



Spire STL Pipeline Project

Resource Report 4
Cultural Resources

FERC Docket No. CP17-___-___

FERC Application
January 2017

Public



RESOURCE REPORT 4 - CULTURAL RESOURCES	
SUMMARY OF FILING INFORMATION	
Information	Found in
1. Initial cultural resources consultation and documentation, and documentation of consultation with Native Americans - Title 18 Code of Federal Regulations (CFR) part (§) 380.12(f)(1)(i) & (2)	Section 4.2
2. Overview/Survey Report(s) - 18 CFR § 380.12(f)(1)(ii) & (2)	Section 4.3
INFORMATION RECOMMENDED OR OFTEN MISSING	
1. Identify the project area and the project’s impacts in terms of direct and indirect effects on cultural resources.	Section 4.3
2. Provide a project map with mileposts clearly showing boundaries of all survey areas (right-of-way, extra work areas, access roads, etc.). Ensure mileposts are marked, and survey corridor widths are clearly specified, and clearly indicate where survey has not yet been completed.	Appendices 4-A and 4-B
3. Provide documentation of consultation with applicable State Historic Preservation Offices (SHPO), Tribal Historic Preservation Offices (THPO), and land-managing agencies regarding the need for and required extent of cultural resource surveys.	Section 4.2
4. Provide a narrative summary of overview results, cultural resource surveys completed, identified cultural resources and any cultural resource issues.	Section 4.3
5. Provide a project specific Ethnographic Analysis (can be part of Overview/Survey Report).	Appendices 4-A and 4-B
6. Identify by mileposts any areas requiring survey for which the landowner denied access.	



RESOURCE REPORT 4 - CULTURAL RESOURCES	
INFORMATION RECOMMENDED OR OFTEN MISSING	
Information	Found in
7. Provide written comments on the Overview and Survey Reports, if available, from the applicable SHPOs, THPOs, and land-managing agencies.	Section 4.3
8. Provide a Summary Table of completion status of cultural resource surveys, and applicable SHPO or THPO and land-managing agency comments on the reports.	
9. Provide a Summary Table of identified cultural resources, and applicable SHPO or THPO and land-managing agency comments on the eligibility recommendations for those resources.	Section 4.3
10. Provide a brief summary of the status of federally recognized Indian tribe contact, including copies of all related correspondence and records of verbal communications.	Section 4.2
11. Provide a brief summary of comments received from stakeholders regarding cultural resources.	Section 4.2
12. Provide a schedule for completing any outstanding cultural resource studies.	Section 4.3
13. Provide an Unanticipated Discoveries Plan for the project area, referencing appropriate state statutes.	Section 4.4 and Appendix 4-C



Table of Contents

Cultural Resources.....	4-1
4.1 Introduction.....	4-1
4.2 Initial Cultural Resources Consultation	4-1
4.2.1 Consultation with the SHPOs	4-2
4.2.2 Consultation with Native American Tribes.....	4-2
4.3 Cultural Resources Investigations	4-9
4.3.1 Previously Identified Cultural Resources.....	4-11
4.3.2 Archaeological Survey Results.....	4-13
4.3.3 Historic Architectural Survey Results	4-21
4.4 Unanticipated Discoveries Plan.....	4-25
Tables	
4.2-1 Summary of Tribal Consultation.....	4-3
4.3-1 Areas where Cultural Resources Survey is Incomplete	4-11
4.3-2 Previously Identified Cultural Resources within the APE	4-12
4.3-3 Archaeological Resources Identified within the APE	4-14
4.3-4 Historic Architectural Resources Identified within the APE	4-21
Appendices	
4-A Illinois Cultural Resources Report	
CONTAINS PRIVILEGED INFORMATION - DO NOT RELEASE	
4-B Missouri Cultural Resources Report	
CONTAINS PRIVILEGED INFORMATION - DO NOT RELEASE	
4-C Unanticipated Discoveries Plans for Illinois and Missouri	



Acronyms and Abbreviations

APE	Area of Potential Effect
CFR	Code of Federal Regulations
FERC	Federal Energy Regulatory Commission
IHPA	Illinois Historic Preservation Agency
M&R	Metering and Regulating
MO SHPO	Missouri State Historic Preservation Office
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
Project	Spire STL Pipeline Project
ROW	right-of-way
SHPO	State Historic Preservation Office
Spire	Spire STL Pipeline LLC
STPs	shovel test pits
USGS	United States Geological Survey



Cultural Resources

Spire STL Pipeline LLC (“Spire”) proposes to construct and operate the Spire STL Pipeline Project (“Project”) to be located in Scott, Greene, and Jersey Counties, Illinois, and St. Charles and St. Louis Counties, Missouri. Resource Report 4 addresses the nature and significance of cultural resources, including archaeological sites and historic properties, within the Area of Potential Effect (“APE”) for the Project. It also summarizes agency and Native American consultations, methods and results of investigations, newly identified resources, and plans for addressing the potential for unanticipated discoveries of cultural resources and/or human remains during Project-related activities.

4.1 Introduction

Cultural resource investigations for the Project were conducted in compliance with Section 106 [36 Code of Federal Regulations (“CFR”) 800] of the National Historic Preservation Act (“NHPA”) requiring all federal agencies, including the Federal Energy Regulatory Commission (“FERC”), to take into account, prior to authorizing an undertaking (e.g., the issuance of a FERC Certificate), the effect of that undertaking on cultural resources listed in or eligible for listing in the National Register of Historic Places (“NRHP”) (NRHP; 36 CFR 60). The NHPA and federal regulations also require federal agencies to consult with the appropriate State Historic Preservation Office (“SHPO”) and federally recognized Native American tribal organizations for undertakings with potential to affect NRHP-listed or NRHP-eligible properties. Spire has initiated consultation with the Illinois Historic Preservation Agency (“IHPA”), Missouri SHPO (“MO SHPO”), and federally recognized tribes. A summary of correspondence to date is described in Section 4.2. Copies of correspondence are included in Resource Report 1, Appendix 1-C. Further correspondence received from the IHPA, MO SHPO or Native American tribes after the FERC application will be provided to FERC upon receipt.

Spire coordinated with landowners for access to the Project areas for the completion of cultural resource surveys. As the Project crosses a primarily agricultural landscape, cultural resource surveys were generally completed after harvest, where access was granted. A summary of the methodologies and results of the cultural resource surveys performed to date is provided in Section 4.3, along with the results of preliminary background research of previously identified cultural resources. Phase I Cultural Resources Reports for each state are contained in Appendices 4-A and 4-B in Volume IV-Privileged Information.

4.2 Initial Cultural Resources Consultation

This section contains a summary of the cultural resources consultations with the IHPA, MO SHPO, and federally recognized tribes that have occurred for the Project. A complete record of agency and tribal correspondence is provided in Resource Report 1, Appendix 1-C.



4.2.1 Consultation with the SHPOs

Spire met with the IHPA to introduce the Project on June 21, 2016. The IHPA confirmed that surveys would be required, and provided guidance for the survey methods. Spire also provided the agency with a notice commencing the initiation of the FERC pre-filing process and an invitation to attend the Project's open houses on July 29 and August 5, 2016, respectively. On August 4, 2016, the IHPA provided a letter (IHPA Log #005080216) formally requesting a Phase I archaeological reconnaissance survey to locate, identify, and record all archaeological resources within the Project area. The IHPA also requested photographs of structures in or adjacent to the Project area. Written initial consultation with the IHPA was submitted on August 29, 2016. Copies of the Unanticipated Discoveries Plan for Cultural Resources and Resource Report 4 were provided to the IHPA on October 28 and November 1, 2016. On November 7, 2016, Spire had a telephone conversation with the IHPA to discuss an approach for architectural reporting for the Illinois portion of the Project. On December 13, 2016, the IHPA attended an Illinois interagency meeting, led by Spire.

Spire met with the MO SHPO to introduce the Project on July 8 and August 3, 2016. The MO SHPO confirmed that surveys would be required, and provided guidance for the survey methods. Spire also provided the agency with a notice commencing the initiation of the FERC pre-filing process and an invitation to attend the Project's open houses on July 29 and August 5, 2016, respectively. Written initial consultation with the MO SHPO was submitted on August 29, 2016. In a series of email discussions occurring between September 12 and October 3, 2016 with the MO SHPO, the topic arose of the location and terminus of the Katy Trail (a NRHP-eligible site). Kim Dillon (Cultural Resources Management Section Chief, Missouri State Parks) sent Spire information from Melanie Robinson-Smith (Assistant District Supervisor, Katy Trail/Rock Island Trail Coordinator, Missouri State Parks, Northern Parks District) stating the trail has not been extended east beyond the Machens trailhead. The termination point is near Machens Road. At its nearest point, the Katy Trail is approximately 0.7 miles southwest of the Project's APE. The Project will therefore avoid the trail, and no impacts to the trail are anticipated from the construction or operation of the Project.

In a September 20, 2016 email, the MO SHPO was provided with an updated list of correspondence with Native American Tribes for the Project. Copies of the Unanticipated Discoveries Plan for Cultural Resources and Resource Report 4 were provided to MO SHPO on October 28 and November 1, 2016.

On November 15, 2016, Spire conducted a telephone conversation with the MO SHPO to discuss an approach for architectural reporting for the Missouri portion of the Project. Additionally, on November 15, 2016, Spire conducted a telephone meeting regarding the proposed pipeline routing near Site SL64. On November 17, 2016, the MO SHPO provided Spire with comments on the Unanticipated Discoveries Plan for Cultural Resources and Resource Report 4.

4.2.2 Consultation with Native American Tribes

The Project does not occur within any property defined as Native American reservation or tribal lands. However, Spire coordinated with the SHPOs and other federal and state agencies to identify federally recognized Native



American tribal organizations that may have an interest in the Project area. Summarized in Table 4.2-1, Spire has provided information to 31 tribes...

Table 4.2-1. Summary of Tribal Consultation

Agency	Title	Contact Name	Date	Correspondence Type	Additional Comments
Absentee-Shawnee Tribe of Indians of Oklahoma	Tribal Historic Preservation Officer	Leonard Longhorn	6/30/2016	Telephone Message	Left a detailed message with assistant (Ashley Burkholder). Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Cherokee Nation	Cultural Resources	Dr. Richard Allen	10/19/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
			10/27/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
Delaware Nation		Ms. Nekole Alligood	6/30/2016	Telephone Message	Left a detailed message with assistant (Leandra). Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Delaware Tribe of Indians	Historic Preservation Office	Dr. Brice Obermeyer	6/30/2016	Attempted Telephone Call, No Response	Called twice. First attempt was disconnected before anyone answered. Second attempt, no answer and no voicemail system available.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Eastern Shawnee Tribe of Oklahoma	Cultural Preservation Director	Ms. Robin Dushane	6/30/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Ho-Chunk Nation	Tribal Historic Preservation Officer	Bill Quackenbush	10/19/2016	Telephone	Introduced the Project. Mr. Quackenbush prefers digital documents and is hoping for at least a 30-day review period.
			10/27/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			10/28/2016	Notice of Pre-filing Letter, courtesy digital copy by email	Sent Notice of Pre-filing Letter, courtesy follow up copy by email



Table 4.2-1. Summary of Tribal Consultation (Continued)

Agency	Region/ Division	Contact Name	Date	Correspondence	Additional Comments			
Iowa Tribe of Kansas and Nebraska	Tribal Historic Preservation Officer	Mr. Lance M. Foster	6/30/2016	Telephone	Left a detailed voicemail. Introduced the Project and offered invitation to call back.			
			7/6/2016	Telephone	Mr. Foster returned call. He is likely to accept the invitation to be a Consulting Party once he reviews mapping from formal correspondence. Wants to receive archaeological reports and notification if human burials or village sites are encountered.			
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter			
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter			
Iowa Tribe of Oklahoma	Division Director	Patrick Durham	6/30/2016	Telephone	Introduced the Project. Mr. Durham is only concerned if human remains are identified. He would like to review the initial information via a letter.			
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter			
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter			
Kaw Indian Nation of Oklahoma	Museum Director	Ms. Crystal Douglas	6/30/2016	Telephone	Introduced the Project. Initial letter should go to Jacqlyn Secondine Hensley and copy Ms. Douglas. Subsequent info can go to Ms. Douglas with a copy to Ms. Hensley. All correspondence should be emailed as PDF document, if possible.			
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter			
			12/19/2016	Telephone	Informed Ms. Douglas that fieldwork has been completed, per request. Ms. Douglas has requested to receive and review the draft Phase I report.			
	Chairman	Ms. Jacqlyn Secondine Hensley	8/9/2016	Notice of Pre-filing Letter, courtesy follow up copy by email	Sent Notice of Pre-filing Letter, courtesy follow up copy by email.			
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter			
			8/30/2016	Telephone	Left a voicemail regarding Ms. Hensley's request to Spire that a meeting be setup to discuss the project and consultation process.			
			9/6/2016	Email	Sent email to ask about available dates for the requested meeting with Spire and the FERC.			
			9/21/2016	Telephone	Ms. Douglas requests to participate in any tribal meetings and would like conference call after cultural surveys are completed to discuss results.			
			Kickapoo Tribe in Kansas	NAGPRA Director	Ms. Nellie Cadue	6/30/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
						7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter						



Table 4.2-1. Summary of Tribal Consultation (Continued)

Agency	Region/ Division	Contact Name	Date	Correspondence	Additional Comments
Kickapoo Traditional Tribe of Texas	Director	Mr. Juan Garza, Jr.	6/30/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter. Delivery was refused.
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Kickapoo Tribe of Oklahoma	Attorney/ Preservation Rep	Kent Collier	6/30/2016	Attempted Telephone Message	No answer and no voicemail system available.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Match-e-be- nash-she-wish Band of Potawatomi Indians of Michigan	Tribal Historic Preservation Officer	DJ Hoffman	10/19/2016	Telephone	Spoke with THPO staff and asked to leave a detailed message on THP Officer's voicemail. Introduced the Project and offered invitation to call back.
			10/27/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter. Returned, unable to forward.
Miami Tribe of Oklahoma	Acting Tribal Historic Preservation Officer	Ms. Diane Hunter	6/30/2016	Telephone	Introduced the Project. Ms. Hunter requests that all correspondence be emailed.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/9/2016	Notice of Pre-filing Letter, courtesy follow up copy by email	Sent Notice of Pre-filing Letter, courtesy follow up copy by email
			8/12/2016	Email	Received a request from Ms. Hunter to be a Consulting Party.
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Osage Nation	Archaeologist	John Fox	6/30/2016	Telephone	Introduced the Project. Mr. Fox will review the letter before responding.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
			8/16/2016	Letter to FERC	Mr. Fox sent a letter to FERC requesting to be a Consulting Party and have a meeting with Spire and FERC.
			8/18/2016	Telephone	Called Mr. Fox regarding his letter to FERC requesting to be a consulting party and for Spire and FERC to organize a tribal consultation meeting. Mr. Fox will get back to us regarding the type of meeting he is requesting.
			9/6/2016	Email	Sent a follow-up email to Mr. Fox asking if he had determined a date for the requested consultation meeting with Spire and the FERC.
			12/19/2016	Telephone	Informed Mr. Fox that fieldwork has been completed, per request. Mr. Fox has requested to receive and review the draft Phase I reports.



Table 4.2-1. Summary of Tribal Consultation (Continued)

Agency	Region/ Division	Contact Name	Date	Correspondence	Additional Comments
Peoria Tribe of Indians of Oklahoma		Logan Davenport	7/1/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Ponca Tribe of Nebraska	Tribal Historic Preservation Officer	Mr. Shannon Wright	7/1/2016	Telephone	Introduced the Project. Mr. Wright is not likely to want consulting party status, but will decide when he sees maps. May only ask to have copies of reports.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Ponca Tribe of Oklahoma	Tribal Historic Preservation Officer	Ms. Halona Clawson	7/1/2016	Attempted Telephone Message	Called twice. No response and no voicemail system available.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Citizen Potawatomi Nation		Andrew Gourd	7/1/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Forest County Potawatomi	Tribal Historic Preservation Officer	Ms. Melissa Cook	7/1/2016	Attempted Telephone Message	Called twice. No response and no voicemail system available.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Huron Potawatomi Nation	Council/ Board	Robyn Burlingham	10/19/2016	Telephone	Introduced the Project. Ms. Burlingham will review the letters with members of the Board (Tribal Council).
			10/27/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
Potawatomi Nation-Hannahville Indian Community	Council/Board	Mr. Kenneth Mechigaud	7/1/2016	Attempted Telephone Message	No response and no voicemail system available.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Hannahville Indian Community of Michigan			10/19/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.



Table 4.2-1. Summary of Tribal Consultation (Continued)

Agency	Region/ Division	Contact Name	Date	Correspondence	Additional Comments
Pokagon Band of Potawatomi Indians	Tribal Historic Preservation Officer	Mr. Marcus Winchester	7/1/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Prairie Band Potawatomi Nation		Ms. Hattie Mitchell	7/1/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Quapaw Tribe of Oklahoma	Chairman	Mr. John Berrey	7/1/2016	Attempted Telephone Message	No response and no voicemail system available.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
	THPO	Mr. Everett Bandy	8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
			8/24/2016	Letter	Received letter expressing interest in St. Louis County, MO and desire to be consulting party. Also request a copy of EA document.
Sac and Fox Tribe of the Missouri in Kansas and Nebraska	Chair	Mr. Edmore Green	7/1/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Sac and Fox Tribe of the Mississippi in Iowa	Historic Preservation Director	Mr. Johnathan L. Buffalo	7/1/2016	Telephone	Introduced the Project. Mr. Buffalo would rather wait for official correspondence and asked that correspondence be sent digitally. He will likely choose to be a consulting party, since sensitive areas will be crossed.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/9/2016	Notice of Pre-filing Letter, courtesy follow up copy by email	Sent Notice of Pre-filing Letter, courtesy follow up copy by email.
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter
Sac and Fox Nation of Oklahoma	Cultural Resources	Ms. Sandra Kaye Massey	7/1/2016	Telephone Message	Left a detailed voicemail. Introduced the Project and offered invitation to call back.
			7/29/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
			8/16/2016	Open House Invitation Letter	Sent Open House Invitation Letter



Table 4.2-1. Summary of Tribal Consultation (Continued)

Agency	Region/ Division	Contact Name	Date	Correspondence	Additional Comments
Shawnee Tribe	Cultural Resources	Ms. Jodi Hayes	10/19/2016	Telephone Message	Spoke with receptionist and asked to leave a detailed message on Ms. Hayes' voicemail. Introduced the Project and offered invitation to call back.
			10/27/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
United Keetoowah Band of Cherokee Indians of Oklahoma	Tribal Historic Preservation Officer	Eric Oosahwee-Voss	10/19/2016	Telephone Message	Spoke with THPO staff and asked to leave a detailed message on THP Officer's voicemail. Introduced the Project and offered invitation to call back.
			10/27/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter
Winnebago Tribe of Nebraska	Tribal Historic Preservation Officer	John Blackhawk	10/19/2016	Telephone Message	Spoke with THPO staff and asked to leave a detailed message on THP Officer's voicemail. Introduced the Project and offered invitation to call back.
			10/27/2016	Notice of Pre-filing Letter	Sent Notice of Pre-filing Letter

Spire attempted to contact each tribe by telephone to introduce the Project in June 2016 and October 2016. A letter providing information on the Project and a notice of the initiation of the FERC pre-filing process was submitted to each Tribe. Copies of these letters were provided by email when requested. Invitations to the open houses and FERC scoping sessions were submitted in August and October 2016.

On August 12, 2016, the Miami Tribe of Oklahoma notified Spire of their intent to serve as a consulting party. The Miami Tribe of Oklahoma also submitted a comment to FERC in a letter on September 14, 2016. The Miami Tribe does not have an objection to the Project at this time, as they are not currently aware of specific sites in the Project area, and request immediate consultation should a discovery under the Native American Graves Protection and Repatriation Act occur. On August 9, 2016 a digital copy of the July 29, 2016 correspondence was emailed to the Miami Tribe of Oklahoma, per request.

In an August 16, 2016 email, the Osage Nation notified Spire of their intent to serve as a consulting party and requested a consultation meeting. On the same date, this was also submitted as a comment letter to FERC. Spire contacted the tribe via telephone and email and is awaiting further coordination on the request for a meeting.

The Quapaw Tribe of Oklahoma sent a letter on August 24, 2016, requesting consulting party status for portions of the Project in St. Louis County, Missouri.

On August 9, 2016 a digital copy of the July 29, 2016 correspondence was emailed to the Kaw Indian Nation of Oklahoma, per request. On September 22, 2016, Spire received a telephone call from the Kaw Indian Nation of Oklahoma requesting to be included in any tribal meetings related to the Project and requested a conference call to discuss the results of the cultural resource investigations. Spire discussed the results of the cultural resource investigations with the Kaw Indian Nation of Oklahoma on December 19, 2016.

On August 9, 2016 a digital copy of the July 29, 2016 correspondence was delivered to the Sac and Fox Tribe of the Mississippi in Iowa of Oklahoma, per request.



Spire will submit its initial Phase I Cultural Resources Reports in January 2017 to the tribes who have requested copies. Supplemental information will also be provided upon the completion of additional cultural resource investigation. Spire will continue to coordinate with the tribes. Further correspondence received after the FERC application will be provided to FERC upon receipt.

4.3 Cultural Resources Investigations

Background research and investigations were completed for all accessible portions of the 24-inch pipeline and the existing Line 880. APE for the 24-inch pipeline portion of the Project, which consists of a 300-foot wide study corridor centered on the proposed pipeline route, a 100-foot wide study corridor for each access road, new Project metering and regulating (“M&R”) facilities, mainline valve locations, cathodic protection systems, and the proposed contractor yards/staging areas. The APE for modifications to the existing Line 880 pipeline consists of a 100-foot to 200-foot wide study corridor along the existing pipeline and a 200-foot corridor in the area where a portion of the existing Line 880 will be relocated. Subsurface testing was employed to determine if the existing right-of-way has been previously disturbed.

A systematic Phase I archaeological survey was conducted in those portions of the proposed APE determined to contain moderate to high potential for yielding archaeological sites. Per the current accepted guidelines for Illinois and Missouri, previously plowed areas exhibiting at least 25 percent ground surface visibility were surface collected by walking five-meter intervals to look for exposed artifacts. This was supplemented by excavating shovel test pits (“STPs”) in small areas where surface visibility drops below the accepted threshold and to define archaeological sites and site boundaries, as well as to obtain representative soil profile data for recovered sites. In areas that have not been previously plowed, or in large areas where surface visibility was below the 25 percent visibility threshold at the time of the study, subsurface testing was conducted by excavating STPs at 15-meter intervals along transects spaced 15 meter apart. This methodology was extended to all areas of the Project interpreted to have a moderate/high potential for site discovery. Per the state guidelines, each STP measured at least 40 centimeters in diameter in Illinois and at least 25 centimeters in diameter in Missouri. STPs were excavated until culturally sterile subsoil was reached or to an average depth of 60 centimeters below the existing ground surface. Where culturally sterile subsoil was not able to be reached, initial geomorphological assessments were conducted. Excavated soil was screened through one-quarter-inch mesh to allow for systematic artifact recovery. If artifacts were recovered in STPs, radial STPs placed at five-meter intervals were excavated around the perimeter of the cluster of positive STPs to more accurately define the archaeological site boundaries, per state guidelines.

Portions of the 24-inch pipeline were located on floodplains that may have potential to contain buried soils. The soil geomorphology evaluation took place across the floodplain at Apple and Macoupin Creeks, and between the Mississippi River and the Missouri River. The purpose of the field visit was to evaluate the valley floor landscapes at the crossings for the potential of deeply buried cultural resources and to provide a geoarchaeological context for any artifacts found at the crossing. The field visit included a reconnaissance walkover followed by examination of hand-auger soundings collected with a 3-inch diameter bucket auger at 11 selected locations. Auger locations



were mapped with a handheld GPS device. Soil/sediment samples were collected and interpreted in the field by a geomorphologist. Descriptions included Munsell color, field texture, soil horizonation and structure, as well as the presence of artifacts or organics. According to the results of the Phase I geoarchaeological study, the potential for deeply buried cultural resources in the Project area is not anticipated, and further soil assessment is therefore not recommended.

Based on guidance from the IHPA, Spire completed a historic architectural survey within one-eighth-mile of the 24-inch pipeline in Illinois. Based on guidance from the MO SHPO, Spire completed a historic and architectural survey within the APE for the proposed 24-inch pipeline in Missouri, and resources directly adjacent to the proposed limits of disturbance for the Line 880 modifications. Architectural survey will serve to document the current condition of previously recorded architectural resources and identify previously unrecorded architectural resources, including buildings, objects, structures, sites, or districts within the APE that are 50 years old or older. These resources were photographed with a digital camera and recorded from the public right-of-way or project APE, noting architectural style, condition, and important features. Architectural historians also noted any major changes or alterations as visible from the right-of-way, and individually mapped each property on United States Geological Survey ("USGS") maps. Photographs towards the proposed Project from each resource were also obtained.

Following field surveys, the identified architectural properties were assessed for integrity and potential significance according to the NRHP Criteria of Evaluation, the historic context developed for this Project, and *National Register Bulletin 15-How to Apply the National Register Criteria of Evaluation* and *National Register Bulletin 30-Guidelines for Criteria for Evaluation and Documenting Rural Historic Landscapes*. Boundaries for potentially eligible historic resources and/or historic districts are developed in accordance with *National Register Bulletin 21-Defining Boundaries for National Register Properties*. Potential effects of the proposed Project on potential NRHP-eligible resources were also assessed.

Phase I archaeological surveys and reconnaissance for historic architectural resources were conducted generally following crop harvest. Field studies were conducted between October 5 and December 10, 2016. Those areas where cultural resources investigations are incomplete are provided in Table 4.3-1. Mapping of these locations are provided in the Phase I technical reports (Appendices 4-A and 4-B in Volume IV - Privileged Information). Follow-up surveys on currently inaccessible properties will be conducted in spring 2017 should landowner permission be obtained. Additional investigations will also be conducted in spring 2017 along reroutes to avoid potentially eligible sites or at locations of potentially eligible sites that are not being avoided. Results of future cultural resource investigations will be provided to FERC and each SHPO in spring 2017 upon completion.

Methods and results of the initial Phase I survey of Project areas accessible in the 2016 field season, including Project maps, graphics, and photographs, in accordance with SHPO's guidelines have been developed and are provided in Appendices 4-A and 4-B Volume IV-Privileged Information. The reports were submitted to the IHPA and MO SHPO in January 2017.



Table 4.3-1. Areas where Cultural Resources Survey is Incomplete

Facility/County, State	Approximate MP In	Approximate MP Out	Reason for Incomplete Survey	Survey Need
24-Inch Pipeline				
Scott County, Illinois	0.0	0.0	Pending Survey Permission	New Staging Area
Scott County, Illinois	3.0	3.4	Hunting Season Restrictions	Centerline
Scott County, Illinois	3.4	3.5	Pending Survey Permission	Centerline
Greene County, Illinois	3.5	4.0	Hunting Season Restrictions and Pending Survey Permission	Centerline
Greene County, Illinois	9.1	9.2	Pending Survey Permission	New ATWS
Greene County, Illinois	9.7	10.3	Pending Survey Permission	Centerline
Greene County, Illinois	18.8	18.9	Pending Survey Permission	Centerline
Greene County, Illinois	19.1	19.5	Pending Survey Permission	Centerline (outside construction ROW)
Greene County, Illinois	19.6	19.6	Pending Survey Permission	New ATWS
Greene County, Illinois	25.9	25.9	Pending Survey Permission	Access Road
Greene County, Illinois	26.1	26.1	Pending Survey Permission	Access Road
Greene County, Illinois	26.4	27.3	Pending Survey Permission	Centerline
Greene County, Illinois	29.2	29.3	Pending Survey Permission	Centerline
Jersey County, Illinois	32.4	32.9	Pending Survey Permission	Centerline
Jersey County, Illinois	34.1	34.2	Pending Survey Permission	New ATWS
Jersey County, Illinois	40.2	41.1	Pending Survey Permission	Centerline and Access Road
Jersey County, Illinois	41.8	43.7	Pending Survey Permission	Centerline
Jersey County, Illinois	43.8	43.8	Pending Survey Permission	New Staging Area
Jersey County, Illinois	44.0	45.1	Pending Survey Permission	Centerline and Access Road
St. Charles County, Missouri	46.1	46.1	Pending Survey Permission	Centerline and Access Road
St. Charles County, Missouri	46.5	46.5	Pending Survey Permission	HDD Pull-Back
St. Charles County, Missouri	46.6	46.6	Pending Survey Permission	New ATWS
St. Charles County, Missouri	48.6	48.7	Pending Survey Permission	Centerline
St. Charles County, Missouri	49.4	49.4	Pending Survey Permission	Centerline (outside construction ROW)
St. Charles County, Missouri	51.0	51.0	Pending Survey Permission	Centerline
St. Charles County, Missouri	52.2	52.3	Pending Survey Permission	Centerline
St. Charles County, Missouri	54.1	54.5	Pending Survey Permission	Centerline
St. Charles County, Missouri	57.2	57.2	Pending Survey Permission	HDD Pull-Back
Total Survey Remaining	8.3 Miles (approximate)			



4.3.1 Previously Identified Cultural Resources

Background research was completed on the APE for the Project to gather information from previous cultural resource investigations and on known archaeological sites and historic architectural properties. Background research was acquired through an inventory search at the IHPA and MO SHPO offices. Additional online inventories were accessed by the use of the Inventory of Illinois Archaeological Sites Flex Archaeology Viewer, Illinois CRM Report Archive Database, and MO SHPO’s Historic Districts and Sites viewer and Archaeology Viewer. Cultural resources previously identified within the APE are described in Table 4.3-2.

Table 4.3-2. Previously Identified Cultural Resources within the APE

Site # ¹	Site Name	County	Topography	Temporal Period	Site Type	NRHP Status	Avoided (Y or N)	Treatment
Illinois								
11ST499 ²	-	Scott	Upland Ridge	Unknown Precontact	Habitation	Not Eligible	N	No further studies
11ST500	-	Scott	Bluffcrest	Unknown Precontact	Habitation	Not Eligible	N	No further studies
11GE18	Charles Eby Site	Greene	Terrace	Unknown Precontact	Habitation	Not Eligible	N	Archaeological study identified two small clusters of artifacts; No adverse effect; No further studies
11GE307 ²	One Ceramic Site	Greene	Terrace	Late Woodland	Habitation	Previously recommended for Phase II	N	No artifacts recovered; No adverse effect; No further study
Missouri								
23SC5	-	St. Charles	-	-	Indian Trail	Destroyed	N	No evidence during Phase I study; No adverse effect; No further study
23SC1057	-	St. Charles	Floodplain Ridge	Early Industrial; Urban Industrial	Habitation	Portion Recommended Not Eligible	Y	No artifacts recovered; No adverse effect; No further study
23SL157 ³	Lavien Site	St. Louis	Ridge	Archaic	Habitation	Unevaluated	N	No artifacts recovered; No adverse effect; No further study
23SL158 ³	Tuco Site	St. Louis	Ridge	Archaic	Habitation	Unevaluated	N	No artifacts recovered; No adverse effect; No further study

Notes:

- ¹ No remains of previously recorded sites were identified at the M&R station locations.
- ² Within access road APE.
- ³ Site occurs along the existing Line 880.

Eight previously identified archaeological sites extend into the defined APE. No historic or architectural resources are located within the Project’s direct APE. Four of these archaeological resources are located in Greene and Scott Counties, Illinois, while the remaining four resources are within St. Charles and St. Louis Counties, Missouri. One of these archaeological sites has been recommended for Phase II archaeological testing, three have been previously



determined as Not Eligible for listing in the NRHP, portions of one site were previously recommended not eligible, one site is recorded as being destroyed, and the remaining two sites have not been evaluated for NRHP eligibility. Spire conducted Phase I archaeological studies at each of these eight previously recorded site locations. Two small clusters of artifacts were identified along one site (11GE18). The remaining seven previously recorded sites were unidentified during Phase I survey.

Site 11GE307 is situated on a terrace in a cultivated field. A portion of the site is crossed by a proposed access road for the current project. This site was identified in 1995 during a survey by the Center for American Archeology for a proposed four lane highway. The site is a small artifact scatter of lithic flakes and one precontact ceramic, dating the site from the Late Woodland. Site 11GE307 was previously recommended for Phase II archaeological testing. However, since no artifacts were encountered during the current survey, no additional study is recommended.

Three previously recorded archaeological sites (11GE18, 11ST499, and 11ST500) in Illinois were determined to be Not Eligible for listing the NRHP. All but one of these resources (11GE18) were identified as a result of previous archaeological surveys. All three sites have an unknown precontact temporal affiliation.

Site 23SC1057 was identified in Missouri during a Phase I survey for the Keystone Pipeline Project in 2016. The portions of the site located within the study corridor of the Keystone Pipeline Project were determined to be Not Eligible for listing in the NRHP. This recorded site's boundaries will be avoided by the Project construction right-of-way (ROW).

Site 23SC5 in Missouri is a Sioux Indian trail that is recorded as being destroyed. Systematic Phase I archaeological studies did not find evidence of an existing trail in the recorded location. This area is currently an active agricultural field.

The remaining two previously recorded archaeological sites (23SL157 and 23SL158) are located in Missouri and remain unevaluated for NRHP eligibility.

Three historic districts are located within a 1-mile radius of the proposed Project. The Principia College Historic District is a National Historic Landmark and is situated approximately 0.8-mile from the APE. The Elsah Historic District is listed in the NRHP and is situated approximately 0.16-mile from the APE. The Chautauqua Historic District is also listed in the NRHP and located approximately 0.4-mile from the APE.

4.3.2 Archaeological Survey Results

Spire conducted archaeological field surveys between October 5 and December 10, 2016. Archaeological resources identified within the APE are provided as Table 4.3-3. Phase I Survey Reports are provided as Appendices 4-A and 4-B in Volume IV - Privileged Information.



Table 4.3-3. Archaeological Resources Identified within the APE

Facility, County, and Resource ID	Site ID #	Resource Type	Temporal Affiliation	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
24-Inch Pipeline							
<i>Scott County, Illinois</i>							
FD#1	11ST603	Site	Precontact	Not Eligible	N	No further study	TBD
FD#2	11ST604	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#3	11ST613	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#4	11ST615	Site	Precontact	Not Eligible	N	No further study	TBD
FD#5	11ST612	Site	Precontact	Not Eligible	N	No further study	TBD
FD#6	11ST614	Site	Precontact	Not Eligible	N	No further study	TBD
FD#7	11ST616	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#8	11ST606	Site	Precontact	Not Eligible	N	No further study	TBD
FD#9	11ST608	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#10	11ST609	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#11	11ST607	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#12	11ST611	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#13	11ST610	Site	Precontact	Not Eligible	N	No further study	TBD
FD#14	11ST605	Site	Precontact	Not Eligible	N	No further study	TBD
<i>Greene County, Illinois</i>							
FD#15	11GE752	Site	Precontact	Not Eligible	N	No further study	TBD
FD#16	11GE728	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#17	11GE727	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#18	11GE729	Site	Precontact	Not Eligible	N	No further study	TBD
FD#19	11GE804	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#20	11GE808	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#21	11GE719	Site	Precontact	Not Eligible	N	No further study	TBD
FD#22	11GE726	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#23	11GE725	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#24	11GE807	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#25	11GE806	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#26	11GE805	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#27	11GE720	Site	Precontact	Not Eligible	N	No further study	TBD
FD#28	11GE721	Site	Precontact	Not Eligible	N	No further study	TBD



Table 4.3-3. Archaeological Resources Identified within the APE (Continued)

Facility, County, and Resource ID	Site ID#	Resource Type	Temporal Affiliation	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
24-Inch Pipeline (continued)							
<i>Greene County, Illinois (continued)</i>							
FD#29	11GE722	Site	Precontact	Not Eligible	N	No further study	TBD
FD#30	11GE730	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#31	11GE734	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#32	11GE733	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#33	11GE736	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#34	11GE735	Site	Precontact and Historic	Not Eligible	N	No further study	TBD
FD#35	11GE803	Site	Precontact	Not Eligible	N	No further study	TBD
FD#36	11GE759	Site	Precontact	Not Eligible	N	No further study	TBD
FD#37	11GE781	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#38	11GE783	Site	Precontact	Not Eligible	N	No further study	TBD
FD#39	11GE784	Site	Precontact	Not Eligible	N	No further study	TBD
FD#40	11GE786	Site	Precontact	Not Eligible	N	No further study	TBD
FD#41	11GE785	Site	Precontact	Not Eligible	N	No further study	TBD
FD#42	11GE787	Site	Precontact and Historic	Not Eligible	Y	No further study	TBD
FD#43	11GE782	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#44	11GE788	Site	Precontact	Not Eligible	N	No further study	TBD
FD#45	11GE789	Site	Precontact	Potentially Eligible	Y	No effect; avoided by construction ROW; No further study	TBD
FD#46	11GE790	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#47	11GE765	Site	Precontact	Not Eligible	N	No further study	TBD
FD#48	11GE763	Site	Historic	Not Eligible	Y	No further study	TBD
FD#49	11GE760	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#50	11GE762	Site	Precontact	Not Eligible	N	No further study	TBD
FD#51	11GE18	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#52	11GE761	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#53	11GE791	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#54	11GE794	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#55	11GE802	Site	Precontact	Not Eligible	N	No further study	TBD
FD#56	11GE795	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#57	11GE796	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#58	11GE797	Isolated Find	Precontact	Not Eligible	N	No further study	TBD



Table 4.3-3. Archaeological Resources Identified within the APE (Continued)

Facility, County, and Resource ID	Site ID#	Resource Type	Temporal Affiliation	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
24-Inch Pipeline (continued)							
<i>Greene County, Illinois (continued)</i>							
FD#59	11GE798	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#60	11GE799	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#61	11GE800	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#62	11GE801	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#63	11GE793	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#64	11GE792	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#65	11GE764	Site	Precontact	Not Eligible	N	No further study	TBD
FD#66	11GE775	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#67	11GE746	Site	Precontact and Historic	Not Eligible	Y	No further study	TBD
FD#68	11GE744	Site	Precontact	Not Eligible	N	No further study	TBD
FD#69	11GE743	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#70	11GE741	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#71	11GE742	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#72	11GE740	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#73	11GE739	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#74	11GE745	Site	Precontact	Not Eligible	N	No further study	TBD
FD#75	11GE737	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#76	11GE738	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#77	11GE768	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#78	11GE766	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#79	11GE767	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#80	11GE769	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#81	11GE731	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#82	11GE751	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#83	11GE748	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#84	11GE749	Site	Precontact	Not Eligible	N	No further study	TBD
FD#85	11GE750	Site	Precontact	Not Eligible	N	No further study	TBD
FD#86	11GE723	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#87	11GE732	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#88	11GE772	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD



Table 4.3-3. Archaeological Resources Identified within the APE (Continued)

Facility, County, and Resource ID	Site ID#	Resource Type	Temporal Affiliation	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
24-Inch Pipeline (continued)							
<i>Greene County, Illinois (continued)</i>							
FD#89	11GE773	Site	Precontact and Historic	Potentially Eligible	Y	No effect; avoided by construction ROW; No further study	TBD
FD#90	11GE774	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#91	11GE753	Site	Precontact	Not Eligible	N	No further study	TBD
FD#92	11GE754	Site	Precontact	Not Eligible	N	No further study	TBD
FD#93	11GE724	Site	Precontact	Not Eligible	N	No further study	TBD
FD#94	11GE756	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#95	11GE757	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#96	11GE758	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#97	11GE776	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#98	11GE777	Site	Precontact	Not Eligible	N	No further study	TBD
FD#99	11GE778	Site	Precontact	Not Eligible	N	No further study	TBD
FD#100	11GE779	Site	Precontact	Not Eligible	N	No further study	TBD
FD#101	11GE780	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#102	11GE755	Site	Historic	Not Eligible	Y	No further study	TBD
FD#103	11GE771	Site	Precontact	Not Eligible	N	No further study	TBD
FD#104	11GE770	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
<i>Jersey County, Illinois</i>							
FD#105	11JY659	Site	Historic	Not Eligible	N	No further study	TBD
FD#106	11JY653	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#107	11JY654	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#108	11JY655	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#109	11JY662	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#110	11JY658	Site	Precontact	Not Eligible	N	No further study	TBD
FD#111	11JY657	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#112	11JY656	Site	Precontact	Not Eligible	N	No further study	TBD
FD#113	11JY665	Site	Precontact	Not Eligible	N	No further study	TBD
FD#114	11JY696	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#115	11JY695	Site	Precontact	Not Eligible	N	No further study	TBD
FD#116	11JY709	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#117	11JY710	Site	Precontact	Not Eligible	Y	No further study	TBD



Table 4.3-3. Archaeological Resources Identified within the APE (Continued)

Facility, County, and Resource ID	Site ID#	Resource Type	Temporal Affiliation	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
24-Inch Pipeline (continued)							
<i>Jersey County, Illinois (continued)</i>							
FD#118	11JY711	Site	Precontact	Not Eligible	N	No further study	TBD
FD#119	11JY716	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#120	11JY715	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#121	11JY714	Site	Precontact	Not Eligible	N	No further study	TBD
FD#122	11JY713	Site	Precontact	Not Eligible	N	No further study	TBD
FD#123	11JY712	Site	Precontact	Not Eligible	N	No further study	TBD
FD#124	11JY697	Site	Precontact	Not Eligible	N	No further study	TBD
FD#125	11JY700	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#126	11JY698	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#127	11JY699	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#128	11JY661	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#129	11JY680	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#130	11JY705	Site	Historic	Not Eligible	N	No further study	TBD
FD#131	11JY706	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#132	11JY707	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#133	11JY708	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#134	11JY663	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#135	11JY681	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#136	11JY679	Site	Precontact	Not Eligible	N	No further study	TBD
FD#137	11JY674	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#138	11JY675	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#139	11JY676	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#140	11JY677	Site	Precontact	Not Eligible	N	No further study	TBD
FD#141	11JY678	Site	Precontact	Not Eligible	N	No further study	TBD
FD#142	11JY702	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#143	11JY703	Site	Precontact	Not Eligible	N	No further study	TBD
FD#144	11JY701	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#145	11JY704	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#146	11JY683	Site	Precontact	Not Eligible	N	No further study	TBD



Table 4.3-3. Archaeological Resources Identified within the APE (Continued)

Facility, County, and Resource ID	Site ID#	Resource Type	Temporal Affiliation	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
24-Inch Pipeline (continued)							
<i>Jersey County, Illinois (continued)</i>							
FD#147	11JY682	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#148	11JY684	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#149	11JY688	Site	Precontact	Not Eligible	N	No further study	TBD
FD#150	11JY685	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#151	11JY693	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#152	11JY694	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#153	11JY686	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#154	11JY689	Site	Precontact	Not Eligible	N	No further study	TBD
FD#155	11JY690	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#156	11JY691	Site	Precontact	Not Eligible	N	No further study	TBD
FD#157	11JY692	Site	Precontact	Not Eligible	N	No further study	TBD
FD#158	11JY687	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#159	11JY669	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#160	11JY667	Site	Precontact	Not Eligible	N	No further study	TBD
FD#161	11JY668	Site	Precontact	Not Eligible	N	No further study	TBD
FD#162	11JY664	Site	Precontact	Not Eligible	N	No further study	TBD
FD#163	11JY718	Site	Precontact	Not Eligible	N	No further study	TBD
FD#164	11JY717	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#165	11JY670	Site	Precontact	Not Eligible	Y	No further study	TBD
FD#166	11JY660	Site	Precontact	Not Eligible	N	No further study	TBD
FD#167	11JY671	Site	Precontact and Historic	Not Eligible	N	No further study	TBD
FD#168	11JY673	Site	Precontact	Not Eligible	N	No further study	TBD
FD#169	11JY672	Site	Precontact	Not Eligible	N	No further study	TBD
FD#170	11JY666	Site	Multi	Not Eligible	N	No further study	TBD
<i>St. Charles County, Missouri</i>							
FD#171	NA	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#172	23SC2219	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#173	23SC2218	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD
FD#174	23SC2213	Site	Precontact	Not Eligible	N	No further study	TBD
FD#175	23SC2215	Site	Precontact	Potentially Eligible	N	Avoid or Phase II testing	TBD



Table 4.3-3. Archaeological Resources Identified within the APE (Continued)

Facility, County, and Resource ID	Site ID#	Resource Type	Temporal Affiliation	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
24-Inch Pipeline (continued)							
<i>St. Charles County, Missouri (continued)</i>							
FD#176	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#177	NA	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#178	23SC2214	Site	Precontact	Not Eligible	N	No further study	TBD
FD#179	NA	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#180	NA	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#181	NA	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#182	NA	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#183	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#184	23SC2220	Site	Historic	Not Eligible	Y	No further study	TBD
FD#185	NA	Isolated Find	Historic	Not Eligible	N	No further study	TBD
FD#186	NA	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#187	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#188	NA	Isolated Find	Precontact	Not Eligible	N	No further study	TBD
FD#189	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#190	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#191	23SC2217	Site	Precontact	Not Eligible	N	No further study	TBD
FD#192	23SC2216	Site	Historic	Potentially Eligible	N	Avoid or Phase II testing	TBD
Line 880							
<i>St. Louis County, Missouri</i>							
FD#193	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#194	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#195	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#196	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD
FD#197	NA	Isolated Find	Precontact	Not Eligible	Y	No further study	TBD

The Phase I cultural resources survey for the Project identified 121 archaeological sites (109 precontact, six historic-period, and six multi component) and 76 precontact isolated artifacts within the Project APE. One of these sites (11GE18) was previously recorded, while the remaining sites are newly identified. The historic-period archaeological sites consist of low density artifact scatters and/or later period artifact assemblages. These historic-period archaeological sites have low research potential and are recommended not eligible for the NRHP.



Of the precontact sites, all but 12 consist of sparse lithic scatters with no evidence of features or diagnostic artifacts that do not warrant further study and are recommended not eligible for the NRHP. These 12 more extensive sites are: 11ST613, 11GE757, 11GE758, 11GE789, 11JY700, 11JY698, 11JY699, 11JY661, 11JY680, 23SC2219, 23SC2218, and 23SC2215. Six of these sites consist of higher density lithic scatters and contain tools and/or diagnostic artifacts, including 11ST613, 11JY700, 11JY698, 23SC2219, and 23SC2215. Four sites (11GE757, 11GE758, 11GE789, and 23SC2218) consist of moderate density lithic scatters and contain precontact ceramics. Two sites (11JY699 and 11JY680) consist of high density lithic scatters with no diagnostic artifacts. Site 11JY661 is a large, high density lithic scatter containing tools, diagnostic artifacts, groundstone, and fire cracked rock.

For the multi-component sites, all but one (11GE773) consist of low density artifact scatters and/or later period artifact assemblages that do not warrant further study and are recommended not eligible for the NRHP. Site 11GE773 consists of a higher density historic surface scatter containing residential and construction materials and a low density lithic scatter with no evidence of precontact features, diagnostic precontact artifacts, or artifact concentrations.

In total, 14 sites are recommended potentially eligible for the NRHP: 11ST613, 11GE726, 11GE757, 11GE758, 11GE773, 11GE789, 11JY700, 11JY698, 11JY699, 11JY661, 11JY680, 23SC2219, 23SC2218, 23SC2215, and 23SC2216. Two of these sites, 11GE773 and 11GE789, will be avoided by the proposed alignment. The remaining 12 sites may warrant Phase II testing if avoidance is not possible.

4.3.3 Historic Architectural Survey Results

Spire conducted architectural surveys in October 2016. Historic architectural resources identified within the APE are provided in Table 4.3-4. Phase I Survey Reports are provided as Appendices 4-A and 4-B in Volume IV - Privileged Information.

Table 4.3-4. Historic Architectural Resources Identified within the APE

Facility, County, and Resource ID	Resource Type	Date	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
24-Inch Pipeline						
<i>Scott County, Illinois</i>						
GAI-01	Farmstead	C. 1890	Not Eligible	Y	No further study	TBD
GAI-02	Farmstead	C. 1890	Potentially Eligible	Y	No effect; No further study	TBD
GAI-03	Farmstead	C. 1890	Not Eligible	N	No further study	TBD
<i>Greene County, Illinois</i>						
GAI-04	Farmstead	C. 1900	Not Eligible	N	No further study	TBD
GAI-05	Farmstead	C. 1900	Not Eligible	N	No further study	TBD
GAI-06	Railroad	C. 1921	Potentially Eligible, Criterion A	Y	No effect; avoided by boring; No further study	TBD



Table 4.3-4. Historic Architectural Resources Identified within the APE (Continued)

Facility, County, and Resource ID	Resource Type	Date	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
24-Inch Pipeline (continued)						
<i>Greene County, Illinois (continued)</i>						
GAI-07	Barn Structures	C. 1900, C. 1960	Not Eligible	Y	No further study	TBD
GAI-08	Farmstead	C. 1900	Not Eligible	N	No further study	TBD
GAI-09	Farmstead	C. 1950	Not Eligible	Y	No further study	TBD
GAI-10	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-11	Community Cemetery	C. 1840- present	Not Eligible	Y	No further study	TBD
GAI-12	Farmstead	C. 1930	Not Eligible	N	No further study	TBD
GAI-13	Farmstead	C. 1900	Not Eligible	N	No further study	TBD
GAI-14	Farmstead	C. 1870	Not Eligible	N	No further study	TBD
GAI-15	Farmstead	C. 1900	Not Eligible	N	No further study	TBD
GAI-16	Farmstead	C. 1920	Not Eligible	N	No further study	TBD
GAI-18	Farmstead	C. 1890	Not Eligible	Y	No further study	TBD
GAI-19	Farmstead	C. 1900	Not Eligible	Y	No further study	TBD
<i>Jersey County, Illinois</i>						
GAI-17	Farmstead	C. 1860	Not Eligible	Y	No further study	TBD
GAI-20	Farmstead	C. 1920	Not Eligible	Y	No further study	TBD
GAI-21	Farmstead	C. 1910	Not Eligible	Y	No further study	TBD
GAI-22	Farmstead	C. 1900	Not Eligible	Y	No further study	TBD
GAI-23	Farmstead	C. 1890	Not Eligible	N	No further study	TBD
GAI-24	Farmstead	C. 1910	Not Eligible	Y	No further study	TBD
GAI-25	Farmstead	C. 1890	Not Eligible	Y	No further study	TBD
GAI-26	Farmstead	C. 1890	Not Eligible	N	No further study	TBD
GAI-27	Farmstead	C. 1950	Not Eligible	N	No further study	TBD
GAI-28	Farmstead	C. 1910	Not Eligible	Y	No further study	TBD
GAI-29	Farmstead	C. 1850	Not Eligible	Y	No further study	TBD
GAI-30	Farmstead	C. 1930	Not Eligible	Y	No further study	TBD
GAI-31	Dwelling	C. 1900	Not Eligible	Y	No further study	TBD
<i>St. Charles County, Missouri</i>						
GAI-01m	Farmstead	C. 1910	Not Eligible	N	No further study	TBD
GAI-02m	Railroad	C. 1849	Potentially Eligible, Criterion A	Y	No effect; avoided by boring; No further study	TBD



Table 4.3-4. Historic Architectural Resources Identified within the APE (Continued)

Facility, County, and Resource ID	Resource Type	Date	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
Line 880						
<i>St Louis County, Missouri</i>						
GAI-03m	Farmstead	C. 1900	Not Eligible	N	No further study	TBD
GAI-04m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-05m	Dwelling	C. 1950	Not Eligible	N	No further study	TBD
GAI-06m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-07m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-08m	Dwelling	C. 1900	Not Eligible	N	No further study	TBD
GAI-09m	Dwelling	C. 1910	Not Eligible	Y	No further study	TBD
GAI-10m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-11m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-12m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-13m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-14m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-15m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-16m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-17m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-18m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-19m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-20m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-21m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-22m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-23m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-24m	Dwelling	C. 1960	Not Eligible	Y	No further study	TBD
GAI-25m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-26m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-27m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-28m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-29m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-30m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-31m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-32m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-33m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD
GAI-34m	Dwelling	C. 1950	Not Eligible	Y	No further study	TBD



Table 4.3-4. Historic Architectural Resources Identified within the APE (Continued)

Facility, County, and Resource ID	Resource Type	Date	Applicant NRHP Assessment	Avoided (Y or N)	Applicant Recommendations	SHPO Comments
Line 880 (continued)						
<i>St Louis County, Missouri (continued)</i>						
GAI-35m	Dwelling	C. 1910	Not Eligible	Y	No further study	TBD
GAI-36m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-37m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-38m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-39m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-40m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-41m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-42m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-43m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-44m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-45m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-46m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-47m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-48m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-49m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-50m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-51m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-52m	Dwelling	C. 1940	Not Eligible	Y	No further study	TBD
GAI-53m	Dwelling	C. 1945	Not Eligible	Y	No further study	TBD
GAI-54m	Dwelling	C. 1910	Not Eligible	Y	No further study	TBD

This architectural survey identified 85 architectural and historical resources (53 dwellings, 28 farmsteads, one complex of barn structures, two railroads, and one community cemetery) within the Project APE. None of these resources has been previously recorded. The 53 dwellings are typically located within residential areas and date to the early- to mid-twentieth century. In rural settings, 28 farmsteads and one complex of barn structures were identified, which typically date to the late-nineteenth century and early-twentieth century. GAI-02, a late-nineteenth century farmstead is recommended potentially eligible for listing in the NRHP under Criterion C; however, this resource will not be physically or visually impacted. Additionally, two railroads were identified during the survey along the 24-inch pipeline, GAI-06 in Greene County, Illinois and GAI-02m in St. Charles County, Missouri. GAI-06 (Gulf, Mobile and Ohio Railroad; now known as the Kansas City Southern Railroad) was constructed circa 1921 and GAI-02m (Chicago, Burlington, and Quincy Railroad; now known as the Burlington Northern and Santa Fe Railroad) was constructed circa 1849. Both are recommended eligible for listing in the



NRHP under Criterion A. Both of these railroads will be avoided via conventional bore. The remaining structures, farmsteads, and dwellings lack sufficient integrity and/or significance to be recommended eligible for NRHP listing.

4.4 Unanticipated Discoveries Plan for Cultural Resources

Spire proposes implementation of the procedures outlined in the Unanticipated Discoveries Plan for Cultural Resources for each state, presented as Appendix 4-C. Copies of this plan will be kept on-site during construction, and environmental inspectors will be trained on the procedures.



APPENDIX 4-A

Illinois Cultural Resources Report

CONTAINS PRIVILEGED INFORMATION - DO NOT RELEASE

(UNDER SEPARATE COVER)



APPENDIX 4-B

Missouri Cultural Resources Report

CONTAINS PRIVILEGED INFORMATION - DO NOT RELEASE

(UNDER SEPARATE COVER)



APPENDIX 4-C

Unanticipated Discoveries Plans for Illinois and Missouri



Spire STL Pipeline Project

Unanticipated Discoveries Plan for Cultural Resources in
Illinois

FERC Docket No. CP17-____-____

January 2017

Public



Table of Contents

Unanticipated Discoveries Plan for Cultural Resources in Illinois	1
1.1 References	4



Acronyms and Abbreviations

FERC	Federal Energy Regulatory Commission
IHPA	Illinois Historic Preservation Agency
NHPA	National Historic Preservation Association
NRHP	National Register of Historic Places
Project	Spire STL Pipeline Project
SHPO	State Historic Preservation Office
Spire	Spire STL Pipeline LLC
UDP	Unanticipated Discoveries Plan



Unanticipated Discoveries Plan for Cultural Resources in Illinois

This Unanticipated Discoveries Plan (“UDP”) details the procedures that will be implemented by Spire STL Pipeline LLC (“Spire”) and its contractors to handle the unanticipated discovery of cultural resources that may be encountered during construction of the proposed Spire STL Pipeline Project (“Project”). This plan was developed in accordance with 36CFR800.13 (Post-Review Discovery clause), as well as the following regulations:

- Illinois Historic Preservation Agency’s (“IHPA”) *Guidelines for Archaeological Reconnaissance Survey/Reports* (IHPA no date);
- Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420);
- Illinois Archaeological and Paleontological Resources Protection Act (20 ILCS 3435); and,
- Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

All construction work force members have the responsibility to monitor construction sites for potential archaeological remains throughout construction. Archaeological remains consist of man-made objects or features greater than 50 years of age. These remains include, but are not limited to, items such as artifacts (e.g., stone flakes, stone tools, ceramics, glass, architectural material), fire pits, building foundations, and human remains. If, during the course of construction, potential archaeological remains are identified, the Environmental or Chief Inspector will immediately halt work in the vicinity (minimum of 25 feet) of the potential find. The Environmental Inspector will notify the Spire Environmental Project Manager. Work in the immediate area of the discovery will not resume until treatment of the discovery has been completed.

The Spire Environmental Project Manager will notify the IHPA and the Federal Energy Regulatory Commission (“FERC”), and will hire a state-approved archaeological consultant who will evaluate the site and provide an immediate verbal recommendation to Spire, FERC, and the IHPA regarding the eligibility status of the site. Spire’s Environmental Manager will continue to consult with the FERC and IHPA’s office, as per the requirements of Section 106 of the National Historic Preservation Act of 1966 (“NHPA”). Communications, such as consultation, transmittals, and reports may be provided via e-mail, as appropriate and acceptable to each agency. Contact information for the various agencies is listed below:



Environmental Inspector

To be determined

Chief Inspector

To be determined

Spire Environmental Project Manager

Russell English
Spire, Inc.
700 Market Street
St. Louis, Missouri 63101
314-956-5221
russell.english@SpireEnergy.com

Spire Project Manager

Russell English
Spire, Inc.
700 Market Street
St. Louis, Missouri 63101
314-956-5221
russell.english@SpireEnergy.com

IHPA

Rachel Leibowitz, Division Manager and Deputy
State Historic Preservation Office ("SHPO")
Illinois Historic Preservation Agency
1 Old State Capital Plaza
Springfield, Illinois 62701-1507
217-785-5031
rachel.leibowitz@illinois.gov

FERC

Laurie Boros, Archaeologist
Federal Energy Regulatory Commission
888 1st Street NE
Room 1A
Washington, D.C. 20426
202-502-8046
laurie.boros@ferc.gov

Greene County Coroner

Dean Bishop
P.O. Box 207,
Greenfield, Illinois 62044
217-368-2202

Greene County Sheriff's Office

403 7th Street
Carrollton, Illinois 62016
217-942-6901

Jersey County Coroner

Larry Alexander
108 North Liberty
Jerseyville, Illinois 62052
618-498-2711

Jersey County Sheriff's Office

114 North Washington
Jerseyville, Illinois 62052
618-498-6881

Scott County Coroner

David King, Jr.
35 East Market Street
Winchester, Illinois 62094
217-742-3141

Scott County Sheriff's Office

35 East Market Street
Winchester, Illinois 62094
217-742-5217



If the unanticipated discovery is determined to be ineligible for inclusion in the National Register of Historic Places (“NRHP”), Spire will proceed with construction following written concurrence from the IHPA and approval from FERC. If the site is determined to be potentially eligible for inclusion in the NRHP, additional work, such as a Determination of Eligibility or Data Recovery, will be performed as required/approved by the IHPA and FERC. Further construction work at the site will be suspended until all criteria of Section 106 of the NHPA and other related federal and state regulations have been successfully completed. Construction activities will be kept a minimum of 25 feet from the site (dependent on the site type, location, construction design, and agency consultation) and separated from the site by temporary fencing.

In the event that human remains are discovered during construction, the Environmental or Chief Inspector will immediately halt work and notify the Spire Environmental Project Manager, the county coroner’s office, and the IHPA. If the county coroner is not available, the Environmental Inspector will contact the local law enforcement agency. The Environmental Inspector will ensure that human remains are protected from further damage, intrusion, or removal until proper examinations can be performed. Provision for security to protect suspected burials from vandalism will be taken, including monitoring of the area. Discovery of human remains should not be made public, including but not limited to, conversations with local residents, posting on social media, or communication with news outlets. Construction activities including vehicle traffic will be kept a minimum of 25 feet from the remains (dependent on the location, construction design, and agency consultation) and separated by temporary fencing. If remains are found not to be of recent origin, the Spire Environmental Project Manager will contact the IHPA and FERC to ensure that relevant laws are followed. As soon as a determination has been made that the human remains are Native American, Spire will contact appropriate tribal representatives for the region in which the remains were found. If the remains are not Native American and not associated with a crime scene, guidance in *National Register Bulletin 41: Guidelines for Evaluating and Registering Cemeteries and Burial Places* (Potter and Boland 1992) will be taken into account. A reasonable attempt will be made to identify the next of kin. Spire’s Environmental Manager will notify FERC of the situation and will continue to keep FERC informed as to the progress of further consultation. Spire will attempt to redesign the Project to avoid impact to the human remains. Only if avoidance is not possible will Spire proceed with removal of the human remains.

If the unanticipated discovery of human remains is determined by the IHPA and FERC to be ineligible for inclusion in the NRHP, Spire will proceed with coordinating the proper removal of the remains through cooperation from the local police, the medical examiner, the IHPA, and FERC. Only after the human remains have been properly removed from the site should construction of the pipeline facilities in the site area be resumed.

Under no circumstances should human remains be removed from the site without completing all permitting and coordination processes with the local police, the medical examiner, the IHPA, Native American representatives as appropriate, and FERC. Further work at the site will be suspended until all criteria of Section 106 of the NHPA and other related state and federal regulations have been successfully completed.



1.1 References

Potter E.W. and B.M. Boland. 1992. *National Register Bulletin 41: Guidelines for Evaluating and Registering Cemeteries and Burial Places*. U.S. Department of the Interior, National Park Service. Washington, D.C.

Illinois Historic Preservation Agency (IHPA). No Date. *Guidelines for Archaeological Reconnaissance Survey/Reports*. Illinois Historic Preservation Agency, Springfield. Accessed electronically, September 2016, <https://www.illinois.gov/iHPA/Preserve/Pages/Archaeology.aspx>.



Spire STL Pipeline Project

Unanticipated Discoveries Plan for Cultural Resources in
Missouri

FERC Docket No. CP17-____-____

January 2017

Public



Table of Contents

Unanticipated Discoveries Plan for Cultural Resources in Missouri	1
1.1 References	4



Acronyms and Abbreviations

FERC	Federal Energy Regulatory Commission
MDNR	Missouri Department of Natural Resources
MO SHPO	Missouri State Historic Preservation Office
NHPA	National Historic Preservation Association
NRHP	National Register of Historic Places
Project	Spire STL Pipeline Project
SHPO	State Historic Preservation Office
Spire	Spire STL Pipeline LLC
UDP	Unanticipated Discoveries Plan



Unanticipated Discoveries Plan for Cultural Resources in Missouri

This Unanticipated Discoveries Plan (“UDP”) details the procedures that will be implemented by Spire STL Pipeline LLC (“Spire”) and its contractors to handle the unanticipated discovery of cultural resources that may be encountered during construction of the proposed Spire STL Pipeline Project (“Project”). This plan was developed in accordance with 36CFR800.13 (Post-Review Discovery clause), 36CFR Part 61 Professional Qualifications Standards, as well as the following regulations:

- The Missouri Department of Natural Resources’ (MDNR) *Guidelines for Archaeological Survey and Reports* (MDNR No Date); and
- Missouri Revised Statute 194.400 through 194.410 (Unmarked Human Burial Sites)

All construction work force members have the responsibility to monitor construction sites for potential archaeological remains throughout construction. Archaeological remains consist of man-made objects or features greater than 50 years of age. These remains include, but are not limited to, items such as artifacts (e.g., stone flakes, stone tools, ceramics, glass, architectural material), fire pits, building foundations, and human remains. If, during the course of construction, potential archaeological remains are identified, the Environmental or Chief Inspector will immediately halt work in the vicinity (minimum of 25 feet) of the potential find. The Environmental Inspector will notify the Spire Environmental Project Manager. Work in the immediate area of the discovery will not resume until treatment of the discovery has been completed.

The Spire Environmental Project Manager will notify the Missouri State Historic Preservation Office (“MO SHPO”) and the Federal Energy Regulatory Commission (“FERC”), and will hire an archaeological consultant who will evaluate the site and provide an immediate verbal recommendation to Spire, the FERC, and the MO SHPO regarding the eligibility status of the site, in accordance with state and federal guidelines. Spire’s Environmental Manager will continue to consult with the FERC and MO SHPO, as per the requirements of Section 106 of the National Historic Preservation Act of 1966 (“NHPA”). If the discovery is determined to be Native American in origin, FERC will contact tribal representatives that requested to be consulting parties. Communications, such as consultation, transmittals, and reports, may be provided via e-mail, as appropriate and acceptable to each agency. Contact information for the various agencies is listed below:



Environmental Inspector

To be determined

Chief Inspector

To be determined

Spire Environmental Project Manager

Russell English
Spire, Inc.
700 Market Street
St. Louis, Missouri 63101
314-956-5221
russell.english@SpireEnergy.com

Spire Project Manager

Russell English
Spire, Inc.
700 Market Street
St. Louis, Missouri 63101
314-956-5221
russell.english@SpireEnergy.com

MO SHPO

Ms. Judith Deel, Compliance Coordinator
Missouri Department of Natural Resources
State Historic Preservation Office
P.O. Box 176
Jefferson City, Missouri 65102-0176
573-751-7862
judith.deel@dnr.mo.gov

MDNR

Ms. Heather Gibb
Missouri Department of Natural Resources
State Historic Preservation Office
P.O. Box 176
Jefferson City, Missouri 65102-0176
573-751-4589
heather.gibb@dnr.mo.gov

FERC

Laurie Boros, Archaeologist
Federal Energy Regulatory Commission
888 1st Street NE
Room 1A
Washington, D.C. 20426
202-502-8046
laurie.boros@ferc.gov

St Charles County Police Department

101 Sheriff Dierker Court
O'Fallon, Missouri 63366
636-949-3000

St Louis County Police Department

7900 Forsyth Blvd
St. Louis, Missouri 63105
636-529-8210



If the unanticipated discovery is determined to be ineligible for inclusion in the National Register of Historic Places (“NRHP”), Spire will proceed with construction following written concurrence from the MO SHPO and approval from FERC. If the site is determined to be potentially eligible for inclusion in the NRHP, additional work, such as a Determination of Eligibility or Data Recovery, will be performed as required/approved by the MO SHPO and FERC. Further construction work at the site will be suspended until all criteria of Section 106 of the NHPA and other related federal and state regulations have been successfully completed. Construction activities will be kept a minimum of 25 feet from the site (dependent on the site type, location, construction design, and agency consultation) and separated from the site by temporary fencing.

In the event that human remains are discovered during construction, the Environmental or Chief Inspector will immediately halt work and notify the Spire Environmental Project Manager, the local law enforcement agency, and the MO SHPO. The Environmental Inspector will ensure that human remains are protected from further damage, intrusion, or removal until proper examinations can be performed. Provision for security to protect suspected burials from vandalism will be taken, including monitoring of the area. Discovery of human remains should not be made public, including but not limited to, conversations with local residents, posting on social media, or communication with news outlets. Construction activities including vehicle traffic will be kept a minimum of 25 feet from the remains (dependent on the location, construction design, and agency consultation) and separated by temporary fencing. If remains are found not to be of recent origin, the Spire Environmental Project Manager will contact the MO SHPO and FERC to ensure that relevant laws are followed. As soon as a determination has been made that the human remains are Native American, Spire will contact appropriate tribal representatives for the region in which the remains were found. If the remains are not Native American and not associated with a crime scene, guidance in *National Register Bulletin 41: Guidelines for Evaluating and Registering Cemeteries and Burial Places* (Potter and Boland 1992) will be taken into account. A reasonable attempt will be made to identify the next of kin. Spire’s Environmental Manager will notify FERC of the situation and will continue to keep FERC informed as to the progress of further consultation. Spire will attempt to redesign the Project to avoid impact to the human remains. Only if avoidance is not possible will Spire proceed with removal of the human remains.

If the unanticipated discovery of human remains is determined by the MO SHPO and FERC to be ineligible for inclusion in the NRHP, Spire will proceed with coordinating the proper removal of the remains through cooperation from the local police, the medical examiner, the MO SHPO, and FERC. Only after the human remains have been properly removed from the site should construction of the pipeline facilities in the site area be resumed.

Under no circumstances should human remains be removed from the site without completing all permitting and coordination processes with the local police, the medical examiner, the MO SHPO, Native American representatives as appropriate, and FERC. Further work at the site will be suspended until all criteria of Section 106 of the NHPA and other related state and federal regulations have been successfully completed.



1.1 References

Potter E.W. and B.M. Boland. 1992. *National Register Bulletin 41: Guidelines for Evaluating and Registering Cemeteries and Burial Places*. U.S. Department of the Interior, National Park Service. Washington, D.C.

Missouri Department of Natural Resources (MDNR). No Date. *Guidelines for Archaeological Survey and Reports*. Missouri Department of Natural Resources, State Historic Preservation Office, St. Louis. Accessed electronically, September 2016, <http://dnr.mo.gov/shpo/sectionrev.htm>.