Exhibit S - Cultural Resources Analysis and Letter **Chennault Site 2-2A**

April 30, 2015

DESIGN

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QUALITY

	Mr. Larry Henson Louisiana Economic Development (LED) 1051 North Third St. Baton Rouge, LA 70802-5239					
Parks & Planning	Mr. David Conner Southwest Economic Development Alliance (SWLA)					
Transportation	P.O. Box 3110 Lake Charles, LA 70602					
Site Development	RE: B11-Chennault Sites 2&2A (185 Acres) Cultural Resources Constraints Analysis					
Utility Systems	Dear Gentlemen:					
Land Surveying	SJB Group, LLC (SJB) has been authorized by Louisiana Economic Development (LED and Southwest Louisiana Economic Alliance (SWLA) to perform due diligence investigations to determine the existence of fatal flaws, if any, that would					
Construction Services	inhibit the development of Chennault Sites 2&2A (+/- 185 acres), located southeast of the City of Lake Charles in Calcasieu Parish, Louisiana.					
Environmental Services	The attached report presents the findings of the Cultural Resources Constraints Analysis for the site. The Cultural Resources Constraints Analysis was performed					
Real Estate Services	by SWCA Environmental Consultants of Houston, TX.					
	Please feel free to contact me at (225) 769-3400, at any time, should you have any questions or need further information.					
	Sincerely,					
P. O. Box 1751	SJB GROUP, LLC					
Baton Rouge, Louisiana 70821-1751	m. 1 PH					
(225) 769-3400	Michaeld. Mon					

Michael L. Thompson, P.E., C.E.T. Engineering Department Manager

Cultural Resources Constraints Analysis - SHPO Concurrence Enclosure:

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(225) 769-3400 Fax (225) 769-3596 www.sjbgroup.com



November 10, 2014

Ms. Pam Breaux State Historic Preservation Officer Louisiana Division of Archaeology 1051 N. 3rd Street, Room 391 Baton Rouge, Louisiana 70802

RE: Cultural Resources Constraints Analysis Chennault Airport Properties SWCA Project No. 30963.01-30963.03 No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Pam Breaux Date State Historic Preservation Officer

Dear Ms Breaux,

On behalf of the SJB Group, LLC, SWCA Environmental Consultants (SWCA) has conducted a cultural resources constraints analysis of three parcels of land located on property adjacent to the Chennault International Airport in Calcasieu Parish, Louisiana.

The purpose of the constraints analysis was to gather available information on conducted archaeological surveys and previously recorded sites within the project area and to assess the potential for the occurrence of significant cultural resources. The goal was to provide information for project planning and development, as well as estimates on possible future archaeological work required for regulatory compliance.

AREAS OF POTENTIAL EFFECTS

Chennault International Airport is located just south of Interstate 10 and just west of Loop 210 in Lake Charles, Louisiana (Attachment A). The areas of potential effects (APE) include three parcels of land. Parcel B11 consists of 173 acres of land and is located immediately adjacent to and west of the airport's runway. There are at least two roads on the parcel and the area has been levelled, graded, and cleared. Parcel B84 is located to the east of the runway; this parcel is 54 acres in size and has also been levelled, graded, and cleared. There is a large detention pond in the northern portion of the parcel. Finally, Parcel B85 is located to the northwest of the runway. This parcel is 131.8 acres in size; it has also been levelled, graded, and cleared. There is a manmade drainage canal, several roads, and multiple buildings with associated parking lots (Attachment B).

REGULATORY FRAMEWORK

The proposed APEs are currently being reviewed by the Southwest Louisiana (SWLA) Economic Development Alliance and Louisiana Economic Development (LED) for future industrial developments. Specific project details of the proposed undertaking are unknown at this time.

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ARCHAEOLOGY





Ground disturbances may include, but are not limited to, clearing, levelling, grading, excavation, and new construction. All work was completed in accordance with Section 106 of the National Historic Preservation Act (NHPA) (16 United States Code [USC] 470) and its implementing regulations (36 CFR 800).

PROJECT CONTACTS

David Conner, SWLA Economic Development Alliance; 4310 Ryan Street, Lake Charles, Louisiana 70605; <u>davidconner@gmail.com</u>; (337) 433-3632.

Larry Henson, LED; 1051 North Third Street, Baton Rouge, Louisiana 70802; larryhenson@la.gov; (225) 342-1135

Michael L. Thompson, SJB Group, LLC; PO Box 1751, Baton Rouge, Louisiana 70821; <u>Michael.thomson@sjbgroup.com</u>; (237) 769-3400.

THE CHENNAULT INTERNATIONAL AIRPORT

There are three retired military airbases in southwestern Louisiana, including the Chennault International Airport, which have since been retired from service. The airport was originally constructed in 1941 and has been in continuous use as a military facility and a public airport.

The airport was originally called the Lake Charles Municipal Airport. It was leased to the government to support a flying school and was later re-designated the Lake Charles Army Airfield in 1942. In 1947, the airfield was returned to the City of Lake Charles. In 1952, the airport was reinstated as a military facility. In 1958, the facility was renamed again as Chennault Air Force Base. In 1963, the facility was officially inactivated and became a publicly owned facility. Current use of the facility, now called Chennault International Airport, is a mix of commercial and private use. Improvements were made to the airport and its facilities in the 1970s and 1980s and there are future improvements planned (Chennault 2014).

METHODS

SWCA performed a background literature review to determine if the APE had been previously surveyed for cultural resources. This review also included gathering information on any cultural resource sites recorded within or adjacent to the APE. To conduct this review, an archaeologist reviewed the Lake Charles, Louisiana U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles and searched the Louisiana Division of Archaeology's Cultural Resources Viewer (an on-line database). These sources provided information on the nature and location of previously conducted archaeological surveys and previously recorded cultural resource sites. These sources also provided information on National Register of Historic Places (NRHP) listings, recorded archaeological sites, and historic standing structures. In addition to these resources, soils and geology of the study areas was examined as well as topographic maps and historic aerial photographs.



Utilizing this information, areas within the APE were assessed for their potential to contain archaeological and/or historical materials. The APE was then assigned to one or more of three categories (high, moderate, and low-probability areas) based on the potential to contain archaeological and historical resources. High-probability areas are defined as locales that possess or have a high likelihood of containing significant cultural resources. These areas are generally identified by distinct landforms and deposits that have been shown in other regional surveys to contain archaeological sites. In the case of historic resources, high-probability areas are identified by the presence of historic-age properties within the project area. Moderate or low-probability areas are defined as locales where archaeological and/or historical resources are likely absent or have limited potential to be preserved or significant (e.g., upland settings or areas with intensive development).

RESULTS

Physiography and Geology

The APE is located within the Western Gulf Coastal Plain physiographic region. The three parcels are all located within the Prairie Allogroup, undifferentiated. This group is composed of late to middle Pleistocene deposits, which include fluvial, colluvial, estuarine, deltaic, and marine groups. Specifically, the three parcels are situated on the Beaumont Alloformation, which is the highest surface of the Prairie Allogroup (Louisiana Geological Society 2002).

Soils

Soil survey data obtained from the Soil Survey of Calcasieu Parish was used to compile a list of soils intersected by the APE (U.S. Department of Agriculture [USDA] 1988). This information was consistent with what was identified from the USDA's online Web Soil Survey. A total of three soils and documented waterbodies are present within the three study areas (Table 1).

Parish	Soil Map Unit	Soil Name	Location			
Calcasieu	Lt	Leton silt loam	Drainageways			
Calcasieu	Mn	Midland silty clay loam	Coastal prairies			
Calcasieu	Mr	Morey loam	Coastal prairies			
Calcasieu	W	Water	Water			

Table 1.	Soils	identified	within	the	proi	iect area.	
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BACKGROUND REVIEW

A review of aerial photographs from 1998 to present indicates that each of the three study areas has been altered in the recent past. Portions of B11 and B84 have been inundated over the years;

both of these areas have been levelled and graded to facilitate drainage. Parcel B85 has been altered several times. There are ponds and a ditch present in 1998; these are filled and a large detention area is created ca. 2003. At this time, the facilities on the property are expanded. Finally, the area is cleared of most of the trees and additional canals are constructed between 2008 and 2012.

Previous Investigations

ENVIRONMENTAL CONSULTANTS Sound Science. Creative Solutions.

Five surveys have been conducted within 1 mile of the three parcels. These include two 1979 surveys (Campbell 1979a, b) associated with the Calcasieu LNG Facility (22-0584 and 22-0615), the Lake Charles Express Pipeline (Krause et al. 2003, 22-2950), and two surveys that were conducted on the airport grounds. These include a 1993 survey conducted by Geo-Marine (22-2007) and a 2006 survey conducted by Gulf South Research Corporation (GSRC) (22-2805). The background review revealed that portions of Parcel B85 have been subjected to cultural resources survey. This same survey effort examined areas that are immediately adjacent to Parcels B11 and B84 (Attachment B).

In 1993, Geo-Marine conducted an archaeological survey and limited architectural survey of three sites in support of an environmental assessment for the U.S. Army. Chennault International Airport was one of these sites (22-2007). The results of the survey effort at Chennault property indicated that the majority of the land in the vicinity of the airport, including the investigated areas, had been extensively modified during the construction of the airport (Whinchell 1993). A combination of visual inspection and shovel testing was conducted with negative results. Soils within the project area were heavily mottled and were not consistent with the soil profiles indicated in the Soil Survey (USDA 1991). As a result of this survey effort, the author found that it was "unlikely that other unknown archaeological sites with intact deposits would be found" given the ongoing development, construction, and maintenance of the airport property (Whinchell 1993).

Outside of the study areas, portions of the airport property were examined by GSRC (Lindemuth and Welch 2006). Both a Phase I archaeological survey and limited standing structure evaluation were conducted. During the survey, the area was noted as highly disturbed by the presence of underground utilities and construction associated with the airport. No archaeological deposits were identified. The structure evaluation identified seven buildings adjacent to the project area; two of these were older than 50 years. Neither was recommended eligible for inclusion to the NRHP and neither structure is located within the current APE (Lindemuth and Welch 2006).

Previously Recorded Sites

There are no previously recorded archaeological sites located within a 1-mile radius of the APE. During the survey of the property, Whinchell identified the Immediate Response Pilot Alert Building (No. 1510). This structure was recommended ineligible for listing on the NRHP and is not located within or adjacent to the APE (Whinchell 1993).





CULTURAL RESOURCES ASSESSMENT

The parcels under review are located on the grounds of an active, maintained airfield. The airfield has been in continuous use from 1941 to present and has been updated and altered several times during the past 73 years of service as the function of the airport changed. As such, each of the parcels has been cleared, levelled, and graded; in some cases the parcels have been excavated to facilitate drainage and ponds have been filled or expanded. Drainage canals have also been excavated or relocated.

Portions of the APE were subjected to cultural resources survey in 1993. At the time of the survey, the examined areas were noted as highly disturbed. A review of aerial photographs from 1998 to present indicates the ground disturbing activities that have taken place on these parcels since the 1993 survey occurred. As such, there is negligible potential that any intact, significant archaeological deposits would be present.

The 1993 survey also examined the area for the presence of eligible historic-era standing structures. Only one structure of historic-age was identified, and it was not recommended eligible for listing on the NRHP. Furthermore, this structure is located outside of the APE. There are buildings located on Parcel B85; however, the review of aerial photographs indicates that the majority of these are of recent construction.

Based on the results of this background review, further investigation of the APE is unlikely to yield new information about the prehistory or history of the region. Consequently, it is SWCA's opinion that an intensive archaeological survey of the APE is unwarranted.

Sincerely,

SWCA Environmental Consultants

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Rebecca Mehok Project Manager/Principle Investigator

Attachments: A. Project Location Map B. Project Layout Map

REFERENCES

ENVIRONMENTAL CONSULTANTS Sound Science. Creative Solutions.

Campbell, Janice

- 1979a Archaeological Survey of a Portion of the Calcasieu LNG Project, Calcasieu Parish, Louisiana (22-0584). Report submitted to LDOA by New World Research.
- 1979b Archaeological Survey of a Portion of the Calcasieu LNG Project, Calcasieu Parish, Louisiana, New World Research Report of Investigations No. 17 (22-0615). Report submitted to LDOA by New World Research.

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2014 Once an Airbase, Now an Economic Powerhouse. Available at: http://www.chennault.org/history, Accessed September 22, 2014.

Krause, Kari, Katy Coyle, Jeremy Pincoske, Eric Vogelheim, Jennai Biddiscombe, and David R. George

2003 Phase I Cultural Resources Survey and Archaeological Inventory of the 30 and 36 Inch Outside Diameter Lake Charles Express Pipeline Project, Allen, Beauregard, Calcasieu, and Jefferson Davis Parishes, Louisiana (22-2950). Report Submitted to LDOA by R. Christopher Goodwin and Associates.

Lindemuth, John and Carl Welch

2006 *Cultural Resources Inventory Survey of the Chennault Air Field, Lake Charles, Louisiana (22-2805).* Report submitted to LDOA by Gulf South Research Corporation.

Louisiana Geological Society

2002 *Geologic Map of Louisiana, Lake Charles 30 x 60 Minute Geologic Quadrangle.* Louisiana Geological Survey, Louisiana State University. Available at: <u>http://www.lgs.lsu.edu/deploy/uploads/Lake%20Charles%20100K.pdf</u>. Accessed September 22, 2014.

USDA

1988 *Soil Survey of Calcasieu Parish, Louisiana*. Unites States Department of Agriculture, Soil Conservation Service.

Whinchell, Frank

1993 Cultural Resources Assessment of a Proposed Intermediate Staging Base and Forward Operating Location in Louisiana for the Joint Readiness Training Center (22-2007). Report submitted to LDOA by Geo-Marine, Inc.



Attachment A: Project Location Map



Attachment B: Project Layout Map.