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**ARCHAEOLOGICAL SURVEY
OF THE
MCCURTAIN COUNTY REGIONAL AIRPORT
PAVEMENT REHABILITATION, MARKINGS,
GRADING AND TAXIWAY DRAINAGE
IMPROVEMENTS,
IDABEL, OKLAHOMA**

Rebecca Shelton, BA
and
Jesse Todd, MS, MA

Submitted to:

KSA ENGINEERS
270 Redbud Boulevard, Suite 200
McKinney, Texas 75069

Submitted by:

AR CONSULTANTS, INC.
11020 Audelia Road, Suite C105
Dallas, Texas 75243-9085

Cultural Resources Report 2007-34
August 6, 2007

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ABSTRACT

On July 25, 2007, AR Consultants, Inc. conducted an intensive pedestrian archaeological survey of the northern and southern end of the McCurtain County Regional Airport which comprises approximately 8 acres. The airport personnel intend to improve and extend the runway which includes pavement rehabilitation and channelization of a possible tributary to Pecan Creek. The survey area is located west of Lincoln Road in the southwest quarter of Section 25 and the northwest quarter of Section 25, Township 7 South, Range 23 East in Idabel which is located in McCurtain County, Oklahoma. The archaeological survey was done for KSA Engineers who is designing the proposed improvements and doing the environmental permitting for the McCurtain County Regional Airport. Also, an archaeological survey was requested by the Caddo Tribe of Oklahoma. No archaeological sites were found on the ground surface or in 8 shovel tests.

Based upon the absence of archaeological sites, AR Consultants, Inc. recommends that the McCurtain County Regional Airport be allowed to proceed with its runway improvements. However, if buried cultural materials are encountered, the Oklahoma Archaeological Survey and the Caddo Tribe of Oklahoma should be notified. Work should not continue until discussions have been completed with both these agencies.

ACKNOWLEDGEMENTS

We would like to thank George Whelton, Manager of the McCurtain County Regional Airport, who provided AR Consultants Inc. with helpful information in regards to the construction of the previous drainages systems at the north and south ends of the runway.

TABLE OF CONTENTS

Abstract..... i
 Acknowledgments..... ii
 Table of Contents..... iii
 List of Figures..... iii
 List of Tables..... iii
 Introduction 1
 Natural Environment..... 1
 Previous Investigations..... 1
 Methodology..... 3
 Results..... 3
 Recommendations..... 6
 References Cited..... 6

LIST OF FIGURES

Figure 1. Study areas plotted on a portion of the Idabel, Oklahoma
 7.5' USGS map..... 2
 Figure 2. Cattails and grasses within the drainage north of the airport
 runway. View is facing southeast..... 4
 Figure 3. Shovel test locations plotted on a portion of the Idabel,
 Oklahoma 7.5' USGS map..... 4
 Figure 4. The study area at the south end of the airport runway, view
 is facing north..... 5

LIST OF TABLES

Table 1. Shovel tests results for north end of study area..... 5

INTRODUCTION

KSA Engineers, Inc. of McKinney, Texas has designed improvements which includes pavement rehabilitation, runway improvements, and channelization of a possible tributary to Pecan Creek for the McCurtain County Regional Airport. The improvements will be made on approximately 8 acres. The airport is located in the town of Idabel, Oklahoma, west of Lincoln Road and in the southwest quarter of Section 25 and the northwest quarter of Section 25, Township 7 South, Range 23 East (Figure 1).

An intensive pedestrian survey was conducted by AR Consultants, Inc. on July 25, 2007 for KSA Engineers, Inc which, also, is doing the environmental permitting. This survey was performed at the request of the Caddo Tribe of Oklahoma to determine if any cultural resources were located in the area north of the runway for the relocation of an unnamed tributary to Perry Creek north of the runway and how the cultural resources might be impacted by construction as well as section 404 concerns. Relevant federal legislation includes the National Historic Preservation Act of 1966 as amended (PL-96-515) the National Environmental Policy Act of 1969 (PL-90-190), and the Archaeological and Historical Preservation Act of 1974, as amended (PL-93-291).

NATURAL ENVIRONMENT

McCurtain County' terrain ranges from the mountainous northern part to the rich bottomlands of the Red River to the south. The county is drained by the Mountain Fork and Little Rivers (Wikipedia Encyclopedia 2007).

Soils within the study area consist of the Hollywood silty clay (HoB) with 1 to 3 percent slopes and the Tiak-Ruston complex (TkC) with 1 to 5 percent slopes (USDA, Natural Resources Conservation Service 2007). The subsoil is listed as 16 inches (40 cm) below the ground surface for the Hollywood series and 4 inches for the Tiak-Ruston Complex.

PREVIOUS INVESTIGATIONS

McCurtain County, Oklahoma has been inhabited from Paleo-Indian to recent times. At least 8 Paleo-Indian (ca. 12,000 to 8,000 BP), 186 Archaic (8,000 to 2,000 BP), 54 Woodland (2,000 to 1,000 BP) and 196 Plains Village (1,000 to 50 BP) archaeological sites have been recorded in the county. It is believed that the Caddo inhabited the county for several thousand years. The best known site is the A.W. Davis site (Mc-6) which is located on the west bank of the Glover River and dates shortly prior to the arrival of Europeans in the Americas. In 1955, archaeological investigations uncovered an 18 foot diameter house pattern. Artifacts recovered include dart and arrow points, pottery, hoes and ground stone earspools. A rectangular mound that is 40x80 feet and 12 feet high is within 100 m of the Davis site but it is not known if it associated with the site (Oklahoma Archaeological Society 2007a).

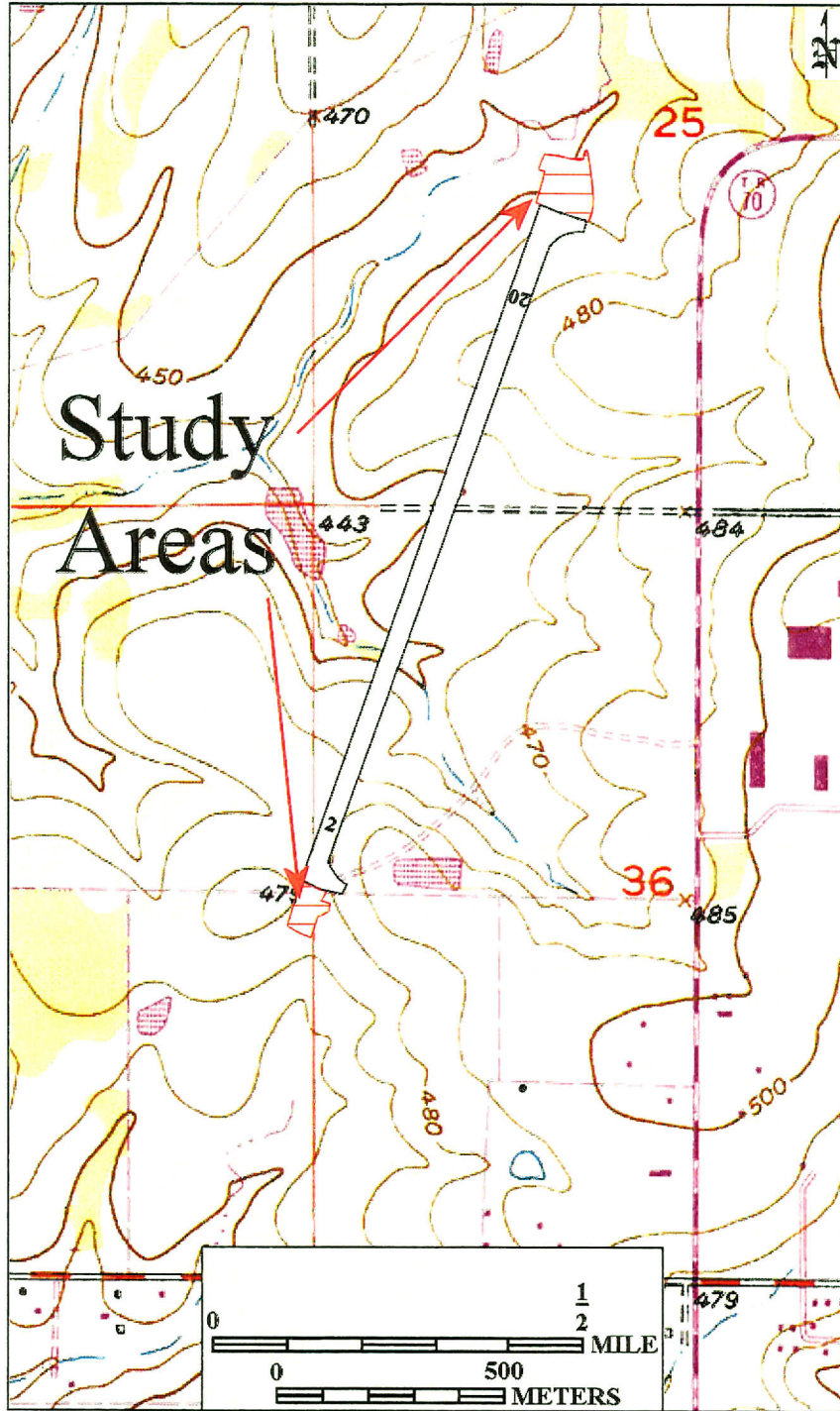


Figure 1. Study areas plotted on a portion of the Idabel, Oklahoma 7.5' USGS map.

According to the Oklahoma Archaeological Survey records (2007), the Prairie Mound Cabin Site and Cemetery (Mc623) is located southwest of the airport facilities and east of the runway in Section 36, Township 7 South, Range 23 East. The site consists of a Territorial Era Choctaw homestead. Artifacts include cut nails, machine-made bricks from Corsicana, Texas, wire, metal springs, clear bottle glass and manganese decolorized bottle glass. The grave stones are dated 1908 and 1911.

METHODOLOGY

The study area was walked in northeast-southwest transects spaced approximately 30 m apart. Shovel tests were excavated in areas with less than 30 percent ground visibility, but not in disturbed areas. The loam was screened through a ¼-inch hardwire screen and the pit walls were examined visually for cultural materials. Due to the upland setting, shovel tests were excavated to the subsoil or the limestone bedrock. Notes on the terrain, soils and other relevant data were taken as were photographs.

RESULTS

The results portion of the report is divided into three sections, the first describes the northern section of the study area along with the shovel tests results, the second section describes the southern section of the study area, and the final section presents the conclusions.

The north end

At the north end of the airport, the study area had ground visibility between 0 and 30 percent. A channel had been created during initial airport construction north of the runway to manage water runoff (Whelton 2007), and the vegetation within this channel included razor and Johnson grass, over 3 feet in height, young mesquite trees, cat tails and various other native grasses (Figure 2). Eight shovel tests were excavated to the subsoil (Figure 3).

The shovel tests were placed along the four north - south transects in the northern study area (Table 1). Shovel tests were placed approximately every 25 to 50 meters apart, with two shovel tests in the first and third transect, one shovel tests in the second transect adjacent to the drainage channel, and three shovel tests were placed in the fourth transect along the eastern ridge above the drainage and the runway. The first shovel tests (hereafter designated as ST) was placed 30 meters north from the end of the runway. An olive yellow very fine sandy clay was in the first 10 cm, followed by the same fine sandy clay mottled with a 5 percent mixture of red clay. Seventy meters north of ST1, ST2 was excavated to 25 cm, with a very dark gray brown loam in the first 20 cm, followed by very dark gray brown slightly loamy clay. In ST4, black clay was at the surface and was excavated to 15 cm. The remainder of the shovel tests, ST3, ST5, ST6, ST7 and ST8 had very shallow topsoil of varying loams and bedrock was encountered at 3 cm in depth. No cultural resources were located during the pedestrian survey or within the shovel tests.



Figure 2. Cattails and grasses within the drainage north of the airport runway. View is facing southeast.

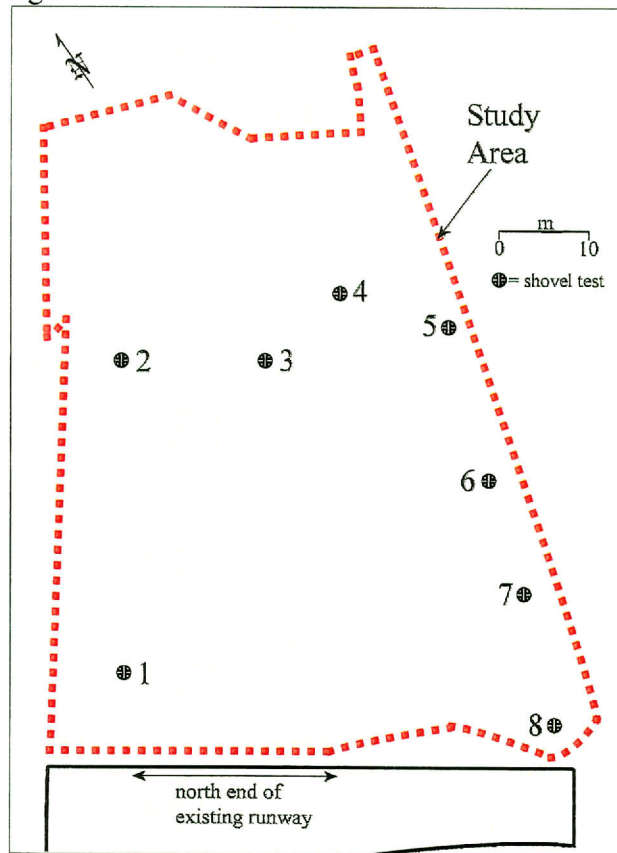


Figure 3. Shovel test locations plotted on a portion of the Idabel, Oklahoma 7.5' USGS map.

Conclusions

No cultural resources were located within the pedestrian survey of the north and south study areas at the McCurtain County Regional Airport. The “unnamed tributary” of Perry Creek north of the runway is actually a drainage channel that was constructed to improve drainage of water runoff from the runway and the adjoining terrain has been heavily modified due to past airport runway construction.

RECOMMENDATIONS

Based upon the absence of archaeological sites, AR Consultants, Inc. recommends that the McCurtain County Regional Airport be allowed to proceed with the runway improvements. However, if buried cultural materials are encountered, the Oklahoma Archaeological Survey ^(and the Choctaw Nation) should be notified. Work should not continue until discussions have been completed with ~~both these agencies.~~ ^{the OAS}

REFERENCES CITED

- Oklahoma Archaeological Society
- 2007a *Oklahoma's Past*. Oklahoma Archaeological Survey website. (Accessed August 6, 2007).
<http://www.ou.edu/cas/archsur/counites/mccurtain.htm>
- 2007b Archival records search for archaeological sites listed on the Idabel, Oklahoma 7.5' USGS map. United States Department of Agriculture, Natural Resources Conservation Service
- 2007 Soil Survey of McCurtain County, Oklahoma. (Accessed December 28, 2006). Internet site. Whelton, George
- 2007 Personal communication. July 25, 2007.
- Wikipedia Encyclopedia
- 2007 McCurtain County, Oklahoma. http://en.wikipedia.org/wiki/McCurtain_County_Oklahoma.

