Final
CONSTRUCTION MASTER MONITORING PLAN
Kansas City International Airport
Terminal Replacement Project

Submitted by:
Golder Associates Inc.
2247 Fox Heights Lane, Suite A Green Bay, Wisconsin, USA 54304

+1 920 491-2500

May 2019
Distribution List
Federal Aviation Administration
Missouri State Historic Preservation Office
City of Kansas City, Aviation Department
Kaw Nation
Osage Nation
Pawnee Nation
Ponca Tribe of Oklahoma
Landrum & Brown
Golder Associates Inc.
# Table of Contents

1.0 EXECUTIVE SUMMARY ................................................................................................................................ 4

2.0 INTRODUCTION ............................................................................................................................................. 5

   2.1 Project Description ........................................................................................................................................ 5

   2.1.1 Initial Test Borings/Subsurface Exploration .................................................................................... 5

   2.1.2 Demolition Activities ........................................................................................................................ 5

   2.1.3 Drilling/Auguring for Deep Pile Foundations ................................................................................... 6

   2.1.4 Soil Disturbance for Excavation, Grading, and Trenching .............................................................. 6

   2.1.5 Vertical Construction, Finishing, and Interior Work ......................................................................... 6

3.0 MONITORING APPROACH ........................................................................................................................... 6

   3.1 Initial Test Borings/Subsurface Exploration ......................................................................................... 7

   3.2 Demolition Activities ............................................................................................................................. 7

   3.3 Drilling/Auguring for Deep Pile Foundations ........................................................................................ 7

   3.4 Soil Disturbance for Excavation, Grading, and Trenching ................................................................... 7

   3.5 Vertical Construction, Finishing, and Interior Work .............................................................................. 8

   3.6 Schedule and Potential Changes to Construction Areas ..................................................................... 8

4.0 MONITORING DOCUMENTATION ................................................................................................................ 9

   4.1 Daily and Weekly Reports .................................................................................................................... 9

   4.2 Monitoring Closure Reports ................................................................................................................. 9

5.0 ARCHAEOLOGICAL TRAINING FOR CONSTRUCTION PERSONNEL ..................................................... 9

6.0 ADDITIONAL INFORMATION ...................................................................................................................... 10

   6.1 Quality Control Plan ........................................................................................................................... 10

   6.2 Health and Safety Plan ...................................................................................................................... 11

7.0 CLOSING ...................................................................................................................................................... 11
ATTACHMENTS

Figures 1 Initial Test Boring Locations
Figures 2 Demolition Areas
Figures 3 Deep Pile Foundation Locations
Figures 4 Additional Test Boring Locations
Figures 5 Additional Test Boring Locations
Figures 6 Additional Test Boring Locations (Site 1 and Site 2)
Figures 7 Test Boring Equipment
Figures 8 Test Boring Soil Material
Figures 9 Potential Excavation, Grading, and Trenching Locations
Figures 10 Areas to be monitored by the Project Archaeologist

Original Cut/Fill Data

Project Archaeologist Resumes

Construction Worker Training PowerPoint Slides

Monitoring Logs from Initial Test Borings
1.0 EXECUTIVE SUMMARY

- The project archaeologist has prepared this Construction Master Monitoring Plan pursuant to the fully executed Programmatic Agreement among the Federal Aviation Administration (FAA), Missouri State Historic Preservation Office (SHPO), the City of Kansas City, Missouri, Kaw Nation, Osage Nation, Pawnee Nation, and the Ponca Tribe of Oklahoma implementing Section 106 of the National Historic Preservation Act for the Proposed Terminal Replacement Project and the demolition of Terminals A, B, and C at Kansas City International Airport, Kansas City, Platte County, Missouri.

- This Master Monitoring Plan has been revised and updated from the January 2019 Plan based on the most up to date information from the contractor.

- Any future changes from this Master Monitoring Plan or any changes identified by the project archaeologist will be submitted to the Consulting Parties for a 15-day review.

- The project archaeologist has completed direct visual inspection of initial test borings as they were occurring and direct visual inspection of collected samples from other test borings. No cultural resource material was found in any boring samples.

- After review of the previous cut/fill limits from the existing terminals, a site visit, experience monitoring the test borings, and a discussion of potential construction activities with the contractor, the project archaeologist has determined not all areas of the project area are considered likely to yield potential cultural resources.

- It is the project archaeologist’s opinion that areas where excavation, grading, and trenching work are proposed to be conducted where native soil is at or near the ground surface will need to have an archaeological monitor present. This resulted in five areas or zones that should be directly monitored by the archaeologist. It is the archaeologist’s opinion that no monitoring is needed for the deep piling foundation construction activities.

- When multiple areas are being excavated, graded, and/or trenched simultaneously that need an archaeological monitor present, the project archaeologist will have archaeological crews present to assist in this coordinated effort, provided that the project archaeologist is given 72 hours’ notice. No excavation will occur in the designated zones for monitoring without the presence of a monitor.

- Monitoring will continue until excavation has reached the maximum depth in that zone or at which important deposits can be expected.

- Monitoring reports will be provided pursuant to the fully executed Programmatic Agreement.

- Prior to the initiation of work in the Project Area, awareness training will be conducted for pertinent construction personnel to ensure their understanding of this Monitoring Plan.

- The project archaeologist has prepared a narrated PowerPoint presentation that will be provided to all construction personnel by the construction site supervisor who will undertake ground disturbing activities prior to their working at the site. The training would provide basic knowledge and guidance to all construction personnel on what to look for and what to do in case potential cultural resources are discovered.

- If there are any unanticipated discoveries during the construction, stipulations described in the executed Programmatic Agreement would be enacted and coordinated with SHPO.
2.0 INTRODUCTION

This Construction Master Monitoring Plan (Monitoring Plan) is intended to assist the City of Kansas City, Aviation Department (KCAD) in its continuance to comply with Section 106 of the National Historic Preservation Act. As part of the environmental assessment and Section 106 process for the Terminal Replacement Project at the Kansas City International Airport (KCI), the Federal Aviation Administration (FAA) consulted with KCAD, the Missouri State Historic Preservation Office (SHPO), the Kaw Nation, the Osage Nation, the Pawnee Nation, and the Ponca Tribe of Oklahoma to develop a Programmatic Agreement (PA). The PA outlines the mitigation measures needed to address any unknown archaeological or cultural resources and resolve adverse effects of the project on the National Register-eligible Kansas City International Airport Historic District. The mitigation measures are a requirement of the project.

The PA states that a professional archaeologist who meets the Secretary of Interior’s Professional Qualification Standards should be present to conduct construction monitoring during certain ground disturbing activities associated with the project. This Monitoring Plan describes the procedures, protocols, and responsibilities of the archaeological monitoring crew and project construction contractors. It is anticipated that the project will be divided up into three main phases of construction. This Monitoring Plan is intended only for the first phase of construction. A monitoring plan will be developed for the second and third phases of construction (primarily the demolition of Terminal B and C) when additional information is available.

Golder Associates Inc. (Golder) has received a copy of the PA and have reviewed and understand the responsibilities and requirements outlined in the PA including the mitigation measures for Unanticipated Discoveries of Cultural Resources and Artifacts and the Inadvertent Discoveries of Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony. Golder has prepared this Monitoring Plan pursuant to the PA.

2.1 Project Description

The first phase of construction includes the construction activities to demolish Terminal A, including the Terminal A parking garage. This phase also includes construction of the new terminal, demolition and construction of apron area, construction of a new parking garage and a surface parking lot, modification of existing roadways, construction of new roadways in the terminal area, trenching and installing associated utilities, construction of various stormwater collection systems including an improved glycol recovery system, and construction of a new central utility plant. It is anticipated that there will be different types of construction activities that will occur associated with this project.

2.1.1 Initial Test Borings/Subsurface Exploration

Initial geotechnical test borings were conducted using a drilling rig with a hollow stem auger for the purposes of testing the soil for the appropriateness of future terminal foundation supports. Core samples were collected and brought to the surface for inspection and lab testing. See Figure 1 for the Initial Test Boring Areas.

2.1.2 Demolition Activities

It is anticipated one of the earliest construction activities will be the demolition of the existing Terminal A building and the demolition of the existing Terminal A garage. Demolition activities would generally occur using large machinery and is not expected to result in any soil disturbance. See Figure 2 for the Demolition Areas.
2.1.3 Drilling/Auguring for Deep Pile Foundations

In order to construct the new terminal building and garage, foundations will be needed. Pile foundations are a long cylinder made of materials such as concrete or steel which will be used to support the structures and transfer the load. It is anticipated that this project would use cast in place concrete piles. This type of pile is constructed by boring to the desired depth and then, depositing freshly mixed concrete in that place and letting it cure. See Figure 3 for the anticipated Deep Pile Foundation Areas.

2.1.4 Soil Disturbance for Excavation, Grading, and Trenching

It is expected soil disturbances associated with normal excavation and grading activities will occur with this project. In addition, it is expected that there would be trenching work associated with relocation/installation of utilities.

2.1.5 Vertical Construction, Finishing, and Interior Work

It is anticipated in the later stages of construction, activities not involving any soil disturbance including vertical construction, interior building work, finishing work of the new terminal and garage, paving activities, etc. would occur.

3.0 MONITORING APPROACH

Golder has reviewed the results of all previous archaeological investigations in the project area and is familiar with the project site having completed the Phase I Archaeological Survey in the summer of 2018. The project archaeologist has been provided information on the cut and fill depths originally conducted for the existing terminal construction in the late 1960’s. In addition, the project archaeologist was provided data from boring samples associated with a geophysical study recently conducted by the contractor. All data indicate that extensive grading and filling has occurred throughout the project area. Therefore, the project archaeologist has determined not all areas of the project site are considered likely to yield potential cultural resources and only certain construction activities would require monitoring.

It is possible that re-deposited soils and imported fill may overlay original ground surface and buried cultural deposits. The Higginsville Series (silty loam and silty clay loam) is the original deposit that superimposed the parent material (bedrock) prior to grading and filling, and may be exposed through excavations on certain construction areas associated with the construction of the project.

The archaeological monitor will be required to monitor certain ground-disturbing activities associated with project construction that has potential to impact culture-bearing strata (assumed to be all strata below the fill/disturbance horizon). Culture-bearing strata generally extends to no more than 5-6 feet below the ground surface if the ground surface has not been previously altered. It is believed that culture-bearing strata might be present in areas below the present fill zone that was deposited over the landform when the existing airport was constructed.

The project archaeologist is proposing the following three types of monitoring for this project:

- Direct visual inspection by the project archaeologist as the construction is occurring,
- Direct visual inspection by the project archaeologist of certain collected samples, and
- No on-site visual inspection by the project archaeologist, but provide training to construction workers operating in areas that are not likely to yield potential cultural resources.
3.1 Initial Test Borings/Subsurface Exploration

Initial geotechnical test borings were conducted in 2018 using a drilling rig with a hollow stem auger for the purposes of testing the soil for the appropriateness of future terminal foundation supports. See Figure 1 for the Initial Test Boring Areas. For these initial geotechnical test borings the project archaeologist recommended direct visual inspection of the collected soil. After conducting the geotechnical test borings the contractor saved, numbered, and secured the material from the test borings. The project archaeologist then reviewed the soil from these initial borings. These initial test borings encountered existing fill extending to depths of approximately 5.4 to 16.7 meters. The existing fill encountered was placed between the later parts of the 1960s to the early 1970s. No cultural resource material was found in the initial boring samples.

In addition to the initial geotechnical test borings, further subsurface exploration test borings were conducted in February and March of 2019. The project archaeologist recommended both direct visual inspection as the borings were occurring and direct visual inspection of the collected samples. See Figure 4 through Figure 6 for the additional Test Boring locations. The project archaeologist conducted direct visual inspection for Site 1, Site 2, and boring locations B30, B31, B33, B34, B35 and B36 in February and March 2019.

The project archaeologist also investigated spoils from boring holes B23, B24, B25, B27, B26, B28, B29 and B32 during this same time period. See Figure 7 for the contractors equipment used in the borings. See Figure 8 for an example of the stockpiled soil material reviewed by the project archaeologist. No cultural resource material was found in the additional boring samples. See the archaeologist’s monitoring logs from the Initial Test Borings at the end of this document.

3.2 Demolition Activities

It is anticipated that this type of construction activities would not include any soil disturbance and therefore would not need to be monitored by the project archaeologist.

3.3 Drilling/Auguring for Deep Pile Foundations

It is anticipated that a great number of pile foundations will be needed for the project. According to the contractor there are a number of pile foundations that will penetrate into native soil. It is anticipated that an 18 inch diameter auger will be used to put pile foundations to a depth of between 64 and 84 feet deep. It is expected that soil material mixed with ground water would come up to the surface. As the auger is removed from the excavation, the excavation will be simultaneously filled with concrete by a pump. Based on the project archaeologist’s experience with the test borings and subsurface exploration, the quality of the soil material is not sufficient for onsite review. This is primarily due to the minimal surface area each foundation will occupy which greatly inhibits the ability to identify subsurface cultural resource features and/or living surfaces. Therefore, it is the project archaeologist’s opinion that no on-site visual inspection by the project archaeologist is conducted for this activity, but that training is provided to construction workers conducting the pile foundations.

3.4 Soil Disturbance for Excavation, Grading, and Trenching

For the most part, the entire project area has been previously modified due to grading, and the placement of imported fill. This modification to the original landform was needed to level the surrounding undulating terrain to accommodate a flat field for the airport’s placement. These disturbances altered the landform through truncation, the redeposition of horizontally displaced sediments, and imported fill. See Figure 9 for potential excavation, grading, and trenching areas associated with the project and the limits of cut and fill depths originally conducted for the existing terminal construction.
It is the project archaeologist's opinion that areas where excavation, grading, and trenching work are proposed to be conducted where native soil is at or near the ground surface will need to have an archaeological monitor present. This resulted in five areas or zones that should be directly monitored by the archaeologist, as identified on Figure 10. In these locations the archaeologist should be present during any excavation, grading, or trenching to ensure that no unanticipated cultural resources are unearthed or if they are encountered that they may be identified. Excavation and any other ground-disturbing activity in areas designated as having a high potential for subsurface archaeological deposits will be monitored continuously by the project archaeologist until the excavation terminates at the proposed construction’s maximum depth. Areas having a high potential for archaeological deposits will include areas determined to potentially contain undisturbed native soils.

3.5 Vertical Construction, Finishing, and Interior Work

It is anticipated that this type of construction activities would not include any soil disturbance and therefore would not need to be monitored by the project archaeologist.

3.6 Schedule and Potential Changes to Construction Areas

A construction schedule is being developed by the contractor. The contractor will provide the schedule to the project archaeologist in order for the project archaeologist to determine if various zones will be active at the same time and to develop a staffing plan so that all zones are monitored. It is understood that this is a design/build project so there may be changes as the construction is occurring and construction activities may be dependent on weather conditions.

When multiple areas are being excavated simultaneously that need an archaeological monitor present, the project archaeologist will have archaeological crews present to assist in this coordinated effort, provided that the project archaeologist is given 72 hours’ notice. No excavation should occur in the areas designated for monitoring without the presence of a monitor. This will provide ample time to schedule and have the necessary archaeological personnel present. The archaeological crews will report to the Project archaeologist, who will be tasked with managing where these personnel are needed.

The archaeological monitor shall be appraised daily by KCAD and/or the construction contractor project manager of construction activities. All effort should be made to communicate construction schedules as early as possible (minimum 72 hours prior to excavation) to facilitate adequate staffing of archaeological monitoring crew. A representative of the archaeological monitoring crew will be designed daily to coordinate with a construction project manager in the morning prior to start of work and at the end of the work day (when archaeological monitoring is required).

Any changes in the Project construction or in areas not previously reviewed by the project archaeologist that could potentially impact buried native soil will require review by the Project archaeologist to determine whether further impact assessment or monitoring is required. If potential exists for archaeological deposits in the revised Project area(s), the Project archaeologist should be provided maps showing the new areas and a description of activities that will take place: a determination will then be made regarding the need and scope of any further work.

Additionally, if archaeological resources are encountered anywhere during project construction when no archaeologist is present, work in the area must halt until the Project archaeologist can evaluate the nature and significance of the find and formulate appropriate evaluation and/or mitigation measures. The Project archaeologist will consult with SHPO to determine appropriate treatment and mitigation of the site. The contractor shall protect the discovery site from vandalism, looting, photography or further disturbance of any kind. The
May 2019

construction contractor and crew will be trained prior to the construction’s commencement of archaeological procedures and policies.

In the proposed construction areas where an archaeological monitor is needed, the construction Site Supervisor, Foreman, or similar onsite authority will need to advise the Project archaeologist of this need. Ideally a 72-hour notice would be necessary for the archaeologist(s) to make the required arrangements (logistics and scheduling) for deployment. The archaeological monitors will be onsite during any earth moving displacement activities associated with the construction’s excavation phase in those areas already predetermined to require monitoring. Once the excavation on these predetermined areas is completed, monitoring of the area ceases and the archaeological monitor will finalize and submit the necessary monitoring documentation to SHPO.

4.0 MONITORING DOCUMENTATION

Archaeological monitoring will involve the close inspection of excavations and other activities within the Project Area. The Site Supervisor, Foreman, or similar onsite authority must be informed of the Monitor’s presence and authority to halt and/or relocate construction work. The Supervisor shall inform all construction personnel of the monitor’s role. The monitor will follow excavations and constructions as closely as conditions require, making all reasonable efforts for safety and noninterference with construction.

The number and placement of monitors will be determined by the Project archaeologist depending on the number of sites that have to be monitored concurrently. Duration of monitoring shall be determined by the Project archaeologist. The Project sponsor will be notified in writing if any additional monitoring or other archaeological work is needed.

4.1 Daily and Weekly Reports

All monitoring activity will be recorded daily. These daily reports will provide the basis for the monitoring closure report. The project archaeologist and monitor(s) will take photographs to aid in the documentation efforts. The project archaeologist will submit daily and weekly electronic reports summarizing the day’s and week’s monitoring activity to the FAA, KCAD, SHPO, and Tribes. The weekly report will consist of the combined daily reports, so they can be reviewed efficiently. If there are any significant findings that require immediate attention, KCAD and the contractor would be notified and an email marked urgent will be sent to the FAA, SHPO, and Tribes.

The monitor(s) will maintain a daily log documenting what construction activities were monitored, descriptions and provenience of any archaeological discoveries or artifacts collected, and other pertinent information. Monitoring will continue until excavation has reached the maximum depth at which important deposits can be expected. Should potentially significant remains be found, the monitor would be empowered to redirect construction activities until the discovery is evaluated. If archaeological deposits or features are encountered the procedures identified in the PA would be implemented.

4.2 Monitoring Closure Reports

The monitoring closure report shall contain at a minimum: field notes, formal written descriptions of the monitoring activities, and a summary of the findings. The monitoring closure report will be submitted electronically and hardcopy via regular mail to the FAA, KCAD, SHPO, and Tribes.

5.0 ARCHAEOLOGICAL TRAINING FOR CONSTRUCTION PERSONNEL

Prior to the initiation of work on the Project Area, awareness training will be provided to all construction personnel, prior to working at the site, to ensure their understanding of this Monitoring Plan. The training will be presented in
a PowerPoint presentation narrated by Chris Tinti, the primary archaeologist and point of contact for the project. A paper copy will also be provided. The PowerPoint presentation will be provided to all construction Site Supervisors, Foremen, or similar onsite authorities who will be required to show the presentation to their workers prior to working at the site. For any construction personnel who have further questions about the training, the primary archeologist has provided his contact information at the end of the presentation.

The training would provide basic knowledge and guidance to all construction personnel on what to look for and what to do in case potential cultural resources are discovered. Further, the training will outline the specific commitments for archaeological monitoring, provide guidance regarding the recognition of archaeological material, and identify procedures for notifying supervisory personnel in the event suspicious or sensitive material are encountered. Crew members will be shown examples of shell tools, lithic examples, and pottery sherds. If crew members find an artifact or archaeological material, the project archaeologist will be on site to review the artifact or material and make a determination about its historical significance. Crew members will not be required to determine if an artifact or material is historically significant. The training will also include a description of pertinent federal, state, and local laws.

The PowerPoint slides are provided at the end of the Construction Monitoring Plan.

6.0 ADDITIONAL INFORMATION

6.1 Quality Control Plan

Golder’s Standard Quality Assurance/Quality Control (QA/QC) procedures will be used for the Project so that technical and regulatory results are produced in accordance to the requirements of the PA. The Quality Control Plan will include procedures for both the field and reporting components of the Project. QA/QC procedures will be implemented so that collected data are of acceptable quality and include the submission of weekly progress reports. Field procedures will be carried out to meet the Project objectives while following the guidelines set out in the PA for an archaeological monitoring. The Quality Control Plan will include procedures for:

- Following technical procedures and specific work instructions for relevant field activities
- Filling a progress report that identifies:
  - The sites recorded
  - Areas monitored
  - Issues that may have occurred and how they were resolved
  - Collecting data sufficient to complete a MO site form for each site identified

Field crews also receive a “Tailgate” or on-site orientation to inform each crew member of the technical procedures, specific work instructions, and guidelines to be followed during construction monitoring.

Proper office procedures will also be a significant part of the Quality Control Plan (e.g., database management, data QC, document control, project filing requirements). Standardized office protocols for the Project will include:

- Data entry database management and audit procedures; and
- Document control procedures (e.g., coding, copying and storage of documents and correspondence related to the Project).
These procedures will be established to maintain the quality of data, daily field logs, site forms, and reports as well as the security of the information from unauthorized disclosure.

### 6.2 Health and Safety Plan

A Golder Health and Safety Plan will be implemented. Each crew member will be required to review and comply with the health and safety requirements. The Health and Safety Plan will include a daily check in phone call to ensure contact with office-based staff and a safe return from the field each day for our field crews. Procedures will be implemented that will identify the sequence of events that will be initiated should a crew fail to check in by the appointed time until they are located. The Health and Safety form will be carried with each crew and will identify all local emergency and important project phone numbers.

### 7.0 CLOSING

Golder is pleased to have the opportunity to provide the required services. Please feel free to contact the project archaeologist at 906-458-0541 if you have any questions.

Christopher Tinti, M.A., RPA  
*Staff Cultural Resource Scientist*  
*Golder Associates Inc.*

This plan was also prepared by:

David Wilcox, M.A., RPA  
*Senior Project Archaeologist*  
*Golder Associates Inc.*

Golder and the G logo are trademarks of Golder Associates Corporation
Figure 1: Initial Test Boring Locations

Legend
- Boring Locations

Figure 2: Demolition Areas
Figure 3: Deep Pile Foundation Locations
Figure 4: Additional Test Boring Locations
Figure 5: Additional Test Boring Locations
Figure 6: Additional Test Boring Locations (Site 1 and Site 2)
Figure 7: Test Boring Equipment
Figure 8: Test Boring Soil Material
Figure 9: Potential Excavation, Grading, and Trenching Locations
Figure 10: Areas to be monitored by the Project Archaeologist
Resumé

CHRISTOPHER TINTI

Golder Associates Inc. – Green Bay

Cultural Resource Scientist

Chris has eleven years of experience in cultural resource management conducting and supervising pedestrian surveys, recording archaeological sites, intensive data recovery excavations, and managing projects in North Dakota, South Dakota, Michigan, Minnesota, Missouri, Wisconsin, Iowa, Indiana, Illinois, Montana, Wyoming, North Carolina, Alabama, and Croatia. He has worked on a variety of projects including energy exploration, oil and gas transmission, mining, telecommunication, electric transmission, transportation, and wetland mitigations. Routine job responsibilities include preparing inventory reports, proposals, compiling site forms, conducting field investigations, and historical research. Chris also has participated in numerous Native American consultation projects with the Mandan, Hidatsa, Arikara, Assiniboine, Chippewa, and Sioux Tribes.

Employment History

Golder Associates Inc. – Green Bay, Wisconsin

Cultural Resource Scientist (2016 to Present)

Major responsibilities include assisting clients with NEPA and NHPA compliance as well as local and state regulations; directing archaeological surveys; preparing reports, proposals, and site forms.

Ethnosciences Inc. – Billings, Montana

Field Director (2013 to 2016)

Served as a project lead and field supervisor for Department of Transportation surveys, large scale mitigations associated with energy development, transmission, pipeline, and telecommunication projects. Responsibilities included preparing reports, site forms, proposals, and assisting with project map preparation.

KLJ Solutions – Bismarck, North Dakota

Crew Chief (2012 to 2013)

Responsibilities included supervising field technicians in archaeological investigations for energy development, transportation, geophysical, and telecommunication projects. Assisted in report preparation, site forms, preparing project maps, and conducting file searches at the North Dakota State Historic Preservation Office.

Office of the Wyoming State Archaeologist – Laramie, Wyoming

Field Technician (2011 to 2011)

Was part of a team of archaeologists that conducted a phase III data recovery of a Paleoindian and Archaic site in Teton County for a transportation project. Was responsible for preparing level forms, unit summary reports, and cataloging artifacts.
University of Wyoming, Department of Anthropology – Laramie, Wyoming
Teaching Assistant (2011 to 2011)
Employed as a teaching assistant for a Forensic Anthropology course. Responsibilities included preparing lab stations, helping with lectures, maintaining office hours, and preparing osteological and funerary collections for repatriation.

University of Wyoming, Department of Anthropology – Laramie, Wyoming
Teaching Assistant (2010 to 2010)
Was employed as a teaching assistant for a Research Methods in Anthropology course. Responsibilities included preparing lectures, teaching laboratory sections, and holding office hours.

University of Wyoming, Department of Anthropology – Laramie, Wyoming
Research Assistant (2009 to 2009)
Responsibilities included analyzing, cleaning, organizing, and cataloging artifacts for curation at the University of Wyoming Archaeological Repository.

Environment and Archaeology, LLC – Pittsfield, Illinois
Field Technician (2008 to 2008)
Part of a team of archaeologists that conducted a phase III investigation for the Rex East pipeline. Responsibilities included excavating 2x2 meter units, maintaining level forms, unit summary forms, and sorting and collecting artifacts.
PROJECT EXPERIENCE – RAILWAYS

Conducted a direct and 3/4-mile visual area of potential effects assessment for a 325-foot base station tower in Jo Daviess County, Illinois (2018). Five shovel tests were excavated within the direct APE and no cultural materials were recovered.

Conducted a direct and half-mile visual area of potential effects assessment for a 185-foot PTC base tower within the CN Green Bay railroad yard in Brown County, Wisconsin (2017). Four historic properties were assessed for visual impacts.

Conducted a direct and 3/4-mile visual area of potential effects assessment for a 275-foot base station tower within the CN Fort Dodge railroad yard in Webster County, Iowa (2017). A total of 34 historic properties were assessed for visual impacts.

Conducted a direct and half-mile visual area of potential effects assessment of a 185-foot PTC base station tower within the CN right-of-way in Hardin County, Iowa (2017). Five shovel tests were excavated within the direct APE and no cultural materials were recovered.

Conducted a direct and 3/4-mile visual area of potential effects assessment of a 255-foot PTC base tower within the CN right-of-way in Hardin County, Iowa (2017). Five shovel tests were excavated within the direct APE and no cultural materials were recovered.

Conducted a direct and 3/4-mile visual area of potential effects assessment of a 230-foot PTC base station tower within the CN Waterloo railroad yard in Black Hawk County, Iowa (2017). Nine NRHP listed historic properties were assessed for visual impacts.
Conducted a direct and 3/4-mile visual area of potential effects assessment for a 255-foot PTC base station tower within the CN right-of-way in Hamilton County, Iowa (2017). Two NRHP listed properties were assessed for visual impacts.

Conducted a direct and half-mile visual area of potential effects assessment for a 185-foot base station tower in Hamilton County, Iowa (2017). One NRHP listed property was assessed for visual impacts.

Conducted a direct and 3/4-mile visual area of potential effects assessment of a 245-foot PTC base station tower within the CN right-of-way in Buchanan County, Iowa (2017). Five shovel tests were excavated within the direct APE and no cultural materials were recovered.

Conducted a direct and 3/4-mile visual area of potential effects assessment of a 305-foot PTC base tower within the CN right-of-way in Black Hawk County, Iowa (2017). Five shovel tests were excavated within the direct APE and no cultural materials were recovered.

Conducted a direct and 3/4-mile visual area of potential effects assessment for a 350-foot PTC base tower adjacent to the CN right-of-way in Butler County, Iowa (2017). Two historic properties were assessed for visual impacts.

Conducted a direct and 1/4-mile visual area of potential effects for a 90-foot PTC tower within the CP Bensenville railroad yard in Cook County, Illinois. No cultural resources were located with the Direct or Visual APE.

Conducted a direct and half-mile visual area of potential effects assessment for a 200-foot PTC base station tower in the CP Enderlin railroad yard in Ransom County, North Dakota (2017). Two historic properties were assessed for visual impacts.
Conducted a direct and half-mile visual area of potential effects assessment for a 180-foot PTC base tower within the CN right-of-way in La Porte County, Indiana (2016). Six historic properties were assessed for visual impacts.

Conducted a direct and 1/4 mile visual area of potential effects assessment for an 80-foot tilt tower within the Canadian Pacific railroad right-of-way in Milwaukee County, Wisconsin (2016). Two historic properties and four historic districts listed in the NRHP were assessed for visual impacts.

Conducted a direct and 1/4 mile visual area of potential effects assessment for a 160-foot PT UT monopole antenna within the Canadian Pacific railroad right-of-way in Ramsey County, Minnesota (2016).

Conducted a direct and 3/4 mile visual area of potential effects assessment for a 200-foot lattice Positive Train Control (PTC) tower within the Canadian National railroad right-of-way in St. Louis County, Minnesota (2016). A total of five negative shovel tests were excavated within the direct APE.

Conducted a direct and 3/4 mile visual area of potential effects assessment for a 200-foot lattice Positive Train Control (PTC) tower within the Canadian National railroad right-of-way in Koochiching County, Minnesota (2016).

Conducted a direct and 3/4-mile visual area of potential effects assessment for a 280-foot lattice Positive Train Control (PTC) tower within the Canadian National Proctor railroad yard in St. Louis County, Minnesota (2016). A total of five negative shovel tests were excavated within the direct APE and the Proctor railroad yard was photographically document on behalf of the Minnesota SHPO.

Conducted a direct and half-mile visual area of potential effects assessment for a 150-foot lattice Positive Train Control (PTC) tower within the Canadian National Mobile railroad yard in Mobile County, Alabama (2016). Visual impacts were assessed for one listed NRHP property.
Resumé

CHRISTOPHER TINTI

PROJECT EXPERIENCE – WATER RESOURCES

North Dakota Department of Transportation
Wetland Mitigation near Goodrich
Sheridan County, North Dakota, USA

A Class III cultural resource inventory of 200 acres and limited subsurface testing for a proposed wetland mitigation. Prepared for the North Dakota Department of Transportation (2016). One historic farmstead was recorded during the investigation.

Dry-Water Regional Water Authority of Richland County
Richland County, Montana, USA

A Class III cultural resource inventory of four utility crossings for the Richland County water/sewer extension project south of Sidney, Montana. Prepared for Interstate Engineering (2013). Three laterals of the Yellowstone Irrigation project were updated.

Shiloh Wetland Mitigation
Burleigh County, North Dakota, USA


PROJECT EXPERIENCE – PIPELINES

Oasis Helix Lite Cultural Resource Monitoring
Mountrail County, North Dakota, USA

Monitored construction activities near prehistoric stone feature sites 32MN1107, 32MN1109, 32MN1107, 32MN1300, 32MN1441, and 32MN1442 in Mountrail County, North Dakota for Andeavor Logistics (2018).

Parshall Gathering System - Hoff to Ehlert Station
Mountrail County, North Dakota, USA

Conducted a Class III cultural resource investigation of a 2.8-mile long pipeline corridor totaling 67.88 acres on behalf of True Companies. The site boundary of site lead 32MNx0042 was updated as part of the investigation (2017).

Parshall Gathering System - Ehlert to Stanley Station
Mountrail County, North Dakota, USA

Conducted a Class III cultural resource investigation of 23.4-mile long pipeline corridor totaling 568.49 acres in Mountrail County, North Dakota on behalf of True Companies. One isolated find (32MNx0839), one historical site (32MN0726), one architectural site (32MN0733), and one prehistoric stone feature site (32MN0726) were updated. A previously undocumented prehistoric stone feature site (32MN1424) was recorded as part of the survey (2017).

Oasis Loop Pipeline
Mountrail County, North Dakota, USA

Conducted a Class III cultural resource investigation of 16.6-mile long pipeline corridor totaling 403.85 acres in Mountrail County, North Dakota for Tesoro Logistics. Three prehistoric stone feature sites (32MN1419, 32MN1420, & 32MN1422 & 32MN1423) a prehistoric isolated find (32MNx967), and two historic agricultural sites (32MN1421) were recorded within the project corridor (2017).
**BakkenLink Integration**  
**- Oasis to Dry Creek Pipeline Construction Monitoring**  
McKenzie County, North Dakota, USA  
Monitored pipeline construction activities, topsoil removal, and trenching of a one mile pipeline segment near sites 32MZ793, 32MZ3091, and 32MZ3092 in McKenzie County, North Dakota for Tesoro Logistics (2016).

**Hidden Bench Phase 2 Gathering System**  
McKenzie County, North Dakota, USA  
A class III cultural resource inventory of an 18.55 mile linear corridor of a proposed crude oil pipeline for Tesoro Logistics (2016). A total of 449.6 acres were surveyed and one historic farmstead (32MZ3089) was recorded and the WAPA transmission line (32MZ1561) was updated.

**Construction monitoring of the West Spur of the Vantage Pipeline**  
Divide and Burke Counties, North Dakota, USA  
Monitored pipeline construction activities, topsoil removal, and potholing near several prehistoric stone feature sites in Divide and Burke Counties, North Dakota for Pembina Pipeline Corporation (2015).

**West Spur of the Vantage Pipeline**  
Williams, Divide, and Burke Counties, North Dakota, USA  

**Keystone XL Project**  
Fallon County, Montana, USA  
A cultural resource survey of an ancillary facility for the Montana segment of the Keystone XL project in southeastern Montana. The project was conducted on behalf of EXP Energy (2014).

---

**PROJECT EXPERIENCE – ARCHAEOLOGY**

**Cultural Resource Monitoring of a Natural Gas and Electrical Service Installation**  
Winnebago County, Wisconsin, USA  
Monitored a natural gas and electrical service installation at a residential service address for Wisconsin Public Service. Monitoring occurred within the boundaries of uncatalogued burial site BWN-0140 in Winnebago County, Wisconsin (2018).

**Cultural Resource Monitoring of an Electrical Upgrades**  
Waupaca County, Wisconsin, USA  
Monitored an electrical line installation within the South Park recreation area for Wisconsin Public Service. Monitoring occurred within the boundaries of site WP-0107 in Waupaca County, Wisconsin (2018).

**Cultural Resource Monitoring of a Natural Gas Service and Meter Installation**  
Oconto County, Wisconsin, USA  
Monitored a natural gas service and meter installation at one service address for Wisconsin Public Service. Monitoring occurred within the boundaries of uncatalogued burial site BOC-0048 in Oconto County, Wisconsin (2017).
Monitored natural gas service upgrades and meter replacement projects at five service address for Wisconsin Public Service. Monitoring occurred within the boundaries of uncatalogued burial sites BWN-0184, BWN-0191, BWN-0159, and BWN-0106 in Winnebago County, Wisconsin (2017).

Conducted an archaeological investigation of a proposed commercial development on behalf of EKI in Dallas County, Iowa. A total of 1,268 acres were investigated and two historic farmsteads (25-01768 and 25-01769) were recorded.


Conducted a direct and half-mile visual impact assessment for a 78-foot monopole tower in an electrical substation for WE Energies. A total of 27 historic properties were assessed for potential visual impacts (2017).

Conducted a direct and half-mile visual impact assessment for a 95-foot monopole tower in an electrical substation for WE Energies. A total of 12 cultural resources were assessed for potential visual impacts (2017).
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dawson and Wibaux Counties, Montana, USA</td>
<td>NorVal Electric Cooperative, Inc.</td>
</tr>
<tr>
<td>Blaine County, Montana, USA</td>
<td>Hill County Electric Cooperative Lankford-Hoefeldt Project</td>
</tr>
<tr>
<td>PROJECT EXPERIENCE – TELECOMMUNICATION</td>
<td></td>
</tr>
<tr>
<td>Nemont Telephone Cooperative, Inc.</td>
<td>A Class III cultural resource inventory of 48.5 miles of selected tracts of public lands, totalling 594.01 acres. Prepared for Finley Engineering, the Bureau of Land Management, State of Montana, and Montana Fish, Wildlife and Parks (2014). Seven previously recorded sites were updated and 14 undocumented sites were recorded.</td>
</tr>
<tr>
<td>Valley and Phillips County, Montana, USA</td>
<td>AT&amp;T Rapids MTL02708-LTE Cellular Communication Modifications</td>
</tr>
<tr>
<td>Stillwater County, Montana, USA</td>
<td>A Class I visual impact assessment and Class III cultural resource analysis for the AT&amp;T Rapids MTL02708-LTE cellular tower. Prepared for Terracon and the FCC (2014). The Union Pacific Railroad along I-90 and Big Ditch irrigation canal were assessed for potential visual impacts.</td>
</tr>
<tr>
<td>AT&amp;T Montana Brewing Company Cellular Collocation</td>
<td>A Class I visual impact assessment and Class III cultural resource inventory for a proposed cellular collocation on top of the Montana Brewing Company building. Prepared for Terracon and the FCC (2014). Two NRHP listed historic districts were assessed for visual impacts.</td>
</tr>
<tr>
<td>Yellowstone County, Montana, USA</td>
<td>AT&amp;T Glendive DT</td>
</tr>
<tr>
<td>Dawson County, Montana, USA</td>
<td>A Visual Impact Assessment and Class I Analysis for Cellular Communication Modifications. Prepared for Terracon and the FCC (2014). The Farmers Union Grain Terminal Association grain elevator (24DW0563) was recorded, one historic district (24DW0028), and four historic properties (24DW0290, 24DW0229, 24DW0413, and 24DW0418) were assessed for visual impacts.</td>
</tr>
</tbody>
</table>
Resumé

CHRISTOPHER TINTI

PROJECT EXPERIENCE – MINING

**BNI Coal Monitoring**
Oliver County, North Dakota, USA
Monitoring of archaeological sites for the construction of a water retention pond. Prepared for BNI Coal and the Public Service Commission (2016).

**Expansion of the East Permit Area for the Falkirk Mining Company**
McLean County, North Dakota, USA
A Class III inventory of the east permit extension for the Falkirk Mining Company. The inventory approximately covered 1,300 acres. Three historic farmsteads (32ML1311, 32ML1318, and 32ML1319), one historic material scatter (32ML1312), and one prehistoric Isolated Find (32MLx786) were recorded during the investigation. Prepared for the Public Service Commission and the Bureau of Land Management (2016).

**Decker Coal**
Big Horn County, Montana, USA
A Class I and Class III cultural resource investigation of the East Decker Mine expansion. Prepared for the Public Service Commission and the State of Montana (2015). One historic farmstead was updated during the investigation.

**Coyote Creek Mine Archaeological Mitigation**
Mercer County, North Dakota, USA
An intensive Phase III mitigation of sites 32ME2436, 32ME2475, and 32ME2476 for a coal mining permit. Prepared for the Public Service Commission (2015). Six stone circles and a lithic scatter were excavated as part of the mitigation.

**Coyote Creek Mine Data Recovery at 32ME2350**
Mercer County, North Dakota, USA
An intensive Phase III mitigation of site 32ME2350, a prehistoric Knife River flint lithic procurement area in preparation of the development of several workshops and office buildings for the main office of the Coyote Creek Mine (2014).

**Coyote Creek Mine Haul Road**
Mercer County, North Dakota, USA
A Class III cultural resource inventory and limited site testing for a haul road corridor. Prepared for the Coyote Creek Mine, North American Coal Corporation, and the Public Service Commission (2014). One stone circle was tested to assess National Register of Historic Places eligibility.

PROJECT EXPERIENCE – TRANSPORTATION

**Highway 200: Junction 41 to McClusky**
McLean and Sheridan Counties, North Dakota, USA
A Class III cultural resource investigation of State Route 200 from Junction 41 to the town of McClusky for sliver grading and general road improvements. Prepared for the North Dakota Department of Transportation (2016).

**Goodrich: Highway 200 from Junction 14 to Junction 3**
Sheridan and Wells Counties, North Dakota, USA
Class III cultural resource investigation of State Route 200 from Junction 14 to Junction 3 for sliver grading and general road improvements. Prepared for the North Dakota Department of Transportation (2016).
Resumé

CHRISTOPHER TINTI

Interstate 15 Lincoln Interchange
Lewis and Clark County, Montana, USA
Class III cultural resource inventory of proposed improvements of the Interstate 15 and Lincoln Road interchange. Prepared for the Montana Department of Transportation (2016).

Rockvale North Gravel Pit and Access Road (CN 407000)
Carbon County, Montana, USA
A cultural resource inventory of the proposed Rockvale North gravel pit and access road. Prepared for the Montana Department of Transportation (2015).

Lovell - Emblem, Wyoming 295 Junction North (Project No. 0202014)
Big Horn County, Wyoming, USA
Class III cultural resource inventory along Wyoming 32. Prepared for the Wyoming Department of Transportation (2015). A segment of the Bridger Trail was updated during the investigation.

Secondary Highway 327
Roosevelt County, Montana, USA
Class III cultural resource inventory of Secondary Highway 327. Prepared for the Montana Department of Transportation and DOWL HKM (2014). A historic irrigation canal was updated during the inventory.

Eagle Butte Mine Highway 59 Relocation Project (Project No. ARS3814)
Campbell County, Wyoming, USA
Class III cultural resource survey of the Eagle Butte Mine Highway 59 relocation project. Prepared for the Wyoming Department of Transportation (2014). Two historic sites were updated and two prehistoric isolated finds were recorded during the inventory.

Lovell - Cowley Road Sage Creek Section (Project No. N345093)
Big Horn County, Wyoming, USA
A Class III cultural resource inventory along Wyoming 310. Prepared for the Wyoming Department of Transportation (2015). A historic bridge was recorded and three previously recorded historic period resources were updated.

NDDOT Project 3-020(107)044, North McHenry to South Junction 15 PCN18874
Eddy County, North Dakota, USA
A Class III cultural resource investigation from North McHenry to South Junction 15. Prepared for the North Dakota Department of Transportation (2013).

Williston, North Dakota Historic District Analysis
Williams County, North Dakota, USA
A Class III cultural resource inventory and historic district analysis along Main Street from Front Street to Sixth Street. Prepared for the North Dakota Department of Transportation (2013).

ROM-0300(119) PCN 19466
Ward County, North Dakota, USA
A Class I cultural resource investigation for a bituminous overlay in Ward County, North Dakota. Prepared for the North Dakota Department of Transportation (2012).
Resumé

CHRISTOPHER TINTI

Highway 85 Expansion,
Watford City to County Road 16
Williams and McKenzie Counties, North Dakota, USA

A Class III cultural resource investigation for the expansion of Highway 85 from two to four lanes between Watford City and Williston, North Dakota (2012). A total of 1,781 acres were surveyed and four historic properties and four prehistoric isolated finds were recorded.

TRAINING

**NEPA Compliance and Cultural Resources**
National Preservation Institute, December 8, 2017

**MSHA New Miner Training**
Bell Hospital, February 22, 2017, annual renewal last completed in February 2018

**NAGPRA and ARPA: Applications and Requirements**
National Preservation Institute, December 9, 2016

**CN OTS Certification**
CN, March 8, 2018

**eRailSafe**
eRailSafe, August 15, 2016

**OSHA 10 Hour General Safety and Work Hazard Certification**
OSHA Training Center, August 11, 2016

**CPR, AED and First Aid Certification**
Health and Safety Institute, March 8, 2018

**H2S Safety Awareness**
North Dakota Safety Council, June 12, 2012

**Archaeological Field School**
Michigan State University and Dickson Mounds Museum, July 2008

PROFESSIONAL AFFILIATIONS

- Society for American Archaeology
- Wisconsin Archaeological Society
- Wyoming Archaeological Society
- Montana Archaeology Society
DAVID WILCOX, M.A., RPA

Senior Project Archaeologist

PROFESSIONAL SUMMARY

David Wilcox has spent more than 23 years managing archaeological projects for the oil & gas, alternative energy, renewable energy sector/wind farm development, mining, and telecommunications industries, as well as several environmental and permitting projects. He has worked extensively within academic institutions, the United States Departments of Agriculture, Defense, Energy, and the Interior, and as a consultant for the private sector dealing with Cultural Resource Management. He has extensive experience working with local, county, state, federal and tribal agencies and permitting authorities. He has developed his skills and experience in over 43 U.S. States, Canada, Mexico and Venezuela. He has supervised personnel in both industrial and environmental settings, directing multiple crews of up to 24 professionals. Many of these projects involved remote locations where he also served as the field health and safety officer. He is bilingual (English/Spanish), and is a native Spanish speaker.

Specialties:

- Resourceful at guiding clients and projects through governmental regulations and laws.
- Worked with colleagues in other NA and international offices to ensure a constant flow of data sharing, expansion of resources, best practices’ approach, safety issues, and client representation.
- Managed and worked with multi-disciplinary teams on technical and project management issues.
- Ensured that environmental monitoring and contingency plans were incorporated into all documents and contracts.

EMPLOYMENT HISTORY

Senior Project Archaeologist (2017 – Present)

Golder Associates Inc.; Green Bay, WI

Major responsibilities, goals and objectives include the following:

- Expanding Golder’s USA archaeology program;
- Mentoring;
- Assisting clients with compliance regarding NEPA, NHPA and local regulations;
- Leading archaeological survey, assessments and excavation throughout the USA and Canada;
- Conducting laboratory and office-based work such as background research, report writing, artifact cataloguing and analysis; and,
- Working/assisting clients with State Historic Preservation Offices (SHPOs) and federally recognized tribal governments and Tribal Historic Preservation Offices (THPOs) to complete the Section 106 consultation processes.
Project Archaeologist (2013 – 2016)
Golder Associates Inc.; Bismarck, ND, and Green Bay, WI
Major responsibilities, goals and objectives include the following:
- Expanding Golder’s USA archaeology program;
- Assisting clients with compliance regarding NEPA, NHPA and local regulations;
- Leading archaeological survey, assessments and excavation throughout the USA and Canada;
- Conducting laboratory and office-based work such as background research, report writing, artifact cataloguing and analysis; and,
- Working/assisting clients with State Historic Preservation Offices (SHPOs) and federally recognized tribal governments and Tribal Historic Preservation Offices (THPOs) to complete the Section 106 consultation processes.

Archaeologist/Field Director/Project Manager (2012)
Cogstone Resource Management Inc., Jean, NV
Eldorado-Ivanpah Transmission Project, Southern California Edison, Eldorado, NV to Ivanpah, CA.
- Supervised field operations, managed daily monitoring activities, and trained field personnel.
  - Coordinated with Southern California Edison, AECOM, construction crews, and field monitors in compliance with the project’s Paleontological and Cultural Resources Management Plans. The project involved the installation of 71-miles of electrical transmission lines that crossed both BLM and private lands, a new 220/115 kV substation, associated telecommunications infrastructure, and system upgrades to ensure reliability. The upgrade created additional interconnection capacity to deliver up to 1,400 MW of renewable energy that is expected to be developed in the Ivanpah Valley.

Senior Project Manager (2012)
Timmins Martelle Heritage Consultants Inc., London, Ontario, Canada
Responsible for overseeing all aspects of field projects, including:
- Supervised TMHC Project Managers and Field Directors;
- Prepared work plans and budgets;
- Client liaison;
- Coordinated and scheduled fieldwork with the Field Operations Manager and identify/resolve logistical issues;
- Coordinated and scheduled property ingress/egress and fieldwork with clients;
- Prepared project-specific health and safety plans, project fieldwork/access protocols, and project mapping for field use;
- Reviewed project field progress, field notes and findings;
- Coordinated the completion of laboratory work with the Laboratory Manager;
- Prepared projects reports;
Quality control review and editing of reports prepared by others;
Completed quality control checks on all field and map data;
Coordinated meetings and monitor work for affected First Nations;
Prepared project invoices in consultation with TMHC’s Office Manager-Administrator and track project budgets;
Artifact analysis, site interpretation and preparation of site recommendations in keeping with provincial and First Nations requirements; and,
Worked cooperatively with TMHC Principals and staff.

Cultural Resources Director/Principal Investigator (2010 - 2011)
Sims & Associates - LLC, Cedar Park, TX (now NewFields)

Contract Pricing, Client/Agency Negotiation & Report Writing
- Developed, negotiated and produced stand-alone reports covering all environmental issues to various regulatory compliance agencies.
- Responsible for procuring work and clients by seeking out and preparing proposals and quotes in response to Request for Quotations (RFQ) and Request for Proposals (RFP) from contracting governmental agencies and private corporations.

Total Project Evolution
- Managed project, and anticipated regulatory compliance agency issues by maintaining a concise project timeline. Key components included the adherence to the Scope of Work (SOW), change orders if deemed necessary, communication with clients regarding the project’s process.

Project Management & Operations
- Managed 18+ environmental/cultural professionals, implemented new project SOW operation procedures, conducted all logistical planning, supervised budgets ranging from US$ 6,500 to 347,000, wrote all technical and final reports, was the point of contact, and was the Health & Safety officer for all projects.

Business Development - Market Traction
- Expanded into new areas and markets by winning RFPs and RFQs, and by hiring personnel with professional regional experience. Built a professional team capable of quick deployment to represent the company and clients, which ensured that all projects were completed on time, 100% under budget and with all regulatory compliance issues covered.

Client/Agency Engagement
- Excellent communication and negotiation skills required to engage all client and regulatory compliance agencies to ultimately align all interests and meet project expectations.

Key Roles:
- Managed numerous projects simultaneously
- Client, Federal, State and Native American consultation throughout the U.S.
- Permit acquisitions
Project tracking
- Logistics and Regulatory compliance officer
- Trainer/Mentor

**Cultural Resources Planner/Senior Archaeologist (2009 - 2010)**
The 106 Group Ltd., St. Paul, MN

Responsible for the supervision of Phase I archaeological surveys, and Phase II archaeological evaluations throughout the Midwest.

- Conducted archival research, cultural resources assessments, artifact analysis, report writing, and all aspects of archaeological fieldwork and interpretive planning projects assuring the timely and successful completion of those projects.
- Aided in providing staff management and the general administrative support for office and field personnel.
- Assisted in proposal writing and editing.
- Facilitated and contributed in the preparation of both state and federal compliance documents, including federal environmental impact statements and programmatic agreements.
- Facilitated in the permitting process with state and local agencies, and assisted with landowner ingress and egress consent.
- Communicated with clients and provided technical proficiency in the completion of cultural resources investigations and compliance documents for a range of energy, transportation, and communication tower projects.
- Assisted in maintaining secure and open communication with clients, the State Historic Preservation Office (SHPO) and other federal agencies, the State Archaeologist, project team members, and other concerned third parties, to guarantee the smooth progress of the projects.

**Senior Project Scientist/Staff Archaeologist (2005 - 2006 and 2007 - 2009)**
Environmental Resources Management, Albuquerque, NM

Project supervisor in charge of FCC telecommunication cell tower NEPA/Phase I, Inventories and NPA assessments, linear right-of-way corridors for FERC, and various state projects, water lines, pipelines, oil/gas well pads, large wind farm tracks, and block survey, which entailed project coordination, permit applications, proposal writing, literature searches, field inspections, client relations, managing and directing survey projects, site recordation, and excavation, technical report writing, editing reports, lithic analysis, and supervising field personnel.


**Project Archaeologist/Principal Investigator (2006 - 2007)**
SWCA Environmental Consultants, Austin, TX

Responsible for project coordination, permit applications, proposal writing, lithic analysis, report writing and editing, numerous large and small scale cultural resource surveys, and site recordation in Andrews, Atascosa, Bastrop, Bexar,

- These projects consisted of linear right-of-way corridors for FERC projects, TxDOT, USACOE, TPWD burn lane corridors, water lines, pipelines, oil/gas well pads, large wind farm tracks, and block surveys.

**Field Director (2004 - 2005)**
*Prentice Thomas and Associates, Inc., Fort Walton Beach, FL*

Working independently as a satellite office, my responsibilities entailed the training of the field and office personnel, supervision of all field operations, research, survey, delineation mapping and demarcation of National Register of Historic Places (NRHP) sites, GPS mapping (Trimble and Garmin) and transect placement, testing, logistics, client relations, and office management in Hinesville, Georgia in accordance with Department of Natural Resources (DNR) Guidelines.

- Worked within the Fort Stewart Military Reservation Base in Bryan, Evans and Liberty Counties, Georgia, and on Eglin Air Force Base projects in Okaloosa and Walton Counties, Florida.

**Archaeologist/Staff Environmental Professional II (2002 - 2004)**
*E2M, Inc., Albuquerque, NM (now HDR)*

- Directly assisting the Principal Investigator in completing multi-tiered cultural resource inventory, eligibility of sites, ARPA assessments, GPS mapping, artifact analyses, pace and compass mapping, drafting and report writing in Kirtland Air Force Base, Albuquerque, New Mexico.
- Conducted CRM work at the Fort Sill Military Reservation, Lawton, Oklahoma.
- Performed a 2434-acre cultural resources inventory in Candy Lake, Osage County, Oklahoma.
- Completed a Phase I archaeological survey for the Alpena Readiness Training Center, Alpena, Michigan.
- Conducted inventory assessments of National Guard Armories throughout the State of Georgia.

**Cultural Resource Specialist/Project Supervisor III (2001 - 2002)**
*Pacific Legacy, Inc., Cameron Park, CA*

Responsible for project coordination, report writing and editing, cost proposals, client relations, surveys, site recordation, monitoring, and mitigations in Tuolumne, Calaveras, Trinity, El Dorado, Yolo, Placer, Lassen, Mono, Tehama, Kern, Lake, Sutter, Fresno, Kings and Santa Barbara Counties, California.

**Cultural Resource Consultant/Environmental Specialist (2001)**
*Trigon-Sheehan, LLC, Durango, CO (now CH2M HILL)*

Wrote reports, did literary research, mapping, surveys (cultural, wetland and avifauna), and represented the company when dealing with the client.
- Worked independently throughout the State of Oklahoma assessing Duke Energy Field Services’ pipeline right-of-way’s and storm water pollution prevention plans.

**Archaeologist/Geoarchaeologist (2000 - 2001)**
*Rare Earth Studies, Albuquerque, NM*
Carried out archaeological & geoarchaeological surveys, excavations & investigations and developed reports & analyses of findings for presentation to clients in New Mexico and Texas.
- Played a key role in preparing proposals and quotes in response to RFQs and RFPs from contracting governmental agencies and private corporations.

*Desert West Archaeological Services, Inc., Carlsbad, NM*
Responsible for the training of field and office personnel, supervision of all field operations, report writing, research, mapping, survey, excavations, analyses of data, artifact illustrations and client relations.
- Worked on Federal, State, Department of Defense, National Park Service, Forest, and Fee lands in Eddy, Lea, Santa Fe, Torrance, Bernalillo, Chaves, Roosevelt, De Baca, Lincoln, Guadalupe and Otero Counties, New Mexico, and Hudspeth County, Texas.

**Staff Archaeologist (1994)**
*Cultural Resources Management Consultants, Inc., Carlsbad, NM*
Assigned to survey, map, write reports, and also included pre-field literature searches, in-field client relations, and artifact illustrations.

**Field Archaeologist (1994 [summer])**
*Centennial Archaeology, Fort Collins, CO*
Surveyed the Diamond Shamrock Petroleum Pipeline right-of-way throughout southeastern New Mexico.

**Field Archaeologist (1994 [spring])**
*Agency for Conservation Archaeology, Eastern New Mexico University, Portales, NM*
Surveyed the Melrose Bombing Range extension, Melrose, New Mexico.

**Field Archaeologist (1993 [summer])**
*Richard G. Haiduven Archaeological Consultants, Inc., Miami, FL*
Excavated the Harwood II Estates, Carol City, Florida.

**Field Archaeologist/Geoarchaeologist (1993 [summer])**
*Archaeological and Historical Conservancy, Inc., Miami, FL*
- Surveyed "The Hollow" at Cape Florida, Key Biscayne, Florida after Hurricane Andrew.
- Excavation at the Bonita Bay Project, Phase IV, Bonita Springs, Florida.

**Field Supervisor (1993 [spring])**
*Eastern New Mexico University, Portales, NM*
Managed individual crews of geoarchaeology graduate students in mapping and collecting for the Burnt Caliche Project, Portales, New Mexico.

**Crew Chief (1992 [(summer)])**
*Proyecto Arqueologico de Chihuahua, El Terrero, Chihuahua, Mexico*
Surveyed and excavated in the Santa Maria Valley for a project sponsored by the University of Calgary, Alberta, Canada.

**Archaeological Crew Leader (GS-7) (1991 [summer])**
*Stanislaus National Forest, Mi-Wok Ranger District, CA*
Managed and directed a crew that surveyed areas for insect salvage sales, and fire recovery projects, and performed some Phase II testing.

**Participant (1991 [summer])**
*Eastern New Mexico University, Portales, NM*
Rio Bonito Archaeological Project, Capitan, New Mexico. Excavation and survey within the Rio Bonito Valley.

**Field Archaeologist (1989 – 1990)**
*Archaeological and Historical Conservancy, Inc., Miami, FL*
- Excavated at the Ortona Indian Mounds.
- Surveyed the Florida Panther Reserve, Sunniland, Florida.
- Surveyed on the Seminole Heritage Survey, Big Cypress Reservation, Florida.
- Assisted with the Fisheating Creek Survey, Palmdale, Florida.
- Part of a salvage recovery crew team that excavated human remains at Silver Lakes, Hollywood, Florida.
- Excavated at the Bonita Bay Phase II Project, a secondary burial mound in Bonita Springs, Florida.
- Excavated the Madden's Hammock Project, Miami, Florida.

**Vice-President (1986 – 1990)**
*Walmart Inc., Coral Gables, FL*
Responsibilities at this import/export company demanded my personal attention to all international quotations regarding industrial machinery requests. This entailed either telecommunications with the client’s plant engineers, or generally demanded my presence overseas to get the appropriate specifications from plant managers regarding the procurement of parts, machinery, or entire assembly lines, and arrange for their international shipment and installation. Most of the necessary travel was in South America.

**Tour Manager (1984 – 1986)**
*Shopping Center Network, Miami, FL*
Represented this marketing firm throughout the continental United States as a liaison between the main client (i.e., Chevrolet, AT&T, Maybelline, and the State of California) and the venue’s management. Managed the erection and striking of exhibits in trade shows and shopping malls to the client specifications and building permits. Hired temporary employees to staff the displays, and
maintained the displays, during the function and moved the show by commercial trucks to the next venue.

*Sidor C.A., Caracas, Venezuela*
Part of a team in charge of preventative maintenance, building the required parts needed at this steel mill.

*Cementos Caribe C.A., Puerto Cumarebo, Venezuela*
Assigned to perform regular repairs and diagnostic evaluation for the heavy equipment machinery (i.e., Caterpillar, Case, John Deer, Komatsu) at this cement plant.

**RELEVANT EXPERIENCE**

**PROJECT EXPERIENCE – WATER RESOURCES**

**Rainy River Cultural Resource Survey**
*Minnesota, USA*
Rainy River Cultural Resource Vulnerability Study for the International Joint Commission from Manitou Rapids to International Falls, MN (2016).

**Hickory Ground Water Development Re-Alignment Project**
*Texas, USA*

**Hickory Ground Water Development Project**
*Texas, USA*

**Brushy Creek Regional Utility Waterline**
*Texas, USA*

**United States Section, International Boundary and Water Commission (USIBWC) Rio Grande Canalization Project**
*New Mexico and Texas, USA*
Carlsbad Caverns and Guadalupe Mountains National Parks' Water Transmission Line, Utility Access Corridor and Storage Systems. New Mexico, USA

PROJECT EXPERIENCE – ARCHAEOLOGY

Town of Silver Cliff Sand and Gravel Pit
Wisconsin, USA

Wisconsin Central LTD (WCL) Haley Siding, Wood Road Realignment
Minnesota, USA

Manitowoc Fiber Optic Route
Wisconsin, USA
Cultural Resource Assessment Survey: Manitowoc Fiber Optic Route, Manitowoc County, Wisconsin (2016).

Canadian National Railway BAU MAR 2014 Archaeological Investigation
TWR.CEN.ULLIN.34400
Illinois, USA

Wisconsin Central Ltd. Blair Yard
Wisconsin, USA

Bastrop State Park Fire Burn Lanes
Texas, USA

Cultural Resources Survey at Fort Stewart Military Reservation
Georgia, USA
Archaeology of the Western Manzanita Mountains
New Mexico, USA

Presence and Distribution of Subsurface Cultural Deposits
New Mexico, USA

Coyote Springs Archaeological Damage Assessment Report
New Mexico, USA

Eastern Portion Survey of the Manzanita Mountains Project
New Mexico, USA

NRHP Eligibility of Nine Archaeological Sites
Oklahoma, USA

Results from Subsurface Testing Three Sites
New Mexico, USA

Work Plan for Testing Three Sites
New Mexico, USA
Work Plan for Testing Sites LA 38141, LA 131735 and LA 131739 Located Along the Proposed Kirtland Air Force Base Fence Corridor Boundary, Kirtland

**Site Testing and National Register Eligibility Evaluation of Six Archaeological Sites**  
*New Mexico, USA*  

**Arco-Permian's Proposed 1280 Acre Track project**  
*New Mexico, USA*  

**Cedar Breaks Project**  
*New Mexico, USA*  

**PROJECT EXPERIENCE – BAKKEN OIL/GAS, AND ASSOCIATED PROJECTS**

**Pad 10**  
*North Dakota, USA*  

**Johnson’s Corner Storage Hub**  
*North Dakota, USA*  

**BakkenLink Integration-Oasis to Dry Creek Connection**  
*North Dakota, USA*  
A Class III Cultural Resource Survey: BakkenLink Integration-Oasis to Dry Creek Connection, McKenzie County, North Dakota (2016). Submitted to Tesoro Logistics GP, LLC.

**BakkenLink Integration-Oasis to Dry Creek**  
*North Dakota, USA*  
A Class III Cultural Resource Survey: BakkenLink Integration-Oasis to Dry Creek, McKenzie County, North Dakota (2016). Submitted to Tesoro logistics GP, LLC.
1 Acre Three Forks Terminal Expansion Site  
*North Dakota, USA*  
A Class III Cultural Resource Survey: 1 Acre Three Forks Terminal Expansion Site, McKenzie County, North Dakota (2106). Submitted to Tesoro Logistics GP, LLC.

**Johnson's Corner Terminal Expansion Site**  
*North Dakota, USA*  
A Class III Cultural Resource Survey: Johnson's Corner Terminal Expansion Site, McKenzie County, North Dakota (2016). Submitted to Tesoro Logistics GP, LLC.

**Three Forks to DAPL Connection**  
*North Dakota, USA*  
A Class III Cultural Resource Survey: Three Forks to DAPL Connection, McKenzie County, North Dakota (2106). Submitted to Tesoro Logistics GP, LLC.

**BASH to DAPL Pipeline Connection**  
*North Dakota, USA*  
A Class III Cultural Resource Survey: BASH to DAPL Pipeline Connection, Williams County, North Dakota (2016). Submitted to Tesoro Logistics GP, LLC.

**Legacy Well Lease and Access Road for the Hansen Pager 12-5H**  
*North Dakota, USA*  

**Legacy Well Lease and Access Road under Permit A73-13**  
*Manitoba, Canada*  

**CNRL Pipeline under Permit 13-206**  
*Saskatchewan, Canada*  
Heritage Resources Impact Assessment of Canadian Natural Resources Limited Pipeline 13-14 to 5-13-3-2 W2M South of Oxbow, Saskatchewan (2013).

**Crescent Point Pipeline and Well Leases under Permit A55-13**  
*Manitoba, Canada*  
Heritage Resources Impact Assessment of Crescent point Energy Corp. 15-22 to 3-27-11-29 WPM Pipeline, CPEC Manson HZNTL 3A-3-10-28 WPM, and CPEC Manson HZNTL 10C-8-13-28 WPM Near Elkhorn, Manitoba (2013).

**Legacy Flowline under Permit A66-13**  
*Manitoba, Canada*  
Heritage Resources Impact Assessment of Legacy Oil + Gas Inc. 9-29-1-27 to 12-29--1-27 WPM East of Lyleton, Manitoba (2013).

**Legacy Flowline under Permit A73-13**
Manitoba, Canada
Heritage Resources Impact Assessment of Legacy Oil + Gas Inc. 9-30-1-28 to 1-30 and 8-30-1-28 WPM Flowline West of Lyleton, Manitoba (2013).

Legacy Pad Site under Permit A74-13
Manitoba, Canada
Heritage Resources Impact Assessment of Legacy Oil + Gas Inc. 8-30-1-28 WPM Pad Site West of Lyleton, Manitoba (2013).

Adonai Pipeline under Permit 13-205
Saskatchewan, Canada

SaskEnergy Limited Pipeline under Permit 13-164
Saskatchewan, Canada

Legacy Pipeline under Permit A51-13
Manitoba, Canada
Heritage Resources Impact Assessment of Legacy Oil + Gas Inc. 1-3-2-28 to 4-35-1-28 WPM Pipeline Northeast of Lyleton, Manitoba (2013).

CPEC Flowline and Well Lease under Permit No, A13-13
Manitoba, Canada

CPEC Pipelines and Well Lease under Permit No, A14-13
Manitoba, Canada

CNRL Well Leases and Pipelines under Permit No. A22-013
Manitoba, Canada
Heritage Resources Impact Assessment of Canadian Natural Resources Ltd. Well Leases and Pipelines South of Pierson, Manitoba (2013).

Legacy Well Leases and Flow Lines under Permit No. A20-13
Manitoba, Canada

Legacy Pipeline from 9-32 to 14-36-1-28 WPM under Permit No. A17-13
Manitoba, Canada
SaskPower Reconnaissance and Shovel Testing for Buried Features and Artifacts
Saskatchewan, Canada

SaskPower Boundary Dam Pipeline Survey
Saskatchewan, Canada
Heritage Resources Impact Assessment of SaskPower Pipeline South of Estevan, Saskatchewan (2013).

Phase I Environmental Site Assessment for Weatherford International, LLC
North Dakota, USA
Phase I Environmental Site Assessment at 11160 32nd Street SW Dickinson, North Dakota, 58601 (2013).

Aggregate Resource Evaluation for OXY-Occidental Petroleum Corporation
North Dakota, USA

PROJECT EXPERIENCE – PIPELINES

Teso High Plains Pipeline Easement & Right-Of-Way Renewal Project
North Dakota, USA

Oasis Helix Lite Pipeline
North Dakota, USA
Class III Cultural Resource Survey: Oasis Helix Lite Pipeline, Mountrail County, ND (2018). Prepared for Andeavor Logistics LP.

XTO North Fork Pipeline
North Dakota, USA

Oasis Loop Pipeline
North Dakota, USA
Class III Cultural Resource Survey: Oasis Loop Pipeline, Mountrail County, ND (2017). Prepared for Tesoro Logistics GP, LLC.

Hidden Bench Phase 2 Gathering System
North Dakota, USA

**Alexander North Pipeline**  
*North Dakota, USA*  

**Powder River Pipeline Relocation Project**  
*Colorado, USA*  

**El Paso Natural Gas River Crossing Project**  
*Texas, USA*  

**El Paso Natural Gas Line Repair and Replacement Project**  
*Texas, USA*  

**El Paso Natural Gas Line Replacement Project**  
*Texas, USA*  

**Chevron West Texas LPG Pipeline Project**  
*Texas, USA*  

**West El Paso Lateral Lines Project**  
*Texas, USA*  

**PROJECT EXPERIENCE – OIL & GAS**

**Pad 10 Pipeline**  
*North Dakota, USA*  
Siembra 3-D Seismic Project
Texas, USA
Archaeological Avoidance Plan for the proposed Samson - Siembra 3-D Seismic Project in Fort Bend and Brazoria Counties, Texas (2007). Prepared for Samson Lone Star, LLC.

Hidalgo County Well Location Projects
Texas, USA

PROJECT EXPERIENCE – POWER

Site C
British Columbia, Canada
Phase II and Phase III excavations (testing and mitigation) for the BC Hydro Site C Clean Energy Project, a dam to be constructed across the Peace River. Excavated Sites HaRf-71 and HbRf-65 (2014).

SaskPower Substation and Transmission Line under Permit 13-165
Saskatchewan, Canada

Southern California Edison's EITP
Nevada - California, USA
The Eldorado-Ivanpah Transmission Project involved the installation of 71 miles of electrical transmission lines that crossed both BLM and private lands, a new 220/115 kV substation, associated telecommunications infrastructure, and system upgrades to ensure reliability (2012).

Pomeroy Wind Farm Project
Iowa, USA
Cultural Resources Literature Review for the Pomeroy Wind Farm Project, Calhoun and Pocahontas Counties, Iowa (2010). Prepared for Pomeroy Wind Farm, LLC.

Tri-County Electric Cooperative Construction Projects
Minnesota, USA

Nobles County Wind Farm Project
Minnesota, USA
Phase I Archaeological Survey or the Nobles County Wind Farm, Nobles County, Minnesota (2009). Prepared for WSB & Associates.

Sherbino Mesa II Wind Farm Project
Texas, USA

**Nine Anemometer Locations for the White Hills Project**  
*Arizona, USA*  

**KS Flat Ridge Wind Farm Project**  
*Kansas, USA*  

**Five Anemometer Locations for the Arizona Prospect I Project**  
*Arizona, USA*  

**Buffalo Gap 3 Wind Farm Project**  
*Texas, USA*  

**Sherbino Mesa Wind Farm Project**  
*Texas, USA*  
A Cultural Resources Survey of the Sherbino Mesa Wind Farm, Pecos County, Texas (2007). Prepared for Orion Energy, LLC.

**Barney M. David Plant**  
*Texas, USA*  

**Nueces Bay Power Plant**  
*Texas, USA*  

**Basalt Canyon Geothermal Exploration Project**  
*California, USA*  

**PROJECT EXPERIENCE – TRANSPORTATION**
**Chandler Road Project**  
*Texas, USA*  

**FM 92**  
*Texas, USA*  

**State Route 3**  
*California, USA*  
Archaeological Survey Report for CA-TRI-1403 in State Route 3 at Hayfork Creek, Trinity County, California (2001). Prepared for the California Department of Transportation North Region in Redding, California.

**PROJECT EXPERIENCE – LAND DEVELOPMENT**

**Blackburn Bridge Road**  
*North Carolina, USA*  
Phase 1 Archaeological Survey; Blackburn Bridge Road Sites, Catawba County, North Carolina (2016). Submitted to Erler & Kalinowski, Inc.

**Sites 1 and 2**  
*Iowa, USA*  
Phase 1A Cultural Resource Reconnaissance Survey; Sites 1 and 2, Dallas County, Iowa (2016). Submitted to Erler & Kalinowski, Inc.

**INEOS Nitriles Facility**  
*Texas, USA*  
Archaeological Survey: Cultural/Archaeological Resource Assessment og Areas 1, 2, 3, and 4 at the INEOS Nitriles Facility in Port Lavaca, Calhoun County, Texas (2016). Prepared for INEOS Nitriles USA LLC.

**Estevan Residential Subdivision under Permit No. 13-149**  
*Saskatchewan, Canada*  

**Lisbon Plant Project**  
*Illinois, USA*  

**Rice Creek North Regional Trail Project**  
*Minnesota, USA*  
Proposed New Comal ISD Elementary School  
*Texas, USA*  

League City Towne Center Project  
*Texas, USA*  
An Archaeological Survey of the League City Towne Center, Galveston County, Texas (2006). Prepared for DCH Environmental Consultants, LP.

Avalon Subdivision Project  
*Texas, USA*  

Village of Fort Sumner's Proposed Dairy Site  
*New Mexico, USA*  

**PROJECT EXPERIENCE – VOLUNTEER EXPERIENCE**

Old San Juan Historic Excavation  
*Puerto Rico, USA*  
Observer, assisted the field director on interpretation of a cistern feature being unearthed on the south side of Bulevar del Valle between El Morro and San Cristobal Fortresses (2016).

BLM Volunteer Archaeologist, Farmington District  
*New Mexico, USA*  
Surveyed areas, mapped sites, and executed site patrols in the Dinéh and San Juan Basin of the Río Arriba, San Juan, and Sandoval Counties, New Mexico under the supervision of Mr. James Copeland, BLM Archaeologist (1998).

Eastern New Mexico University Volunteer Archaeologist  
*New Mexico, USA*  

University of Arizona’s Laboratory of Tree-Ring Research Volunteer  
*New Mexico, USA*  
Part of the Frijoles Canyon Flood Coring Project in Bandelier National Monument, New Mexico (1992). Cored different species of living trees within the Frijoles Canyon constricted flood plain.

University of Miami Volunteer Underwater Archaeologist and Geoarchaeologist
Florida, USA
National Geographic Society sponsored "Deep Core" Project at Little Salt Spring, North Port, Florida, and at the University of Miami's Geology Laboratory, Coral Gables, Florida (1990).

Archaeological and Historical Conservancy, Inc. Volunteer Archaeologist
Florida, USA
Part of the excavation crew at the Joe Robbie Stadium Project, Miami, Florida (1988).

TRAINING

HAZWOPER 40-Hour Training Course
Lindberg Compliance Services Group, LLC, 03/16/2018

FRA 214 Railroad Workspace Safety
CN - On-Track Safety - Contractor, 03/15/2018

MSHA - Annual Refresher (8 Hour Course) - Part 46
TriMedia Environmental and Engineering, 02/13/2018

Bloodborne Pathogens
American Red Cross, March 2017

Adult First Aid/CPR/AED
American Red Cross, March 2017

NEPA Compliance and Cultural Resources
National Preservation Institute, 2017

NAGPRA and ARPA: Applications and Requirements
National Preservation Institute, 2016

TWIC
Transportation Worker Identification Credential, 2016

e-RAILSAFE
e-RAILSAFE, 01/09/2014

Section 106: Principles and Practice a continuing education workshop
SRI Foundation in Salt Lake City, UT by Dr. Lynne Sebastian, RPA, December 11-12, 2013

Environmental Compliance Training for FCC Licensees and Consultants
Federal Communications Commission, 05/14/ 2013

H2S Awareness
North Dakota Safety Council, Inc., 02/19/2013

Project Client Relationships
Golder Associates Inc., 02/13/2013

**Golder 101**
Golder Associates Inc., 02/12/2013

**OSHA - General Industry (10 Hour Course)**
North Dakota Safety Council, Inc., 01/18/2013

**Unexploded Ordinance Training Courses**
Department of Defence (Fort Irwin, CA, Fort Stewart Military Reservation, GA, and Kirtland Air Force Base, NM), 2012, 2002-2005

**Anti-Harassment Training Course**
Environmental Resources Management, 2007

**Health, Safety & Training Course**
Environmental Resources Management, 2006

**Project Safety Training Course**
Burlington Northern Santa Fe Railway, 2006

**Project Management Bootcamp I, 12 Professional Development Hours**
PSMJ Resources, Inc., 2006

**SUPPLEMENTAL SKILLS**

**Report Production**

**Statistical Research**
Helped anthropology faculty with statistical research of data sets (1992)

**Teaching**
Taught and assisted university professors in undergraduate and graduate anthropology, lithic, geography, soil erosion and photography courses (1989-1993).

_
Kansas City International Airport: Cultural Resource Training for Contractors and Consultants - New Terminal Project

PROVIDED BY: GOLDER ASSOCIATES INC.

April 2019
AGENDA

- Why am I reviewing this?
- What am I looking for?
- What should I do if I think I found something?
Why am I reviewing this?

- This construction project is required to have a Project Archaeologist conduct monitoring during certain ground disturbing activities.

- The project archaeologist has identified 5 specific zones that will be monitored. This training is provided to provide basic knowledge and guidance to all construction personnel involved with ground disturbance on what to look for and what to do in case potential cultural resources are discovered.
Why am I reviewing this?

- As you are working **be aware** and on the **lookout**.
- The following photos are primarily from sites in Missouri or adjoining states.
- Burial photos and photos of human bones were not included in the material but make sure you are watching out for those materials as well.
- Remember the project archaeologist has the authority to halt construction activities in the immediate area if potentially significant resources are identified.
An Introduction to Cultural Resources

WHAT ARE CULTURAL RESOURCES?

- Cultural resources are the physical evidence or place of past human activity such as a site, object, landscape, building, or structure.

(Pottery and Bone Midden) (Fort Osage aka Fort Clark / Fort Sibley)
What is an Artifact?

An artifact is an object made or altered by humans such as a tool, art, or clothing that is portable.

Often made of stone, bone, clay, metal, wood, and/or leather.

(Flaking debris from flint knapping)
What is an Artifact? – Continued

PREHISTORIC EXAMPLES

(Kansas City Hopewell Pottery)

(Snyder Projectile Point)

(Bone Awl)
What is an Artifact? – Continued

**HISTORIC EXAMPLES**

- (Coffin Handles)
- (Ceramics)
- (Conical Lead Bullet)
- (Military Uniform Buttons)
- (Glass Medicine Bottles)
- (Straight Razor)
What is a Feature?

A feature is any physical structure, such as a wall, post hole, pit, or floor, that is made or altered by humans but (unlike an artifact) is not portable and cannot be removed.

(Hearth / Fire Pit)
What is a Feature? – Continued

PREHISTORIC EXAMPLES

(Hearth / Fire Pit)
What is a Feature? – Continued

**PREHISTORIC EXAMPLES**

(Mississippian Trench House and Associated Midden)
What is a Feature? – Continued

HISTORIC EXAMPLES

(Late 18th Century House Foundation)
What is a Feature – Continued

HISTORIC EXAMPLES

(Late 19th Century Factory with a Limestone Foundation)
Unanticipated Discovery Protocol

I THINK I FOUND SOMETHING, WHAT NEXT?

Step 1: If intact or disturbed archaeological resources are encountered, immediately stop work in the vicinity of the archaeological site and secure the area. String no work zone flagging in a 100-meter (approx. 330 feet) perimeter around the site and do not undertake further work that could disturb the site. Do not pick up or move the artifacts, or move soil from the site, including adjacent spoil material.
Unanticipated Discovery Protocol – Continued

I THINK I FOUND SOMETHING, WHAT NEXT?

Step 2: Contact the on-site Archaeologist immediately for further guidance. The archaeologist will determine if the finds are archaeological in nature. Work may resume if it is determined the find is not of cultural importance.
Unanticipated Discovery Protocol – Continued

I THINK I FOUND SOMETHING, WHAT NEXT?

Step 3: If the Archaeologist determines the find is significant, the Archaeologist will contact the appropriate individuals at KCI and set up a meeting with the State Historic Preservation Office to determine the appropriate action.

Step 4: If human remains are encountered, all work will stop. The Archaeologist and KCI will contact the Local Law Enforcement, Medical Examiner/Coroner, FAA, State Historic Preservation Office, and Native American Tribes.
Unanticipated Discovery Protocol

I THINK I FOUND SOMETHING, WHAT NEXT?

What to do if something is found in an area outside the archaeological monitoring area, and the archaeologist is not present.

Alert/contact the construction foreman, they will halt the work in the area, they will cordon a buffer to prevent further disturbances to the find, then they will contact the project archaeologist to examine the find.

If the Archaeologist is not present in the site, the construction foreman will contact the appropriate individuals at KCI, and give the archaeologist 48 hours to come to the area and determine the appropriate action needed.
State and Federal Regulations

MISSOURI STATUTES

Archaeological and human burial sites are protected by a variety of Federal and State laws.

Missouri Revised Statutes, Section 194.410:

Any person or entity who knowingly disturbs, destroys, vandalizes, or damages a marked or unmarked human burial site commits a class D felony.

Any person who knowingly appropriates for profit, uses for profit, sells, purchases or transports for sale or profit any cultural items obtained in violation of sections 194.400 to 194.410 commits a class A misdemeanor and, in the case of a second or subsequent violation, commits a class E felony.
Project Archaeologist Contact Information

**POINT OF CONTACT**

Chris Tinti, M.A. RPA
Staff Archaeologist
Cell: 906-458-0541
Email: ctinti@golder.com
DAILY FIELD NOTES FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Conditions: Clear skies, dry, icy, and northwest wind 5-10 mph. Afternoon high of 23 degrees F and sunny.

Field Crew: David Wilcox, Senior Project Archaeologist (Golder Associates)

Overview of Field Day: Monitored geotechnical borings at B30 (in the airport parking lot at the end of Nairobi Drive) and B31 (near the intersection of Paris Street and Mexico City Avenue). Geotechnical bore B30 will continue sometime next week. Once monitoring was completed for the day, I headed over to the tailings pile yard near the intersection of Paris Street and Mexico City Avenue to inspect backfill that we stored from past geotechnical work for signs of cultural resources. Throughout the course of the day, backfill was screened from geotechnical bores B33 and B34. The soils from these test locations primarily consisted of heavy clays with small pieces of shale and varied in color (2.5Y 6/4, 2.5Y 6/1, 10YR 5/2, 10YR 5/3, and Gley 1 4/N). No cultural resources were recovered.
February 11, 2019

DAILY FIELD NOTES FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Conditions: Overcast, wet, muddy, mid-day rain showers, and west wind 5-10 mph. Afternoon high of 35 degrees F.

Field Crew: David Wilcox, Senior Project Archaeologist (Golder Associates)

Overview of Field Day: Headed over to the tailings pile yard near the intersection of Paris Street and Mexico City Avenue to inspect backfill that was stored from past geotechnical work for signs of cultural resources. Throughout the course of the day, backfill was screened from geotechnical bores B35 and B36. The soils from these test locations primarily consisted of heavy clays and varied in color (2.5Y 6/4, 2.5Y 6/5, 2.5Y 6/1, 10YR 5/2, and 10YR 5/3). No cultural resources were recovered. The field day was cut short due to midafternoon rain showers.
February 12, 2019

DAILY FIELD NOTES FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Conditions: Overcast, wet/muddy from rain yesterday, northwest wind 5-15 mph. Afternoon high of 38 degrees F.

Field Crew: David Wilcox, Senior Project Archaeologist (Golder Associates)

Overview of Field Day: Conducted cultural resource monitoring at geotechnical bore B30 (in the airport parking lot at the end of Nairobi Drive). This bore was initially started on 2/8/2019 but given a series of equipment and weather setbacks, the bore was completed today. The soils from this test location primarily consisted of heavy clays with small pieces of shale, degraded quartzite, and varied in color (2.5Y 6/4, 2.5Y 6/1, 10YR 5/2, and 10YR 5/3). No cultural resources were recovered.
February 13, 2019

DAILY FIELD NOTES FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Conditions: Partly to mostly cloudy, wet and muddy conditions, south wind 5-10 mph. Afternoon high of 56 degrees F.

Field Crew: David Wilcox, Senior Project Archaeologist (Golder Associates)

Overview of Field Day: Conducted cultural resource monitoring at geotechnical bore B26 (in the airport parking lot between Bogota Circle and Moscow Drive). Soils from this test location primarily consisted of heavy clays and varied in color (2.5Y 6/4, 2.5Y 6/1, 10YR 5/1, 10YR 5/3, and Gley 14/N). No cultural resources were recovered.
February 8-13, 2019

WEEKLY SUMMARY FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Crew: David Wilcox, Senior Project Archaeologist (Golder Associates)

Summary of Field Week: Cultural resource monitoring occurred at geotechnical borings at B26 (in the airport parking lot between Bogota Circle and Moscow Drive), B30 (in the airport parking lot at the end of Nairobi Drive), and B31 (near the intersection of Paris Street and Mexico City Avenue). Additional backfill was screened from geotechnical borings B33, B34, B35, and B36 (near the intersection of Paris Street and Mexico City Avenue). No cultural resources were encountered.
March 11, 2019

DAILY FIELD NOTES FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Conditions: Clear skies, calm, 28 degrees F. in the morning. Afternoon high of 54 degrees F and sunny.

Field Crew: Chris Tinti, Archaeologist (Golder Associates), CBS Drilling, Justin Madden, Engineer (Clark, Weitz, Clarkson)

Overview of Field Day: Arrived at test pile site 2 (in the airport parking lot south of the Amsterdam Circle Exit overpass between Bogota Circle and Moscow Drive) at 6:50am and Spoke with the CBS drilling team. Was informed that no pile testing would occur today. Headed over to the tailings pile yard near the intersection of Paris Street and Mexico City Avenue to inspect backfill that we stored from past geotechnical and pile testing investigations for signs of cultural resources. I spoke with Justin Madden at 10:30am about storing future backfill and scheduling cultural resource monitoring for future geotechnical investigations. Throughout the course of the day, I screened backfill from test pile site 1 (pile testing holes R4, R1, R3 and Comp Test) and geotechnical bores (B23, B24, and B26). The soils from these test locations primarily consisted of heavy clays with small pieces of shale and varied in color (2.5Y 6/4, 2.5Y 6/1, 10YR 5/2, 10YR 5/3, and Gley 1 4/N). No cultural resources were recovered. I finished the field day 4:30pm.
March 12, 2019

DAILY FIELD NOTES FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Conditions: Overcast, southwest wind 5-10 mph, light rain, wet/muddy, high 58 degrees F.

Field Crew: Chris Tinti, Archaeologist (Golder Associates) and CBS Drilling

Overview of Field Day: Arrived at test pile site 2 (in the airport parking lot south of the Amsterdam Circle Exit overpass between Bogota Circle and Moscow Drive) at 6:55am and spoke with the CBS drilling team. CBS plans on drilling 4 of the 7 pile tests (R1, R2, R3, and R4) this morning. I sifted through the tailings from the drilling as they were excavated from the ground. My efforts were focused on the first six feet of native soils beneath imported fills (22-28 feet below ground surface), which at this location averages 22 feet thick. As each of the test pile excavations were completed they were backfilled with concrete. The test piles at this location were argued to a maximum depth of 40 feet below ground surface. No cultural resources were encountered while monitoring. The drilling was called off at 12:30pm due to heavy rains.
March 13, 2019

DAILY FIELD NOTES FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Conditions: Overcast, south-southeast wind 15-25 mph, light rain, wet/muddy, high 61 degrees F.

Field Crew: Chris Tinti, Archaeologist (Golder Associates)

Overview of Field Day: Arrived at test pile site 2 (in the airport parking lot south of the Amsterdam Circle Exit overpass between Bogota Circle and Moscow Drive) at 6:49am and spoke with the CBS drilling team. Due to strong winds and intense rainstorms forecasted by midday, no drilling will occur today. As a result, I headed over to the tailings pile yard near the intersection of Paris Street and Mexico City Avenue to inspect backfill and pick up where I left off on Monday (3/11/2019). Throughout the morning, I screened backfill from geotechnical bores B28 and B32. The soils from these test locations primarily consisted of heavy clays with small pieces of shale and degraded quartzite. These soils varied in color (2.5Y 6/4, 2.5Y 6/1, 10YR 5/2, 10YR 5/3, and Gley 1 4/N). At 10:23am a thunder and lightning storm with intense rain moved into the area. Due to the unsafe work conditions, I headed indoors. The storm passed around 2:30pm so I headed back to the yard and picked up where I left off this morning. I screened soils from geotechnical bores B29 and B27. No cultural resources were recovered. I finished the field day 4:30pm.
DAILY FIELD NOTES FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Conditions: Overcast, wet/muddy, high 41 degrees F., south-southwest wind 25-30 mph

Field Crew: Chris Tinti, Archaeologist (Golder Associates) and CBS drilling team

Overview of Field Day: Arrived at test pile site 2 (in the airport parking lot south of the Amsterdam Circle Exit overpass between Bogota Circle and Moscow Drive) at 6:57am and spoke with the CBS drilling team. Due to strong winds, no drilling will occur today. As a result, I headed over to the tailings pile yard near the intersection of Paris Street and Mexico City Avenue to inspect backfill and pick up where I left off on Wednesday (3/13/2019). Throughout the morning, I screened backfill from geotechnical bore B25 and the Lat. test pile from test pile site 1 to ensure no cultural resources were missed during past monitoring. The soils from these test locations primarily consisted of heavy clays. These soils varied in color (2.5Y 6/4, 2.5Y 6/1, 7.5 YR 4/4, 10YR 5/2, 10YR 5/3, and Gley 1 4/N). No cultural resources were recovered. At 10:50am I finished for the morning and attended construction scheduling and cultural resource monitoring meetings for the rest of the day.
DAILY FIELD NOTES FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Conditions: Partly cloudy, variable winds 10-20 mph, wet/muddy, high 47 degrees F.

Field Crew: Chris Tinti, Archaeologist (Golder Associates) and CBS Drilling

Overview of Field Day: Arrived at test pile site 2 (in the airport parking lot south of the Amsterdam Circle Exit overpass between Bogota Circle and Moscow Drive) at 6:55am and spoke with the CBS drilling team. CBS plans on drilling 3 of the 7 pile tests (Lat., TT, and Comp) this morning. I sifted through the tailings from the drilling as they were excavated from the ground. My efforts were focused on the first six feet of native soils beneath imported fills (22-28 feet below ground surface), which at this location averages 22 feet thick. As each of the test pile excavations were completed they were backfilled with concrete. The test piles at this located were argued to a maximum depth of 60 feet below ground surface. No cultural resources were encountered while monitoring. The drilling was completed at 9:50am. Afterward, I headed over to the tailings yard and sifted through backfill from the TT and R2 piles from test pile site 1. No cultural resources were recovered.
WEEKLY SUMMARY FOR CULTURAL RESOURCE MONITORING AT MCI INTERNATIONAL AIRPORT

Field Crew: Chris Tinti, Archaeologist (Golder Associates), CBS Drilling, Justin Madden, Engineer (Clark, Weitz, Clarkson)

Summary of Field Week: Cultural resource monitoring occurred at pile test site 2 (in the airport parking lot south of the Amsterdam Circle Exit overpass between Bogota Circle and Moscow Drive) on 3/12/2019 and 3/15/2019. The CBS drilling team drilled a total of 7 pile tests at this location. I sifted through the tailings from the drilling as they were excavated from the ground. My efforts were focused on the first six feet of native soils beneath imported fills (22-28 feet below ground surface), which at this location averages 22 feet thick. The test piles at this location were argued to a maximum depths of 40 and 60 feet below ground surface. As each of the test pile excavations were completed they were backfilled with concrete. No cultural resources were encountered while monitoring. I also screened dirt for pile tests from pile test site 1 (R1, R2, R3, R4, Comp., Lat. and TT) as well as geotechnical borings B23, B24, B25, B26, B27, B28, B29, and B32 to ensure no cultural resources were missed.