PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA) & GEORGIA ENVIRONMENTAL POLICY ACT (GEPA) EVALUATION

FOR

NEW DORMITORY ON COMPASS POINT DRIVE PARKING LOT AND NEW PARKING LOT SITE ARMSTRONG ATLANTIC STATE UNIVERSITY SAVANNAH, GEORGIA

PREPARED FOR:

BOB MILLS UNIVERSITY HOUSING SERVICES, INC. 2720 PIEDMONT ROAD, NE ATLANTA, GEORGIA 30305

FEBRUARY 2009

EMC PROJECT NUMBER 08-3049

Prepared By



EMC ENGINEERING SERVICES, INC.

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Marine

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February 13, 2009

Mr. Bob Mills President University Housing Services, Inc. 2720 Piedmont Road, NE Atlanta, GA 30305

RE: Armstrong Atlantic State University

New Dormitory on Compass Point Drive Parking Lot and New Parking Lot Site

Combined Phase I Environmental Site

Assessment and GEPA

Qualifications of Environmental Professional

EMC PROJECT NO.: 08-3049

Dear Mr. Mills:

Please find the required qualifications statement regarding the referenced project.

Qualification(s) of Environmental Professional(s)

Mr. Alvin John Patrick, PG, declares that, to the best of his knowledge and belief, he meets the definition of *Environmental Professional* as defined in §312.10 in 40 CFR 312 and has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. He has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Mr. Patrick holds a current Professional Geologist's license from the State of Georgia and has 18 years of full-time relevant experience.

Alvin John Patrick, PG

Sincerely,

Ollin John Patrick, PG

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Alvin John Patrick, PG

David P. Kosciuk, Jr., AHERA Building Inspector

EXECUTIVE SUMMARY

University Housing Services, Inc. retained EMC Engineering Services, Inc. (EMC), to conduct a Phase I Environmental Site Assessment and Georgia Environmental Policy Act (GEPA) Evaluation for two sites, located on the north side of Compass Point Drive on the campus of Armstrong Atlantic State University (AASU), 11935 Abercorn Street, Savannah, Georgia 31419. The objective of the assessment was to provide an independent, professional opinion regarding recognized environmental conditions, as defined by ASTM and GEPA, associated with the subject properties. This assessment was requested in association with the construction of proposed a New Dormitory on the Compass Point Drive parking lot and a New Parking Lot on the AASU campus.

This assessment was performed in accordance with EMC proposal, dated February 9, 2009, the terms and conditions set forth therein, ASTM E1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and as defined by the Board of Regents' Criteria for Combined Environmental Site Assessments (ESA) and Georgia Environmental Policy Act (GEPA) Evaluations (February 2000) as required by Armstrong Atlantic State University, a unit of the Board of Regents of the University System of Georgia. Any exceptions to, additions to, or deletions from the ASTM practice are described in this report. Details of the work performed, sources of information, and findings are presented in the report.

The subject properties consist of a two sites on southwestern side of the Armstrong Atlantic State University campus. A 569 bed dormitory is proposed to be built on the parking lot north of Compass Point Drive. The dormitory site is approximately six acres in size. The proposed dormitory will be a four story wood frame structure with a 100% brick exterior. The parking lot site is proposed to be built approximately 300 feet west of the dormitory on the north side of Compass Point Drive. The parking lot site is approximately seven acres in size and east of Roger Warwick Drive and University Terrace (AASU housing), 12220 Apache Avenue. The proposed parking lot will be utilized by students living in the proposed dormitory. In the surrounding area, private housing developments are located east and south of the subject sites. AASU and commercial property are located north of the subject sites. Hoover Creek and the Little Ogeechee River are located west of the subject sites.

The subject sites are described by the environment lien search prepared by Environmental Data Resources, Inc. (EDR) dated January 30, 2009 as part of the campus of Armstrong College of Savannah lying approximately eight miles south of Savannah, Georgia, along the southside of Abercorn Street Extension, Chatham County. Georgia. The campus lies wholly within the Sixth Military District. The sites are within Parcel ID number 2-0781 -02-003 according to the Chatham County Tax Assessors Office. This parcel number is for the entire campus of Armstrong Atlantic State University.

This assessment has revealed no Recognized Environmental Conditions (REC), as defined by ASTM, in connection with the subject property.

Having reviewed this proposed project and the Environmental Checklist as required by the GEPA, there are no significant adverse environmental effects resulting from this project.

1.0 INTRODUCTION

University Housing Services retained EMC Engineering Services, Inc., (EMC), to conduct a Phase I Environmental Site Assessment (ESA) and Georgia Environmental Policy Act (GEPA) Evaluation for two sites on the campus of Armstrong Atlantic State University (AASU), 11935 Abercorn Street, Savannah, Georgia 31419. AASU is located on the south side of Savannah, Georgia (Figure 1). The subject sites are shown on a current USGS Quadrangle Map on Figure 2. The subject properties consist of a two sites on the southwestern side of the AASU campus. A 569 bed dormitory is proposed to be built in the parking lot north of Compass Point Drive and west of Science Drive. The dormitory site is approximately six acres in size. The proposed dormitory will be a four story wood frame structure with a 100% brick exterior. The parking lot site is proposed to be built approximately 300 feet west side of the proposed dormitory site. The parking lot site is approximately seven acres in size and is located north of Compass Point Drive and east of Roger Warwick Drive and University Terrace (AASU student housing). The proposed parking lot will be utilized by students living in the proposed dormitory. Both sites are shown on a campus map on Figure 3. In the surrounding area, private housing developments are located east and south of the subject sites. AASU and commercial property are located north of the subject sites. Hoover Creek and the Little Ogeechee River are located west of the subject sites. Figures are shown in Appendix A. The GEPA Evaluation will be discussed in Part Il of the report.

The subject sites are described by the environment lien search prepared by Environmental Data Resources, Inc. (EDR) dated January 30, 2009 as part of the campus of Armstrong College of Savannah lying approximately eight miles south of Savannah, Georgia, along the southside of Abercorn Street Extension, Chatham County. Georgia. The campus lies wholly within the Sixth Military District. The sites are within Parcel ID number 2-0781 -02-003 according to the Chatham County Tax Assessors Office. This parcel number is for the entire campus of Armstrong Atlantic State University.

1.1. PURPOSE

The objective of this assessment was to provide an independent, professional opinion regarding recognized environmental conditions associated with the subject property as described in the EMC proposal dated January 5, 2009 and as defined by the Board of Regents' <u>Criteria for Combined Environmental Site Assessments (ESA) and Georgia Environmental Policy Act (GEPA) Evaluations</u> (February 2000).

The intent of conducting a Phase I ESA under the ASTM practices is to satisfy the "appropriate inquiry" requirements established under the 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as "Superfund"), thereby qualifying the User of the ESA for the "innocent landowner defense" to CERCLA liability (42 USC 9601 (35) (B) and 9607 (b) (3)), assuming compliance with other elements of the defense. Additionally, this Phase I ESA satisfies the conditions of the recently introduced (November 1, 2005) United States Environmental Protection Agency Standard for "All Appropriate Inquiry" (AAI) effective November 2006. The author of this ESA meets or exceeds the necessary educational and experience requisites for a *Qualified Environmental Professional*, as defined by the AAI Standards.

The purpose of the Phase I ESA is to identify "Recognized Environmental Conditions" to the extent feasible by those component processes outlined in the established guidelines and in accordance with recognized and accepted practices for conduction environmental assessments.

The term Recognized Environmental Condition (REC) is defined by ASTM E1527 -05 as the presence or likely presence of any hazardous substances or petroleum products on a property

under conditions that indicate an existing release, a past release, or a *material threat* of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not *Recognized Environmental Condition (REC)*.

The Phase I Environmental Site Assessment (Part I) and GEPA Evaluation (Part II) were requested in connection with the planned development of the subject sites. This planned development will take approximately two years to complete. The planned use of the subject sites is understood to be:

- Construct a 569 bed dormitory, a retention pond and associated green space
- Construct a parking area with 600 spaces

1.2. METHODOLOGY AND EXCEPTIONS

This assessment was performed in accordance with EMC proposal, dated February 9, 2009, and the terms and conditions set forth therein, and with the scope and limitations of ASTM E1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, including:

- A site reconnaissance of the subject properties
- A review of pertinent records for evidence of historical and present use of the subject and adjoining properties
- A search of regulatory databases
- Interviews with current key site managers, property owners, and government officials
- Evaluation of information gathered and development of this report

In addition to the minimum requirements referenced in American Society for Testing and Materials (ASTM) standard E1527-05, "Standard Practice for Environmental Site Assessments," the ESA of the combined evaluation will also include detailed assessments of other potential environmental/ property conditions as outlined below:

- I. Asbestos-Containing Materials
- II. Lead-Based Paint (or other lead contamination)
- III. Soil and/ or Groundwater Contamination
- IV. Solid Waste (buried waste/ landfills)
- V. Wetlands
- VI. Archaeological Sites/ Artifacts

This assessment did not include laboratory analyses of soil, groundwater, or other materials, or subsurface investigations.

This assessment did not include evaluations of radon, lead in drinking water, historical/cultural resources, or endangered/ threatened species.

Mr. Alvin John Patrick. P.G., hydrogeologist, and Mr. David P. Kosciuk, Jr. AHERA, conducted the site reconnaissance portion of the assessment on January 12, January 16 and February 12, 2009. Site photographs are shown in Appendix B. Mr. Patrick and Mr. David P. Kosciuk, Jr, AHERA Building Inspector, under Mr. Patrick's supervision, prepared the report. Mr. Patrick

reviewed the report when it was completed. Resumes of environmental professionals involved in this assessment are included in Appendix G.

1.3. LIMITING CONDITIONS OF ASSESSMENT

Assessment information was obtained from sources listed in Appendix F of this report. This information, to the extent it was relied on to form our opinion, is assumed to be correct and complete. EMC is not responsible for the quality or content of information from these sources.

The information and opinions rendered in this report are exclusively for use by University Housing Services, Inc. and their designees. The information and opinions expressed in this report are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided in completing this project are consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

Non-scope issues, radon, lead in drinking water, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, historical/cultural resources, ecological resources, endangered species, indoor air quality, and high voltage power lines are not included in our assessment of the subject property.

2.0 SUBJECT PROPERTY DESCRIPTION

2.1. LOCATION AND LEGAL DESCRIPTION

Two sites were investigated for this report. One is land on which the proposed dormitory is to be built located north of Compass Point Drive, west of Science Drive and south of the Armstrong Atlantic State University housing. The other is land on which the proposed parking area is to be built located north of Compass Point Drive and east of Roger Warlick Drive and the University Terrace Apartments (AASU student housing). Both sites are located on the campus of Armstrong Atlantic State University, Savannah, Georgia (Figures 3).

The subject sites are described by the environment lien search prepared by Environmental Data Resources, Inc. (EDR) dated January 30, 2009 as part of the campus of Armstrong College of Savannah lying approximately eight miles south of Savannah, Georgia, along the southside of Abercorn Street Extension, Chatham County. Georgia. The sites lie wholly within the Sixth Military District. The sites are within Parcel ID number 2-0781 -02-003 according to the Chatham County Tax Assessors Office. This parcel number referenced is for the entire campus of Armstrong Atlantic State University (Figure 4).

EMC Engineering Services, Inc. was not provided with the Chain of title and recorded deed information. Chain of title and recorded deed information was not reviewed for this report.

2.2. CURRENT USE OF SUBJECT PROPERTY

2.2.1. DORMITORY SITE

The site where the dormitory is proposed to be built consists of a parking lot and a retention pond.

This site is located on the southwestern side of the Armstrong Atlantic State University. It is bound to the north by AASU parking and student housing, south by Compass Point Drive and woodlands, east by Science Drive, AASU parking and athletic facilities, west by AASU parking and the wooded undeveloped area which is where the new parking lot is proposed to be built.

2.2.2. PARKING LOT SITE

The site where the parking lot is proposed to be built consists of a wooded undeveloped area. Trails are located on the west and north sides of this site.

The property is located on the southwest side of the Armstrong Atlantic State University. It is bound on the north by a drainage ditch and University parking, east by Armstrong Atlantic State University apartments, south by Compass Point Drive and undeveloped woodland of Armstrong Atlantic State University and west by Roger Warlick Drive and University Terrace Apartments (AASU student housing).

2.3. CURRENT USE OF ADJOINING PROPERTIES

The area surrounding the subject properties are institutional, residential and undeveloped as indicated in the aerial photographs of the subject sites located in Appendix A. Properties adjacent to or near the subject properties include:

North: Existing parking lots and student housing are located north of the subject

sites. .

South: Compass Point Drive and undeveloped wooded lands are located south

of the subject sites.

East: Science Drive and athletic facilities are located east of the proposed

dormitory site. AASU student housing and parking and the proposed dormitory site are located east of the proposed parking lot site. The two

subject sites are approximately 300 feet apart.

West: AASU parking and student housing and the proposed parking lot site are

located west of the proposed dormitory site. AASU apartments and Roger Warlick Drive are located west of the proposed parking lot site.

Adjacent and nearby properties were observed (from the subject property or from public access areas) for signs of Recognized Environmental Conditions and their potential to pose an environmental concern to the subject property.

In the surrounding area, private housing developments are located east and south of the subject sites. AASU and commercial property are located north of the subject sites. Hoover Creek and the Little Ogeechee River are located west of the subject sites.

No environmental conditions were observed on the adjacent and nearby properties.

2.4. PHYSICAL SETTING

The proposed dormitory site is a parking lot north of Compass Point Drive. There are two retention ponds between the parking lot and Compass Point Drive. The proposed parking lot site is undeveloped woodlands. The two sites are approximately 300 feet apart. The sites are shown on Figure 5. The planned development is shown on Figure 6. Planned development of the dormitory will require filling in a portion of the detention ponds. Surface water drains to the west and south towards Hoover Creek via the overland flow, detention ponds and through a local storm water collection system. Overland flow and the detentions ponds predominate at the proposed dormitory site. Drainage ditches lie along the north and west sides of the proposed parking lot site. The majority of the storm water at the proposed parking lot site flows through storm water outfalls that discharge to the south and west beneath Roger Warlick Drive. Planned development of the dormitory site will require filling a portion of the existing detention ponds and constructing green space. The site is out of the 100-year FEMA Flood Zone as is shown on Figure 7. The ground surface slopes gently to the southwest. The approximate elevation of the both sites is 19 feet (6 meters).

The proposed dormitory site is a parking lot. The only exposed soil is in the two detention ponds between the parking lot and Compass Point Drive.

Soils on the proposed parking lot site are described in the Soil Survey of Bryan and Chatham Counties, Georgia as Ogeechee loamy fine sand. The soil types are used for analysis of the subject property to give insight into the possibility of migration of containments onto or off the subject property. The soil chemistry and physical properties of the soil type also affect the probability of contaminant migration.

The Ogeechee series consist of somewhat poorly drained soils on broad flats, in depressions and drainage ways. These soils formed mainly in loamy material on low marine terraces. The marine terrace at the subject site is the Pamlico terrace complex. Slopes range from 0 to 2 percent.

In a representative profile, the surface layer is very dark gray loamy fine sand about 8 inches thick. Below the surface layer to a depth of more than 60 inches are layers of sandy clay loam and sandy clay. They are dark grayish brown in the upper part and grayish brown in the lower part and they are mottled with shades of brown.

The native vegetation is chiefly loblolly pine and slash pines and there are blackgum, sweet gum, cypress and bay and an understory of waxmytle.

Ogeechee soils are low in organic matter content and natural fertility. They are strongly acid to very strongly acid. Permeability is moderately slow and available water capacity is medium. The high water table is near the surface for long periods and limits the depth that the roots of some plants penetrate.

Permeability ranges from 6.3 - 0.63 inches per hour. Percolation ranges from less than 45 minutes to greater than 75 minutes per inch of soil.

The subject property is located within the eastern portion of the Barrier Island Sequence of the Coastal Plain Province of the Atlantic Plain Physiographic Section of Georgia. The property is underlain by the Satilla Formation which directly overlies the Pamlico terrace complex. The Pamlico terrace complex is a geomorphic feature that formed during a deposition period when the sea level was approximately 25 feet higher than it is today. The Satilla Formation is a heterogeneous unit and consists variably of sand and clay. Its age is Pleistocene. It overlies unconsolidated sediments to semiconsolidated to very dense layers of limestone and dolomite. The underlying strata range in age from Pliocene to Cretaceous. The underlying Oligocene and Eocene limestone make up the Upper Floridan Aquifer which is the principal aquifer and source of potable water in the area. The top of the Upper Floridan Aquifer is approximately 350 feet below ground surface beneath the subject sites. The subject sites are within the Little Ogeechee Drainage Basin which flows into the Atlantic Ocean approximately 8 miles away.

2.5. FEMA FLOOD ZONE

The most recent FEMA map (Figure 7) show that the sites are outside the 100-year flood zone. The NEPA flood plain map shows that the sites are outside the 500 year flood zone (Appendix C).

3.0 HISTORICAL REVIEW

3.1. AERIAL PHOTOGRAPHS

Aerial photographs of the subject properties and surrounding area were obtained from Environmental Data Resources, Inc. for the years 1970, 1971, 1974 and 1988. A current Google Aerial photograph of the subject properties was also reviewed. Aerial photographs are shown in Appendix A. Observations made of these aerial photographs are summarized below:

- 1970 Aerial Photograph –The subject properties are shown in the center of the photograph (Historical Photo 1). Both sites are wooded. Compass Point Drive has not been constructed. Roadways surround the properties. The Armstrong Atlantic State University is located northeast of the subject properties. Science Drive is visible. Housing developments are located south of the subject properties.
- 1971 Aerial Photograph The subject properties are shown in the center of the photograph (Historical Photo 2). The area appears much the same as in the 1970 aerial photograph.
- 1974 Aerial Photograph. The subject properties are shown in the center of the photograph (Historical Photo 3). The subject properties appear much the same as in the 1971 aerial photograph. Land west of the proposed parking lot site has been cleared. Additions to the University campus are visible on the northwest side of the campus.
- 1988 Aerial Photograph The subject properties are shown in the center of the photograph (Historical Photo 4). The soccer field has been constructed. Apartments are clearly visible west of the proposed parking lot site.
- Current Google Aerial Photograph. The subject properties are shown in the center of the photograph. Both sites appear as they did during the site reconnaissance. Compass Point Drive has been constructed.

There are no environmental conditions observed on the aerial photographs of the subject property.

3.2. TOPOGRAPHIC MAPS

Historical topographic maps of the subject property and surrounding area were obtained from Environmental Data Resources, Inc. for the years 1957, 1971, 1979 and 1988, which all can be found in Appendix A: Historical Topographic Maps. Observations made of these historical topographic maps are summarized below:

- 1957 Topographic Map –The subject properties are shown in the center of the map (Historical Topo 1). No development is present. The subject properties slope gently towards Hoover Creek. An unpaved Middle Ground Road is located west of the subject sites.
- 1971 Topographic Map –The subject properties are shown in the center of the map (Historical Topo 2). There is no development present on the site. Armstrong Atlantic State University has been constructed north of the site and land has been cleared south of the subject sites. Science Drive is visible.
- 1979 Topographic Map The subject properties are shown in the center of the map (Historic Topo 3). The subject properties remain undeveloped. Additions have been made to Armstrong Atlantic State University. Streets and houses are shown south of the subject sites.
- 1988 Topographic Map. The subject sites are shown in the center of the map (Historic Topo 4). The subject sites remain undeveloped. University Drive can be seen. Cleared land and apartments can be seen west of the proposed parking lot site.

There are no environmental conditions observed on the topographic maps of the subject properties.

3.3. REGULATORY DATABASE SEARCH

A regulatory database search was provided by Environmental Data Resources, Inc. for the subject sites (Appendix C). It is a search of available environmental records meeting EPA's Standards and Practices for All Appropriate Inquires (40 CFR Part 312) and ASTM Standard Practice for Environmental Site Assessments (E 1527-05). The findings are provided in **Section 4.0**

3.4. NEPA SEARCH

A NEPA search was provided by Environmental Data Resources, Inc. for the subject site (Appendix C). This was done to meet Board of Education GEPA requirements. The findings are discussed in **Section 6.0**.

3.5. CITY DIRECTORIES

A search was conducted for the subject area noted above to identify any Historical City Directories coverage/ tenant information maintained at national repositories, local city/ town libraries and/or various public sources.

The results of the search are located in Appendix C. The directories detail the known listings of addresses on or in close proximity of the subject property. This information can be used to ascertain type of occupancy that is associated with the address. Armstrong Atlantic State University is the only occupant given for 11935 Abercorn Street, Savannah, Georgia.

There are no environmental conditions associated with the review of the available Historical City Directories available for the subject property and adjacent areas.

3.6. SANBORN FIRE INSURANCE MAPS

Sanborn Fire Insurance Maps were originally developed in order to illustrate land/ property usage for the express purpose of establishing the relative risk of fire for insurance underwriters and were produced from the late 1800s through the late 1960s/ early 1970s for many (predominately urban) communities in the United States with significant commercial and/ or industrial development.

The Sanborn maps are therefore useful in establishing potential environmental risk associated with past petroleum storage tanks, chemical use and storage, industrial cleaning operations, and other activities that could have resulted in contamination of soils and/ or groundwater.

No Sanborn Map coverage exists for the target property or immediate vicinity. A copy of FirstSearch's "No Coverage" letter is included in Appendix C.

3.7. ENVIRONMENTAL LIEN REPORT

Environmental Data Resources completed an environmental lien search on the Armstrong Atlantic State University site and found there were no environmental liens on the property including the subject sites (Appendix C).

3.8. PRIOR OWNERSHIP

No title report has been provided to EMC Engineering Services, Inc. for the subject sites. Mr. David Faircloth, AASU Director of Operations, indicated that approximately 250 acres were donated to the Armstrong Junior College, which later became Armstrong Atlantic State

University, in 1962. The sites lie within these 250 acres. He said that there had been farm equipment on the 250 acres parcel and that he thought the land was formerly farmland.

3.9. AGENCY CONTACTS

3.9.1. City of Savannah Fire Department

The City of Savannah Fire Department was contacted on January 15, 2009 to obtain information concerning environmental concerns and/or emergency responses related to the subject properties. Captain Paul Phillips indicated that the fire department has not had to respond to any environmental concerns at or adjacent to the subject properties. He indicated the Fire Department responded to a spill at a filling station approximately 3/4 mile from the site.

3.9.2 Georgia Environmental Protection Division (EPD)

The Georgia Environmental Protection Division Emergency Response Team was contacted on January 15, 2009 to obtain information concerning environmental concerns and/or emergency responses related to the subject sites. Ms. Michelle Cortes, EES, indicated that the Emergency Response Team has not had to respond to any environmental concerns at or adjacent to the subject properties.

3.9.3 Coastal Health Department

The Chatham County Division of Environmental Health was contacted on January 22, 2009 to obtain information concerning environmental concerns and/or emergency responses related to the subject properties. Mr. Chris Ruston, Director of Environmental Health, indicated that he had no knowledge of any environmental concerns at the subject sites.

No environmental conditions were evident from the interviews with the public agency personnel.

3.10 PREVIOUS ENVIRONMENTAL REPORTS

EMC reviewed ESAs/GEPAs prepared for AASU that were provided by Mr. David Faircloth. The sites which were the subject of the previous environmental reports are on the opposite side of the campus as the subject sites for this report.

No environmental conditions were evident from the previous environmental reports that pertain to the subject properties.

3.11 SUMMARY OF HISTORICAL REVIEW

The City Directory provided by Environmental Data Resources has no address listed for the site prior to 1970. Based on an interview with Mr. Faircloth, AASU Director of Plant Operations, the site was farmland prior to being donated in 1962 to the college that later became AASU.

No environmental conditions were evident from the historical review of the subject property.

4.0. STANDARD ENVIRONMENTAL RECORD SOURCES, FEDERAL, STATE, AND LOCAL

As prescribed by ASTM E 1527, the following standard Federal and State Environmental Record Sources were reviewed:

<u>Database</u>
Federal NPL site list
Federal CERCLIS list
Federal CERCLIS NFRAP site list

Approx. Min. Search Distance, miles

1 mile
½ mile
Subject property and adjoining properties (½ mile)

Federal RCRA CORRACTS TSD facilities list

1 mile

Federal RCRA non-CORRACTS TSD facilities list

Federal RCRA generators list

Federal ENRS list

State of Georgia HSI list

½ mile

Subject property and adjoining

properties (1/2 mile)
Subject property only

1 mile – State equivalent

NPL

1/2 mile - State equivalent

CERCLIS

State of Georgia Landfill or Solid Waste

disposal site lists

State of Georgia Leaking UST lists State of Georgia registered UST lists ½ mile

1/2 mile

Subject property and adjoining

properties (1/4 mile)

Federal and State database information was acquired from Environmental Data Resources, Inc., and reviewed to evaluate both the subject property and listed sites within ASTM recommended search distances.

Regulatory database information reviewed is included in Appendix C of this report.

The following sites were found within the specified search distance of the subject property:

- Armstrong Atlantic State College/Physical Plant 11935 Abercorn Street Savannah,
 GA 31419 Facility ID 4250150 Leaking Underground Storage Tank (LUST) 1
 Confirmed Release
 - One 1,000 gallon LUST was closed and removed from the ground. No Further Action Required (NFA) cleanup status was given by the Georgia Environmental Protection Division (EPD). This site is not considered an environmental condition that could impact the subject properties. There are no longer underground storage tanks on the AASU campus.
- Armstrong Atlantic State University 11935 Abercorn Street Savannah, GA 31419 -RCRA Conditionally Exempt Small Quantity Generator (CESQG).
 - o F001 Waste Spent halogenated solvents
 - F002 Waste Spent halogenated solvents
 - F003 Waste Spent non-halogenated solvents
 - o U106 Waste Benzene and 2-Methyl-1,3-Dinitro-
 - U122 Waste Formaldehyde
 - U154 Waste Methanol (I)
 - o U188 Waste Phenol
 - o U225 Waste Bromoform

No violations were found. Because there have been no violations, the CESQG activities at AASU are not considered environmental conditions that could impact the subject sites. Mr. David Roberts, Environmental Safety Coordinator, indicated by e-mail that these and other wastes are routinely removed from the site according to EPD regulations.

- Enmark Abercorn #010, 1400 Abercorn Street, Savannah, GA 31419 Facility ID 4250431 -
 - LUST 1 No Further Action (NFA) required status was given by the Georgia FPD
 - LUST 2 No Further Action (NFA) required status was given by the Georgia FPD
 - LUST 3 No Further Action (NFA) required status was given by the Georgia FPD

This facility is located 2500 feet away from and hydrogeologically side gradient to the subject sites and it has been given NFA, therefore the facility is not considered an environmental condition that could impact the subject sites.

There are 25 non-geocoded sites listed in the regulatory database search (Appendix C). Non-geocoded (unmapped) sites cannot be plotted with confidence, but can be located by zip code, street address or city name. In general, these sites cannot be geocoded due to inaccurate or missing information in the environmental database record provided by the applicable regulatory agency. Cross-referencing of site names and addresses, as well as a visual reconnaissance of surrounding properties, has been completed for the non-geocoded facility sites. A summary of these sites is as follows:

- 1) The subject property was not identified among the listed non-geocoded sites.
- 2) The non-geocoded facility sites were not located adjacent to the subject property.

5.0. SITE RECONNAISSANCE AND INTERVIEWS

Individuals with personal knowledge of the subject property were interviewed for this assessment (Appendix D, Interview Documentation)

Mr. David Faircloth, Director of Plant Operations, AASU – had no knowledge of the subject sites having any environmental issues.

An interview from students revealed they had no knowledge of the subject sites having any environmental issues.

The proposed dormitory site was visited on February 12, 2009. The subject site is north of Compass Point Drive and west of Science Drive. The entire site is a parking lot with a two detention ponds located between the parking lot and Compass Point Drive.

The proposed parking lot site was visited on January 12, 2009. The entire site is wooded. Several low mounds covered with pine needles were observed on the site. Some silt fencing and a shallow ditch were also observed on the site. We do not suspect there is buried debris on the site.

There were no unidentified substance containers and materials that might contain hazardous substances or petroleum products on either site. No threatened or endangered species that were described in the NEPA search were observed (see Appendix C). (Photographs taken during the site reconnaissance are included in Appendix B.) No environmental conditions were evident from the site reconnaissance and interviews for the subject properties.

5.1. GENERAL OBSERVATIONS

Summarized below are the subject site observations and an assessment findings overview.

Conditions	Observed/ Reported		Report Section
	Yes	No	
Water bodies, springs, pits, ponds, lagoons, swamps, rivers, lakes		Х	
Areas of distressed, discolored, or stained vegetation		Х	
Areas of artificial fill		Х	
Wells		Х	
Railroad spurs		Х	41
Wooded areas and variations of vegetation	Х		5.0
Electrical power transmission lines		Х	
Underground and/or Aboveground Storage Tanks		Х	
Drains, vent pipes, cisterns, sumps, clarifiers	<u> </u>	Х	
Surface impoundments or holding ponds		Х	
Industrial or manufacturing activities		Х	
Evidence of oil or gas exploration, extraction, production		Х	
Evidence of agricultural use (pesticides, herbicides)		Х	
Hydraulic elevators, lifts, transformers, and possible PCB sources		Х	
Dry cleaning facilities		Х	
Hazardous substances and petroleum products and/or containers		Х	
Unidentified substance containers		Х	
Air emissions or wastewater discharge		Х	
Odors of chemical vapors, petroleum products or foul odors		Х	
Solid wastes			5.9
Septic systems		Х	
Bio-hazardous waste		Х	
Radioactive waste		Х	
Drums		Х	
Landfill, dumping, disturbed soils, or direct burial activity		х	

Conditions	Observed/ Reported		Report Section
	Yes	No	
Remedial activities		Х	
Stained, discolored, or corroded soils, pavement, or flooring		X	
Leachate or seeps		Х	
Evidence of groundwater or surface water contamination		Х	
Evidence of chemical spills or releases		Х	
Pools of liquid		Х	
Wells		Х	
Asbestos-containing materials		Х	
Lead-based paint (or other lead-based contaminants)	- "	Х	
Archaeological Sites/ Artifacts		Х	

All items that were physically observed, discovered through record review or interview, or which may otherwise be present at the subject property are discussed in the referenced report sections.

5.2. RAILROAD SPURS

There are no railroad spurs on the subject sites.

5.3. WOODED AREAS AND VARIATIONS OF VEGETATION

No distressed vegetation, stained soils, or other indicators of damaged environment was observed at either site.

No environmental conditions associated with presence of wooded areas and variations of vegetation were noted on the subject or adjoining properties.

5.4. ELECTRICAL POWER TRANSMISSION LINES

No electrical transmission lines were observed at the site. There was no staining on the concrete parking lot.

There are no environmental conditions associated with presence of the electrical power transmission lines on the subject or adjoining properties

5.5. PETROLEUM PRODUCTS

5.5.1. Underground Storage Tanks

The subject property was inspected for evidence of underground storage tanks (USTs) (e.g., fill and vent piping, dispensing equipment, pavement variations). No evidence of underground storage tanks was observed at the subject property during the site reconnaissance.

No environmental conditions associated with underground petroleum storage tanks were noted on the subject or adjoining properties.

5.5.2. Aboveground Storage Tanks

The subject property was inspected for evidence of aboveground storage tanks (ASTs). No evidence of ASTs was observed at the subject properties during the site reconnaissance.

No environmental conditions associated with underground petroleum storage tanks were noted on the subject or adjoining properties.

5.6. EVIDENCE OF AGRICULTURAL USE (PESTICIDES, HERBICIDES)

The site were apparently farm land before 1962 when to the college that later became AASU. No evidence of pesticide use was observed during the site reconnaissance or noted on the interview forms.

No environmental conditions associated with the evidence of the usage of pesticides/ herbicides on the adjoining property.

5.7. INDICATIONS OF POLYCHLORINATED BIPHENYLS (PCB)

The subject property was inspected for the presence of liquid-cooled electrical equipment (transformers, light ballasts, and capacitors), and major sources of hydraulic fluid (elevators and lifts). Such units are notable because they represent potential sources of polychlorinated biphenols (PCB).

No transformers were observed on the property.

PCBs are not an environmental condition associated with this site.

5.8. HAZARDOUS MATERIAL AND WASTE

The subject property was assessed for signs of storage, use, or disposal of hazardous materials. The assessment consisted of noting evidence (e.g., drums, and unusual vegetation patterns, staining) indicating that hazardous materials are currently or were previously located on the subject property.

The Environmental Data Resources, Inc review of the EPD Hazardous Substance Release (HSR) hazardous site inventory (HSI) indicated there were no sites within the ASTM search radius

No environmental conditions were identified for the subject properties in connection with hazardous material use, storage, or disposal.

5.9. INDICATIONS OF SOLID WASTE DISPOSAL

The subject property was inspected for evidence of solid waste disposal, e.g. hummocky ground or surface debris. Hummocky ground was observed on the proposed parking lot site but buried debris is not suspected to be on the site.

The Environmental Data Resources, Inc review of the EPD Solid Waste Sites indicated there were no sites within the ASTM search radius. We reviewed a map prepared by EPD of old landfills in Chatham County and did not find any landfills within the ASTM radius of the subject sites.

No environmental conditions were identified for the subject properties in connection with solid waste disposal.

5.10. STAINED, DISCOLORED, OR CORRODED, PAVEMENT, OR FLOORING

There were no stained pavements or roads at the proposed dormitory site. There are no pavements or roads present at the proposed parking lot site.

5.11. WELLS

No wells were observed on the subject properties. The subject properties are currently serviced by City of Savannah water.

5.12. ASBESTOS-CONTAINING MATERIALS

According to Mr. Faircloth, Director of Plant Operations, there are no asbestos-containing materials in the groundwater or soil on either of the subject sites. No asbestos-containing debris was observed during the site reconnaissance.

5.13. LEAD-BASED PAINT (OR OTHER LEAD CONTAMINATION)

According to Mr. Faircloth, Director of Plant Operations, there is no lead-based paint on any materials on either site.

There are no environmental conditions present associated with the presence of lead-based paint.

6.0. NEPA SEARCH

The NEPA search provided information on threatened or endangered species (Federal and State list), historic sites (Federal and State list), flood plains (National Flood Plain Data) and wetlands (National Wetlands Inventory).

6.1. Threatened or Endangered Species

The Georgia Endangered Species data base contains multiple large areas, each approximately 3.5 mile by 4.5 mile. The search area for this report fell within one of these areas for the following species: Spotted Turtle, Gopher Tortoise, Red-cockaded Woodpecker and Least Tern. None of the species were observed during the site reconnaissance. Furthermore, given the local land development, and that one of the subject sites is a parking lot, it is unlikely that the subject sites are suitable habitat for these animals.

6.2. Historic Places

No mapped sites were found in the search.

6.3. Flood Plains

The sites are not within the 100-year or 500-year flood plain.

6.4. Wetlands

The sites are not within the National Wetland Inventory.

7.0. ARCHAEOLOGICAL SITES/ ARTIFACTS

EMC Engineering Services, Inc. reviewed reports for the area prepared by the University Of Georgia Department Of Anthropology. The reports were based on a review of the Georgia Archeological Site File. No archeological sites or artifacts are present on the subject sites according to the reports (Appendix E).

No environmental conditions associated with archaeological sites/ artifacts were discovered in connection with the subject properties.

8.0. FINDINGS

The environmental conditions, as described in Section 4.0 and shown in Appendix C were identified during this assessment to be located within the ASTM search radii.

These environmental conditions are not considered environmental conditions that could impact the subject properties.

9.0. OPINIONS

It is the opinion of EMC based upon information provided in this report that there are no environmental conditions that could impact the site. The sites are environmentally suitable for the planned development.

10.0. CONCLUSIONS

EMC performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527 and a as defined by the Board of Regents' <u>Criteria for Combined Environmental Site Assessments (ESA) and Georgia Environmental Policy Act (GEPA) Evaluations</u> (February 2000).

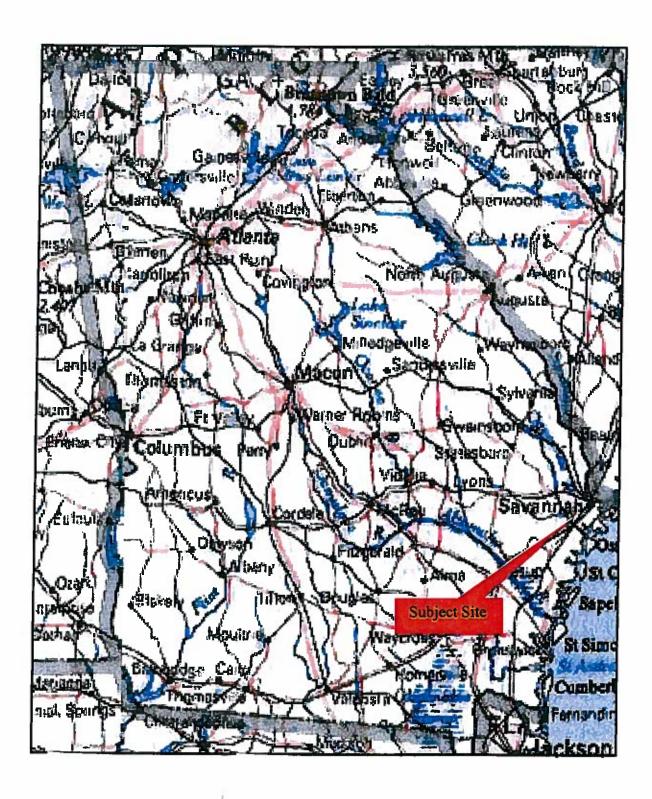
This assessment has revealed no evidence of current Recognized Environmental Conditions, as defined by ASTM and by the Board of Regents' <u>Criteria for Combined Environmental Site Assessments (ESA) and Georgia Environmental Policy Act (GEPA) Evaluations</u> (February 2000), in connection with the subject property.

11.0 PROFESSIONAL SIGNATURES

This report prepared by:	ali John Petuck
	Alvin John Patrick, PG Hydrogeologist, Savannah
This report prepared by:	David P. Kosciuk, Jr., AHERA Building Inspector Engineering Technician II, Savannah
This report reviewed by:	Alvin John Patrick, PG Hydrogeologist, Savannah



APPENDIX A FIGURES





EMC ENGINEERING SERVICES, INC. Post Office Box 8101 23 East Charlton Street Savannah, Georgia 31412

Phone: (912) 232-6533 Fax: (912) 233-4580 SITE VICINITY MAP ARMSTRONG ATLANTIC STATE UNIVERSITY SAVANNAH, GEORGIA



FIGURE
1
PROJECT:08-3049.31





EMC ENGINEERING SERVICES, INC. Post Office Box 8101 23 East Charlton Street Savannah, Georgia 31412 Phone: (912) 232-6533

Fax: (912) 233-4580

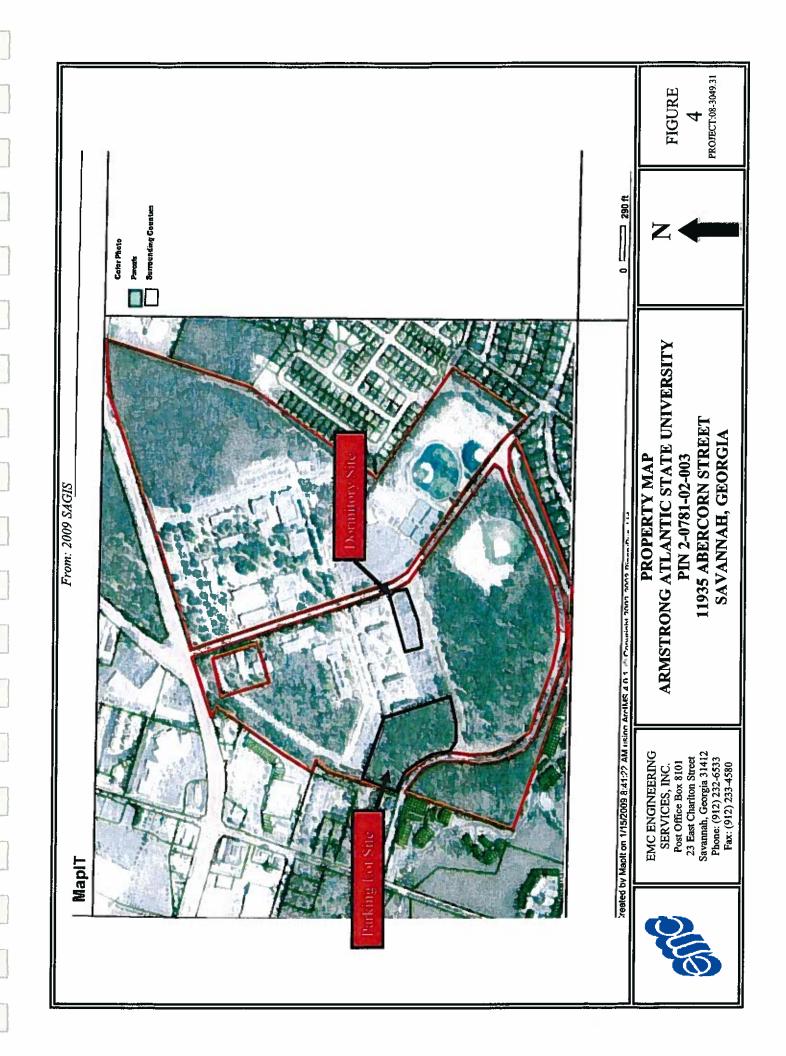
USGS TOPOGRAPHIC QUAD MAP ARMSTRONG ATLANTIC STATE UNIVERSITY CHATHAM COUNTY SAVANNAH, GEORGIA

(1.5 meter contours)



FIGURE 2 PROJECT:08-3049.31

PROJECT:08-3049.31 FIGURE Parking Lot Site Dormitory Site No Scale ARMSTRONG ATLANTIC STATE UNIVERSITY From: Armstrong Atlantic State University SAVANNAH, GEORGIA **CAMPUS MAP** Find what you're looking for at ARMSTRONG ATLANTIC STATE UNIVERSITY FACHUMES DIRECTORY adem Rictretina Comes EMC ENGINEERING SERVICES, INC. Post Office Box 8101 23 East Charlton Street Savannah, Georgia 31412 Phone: (912) 232-6533 Fax: (912) 233-4580 Berners Hall Victori Hall Gashle Hall Lewisse Hall Harridge .



SEEDS ... MAP NUMBER 13051C0256F EFFECTIVE DATE SEPTEMBER 26, 2008 tency Management Agency (SEE MAP INDEX FOR FIRM PANEL LAYOUT) AND INCORPORATED AREAS FLOOD INSURANCE RATE MAP CHATHAM COUNTY, GEORGIA PANEL 0258F PANEL 256 OF 455 WARDONAL FLOOD INSURANCE PROGRAM **Dormitory Site** Parking Lot Site 435163

From: msc.fema.gov

ARMSTRONG ATLANTIC STATE UNIVERSITY FEMA FLOOD ZONE MAP SAVANNAH, GEORGIA

As shown

FIGURE

PROJECT:08-3049.31

SERVICES, INC. Post Office Box 8101 23 East Charlton Street Savannah, Georgia 31412 Phone: (912) 232-6533 Fax: (912) 233-4580

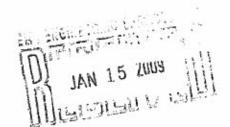
EMC ENGINEERING

APPENDIX A HISTORICAL AERIAL PHOTOGRAPHS

Armstrong Atlantic State University 11935 Abercorn Street Savannah, GA 31419

Inquiry Number: 2396231.5

January 09, 2009





THE EDR AERIAL PHOTO DECADE PACKAGE

Environmental Data Resources, Inc.s (EDR) Aerial Photography Print Service is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDRs professional researchers provide digitally reproduced historical aerial photographs at one photo per decade.

References

EPAs Standards and Practices for All Appropriate Inquiries (AAI), section 312.24, identifies the historical sources of information necessary to achieve the objectives and performance factors of section 312.20. According to AAI, "historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

To meet the prior use requirements of ASTM E 1527-05, Section 8.3.2, the following standard historical sources may be used: aerial photographs, fire insurance maps, property tax files, land title records (although these cannot be the sole historical source consulted), topographic maps, city directories, building department records, or zoning/land use records. ASTM E 1527-05, Section 8.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. ASTM E 1527-05 requires "All obvious uses of the property shall be identified from the present, back to the property's first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historcal sources as are necessary and both reasonably ascertainable and likely to be useful." (ASTM E 1527-05, Section 8.3.2) Reasonably ascertainable means information that is publicly available, obtainable from a source within reasonable time and cost constraints, and practically reviewable.

Data Gaps

In order to address data gaps, additional sources of information may be consulted. According the AAI, Section 312.20 (g), "to the extent there are data gaps (as defined in section 312.10) in the information developed...that affect the ability of persons (including the environmental professional) conducting the all appropriate inquiries to identify conditions indicative of releases or threatened releases...such persons should identify such data gaps, identify the sources of information consulted to address such data gaps, and comment upon the significance of such data gaps." According to ASTM E 1527-05, Section 8.3.2.3, "historical research is complete when either: (1) the objectives in 8.3.1 through 8.3.2.2 are achieved; or (2) data failure is encountered. Data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objectives have not been met.... If data failure is encountered, the report shall document the failure and, if any of the standard historical sources were excluded, give the reasons for their exclusion."

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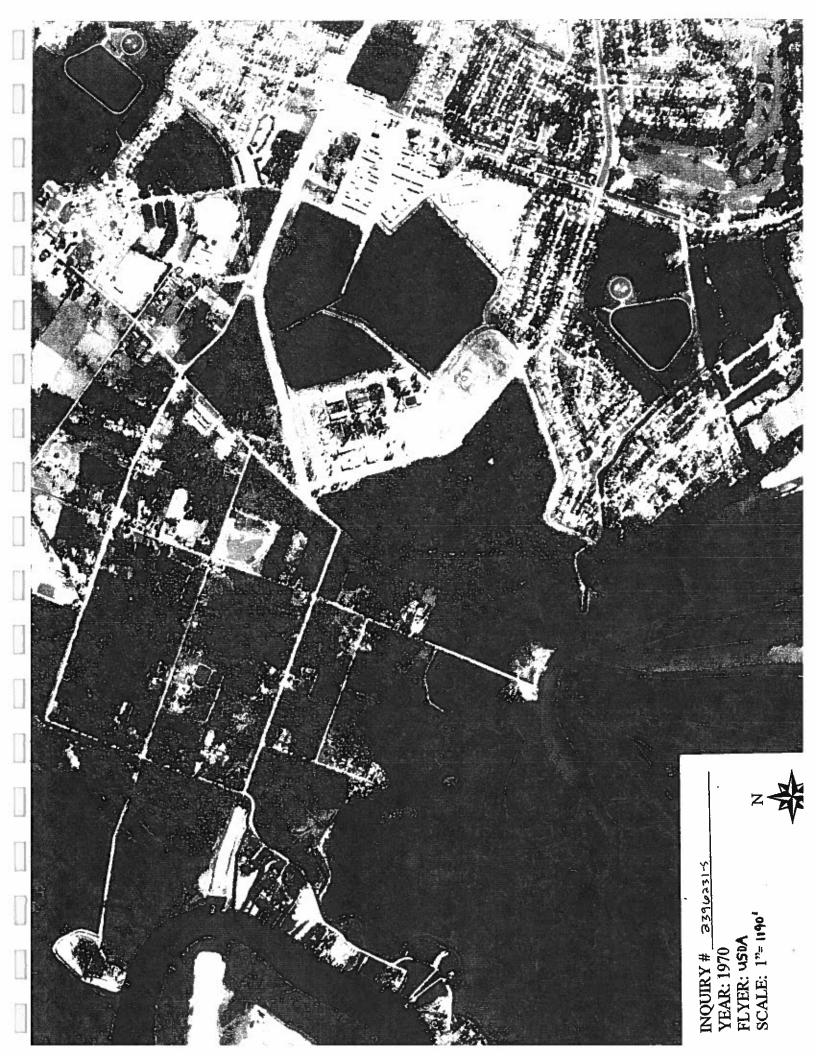
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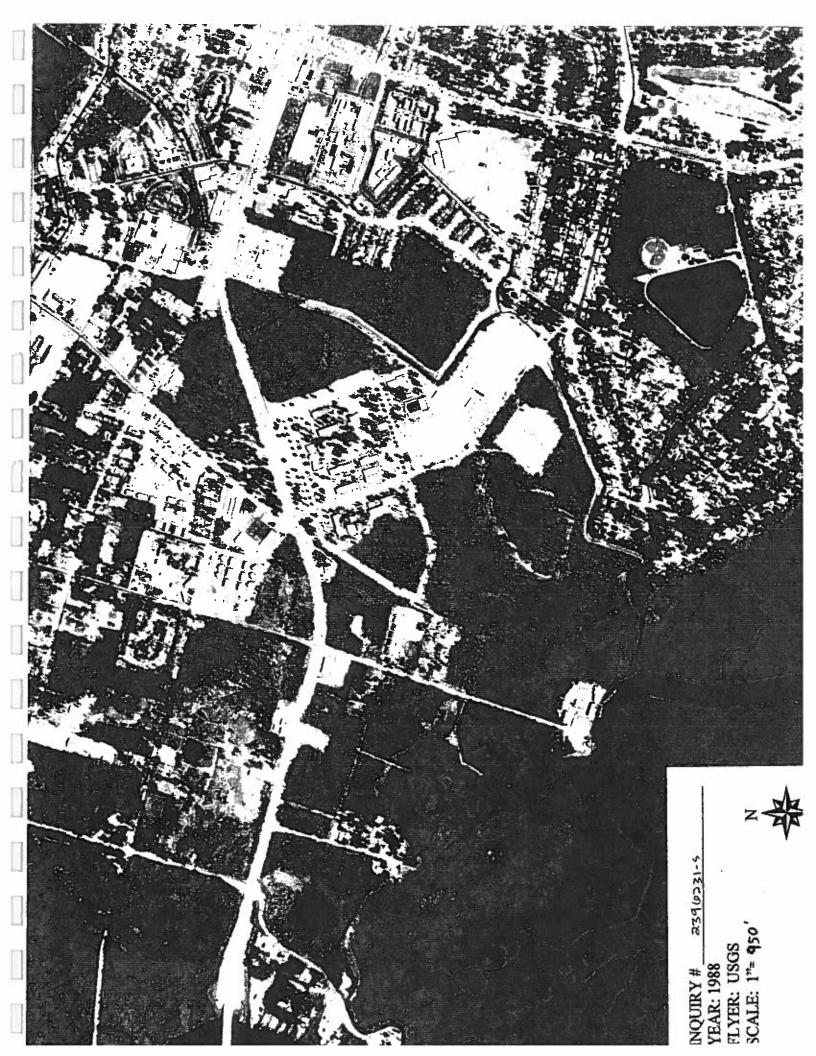
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APPENDIX A HISTORICAL TOPOGRAPHIC MAPS

Armstrong Atlantic State University

11935 Abercorn Street Savannah, GA 31419

Inquiry Number: 2396231.4

January 09, 2009

The EDR Historical Topographic Map Report



EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

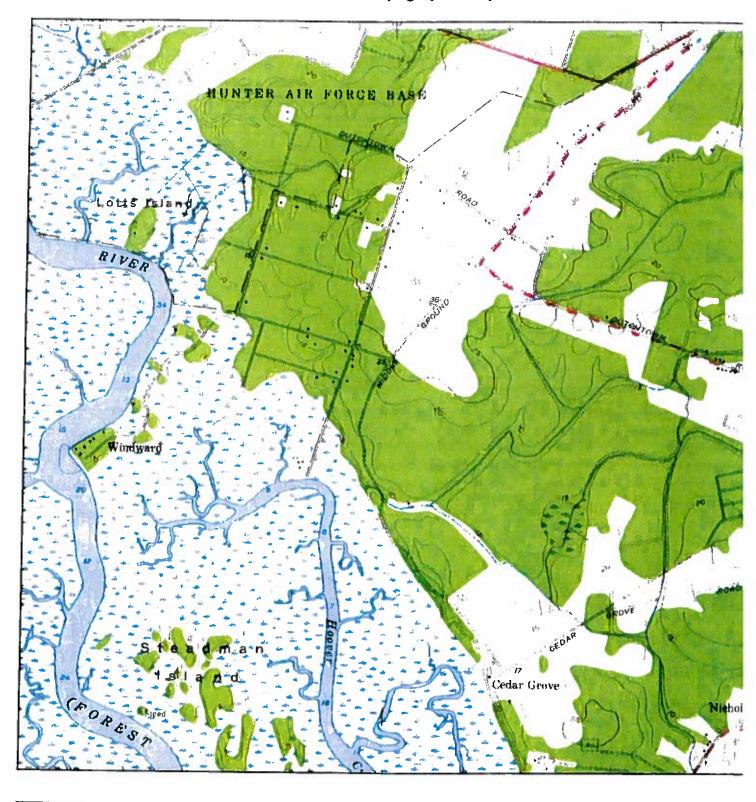
Thank you for your business.
Please contact EDR at 1-800-352-0050 with any questions or comments.

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TARGET QUAD

NAME: **BURROUGHS**

MAP YEAR: 1957

SERIES: 7.5

SCALE: 1:24000

SITE NAME: Armstrong Atlantic State University

ADDRESS:

11935 Abercorn Street Savannah, GA 31419

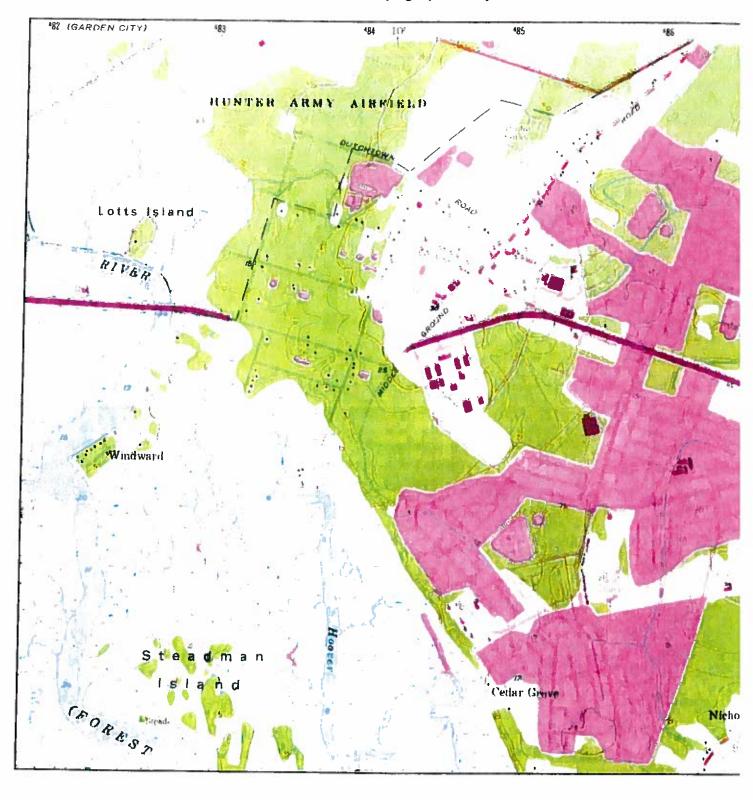
LAT/LONG: 31.9772 / 81.1653 CLIENT:

EMC Engineering Services

CONTACT:

John Patrick

INQUIRY#: 2396231.4



TARGET QUAD

NAME:

BURROUGHS

MAP YEAR: 1971

PHOTOREVISED FROM:1957

SERIES: 7.5

SCALE:

1:24000

SITE NAME: Armstrong Atlantic State

University

ADDRESS:

11935 Abercorn Street

Savannah, GA 31419

LAT/LONG:

31.9772 / 81.1653

CLIENT:

EMC Engineering Services

CONTACT:

John Patrick

INQUIRY#:

2396231.4



TARGET QUAD

NAME: **BURROUGHS**

MAP YEAR: 1979

SERIES:

SCALE:

7.5 1:24000

SITE NAME: Armstrong Atlantic State

University

ADDRESS:

11935 Abercom Street

Savannah, GA 31419

LAT/LONG:

31.9772 / 81.1653

CLIENT:

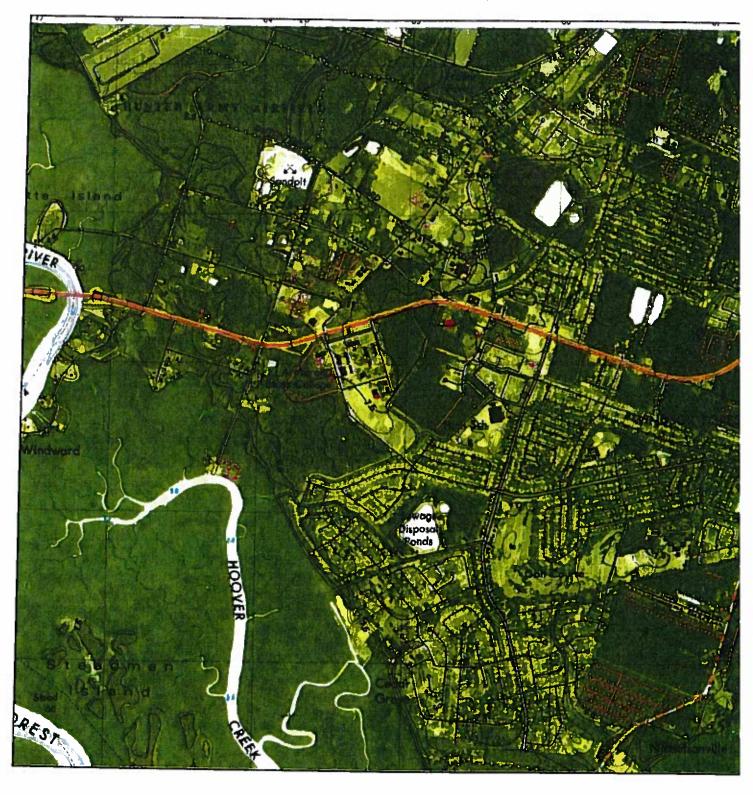
EMC Engineering Services

CONTACT:

John Patrick

INQUIRY#:

2396231.4



TARGET QUAD

NAME: BURROUGHS

MAP YEAR: 1988

PHOTOREVISED FROM:1979

SERIES:

7.5

SCALE: 1:24000

SITE NAME: Armstrong Atlantic State University

ADDRESS:

11935 Abercorn Street

Savannah, GA 31419

LAT/LONG: 31.9772 / 81.1653 CLIENT:

EMC Engineering Services

CONTACT:

John Patrick

INQUIRY#:

2396231.4

APPENDIX B SITE PHOTOGRAPHS



EMC PROJECT	DESCRIPTION	Proposed Dormitory Site Looking Towards the North	1
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	2/12/09



ŀ	 	Application of the second section of the section of the second section of the section of t		
	EMC PROJECT	DESCRIPTION	Proposed Dormitory Site Looking Towards the Southwest Across the Detention Pond Towards Compass Point Drive	2
	NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
	08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	2/12/09



ľ	EMC PROJECT	DESCRIPTION	Proposed Dormitory Site Looking Towards the East	3
ı	NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
	08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	2/12/09



EMC PROJECT	DESCRIPTION	Proposed Dormitory Site Looking Towards the North Towards Existing Student Housing	4
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	2/12/09



EMC PROJECT	DESCRIPTION	Proposed Dormitory Site Looking Across Detention Pond Towards the South	5
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	2/12/09



EMC PROJECT	DESCRIPTION	Proposed Dormitory Site Looking Across Science Drive Towards the East	6
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	2/12/09



EMC PROJECT	DESCRIPTION	Proposed Dormitory Site Looking From Science Drive Towards the West	7
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	2/12/09



EMC PROJECT NO.	DESCRIPTION	Proposed Dormitory Site Looking From the Compass Point Drive Entrance	8
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	1/12/09



EMC PROJECT	DESCRIPTION	Trail on the west side of the wooded parking area site	9
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	1/12/09



EMC PROJECT NO.
08-3049.31

DESCRIPTION	Wooded parking area site	10
SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
CLIENT	University Housing Services for Freshman Housing Project	1/12/09

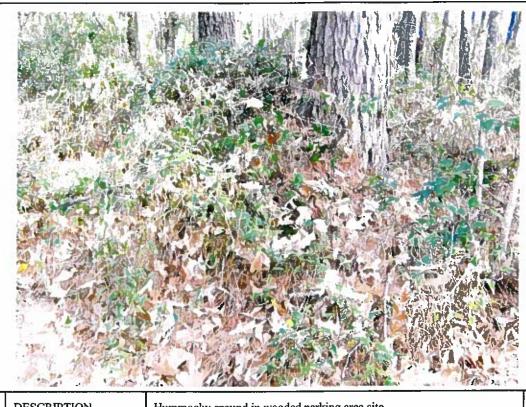


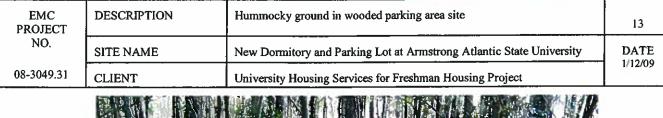
EMC PROJECT	DESCRIPTION	Wooded parking area site	11
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	1/12/09



EMC PROJECT NO.
08-3049.31

DESCRIPTION	Buried debris in wooded parking area site	12
SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
CLIENT	University Housing Services for Freshman Housing Project	1/12/09







EMC PROJECT NO.
08-3049.31

DESCRIPTION	Hummocky ground at wooded parking area site	14
SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
CLIENT	University Housing Services for Freshman Housing Project	1/12/09



EMC PROJECT NO.

08-3049.31

DESCRIPTION Shallow trench in wooded parking area site

15

SITE NAME New Dormitory and Parking Lot at Armstrong Atlantic State University

CLIENT University Housing Services for Freshman Housing Project

DATE
1/12/09



EMC
PROJECT
NO.

DESCRIPTION	Hummocky ground in wooded parking area site	16
SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE 1/12/09

08-3049.31



EMC PROJECT	DESCRIPTION	Ditch on west side of wooded parking area site	17
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	1/12/09



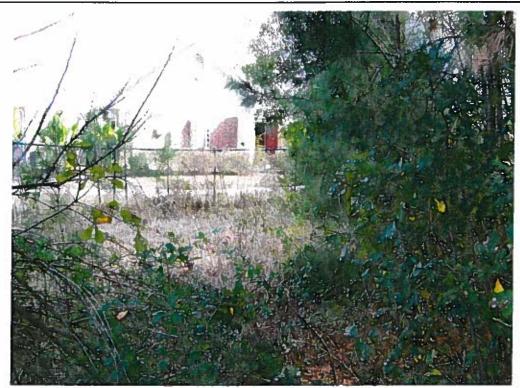
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EMC PROJECT	DESCRIPTION	University Terrace Apartments west of wooded parking area site	18
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	1/12/09



EMC PROJECT	DESCRIPTION	North side of wooded parking area site	19
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	1/12/09



EMC PROJECT	DESCRIPTION	Trail on north side of wooded parking area site	20
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	I/12/09

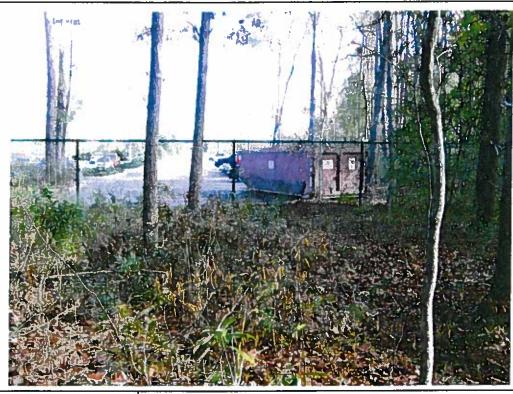


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	EMC PROJECT	DESCRIPTION	Apartments east of wooded parking area site	21
i	NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
	08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	1/12/09



EMC PROJECT NO.
08-3049.31

DESCRIPTION	Apartments east of wooded parking area site	22
SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
CLIENT	University Housing Services for Freshman Housing Project	1/12/09



EMC PROJECT NO.	DESCRIPTION	Parking area and dumpster east of the wooded parking area site	23
	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project	1/12/09



EMC PROJECT	DESCRIPTION	Looking SE along Compass Point Dr. at wooded parking area site	24		
NO.	SITE NAME	New Dormitory and Parking Lot at Armstrong Atlantic State University	DATE 1/12/09		
08-3049.31	CLIENT	University Housing Services for Freshman Housing Project			