurable fresh water lens exists in the eastern half of the island due to extensive areas of artificial fill. A fresh groundwater lens exists on the top of the saltwater due to the density differences. The lens exists under water-table conditions and is found between 5 to 8 feet below grade in the Property area. The water table fluctuates and the shape of the lens changes due to tidal effects. Precipitation is the primary type of recharge to the fresh water lens. The lens is approximately 5 feet thick (less than 250 milligrams per liter (mg/l) chloride) in the center of the island. The freshwater head is greater in the center of the island where land surface elevations are higher. Groundwater moves from the center of the lens and discharges along beaches and salt ponds. Based on regional flow patterns, the surficial aquifer flow in the Property area is to the southwest.

The surficial aquifer system in Key West is generally not considered to be an adequate or reliable source of potable water. The freshwater lens on Key West has chloride concentrations varying from zero to 250 mg/l. It is underlain by a number of successively deeper transition zones. These transition zones become progressively more saline with depth and include a very slightly saline water zone (250-400 mg/l), and slightly saline water zone (400-1,500 mg/l), a moderately saline water zone (1,500-5,000 mg/l) and very saline water zone (5,000-19,000 mg/l). The water table has been known to fluctuate from 0.8 feet above mean sea level (MSL) to 2.4 feet above MSL near the center of Old Town, Key West. Tidal effects greatly influence the depth to water table and configuration of the freshwater lens. The freshwater lens averages about 5 inches in thickness in the center of the western half Old Town, Key West. The thickness and amount of the freshwater is dependent on precipitation, discharge to the ocean, evapotranspiration and withdrawal. It is underlain by a freshwater-saltwater mixture. This mixture extends to a depth of about 40 feet deep in the center of the island. The salt-water interface (19,000 mg/l chloride)



exists around this depth. A number of private wells may tap the fresh-water lens in the western half of the island. Most of the private wells are used primarily for irrigation. However, Florida Keys Aqueduct Authority (FKAA) and Monroe County Health Department (MCHD) report that an undetermined number of residents on the island refuse to hookup to the FKAA water lines and use private wells for potable water. The FKAA water lines provide potable water to the Keys from the mainland and water treatment facilities located on the Keys.

The general subsurface soil stratigraphy encountered by PM, based on soil boring logs, consists of two to four feet of medium sand underlain by coral limestone to a depth of 25 feet. The groundwater was encountered at depths ranging from approximately 2.7 to 4.6 feet below grade.

#### **WATER SAMPLING AT THE SITE**

In March 2014, PM collected four water samples (SW-1 through SW-4) from the existing concrete-lined pits surrounding the former generators located in the Plant Building at the Site. Each pit measured approximately 40 feet by 14 feet and the depths ranged from approximately 2 to 8 feet deep. The water analytical results indicated VOCs, PAHs and TRPH concentrations were not detected above the FDEP GCTL. Based on the analytical results of the water samples, PM concluded that the water contained in the concrete-lined pits surrounding the former generators did not appear to be hazardous and recommended no further investigation of the water contained in the historical generator pits.

#### **ASBESTOS CONTAINING MATERIAL SURVEY**

An inspection for Asbestos Containing Materials (ACM) was performed by PM in July 2013 (Pre-Renovation Asbestos Containing Materials Survey, July 26, 2013) at the Property that included the three buildings at the Site, the blacksmith shop, and the machine shop. The interior of the main building was a combination of concrete and ceramic tile floor, brick and mortar walls, and exposed ceilings throughout the buildings. Tansite panels, wire, and pipe insulation were present in the main control and switchboard area. The blacksmith and machine shop interiors consisted of concrete floors, brick and mortar walls, and exposed ceilings. The exteriors of the buildings consisted of concrete brick and mortar walls with galvanized roofs.

PM collected 34 samples of suspect ACM from 13 different homogenous areas at the Property including the Site for laboratory analysis. Based on the laboratory analytical results PM identified that Transite panels, wire insulation, window glaze, and pipe insulation in the three buildings at the Site contain regulated quantities of asbestos



(above 1%). PM recommended that the identified ACM should be removed by a licensed Asbestos Abatement contractor prior to renovation or demolition activities.

### **LEAD BASED PAINT SURVEY**

Professional Services Industries, Inc. (PSI) performed a lead based paint (LBP) survey in July 2013 at the Property that included the three buildings at the Site, and two additional buildings at the Property (blacksmith shop and machine shop). The LBP survey included a Field survey and X-Ray Fluorescence (XRF) Testing. The Field survey consisted of a visual inspection of both interior and exterior accessible building surfaces for the presence of paints, varnishes or other surface coatings suspected of containing lead. The XRF Testing was performed with an XRF Lead Paint Spectrum Analyzer, LPA-1 manufactured by Radiation Monitoring Devices. Fifty seven out of a total of 110 XRF readings collected from various components on the interior and exterior of the buildings indicated a lead concentration equal to or in excess of 1.0 mg/cm<sup>2</sup>, as established by the Lead-Based Paint Poisoning Prevention Act, Section 302 and the HUD guidelines.

PSI's findings indicated the following building components or structures in the three buildings at the Site have coating that contain lead: metal door, I-beams, cross beams, beams, ceiling beams, walls, piping, window frames, doors, door frames, air compressor metal tank frames, tanks, engine exhaust, stairs, top of engine, hand rails and concrete base for switch gear. In addition, the window frames, beams and door frames at the blacksmith building and the door and window frame at the machine shop contain lead.

### **SUMMARY OF PROPERTY AND SITE CONDITIONS**

Recent site assessments activities and one year of NAM were completed by PM at the Property that included the Site. Soil analytical results of the assessment activities indicated concentrations of PAHs, TRPHs, and metals (arsenic, barium, and lead) in the soil (at depths ranging from 1 to 4 feet below grade) above the FDEP SCTLs at the Property including the Site. In addition, the analytical results indicated concentrations of VOCs, PAHs, and TRPHs in the groundwater above the applicable FDEP GCTLs and NADCs at the Property but not at the Site.

Following one year of FDEP approved NAM completed by PM at portions of the Property excluding the Site, groundwater analytical results indicated that plumes of VOC analytes and PAH analytes present at the eastern portion of the Property appeared to be stable. The groundwater VOC analyte and PAH analyte plumes are defined at the eastern portion of the Property with the exception of the northeastern edge of the plume. Groundwater TRPH concentrations detected above the applicable FDEP GCTL during the assessment



activities reduced to concentrations below the FDEP GCTL during the subsequent NAM events. PM concluded that the impacted groundwater plume is stable with limited likely migration of contaminated groundwater for the northeast of the Property. The FDEP approved a Declaration of Restrictive Covenant (DRC) and issued a SRCO-C dated April 26, 2016 for the documented impact at the Property with a discharge date of February 20, 2012.

Water sampling performed by PM in March 2014, from the existing concrete-lined pits surrounding the former generators located in the Plant Building at the Site indicated VOCs, PAHs and TRPH concentrations were not detected above the FDEP GCTL. Based on the analytical results of the water samples PM concluded that the water contained in the concrete-lined pits surrounding the former generators did not appear to be hazardous and recommended no further investigation of the water contained in the historical generator pits.

An ACM inspection was performed by PM in July 2013 at the Property that included the three buildings at the Site, and two additional buildings at the Property (blacksmith shop and machine shop). Thirty four samples of suspect ACM from 13 different homogenous areas at the Property including the Site were collected for laboratory analysis. PM identified that Transite panels, wire insulation, window glaze, and pipe insulation in the three buildings at the Site contain regulated quantities of asbestos (above 1%), based on the laboratory results and recommended that the identified ACM should be removed by a licensed Asbestos Abatement contractor prior to renovation or demolition activities.

An LBP survey performed in July 2013 by PSI at the Property found 57 out of a total of 110 XRF readings collected from various components on the interior and exterior of the buildings contain lead concentration equal to or in excess of 1.0 mg/cm<sup>2</sup>, as established by the Lead-Based Paint Poisoning Prevention Act, Section 302 and the HUD guidelines. PSI's findings indicated several building components or structures in the three buildings at the Site, and two additional buildings at the Property (blacksmith shop and machine shop) have coating that contain lead.

## **CONCLUSION**

Amec Foster Wheeler has completed a review of historical environmental site assessment reports for the Key West Diesel Plant Property (the Property) including the Site that consists of the three buildings located at the western portion of the Property and the Fort Street Extension right-of-way (ROW). Soil PAHs, TRPHs, and metals (arsenic, barium, and lead) impact are present at depths ranging from 1 to 4 feet below grade at the Property including the Site. The soil impacts at the Site are not defined vertically and horizontally.



Groundwater VOC and PAH impacts are defined with the exception of the northeastern edge of the plume at the eastern portion of the Property and appears to be stable with limited likely migration. Groundwater VOC, PAH and TRPH impacts were not detected at the Site located at the southwestern portion of the Property.

The FDEP issued a SRCO-C dated April 26, 2016 for the documented impact at the Property regarding a discharge date of February 20, 2012, releasing KEYS Energy Services from any further obligation to conduct site rehabilitation at the Property and the Site except for the conditions outlined in the SRCO-C. However, the DRC and the SRCO including the exceptions did not address the documented surficial soil impacts present at the Property and the Site. Whereas additional site rehabilitation activities are not required at the Property including the Site, additional investigation to address the documented soil impact may be required if planned renovation activities will disturb the land surface (i.e. demolition and/or construction activities, removal of concrete building slabs or soil removal).

The SRCO-C released KEYS Energy Services from any further obligation to conduct site rehabilitation at the Property except for the conditions outlined in the SRCO-C. FDEP's restrictive covenant for the Property does not allow the use of groundwater under the Property. Restrictions contained in the covenant run with the land and with the title of the Property in order to ensure the perpetual nature of these restrictions. The owner of property shall reference these restrictions in any subsequent lease or deed of conveyance.

Water contained in the concrete-lined pits surrounding the former generators do not appear to be hazardous based on March 2014 laboratory analytical results and sampling performed by PM. PM concluded that no further investigation of the water contained in the historical generator pits was necessary. However, additional testing of the water may be required in order to properly dispose of the water once a site development plan has been finalized for the Site.

Transite panels, wire insulation, window glaze, and pipe insulation in the three buildings at the Site contain regulated quantities of asbestos (above 1%) and the identified ACM should be removed or properly addressed by a licensed Asbestos Abatement contractor prior to renovation or demolition activities.

Building components and structures in the three buildings at the Site have paint or coatings that contain lead concentrations in excess of 1.0 mg/cm<sup>2</sup>, as established by the Lead-Based Paint Poisoning Prevention Act, Section 302 and the HUD guidelines. Where leaded coatings will be disturbed, potentially resulting in airborne lead that could exceed



the OSHA lead Action Level, lead abatement should be performed by certified lead abatement contractors prior to renovation activities. If only demolition services will be performed, a lead abatement inspector may be required to oversee the demolition activities.

## **RECOMMENDATION**

The City of Key West is considering acquiring the Site that consists of the three buildings located at the western portion of the Property. Based on the historical use of the buildings, such as housing generators used for electrical power generation, the presence of impacted soil at the Site, the presence of asbestos containing materials, and lead based paint in building components, and the proximity of the Site to the electrical Keys Substation the following recommendations are provided to minimize potential human exposures:

- The future development and use of the Site should be limited to commercial structures and/or commercial purposes unless engineering controls are incorporated into the site development plan for residential uses.
- Reasonable security measures including installation of a temporary fence should be considered for the Site in order to restrict site access and limit potential exposure to the documented petroleum hydrocarbon impacted soil and asbestos containing material present in the onsite buildings.
- Limited soil assessment had been conducted in the past beneath the sub slabs of the three onsite buildings. Therefore, if planned renovations and/or demolition of the buildings will disturb the soil, additional soil assessment may be required to further define the extent of potential soil impacts. In addition, a soil and groundwater management plan would need to be developed for the Site. The management plan will ensure proposed soil disturbance activities are performed in accordance with existing land use controls and that residual groundwater impact at the Site is not disturbed by site development activities. Any potential soil impact encountered beneath the buildings could be addressed through source removals during scheduled construction activities to minimize cost.
- Additional testing of the water contained in concrete-lined pits surrounding former generators at the Site may be required (due to age of the original test results) in order to properly dispose of the water once a site development plan has been finalized.



- Asbestos containing materials identified in the three buildings should be removed or properly addressed by a licensed Asbestos Abatement contractor prior to renovation or demolition activities.
- Lead abatement of identified lead based paint materials in building components should be performed by certified lead abatement contractors prior to renovation activities. If only demolition activities will be performed, a lead abatement inspector may be required to oversee the demolition activities.
- Ball park estimated costs for the additional site assessment (if warranted) and recommended abatement activities (asbestos and lead) are provided below:
  - If planned renovations and/or demolition of the buildings will disturb soil, additional soil assessment may be required to further define the extent of potential soil impacts. Additional site assessment costs (if required) is estimated to be between \$35,000 to \$50,000. A cost to remove and properly dispose of any impacted soil that may be identified cannot be provided at this time. Typical costs to remove and dispose of petroleum hydrocarbon impacted soil ranges from \$125 to \$175/ton.
  - Abatement of asbestos containing materials identified in the three onsite buildings is estimated to be between \$10,000 to \$15,000, based on PM Environmental Inc's Pre-Renovation Asbestos Containing Material Survey (July 2013) that estimated the presence of 2,250 sq. ft. of asbestos containing material.
  - Based on PSI's Lead-Based Paint Survey (July 2013) an estimate for lead abatement is difficult to provide without additional information regarding planned renovations for the buildings. Lead abatement costs could exceed \$75,000 based on the results of PSI's survey. Additional information regarding planned renovations and/or planned uses for the Site could be used to refine the abatement estimate. Alternatively, a supplementary Lead-Based Paint Survey to quantify the amount of lead containing finishes would assist in providing a cost estimate for abatement.

Sincerely,

**AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.**

A handwritten signature in blue ink, appearing to read "Jonathan Bulley".

Jonathan Bulley  
Senior Engineer

A handwritten signature in blue ink, appearing to read "Paul H. Thornbury".

Paul H. Thornbury  
Project Manager





## REFERENCES

Contamination Assessment Report, CH2M Hill, September 1991

Remedial Action Plan, CH2M Hill, October 1992

Remedial Action Plan Modification, PDG Environmental Services, October 1992

Site Inspection Report, Florida Department of Environmental Protection (FDEP) /  
US Environmental Project Agency, August 16, 2012

Phase I Environmental Site Assessment, PM Environmental, Inc., July 26, 2013

Phase II Environmental Site Assessment, PM Environmental, Inc., October 8, 2013

Site Assessment Report, PM Environmental, Inc., March 10, 2014

Surface Water Sampling, PM Environmental, Inc., July 22, 2014

Supplemental Site Assessment, PM Environmental, Inc., August 8, 2014

Lead Based Paint Survey, Professional Service Industries, Inc., (PSI) July 18, 2013

Pre-Renovation Asbestos Containing Material Survey, PM Environmental, Inc.,  
July 26, 2013

4<sup>th</sup> Quarter, 1<sup>st</sup> Year Natural Attenuation Monitoring Report, PM Environmental, Inc.,  
July 10, 2015

Site Rehabilitation Completion Order, FDEP, April 26, 2016

Well Abandonment Report, PM Environmental, Inc., June 17, 2016

# FIGURES

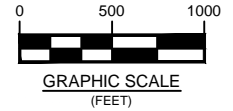


REFERENCE  
 USGS - KEY WEST QUADRANGLE, FLORIDA-MONROE CO.  
 1988 DATUM, GRID ZONE DESIGNATION 17R  
 7.5 MINUTE SERIES (TOPOGRAPHIC)

LEGEND



KEY WEST DIESEL PLANT  
 (THE PROPERTY)



Former Key West Gas  
 & Electric Company

101 - 111 GERALDINE STREET  
 KEY WEST, FLORIDA

AMEC PROJECT #: 6783-16-2825

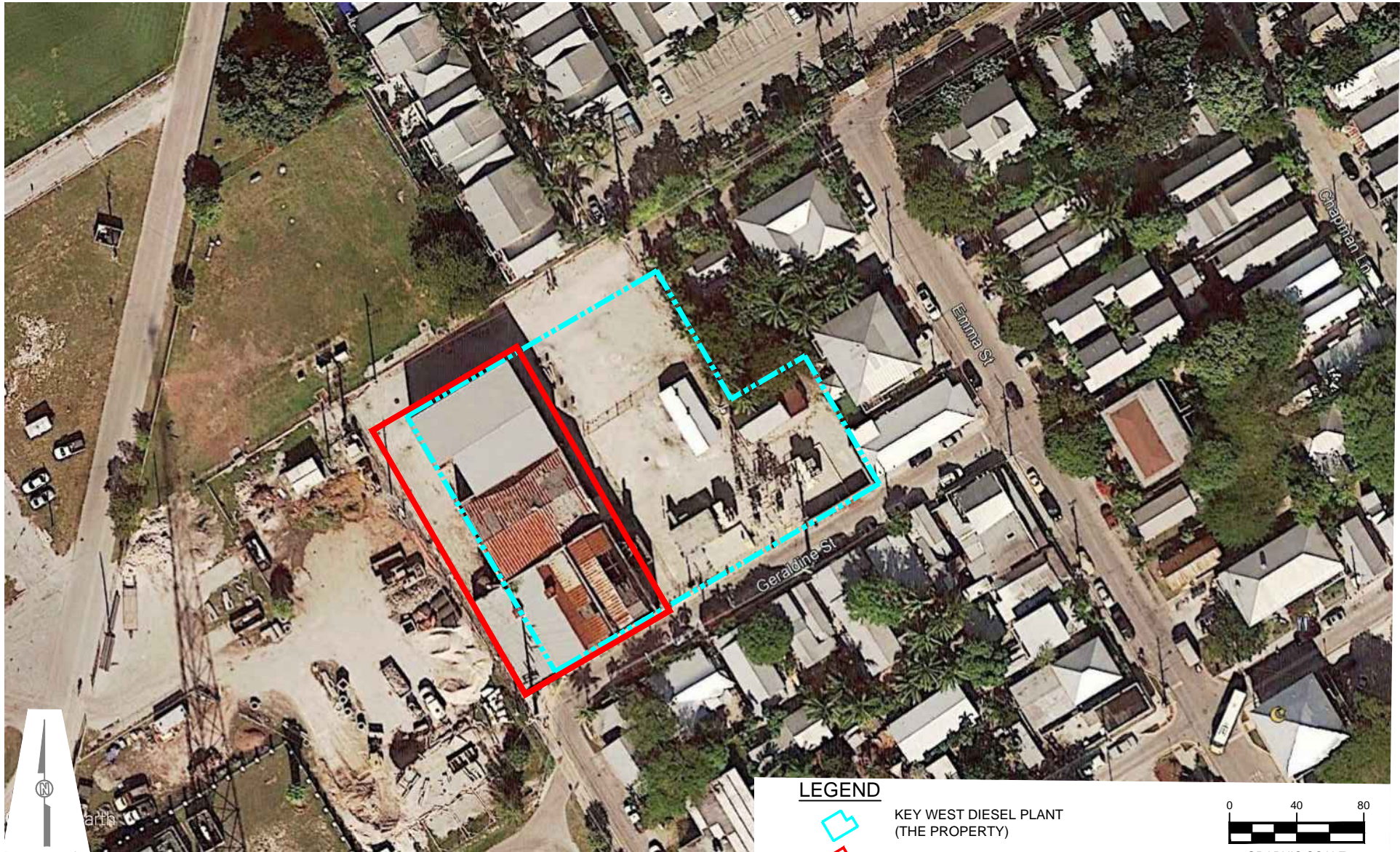


AMEC FOSTER WHEELER  
 ENVIRONMENT & INFRASTRUCTURE, INC.

5845 N.W. 158th STREET  
 MIAMI LAKES, FL 33014  
 TEL: (305) 826-5588  
 FAX: (305) 826-1799



FIGURE 1  
 TOPOGRAPHIC MAP WITH  
 PROPERTY BOUNDARY LOCATION

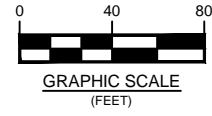
CREATED BY: NAB	DATE: 06/22/16
CHECKED BY: JAB	SCALE: AS SHOWN



REFERENCE  
2014 AERIAL PHOTOGRAPH FROM  
GOOGLE EARTH PRO

**LEGEND**

-  KEY WEST DIESEL PLANT  
(THE PROPERTY)
-  THE SITE



**Former Key West Gas  
& Electric Company**

101 - 111 GERALDINE STREET  
KEY WEST, FLORIDA

AMEC PROJECT #: 6783-16-2825



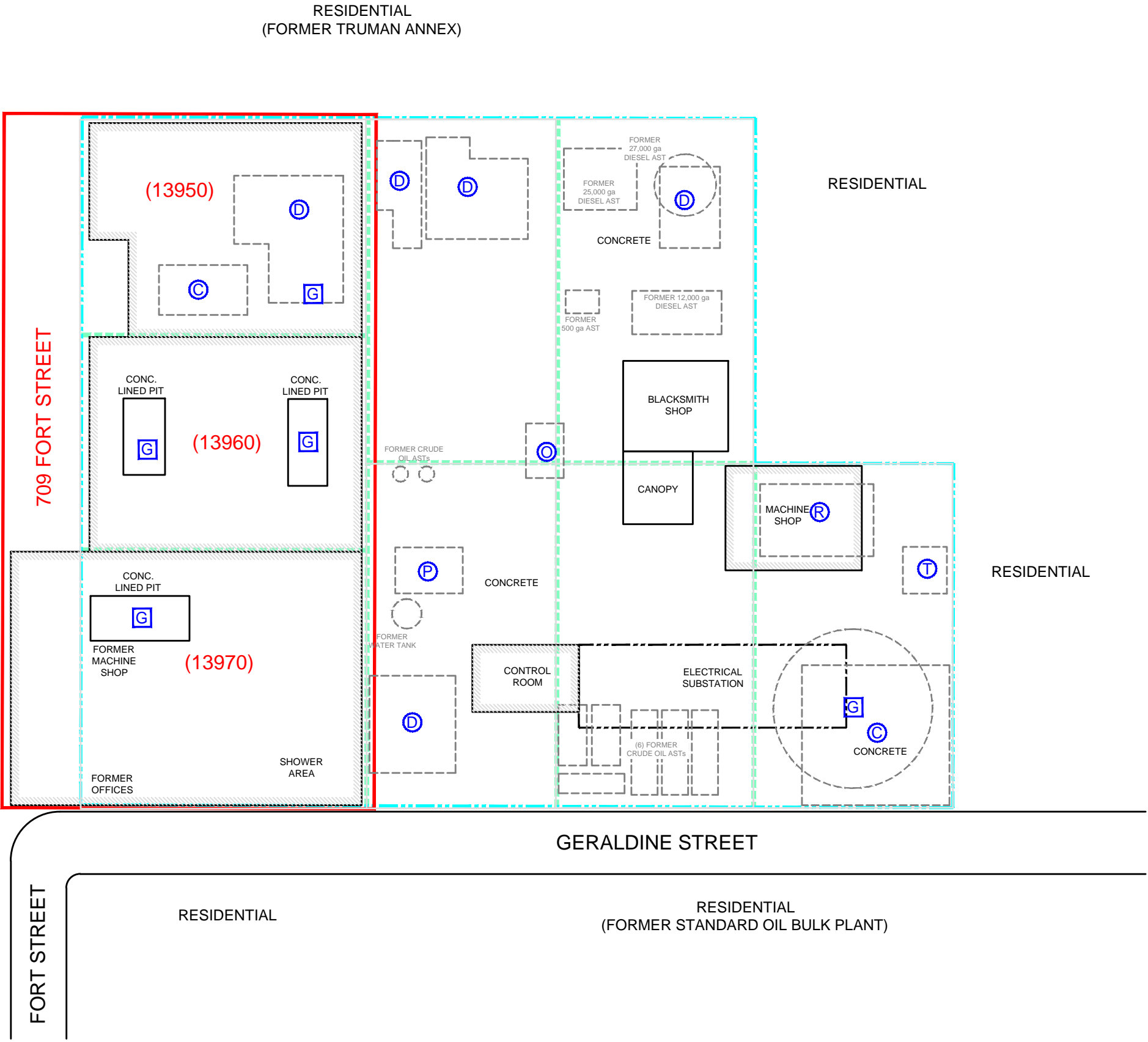
**AMEC FOSTER WHEELER**  
ENVIRONMENT & INFRASTRUCTURE, INC.

5845 N.W. 158th STREET  
MIAMI LAKES, FL 33014  
TEL: (305) 826-5588  
FAX: (305) 826-1799

**FIGURE 2**  
AERIAL MAP WITH PROPERTY  
AND SITE LOCATION

CREATED BY: NAB	DATE: 06/22/16
CHECKED BY: JAB	SCALE: AS SHOWN

918 FORT STREET  
CITY OF KEY WEST  
(FORMER  
GOVERNMENTAL SLIP)



RESIDENTIAL  
(FORMER TRUMAN ANNEX)

RESIDENTIAL

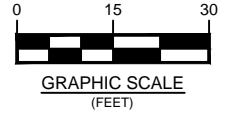
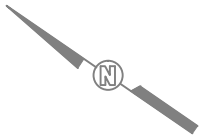
RESIDENTIAL

GERALDINE STREET

RESIDENTIAL

RESIDENTIAL  
(FORMER STANDARD OIL BULK PLANT)

FORT STREET



REFERENCE:  
PE ENVIRONMENTAL INC.,  
4th QUARTER, 1st YEAR NATURAL  
ATTENUATION MONITORING REPORT  
(JULY 10, 2015)  
NOTE:  
MAP IS COLOR CODED.  
DO NOT PLOT BLACK & WHITE.

- LEGEND**
- (13950) PARCEL NUMBER
  - PARCEL / LOT BOUNDARY
  - PROPERTY BOUNDARY
  - SITE BOUNDARY
  - FORMER HISTORICAL SITE FEATURES
  - G GENERATOR
  - D FORMER DWELLING
  - T FORMER TOO SHED
  - C FORMER CISTERN
  - P FORMER PUMP HOUSE
  - O FORMER OIL PUMP HOUSE
  - R FORMER RETORT ROOM
  - G FORMER GASOMETER



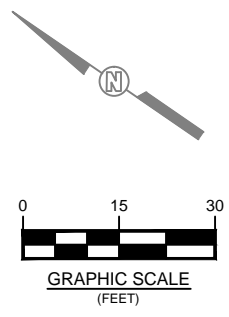
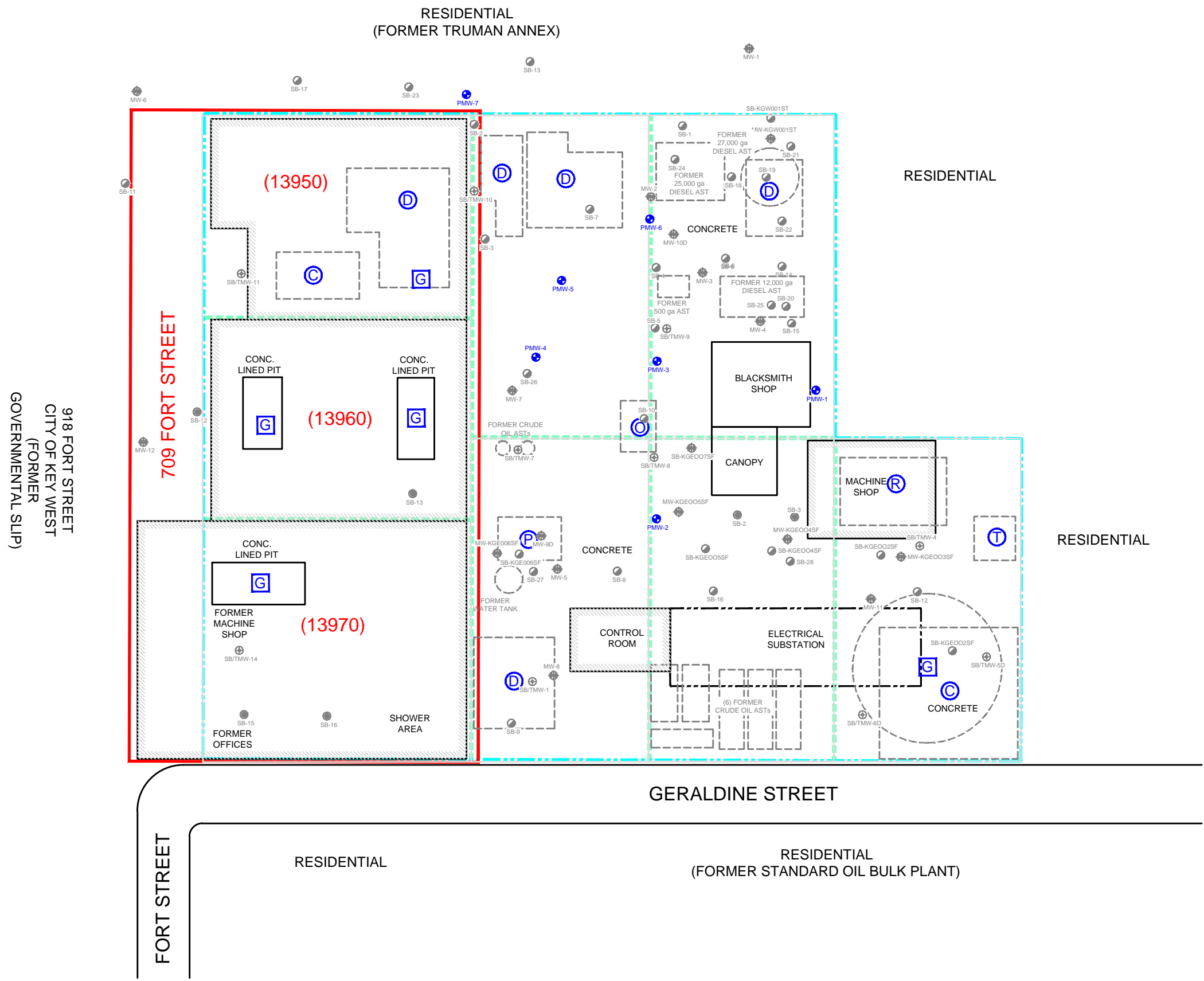
AMEC FOSTER WHEELER  
ENVIRONMENT & INFRASTRUCTURE, INC.  
5845 N.W. 158th STREET  
MIAMI LAKES, FL 33014  
TEL: (305) 826-5588  
FAX: (305) 826-1799  
AMECFW PROJECT #: 6783-16-2825

Former Key West Gas  
& Electric Company

101 - 111 GERALDINE STREET  
KEY WEST, FLORIDA

FIGURE 3  
PROPERTY AND  
SITE LAYOUT

DRAWN BY: NAB	DATE: 06/22/16
CHECKED BY: JAB	SCALE: AS SHOWN



**REFERENCE:**  
 BASED ON FIGURE 4 - GW CONC. MAP FOR VOCs EXCEEDING THE GCTL CRITERIA, CREATED BY PM ENVIRONMENTAL ON 7/9/15  
**NOTE:**  
 MAP IS COLOR CODED. DO NOT PLOT BLACK & WHITE.

- LEGEND**
- (13950) PARCEL NUMBER
  - PARCEL / LOT BOUNDARY
  - PROPERTY BOUNDARY
  - SITE BOUNDARY
  - FORMER HISTORICAL SITE FEATURES
  - G GENERATOR
  - D FORMER DWELLING
  - T FORMER TOO SHED
  - C FORMER CISTERN
  - P FORMER PUMP HOUSE
  - O FORMER OIL PUMP HOUSE
  - R FORMER RETORT ROOM
  - G FORMER GASOMETER
  - SB-KGEO02SF FORMER SOIL BORING
  - MW-2 FORMER MONITORING WELL
  - SB-2 FORMER SOIL BORING
  - SB-TMW-5D FORMER SOIL BORING / TEMP. MONITORING WELL
  - PMW-1 MONITORING WELL

**amec foster wheeler**  
 ENVIRONMENT & INFRASTRUCTURE, INC.  
 5845 N.W. 158th STREET  
 MIAMI LAKES, FL 33014  
 TEL: (305) 826-5588  
 FAX: (305) 826-1799  
 AMECFW PROJECT #: 6783-16-2825

**Former Key West Gas & Electric Company**  
 101 - 111 GERALDINE STREET  
 KEY WEST, FLORIDA

**FIGURE 4**  
 PROPERTY SITE LAYOUT WITH HISTORICAL SAMPLE LOCATIONS

<b>DRAWN BY:</b> NAB	<b>DATE:</b> 06/22/16
<b>CHECKED BY:</b> JAB	<b>SCALE:</b> AS SHOWN

# **ATTACHMENT A**

## **CITY OF KEY WEST EXECUTIVE SUMMARY**



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THE CITY OF KEY WEST  
3140 Flagler Ave Key West, FL 33040 (305) 809-3700

## EXECUTIVE SUMMARY

**TO:** Jim Scholl, City Manager  
**FROM:** Jim Bouquet, P.E., Engineering Director  
**DATE:** March 31, 2016  
**RE:** Pre-acquisition Inspection of the Former Key West Diesel Plant

---

### ACTION STATEMENT

Authorizing the City Manager to execute a Task Order agreement with Amec Foster Wheeler to complete a pre-acquisition inspection of the Former Key West Diesel Plant in the amount of \$22,000.00

### BACKGROUND

As summarized in a memorandum dated October 23, 2015 (attached), the Engineering Services Department reviewed information provided by KEYS Energy Services (KEYS) regarding possible City of Key West (City) acquisition of a portion (the Site) of the Key West Diesel Plant (the Property). The Site consists of three buildings identified as 100 Angela Street, 709 Fort Street and 101 Geraldine Street and the Fort Street Extension right-of-way (ROW). City staff subsequently requested Amec Foster Wheeler (AFW) prepare a proposal to conduct a pre-acquisition inspection of the Site. City and AFW met on site and established the following City objectives for this project:

- Conduct a structural engineering assessment.
- Review existing environmental information provided by KEYS and prepare an executive summary.
- Prepare an engineering cost estimate for demolition of 101 Geraldine Street and rehabilitation (white box) of the remaining two buildings.

The AFW scope of work and fee are presented in the attached proposal dated March 31, 2016.



### **PURPOSE AND JUSTIFICATION**

The intent of the AFW report is to provide baseline structural condition, environmental issues and restrictions, and building stabilization costs for consideration by the City Commission and citizens.

### **FINANCIAL**

The fee to complete this Task Order proposal is \$22,000.00 and will be funded from account #001-1906-519-3100, Professional Services. Work will be performed in accordance with the General Engineering Services Agreement between AFW and the City approved under Resolution 12-280 and extended under Resolution 15-208.

### **RECOMMENDATION**

Staff recommends approving Amec Foster Wheeler to complete a pre-acquisition inspection of the Former Key West Diesel Plant in the amount of \$22,000.00 and authorizing the City Manager to execute the Task Order.

**ATTACHMENT B**

**MONROE COUNTY  
PROPERTY APPRAISERS RECORDS**



# Scott P. Russell, CFA Property Appraiser Monroe County, Florida

Key West (305) 292-3420  
Marathon (305) 289-2550  
Plantation Key (305) 852-7130

## Property Record Card - Maps are now launching the new map application version.

Alternate Key: 1014338 Parcel ID: 00013950-000000

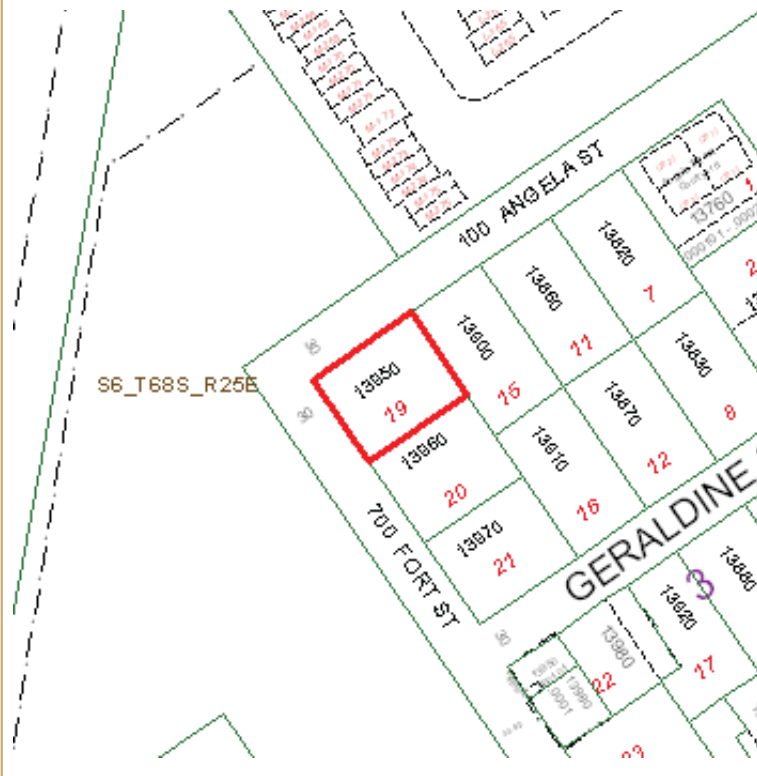
### Ownership Details

**Mailing Address:**  
THE UTILITY BOARD OF THE CITY OF KEY WEST  
1001 JAMES ST  
KEY WEST, FL 33040-6935

### Property Details

**PC Code:** 91 - UTILITIES,WATER TANKS  
**Millage Group:** 11KW  
**Affordable Housing:** No  
**Section-Township-Range:** 06-68-25  
**Property Location:** 100 ANGELA ST KEY WEST  
**Legal Description:** KW LOT 19 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

Click Map Image to open interactive viewer





### Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	667,636.00

### Land Details

Land Use Code	Frontage	Depth	Land Area
100E - COMMERCIAL EXEMPT	58	70	4,060.00 SF

### Building Summary

Number of Buildings: 1  
 Number of Commercial Buildings: 1  
 Total Living Area: 3600  
 Year Built: 1923

### Building 1 Details

Building Type  
 Effective Age 58  
 Year Built 1923  
 Functional Obs 0

Condition P  
 Perimeter 250  
 Special Arch 0  
 Economic Obs 0

Quality Grade 350  
 Depreciation % 60  
 Grnd Floor Area 3,600

**Inclusions:**

Roof Type  
 Heat 1  
 Heat Src 1

Roof Cover  
 Heat 2  
 Heat Src 2

Foundation  
 Bedrooms 0

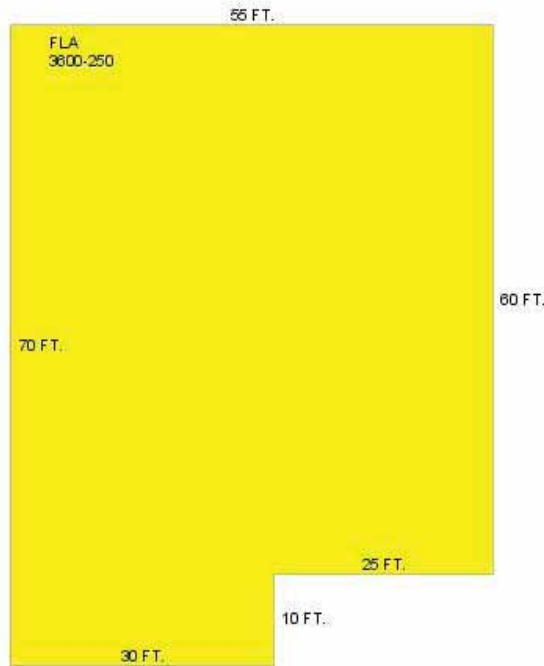
**Extra Features:**

2 Fix Bath 0  
 3 Fix Bath 1  
 4 Fix Bath 0

Vacuum 0  
 Garbage Disposal 0  
 Compactor 0

5 Fix Bath 0  
 6 Fix Bath 0  
 7 Fix Bath 0  
 Extra Fix 0

Security 0  
 Intercom 0  
 Fireplaces 0  
 Dishwasher 0



**Sections:**

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area
1	FLA		1	1922					3,600

**Interior Finish:**

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	2602	ELEC/TELEPHONE ETC C	100	N	N

**Exterior Wall:**

Interior Finish Nbr	Type	Area %
680	BRICK	100

**Misc Improvement Details**

Nbr	Type	# Units	Length	Width	Year Built	Roll Year	Grade	Life
1	PT3:PATIO	6 SF	3	2	1997	1998	2	50

**Appraiser Notes**

2002-7-24 THIS PROPERTY IS BEING USED BY KEYS ENERGY SYSTEMS.

OR2790-736/743 DECLARATION OF RESTRICTIVE COVENANT STATES THAT THE ENVIRONMENTAL REPORTS CONFIRM

THAT CONTAMINATED GROUNDWATER EXISTS ON THIS PROPERTY. PROPERTY WAS FORMERLY UTILIZED FOR MANUFACTURED GAS AND ELECTRIC POWER PLANT OPERATIONS AND IS CURRENTLY USED AS AN ELECTRICAL SUBSTATION. IN CONNECTION WITH HISTORIC SITE USES THERE ARE ONSITE PETROLEUM CONSTITUENT IMPACTS TO GROUNDWATER.

## Building Permits

Bldg	Number	Date Issued	Date Completed	Amount	Description	Notes
1	9801608	06/04/1998	01/01/1999	1,000	Commercial	POUR CONCRETE PADS

## Parcel Value History

Certified Roll Values.

[View Taxes for this Parcel.](#)

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2015	207,966	35	459,631	667,632	661,345	667,632	0
2014	207,966	33	443,216	651,215	601,223	651,215	0
2013	207,966	34	338,567	546,567	546,567	546,567	0
2012	207,966	35	338,567	546,568	546,568	546,568	0
2011	207,966	36	451,423	659,425	653,072	659,425	0
2010	207,966	36	385,700	593,702	593,702	593,702	0
2009	207,966	37	456,750	664,753	664,753	664,753	0
2008	207,966	38	466,900	674,904	674,904	674,904	0
2007	134,954	39	466,900	601,893	601,893	601,893	0
2006	134,954	40	263,900	398,894	398,894	398,894	0
2005	134,954	41	263,900	398,895	398,895	398,895	0
2004	134,954	42	259,840	394,836	394,836	394,836	0
2003	134,954	43	259,840	394,837	394,837	394,837	0
2002	134,954	44	71,050	206,048	206,048	206,048	0
2001	134,954	45	60,900	195,899	195,899	195,899	0
2000	134,954	14	50,750	185,718	185,718	185,718	0
1999	134,954	15	50,750	185,719	185,719	185,719	0
1998	90,180	0	50,750	140,930	140,930	140,930	0
1997	90,180	0	42,630	132,810	132,810	132,810	0
1996	81,981	0	42,630	124,611	124,611	124,611	0
1995	81,981	0	42,630	124,611	124,611	124,611	0
1994	81,981	0	42,630	124,611	124,611	124,611	0
1993	81,981	0	42,630	124,611	124,611	124,611	0
1992	81,981	0	42,630	124,611	124,611	124,611	0
1991	81,981	0	42,630	124,611	124,611	124,611	0
1990	102,477	0	32,480	134,957	134,957	134,957	0
1989	102,477	0	31,465	133,942	133,942	133,942	0
1988	84,903	0	26,390	111,293	111,293	111,293	0
1987	83,018	0	12,992	96,010	96,010	96,010	0

1986	83,451	0	12,180	95,631	95,631	95,631	0
1985	81,291	0	12,545	93,836	93,836	93,836	0
1984	79,858	0	12,545	92,403	92,403	92,403	0
1983	79,858	0	12,545	92,403	92,403	92,403	0
1982	68,675	0	8,891	77,566	77,566	77,566	0

## Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

Sale Date	Official Records Book/Page	Price	Instrument	Qualification
9/26/2012	2592 / 2258	100	<u>QC</u>	<u>11</u>
4/25/2012	2571 / 2253	100	<u>QC</u>	<u>11</u>

This page has been visited 99,816 times.

Monroe County Property Appraiser  
 Scott P. Russell, CFA  
 P.O. Box 1176 Key West, FL 33041-1176



# Scott P. Russell, CFA Property Appraiser Monroe County, Florida

Key West (305) 292-3420  
Marathon (305) 289-2550  
Plantation Key (305) 852-7130

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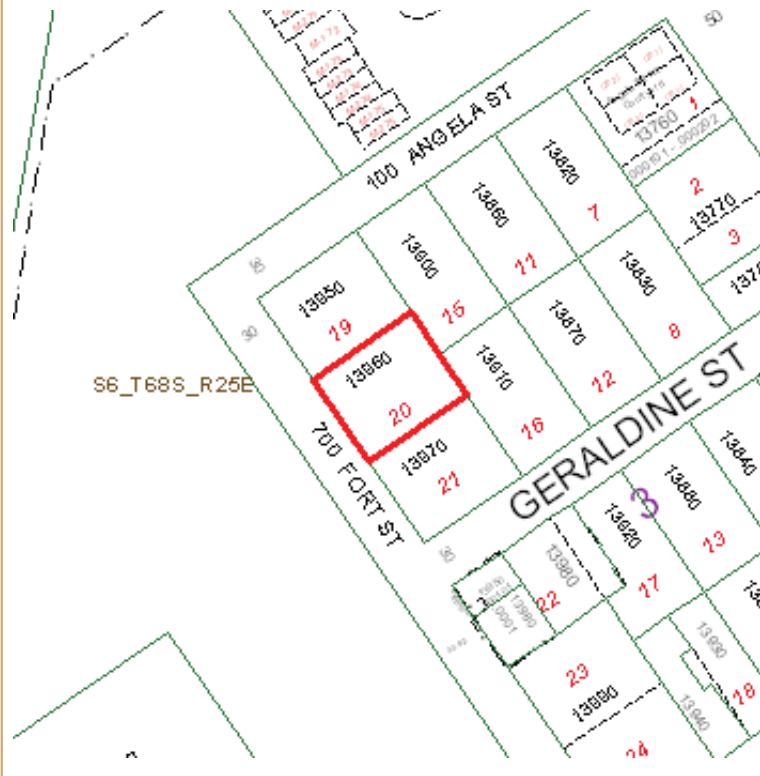
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THE UTILITY BOARD OF THE CITY OF KEY WEST  
1001 JAMES ST  
KEY WEST, FL 33040-6935

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**Millage Group:** 11KW  
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**Section-Township-Range:** 06-68-25  
**Property Location:** 709 FORT ST KEY WEST  
**Legal Description:** KW LOT 20 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

[Click Map Image to open interactive viewer](#)







## Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	668,060.00

## Land Details

Land Use Code	Frontage	Depth	Land Area
100E - COMMERCIAL EXEMPT	58	70	4,060.00 SF

## Building Summary

Number of Buildings: 1  
 Number of Commercial Buildings: 1  
 Total Living Area: 3850  
 Year Built: 1923

## Building 1 Details

Building Type  
 Effective Age 58  
 Year Built 1923  
 Functional Obs 0

Condition P  
 Perimeter 250  
 Special Arch 0  
 Economic Obs 0

Quality Grade 350  
 Depreciation % 60  
 Grnd Floor Area 3,850

### Inclusions:

Roof Type  
 Heat 1  
 Heat Src 1

Roof Cover  
 Heat 2  
 Heat Src 2

Foundation  
 Bedrooms 0

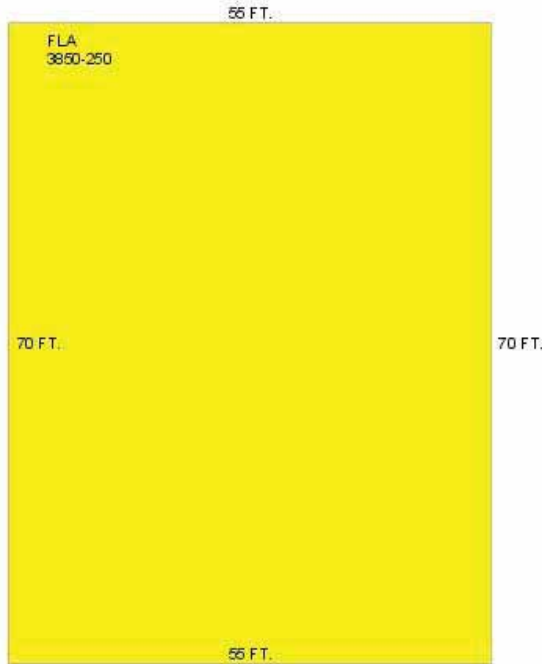
### Extra Features:

2 Fix Bath 0  
 3 Fix Bath 0  
 4 Fix Bath 0

Vacuum 0  
 Garbage Disposal 0  
 Compactor 0

5 Fix Bath 0  
 6 Fix Bath 0  
 7 Fix Bath 0  
 Extra Fix 0

Security 0  
 Intercom 0  
 Fireplaces 0  
 Dishwasher 0



**Sections:**

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area
1	FLA		1	1922					3,850

**Interior Finish:**

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	2603	ELEC/TELEPHONE ETC C	100	N	N

**Exterior Wall:**

Interior Finish Nbr	Type	Area %
681	BRICK	100

**Appraiser Notes**

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OR2790-736/743 DECLARATION OF RESTRICTIVE COVENANT STATES THAT THE ENVIRONMENTAL REPORTS CONFIRM THAT CONTAMINATED GROUNDWATER EXISTS ON THIS PROPERTY. PROPERTY WAS FORMERLY UTILIZED FOR MANUFACTURED GAS AND ELECTRIC POWER PLANT OPERATIONS AND IS CURRENTLY USED AS AN ELECTRICAL SUBSTATION. IN CONNECTION WITH HISTORIC SITE USES THERE ARE ONSITE PETROLEUM CONSTITUENT IMPACTS TO GROUNDWATER.

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2013	208,429	0	338,567	546,996	546,996	546,996	0
2012	208,429	0	338,567	546,996	546,996	546,996	0
2011	208,429	0	451,423	659,852	653,541	659,852	0
2010	208,429	0	385,700	594,129	594,129	594,129	0
2009	208,429	0	456,750	665,179	665,179	665,179	0
2008	208,429	0	466,900	675,329	675,329	675,329	0
2007	134,627	0	466,900	601,527	601,527	601,527	0
2006	134,627	0	263,900	398,527	398,527	398,527	0
2005	134,627	0	263,900	398,527	398,527	398,527	0
2004	134,627	0	259,840	394,467	394,467	394,467	0
2003	134,627	0	259,840	394,467	394,467	394,467	0
2002	134,627	0	71,050	205,677	205,677	205,677	0
2001	134,627	0	60,900	195,527	195,527	195,527	0
2000	134,627	0	50,750	185,377	185,377	185,377	0
1999	134,627	0	50,750	185,377	185,377	185,377	0
1998	89,961	0	50,750	140,711	140,711	140,711	0
1997	89,961	0	42,630	132,591	132,591	132,591	0
1996	81,783	0	42,630	124,413	124,413	124,413	0
1995	81,783	0	42,630	124,413	124,413	124,413	0
1994	81,783	0	42,630	124,413	124,413	124,413	0
1993	81,783	0	42,630	124,413	124,413	124,413	0
1992	81,783	0	42,630	124,413	124,413	124,413	0
1991	81,783	0	42,630	124,413	124,413	124,413	0
1990	102,229	0	32,480	134,709	134,709	134,709	0
1989	102,229	0	31,465	133,694	133,694	133,694	0
1988	83,435	0	26,390	109,825	109,825	109,825	0
1987	81,670	0	12,992	94,662	94,662	94,662	0
1986	82,110	0	12,180	94,290	94,290	94,290	0
1985	80,089	0	12,545	92,634	92,634	92,634	0
1984	78,860	0	12,545	91,405	91,405	91,405	0
1983	78,860	0	12,545	91,405	91,405	91,405	0
1982	67,706	0	8,891	76,597	76,597	76,597	0

## Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

Sale Date	Official Records Book/Page	Price	Instrument	Qualification
9/26/2012	2592 / 2258	100	<u>QC</u>	<u>11</u>
4/25/2012	2571 / 2253	100	<u>QC</u>	<u>11</u>

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Monroe County Property Appraiser  
Scott P. Russell, CFA  
P.O. Box 1176 Key West, FL 33041-1176



# Scott P. Russell, CFA Property Appraiser Monroe County, Florida

Key West (305) 292-3420  
Marathon (305) 289-2550  
Plantation Key (305) 852-7130

## Property Record Card - Maps are now launching the new map application version.

Alternate Key: 1014354 Parcel ID: 00013970-000000

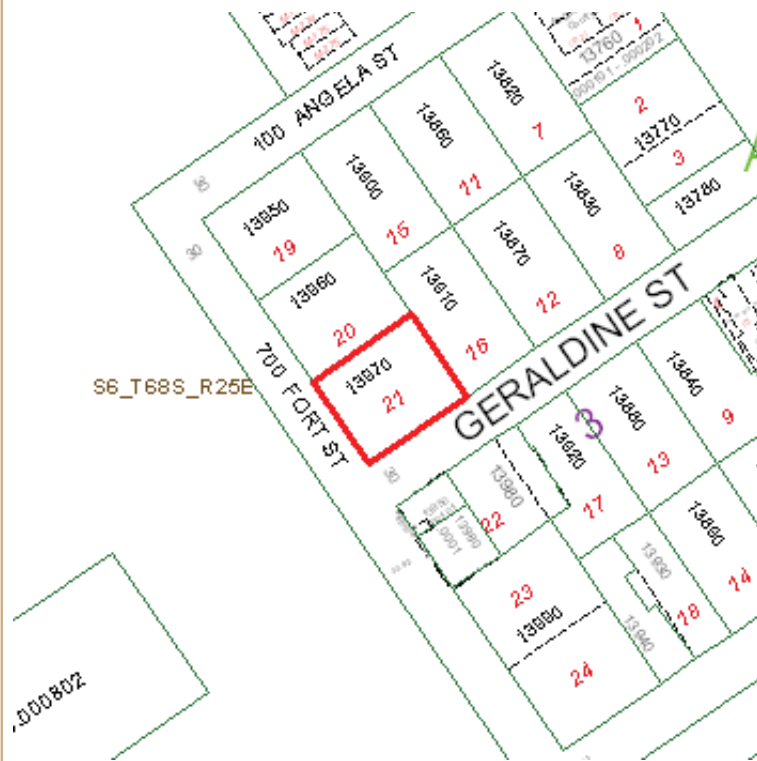
### Ownership Details

**Mailing Address:**  
THE UTILITY BOARD OF THE CITY OF KEY WEST  
1001 JAMES ST  
KEY WEST, FL 33040-6935

### Property Details

**PC Code:** 91 - UTILITIES,WATER TANKS  
**Millage Group:** 11KW  
**Affordable Housing:** No  
**Section-Township-Range:** 06-68-25  
**Property Location:** 101 GERALDINE ST KEY WEST  
**Legal Description:** KW LOT 21 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

[Click Map Image to open interactive viewer](#)





## Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	773,631.00

## Land Details

Land Use Code	Frontage	Depth	Land Area
100E - COMMERCIAL EXEMPT	58	70	4,060.00 SF

## Building Summary

Number of Buildings: 1  
 Number of Commercial Buildings: 1  
 Total Living Area: 5850  
 Year Built: 1923

## Building 1 Details

Building Type  
 Effective Age 58  
 Year Built 1923  
 Functional Obs 0

Condition P  
 Perimeter 310  
 Special Arch 0  
 Economic Obs 0

Quality Grade 350  
 Depreciation % 60  
 Grnd Floor Area 5,850

### Inclusions:

Roof Type  
 Heat 1  
 Heat Src 1

Roof Cover  
 Heat 2  
 Heat Src 2

Foundation  
 Bedrooms 0

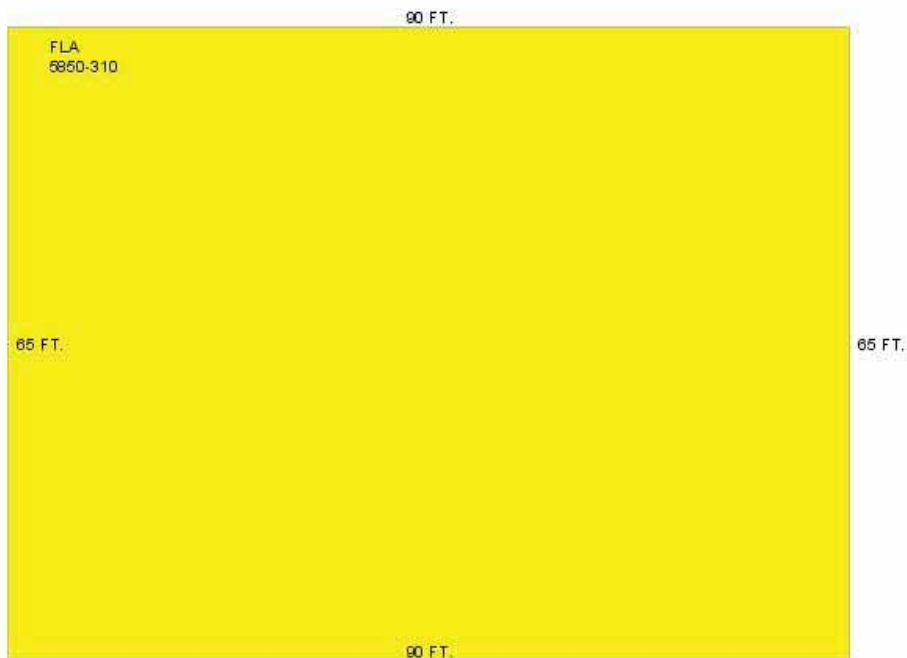
### Extra Features:

2 Fix Bath 0  
 3 Fix Bath 1  
 4 Fix Bath 0

Vacuum 0  
 Garbage Disposal 0  
 Compactor 0

5 Fix Bath 0  
 6 Fix Bath 0  
 7 Fix Bath 0  
 Extra Fix 0

Security 0  
 Intercom 0  
 Fireplaces 0  
 Dishwasher 0



**Sections:**

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area
1	FLA		1	1922					5,850

**Interior Finish:**

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	2604	ELEC/TELEPHONE ETC C	100	N	N

**Exterior Wall:**

Interior Finish Nbr	Type	Area %
682	BRICK	100

**Appraiser Notes**

2002-7-24 PROPERTY BEING USED BY KEYS ENERGY SYSTEMS

OR2790-736/743 DECLARATION OF RESTRICTIVE COVENANT STATES THAT THE ENVIRONMENTAL REPORTS CONFIRM THAT CONTAMINATED GROUNDWATER EXISTS ON THIS PROPERTY. PROPERTY WAS FORMERLY UTILIZED FOR MANUFACTURED GAS AND ELECTRIC POWER PLANT OPERATIONS AND IS CURRENTLY USED AS AN ELECTRICAL SUBSTATION. IN CONNECTION WITH HISTORIC SITE USES THERE ARE ONSITE PETROLEUM CONSTITUENT IMPACTS TO GROUNDWATER.

## Parcel Value History

Certified Roll Values.

[View Taxes for this Parcel.](#)

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2015	314,000	0	459,631	773,631	773,631	773,631	0
2014	314,000	0	443,216	757,216	717,823	757,216	0
2013	314,000	0	338,567	652,567	652,567	652,567	0
2012	314,000	0	338,567	652,567	652,567	652,567	0
2011	314,000	0	451,423	765,423	765,423	765,423	0
2010	314,000	0	385,700	699,700	699,700	699,700	0
2009	314,000	0	456,750	770,750	770,750	770,750	0
2008	314,000	0	466,900	780,900	780,900	780,900	0
2007	203,118	0	466,900	670,018	670,018	670,018	0
2006	203,118	0	263,900	467,018	467,018	467,018	0
2005	203,118	0	263,900	467,018	467,018	467,018	0
2004	203,117	0	259,840	462,957	462,957	462,957	0
2003	203,117	0	259,840	462,957	462,957	462,957	0
2002	203,117	0	71,050	274,167	274,167	274,167	0
2001	203,117	0	60,900	264,017	264,017	264,017	0
2000	203,117	0	50,750	253,867	253,867	253,867	0
1999	203,117	0	50,750	253,867	253,867	253,867	0
1998	135,728	0	50,750	186,478	186,478	186,478	0
1997	135,728	0	42,630	178,358	178,358	178,358	0
1996	123,389	0	42,630	166,019	166,019	166,019	0
1995	123,389	0	42,630	166,019	166,019	166,019	0
1994	123,389	0	42,630	166,019	166,019	166,019	0
1993	123,389	0	42,630	166,019	166,019	166,019	0
1992	123,389	0	42,630	166,019	166,019	166,019	0
1991	123,389	0	42,630	166,019	166,019	166,019	0
1990	154,236	0	32,480	186,716	186,716	186,716	0
1989	154,236	0	31,465	185,701	185,701	185,701	0
1988	125,680	0	26,390	152,070	152,070	152,070	0
1987	123,072	0	12,992	136,064	136,064	136,064	0
1986	123,696	0	12,180	135,876	135,876	135,876	0
1985	120,711	0	12,545	133,256	133,256	133,256	0
1984	118,934	0	12,545	131,479	131,479	131,479	0
1983	118,934	0	12,545	131,479	131,479	131,479	0
1982	102,095	0	8,891	110,986	110,986	110,986	0

## Parcel Sales History



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4/25/2012	2571 / 2253	100	<u>QC</u>	<u>11</u>

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Monroe County Property Appraiser  
Scott P. Russell, CFA  
P.O. Box 1176 Key West, FL 33041-1176

**ATTACHMENT C**

**SITE PHOTOGRAPHS**



**PHOTO 1:**  
Interior of buildings at  
the Site



**PHOTO 2:**  
Inactive generator  
inside buildings at the  
Site



**PHOTO 3:**  
Inactive generator  
inside buildings at the  
Site



**PHOTO 4:**  
Interior of buildings at  
the Site



**PHOTO 5:**  
Interior of buildings at  
the Site



**PHOTO 6:**  
Interior of buildings at  
the Site showing an  
inactive generator





**PHOTO 7:**  
Interior of buildings at  
the Site



**PHOTO 8:**  
Interior of buildings at  
the Site showing an  
inactive generator



**PHOTO 9:**  
Interior of buildings at  
the Site showing an  
inactive generator



**PHOTO 10:**  
Interior of buildings at  
the Site

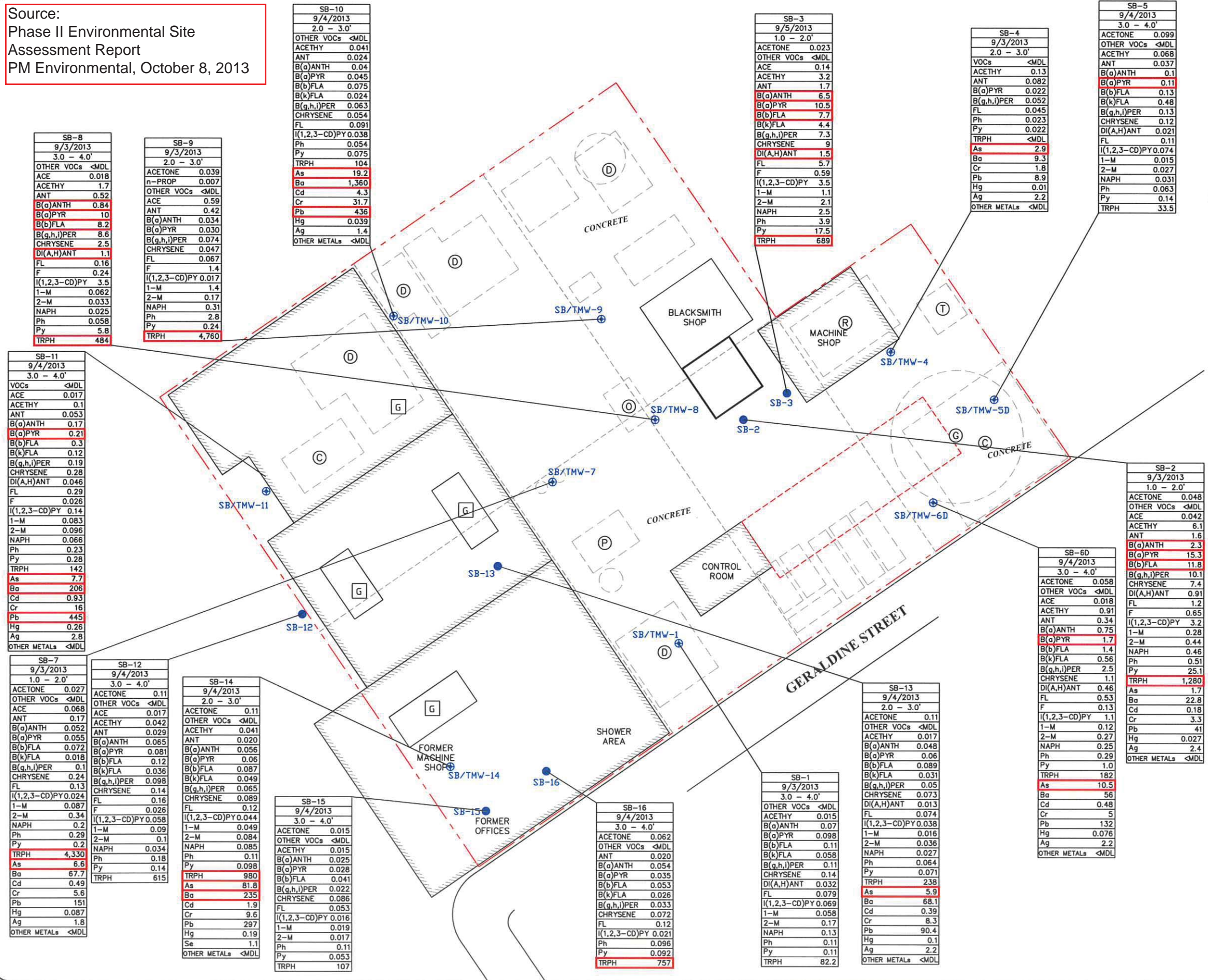


**PHOTO 11:**  
Interior of buildings at  
the Site showing an  
inactive generator

# **ATTACHMENT D**

## **HISTORICAL FIGURES**

Source:  
Phase II Environmental Site  
Assessment Report  
PM Environmental, October 8, 2013



**LEGEND:**

- SUBJECT PROPERTY
- APPROXIMATE FORMER/HISTORICAL SITE FEATURES
- PARCEL / LOT BOUNDARIES
- G GENERATOR
- D FORMER DWELLING
- T FORMER TOOL SHED
- C FORMER CISTERN
- P FORMER PUMP HOUSE
- O FORMER OIL/PUMP HOUSE
- R FORMER RETORT ROOM
- G FORMER GASOMETER
- As ARSENIC
- Ba BARIUM
- Cd CADMIUM
- Cr CHROMIUM
- Pb LEAD
- Hg MERCURY
- Se SELENIUM
- Ag SILVER
- ACE ACENAPHTHENE
- ACETHY ACENAPHTHYLENE
- ANT ANTHRACENE
- B(a)ANTH BENZO(a)ANTHRACENE
- B(a)PYR BENZO(a)PYRENE
- B(b)FLA BENZO(b)FLUORANTHENE
- B(g,h,i)PER BENZO(g,h,i)PERYLENE
- B(k)FLA BENZO(k)FLUORANTHENE
- F FLUORENE
- FL FLUORANTHENE
- I(1,2,3-CD)PYR INDENO(1,2,3-CD)PYRENE
- 1-M 1-METHYLNAPHTHALENE
- 2-M 2-METHYLNAPHTHALENE
- NAPH NAPHTHALENE
- Ph PHENANTHRENE
- Py PYRENE
- DI(A,H)ANT DIBENZO(a,h)ANTHRACENE
- n-PROP n-PROPYLBENZENE
- VOCs VOLATILE ORGANIC COMPOUNDS
- MDL METHOD DETECTION LIMIT
- VALUE EXCEEDS APPLICABLE CRITERIA
- NOTES: REFER TO TABLES FOR SPECIFIC COMPOUNDS ANALYZED
- UNITS: mg/Kg
- TRPH TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
- PAHs POLYNUCLEAR AROMATIC COMPOUNDS



**FIGURE 3**  
SOIL BORING / TEMPORARY MONITORING WELL  
LOCATION MAP WITH SOIL ANALYTICAL  
RESULTS

PROJ:  
FORMER KEY WEST GAS AND ELECTRIC COMPANY  
101-111 GERALDINE STREET  
KEY WEST, FL

THIS IS NOT A LEGAL SURVEY  
VERIFY SCALE  
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRN BY: TS/MM/TS/MM  
CHKD BY: RS/CCF  
FILE NAME: 06-3668-1F03R00

DATE: 10/1/2013  
SCALE: 1" = 30'

Source:  
Phase II Environmental Site  
Assessment Report  
PM Environmental, October 8, 2013

TMW-10 9/4/2013	
2.0 - 12.0' SCREEN	
UNITS	ug/L
n-BUTYLB	6.0
sec-BUTYLB	1.9
ISOP	5.3
n-PROP	7.5
OTHER VOCs	<MDL
ACE	2.4
ACETHY	0.82
ANT	0.15
F	5.4
1-M	133
2-M	140
NAPH	1.0
Ph	6.3
OTHER PAHs	<MDL
TRPH	3,300

TMW-9 9/4/2013	
1.7 - 11.7' SCREEN	
UNITS	ug/L
B	0.11
n-BUTYLB	6.0
sec-BUTYLB	2.7
Chi	0.59
E	0.88
ISOP	7.3
n-PROP	9.2
1,2,3-TMB	1.1
1,2,4-TMB	5.2
1,3,5-TMB	0.62
X	0.88
OTHER VOCs	<MDL
ACE	2.4
ACETHY	0.65
ANT	0.18
F	5.5
1-M	61.6
2-M	56.6
NAPH	1,190
Ph	5.6
OTHER PAHs	<MDL
TRPH	4,200

TMW-4 9/5/2013	
2.0 - 12.0' SCREEN	
UNITS	ug/L
ACETONE	9.7
BROMOD	3.5
Chi	2.1
1,2,4-TMB	4.1
OTHER VOCs	<MDL
ACE	0.72
ACETHY	0.18
ANT	0.11
NAPH	4.3
OTHER PAHs	<MDL
TRPH	66

TMW-5D 9/5/2013	
20.0 - 25.0' SCREEN	
UNITS	ug/L
VOCs	<MDL
PAHs	<MDL
TRPH	<MDL

TMW-11 9/4/2013	
2.0 - 12.0' SCREEN	
UNITS	ug/L
ISOP	3.1
n-PROP	2.4
OTHER VOCs	<MDL
ACE	1.1
ACETHY	0.20
F	1.7
1-M	11.8
2-M	4.7
NAPH	2.1
Ph	1.9
OTHER PAHs	<MDL
TRPH	240

TMW-7 9/4/2013	
2.0 - 12.0' SCREEN	
UNITS	ug/L
BROMOD	3.1
n-BUTYLB	5.2
sec-BUTYLB	1.1
Chi	1.6
ISOP	4.6
n-PROP	5.1
1,2,4-TMB	4.1
OTHER VOCs	<MDL
ACE	1.3
ACETHY	0.34
ANT	0.12
F	3.0
1-M	8.7
NAPH	4.7
Ph	2.9
OTHER PAHs	<MDL
TRPH	400

TMW-14 9/4/2013	
1.3 - 11.3' SCREEN	
UNITS	ug/L
VOCs	<MDL
PAHs	<MDL
TRPH	<MDL

TMW-1 9/4/2013	
2.0 - 12.0' SCREEN	
UNITS	ug/L
BROMOD	3.7
n-BUTYLB	4.7
Chi	2.7
DICLFMETH	1.0
OTHER VOCs	<MDL
ACE	0.56
ACETHY	0.33
F	2.4
1-M	1.0
Ph	1.9
OTHER PAHs	<MDL
TRPH	280

TMW-8 9/4/2013	
2.0 - 12.0' SCREEN	
UNITS	ug/L
B	0.38
E	296
ISOP	36.4
p-ISOPT	10.3
n-PROP	17.6
ST	5.0
T	5.6
1,2,3-TRI	5.5
1,2,3-TMB	67.8
1,2,4-TMB	128
1,3,5-TMB	66.1
X	224
OTHER VOCs	<MDL
ACE	40.6
ACETHY	40.2
ANT	13.4
B(a)ANTH	2.1
B(a)PYR	2.1
B(b)FLA	1.6
B(g,h,i)PER	0.55
CHRYSENE	2.2
DI(A,H)ANT	0.20
FL	7.0
F	57.6
I(1,2,3-CD)PY	0.36
1-M	543
2-M	560
NAPH	2,400
Ph	89.2
Py	16.6
OTHER PAHs	<MDL
TRPH	22,000

TMW-6D 9/5/2013	
20.0 - 25.0' SCREEN	
UNITS	ug/L
VOCs	<MDL
NAPH	3.0
Ph	0.72
Py	0.63
OTHER PAHs	<MDL
TRPH	<MDL

**LEGEND:**

- SUBJECT PROPERTY
- APPROXIMATE FORMER/HISTORICAL SITE FEATURES
- PARCEL / LOT BOUNDARIES
- G GENERATOR
- D FORMER DWELLING
- T FORMER TOOL SHED
- C FORMER CISTERN
- P FORMER PUMP HOUSE
- O FORMER OIL/PUMP HOUSE
- R FORMER RETORT ROOM
- G FORMER GASOMETER

ACE ACENAPHTHENE  
 ACETHY ACENAPHTHYLENE  
 ANT ANTHRACENE  
 Chi CHLOROFORM  
 B(a)ANTH BENZO(a)ANTHRACENE  
 B(a)PYR BENZO(a)PYRENE  
 B(b)FLA BENZO(b)FLUORANTHENE  
 B(g,h,i)PER BENZO(g,h,i)PERYLENE  
 F FLUORENE  
 FL FLUORANTHENE  
 I(1,2,3-CD)PY INDENO(1,2,3-CD)PYRENE  
 1-M 1-METHYLNAPHTHALENE  
 2-M 2-METHYLNAPHTHALENE  
 NAPH NAPHTHALENE  
 Ph PHENANTHRENE  
 Py PYRENE  
 DI(A,H)ANT DIBENZO(a,h)ANTHRACENE  
 B BENZENE  
 T TOLUENE  
 E ETHYLBENZENE  
 X XYLENES  
 1,2,4-TMB 1,2,4-TRIMETHYLBENZENE  
 1,3,5-TMB 1,3,5-TRIMETHYLBENZENE  
 1,2,3-TMB 1,2,3-TRIMETHYLBENZENE  
 ISOP ISOPROPYLBENZENE  
 n-PROP n-PROPYLBENZENE  
 ST STYRENE  
 n-BUTYLB n-BUTYLBENZENE  
 sec-BUTYLB sec-BUTYLBENZENE  
 BROMOD BROMODICHLOROMETHANE  
 DICLFMETH DIBROMOCHLOROMETHANE  
 VOCs VOLATILE ORGANIC COMPOUNDS  
 MDL METHOD DETECTION LIMIT  
 VALUE EXCEEDS APPLICABLE CRITERIA

NOTES:  
 REFER TO TABLES FOR SPECIFIC COMPOUNDS ANALYZED

UNITS ug/L  
 TRPH TOTAL RECOVERABLE PETROLEUM HYDROCARBONS  
 PAHs POLYNUCLEAR AROMATIC COMPOUNDS



**FIGURE 4**  
SOIL BORING / TEMPORARY MONITORING WELL  
LOCATION MAP WITH GROUNDWATER  
ANALYTICAL RESULTS

PROJ:  
FORMER KEY WEST GAS AND ELECTRIC COMPANY  
101-111 GERALDINE STREET  
KEY WEST, FL

THIS IS NOT A LEGAL SURVEY	DRN BY: IS/MM/TS/MM	DATE: 10/1/2013
VERIFY SCALE	CHKD BY: RS/CCF	SCALE: 1" = 30'
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	FILE NAME:	06-3668-1F04R00

PMW-5	PMW-5	PMW-5	PMW-5	PMW-5
1/29/2014	7/1/2014	11/6/2014	2/11/2014	5/7/2015
2.30 ~ 12.30' SCREEN	2.30 ~ 12.30' SCREEN	2.30 ~ 12.30' SCREEN	2.30 ~ 12.30' SCREEN	2.30 ~ 12.30' SCREEN
ACETONE 10.9	sec-BUTYLB 1.3	n-PROP 0.52	sec-BUTYLB 0.69	VOCs <MDL
n-BUTYLB 0.85	ISOP 1.3	OTHER VOCs <MDL	OTHER VOCs <MDL	ACETHY 0.23
sec-BUTYLB 2.0	n-PROP 1.2	ACE 0.66	ACE 0.9	ANT 0.14
tert-BUTYLB 0.51	OTHER VOCs <MDL	ACETHY 0.19	ACETHY 0.32	FL 0.030
Chl 1.3	ACE 0.68	ANT 0.089	ANT 0.26	F 1.2
ISOP 3.6	ACETHY 0.21	FL 0.029	FL 0.045	Ph 0.091
n-PROP 4.9	F 1.7	F 1.5	F 2.0	Py 0.088
OTHER VOCs <MDL	1-M 9.8	Ph 0.33	Ph 0.28	OTHER PAHs <MDL
ACE 1.0	2-M 5.7	Py 0.075	Py 0.099	
ACETHY 0.36	OTHER PAHs <MDL	1-M 3.1	1-M 2.3	
ANT 0.21	TRPH 340	OTHER PAHs <MDL	OTHER PAHs <MDL	
FL 0.049		TRPH 680		
F 2.4				
Ph 2.6				
Py 0.12				
1-M 35.5				
2-M 46.6				
OTHER PAHs <MDL				
TRPH 810				

PMW-7	PMW-7	PMW-7	PMW-7	PMW-7
1/29/2014	7/1/2014	11/6/2014	2/11/2014	5/7/2015
2.25 ~ 12.25' SCREEN	2.25 ~ 12.25' SCREEN	2.25 ~ 12.25' SCREEN	2.25 ~ 12.25' SCREEN	2.25 ~ 12.25' SCREEN
ACETONE 11.6	VOCs <MDL	VOCs <MDL	VOCs <MDL	1,2-DCA 0.65
sec-BUTYLB 0.78	ACE 0.058	ACE 0.2	ACE 0.15	p-ISOPT 0.56
ISOP 1.1	F 0.090	ACETHY 0.051	ACETHY 0.037	OTHER VOCs <MDL
n-PROP 2.7	OTHER PAHs <MDL	ANT 0.032	ANT 0.038	F 0.1
OTHER VOCs <MDL	TRPH <MDL	F 0.42	F 0.098	NAPH 3.5
ACE 0.42		Ph 0.040	Ph 0.051	OTHER PAHs <MDL
ACETHY 0.16		OTHER PAHs <MDL	Py 0.037	
ANT 0.094		TRPH 73	OTHER PAHs <MDL	
F 1.0				
Ph 1.1				
Py 0.036				
1-M 11.1				
2-M 12.6				
OTHER PAHs <MDL				
TRPH 340				

PMW-4	PMW-4	PMW-4	PMW-4	PMW-4
1/28/2014	7/1/2014	11/6/2014	2/11/2014	5/7/2015
2.30 ~ 12.30' SCREEN	2.30 ~ 12.30' SCREEN	2.30 ~ 12.30' SCREEN	2.30 ~ 12.30' SCREEN	2.30 ~ 12.30' SCREEN
sec-BUTYLB 0.84	VOCs <MDL	VOCs <MDL	VOCs <MDL	VOCs <MDL
n-PROP 1.5	ACE 0.046	Ph 0.032	ACE 0.030	PAHs <MDL
OTHER VOCs <MDL	OTHER PAHs <MDL	OTHER PAHs <MDL	Ph 0.031	
ACE 0.48	TRPH <MDL	TRPH <MDL	Py 0.026	
ACETHY 0.18			OTHER PAHs <MDL	
ANT 0.12				
FL 0.047				
F 1.1				
Ph 0.37				
Py 0.072				
OTHER PAHs <MDL				
TRPH 230				

PMW-6	PMW-6	PMW-6	PMW-6	PMW-6
1/29/2014	7/1/2014	11/6/2014	2/11/2014	5/7/2015
2.10 ~ 12.10' SCREEN	2.10 ~ 12.10' SCREEN	2.10 ~ 12.10' SCREEN	2.10 ~ 12.10' SCREEN	2.10 ~ 12.10' SCREEN
n-BUTYLB 1.7	sec-BUTYLB 0.78	ISOP 0.57	VOCs <MDL	n-BUTYLB 0.54
sec-BUTYLB 2.4	tert-BUTYLB 0.66	OTHER VOCs <MDL	ACE 0.7	CHLOROMETHANE 7.2
tert-BUTYLB 0.54	ISOP 0.81	ACE 0.96	ACETHY 0.16	1,2-DCA 0.60
ISOP 3.9	OTHER VOCs <MDL	ACETHY 0.20	ANT 0.23	ISOP 0.85
n-PROP 6.4	ACE 0.98	ANT 0.12	FL 0.057	p-ISOPT 0.79
1,2,3-TMB 1.2	ACETHY 0.22	FL 0.049	F 0.84	n-PROP 0.61
OTHER VOCs <MDL	F 1.4	Ph 0.24	X 2.4	
ACE 2.1	Ph 0.72	Ph 0.7	Py 0.12	OTHER VOCs <MDL
ACETHY 0.67	1-M 8.3	Py 0.069	OTHER PAHs <MDL	ANT 0.14
ANT 0.28	2-M 1.2	1-M 1.6	FL 0.056	
FL 0.077	OTHER PAHs <MDL	2-M 2.7	F 0.76	
F 3.9	TRPH 420	OTHER PAHs <MDL	TRPH 1,000	
NAPH 2.6				
Ph 4.2				
Py 0.10				
1-M 61.0				
2-M 88.5				
OTHER PAHs <MDL				
TRPH 1,700				

PMW-1	PMW-1	PMW-1	PMW-1	PMW-1
1/28/2014	7/1/2014	11/6/2014	2/11/2014	5/7/2015
1.90 ~ 11.90' SCREEN	1.90 ~ 11.90' SCREEN	1.90 ~ 11.90' SCREEN	1.90 ~ 11.90' SCREEN	1.90 ~ 11.90' SCREEN
B 0.21	Bro-Ben 1.4	Bro-Ben 1.3	n-BUTYLB 1.7	n-BUTYLB 1.5
n-BUTYLB 3.0	n-BUTYLB 3.0	n-BUTYLB 1.8	E 1.4	ISOP 11.8
E 3.3	E 2.5	E 1.4	ISOP 32.6	n-PROP 3.4
ISOP 48.4	ISOP 43.6	ISOP 28.2	p-ISOPT 2.4	1,2,3-TMB 13.8
p-ISOPT 5.6	p-ISOPT 4.9	p-ISOPT 2.7	n-PROP 8.1	1,2,4-TMB 3.8
n-PROP 15.7	n-PROP 14.6	n-PROP 8.2	1,2,3-TMB 38.4	1,3,5-TMB 11.9
ST 1.4	T 3.5	1,2,3-TMB 28.7	1,2,4-TMB 10.1	X 7.5
T 1.1	1,2,3-TMB 54.7	1,2,4-TMB 11.4	1,3,5-TMB 26.6	OTHER VOCs <MDL
1,2,3-TMB 2.4	1,2,4-TMB 49	1,3,5-TMB 38.3	X 29.9	ACE 3.8
1,2,3-TMB 61.6	1,3,5-TMB 74.9	X 26	OTHER VOCs <MDL	ACETHY 5.5
1,2,4-TMB 86.3	X 49.7	OTHER VOCs <MDL	ACE 10.3	ANT 2.0
1,3,5-TMB 85.2	OTHER VOCs <MDL	ACE 10.2	ACETHY 8.3	B(g)ANTH 0.079
X 71.9	ACE 11.3	ACETHY 12.7	CHRYSENE 0.095	B(g)PYR 0.95
OTHER VOCs <MDL	ACETHY 12	ANT 3.7	ANT 2.6	B(b)FLA 0.94
ACE 14.4	ANT 2.9	B(g)ANTH 0.31	FL 1.5	B(k)FLA 0.58
ACETHY 27.5	FL 0.92	B(g)PYR 0.23	F 11.6	B(g,h,i)PER 1.8
ANT 4.6	F 13.3	B(b)FLA 0.46	NAPH 361	FL 1.6
B(g)ANTH 0.16	NAPH 1,390	CHRYSENE 0.038	Ph 29.9	F 5.1
B(b)FLA 0.027	Ph 35.2	FL 1.8	Py 2.7	1,2,3-CD)PY 1.9
B(k)FLA 0.028	Py 2.5	F 12.8	1-M 163	NAPH 181
CHRYSENE 0.18	1-M 123	NAPH 677	2-M 41.1	Ph 13.6
FL 2.4	2-M 121	Ph 35.4	OTHER PAHs <MDL	Py 3.7
F 21.0	OTHER PAHs <MDL	Py 3.5		1-M 33
NAPH 1,480	TRPH 3,700	1-M 129		2-M 9.9
Ph 41.7		2-M 90.7		OTHER PAHs <MDL
Py 4.9		OTHER PAHs <MDL		
1-M 259		TRPH 3,000		
2-M 335				
OTHER PAHs <MDL				
TRPH 6,300				

PMW-3	PMW-3	PMW-3	PMW-3	PMW-3
1/28/2014	7/1/2014	11/6/2014	2/11/2014	5/7/2015
2.25 ~ 12.25' SCREEN	2.25 ~ 12.25' SCREEN	2.25 ~ 12.25' SCREEN	2.25 ~ 12.25' SCREEN	2.25 ~ 12.25' SCREEN
ACETONE 13.0	n-BUTYLB 0.89	sec-BUTYLB 0.61	sec-BUTYLB 0.69	sec-BUTYLB 0.66
BROMOD 0.69	sec-BUTYLB 1.7	OTHER VOCs <MDL	OTHER VOCs <MDL	OTHER VOCs <MDL
n-BUTYLB 1.4	tert-BUTYLB 0.56	ACE 1.2	ACE 1.9	ACETHY 0.17
sec-BUTYLB 1.8	ISOP 2.8	ACETHY 0.15	ACETHY 0.44	ANT 0.18
Chl 1.0	n-PROP 3.6	ANT 0.11	ANT 0.26	B(b)FLA 0.16
ISOP 4.4	OTHER VOCs <MDL	FL 0.093	FL 0.37	FL 0.18
n-PROP 6.4	ACE 2.1	F 1.5	F 3.0	F 1.2
1,2,3-TMB 1.1	ACETHY 0.5	Ph 0.25	Ph 0.12	Ph 0.091
OTHER VOCs <MDL	F 3.4	Py 0.19	Py 0.63	Py 0.37
ACE 2.2	Ph 2.0	1-M 3.2	1-M 2.2	OTHER PAHs <MDL
ACETHY 0.60	1-M 32.2	OTHER PAHs <MDL	OTHER PAHs <MDL	
ANT 0.35	2-M 7.5	TRPH 1,400		
CHRYSENE 0.035	OTHER PAHs <MDL			
FL 0.51	TRPH 660			
F 4.0				
NAPH 2.6				
Ph 4.4				
Py 0.88				
1-M 55.1				
2-M 55.2				
OTHER PAHs <MDL				
TRPH 930				

PMW-2	PMW-2	PMW-2	PMW-2	PMW-2
1/28/2014	7/1/2014	11/6/2014	2/11/2014	5/7/2015
2.20 ~ 12.20' SCREEN	2.20 ~ 12.20' SCREEN	2.20 ~ 12.20' SCREEN	2.20 ~ 12.20' SCREEN	2.20 ~ 12.20' SCREEN
B 0.11	n-BUTYLB 1.0	n-BUTYLB 0.75	E 7.3	sec-BUTYLB 0.56
n-BUTYLB 0.88	E 23.1	E 9.1	ISOP 6.1	E 3.9
sec-BUTYLB 1.4	ISOP 9.1	ISOP 9.1	1,2,3-TMB 10.6	ISOP 4.2
E 38.4	p-ISOPT 3.5	p-ISOPT 4.2	1,2,4-TMB 13.2	p-ISOPT 1.5
ISOP 12.0	n-PROP 3.9	n-PROP 1.6	OTHER VOCs <MDL	n-PROP 0.70
p-ISOPT 3.8	T 3.4	1,2,3-TMB 31.1	ACE 38.7	T 0.63
n-PROP 4.5	1,2,3-TMB 12.7	1,2,4-TMB 52.3	ACETHY 12.5	1,2,3-TMB 12.3
ST 0.50	1,2,4-TMB 22.4	1,3,5-TMB 13.9	ANT 5.4	1,2,4-TMB 10.3
T 1.0	1,3,5-TMB 5.9	X 27.6	B(g)ANTH 0.39	1,3,5-TMB 4.8
1,2,3-TMB 18.7	X 16.9	OTHER VOCs <MDL	B(b)FLA 0.081	X 9.3
1,2,4-TMB 29.0	OTHER VOCs <MDL	ACE 29.7	CHRYSENE 0.5	OTHER VOCs <MDL
1,3,5-TMB 7.1	ACE 34.6	ACETHY 16.0	FL 6.2	ACE 23.2
X 26.9	ACETHY 8.3	ANT 6.7	F 8.0	ACETHY 8.9
OTHER VOCs <MDL	ANT 3.7	B(g)ANTH 0.39	NAPH 185	ANT 5.5
ACE 37.1	FL 4.6	B(g)PYR 0.21	Ph 56	B(g)ANTH 0.048
ACETHY 11.2	F 5.7	B(b)FLA 0.42	Py 13.1	B(g)PYR 0.069
ANT 5.5	NAPH 346	CHRYSENE 0.11	1-M 115	B(b)FLA 0.090
B(g)ANTH 0.54	Ph 49.2	FL 4.3	2-M 16.4	FL 5.2
B(g)PYR 0.14	Py 10.3	F 10	OTHER PAHs <MDL	F 6.4
B(b)FLA 0.12	1-M 132	NAPH 622		NAPH 179
B(g,h,i)PER 0.043	2-M 31.2	Ph 52.5		Ph 34.5
CHRYSENE 0.49	OTHER PAHs <MDL	Py 8.8		Py 11.5
FL 5.8	TRPH 1,600	1-M 120		1-M 52
F 9.7		2-M 81.9		2-M 8.8
1,2,3-CD)PY 0.026		OTHER PAHs <MDL		OTHER PAHs <MDL
NAPH 219		TRPH 2,700		
Ph 55.0				
Py 12.1				
1-M 187				
2-M 62.4				
OTHER PAHs <MDL				
TRPH 2,300				

**LEGEND:**

- SUBJECT PROPERTY
- - - APPROXIMATE FORMER/HISTORICAL SITE FEATURES
- - - PARCEL / LOT BOUNDARIES
- - - PROPOSED SITE FEATURES
- G GENERATOR
- D FORMER DWELLING
- T FORMER TOOL SHED
- C FORMER CISTERN
- P FORMER PUMP HOUSE
- R FORMER OIL/PUMP HOUSE
- O FORMER RETORT ROOM
- G FORMER GASOMETER
- ⊕ FORMER SOIL BORING
- ⊕ FORMER MONITORING WELL
- ⊕ FORMER SOIL BORING
- ⊕ FORMER SOIL BORING/TEMPORARY MONITORING WELL
- ⊕ MONITORING WELL

B BENZENE  
T TOLUENE  
E ETHYLBENZENE  
X XYLENES  
F FLUORENE  
Ph PHENANTHRENE  
Py PYRENE  
ST STYRENE  
FL FLUORANTHENE  
ANT ANTHRACENE  
ACE ACENAPHTHENE  
Chl CHLOROFORM  
ACETHY ACENAPHTHYLENE  
B(g)ANTH BENZO(a)ANTHRACENE  
B(o)PYR BENZO(a)PYRENE  
B(b)FLA BENZO(b)FLUORANTHENE  
B(k)FLA BENZO(k)FLUORANTHENE  
1-M 1-METHYLNAPHTHALENE  
2-M 2-METHYLNAPHTHALENE  
NAPH NAPHTHALENE  
1,2,3-TRI 1,2,3-TRICHLOROPROPANE  
1,2,4-TMB 1,2,4-TRIMETHYLBENZENE  
1,3,5-TMB 1,3,5-TRIMETHYLBENZENE  
I(1,2,3-CD)PY INDENO(1,2,3-CD)PYRENE  
ISOP ISOPROPYLBENZENE  
p-ISOPT p-ISOPROPYLTOLUENE

1,2-DCA 1,2-DICHLOROETHANE  
n-PROP n-PROPYLBENZENE  
n-BUTYLB n-BUTYLBENZENE  
sec-BUTYLB sec-BUTYLBENZENE  
tert-BUTYLB tert-BUTYLBENZENE  
BROMOD BROMODICHLOROMETHANE  
VOCs VOLATILE ORGANIC COMPOUNDS  
PAHs POLYNUCLEAR AROMATIC COMPOUNDS  
TRPH TOTAL RECOVERABLE PETROLEUM HYDROCARBONS  
MDL METHOD DETECTION LIMIT  
μg/L VALUE EXCEEDS APPLICABLE CRITERIA

**NOTES:** REFER TO TABLES FOR SPECIFIC COMPOUNDS ANALYZED

Source:  
4th Quarter, 1st Year Natural  
Attenuation Monitoring Report,  
PM Environmental, July 10, 2015

**PM ENVIRONMENTAL** | Environmental & Engineering Services

**FIGURE 3**  
SOIL BORING/MONITORING WELL LOCATION  
MAP WITH GROUNDWATER ANALYTICAL  
RESULTS

PROJ:  
FORMER KEY WEST GAS AND ELECTRIC COMPANY  
101-111 GERALDINE STREET  
KEY WEST, FL

THIS IS NOT A LEGAL SURVEY  
VERIFY SCALE  
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRN BY: TS/MM/CS/ES/KS  
CHKD BY: RS/CCF  
FILE NAME:

DATE: 7/9/2015  
SCALE: 1" = 40'  
06-3668-4F03R03

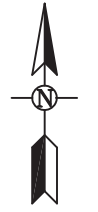


Source:  
 4<sup>th</sup> Quarter, 1<sup>st</sup> Year Natural  
 Attenuation Monitoring Report,  
 PM Environmental, July 10, 2015



**LEGEND:**

- SUBJECT PROPERTY
  - APPROXIMATE FORMER/HISTORICAL SITE FEATURES
  - PARCEL / LOT BOUNDARIES
  - PROPOSED SITE FEATURES
  - G GENERATOR
  - D FORMER DWELLING
  - T FORMER TOOL SHED
  - C FORMER CISTERN
  - P FORMER PUMP HOUSE
  - O FORMER OIL/PUMP HOUSE
  - R FORMER RETORT ROOM
  - G FORMER GASOMETER
  - FORMER SOIL BORING
  - FORMER MONITORING WELL
  - FORMER SOIL BORING
  - FORMER SOIL BORING / TEMPORARY MONITORING WELL
  - MONITORING WELL
  - ISOPROPYLBENZENE GCTL 0.8 µg/L
  - 1,2,3 TRIMETHYLBENZENE GCTL 10 µg/L AND
  - 1,2,4 TRIMETHYLBENZENE GCTL 10 µg/L
  - 1,3,5 TRIMETHYLBENZENE GCTL 10 µg/L
  - CHLOROMETHANE GCTL 2.7 µg/L
- UNITS µg/L



918 FORT STREET  
 CITY OF KEY WEST  
 (FORMER GOVERNMENTAL SLIP)

RESIDENTIAL  
 (FORMER STANDARD OIL BULK PLANT)

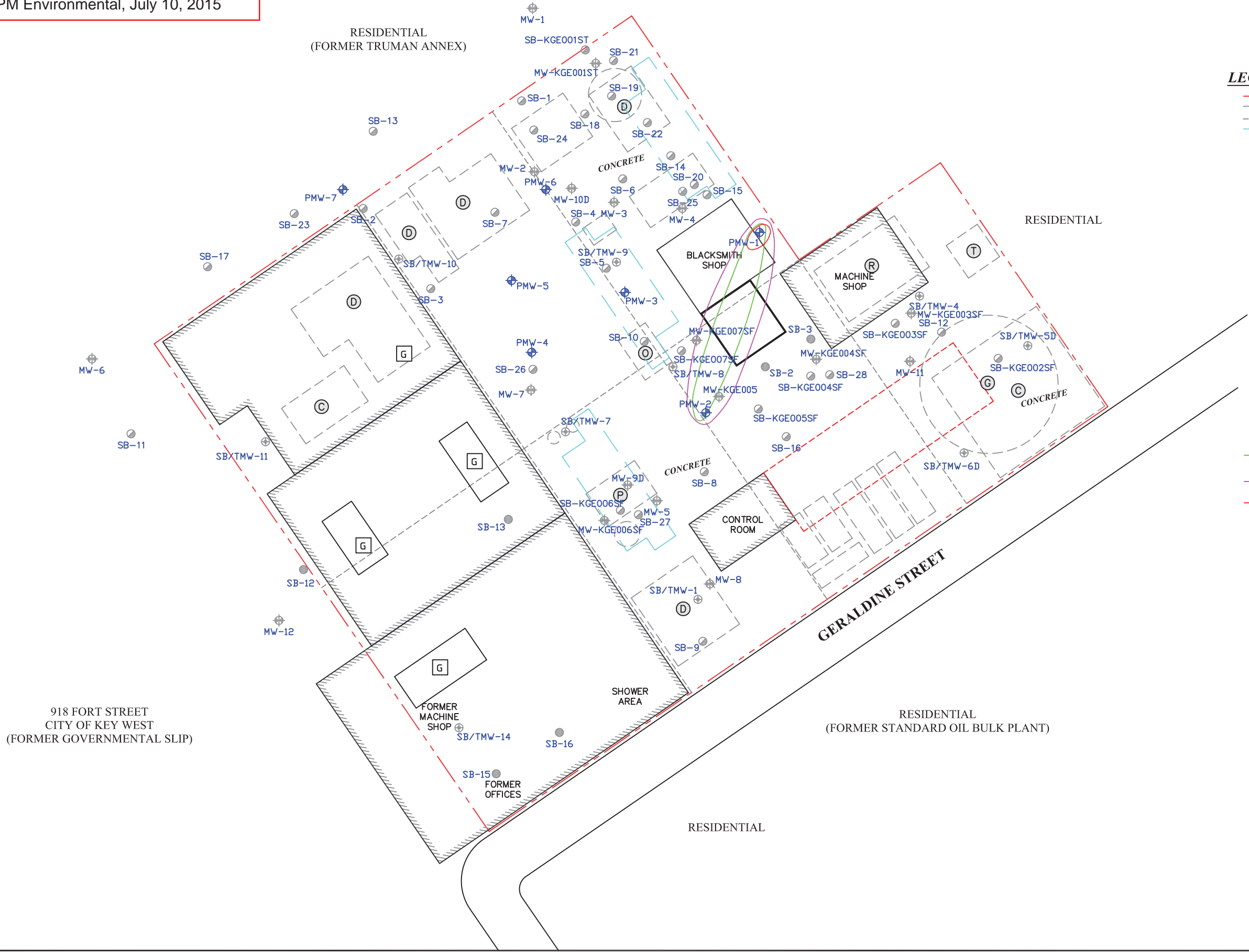


**FIGURE 4**  
 GROUNDWATER CONCENTRATION MAP FOR  
 VOCs EXCEEDING THE GCTL CRITERIA  
 (5/2015)

PROJ:  
 FORMER KEY WEST GAS AND ELECTRIC COMPANY  
 101-111 GERALDINE STREET  
 KEY WEST, FL

THIS IS NOT A LEGAL SURVEY	DRN BY: TS/CS/ES/KS	DATE: 7/9/2015
VERIFY SCALE	CHKD BY: RS/CCF	SCALE: 1" = 30'
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.		
FILE NAME: 06-3668-4F04R06		

Source:  
4<sup>th</sup> Quarter, 1<sup>st</sup> Year Natural  
Attenuation Monitoring Report,  
PM Environmental, July 10, 2015



**LEGEND:**

- SUBJECT PROPERTY
- APPROXIMATE FORMER/HISTORICAL SITE FEATURES
- PARCEL / LOT BOUNDARIES
- PROPOSED SITE FEATURES

- G GENERATOR
- D FORMER DWELLING
- T FORMER TOOL SHED
- C FORMER CISTERN
- P FORMER PUMP HOUSE
- O FORMER OIL/PUMP HOUSE
- R FORMER RETORT ROOM
- G FORMER GASOMETER
- FORMER SOIL BORING
- ⊕ FORMER MONITORING WELL
- FORMER SOIL BORING
- ⊕ FORMER SOIL BORING / TEMPORARY MONITORING WELL
- ⊕ MONITORING WELL

- 1-METHYLNAPHTHALENE GCTL 28 µg/L
- NAPHTHALENE GCTL 14 µg/L
- BENZO(a)ANTHRACENE GCTL 0.05 µg/L  
BENZO(a)PYRENE GCTL 0.2 µg/L  
BENZO(b)FLUORANTHENE GCTL 0.05 µg/L  
BENZO(k)FLUORANTHENE GCTL 0.5 µg/L

UNITS µg/L



**Environmental  
& Engineering  
Services**

**FIGURE 5**  
GROUNDWATER CONCENTRATION MAP FOR  
PAHs EXCEEDING THE GCTL CRITERIA  
(5/2015)

PROJ:  
FORMER KEY WEST GAS AND ELECTRIC COMPANY  
101-111 GERALDINE STREET  
KEY WEST, FL

THIS IS NOT A LEGAL SURVEY	DRN BY: TS/CS/ES/KS	DATE: 7/9/2015
VERIFY SCALE	CHKD BY: RS/CCF	SCALE: 1" = 30'
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	FILE NAME: 06-3668-4F05R04	

**ATTACHMENT E**

**FDEP CORRESPONDENCES**

## Candace Chin Fatt

---

**From:** Masella, Charles <Charles.Masella@dep.state.fl.us>  
**Sent:** Thursday, October 31, 2013 1:30 PM  
**To:** Candace Chin Fatt  
**Cc:** McLaurin, Albert; Sautter, Mark  
**Subject:** COM\_303264 Former Key West Gas and Electric Company

October 31, 2013

Candace Chin Fatt  
PM Environmental, Inc.  
954-924-1801  
[ChinFatt@pmenv.com](mailto:ChinFatt@pmenv.com)

Re: Phase II ESA Discussion  
Former Key West Gas & Electric  
Monroe County  
COM\_303264

Dear Ms. Chin Fatt:

Pursuant to our telephone conversation this afternoon, the primary constituents that are of a concern are the petroleum product components and residues. In the submittal received on October 17, 2013 by the South District, it appears that there are three monitoring well positions (TMW-8, TMW-9, and TMW-10) that indicate significant exceedances over Chapter 62-777 F.A.C. Groundwater Cleanup Target Levels (GCTLs). These constituents are Ethylbenzene, and Naphthalene (also 1 & 2-Methylnaphthalenes). The BaPs are breakdown (daughter components) and may attenuate. We further see readings for Lead and Arsenic, but although exceeding criteria, are not significant at this time, and may be addressed following delineation of the petroleum product plume.

The area of greater concern is the ellipse that includes TMW-8, TMW-9, and TMW-10. I would suggest concentrating groundwater remediation efforts in this part of the property. Careful over-pumping preceding groundwater collection might assist in the removal of the Polynuclear Aromatic Hydrocarbons (PAHs) in the upper watertable, and speed the volatilization of the Ethylbenzene.

As for soils, they are a secondary issue, due to the abundance of sand and limerock (possibly vugular, or oolitic in composition) on the site. Plus the gradient may be alternating due to the proximity of the surrounding water-body, so we would not expect you to labor too much on exact determination of directional issues. In the event you expect to encounter elevated Total Recoverable Petroleum Hydrocarbons (TRPHs), I would suggest analysis through Fractionation or Speciation. This may indicate a carbon concentration within criteria.

You may proceed with your assessment without the submittal of a work plan to the Department. The assessment should be conducted pursuant to Chapter 62-780 F.A.C.

Charles A. Masella  
FDEP-SD CAP WC/TK  
239-344-5667  
[Charles.Masella@dep.state.fl.us](mailto:Charles.Masella@dep.state.fl.us)



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

SOUTH DISTRICT  
P.O. BOX 2549  
FORT MYERS, FL 33902-2549  
*SouthDistrict@dep.state.fl.us*

RICK SCOTT  
GOVERNOR

CARLOS LOPEZ-CANTERA  
LT. GOVERNOR

HERSCHEL T. VINYARD JR.  
SECRETARY

**To:** Charles A. Masella *CAM*  
**Florida Department of Environmental Protection**

**From:** Mark A. Sautter *MS*  
**Florida Department of Environmental Protection**

**Date:** August 26, 2014

**Subject:** Monroe County – WC  
**Supplemental Site Assessment Report**  
**Former Key West Gas and Electric Company**  
**101-111 Geraldine Street**  
**Key West, Florida 33040**  
**Waste Cleanup Tracking Number: COM\_303264**

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The Florida Department of Environmental Protection (Department) has conducted a technical review of the Supplemental Site Assessment Report (SSAR) for the Former Key West Gas and Electric Company facility. The submittal was generated by PM Environmental, Inc. (PM), and received by the Department on August 25, 2014. Site activities were initiated to address the petroleum contaminant confirmed through an October 8, 2013, Phase II Environmental Site Assessment (PH II ESA).

On September 4, 2013, PM personnel supervised the installation of advancement of sixteen (16) soil borings (SB-1 through SB-16) and the installation of ten (10) temporary groundwater monitoring wells (TMW-1, TMW-4, TMW-5D, TMW-6D, TMW-7 through TMW-11, and TMW-14). PM personnel collected sixteen (16) soil samples and ten (10) groundwater samples. The collected samples were submitted for laboratory analysis for Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), Total Recoverable Petroleum Hydrocarbons (TRPH), Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver. The laboratory analytical data reported concentrations of PAHs, TRPH, and Metals in excess of their respective Florida Administrative Code (F.A.C.) Rule 62-777 Soil Cleanup Target Levels (SCTLs) and VOCs, PAHs, and TRPH in concentrations exceeding their respective F.A.C. Rule 62-777 Groundwater Cleanup Target Levels (GCTLs) and/or Natural Attenuation Default Concentrations (NADCs).

Based upon the findings of the PH II ESA, PM recommended that a Site Assessment (SA) be performed and, on January 27, 2014, PM personnel supervised the installation of seven (7) permanent groundwater monitoring wells (PMW-1 through PMW-7). Groundwater samples were collected from the newly installed wells on January 28, 2014. The collected samples were submitted for laboratory analysis by EPA Method 8260B for VOCs, EPA Method 8270C for PAHs, and by the Florida Residual Petroleum Organics (FL-PRO) Method for Total Recoverable Petroleum Hydrocarbons (TRPH).

**Supplemental Site Assessment Report (SSAR)**  
**Former Key West Gas and Electric Company**  
**Waste Cleanup Tracking Number COM\_303264**  
Page 2

The laboratory analytical data reported Isopropyl Benzene (Cumene) in PMW-1, PMW-2, PMW-3, PMW-5, PMW-6, and PMW-7 at 48.4 micrograms per liter ( $\mu\text{g/l}$ ), 12.0  $\mu\text{g/l}$ , 4.4  $\mu\text{g/l}$ , 3.6  $\mu\text{g/l}$ , 3.9  $\mu\text{g/l}$ , and 1.1  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 0.8  $\mu\text{g/l}$ . In addition, the concentrations detected in PMW-1 and PMW-2 exceed the NADC of 8  $\mu\text{g/l}$ . Bromodichloromethane was detected in PMW-3 at 0.69  $\mu\text{g/l}$ . This concentration exceeds the GCTL of 0.6  $\mu\text{g/l}$ . Ethylbenzene was detected in MW-2 at 38.8  $\mu\text{g/l}$ . This concentration exceeds the GCTL of 30  $\mu\text{g/l}$ . 1,2,3-Trichloropropane was detected in PMW-1 at 2.4  $\mu\text{g/l}$ . This concentration exceeds the GCTL of 0.02  $\mu\text{g/l}$  and the NADC of 2  $\mu\text{g/l}$ . However, when this value is rounded in accordance with the memorandum issued by the Director of the Division of Waste Management, Jorge Caspary, the resulting concentration is 2  $\mu\text{g/l}$ ; equal to, but not exceeding the NADC. 1,2,3-Trimethylbenzene was detected in PMW-1 and PMW-2 at 61.6  $\mu\text{g/l}$  and 18.7  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 10. 1,2,4-Trimethylbenzene was detected in PMW-1 and PMW-2 at 86.3  $\mu\text{g/l}$  and 29  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 10  $\mu\text{g/l}$ . 1,3,5-Trimethylbenzene was detected in PMW-1 at 85.2  $\mu\text{g/l}$ . This concentration exceeds the GCTL of 10  $\mu\text{g/l}$ . Total Xylenes were detected in PMW-1 and PMW-2 at 71.9  $\mu\text{g/l}$  and 26.9  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 20  $\mu\text{g/l}$ . Acenaphthene was detected in PMW-2 at 37.1  $\mu\text{g/l}$ . This concentration exceeds the GCTL of 20  $\mu\text{g/l}$ . Benzo(a)anthracene was detected in PMW-1 and PMW-2 at 0.16  $\mu\text{g/l}$  and 0.54  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 0.05  $\mu\text{g/l}$ . Benzo(b)fluoranthene was detected in PMW-2 at 0.12  $\mu\text{g/l}$ . This concentration exceeds the GCTL of 0.05  $\mu\text{g/l}$ . Naphthalene was detected in PMW-1 and PMW-2 at 1,480  $\mu\text{g/l}$  and 219  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 14  $\mu\text{g/l}$  and the NADC of 140  $\mu\text{g/l}$ . 1-Methylnaphthalene was detected in PMW-1, PMW-2, PMW-3, PMW-5, and PMW-6 at 259  $\mu\text{g/l}$ , 187  $\mu\text{g/l}$ , 55.1  $\mu\text{g/l}$ , 35.5  $\mu\text{g/l}$ , and 61.0  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 28  $\mu\text{g/l}$ . 2-Methylnaphthalene was detected in PMW-1, PMW-2, PMW-3, PMW-5, and PMW-6 at 335  $\mu\text{g/l}$ , 62.4  $\mu\text{g/l}$ , 55.2  $\mu\text{g/l}$ , 46.6  $\mu\text{g/l}$ , and 88.5  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 28  $\mu\text{g/l}$ . In addition, the concentration detected in PMW-1 exceeds the NADC of 280  $\mu\text{g/l}$ . TRPH was detected in PMW-1 at 6,300  $\mu\text{g/l}$ . This concentration exceeds the GCTL of 5,000  $\mu\text{g/l}$ .

On July 1, 2014, PM personnel collected groundwater samples from seven (7) groundwater monitoring wells (PMW-1 through PMW-7). The collected samples were submitted for laboratory analysis by EPA Method 8260B for VOCs, EPA Method 8270C for PAHs, and by the FL-PRO Method for TRPH.

The analytical data reported Cumene in PMW-1, PMW-2, PMW-3, PMW-5, and PMW-6 at 43.6  $\mu\text{g/l}$ , 9.1  $\mu\text{g/l}$ , 2.8  $\mu\text{g/l}$ , 1.3  $\mu\text{g/l}$ , and 0.81  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 0.8  $\mu\text{g/l}$ . In addition, the concentrations detected in PMW-1 and PMW-2 exceed the NADC of 8  $\mu\text{g/l}$ . 1,2,3-Trimethylbenzene was detected at 54.7  $\mu\text{g/l}$  and 12.7  $\mu\text{g/l}$  in PMW-1 and PMW-2, respectively. These concentrations exceed the GCTL of 10  $\mu\text{g/l}$ . Similarly, 1,2,4-Trimethylbenzene was detected in PMW-1 and PMW-2 at 49  $\mu\text{g/l}$  and 22.4  $\mu\text{g/l}$ , respectively. These concentrations exceed the GCTL of 10  $\mu\text{g/l}$ . Xylenes and 1,3,5-Trimethylbenzene were detected in PMW-1 at 49.7  $\mu\text{g/l}$  and 74.9  $\mu\text{g/l}$ , respectively. These concentrations exceed their

**Supplemental Site Assessment Report (SSAR)  
Former Key West Gas and Electric Company  
Waste Cleanup Tracking Number COM\_303264  
Page 3**

respective GCTLs of 20 µg/l and 10 µg/l. Acenaphthene was detected in PMW-2 at 34.6 µg/l. This concentration exceeds the GCTL of 20 µg/l. Naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene were detected in PMW-1 at 1,390 µg/l, 123 µg/l, and 121 µg/l, and in PMW-2 at 346 µg/l, 132 µg/l, and 31.2 µg/l, respectively. These concentrations exceed their respective GCTLs of 14 µg/l, 28 µg/l, and 28 µg/l. The concentrations of Naphthalene in PMW-1 and PMW-2 also exceed the NADC of 280 µg/l. 1-Methylnaphthalene was also detected in PMW-3 at 32.2 µg/l. This concentration exceeds the GCTL of 28 µg/l.

**Summary:**

The Florida Department of Environmental Protection (Department) has completed our technical review of the Supplemental Site Assessment Report (SSAR) for the Former Key West Gas and Electric Company and concurs with the environmental consultant that the onsite plume of dissolved hydrocarbons is largely delineated. While additional, offsite delineation is required in the vicinity of PMW-1, the Department understands that the necessary monitoring well installation will require the procurement of an Offsite Access Agreement from the adjoining property owner. As this may take considerable time to obtain, the Department concurs with the consultant that Natural Attenuation Monitoring (NAM) of the existing wells is appropriate for this site. The July 2014 sampling event will be considered the Year-1, Quarter-1 Natural Attenuation Monitoring event. Subsequent quarterly events should include the collection of groundwater samples from PMW-1 through PMW-7. The collected samples should be submitted for laboratory analysis by EPA Method 8260B for VOCs and EPA Method 8270C for PAHs.

The dramatic reduction in the concentrations and distribution of contaminants of concern between the January 2014 and July 2014 sampling events suggests a seasonal fluctuation at this site. If, however, after one (1) year of quarterly samples the concentrations and distribution remain relatively constant, the Department will consider a semi-annual monitoring schedule and a reduction of sample points. The Year-1, Quarter-2 NAM event should be scheduled for October 2014. The environmental consultant should also attempt to obtain the Offsite Access Agreement in order to install the additional monitoring well to be situated northeast of PMW-1.

## **ATTACHMENT F**

# **SITE REHABILITATION COMPLETION ORDER WITH CONDITIONS AND DECLARATION OF RESTRICTIVE COVENANT**





# Florida Department of Environmental Protection

Rick Scott  
Governor

Carlos Lopez-Cantera  
Lt. Governor

South District  
Post Office Box 2549  
Fort Myers, Florida 33902-2549  
*SouthDistrict@dep.state.fl.us*

Jonathan P. Steverson  
Secretary

April 26, 2016

## VIA ELECTRONIC MAIL

Mr. Stanley Rzad  
Keys Energy Services  
1001 James Street  
Key West, Florida 33041-6100  
**E-mailed to:** [Stanley.Rzad@keysenergy.com](mailto:Stanley.Rzad@keysenergy.com)

Subject: Monroe County – WC  
Site Rehabilitation Completion Order (SRCO) Approval  
No Further Action Risk Management Option Level III (NFA RMO III)  
Former Key West Gas and Electric Company  
101-111 Geraldine Street, Key West, Florida 33040  
Waste Cleanup Tracking Number: COM\_303264  
Discharge Date: February 20, 2012

Dear Mr. Rzad:

The Florida Department of Environmental Protection (Department) has completed our technical review of the documentation (including No Further Action with Institutional Controls Proposal for Former Key West Gas and Electric Company, generated by PM Environmental, Inc. (PM)) submitted in support of a Site Rehabilitation Completion Order with Conditions (SRCO-C) pursuant to Florida Administrative Code (F.A.C.) Rule 62-780.680(3) Risk Management Option Level III (RMO III) for the Former Key West Gas and Electric Company Facility located at 101-111 Geraldine Street, Key West, Florida 33040. All the documents submitted to date are adequate to meet the site assessment requirements of Rule 62-780.680(3) Florida Administrative Code (F.A.C.). The DRC is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order) No Further Action Risk Management Options Level III (NFA RMO III). Therefore, you are released from any further obligation to conduct site rehabilitation at the site for petroleum product contamination associated with the discharge referenced above, except as set forth below.

- 1) In the event concentrations of petroleum products' contaminants of concern migrate beyond the established physical limits as documented in the Declaration of Restrictive Covenant approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the site, the Florida Department of Environmental Protection (Department) may require assessment and site rehabilitation pursuant to Chapter 62-780, F.A.C., to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the SRCO or otherwise allowed by Chapter 62-777, F.A.C.

- 2) Additionally, you are required to properly abandon all monitoring wells within 60 days of receipt of this Order. The monitoring wells must be plugged and abandoned in accordance with the requirements of Subsection 62-532.500(4), F.A.C.

### Legal Issues

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for an administrative hearing are set forth below. Persons affected by this Order have the following options:

- 1) If you choose to accept the Department's decision regarding the DRC NFA RMO III you do not have to do anything. This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order.
- 2) If you choose to challenge the decision, you may do the following:
  - a) File a request for an extension of time to file a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for an administrative hearing; or
  - b) File a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to section 120.573, F.S., is not available.

### How to Request an Extension of Time to File a Petition for an Administrative Hearing

For good cause shown, pursuant to subsection 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Keys Energy Services shall mail a copy of the request to Mr. Stanley Rzad ([Stanley.Rzad@keysenergy.com](mailto:Stanley.Rzad@keysenergy.com)), Keys Energy Services, 1001 James Street, Key West, Florida 33041-6100, at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

### How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Keys Energy Services shall mail a copy of the request to Mr. Stanley Rzad ([Stanley.Rzad@keysenergy.com](mailto:Stanley.Rzad@keysenergy.com)), Keys Energy Services,

1001 James Street, Key West, Florida 33041-6100, at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under sections 120.569 and 120.57, F.S.

Pursuant to subsection 120.569(2), F.S. and rule 28-106.201, F.A.C., a petition for an administrative hearing shall contain the following information:

- a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the facility owner's name and address, if different from the petitioner; the FDEP facility number, and the name and address of the facility;
- b) A statement of when and how each petitioner received notice of the Department's action or proposed action;
- c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;
- e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and
- g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order. Timely filing a petition for an administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

#### Judicial Review

Any party to this Order has the right to seek judicial review of it under section 120.68, F.S., by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the Department's clerk (see below).

Questions

Any questions regarding the Department's review of your Declaration of Restrictive Covenant (DRC) No Further Action Risk Management Options Level III (NFA RMO III) should be directed to Mark A. Sautter at (239) 344-5690 or [Mark.Sautter@dep.state.fl.us](mailto:Mark.Sautter@dep.state.fl.us). **Whenever possible, please submit any written response(s) electronically to [FTM.Tanks.Cleanup@dep.state.fl.us](mailto:FTM.Tanks.Cleanup@dep.state.fl.us).**

Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing. The FDEP Waste Cleanup Tracking Number for this site is **COM\_303264**. Please use this identification on all future correspondence with the Department.

Sincerely,



\_\_\_\_\_  
Jon M. Iglehart  
Director of District Management  
South District


JMI/MAS/se

Enclosures: (1) Site Rehabilitation Completion Order (SRCO) Approval April 19, 2016  
(2) Declaration of Restrictive Covenant

cc: Candace Chin Fatt – PM ([chinfatt@pmenv.com](mailto:chinfatt@pmenv.com))  
Lindsay C. Walton, Esq. – Goldstein Env. Law Firm ([lwalton@goldsteinenvlaw.com](mailto:lwalton@goldsteinenvlaw.com))  
Dan Blackwell – FDEP ([Dan.Blackwell@dep.state.fl.us](mailto:Dan.Blackwell@dep.state.fl.us))  
Toni Sturtevant – FDEP ([Toni.Sturtevant@dep.state.fl.us](mailto:Toni.Sturtevant@dep.state.fl.us))  
Jennifer Carpenter – FDEP ([Jennifer.Carpenter@dep.state.fl.us](mailto:Jennifer.Carpenter@dep.state.fl.us))  
Elizabeth Sweigert – FDEP ([Elizabeth.Sweigert@dep.state.fl.us](mailto:Elizabeth.Sweigert@dep.state.fl.us))  
Charles A. Masella – FDEP ([Charles.Masella@dep.state.fl.us](mailto:Charles.Masella@dep.state.fl.us))  
Ryan Snyder – FDEP ([Ryan.Snyder@dep.state.fl.us](mailto:Ryan.Snyder@dep.state.fl.us))  
Mark A. Sautter – FDEP ([Mark.Sautter@dep.state.fl.us](mailto:Mark.Sautter@dep.state.fl.us))

**FILING AND ACKNOWLEDGMENT**

FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

  
\_\_\_\_\_  
Clerk

\_\_\_\_\_  
April 26, 2016  
Date

## SRCO Approval Attachment

SRCO NFA RMO III for Waste Cleanup Tracking Number: COM\_303264

Former Key West Gas and Electric Company  
101-111 Geraldine Street, Key West, Florida 33040  
Waste Cleanup Tracking Number: COM\_303264  
Discharge Date: February 20, 2012

I hereby certify that in my judgment, the components of this Site Rehabilitation Completion Order (SRCO) satisfy the requirements set forth in Chapter 62-780.680(3), Florida Administrative Code (F.A.C.), No Further Action Risk Management Options Level III (NFA RMO-III) and that the conclusions in this report provide reasonable assurances that the objectives in Chapter 62-780.680(3), F.A.C., have been met.

- I personally completed this review.
- This review was conducted by Mark A. Sautter working under my direct supervision.



---

Charles A. Masella  
Projects Manager-Environmental Consultant  
Florida Department of Environmental Protection

April 21, 2016 *CSM*

---

Date

**This instrument prepared by:**

Lindsay C. Walton, Esq.  
The Goldstein Environmental Law Firm, P.A.  
One Southeast Third Avenue, Suite 2120  
Miami, Florida 33131  
Tel: (305) 777-1686  
Email: [lwalton@Goldsteinenvlaw.com](mailto:lwalton@Goldsteinenvlaw.com)

**DECLARATION OF RESTRICTIVE COVENANT**

This **DECLARATION OF RESTRICTIVE COVENANT** (hereinafter "Declaration") is made by **THE UTILITY BOARD OF THE CITY OF KEY WEST, FLORIDA**, authorized to conduct business in the State of Florida (hereinafter "Grantor") and the **FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION** (hereinafter "FDEP"). The Grantor and the FDEP are the "Parties" under this Declaration.

**I. Recitals**

A. The Grantor is the fee simple owner of that certain real property situated in the City of Key West, Monroe County, Florida, more particularly described in the legal description attached hereto at Exhibit A and made a part of this Declaration hereof (hereinafter the "Property"). The street address of the Property is 100 Angela Street, Key West, Monroe County, FL, and the parcel numbers are 13950; 13960; 13970; 13900; 13910; 13870; 13860; and 13830.

B. The FDEP Facility Identification Number for the Property is COM\_303264.

C. The Property was formerly utilized for manufactured gas and electric power plant operations and is currently used as an electrical substation. In connection with historic site uses, there are onsite petroleum constituent impacts to groundwater. The assessment of groundwater at the Property is documented in the following reports that are incorporated into this Declaration by reference (hereinafter, the "Environmental Reports"):

1. Correspondence issued by C. A. Masella, FDEP, to S. Rzad, Keys Energy Services, regarding Former Key West Gas and Electric Company Site, Waste Cleanup Tracking Number: COM\_303264, dated July 16, 2015;
2. 4<sup>th</sup> Quarter, 1<sup>st</sup> Year Natural Attenuation Monitoring Report, prepared by PM Environmental, dated July 10, 2015;
3. 3<sup>rd</sup> Quarter, 1<sup>st</sup> Year Natural Attenuation Monitoring Report, prepared by PM Environmental, dated March 11, 2015;
4. 2<sup>nd</sup> Quarter, 1<sup>st</sup> Year Natural Attenuation Monitoring Report, prepared by PM Environmental, dated December 5, 2014;

**RECEIVED**

**MAR 02 2016**

**D.E.P. South District**

5. Supplemental Site Assessment Report, prepared by PM Environmental, dated August 25, 2014; and
6. Site Assessment Report and 1<sup>st</sup> Quarter, 1<sup>st</sup> Year Natural Attenuation Monitoring Report, prepared by PM Environmental, dated March 10, 2014.

D. The Environmental Reports set forth the nature and extent of the contamination located at the Property. These reports confirm that contaminated groundwater as defined by Chapter 62-780, Florida Administrative Code (F.A.C.), exist on the Property. Also, these reports document that the groundwater contamination does not extend beyond the Property boundary, that the extent of the groundwater contamination does not exceed 1/4 acre, and the groundwater contamination is not migrating.

E. It is the intent that the restrictions in this Declaration reduce or eliminate the risk of exposure of users or occupants of the Property and the environment to the contaminants and to reduce or eliminate the threat of migration of the contaminants.

F. FDEP has agreed to issue the Grantor, or its respective successors or assigns, a Site Rehabilitation Completion Order (hereinafter "SRCO") upon recordation of this Declaration, and the FDEP can unilaterally revoke the SRCO if the conditions of this Declaration or of the SRCO are not met. Additionally, if concentrations of contaminants increase above the levels approved in the SRCO, or if a subsequent discharge occurs at the Property, the FDEP may require site rehabilitation to reduce concentrations of contamination to the levels allowed by the applicable FDEP rules. The SRCO relating to this Declaration can be found by contacting the South District office of the FDEP.

G. The Grantor deems it desirable and in the best interest of all present and future owners of the Property that an SRCO be obtained and maintained so long as contaminants remain at the Property above applicable cleanup target levels, and that the Property be held subject to certain restrictions, all of which are more particularly hereinafter set forth.

## **II. Agreement**

**NOW, THEREFORE**, to induce the FDEP to issue the SRCO and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by each of the undersigned Parties, Grantor agrees as follows:

1. The foregoing Recitals are true and correct and are incorporated herein by reference.
2. The Grantor hereby imposes on the Property the following restrictions:
  - a. There shall be no use of the groundwater under the Property. There shall be no drilling for water conducted on the Property, nor shall any wells be installed on the Property other than monitoring wells pre-approved in writing by FDEP's Division of Waste Management, in addition to any authorizations required by the Division of Water Resource Management ("DWRM") and the Water Management Districts ("WMD"). Additionally, there shall be no stormwater swales, stormwater detention

or retention facilities, or ditches on the Property. For any dewatering activities, a plan approved by FDEP's Division of Waste Management must be in place to address and ensure the appropriate handling, treatment, and disposal of any extracted groundwater that may be contaminated.

3. In the remaining paragraphs, all references to "Grantor" and "FDEP" shall also mean and refer to their respective successors and assigns.

4. For the purpose of monitoring the restrictions contained herein, FDEP is hereby granted a right of entry upon and access to the Property at reasonable times and with reasonable notice to GRANTOR.

5. It is the intention of Grantor that the restrictions contained in this Declaration shall touch and concern the Property, run with the land and with the title to the Property, and shall apply to and be binding upon and inure to the benefit of Grantor and to the FDEP, and to any and all parties hereafter having any right, title or interest in the Property or any part thereof as provided by applicable law. The FDEP may enforce the terms and conditions of this Declaration by injunctive relief and other appropriate available legal remedies. Any forbearance on behalf of the FDEP to exercise its right in the event of the failure of the Grantor to comply with the provisions of this Declaration shall not be deemed or construed to be a waiver of the FDEP's rights hereunder. This Declaration shall continue in perpetuity, unless otherwise modified in writing by Grantor and the FDEP as provided in Paragraph 7 of this Declaration. These restrictions may also be enforced in a court of competent jurisdiction by any other person, firm, corporation, or governmental agency that is substantially benefited by this Declaration. If the Grantor does not or will not be able to comply with any or all of the provisions of this Declaration, the Grantor shall notify the FDEP in writing within three (3) calendar days. Additionally, Grantor shall notify FDEP thirty (30) days prior to any conveyance or sale, granting or transferring the Property, to any heirs, successors, assigns or grantees, including, without limitation, the conveyance of any security interest in said Property.

6. In order to ensure the perpetual nature of these restrictions, Grantor shall reference these restrictions in any subsequent lease or deed of conveyance, including the recording book and page of record of this Declaration. Furthermore, prior to the entry into a landlord-tenant relationship with respect to the Property, the Grantor agrees to notify in writing all proposed tenants of the Property of the existence and contents of this Declaration.

7. This Declaration is binding until a partial or full release of this Declaration is executed by the FDEP Secretary (or by the Secretary's designee) and by the Grantor and is recorded in the public records of the county in which the land is located. To receive prior approval from the FDEP to remove this Declaration or any requirement herein, applicable cleanup target levels established pursuant to Florida Statutes and FDEP rules must have been achieved at the Property. This Declaration may be modified in writing only. Any modification of or amendment to this Declaration must be executed by both the Grantor and the FDEP and be recorded by the Grantor as an amendment hereto.



8. If any provision of this Declaration is held to be invalid by any court of competent jurisdiction, the invalidity of that provision shall not affect the validity of any other provisions of the Declaration. All such other provisions shall continue unimpaired in full force and effect.

9. The Grantor covenants and represents that on the date of execution of this Declaration that the Grantor is seized of the Property in fee simple and has good right to create, establish, and impose this restrictive covenant on the use of the Property. The Grantor also covenants and warrants that the Property is free and clear of any and all liens, mortgages, or encumbrances that could impair GRANTOR'S rights to impose the restrictive covenant described in the Declaration.

**[SIGNATURES APPEAR ON FOLLOWING PAGES]**

IN WITNESS WHEREOF, the Grantor has executed this Declaration, this 24 day of February, 2016.

BY: The Utility Board of the City of Key West, Florida  
d/b/a KEYS Energy Services  
1001 James Street  
Key West, FL 33040

[Signature]  
Peter Batty, Chairman

Signed, sealed and delivered in the presence of:

[Signature] Date: 2/24/2016  
Witness

Print Name: Lynne Tejeira

[Signature] Date: 2/24/2016  
Witness

Print Name: Stanley Beard

**NOTARY**

STATE OF Florida

COUNTY OF Monroe

The foregoing instrument was acknowledged before me this 24 day of Feb, 2016, by Peter Batty.

Personally Known  OR Produced Identification \_\_\_\_\_.

Type of Identification Produced \_\_\_\_\_.

[Signature]

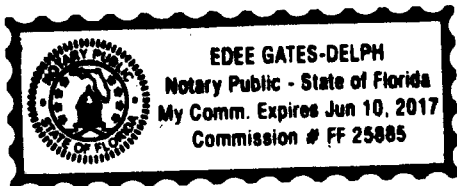
Signature of Notary Public

Edee Gates-Delph

Print Name of Notary Public

Commission No. FF 25885

Commission Expires: June 10, 2017



FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

By:

[Signature]  
JON IGLEHART,  
Director of District Management

Approved as to form by:

[Signature]  
Toni Sturtevant, Asst. General Counsel  
Florida Department of  
Environmental Protection  
Office of General Counsel

Dept. of Environmental Protection  
South District  
P O Box 2549  
Fort Myers, Florida 33902-2549

Signed, sealed, and delivered in  
in the presence of:

[Signature]  
Witness Signature  
TERRANCE P. CERULLO  
Printed Name  
March 29, 2016  
Date

[Signature]  
Witness Signature  
MARK SATTOR  
Printed Name  
3/29/2016  
Date

STATE OF FLORIDA  
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this 29<sup>th</sup> day of March  
2016, by JON IGLEHART, who is personally known to me.

[Signature]  
Notary Public, State of Florida at Large



# Exhibit A

## **Exhibit A**

### **Legal Description**

Subdivisions Eight (8), Eleven (11), Twelve (12), Fifteen (15), Sixteen (16), Nineteen (19), Twenty (20), and Twenty-one (21) in Square Three (3) of Tract Three (3), according to a Diagram of Thomas J. Ashe's Subdivision recorded in Deed Book "I", Page 77 of the Public Records of Monroe County, Florida.

**MONROE COUNTY  
OFFICIAL RECORDS**