

**FEDERAL
CORRECTIONAL
INSTITUTION AND
FEDERAL PRISON CAMP
LEAVENWORTH, KANSAS**

**Cultural Resource
Monitoring Plan**

July 2021



U.S. Department of Justice
Federal Bureau of Prisons
320 First Street, NW
Washington, D.C.

CULTURAL RESOURCE MONITORING PLAN

Federal Correctional Institution and Federal Prison Camp at U.S. Penitentiary — Leavenworth, Kansas

Prepared for:



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EXECUTIVE SUMMARY

The U.S. Department of Justice, Federal Bureau of Prisons (BOP) is moving forward with development of a new Federal Correctional Institution (FCI) to house medium-security inmates and a Federal Prison Camp (FPC) to house minimum-security inmates within property comprising the U.S. Penitentiary (USP) in Leavenworth, Kansas. The USP Leavenworth property is located immediately north of the City of Leavenworth and south and west of the Fort Leavenworth U.S. Army Garrison. The area planned for FCI/FPC development comprises approximately 225 acres located east of the USP.

As part of FCI/FPC planning, the BOP conducted archaeological investigations across the entire development area in accordance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA). While no National Register-eligible archaeological sites were found, there is the potential for impacts to unanticipated resources resulting from development.

Representatives of the Osage Nation have been reviewing plans for the new FCI/FPC and given the number of archaeological sites in the project area, the significance of the area to the Osage Nation, and the possibility of encountering human remains during construction, the Osage Nation requested that cultural resource monitoring be undertaken during construction. To guide that effort, a Monitoring Plan has been prepared for use during ground-disturbing construction activities. The Plan describes the procedures, protocols, and responsibilities of archaeological monitors and others involved in FCI/FPC development.

A Secretary of the Interior-qualified Archaeologist/Monitor will be responsible for conducting monitoring consisting of visual observations as ground-disturbing activities are occurring and inspection of collected samples. The Archaeologist/Monitor will follow excavations and constructions as closely as conditions allow and require, making all reasonable efforts for safety and noninterference with construction. As an added level of monitoring, a training program will be employed to provide construction workers with an understanding of what to look for and what to do in the event cultural resources are discovered.

If potentially significant cultural materials or remains are found, the Archaeologist/Monitor shall be empowered to redirect construction activities until the discovery is evaluated. If archaeological deposits or features are encountered, the procedures identified in the Plan would be implemented.

All archaeological objects will be curated in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register, Vol. 48, No. 190) and Kansas State Historic Preservation Office (SHPO) guidelines for treatment of archaeological artifacts and features. Collection, processing, and disposition of any recovered artifacts will be addressed on a case-by-case basis among the BOP, Osage Nation, and Kansas SHPO.

Human remains discovered unexpectedly during construction must be treated with the utmost dignity and respect. In the event human remains are uncovered, construction activity in the area of the find will immediately be halted, and local law enforcement will be contacted. All human remains must be initially treated as a potential crime scene until a medical examiner or coroner has been contacted. The remains will stay in place so that a determination can be made by the district coroner as to whether or not the remains should be considered part of a modern crime scene pursuant to the Kansas Unmarked Burial Sites Preservation Act (K.S.A 75-2741, et seq. 1989).

The Archaeologist/Monitor shall also inform the appropriate officials representing the BOP, construction contractor, Kansas SHPO, Osage Nation Tribal Historic Preservation Office, and/or others as appropriate of the inadvertent discovery of human remains. In keeping with NHPA regulations, consultations with all parties who may have an interest in discovered human remains will also be undertaken. If the coroner determines that the remains are not of evidentiary or forensic interest, the Kansas SHPO, BOP, and the Osage Nation will consult on treatment and disposition of the remains according to the provisions of the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) and its implementing regulations (43 CFR 10).



Monitoring for cultural resources will occur each day that ground-disturbing activities are taking place within the development zone. The Archaeologist/Monitor will prepare a daily monitoring report documenting field conditions at the time of monitoring, which construction activities were monitored and their locations, descriptions and provenience of any archaeological discoveries or artifacts collected, recommendations and necessary follow-up, and other pertinent information. Daily monitoring reports will form the basis for weekly summary reports and eventually a final monitoring report.



1.0 INTRODUCTION

The U.S. Department of Justice, Federal Bureau of Prisons (BOP) is moving forward with development of a new Federal Correctional Institution (FCI) to house medium-security inmates and a Federal Prison Camp (FPC) to house minimum-security inmates within BOP property comprising the U.S. Penitentiary (USP) in Leavenworth, Kansas. Once development is completed, inmates currently housed at the existing USP and FPC will be transferred to the new facilities along with the complement of correctional officers and other staff.

1.1 Location

The USP Leavenworth property is located immediately north of the City of Leavenworth and south and west of the Fort Leavenworth U.S. Army Garrison. The BOP property is generally bordered by Corral Creek to the north, Grant Avenue to the east, Metropolitan Avenue to the south, and the Santa Fe Trail to the west. The area planned for development of the new FCI/FPC is known as the East Site, and an area of approximately 225 acres located east of the USP (Exhibit 1).



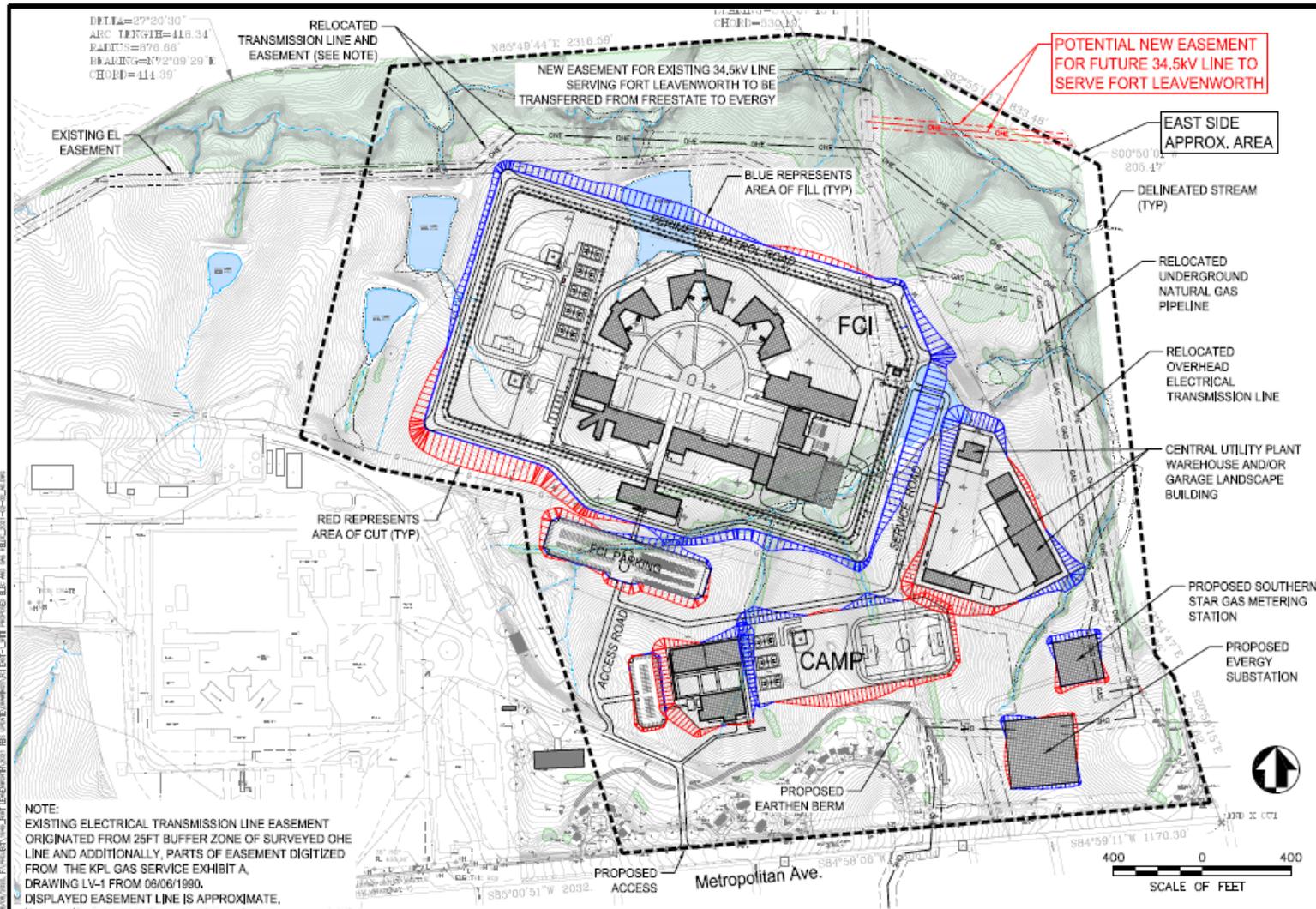
Exhibit 1: East Site - Location of FCI/FPC

1.2 Background

As part of FCI/FPC planning, the BOP conducted archaeological survey investigations across the entire East Site. While several archaeological sites were identified, none were found to be National Register-eligible during archaeological investigations and subsequent consultation conducted as part of the Section 106 process. However, there is still the potential for direct impacts to unanticipated resources from ground-disturbing activities associated with utility installations and removals and construction of the FCI/FPC. Such ground-disturbing activities include, but are not limited to, stripping and scarification of surface soils during site grading, construction of footings and foundations, trenching and excavations for extending and relocating water, sewer, power and natural gas services, and construction of roadways and parking areas as shown on Exhibit 2.

To comply with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA), the BOP prepared a Draft Environmental Impact Statement (EIS) in 2011, a Final EIS in 2015, a Draft Supplemental EIS in 2020 and a Final Supplemental EIS in 2021. During this time, the BOP consulted with the Kansas SHPO, Native American tribes including the Osage Nation, and many other agencies, organizations and stakeholders.

Following publication of the Final Supplemental EIS (February 26, 2021), the Osage Nation Tribal Historic Preservation Office submitted comments to the BOP regarding development of the FCI/FPC. Given the number of archaeological sites in the project area, the significance of the area to the Osage Nation, and the possibility of encountering human remains within the FCI/FPC development zone during construction, the Osage Nation requested preparation of a Cultural Resource Monitoring Plan ("Monitoring Plan" or "Plan") and implementation of the Plan during earth-disturbing construction activities to which the BOP has concurred.



Source: BOP, June 2021.

Note: All locations shown on the map are preliminary and subject to change.

Exhibit 2: Conceptual Layout of FCI/FPC



This Monitoring Plan is intended to assist the BOP in its ongoing efforts to comply with Section 106 of the NHPA. The Plan outlines the measures to be followed during ground-disturbing activities to address any unknown archaeological or cultural resources and resolve adverse effects of the project.

In accordance with the Osage Nation Tribal Historic Preservation Office's 2018 National Historic Preservation Act Section 106 Consultation Procedures and 2019 Archaeological Survey Standards, the Plan requires that a professional archaeologist who meets the Secretary of Interior's (SOI) Professional Qualification Standards be present during ground-disturbing activities associated with the project to conduct cultural resource monitoring and to respond to the discovery of any artifacts or human remains during construction. Appendix A contains resumes of those participating as SOI-qualified Archaeologists/Monitors.

The Monitoring Plan is intended for use during those phases of construction that involve ground-disturbing activities. The Plan describes the procedures, protocols, and responsibilities of the archaeological monitors and contractors involved with FCI/FPC construction. For purposes of this Plan, the project has been divided into three main phases of ground-disturbing activities: initial utility installation and removals; FCI/FPC site preparation including stripping and scarification of surface soils during site grading; and excavations, trenching, and grading for footings, building foundations, water, sewer, power, and natural gas services, and roadways and parking areas.

Archaeological monitoring of ground-disturbing activities requires careful and considered planning. WSP USA Solutions Inc. (WSP) prepared this Plan on behalf of BOP following review of all relevant communications and documents received from the Kansas SHPO, the Osage Nation, various regulatory agencies, and the public. WSP also understands the responsibilities and requirements of all parties involving measures to address unanticipated discoveries of cultural resources and artifacts and the inadvertent discoveries of human remains, funerary objects, sacred objects, and objects of cultural patrimony as regulated by NAGPRA.

1.3 Project Description

1.3.1 Federal Correctional Institution/Federal Prison Camp

The BOP is proposing to construct and operate a new FCI and FPC on the grounds of the USP Leavenworth located north of the City of Leavenworth, Kansas. The FCI would be designed to house approximately 1,152 medium-security male inmates and the FPC would be designed to house 256 minimum-security male inmates for a total population of 1,408 inmates along with approximately 338 staff necessary for operation. Once development is completed and the new FCI/FPC are activated, inmates will be transferred from the existing USP Leavenworth facilities to the new facilities along with the complement of correctional officers and other staff. At that time, the existing USP and FPC will cease housing inmates while the BOP determines a possible future use or mission for the vacated USP and FPC.

All structures comprising the FCI would be similar in scale and appearance to a light industrial park or secondary school with most buildings comprising one- and two-story structures. Building groupings would include administration, services, housing, religion, education, training, recreation, with an option for prison industries, and a central utility plant and together will have a gross building area of approximately 580,000 square feet. Buffer zones of undeveloped acreage would generally surround the facility, providing both visual and physical setbacks from the property boundaries (Exhibit 3). A single road for controlled access from Metropolitan Avenue is planned along with separate parking lots accommodating employees and visitors to be located near the public entrances to the FCI and FPC.



Various ground-disturbing activities will occur with the initial phase typically comprising site clearing and grading and excavations for installation of underground utilities. This would be followed by construction of footings and foundations for the various FCI/FPC structures.

The BOP is currently developing an overall project schedule starting with procuring a Design/Build contractor to develop the new FCI/FPC. Assuming an approximately 12-month procurement process begins in the fourth quarter of 2021, groundbreaking for the new FCI/FPC could begin in early 2023. At the time a construction schedule becomes available, it will be incorporated within the Monitoring Plan.



Source: BOP, 2021

Exhibit 3: Typical FCI (background) and FPC (foreground)

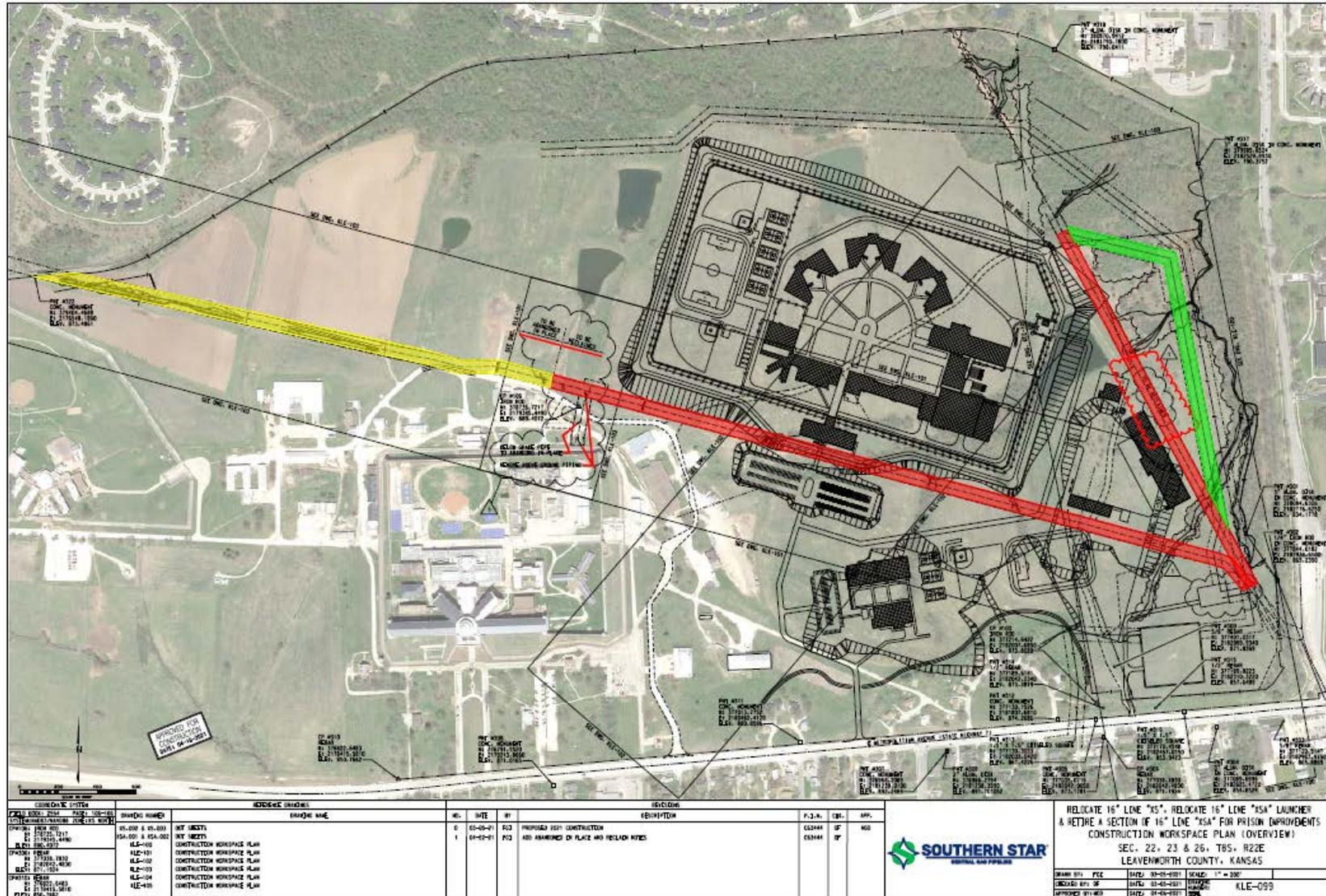
1.3.2 Utility System Installations and Removals

The FCI/FPC development zone is currently the location of various utility systems that will require removal and/or replacement to avoid conflicting with the planned construction. This includes two underground high-pressure natural gas pipelines operated by Southern Star Central Gas Pipeline, Co.; an overhead electric transmission line operated by Evergy; and an overhead distribution line operated by FreeState Electric Cooperative. In addition, Kansas Gas Service will be constructing various improvements to service the new facilities.

- **Southern Star Central Gas Pipeline, Co.**

Prior to FCI/FPC groundbreaking, Southern Star will install one new high-pressure natural gas pipeline (following a north-south alignment) to continue servicing customers who rely upon the pipeline. Construction of the new natural gas pipeline is expected to begin on or about August 1, 2021 when crews and equipment mobilize to the East Site. Once started, pipeline construction is expected to be continuous (six days per week depending upon conditions) and last approximately three months (although ground-disturbing activities will be of a shorter duration), ending on or about October 31, 2021. Available construction drawings (considered preliminary) are included as Appendix B.

Removal of the two high-pressure natural gas pipelines (along north-south and east-west alignments) will follow once the new pipeline has been placed into service (Exhibit 4). A schedule for pipeline construction has been developed by Southern Star and is also included as part of Appendix B. While Southern Star is currently the natural gas provider to the USP, it is not expected to continue such service following development of the new FCI/FPC.



Source: Southern Star, 2021.

Note: All locations shown on the map are preliminary and subject to change.

Exhibit 4: Southern Star Natural Gas Pipeline Installation (green), Removals (red), and to Remain (yellow)



- **Evergy/FreeState Electric Cooperative**

Relocation of overhead electrical lines, which include one transmission line (operated by Evergy) and one distribution line (operated by FreeState), is also required prior to FCI/FPC development. Coinciding with powerline relocations is construction of a long-planned electrical substation (by Evergy) in the southeastern portion of the USP property (Exhibit 5). Evergy will be responsible for construction of the new electric substation and overhead transmission and distribution lines (within a single new alignment) and will follow completion of natural gas pipeline construction. Crews and equipment are expected to mobilize to the East Site in early 2022 with all power system-related construction, testing, and activation to be completed by December 31, 2022 (although ground-disturbing activities will be of a shorter duration). A schedule for substation and powerline construction has been prepared by Evergy and is included as Appendix C.

- **Kansas Gas Service**

Natural gas service to the new FCI/FPC, staff housing, and USP is expected to be provided by Kansas Gas Service. In addition to other utility installations, a new gas metering station and distribution pipelines will be installed by Kansas Gas (Exhibit 6). A schedule for metering station and pipeline construction has been prepared by Kansas Gas and is included as Appendix G.

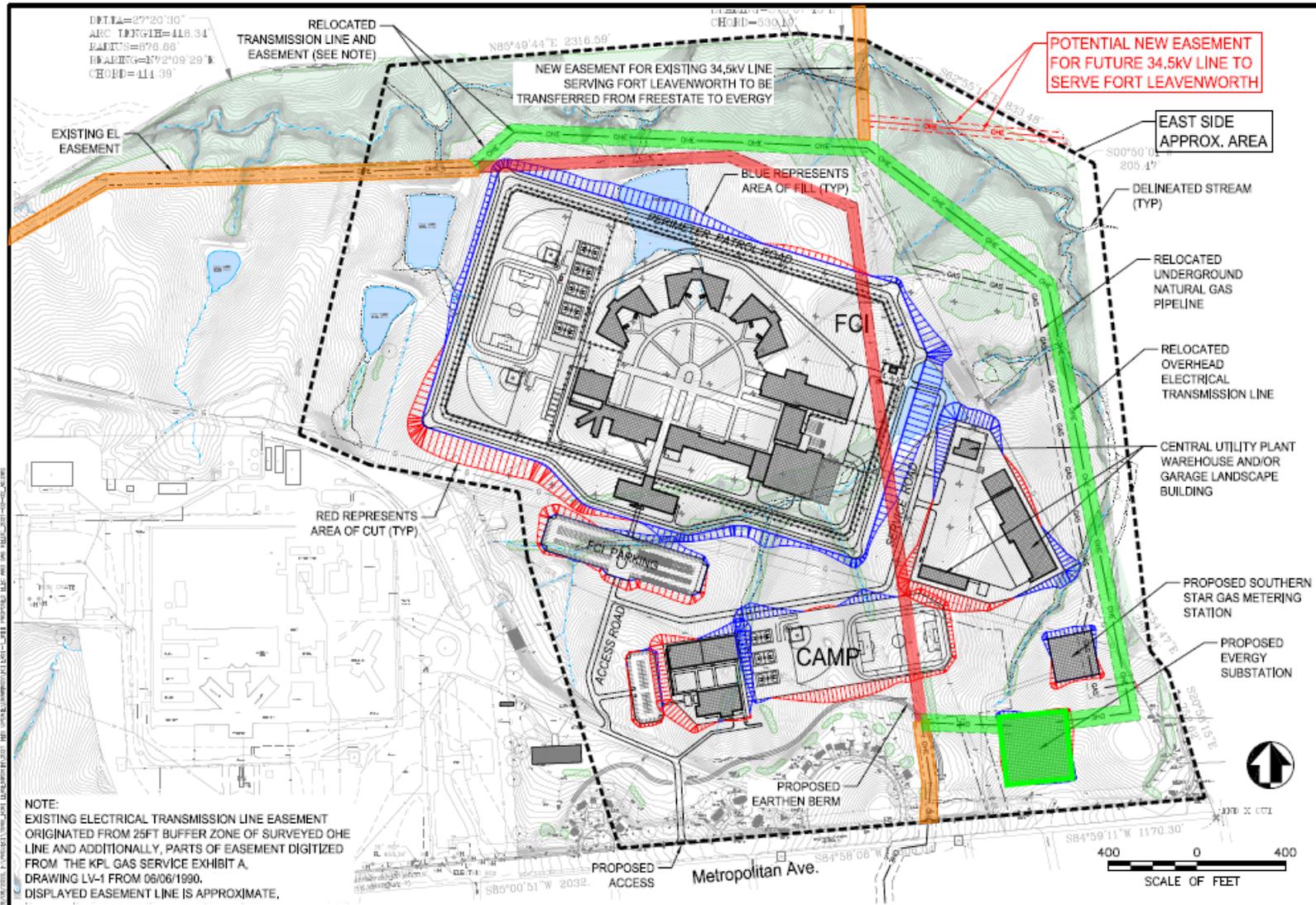
1.4 Cultural Resource Investigations

Cultural resource investigations in support of FCI/FPC development were undertaken pursuant to Section 106 of the NHPA of 1966 (as amended); the Archaeological and Historical Preservation Act of 1974; Executive Order 11593; and Title 36 of the Code of Federal Regulations, Parts 660-66 and 800 (as appropriate). Field investigations and related work met the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register 48:190:44716-44742) (U.S. Department of the Interior 1983) and the Kansas SHPO Guide for Archaeological Survey, Assessment and Reports (KSHS 2004) and the Osage Nation Tribal Historic Preservation Office's Archaeological Survey Standards (ONHPO, 2019).

Pursuant to 36 CFR 800.3, consultation with the Kansas SHPO was initiated by letter on November 29, 2010, informing the agency of the BOP's proposed undertaking in Leavenworth, Kansas. A meeting was held with SHPO on December 1, 2010 to discuss the cultural resource investigations to be undertaken in support of the proposed project. Also, in accordance with 36 CFR 800.3-4, the BOP initiated consultation regarding the undertaking with Native American Tribes in January 2011.

Archaeological and architectural surveys were performed in early 2011 with a Phase I Cultural Resources Survey report incorporated within a Draft EIS prepared in accordance with NEPA. The Draft EIS, including the Phase I report, was reviewed by SHPO in September 2011 which concurred with the findings along with the request that the details of the project impacts be delineated in the report abstract. Six previously recorded archaeological sites, 15 new archaeological sites, and 15 isolated finds were investigated during the survey including both precontact and historic-period artifacts. Many of the precontact sites were of unknown age, though several did contain diagnostic artifacts indicating occupations dating to circa AD 700 to 1500. Historic-period sites included finds related to the site's use by the U.S. Army during the nineteenth century and the early twentieth-century establishment of the USP. All but five of the sites were recommended as not eligible for listing in the NRHP. Precontact sites 14LV169, 14LV171, 14LV172, 14LV176, and 14LV181 were recommended for additional investigations to evaluate NRHP eligibility.

In July 2014, archaeological evaluations of Sites 14LV169, 14LV171, 14LV172, 14LV176, and 14LV181 were completed with all five sites recommended as not eligible for listing in the NRHP due to the physical degradation of the sites by erosion and historic-period agricultural activities. The SHPO reviewed the report of the site evaluations in October 2014 which concurred with the recommendations in a letter to the BOP dated November 6, 2014. The report of the site evaluations was incorporated within a Final EIS which was published on April 10, 2015, with the public comment period lasting until May 15, 2015.



Source: Evergy, 2021.

Note: All locations shown on the map are preliminary and subject to change.

Exhibit 5: Evergy Electric Power System Installations (green) and Removals (red)

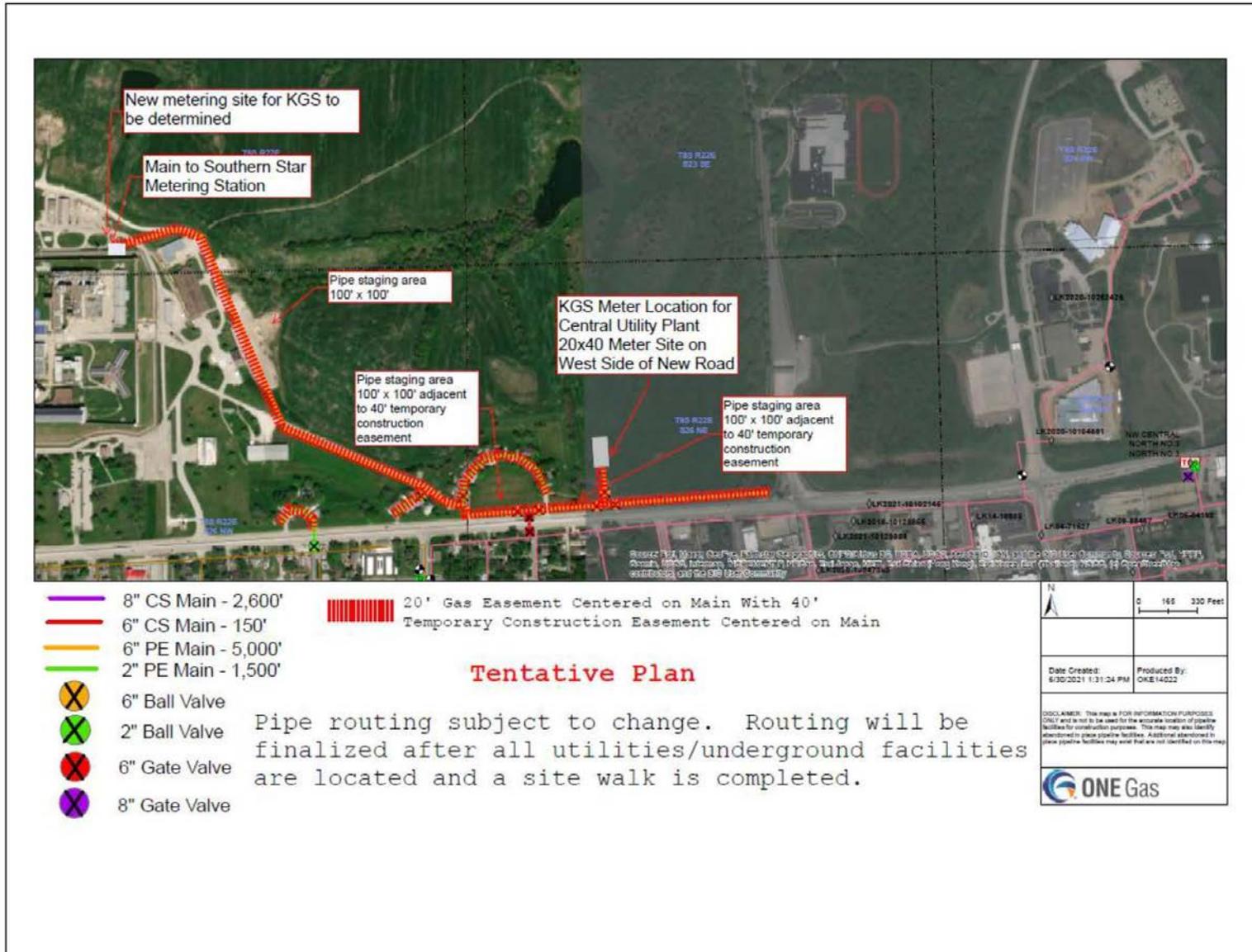


Exhibit 6: Kansas Gas Service System Installations



In the absence of appropriated funds for the project, no further action was undertaken by the BOP at that time. When funds were appropriated, the BOP announced that it was resuming the NEPA process (June 12, 2020) with preparation of a Draft Supplemental EIS (DSEIS). Preparation of the DSEIS was intended to provide all interested parties and the public with updated information about the proposed project, the purpose for proceeding with developing a new FCI/FPC in Leavenworth, and to provide elected and appointed officials, regulatory agencies, stakeholders and others an additional opportunity to voice their interests and provide comments concerning the proposed project.

A meeting was held with the SHPO on September 9, 2020, to discuss the current status of the proposed project including modifications made since 2015 to reduce potential adverse impacts to cultural resources. Following the meeting, the BOP provided the Kansas SHPO with additional and updated information in a letter dated September 22, 2020. The SHPO acknowledged receipt of the information and concurred with the current status of the archaeological and architectural surveys in a letter dated October 9, 2020. The DSEIS was made available for public review on November 20, 2020 and a Final SEIS was made available for review on February 26, 2021 followed by adoption of a Record of Decision by the Director of the BOP on May 10, 2021.

Reviewing entities have concurred that following completion of the archaeological survey and archaeological evaluation of previous and newly recorded sites, none of the previously recorded sites, newly recorded sites, and isolated find spots are eligible for listing in the NRHP. No further archaeological studies were recommended or conducted.

1.5 Anticipated Resources

The 2011 survey and 2014 site evaluations covered both the current project area to be monitored (the East Site) plus an additional area no longer under consideration for development located west of the present USP facility and known then as the West Site. Within the East Site specifically, 10 archaeological sites and eight isolated finds were identified during the 2011 survey including a twentieth-century dump and artifact scatters related to the USP facility and farming activity as well as precontact sites of unknown age. All but two of the sites and finds were recommended not eligible for listing in the NRHP. Two sites, 14LV176 and 14LV181, were subject to archaeological evaluation in 2014, and each was recommended as not eligible for listing on the NRHP given the lack of datable artifacts and the disturbed nature of the contexts from which finds were recovered.

The precontact sites and finds recorded in the East Site suggests the presence of multiple small temporary campsites focused on the production of stone tools such as arrow points, drills, and scrapers from chert and jasper cobbles likely sourced from the nearby creeks. No archaeological features were found that suggest the any kind of prolonged occupation or activity areas and cultigens were discovered or bone tools or bone from processing plants or animals for food were recovered. The sites lacked the volume and diversity of finds and deposits to meaningfully address any significant research questions.

Based on the findings of the previous archaeological studies, the likelihood of identifying intact significant cultural remains in the project area is low, but still present. However, the presence of known archaeological sites does suggest that the ground-disturbing activities will likely uncover archaeological artifacts from disturbed contexts and non-NRHP eligible sites. The types of materials recovered from the non-NRHP eligible sites across the East Site suggest that monitors are likely to encounter twentieth-century refuse, including historic ceramics, glass, and nails, and precontact artifacts, such as chert and jasper debitage, and the flakes and shattered residue from stone tool production.

2.0 MONITORING APPROACH

The Archaeologist/Monitor will be responsible for monitoring ground-disturbing activities associated with project construction that have potential to impact culture-bearing strata. Culture-bearing strata generally extends to no more than two to three 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 original landform when the USP, warehouses, and staff housing were constructed since the early 1900s. Monitoring by the Archaeologist/Monitor will consist of the following:

- Direct visual observation as ground-disturbing activities are occurring
- Direct visual inspection of collected samples
- Taking of written notes and use of a trowel or shovel to examine dirt/soils

As an added level of monitoring, the Archaeologist/Monitor will employ a training program to provide construction workers involved in ground-disturbing activities with an understanding of what to look for and what to do in the event cultural resources are discovered

Monitoring will involve the close observation of excavations and similar activities within the development area. Upon arrival at the project site each day, the Monitor will inform the Site Supervisor, Foreperson, or similar on-site authority of his/her presence and responsibility for conducting monitoring. Prior to initiating monitoring, construction personnel will also be reminded of the Monitor's role and responsibilities. The Archaeologist/Monitor will follow excavations and constructions as closely as conditions allow and require, making all reasonable efforts for safety and noninterference with construction. Depending on the extent and location of construction activities underway on-site at a given time, multiple Monitors may need to be deployed simultaneously. Monitoring activities will be documented via digital photography and spatial data collected using cloud-based ESRI ArcGIS Collector software on a hand-held GPS-enabled device.

2.1 Soil Borings/Subsurface Exploration

Prior to construction, soil borings will be undertaken within the FCI/FPC development zone to determine subsurface conditions and aid in the design of building footings and foundations. Given the small size of the borings, monitoring is not planned.

2.2 Demolition Activities

There are no standing structures within the FCI/FPC development area; therefore, no demolition activities are planned. However, the development area is bisected by a north-south overhead electric transmission line (operated by Evergy) and an overhead electric distribution line (operated by FreeState Electric Cooperative) with both slated for removal. Also, two 16-inch high pressure natural gas pipelines (operated by Southern Star Central Gas Pipeline, Co.) require removal from their current north-south and east-west alignments. These utility-related activities, involving contractors working for Evergy and Southern Star, will involve earth disturbance and therefore, will be monitored by the Archaeologist/Monitor.

2.3 Drilling/Auguring for Deep Pile Foundations

It is anticipated that a large number of pile foundations will be needed to construct the FCI/FPC with many penetrating native soil. It is anticipated that an auger will be used to install pile foundations (to depths to be determined) and that soil material, possibly mixed with groundwater, would come up to the surface. Upon completion, the auger is removed and the excavation is filled with concrete. Auguring for pile foundations will be monitored by the Archaeologist/Monitor.

2.4 Excavation, Grading, and Trenching

The Archaeologist/Monitor will closely observe areas where new excavation, grading, and trenching work is proposed. In these locations the Archaeologist/Monitor will 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 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. No ground-disturbing activities should occur without the presence of a monitor.

2.5 Borrow Pits

Depending upon the final FCI/FPC design, there may be a need to transport fill material to the construction site to establish level building surfaces. If such fill material is excavated from within the USP property, the area(s) to be excavated will undergo an archaeological survey in advance and similar monitoring. If borrow fill is needed from outside of the BOP property, the BOP will require that such fill material be acquired from a commercial source permitted by at least one State.

2.6 Vertical Construction, Finishing, and Interior Work

Vertical building construction, finishing, and interior work associated with FCI/FPC development is not expected to include any soil disturbance and therefore would not need to be monitored by the Archaeologist/Monitor.

2.7 Construction Schedule Changes

Construction schedules will be maintained by the contractors. Any revisions to the start/end dates of various activities will be conveyed to the Archaeologist/Monitor so that he/she can adjust the schedule to ensure that all construction zones are monitored. This includes changes resulting from weather conditions and other unforeseen events.

The Archaeologist/Monitor shall be appraised daily by the contractor's project manager of the day's planned construction activities. Any changes in the construction schedules or areas not previously anticipated to be disturbed will be conveyed to the Archaeologist/Monitor. Efforts will be made to communicate any construction changes to ensure availability of an Archaeologist/Monitor.

2.8 Treatment of Finds

All category two artifacts recovered (described in Section 2.8.1) will be cleaned and stored at the WSP office in Kansas City, Missouri. Artifacts requiring curation will be determined in consultation with the BOP, Osage Nation, and Kansas SHPO.

2.8.1 Treatment of Artifacts

Artifacts and other finds of archaeological interest are expected to be representative of two categories; those that can be inspected and documented in the field and those that need to be collected for examination in an archaeological lab. The first category will only require the removal of soil or other debris by hand tools or hand sprayers on-site and can then be documented and discarded as appropriate. Finds that can be documented and discarded include clearly modern refuse and historic-period items including industrially produced ceramics, glass, nails, and construction materials. Additionally, all non-diagnostic precontact lithic debitage, the flakes of shatter debris from stone production, will also be collected.

Precontact artifacts that are potentially diagnostic to specific time periods such as formal stone tools and ceramics will be collected. Those artifacts or materials that need to be examined more closely will be transported by WSP to its archaeological lab for further evaluation. Historic-period finds that appear to pre-date the USP facility or originate from intact historic-period features may be collected for further assessment. In all cases, an examination of the depositional context of any finds will be made to assess whether or not they originate from possible intact cultural deposits or the disturbed fills and plowzone layers known to be present at most of the recorded sites. Additionally, the position of any documented or collected artifact will be recorded so that they can be linked to previously recorded sites, as appropriate.



All collected archaeological objects shall be cared for and curated in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register, Vol. 48, No. 190) and Kansas SHPO guidelines for treatment of archaeological artifacts and features. Curation of artifacts will be conducted in accordance with 36 CFR Part 79, Curation of Federally Owned and Administered Archaeological Collections. Ownership and disposition of any recovered artifacts will be addressed on a case by case basis among the BOP, Osage Nation, and Kansas SHPO.

2.8.2 Treatment of Human Remains and Funerary Objects

Human remains discovered unexpectedly during construction must be treated with the utmost dignity and respect. In the event human remains are uncovered, construction activity in the area of the discovery will immediately be halted while the following procedures are implemented. If the Archaeologist/Monitor determines any bone found is potentially human, local law enforcement will be contacted by the designated BOP representative in compliance with the Kansas Unmarked Burial Sites Preservation Act (K.S.A 75-2741, et seq. 1989).

If the coroner determines that the remains are not of evidentiary or forensic interest, the procedures below will be implemented. The procedures apply to Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony as defined in the statute of the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), (25 U.S.C. 3001-3013) that are discovered inadvertently on Federal or Tribal lands. All procedures are in keeping with the regulations of NAGPRA regarding Inadvertent Discoveries (43 CFR 10.4).

- **Confidentiality**

The BOP and all construction contractors working within the FCI/FPC development area will safeguard information about properties of religious and cultural significance to the Osage Nation. This includes location information, or non-public information provided by the Osage Nation to assist in the identification of such properties, to the extent allowed by the provisions of the Freedom of Information Act, Section 304 of the NHPA (54 USC § 307103), and other applicable laws.

- **Points of Contact for Human Remains and Funerary Objects**

The BOP and the Osage Nation have each designated a primary and secondary point of contact in the event of inadvertent discoveries during ground-disturbing activities. All initial and formal correspondence is to be sent to the primary contact. If the individual designated as the primary point of contact is not available, communications should be directed to the secondary contact.

- Osage Nation Primary Point of Contact (human remains and/or funerary objects)
Dr. Andrea A. Hunter, THPO/Director
Osage Nation Tribal Historic Preservation Office
627 Grandview Avenue, Pawhuska, Oklahoma 74056
Email: ahunter@osagenation-nsn.gov
Tel: 918-287-5328
- Osage Nation Secondary Point of Contact (human remains and/or funerary objects)
Sarah O'Donnell, NAGPRA Coordinator, M.S., RPA
Osage Nation Tribal Historic Preservation Office
627 Grandview Avenue, Pawhuska, Oklahoma 74056
Email: sodonnell@osagenation-nsn.gov
Tel: 918-287-5522



- BOP Primary Point of Contact
Kimberly S. Hudson, Site Selection Specialist
Construction and Environmental Review Branch
Federal Bureau of Prisons
320 First Street, NW, Room 901-5, Washington, D.C. 20534
Email: kshudson@bop.gov
Tel: 202-616-2574
- BOP Secondary Point of Contact
Cheryl Ciccone, Acting Chief
Construction and Environmental Review Branch
Federal Bureau of Prisons
320 First Street, NW, Room 901-5, Washington, D.C. 20534
Email: cciccone@bop.gov
Tel: 202-616-2772

The procedures described below should in no way be construed as a substitute for mandated consultation with the Osage Nation, nor is it a justification to excavate any human remains outside the specific and discrete standards of archaeological activity. If the planned activity is also subject to review under Section 106 of the National Historic Preservation Act (16 U.S.C. 470) (NHPA), consultation and any agreement for compliance should be in accordance with the requirements of the NHPA.

- Upon a possible inadvertent discovery of human remains or funerary objects the BOP and all construction contractors working within the FCI/FPC development area shall ensure that work shall cease in the immediate vicinity of the discovery and the remains shall be protected in situ from any potential disturbance (including vandalism or theft). This includes the establishment of a 100-foot buffer area around the burial to ensure avoidance. The remains shall then be covered with canvas and not exposed to public view.
- Any inadvertent discovery that includes human skeletal material will be treated as a potential crime scene. This means that the site must initially be evaluated by law enforcement. If the remains are determined to be recent human remains and/or associated with a crime, the appropriate law enforcement agency will assume complete control of the effort.
- No photographs will be taken of human remains. If necessary, only hand-drawn illustrations or plan notes may be used in documentation and other communication. Should unforeseen, unusual circumstances arise, law enforcement may request that photographs be taken in the case of a crime scene. These photographs will, however, be taken only after consultation with the Osage Nation Tribal Historic Preservation Office (THPO). After conclusion of the criminal case, all photographs of human remains will be turned over to the Osage Nation THPO for destruction.
- When the Archaeologist/Monitor determines that the inadvertent discovery of human remains or funerary objects has occurred, telephone notification must be provided to the Osage Nation and BOP points of contract within 24 hours. Telephone notification will be followed immediately by written notification that contains all information regarding the current status of the discovery.
- The Osage Nation will be given the opportunity to visit the location and be provided an on-site orientation of the location where the human remains were discovered prior to any further disturbance or excavation in the location.
- It is the preference of the Osage Nation that, wherever possible, burials are left in place and any further project activities avoid the burial with an appropriate buffer area, to be determined by the BOP and Osage Nation THPO on a case-by-case basis.
- The Osage Nation and the BOP will consult to develop a NAGPRA Plan of Action should excavation be deemed necessary by both parties. Under the NAGPRA regulations (43 C.F.R.



10.3-10.5), a Federal agency must prepare, approve, and sign a Plan of Action if the agency intends to excavate or remove, or leave in place NAGPRA cultural items.

At minimum, this Plan of Action will address the requirements of 43 CFR 10.5(e):

- The kinds of objects to be considered as cultural items;
- Specific information used to determine custody;
- Planned treatment, care, and handling of human remains, funerary objects, sacred objects, or objects of cultural patrimony recovered;
- Planned archaeological recording of the human remains, funerary objects, sacred objects, or objects of cultural patrimony recovered;
- The kinds of analysis planned for each kind of object;
- Steps to be followed to contact Indian tribe officials at the time of intentional excavation or inadvertent discovery of specific human remains, funerary objects, sacred objects, or objects of cultural patrimony;
- The kind of traditional treatment, if any, to be afforded the human remains, funerary objects, sacred objects, or objects of cultural patrimony by members of the Indian tribe or Native Hawaiian organization;
- Nature of reports to be prepared; and
- Planned disposition of human remains, funerary objects, sacred objects, or objects of cultural patrimony.

Neither BOP staff nor any of its contracted employees will conduct excavation, handling, or removal of any human remains without the Osage Nation's consent, per the guidelines established in the NAGPRA Plan of Action. The construction contractor may resume construction activities in the area of the discovery upon receipt of written authorization from the BOP and concurrence by the Osage Nation THPO.

2.8.3 Points of Contact for Inadvertent Archaeological Discoveries

The BOP and the Osage Nation have also designated primary and secondary points of contact in the event of inadvertent archaeological discoveries during ground-disturbing activities. All initial and formal correspondence involving inadvertent archaeological discoveries is to be sent to the primary contact. If the individual designated as the primary point of contact is not available, communications should be directed to the secondary contact.

- Osage Nation Primary Point of Contact (for significant archaeological discoveries)
Dr. Andrea A. Hunter, THPO/Director
Osage Nation Tribal Historic Preservation Office
627 Grandview Avenue, Pawhuska, Oklahoma 74056
Email: ahunter@osagenation-nsn.gov
Tel: 918-287-5328
- Osage Nation Secondary Point of Contact (to receive weekly monitoring reports)
Ms. Johnnie Jacobs, Historic Preservation Specialist
Osage Nation Tribal Historic Preservation Office
627 Grandview Avenue, Pawhuska, Oklahoma 74056
Email: johnnie.jacobs.ctr@osagenation-nsn.gov
Tel: 405-712-3623



- BOP Primary Point of Contact
Kimberly S. Hudson, Site Selection Specialist
Construction and Environmental Review Branch
Federal Bureau of Prisons
320 First Street, NW, Room 901-5, Washington, D.C. 20534
Email: kshudson@bop.gov
Tel: 202-616-2574
- BOP Secondary Point of Contact
Cheryl Ciccone, Acting Chief
Construction and Environmental Review Branch
Federal Bureau of Prisons
320 First Street, NW, Room 901-5, Washington, D.C. 20534
Email: cciccone@bop.gov
Tel: 202-616-2772

3.0 MONITORING DOCUMENTATION

Monitoring for cultural resources will occur each day that ground-disturbing activities are taking place within the development zone, except in areas that have already been determined to be clear of artifacts. At this time schedules for construction of the new natural gas pipeline (by Southern Star Central Gas Pipeline, Co.), new gas metering station and distribution pipelines (by Kansas Gas), and electric substation and overhead transmission/distribution lines (by Evergy/FreeState) have been developed although dates for construction activities involving the new FCI/FPC (by BOP) are yet to be determined. Therefore, cultural resource monitoring using this Plan during these later stages of development will be addressed separately as schedules become known.

3.1 Daily and Weekly Monitoring Reports

The Archaeologist/Monitor will maintain a daily log documenting field conditions at the time of monitoring, which construction activities were monitored and their locations, descriptions and provenience of any archaeological discoveries or artifacts collected, recommendations and necessary follow-up, and other pertinent information. Monitoring at a given location will continue until excavation has reached the maximum depth at which cultural deposits can be expected.

At the end of each day of monitoring, the Archaeologist/Monitor will prepare a daily monitoring report summarizing the day's activities including the areas monitored and any artifacts or other materials discovered. If potentially significant artifacts or human remains are discovered during construction, the Archaeologist/Monitor shall immediately notify the appropriate officials representing the BOP, local law enforcement, Kansas SHPO, Osage Nation Tribal Historic Preservation Officer, and/or others as appropriate (see Section 6.0, *Contacts*).

Daily monitoring activities will be reported using digital photography and spatial data collected using cloud-based ESRI ArcGIS Collector software on a hand-held GPS-enabled device. Daily monitoring activities and reports will form the basis for weekly summary reports and eventually the final monitoring report. Daily and weekly monitoring reports will include photographs as appropriate to aid in documenting the monitoring effort and any findings. Weekly summary reports will be produced and submitted to the BOP and Osage Nation officials for review and comment in PDF format. Templates for use in preparing daily monitoring and weekly summary reports are included as Appendix D.

Daily and weekly monitoring reports shall remain confidential and shared only with designated representatives of the BOP, Osage Nation, and Kansas SHPO. This Monitoring Plan is also considered confidential and to be shared only with designated representatives of the BOP, Osage Nation, Kansas SHPO, and any officials or construction contractors working on the project at the site.



3.2 Notifications

If potentially significant cultural materials or remains are found, the Archaeologist/Monitor would be empowered to redirect construction activities until the discovery is evaluated. If archaeological deposits or features are encountered, the procedures identified in this plan would be implemented. If any findings require immediate attention, the Archaeologist/Monitor will immediately notify the construction contractor and an email marked "Urgent" will be sent to the designated BOP, Osage Nation, and Kansas SHPO representatives (see Section 6.0, *Contacts*).

3.3 Final Monitoring Report

At the conclusion of monitoring, a final monitoring report will be prepared describing the results of the entire monitoring program. The report will include all weekly summary reports with descriptions of the monitoring activities and a summary of the findings and follow-up actions. The report will be prepared in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and address the following:

- Overview of project area landscape (physical and archaeological)
- Description of monitoring plan
- Monitoring methodology and dates and duration of monitoring
- Overview of ground, weather and overall monitoring conditions, particularly with respect to any problems encountered
- Description of archaeological artifacts and features uncovered, including provenience information, if available
- Subsequent decisions made with regard to any archaeological sites or features discovered, including cross-referencing (where available) with any official number designation to a site subsequently excavated
- Summary and tabulation of all registered finds/archaeological objects
- Conclusion and recommendations
- Supporting maps, plans, photographs and illustrations
- Location and content of the monitoring archive

Upon completion, a final monitoring report will be submitted electronically in PDF format and/or hardcopy to the designated BOP, Osage Nation, and Kansas SHPO representatives.

4.0 CULTURAL RESOURCE AWARENESS TRAINING FOR CONSTRUCTION PERSONNEL

This Monitoring Plan includes a training program to provide construction personnel involved in ground-disturbing activities the basic knowledge and guidance on what to look for and what to do in the event cultural resources are discovered. Included as Appendix E, the training program:

- Describes the FCI/FPC project
- Summarizes pertinent laws and regulations protecting archaeological and historical resources and reinforcing the BOP's commitment to cultural resource protection
- Identifies locations of ground-disturbing activities and where and when monitoring will take place
- Educates the construction workforce about precontact and historic cultural resources and features and how to recognize suspected cultural material



- Describes the role and responsibilities of Archaeologists/Monitors
- Outlines procedures for notifying Archaeologists/Monitors and supervisory personnel in the event suspicious or sensitive material is encountered
- Includes names and contact information for BOP and WSP personnel involved in the project

The training program includes examples of cultural resources (i.e., stone tools, points, and pottery sherds) previously uncovered at the East Site. If construction personnel uncover possible artifacts or archaeological materials, the on-site Archaeologist/Monitor will review the material and make a determination about its historical significance. Construction personnel are not required to determine if a suspected artifact is historically significant. Construction personnel are also prohibited from photographing any cultural resources observed or collected during the project. For any construction personnel who have questions after the training, the program includes contact information for the Archaeologist/Monitor and others.

Prior to initiating ground-disturbing activities, training will be provided to construction personnel (supervisors, forepersons, and equipment operators) involved in grading, excavations for electric substation and overhead utility installations, trenching for underground utility installations and removals, and similar earth-moving activities to ensure their understanding of the goals and objectives of the BOP and its monitoring program. The SOI-qualified Archaeologist/Monitor will present the training program using PowerPoint and be the point of contact during the monitoring program. Paper copies of the Monitoring Plan, including the training program, will also be provided for construction contractor reference.

To increase awareness of cultural resources which may be uncovered during construction, training will also be provided to BOP personnel who may play an oversight role to identify possible artifacts and similar materials and to notify the Archaeologist/Monitor if such materials are discovered. The intent of the training program is to assist non-archaeological staff in identifying potential cultural resources and to provide an understanding of their importance.

5.0 WORKER HEALTH AND SAFETY

The health and safety of all field personnel is of paramount importance and therefore, a Health and Safety Plan has been developed for use throughout the duration of monitoring. Each Archaeologist/Monitor is required to review and comply with the health and safety requirements including a daily check in phone call to ensure contact with office-based staff and his/her safe exit from the field each day. The Health and Safety Plan identifies local emergency and other important telephone numbers and will be provided to each Archaeologist/Monitor prior to the start of monitoring (Appendix F).

6.0 CONTACTS

Those involved in cultural resource monitoring along with representatives of the BOP, Osage Nation, and Kansas SHPO are listed below together with their contact information. In addition, key individuals to be notified in the event of a significant discovery are also highlighted.

Name	Title/Affiliation	Telephone	Email
Hope Luhman, Ph.D., RPA	Senior Vice President/ Archaeologist, WSP	(o) 816-398-8656 (m) 518-334-6035	hope.luhman@wsp.com
Robert J. Nardi, PP	Project Manager, WSP	(o) 973-407-1681 (m) 973-809-7495	robert.nardi@wsp.com
Andrew Wilkins, Ph.D., RPA	Senior Archaeologist/Monitor, WSP	(o) 816-599-3809 (m) 585-747-9384	andrew.wilkins@wsp.com
Kathryn Wilkins, RPA	Archaeologist/Monitor, WSP	(o) 816-599-3819	kathryn.wilkins@wsp.com



Name	Title/Affiliation	Telephone	Email
Marlis Muschal, RPA	Archaeologist/Monitor, WSP	(o) 816-702-4268	marlis.muschal@wsp.com
Kimberly Hudson	Site Selection Specialist, Construction and Environmental Review Branch, BOP	(o) 816-702-4268 (m) 202-616-2574	kshudson@bop.gov
Cheryl Ciccone	Acting Chief, Construction and Environmental Review Branch, BOP	(o) 202-616-2772 (m) 202-532-5132	cciccone@bop.gov
Judah Organic	Projects Administrator, Construction and Environmental Review Branch, BOP	(o) 202-514-9566 (m) 202-598-0166	jorganic@bop.gov
Karl B. Chamberlain, Jr.	Facilities Manager, USP Leavenworth, BOP	(o) 913-578-1446	k1chamberlain@bop.gov
Dr. Andrea Hunter	Director/THPO, Osage Nation Tribal Historic Preservation Office	(o) 918-287-5328 (m) 918-287-8338	ahunter@osagenation-nsn.gov
Johnnie Jacobs	Historic Preservation Specialist, Osage Nation Tribal Historic Preservation Office	(m) 405-712-3623 (main) 918-287-5328	johnnie.jacobs.ctr@osagenation- nsn.gov
Jess Hendrix	Deputy THPO, Osage Nation Tribal Historic Preservation Office	(o) 918-287-5427 (m) 434-429-5055	jess.hendrix@osagenation-nsn.gov
Sarah O'Donnell, M.S., RPA	NAGPRA Coordinator, Osage Nation Tribal Historic Preservation Office	(o) 918-287-5522 (main) 918-287-5328	sodonnell@osagenation-nsn.gov
Patrick Zollner	Deputy State Historic Preservation Officer, Kansas Historical Society	(o) 785-272-8681	patrick.zollner@ks.gov
Tim Weston	Kansas Historical Society, Cultural Resources Division	(o) 785-272-8681 ext. 214	tim.weston@ks.gov
	Leavenworth Police Department	913-682-4411	

**Appendix A:
Resumes of Cultural Resource Monitors**



ANDREW WILKINS, Ph.D., RPA
Archaeologist II, Heritage Resource Management



CAREER SUMMARY

Dr. Wilkins has conducted, directed, and managed archaeological projects in all phases of survey, evaluation, and data recovery with both prehistoric and historic resources. Dr. Wilkins has specialized expertise in historical archaeology, including primary historical research, soil chemistry, statistics, and spatial analysis. For WSP Dr. Wilkins has served as field director, principal investigator, and project manager for a range of private and public sector clients in transportation, energy, defense, buildings and facilities, and environmental markets. Dr. Wilkins has brought his technical expertise in archaeological research, writing, and presentations to provide clients with high-quality deliverable products as part of compliance with the National Historic Preservation Act (NHPA), National Environmental Protection Act (NEPA), and various state planning and permitting processes. Dr. Wilkins has wide-ranging experience across the US, including projects in Alabama, California, Connecticut, Delaware, Hawaii, Illinois, Indiana, Iowa, Kansas, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, New Hampshire, New Jersey, New Mexico, New York, Nevada, North Carolina, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin, and Wyoming.

Years with the firm

6

Years total

15

Professional qualifications

Register of Professional Archaeologists (No. 29929559)

Areas of practice

Archaeology, Historic Preservation

Languages

English

EDUCATION

Ph.D., Anthropology, University of Tennessee, Knoxville	2017
M.A., Historical Archaeology, University of Massachusetts, Boston	2009
B.A., Historic Preservation, University of Mary Washington, Fredericksburg, Virginia	2006

ADDITIONAL TRAINING

40-hour Health and Safety Training for Hazardous Waste Operations and Emergency Responses (OSHA HAZWOPER: 29 CFR 1910.120)	2017, refreshers 2018, 2019, 2020
First Aid/CPR & AED certified, Emergency Care & Safety Institute	2019

PROFESSIONAL MEMBERSHIPS

Society for Historical Archaeology	2007-present
Missouri Archaeological Society	2015-present
Association of Iowa Archaeologists	2016-present

PROFESSIONAL EXPERIENCE

Federal: Department of Justice

- Proposed Federal Correctional Institution and Federal Prison Camp, Leavenworth County, Kansas, US (2014 - Present): Project Archaeologist. Analysis of and contributing author of report for Phase III evaluations of five prehistoric sites. Client: Federal Bureau of Prisons.



ANDREW WILKINS, Ph.D., RPA

Archaeologist II, Heritage Resource Management

Energy

- Cultural Resource Survey for Confidential Project, multiple counties, Iowa and Illinois, US (2020-present). Project Manager/Principal Investigator. Managed scope, budget, design, and execution of Phase I archaeological survey of 426-mile linear survey corridor that included development of a predictive model, ground-truthing reconnaissance, and Phase I pedestrian survey and shovel testing. Client: Confidential.
- Marengo Solar Facility Project Phase I Cultural Resource Survey, McHenry County Illinois, US (2020): Project Manager. Managed survey research, fieldwork, and reporting for pedestrian survey of 15-acre proposed solar energy facility as well as windshield survey of adjacent architectural resources. Client: Ecology and Environment for NextEra Energy Resources.
- Day County II Wind Energy Project, Day and Brown Counties, South Dakota, US (2017-2018): Principal Investigator. Directed and contributed to Level 1 records search report, directed cultural resource consultation for initial siting of proposed wind farm. Led collaborative Level III and TCP survey with tribes identified 17 prehistoric stone circle and alignment sites. Client: WEST for NextEra Energy Resources.

Federal: Military

- United States Army Corps of Engineers Mobile District. National Register Evaluation of Archaeological Sites 44NN0085, 44NN0094, and 44NN0118, Joint Base Langley Eustis, City of Newport News, Virginia, US (2016-2017): Principal investigator. Directed Phase II excavations of three historic sites, primary author of technical report.
- National Register Evaluation of Archaeological Site 44NN0128, Joint Base Langley Eustis, City of Newport News, Virginia, US (2015): Principal Investigator. Directed Phase II excavations of historic site and primary author of technical report. Client: Center for Environmental Management of Military Lands.

Federal: National Park Service

- National Park Service. Includes projects listed below.
 - Great Smoky Mountains National Park Gatlinburg Spur, Greenway, and Metcalf Bottoms Connector Road Project, Sevier County, Tennessee US (2020-present): Principal Investigator.
 - Shenandoah Watershed Restoration Project, Augusta County, Virginia US (2019-present): Archaeologist. Reviewed, synthesized, and wrote affected environment and environmental impacts sections of project study.
 - Archeological Investigations at Booker T Washington National Monument, Franklin County, Virginia, US (2018-2019): Principal Investigator. Led proposal effort and directed survey and testing of approximately 9-acres near in area of suspected mid-nineteenth-century slave quarters and tobacco barn.
 - Badlands National Park Cedar Pass Developed Area Environmental Assessment, Jackson County, South Dakota, US (2018): Archaeologist. Reviewed, synthesized, and wrote affected environment and environmental impacts sections of EA for cultural resources, including cultural landscapes and historic structures.



ANDREW WILKINS, Ph.D., RPA

Archaeologist II, Heritage Resource Management

- Phase I Geoarchaeology for Septic System Replacement at Effigy Mounds National Monument, Allamakee County, Iowa, US (2018): Principal Investigator. Supervised core sampling of approximately 0.5-acre APE for new septic system in are of potential Woodland-period mounds.

Federal: Other

- Phase I Geoarchaeology Survey for Disposal of Lots in Council Bluffs, Potawattamie County, Iowa, US (2019): Principal Investigator. Supervised core sampling of approximately 0.33 acres of paved parking area prior to potential sale of lots. Client: United States Postal Service.
- Phase I Archaeological Survey of 20 acres in Canton Township, Wayne County, Michigan, US (2019): Archaeologist. Provided prehistoric culture history and historical research for technical report in support of ERG's survey for proposed land acquisition project. Client: Environmental Research Group, LLC on behalf of United States Department of Veterans Affairs.

Local, County, and State Governments

- Osage Street Drainage Improvement Phase I Archaeological Survey, Independence, Jackson County, Missouri, US (2020): Project Manager/Principal Investigator. Bid for, won, and managed Phase I survey of approximately 0.25 acres of proposed drainage culvert improvements. Client RIC on behalf of City of Independence.
- Cultural Resource Survey for ADA Upgrades to City Park, Kansas City, Kansas, US (2019-2020): Project Manager/Principal Investigator. Managed survey of approximately 2 acres of proposed ADA-compliant park facilities; as well as location and evaluation of two nearby previously recorded prehistoric sites. Project also includes monitoring of ground-disturbing construction activities. Client: Unified Government of Wyandotte County/Kansas City, Kansas.
- Missouri Army National Guard. Archaeological Investigations at Camp Clark, Vernon County, Missouri, US (2019): Project Manager/Principal Investigator. Conducted archaeological survey of 14-acre parcel including metal detection and shovel test pits.
- Hawaii Department of Public Safety. Maui Community Correctional Center Project, Wailuku, Hawaii, US (2019): Archaeologist. Conducted archaeological and architectural reconnaissance survey of proposed new medium-security housing structure in support of EA, wrote technical report.

Private Sector

- Rural Medical Clinic Expansion Project, Jackson County, Kansas, US (2019): Project manager. Bid for, won, and managed intensive survey of proposed 2-acre hospital expansion funded by USDA Rural Development loan. Client: Holton Community Hospital
- Phase I Cultural Resource Survey for the Gander Wetland Restoration Project, Allamakee County, Iowa, US (2019): Project Manager/Principal Investigator. Bid for, won, and directed Phase I survey of approximately 9 acre-parcel slated for wetland and stream restoration as part of a NEPA alternative mitigation. Client: Severson Service

Transportation

- Laker Line BRT Project, City of Grand Rapids, Kent County, Michigan, US (2019): Archaeologist. Cultural resource records review and impacts assessment for



ANDREW WILKINS, Ph.D., RPA

Archaeologist II, Heritage Resource Management

- construction-phase design change in area of previously known site. Client: The Rapid (Interurban Transit Partnership).
- Clay County Highway Department (CCHD). Includes projects listed below.
 - Cultural Resource Survey for the 188th Street Bridge Reconstruction over New Hope Creek, Holt, Missouri, US (2019). Field Director. Directed fieldwork including shovel testing and hand auger deep testing of approximately 2 acres of ROW, identified Woodland site.
 - Cultural Resource Survey for the 148th Street Bridge Reconstruction over Carrol Creek, Kearny, Missouri, US (2019). Field Director. Directed fieldwork including shovel testing and hand auger deep testing of approximately 1.6 acres of ROW.
 - SD Highway 25 Reconstruction Project, Clark and Kingsbury County, South Dakota, US (2019): Principal investigator. Level III survey of 13.5 miles of highway ROW including file search, background research, and pedestrian reconnaissance. Client: Banner Associates for the South Dakota Department of Transportation
 - Clark County Department of Public Works (CCDPW). Borrow Site Survey for the Laughlin Bullhead City Bridge Project, Clark County, Nevada, US (2018-2019): Principal investigator. Class III pedestrian survey of 156 acres proposed for use as borrow site and for proposed bridge construction.
 - Peninsula Corridor Joint Powers Board (Caltrain). Includes projects listed below.
 - Rengstorff Ave. Grade Separation Cultural Resources Survey, Mountain View, California, US (2020): Principal investigator. Conducted archaeological and architectural background research in support of proposed railroad construction.
 - Broadway Grade Separation Cultural Resources Survey, Burlingame, California, US (2017-2019): Principal investigator. Conducted archaeological and architectural background research and reconnaissance survey in support of proposed railroad construction.
 - Guadalupe River Bridge Project, San Jose, California, US (2018-2019): Project Archaeologist. Conducted background research and composed technical summary of past investigations in support of bridge replacement.

ADDITIONAL PROFESSIONAL EXPERIENCE

- University of Mary Washington, Department of Historic Preservation, Field School in Archaeology at Stratford Hall Plantation, Westmoreland County, Virginia, US (2013-2014). Adjunct Instructor. Led field and classroom instruction of students, directed open area excavation of 18th-century plantation quarters, primary author of technical report. Field Supervisor (2006, 2007, 2009-2012), Student/crew member (2005).
- Hunter Research, Inc., US Route 301 Corridor Project, New Castle and Sussex counties, Delaware, US (2013-2014). Soil Chemistry Consultant. Soil chemistry data analysis and report preparation for Phase III mitigations of three historic sites.
- Dovetail Cultural Resource Group, Fredericksburg, Virginia, US (2011-2014). Soil Chemistry Consultant. Soil chemistry data analysis and report preparation for seven Phase II and III investigations of historic sites for projects in Maryland, Virginia, and Delaware.



ANDREW WILKINS, Ph.D., RPA

Archaeologist II, Heritage Resource Management

- University of Tennessee
 - Department of Anthropology, Knoxville, Tennessee, US (2010-2014). Graduate Teaching Associate/Assistant. Discussion Section instructor for 100-level World Prehistory and primary instructor for 300-level North American Prehistory, Historical Archaeology, and Historic Artifacts courses.
 - Archaeological Research Laboratory, Knoxville, Tennessee, US (2009-2014). Archaeologist. Phase I, II, and III excavations, monitoring laboratory flotation and artifact processing, and report preparation for various projects in east Tennessee including Blount, Greene, Knox, Rhea, Roane, and Union counties.
- University of Massachusetts, Andrew Fiske Memorial Center for Archaeological Research, Boston, Massachusetts (2006-2009). Graduate Research Assistant. GIS editing, Phase II excavation, and laboratory technician for various projects in Massachusetts and Connecticut.
- Gray & Pape Cultural Resources Consultants, Providence, Rhode Island, US (2007-2009). Field Technician. Phase I survey and Phase II site evaluations for multiple projects in Rhode Island, Pennsylvania, New Jersey, New York, and Connecticut.
- George Washington Foundation, Ferry Farm, Stafford County, Virginia, US (2008). Field Technician. Open-area excavation of 18th-19th-century farm. Laboratory Intern (2005-2006).

PUBLICATIONS AND PRESENTATIONS

Publications

- Wilkins, Andrew. "Elements of a Landscape: Soil Chemistry at Stratford Hall Plantation." *Journal of Middle Atlantic Archaeology* 26(2010):155-164.

Presentations

- Wilkins, Andrew. "A View from Phase II: Evaluations of Post-bellum African American Sites on Mulberry Island, Joint Base Langley-Eustis, City of Newport News, Virginia." Annual Conference on Historical and Underwater Archaeology, Boston, MA. January 11, 2020.
- Wilkins, Andrew. "Recent Archeology at Booker T. Washington National Monument". Invited speaker at public program for Virginia Archaeology Month at Booker T. Washington National Monument, Hardy, Virginia. October 12, 2019.
- Wilkins, Andrew. "Tactics and Strategies of Race and Class: Overseer and Enslaved Spatialities on Virginia Plantations." Annual Conference on Historical and Underwater Archaeology, St. Charles, MO. January 10, 2019
- Wilkins, Andrew. "The University of Mary Washington's Annual Field School in Archaeology: Professor Sanford's 20 Years at Stratford Hall Plantation." Middle Atlantic Archaeological Conference, Ocean City, MD. March 17, 2017
- Wilkins, Andrew and John Bedell. "Eighteenth-Century Life Along Delaware's Cart Roads: The Noxon Tenancy." Annual Conference on Historical and Underwater Archaeology, Washington, DC. January 9, 2016
- Wilkins, Andrew. "Historical Archaeology." Kansas Anthropological Association 2-Day Certification Seminar, McPherson, KS. February 21-22, 2015



KATHRYN WILKINS

Archaeologist, Heritage Resource Management



CAREER SUMMARY

Ms. Wilkins is responsible for managing the Heritage Resource Laboratory. She oversees the general management of laboratory projects, including artifact processing, analysis, photography, and preparing archaeological and archival collections for permanent curation at individual repositories nationwide. Ms. Wilkins has extensive experience working and complying with repository guidelines, making sure to stay informed regarding current changes to curation standards and practices. She also has experience conducting all phases of archaeological surveys, historic documents handling and digitization, preparing technical reports, and assisting with field crew coordination and supervision.

Ms. Wilkins is proficient in operating and maintaining a Microsoft Access database and Excel software; Adobe software, including Photoshop, Bridge, and Acrobat DC; ArcGIS 10.7; operating and maintaining a Canon EOS Rebel T5i and EOS Utility Software; Trimble XH and XT units; and Rediscovery Proficio. Her work for WSP has covered projects in 21 states and the District of Columbia, including numerous projects for the National Park Service, the military, other federal agencies, state departments of transportation, and energy companies. Her past experience includes working for cultural resource management firms, museums, and laboratories in the United States, in addition to the Virgin Islands National Park St. John and Al Baleed Archaeological Park in Salalah, Oman.

Years with the firm

7

Years total

13

Areas of practice

Archaeology

Languages

English

EDUCATION

M.A. Anthropology, University of Tennessee, Knoxville	2013
B.S. Anthropology with Double Minor in English and Antiquities, Missouri State University, Springfield	2007

PROFESSIONAL MEMBERSHIPS

Register of Professional Archaeologists (RPA), Member Number: 2857691
Missouri Archaeological Society (MAS)
Association for Environmental Archeology (AEA)

SELECTED PROFESSIONAL EXPERIENCE

FEDERAL

- U.S. Department of Justice, Bureau of Prisons
 - Evaluations of Five Archaeological Sites at the United States Penitentiary, Leavenworth, Leavenworth County, Kansas (2014-2015): Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, and artifact photography. Prepared and delivered artifact and archival record collection for curation with the Kansas State Historical Society.
- U.S. Navy
 - Indian Head, Naval Support Facility, Multiple Phase I Surveys and Phase II Evaluation Studies. Laboratory Director (2014-present). Including Phase I Survey Near Mattawoman Creek and Phase II Evaluation of several sites; Phase I and II Investigations of Site 18CH388 for Support of IR Cleanup. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparing artifact and archival record



KATHRYN WILKINS

Archaeologist, Heritage Resource Management

collection for curation in accordance with Maryland Archaeological Conservation Laboratory standards.

- Joint Base Anacostia-Bolling, Washington D.C., multiple Phase I and Phase II projects. Laboratory Director (2015-present). Including a Geoarchaeological Study, Phase I Archaeological Survey at the Proposed Navy Lodge Site, Archaeological Monitoring of JBAB Solar Panel Array survey, and Phase I Athletic Field survey. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparing artifact and archival record collection for curation in accordance with Maryland Archaeological Conservation Laboratory standards.
- Naval Auxiliary Landing Field Fentress, Chesapeake, Virginia. Phase I Archaeological Survey of 229.8 Acres. Laboratory Director (2018). Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, photography, and preparing artifact and archival record collection (artifacts and archival documents) for curation in accordance with Fort Lee curation facility standards. Also responsible for technical report preparation.
- Susquehanna Plantation's Back 40: Investigation of a Proposed Rotorcraft Training Course and Phase II Evaluation of Sites 18ST393 and 18ST747, Naval Air Station Patuxent River, St. Mary's County, Maryland. Laboratory Director (2016). Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparing artifact and archival record collection for curation in accordance with Maryland Archaeological Conservation Laboratory standards.
- Naval Air Station Patuxent River Webster Field Annex, St. Mary's County, Maryland. Phase I Archaeological Surveys. Laboratory Director (2016). Responsible for artifact identification, data entry, preparation of data for reports, and artifact photography.
- Naval Support Facility Dahlgren, multiple projects. Laboratory Director (2015). Including Phase I Survey of 6 Acres Near Building 1580 and Phase II Archaeological Investigation of Site 44KG0226 for the Railgun Analysis and Integration Lab (RAIL) Project. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, photography, and preparing artifact and archival record collection (artifacts and archival documents) for curation in accordance with Fort Lee curation facility standards.
- United States Army Corps of Engineers (USACE)
 - USACE Veterans Curation Program, Laboratory Director (2015). Service and support for three nationwide laboratories that specialize in processing at-risk USACE archaeological and associated records collections; responsible for archaeological collections quality control, archival collections quality control, and laboratory personnel management.
 - USACE Mobile District, Archaeological Site Detection Survey at Fort Campbell, Kentucky. Laboratory Director (2016). Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, photography, and preparing artifact and archival record collection (artifacts and archival documents) for curation in accordance with Fort Campbell curation facility standards.



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- USACE Mobile District, Fort Eustis Phase I and II Archaeological Surveys. Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, photography, and preparing artifact and archival record collection (artifacts and archival documents) for curation in accordance with Fort Lee curation facility standards. 2016-2018
- National Park Service
 - Archeological Investigations in Support of the New Museum Construction, Statue of Liberty National Monument. Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with NPS NRAH standards. 2016
 - Phase I Archeological Investigations Floyd Bennett Field, Gateway National Recreation Area.. Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with NPS NRAH standards. 2017
 - Phase I Archeological Investigations FIIS 2015 A, William Floyd Estate, Heating System Upgrade. Laboratory Director, Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with NPS NRAH standards. 2017
 - Phase I Archeological Investigation of the Pedestrian/Bicycle Trail Connecting the George Spangler Farm to the Gettysburg National Military Park Museum and Visitor Center, Gettysburg, Adams County, Pennsylvania. Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with NPS NRAH standards. 2018
 - Archaeological Overview, Assessment, Identification, and Evaluation Study of Great Falls Park Years 1-4, Fairfax County, Virginia. Laboratory Director. Responsible for background research, artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparing artifact and archival record collection for curation in accordance with NPS NCR standards. 2015-2018
 - Antietam National Battlefield. Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with NPS NCR standards. 2014, 2016
 - George Washington Memorial Parkway (GWMP) Year 1-3. Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with NPS NCR standards. 2015-2018
 - Baltimore-Washington Parkway (BAWA) Phase I/II. Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with NPS NCR standards. Ongoing



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Archaeologist, Heritage Resource Management

- Fort Dupont and Fort Davis Parks Phase I. Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with NPS NCR standards. 2018
- Phase II Archeological Investigation of an Unexpected Archeological Discovery at site 44PW0301, the John Dogan Farm, Manassas National Battlefield Park, Virginia. Laboratory Director. Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with NPS NCR standards. 2016

Energy

- New York Power Authority (NYPA). Phase I Archaeological Survey, NYPA Smart Path Access Roads, St. Lawrence and Lewis Counties, New York (2019): Laboratory Director. Archaeological survey covered large project area for proposed 86-mile transmission line.
- Appalachian Power. Alternative Mitigation Strategy – Analysis of Smithsonian Collections from Archaeological Sites in Association with the Leesville Development, Smith Mountain Pumped Storage Project, Bedford, Franklin, and Pittsylvania Counties, Virginia. (2017): Laboratory Director and Faunal Analyst.
- Vermont Transco (VELCO). Substation Condition Assessment Project (SCAP), Archaeological Resource Assessments with some architectural surveys for substation properties throughout Vermont (2015-2017): Check-in, cleaning, analysis, data entry, artifact photography, and artifact report preparation.
- Central Iowa Power Cooperative (CIPCO). Line 18 Bennett Switching Station West to ITC Tipton Phase I Archaeological Survey. Principle Investigator (2014). Conducted Phase I archaeological pedestrian survey and auger testing for transmission line rebuild; experience using Trimble handheld GPS technologies.
- Level I Record Search, Day County II Wind Project, Day and Brown Counties, South Dakota (2017): Principal editor. Report summarizing cultural resource potential in proposed wind farm project area 25 miles long and 5 miles wide. Nextera Energy.
- Phase I Archaeological Survey of the Proposed Sorenson Substation Improvements, and Phase II Archaeological Evaluations of Sites 12-Hu-1349 and 12-Hu-1352, Huntington County, Indiana (2014): Laboratory Director.

LOCAL, COUNTY, AND STATE GOVERNMENTS

- Clay County, Missouri Highway Department. 188th Street Bridge Reconstruction Over New Hope Creek Phase I Survey, Holt, Missouri. Principal Investigator (2019).
- City of Cedar Rapids, Cedar Rapids Single Family New Construction Surveys. Principal Investigator (2015-2016). Conducted Phase I archaeological pedestrian survey and auger testing of vacant lots in preparation of proposed development; completed Iowa ASSRs for survey locations; completed reports for cisterns and prehistoric sites.
- New Jersey Department of Environmental Protection, Phase I Cultural Resource Survey and Phase II Site Evaluation Mad Hose Creek Wetland Restoration Project,



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Lower Alloways Creek Township, Salem County, New Jersey. Laboratory Director (2015-2019).

PRIVATE SECTOR

- Holton Community Hospital, Phase II Intensive Archaeological Survey of Proposed Holton Community Hospital Expansion Areas. Holton, Jackson County, Kansas. Principal Investigator (2019). Conducted Phase II archaeological survey for the proposed expansion areas located on the existing hospital property. Responsible for background research and shovel testing.
- National Register Evaluations of 10 Archaeological Sites in Lots 4 and 5, Surveys and Evaluations of Architectural Resources in Lots 1-5, Berry Hill Industrial Park, Pittsylvania County, Virginia (2015): Laboratory Director. Ten archaeological sites and 32 historic properties evaluated for development of industrial park, which required a USACE permit. Dewberry.

TRANSPORTATION

- Connecticut Department of Transportation - Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with Connecticut Archaeology Center standards.
 - Phase IB Archaeological Reconnaissance Survey Major Intersection Improvements U.S. Route 202/Route 10 at Route 20 and Route 189, Granby, Connecticut. State Project No. 55-142. Laboratory Director (2019).
 - Phase I Cultural Resource Assessment and Reconnaissance Survey Intersection Improvements on Route 39-Beckerle Street-East Gate Road, Danbury Connecticut. State Project No. 34-351. Laboratory Director (2019).
- Iowa Department of Transportation -Responsible for artifact identification, data entry, preparation of data for reports, artifact labeling, artifact photography, and preparation of artifact and archival record collection for curation in accordance with Office of the State Archaeologist Curation Facility, University of Iowa standards.
 - Phase I Archaeological Survey of the Indian Slough South Wetland South Wetland Mitigation Site, Louisa County Iowa. Laboratory Director (2013-2014).
 - Iowa DOT US 218 Bridge Phase I Archaeological Survey. Laboratory Director (2014).
- Missouri Department of Transportation
 - Politics and Place in Southern Missouri: The History of Bull Shoals, Taney and Ozark Counties, Missouri (2017): Principal editor. Part of extensive mitigation plan for rehabilitation/replacement of NRHP-listed bridges in the Bull Shoals Dam and Lake project. Historic context of the area, including towns that were inundated to create the dam and lake. Included annotated bibliography, media plan, and interpretive plan.
 - Faunal Analysis Technical Report for the Bruno-Dreckshage Site (23SC55/66), St. Charles County, Missouri (2016): Principal editor. Laboratory staff analyzed and tabulated the 365-piece faunal collection from the site for use in future studies.



MARLIS M. MUSCHAL, RPA

Archaeologist, Heritage Resource Management



Years with the firm

<1

Years total

6

Professional qualifications

Register of Professional Archaeologists

Areas of practice

Archaeology

Languages

English; Spanish (intermediate)

CAREER SUMMARY

Marlis Muschal is based in WSP’s Kansas City, Missouri, office and is an archaeologist with experience conducting fieldwork and/or Section 106 compliance in Arkansas, Colorado, Illinois, Iowa, Kansas, Missouri, Nebraska, Oklahoma, Oregon, South Dakota, and Washington. She has conducted archaeological fieldwork and historical research and written reports for a variety of clients, including the U.S. Army, the U.S. Bureau of Reclamation, federally recognized Native American tribes, state agencies, public utilities, private developers, and energy companies. She has coordinated with Native American tribes to receive input and guidance on cultural resource matters. Marlis has co-authored historic contexts, research designs, and state and federal permit applications for archaeological excavation. Marlis has contributed to the National Register of Historic Places (NRHP) evaluation of a variety of precontact and historic archaeological sites. In the field she has led field crews and is experienced in archaeological survey, excavation, and monitoring. Marlis is also experienced in archaeological site recording using professional-grade GPS units (Trimble GeoExplorer Series), photo-documentation, and detailed site sketch maps. She has also coordinated project planning and prepared budgets. Marlis worked as a graduate Teaching Assistant, supervised the University of Iowa Archaeological Field School, and presented research at several professional conferences.

EDUCATION

M.A., Anthropology (Archaeology focus), University of Iowa, Iowa City	2014
B.A. cum laude, Anthropology and History major, Spanish minor, Marquette University, Milwaukee	2010

ADDITIONAL TRAINING

First Aid/CPR/AED Certification, American Red Cross	June 5, 2019
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PROFESSIONAL MEMBERSHIPS

Plains Anthropological Society
Kansas Historical Society
Missouri Archaeological Society
Illinois State Archaeological Society
Association for Washington Archaeology
Society for American Archaeology

PREVIOUS PROFESSIONAL EXPERIENCE

— R. Christopher Goodwin & Associates, Lawrence, Kansas (2019-2020): Assistant project manager. Conducted archaeological fieldwork, historical research, and reporting for cultural resource management projects in Kansas, Oklahoma, Missouri, Iowa, Arkansas, Nebraska, and South Dakota. Submitted bids for Requests for Proposal (RFPs), prepared project budgets, and coordinated project planning. Executed archaeological survey, site testing, and monitoring for projects related to



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natural gas pipelines, U.S. Army cultural resource programs, and private development. Researched tribal histories, treaties, and impacts of U.S. Indian Removal policy to develop historic contexts for cultural resource projects. Led field crews to achieve project goals in a safe, efficient, and timely manner. Completed archaeological survey and site documentation using professional-grade GPS units (Trimble GeoExplorer Series), photo-documentation, and detailed site sketch maps. Includes projects listed below (co-author of technical reports for all).

- Cultural Properties Ethnographic Study, with R. Christopher Goodwin, Janice A. McLean, Shannon R. Ryan, and Alan R. Potter (2020). ALL Consulting, LLC, Tulsa, Oklahoma and U.S. Army Garrison, Fort Sill, Oklahoma.
- Regional Historic Context for Choctaw, McCurtain, and Pushmataha Counties, Oklahoma, with Katherine E. Grandine, Kirsten G. Peeler, Kale M. Bruner, Alan R. Potter, Janice A. McLean, and Jack L. Hofman (2020). U.S. Army Corps of Engineers, Tulsa District, Tulsa, Oklahoma.
- Archeological Action Plans, Fort Sill Military Reservation, Comanche County, Oklahoma, with Janice A. McLean, Alan R. Potter, Shannon R. Ryan, and Brittany E. Hill (2020). ALL Consulting, LLC, Tulsa, Oklahoma and U.S. Army Garrison, Fort Sill, Oklahoma.
- National Register Evaluations of Fourteen Historic Archeological Sites at Fort Riley, Geary and Riley Counties, Kansas, with Grace D. Gutierrez, Alan R. Potter, Shannon R. Ryan, and Brittany E. Hill (2020). Fort Riley Cultural Resources Management Program, Fort Riley, Kansas and U.S. Army Corps of Engineers, Kansas City District, Kansas City, Missouri.
- Intensive Archeological Survey of the Clay County Incident on the Ozark Gas Transmission Pipeline, Clay County, Arkansas, with Garret A. Welch and Alan R. Potter (2020). Enbridge, Inc., Houston, Texas.
- Cultural Resources Inventory for the Proposed Golden Plains Development, Clay and Platte Counties, Missouri, with Alan Potter (2019). Diode Ventures, LLC, Overland Park, Kansas.
- Willamette Cultural Resources Associates, Portland, Oregon (2017-2019): Project archaeologist. Managed cultural resource projects in Oregon and Washington for government agencies and private clients. Prepared project budgets, and coordinated project planning. Wrote research designs, historic contexts, and state and federal permit applications for archaeological site excavation. Coordinated with tribes to receive input and guidance on cultural resource matters. Executed archaeological survey, site testing, and monitoring for projects related to solar development, manmade reservoirs, residential development, private airport expansion, and emergency infrastructural maintenance. Completed archaeological survey and site documentation using professional-grade GPS data collection (ESRI Collector), photo-documentation, and detailed site sketch maps. Includes projects listed below (co-author or author of technical report for all).
 - Archaeological Test Excavations at Site 35-HA-4892 and Supplemental Survey for the Proposed Haywire Transmission Line, Harney County, Oregon, with Paul S. Solimano, Todd Ogle, Don Shannon, Breanne Taylor, Charles Hodges, Diane Teema (2019). Willamette CRA Report 18-106-b. NewSun Energy, Tucson, Arizona.



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- Archaeological Assessment of the Proposed NewSun Fort Rock North Gen-Tie Corridor, Lake County, Oregon (a.k.a. Hufford Gen-Tie), with Michael Shimel, Breanne Taylor, Michelle North, Donald Shannon (2019). Willamette CRA Report 17-101-g. NewSun Energy, Tucson, Arizona.
- Cultural Resource Survey for the Newell Creek Canyon Day Use Area and Trails Projects Oregon City, Clackamas County, Oregon, with Michael Daniels, Todd Ogle (2019). Willamette CRA Report 18-131. Metro, Portland, Oregon.
- An Archaeological Assessment of the Proposed Wicks Ranch Transmission Line, Harney County, Oregon, with Paul S. Solimano, Michael Daniels, Matt Goodwin, Donald Shannon (2019). Willamette CRA Technical Memorandum. NewSun Energy, Tucson, Arizona.
- Archaeological Test Excavations at Seven Precontact Sites Near Burns, Harney County, Oregon, with Paul S. Solimano, Todd Ogle, Thomas J. Brown, Don Shannon, Jonathan Duelks, Breanne Taylor, Charles Hodges, Diane Teeman (2019). Willamette CRA Report 18-106-a. NewSun Energy, Tucson, Arizona.
- Cultural Resources Survey Report for the Sunriver Airport, Sunriver, Deschutes County, Oregon, with Michael Daniels, Donald Shannon, Paul S. Solimano (2019). Willamette CRA Report 18-135. Sunriver Airport LLC, Sunriver, Oregon.
- Cultural Resources Survey Report for the 2018 Hagg Lake Drawdown, Washington County, Oregon, with Breanne Taylor, Dave Ellis (2019). Willamette CRA Report 18-120. Clean Water Services, Hillsboro, Oregon.
- Cultural Resources Survey Report for Clean Water Services' Tualatin Basin Dam Safety and Water Supply Joint Project, Washington County, Oregon, with Elizabeth O'Brien, Breanne Taylor, David V. Ellis (2019). Willamette CRA Report 18-39. Clean Water Services, Hillsboro, Oregon, and David Evans and Associates, Portland, Oregon.
- Archaeological Assessment of the Proposed Tygh Valley Solar Farm Transmission Line, Wasco County, Oregon, with Paul S. Solimano, Donald Shannon (2018). Willamette CRA Report 17-101-h. NewSun Energy, Tucson, Arizona.
- An Archaeological Assessment of the Proposed Alfalfa Solar Farm, Deschutes County, Oregon, with Paul S. Solimano, Donald Shannon, Breanne Taylor (2018). Willamette CRA Report 17-101-j. NewSun Energy, Tucson, Arizona.
- Archaeological Assessment of the Proposed Tygh Valley Solar Farm, Wasco County, Oregon (a.k.a. Diamond Z Solar Facility), with Paul S. Solimano, Donald Shannon, Breanne Taylor (2018). Willamette CRA Report 17-101-h. NewSun Energy, Tucson, Arizona.
- Archaeological Assessment of the Proposed Fort Rock North Solar Farm, Lake County, Oregon (a.k.a. Hufford Solar Facility). Willamette CRA Report 17-101-g. Prepared for NewSun Energy, Tucson, Arizona.
- Archaeological Test Excavations at 35-MA-223, Silver Falls State Park,



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- Sublimity, Oregon, with Paul S. Solimano, Donald Shannon, Breanne Taylor (2018). Willamette CRA Report 18-79. Oregon Parks and Recreation Department, Gervais.
- Archaeological Assessment of the Proposed Riley Solar Farm, Suntext, Harney County, Oregon (a.k.a. Raney Solar Facility), with Paul S. Solimano, Donald Shannon, Breanne Taylor (2018). Willamette CRA Report 17-101-e. NewSun Energy, Tucson, Arizona.
 - Archaeological Assessment of the Proposed Riley Solar Farm, Best Lane, Harney County, Oregon (aka Doverspike Solar Facility), with Paul S. Solimano, Donald Shannon, Breanne Taylor (2018). Willamette CRA Report 17-101-d. NewSun Energy, Tucson, Arizona.
 - Archaeological Assessment of the Proposed Kruse Transmission Line and Staging Area, Lake County, Oregon, with Paul S. Solimano, Donald Shannon, Breanne Taylor (2018). Willamette CRA Report 17-101-f. NewSun Energy, Tucson, Arizona.
 - Archaeological Assessment of the Proposed Wicks Solar Facility, Harney County, Oregon, with Paul S. Solimano, Donald Shannon, Breanne Taylor (2018). Willamette CRA Report 17-101-b. NewSun Energy, Tucson, Arizona.
 - Archaeological Assessment of the Proposed Haywire Transmission Line, Harney County, Oregon, with Paul S. Solimano, Donald Shannon, and Breanne Taylor (2018). Willamette CRA Report No. 17-101-c. New Sun Energy, Tucson, Arizona.
 - Archaeological Assessment of the Proposed Haywire Solar Facility, Harney County, Oregon (with Paul S. Solimano, Donald Shannon, and Breanne Taylor (2018). Willamette CRA Report 17-101-c. New Sun Energy, Tucson, Arizona.
 - Archaeological Assessment of the Proposed Kruse Solar Facility, Harney County, Oregon, with Paul S. Solimano, Donald Shannon, Breanne Taylor (2018). Willamette CRA Report 17-101-f. NewSun Energy, Tucson, Arizona.
 - Archaeological Test Excavations at 35-BE-167, Albany, Oregon (2018). Willamette CRA Report 17- 104a. AKS Engineering and Forestry, Tualatin, Oregon.
 - Cultural Resources Survey Report for the Ponderosa Ridge PUD Project, City of Corvallis, Benton County, Oregon, with David V. Ellis (2018). Willamette CRA Report 17-145. AKS Engineering and Forestry, Tualatin, Oregon.
 - Cultural Resources Survey for the Campanella Estates PUD, Clackamas County, Oregon, with Michael Daniels, Breanne Taylor (2018). Willamette CRA Report 18-02. AKS Engineering and Forestry, Tualatin, Oregon.

Confederated Tribes of the Colville Reservation, History/Archaeology Program, Nespelem, Washington (2015-2017): Senior archaeological technician. Conducted archaeological fieldwork, historical research, and reporting for cultural resource management projects in central and northeast Washington. Co-author of research designs, monitoring reports, and archaeological inventory reports submitted to lead federal agencies. Executed archaeological survey, site testing, and monitoring for projects related to annual reservoir drawdowns, power line corridors, and environmental remediation. Conducted archaeological site testing on Paleoindian site



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located within Lake Roosevelt Reservoir drawdown zone on Columbia River.

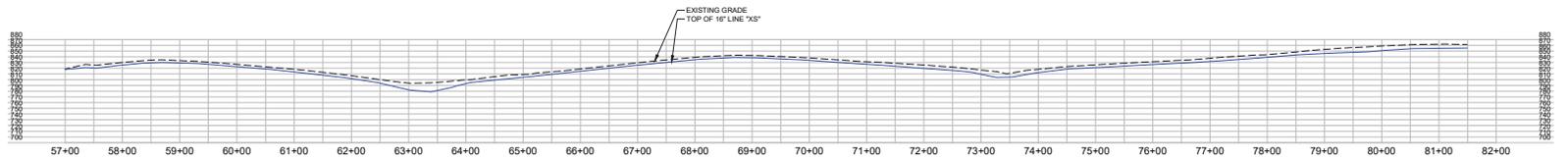
Completed archaeological survey and site documentation using professional-grade GPS data collection (ESRI Collector, Trimble GeoExplorer Series), photo- documentation, and detailed site sketch maps. Contributed to working relationship among sovereign tribal government, U.S. government agencies, and private landowners to achieve goals shared among all involved parties. Includes projects listed below (co-author of technical report for all).

- Final Results of the 2016 Archaeological Inventory of Previously Un-Surveyed Areas in the Grand Coulee Dam Project Area, Douglas, Ferry, Lincoln, Okanogan, and Stevens Counties, Washington, with Brenda L. Covington (2017). Bonneville Power Administration and U.S. Bureau of Reclamation, BPA Contract No. 70139 and 73862.
- Proposed Testing for 45LI224 during the FY17 Grand Coulee Dam Inventory Project, Lincoln County, Washington, with Brenda L. Covington, Eric Gleason (2017). Bonneville Power Administration and U.S. Bureau of Reclamation, BPA Contract No. 70139.
- 2015 Wells Dam Project Cultural Resource Monitoring, Chelan, Douglas, and Okanogan Counties, Washington, with Aaron J. Naumann (2016). Douglas County Public Utilities District No. 1.
- Final Results of the 2016 Archaeological Inventory of Previously Un-Surveyed Areas in the Grand Coulee Dam Project Area, Douglas, Ferry, Lincoln, Okanogan, and Stevens Counties, Washington, with Brenda L. Covington (2017). Bonneville Power Administration and U.S. Bureau of Reclamation, BPA Contract No. 70139 and 73862.
- Proposed Testing for 45LI224 during the FY17 Grand Coulee Dam Inventory Project, Lincoln County, Washington, with Brenda L. Covington, Eric Gleason (2017). Bonneville Power Administration and U.S. Bureau of Reclamation, BPA Contract No. 70139.
- 2015 Wells Dam Project Cultural Resource Monitoring, Chelan, Douglas, and Okanogan Counties, Washington, with Aaron J. Naumann (2016). Prepared for Douglas County Public Utilities District No. 1.
- University of Iowa Department of Anthropology, Iowa City (2012-2014): Teaching assistant. Instructor for discussion sections for Introduction to Prehistory, Native Peoples of North America, and Human Impacts on the Environment. Prepared materials for weekly class meetings; graded exams, classwork, and written assignments for over 75 students each semester; created assignments to test critical thinking and writing skills; trained students in outdoor archaeological field school.

PRESENTATIONS

- Silver Creek Archaeological Context – Harney County, Oregon. Poster presented at the 72nd Northwest Anthropological Conference, Kennewick, Washington, 2019.
- Harney Basin Cultural Context. Presentation for Portland State University First Thursday lecture series, 2019.

**Appendix B:
Southern Star Pipeline Construction Drawings and
Schedule**



**EXHIBIT DRAWING
FOR REVIEW ONLY**

**FARNSWORTH
GROUP INC**
DATE: 02-12-2021

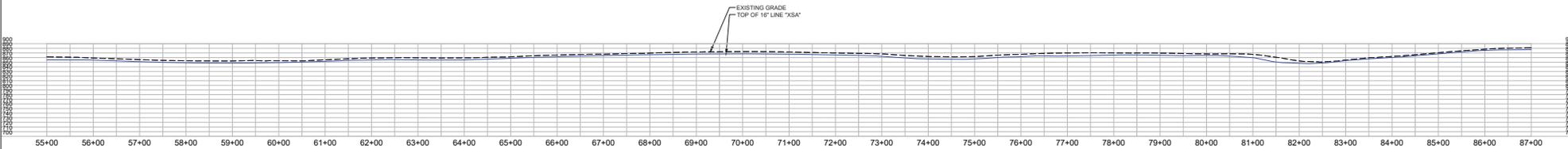


RELOCATE 16" LINE "XS", RELOCATE 16" LINE "XSA" LAUNCHER
& RETIRE A SECTION OF 16" LINE "XSA" FOR PRISON IMPROVEMENTS
PRELIM RECLAIM PLAN AND PROFILE EXISTING 16" LINE "XS"
SEC. 23 & 26, T8S, R22E
LEAVENWORTH COUNTY, KANSAS

DRAWN BY: FGI	DATE: 02-12-2021	SCALE: 1" = 100'-0"
CHECKED BY: DF	DATE: 02-12-2021	DRAWING NUMBER: SK 2021-02-12
APPROVED BY:	DATE:	DATE:



0 50 100 200
 SCALE: 1"=100'
 U.S. SURVEY FEET



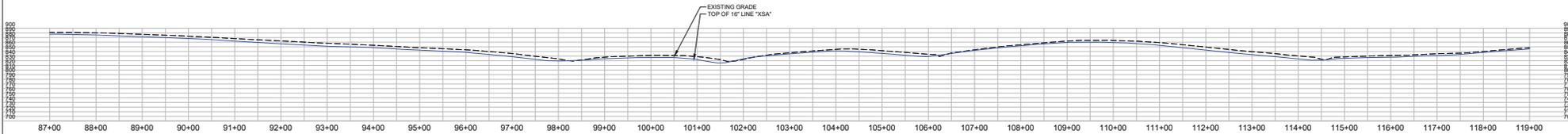
**EXHIBIT DRAWING
 FOR REVIEW ONLY**

**FARNSWORTH
 GROUP INC**
 DATE: 02-12-2021



RELOCATE 16" LINE "XS", RELOCATE 16" LINE "XSA" LAUNCHER
 & RETIRE A SECTION OF 16" LINE "XSA" FOR PRISON IMPROVEMENTS
 PRELIM RECLAIM PLAN AND PROFILE EXISTING 16" LINE "XSA"
 SEC. 22, 23 & 26, T8S, R22E
 LEAVENWORTH COUNTY, KANSAS

DRAWN BY: FGI	DATE: 02-12-2021	SCALE: 1" = 100'-0"
CHECKED BY: DF	DATE: 02-12-2021	DRAWING NUMBER: SK 2021-02-12
APPROVED BY:	DATE:	DATE:



**EXHIBIT DRAWING
FOR REVIEW ONLY**

**FARNSWORTH
GROUP INC**
DATE: 02-12-2021



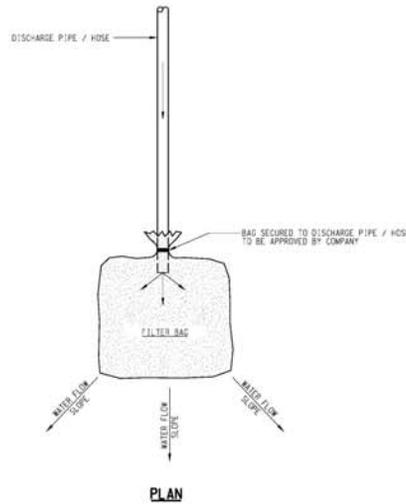
RELOCATE 16" LINE "XS", RELOCATE 16" LINE "XSA" LAUNCHER
& RETIRE A SECTION OF 16" LINE "XSA" FOR PRISON IMPROVEMENTS
PRELIM RECLAIM PLAN AND PROFILE EXISTING 16" LINE "XSA"
SEC. 22, 23 & 26, T8S, R22E
LEAVENWORTH COUNTY, KANSAS

DRAWN BY: FGI	DATE: 02-12-2021	SCALE: 1" = 100'-0"
CHECKED BY: DF	DATE: 02-12-2021	DRAWING NUMBER: SK 2021-02-12
APPROVED BY:	DATE:	SHEET NUMBER:

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NOTES:

1. THE DEWATERING STRUCTURE SHALL BE SIZED ACCORDINGLY BASED ON THE PUMP FLOW RATE AND TYPE OF SEDIMENT EXPECTED.
2. DEWATERING STRUCTURE SHALL BE PLACED IN A WELL-VEGETATED AND UNDISTURBED AREA OF THE COMPANY APPROVED WORKSPACE. IF AN UNDISTURBED AREA OF THE WORKSPACE CANNOT BE IDENTIFIED, THE STRUCTURE MAY BE CONSTRUCTED OUTSIDE OF, BUT ADJACENT TO THE APPROVED WORKSPACE. (NOTICE: IF OUTSIDE OF THE WORKSPACE, IT CAN ONLY BE CONSTRUCTED OR REMOVED BY HAND - NO EQUIPMENT ALLOWED OUT OF THE WORKSPACE).
3. DEWATERING STRUCTURE MAY BE PLACED ON STRAW/HAY BALES TO MAXIMIZE FLOW RATE THROUGH ENTIRE SURFACE AREA OF THE BAG.
4. DEWATERING STRUCTURE SHALL BE PLACED OUTSIDE OF ANY ENVIRONMENTALLY SENSITIVE AREAS SUCH AS ENDANGERED SPECIES HABITAT AND AT LEAST TWENTY (20) FEET (6.1) FROM A JURISDICTIONAL WETLAND, STREAM OR NATURAL WATER SOURCE.
5. DEWATERING STRUCTURE SHALL BE CONSTRUCTED OUTSIDE OF ANY ENVIRONMENTALLY SENSITIVE AREAS SUCH AS ENDANGERED SPECIES HABITAT AND AT LEAST TWENTY (20) FEET (6.1) FROM A JURISDICTIONAL WETLAND, STREAM OR NATURAL WATER SOURCE.
6. DEWATERING STRUCTURE SHALL BE CONSTRUCTED IN A MANNER THAT THE DISCHARGE WATER WILL FLOW AWAY FROM THE STRUCTURE AND DISTURBED WORKSPACE.
7. DEWATERING ACTIVITIES SHALL NOT RESULT IN THE DEPOSITION OF SAND, SILT AND/OR SEDIMENT NEAR THE POINT OF DISCHARGE INTO A WETLAND OR WATER BODY. IF SUCH A DEPOSIT IS OCCURRING, DEWATERING ACTIVITIES SHALL BE SUSPENDED AND THE DESIGN OF THE DEWATERING STRUCTURE ALTERED TO PREVENT FURTHER DEPOSITION.
8. DEWATERING ACTIVITIES SHALL NOT RESULT IN SCOURING OR EROSION OF SOIL. IF SCOURING OR EROSION OCCURS, DEWATERING ACTIVITIES WILL BE SUSPENDED AND STRUCTURE ALTERED OR RELOCATED TO PREVENT FURTHER DAMAGE.
9. DEWATERING OPERATIONS SHALL BE SUSPENDED IF ANY PORTION OF THE STRUCTURE FAILS. IF THE STRUCTURE FAILS, REPAIRS SHALL BE MADE AND APPROVED BY THE COMPANY BEFORE DEWATERING OPERATIONS RESUME.
10. CONTRACTOR SHALL SUPPLY ALL MATERIAL NECESSARY TO INSTALL DEWATERING STRUCTURE.
11. THE DEWATERING STRUCTURE SHALL BE REMOVED UPON COMPLETION OF THE PROJECT AND DISPOSED OF IN AN APPROVED LANDFILL.
12. SUCTION HOSES FOR TRENCH DEWATERING ACTIVITIES SHALL BE HELD OFF THE BOTTOM OF THE TRENCH TO PREVENT SUCTION AND DISCHARGE OF SOLIDS.
13. DEWATERING STRUCTURES SHALL BE MONITORED WHILE IN USE AND REPAIRED OR REPLACED AS NEEDED.
14. IF DAILY SHEEN IS EVIDENT NO DEWATERING FROM TRENCHES SHALL BE ALLOWED.



**TRENCH DEWATERING
STRUCTURE DETAIL**



2/19/2019

CODE REQUIREMENTS		REFERENCE DRAWINGS			REVISIONS					
DESIGN FACTOR	X-RAY	DRAWING NUMBER	DRAWING NAME	NO.	DATE	BY	DESCRIPTION	P. I. N.	CHK.	APP.
DESIGN PRESSURE	TEMPERATURE			0	07-19-18	CNC	ORIGINAL STANDARD DRAWING ISSUE			LMW1
TEST PRESSURE	DURATION									
M.A.D.P.	ASME SEC. VIII									
PART 192	STRESS RELIEVE									



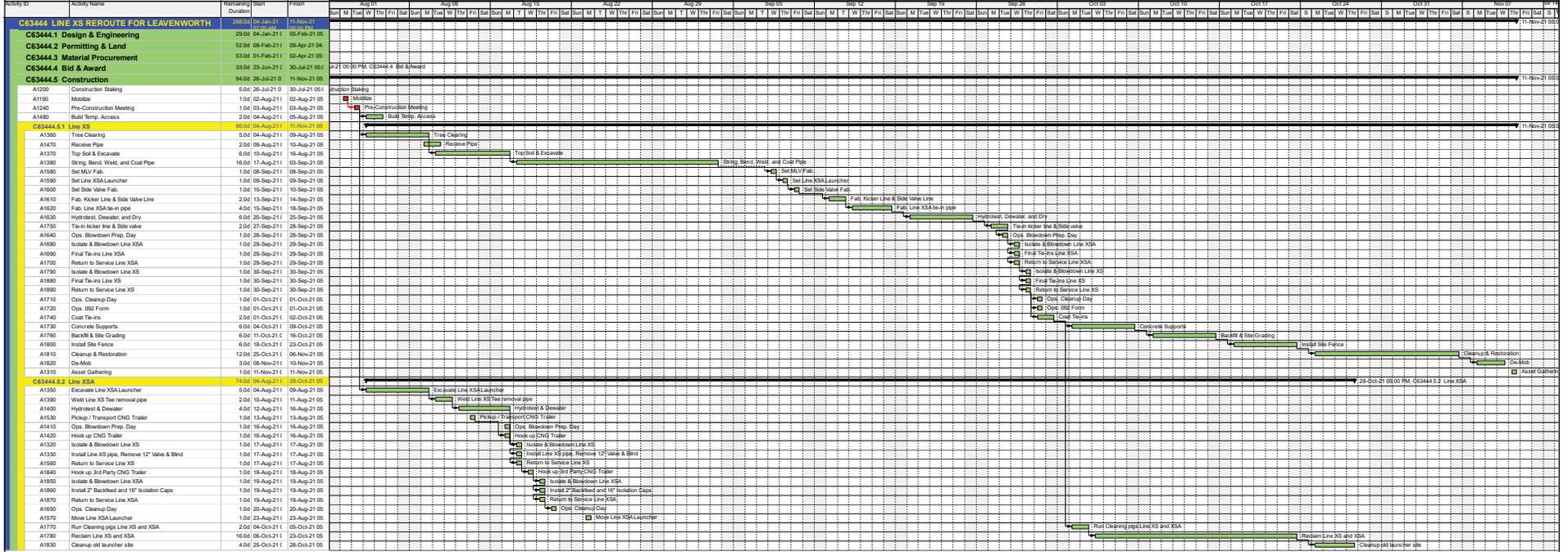
**STANDARD
DEWATER STRUCTURE
FOR TRENCH DEWATERING**

DRAWN BY: CNC	DATE: 07-19-2018	SCALE: NONE
CHECKED BY:	DATE:	DRAWING NUMBER:
APPROVED BY: LMW1	DATE: 07-27-2018	NO. STD-DE-WATER-TRENCH

LINE XS REROUTE FOR LEAVENWORTH PRISON

Classic Schedule Layout

10-Jun-21 08:50 AM



█ Actual Work
 █ Critical Remaining Work
 █ Remaining Work
 ◆ Milestone
 ▸ Summary

**Appendix C:
Every Power System Construction Schedule**

ID	Predecessors	Task Name	Successors	Duration	% Complete	Baseline Start	Baseline Finish	2019	2020	2021	2022	2023	2024			
								Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
0		MULTI-058110-Carousel Substation		1266 days	16%	Wed 1/16/19	Fri 1/19/24									
1		Start Project		0 days	99%	Wed 1/16/19	Tue 3/2/21									
2		Planning	3,217,236FF	659 days	66%	Wed 1/16/19	Thu 9/2/21									
22		Outage Coordination		423 days	0%	Tue 3/16/21	Mon 10/31/22									
31		Transmission Line		686 days	26%	Tue 3/17/20	Wed 11/9/22									
45		Engineering		375 days	32%	Mon 11/2/20	Mon 5/9/22									
71		Permitting		341.25 days	62%	Tue 3/17/20	Thu 7/22/21									
109		Critical Material		187.25 days	0%	Fri 11/5/21	Fri 8/5/22									
136		Vegetation Management		21.25 days	0%	Fri 7/22/21	Fri 8/20/21									
142		Construction Contractor Procurement		52 days	0%	Tue 4/12/22	Thu 6/23/22									
147		Construction - Transmission Line		118 days	0%	Fri 6/24/22	Wed 11/9/22									
148	146,70,26,145FS+10 days	Preconstruction Meeting	149,150,524SS	0.5 days	0%	Fri 6/24/22	Fri 6/24/22									
149	130,148,141,108,126	Haul Materials	151	2 days	0%	Mon 7/18/22	Tue 7/19/22									
150	125,108,148	Foundations	152,27	5 days	0%	Fri 6/24/22	Fri 7/1/22									
151	127,149	Framing Structures	152	10 days	0%	Mon 8/1/22	Fri 8/12/22									
152	151,150,28	Set Structures	154,156,158,29	10 days	0%	Thu 9/22/22	Wed 10/5/22									
153		Conductor		8 days	0%	Thu 10/6/22	Mon 10/17/22									
154	152,128,420	Pull, Sag and Clip Conductor	485,437,475,468	8 days	0%	Thu 10/6/22	Mon 10/17/22									
155		OPGW		8 days	0%	Thu 10/6/22	Mon 10/17/22									
156	152,135,129,420	Pull, Sag and Clip OPGW	485,437,475,468	8 days	0%	Thu 10/6/22	Mon 10/17/22									
157		Dismantling (Consider moving to Post Const Activities if complete)		14 days	0%	Thu 10/6/22	Wed 10/26/22									
158	152,485,487	Dismantle Conductor	159	5 days	0%	Tue 11/1/22	Mon 11/7/22									
159		Dismantle Structures	160,500	10 days	0%	Tue 11/8/22	Mon 11/21/22									
160	159	De-Mobilize		10 days	0%	Tue 11/22/22	Mon 12/5/22									
204		Substation		583 days	0%	Thu 7/9/20	Fri 10/28/22									
214		Engineering		518.5 days	13%	Thu 7/9/20	Fri 7/2/22									
215		Civil		282.25 days	40%	Thu 7/9/20	Fri 8/13/21									
216		Substation CAROUSEL		282.25 days	40%	Thu 7/9/20	Fri 8/13/21									
234		Mech Engineering		114.25 days	12%	Fri 5/14/21	Tue 10/19/21									
259		Relay Engineering		290.5 days	0%	Fri 5/28/21	Fri 7/22/22									
260		Substation CAROUSEL		183.5 days	0%	Fri 5/28/21	Mon 2/21/22									
271		Substation N.W. LEAVENWORTH		17.5 days	0%	Mon 2/21/22	Thu 3/17/22									
282		Substation THORNTON STREET		89.5 days	0%	Thu 3/17/22	Fri 7/22/22									
293		Critical Material		207.75 days	0%	Fri 10/8/21	Fri 8/5/22									
294		Materials On Order		186.75 days	0%	Fri 10/8/21	Thu 7/7/22									
295		Substation CAROUSEL		45.5 days	0%	Fri 10/8/21	Wed 12/15/21									
337		Substation THORNTON STREET		5.5 days	0%	Thu 6/30/22	Thu 7/7/22									
342		Materials Received		187.5 days	0%	Fri 11/5/21	Fri 8/5/22									
343		Substation CAROUSEL		186.25 days	0%	Fri 11/5/21	Thu 8/4/22									
385		Substation THORNTON STREET		6.25 days	0%	Fri 7/29/22	Fri 8/5/22									
391		Construction Contractor Procurement		95 days	0%	Mon 10/11/21	Tue 3/1/22									
392		Substation CAROUSEL		95 days	0%	Mon 10/11/21	Tue 3/1/22									
393	242,222	Construction RFP Prepare and Issue	394FS+20 days	10 days	0%	Mon 10/11/21	Mon 10/25/21									
394	393FS+20 days	Proposal Receipt and Analysis	395	40 days	0%	Tue 11/23/21	Tue 1/25/22									
395	394	Construction Contract Awarded	396FS+14 days,409	10 days	0%	Tue 1/25/22	Tue 2/8/22									
396	395FS+14 days	Issue Procurement Binder	409	1 day	0%	Mon 2/28/22	Tue 3/1/22									
407		Construction		292.75 days	0%	Fri 10/28/21	Fri 10/28/22									
408		Substation CAROUSEL		166 days	0%	Tue 3/1/22	Fri 10/28/22									
409	26,395,396,221	Pre-construction meeting (Resource PM)	524SS,413,411,25FS-12 mons	0.5 days	0%	Tue 3/1/22	Tue 3/1/22									
410		Site Work		30 days	0%	Tue 3/1/22	Tue 4/12/22									
411	224,409	Earthwork	413,417	30 days	0%	Tue 3/1/22	Tue 4/12/22									
412		Below Grade Construction		39 days	0%	Tue 4/12/22	Tue 6/7/22									
413	409,411	Install Foundations	345,359,361,415,418,420,422,429,433,427,428	16 days	0%	Tue 4/12/22	Wed 5/4/22									
415	413	Install Conduit	416,418,434	10 days	0%	Wed 5/4/22	Wed 5/18/22									
416	415	Install Ground Mat	418	10 days	0%	Wed 5/18/22	Wed 6/1/22									
417	411	Install Fence	418	8 days	0%	Tue 4/12/22	Fri 4/22/22									
418	413,415,417,416	Gravel		4 days	0%	Wed 6/1/22	Tue 6/7/22									
419		Above Grade Construction		69.75 days	0%	Wed 5/4/22	Fri 8/12/22									
420	346,413	Install Steel	421,425,423,154,156	10 days	0%	Mon 5/9/22	Mon 5/23/22									
421	420,347	Install Switches	425,435	5 days	0%	Mon 5/23/22	Mon 5/30/22									
422	351,413,349	Install Breaker, Circuit Switchers, Cap Switchers	426,435,430,431	5 days	0%	Wed 5/4/22	Wed 5/11/22									
423	359,420,354,355,352	Install Instrument & Station Power Transformers	431,426	1 day	0%	Thu 8/4/22	Fri 8/5/22									
425	420,421	Install bus	426	10 days	0%	Mon 5/30/22	Mon 6/13/22									
426	422,425,429,423	Install Jumper, Arrestors, Other Small Equipment	434	5 days	0%	Fri 8/5/22	Fri 8/12/22									
427	413	Set PCC	434	1 day	0%	Wed 5/4/22	Thu 5/5/22									
428	413,361	Set Control Enclosure	433	3 days	0%	Thu 5/5/22	Tue 5/10/22									
429	345,413	Set & Dress Transformer	428,431	5 days	0%	Mon 5/23/22	Mon 5/30/22									
430	422	Mechanical Work (gas & lime breaker)	431	5 days	0%	Wed 5/11/22	Wed 5/18/22									
431	422,423,429,430	Doble Test Equipment	487	5 days	0%	Fri 8/5/22	Fri 8/12/22									
432		Relay Construction		115.5 days	0%	Tue 5/10/22	Fri 10/28/22									
433	360,413,428,270	Install Panels	436	10 days	0%	Tue 5/10/22	Tue 5/24/22									
434	415,426,427	Install Control Wire	435	15 days	0%	Fri 8/12/22	Fri 9/2/22									

Project: MULTI-058110-Carousel S Date: Thu 6/10/21

Task		Summary		External Milestone		Inactive Summary		Manual Summary Rollup		Finish-only		Critical Split
Split		Project Summary		Inactive Task		Manual Task		Manual Summary		Deadline		Progress
Milestone		External Tasks		Inactive Milestone		Duration-only		Start-only		Critical		

BI 058110 Carousel Sub

Energy Carousel Substation & T-Line Relocation

Status Date: Tue 6/1/21 Printed on Thu 6/10/21

ID	Predecessors	Task Name	Successors	Duration	% Complete	Baseline Start	Baseline Finish	2019	2020	2021	2022	2023	2024					
								Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2
435	421,422,434	Terminate Control Wire at equipment	437	5 days	0%	Fri 9/2/22	Fri 9/9/22											
436	433	Control Building/PCC Wiring	437	10 days	0%	Tue 5/24/22	Wed 6/8/22											
437	435,436,154,156	Relay Programming, Functional Testing	438	6 days	0%	Tue 10/18/22	Tue 10/25/22											
438	437,267FS+12 wks,289FS+12 wks	RTU Installation & Configuration	487,30	3 days	0%	Wed 10/26/22	Fri 10/28/22											
439		Substation N.W. Leavenworth		9 days	0%	Tue 10/18/22	Fri 10/28/22											
463		Relay Construction		9 days	0%	Tue 10/18/22	Fri 10/28/22											
470		Substation THORNTON		292.75 days	0%	Wed 8/25/21	Fri 10/28/22											
471	26	Pre-construction meeting (Resource PM)	524SS,473	0.5 days	0%	Wed 8/25/21	Wed 8/25/21											
472		Relay Construction		54.5 days	0%	Fri 8/5/22	Fri 10/28/22											
477		EMS/Field Communications Tasks		107 days	0%	Thu 5/12/22	Wed 10/12/22											
482		Commissioning		30 days	0%	Tue 10/18/22	Thu 12/1/22											
483		Energization/In Service		30 days	0%	Tue 10/18/22	Thu 12/1/22											
485	154,156	In-Service Tline WR#	492,493,495,496,498,501FS+9 mons,503FS-6 mo	1 day	0%	Tue 10/18/22	Tue 10/18/22											
487	286FS+90 days,431,438,469	In-Service Sub CAROUSEL WR#	493,494,495,497,498,501FS+9 mons,503FS-6 mo	1 day	0%	Mon 10/31/22	Mon 10/31/22											
489	288FS+90 days,476	In-Service Sub THORNTON WR#	493,494,495,497,498,501,503,504,507FS+30 days	1 day	0%	Thu 11/3/22	Fri 11/4/22											
490	485,487,489	In-Service Constraint 12/1/2022		1 day	0%	Thu 12/1/22	Thu 12/1/22											
491		Post Construction Activities		194 days	0%	Wed 10/19/22	Thu 7/27/23											
502		T&S Construction Turnover Packet (Utilize Checklist)		300 days	0%	Fri 11/4/22	Fri 1/19/24											
506		Administrative Activities		31 days	0%	Fri 11/4/22	Thu 12/22/22											
512		Obtain Lien Waiver Construction >\$1 million		1 day	0%	Wed 12/21/22	Thu 12/22/22											
517		Administrative Milestones		1014 days	99%	Thu 1/16/20	Fri 1/19/24											
528		T&S Support Services Milestones		236.25 days	0%	Fri 8/13/21	Fri 7/22/22											
530	70	Transmission Engineering Complete		0 days	0%	Mon 5/9/22	Mon 5/9/22											
531	224	Civil Engineering		0 days	0%	Fri 8/13/21	Fri 8/13/21											
532	246	Mechanical Engineering Complete		0 days	0%	Tue 10/19/21	Tue 10/19/21											
533	270,281,292	Relay Engineering Complete		0 days	0%	Fri 7/22/22	Fri 7/22/22											

Project: MULTI-058110-Carousel S
Date: Thu 6/10/21

Summary	External Milestone	Inactive Summary	Manual Summary Rollup	Finish-only	Critical Split
Project Summary	Inactive Task	Manual Task	Manual Summary	Deadline	Progress
Milestone	Inactive Milestone	Duration-only	Start-only	Critical	Critical

**Appendix D:
Daily and Weekly Monitoring Report Templates**



Cultural Resource Monitoring – *Daily Monitoring Report*
Federal Correctional Institution/Federal Prison Camp – Leavenworth, Kansas

Monitoring Date: _____

Name of Archaeologist/Monitor: _____

Contact Information (Telephone/Email): _____

Field Conditions: _____

Description of Monitoring Day: _____

Cultural Resources Observed: _____

Recommendations/Follow-up Needed: _____

Monitoring Location Map:

Other Notes: _____





Daily Monitoring Photographs: Date _____ (Sample)



Photo 1: Add Caption



Photo 2: Add Caption



Photo 3: Add Caption



Photo 4: Add Caption



Photo 5: Add Caption



Photo 6: Add Caption



Monitoring Location Map:



**Appendix E:
Construction Worker Training Program**

Protecting Cultural Resources

Federal Correctional Institution and Federal Prison Camp



Leavenworth, Kansas

PROTECTING CULTURAL RESOURCES

• Welcome

- Andrew Wilkins, Ph.D., RPA, Senior Archaeologist, WSP USA Inc.
- Karl Chamberlain, Facilities Manager USP, Federal Bureau of Prisons

• Program

- Background
- Project Overview
- What are cultural resources?
- What is cultural resource monitoring and why is it important?
- What is your role and responsibility?
- Contacts



PROTECTING CULTURAL RESOURCES

SAFETY MOMENT



PROTECTING CULTURAL RESOURCES

- **Safety Moment** - Working around heavy machinery
- **Hazards**
 - Caught between, crushing, being struck by moving equipment
 - Hearing and eye hazards from loud noise and debris



PROTECTING CULTURAL RESOURCES

- **Safety Moment** - Working around heavy machinery
- **Controls**
 - PPE: Class II high-visibility, safety-toed boots, hard hats, hearing and eye protection
 - Maintain safe distances to avoid being struck by moving parts or caught under a tip-over
 - Always maintain line of sight with machinery operators
 - Establish hand signals or alerts to be used to stop machine operation
- ***UNDER NO CIRCUMSTANCES WILL MONITORING STAFF ENTER OR OPERATE ANY MACHINERY***



PROTECTING CULTURAL RESOURCES

BACKGROUND



PROTECTING CULTURAL RESOURCES

- **Federal Bureau of Prisons**

- Established in 1930
- Mission: *Protect society by confining offenders in controlled environments of prisons and community-based facilities that are safe, humane, cost-efficient, and appropriately secure, and provide work and other self-improvement opportunities to assist offenders in becoming law-abiding citizens.*



PROTECTING CULTURAL RESOURCES

• The Osage Nation - Historic Preservation Office

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- Mission: *To preserve, maintain, and revitalize the culture and traditions of the Osage Nation.*
- Program focus is to: 1) identify, 2) document, 3) protect, 4) preserve archaeological and historic Osage sites and graves in Osage County and throughout its ancestral territory.
- Overarching goal of the program is to meet the cultural preservation needs voiced by the Osage people.



Slide information provided by the Osage Nation Historic Preservation Office



PROTECTING CULTURAL RESOURCES

- The Osage migration according to oral tradition and archaeological evidence



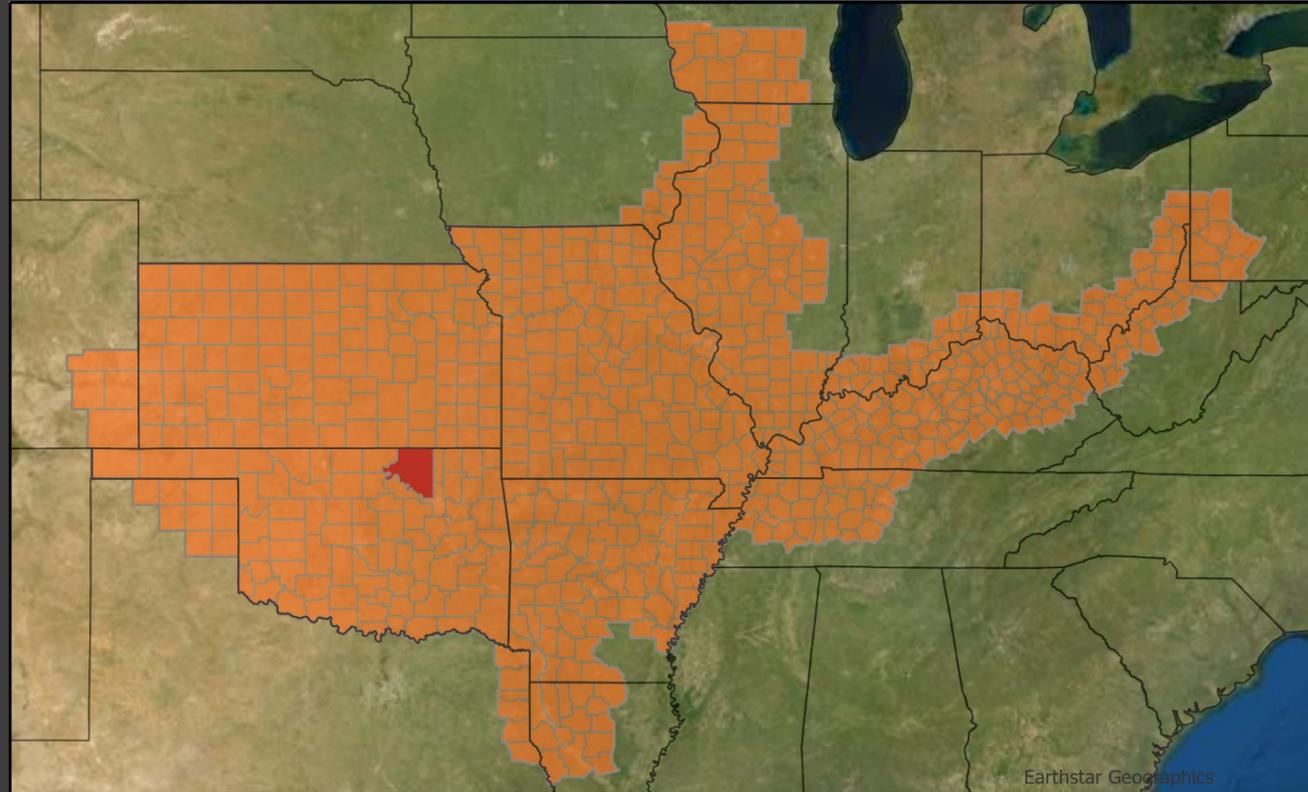
Slide information provided by the Osage Nation Historic Preservation Office



PROTECTING CULTURAL RESOURCES

• The Osage Nation Area of Interest

- Oklahoma
- Kansas
- Missouri
- Arkansas
- Illinois
- Texas
- Colorado
- Louisiana
- Kentucky
- Indiana
- Ohio
- West Virginia
- Wisconsin
- Tennessee
- Iowa
- Pennsylvania



Slide information provided by the Osage Nation Historic Preservation Office



PROTECTING CULTURAL RESOURCES

- **Why is this Important?**

- Identification of archaeological sites and cultural resources are significant to the Osage Nation.
- Unlike environmental resources (ex. plants), once a cultural resource has been destroyed it cannot be replaced.
- These resources are part of the Osage Nation's past and sacred history.



Slide information provided by the Osage Nation Historic Preservation Office



PROTECTING CULTURAL RESOURCES

- **Why is this Important?**

- Once destroyed, resources are gone forever; like tearing out a chapter of a history book.
- Hope is to identify newly discovered cultural resources so that they can be reclaimed as part of the Osage Nation's cultural history.
- Human remains, funerary objects, and sacred objects may be present.

Slide information provided by the Osage Nation Historic Preservation Office



PROTECTING CULTURAL RESOURCES

- **Why is this Important (cont.)?**

- Human remains, funerary objects, and sacred objects may be present.
- Just as you would not want your grandmother's grave or child's grave to be disturbed, the Osage Nation also does not want their ancestors' resting places disturbed.
- If they are inadvertently disturbed, then proceed with the highest level of care and respect just as you would want for your own family members.



Slide information provided by the Osage Nation Historic Preservation Office



PROTECTING CULTURAL RESOURCES

PROJECT OVERVIEW



PROTECTING CULTURAL RESOURCES

- **Project Overview**

- U.S. Penitentiary (USP) Leavenworth, KS is among oldest federal prisons in nation
- BOP to develop new medium-security FCI and minimum-security FPC to meet current and future needs



U.S. Penitentiary, Leavenworth opened in 1906



PROTECTING CULTURAL RESOURCES

- **Once New FCI/FPC Activated**

- Inmates and staff from USP and prison camp transfer to new facilities
- Existing facilities cease housing inmates (future uses to be determined)



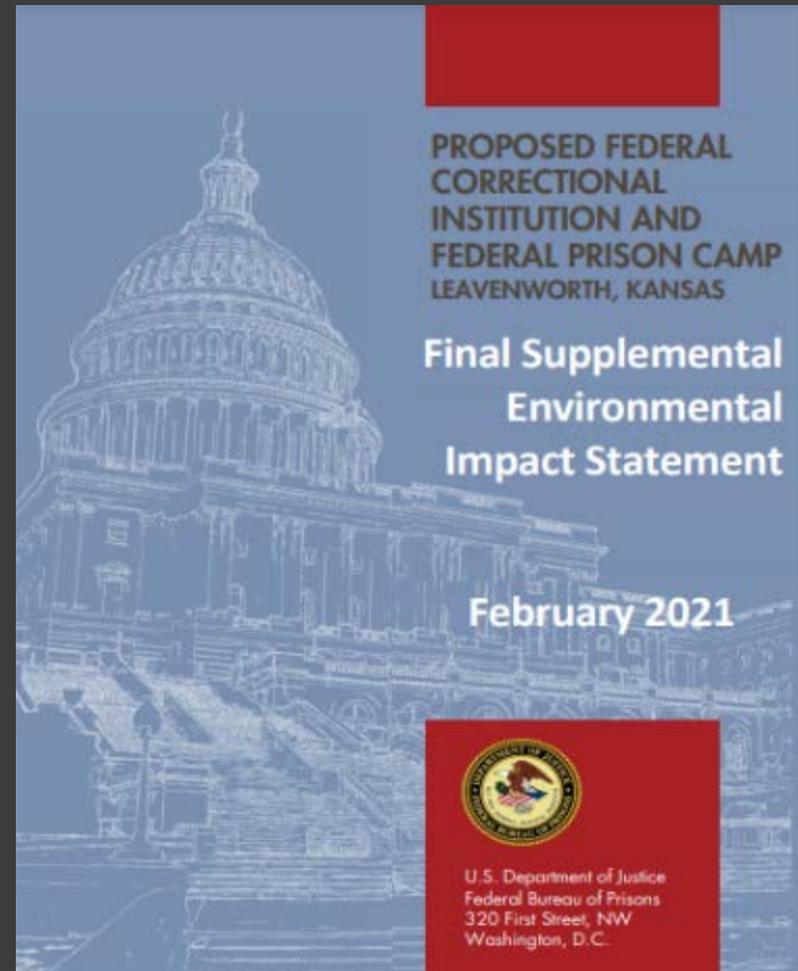
U.S. Penitentiary, Leavenworth



PROTECTING CULTURAL RESOURCES

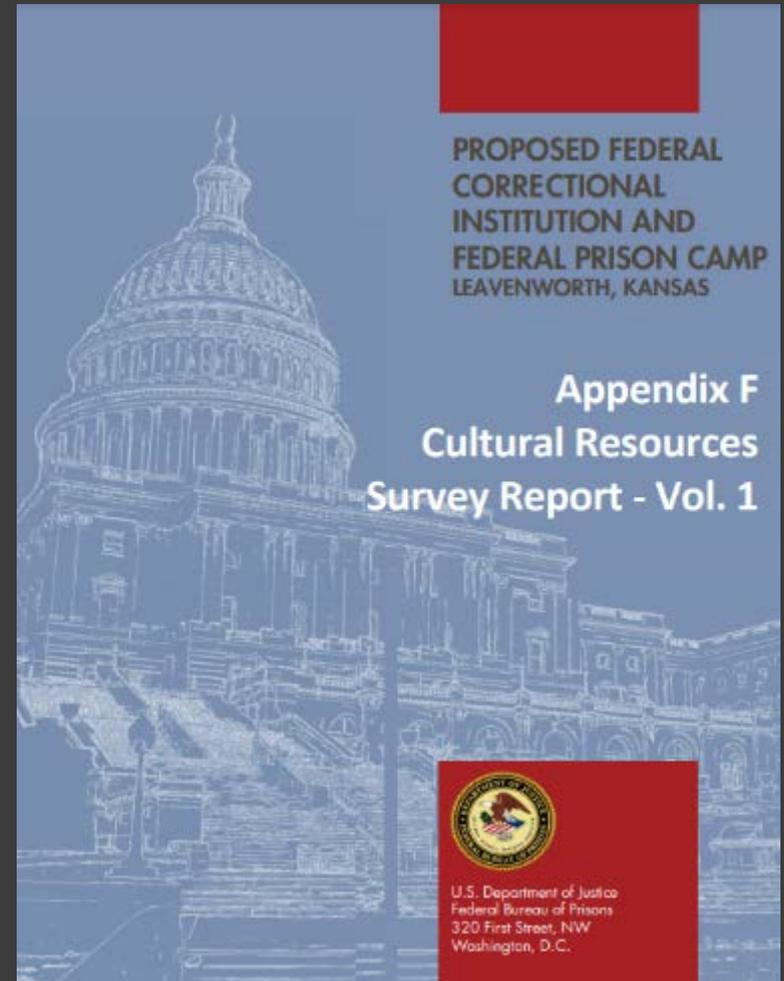
- **Accomplishments**

- Environmental impact studies completed (2021)
- Working with elected officials, regulatory agencies, utilities, Native American Tribes, others



PROTECTING CULTURAL RESOURCES

- **Accomplishments (cont.)**
 - Cultural resources surveys completed in compliance with National Historic Preservation Act
 - Surveys identified previously recorded and new archaeological sites

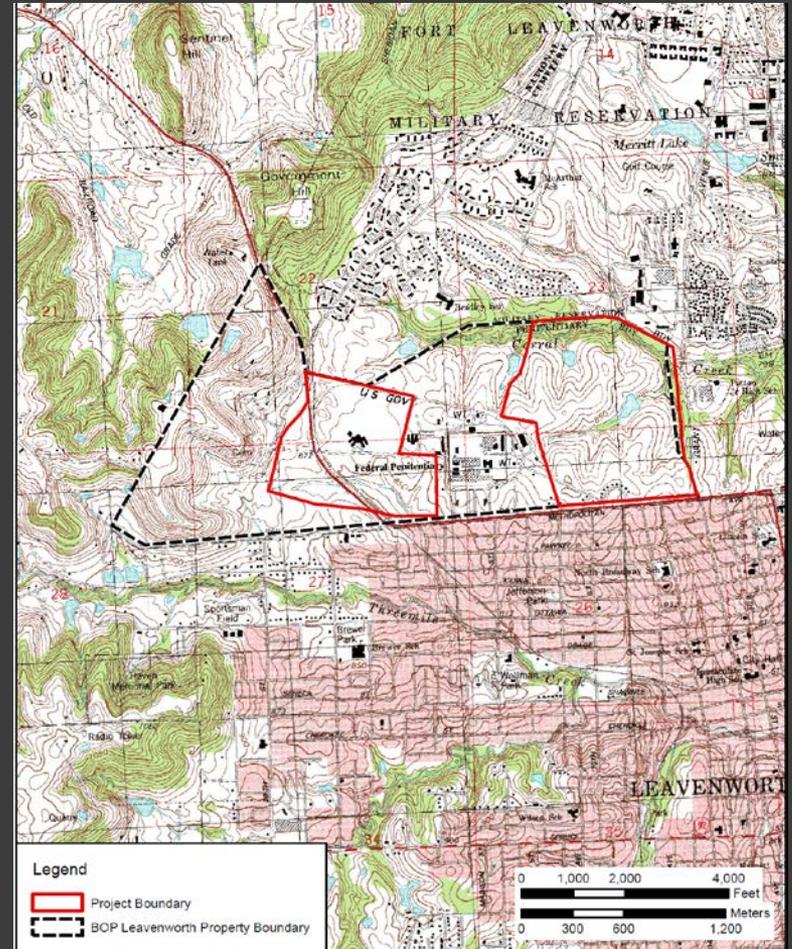


PROTECTING CULTURAL RESOURCES

- Accomplishments (cont.)



Archaeological surveys completed



PROTECTING CULTURAL RESOURCES

- **Regulatory Environment**

- National Historic Preservation Act
- National Environmental Policy Act
- Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments)
- Presidential Memorandum on Tribal Consultations (2009, 2021)
- Native American Graves Protection and Repatriation Act
- Osage Nation's National Historic Preservation Act Consultation Procedures and Archaeological Survey Standards
- Other laws, regulations and Executive Orders



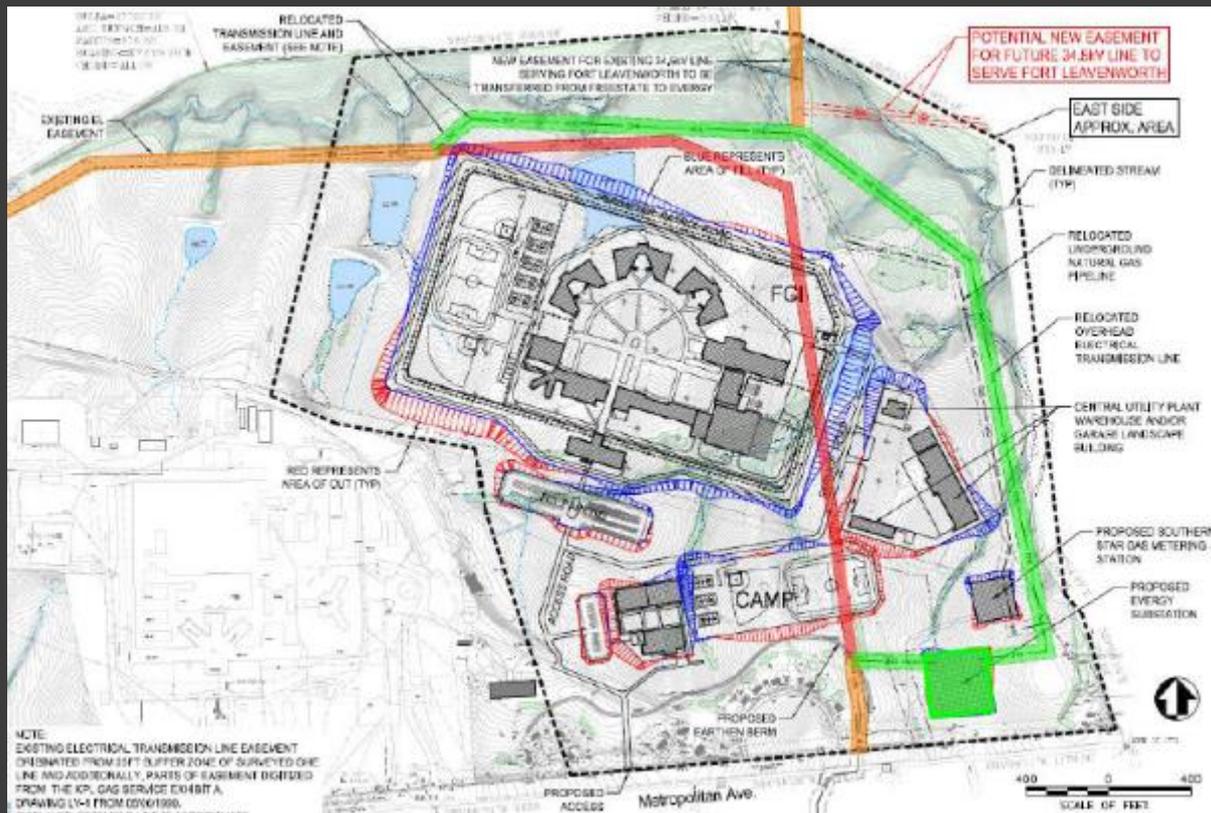
PROTECTING CULTURAL RESOURCES

- **Next Steps (cont.)**
 - Natural gas distribution system installations



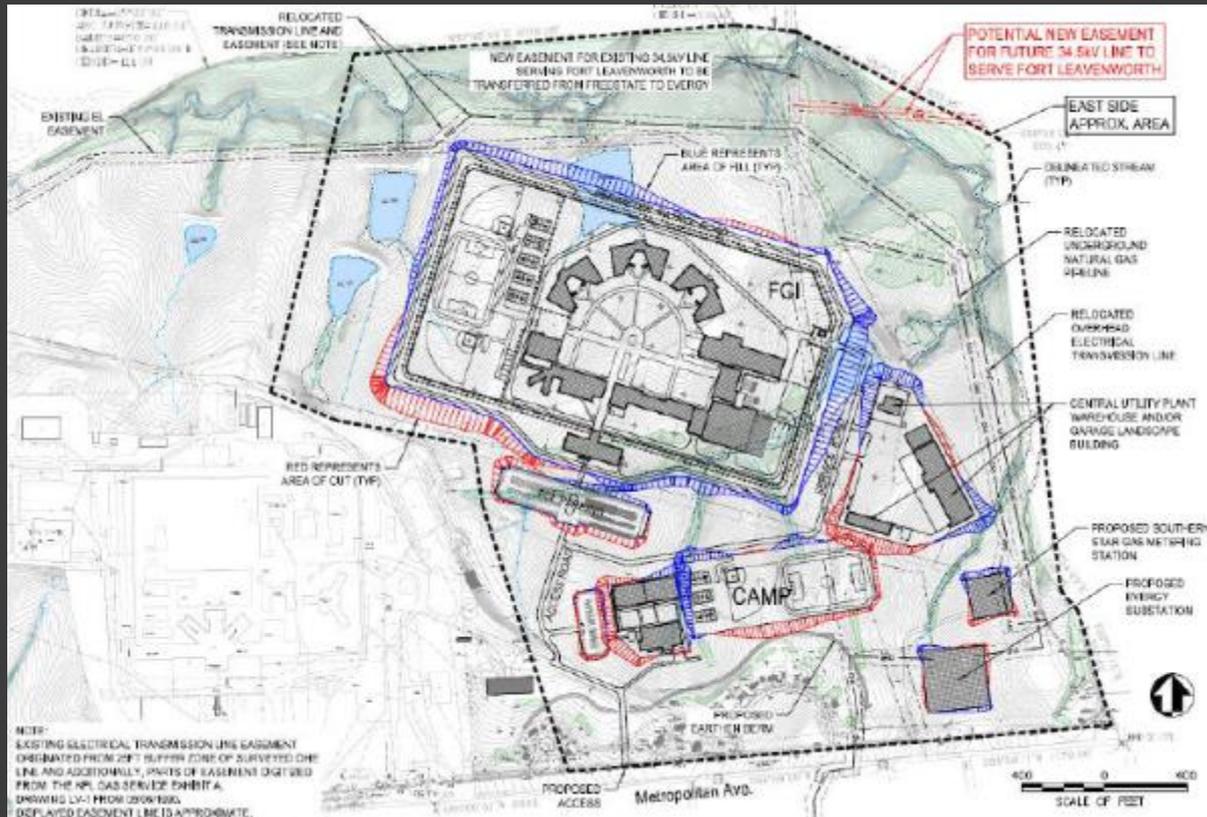
PROTECTING CULTURAL RESOURCES

- **Next Steps (cont.)**
 - Electric power system installations and removals



PROTECTING CULTURAL RESOURCES

- Next Steps (cont.)
 - FCI/FPC development



PROTECTING CULTURAL RESOURCES

- **Concerns**

- Historical significance of area to the Osage Nation
- Prevalence of archaeological sites on USP property and in FCI/FPC development zone
- Possibility of encountering human remains during construction

- **Response**

- SOI - qualified archaeologist to be present during ground disturbing activities to monitor for cultural resources



PROTECTING CULTURAL RESOURCES

WHAT ARE CULTURAL RESOURCES?



PROTECTING CULTURAL RESOURCES

- **What are cultural resources?**
 - Physical evidence or place of past human activity such as a site, object, landscape, building, or structure.



Structures, cemetery, early tools at USP Leavenworth



PROTECTING CULTURAL RESOURCES

- **What are precontact artifacts?**

- Objects made or altered by humans such a tool, art, or clothing that is portable.
- Often made of stone, bone, clay, metal, wood or leather.



Chipped stone tools, points and pottery sherds collected at USP Leavenworth



PROTECTING CULTURAL RESOURCES

- What are historic artifacts?



PROTECTING CULTURAL RESOURCES

- **What is a feature?**

- Any physical structure, such as a wall, posthole, pit, or floor, that is made or altered by humans
- Not portable and cannot be removed



PROTECTING CULTURAL RESOURCES

- Precontact features
 - Postholes, ditches, pits, etc.



PROTECTING CULTURAL RESOURCES

- Historic feature (late 18th century foundation)



PROTECTING CULTURAL RESOURCES

**WHAT WILL BE MONITORED AND
WHY IS IT IMPORTANT?**



PROTECTING CULTURAL RESOURCES

- **What will be Monitored?**

- Construction activities by Archaeologist/Monitor to:
 - Identify/protect human remains that may be uncovered
 - Identify/preserve items of archaeological significance
 - Comply with historic preservation laws, regulations, Executive Orders
- BOP and Osage Nation share an interest and concern for protecting historic and ancestral cultural resources



PROTECTING CULTURAL RESOURCES

- **What will be Monitored (cont.)?**
- Archaeologist to inspect area and record and document excavations and materials uncovered via photographs, drawings, soil screening, etc.
- Construction is not under control of archaeologist/monitor, but . . .

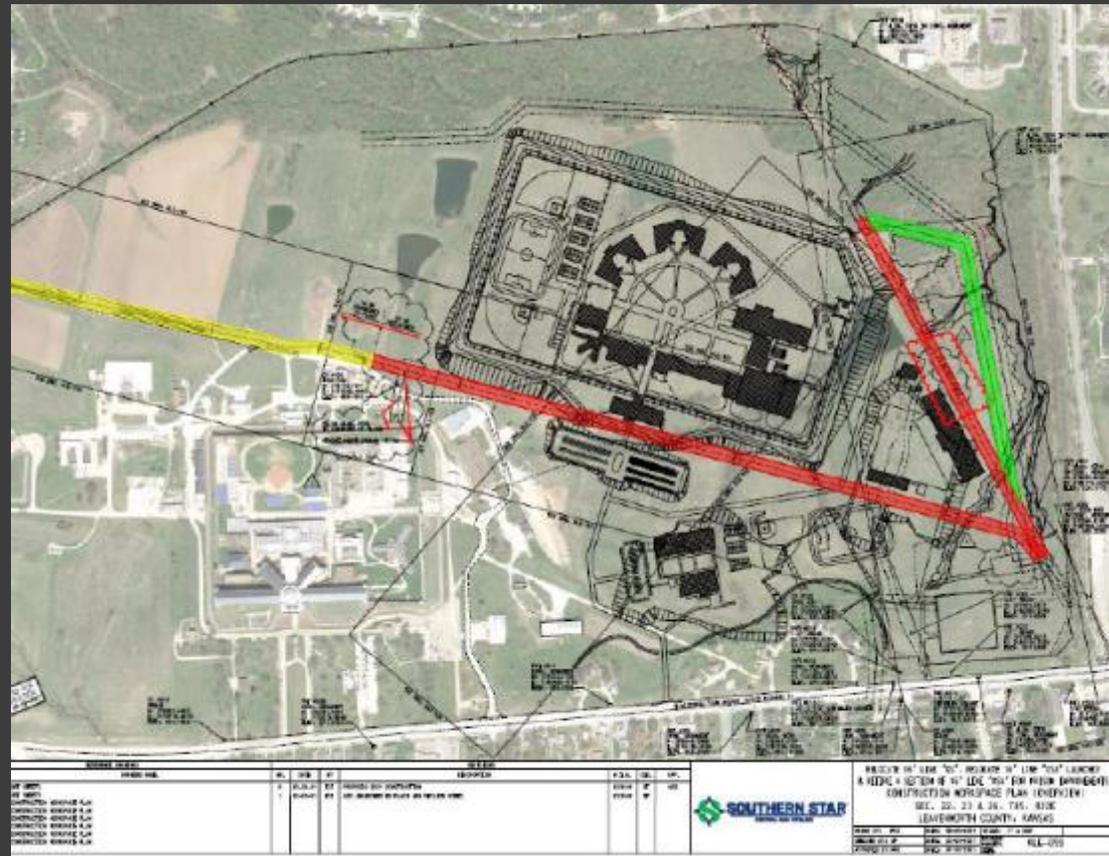
Has authority to temporarily halt construction in area of discovery



PROTECTING CULTURAL RESOURCES

- **Monitoring Locations – 2021**

- Southern Star installs one new natural gas pipeline (green) and removes two existing natural gas pipelines (red)
- No disturbance (yellow)



PROTECTING CULTURAL RESOURCES

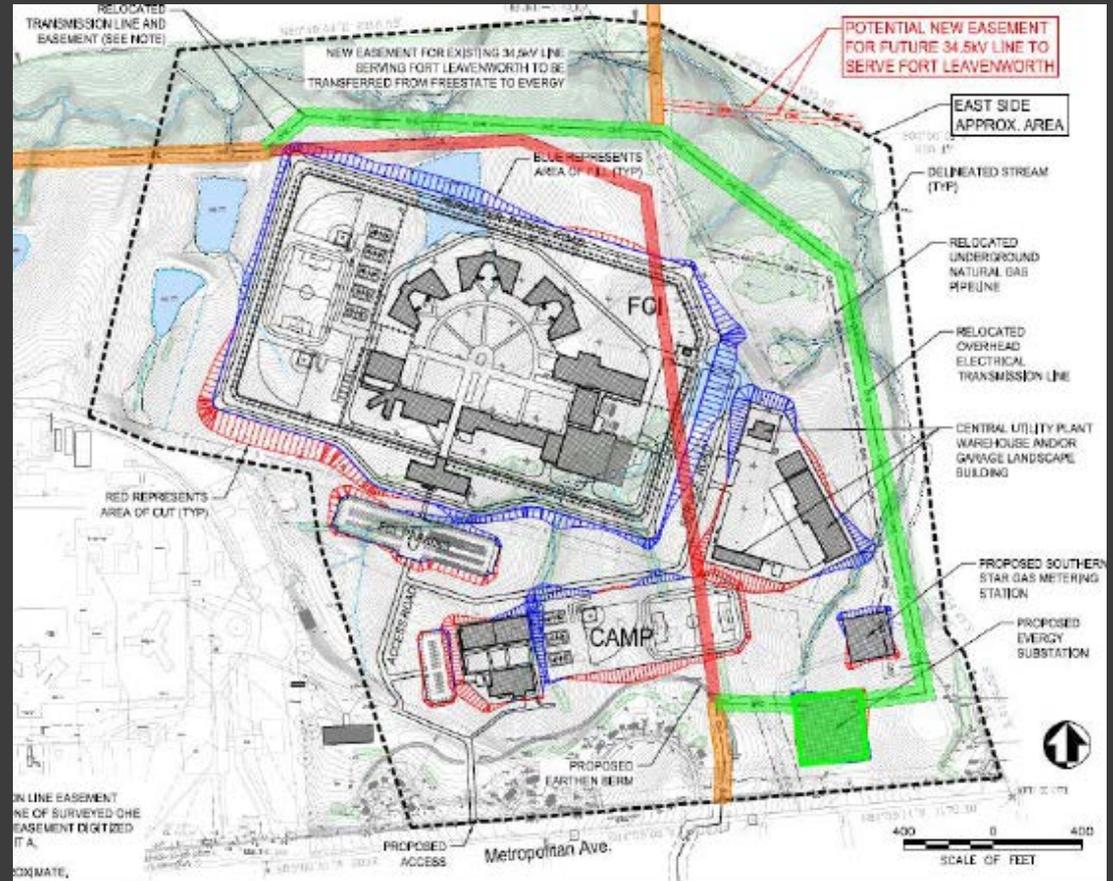
- **Monitoring Locations – 2021**
- Kansas Gas installs new metering station and distribution mains



PROTECTING CULTURAL RESOURCES

• Monitoring Locations – 2022

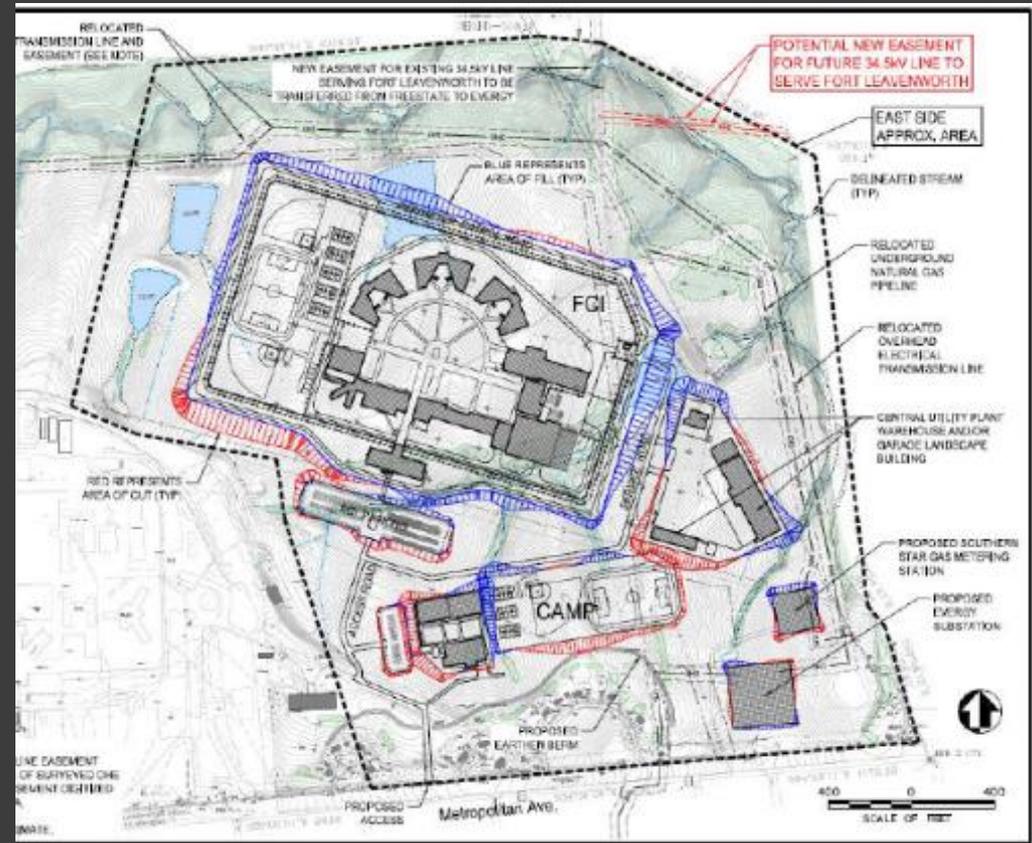
- Evergy constructs new electric substation (green)
- Installs new electric transmission/distribution poles (green)
- Removes obsolete poles (red)



PROTECTING CULTURAL RESOURCES

• Monitoring Locations – 2023

- New FCI
- New FPC
- Warehouse
- Central Utility Plant
- Entrance drive
- Parking areas
- Underground utilities



PROTECTING CULTURAL RESOURCES

WHAT ARE YOUR RESPONSIBILITIES?



PROTECTING CULTURAL RESOURCES

- **Preparing for Cultural Resource Monitoring**

- Provide basic knowledge and guidance to construction personnel involved in ground disturbance
 - What to look for during ground-disturbing activities
 - What to do if potential cultural resources are discovered

Archaeologist/Monitor has authority to halt construction activities in immediate area if potentially significant resources are identified



PROTECTING CULTURAL RESOURCES

- **Unanticipated Discovery Protocol**

I think I found something. What do I do?

- **Step 1:** If suspected archaeological resources are encountered, immediately stop work in vicinity of site and secure area
- Do not pick up or move artifacts or soil from site, including adjacent excavated material



PROTECTING CULTURAL RESOURCES

- **Unanticipated Discovery Protocol (cont.)**
- **Step 2:** Contact Archaeologist/Monitor immediately

If Monitor not present:

- String **NO WORK ZONE** flagging in approx. 100 - foot perimeter around site; do no further work that could disturb site
- Contact foreman to alert Monitor
- Monitor will determine if find is archaeological in nature. Work resumes if find is not of cultural importance



PROTECTING CULTURAL RESOURCES

- **Unanticipated Discovery Protocol (cont.)**

- **Step 3:** If Monitor determines find is potentially significant, appropriate individuals at BOP, Osage Nation, and Kansas State Historic Preservation Office (SHPO) will be contacted to determine course of action
- Treatment of artifacts, technical analysis of samples, curation, preparation of reports, etc., as specified by Kansas SHPO
- If human remains or funerary objects are encountered, all work in area stops



PROTECTING CULTURAL RESOURCES

- **Unanticipated Discovery of Human Remains or Funerary Objects**

- Monitor will secure area, establish 100-foot buffer, and cover any exposed remains with canvas
- BOP contacts local law enforcement, medical examiner/ coroner, Osage Nation and Kansas SHPO
- All human remains must be initially treated as potential crime scene
- Priority given to preservation of materials in place. No burial materials will be removed without Osage Nation THPO concurrence



PROTECTING CULTURAL RESOURCES

• Daily Reporting

- Daily log documents construction activities, descriptions and provenience of archaeological discoveries, artifacts collected, other information
- Monitoring continues until excavation reaches maximum depth at which important deposits can be expected
- If potentially significant remains are found, Monitor is empowered to redirect construction activities until discovery is evaluated

wsp

Cultural Resource Monitoring – **Daily Monitoring Report**
Federal Correctional Institution/Federal Prison Camp – Leavenworth, Kansas

Monitoring Date: _____

Name of Archaeologist/Monitor: _____

Contact Information (Telephone/Email): _____

Field Conditions: _____

Description of Monitoring Day: _____

Cultural Resources Observed: _____

Recommendations/Follow-up Needed: _____

Monitoring Location Map: 

Other Notes: _____

D-1



PROTECTING CULTURAL RESOURCES

- **Contacts (On-Site)**

- **Andrew Wilkins, Ph.D., RPA, Archaeologist/Monitor**

WSP USA Inc. (Kansas City, MO)

Tel: 585-747-9384

Email: Andrew.wilkins@wsp.com

- **Karl B. Chamberlain Jr., Facilities Manager**

Federal Bureau of Prisons (USP Leavenworth, KS)

Tel: 913-578-1446

Email: k1chamberlain@bop.gov



PROTECTING CULTURAL RESOURCES

- **Contacts (Osage Nation), Archaeological Resources**

- **Dr. Andrea Hunter, Director/THPO** (for significant archaeological material)

Osage Nation (Pawhuska, OK)

Tel: 918-287-5328

Email: ahunter@osagenation-nsn.gov

- **Ms. Johnnie Jacobs, Historic Preservation Specialist**
(for Weekly Monitoring reports)

Osage Nation (Pawhuska, OK)

Tel: 405-712-3623

Email: johnnie.jacobs.ctr@osagenation-nsn.gov



PROTECTING CULTURAL RESOURCES

- **Contacts (Office)**

- **Kimberly S. Hudson, Site Selection Specialist**

Federal Bureau of Prisons (Washington DC)

Tel: 202-616-2574

Email: kshudson@bop.gov

- **Robert J. Nardi, Vice President**

WSP USA Inc. (Morristown, NJ)

Tel: 973-809-7495

Email: robert.nardi@wsp.com

- Project website <https://www.proposed-fci-fpc-leavenworth.com/>



PROTECTING CULTURAL RESOURCES



THANK YOU FROM THE OSAGE NATION



PROTECTING CULTURAL RESOURCES

THANK YOU FROM THE
FEDERAL BUREAU OF PRISONS



Leavenworth, Kansas

**Appendix F:
Health and Safety Plan**

HEALTH AND SAFETY PLAN

PROJECT NAME: Federal Correction Institution and Federal Prison Camp at USP Leavenworth

WSP PROJECT NO: 31800052.001.05

ADDRESS: 1300 Metropolitan Avenue, Leavenworth, Kansas 66048

PROJECT DESCRIPTION: Cultural Resources Monitoring

PROPOSED DATE OF WORK: August 1, 2021 through December 31, 2022

PLAN PREPARATION:

Prepared By: Andrew Wilkins, Ph.D., RPA



July 29 2021

APPROVALS:

Project Manager: Robert J. Nardi, PP



July 29, 2021

PRE-FIELD EQUIPMENT CHECKLIST:

1. COVID-19 Employee Field Work Guidance (*Attachment F*)
2. First Aid Kit and Bloodborne Pathogen Kit
3. Permethrin / Insect Repellant
4. Ivy-X, Tecnu, or other cleanser, Zanfel
5. Cell Phone (all supervisors carry cell phones)
6. Emergency Action Plan with contact numbers
7. Pre-field Check for Proper Clothing and Gear
8. Hand sanitizer and wipes

SITE ORGANIZATION:

The following personnel are designated to carry out the stated job functions on site.

WSP Personnel	Responsibilities
Robert J. Nardi, PP	Vice President/Project Manager
Andrew Wilkins, Ph.D., RPA	Senior Consultant, Archaeologist/Field Monitor
Marlis Muschal, RPA	Archaeologist/Field Monitor
Kathryn Wilkins, RPA	Archaeologist/Field Monitor

SITE DESCRIPTION:

The Federal Bureau of Prisons (BOP) is moving forward with development of a new Federal Correctional Institution (FCI) to house medium-security inmates and a Federal Prison Camp (FPC) to house minimum-security inmates within property comprising the U.S. Penitentiary (USP) in Leavenworth, Kansas. Once development is completed, inmates currently housed at the existing USP and FPC will be transferred to the new facilities along with the complement of corrections officers and other staff.

The USP Leavenworth property is bordered by Metropolitan Avenue to the south and is immediately north of the City of Leavenworth and south and west of the Fort Leavenworth U.S. Army Base. Much of the southern portion of the USP Leavenworth property has already been developed with the USP, minimum-security prison camp, warehouses, staff housing, internal roadways, parking areas and other ancillary support facilities. Within the overall property, the planned development site is located east of the USP. Known as the East Site, the area consists of approximately 225 acres of regularly maintained and undeveloped hilly, grassland, bordered to the north by riparian forest that parallels Corral Creek (Exhibit 1). Two man-made ponds are also situated on the East Site, located north of the primary drainage that bisects the property.



Exhibit 1: East Site - Location of FCI/FPC

PROPOSED ON-SITE ACTIVITIES:

As part of FCI/FPC planning, WSP conducted archaeological survey investigations across the entire East Site on behalf of the BOP. While no National Register-eligible archaeological sites were revealed, there is the potential for direct impacts to unanticipated resources from ground-disturbing activities associated with utility installations and removals and construction of the FCI/FPC. Such ground-disturbing activities include, but are not limited to, stripping and scarification of surface soils during site grading, construction of footings and foundations, trenching and excavations for extending or relocating water, sewer, power and natural gas services, and construction of roadways and parking areas.

The BOP has requested that a Secretary of the Interior-qualified archaeologist be present during certain ground-disturbing activities associated with the project to conduct periodic cultural resource monitoring and to respond to the discovery of any artifacts or human remains during construction. It is anticipated that the project will be divided into three main phases of construction: utility relocations and installations, site preparation, and building construction.

COVID-19 EMPLOYEE TRAVEL GUIDANCE:

All employees shall follow all WSP and governmental policies and directives related to COVID-19 response. These directives may change frequently; therefore, employees working on the project should check for updated directives at least once per day.

1. Check state and local health department websites for restrictions at your destination. Keep in mind that restrictions can change rapidly depending on local conditions. Check for updates as your travel gets closer.
2. Conduct work travel in accordance with guidance provided in *Attachment F - COVID-19 Employee Field Work Guidance*.
3. Complete a self-assessment through the WSP *WorkTogether* web application prior to leaving your home for travel.
4. Conduct a self-check prior to leaving your home for travel to confirm you are feeling well and are not symptomatic. Health compromised employees should not travel.
5. Maintain social distance of six feet between you and others as much as possible. Wash your hands regularly with soap and water for at least 20 seconds, including directly before and after going through screening at airports. If soap and water aren't available, use a hand sanitizer that contains at least 60% alcohol.
6. Ensure the rental car agency you select has documented cleaning standards in response to COVID-19.
7. Sanitize door handles, steering wheel, and interior of car with sanitizing wipes before and after rental vehicle use.
8. While traveling together in one vehicle, employees must wear masks or facial covers. The vehicle should also be sanitized before and after use.
9. When you need to refuel the vehicle, use a disinfectant wipe on handles or buttons before you touch them.
10. When choosing meals during your trip, opt for restaurants that offer drive-thru or curbside service.

The following travel advice for hotel stays is provided by the Mayo Clinic:

(<https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/coronavirus-safe-travel-advice/art-20486965>)

1. When booking hotel rooms, consider only major hotel chains and check websites for information about how the hotel is protecting guests and staff. Some best practices include:
 - Enhanced cleaning of public areas, elevators, guest rooms, as well as food preparation and laundry areas
 - Social distancing measures in the lobby, at the front desk and in parking areas
 - Masking of staff and guests
 - Focused employee training in hand-washing procedures, cleaning and disinfecting protocols, and use of personal protective equipment
 - Protocol in the event that a guest becomes ill, which should include temporarily closing the guest's room for cleaning and disinfecting
2. Once you arrive at your room or rental, clean and disinfect all high-touch surfaces, such as doorknobs, light switches, countertops, tables, desks, phones, remote controls, toilets, sinks and faucets. Wash plates, glasses, cups and silverware (other than prewrapped plastic items) before using.

COVID-19 EMPLOYEE FIELD WORK GUIDANCE:

All employees shall follow all WSP and governmental policies and directives related to COVID-19 response. These directives may change frequently; therefore, employees working on the project in the field should check for updated directives at least once per day. In order to maximize protection from the COVID-19 virus the field crew will follow these steps:

1. Conduct field work in accordance with guidance provided in *Attachment F* - COVID-19 Employee Field Work Guidance.
2. Complete a self-assessment through the WSP *WorkTogether* web application prior to leaving the hotel for the work site.
3. Conduct a self-check prior to leaving the hotel for the work site to confirm you are feeling well and are not symptomatic. Health compromised employees should not conduct field work.
4. Employees must wear gloves and masks or facial covers at all times during travel and when social distancing is not feasible during outdoor field work.
5. Employees should practice good hygiene practices while in the field. Don't shake hands.
6. Thoroughly wash and sanitize hands, cell phones, and field equipment, including GPS and hand tools before and after use.
7. If at any point during field work or travel the employee feels ill, he/she must self-isolate and contact their HRBP. Avoid any contact with other people.
8. Unless unsafe due to site conditions, maintain at least six feet from other employees and other individuals during all field activities.
9. Various meetings with local project contacts that would normally be held in-person will, to the degree possible, be held remotely using virtual meeting services that allow participants to attend from safe locations. If meetings are necessary, all applicable COVID-19 protocols involving personal protective equipment, social distancing and similar protections will be required and enforced.

REQUIRED SAFETY EQUIPMENT:

Long pants, long sleeves, 6-inch safety toed boots that meet the requirements of ASTM F2413-11, hard hat, eye protection, and hearing protection (as needed), rain gear, and high visibility safety vest for each field monitor. Insect repellent (20-30% DEET or Picaridin for exposed skin and Permethrin for clothing only) should also be worn. Employees shall also carry a "Tick Key" for tick removal. To protect against COVID-19, the field team shall also have gloves, masks or equivalent, and hand sanitizer and sanitizing wipes to disinfect hands, equipment, and vehicles.

HEALTH REPORTING REQUIREMENTS:

WSP work-related injuries and illness must be reported to Triage Now. Specific employee responsibilities are provided in *Attachment B*: Triage Now. Please refer to SA 203 Incident Investigation and Reporting as the source for detailed instructions on reporting injuries and near misses:

http://intranet.wspgroup.com/Documents/WSP-PB-USA/Operations/Health-and-Safety/Occupational%20Safety%20and%20Health%20Program/Safety-Procedures/SA-203/01_Procedure/SA%20203%20Incident%20Investigation%20and%20Reporting%20Rev%2011.pdf

Note: A tick check should be performed at the end of the day. If a tick is found embedded on a field worker's body, then Triage Now must be called to open a case. If a poison ivy rash appears after field work occurs, Triage Now must be called to open a case. Please note the rash may not appear until 48 hours after contact with the plant. For ticks embedded in the skin and rashes from poison ivy, Triage

Now can be called for information on how to treat. If medical treatment is needed, Liberty Mutual will identify a medical facility for treatment.

All first aid cases and medical treatment cases shall be reported to your immediate manager, HR, and Health and Safety (carl.sall@wsp.com). The reason is, if you call Triage Now and it is only a first aid case (example, tick embedded in the skin), they will not open a Workers' Comp file. Health and Safety needs to be notified so they can document the case and call Workers' Comp and make a "Notification Only" claim. This is needed so if the case gets worse (Lyme Disease, cut becomes infected, etc.) Workers' Comp has already been notified and can use the "Notification Only" claim to open an actual claim to cover the medical expenses.

If you call Triage Now and they send you for medical treatment, they will immediately open a Workers' Compensation file. That way the employee is covered from the beginning.

PRE-JOB BRIEFING:

Prior to starting work, a pre-job briefing will be conducted to identify, eliminate or control recognized hazards before commencing a task as a means of creating a safer and healthier work environment. Each field staff member and the project manager should review latest updates from WSP on changing conditions regarding COVID-19 and communicate by Text, email and/or phone each morning prior to travel to the site to confirm if new protocols are issued and how they may affect the Health and Safety Plan requirements.

JOB SAFETY ANALYSIS:

A Job Safety Analysis (JSA) (see *Attachment C: Job Safety Analysis Form*) must be completed and signed at least daily. If multiple sites are visited in one day, then a JSA must be completed for each site. At the end of the day, any near misses should be reported in *iSMS* (<https://zeroharm.onepb.net/fieldforms>), recorded on the JSA, and addressed the following day as potential hazards (see *Attachment E*). JSAs should be saved, scanned, and uploaded to a project safety folder whether on a local area network or SharePoint site.

OTHER NEEDED MATERIALS:

- First-aid kit
- Water
- Poison Ivy Wash (e.g., Tecnu)
- Sun protection (e.g., sunblock, UV protectant shirts, hat, sunglasses)
- Rain gear
- Flashlight
- Windshield/dashboard letter, business cards for team leads
- Copy of this Health and Safety Plan
- WSP Job Safety Analysis forms
- Tick Key(s)
- Face covering
- Cleaning wipes
- Hand sanitizer
- Work gloves

COMMUNICATION:

If a non-emergency incident occurs, first, always contact the project manager and/or site supervisor, then dial Triage Now (1-877-311-0038) before you seek medical attention. If you cannot reach either the project manager or field coordinator, see *Attachment D: Project Contact List* for additional project contacts. After initial treatment is provided, contact your immediate supervisor, HR, and Health and Safety (carl.sall@wsp.com) and submit a First Report, found in *Attachment E*, or enter the incident into iSMS (<https://zeroharm.onepb.net/fieldforms>). For emergency situations call 911.

LOCAL RESOURCES:

Nearest Hospital: Saint John Hospital
3500 S. 4th Street
Leavenworth, Kansas 66048
Tel: 913-680-6000

Nearest Fire Station: Ft. Leavenworth Fire Station #1
750 McPherson Avenue, Leavenworth, Kansas 66027
Call 911 for emergency
Tel: 913-758-6738

USP Leavenworth: Karl Chamberlain, Outside General Forman
United States Penitentiary
1300 Metropolitan Avenue, Leavenworth, Kansas 66048
Tel: 913-578-1458
Email: k1chamberlain@bop.gov

OFFICE RESOURCES:

- WSP Office: 300 Wyandotte Street, Suite 200, Kansas City, MO 64105; Tel: 816-599-3809
- WSP Office: 412 Mount Kemble Ave, Morristown, NJ 07960; Tel: 973-407-1000

ALL FIELD PERSONNEL SHOULD READ AND SIGN. PLAN COPY IS TO BE STORED IN GLOVE COMPARTMENT OR DASH OF FIELD VEHICLE.

NAME	SIGNATURE	DATE
_____	_____	_____

NAME	SIGNATURE	DATE
_____	_____	_____

NAME	SIGNATURE	DATE
_____	_____	_____

NAME

SIGNATURE

DATE

ATTACHMENT A
HAZARD EVALUATION AND CONTROLS

Hazard Evaluation and Controls

If any accidents or injuries occur in the field, staff must inform their Field Supervisor of the incident as soon as possible. The Field Supervisor will be responsible for contacting the Project Manager and providing the information necessary to complete an injury report. Common environmental hazards you may encounter while conducting field work are detailed below. Please familiarize yourself with the causes and symptoms of these in order to prevent and avoid any accidental injuries.

1. COVID-19 (Coronavirus)

Field work will require being in proximity of other individuals and around equipment handled or operated by others. If you are uncomfortable with traveling or conducting field work, please contact your manager for options. No employee will be forced to conduct field work. Traveling (not including commute) more than one hour or 60 miles for field work must be approved by the appropriate Senior Vice President. Air travel for field work must be approved by the relevant Sector President. Also, complete a self-assessment through the WSP *WorkTogether* web application prior to leaving for the worksite.

Your Safety

Before you head out, consider all risks associated with the work you will be performing.

- If visiting a client site, ask the client what their current plan is for pandemic response and if they have any positive cases.
- Determine if the client requires specific PPE for the site before you go.
- Assess your health. If you are not well, stay home and contact your Human Resources Business Partner (HRBP). Do not attempt field work if you are not well.
- Practice good personal hygiene and social distancing of six feet or more.
- Health compromised employees should consider not conducting field work.
- If at any point during field work or travel the employee feels ill, they must self-isolate and contact their Human Resources Business Partner. Avoid any contact with other people.
- Employees should practice good hygiene practices while in the office or in the field.
- Don't shake hands.

Vehicle Use

- When driving to and from the field location, no more than two employees should be in the same vehicle. Neither employee should have any symptoms of illness. This should be communicated between employees to confirm. If two vehicles are available, take both vehicles.
- All work vehicle interiors shall be cleaned with a disinfecting agent before and after use. When cleaning, staff shall focus on high use items such as steering wheels, gear shifters, blinkers, armrests, radio/AC controls, and door handles.
- If the field staff can remain in their vehicle to observe work, then do so.

Field Equipment

- When loading equipment used for field work, practice social distancing. Consider loading and unloading equipment at times that will minimize contact.
- Equipment should not be used by multiple people if possible.
- Any equipment that will be handled by employees should be cleaned and disinfected before and

after each use. If this is impractical during use, nitrile, vinyl, or latex gloves should be worn whenever handling equipment. Even if disinfection before each use is practical, gloves should still be worn.

Key Contacts

- Human Resources: Human Resources Business Partner
- Health, Safety and Environment Team: safetyteam@wsp.com
- Communications support: USComms@wsp.com

2. Proximity to Heavy Machinery

WSP staff will be observing work including excavation for demolition and construction activities involving the use of construction-scale heavy machinery including backhoes, front loader, skid steer, etc. Hazards of working near this equipment can include caught between, crushing, and being struck by moving parts. Other hazards include hearing damage from loud noise of operation and possible eye hazards from flying debris during mechanical excavations.

UNDER NO CIRCUMSTANCES WILL WSP STAFF ENTER OR OPERATE ANY MACHINERY

Staff must wear safety-toed boots, Class II high-visibility safety vests, and hard hats at all times around machinery and use hearing and eye protection while machinery is in operation. Staff should maintain a safe distance from the machinery while in operation, sufficient to exclude the possibility of being struck by moving parts or the machine itself if there is a tip-over. Staff should always maintain a line of sight with machinery operators, and not approach the machine or excavation while the equipment is running. WSP staff should verbally establish with operators hand signals or alerts to be used to stop machine operation.

WSP staff should not enter excavations while equipment is in operation. While deep excavations and trenching are not anticipated, WSP staff should not enter any excavation greater than four feet in depth.

3. Extreme Cold

Cold stress may occur at any time work is being performed at low temperatures (less than 40 degrees Fahrenheit). Field work and construction projects can and does take place throughout the winter months, at times exposing personnel to cold weather. The most effective way to monitor the effects of exposure to these working conditions is for personnel to watch out for another. To make this possible, each individual must be able to recognize the symptoms of cold stress (identified below), and to know how best to prevent such stress from occurring. Preventive measures include adequate insulating dry clothing to maintain core temperatures above 36 degrees Celsius (96.8 degrees Fahrenheit) and additional amounts of such clothing for older workers or workers with circulatory problems. Also, special protection of the hands is required to maintain manual dexterity.

Definitions

Cold Stress – physiologic stress due to cool or cold temperatures.

Frostnip – an early stage of frostbite in which the body part may also appear white, but it resolves without complications.

Frostbite – freezing or local effect of the partial freezing of some part of the body, typically seen in extremities such as the fingers, toes, ears, or nose.

Treatment: Heated warming shelters (tents, cabins, rest rooms, etc.) should be made available nearby. Workers should be instructed and encouraged to use these shelters at regular intervals, the frequency depending on the severity of the exposure. Upon the first sign of frostnip, immediate return to the shelter is required.

Hypothermia – the reduction of core body temperature to 96.8 degrees Fahrenheit or below; lower body temperatures will very likely result in reduced mental alertness, reduction in rational decision making, or loss of consciousness with the threat of fatal consequences. This will be accompanied by uncontrollable shivering and possibly unconsciousness. Hypothermia should be considered a medical emergency. Immediate medical attention is required. Pain in the extremities may be the first early warning of danger to cold stress. During exposure to cold, maximum severe shivering develops when the body temperature has fallen to 96 degrees Fahrenheit. This must be taken as a sign of danger to workers and exposure to cold should be immediately terminated for any worker when severe shivering becomes evident. Since prolonged exposure to cold air or to immersion in cold water, at temperatures well above freezing can lead to dangerous hypothermia, whole body protection must be provided.

- Symptoms: Uncontrolled shivering followed by impaired judgment, apathy, absence of shivering and unconsciousness.
- Treatment: Hypothermia should be considered a medical emergency with immediate medical attention required.

Hazards

The hazards associated with cold stress range from discomfort and distraction up to and including fatalities. Proper planning and prevention should minimize all the possible outcomes associated with exposure to cool/wet and cold environments.

Procedures

- If the air temperature falls below 40 degrees Fahrenheit, gloves should be worn by employees.
- Additional whole body protection is required for work performed in an environment below 39 degrees Fahrenheit. Workers should wear protective clothing appropriate for the level of cold and physical activity.
- Metal handles of tools and control bars should be covered with insulating materials at temperatures below 30 degrees Fahrenheit.
- If the air velocity at the jobsite is increased by wind, draft, or artificial means, the cooling effect of the wind should be reduced by shielding the work area or by wearing easily removable wind break garments.
- Preventive measures include adequate insulating dry clothing to maintain core temperatures above 96.8 degrees Fahrenheit and additional amounts of such clothing for older workers or workers with circulatory problems.
- Superficial or deep tissue freezing will occur only at temperatures below 30 degrees Fahrenheit regardless of wind speed.
- At air temperatures below 36 degrees Fahrenheit, it is imperative that workers who become immersed in water or whose clothing becomes wet be immediately provided a change of clothes and be treated for hypothermia. If clothing may become wet, water repellent outerwear should be utilized. Outer garments should include provisions to allow for ventilation in order to prevent wetting of inner layers by sweat.
- Employees handling evaporative liquids (gasoline, alcohol or cleaning fluids) should take special precautions to avoid soaking of clothing or gloves because of the added danger of cold injury due to evaporative cooling.

- If work is performed continuously in the cold at an equivalent chill temperature at or below 19 degrees Fahrenheit, heated warming shelters (tents, cabins, rest rooms, etc.) should be made available nearby. The workers should be encouraged to use these shelters at regular intervals, the frequency depending on the severity of environmental conditions. The onset of heavy shivering, minor frostbite (frostnip), the feeling of excessive fatigue, drowsiness, irritability, or euphoria are indications for immediate return to the shelter.
- When entering the heated shelter, the outer layer of clothing should be removed and the remainder of the clothing loosened to permit sweat evaporation or a change of dry work clothing provided.
- Warm sweet drinks and soups should also be provided to prevent dehydration, which occurs insidiously in cold environments. Coffee consumption should be limited due to its diuretic and circulatory effects.
- When cold surfaces (below 19 degrees Fahrenheit) are within reach, a warning should be given to prevent inadvertent contact with bare skin.
- If available clothing does not give adequate protection to prevent hypothermia or frostbite, work should be modified or suspended until adequate clothing is made available or until weather conditions improve.
- Work will not be conducted below 11 degrees Fahrenheit.
- Dehydration occurs insidiously in the cold and may increase the susceptibility of the worker to cold injury due to a significant change in blood flow to the extremities.
- During the planning stages, the potential for cold stress disorders must be considered as physical hazards in the site-specific Health and Safety Plan. Risk assessment can be accomplished in the development stages of a project by listing in the Health and Safety Plan the most likely cold stress disorders which may occur. The true determination of risk must often be made on-site by the Site Health and Safety Coordinator or Field Manager. In addition, all site personnel must be aware of the symptoms of cold stress (identified below) in both themselves and their co-workers.

4. Extreme Heat

Field projects can occur throughout the year, at times exposing personnel to temperature extremes. Heat stress is a common hazard that may be encountered while conducting field surveys. The most effective way to avoid the effects of exposure is for Team Members to drink plenty of water, be aware of your field partner and watch out for one another. To make this possible, the individual must be able to recognize the symptoms of heat stress, and know how to prevent heat stress from occurring. As a general rule, extra gallon jugs of water should be kept in your vehicle. All field personnel should be aware of the following:

Heat Stress / Dehydration Prevention

Heat stress and dehydration can be easily prevented; below are common preventative strategies to avoid symptoms caused by extreme heat.

- Hydrate yourself before the workday begins.
- Increase fluid intake. Cool, plain water is excellent; only small amounts of sugar and electrolytes are needed. These can be obtained from dilute fruit juices and electrolyte replacement drinks.
- Increase frequency of rest periods/slow work pace.
- Wear a wide-brimmed hat.
- Minimize caffeine consumption.

Heat Cramps

Heat cramps are often caused by profuse perspiration in conjunction with inadequate fluid and electrolyte replacement. It is important to drink plenty of water before, during and after all field work.

- *Signs and Symptoms:* muscle spasms, pains in the hands, feet, and abdomen.
- *Treatment:* Remove affected individual to a cool place and give sips of salted water. This should quickly relieve the cramps. Manual pressure may be applied to cramped muscles.

Heat Exhaustion

Heat exhaustion is a mild form of shock caused by sustained physical activity in heat, and profuse perspiration without adequate fluid and electrolyte replacement.

- *Signs and Symptoms:* Weak pulse, shallow breathing, pale, cool, moist (clammy) skin, profuse sweating, dizziness, fatigue, nausea, vomiting, headache. If sweating stops and cooling and rehydration measures are not taken, it may progress to heat stroke.
- *Treatment:* Remove affected individual to a cool place and give sips of salted water. Fan the person to reduce heat by convection. Allow the person to rest. Do not allow the person to become chilled.

Heat Stroke

Heat stroke is the most severe form of heat stress (hyperthermia); if experienced, the body must be cooled immediately to prevent severe injury or death.

- *Signs and Symptoms:* Red, hot, dry skin; body temperature of 105° F or higher. No perspiration, dizziness, confusion, strong, rapid pulse, or coma.
- *Treatment:* HEAT STROKE IS A SERIOUS MEDICAL EMERGENCY! THE INDIVIDUAL SHOULD BE IMMEDIATELY TRANSPORTED TO A HOSPITAL. Fan the person vigorously to reduce heat by convection. Use wet clothing or an ice bath to reduce their temperature. The locations of nearby hospitals in the study area are provided in Appendix A.

5. Insect, Arachnid, and Animal Bites

Each team member should consider allergic reactions to stings, bites, pollens, and plant toxins prior to conducting field work. Any team members known to be hypersensitive to certain plants, animals, or insects should inform their field partner and Field Supervisor of these concerns prior to the field survey.

Ticks

Ticks are very small blood-feeding external parasites and are all generally found in woody or grassy areas, open fields, and especially the margin where fields meet wooded areas. Physical contact is the common method utilized for ticks to attach to a host. The most common ticks you are likely to encounter are deer ticks and American dog ticks. Spot checks for ticks should be conducted periodically while in the field, before leaving the site, and every evening. Ticks should be removed as soon as possible because risk of infection increases between 24 to 72 hours after the tick attaches to the skin. You should be cautious of all ticks; however, deer ticks, specifically, are known to commonly carry diseases such as Lyme disease and Rocky Mountain Spotted Fever.

Identification: Adult deer ticks are tiny; approximately the size of a sesame seed. Males are black; females have a brick-red abdomen and a black shield near the head. Females swell to ¼ mm when fully engorged after feeding. Adults are found primarily in March and April and September through November. Adults feed mainly on deer, but will also prey on cattle, horses, dogs, etc. Humans are accidental hosts; however, these tick bites are serious and can lead to Lyme disease or Rocky Mountain Spotted-Fever.

American dog ticks are slightly larger than the deer tick; males are approximately 1/8 of an inch long while females are around ½ inch when fully engorged. American dog ticks are reddish brown, with white or pale yellow markings. The females are categorized by the large off-white scutum (near the head) against the dark brown body. Adults are active April through early August and are most likely to be found in places with very little tree cover, commonly in tall grass and low lying bushes. Unlike deer ticks, American dog ticks do commonly attack humans and are known to carry diseases such as Rocky Mountain Spotted Fever.



Identification: Left—Deer Tick: female, male, nymph, and larval. Scale in cm.

Right—American dog tick (clockwise): larval, nymph, female and male

Prevention: Field team members should routinely check for ticks during the work day and after being outdoors. Wearing light-colored clothing may improve detection of ticks. Tucking pants into boots or socks, wearing long-sleeved shirts, and applying tick/insect repellent to clothing may minimize exposure. Treat exposed skin with an insect repellent containing DEET (*N, Ndiethyl-meta-toluamide*). Also consider treating clothes, especially pants legs with a repellent containing Permethrin.

Treatment: Ticks should be removed as soon as possible before they are allowed time to embed into your skin. If a tick is embedded, grasp it with a Tick Key or tweezers as close to the skin (head of tick) as possible and pull it out slowly and firmly. Be mindful to pull the tick straight out; twisting or jerking the tick may cause the head to break from the body and remain in place. Once the tick is removed, wash the affected area and your hands with soap and water, then apply an antiseptic to the bite. Team Members should seek medical treatment immediately if a rash or flu-like symptoms develop.

Potential Serious Illness from Ticks

Lyme disease is caused by a *spirochete* bacterium. Lyme disease is most commonly carried by the deer tick (also called the bear tick) in the Northeast and Midwest, and the black-legged deer tick in the South. In some geographic regions, up to 80% of the tick population carries the Lyme disease parasite.

Approximately two-thirds of people infected with Lyme disease develop a red rash (*erythema migraines*) within a month after the tick bite. The rash typically occurs at the tick bite location and expands slowly for an extended period before fading. The rash may develop a “bulls-eye” appearance, be sensitive to the touch, and vary in size from an inch in diameter to covering the entire body part. Other early symptoms include flu-like symptoms (malaise), including a low-grade fever, and muscle or joint aches and pains. Lyme disease can be detected with a laboratory blood test, used to examine for antibodies to the bacteria. However, it may take a few weeks for an antibody test to read positive, resulting in a high (up to 30%) rate of early negative readings. The common treatment for Lyme disease is an oral dose of antibiotics for four weeks.



Symptom: Bulls eye rash indicative of Lyme disease

It is important to seek medical treatment when you first suspect you may have contracted the disease. Approximately 30% of all untreated patients develop intermittent or migratory arthritis, typically in large joints such as the knee. Other serious complications may include meningitis, encephalitis, Bell's palsy, and cardiac abnormalities. If you have reason to suspect you have contracted Lyme disease, seek prompt medical attention.

Rocky Mountain Spotted Fever is caused by the bacterium *Rickettsia rickettsii* bacterial organism, and is most commonly carried by the American dog tick and Rocky Mountain wood tick.

Over half of the cases occur in the mid- and south-Atlantic regions of the United States (Delaware, Maryland, Washington D.C., Virginia, West Virginia, North Carolina, South Carolina, Georgia and Florida) with very few cases actually occurring in the Rocky Mountain region. Initial symptoms are flu-like, and include aches, fever, headache, nausea, and lack of appetite.

Later symptoms include abdominal pain or joint pain, a thick white or brown coating on the tongue, and a pink rash. The rash may start small but can spread; it will typically first appear on the wrists, ankles, forearms, soles of your feet, or palms of your hand.

ROCKY MOUNTAIN SPOTTED FEVER IS A SERIOUS DISEASE AND REQUIRES IMMEDIATE MEDICAL TREATMENT! If you are suspected to have this, doctors will run specialized tests to check for, thrombocytopenia (decreased platelets), hyponatremia (low blood sodium), and elevated liver enzyme levels. Treatments typically include tetracycline antibiotic for 5 to 10 days.



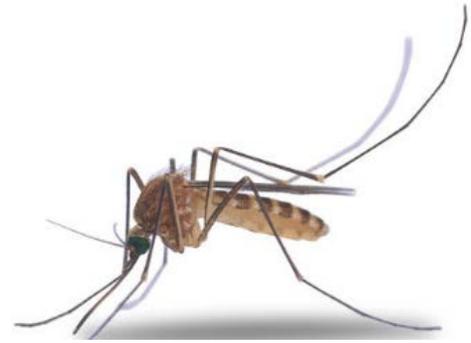
Symptom: Rash caused by Rocky Mountain Fever

Mosquitoes

Mosquitoes are small fly-like insects who typically feed on sugars and nectars; however, females feed on humans to obtain vital nutrients in order to reproduce. Mosquitoes lay their eggs in standing water, so areas such as wetlands and streams may be subject to high populations of the insect. These insects are typically just an itchy nuisance but they can transmit infections such as the West Nile Virus and Zika.

Identification: Adult mosquitoes have slender, elongated bodies and are covered with scales, as are the veins of the wings. Mosquitoes are also characterized by long, fragile-looking legs and elongated, piercing mouthparts.

Prevention: Field crew members should use insect repellents, including those containing DEET (*N, Ndiethyl-meta-toluamide*) and wear long sleeve shirts and pants to guard against mosquito bites. Mosquitoes are most active during dawn and dusk, so use extra precaution during these times. In a high-density mosquito area, the use of a mosquito-netted hat covering the face and neck is suggested, but not mandatory.



Identification: Mosquito

Potential Serious Illness from Mosquitos

West Nile Virus (WNV) is caused by a virus transmitted by mosquitoes. In 2009, the WNV was reported to the Center for Disease Control (CDC) to occur in avian, animal or mosquitoes in the states of PA, WV, VA and NC, as well as two known human infections in MD. Symptoms often appear 3 to 14 days after infection; however, most people infected with WNV will have mild or not have any symptoms; mild symptoms include rash, muscle weakness, headache, fever, and nausea and will usually pass on their own within a few weeks without treatment. In more severe cases (1 out of every 150), hospitalization may be necessary for supportive treatment such as intravenous fluids and help with breathing.

Zika is caused by a virus transmitted by mosquitoes. The incubation period (the time from exposure to symptoms) for Zika virus disease is not known, but is likely to be a few days to a week. Zika infection during pregnancy can cause a serious birth defect called microcephaly and other problems, like miscarriage and stillbirth. If you are pregnant and you think you may have been exposed to Zika, you should see your healthcare provider right away. Most people infected with Zika will not have any symptoms, but if they do, they are usually mild. Symptoms include headache, fever, joint/muscle pain, rash, pink eye, pain behind the eyes, and nausea. If you think you have been exposed to Zika, you should seek medical attention. Rest, hydration, and acetaminophen (e.g., Tylenol) or paracetamol (to reduce fever and pain) are recommended.

Chiggers

Chiggers are the larval form of a mite. They are very small and barely visible by the human eye and are commonly found in forests, grassy fields, gardens parks, and moist areas surrounding lakes or rivers. Chiggers will infest humans when vegetation containing chiggers is brushed against by a pant leg, sleeves or collars. It is a common myth that upon contact, chiggers burrow into skin and remain there for a period of time; in reality, chiggers will insert their feeding structures into the skin and inject enzymes, to create feeding structures upon which larvae feed upon, that result in itching.

Identification: It is unlikely that you will see chiggers as they are biting you, as they are 1/150th of an inch long, you will, however, feel the effects.

Prevention: Wash your body and clothes with soap and water as soon as possible after any field work. Chiggers are not found in areas greater than 99 degrees Fahrenheit, so be mindful where you sit in the field; do not sit on rocks in the sun, as they may be likely to burn the skin. As always, wear proper clothing; long pants and long sleeve shirts, as well as thick socks and tall boots, can help prevent chiggers from reaching the skin.

Symptoms: You are not likely to see the location of the bite right away, but after about one to three hours of being bitten, the area will begin to itch and become reddened with flat or raised bumps. Chiggers are likely to congregate in areas around the ankles, waistband and underarms, causing large areas to be covered in the small bites that could resemble chicken pox. It may take several weeks for the itching to subside, with most intense itching within the first couple days.

Treatment: Typical anti-itching ointments such as Calamine lotion or hydrocortisone creams or antihistamines such as Benadryl will help with the inflammation and itching. Best thing you can do is avoid scratching the bites and let it run its course.



Symptom: Bumps caused by chigger bites

Snake Bite Prevention and First Aid

Field members should be mindful of the possible presence of snakes when walking through overgrown vegetation and when moving debris (e.g., lumber, scrap metal). Personal protective equipment, including snake chaps, should be considered prior to initiating field surveys, but are not required. If a field team member is bitten by a snake, the wound should be washed and the bite areas kept still and lower than the heart. The person should be transported safely to the nearest medical facility.

A list of venomous snakes that may potentially occur in the project area is provided in the table below. IF YOU SUSPECT YOU HAVE BEEN BITTEN BY ANY OF THESE SNAKES, IMMEDIATELY SEEK PROFESSIONAL MEDICAL ATTENTION. While in transit to the hospital, try to splint the bitten extremity and keep it below heart level.

Venomous snakes found in Kansas

Source: http://www.venombyte.com/venom/snakes/venomous_snakes_by_state.asp

Common Name	Latin Name	Photo
Broad-Banded Copperhead	<i>Agkistrodon contortrix</i>	
Desert Massasauga	<i>Sistrurus catenatus</i>	
Prairie Rattlesnake	<i>Crotalus viridis</i>	
Osage Copperhead	<i>Agkistrodon contortrix</i>	
Western Massasauga	<i>Sistrurus catenatus</i>	

Common Name	Latin Name	Photo
Timber Rattlesnake	<i>Crotalus horridus</i>	

Other Animal Bites

Animal bites must always be treated by a medical professional. These types of wounds have a high potential for infection, and there is a risk for contracting rabies. All such animal bites must be reported to your Field Supervisor. In addition to seeking medical attention, police and local health departments must be notified to capture and test the animal. Under no circumstances should an employee attempt to capture the animal. In addition, contact the local health department if an animal is observed to be sick or behaving strangely (such as nocturnal animals, including raccoons or bats, in the daylight).

6. Poison Ivy, Poison Oak, and Poison Sumac

Skin reactions are caused by coming in contact with natural oils found on poison ivy, poison oak, and poison sumac. It can also be spread by touching dead poison ivy or something that has touched poison ivy. Some people are very sensitive to these oils, while others are immune to the reaction. One may lose immunity with age, thus, avoidance of these plants is encouraged at all times.

Plant Identification: Poison Ivy and Oak are characterized by their “leaves of three” or trademark grouping of three leaflets. Poison Ivy and Oak typically grow as vines with “furry” aerial roots and can be found growing up large trees; however, it can also grow along the ground or in fields and can grow to be waist high. Poison Sumac is a shrub and has compound leaves (several leaves on one branch or stalk). All three typically have a reddish tinge when the leaves first come out in the spring, but the leaves turn green in the summer. Pictures are shown below.

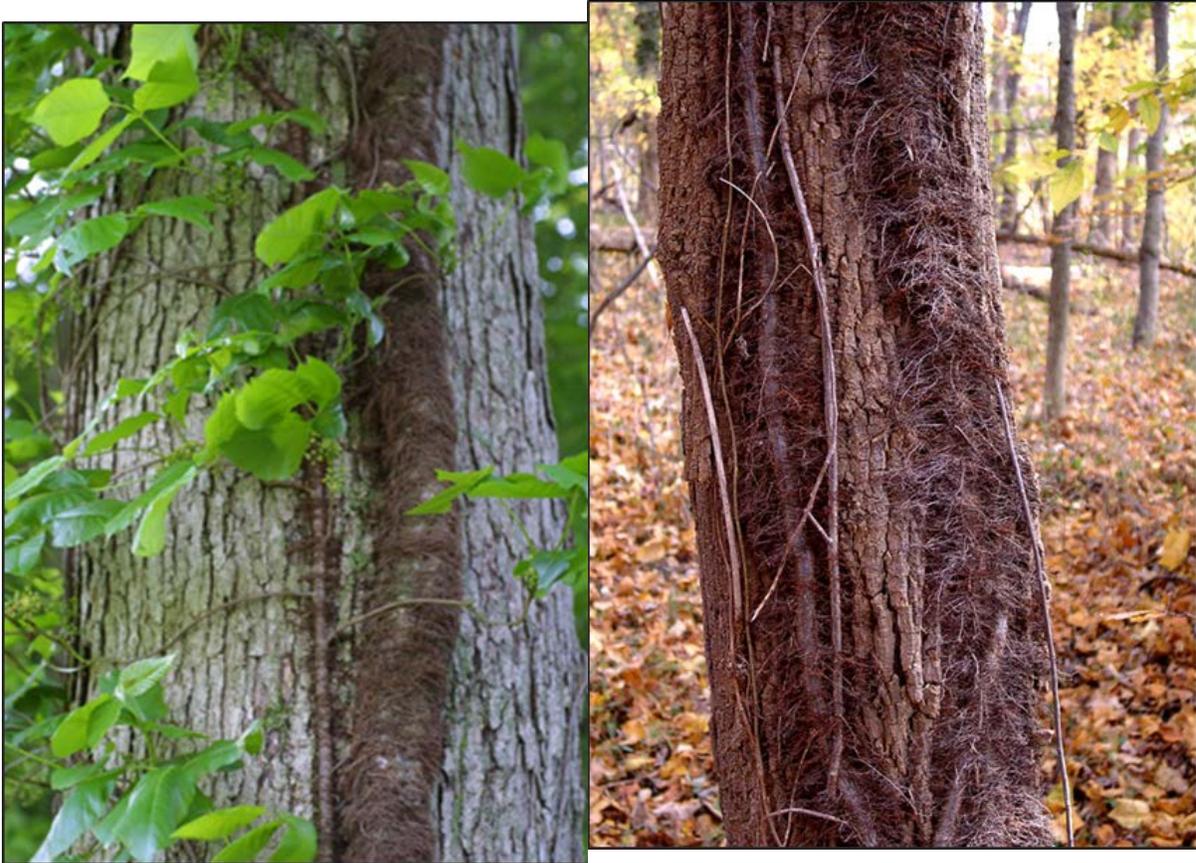
Prevention: The best prevention for contracting a rash from poison plants is to learn their identification and wear gloves, long sleeves and pants to protect exposed skin. Exposed skin may also be protected using a skin barrier cream or lotion.

Symptoms: Poison ivy reaction occurs as a severely itchy red rash that may later blister. This may be localized or spread.

First Aid: If field team members come into contact with poison ivy, poison oak, or poison sumac, they should immediately wash the affected area with cleaner; this should be provided in the first aid kit or may easily be purchased at a drug store. If a rash develops, treatment at a medical facility should be sought as soon as possible, as applicable.



Symptom: Rash caused by Poison Ivy



Identification: Poison ivy growing up a tree. Bare vines can be recognized by their "furry" aerial roots.



Identification: Poison ivy growing on the ground and as a climbing vine.



Identification of Leaves: Poison Ivy leaves can be shiny or dull; green or red



Identification: Poison Oak



Identification: Poison Sumac

7. Wildlife Encounters

Field team members should be aware of possible wildlife encounters, such as wild boar and bears in some areas. To avoid spooking wild boar, bears, or other wildlife in areas where such wildlife may be present, a bear bell or other noises (e.g., shouts, claps) can be used to alert wildlife to your presence and thus reduce the risk of dangerous encounters. If you encounter a bear, stop what you are doing and evaluate the situation. Speak calmly to the bear and back away slowly, preferably in the direction you came. Walk, don't run, and keep your eye on the bear until you are in a safe position.

8. Severe Weather

Field team members should be aware of local weather forecasts and should seek appropriate shelter at the first signs of approaching storms, tornadoes, high winds, hail, and lightning. Team members are responsible for wearing appropriate clothing (for example, rain gear, hat, warm coat) for existing and anticipated weather conditions. Use your best judgment when preparing for field activity in inclement weather. Listen to local forecasts for warnings about specific weather hazards such as tornadoes, hurricanes and “flash” floods.

Lightning: If a thunderstorm threatens, the best response is to seek shelter in a building or vehicle. When this is not feasible, care should be taken to minimize the risk of being struck by lightning. Avoid open areas and exposed portions of the landscape (peaks, hilltops, ridges). Boaters should seek shelter on shore immediately. Never stand near or under isolated tall objects, such as trees or power poles. The safest places outdoors are in topographically protected areas (valleys or ravines), away from the tallest trees. Avoid sheltering under rock overhangs or in other situations where an individual could become part of the shortest path of lightning to ground.

Snow and Ice: If heavy snowfall and/or the potential for ice/freezing rain occurs during field work, it is advisable to discontinue work and seek shelter. Be aware that driving in bad winter weather could cause poor visibility and unsafe driving conditions. Check weather conditions prior to conducting field work to avoid these situations.

9. Walking and Working Surfaces

Steep topography: Field work may involve hiking in areas of steep topography, where a real risk of injury caused by accidental falls may exist. Exercise caution when hiking in steep terrain (such as rock outcrops). Similar precautions should be exercised in other areas where falls could occur (overlooks, observation towers, waterfall areas, large canals, etc.). Even wet or mossy rocks on a path can be a serious hazard.

Uneven Surfaces: Many of the surfaces will be uneven and pose tripping hazards. When working in the woods, near river beds, or other uneven surfaces, take a minute to plan your walking path. If possible, take the extra time needed to walk around rocks, steep surfaces, areas with lots of exposed tree roots, etc. so that you avoid exposure to uneven surfaces. If practical to use, a walking stick or hiking pole can help prevent slips, trips or falls when walking on steep, uneven or wet terrain.

10. Large Forested Areas

When hiking in large forested areas without well-defined trails, utilize fluorescent ribbon, flagging, or paint to mark your trail for the return hike to your vehicle. Watch for and avoid walking near or under broken or dead limbs and trees.

11. Hunting Season

If working during the fall/winter hunting season, wear bright yellow or orange, observe posted, private property, and public hunting land signs, pay attention to location and proximity of gunshots, leave area if unsafe. A brightly colored hat is also advised to wear in hunting areas/seasons, especially in tall grass and wooded areas.

12. Wetlands, Swamps

Be mindful of hidden depressions. Take care where stepping in soft sediments. Deep, soft boggy areas often develop from tree falls or decayed stumps. These areas are often, but not always, observed to have dark surfaces. Proceed slowly, testing the ground before applying your full weight.

13. Roadside Safety

Fieldwork may require working on or near active roadways. Staff should be aware of the hazards listed below and take safety precautions (e.g., safety vests or other high visibility apparel) when working in these situations.

Working on the Roadside: When working adjacent to an active roadway, including a paved or grassed shoulder, be alert to vehicle traffic traveling in both directions and vehicles potentially pulling off onto the road shoulder. If possible, always face oncoming traffic. Be wary of surfaces adjacent to the roadway that are sloped so steeply that an employee could slip or fall into the roadway or down the slope. Use

orange cones, flags, barricades, and caution tape to define work area. Use vehicle to block work area. High visibility PPE should always be worn when working along a roadway. Engage police detail for high-traffic situation.

Crossing Active Roadway: Before crossing a roadway, look both ways to ensure the road is clear of oncoming vehicles. Walk across the road, do not run. High visibility PPE should always be worn when crossing a roadway. Parking on roadway shoulders is dangerous and is to be done with a vehicle flashing top light, and hazards lights flashing. Staff should not be behind the vehicle, rather they should work in front of the vehicle wearing Class II safety vests.

ATTACHMENT B
WORKPLACE INJURY

IN THE EVENT OF A WORKPLACE INJURY

EN CASO DE UNA LESIÓN EN EL LUGAR DE TRABAJO



Step 1) Injured Employee Notifies Supervisor of Incident.

Empleado lesionado notifica a su Supervisor del incidente.

If this is a life or limb threatening injury immediately call 911.

Si se trata de una lesión que amenaza la vida o una extremidad, llame inmediatamente al 911.

Step 2) Injured Employee Immediately Call TriageNow.

Supervisor & empleado lesionado llamen inmediatamente a TriageNow.

1-877-311-0038

Step 3) TriageNow gathers pertinent information and guides the Injured Employee to appropriate care.

TriageNow recopila información pertinente y guía al empleado lesionado a atención adecuada.

Step 4) TriageNow immediately notifies Medical Facility if injured employee is arriving and sends Incident Reports to employer.

TriageNow inmediatamente notifica al centro médico si el empleado lesionado está por llegar y envía informes de incidente al empleador.

IMPORTANT

Please call TriageNow prior to seeking any treatment for non-life threatening emergencies and before leaving the job site when possible.

IMPORTANTE

Por favor llame a TriageNow ante de procurar tratamiento para emergencias que no constituyan una amenaza a la vida y antes de abandonar el lugar de trabajo cuando sea posible.



ATTACHMENT C
JOB SAFETY ANALYSIS FORM

REPORT ALL INCIDENTS IMMEDIATELY!

Daily Safety Tailgate Topic: Field Safety for conducting cultural resource monitoring during construction of utility system relocations and removals within the FCI/FPC site in Leavenworth, Kansas.

PROJECT: Cultural Resource Monitoring at Leavenworth FCI Site

DATE:

SUPERVISOR: Andrew Wilkins, Ph.D., RPA **work: 816-599-3809** **cell: 585-747-9384**

WORK LOCATION (ADDRESS/COORDINATES) 1300 Metropolitan Ave, Leavenworth, KS 66048

39°19'50.2"N 94°56'11.2"W

TASK AND ASSOCIATED HAZARDS	(CHECK)	HAZARD CONTROLS	(CHECK)
Cultural Resource Monitoring			
Covid-19		Complete <i>WorkTogether</i> Self-Assessment; Maintain at least 6 feet distance between you and others; thoroughly clean hands with sanitizing gel or wipes after handling shared equipment; clean vehicle with sanitizers before/after use	
Heavy Machinery		Awareness of machinery, appropriate PPE, safe distancing from machinery, and communication with machinery operators	
Heat and Sun Exposure		Sunblock, water and shade breaks	
Cold, Rain, Snow Exposure		Layers (warm and waterproof). Seek warm dry shelter when conditions become too harsh	
Ticks, mosquitoes, other insects		Repellent, long sleeves and pants, tuck pants into socks and shirt into pants	
Snake and other animals		Be aware of the possible presence when walking through overgrown vegetation and moving debris	
Thorns and brush		Heavy fabric loose clothes, shield face and eyes moving through brush	
Traffic		Wear yellow Class II high visibility wear, use cones when parked on roadside, stay alert	
Slip Trip Fall		Stay alert, be cautious, watch your steps; take care where stepping in soft sediments	
Hunting Season		Wear bright yellow or orange, observe posted, private property, and game land signs, pay Attention to location and proximity of gunshots, leave area if unsafe	

Name	Date	Signature	Signed Out (Initials)

ATTACHMENT D
PROJECT CONTACT LIST

NAME	TITLE	COMPANY	TELEPHONE	EMAIL
Hope Luhman, Ph.D.	Senior Vice President/Archaeologist	WSP	(o) 816-398-8656 (m) 518-334-6035	hope.luhman@wsp.com
Robert J. Nardi, PP	Vice President/Client Contact	WSP	(o) 973-407-1681 (m) 973-809-7495	robert.nardi@wsp.com
Andrew Wilkins, Ph.D., RPA	Senior Archaeologist/Monitor	WSP	(o) 816-599-3809 (m) 585-747-9384	andrew.wilkins@wsp.com
Marlis Muschal, RPA	Archaeologist/Monitor	WSP	(o) 816-702-4268 (m) 630-453-9397	marlis.muschal@wsp.com
Kathryn Wilkins, RPA	Archaeologist/Monitor	WSP	(o) 816-559-3819 (m) 636-390-3138	kathryn.wilkins@wsp.com

ATTACHMENT E
INCIDENT REPORTING

iSMS Data Entry – Incident Report

Incident Date: Date event occurred using the calendar selection tool.

Incident Time: Time incident occurred, you can manually enter the time or use the drop down list.

Select Event Type: After selecting event type, add the selection using the + sign. Add as many as needed and identify the Primary event type by clicking the “Type of Event” field and setting a primary event. The first event entered will default as the primary event.

- **Business Travel** – occurred during business travel, not at a work location
- **Complaints** – Issues not covered by other selections below
- **Environment** – Environmental release (land, air, or water)
- **Legal** – Violation of regulatory or contractual requirement
- **Loss or Damage** – Equipment/Asset loss or damage
- **Near Miss** – Event that resulted in exposure to hazard and/or a close call
- **Occupational Injury/Illness** – Work related injury or illness (includes First Aid cases)
- **Quality** – Quality related problem
- **Road/Vehicle** – Car accident involving work vehicle or driving personal vehicle for work event
- **Security** – Theft, mugging, unsecured documents or offices, computer security, kidnapping, hostage, riots, protestors, or other security events
- **Service Strike** – Damage to electrical, water, sewer, or other utilities
- **Specific Events** – Problem related to an event

Location: You can search this field base on country, state, city, or office location. As you type, possible selections will become available.

Description: Give a detailed description of the location (example: building, floor, room number, intersection, GPS location)

Organization: You can search the organization by Division, Region, or organizational level. Start typing and possible selections will appear.

- **Division:** WSP
- **Region:** Country (example: USA)
- **Level 1:** Select “WSP US Solutions”
- **Level 2-4:** View Drop down selections available based on selection of previous Level

Organizational Detail: WSP Employee

Business Service: Check for Selections – not used at when this document was created

Check Boxes: Check the appropriate boxes for injury information

Injured Person Information: Enter data for each person injured. When completed use the “+ Add Person” to enter the person’s data into the system. Complete for each person injured.

Reported By: Complete the information for who reported the event. You can complete this report for another person by entering their data in this section.

Check Boxes: If there was a safety/security manager, witness, or other contact, check the appropriate box and complete the contact information for the person.

Description:

- **Short Description** – Short title for the event, make it descriptive. Do not use people’s names.
- **Long Event Description:** Provide full details on the event, as much as possible. Do not provide any personal details or employee names in the description. The more detail provided will be helpful for incident investigations.
- **Immediate Actions Taken:** Provide as much detail as possible for actions taken after the event. Do not provide any personal details or employee names in the description. The more detail provided will be helpful for incident investigations.

Check Boxes: Check all appropriate boxes and provide additional information as required.

NOTE: UK Dangerous Occurrence is only used in the United Kingdom.

Attachments: Add attachments such as pictures, documents, scanned emails, etc. Add as many as needed to the report.

When completed, hit the Submit icon at the bottom of the screen.

iSMS Data Entry – Observation Report:

Inspection Type: What were you doing when the observation was made?

- Office Walk Through
- During Work On-Site
- Non Work-Related
- Lesson Learned
- Commuting
- Business Travel
- Pre-Start Activities
- Safety Tour (By Sr. Leadership)
- Drill/Exercise
- Training

Date: Date event occurred using the calendar selection tool.

Time: Time incident occurred, you can manually enter the time or use the drop down list.

Location: You can search this field base on country, state, city, or office location. As you type, possible selections will become available.

Description: Give a detailed description of the location (example: building, floor, room number, intersection, GPS location)

Organization: You can search the organization by Division, Region, or organizational level. Start typing and possible selections will appear.

- **Division:** WSP

- **Region:** Country (example: USA)
- **Level 1:** Select “WSP US Solutions”
- **Level 2-4:** View Drop down selections available based on selection of previous Level

Organizational Detail: WSP Employee

Business Service: Check for Selections – not used at when this document was created

Type: Was observation a positive observation or identifying a hazard?

Category Group:

Animal/Insect	Atmospheric	Cranes and Rigging
Electrical	Environmental	Ground Penetration
Hazardous Substances	Heights	Hot or Cold
Hot Work	Illness/Infection	Manual Handling
Marine/Work Over Water	Noise and Vibration	People
Plant/Equipment	Rail	Sharps
Slip/Trip	Structures	Quality (system/process)
Utilities/Services	Vehicle	Workplace/Facilities
Training	Other	Lone Work

Category and Sub Categories: Selections based on previous category selections

Description: Give a full and detailed description of the observation. Do not provide any employee names or personal details. When completed, add the item by selecting the “+ Add Item”. Add as many observations as necessary.

Reported By: Complete the information for who reported the event. You can complete this report for another person by entering their data in this section.

Check Boxes: If there was a safety/security manager, witness, or other contact, check the appropriate box and complete the contact information for the person.

Attachments: Add attachments such as pictures, documents, scanned emails, etc. Add as many as needed to the report.

When completed, hit the Submit icon at the bottom of the screen.

First Report (Near Miss, Injury, Illness, or Incident)

For Injury or Illness, was AIG Productivity Edge (1-855-365-7279) called to receive treatment advice and report the event? <input type="radio"/> Yes <input type="radio"/> No			
Injured Person Information			
Injured Person #1 Name	Mobile Phone #	Level of Treatment for injury/illness: <input type="radio"/> No Treatment <input type="radio"/> 1 st Aid <input type="radio"/> Clinic/Hospital	
Injured Person #2 Name	Mobile Phone #	Level of Treatment for injury/illness: <input type="radio"/> No Treatment <input type="radio"/> 1 st Aid <input type="radio"/> Clinic/Hospital	
Injured Person #3 Name	Mobile Phone #	Level of Treatment for injury/illness: <input type="radio"/> No Treatment <input type="radio"/> 1 st Aid <input type="radio"/> Clinic/Hospital	
Health and Safety Information (To be completed by H&S Department)			
Name of who received report:	Mobile Phone #:	Level of Treatment for injury/illness: <input type="radio"/> No Treatment <input type="radio"/> 1 st Aid <input type="radio"/> Clinic/Hospital	
Date & Time Received:	Notification made to AIG? <input type="radio"/> Yes <input type="radio"/> No	Supervisor sent report forms? <input type="radio"/> Yes <input type="radio"/> No	
Incident Report #:	Workers' Comp Claim #:	Incident Report Required? <input type="radio"/> Yes <input type="radio"/> No	Incident Investigation Required? <input type="radio"/> Yes <input type="radio"/> No
OSHA Recordable? <input type="radio"/> Yes <input type="radio"/> No	Days Away from Work? <input type="radio"/> Yes <input type="radio"/> No	Restricted Duty? <input type="radio"/> Yes <input type="radio"/> No	Submitted to Case Management? <input type="radio"/> Yes <input type="radio"/> No
Additional Information on event:			
_____		_____	_____
(Name Received By – H&S)		(Signature)	(Date)

20-HSE-FRM-101-09 (Feb 17)

If in doubt on how to report an event, report it as a Near Miss. The health and safety team can make any corrections after the incident is reviewed.

Examples of Near Miss reporting?

- All unsafe conditions, unsafe acts, or events identified where there was no injury or property loss at a WSP worksite or office.
- Close calls (narrow escapes) when driving a vehicle for work purposes (this includes driving personal vehicles). Example, you are stopped at a red stoplight, the light turns green and as you move forward you have to slam on your brakes because someone runs a red light.
- Events that occur on a worksite where WSP staff are working but does not affect WSP staff. Example, while working on a worksite controlled by another employer, a load shifts and falls injuring a contractor staff, but the WSP staff is not injured. Although the contract employee was injured, to the WSP employee the event was a near miss.
- If you are on a contractor's worksite and you identify an unsafe act, unsafe condition, or witness a close call. NOTE: Make sure you also report this to the contractor's health and safety staff
- An event occurs where there is potential for equipment damage or an environmental release, but it does not occur.
- If you are commuting to work or back home and you experience a near miss, report the event.

iSMS Data Entry – Select: Incident Report: (<https://zeroharm.onepb.net/PublicForms>)

Incident Date: Date event occurred using the calendar selection tool.

Incident Time: Time incident occurred, you can manually enter the time or use the drop down list.

Event Type: Near Miss

Location: You can search this field base on country, state, city, or office location. As you type, possible selections will become available.

Description: Give a detailed description of the location (example: building, floor, room number, intersection, GPS location)

Organization: You can search the organization by Division, Region, or organizational level. Start typing and possible selections will appear then select the appropriate option. Division, Region, and Level 1 will auto-fill. Then you can use the drop down selection for Levels 2-4.

- **Division:** WSP
- **Region:** Country (example: USA)
- **Level 1:** Select "WSP US Solutions"
- **Level 2-4:** View Drop down selections available based on selection of previous Level

Organizational Detail: WSP Employee

Business Service: Check for Selections – not used at when this document was created

Check Boxes: Check the appropriate boxes for injury information

Injured Person Information: Since this is a near miss, there should be no injuries.

Reported By: Complete the information for who reported the event. You can complete this report for another person by entering their data in this section.

Check Boxes: If there was a safety/security manager, witness, or other contact, check the appropriate box and complete the contact information for the person.

Description:

- **Short Description** – Short title for the event, make it descriptive. Do not use people’s names.
- **Long Event Description:** Provide full details on the event, add as much detail as possible. Do not provide any personal details or employee names in the description. The more detail provided will be helpful for incident investigations.
(If you have information on people involved in the event, such as contact information or witness reports, create a word document with the information and attach the document to the record – see last step.)
- **Immediate Actions Taken:** Provide as much detail as possible for actions taken after the event. Do not provide any personal details or employee names in the description. The more detail provided will be helpful for incident investigations.

Check Boxes: Check all appropriate boxes and provide additional information as required.

NOTE: UK Dangerous Occurrence is only used in the United Kingdom.

Attachments: Add attachments such as pictures, documents, scanned emails, etc. Add as many attachments as needed to the report.

When completed, hit the Submit icon at the bottom of the screen.

ATTACHMENT F
COVID-19 Employee Field Work Guidance

COVID-19 (Coronavirus)

Employee Field Work Guidance

Key Contacts:

- Human Resources:
[Human Resources Business Partner](#)
- Health, Safety and Environment Team:
safetyteam@wsp.com
- Communications support:
USComms@wsp.com

Field work must be client required and should be minimized whenever possible. If you are uncomfortable with traveling or conducting field work, please contact your manager for options. No employee will be forced to conduct field work. Traveling (not including commute) more than 1 hour or 60 miles for field work must be approved by the Sector President. Air travel for field work must be approved by the COO, Rich Driggs.

Your Safety

- Before you head out, consider all risks associated with the work you will be performing.
- If visiting a client site, ask the client what their current plan is for pandemic response and if they have any positive cases.
- Determine if the client requires specific PPE for the site before you go.
- Assess your health. If you are not well, stay home and contact your Human Resources Business Partner (HRBP). Do not attempt field work if you are not well.
- Practice good personal hygiene and social distancing of 6 feet or more.
- Health compromised employees should consider not conducting field work.
- If at any point during field work or travel the employee feels ill, they must self-isolate and contact their HRBP. Avoid any contact with other people.
- Employees should practice good hygiene practices while in the office or in the field. Don't shake hands.





Travel

- Limit all travel. Postpone or delay if possible.
- Project managers should attempt to find local resources to complete the work. Talk with local offices and sectors to see if other WSP employees can perform the work
- If possible, avoid air travel and staying in hotels. Hotels and other travel necessities can close without notice.
- If staying in a hotel, verify that the hotel is thoroughly cleaning and disinfecting the rooms between each guest. The hotel should post what they are doing on their website.
- Avoid all hotel common spaces such as bars, restaurants, pools, and hot tubs.
- If airline travel is necessary, situation-specific safety plans will be developed and must be followed.

Vehicle Use

- When driving to and from the field location, no more than two employees should be in the same vehicle. Neither employee should have any symptoms of illness. This should be communicated between employees to confirm. If two vehicles are available, take both vehicles.
- All work vehicle interiors shall be cleaned with a disinfecting agent before and after use. When cleaning, staff shall focus on high use items such as steering wheels, gear shifters, blinkers, armrests, radio/AC controls, and door handles.
- If the field staff can remain in their vehicle to observe work, then do so.



Field Equipment

- When loading, equipment used for field work, practice social distancing. Consider loading and unloading equipment a t times that will minimize contact.
- Equipment should not be used by multiple people if possible.
- Any equipment that will be handled by employees should be cleaned and disinfected before and after each use. If this is impractical during use, nitrile, vinyl, or latex gloves should be worn whenever handling equipment. Even if disinfection before each use is practical, gloves should still be worn.



Field Offices

- Staff should clean their work areas, to include testing or inspection equipment, daily at the start and end of their day.
- Clean offices nightly (conclusion of each shift), contact surfaces wiped down with a disinfecting agent.
- WSP should not have any in-person staff, group, or client meetings. WSP will conduct all meetings using a conference call or Skype whenever possible.
- Employees maintain social distancing of 6 feet from people while in the field and in the office, whenever possible.
- Where WSP controls a field office, minimize visitors into the office, and attempt to conduct meetings using a conference call or Skype
- If an employee has a potential exposure, they shall work from home, if possible, and avoid coming into the office. Staff shall monitor their health for 14 days. Should any symptoms develop, employees shall contact their HRBP.
- Staff shall not come into a WSP office if they are showing symptoms.
- Refer to the corporate guidelines for time charges related to self-quarantine, illness or remote working. If you have any questions speak with your supervisor and HRBP.



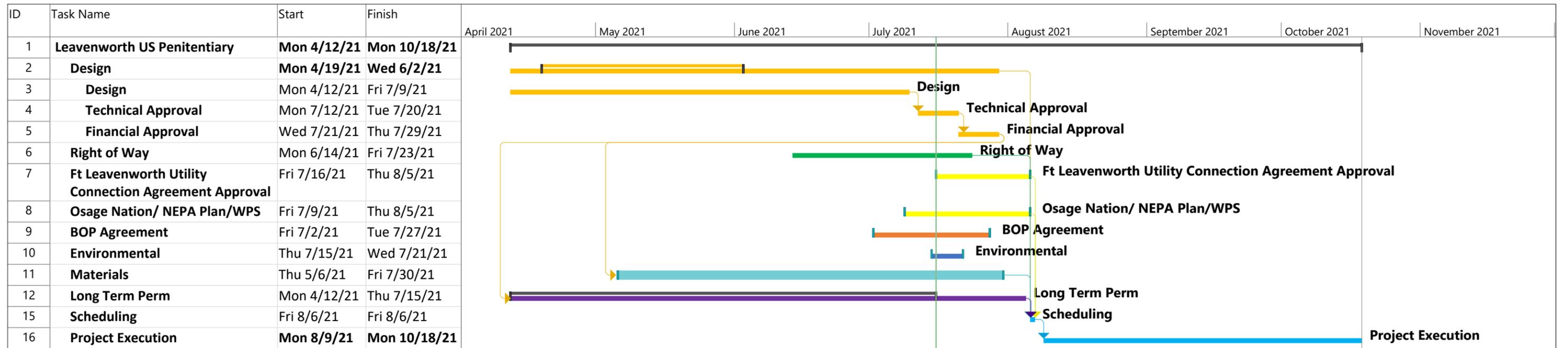
Key Contacts

- Human Resources: [Human Resources Business Partner](#)
- Health, Safety and Environment Team: safetyteam@wsp.com
- Communications support: USComms@wsp.com

Resources on Coronavirus

- [CDC Coronavirus website](#)
- [CDC Travel Advice](#)
- [World Health Organization](#)
- [WSP USA Health & Safety Intranet page](#)
- [WSP USA Official Playbook on Coronavirus \(COVID-19\)](#)
- [Guidance for Staff Working in Medical Facilities](#)
- [Guidance on Information Technology \(IT\)](#)

**Appendix G:
Kansas Gas Service Construction Schedule**



Project: 2021 Leavenworth US P Date: Fri 7/16/21	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

