BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of NextEra Energy Transmission Southwest, LLC for a Siting Permit for the Construction of a 345 kV Transmission Line in Coffey, Anderson, Allen, Bourbon and Crawford Counties, Kansas	)))))))	Docket No. 23-NETE-___-___

DIRECT TESTIMONY OF DUSTY E. WERTH
BURNS & McDONNELL ENGINEERING COMPANY, INC.

ON BEHALF OF

NEXTERA ENERGY TRANSMISSION SOUTHWEST, LLC

Docket No. 23-NETE-___-___

JANUARY 24, 2023

Contents

I. INTRODUCTION

Q. Please state your name, business address, and present position.

A. My name is Dusty Edward Werth. I am employed by Burns & McDonnell Engineering Company, Inc. ("Burns & McDonnell") as a Senior Environmental Scientist. My office is located at 9450 Ward Parkway in Kansas City, Missouri 64114.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of NextEra Energy Transmission Southwest, LLC ("NEET Southwest").

Q. Please describe your educational background and employment experience.

A. I graduated from Avila University in 2006 with a Bachelor of Science Degree in Biology. Since joining Burns & McDonnell in 2006, I have provided environmental planning and consulting services for transmission lines and other energy-related projects. I have successfully routed more than 40 projects, totaling more than 2,000 miles of transmission lines in 24 different states. These projects ranged in voltage from 34.5-kilovolt ("kV") to 765-kV and in mileage from less than 10 miles to approximately 400 miles. I have prepared written testimony, rebuttal testimony, and testified live before the New York Public Service Commission.

Q. Have you previously provided testimony before the Kansas Corporation Commission?

A. No, I have not previously provided testimony to the Commission. I did provide written testimony in support of NEET Southwest's application to the Missouri Public Service Commission ("MPSC") for a Certificate of Convenience and Necessity ("CCN") for the proposed Wolf Creek to Blackberry 345 kV Transmission Line Project (the "Wolf Creek-Blackberry

Project" or the "Project"), in MPSC Docket No. EA-2022-0234, which is also the subject of this line siting application.

Q. Please describe Burns & McDonnell and its role in the Wolf Creek-Blackberry 345-kV Transmission Project.

A. Burns & McDonnell was retained by NEET Southwest to perform a routing study for the Project, which is an approximately 92-mile, 345 kV transmission line between the existing Wolf Creek Substation in Coffey County, Kansas, to the existing Blackberry Substation, in Jasper County, Missouri. Burns & McDonnell assembled a staff of various disciplines to assist in the Project's data acquisition, routing analysis, and environmental impacts assessment.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to support NEET Southwest's request for a CCN to construct, own, operate, and maintain the Project. Approximately 83 miles of the Project's proposed route ("Proposed Route") are in Kansas, in parts of Allen, Anderson, Bourbon, Coffey, and Crawford counties. My Direct Testimony introduces the Routing Study and Environmental Report (the "Routing Study"), attached hereto as Exhibit DW-1. The Routing Study provides a high-level overview of the route selection methodology and analysis of environmental and other potential impacts such as agricultural, residential, and cultural, that were factored into the routing selection process. NEET Southwest witness Kara Wry describes the public engagement aspects of the Project in her Direct Testimony.

Q. Are you sponsoring any schedules or exhibits as part of your direct testimony?

A. Yes, I am sponsoring Exhibits DW-1 through DW-3, which were prepared under my supervision and direction.

II. BACKGROUND ON THE PROJECT AND THE PROPOSED ROUTE

Q. What was the objective of the route selection studies?

A. The primary objective of the routing analysis was to identify an economically feasible route that offered the most benefits in terms of providing reliable electric service but also limited adverse impacts on landowners, as well as the social and natural environment within the study area. The ultimate goal of the study was to identify and analyze routing alternatives in order to select a Proposed Route for the Project.

Q. What was your role on the routing team?

A. I was the principal investigator and was responsible for the data collection, route development, and route evaluation for the Project.

III. OVERVIEW OF ROUTE SELECTION PROCESS

Q. Please summarize the route selection process that NEET Southwest undertook for the Project.

A. The route selection process was a multi-step process that included a five-phase approach: study area phase, preliminary route network phase, proposed route selection phase, public involvement phase, and final adjustments to the Proposed Route. Each phase is briefly described below and in more detail later in my Direct Testimony.

First, the study area phase involved defining Project endpoints, identifying the study area, collecting publicly available study area data, and identifying constraints, opportunities, and routing criteria. Second, the preliminary route network phase involved refining the routes identified by the Project team, identifying routing principles, identifying modifications to the initial NEET Southwest routes, and identification of additional routes that make up the initial route network, conducting a field review of the alternative routes, analyzing and comparing route alternatives, and finalizing the preliminary route network.

Third, the Proposed Route selection phase involved incorporating information received from the field review and the NEET Southwest subject matter experts, making necessary route adjustments, performing a route analysis, and selecting a proposed route. Fourth, the public involvement phase included public outreach and obtaining feedback from members of the public. This phase is described in Ms. Wry's testimony. Fifth and finally, the final adjustments to the Proposed Route followed the public involvement phase and included changes requested by the NEET Southwest engineering team, the NEET Southwest environmental team, and changes requested by the public. Feedback was solicited from the public in Kansas and Missouri, which resulted in several change requests by several parties in the Kansas portion of the Proposed Route. The modifications to the routes are described in section 7.2 in the Routing Study provided in Exhibit DW-1.

IV. STUDY AREA AND ROUTE DEVELOPMENT

Q. Explain the study area phase of the Project.

A. In order to develop a study area in which to locate the Proposed Route, Project endpoints need to be defined. For the Project, the endpoints were the existing Wolf Creek 345 kV Substation and the existing Blackberry 345 kV Substation, as identified by SPP in its Request for Proposals ("RFP") for the Project.[1] With these endpoints in mind, the Project team, which consisted of staff from NEET Southwest's engineering, real estate, environmental, construction, public involvement, vegetation management, and project management groups, along with staff from Burns & McDonnell's routing and permitting groups, established the study area boundary.

The study area is roughly bounded by U.S. Highway 75, the Neosho County boundary, Udall Road on the west, 18th Road on the north, the Kansas / Missouri State line and State

[1] *See* Exhibit BW-3 to the Direct Testimony of Becky Walding (SPP RFP).

Highway 43 on the east, and State Highway 103 / Weir Road on the south. This area is approximately 1,643,130 acres in size, extending approximately 70 miles both east to west and north to south.

Defining the study area boundary is important so that the investigation can become focused early in the process. The study area was designed to provide a substantial area within which numerous potential route alternatives could be developed and considered without being so large as to overwhelm the study with alternative options. The study area for the Project included: several municipalities; conservation areas; multiple local parks; conservation easements; the Fort Scott Municipal Airport in Bourbon County, Kansas; the Allen County Airport in Kansas; the Atkinson Municipal Airport in Crawford County, Kansas; several rivers; and existing linear infrastructure, such as existing electric transmission and distribution lines, oil and gas pipelines, highways, railroads, and local roads.

Q. What was the next step in the routing process, following the development of the study area?

A. Publicly available data pertaining to the study area were collected and organized within a geographic information system ("GIS") database. This data included recent aerial photography, U.S. Geological Survey ("USGS") topographic maps, wetlands, parcel data, roads, and municipal boundaries. The collection of this data was necessary in order to identify constraints and opportunities within the study area for the development of the initial alternative route network.

A constraint is an area that generally can be delineated on a map and that can affect the location of the new facility. Constraints represent obstacles or impediments to the routing of a transmission line. Examples of constraints for route selection included dense residential areas, forested wetlands areas, and crossings of other existing transmission lines. Several of the routing constraints identified within the study area included state-owned lands, airports, center pivot

irrigation, and conservation easements. Routing opportunities are locations the routes could be paralleled, if appropriate, along existing linear infrastructure, such as railroads, roads, existing transmission lines, etc., to potentially minimize the impacts of the new transmission line on the social and natural environments. Routing opportunities in the study area included the siting of transmission line route segments parallel to highways, existing power lines, or other linear features (paralleling opportunities).

The Project team assembled this data and identified the opportunities and constraints for the study area.

Q. Once study area data is collected and the opportunities and constraints are identified, what was the next step in the process?

A. The Project team identified the routing criteria, which consisted of engineering, social and environmental/land use criteria to be considered for the evaluation of the route networks. This completed the first phase of the route selection process for the Project.

V. PRELIMINARY ROUTE NETWORK PHASE

Q. You noted that the second phase of the route selection process involved the establishment of a preliminary route network. Did you establish a preliminary route network for the Project?

A. Yes. Following the study area phase, the Project team identified an initial, extensive, and very broad network of geographically distinct route options that could connect the Project endpoints. These routes were comprised of numerous shorter and interconnecting segments. Once these alternative route segments were identified, the Project team reviewed these conceptual routes in detail during numerous Project meetings and added, modified, or eliminated several of the Project route segments. These changes were based on a review of the routing principles, selected evaluation criteria, and compliance with NEET Southwest standards of feasibility and constructability.

Q. What were the routing principles used to identify the route alternatives?

A. Routing principles used to identify alternative routes are listed below:

- Minimize length;
- Minimize angles;
- Maintain as much distance as practicable from residential areas, individual homes, and public facilities (*i.e.*, religious facilities, schools, etc.);
- Minimize impacts to social resources such as residences and cultural resources;
- Minimize impacts to natural resources such as wetlands, woodlands, and wildlife;
- Minimize impacts to airports and airstrips;
- Minimize conflict with current and planned uses of land;
- Minimize visual contrast with the natural landscape;
- Minimize impacts to irrigation systems;
- Follow existing rights-of-way ("ROW") such as for roads or electric transmission lines, as appropriate; and
- Avoid federal and state lands and conservation and restricted easement areas.

Q. Did the Project team conduct a field review of the identified alternative routes?

A. Yes. After alternative route segments were identified and retained as part of the desktop review, the Project team conducted a field review of the alternative routes along publicly accessible roads to verify the feasibility of the routes and to facilitate the further screening and evaluation of the routes.

At the conclusion of the field review process, the alternative routes that best adhered to the routing criteria and minimized potential impacts were carried forward as the preliminary route alternatives. Based upon these considerations, a network of 53 route segments was established between the Wolf Creek Substation and the Blackberry Substation. The 53 identified route segments between the endpoints could be combined to form 729 possible route combinations. The

preliminary network of route alternatives for the Project is shown Figure 3-1 in the Routing Study provided in Exhibit DW-1.

Q. What were the routing criteria that were utilized to evaluate preliminary routes?

A. The Project team evaluated the preliminary routes using a systematic comparison of the alternatives based on the social, environmental, and engineering criteria that represent potential adverse effects on resources in the study area. The full routing criteria are listed in Table 3-1 in the Routing Study.

VI. EVALUATION OF ALTERNATIVE ROUTES

Q. How were alternative routes evaluated?

A. Burns & McDonnell quantified the route criteria for the potential route alternatives using a statistical Z-score analysis as described in Section 3.3.3 of the Routing Study. Under this analysis, a lower value means less impact on a particular criterion. No single route had the lowest value for all the measured criteria. While a particular route may have the lowest impact for one criterion, it may have higher impacts for another. The routing criteria included units such as combined score, length, acres, and numbers of selected resources. These units are not directly comparable but need to be considered as a whole in the evaluation process. The level of complexity resulting from the number of routes, combined with numerous criteria and differences in measurement units, made it difficult to conduct a route-by-route comparison to identify a route that would minimize potential overall impacts to the area. Consequently, Burns & McDonnell used a statistical Z-score analysis as a tool to rank and screen the route alternatives and to identify a smaller, more manageable number of routes warranting further investigation and comparison for the selection of the Proposed Route.

Q. Were the routing criteria weighted?

A. Yes. The Project team assigned weights to the criteria based on their experience with similar transmission line projects across the country. Not all criteria are necessarily of equal importance within the study area. To allow the evaluation to be more sensitive to concerns in the study area, relative weights were placed on criteria that should most influence the selection of the Proposed Route. Weights allow for more separation within the scores that make up the quantitative analysis which can make natural breaks in scores more apparent.

Q. Were any state, federal, or local agencies or Tribes contacted as part of the routing process?

A. Yes. Letters were sent to state and federal agencies as well as Tribes to seek input on threatened, endangered, proposed, and candidate species; eagles; protected habitats; bats; and conservation concern birds. In particular, requests for information were provided to the U.S. Fish and Wildlife Service ("USFWS"), Kansas Department of Wildlife and Parks ("KDWP"), and Missouri Department of Conservation ("MDC"). Letters were also sent to each of the counties crossed by the Project, requesting information related to county road and ROW permitting, regulations, and agreements; county floodplain permitting; and county building / construction permitting. Additionally, as NEET Southwest witness Kara Wry testifies, elected public officials including county commissioners, county and municipal leaders, and other elected officials received copies of the information that was provided to landowners as part of the public outreach. Separately, NEET Southwest's Tribal Relations team sent letters to fifty-one federally recognized Tribes assessed to have ancestral ties to the project area to provide input on cultural resources of specific interest to the Tribes.

Q. Was any feedback received from the agencies or Tribes?

A. Yes, it was, and we used that feedback in evaluating permitting requirements for the selected route.

Specifically, KDWP provided information based on the study corridor that was provided and used the study corridor information to review the Project for potential impacts to current State-listed threatened or endangered species, species of concern, species in need of conservation, and public recreation areas under KDWP authority. KDWP identified that the study corridor intersected the designated critical habitat for the state-listed Eastern spotted skunk in Anderson County, the broadhead skink in Bourbon and Crawford Counties, the gray bat in Crawford County, and the Northern map turtle in Bourbon County. KDWP also provided a list of recommendations for the Project, including the use of existing corridors, the replanting of disturbed grasslands with native forbs and grasses, the installation of perch guards on poles with repeat avian mortality, and the avoidance of wetlands, native vegetation, timberland, and encroachment in floodplains. KDWP indicated that the project will likely require an Action Permit issued by the agency prior to the start of construction.

In addition, MDC provided a Natural Heritage Review outlining the federal- and state-listed species as well as a list of general recommendations.

Of the fifty-one federally recognized Tribes that were sent letters, nine responded and eight Tribes indicated that they were interested in participating in field work. Traditional Cultural Specialists ("TCS") from several Tribes joined Burns & McDonnell archaeologists during field surveys of the proposed ROW. Adjustments to the Project infrastructure were made to avoid sites identified by the TCS.

Q. Were any other adjustments made when analyzing alternative routes?

A. Yes. For example, an adjustment was made to move the Proposed Route to avoid placing a heavy-angle structure in a previously mined area. This adjustment was on Segment 37 located east of North 230th Street and north of East 650th Avenue in Crawford County.

Q. What is the reduced route network and how was it established?

A. Following the analysis of the alternative routes, the routes were ranked based on their potential impact scores, and the top 5 percent were carried forward for additional review. These top 5 percent were the reduced route network.

Q. Can you provide an example as to how the criteria were considered in determining the reduced route network?

A. Yes. For example, the segment combination of Segments 2 and 9 (eastern option) ranked better than Segments 3, 4, and 7, followed by routes using Segments 3, 5, and 7. The differences between these combinations are relatively minor, but generally, the poorer scoring options are longer, have more woodland impacts, some more karst impacts, more angles, and cross more streams and transmission lines. Additional examples of this can be found in section 3.4.4 of the Routing Study.

VII. SELECTION OF THE PROPOSED ROUTE

Q. Once the network of preliminary routes for the Project was finalized, how did the Project team go about selecting the Proposed Route?

A. The data for the top 5 percent of routes were reviewed in detail to help differentiate the routes. This process is described in detail in Section 3.4.4 of the Routing Study.

Q. Which of the alternate routes for the Project was selected?

A. The final route alignment selected as the Proposed Route is Route 65 and is depicted in Figure 3-2 of the Routing Study. In addition, detailed maps and a legal description of the Kansas portion of the Proposed Route are provided in Exhibits DW-2 and DW-3, respectively.

Q. Why was Route 65 selected as the Proposed Route?

A. Route 65 parallels existing 69 and 161 kV transmission lines for longer lengths, has lower sensitive species impact scores (has less woodland clearing and skink critical habitat impacts), and crosses less cropland and floodplain. Route 65 also has fewer existing transmission line crossings, less woodland clearing in the gray bat critical habitat area, and fewer broadhead skink impacts, a lower residential impact, and lower floodplain impacts than most other alternative routes.

Q. Were there other considerations that contributed to the selection of Route 65 for the Project?

A. Yes. Some of the other considerations that led to the selection of Route 65 are potential airport obstructions and reliability concerns. Route 65 is further from the Atkinson Municipal Airport, and thus has lower impact on the airport. Route 65 also minimizes paralleling of other 345 kV transmission lines, which enhances the resiliency of the 345 kV transmission system.

VIII. ROUTE ADJUSTMENTS FOLLOWING PUBLIC INVOLVEMENT

Q. What opportunities were the public given to provide feedback during the route selection process?

A. As described in Kara Wry's direct testimony, NEET Southwest hosted two virtual open house meetings on March 22, 2022 and has conducted in-person informational sessions with county commissions and landowners. NEET Southwest also made Project information available on its public website and maintained a telephone hotline and email inbox where landowners or other interested stakeholders could contact the company with questions concerning the Project. Additionally, as NEET Southwest witness Becky Walding testifies, land agents began contacting the potentially affected landowners along the Proposed Route and soliciting feedback.

Q. Have stakeholders or members of the public provided feedback to NEET Southwest?

A. Yes, the Project team has received feedback from interested stakeholders and landowners in the Project area.

Q. Were any modifications to the Proposed Route made as a result of this public feedback?

A. Yes. NEET Southwest has made a number of modifications to refine the Proposed Route as a result of these interactions. Following receipt of landowner inquiries, the Project team has modified the location of 95 different transmission line structures (as of January 23, 2023).

IX. CONCLUSION

Q. What do you conclude regarding the route selection for the Project?

A. The Proposed Route alignment for the Project, which was determined after a detailed analysis process and input from potentially affected landowners and other stakeholders, was selected because it would minimize the overall social and environmental impacts of the Project while providing an economical and reasonable route for design and construction.

Q. Is it possible that changes will be made to the Proposed Route?

A. Based on local conditions that may be identified or encountered during the survey, final engineering, design, ROW acquisition, or construction, NEET Southwest may be required to make minor adjustments to the Proposed Route alignment. These adjustments would be to address specific, localized conditions or circumstances not readily apparent as part of the route selection process but would not be anticipated to result in substantial (if any) additional impacts. Any adjustments would generally be intended to reduce overall environmental impacts, reduce Project inconvenience to landowners, and/or protect public safety.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

VERIFICATION

STATE OF MISSOURI)
) ss.
COUNTY OF JACKSON)

I, Dusty E. Werth, being duly sworn, on oath state that I am Senior Environmental Scientist at Burns & McDonnell Engineering Company, Inc., and that I have read the foregoing testimony and know the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge and belief.

By _____
Dusty E. Werth

The foregoing pleading was subscribed and sworn to before me this 18th day of January, 2023.

_____
Notary Public

My Commission Expires:
Oct 6, 2023

TAMI DANIEL
Notary Public-Notary Seal
STATE OF MISSOURI
Platte County
My Commission Expires Oct. 6, 2023
Commission # 15420517

EXHIBIT DW-1

PUBLIC

Routing Study and Environmental Report

NextEra Energy Transmission Southwest, LLC

Wolf Creek - Blackberry 345-kV Transmission Line Project
Project No. 119960

Routing Study and Environmental Report

prepared for

NextEra Energy Transmission Southwest, LLC
Wolf Creek - Blackberry 345-kV Transmission Line Project

Project No. 119960

prepared by

Burns & McDonnell
Kansas City, Missouri

TABLE OF CONTENTS

Page No.

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LIST OF TABLES

Page No.

LIST OF FIGURES

Page No.

LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
AECI	Associated Electric Cooperative, Incorporated
APLIC	Avian Power Line Interaction Committee
ASR	Antenna Structure Registration
BMP	Best Management Practice
BNSF	Burlington Northern Santa Fe Railroad
CRP	Conservation Reserve Program
CWA	Clean Water Act
DASC	Kansas Data Access and Support Center
DWR	Kansas Division of Water Resources
EDGE	Education Demographic and Geographic Estimates
ESA	Endangered Species Act
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
GAP	Gap Analysis Project
GIS	Geographic Information System
gNATSGO	Gridded National Soil Survey Geographic Database
GNIS	Geographic Names Information System
IPaC	Information for Planning and Consultation
KCS	Kansas City Southern Railroad

KDHE	Kansas Department of Health and Environment
KDOT	Kansas Department of Transportation
KDWP	Kansas Department of Wildlife and Parks
kV	kilovolt
MDC	Missouri Department of Conservation
MDNR	Missouri Department of Natural Resources
mgd	million gallons per day
NAIP	National Agriculture Imagery Program
NASR	National Airspace System Resource
NASS	National Agricultural Statistics Service
NCED	National Conservation Easement Database
NEET Southwest	NextEra Energy Transmission Southwest, LLC
NHD	National Hydrology Dataset
NITU	Notice of Interim Trail Use
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
PADUS	Protected Areas Database of the U.S.
Q&A	Question and answer
ROW	right-of-way
SHPO	State Historic Preservation Office

SKOL	South Kansas and Oklahoma Railroad
SPP	Southwest Power Pool
TERPS	Terminal Instrument Procedures
THPO	Tribal Historic Preservation Office
UP	Union Pacific Railroad
U.S.	United States
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEIA	U.S. Energy Information Administration
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WRP	Wetland Reserve Program

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1.0 INTRODUCTION AND PROJECT DESCRIPTION

In order to provide reliable electric service to the region and to meet the needs identified by the Southwest Power Pool, Inc. (SPP), NextEra Energy Transmission Southwest, LLC (NEET Southwest) proposes to design, build, and operate a new transmission line – the Wolf Creek to Blackberry 345-kilovolt (kV) Transmission Line Project (Project). The Project will connect Evergy, Inc's (Evergy) existing Wolf Creek Substation to Associated Electric Cooperative's (AECI) existing Blackberry Substation. The Project Study Area is in the following counties: Allen, Anderson, Bourbon, Cherokee, Coffey, Crawford, Neosho, and Woodson counties in Kansas, and Barton and Jasper counties in Missouri. The Project is required to address the needs identified by SPP in its 2019 Integrated Transmission Planning Report to increase transmission capability in Kansas and Missouri, which the Kansas Corporation Commission (KCC) and Missouri Public Service Commission (MPSC) have approved.

NEET Southwest retained Burns & McDonnell to assist with the line routing for the Project. Burns & McDonnell assisted with the selection of routing alternatives and the preparation of this routing study and environmental report. This document contains a summary of the route identification and preferred route selection process, as well as the potential environmental impacts along the selected route.

The following chapters include a description of the Project, including the need for the Project (Chapter 1.0) and a description of the existing environmental and social conditions in the Study Area (Chapter 2.0). The analysis of routing alternatives is described in Chapter 3.0. Potential environmental impacts of the proposed Project are discussed in Chapter 4.0 and proposed mitigation measures are described in Chapter 5.0. Public involvement actives are summarized in Chapter 6.0, recent project modifications are summarized in Chapter 7.0, and references are provided in Chapter 8.0.

1.1 Description of the Project

To construct and operate a connection between the existing Wolf Creek Substation with the existing Blackberry Substation, NEET Southwest will require the construction of up to approximately 100 miles of 345-kV transmission line within an approximately 150-foot-wide easement. The easement width will be sufficient to provide the necessary configuration for the new line. The proposed line will be owned and operated by NEET Southwest. Alternative routes have been identified, and a preferred route was selected based on a route analysis process. The analysis is described in Chapter 3.0.

1.1.1 Purpose and Necessity

Through SPP's Integrated Transmission Planning (ITP) Process, SPP identified a need for additional transmission capacity capable of supporting bulk power transfers from the western region of Kansas to

load centers in eastern Kansas and western Missouri. SPP's assessment of electric energy requirements has identified the need to build a new 345-kV transmission line to relieve heavy congestion, increase reliability, and improve the transfer of bulk power within the region (SPP, 2019).

Currently, there are approximately five major transmission lines in the area roughly bounded by United States (U.S.) Highway 75, the Neosho County boundary, and Udall Road on the west, 18th Road on the north, the Kansas / Missouri state line and State Highway 43 on the east, and State Highway 103 / Weir Road on the south (the "Study Area"). The Study Area is approximately 1,643,130 acres in size, extending approximately 70 miles both east to west and north to south. Currently 2 large power plants, 32 different substations, and numerous transmission and distribution circuits direct power within this area.

1.1.2 Location

The Study Area is located in southeast Kansas and southwest Missouri and includes at least portions of the following counties: Allen, Anderson, Bourbon, Cherokee, Coffey, Crawford, Neosho, and Woodson counties in Kansas, and Barton and Jasper counties in Missouri. Due to the size of the Study Area, none of the counties comprise more than 25 percent of the Study Area. However, most of the Study Area will be located in Crawford, Bourbon, Allen, Anderson, and Coffey counties. Figure 1-1 shows the region in which the Study Area is located.

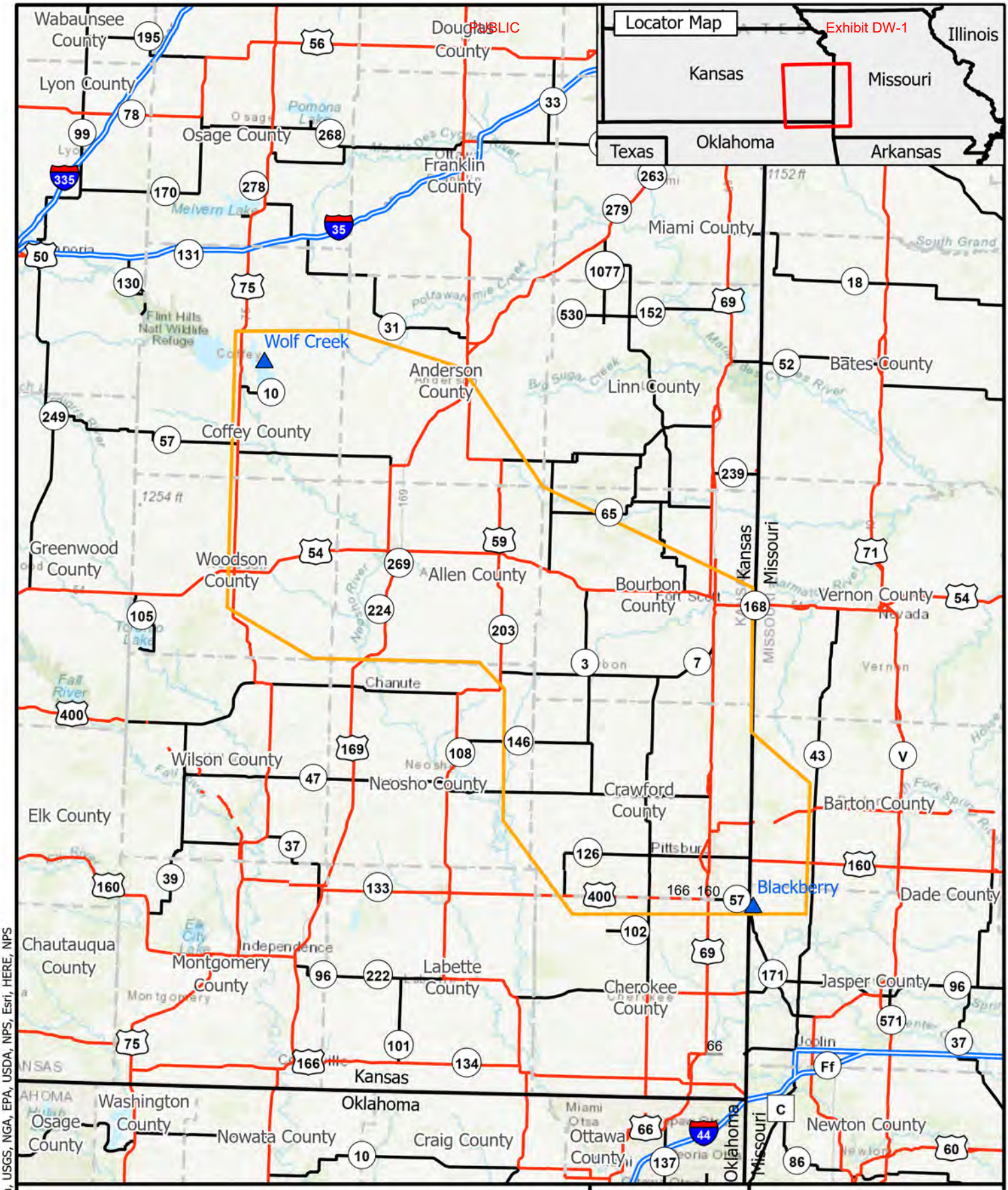
1.1.3 Structures

Transmission line structures will consist of concrete or steel monopoles and guyed or self-supporting monopole structures for most of the new line. Ground clearance will meet or exceed the National Electrical Safety Code requirements for a 345-kV transmission line. Typical above-ground heights for the new structures will be approximately 110 to 130 feet, depending on the type of structure required. The structures will be spaced approximately 800 to 1,000 feet apart. Heights and spans may vary depending on the design, terrain, or measures to mitigate potential impacts of the line.

1.1.4 Right-of-Way

The route alternatives evaluated for the proposed Project will require an approximately 150-foot-wide right-of-way (ROW) to accommodate the transmission structures.

Doyle Land Services (Doyle) was selected by NEET Southwest to provide ROW acquisition strategies, programs, and procedures.


PUBLIC
Locator Map
Exhibit DW-1
Illinois
Kansas
Missouri
Texas
Oklahoma
Arkansas
Wabaunsee County
Lyon County
Osage County
Douglas County
Franklin County
Miami County
Linn County
Bates County
Anderson County
Coffey County
Wolf Creek
Flint Hills Natl Wildlife Refuge
Greenwood County
Woodson County
Allen County
Bourbon County
Vernon County
Nevada
Chanute
Wilson County
Neosho County
Crawford County
Barton County
Elk County
Pittsburg
Blackberry
Dade County
Chautauqua County
Montgomery County
Independence
Labette County
Cherokee County
Jasper County
Joplin
Newton County
Washington County
Nowata County
Craig County
Ottawa County
Osage County
Kansas
Oklahoma
Missouri
Project Endpoint
Study Area
County Boundary
State Boundary
Interstate
U.S. Highway
State Highway
Local Highway
15 7.5 0 15
Miles
BURNS McDONNELL
Figure 1-1
Regional Map
Wolf Creek - Blackberry
NEET Southwest
Exhibit DW-1
Page 16 of 311
Path: D:\Wolf_Creek\Wolf_Creek_2_Blackberry\Wolf_Creek_2_Blackberry.aprx
Sources: Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS, Esri, HERE, NPS

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NEET Southwest's land agents will work with individual property owners to purchase easements for the new line. NEET Southwest pays fair market value for easements, and landowners retain ownership of the property with some limitations on the use of the land in the ROW. Under the agreement, property owners cannot place any permanent structures that would interfere with the conductors or restrict complete access for maintenance of the transmission line or ROW within the corridor.

1.2 Construction, Operation, and Maintenance

The transmission line will be constructed in several phases using both rubber-tired and track equipment. In environmentally sensitive areas, float track equipment may also be used during construction of the line. The appropriate materials will be delivered to each structure location for assembly. Holes for direct pole embedment or concrete foundations for structures will be dug with an auger, and the structures will be erected using a crane. Afterwards, the holes will be backfilled with crushed rock or flowable concrete, and any excess soil will be evenly distributed around each structure. The surrounding soil will then be stabilized. In wetland areas (if any), the method used for the installation of structures will depend on the nature of the sub-surface conditions. Excess soil from the holes in wetland areas will be transported to upland areas and stabilized. No concrete foundations are anticipated in wetlands. Conductors will be pulled through each structure using tensioning equipment. Danger trees will also be removed along the corridor. Danger trees are trees outside the cleared corridor that are tall enough to potentially impact the transmission line should the trees fall into the ROW.

Maintaining the ROW under, and immediately adjacent to, transmission lines is essential for the reliable operation of the line and public safety. ROW vegetation management will include periodic tree trimming removing danger trees and managing the height of other vegetation within the corridor. NEET Southwest will use an integrated vegetation management approach to include both chemical and limited mechanical control methods to maintain the ROW. Herbicides are the preferred method of maintaining the ROW. The use of herbicides will be applied to individual woody stems using a low volume backpack sprayer. NEET Southwest uses herbicides approved by the U.S. Environmental Protection Agency (EPA) for use on terrestrial and wetland transmission line ROW.

Inspections of the transmission line will occur on a regular basis and utilize both aerial and ground patrols. However, line maintenance would require only infrequent visits by NEET Southwest or its contractors. Most maintenance activities are on an approximate six-year cycle.

1.3 Project Schedule

The projected schedule for the Project is described below:

- Route selection: November 2020 – May 2022
- ROW acquisition: Voluntary negotiations commenced in November 2021. ROW acquisition will be completed following receipt of all necessary regulatory approvals and permits, including a certificate of convenience and necessity ("CCN") and line siting approval from the KCC and a CCN from the MPSC.
- Construction: Following receipt of all necessary regulatory approvals and permits; estimated to begin in mid-2023
- In-service date: January 1, 2025

1.4 Project Cost

NEET Southwest has estimated a Project cost of $85.2 million in 2021 dollars, subject to cost containment provisions set forth in NEET Southwest's bid to SPP. NEET Southwest provided more details on the proposed Project cost in its application and accompanying testimony in the CCN proceeding, as discussed in the Direct Testimony of Becky Walding in the current case.

2.0 DESCRIPTION OF THE STUDY AREA

The following describes existing environmental conditions, including the natural and social resources located within the Study Area. The information presented in this chapter was obtained from publicly available data sets and observations made using on-line imagery and field windshield surveys.

2.1 Study Area Identification and Data Collection

The limits of the Study Area were established based on the location of the existing Wolf Creek 345-kV Substation (approximately one mile south of the intersection of 16th Road and Oxen Lane in Coffey County, Kansas), the location of the existing Blackberry 345-kV Substation (southeast of the intersection of Missouri Highway 177 and Sumac Road in Jasper County, Missouri), and a preliminary review of potential routing opportunities and constraints in the Study Area. The Study Area, which encompasses approximately 1,643,130 acres, is shown in Figure 2-1. The Study Area was defined to incorporate the potential Project endpoints while offering an area large enough to provide a set of reasonable and geographically distinct route alternatives.

After the Study Area boundary was identified, the Burns & McDonnell Project team initiated the information gathering process and the identification of environmental and land use constraints within the Study Area. Data was collected from publicly available sources, including federal, state, county, and local agencies. The result of the information gathering process was a constraint map that plotted environmental and land use constraints and was used in identifying preliminary alternative routes. The geographic locations of environmentally sensitive areas, restrictive areas, exclusion areas, land use constraints, etc., within the Study Area, were identified on an aerial photograph base map (Figure 2-2).

2.2 Natural Resources

The following is a description of natural resources in the Study Area that could be affected by the construction and operation of the proposed Project. These resources include physiography, hydrology, vegetation, wetlands, and wildlife. The potential impacts of this Project upon these resources are described in Chapter 4.0.

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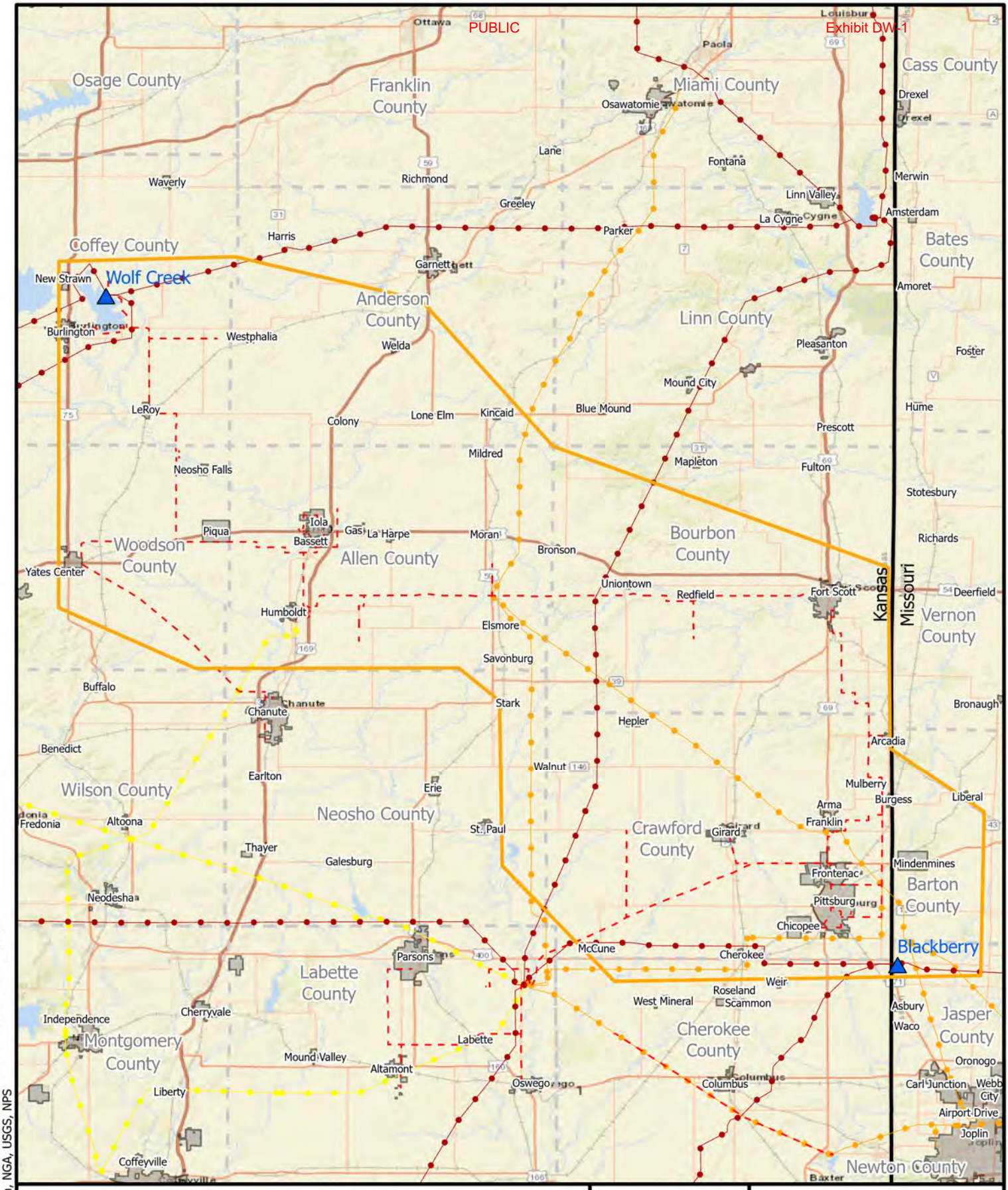

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Sources: Esri, HERE, Garmin, NGA, USGS, NPS

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Figure 2-1
Study Area
Wolf Creek - Blackberry
NEET Southwest

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Figure 2-2
Constraint Map
Wolf Creek - Blackberry
NEET Southwest

Study Area
Project Endpoint
FAA Obstructions
Existing Power Plant
Existing Substation
Pipeline
Private Use Airstrip
Public Use Airstrip

FAA Horizontal Surface

Existing Transmission Line
138-kV
161-kV
345-kV
69-kV

NRHP Resource
NRHP District/Area

Gray Bat Critical Habitat
Federal Linear Critical Habitat
Scenic Byway
Interstate
State Highway
U.S. Highway
Local Highway
Local Roads

Railroad
County Boundary
Park
Municipal Boundary
State Boundary
Federal Easement
Private/NGO Easement
Other Easement

Federal Managed Land
State Managed Land
Local Government Managed Land
Private/NGO Managed Land
Stream
Floodplain
Floodway
Waterbody

12,000 6,000 0 12,000
Feet

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Path: D:\Wolf_Creek\Wolf_Creek_2_Blackberry\Wolf_Creek_2_Blackberry.aprx
Sources: Earthstar Geographics

Source: Energy Velocity, U.S. Energy Information Agency, FAA, NPS, ESRI, USGS, Real Estate Portal USA, LLC, NHE, FEMA, NPMS, DASC, MSDIS, and Burns & McDonnell

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2.2.1 Topography and Physiography

The Study Area lies entirely within the Prairie Parkland (Temperate) Province, which consists of alternating prairie and deciduous forest with mostly gently rolling plains and steep bluffs bordering some valleys (U.S. Forest Service [USFS], 2015). Elevation changes are generally relatively minimal with only a few hundred feet of elevation increase generally extending from the southeastern portion of the Study Area to the northwest. Elevations within the Study Area range from 751 to 1,214 feet above sea level (U.S. Geological Survey [USGS], 2020a).

2.2.2 Soils

Land use patterns in the Study Area are influenced by the suitability and limitations of soil properties for development. The U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS, 2018) has surveyed and mapped the soil units in the Study Area counties based on the physical properties and composition of the soil and the amount of slope and drainage where the soil is located. These soil maps are helpful in planning future land use and development.

Soil map units describe the soil characteristics in a specific geographic region. The Study Area consists of 58 different soil map units. The predominant soil map units that make up more than 50 percent of the Study Area include: the Pharoah map unit, comprised of very deep, somewhat poorly drained upland soils; the Olpe map unit, comprised of very deep, well drained upland or high-terrace gravelly soils; the Aliceville map unit, comprised of deep, moderately well drained sloping soils; the Ringo map unit, comprised of moderately deep, moderately well-drained upland soils; and the Verdigris map unit, comprised of very deep, well drained floodplain soils. Hydric soils comprise 9.3 percent of the soils in the Study Area and soils characterized as prime farmland comprise 84.9 percent of the soils in the Study Area.

Soils considered by the USDA to be highly erodible comprise approximately 18.2 percent of the Study Area (USDA NRCS, 2018). These areas are extrapolated from the USDA's aggregated Potential Erosion Hazard - Road / Trail ratings of moderate or severe for each map unit. These soils could be of concern during construction. Areas with shallow bedrock can also present concerns during foundation installation. The USDA has calculated a value called the Restrictive Layer Depth that represents any nearly continuous layers within a map unit that have a property that significantly impedes the movement of water and air or that restricts roots. For this study, the “representative” depth value was used. The Study Area consists of approximately 31.9 percent of soils with very shallow bedrock. This data is not a reliable substitute for completing soil borings to verify soil conditions prior to construction but may provide some indication of potentially troublesome areas.

2.2.3 Water Resources

Water resources within the Study Area can include surface waters, wetlands, floodplains, and aquifers. Below is a description of the specific features within the Study Area.

2.2.3.1 Surface Water

According to a USGS study, the Study Area counties receive an average total of approximately 43.0 inches of rainfall a year. Surface water is the primary source of water for most residents in all Study Area counties (USGS, 2015). The USGS study showed that estimated surface water usage in the Study Area counties averaged approximately 3.3 million gallons per day (mgd), and the estimated average groundwater usage was less than 0.1 mgd, with an average of 1.8 mgd total water usage. The average per capita usage for these counties was estimated to be approximately 140.0 gallons per day.

The Study Area lies within the Neosho, Osage, and Verdigris River Basins. The Neosho River Basin extends approximately 275 miles generally along the Neosho River, starting in Morris County in east central Kansas and continuing southeast into Oklahoma, Missouri, and Arkansas. It encompasses approximately 1,650 square miles in Arkansas, Kansas, Missouri, and Oklahoma and 1,053,208 acres within the Study Area. The Neosho River Basin includes one sub-basin within the Study Area: Spring sub-basin (USGS, 2018a).

The Osage River Basin extends approximately 275 miles starting near Osage County in east-central Kansas and extending east / southeast into central and southwestern Missouri and encompasses approximately 910 square miles in Kansas and Missouri and 581,632 acres within the Study Area. The Osage River Basin includes one sub-basin within the Study Area: Marmaton sub-basin (USGS, 2018a).

The Verdigris River Basin extends approximately 200 miles starting in Lyon County in east-central Kansas and extending generally south into Oklahoma and encompasses approximately 13 square miles in Kansas and Oklahoma and 8,300 acres within the Study Area. The Verdigris River Basin includes one sub-basin within the Study Area: Upper Verdigris sub-basin (USGS, 2018a).

Numerous hydrological features are found within the Study Area, with named streams including the Neosho River; Marmaton River; Lightning Creek; Rock Creek; Owl Creek; Walnut Creek; Elm Creek; Deer Creek; Cherry Creek; Limestone Creek; Cedar Creek; Big Creek; Coal Creek; Crooked Creek; Paint Creek; Long Creek; Flat Rock Creek; Second Cow Creek; West Fork Dry Wood Creek; and Wolf Creek. Named lakes and ponds include: Bone Creek Reservoir; Fort Scott Lake; Crawford Lake; Blackberry Hay Farm Lake; Yates Center Reservoir; Elm Creek Lake; Rock Creek Lake; Mathias Lake; Welda Lake;

Katy Lake; Number 180 Reservoir; Circle Lake; Spencer Lake; Mildred Lake; Bassola Lake; Gardner Farms Lake; Frisco Lake; Boyers Lake; Dawson Lake; and Nyman Lake (USGS, 2018a).

2.2.3.2 Wetlands

Wetlands are areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, vegetation adapted for life in saturated soil conditions. Wetlands filter sediments and contaminants, reduce flood damage, provide breeding grounds for fish and wildlife, including endangered species, and protect shorelines from erosion. Reducing and preventing loss and damage to wetlands is a primary goal of the Clean Water Act (CWA) (U.S. Corps of Engineers [USACE], no date).

Most wetlands found within the Study Area are categorized as palustrine, which are non-tidal, vegetated wetlands defined by dominant plant species, such as trees, shrubs, and emergent (herbaceous) plants (Cowardin et al., 1979). The Study Area contains three main groups of palustrine wetlands: emergent, forested / scrub-shrub, and freshwater ponds. Freshwater ponds and emergent wetlands are the most common palustrine wetlands within the area. Most of the wetlands within the Study Area are along streams and around lakes and ponds, as well as associated with reclaimed mine areas (U.S. Fish and Wildlife Service [USFWS], 2018).

2.2.3.3 Floodplains

The Federal Emergency Management Agency (FEMA) has mapped floodplains within the Study Area. The most prominent floodplains that have been mapped in the Study Area are associated with the Wolf Creek Generating Station Lake and the Neosho River, as well as locations along Long Creek, Indian Creek, and East Cow Creek (FEMA, 2018). Most of the floodplains, as mapped by FEMA, are relatively narrow and can likely be spanned with strategic structure placement. The Kansas Department of Agriculture Division of Water Resources regulates floodplain fills and impacts to regulatory floodways in the state of Kansas and the Missouri State Emergency Management Agency administers the National Flood Insurance Program for Missouri.

2.2.3.4 Subsurface Waters and Features

An aquifer is a geologic formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs (USGS, 2017). Aquifers that are shallow may be affected by the installation of foundations for the transmission line structures. According to groundwater data managed by the USGS (2017), the Project Study Area does not fall within a specific principal aquifer

but is in an area that contains rocks that are minimally permeable but may contain locally productive aquifers.

A karst is a type of landscape where the dissolving of the bedrock has created sinkholes, caves, springs, and other characteristic features. They are associated with soluble rock types such as limestone, marble, and gypsum (National Park Service [NPS], 2018). NEET Southwest contracted with Terracon to assess the Study Area for the risk of the presence of karst features. Much of the Study Area falls within areas that have a potential for karst features. The risk is lowest in the southeastern and northwestern corners of the Study Area.

2.2.4 Vegetation

The Study Area is relatively flat with some slopes associated with streams and reclaimed mine areas with intermingled prairie, pasture, cropland, and strips of largely deciduous trees. Wooded areas consist primarily of oak, hickory, eastern cottonwood, black willow, American elm, and red cedar (Bailey, 2020). Other vegetation in the Study Area includes rough-leaved dogwood, smooth sumac, elderberry, prairie rose, chokecherry, American hazelnut, and buttonbush (Kansas Native Plants, 2018). Crops within the Study Area consist primarily of soybeans, corn, and winter wheat (USDA National Agricultural Statistics Service [NASS], 2017).

2.2.4.1 Federally Listed Plant Species

The USFWS developed a service called Information for Planning and Consultation (IPaC) that provides a listing of protected species and lands within the Study Area and by county. There is one federally protected plant species that may occur within the Study Area based on the USFWS IPaC results retrieved on January 7, 2021. This species is Mead's milkweed (threatened) (USFWS, 2020a). Mead's milkweed occurs primarily in tallgrass prairie with a late successional bunch-grass structure, as well as in hay meadows and thin soil glades or barrens (USFWS, 2003).

2.2.5 Wildlife

Wildlife species found in southeast Kansas and southwest Missouri are likely to be present within the Study Area. Mammal species potentially occurring in the Study Area include: white-tailed deer, Virginia opossum, nine-banded armadillo, eastern cottontail, woodchuck, eastern fox squirrel, deer mouse, eastern woodrat, coyote, and raccoon (Great Plains Nature Center, 2013).

Bird species found within the Study Area include waterfowl species, such as mallard, northern pintail, green-winged teal, Canada geese, and snow geese (Kansas Department of Wildlife and Parks [KDWP], 2020). Other bird species may include the following: turkey vulture, red-tailed hawk, northern cardinal,

mourning dove, great horned owl, red-headed woodpecker, common grackle, blue jay, American crow, and American goldfinch (Otte and Gress, 2012).

Reptiles and amphibians potentially found within the Study Area include American toad, American bullfrog, spring peeper, eastern tiger salamander, snapping turtle, painted turtle, broadhead skink, gopher snake, common garter snake, and western massasauga (Taggart and Riedle, 2017).

2.2.5.1 Federally Listed Animal Species

Based on a review of the USFWS' IPaC results for the Study Area completed on January 7, 2021, there are seven federally protected animal species that may occur within the Study Area. Table 2-1 lists the federally listed animal species potentially found within the Study Area.

Gray bats are a cave dwelling bat species. They forage for insects in forests and riparian corridors. KDWP has designated critical habitat for this species as suitable woodlands and water bodies within the southeast portion of Crawford County, Kansas. The U.S. Fish and Wildlife Service (USFWS) and State of Missouri have not designated critical habitat for this species. The gray bat hibernates in the winter in deep, vertical caves and roosts in the summer in caves scattered along rivers. They may forage for insects along rivers and lakes (USFWS, 2019a).

The Indiana bat occurs in Missouri but is not likely to occur in Kansas. The Indiana bat hibernates in the winter in caves or occasionally abandoned mines (USFWS, 2019b). During the summer, the Indiana bat may roost beneath loose bark of live, dead, or dying trees. Roosting and foraging habitat includes forests, wooded fence rows, and riparian areas.

The northern long-eared bat occurs in Kansas and Missouri. The northern long-eared bat hibernates in caves or abandoned mines during the winter. During the summer, the northern long-eared bat may roost beneath loose bark of live, dead, or dying trees. Additionally, the northern long-eared bat may roost in barns, in sheds, under bridges, or in other buildings that have little human disturbance. Female northern long-eared bats typically roost in a maternity colony, while male northern long-eared bats tend to roost singly or in small groups. Roosting and foraging habitat includes forests, wooded fence rows, and riparian areas (USFWS, 2020b).

The Neosho madtom is a fish species found in stream riffles over loosely packed gravel bottoms (USFWS, 2019c).

The Ozark cavefish is a fish species that lives in cave streams and springs (USFWS, 2019d).

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Table 2-1: USFWS Federally Listed Animal Species by County

Common Name	Federal Status	Kansas									Missouri	
		Allen	Anderson	Bourbon	Cherokee	Coffey	Crawford	Jasper	Neosho	Woodson	Barton	Jasper
Gray bat	Endangered						X	X			X	X
Indiana bat	Endangered							X			X	X
Northern long-eared bat	Threatened	X	X	X	X	X	X	X	X	X	X	X
Neosho madtom	Threatened	X			X	X		X	X	X		X
Ozark cavefish	Threatened				X			X				X
Neosho mucket	Endangered	X			X	X		X	X	X	X	X
Rabbitsfoot	Threatened	X			X	X		X	X	X	X	X

USFWS IPAC

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The Neosho mucket is associated with shallow riffles and runs with a gravel substrate and moderate to swift currents in some Kansas and Missouri rivers (USFWS, 2020c). The IPaC also indicates that the Study Area overlaps critical habitat identified for the Neosho mucket.

The rabbitsfoot inhabits small to medium sized streams and some larger rivers, in shallow water along banks and adjacent runs and shoals with low water velocity and a gravel or sand substrate (USFWS, 2020d). The IPaC indicates that the Study Area overlaps critical habitat identified for the rabbitsfoot.

The KDWP has also identified many state-threatened and endangered animal species in the Study Area. Other than fish, mussels, and other aquatic species (which are not likely to be impacted by the Project because streams and creeks will be spanned), there are three species with designated state critical habitat located within the Study Area: broadhead skink, eastern skunk, and the gray bat. The broadhead skink critical habitat is comprised of all stands of mature oak woodland or stands of suitable timber in Bourbon and Crawford counties within the Study Area (KDWP, 2020b). The eastern spotted skunk prefers forest edges and upland prairie grasslands, especially where rock outcrops and shrub clumps are present, as well as riparian corridors, woody fencerows, and abandoned farm buildings. Critical habitat for the skunk may be found within Anderson and Woodson counties in the Study Area (KDWP, 2020c). The gray bat is almost totally cave dwelling, dependent on storm sewers in Crawford and Cherokee counties. Nearby streams with adjacent woodlands provide the critical foraging habitat for the species and they may use woody stream corridors and linear tree plantings as travel lanes. The designated state critical habitat for the gray bat is defined roughly as the southeast quadrant of Crawford County and along Cow Creek into Cherokee County (KDWP, 2020d). Non-aquatic species with no state critical habitat designated within the Study Area include the least tern, piping plover, snowy plover, American burying beetle, and the whooping crane.

There are also several species listed as state endangered or threatened by the Missouri Department of Conservation (MDC) within Barton and Jasper counties in the Study Area. Species in Barton County include Mead's milkweed, plains spotted skunk, northern harrier, redfin darter, and greater prairie chicken (MDC, 2020a). State threatened and endangered species in Jasper County include the gray bat, American bittern, black-tailed jackrabbit, greater prairie chicken, Neosho madtom, Neosho mucket, northern harrier, Ozark cavefish, rabbitsfoot, and the redfin darter (MDC, 2020b).

The Project is within the range of the bald eagle and the winter range of the golden eagle, both of which are protected under the Bald and Golden Eagle Protection Act.

2.2.6 Managed / Protected Lands

Several (42) park and recreation areas and lands managed by federal, state, local, and private entities are located within the Study Area.

In addition to managed lands, private and public organizations are working to conserve and protect natural areas, riparian buffers, farmlands, watersheds, and other "special" places, often on private land. The form of protection varies, from relatively simple agreements that include conservation land management practices, to more complex and restrictive agreements that may prohibit virtually any disturbance of the land. The agreements, even if between private landowners and private organizations, can involve the use of state or federal grant funds. The agreements can be short-term, last several years, or be in perpetuity. These lands are typically called conservation easements. There are 12 known conservation easements located within the Study Area (National Conservation Easement Database [NCED], 2018).

Similarly, certain state and federal regulatory programs require mitigation for the unavoidable loss of resources resulting from activities that the programs regulate. The most common example is the CWA Section 404 (wetlands) regulatory program, which requires mitigation for permitted wetland losses through enhancement, restoration, or creation of other wetlands. Those mitigation lands are protected from further development, typically by perpetual easements. It can be difficult to identify mitigation lands in an area without detailed land title research. No mitigation lands have been identified in the Study Area using parcel ownership information and other data sources to identify state and federal lands that are not associated with other managed lands.

Below is a description of the primary managed lands, including conservation easements and known mitigation lands (if any), located within the Study Area.

2.2.6.1 Federally Owned / Managed Lands and Easements

According to the USGS Geographic Information System (GIS) data managed by the USGS (2018b), there are 14 lands within the Study Area that are owned and managed by the Federal government. These lands or tracts range in size from approximately 5.9 to 158.9 acres and include: NRCS wetland reserve program (WRP) lands; the NPS's Fort Scott National Historic Site; and the USACE's John Redmond Reservoir. NRCS WRP lands are scattered throughout the Study Area. The Fort Scott National Historic Site is in Fort Scott, and John Redmond Reservoir just slightly extends into the northwestern edge of the Study Area.

2.2.6.2 State Owned / Managed Lands and Easements

According to the USGS data (2018b), 20 tracts of land within the Study Area are owned and managed by the State(s) of Kansas and Missouri. These tracts range from approximately 5.5 to 3,043 acres in size and include: KDWP Bourbon State Lake and Wildlife Area; KDWP Crawford State Park; Missouri Department of Natural Resources (MDNR) Prairie State Park and adjacent lands (MDC East Drywood Creek Natural Area; MDC Regal Prairie Natural Area; and MDC Tzi-Sho Prairie Natural Area); MDC Shawnee Trail Conservation Area; KDWP Neosho Wildlife Area; KDWP Mined Land Wildlife Areas, Pittsburg area 1-8 and Scamman area 26; MDC Lester R. Davis Memorial Forest; KDWP Hollister Wildlife Area; MDC Hunkah Prairie Natural Area; MDC Mon-Shon Prairie Conservation Area; KDWP Robb Prairie; and the KDWP Prairie Spirit Rail-to-Trail. Most of these state managed lands are in the southern half of the Study Area in eastern Crawford County, western Barton County, and southern Bourbon County in Kansas. The Prairie Spirit Trail crosses the Study Area diagonally from the northeast in Anderson County to southwest into Allen County, Kansas.

2.2.6.3 County / Locally Owned / Managed Lands and Easements

There appear to be no locally owned managed lands or easements within the Study Area.

2.2.6.4 Privately Owned Lands and Easements

There are very few (four) privately-owned conservation lands within the Study Area. These are all Nature Conservancy Anderson County Prairie tracts (USGS, 2018b). These private tracts range in size from approximately 50.9 to 1,269 acres and are in the northeastern portion of the Study Area in Anderson County, Kansas. There are some privately-owned conservation and hunting lands throughout the Study Area, based on a review of parcel data, but these lands do not appear to involve any federal, state, or non-governmental agency reviews or authorizations.

2.3 Social Resources

The following is a description of the social resources in the Study Area that could be impacted by the construction and operation of the proposed Project. Topics addressed include patterns of land use and socioeconomics, cultural resources, and visual character.

2.3.1 Land Use and Development Patterns

This section contains information on general land use patterns, agriculture, urban areas, recreation areas, transportation, and utilities within the Study Area.

Thirty-seven municipalities occur within the Study Area; the ten largest include: Pittsburg; Fort Scott; Iola; Frontenac; Girard; Burlington; Humboldt; Arma; Yates Center; and Cherokee. The Study Area largely consists of scattered rural residential development and agricultural practices with some more densely residential and commercially developed areas and reclaimed mine lands around Pittsburg and other larger towns in the Study Area.

2.3.1.1 Agriculture

Agricultural land uses can include more common uses, such as cropland and pastureland, to less common uses, such as pine plantations, orchards, and aquaculture. It is useful to determine the most common types of agricultural practices in an area to evaluate the potential for farm owner concerns associated with transmission lines. Transmission structures may somewhat alter the ways in which a farmer is able to plant, plow, and cultivate crops and may also reduce the amount of land on which to grow crops by a small amount. The extent of irrigation practices, such as center-pivot systems, can also be limited by transmission structures. It can be difficult to identify feasible routes that do not impact irrigation in areas with concentrations of center-pivot systems.

Most of the Study Area is comprised of pasture and cropland, interspersed with wooded fringes around streams and wetlands, some hay land, and some prairie lands. There is a concentration of cropland along the Neosho River corridor. Less pasture and cropland are present around Pittsburg, where there is more development and reclaimed mine lands. Approximately 29.5 percent of the Study Area is comprised of cropland (484,342 acres). There is relatively little center-pivot irrigation in this region of Kansas, although there are several systems located in the southeastern portion of the Study Area, mostly in Barton County, Missouri, and a few located in the northwestern portion of the Study Area in Coffey County, Kansas.

The USDA publishes a Census of Agriculture approximately every five years that summarizes agricultural characteristics by state and county. Table 2-2 summarizes the key agricultural characteristics of the state and counties within the Study Area (USDA NASS, 2017).

The top five crops are the same for each county in the Study Area; however, the counties vary in the order in which the crops are grown. Soybeans are the primary crop for almost all the counties. Based on the agricultural census, the primary crops grown in all the counties, in varying order, are soybeans, forage, hay, corn, and wheat (USDA NASS, 2017).

Table 2-2: Agricultural Characteristics for Kansas and Missouri and Study Area Counties

Characteristic	KANSAS	Allen	Anderson	Bourbon	Cherokee	Coffey	Crawford	Neosho	Woodson	MISSOURI	Barton	Jasper
Number of farms	58,569	505	611	813	756	699	777	687	289	95,320	865	1,315
Land in farms (acres)	45,759,319	239,906	364,522	336,045	319,315	386,279	335,118	323,092	282,986	27,781,883	331,013	264,509
Average farm size (acres)	781	475	597	413	422	553	431	470	979	291	383	201
Land enrolled in conservation reserve, wetland reserve, farmable wetlands, or other enhancement programs (acres)	2,307,445	9,441	7,895	11,164	713	17,244	8,777	10,701	3,844	1,053,287	14,456	3,792
Irrigated land (acres)	2,503,386	548	2,927	634	995	1,148	1,377	845	0	1,529,155	21,682	5,315
Market value of crop sales ($, %)	$6,460,437,000 (34%)	$31,210,000 (65%)	$80,868,000 (74%)	$24,925,000 (32%)	$81,160,000 (76%)	$46,874,000 (65%)	$62,355,000 (73%)	$45,836,000 (56%)	$27,749,000 (53%)	5,476,314,000 (52%)	$80,550,000 (61%)	$46,728,000 (48%)
Market value of livestock sales ($, %)	$12,322,289,000 (66%)	$16,725,000 (35%)	$27,909,000 (26%)	$54,009,000 (68%)	$25,796,000 (24%)	$24,818,000 (35%)	$23,585,000 (27%)	$36,032,000 (44%)	$24,801,000 (47%)	5,049,623,000 (48%)	$51,494,000 (39%)	$50,512,000 (52%)

USDA NASS, 2017

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Primary livestock produced in each of the 10 Study Area counties include cattle and calves, cattle for beef, sales of cattle and calves for husbandry, and egg-laying chickens. Some counties also produce turkeys, horses, hogs, goats, and rabbits (USDA NASS, 2017).

2.3.1.2 Urban and Developed Areas

When siting transmission lines, it is preferable to minimize potential impacts to residences and urban areas, if possible. The public generally prefers that new transmission lines be located as far away from their homes, businesses, and public facilities as possible. Therefore, it is important to understand the population density, housing units, and development trends of the area when identifying new transmission line routes. Population is also an important consideration, which is summarized in Section 2.3.2.1. Table 2-3 displays the population density, housing units, and amount of land within the state, counties, and largest cities or towns within the Study Area (U.S. Census Bureau, 2017).

The population density of Crawford County (KS) and Jasper County (MO) were well above that of their respective States. The population density of Allen County (KS), Anderson County (KS), Barton County (MO), Bourbon County (KS), Coffey County (KS), and Woodson County (KS) were all well below their respective States. The population density of Cherokee County and Neosho County were within 25% of the State's population density. Counties with population densities greater than the State tend to be more developed than those with population densities well below the State. More densely developed areas can be more difficult in which to site feasible transmission line alternatives. There can also be dense concentrations of development, such as cities, in the less densely developed counties, and subdivisions, in the less densely developed cities, that need to be identified during the routing process. The number of housing units can also indicate more densely developed areas. In 2017, Jasper County (MO) and Crawford County (KS) had the greatest number of housing units, while Woodson County (KS) and Anderson County (KS) had the least. Among the cities within the Study Area, Pittsburg and Fort Scott had the greatest number of housing units and Cherokee and Arma had the least.

The Study Area is comprised mostly of scattered rural residences, except for the Pittsburg area in the south and along U.S. Highway 69 where there is denser residential and commercial development. Crawford County, Allen County, and Bourbon County comprise most of the land area within the Study Area. Pittsburg and Fort Scott are the largest cities in terms of area within the Study Area, as well as population density and housing units.

Table 2-3: Population Densities, Housing Units, and Land Area for the State, Counties, and the Ten Largest Cities/Towns Within the Study Area

State / County / City	Population Density (persons/sq. mi)	Housing Units	Land Area within Study Area (acres)
KANSAS	35.0	1,233,215	1,563,191
Allen County	24.8	6,226	321,002
Anderson County	13.4	3,720	184,472
Bourbon County	23.1	7,167	313,826
Cherokee County	34.0	9,890	26,146
Coffey County	12.6	3,964	143,061
Crawford County	65.6	17,801	377,006
Neosho County	27.7	7,513	47,224
Woodson County	6.2	2,022	150,455
MISSOURI	88.0	2,712,729	79,940
Barton County	19.9	5,600	66,094
Jasper County	187.5	50,668	13,846
CITIES	-	-	-
Pittsburg	1,572.9	9,210	8,252
Fort Scott	1,402.0	3,819	3,571
Iola	1,127.9	2,636	3,074
Frontenac	672.3	1,519	3,235
Girard	1,127.5	1,228	1,559
Burlington	1,242.1	1,296	1,124
Humboldt	1,307.6	923	924
Arma	1,343.0	736	731
Yates Center	439.3	821	1,324
Cherokee	1,046.5	324	454

U.S. Census Bureau, 2017

There are three colleges / universities, 20 elementary schools, eight middle schools, and 14 high schools located within the Study Area (National Center for Education Statistics, 2017). Most of these schools are located in cities and towns. Colleges include Pittsburg State University, Allen Community College, and Fort Scott Community College. Elementary schools within the Study Area include: Northeast; R.V. Haderlein; Jefferson; George E. Nettels; Burlington; Crest; Lincoln; Eugene Ware; Winfield Scott; Marmaton Valley; Leroy; Frank Layden; Humboldt; McKinley; Lakeside; Westside; Meadowlark; West Bourbon; Westphalia; and Yates Center. Middle schools within the Study Area include: Frontenac Junior High; Southeast Junior High; Iola Middle; Fort Scott Middle; Humboldt Middle; Burlington Middle;

Girard Middle; and Pittsburg Middle. High schools within the Study Area include: Humboldt; Fort Scott; Iola; Crest; Southern Coffey County; Marmaton Valley; North East; Burlington; Pittsburg; Yates Center; Southeast; Uniontown; Frontenac; and Girard.

There are several quarries and landfills scattered throughout the Study Area. Some larger sites are owned by the Monarch Cement Company, Nelson Quarries, Mulberry Limestone Quarry Company, Midwest Minerals, and U.S.A Waste Services Kansas Landfills, Inc. Beginning in the mid- to late 1800's, both subsurface and strip coal mining became a prominent industry in southeast Kansas, including Crawford and Cherokee Counties, and was a major factor in the development of the area. Some mining camps later became communities, such as Frontenac. After peak production in 1926, most of the mining ended by 1970 and all mines were closed by 1997 (Kansas Historical Society, 2018). Today, the southeastern portion of the Study Area contains evidence of extensive former mining activity, including abandoned and reclaimed sub-surface and surface strip coal mines and tailings.

2.3.1.3 Recreation Areas

Outdoor recreational opportunities, such as hunting and fishing, can be found in reclaimed strip mine lands and other woods, as well as in and around lakes, ponds, and creeks and their riparian woodlands within the Study Area. There are large tracts of land managed for private hunting clubs. Existing parks, such as Schlanger Park, Winston Park, Gunn Park, Deramus Park, and Lincoln Park, and several golf courses and country clubs, including Four Oaks, Cedar Brook, Countryside, Crestwood, and Girard are also found largely in and around the cities and towns within the Study Area (USGS, 2018b; ESRI, 2019a; ESRI, 2019b; USGS, 2020b).

2.3.1.4 Transportation and Aviation

The Kansas Department of Transportation (KDOT) is responsible for coordinating and developing comprehensive transportation policies and developing and operating transportation facilities and services across the State.

The Study Area is crossed by six U.S. highways and 13 state highways, and numerous smaller, local roadways. U.S. 54 extends east / west through the central portion of the Study Area. U.S. 69 extends north / south along the eastern edge of the Study Area. U.S. 69 is also the Frontier Military Historic Byway that extends 167 miles from Fort Leavenworth south to the Oklahoma border, which approximates the old military trail used by the Army to transport troops and supplies between the frontier forts (KDWP, 2011). U.S. 59 runs north / south through the north-central portion and then along the western edge of the southern portion of the Study Area; U.S. 169 extends generally north / south through the north-central

portion of the Study Area; and U.S. 75 extends north / south along the northwestern edge of the Study Area. State Highway (SH) 58 extends east / west through the northern portion of the Study Area between U.S. 75 and U.S. Highway 169; SH 7 extends predominately north / south through the south-central portion of the Study Area; SH 3 extends north / south through the central portion of the Study Area; SH 126 extends largely east / west in the southern portion of the Study Area; and SH 39 and SH 146 both run east / west through the southern portion of the Study Area (ESRI, 2016).

Five single-track rail lines extend through the Study Area. The Union Pacific (UP) Railroad Parsons, Coffeyville, and Wolf Creek Lead tracks extend largely north / south in the northwestern and central portions of the Study Area; the Burlington Northern Santa Fe (BNSF) Railroad Fort Scott, Afton, and Gorilla branches extend largely north / south through the southeastern portion of the Study Area; and the South Kansas and Oklahoma (SKOL) and Kansas City Southern (KCS) railroads both cross the southeastern corner of the Study Area (U.S. Department of Transportation Bureau of Transportation Statistics [USDOT], 2018). Many abandoned railroad corridors are present in Crawford and Cherokee counties that were removed in the 1920's and 1930's due to the decline in coal mining (Powell, 1972).

There are three public airports in the Study Area: Fort Scott Municipal is located approximately 2.5 miles southwest of Fort Scott in the eastern portion of the Study Area; Allen County is located east of U.S. Highway 69 about 1.75 miles south of Iola; and Atkinson Municipal is located approximately 2.75 miles northwest of central Pittsburg. There are eight privately-owned airstrips located primarily in the southern half of the Study Area around Pittsburg and Fort Scott (Federal Aviation Administration [FAA], 2020).

2.3.1.5 Utilities and Communication Towers

There are several large power plants, wind farms, and many (32) electrical substations located within the Study Area. The Evergy-owned Wolf Creek Generating Station is in the northwestern corner of the Study Area, and the Empire District Electric Company owned Asbury Power Plant is in the southeastern corner of the Study Area. Prairie Queen Wind Farm, owned by EDP Renewables, is in the north-central portion of the Study Area. The Jayhawk Wind Farm, owned by The Empire District Electric Company, is in the central portion of the Study Area. The electrical substations are scattered throughout the Study Area (Hitachi ABB Power Grid, 2016).

There are approximately 37 transmission lines that extend through the Study Area. The primary lines include: the Marmaton to Litchfield 161-kV and 69-kV lines; Neosho to La Cygne 345-kV line; Litchfield to Asbury 161-kV line; Litchfield to Neosho 161-kV line; Blackberry to Neosho 345-kV line; Marmaton to Neosho 161-kV line; and Centerville to Marmaton 161-kV transmission line (U.S. Energy

Information Administration [USEIA], 2018; Hitachi ABB Power Grid, 2016) (Figure 2-1). The Marmaton to Litchfield 161-kV transmission line extends generally southeast / northwest through the south-central portion of the Study Area in Crawford, Bourbon, and Allen counties. The Marmaton to Litchfield 69-kV transmission line runs north / south along the eastern Study Area boundary in Crawford and Bourbon counties and then turns east / west through central Bourbon County. The Neosho to La Cygne 345-kV transmission line extends generally southwest / northeast through Crawford and Bourbon counties. The Litchfield to Asbury 161-kV transmission line extends generally southeast / northwest in the southeastern corner of the Study Area in Jasper and Barton counties. The Litchfield to Neosho 161-kV and Blackberry to Neosho 345-kV transmission lines extend east / west along the southern boundary of the Study Area in Crawford and Cherokee counties. The Marmaton to Neosho and Centerville to Marmaton 161-kV transmission lines extend generally north / south through Crawford, Allen, and Anderson counties in the southwestern and central portions of the Study Area.

In addition to high voltage electric transmission lines, there are also several large diameter natural gas, oil, and petroleum pipelines that crisscross the Study Area. Lines appear to be operated by Southern Star Central Gas Pipeline, Magellan Midstream Partners, Enbridge, and BP. Most pipelines extend from the northeastern portion of the Study Area into Anderson and Allen counties converging on an area south of Humboldt, Kansas, while other pipelines extend from the east or southeast across Bourbon and Crawford counties into Allen County.

There are also 213 communication towers located within the Study Area. These include antenna structure registrations (ASR), microwave, FM radio, and paging towers scattered throughout the entire Study Area, with some concentrations around Fort Scott and Pittsburg within the Study Area (Federal Communications Commission [FCC], 2018).

2.3.2 Socioeconomic Patterns

This section contains data on population and employment in the following Study Area counties: Allen, Anderson, Bourbon, Cherokee, Coffey, Crawford, Neosho, and Woodson counties in Kansas and Barton and Jasper counties in Missouri.

2.3.2.1 Population

Like urban areas, population densities, and housing units, understanding populations and trends within the counties and cities within the Study Area can help to identify areas of constraint and to develop alternative routes that minimize impacts to the extent practicable. Table 2-4 displays the 2010 and 2017

populations and percent change in population for the state, counties and the largest cities or towns within the Study Area (U.S. Census Bureau, 2010; U.S. Census Bureau, 2017).

Both state populations increased between 2010 and 2017 by 2.1 percent. Jasper County (MO) was the only county to also increase in population during this same period, at only a slightly greater percentage than either state. All other Kansas and Missouri counties in the Study Area decreased in population during this same period, some by as much as 6 to 7 percent. Among the cities or towns within the Study Area, Pittsburg, Burlington, Arma, and Cherokee increased in population and Fort Scott, Iola, Frontenac, Girard, Humboldt, and Yates Center decreased in population.

Table 2-4: 2010 and 2017 Populations and Trends for the States, Counties, and Largest Cities/Towns Within the Study Area

State / County / City	2010 Population	2017 Population	Percent Change
KANSAS	2,853,118	2,913,123	2.1%
Allen County	13,371	12,519	-6.4%
Anderson County	8,102	7,833	-3.3%
Bourbon County	15,173	14,754	-2.8%
Cherokee County	21,603	20,115	-6.9%
Coffey County	8,601	8,224	-4.4%
Crawford County	39,134	39,034	-0.3%
Neosho County	16,512	16,015	-3.0%
Woodson County	3,309	3,147	-4.9%
MISSOURI	5,988,927	6,113,532	2.1%
Barton County	12,402	11,850	-4.5%
Jasper County	117,404	120,217	2.4%
CITIES	-	-	-
Pittsburg	20,233	20,290	0.3%
Fort Scott	8,087	7,823	-3.3%
Iola	5,704	5,414	-5.1%
Frontenac	3,437	3,402	-1.0%
Girard	2,789	2,751	-1.4%
Burlington	2,674	2,745	2.7%
Humboldt	1,953	1,883	-3.6%
Arma	1,481	1,531	3.4%
Yates Center	1,417	1,340	-5.4%
Cherokee	714	743	4.1%

U.S. Census Bureau, 2010; U.S. Census Bureau, 2017

2.3.2.2 Employment and Income

According to the U.S. Census Bureau's 2017 American Community Survey, Kansas' labor force was 50.8 percent of the population (individuals 16 years of age and over) and Missouri's labor force was 49.9 percent of its population. Anderson County (KS) had a greater labor force percentage (52.9 percent) than both states. The rest of the counties (Allen County [KS; 50.3 percent], Barton County [MO; 43.2 percent], Bourbon County [KS; 46.5 percent], Cherokee County [KS; 50.5 percent], Coffey County [KS; 50.1 percent], Crawford County [KS; 49 percent], Jasper County [MO; 47.2 percent], Neosho County [KS; 37.8 percent], and Woodson County [KS; 50.5 percent]) all had a lower labor force percentage than their respective states (U.S. Census Bureau, 2017).

The same survey recorded an unemployment rate for Kansas of 3.6 percent and for Missouri of 3.8 percent. All Kansas counties had higher unemployment rates than the state (4.9 percent in Allen County; 4.0 percent in Anderson County; 4.5 percent in Bourbon County; 3.9 percent in Cherokee County; 5.3 percent in Coffey County; 4.2 percent in Crawford County; 5.2 percent in Neosho County; and 4.5 percent in Woodson County). In Missouri, Barton County had a higher unemployment rate than the state at 4.2 percent, but Jasper County had a lower rate at 3.3 percent (U.S. Census Bureau, 2017).

The two most predominant industries within the counties in the Study Area in 2010 were manufacturing and educational services / health care / and social assistance (U.S. Census Bureau, 2010).

The median household income for Kansas was $56,382 per year in 2017 and $53,506 in Missouri. Coffey County ($57,021) had a median household income higher than either statewide median, but all the other counties in the Study Area had a lower median household income than either state (Woodson County [KS; $38,840], Neosho County [KS; $44,073], Jasper County [MO; $46,611], Crawford County [KS; $39,461], Cherokee County [KS; $42,469], Bourbon County [KS; $41,847], Barton County [MO; $41,796], Anderson County [KS; $46,595], and Allen County [KS; $42,957]). Woodson County had the lowest median income (U.S. Census Bureau, 2017).

2.3.3 Cultural Resources

Burns & McDonnell archaeologists performed a records search in September 2020 and again in January 2022, via the Kansas and Missouri State Historic Preservation Office's (SHPO) online databases. There are 45 structures, sites, or districts within the Study Area that are listed on the National Register of Historic Places (NRHP) or that have been recommended as eligible for the NRHP. They are located primarily in the cities and towns in the Study Area, including Fort Scott, Pittsburg, Arma, Girard, and Iola, which are typically avoided when routing large transmission lines, whenever possible. Five of these

sites are historic districts: Fort Scott Historic Site, Fort Scott Downtown Historic District, Fourth and Broadway Historic District and Whitesitt-Shirk Historic District in Pittsburg, and Yates Center Courthouse Square. NRHP sites include houses, jails, post offices, courthouses, churches, bridges, and rail depots, among others. There are 663 recorded archeological sites scattered throughout the Study Area but they are in relatively low concentrations so that impacts to these recorded archeological sites are likely to be minimal during line siting and pole spotting. There may be other cultural resources located within the Study Area but that are undiscovered, as much of the area has not likely been surveyed.

2.3.4 Visual Character

The visual character of an area is a function of the terrain, land cover, and land use. Throughout the Study Area, the land cover is largely a mixture of pasture and cropland, with some woodlands along streams and wetlands. The terrain within the Study Area is mostly flat, with some slopes around streams and creeks and around reclaimed mine areas. The lack of large, wooded areas and diverse terrain mean that views of linear aboveground features in the Study Area, such as an electric transmission line, could extend for miles.

The number of people potentially within view of the new line, depending on the route selected, is relatively low due to mostly scattered rural residential development across most of the Study Area. Highways, local roads, and railroads pass through the Study Area, as described in Section 2.3.1.4, as do transmission lines and distribution lines, as described in Section 2.3.1.5. These features add to the man-made elements within the Study Area and help to reduce the overall visual intrusion that could be caused by the proposed Project.

3.0 ANALYSIS OF ALTERNATIVES

NEET Southwest retained Burns & McDonnell to assist in the route identification, selection, and documentation for the Project. This section presents the rationale behind the route identification and evaluation process used for the Project. The evaluation ultimately resulted in the selection of a preferred route.

3.1 Overview of the Routing Process

The following is an overview of the steps involved in the identification of the route alternatives and the selection of a preferred route for the Project.

Potential routes were identified that met the routing objective: to identify economically feasible routes connecting the proposed Project endpoints that avoided or minimized impacts to both community and natural resources.

Parelleling opportunities with existing transmission lines, roads, and railroads were investigated during the initial review of the Study Area, as well as during the identification of the preliminary routes. The study team then quantified the engineering, social, and environmental resources that would be impacted by each feasible route. Quantitative data were used to evaluate the alternatives and to recommend a preferred route for the proposed transmission line. Activities leading to the selection of the preferred route are described in more detail in the following sections.

3.2 Identification of Route Alternatives

The objective of the routing analysis was to identify an economically feasible route that offered the most benefits in terms of providing reliable electric service, but that also limited adverse impacts to the social and natural environment within the Study Area. This effort included three primary components: review of USGS topographic maps and recent aerial photography, review of available GIS data regarding potential constraints within the Study Area, and a field review of the alternative routes conducted on October 12 - 15, 2020 along public roads.

The NEET Southwest team initially identified a set of routes using their collected data and routing-based programs. The Burns & McDonnell team then gathered additional data within the Study Area, completed a review of the NEET Southwest routes, and provided recommendations for adjustments and other potential routes to evaluate. The primary goals regarding routing were to:

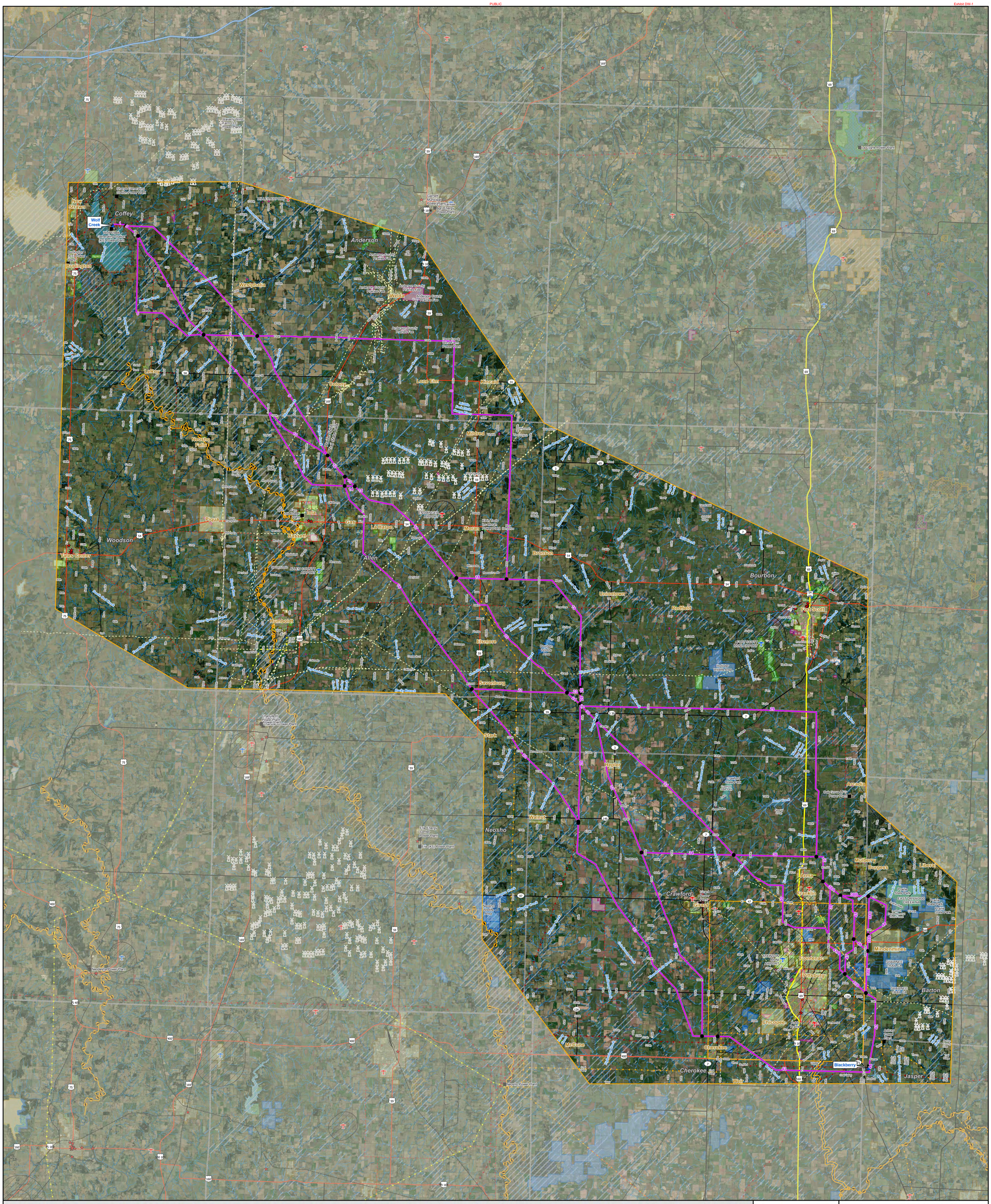
- Minimize overall impacts by paralleling existing transmission line ROW, where possible;
- Maximize the distance of the line from existing residences and other development;
- Avoid crossing state and federal managed and owned lands;
- Minimize the overall length of the route and minimize angles to help keep the cost reasonable and to minimize land use impacts;
- Minimize crossing contiguous woodland tracts within the gray bat critical habitat area;
- Minimize crossings of large concentrations of wetlands and parallel to streams;
- Minimize impacts to airports and runways.

Adjustments were made to the NEET Southwest routes to accomplish the above objectives and to address constraints and newly identified structures observed during the field review. For example, one portion of a preliminary route would have crossed a golf course, so an adjustment was made to avoid the golf course. Additional adjustments were made to minimize the length of routes through restrictive FAA obstruction zones around the Atkinson Municipal Airport near Pittsburg, to avoid paralleling streams, to avoid having known oil / gas wells and tanks in the ROW, and to minimize crossing possible gray bat habitat (*i.e.*, large wooded tracts) in both Kansas and Missouri. An additional route was added for evaluation as an option that would maximize paralleling along roads and property lines. Additional connector segments between routes were added to provide flexibility in using various combinations of routes to reach the endpoints.

The final set of route alternatives consist of individual segments that can be combined in different arrangements to form a continuous path between the Project endpoints. Each segment begins and ends at intersections with other segments. The set of route alternatives for this Project consisted of 53 individual segments. The alternatives were identified to minimize, to the extent practicable, impacts to environmentally sensitive features and residential areas while providing a direct route alignment. Ultimately, 729 distinct routes were developed using forward-progressing combinations of the 53 segments. Figure 3-1 shows the route alternatives overlaid on an aerial photography background of the Study Area.

3.3 Identification of the Preferred Route

The analysis of alternatives was based on social, environmental, and engineering criteria. Data for each criterion were quantified for each segment and summed for each route. Following is a description of the process that resulted in the selection of a preferred route.



Path: D:\Wolf_Creek\Wolf_Creek_2_Blackberry\Wolf_Creek_2_Blackberry.aprx
Sources: Earthstar Geographics

Source: Energy Velocity, U.S. Energy Information Agency, FAA, NPS, ESRI, USGS, Real Estate Portal USA, LLC, NHE, FEMA, NPMS, DASC, MSDIS, and Burns & McDonnell

BURNS McDONNELL™

Figure 3-1
Aerial Map of Proposed Route Alternatives
Wolf Creek - Blackberry
NEET Southwest

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3.3.1 Evaluation Criteria

The evaluation of the alternative routes included a systematic comparison of the alternatives based on the social, environmental, and engineering criteria that represent potential adverse effects on resources in the Study Area. Table 3-1 shows the routing criteria measured, though not all of these criteria were necessarily used in the route comparison analysis due to lack of variation among routes.

The primary source of the data used in this analysis was aerial imagery from previous years, including imagery from 2019, supplemented with digital data, such as roads, parcels, protected lands, and wetlands, acquired from various federal and state agencies and sources, and a field review of routes in October of 2020.

To best evaluate potential impacts, the amount of new ROW was calculated as the acreage of new land that would be needed to construct the line. For this Project, a new ROW width of 150 feet was used. New ROW was measured for each route alternative and was used to calculate different land use impacts. It was not included in the evaluation process as it would be like the total length measurement in reflecting potential overall impacts of a route alternative.

Table 3-1: Routing Criteria

Factor	Type
Total Length (feet, miles)	Engineering
Angles Over 30 Degrees (count)	Engineering
Highway Crossings (count)	Engineering
Other Roadway Crossings (count)	Engineering
Length Not Along Existing Transmission Line (feet)	Engineering
Length Not Along Roads (feet)	Engineering
Oil / Gas Wells / Tanks in ROW (count)	Engineering
Number of Pipeline Crossings (count)	Engineering
Length through Previously Mined Area (feet)	Engineering
Transmission Line Crossings (count)	Engineering
Total Length in Karst Area (feet)	Engineering
Residential Proximity Score (score)	Social
Residences within 150 feet (count) Residences within 300 feet (count) Residences within 500 feet (count)	
Businesses within 300 feet (count)	Social
Public Facilities within 500 feet (count)	Social

Factor	Type
Outbuildings within ROW (count)	Social
Archeological Sites within ROW (count)	Social
Parcels Crossed (count)	Social
Length Not Along Parcel Boundary (feet)	Social
Cropland in ROW (acres)	Social
Rangeland in ROW (acres)	Social
Sensitive Species Score (score)	Environmental
Woodland within Gray Bat Critical Habitat in ROW (acres) Eastern Spotted Skunk Critical Habitat in ROW (acres) Broadhead Skink Critical Habitat in ROW (acres) Woodland in ROW (acres)	
Stream Crossings (count)	Environmental
Waterbodies in ROW (acres)	Environmental
Wetlands in ROW (acres)	Environmental
Floodplain in ROW (acres)	Environmental

3.3.1.1 Engineering / Design Criteria

Engineering criteria were considered in the route analysis to account for impacts resulting from length, length along existing transmission lines and roads, heavy angles, road, pipeline, and transmission line crossings, oil / gas wells within the ROW, length through previously mined areas, and length through karst areas.

Total Length is a general indicator of the overall presence of the Project. Length is also an indicator of construction costs. The longer the proposed route, the more expensive it would be if all other criteria were equal.

Angles Over 30 Degrees were considered because these angles typically require larger structures and more space for construction and guying. Consequently, these structures tend to be more visible and more expensive.

Highway and Other Roadway Crossings provides an indicator of potential permitting and / or line crossing issues that may require special designs or additional permits.

Length Not Along Existing Transmission Line was measured because following existing transmission lines is generally considered to have less impact than a new ROW. Because it is desirable and less

impacting to parallel a new route along an existing transmission line, potential impacts would be more likely to occur where a route would be built away from the existing line, so length *not* along existing transmission lines was measured.

Similarly, **Length Not Along Roads** was measured because following roads is preferred where there is little or no adjacent development. In general, following roads is not as preferable as paralleling existing transmission lines because there are fewer above-ground facilities associated with roads that have already affected the visual environment.

Oil / Gas Wells / Tanks in ROW were quantified to help identify the potential for pole spotting or route alignment changes. Well data from the Kansas Data Access and Support Center (DASC) and the MDNR indicating active wells was used, combined with a field review of obvious wells and tanks along the routes. Available data and the field review were not precise enough to completely avoid the risk of having these features in the ROW. Minor route shifts may be necessary to completely avoid impacts to active wells within the ROW following field surveys along the preferred route.

Number of Pipeline Crossings was calculated to provide engineers with a rough estimate of where permits and special designs may be needed to avoid impacting large diameter pipelines.

Length through Previously Mined Area was calculated using various old USGS maps and data derived from interpretation of topographic and aerial maps. None of these areas are actively mined and are reclaimed. However, these areas could present additional soil or substrate challenges during construction.

Transmission Line Crossings provides an indicator of potential line crossing issues that may require special designs or additional considerations like line outages.

Total Length in Karst Area was calculated using data provided by Terracon, assessing the potential route alternatives for the risk of the presence of karst features. All routes must cross these areas, but the risk indicator can provide an index for where the risks may be greater due to special design or permitting challenges.

3.3.1.2 Social / Structure Criteria

Social and structure criteria were included in the analysis to account for impacts to the human environment, including individual residences, businesses, and public facilities located close to the routes; outbuildings in the ROW; cultural resources within the ROW; parcels crossed; length not along parcel boundaries; and cropland and rangeland crossed.

Proximity to residences was considered for the route analysis. Residences within 150 feet, between 151-300 feet, and between 301-500 feet from the centerline were identified within the Study Area using aerial photography, Microsoft Building Footprint data, and field reconnaissance. The impact to these structures varied depending on the distance from the route. The three criteria for the distance to residences were converted to a

Residential Proximity Score to reflect the public concern that residences located closer to a transmission line would be more affected than those further away. To determine the residential proximity score, the number of residences within 150 feet of the centerline were multiplied by three; the number of residences between 101-300 feet were multiplied by two; and the number of residences between 301-500 feet were multiplied by one. Then, all three results were added together.

Businesses within 300 feet were quantified using GIS data documenting the location of businesses. This data was collected during the field review of the routes.

Public Facilities within 500 Feet was calculated to quantify the potential impact of the line on areas frequented by numbers of people, including schools, religious facilities, parks, and other areas where people may gather, as identified in ESRI or Geographic Names Information System (GNIS) data and from the field review of the routes.

Outbuildings within the ROW were quantified using data collected from the field reconnaissance effort, from a review of aerial imagery, and from Microsoft Building Footprints data. These could indicate locations where landowners may need to be compensated for removal or relocation of the structures, or where there could be asbestos mitigation concerns or the potential for eastern spotted skunk habitat.

Archeological Sites within the ROW were counted using data maintained by the Kansas and Missouri SHPOs. Much of the Study Area has not been surveyed and as a result there is a likelihood that additional sites could be encountered during ground surveys of the proposed route. There were no sites listed or eligible for listing on the NRHP that were crossed by the alternative routes.

Parcels Crossed by the ROW were quantified for each route as a relative measure of the overall impact on private property. Routes that cross significantly more parcels tend to cost more as a result of additional landowners from which to acquire easements. Often this factor is correlated with length such that longer routes have more parcels crossed and therefore was not included in the analysis.

Length Not Along Parcel Boundary was measured because following existing parcel boundaries is generally considered to have less impact than a new ROW across the center of a parcel. Because it is

desirable and less impacting to locate a new route along a parcel boundary, potential impacts would be more likely to occur where a route would be built away from the parcel boundary, so length *not* along parcel boundary was measured.

Acres of **Cropland within the ROW** was calculated as those areas crossed by the proposed new ROW using Kansas' DASC Land Cover Patterns Level IV-2005 data designated as cropland and alfalfa and the NASS data characterized as cropland for Missouri only. Any modeled woodland areas (see 3.3.1.3 below) were removed from the calculation.

Acres of **Rangeland within the ROW** was determined using data characterized in the digital DASC Land Cover Patterns Level IV -2005 data as Conservation Reserve Program (CRP), warm-season grassland, and cool-season grassland and the NASS data characterized as "alfalfa", "clover/wildflowers ", "fallow/idle cropland ", "grassland/pasture ", "other hay/non-alfalfa", and "sod/grass seed" in Missouri only. Any modeled woodland areas (see 3.3.1.3 below) were removed from the calculation.

Crossing rangeland is generally preferable to building a transmission line in wooded areas or areas of cropland as there is generally less impact (*i.e.*, no clearing) to open rangeland or pasture.

3.3.1.3 Environmental Criteria

Environmental evaluation criteria included sensitive species habitat impacts; woodland in the ROW; streams and waterbodies crossed or in the ROW; wetlands in the ROW; and floodplains in the ROW.

A **Sensitive Species Score** was calculated for the routes to evaluate the potential of each route to impact potential habitat for the gray bat, the eastern spotted skunk, and the broadhead skink. **Woodland within Gray Bat Critical Habitat in ROW** was quantified as all wooded areas within the critical habitat zone as designated by KDWP in Crawford and Cherokee counties. **Eastern Spotted Skunk Critical Habitat in ROW** was quantified as all woodland and upland prairie (using the DASC Land Cover Patterns Level IV -2005 data designated as CRP, warm-season grassland, and cool-season grassland) within Anderson and Woodson counties as defined by KDWP. **Broadhead Skink Critical Habitat in ROW** was quantified as all woodland within Bourbon and Crawford counties, as defined by KDWP. **Woodland in ROW** was determined using an imagery analysis model that analyzed 2019 National Agriculture Imagery Program (NAIP) Natural Color Infrared imagery to determine likely signatures of woody vegetation. Woodland Within the ROW represented the forested areas within the ROW that would be cleared along each route and which could be considered sensitive bat habitat. Because NEET Southwest expects that addressing and mitigating gray bat impacts are likely to be more challenging than mitigating impacts to the skink, skunk, and species habitat in other wooded areas, the score was calculated by multiplying the Woodland

within Gray Bat Critical Habitat in ROW by two and then adding the Eastern Spotted Skunk Critical Habitat in ROW, Broadhead Skink Habitat in ROW and total woodland in ROW.

Streams Crossed was measured to capture the potential impact of crossing both perennial and intermittent streams based on National Hydrology Dataset (NHD) data. Additional permitting may be required at stream crossings for the transmission line and access roads, if needed. In addition to streams, acres of **Waterbodies Within the ROW** was also measured using NHD data to identify and evaluate waterbodies other than the NHD streams.

Wetlands in ROW was calculated using National Wetland Inventory (NWI) data produced by the USFWS, and the Kansas Applied Remote Sensing Program's Potential Wetland Areas data available on DASC. Wetlands within the ROW represent areas where additional permitting would be necessary as well as where there could be constraints on pole locations.

Floodplain in ROW was calculated using FEMA floodplain data. Additional permits and design considerations may be required when siting poles or access roads through floodplains. To reduce permitting requirements, efforts will be made to spot poles and access roads in a way that minimizes floodplain impacts.

3.3.2 Weighting the Routing Criteria

The categories described above were considered to represent the potential impact of construction and operation of the new transmission line. The Project team then assigned weights to some of the criteria based on their experience with similar transmission line projects across the country. A weight scale from 1 to 10 was used for this process, with 1 representing the lowest impact and 10 representing the highest impact during the evaluation. Some factors in Table 3-1 were determined to not have much variability between routes; as such, they would not help discriminate between the various routes, which was the intent of this analysis. Therefore, those criteria were assigned a weight of zero and are not included in Table 3-2. The weights associated with each routing criterion are presented in Table 3-2.

3.3.3 Evaluation Process

Within the proposed Study Area, 53 route segments were developed and evaluated to select a final route(s) from the existing Wolf Creek Substation to the existing Blackberry Substation. The route network developed from the 53 segments can be combined to form 729 route alternatives (see Figure 3-1). The route components and route data for all route alternatives are provided in Appendix A.

Burns & McDonnell quantified the route criteria for the potential route alternatives. No single route had the lowest value for all of the measured criteria. While a particular route may have the lowest impact for one criterion, it may have much higher impacts for another. The routing criteria included units such as combined score, length, acres, and numbers of selected resources. These units are not directly comparable but need to be considered as a whole in the evaluation process. The level of complexity resulting from the number of routes, combined with numerous criteria and differences in measurement units made it difficult to conduct a route-by-route comparison to identify a route that would minimize potential overall impacts to the area. Consequently, Burns & McDonnell used a statistical Z-score analysis as a tool to rank and screen the route alternatives and to identify a smaller, more manageable number of routes warranting further investigation and comparison for the selection of a final route alignment.

Table 3-2: Routing Criteria Weights

Factor	Weight
Residential Proximity Score (score)	10
Sensitive Species Score (score)	9
Length Not Along Existing Transmission Line (feet)	8
Total Length (feet)	6
Wetlands in ROW (acres)	5
Length through Previously Mined Areas (feet)	4
Angles Over 30 Degrees (count)	4
Floodplain in ROW (acres)	3
Cropland in ROW (acres)	3
Stream Crossings (count)	3
Archeological Sites within ROW (count)	2
Transmission Line Crossings (count)	2
Total Length through Karst Area (feet)	1
Length Not Along Parcel Boundary (feet)	1
Public Facilities within 500 feet (count)	1

The impacts associated with each criterion for each potential route were determined, and a Z-score was then calculated for each criterion for each route. A Z-score determines the mean value within a set of data, compares each individual route value to the mean, and transforms the data into comparable values. A degree of difference is calculated for each route by determining how far (number of standard deviations) each route value deviates from the mean value. For example, the total length of all routes would be quantified, and the mean value would be determined for the entire set of routes. The total length for each route would then be compared against the mean value. If a particular route length was equal to the mean

value, then the assigned Z-score would be zero. If the total length was greater than the mean value, then the Z-score for that route would be a positive number. If the total length was less than the mean value, the Z-score would be a negative value for that route. The more the individual route value exceeded the mean, the higher the positive number would be. Conversely, the more the route value was below the mean, the more negative the Z-score. As a result, the more negative a number, the less impacting that route would be for that criterion.

After all Z-scores were calculated, Burns & McDonnell applied a weight factor to each criterion to give greater consideration in the evaluation process to those criteria that are considered to have a greater impact on the overall Project evaluation (see Table 3-2). If weight factors were not applied, all criteria would be assumed to have the same level of impact on the evaluation process. Although all criteria need to be considered during the routing process because they have the capacity to influence potential impacts, design, and cost, certain criteria have the capacity to influence the Project in a greater manner. Therefore, all criteria are not equal in terms of importance to the Project, and thus are weighted accordingly. For example, the number of streams crossed is an important criterion to be considered because of the potential impact to aquatic systems and habitat, as well as design factors. However, design issues are relatively easy to address when crossing streams and measures can be taken to mitigate impacts to aquatic systems along a waterway. Therefore, this criterion received a lower weight. On the other hand, the number of residences located near the route was given a higher weight during evaluation because of concerns often expressed by homeowners and landowners to new transmission lines.

Weights were assigned to each criterion and were multiplied by the raw Z-score calculated for each criterion for each potential route. By weighting the Z-scores, those criteria determined to warrant greater consideration during the evaluation process were weighted higher and thus became more significant contributors to the overall analysis and screening of the potential routes. The range of weights (1-10) was determined by the number of criteria, the relative importance of each criteria in relation to the others, and the need to differentiate between the alternative routes.

After applying weights to each of the calculated Z-scores for each criterion, the resulting weighted Z-scores for each criterion were summed for all alternative routes to give a total weighted Z-score for each route. Both positive and negative Z-scores were included in the analysis to determine the total weighted Z-score. As with individual criterion Z-scores, a positive total weighted Z-score for a particular route would suggest that the route would have greater-than-average impacts as compared to all routes. A negative Z-score would indicate routes having less-than-average impacts as compared to the other routes.

The Z-score analysis allowed all routes to be screened to simplify the identification of the routes with lower overall impacts.

Z-scores only consider quantified route evaluation criteria. Therefore, Z-scores do not necessarily reflect all actual impacts but provide a guide to better assess and compare overall potential impacts associated with all routes. This methodology is used to organize, manage, and screen the extensive route data to streamline the analysis to a manageable number of routes that can be further evaluated before a final route recommendation is made. Having determined total weighted Z-scores for all route alternatives, Burns & McDonnell arranged the routes by their total weighted Z-scores. Routes were listed in ascending order, beginning with routes having the lowest Z-scores (i.e., least impacting) and continuing to the routes having the highest Z-scores (i.e., most impacting) (Appendix B).

The resulting total weighted Z-scores for the 729 route alternatives ranged from a low of -52.83 to a high of 73.52. In general, the routes that stair-stepped along roads and property boundaries using Segment 8, Segment 18, and Segment 29 (especially from Segments 16 and 24) scored the poorest of all the alternative routes, largely because they were longer and had more angles, as well as having other greater impacts than other routes. Routes that used Segment 16 along the western portion of the Study Area and then turned along Segments 21, 29, or 34 to go back east, also scored poorly due to extra length and greater overall impacts. None of the routes using these segment combinations were carried forward for further evaluation.

Based on the number of possible route combinations for the Project, it was not feasible to do a route-by-route comparison of all possible routes. Therefore, to streamline the analysis, approximately five percent of the lowest-scoring (least-impacting) routes in the Z-score analysis were reviewed for additional evaluation and comparison. This lowest-scoring five percent included 36 route alternatives, all of which scored well compared to the remaining route alternatives and would be feasible to construct with fewer impacts compared to the other routes. Table 3-3 and Table 3-4 (located at the end of this chapter) include the route data and weighted scores for these top five percent of routes evaluated. A more detailed description of the selection of the final routes is discussed in the following section.

3.3.4 Selection of the Preferred Route

The evaluation included a review of the overall rankings of all alternative routes with a focus on the top five percent of the routes evaluated as described above. After each route received a weighted score based on measured criteria for each route alternative, the Project team considered the merits of the remaining 36 route alternatives to determine a set of final routes for further consideration and analysis.

When considering the 36 route alternatives retained for further evaluation, both quantitative and qualitative data was used to differentiate the routes and to provide a rationale for the selection of final route alignments. Environmental, social, and engineering data were evaluated.

In the route evaluation, there were some trends in the way the routes scored. Beginning at the northwest corner at the Wolf Creek Substation, the segment combination of Segments 2 and 9 (eastern option) ranked better than Segments 3, 4, and 7, followed by routes using Segments 3, 5, and 7. The differences between these combinations are relatively minor, but generally the poorer scoring options are longer, have more woodland impacts, some more karst impacts, more angles, and cross more streams and transmission lines. Continuing south along the route alternatives, routes using Segment 17 scored generally better than routes using Segment 16 due primarily to more length along existing transmission lines and a lower impact to sensitive species habitat (less woodland clearing). In the southern portion of the Study Area, routes using Segment 31 scored better than routes using Segments 32 and 35, Segment 33, Segments 32 and 34, and Segment 29. The latter two combinations did not even score well enough to rank in the top five percent of routes. Routes using Segment 31 scored better than the other combinations primarily in length, length along existing transmission lines, transmission line crossings, sensitive species habitat impacts, and floodplain crossed.

Of the top five percent of routes, the top five routes were Routes 65, 68, 76, 75, and 57. The scores of these routes did not differ substantially from the others, so any of these routes could be selected as the preferred route and the Project would still have relatively minor overall impacts. Each of these five routes uses Segments 1, 2, 9, 12, 13, 17, and 20 for the northern half of the route. In fact, 80 percent of the top 10 routes use this route combination using Segment 24 or a minor variation using Segment 23, so it seems clear this route is less impacting for this portion of the Project. There is no specific set of features that cause these routes to score somewhat better than the other route options in the northern half of the Project; it is just a combination of impacts that caused a slightly lower set of scores.

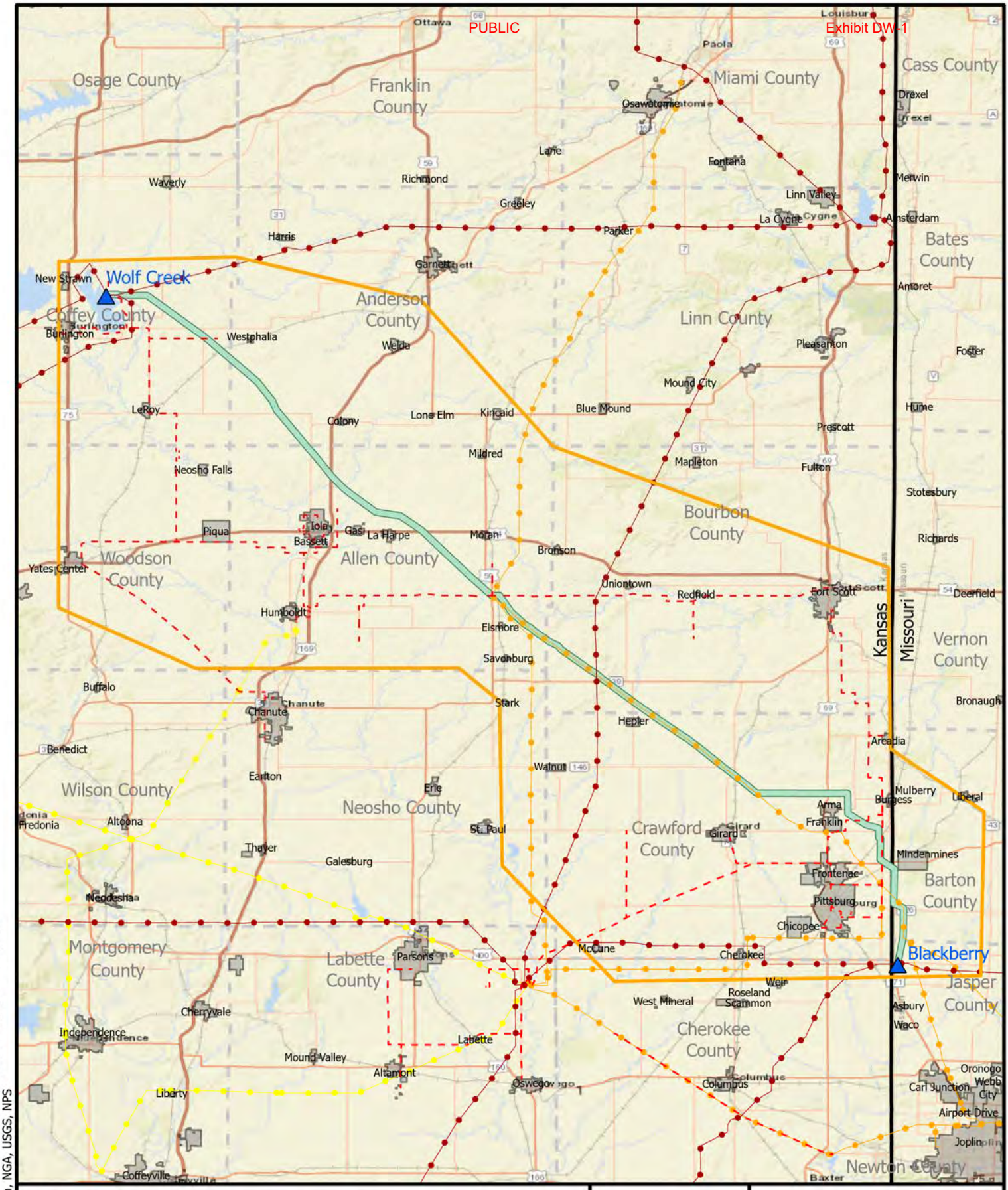
For the southern half of the Project, after Segments 23/24, the top five routes continue along Segments 30 and 31 to extend north and east of Pittsburg, or turn south on either Segments 30, 32, and 35 or on Segments 28 and 33 to extend south and west of Pittsburg. In the analysis, the top two routes, Routes 65 and 68, extend north and east of Pittsburg. The next three poorer-scoring routes (Routes 76, 75, and 57) head south around Pittsburg. Routes 65 and 68 are shorter than Routes 76, 75, and 57, parallel existing transmission lines for longer lengths, have lower sensitive species impact scores (have less woodland clearing and skink critical habitat impacts), and cross less cropland and floodplain. The south-Pittsburg routes (Routes 76, 75, and 57) have lower residential impacts and cross less previously mined areas and

fewer streams, but these were not enough to outweigh the greater impacts in the other quantified factors. In addition, Routes 76, 75, and 57 all use Segment 43 that parallels nearly 10 miles of the Blackberry to Neosho 345-kV transmission line. Having two high voltage lines in such close proximity reduces system reliability (if a weather event were to remove both lines from service at the same time, overloading of the electrical system in the region could occur). This reduced reliability makes these routes less preferable than Routes 65 and 68 that extend north of Pittsburg and parallel lower voltage lines. For these reasons, the analysis then became focused on a comparison between Route 65 and Route 68.

Route 65 differs from Route 68 in how it extends around the north side of Pittsburg. Route 65 uses Segments 36, 37, 38A, 45, 46, and 38E northeast of the towns of Arma and Franklin. Route 68 is west of Route 65 and uses Segments 40, 41A, and 41B south of Arma and Franklin. Route 65 is a bit longer than Route 68, but has fewer existing transmission line crossings, a lower sensitive species score due to less woodland clearing in the gray bat critical habitat area, less broadhead skink impacts, a lower residential impact, and lower floodplain impacts. Route 68 is shorter, has fewer heavy angles, parallels existing transmission lines more, and crosses fewer streams and wetlands. Route 68, however, extends through areas where the line could be considered an obstruction to the Atkinson Municipal Airport by the FAA. Evaluations of the Part 77 and TERPS (Terminal Instrument Procedures) surfaces associated with the airport indicate that heights may be limited, and special designs could be required in some locations along Route 68. Because Route 65 is further east and further from the airport, it would not be as limited (or limited at all) in height and design as Route 68. Preliminary structures have been filed with the FAA to validate the analysis completed for the airport impacts. To avoid the costs and challenges associated with potential impacts to the airport, and because Route 65 would impact gray bat critical habitat less than Route 68, Route 65 was selected as the preferred route to present to the public.

Route 65 is comprised of Segments 1, 2, 9, 12, 13, 17, 20, 24, 27, 30, 31, 36, 37, 38A, 45, 46, 38E, 42, and 44. This route exits the Wolf Creek Substation to the east for approximately 3 miles and then turns southeast. It continues diagonally to the southeast for approximately 41 miles where it then continues to the southeast for approximately 27 miles parallel to the existing Marmaton to Litchfield 161-kV transmission line. Route 65 then turns east for about 7 miles to avoid the FAA obstruction areas around the Atkinson Municipal Airport before then turning generally south/southeast for another 5.5 miles to then parallel the existing Marmaton to Litchfield 69-kV transmission heading south for approximately 2 miles. The route then turns to the southeast for approximately 1.5 miles, extending into Missouri, where the route then turns south and southeast for about 4 miles. At this point, Route 65 parallels the existing Litchfield to Asbury 161-kV transmission line south for approximately 3 miles before a slight turn to the southwest for approximately 2.5 miles to connect with the Blackberry Substation. Figure 3-2 shows the

preferred route alignment. Additional review and adjustments were made to Route 65 following its selection based on both engineering and environmental concerns. For ease of discussion in later chapters, Route 65 will be referred to as the Proposed Route. Adjustments and possible impacts along the route are described in Chapter 4.0.



PUBLIC

Path: D:\Wolf_Creek\Wolf_Creek_2_Blackberry\Wolf_Creek_2_Blackberry.aprx
Sources: Esri, HERE, Garmin, NGA, USGS, NPS

BURNS McDONNELL

Figure 3-2
Preferred Route
Wolf Creek - Blackberry
NEET Southwest

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Table 3-3: Route Data for the Top Routes Evaluated

Route	Segments	Total Length (mi)	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line (feet)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Total Length Karst Area (feet)	Residential Proximity Score (score)	Public Facilities within 500 feet (count)	Archaeological Sites within ROW (count)	Length Not Along Parcel Boundary (feet)	Cropland in ROW (acres)	Sensitive Species Score (score)	Stream Crossings (count)	Wetlands in ROW (acres)	Floodplain in ROW (acres)
65	1,2,9,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	94.3	17	366,820	53,860	10	307,310	58	0	0	433,960	651.2	314.5	168	39.2	200.4
68	1,2,9,12,13,17,20,24,27,30,31,40,41A,41B,42,44	92.5	14	342,230	54,060	12	294,100	63	0	0	447,830	675.7	389.5	162	35.1	219.5
75	1,2,9,12,13,17,20,24,27,30,32,35,43,44	94.7	15	456,800	20,220	13	311,020	48	1	1	437,520	712.9	411.7	139	32.2	249.7
76	1,2,9,12,13,17,20,24,28,33,43,44	96.0	16	421,840	20,220	13	299,650	38	0	1	462,170	688.2	433.4	157	37.7	235.0
66	1,2,9,12,13,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	94.9	17	369,780	54,020	12	307,310	58	0	0	433,690	657.0	336.1	163	39.7	249.7
57	1,2,9,12,13,17,20,23,26,28,33,43,44	96.5	17	422,970	20,220	13	302,460	38	0	1	460,780	690.4	435.9	157	38	193.7
372	1,3,4,7,11,15,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	94.8	17	363,140	53,860	10	306,110	54	0	1	444,070	672.5	289.7	171	43.5	206.6
46	1,2,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	94.8	20	367,950	53,860	10	310,120	58	0	0	432,570	653.4	317.1	168	39.5	225.8
375	1,3,4,7,11,15,17,20,24,27,30,31,40,41A,41B,42,44	92.9	14	338,550	54,060	12	292,910	59	0	1	457,930	697.0	364.6	165	39.4	200.4
49	1,2,9,12,13,17,20,23,26,27,30,31,40,41A,41B,42,44	93.0	17	343,360	54,060	12	296,910	63	0	0	446,440	677.9	392.1	162	35.4	219.5
382	1,3,4,7,11,15,17,20,24,27,30,32,35,43,44	95.2	15	453,120	20,220	13	309,820	44	1	2	447,630	734.2	386.8	142	36.5	255.9
56	1,2,9,12,13,17,20,23,26,27,30,32,35,43,44	95.2	18	457,930	20,220	13	313,830	48	1	1	436,130	715.1	414.3	139	32.5	257.7
383	1,3,4,7,11,15,17,20,24,28,33,43,44	96.5	16	418,160	20,220	13	298,450	34	0	2	472,280	709.5	408.5	160	42	241.2
115	1,2,9,12,14,16,22,33,43,44	94.2	16	485,780	20,220	11	309,520	39	0	1	437,840	674.5	457.8	146	36.9	235.0
276	1,3,4,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	93.8	15	357,720	53,860	10	300,970	60	0	1	441,950	647.4	294.2	172	45.9	265.4
422	1,3,4,7,11,16,22,33,43,44	94.2	15	479,840	20,220	11	306,050	34	0	2	449,390	696.8	430.7	148	41.0	207.8
279	1,3,4,7,10,12,13,17,20,24,27,30,31,40,41A,41B,42,44	91.9	12	333,130	54,060	12	287,760	65	0	1	455,820	671.9	369.1	166	41.9	226.9
286	1,3,4,7,10,12,13,17,20,24,27,30,32,35,43,44	94.1	13	447,700	20,220	13	304,680	50	1	2	445,510	709.1	391.3	143	39.0	257.1
373	1,3,4,7,11,15,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	95.4	17	366,100	54,020	12	306,110	54	0	1	443,790	678.4	311.2	166	44.0	255.9
47	1,2,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,47,41B,42,44	95.4	20	370,910	54,020	12	310,120	58	0	0	432,300	659.3	338.7	163	40.0	199.9
287	1,3,4,7,10,12,13,17,20,24,28,33,43,44	95.4	14	412,740	20,220	13	293,310	40	0	2	470,160	684.4	413.0	161	44.5	242.4
364	1,3,4,7,11,15,17,20,23,26,28,33,43,44	97.0	17	419,290	20,220	13	301,260	34	0	2	470,890	711.7	411.0	160	42.3	193.7
353	1,3,4,7,11,15,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	95.3	20	364,270	53,860	10	308,920	54	0	1	442,680	674.7	292.2	171	43.8	206.6
679	1,3,5,7,11,15,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	97.3	22	359,080	53,860	11	317,060	51	1	0	427,930	657.3	317.9	173	41.3	225.8
356	1,3,4,7,11,15,17,20,23,26,27,30,31,40,41A,41B,42,44	93.5	17	339,690	54,060	12	295,720	59	0	1	456,540	699.2	367.2	165	39.7	211.1
682	1,3,5,7,11,15,17,20,24,27,30,31,40,41A,41B,42,44	95.4	19	334,490	54,060	13	303,850	56	1	0	441,800	681.8	392.9	167	37.3	230.2
277	1,3,4,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	94.3	15	360,680	54,020	12	300,970	60	0	1	441,670	653.2	315.7	167	46.5	257.1
363	1,3,4,7,11,15,17,20,23,26,27,30,32,35,43,44	95.7	18	454,250	20,220	13	312,630	44	1	2	446,240	736.4	389.4	142	36.8	201.1
268	1,3,4,7,10,12,13,17,20,23,26,28,33,43,44	96.0	15	413,870	20,220	13	296,120	40	0	2	468,770	686.6	415.5	161	44.8	241.2
690	1,3,5,7,11,15,17,20,24,28,33,43,44	99.0	21	414,100	20,220	14	309,400	31	1	1	456,140	694.3	436.8	162	39.9	260.3
257	1,3,4,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	94.3	18	358,850	53,860	10	303,780	60	0	1	440,560	649.6	296.7	172	46.2	207.8
689	1,3,5,7,11,15,17,20,24,27,30,32,35,43,44	97.6	20	449,050	20,220	14	320,770	41	2	1	431,490	719.0	415.1	144	34.4	245.7
583	1,3,5,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	96.3	20	353,660	53,860	11	311,910	57	1	0	425,810	632.1	322.4	174	43.8	226.9
260	1,3,4,7,10,12,13,17,20,23,26,27,30,31,40,41A,41B,42,44	92.4	15	334,260	54,060	12	290,570	65	0	1	454,420	674.1	371.7	166	42.2	265.1
729	1,3,5,7,11,16,22,33,43,44	96.7	20	475,780	20,220	12	317,010	31	1	1	433,260	681.6	458.9	150	38.9	269.8
586	1,3,5,7,10,12,13,17,20,24,27,30,31,40,41A,41B,42,44	94.4	17	329,070	54,060	13	298,710	62	1	0	439,680	656.7	397.4	168	39.8	212.2

Table 3-4: Weighted Scores for the Top Routes Evaluated

Route	Segments	Total Length	Angles Over 30 Degrees	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Total Length Karst Area	Residential Proximity Score	Public Facilities within 500 feet	Archaeological Sites within ROW	Length Not Along Parcel Boundary	Cropland in ROW	Sensitive Species Score	Stream Crossings	Wetlands in ROW	Floodplain in ROW	Total
Weights		6	4	8	4	2	1	10	1	2	1	3	9	3	5	3	
65	1,2,9,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	-9.31	-3.98	-12.49	-0.15	-2.82	-0.83	0.89	-1.22	-2.30	1.06	-0.42	-12.45	0.83	-5.67	-3.96	-52.83
68	1,2,9,12,13,17,20,24,27,30,31,40,41A,41B,42,44	-11.70	-7.74	-16.24	-0.09	-0.17	-1.85	5.51	-1.22	-2.30	1.37	0.59	-7.12	-0.41	-10.19	-0.96	-52.52
75	1,2,9,12,13,17,20,24,27,30,32,35,43,44	-8.86	-6.49	1.23	-10.50	1.16	-0.55	-8.35	0.07	0.59	1.14	2.13	-5.54	-5.19	-13.38	3.78	-51.70
76	1,2,9,12,13,17,20,24,28,33,43,44	-7.18	-5.23	-4.10	-10.50	1.16	-1.42	-17.60	-1.22	0.59	1.69	1.11	-4.00	-1.45	-7.32	1.47	-51.08
66	1,2,9,12,13,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	-8.59	-3.98	-12.04	-0.10	-0.17	-0.83	0.89	-1.22	-2.30	1.05	-0.18	-10.92	-0.21	-5.12	3.78	-48.81
57	1,2,9,12,13,17,20,23,26,28,33,43,44	-6.50	-3.98	-3.93	-10.50	1.16	-1.21	-17.60	-1.22	0.59	1.66	1.20	-3.82	-1.45	-6.99	-5.02	-48.73
372	1,3,4,7,11,15,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	-8.69	-3.98	-13.06	-0.15	-2.82	-0.93	-2.81	-1.22	0.59	1.29	0.46	-14.21	1.46	-0.94	-2.99	-47.99
46	1,2,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	-8.64	-0.21	-12.32	-0.15	-2.82	-0.62	0.89	-1.22	-2.30	1.03	-0.33	-12.27	0.83	-5.34	0.03	-47.68
375	1,3,4,7,11,15,17,20,24,27,30,31,40,41A,41B,42,44	-11.08	-7.74	-16.81	-0.09	-0.17	-1.94	1.81	-1.22	0.59	1.59	1.47	-8.89	0.21	-5.45	-3.96	-47.42
49	1,2,9,12,13,17,20,23,26,27,30,31,40,41A,41B,42,44	-11.03	-3.98	-16.07	-0.09	-0.17	-1.63	5.51	-1.22	-2.30	1.34	0.68	-6.94	-0.41	-9.86	-0.96	-47.12
382	1,3,4,7,11,15,17,20,24,27,30,32,35,43,44	-8.24	-6.49	0.67	-10.50	1.16	-0.64	-12.05	0.07	3.48	1.36	3.00	-7.31	-4.57	-8.65	4.76	-46.87
56	1,2,9,12,13,17,20,23,26,27,30,32,35,43,44	-8.18	-2.72	1.40	-10.50	1.16	-0.34	-8.35	0.07	0.59	1.11	2.22	-5.36	-5.19	-13.05	5.04	-46.54
383	1,3,4,7,11,15,17,20,24,28,33,43,44	-6.56	-5.23	-4.66	-10.50	1.16	-1.51	-21.30	-1.22	3.48	1.91	1.99	-5.77	-0.83	-2.59	2.45	-46.25
115	1,2,9,12,14,16,22,33,43,44	-9.52	-5.23	5.65	-10.50	-1.49	-0.67	-16.67	-1.22	0.59	1.15	0.54	-2.27	-3.74	-8.21	1.47	-45.67
276	1,3,4,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	-10.01	-6.49	-13.88	-0.15	-2.82	-1.32	2.74	-1.22	0.59	1.24	-0.57	-13.89	1.67	1.71	6.25	-45.24
422	1,3,4,7,11,16,22,33,43,44	-9.44	-6.49	4.74	-10.50	-1.49	-0.93	-21.30	-1.22	3.48	1.40	1.46	-4.19	-3.32	-3.69	-2.80	-45.22
279	1,3,4,7,10,12,13,17,20,24,27,30,31,40,41A,41B,42,44	-12.40	-10.26	-17.63	-0.09	-0.17	-2.33	7.36	-1.22	0.59	1.55	0.44	-8.57	0.42	-2.70	0.20	-44.81
286	1,3,4,7,10,12,13,17,20,24,27,30,32,35,43,44	-9.55	-9.00	-0.16	-10.50	1.16	-1.04	-6.51	0.07	3.48	1.32	1.97	-6.99	-4.36	-5.89	4.94	-43.99
373	1,3,4,7,11,15,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	-7.97	-3.98	-12.60	-0.10	-0.17	-0.93	-2.81	-1.22	0.59	1.28	0.70	-12.69	0.42	-0.39	4.76	-43.98
47	1,2,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,47,41B,42,44	-7.92	-0.21	-11.87	-0.10	-0.17	-0.62	0.89	-1.22	-2.30	1.02	-0.08	-10.73	-0.21	-4.79	-4.04	-43.90
287	1,3,4,7,10,12,13,17,20,24,28,33,43,44	-7.87	-7.74	-5.49	-10.50	1.16	-1.91	-15.75	-1.22	3.48	1.87	0.95	-5.45	-0.62	0.16	2.63	-43.36
364	1,3,4,7,11,15,17,20,23,26,28,33,43,44	-5.88	-3.98	-4.49	-10.50	1.16	-1.30	-21.30	-1.22	3.48	1.88	2.08	-5.59	-0.83	-2.26	-5.02	-43.32
353	1,3,4,7,11,15,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	-8.01	-0.21	-12.88	-0.15	-2.82	-0.71	-2.81	-1.22	0.59	1.25	0.55	-14.04	1.46	-0.61	-2.99	-42.59
679	1,3,5,7,11,15,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	-5.49	2.30	-13.67	-0.15	-1.49	-0.09	-5.58	0.07	-2.30	0.93	-0.16	-12.21	1.87	-3.36	0.03	-42.27
356	1,3,4,7,11,15,17,20,23,26,27,30,31,40,41A,41B,42,44	-10.41	-3.98	-16.63	-0.09	-0.17	-1.72	1.81	-1.22	0.59	1.56	1.56	-8.71	0.21	-5.12	-2.28	-41.62
682	1,3,5,7,11,15,17,20,24,27,30,31,40,41A,41B,42,44	-7.88	-1.46	-17.43	-0.09	1.16	-1.10	-0.96	0.07	-2.30	1.23	0.84	-6.88	0.63	-7.76	0.72	-41.21
277	1,3,4,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	-9.29	-6.49	-13.43	-0.10	-0.17	-1.32	2.74	-1.22	0.59	1.23	-0.33	-12.37	0.63	2.37	4.94	-41.10
363	1,3,4,7,11,15,17,20,23,26,27,30,32,35,43,44	-7.56	-2.72	0.84	-10.50	1.16	-0.43	-12.05	0.07	3.48	1.33	3.09	-7.13	-4.57	-8.32	-3.85	-41.01
268	1,3,4,7,10,12,13,17,20,23,26,28,33,43,44	-7.20	-6.49	-5.32	-10.50	1.16	-1.69	-15.75	-1.22	3.48	1.84	1.04	-5.27	-0.62	0.49	2.45	-40.84
690	1,3,5,7,11,15,17,20,24,28,33,43,44	-3.36	1.05	-5.28	-10.50	2.49	-0.67	-24.07	0.07	0.59	1.55	1.36	-3.76	-0.41	-4.90	5.45	-40.40
257	1,3,4,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	-9.33	-2.72	-13.71	-0.15	-2.82	-1.11	2.74	-1.22	0.59	1.21	-0.48	-13.72	1.67	2.04	-2.80	-39.82
689	1,3,5,7,11,15,17,20,24,27,30,32,35,43,44	-5.04	-0.21	0.05	-10.50	2.49	0.20	-14.83	1.37	0.59	1.01	2.38	-5.30	-4.15	-10.96	3.15	-39.76
583	1,3,5,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	-6.81	-0.21	-14.50	-0.15	-1.49	-0.48	-0.03	0.07	-2.30	0.88	-1.20	-11.89	2.08	-0.61	0.20	-39.40
260	1,3,4,7,10,12,13,17,20,23,26,27,30,31,40,41A,41B,42,44	-11.72	-6.49	-17.46	-0.09	-0.17	-2.12	7.36	-1.22	0.59	1.52	0.53	-8.39	0.42	-2.37	6.20	-38.82
729	1,3,5,7,11,16,22,33,43,44	-6.25	-0.21	4.12	-10.50	-0.17	-0.09	-24.07	0.07	0.59	1.04	0.84	-2.19	-2.91	-6.00	6.94	-38.77
586	1,3,5,7,10,12,13,17,20,24,27,30,31,40,41A,41B,42,44	-9.20	-3.98	-18.25	-0.09	1.16	-1.49	4.59	0.07	-2.30	1.19	-0.19	-6.56	0.83	-5.01	-2.11	-38.76

4.0 ENVIRONMENTAL IMPACTS OF THE PROPOSED ROUTE

This section contains a description of the potential environmental effects that could result from the construction, operation, and maintenance of the Proposed Route for the 345-kV transmission line from the existing Wolf Creek Substation to the existing Blackberry Substation. Following selection of the Proposed Route, modifications were made to further minimize impacts along the Proposed Route. Those modifications are described below. Potential impacts to both natural and social resources along the final Proposed Route are then considered.

4.1 Modifications to the Proposed Route Following Selection

The Route 65 was selected as the final Proposed Route as described in Chapter 3.0 from the segment and route data and corresponding route evaluation presented in Tables 3-3 and 3-4 and Appendices A and B. Following the route analysis that resulted in the selection of this Proposed Route, NEET Southwest subject matter experts completed a detailed review of the Proposed Route's alignment and made recommendations for adjustments. The adjustments were reviewed by the Project team and those that were approved were incorporated into the selected Proposed Route. Figure 4-1 shows the final adjusted alignment of the Proposed Route overlaid on the aerial constraint map.

Adjustments were made in conjunction with the completion of a detailed study of pole spotting. The detailed pole spotting resulted in adjustments that were needed to keep structures out of floodplains and streams and to minimize the need for wetland and floodplain permits. Access roads to preliminary structure locations were also evaluated to determine if structures needed to be adjusted to avoid access roads that would have to cross streams and wetlands. Adjustments were also made to cross railroads and highways as close to a 45- to 90-degree angle as possible and to avoid having known bridges and culverts located within 300 feet of the ROW. Finally, adjustments were made to the Proposed Route along Segments 38C, 38D, and 38E, moving the Proposed Route adjacent to the state line (on the Missouri side) to reduce clearing of wooded habitat, which could be areas in which the endangered gray bat could be found. This adjustment is also expected to reduce the impact to wetlands and reclaimed mined lands.

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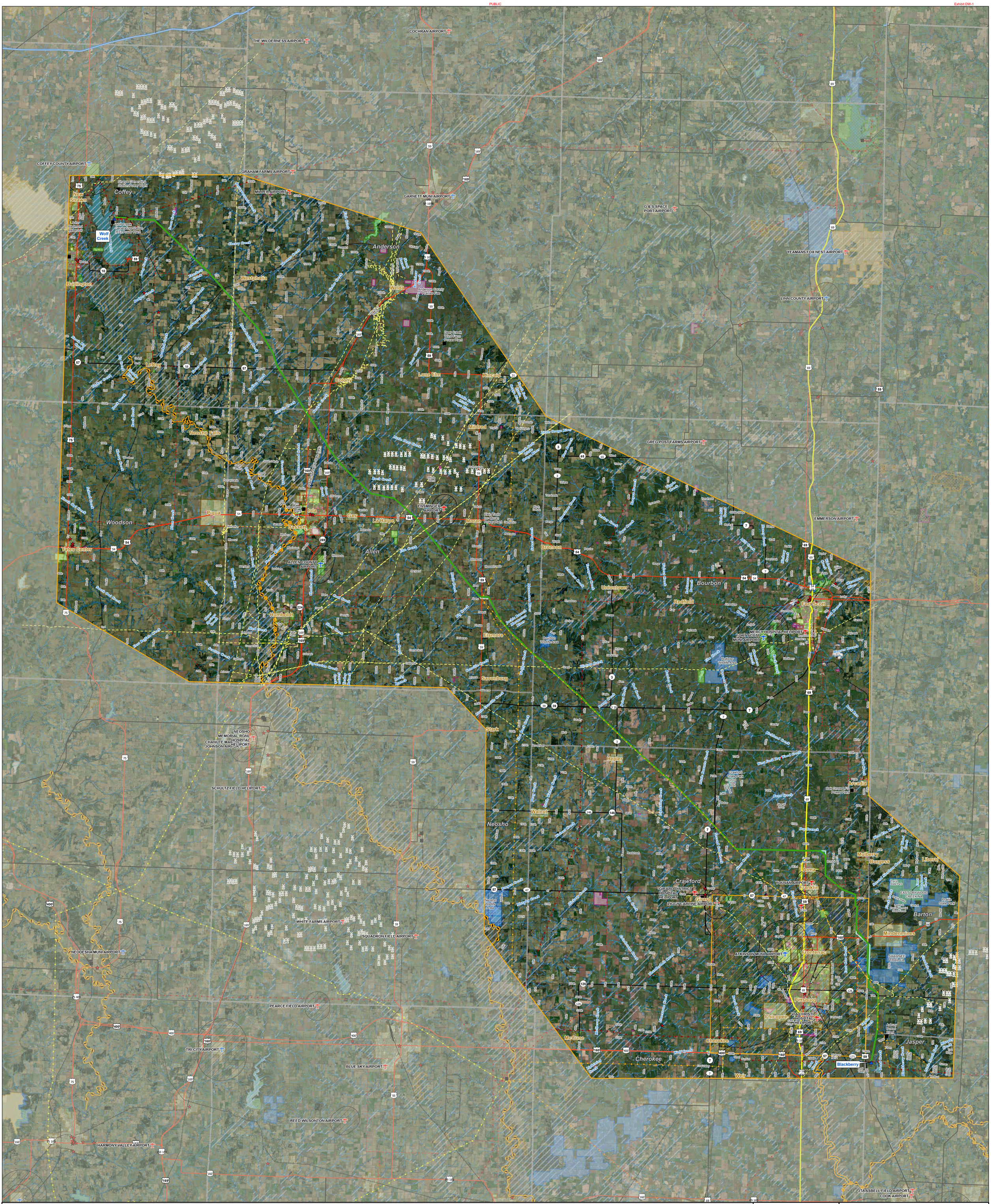

Path: D:\Wolf_Creek\Wolf_Creek_2_Blackberry\Wolf_Creek_2_Blackberry.aprx
Sources: Earthstar Geographics

Source: Energy Velocity, U.S. Energy Information Agency, FAA, NPS, ESRI, USGS, Real Estate Portal USA, LLC, NHE, FEMA, NPMS, DASC, MSDIS, and Burns & McDonnell

BURNS McDONNELL

Figure 4-1
Adjusted Final Alignment - Green Route
Wolf Creek - Blackberry
NEET Southwest

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4.2 Final Proposed Route

The final Proposed Route selected for the Wolf Creek – Blackberry Project is the Proposed Route (also referred to as "Route 65"). The Proposed Route was selected for several key reasons:

- It is one of the shortest routes;
- It crosses nearly the fewest number of parcels;
- It would avoid impacting the Atkinson Municipal Airport in Pittsburg, Kansas, and flights into and out of the airport;
- It would have less overall land use impacts because it parallels existing transmission lines (161-kV and lower) for over a quarter of its length;
- It would impact a very low amount of critical species habitat, including only 3.0 acres of woodland within the designated gray bat critical habitat, the least amount of broadhead skink habitat, and nearly the lowest amount of overall woodland clearing;
- It would have no impact to known archeological sites or sites listed on the NRHP;
- No public facilities are within 500 feet of the route;
- It would impact relatively few wetland and floodplain acres;
- It would cross relatively few existing transmission lines, which would improve reliability and reduce design challenges associated with the crossings; and
- While the route had a higher residential impact than some of the other evaluated routes, it would still have a relatively low impact to houses for a 94-mile route (seven homes are within 150 feet and 21 homes are between 151 and 300 feet).

The following sections describe the Proposed Route and its potential impacts in more detail.

The adjusted Proposed Route is approximately 496,348 feet (94.0 miles) in length (Figure 4-1). The Proposed Route originates at the existing Wolf Creek Substation, located approximately one mile south of the intersection of Oxen Lane and 16th Road in Coffey County, Kansas. This Proposed Route would exit the Wolf Creek Substation to the east and then southeast, continuing diagonally to the southeast for approximately 41 miles, then another 27 miles while parallel to the existing Marmaton to Litchfield 161-kV transmission line. The Proposed Route would then turn east for about 7 miles to avoid the FAA obstruction areas around the Atkinson Municipal Airport on the northwest side of Pittsburg, then continue south/southeast for another 16 miles, extending into Missouri and paralleling the Marmaton to Litchfield 69-kV transmission line for approximately 2 miles and the existing Litchfield to Asbury 161-kV transmission line for approximately 3 miles. At this point, the Proposed Route would turn slightly

southwest for approximately 2.5 miles to connect with the Blackberry Substation, located approximately a half mile southeast of the intersection of SH 171 and Sumac Road in Missouri.

4.2.1 Proposed Route Data

Table 4-1 contains a cumulative summary of the data for the adjusted Proposed Route, as well as the range of values for all the other alternative routes compared from the analysis completed and described in Chapter 3.0. Acres of impacts were calculated based on a 150-foot-wide ROW.

4.3 Impacts on Natural Resources

Following is a description of potential impacts to natural resources from the construction and operation of the Proposed Route. These resources include topography, soils, hydrology, vegetation, wetlands, and wildlife.

4.3.1 Topography and Soils

Clearing, construction, and operation of the proposed Project would not result in any significant impacts to the existing topography. The Project would generally follow the existing contour of the land, and extensive grading or earthwork would not be necessary. Land clearing would consist of tree and shrub removal. Impacts, if any, to topography from the use of heavy equipment would be localized, limited, and temporary in nature.

The Project would result in temporary and minor adverse soil impacts within the ROW during construction regardless of the route selected. NEET Southwest's ROW clearing practices involve cutting vegetation within four inches of the ground. Stumps, low-growing vegetation, and root mats are left in place. There is no "grubbing" or grading within the ROW. However, some impacts to area soils would result from the use of heavy construction equipment and the excavation of soils required for installing the transmission structures. Construction activities, which are temporary in nature, can cause soil compaction, ruts or tracks from vehicular movement, and mixing of the soil profile.

During and following construction of the proposed transmission line, some erosion can occur within the cleared ROW. The National Pollutant Discharge Elimination System (NPDES) regulates discharges of wastewater and stormwater from construction activities such as this transmission line Project and requires the preparation and implementation of a sedimentation and erosion control plan to regulate and manage these discharges. In Kansas, the NPDES regulations are implemented by the Kansas Department of Health and Environment (KDHE) and in Missouri by the MDNR. Mitigation proposed in Chapter 5.0 includes Project compliance with the CWA and the NPDES, thus controlling offsite sedimentation and avoiding potential soil run-off into area streams.

Table 4-1: Proposed Route Summary Data

	Factor	Proposed Route	Range for All Routes
Engineering	Total Length (feet)	496,348	485,280 – 631,420
	Total Length (miles)	94.0	91.9 – 119.6
	Angles Over 30 Degrees (count)	18	12 – 29
	Highway Crossings (count)	12	10 – 14
	Other Roadway Crossings (count)	100	96 – 110
	Number of Pipeline Crossings (count)	10	10 – 18
	Transmission Line Crossings (count)	10	9 – 15
	Length Not Along Existing Transmission Line (feet)	369,620	329,070 – 538,570
	Length Not Along Roads (feet)	477,210	449,800– 555,910
	Total Length through Karst Area (feet)	307,350	282,360 – 347,790
	Length through Previously Mined Area (feet)	51,930	20,220 – 69,380
	Oil/Gas Wells/Tanks in ROW (count)	8[1]	0 – 3
	Outbuildings in ROW (count)	2	0 – 6
Environmental	Stream Crossings (count)	163	137 – 210
	Waterbodies in ROW (acres)	13.8	7.9 – 20.0
	Wetlands in ROW (acres)	36.4	32.2 – 55.4
	Floodplain in ROW (acres)	200.1	190 - 290
	Woodland within Gray Bat Critical Habitat in ROW (acres)	3.0	0 – 32.8
	Eastern Spotted Skunk Critical Habitat in ROW (acres)	65.7	26.2 – 205.9
	Broadhead Skink Critical Habitat in ROW (acres)	72.1[1]	75.6 – 257.6
	Woodland in ROW (acres)	156.7[1]	163.3 – 459.4
	Sensitive Species Score (score)	300.5	289.7 – 932.3
Social	Cropland in ROW (acres)	655.4	490.2 – 814.9
	Rangeland in ROW (acres)	842.3	696.2 – 1,053.5
	Archeological Sites within ROW (count)	0	0 – 2
	Parcels Crossed (count)	299	293 – 368
	Length Not Along Parcel Boundary (feet)	429,460	209,100 – 472,580
	Residences within 150 feet (count)	7[1]	0 – 5
	Residences within 300 feet (count)	21	7 – 24
	Residences within 500 feet (count)	18	8 – 28
	Residential Proximity Score (score)	81	31 – 84
	Businesses within 300 feet (count)	0	0 – 1
	Public Facilities within 500 feet (count)	0	0 – 3

[1] Values for the Proposed Route may no longer fall within the range of values for all routes due to the adjustments made following the selection of the preferred route (see Section 4.1)

4.3.2 Water Resources

Construction and operation of the Project would not significantly impact surface water features along the Proposed Route. Based on USGS 1:24,000 scale topographic maps and NHD data, the Proposed Route would cross 163 streams.

The transmission line would be designed to span all waterbodies so that no structures would be placed within any waterway. All streams along the Proposed Route are narrow enough that they can easily be spanned with normal structure spacing and heights. Similarly, the construction and maintenance of the transmission line would not disturb any subsurface waters. Each structure would be buried to a depth of approximately 10 percent of the actual structure height plus 1.5 feet. Most of the structures would be buried approximately 9 to 15 feet, an insufficient depth to encounter most subsurface aquifers, if present.

NEET Southwest, as indicated above, intends to fully comply with the Kansas and Missouri Pollutant Discharge Elimination System standards, as well as other applicable laws, such as the Federal CWA. This compliance, coupled with NEET Southwest's limited-impacting ROW clearing practices, is intended to prevent offsite sedimentation, including impacts to streams and wetlands. Mitigation measures proposed in Chapter 5.0 would further reduce potential water quality impacts associated with stream crossings.

Most of the wetlands in the Study Area are emergent wetlands associated with creeks, ponds, and agricultural swales. The ROW for the Proposed Route would cross approximately 36.4 acres of NWI and Kansas potential wetlands and 13.8 acres of waterbodies. A desktop wetland analysis for the Proposed Route was conducted to further document potential wetland impacts. The results of this study are presented in a separate report.

To minimize impacts to wetlands and reduce complexity, cost, and timeline of wetland permitting, NEET Southwest has imposed the following constraints on the engineering of the transmission line and access roads:

- Minimize temporary impacts to wetland areas with access roads;
- All access roads through wetlands will be matted;
- Unless required for engineering, avoid all wetlands with pole locations;
- Where it is required to have a pole in a wetland, limit the loss of wetlands to no more than 1/10 acre per pole location; and
- Avoid all regulated activity in Designated State Waters which includes Outstanding National Resource Waters, Exceptional State Waters, or Special Aquatic Life Use Waters as listed in the Kansas Surface Water Register.

Construction and operation of the Project is designed to limit jurisdictional discharges to water or wetlands. Forested wetlands would be maintained as scrub / shrub or emergent wetlands. NEET Southwest's ROW clearing practices include hand-clearing in jurisdictional wetlands to help avoid jurisdictional discharges. Similarly, NEET Southwest typically can avoid placing structures in streams or smaller wetlands by spanning such areas. Erosion control measures described previously and in Chapter 5.0 would further minimize sediment from entering waterways or impacting wetlands.

NEET Southwest would conduct wetland / stream delineations and coordinate with the USACE regarding jurisdictional determinations for wetland / stream extent and location, if any would be impacted. NEET Southwest would seek approval for Section 404 and Section 401 permits from the USACE, KDHE, and MDNR. Should the Project require unavoidable impact to waters or wetlands, NEET Southwest would obtain the required approvals under the USACE Nationwide Permit Program.

NEET Southwest will minimize impacts to floodplains through intensive, site-specific layouts of both transmission line structures and access roads. The adjusted Proposed Route crosses approximately 200.1 acres of floodplain. All structures that may be located within a floodplain will exceed the Kansas Division of Water Resources (DWR) Utility Pole Stream Setback requirements; thus, NEET Southwest does not anticipate that the Project would need to obtain a permit from the DWR for floodplain impacts. A separate permit from the Missouri State Emergency Management Agency for constructing utility structures in floodplains would also not be required.

The Proposed Route crosses seven counties, each with specific floodplain regulations. Each county's floodplain regulations appear to be consistent with each other and very similar in their requirements. Close collaboration between our engineers and environmental staff will allow structures and access roads to be located and designed to minimize floodplain impacts and associated permitting risk. NEET Southwest does not anticipate that the Project will require an Engineering "No-Rise" Certificate because no utility poles are located within a regulatory floodway.

Terracon completed an assessment of possible karst areas along the Proposed Route. The adjusted Proposed Route crosses approximately 307,350 feet of possible karst area. If specific karst features (e.g., sinkholes, springs, etc.) are identified within the ROW during future field surveys along the Proposed Route, additional evaluations may be required to determine possible environmental impacts, including the potential for bat habitat, as well as possible design impacts caused by those karst features.

4.3.3 Vegetation

Construction and maintenance of the proposed transmission line would result in the loss of tall vegetation within the transmission line ROW due to shrub and tree clearing. Herbaceous vegetation would not be removed but could be damaged by construction equipment and vehicular movement. Disturbed areas in uplands would be mulched and / or re-seeded following the disturbance, as described in NEET Southwest's erosion control plan, which would be submitted to the KDHE and MDNR for the Project. Tree clearing would occur where the line crosses wooded fence rows, narrow riparian corridors, and undeveloped forested land. The adjusted Proposed Route would require clearing approximately 156.7 acres of woodland. In addition to the clearing of the actual maintained ROW, danger trees that could fall into the new transmission line and cause an outage would also be removed outside the maintained corridor.

Most woody vegetation that would be impacted consists of deciduous hardwood stands interspersed in some areas with red cedar. Mature trees, such as pines, oaks, hickories, and maples occurring in or immediately adjacent to the transmission line ROW, would have to be cleared to protect the integrity of the line. Ongoing maintenance of the ROW during operation of the line through mowing and/or herbicide application would encourage the proliferation of lower-growing types of vegetation, which helps stabilize the soil. Some cropland may also be impacted along the Proposed Route by the placement of structures. Impacts to crops are discussed in Section 4.4.1.1.

4.3.3.1 Federally Listed Plant Species

Mead's milkweed is a federally threatened plant species that may be located within the Study Area. This plant can occur in moderately wet to moderately dry upland tallgrass prairie or glade/barren habitat characterized by vegetation adapted for drought and fire (USFWS, 2019e). Almost all land crossed by the Proposed Route is cropland or pasture altered by agricultural operations, which would prohibit Mead's milkweed from proliferating. As a result, impacts to Mead's milkweed are expected to be relatively low, but NEET Southwest will work with the USFWS to avoid or minimize impacts wherever suitable habitat is found along the ROW.

4.3.4 Wildlife

Construction and maintenance of the Proposed Route could result in some adverse impacts to wildlife. The removal of forested vegetation within or near the proposed ROW may impact foraging, shelter, or nesting habitat for some species. Impacts to most species would be temporary and short-term during construction and would consist primarily of displacement and disturbance. Some less mobile species occurring in the construction corridor could be directly impacted, and movements between segmented

habitats could be temporarily impeded due to noise and human presence. Additional temporary disturbance could occur during future maintenance of the line. No impacts are expected to fish or other aquatic species because perennial waterways would be spanned or avoided, and erosion control techniques would be used to limit sedimentation of waterways.

4.3.4.1 Federally Listed Animal Species

According to the USFWS, seven federally listed animal species are known, or have been known, to occur within the Study Area. These seven species include the gray bat, Indiana bat, and Neosho mucket (endangered) and the northern long-eared bat, Neosho madtom, Ozark cavefish, and rabbitsfoot (threatened). The Neosho mucket, Neosho madtom, Ozark cavefish, and rabbitsfoot are aquatic species and are not likely to be impacted by the Proposed Route because all perennial streams and open waters will be spanned. There is habitat or the potential for the occurrence of the gray bat, Indiana bat, and northern long-eared bat along the Proposed Route.

According to information obtained from USFWS, there are currently no known roost caves or hibernaculum structures for the gray bat in the vicinity of the Project in the Kansas and Missouri counties that are crossed. The Proposed Route crosses some forested areas that are likely to be suitable foraging habitat for this species and could be considered designated critical habitat by the KDWP. The NEET Southwest team has carefully reviewed all of these areas and worked to design the Proposed Route, including locating proposed structures and construction access roads, to reduce potential impacts to potential gray bat foraging habitat and areas that could be considered designated critical habitat. The Proposed Route crosses approximately 3.0 acres of woodland within the designated critical habitat area for the gray bat. Through ongoing coordination with the USFWS and KDWP, the NEET Southwest team has worked to reduce potential impacts to the gray bat to avoid the need for additional permitting and mitigation requirements. Tree clearing outside of the gray bat active season (April 1 to October 31) is an agency recommended measure that the NEET Southwest team would implement for the Project to minimize and avoid impacts to the gray bat. Unless the Project directly impacts a roost cave or hibernaculum structure, the USFWS will not require mitigation for gray bats simply for clearing trees during the winter. Other than the sewer systems in Pittsburg, the agencies have not identified any roost caves or hibernaculum structures that would be crossed by the Proposed Route.

The Indiana bat occurs in Missouri but is not likely to occur in Kansas. Currently, there are no known roosts for the Indiana bat in the vicinity of the Proposed Route in the Missouri counties crossed, according to conversations by our project biologist with USFWS. The Proposed Route crosses some forested areas that are likely to be suitable for this species. The NEET Southwest team has worked to

design the Proposed Route and locate proposed structures to reduce impacts to potential Indiana bat habitat. The Indiana bat is not anticipated to pose any potential risks to the Project because the NEET Southwest team is minimizing the amount of tree clearing required and would implement tree clearing for the Project outside of the Indiana bat roosting season (April 1 to October 31).

The northern long-eared bat occurs in Kansas and Missouri. The USFWS published a proposal on March 23, 2022, to reclassify the northern long-eared bat as endangered under the Endangered Species Act (ESA). The USFWS is under court order to complete a new final listing determination for the northern long-eared bat by November 2022. If finalized, the reclassification, would remove the current 4(d) rule. The 4(d) rule for northern long-eared bat specifies that incidental take as a result of tree clearing activities is only prohibited if it occurs within 150 feet of a known, occupied maternity roost during the pup rearing season (June 1 to July 31), or within 0.25-mile of a known hibernaculum at any time of year. Currently, there are no known maternity roosts for northern long-eared bats in the Kansas and Missouri counties crossed by the Project, according to conversations with USFWS. The Project crosses some forested areas that are likely to include suitable roost trees for this species. The NEET Southwest team has worked to design the Proposed Route and locate proposed structures to reduce potential impacts to potential northern long-eared bat habitat. The Project would not be prohibited under the 4(d) rule and because no known maternity roosts or hibernacula occur near the Project and the NEET Southwest team would implement tree clearing for the Project outside of the pup rearing season (June 1 to July 31). Guidance from the USFWS regarding restrictions or effects determinations is being drafted. NEET Southwest is planning to adhere to more stringent time of year tree clearing restrictions, conducting tree clearing outside of bat roosting season (April 1 to October 31); no impacts to this species are anticipated.

The Project is within the range of the bald eagle and the winter range of the golden eagle. However, due to their rarity in Kansas and Missouri, the Project is not anticipated to impact golden eagles. The Project will be designed following Avian Power Line Interaction Committee (APLIC, 2012) suggested practices to minimize impacts to migratory birds and eagles. Eagle nest surveys will be conducted prior to construction of the Proposed Route and construction activity around active nests will be avoided until eagles have fledged, in coordination with the USFWS.

4.3.4.2 State Listed Animal Species

The gray bat, eastern spotted skunk, and broadhead skink have KDWP-designated critical habitat located within the Study Area and along the Proposed Route. The potential for impacts to the gray bat are described in the previous section because it is also listed as a federally protected species.

The eastern spotted skunk is listed as a Kansas threatened species and a Missouri endangered species; it is not a federally protected species. Eastern spotted skunks prefer forest edges, upland prairie grasslands, and riparian corridors where rock outcrops and shrub clumps are present. This species may also occur in fencerows and abandoned farm buildings. KDWP has designated all suitable habitat within Anderson County, Kansas, as critical habitat for this species; no critical habitat has been designated in the State of Missouri.

NEET Southwest has completed desktop evaluations using GIS data and aerial photographs and windshield surveys to identify areas that KDWP would likely consider designated critical habitat for the eastern spotted skunk. The Proposed Route crosses approximately 65.7 acres of possible eastern spotted skunk critical habitat. Additional on-the-ground evaluation during the permitting phase of the Project will be necessary to determine the suitability of potential designated critical habitat areas crossed by the Project as suitable habitat and determine the level of coordination with the KDWP. The NEET Southwest team has been coordinating with the KDWP to reduce potential impacts to the eastern spotted skunk and avoid additional permitting and mitigation requirements. Measures suggested by KDWP that could be implemented along the Proposed Route are described in Chapter 5.0 and would also help to further minimize the potential impacts of this Project.

The broadhead skink is listed as a threatened species in Kansas. The broadhead skink is not a federally listed species or a listed species in the State of Missouri. KDWP has designated all stands of mature oak woodland in Bourbon and Crawford Counties in Kansas as critical habitat for this species.

Through a detailed evaluation of aerial photography and GIS data, NEET Southwest's Proposed Route would avoid and minimize impacts to wooded habitats that appear to be mature oak woodland. The Proposed Route would cross approximately 72.1 acres of possible broadhead skink critical habitat. Additional on the ground evaluation during the permitting phase of the Project will be necessary to determine if the wooded areas crossed are considered suitable habitat and determine the level of coordination with the KDWP. The NEET Southwest team has been coordinating with the KDWP to reduce potential impacts to the broadhead sink and avoid additional permitting and mitigation requirements. Measures suggested by KDWP that could be implemented along the Proposed Route are described in Chapter 5.0 and would also help to further minimize the potential impacts of this Project.

The NEET Southwest team has reviewed state and federal lists of protected species for the areas crossed by the Proposed Route. Additional threatened and endangered species are known or likely to occur in the Kansas and Missouri counties crossed by the Proposed Route. However, most of these protected species

are known from specific habitats not crossed by the Proposed Route or are aquatic dependent species that are associated with a specific stream that is either avoided or is spanned by the Project. KDWP has designated critical habitat for some state listed aquatic dependent species in Kansas but has indicated that a Kansas State Action Permit would not be necessary if the aquatic feature, including the designated critical habitat, is spanned by the Project.

4.3.5 Managed / Protected Lands

The Proposed Route crosses no Federal or State-owned lands, except for a crossing of the KDWP-owned Prairie Spirit Trail, which is a former railroad corridor that has been rail banked and converted to a public use recreational trail. KDWP holds the Notice of Interim Trail Use (NITU) for the Prairie Spirit Trail and is responsible for the maintenance of the trail. According to KDWP, KDWP indicated that they would be the sole agency that would be responsible for reviewing the project and issuing a utility crossing permit/easement. Although it has been designated a National Recreation Trail, there would be no federal agency involvement.

The NEET Southwest design team reviewed potential crossing locations along the Prairie Spirit Trail based on input from KDWP. Because this trail could revert to an operational railroad in the future, the crossing angle, proposed conductor height above the trail, adjacent transmission line structure locations and distances from the trail right-of-way will all be designed to comply with railroad crossing requirements. This will eliminate any future modifications to the transmission line that would be required if Prairie Spirit Trail reverts to a railroad.

The data used to evaluate possible impacts to environmentally sensitive lands was provided by the Protected Areas Database of the U.S. (PADUS) and NCED datasets, which catalog lands managed by state or federal agencies, as well as conservation easements or mitigation lands. Additionally, county parcel data was reviewed to identify lands that may be owned by federal or state entities. Based on the available data, the Proposed Route would not likely impact any Federal or State easements. It is possible, though not expected, there are yet unknown or undocumented environmentally sensitive lands located within the path of the Proposed Route. Once the Proposed Route is approved by the KCC and MPSC, NEET Southwest would work with the landowners, the USFWS, USACE, State, and local agencies prior to construction to identify environmentally sensitive lands and design to avoid structure placement on these lands or develop mitigation strategies to limit potential impacts to them.

4.4 Impacts on Social Resources

This section contains a discussion of the potential impacts of the Project in general and the Proposed Route in particular on the social resources in the area, including land use, socioeconomics, and cultural resources.

4.4.1 Land Use and Development

The following paragraphs provide information on potential impacts to agriculture, urban and residential areas, recreational areas, and transportation and utility corridors. In general, the Proposed Route would have very limited impacts on the existing land uses in the area. NEET Southwest would work with individual landowners to the extent feasible to reach agreeable solutions to land use conflicts that may arise.

4.4.1.1 Agriculture and Other Land Uses

Construction and operation of the Proposed Route could result in some minor impacts to agricultural land within the proposed ROW. The Proposed Route would cross approximately 655.4 acres of cropland, based on land use classifications made in the Kansas DASC Land Cover Patterns Level IV-2005 data and NASS data for Missouri. Impacts to cropland would occur because structures and guy wires placed in cropland remove some of the land from production and may create obstacles for large farm machinery. Some structure and minor alignment adjustments may be made during future easement consultations with landowners to further reduce impacts. Temporary disturbance from heavy equipment within the ROW may result in the loss of some crops during construction. The only land that would be unavailable for agricultural use following construction would be the area occupied by the structure or guy wires. Other cropland within the ROW can continue to be farmed.

The Proposed Route would cross approximately 842.3 acres of rangeland (as defined by the Land Cover Patterns Level IV – 2005 data and the NASS dataset for Missouri). Some of the rangeland in the Study Area is used as pasture. The new transmission lines should not have a major impact on rangeland or on the livestock that may graze these lands. Livestock may congregate near structures for shade or other purposes.

4.4.1.2 Urban and Developed Areas

Though predominately rural, there are still homes scattered throughout the area, mostly concentrated along highways and other local roads. The adjusted Proposed Route would be constructed within 500 feet of 46 homes, although only seven of these homes would be within 150 feet of the Proposed Route and only 21 would be located between 151 and 300 feet. An adjustment made to the Proposed Route

following the route evaluation (Section 4.1) to follow a road corridor reduced impacts to gray bat habitat, reclaimed mine lands, and wetlands but increased the number of homes located close to the line. This adjustment was made along the southern portion of the Proposed Route in Missouri. Many of the houses within 500 feet of the new Proposed Route are on the opposite side of the road from the adjusted Proposed Route. Despite this increase, the residential impact is still relatively low for an approximately 94-mile route. There are no identified businesses or public facilities located within 500 feet of the adjusted Proposed Route.

Routes with lower residential impact scores generally paralleled fewer transmission lines, crossed more transmission lines, impacted more wetlands and floodplains, and had other issues that reduced their overall score. For example, the two routes with the lowest residential impact score (Routes 690 and 729) had the highest sensitive species scores—meaning they had the most negative impact on sensitive species out of all the routing alternatives.

During easement negotiations, NEET Southwest and its land agents would work with individual homeowners to minimize impacts to their homes and properties to the extent possible, while still balancing overall cost and environmental impacts.

The adjusted Proposed Route crosses some apparent active oil / gas fields. Based on the Kansas DASC active well data and an attempt to identify wells during the route field review along public roads, the adjusted Proposed Route would have 8 wells or tanks within its ROW. However, the data is not reliable as it was difficult to accurately locate all wells and tanks from public roads, and the Kansas DASC data does not appear to be exceptionally accurate. NEET Southwest will complete a field survey along the Proposed Route to verify locations of active wells and will make any necessary adjustments as needed to minimize impacts to those actually located in the ROW.

The adjusted Proposed Route crosses approximately 51,930 feet (approximately 10% of the total route length) of areas that were previously mined, based on a review of historic mine maps and data. These areas may contain contaminated soils, soil mounds, wetlands, and other features that may require design modifications, structure shifts, or alignment shifts once field surveys are completed along the Proposed Route. Due to the high amount of mining activity in the southeastern Study Area, it would be difficult to identify a route that does not cross previously mined lands.

4.4.1.3 Recreation Areas

No lands crossed by the Proposed Route (other than the Prairie Spirit Trail discussed in Section 4.3.5 above) are reserved for recreational use. However, outdoor recreational opportunities, such as hunting and

fishing, may occur on private lands within the forested and agricultural areas and along creeks. The Proposed Route crosses reclaimed mine lands in the southern portion of the Project area where there may be a slightly greater concentration of hunting activities. Limited, temporary impacts to seasonal hunting activities may occur during construction of the transmission line.

4.4.1.4 Transportation and Aviation

Construction of the Proposed Route may result in some brief disruption of traffic during stringing of the line and hauling of material to the job site. Most roads in the Study Area are considered local routes, some of which are crossed by the Proposed Route. The Proposed Route crosses 12 U.S. and State highways and an additional 100 local roads. The Proposed Route crosses eight railroad corridors, but four of the crossings appear to be inactive railroads. Three crossings are of the Wolf Creek Plant spur, which is the origin of this Project. Railroads are owned by BNSF, SKOL, KCS, and UP. NEET Southwest would adhere to city, county, state, and federal regulations for road and railroad crossings and would coordinate with KDOT and MODOT to verify State-requirements are met and to acquire permits as needed. Necessary coordination and permits would also be obtained from BNSF, SKOL, KCS, and UP for the railroad crossings.

The Proposed Route is located outside the identified airspace obstruction surfaces near the Atkinson Municipal Airport and does not appear to be located near any private airstrips. Preliminary structures have been filed with the FAA at locations closest to the Atkinson Municipal Airport to verify obstruction calculations. Although not anticipated, modifications will be made to the structures or alignment should any be identified by the FAA as an airspace obstruction.

4.4.1.5 Utilities and Communication Towers

The Proposed Route crosses 10 existing transmission lines. The operation of the new 345-kV line would result in an overall increased reliability of electrical service both in and out of the Study Area. NEET Southwest has adjusted the Proposed Route so that most existing line crossings would be located at the mid-span (low point of the conductors) between structures to keep the height of the new line lower. The Proposed Route also crosses 10 large-diameter gas, oil, and petroleum transmission and gathering lines as well, and there may be oil and gas wells located close to the Proposed Route or even in the ROW. NEET Southwest would coordinate with the other utility owners during construction as needed to minimize impacts to active facilities.

There is only one communication tower located within 500 feet of the Proposed Route. It is located just north of the Wolf Creek Substation on the west side of Oxen Lane. According to FCC data, it contains

both Antenna Structure Registration (ASR) and microwave antennas registered to Evergy. While this tower would be within 500 feet of the Proposed Route, the line would not affect the tower or the guy lines, nor would any impact to the tower be anticipated due to the presence of the substation, power plant, and other existing transmission lines already in the vicinity of the tower.

4.4.2 Socioeconomic Patterns

This section addresses the potential impacts of the Proposed Route on the socioeconomic patterns in the Study Area. The topics include population, employment, and income.

4.4.2.1 Population

Construction and operation of the Proposed Route would not directly result in a change in the population in the Study Area. However, the Project would help to meet the electrical needs of the area and increase reliability of the electrical system in the vicinity. Reliable electric service is important to residents and can be a significant factor in the location of many industries. The Proposed Route also avoids densely populated areas. There are some slightly more densely developed areas where the Proposed Route approaches Pittsburg, but the Proposed Route avoids the majority of development associated with the city.

4.4.2.2 Employment and Income

Construction and operation of the new line would not significantly affect employment in the Study Area. The construction work force would be small and temporary. Workers would likely commute on a daily or weekly basis to the construction area. The presence of additional workers may result in a slight increase in retail sales in and near the Study Area due to purchases of food, fuel, and other merchandise. No additional staff would be expected for Project operations. By helping to relieve electrical congestion and improving reliability, industries and businesses may be attracted to the area in the future, thereby increasing the potential for employment in and around the Study Area. The Project would also increase the tax base in Coffey, Anderson, Allen, Bourbon, Crawford, Barton, and Jasper counties because NEET Southwest would pay property taxes based on the value of the new electric transmission line.

4.4.3 Cultural Resources

The route identification process included avoidance of known historical and archaeological resources based on a records search within one mile of the preliminary alternative routes within the Study Area conducted by Burns & McDonnell using data provided by the Kansas and Missouri SHPOs. This search indicated there were no known NRHP-listed or eligible archaeological sites or historic structures that may be crossed by or within a quarter-mile of the adjusted Proposed Route, nor were there any unevaluated,

documented cultural sites located within the Proposed Route ROW. Because much of the area has not been surveyed, additional investigations may reveal sites or areas of cultural concern. If the SHPOs or Tribal Historic Preservation Office (THPO) require an archaeological survey of portions of the Proposed Route, NEET Southwest would retain a consultant to perform the survey and submit the results, and any proposed mitigation would be coordinated with the SHPOs and/or THPO. Structure placement generally can be adjusted to avoid most archaeological sites.

4.4.4 Visual Character

The visual character of an area is a function of the terrain, land cover, and land use. Construction and operation of the transmission line would impact the existing aesthetics of the Study Area through which the line passes, primarily due to the clearing of trees and the introduction of a new linear facility.

The transmission line could create some visual contrast with the surrounding environment. The Proposed Route was routed to parallel existing lines when possible to help keep visual impacts in a common corridor. The Proposed Route would parallel existing lines for approximately 26 percent of its length. Where present, surrounding forest vegetation and terrain may also help to provide visual screening of the transmission line. Crossing open agricultural or pastureland can make the line more visible from viewpoints with a long perspective. Additionally, the line would be seen at road crossings and where the line is constructed near or along roads, although only about two percent of the Proposed Route would be constructed along a road. Visibility from the roads, especially at road crossings, would be temporary and fleeting, due to the normal flow of traffic.

4.5 Proposed Route Impact Summary

The construction and operation of the proposed Project would have limited impacts on natural and social resources in the Study Area. The following is a summary of the impacts of the Proposed Route.

The Proposed Route would have relatively minor overall impacts because many resources can be spanned or have been avoided during the route identification and analysis process described in Chapter 3.0. The Proposed Route was one of the shortest routes and, as a result, would have relatively low land use impacts. The Proposed Route would not impact flights into and out of the Atkinson Municipal Airport and parallels existing transmission lines for over a quarter of its length. Furthermore, the Proposed Route would have one of the lowest impacts to the natural environment, including low impacts to protected species habitat, wetlands, and floodplains. The results of this analysis indicate the Proposed Route would have relatively low overall impacts to the social and natural environment. Mitigation measures as described in Chapter 5.0 would also help to further minimize the potential impacts of this Project.

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5.0 MITIGATION MEASURES

Mitigation measures are those steps undertaken to reduce the potential impact of the construction or operation of a project on natural and social resources. The primary forms of mitigation are avoidance of potential negative impacts, which typically occurs during the initial route development, and minimization, such as paralleling new lines adjacent to existing lines to reduce the required ROW width and overall impacts.

This section includes a discussion of the steps taken to avoid negative impacts through the routing and design of the proposed transmission line. For those impacts that could not be avoided, recommended measures for reducing impacts are described. If impacts cannot be avoided or minimized to the extent that no substantial adverse effect is expected, additional mitigation may be required by the agencies in charge of the resource affected.

5.1 Mitigation of Natural Resource Impacts

The Proposed Route would traverse approximately 94 circuit miles of new transmission line from the existing Wolf Creek Substation to the Blackberry Substation, depending on the final route approved by the KCC and MPSC. The primary issues discussed in Chapter 4.0 regarding natural resources were soil and erosion control, water resources and wetlands, and threatened and endangered species. Measures to reduce or eliminate potential negative impacts to these resources are described below.

5.1.1 Soil and Erosion Control

NEET Southwest would submit an erosion control plan to the KDHE and MDNR for approval prior to Project construction. NEET Southwest may be able to file a simplified plan, since ROW clearing typically only involves cutting of vegetation above-ground, with no “blading,” “grubbing,” or other typical land-disturbing activities. NEET Southwest also limits impacts to stream buffers and other “sensitive” areas by using internal construction buffers that must be hand-cleared during construction, in addition to the “sensitive” area itself.

In upland areas, holes for each structure would be dug with an auger, and the structures would be erected using a crane. Most structures would be buried directly in the ground. Excess soil from the structure excavations in uplands would be evenly distributed around each structure and the soil stabilized. Excess soil in wetland areas would be transported to upland areas and stabilized. Structures have been sited in uplands outside of wetlands and streams. Temporary access roads may traverse wetlands. In these instances, crossing locations will be located to minimize the length of the wetland crossings and construction matting will be used. Similarly, some streams might be crossed with temporary culverts or

bridges. Access routes will also be selected to reduce impacts by following existing ground contours. Areas disturbed by construction activities would be restored by establishing an appropriate ground cover to limit erosion of the soil.

Where possible, contractors would use existing access roads along the ROW that are paralleled. If new access roads are required, they would be routed, where practicable, to follow present land contours and limit clearing and surface changes.

5.1.2 Protection of Water Resources and Wetlands

NEET Southwest would survey the Proposed Route for jurisdictional waters and wetlands. NEET Southwest's standard transmission ROW clearing and line construction practices call for avoiding impacts to waters and wetlands to the extent practicable. All vegetation is cut to near-ground level. Vegetative buffers adjacent to streams are left as appropriate (only low-growing vegetation can be left). No "blading" or "grubbing" of stumps is allowed, and remaining root mats typically sprout and quickly re-vegetate ROW with native species. Remaining stumps help maintain stream bank stabilization. Temporary access roads may cross wetlands with construction matting and streams might be crossed with temporary culverts or bridges.

There would be no change in contours or redirection of water flow, and the amount of spoilage from the installation of structures would be limited. Any excess spoilage would be spread evenly around the structure location. Trees outside of the ROW corridor tall enough to endanger the line if they fell ("danger trees") would be selectively cut.

If required, NEET Southwest would work closely with the USACE, KDHE, and MDNR to comply with the applicable regulations and permit conditions, if necessary. Additional mitigation measures may be implemented following consultation with the USACE for Section 404 compliance, if required.

5.1.3 Protected Species

Tree clearing outside of the gray bat active season (April 1 to October 31) is an agency recommended measure that the NEET Southwest team would implement for the Project to minimize and avoid impacts to the gray bat. Unless the project directly impacts a roost cave or hibernaculum structure, the USFWS will not require mitigation for gray bats simply for clearing trees during the winter. Currently no known roost caves or hibernaculum structures are located in proximity to the Proposed Route.

The NEET Southwest team is minimizing the amount of tree clearing required along the Proposed Route and would implement tree clearing for the Project outside of the Indiana bat roosting season (April 1 to

October 31) to mitigate for any potential Indiana bat impacts. Likewise, NEET Southwest would implement tree clearing for the Project outside of the northern long-eared bat pup rearing season (June 1 to July 31), so no impacts to this species are anticipated.

Based on conversations with KDWP, potential measures that would be implemented to mitigate for impacts to designated critical habitat for the eastern spotted skunk and broadhead skink include stacking cut timber in piles or placing individual logs in upland areas along the edges of woodlands and the Project right-of-way to provide refuge habitats for these species.

Additional communication with the USFWS, KDWP, and MDC regarding potential impacts concerning state and federally protected species would occur during the permitting phase of the Project. State or federally protected species known to occur within the Study Area or near the Proposed Route ROW are not expected to be adversely impacted.

Eagle nest surveys will be conducted prior to construction of the Proposed Route and construction activity around active nests will be avoided until eagles have fledged, in coordination with the USFWS.

Based on preliminary inquiries with the regulatory agencies, the NEET Southwest team intends to implement appropriate Best Management Practices (BMPs) during construction to intercept stormwater runoff that could be carrying silt and sediment and protect off areas outside of the Project footprint. The type and location of these BMPs would be identified and during the permitting phase of the Project and coordinated with the KDHE and MDNR.

If necessary, NEET Southwest would hire a consultant to conduct a survey of the Proposed Route to determine whether potential habitat for protected species is likely to be impacted by the Proposed Route. If habitat is found along the Proposed Route, surveys to determine the presence or absence of protected species along the Proposed Route may be necessary. If mitigation is required to avoid damage to protected plant and wildlife species communities or habitat, NEET Southwest would implement strategic structure placement, avoidance, or other USFWS, KDWP, or MDC recommendations.

5.2 Mitigation of Social Resource Impacts

The main issues discussed in Chapter 4.0 related to social resources were land use, cultural resources, and visual character. Measures to avoid or reduce potential negative impacts to these resources are described below.

5.2.1 Land Use

All routes that were initially developed were developed to limit impacts to residences and other land uses where possible. The Proposed Route was identified to avoid areas with dense residential subdivisions and commercial operations as much as possible. Following award of the Project, NEET Southwest began to work with individual landowners, as needed, to reach mutually acceptable solutions to the extent feasible for land use conflicts that may arise.

5.2.2 Cultural Resources

The route identification process included the avoidance of known historical and archaeological resources. In this instance, no NRHP-listed or eligible sites, nor any unevaluated sites, were found to occur along the Proposed Route. No mitigation for the protection of cultural resources is anticipated at this time. In coordination with the SHPOs and relevant THPOs, NEET Southwest will complete archaeological surveys along the Proposed Route. If the survey results in the discovery of any sites that could be considered eligible for the NRHP, the line or structures could be adjusted to avoid the sites, or other actions would be taken as recommended by the SHPOs or THPO. Should impacts to sites that could be considered eligible for the NRHP be unavoidable, the survey findings would be submitted to the SHPOs and THPOs, and any proposed mitigation would be coordinated with the SHPOs and THPOs.

5.2.3 Visual Character

Most of the structures for the proposed Project would be monopoles. Single pole structures can be less visible than other structure types because there is only one pole to be viewed for each structure, as opposed to two poles for H-frame structures or guyed v-structures and a web of steel for lattice towers. NEET Southwest intends to use concrete material for their structures. This material can be less visible at longer distances where the color blends better with the background but may be more visible at closer ranges than other structure materials, such as weathering steel. While spans may be shorter for single poles vs. H-frames, the vertical alignment of the conductors allows for a narrower ROW and less clearing and creates a more vertical view as opposed to a wider horizontal view. Where practicable, structures would be located to take advantage of any existing vegetation for screening from residences and roadways. Typically, the structure itself creates the most visual contrast for a transmission line, so longer spans would result in fewer overall structures and less overall visual impact compared to other structure designs. Because angle structures are larger, require more space, and hence are more visible, all routes were designed to minimize the number of such structures to the extent practicable, while also avoiding residences and other known constraints.

5.3 Conclusion

By following NEET Southwest's standard clearing and construction practices, the route selection process described, and the above mitigation techniques, most potential impacts along the Proposed Route would either be avoided or minimized. As a result, the construction and operation of the Proposed Route would have limited impacts on the natural and social resources.

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6.0 PUBLIC INVOLVEMENT & PROJECT OUTREACH

6.1 Public Involvement Overview

To determine community values relative to the Project, the route selection process included several forms of public input, including communications with county commissioners and public interest groups, virtual public open houses, in-person open houses, and direct landowner communication. All input was used to assess the values and attitudes of the stakeholders regarding the Project and facilitate further refinement of the Proposed Route.

6.2 Identifying Project Stakeholders

6.2.1 Potentially Affected Landowners

Potentially affected landowners are an integral part of any project, and communications with those individuals are paramount to a successful project. After the Project's Proposed Route and corresponding route alternatives were developed, the Burns & McDonnell public involvement team created notification boundaries to identify potentially impacted parcels and landowners. For the Kansas portion of the Project, this boundary was drawn 1,000 feet from the centerline of the Proposed Route and proposed alternatives running through Coffey, Anderson, Allen, Bourbon, and Crawford Counties; the Missouri boundary was 300 feet through Barton and Jasper Counties.

Table 6-1: Parcels & Landowners by County

County	Potentially Affected Parcels	Potentially Affected Landowners
Allen County, KS	146	109
Anderson County, KS	53	42
Bourbon County, KS	34	15
Coffey County, KS	63	41
Crawford County, KS	242	147
Barton County, MO	24	18
Jasper County, MO	10	9
Total	**572**	**381**

6.2.2 Elected Officials

It is important to keep elected leadership well-informed of the Project, the goals and impacts that it may have on the area, and the Project team's plans for engaging the local residents and stakeholders. All

Project communications distributed to landowners were also sent to the appropriate elected public offices, including state and federal officials, and other elected officials from municipalities and counties.

6.3 Project Communications

The Project team used the communication tools outlined in this section to inform and educate stakeholders of the affected communities in both Kansas and Missouri about the Project in a proactive manner, making Project messaging readily available to interested parties across a variety of channels and allowing for two-way communication between Project team members and public stakeholders.

In conjunction with NEET Southwest, the Burns & McDonnell public involvement team helped develop Project messaging to communicate with the public. This messaging includes Project specifics, past NEET Southwest endeavors, and industry best practices.

6.3.1 Project Hotline and Email

During the initial phases of Project outreach, Burns & McDonnell established and managed a toll-free Project hotline with a local prefix. This portal has allowed the Project team to interact with landowners and community stakeholders and ascertain prevalent questions and concerns that the public may have. A Project email address was also created and managed by NEET Southwest.

The hotline and email address that were established for the initial public outreach and open house process will remain in effect throughout the Project's development and construction phases so that stakeholders can continue to provide input and ask questions of the Project team. All hotline voicemails are logged by the public involvement team and forwarded to the larger Project team for consideration and response. The hotline number is 620-205-2051. The email address is neetsw@nexteraenergy.com. As of January 17, 2022, there have been 29 messages left on the Project hotline and 26 emails received to the Project email.

6.3.2 Project Website

Key Project messaging and associated materials were incorporated into an intuitive Project website that provides relevant information to the public and landowners. In tandem with the Project hotline and email address, a contact form was integrated on the website and utilizes the same approach regarding returning messages. Periodic updates on Project progress, public meetings, maps, and other Project news will be updated on the website throughout the life of the Project's development and construction. The URL for the Project website is: www.nexteraenergytransmission.com/subsidiaries/neetsw/projects/wolf-creek-blackberry.html.

The Project website was established early in the Project and includes information regarding Project need and benefits, schedule, public meeting information, maps, and frequently asked questions and answers. The Project website includes the following sections:

- Site home page, which functions as the primary landing page for stakeholders to learn about the Project and navigate throughout the site functions and subpages to find more information. On this page, stakeholders are given the following segments of information:
  - An overview map of the entire project area and Proposed Route; this map is also hyperlinked and made available to download
  - Project overview giving a brief background on the Project
  - Callout banner for the virtual open house and a link to the open house subpage
  - Breakdown of the Project benefits
  - Project fact sheet linked for download
  - Graphic outlining the general timeline anticipated
  - Information on the Project's intended structure design including a visual rendering and photograph for better explanation
  - Contact information to the Project hotline and email address
- FAQs
- Contact Us page where stakeholders can submit feedback and connect with Project team members. In tandem with the hotline and email, the Contact Us portal employs the same approach regarding returning messages.

The Project's inclusive approach to stakeholder engagement necessitates the development of input portals. The website allows stakeholders to obtain Project information and offers them multiple avenues through which they can contact or interact with Project team members. Appendix C contains screenshots of the Project website along with copies of other materials available for download on the site.

6.3.3 Virtual Open House Invitations

6.3.3.1 Mailing List

After the Project's Proposed Route and corresponding route alternatives were developed, Burns & McDonnell developed a mailing list for landowner notifications that included both the parcel mailing and situs addresses as shown on the parcel's county tax record to better disseminate information to all appropriate parties. The mailing lists were not only used during the virtual open house postcard

distribution, but also allowed the Project team to better identify and catalog future communications with landowners.

6.3.3.2 Landowner Postcards

On Monday, Feb. 28. 2022, the Burns & McDonnell public involvement team mailed color postcard invitations to the potentially affected landowners list. These postcards were also sent to elected officials and key personnel for each county and their respective cities. A copy of the postcard is located in Appendix D.

6.3.3.3 Newspaper Advertisements

As part of the communications process for the virtual open house events, local newspapers serve as a valuable resource for disseminating information and effectively reaching local communities. As such, Burns & McDonnell identified relevant newspaper publications in each affected county to publish full color, quarter-page advertisements announcing the upcoming virtual open houses and key information. Each publication's ad ran at least two-weeks prior to the virtual open houses to allow ample opportunity and prior notice for interested individuals to attend.

Table 6-2: Newspaper Advertisements

County	Publication	Publication Date
Allen County, KS	Iola Register	03/02/2022
Anderson County, KS	Anderson County Review	03/01/2022
Bourbon County, KS	Fort Scott Tribune	03/02/2022
Coffey County, KS	Coffey County Republican	03/03/2022
Crawford County, KS	The Morning Sun	03/04/2022
Barton County, MO	Lamar Democrat	03/02/2022
Jasper County, MO	The Joplin Globe	03/03/2022

Identification of these newspapers involved web research to identify the best publication for each county, and ultimately was decided by selecting the largest newspaper for its corresponding county to have the greatest potential community reach. The newspaper ads included a unique URL to the virtual open house registration page to track the number of individuals who registered for the event after seeing the ad; a total of 10 respondents visited the registration page directly from the newspapers' ads. Scanned copies for the newspapers' advertisements are in Appendix D.

6.4 Virtual Open Houses

Due to concerns over the COVID-19 pandemic in the spring of 2022 and considering the health and safety of the community and team members, NEET Southwest elected to host virtual events in lieu of traditional, in-person open houses. The well-being of the Project's communities has always been NEET Southwest's and Burns & McDonnell's highest priority, and as such, NEET Southwest and Burns & McDonnell sought to provide the safest environment for landowners to engage with the Project team. As public health concerns and guidelines have evolved, NEET Southwest and Burns & McDonnell have conducted more in-person events and in-person landowner outreach, as discussed below and in the Direct Testimony of Kara Wry.

6.4.1 Overview

The intent of the virtual public open house was to provide potentially affected landowners, business owners, and other stakeholders near the Proposed Route with an understanding of the need for the Project and the decision-making process used to select the Proposed Route and to provide a forum to voice their questions and concerns about the Project.

Under the direction of NEET Southwest, the Burns & McDonnell public involvement team led the virtual public open house presentations via the Microsoft Teams platform. This platform allows attendees to view presentation materials, hear from Project representatives, and engage in a Question & Answer (Q&A) session using the platform's question dialogue portal. Attendees were also given a 'call-in only' feature, allowing those with limited internet access to participate by listening throughout the event. A recording of both sessions was captured and uploaded on the Project website.

6.4.2 Event Logistics

NEET Southwest, as coordinated by the Burns & McDonnell public involvement team, hosted two virtual public events on Tuesday, March 22, 2022; one morning session from 10:00-11:00 am CST and an evening session from 6:00-7:00 pm CST. During the initial event planning process, the Project team determined that having two sessions at varying times of day would better accommodate stakeholders' schedules and encourage participation. A total of 51 individuals joined the morning session, with an additional 13 people utilizing the call-in only feature. The evening session had 39 total attendees with an additional 25 on the call-in feature.

As discussed in Section 6.3.3.2, informational postcards describing the Project and advertising the virtual public open houses were mailed to landowners and elected officials approximately 2 weeks prior to the events. This information was also published in local newspapers (Section 6.3.3.3) and made available on

the Project's website. Through these methods of invitation, the following is a breakdown of total registrants prior to the virtual open house.

Table 6-3: Virtual Open House Registrants by Source

Source	Number of Registrants
Newspaper Ads	10
Postcard Invitations	48
Website	2

6.4.3 Virtual Open House Presentation, Materials, and Engagement

During the virtual open house sessions, the NEET Southwest team presenters included representatives from Development and Engineering & Construction who presented information on the following topics:

- Background on NEET
- Background – Project Need
- Wolf Creek – Blackberry 345-kV Transmission Line Project
- Project Benefits
- Routing Considerations
- Engineering Design and Construction Activities
- Right-Of-Way Easements
- Anticipated Project Schedule
- Operations and Maintenance
- Q&A Session

Along with the three presenters, the Q&A sessions also featured four additional subject matter experts representing areas of Land, Environmental, Operations, and General Counsel to provide better insight to landowners' potential questions. In total, there were 32 landowner questions received during the morning session and 33 questions during the evening session. The virtual open house presentation and transcripts of both sessions, as well as a copy of the questions received during each event, can be found in Appendix E.

6.4.4 Virtual Open House Materials

Information presented during the public meetings was also posted on the Project website, which allows landowners and other interested parties the opportunity to review this information if they were not able to

attend the virtual open houses. Recordings from both sessions were also uploaded to the Project website for those unable to attend the event. Copies of these materials can be found in Appendix C.

6.4.5 Virtual Open House Public Comments

Comments and information obtained during the open houses was evaluated by the Project team and shared with the appropriate land agents to help formulate and deliver a response to the landowner. This content is being compiled in a manner that allows the Project team to assess public opinion, determine if Project modifications are needed and appropriate, and select a final route.

From these open house efforts, the Project team received two landowner inquiries regarding the Project route development and requesting a route modification. As with all other comments and questions received through the Project communication portals, these requests were evaluated by the Project team. A follow-up, in-person meeting was held with the landowners to fully understand the landowner's primary concerns and internal coordination to finalize the route in this area is on-going.

6.5 In-Person Open Houses

In addition to the virtual open houses, the Project team hosted two in-person open houses on December 12, 2022 and January 10, 2023, respectively. The first open house was held at the Burlington Recreation Center in Burlington, Kansas, from 6:00-8:00 pm. The second open house was held at the Empress Event Center in Fort Scott, Kansas, from 6:00-8:00 pm.

6.5.1 In-person Open House Invitations

6.5.1.1 Mailing List

Landowner data for the potentially affected parcels was refreshed in November and December 2022, and the updated landowner information was used for the open house mailing list. Landowners within 1,000 feet of the proposed Project centerline were included in the mailing list.

6.5.1.2 Landowner Postcards

The first in-person open house located in Coffey County targeted participation from landowners and the public located in Coffey and Anderson Counties. For the first in-person open house, NEET Southwest mailed color postcard invitations to the potentially affected landowners located in Coffey and Anderson Counties on December 2, 2022. The mailing list of potentially affected landowners was updated prior to sending the landowner invitations.

The second open house, located in Bourbon County, targeted participation from landowners and public located in Allen, Bourbon and Crawford Counties. For the second in-person open house, NEET Southwest mailed color postcard invitations to the potentially affected landowners in Allen, Bourbon, and Crawford Counties on December 27, 2022. Copies of these landowner postcards can be found in Appendix F.

6.5.1.3 Newspaper Advertisements

As part of the communications process for the in-person open house events, NEET Southwest again published full color, quarter-page advertisements local newspapers announcing the upcoming virtual open houses and key information. Table 6-4 below details the publication date of the in-person open house advertisement for each event.

Table 6-4: Newspaper Advertisements

County	Publication	Publication Date(s)
Anderson County, KS	Anderson County Review	12/06/2022; 01/03/2023
Coffey County, KS	Coffey County Republican	12/08/2022; 01/05/2023
Allen County, KS	Iola Register	01/04/2023
Bourbon County, KS	Fort Scott Tribune	01/04/2023
Crawford County, KS	The Morning Sun	01/04/2023

Copies of these newspaper advertisements can be found in Appendix F.

6.5.2 Event Logistics and Materials

NEET Southwest, Burns & McDonnell, and Doyle Land Services personnel were present and available at specific stations related to: Project schedule and purpose and need; route maps and routing; real estate; engineering and structure design. These personnel answered questions from and shared information with landowners about the Project and were able to obtain feedback from landowners on specific parcels. The open house format allowed landowners to speak directly with subject matter experts and allowed all landowners an opportunity to ask their questions. Copies of the posterboards used at the in-person open houses can be found in Appendix G.

6.5.3 Comments Collected

Comment cards and a collection box were provided at each in-person open house. No formal comments were submitted at the December 12, 2022 in-person open house. One formal comment was submitted at

the January 10, 2023 in-person open house. Land agents followed up with the landowner to address the comment.

6.6 Additional Outreach Activities

6.6.1 Ongoing County and Land Agent / Landowner Communications

In order to provide right-of-way services for the Project, NEET Southwest retained Doyle to organize a team of land agents to identify parcel ownership and communicate with landowners about the Project. As part of this effort, Doyle assigned each of the land agents tracts of land along the Project route to begin communicating with landowners.

The Project team began initial outreach through phone calls and door-to-door visits along the Proposed Route beginning in January 2022. The goal of this initial outreach was to introduce the land agent team, as well as educate landowners about the Project. During those initial outreach efforts, if land agents' first attempts to reach potentially affected landowners were not successful (e.g., the landowner was not home during a visit or did not answer outreach phone calls,) the land agents mailed a basic postcard referencing the Project and including the land agent's contact information.

Since January 2022, Project land agents have made contact with approximately 95% of the landowners along the Proposed Route and have received permission to perform surveys on roughly 68 miles of the Proposed Route. The team has also responded to hundreds of requests for information through the land agents in the field or the Project hotline. The land agents continue to work closely with landowners on a daily basis to coordinate surveys and address property-specific needs and concerns. Land agents have started initial easement negotiations with around 85% of affected landowners.

NEET Southwest has met with various counties along the proposed route, including most recently, appearing at county commission meetings in Coffey County and Anderson County, Kansas, on December 12, 2022, and Allen County on January 10, 2023. NEET Southwest is scheduled to meet with the county commission in Crawford County on February 3, 2023.

7.0 PROPOSED ROUTE ADJUSTMENTS AND ONGOING SURVEYS

Since the selection of NEET Southwest by SPP in December of 2021, the team has continued to make data updates, to work with landowners, to perform additional studies / surveys, and to continue agency outreach activities. These Project efforts are described in the following sections and are ongoing but will end prior to the approval by KCC and MPSC.

7.1 Data Updates

The primary source of the data used in the routing analysis was aerial imagery from previous years. Aerial imagery was updated to use 2021 NAIP data in 2021 for the counties along the Proposed Route. Other digital data, such as roads, parcels, protected lands, threatened and endangered species, and wetlands, acquired from various federal and state agencies and sources, was also re-downloaded in 2021 if updates were available. These updates have allowed NEET Southwest to assess if any major changes have occurred related to resource data used in the route analysis described in Chapter 3.0.

7.2 Stakeholder Considerations

Through the outreach plan described above, stakeholders have been steadily providing NEET Southwest with additional information. NEET Southwest continues to evaluate information coming in from stakeholders to reach agreeable solutions with stakeholders.

Following the open houses multiple requests for route changes were received from landowners. As a result of the landowner requests, the project team has modified the location of 95 different structures.

NEET Southwest will continue to work with stakeholders.

7.2.1 Engineering Revisions

Prior to the open house NEET Southwest routing, environmental, and engineering teams investigated potential route adjustments to reduce overall line length and eliminate higher cost angle structures in 2022. These investigations led to eliminating points of inflection along the Proposed Route. There were four areas where Points of Inflection (PIs) were removed to straighten the line, the majority of these PIs were minor angles and generally did not affect the overall alignment of the Proposed Route. The Proposed Route was also modified to avoid infrastructure associated with the recently constructed Jayhawk Wind Farm. The original route would have passed over the newly built substation for this wind farm; this change introduced three PIs into the final alignment.

Additionally, during detailed engineering review, three additional route adjustments were made to avoid existing infrastructure.

7.2.2 Environmental Revisions

During detailed review of the Proposed Route, proposed pole placement was adjusted to avoid wetland impacts or archaeological sites identified during field surveys. These structure shifts generally do not impact the overall alignment of the Proposed Route as they typically can be shifted within the current alignment of the Proposed Route.

7.3 Additional Surveys / Studies

After the Proposed Route was identified, additional detailed surveys were undertaken to provide additional information related to potential impacts along the Proposed Route. Field work has been conducted on the following days to date:

- Wetland delineation and protected species habitat assessment field surveys: March 28 – April 15, 2022, as well as May 2 – 5, 2022
- Stick nest surveys: April 1, 2022
- Cultural surveys: March 28 – April 1, 2022; April 11 – 15, 2022; May 3, 2022; and July 26-28
- Tribal field review: March 30 – April 4, 2022
- Geotechnical Investigation: April 4, 2022 – April 27, 2022; and August 1, 2022 – August 31, 2022
- Boundary and Utility Land Surveys: March 28, 2022 – May 6, 2022; August 9, 2022 – August 30, 2022; and December 2, 2022 – December 19, 2022.

Additional surveys will be completed if necessary.

7.4 Agency Coordination

Agency outreach and coordination is ongoing on the Project. On April 18, 2022, letters were sent to the USFWS, MDC, and KDWP containing general Project information and requesting any species or habitat data related to threatened, endangered, proposed, and candidate species; eagles; protected habitats; bats; and conservation concern birds.

On April 19, 2022, representatives for each county were sent a letter containing general Project information and requesting information related to county road and ROW permitting, regulations, and agreements; county floodplain permitting; and county building / construction permitting.

Copies of these letters can be found in Appendix G.

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APPENDIX A – ROUTE DATA

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
1	1,2,8,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	606,040	114.8	22	11	103	501,280	502,580	0	14	69,380	9	182	13.8	46.6	0.0	0.0	205.9	246.1
2	1,2,8,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	613,910	116.3	24	11	106	509,150	503,030	0	14	65,450	9	183	11.2	47.2	0.0	0.0	205.9	246.1
3	1,2,8,19,25,26,27,29,37,38A,45,46,38E,42,44	601,140	113.9	25	11	104	496,380	500,030	0	14	59,730	9	184	11.2	41.9	71.6	3.4	205.9	242.0
4	1,2,8,19,25,26,27,29,37,38A,45,47,41B,42,44	604,100	114.4	25	11	106	499,340	502,990	0	14	59,890	11	179	12	42.4	141.0	11.6	205.9	250.3
5	1,2,8,19,25,26,27,29,37,39,41A,41B,42,44	599,830	113.6	23	11	109	495,070	476,020	0	14	61,990	11	177	13.9	43.2	146.5	21.6	205.9	257.6
6	1,2,8,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	571,840	108.3	18	13	103	388,070	476,360	2	14	63,500	9	195	16.5	44.2	0.0	0.0	205.9	115.0
7	1,2,8,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	579,710	109.8	20	13	106	395,940	476,800	2	14	59,570	9	196	13.9	44.7	0.0	0.0	205.9	115.0
8	1,2,8,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	566,940	107.4	21	13	104	383,170	473,810	2	14	53,860	9	197	13.9	39.4	71.6	3.4	205.9	110.9
9	1,2,8,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	569,900	107.9	21	13	106	386,130	476,760	2	14	54,020	11	192	14.7	39.9	141.0	11.6	205.9	119.2
10	1,2,8,19,25,26,27,30,31,36,37,39,41A,41B,42,44	565,630	107.1	19	13	109	381,860	449,800	2	14	56,110	11	190	16.6	40.7	146.5	21.6	205.9	126.5
11	1,2,8,19,25,26,27,30,31,40,41A,41B,42,44	557,100	105.5	18	14	104	358,590	451,360	2	16	54,060	11	191	13.4	35.4	201.4	32.8	205.9	124.9
12	1,2,8,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	587,920	111.3	19	13	100	477,550	492,440	0	16	63,500	11	171	13.4	42.1	0.0	0.0	205.9	139.2
13	1,2,8,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	595,800	112.8	21	13	103	485,420	492,890	0	16	59,570	11	172	10.8	42.6	0.0	0.0	205.9	139.2
14	1,2,8,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	583,030	110.4	22	13	101	472,650	489,890	0	16	53,860	11	173	10.8	37.4	71.6	3.4	205.9	135.1
15	1,2,8,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	585,980	111	22	13	103	475,610	492,850	0	16	54,020	13	168	11.6	37.9	141.0	11.6	205.9	143.4
16	1,2,8,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	581,710	110.2	20	13	106	471,330	465,890	0	16	56,110	13	166	13.5	38.6	146.5	21.6	205.9	150.7
17	1,2,8,19,25,26,27,30,32,34,40,41A,41B,42,44	573,190	108.6	21	14	101	448,060	467,440	0	18	54,060	13	167	10.3	33.3	201.4	32.8	205.9	149.1
18	1,2,8,19,25,26,27,30,32,35,43,44	568,810	107.7	19	14	102	473,150	475,320	0	15	20,220	12	168	8.7	32.5	88.3	25.0	205.9	137.5
19	1,2,8,19,25,26,28,33,43,44	575,720	109	18	14	104	438,190	482,230	0	15	20,220	12	186	13.1	38	88.3	25.0	205.9	148.7
20	1,2,9,12,13,17,18,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	556,820	105.5	20	10	99	502,500	517,740	1	10	69,380	10	168	13.5	48.1	0.0	0.0	65.7	246.1
21	1,2,9,12,13,17,18,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	564,700	106.9	22	10	102	510,380	518,190	1	10	65,450	10	169	10.9	48.6	0.0	0.0	65.7	246.1
22	1,2,9,12,13,17,18,19,25,26,27,29,37,38A,45,46,38E,42,44	551,930	104.5	23	10	100	497,610	515,190	1	10	59,730	10	170	10.9	43.4	71.6	3.4	65.7	242.0
23	1,2,9,12,13,17,18,19,25,26,27,29,37,38A,45,47,41B,42,44	554,880	105.1	23	10	102	500,560	518,150	1	10	59,890	12	165	11.7	43.9	141.0	11.6	65.7	250.3
24	1,2,9,12,13,17,18,19,25,26,27,29,37,39,41A,41B,42,44	550,610	104.3	21	10	105	496,290	491,190	1	10	61,990	12	163	13.6	44.6	146.5	21.6	65.7	257.6
25	1,2,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	522,620	99	16	12	99	389,290	491,520	3	10	63,500	10	181	16.2	45.6	0.0	0.0	65.7	115.0
26	1,2,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	530,490	100.5	18	12	102	397,170	491,970	3	10	59,570	10	182	13.6	46.2	0.0	0.0	65.7	115.0
27	1,2,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	517,720	98.1	19	12	100	384,400	488,970	3	10	53,860	10	183	13.6	40.9	71.6	3.4	65.7	110.9
28	1,2,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	520,680	98.6	19	12	102	387,350	491,930	3	10	54,020	12	178	14.4	41.4	141.0	11.6	65.7	119.2
29	1,2,9,12,13,17,18,19,25,26,27,30,31,36,37,39,41A,41B,42,44	516,410	97.8	17	12	105	383,080	464,960	3	10	56,110	12	176	16.3	42.1	146.5	21.6	65.7	126.5
30	1,2,9,12,13,17,18,19,25,26,27,30,31,40,41A,41B,42,44	507,890	96.2	16	13	100	359,810	466,520	3	12	54,060	12	177	13.1	36.8	201.4	32.8	65.7	124.9
31	1,2,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	538,710	102	17	12	96	478,770	507,610	1	12	63,500	12	157	13.1	43.6	0.0	0.0	65.7	139.2
32	1,2,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	546,580	103.5	19	12	99	486,640	508,050	1	12	59,570	12	158	10.5	44.1	0.0	0.0	65.7	139.2
33	1,2,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	533,810	101.1	20	12	97	473,870	505,050	1	12	53,860	12	159	10.5	38.8	71.6	3.4	65.7	135.1
34	1,2,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	536,770	101.7	20	12	99	476,830	508,010	1	12	54,020	14	154	11.3	39.4	141.0	11.6	65.7	143.4
35	1,2,9,12,13,17,18,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	532,500	100.9	18	12	102	472,550	481,050	1	12	56,110	14	152	13.2	40.1	146.5	21.6	65.7	150.7
36	1,2,9,12,13,17,18,19,25,26,27,30,32,34,40,41A,41B,42,44	523,970	99.2	19	13	97	449,280	482,610	1	14	54,060	14	153	10	34.8	201.4	32.8	65.7	149.1
37	1,2,9,12,13,17,18,19,25,26,27,30,32,35,43,44	519,590	98.4	17	13	98	474,370	490,490	1	11	20,220	13	154	8.5	33.9	88.3	25.0	65.7	137.5
38	1,2,9,12,13,17,18,19,25,26,28,33,43,44	526,500	99.7	16	13	100	439,410	497,400	1	11	20,220	13	172	12.9	39.4	88.3	25.0	65.7	148.7
39	1,2,9,12,13,17,20,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	539,850	102.2	21	10	99	486,060	519,230	1	10	69,380	10	153	13.7	46.7	0.0	0.0	65.7	212.1
40	1,2,9,12,13,17,20,23,26,27,29,37,38A,38B,48,38D,38E,42,44	547,720	103.7	23	10	102	493,930	519,670	1	10	65,450	10	154	11.1	47.2	0.0	0.0	65.7	212.1
41	1,2,9,12,13,17,20,23,26,27,29,37,38A,45,46,38E,42,44	534,950	101.3	24	10	100	481,160	516,670	1	10	59,730	10	155	11.1	41.9	71.6	3.4	65.7	208.0
42	1,2,9,12,13,17,20,23,26,27,29,37,38A,45,47,41B,42,44	537,910	101.9	24	10	102	484,120	519,630	1	10	59,890	12	150	11.9	42.5	141.0	11.6	65.7	216.3
43	1,2,9,12,13,17,20,23,26,27,29,37,39,41A,41B,42,44	533,640	101.1	22	10	105	479,850	492,670	1	10	61,990	12	148	13.8	43.2	146.5	21.6	65.7	223.6
44	1,2,9,12,13,17,20,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	505,650	95.8	17	12	99	372,850	493,000	3	10	63,500	10	166	16.4	44.2	0.0	0.0	65.7	81.0
45	1,2,9,12,13,17,20,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	513,520	97.3	19	12	102	380,720	493,450	3	10	59,570	10	167	13.8	44.7	0.0	0.0	65.7	81.0
46	1,2,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	500,750	94.8	20	12	100	367,950	490,450	3	10	53,860	10	168	13.8	39.5	71.6	3.4	65.7	76.9
47	1,2,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,47,41B,42,44	503,710	95.4	20	12	102	370,910	493,410	3	10	54,020	12	163	14.6	40	141.0	11.6	65.7	85.2
48	1,2,9,12,13,17,20,23,26,27,30,31,36,37,39,41A,41B,42,44	499,440	94.6	18	12	105	366,640	466,450	3	10	56,110	12	161	16.5	40.7	146.5	21.6	65.7	92.5
49	1,2,9,12,13,17,20,23,26,27,30,31,40,41A,41B,42,44	490,910	93	17	13	100	343,360	468,000	3	12	54,060	12	162	13.3	35.4	201.4	32.8	65.7	90.9
50	1,2,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	521,730	98.8	18	12	96	462,320	509,090	1	12	63,500	12	142	13.4	42.2	0.0	0.0	65.7	105.2
51	1,2,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	529,610	100.3	20	12	99	470,200	509,540	1	12	59,570	12	143	10.8	42.7	0.0	0.0	65.7	105.2
52	1,2,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	516,840	97.9	21	12	97	457,430	506,540	1	12	53,860	12	144	10.7	37.4	71.6	3.4	65.7	101.1
53	1,2,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	519,790	98.4	21	12	99	460,380	509,500	1	12	54,020	14	139	11.6	38	141.0	11.6	65.7	109.4
54	1,2,9,12,13,17,20,23,26,27,30,32,34,36,37,39,41A,41B,42,44	515,520	97.6	19	12	102	456,110	482,530	1	12	56,110	14	137	13.4	38.7	146.5	21.6	65.7	116.7
55	1,2,9,12,13,17,20,23,26,27,30,32,34,40,41A,41B,42,44	507,000	96	20	13	97	432,840	484,090	1	14	54,060	14	138	10.2	33.4	201.4	32.8	65.7	115.1
56	1,2,9,12,13,17,20,23,26,27,30,32,35,43,44	502,620	95.2	18	13	98	457,930	491,970	1	11	20,220	13	139	8.7	32.5	88.3	25.0	65.7	103.5
57	1,2,9,12,13,17,20,23,26,28,33,43,44	509,530	96.5	17	13	100	422,970	498,880	1	11	20,220	13	157	13.1	38	88.3	25.0	65.7	114.7
58	1,2,9,12,13,17,20,24,27,29,37,38A,38B,38C,38D,38E,42,44	537,070	101.7	18	10	99	484,930	516,450	1	10	69,380	10	153	13.7	46.4	0.0	0.0	65.7	210.8
59	1,2,9,12,13,17,20,24,27,29,37,38A,38B,48,38D,38E,42,44	544,950	103.2	20	10	102	492,800	516,900	1	10	65,450	10	154	11.1	46.9	0.0	0.0	65.7	210.8
60	1,2,9,12,13,17,20,24,27,29,37,38A,45,46,38E,42,44	532,180	100.8	21	10	100	480,030	513,900	1	10	59,730	10	155	11.1	41.6	71.6	3.4	65.7	206.7
61	1,2,9,12,13,17,20,24,27,29,37,38A,45,47,41B,42,44	535,130	101.4	21	10	102	482,990	516,860	1	10	59,890	12	150	11.9	42.2	141.0	11.6	65.7	215.0
62	1,2,9,12,13,17,20,24,27,29,37,39,41A,41B,42,44	530,860	100.5	19	10	105	478,720	489,900	1	10	61,990	12	148	13.8	42.9	146.5	21.6	65.7	222.3
63	1,2,9,12,13,17,20,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	502,870	95.2	14	12	99	371,720	490,230	3	10	63,500	10	166	16.4	43.9	0.0	0.0	65.7	79.7

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
64	1,2,9,12,13,17,20,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	510,750	96.7	16	12	102	379,590	490,670	3	10	59,570	10	167	13.8	44.4	0.0	0.0	65.7	79.7
65	1,2,9,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	497,980	94.3	17	12	100	366,820	487,680	3	10	53,860	10	168	13.8	39.2	71.6	3.4	65.7	75.6
66	1,2,9,12,13,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	500,930	94.9	17	12	102	369,780	490,640	3	10	54,020	12	163	14.6	39.7	141.0	11.6	65.7	83.9
67	1,2,9,12,13,17,20,24,27,30,31,36,37,39,41A,41B,42,44	496,660	94.1	15	12	105	365,510	463,670	3	10	56,110	12	161	16.5	40.4	146.5	21.6	65.7	91.2
68	1,2,9,12,13,17,20,24,27,30,31,40,41A,41B,42,44	488,140	92.5	14	13	100	342,230	465,230	3	12	54,060	12	162	13.3	35.1	201.4	32.8	65.7	89.6
69	1,2,9,12,13,17,20,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	518,960	98.3	15	12	96	461,190	506,320	1	12	63,500	12	142	13.4	41.9	0.0	0.0	65.7	103.9
70	1,2,9,12,13,17,20,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	526,830	99.8	17	12	99	469,060	506,760	1	12	59,570	12	143	10.8	42.4	0.0	0.0	65.7	103.9
71	1,2,9,12,13,17,20,24,27,30,32,34,36,37,38A,45,46,38E,42,44	514,060	97.4	18	12	97	456,290	503,760	1	12	53,860	12	144	10.7	37.1	71.6	3.4	65.7	99.8
72	1,2,9,12,13,17,20,24,27,30,32,34,36,37,38A,45,47,41B,42,44	517,020	97.9	18	12	99	459,250	506,720	1	12	54,020	14	139	11.6	37.6	141.0	11.6	65.7	108.1
73	1,2,9,12,13,17,20,24,27,30,32,34,36,37,39,41A,41B,42,44	512,750	97.1	16	12	102	454,980	479,760	1	12	56,110	14	137	13.4	38.4	146.5	21.6	65.7	115.4
74	1,2,9,12,13,17,20,24,27,30,32,34,40,41A,41B,42,44	504,220	95.5	17	13	97	431,710	481,320	1	14	54,060	14	138	10.2	33.1	201.4	32.8	65.7	113.8
75	1,2,9,12,13,17,20,24,27,30,32,35,43,44	499,840	94.7	15	13	98	456,800	489,200	1	11	20,220	13	139	8.7	32.2	88.3	25.0	65.7	102.2
76	1,2,9,12,13,17,20,24,28,33,43,44	506,750	96	16	13	100	421,840	496,110	1	11	20,220	13	157	13.1	37.7	88.3	25.0	65.7	113.5
77	1,2,9,12,14,16,21,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	554,190	105	21	10	100	530,700	532,980	1	10	69,380	10	156	15.1	47.1	0.0	0.0	65.7	215.1
78	1,2,9,12,14,16,21,23,26,27,29,37,38A,38B,48,38D,38E,42,44	562,060	106.5	23	10	103	538,570	533,430	1	10	65,450	10	157	12.5	47.7	0.0	0.0	65.7	215.1
79	1,2,9,12,14,16,21,23,26,27,29,37,38A,45,46,38E,42,44	549,290	104	24	10	101	525,800	530,430	1	10	59,730	10	158	12.5	42.4	71.6	3.4	65.7	211.0
80	1,2,9,12,14,16,21,23,26,27,29,37,38A,45,47,41B,42,44	552,250	104.6	24	10	103	528,760	533,390	1	10	59,890	12	153	13.3	42.9	141.0	11.6	65.7	219.3
81	1,2,9,12,14,16,21,23,26,27,29,37,39,41A,41B,42,44	547,980	103.8	22	10	106	524,490	506,420	1	10	61,990	12	151	15.2	43.7	146.5	21.6	65.7	226.6
82	1,2,9,12,14,16,21,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	519,990	98.5	17	12	100	417,490	506,760	3	10	63,500	10	169	17.8	44.6	0.0	0.0	65.7	83.9
83	1,2,9,12,14,16,21,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	527,860	100	19	12	103	425,360	507,200	3	10	59,570	10	170	15.2	45.2	0.0	0.0	65.7	83.9
84	1,2,9,12,14,16,21,23,26,27,30,31,36,37,38A,45,46,38E,42,44	515,090	97.6	20	12	101	412,590	504,210	3	10	53,860	10	171	15.2	39.9	71.6	3.4	65.7	79.8
85	1,2,9,12,14,16,21,23,26,27,30,31,36,37,38A,45,47,41B,42,44	518,050	98.1	20	12	103	415,550	507,160	3	10	54,020	12	166	16	40.4	141.0	11.6	65.7	88.2
86	1,2,9,12,14,16,21,23,26,27,30,31,36,37,39,41A,41B,42,44	513,770	97.3	18	12	106	411,280	480,200	3	10	56,110	12	164	17.9	41.2	146.5	21.6	65.7	95.4
87	1,2,9,12,14,16,21,23,26,27,30,31,40,41A,41B,42,44	505,250	95.7	17	13	101	388,000	481,760	3	12	54,060	12	165	14.7	35.9	201.4	32.8	65.7	93.9
88	1,2,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	536,070	101.5	18	12	97	506,960	522,840	1	12	63,500	12	145	14.7	42.6	0.0	0.0	65.7	108.1
89	1,2,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	543,950	103	20	12	100	514,830	523,290	1	12	59,570	12	146	12.1	43.1	0.0	0.0	65.7	108.1
90	1,2,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	531,180	100.6	21	12	98	502,060	520,290	1	12	53,860	12	147	12.1	37.9	71.6	3.4	65.7	104.0
91	1,2,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	534,130	101.2	21	12	100	505,020	523,250	1	12	54,020	14	142	12.9	38.4	141.0	11.6	65.7	112.4
92	1,2,9,12,14,16,21,23,26,27,30,32,34,36,37,39,41A,41B,42,44	529,860	100.4	19	12	103	500,750	496,290	1	12	56,110	14	140	14.8	39.1	146.5	21.6	65.7	119.6
93	1,2,9,12,14,16,21,23,26,27,30,32,34,40,41A,41B,42,44	521,340	98.7	20	13	98	477,480	497,840	1	14	54,060	14	141	11.6	33.8	201.4	32.8	65.7	118.1
94	1,2,9,12,14,16,21,23,26,27,30,32,35,43,44	516,960	97.9	18	13	99	502,560	505,720	1	11	20,220	13	142	10	33	88.3	25.0	65.7	106.5
95	1,2,9,12,14,16,21,23,26,28,33,43,44	523,870	99.2	17	13	101	467,610	512,630	1	11	20,220	13	160	14.4	38.5	88.3	25.0	65.7	117.7
96	1,2,9,12,14,16,21,24,27,29,37,38A,38B,38C,38D,38E,42,44	551,410	104.4	20	10	100	529,570	530,210	1	10	69,380	10	156	15.1	46.8	0.0	0.0	65.7	213.8
97	1,2,9,12,14,16,21,24,27,29,37,38A,38B,48,38D,38E,42,44	559,290	105.9	22	10	103	537,440	530,650	1	10	65,450	10	157	12.5	47.4	0.0	0.0	65.7	213.8
98	1,2,9,12,14,16,21,24,27,29,37,38A,45,46,38E,42,44	546,520	103.5	23	10	101	524,670	527,650	1	10	59,730	10	158	12.5	42.1	71.6	3.4	65.7	209.7
99	1,2,9,12,14,16,21,24,27,29,37,38A,45,47,41B,42,44	549,470	104.1	23	10	103	527,630	530,610	1	10	59,890	12	153	13.3	42.6	141.0	11.6	65.7	218.0
100	1,2,9,12,14,16,21,24,27,29,37,39,41A,41B,42,44	545,200	103.3	21	10	106	523,350	503,650	1	10	61,990	12	151	15.2	43.3	146.5	21.6	65.7	225.3
101	1,2,9,12,14,16,21,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	517,210	98	16	12	100	416,360	503,980	3	10	63,500	10	169	17.8	44.3	0.0	0.0	65.7	82.6
102	1,2,9,12,14,16,21,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	525,090	99.4	18	12	103	424,230	504,430	3	10	59,570	10	170	15.2	44.9	0.0	0.0	65.7	82.6
103	1,2,9,12,14,16,21,24,27,30,31,36,37,38A,45,46,38E,42,44	512,320	97	19	12	101	411,460	501,430	3	10	53,860	10	171	15.2	39.6	71.6	3.4	65.7	78.6
104	1,2,9,12,14,16,21,24,27,30,31,36,37,38A,45,47,41B,42,44	515,270	97.6	19	12	103	414,420	504,390	3	10	54,020	12	166	16	40.1	141.0	11.6	65.7	86.9
105	1,2,9,12,14,16,21,24,27,30,31,36,37,39,41A,41B,42,44	511,000	96.8	17	12	106	410,140	477,430	3	10	56,110	12	164	17.9	40.9	146.5	21.6	65.7	94.2
106	1,2,9,12,14,16,21,24,27,30,31,40,41A,41B,42,44	502,480	95.2	16	13	101	386,870	478,980	3	12	54,060	12	165	14.7	35.6	201.4	32.8	65.7	92.6
107	1,2,9,12,14,16,21,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	533,300	101	17	12	97	505,830	520,070	1	12	63,500	12	145	14.7	42.3	0.0	0.0	65.7	106.8
108	1,2,9,12,14,16,21,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	541,170	102.5	19	12	100	513,700	520,510	1	12	59,570	12	146	12.1	42.8	0.0	0.0	65.7	106.8
109	1,2,9,12,14,16,21,24,27,30,32,34,36,37,38A,45,46,38E,42,44	528,400	100.1	20	12	98	500,930	517,520	1	12	53,860	12	147	12.1	37.6	71.6	3.4	65.7	102.8
110	1,2,9,12,14,16,21,24,27,30,32,34,36,37,38A,45,47,41B,42,44	531,360	100.6	20	12	100	503,890	520,470	1	12	54,020	14	142	12.9	38.1	141.0	11.6	65.7	111.1
111	1,2,9,12,14,16,21,24,27,30,32,34,36,37,39,41A,41B,42,44	527,090	99.8	18	12	103	499,620	493,510	1	12	56,110	14	140	14.8	38.8	146.5	21.6	65.7	118.4
112	1,2,9,12,14,16,21,24,27,30,32,34,40,41A,41B,42,44	518,560	98.2	19	13	98	476,340	495,070	1	14	54,060	14	141	11.6	33.5	201.4	32.8	65.7	116.8
113	1,2,9,12,14,16,21,24,27,30,32,35,43,44	514,180	97.4	17	13	99	501,430	502,950	1	11	20,220	13	142	10	32.7	88.3	25.0	65.7	105.2
114	1,2,9,12,14,16,21,24,28,33,43,44	521,090	98.7	18	13	101	466,470	509,860	1	11	20,220	13	160	14.4	38.1	88.3	25.0	65.7	116.4
115	1,2,9,12,14,16,22,33,43,44	497,130	94.2	16	13	103	485,780	485,890	3	11	20,220	11	146	13.6	36.9	88.3	25.0	65.7	105.4
116	1,3,4,6,8,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	610,390	115.6	20	11	104	499,390	508,380	0	14	69,380	9	193	14.3	51.8	0.0	0.0	200.6	246.1
117	1,3,4,6,8,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	618,270	117.1	22	11	107	507,260	508,820	0	14	65,450	9	194	11.7	52.3	0.0	0.0	200.6	246.1
118	1,3,4,6,8,19,25,26,27,29,37,38A,45,46,38E,42,44	605,490	114.7	23	11	105	494,490	505,820	0	14	59,730	9	195	11.7	47	71.6	3.4	200.6	242.0
119	1,3,4,6,8,19,25,26,27,29,37,38A,45,47,41B,42,44	608,450	115.2	23	11	107	497,450	508,780	0	14	59,890	11	190	12.5	47.5	141.0	11.6	200.6	250.3
120	1,3,4,6,8,19,25,26,27,29,37,39,41A,41B,42,44	604,180	114.4	21	11	110	493,180	481,820	0	14	61,990	11	188	14.4	48.3	146.5	21.6	200.6	257.6
121	1,3,4,6,8,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	576,190	109.1	16	13	104	386,180	482,150	2	14	63,500	9	206	17	49.3	0.0	0.0	200.6	115.0
122	1,3,4,6,8,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	584,060	110.6	18	13	107	394,050	482,600	2	14	59,570	9	207	14.4	49.8	0.0	0.0	200.6	115.0
123	1,3,4,6,8,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	571,290	108.2	19	13	105	381,280	479,600	2	14	53,860	9	208	14.3	44.5	71.6	3.4	200.6	110.9
124	1,3,4,6,8,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	574,250	108.8	19	13	107	384,240	482,560	2	14	54,020	11	203	15.2	45.1	141.0	11.6	200.6	119.2
125	1,3,4,6,8,19,25,26,27,30,31,36,37,39,41A,41B,42,44	569,980	108	17	13	110	379,970	455,600	2	14	56,110	11	201	17	45.8	146.5	21.6	200.6	126.5
126	1,3,4,6,8,19,25,26,27,30,31,40,41A,41B,42,44	561,450	106.3	16	14	105	356,690	457,150	2	16	54,060	11	202	13.8	40.5	201.4	32.8	200.6	124.9

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
127	1,3,4,6,8,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	592,280	112.2	17	13	101	475,650	498,240	0	16	63,500	11	182	13.9	47.2	0.0	0.0	200.6	139.2
128	1,3,4,6,8,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	600,150	113.7	19	13	104	483,520	498,690	0	16	59,570	11	183	11.3	47.8	0.0	0.0	200.6	139.2
129	1,3,4,6,8,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	587,380	111.2	20	13	102	470,750	495,690	0	16	53,860	11	184	11.3	42.5	71.6	3.4	200.6	135.1
130	1,3,4,6,8,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	590,340	111.8	20	13	104	473,710	498,650	0	16	54,020	13	179	12.1	43	141.0	11.6	200.6	143.4
131	1,3,4,6,8,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	586,070	111	18	13	107	469,440	471,680	0	16	56,110	13	177	14	43.8	146.5	21.6	200.6	150.7
132	1,3,4,6,8,19,25,26,27,30,32,34,40,41A,41B,42,44	577,540	109.4	19	14	102	446,170	473,240	0	18	54,060	13	178	10.8	38.5	201.4	32.8	200.6	149.1
133	1,3,4,6,8,19,25,26,27,30,32,35,43,44	573,160	108.6	17	14	103	471,260	481,120	0	15	20,220	12	179	9.2	37.6	88.3	25.0	200.6	137.5
134	1,3,4,6,8,19,25,26,28,33,43,44	580,070	109.9	16	14	105	436,300	488,030	0	15	20,220	12	197	13.6	43.1	88.3	25.0	200.6	148.7
135	1,3,4,6,9,12,13,17,18,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	561,180	106.3	20	10	100	500,610	523,540	1	10	69,380	10	179	14	53.2	0.0	0.0	60.3	246.1
136	1,3,4,6,9,12,13,17,18,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	569,050	107.8	22	10	103	508,480	523,980	1	10	65,450	10	180	11.4	53.8	0.0	0.0	60.3	246.1
137	1,3,4,6,9,12,13,17,18,19,25,26,27,29,37,38A,45,46,38E,42,44	556,280	105.4	23	10	101	495,710	520,990	1	10	59,730	10	181	11.4	48.5	71.6	3.4	60.3	242.0
138	1,3,4,6,9,12,13,17,18,19,25,26,27,29,37,38A,45,47,41B,42,44	559,240	105.9	23	10	103	498,670	523,940	1	10	59,890	12	176	12.2	49	141.0	11.6	60.3	250.3
139	1,3,4,6,9,12,13,17,18,19,25,26,27,29,37,39,41A,41B,42,44	554,960	105.1	21	10	106	494,400	496,980	1	10	61,990	12	174	14.1	49.7	146.5	21.6	60.3	257.6
140	1,3,4,6,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	526,980	99.8	16	12	100	387,400	497,320	3	10	63,500	10	192	16.7	50.7	0.0	0.0	60.3	115.0
141	1,3,4,6,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	534,850	101.3	18	12	103	395,270	497,760	3	10	59,570	10	193	14.1	51.3	0.0	0.0	60.3	115.0
142	1,3,4,6,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	522,080	98.9	19	12	101	382,500	494,760	3	10	53,860	10	194	14.1	46	71.6	3.4	60.3	110.9
143	1,3,4,6,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	525,040	99.4	19	12	103	385,460	497,720	3	10	54,020	12	189	14.9	46.5	141.0	11.6	60.3	119.2
144	1,3,4,6,9,12,13,17,18,19,25,26,27,30,31,36,37,39,41A,41B,42,44	520,760	98.6	17	12	106	381,190	470,760	3	10	56,110	12	187	16.8	47.3	146.5	21.6	60.3	126.5
145	1,3,4,6,9,12,13,17,18,19,25,26,27,30,31,40,41A,41B,42,44	512,240	97	16	13	101	357,910	472,320	3	12	54,060	12	188	13.6	42	201.4	32.8	60.3	124.9
146	1,3,4,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	543,060	102.9	17	12	97	476,870	513,400	1	12	63,500	12	168	13.6	48.7	0.0	0.0	60.3	139.2
147	1,3,4,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	550,940	104.3	19	12	100	484,750	513,850	1	12	59,570	12	169	11	49.2	0.0	0.0	60.3	139.2
148	1,3,4,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	538,170	101.9	20	12	98	471,980	510,850	1	12	53,860	12	170	11	44	71.6	3.4	60.3	135.1
149	1,3,4,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	541,120	102.5	20	12	100	474,930	513,810	1	12	54,020	14	165	11.8	44.5	141.0	11.6	60.3	143.4
150	1,3,4,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	536,850	101.7	18	12	103	470,660	486,850	1	12	56,110	14	163	13.7	45.2	146.5	21.6	60.3	150.7
151	1,3,4,6,9,12,13,17,18,19,25,26,27,30,32,34,40,41A,41B,42,44	528,330	100.1	19	13	98	447,390	488,400	1	14	54,060	14	164	10.5	39.9	201.4	32.8	60.3	149.1
152	1,3,4,6,9,12,13,17,18,19,25,26,27,30,32,35,43,44	523,950	99.2	17	13	99	472,480	496,280	1	11	20,220	13	165	8.9	39.1	88.3	25.0	60.3	137.5
153	1,3,4,6,9,12,13,17,18,19,25,26,28,33,43,44	530,860	100.5	16	13	101	437,520	503,190	1	11	20,220	13	183	13.3	44.6	88.3	25.0	60.3	148.7
154	1,3,4,6,9,12,13,17,20,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	544,200	103.1	21	10	100	484,170	525,020	1	10	69,380	10	164	14.2	51.8	0.0	0.0	60.3	212.1
155	1,3,4,6,9,12,13,17,20,23,26,27,29,37,38A,38B,48,38D,38E,42,44	552,080	104.6	23	10	103	492,040	525,470	1	10	65,450	10	165	11.6	52.3	0.0	0.0	60.3	212.1
156	1,3,4,6,9,12,13,17,20,23,26,27,29,37,38A,45,46,38E,42,44	539,310	102.1	24	10	101	479,270	522,470	1	10	59,730	10	166	11.6	47.1	71.6	3.4	60.3	208.0
157	1,3,4,6,9,12,13,17,20,23,26,27,29,37,38A,45,47,41B,42,44	542,260	102.7	24	10	103	482,230	525,430	1	10	59,890	12	161	12.4	47.6	141.0	11.6	60.3	216.3
158	1,3,4,6,9,12,13,17,20,23,26,27,29,37,39,41A,41B,42,44	537,990	101.9	22	10	106	477,950	498,470	1	10	61,990	12	159	14.3	48.3	146.5	21.6	60.3	223.6
159	1,3,4,6,9,12,13,17,20,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	510,000	96.6	17	12	100	370,960	498,800	3	10	63,500	10	177	16.9	49.3	0.0	0.0	60.3	81.0
160	1,3,4,6,9,12,13,17,20,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	517,870	98.1	19	12	103	378,830	499,250	3	10	59,570	10	178	14.3	49.9	0.0	0.0	60.3	81.0
161	1,3,4,6,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	505,100	95.7	20	12	101	366,060	496,250	3	10	53,860	10	179	14.3	44.6	71.6	3.4	60.3	76.9
162	1,3,4,6,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,47,41B,42,44	508,060	96.2	20	12	103	369,020	499,210	3	10	54,020	12	174	15.1	45.1	141.0	11.6	60.3	85.2
163	1,3,4,6,9,12,13,17,20,23,26,27,30,31,36,37,39,41A,41B,42,44	503,790	95.4	18	12	106	364,740	472,240	3	10	56,110	12	172	17	45.9	146.5	21.6	60.3	92.5
164	1,3,4,6,9,12,13,17,20,23,26,27,30,31,40,41A,41B,42,44	495,260	93.8	17	13	101	341,470	473,800	3	12	54,060	12	173	13.8	40.6	201.4	32.8	60.3	90.9
165	1,3,4,6,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	526,090	99.6	18	12	97	460,430	514,890	1	12	63,500	12	153	13.8	47.3	0.0	0.0	60.3	105.2
166	1,3,4,6,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	533,960	101.1	20	12	100	468,300	515,330	1	12	59,570	12	154	11.2	47.8	0.0	0.0	60.3	105.2
167	1,3,4,6,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	521,190	98.7	21	12	98	455,530	512,330	1	12	53,860	12	155	11.2	42.5	71.6	3.4	60.3	101.1
168	1,3,4,6,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	524,150	99.3	21	12	100	458,490	515,290	1	12	54,020	14	150	12	43.1	141.0	11.6	60.3	109.4
169	1,3,4,6,9,12,13,17,20,23,26,27,30,32,34,36,37,39,41A,41B,42,44	519,880	98.5	19	12	103	454,220	488,330	1	12	56,110	14	148	13.9	43.8	146.5	21.6	60.3	116.7
170	1,3,4,6,9,12,13,17,20,23,26,27,30,32,34,40,41A,41B,42,44	511,350	96.8	20	13	98	430,940	489,890	1	14	54,060	14	149	10.7	38.5	201.4	32.8	60.3	115.1
171	1,3,4,6,9,12,13,17,20,23,26,27,30,32,35,43,44	506,970	96	18	13	99	456,030	497,770	1	11	20,220	13	150	9.1	37.7	88.3	25.0	60.3	103.5
172	1,3,4,6,9,12,13,17,20,23,26,28,33,43,44	513,880	97.3	17	13	101	421,080	504,680	1	11	20,220	13	168	13.5	43.1	88.3	25.0	60.3	114.7
173	1,3,4,6,9,12,13,17,20,24,27,29,37,38A,38B,38C,38D,38E,42,44	541,430	102.5	18	10	100	483,040	522,250	1	10	69,380	10	164	14.2	51.5	0.0	0.0	60.3	210.8
174	1,3,4,6,9,12,13,17,20,24,27,29,37,38A,38B,48,38D,38E,42,44	549,300	104	20	10	103	490,910	522,690	1	10	65,450	10	165	11.6	52	0.0	0.0	60.3	210.8
175	1,3,4,6,9,12,13,17,20,24,27,29,37,38A,45,46,38E,42,44	536,530	101.6	21	10	101	478,140	519,700	1	10	59,730	10	166	11.6	46.8	71.6	3.4	60.3	206.7
176	1,3,4,6,9,12,13,17,20,24,27,29,37,38A,45,47,41B,42,44	539,490	102.2	21	10	103	481,100	522,650	1	10	59,890	12	161	12.4	47.3	141.0	11.6	60.3	215.0
177	1,3,4,6,9,12,13,17,20,24,27,29,37,39,41A,41B,42,44	535,220	101.4	19	10	106	476,820	495,690	1	10	61,990	12	159	14.3	48	146.5	21.6	60.3	222.3
178	1,3,4,6,9,12,13,17,20,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	507,230	96.1	14	12	100	369,830	496,030	3	10	63,500	10	177	16.9	49	0.0	0.0	60.3	79.7
179	1,3,4,6,9,12,13,17,20,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	515,100	97.6	16	12	103	377,700	496,470	3	10	59,570	10	178	14.3	49.6	0.0	0.0	60.3	79.7
180	1,3,4,6,9,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	502,330	95.1	17	12	101	364,930	493,470	3	10	53,860	10	179	14.3	44.3	71.6	3.4	60.3	75.6
181	1,3,4,6,9,12,13,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	505,290	95.7	17	12	103	367,890	496,430	3	10	54,020	12	174	15.1	44.8	141.0	11.6	60.3	83.9
182	1,3,4,6,9,12,13,17,20,24,27,30,31,36,37,39,41A,41B,42,44	501,020	94.9	15	12	106	363,610	469,470	3	10	56,110	12	172	17	45.6	146.5	21.6	60.3	91.2
183	1,3,4,6,9,12,13,17,20,24,27,30,31,40,41A,41B,42,44	492,490	93.3	14	13	101	340,340	471,030	3	12	54,060	12	173	13.8	40.3	201.4	32.8	60.3	89.6
184	1,3,4,6,9,12,13,17,20,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	523,310	99.1	15	12	97	459,300	512,110	1	12	63,500	12	153	13.8	47	0.0	0.0	60.3	103.9
185	1,3,4,6,9,12,13,17,20,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	531,190	100.6	17	12	100	467,170	512,560	1	12	59,570	12	154	11.2	47.5	0.0	0.0	60.3	103.9
186	1,3,4,6,9,12,13,17,20,24,27,30,32,34,36,37,38A,45,46,38E,42,44	518,420	98.2	18	12	98	454,400	509,560	1	12	53,860	12	155	11.2	42.2	71.6	3.4	60.3	99.8
187	1,3,4,6,9,12,13,17,20,24,27,30,32,34,36,37,38A,45,47,41B,42,44	521,370	98.7	18	12	100	457,360	512,520	1	12	54,020	14	150	12	42.8	141.0	11.6	60.3	108.1
188	1,3,4,6,9,12,13,17,20,24,27,30,32,34,36,37,39,41A,41B,42,44	517,100	97.9	16	12	103	453,090	485,560	1	12	56,110	14	148	13.9	43.5	146.5	21.6	60.3	115.4
189	1,3,4,6,9,12,13,17,20,24,27,30,32,34,40,41A,41B,42,44	508,580	96.3	17	13	98	429,810	487,110	1	14	54,060	14	149	10.7	38.2	201.4	32.8	60.3	113.8

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
190	1,3,4,6,9,12,13,17,20,24,27,30,32,35,43,44	504,200	95.5	15	13	99	454,900	494,990	1	11	20,220	13	150	9.1	37.4	88.3	25.0	60.3	102.2
191	1,3,4,6,9,12,13,17,20,24,28,33,43,44	511,110	96.8	16	13	101	419,940	501,900	1	11	20,220	13	168	13.5	42.8	88.3	25.0	60.3	113.5
192	1,3,4,6,9,12,14,16,21,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	558,540	105.8	21	10	101	528,800	538,780	1	10	69,380	10	167	15.6	52.3	0.0	0.0	60.3	215.1
193	1,3,4,6,9,12,14,16,21,23,26,27,29,37,38A,38B,48,38D,38E,42,44	566,410	107.3	23	10	104	536,680	539,220	1	10	65,450	10	168	13	52.8	0.0	0.0	60.3	215.1
194	1,3,4,6,9,12,14,16,21,23,26,27,29,37,38A,45,46,38E,42,44	553,640	104.9	24	10	102	523,910	536,220	1	10	59,730	10	169	13	47.5	71.6	3.4	60.3	211.0
195	1,3,4,6,9,12,14,16,21,23,26,27,29,37,38A,45,47,41B,42,44	556,600	105.4	24	10	104	526,860	539,180	1	10	59,890	12	164	13.8	48	141.0	11.6	60.3	219.3
196	1,3,4,6,9,12,14,16,21,23,26,27,29,37,39,41A,41B,42,44	552,330	104.6	22	10	107	522,590	512,220	1	10	61,990	12	162	15.7	48.8	146.5	21.6	60.3	226.6
197	1,3,4,6,9,12,14,16,21,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	524,340	99.3	17	12	101	415,590	512,550	3	10	63,500	10	180	18.3	49.8	0.0	0.0	60.3	83.9
198	1,3,4,6,9,12,14,16,21,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	532,210	100.8	19	12	104	423,470	513,000	3	10	59,570	10	181	15.7	50.3	0.0	0.0	60.3	83.9
199	1,3,4,6,9,12,14,16,21,23,26,27,30,31,36,37,38A,45,46,38E,42,44	519,440	98.4	20	12	102	410,700	510,000	3	10	53,860	10	182	15.6	45	71.6	3.4	60.3	79.8
200	1,3,4,6,9,12,14,16,21,23,26,27,30,31,36,37,38A,45,47,41B,42,44	522,400	98.9	20	12	104	413,650	512,960	3	10	54,020	12	177	16.5	45.6	141.0	11.6	60.3	88.2
201	1,3,4,6,9,12,14,16,21,23,26,27,30,31,36,37,39,41A,41B,42,44	518,130	98.1	18	12	107	409,380	486,000	3	10	56,110	12	175	18.3	46.3	146.5	21.6	60.3	95.4
202	1,3,4,6,9,12,14,16,21,23,26,27,30,31,40,41A,41B,42,44	509,600	96.5	17	13	102	386,110	487,550	3	12	54,060	12	176	15.1	41	201.4	32.8	60.3	93.9
203	1,3,4,6,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	540,430	102.4	18	12	98	505,070	528,640	1	12	63,500	12	156	15.2	47.7	0.0	0.0	60.3	108.1
204	1,3,4,6,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	548,300	103.8	20	12	101	512,940	529,080	1	12	59,570	12	157	12.6	48.3	0.0	0.0	60.3	108.1
205	1,3,4,6,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	535,530	101.4	21	12	99	500,170	526,090	1	12	53,860	12	158	12.6	43	71.6	3.4	60.3	104.0
206	1,3,4,6,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	538,490	102	21	12	101	503,130	529,050	1	12	54,020	14	153	13.4	43.5	141.0	11.6	60.3	112.4
207	1,3,4,6,9,12,14,16,21,23,26,27,30,32,34,36,37,39,41A,41B,42,44	534,220	101.2	19	12	104	498,860	502,080	1	12	56,110	14	151	15.3	44.3	146.5	21.6	60.3	119.6
208	1,3,4,6,9,12,14,16,21,23,26,27,30,32,34,40,41A,41B,42,44	525,690	99.6	20	13	99	475,580	503,640	1	14	54,060	14	152	12.1	39	201.4	32.8	60.3	118.1
209	1,3,4,6,9,12,14,16,21,23,26,27,30,32,35,43,44	521,310	98.7	18	13	100	500,670	511,520	1	11	20,220	13	153	10.5	38.1	88.3	25.0	60.3	106.5
210	1,3,4,6,9,12,14,16,21,23,26,28,33,43,44	528,220	100	17	13	102	465,710	518,430	1	11	20,220	13	171	14.9	43.6	88.3	25.0	60.3	117.7
211	1,3,4,6,9,12,14,16,21,24,27,29,37,38A,38B,38C,38D,38E,42,44	555,770	105.3	20	10	101	527,670	536,000	1	10	69,380	10	167	15.6	51.9	0.0	0.0	60.3	213.8
212	1,3,4,6,9,12,14,16,21,24,27,29,37,38A,38B,48,38D,38E,42,44	563,640	106.8	22	10	104	535,550	536,450	1	10	65,450	10	168	13	52.5	0.0	0.0	60.3	213.8
213	1,3,4,6,9,12,14,16,21,24,27,29,37,38A,45,46,38E,42,44	550,870	104.3	23	10	102	522,780	533,450	1	10	59,730	10	169	13	47.2	71.6	3.4	60.3	209.7
214	1,3,4,6,9,12,14,16,21,24,27,29,37,38A,45,47,41B,42,44	553,830	104.9	23	10	104	525,730	536,410	1	10	59,890	12	164	13.8	47.7	141.0	11.6	60.3	218.0
215	1,3,4,6,9,12,14,16,21,24,27,29,37,39,41A,41B,42,44	549,560	104.1	21	10	107	521,460	509,450	1	10	61,990	12	162	15.7	48.5	146.5	21.6	60.3	225.3
216	1,3,4,6,9,12,14,16,21,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	521,570	98.8	16	12	101	414,460	509,780	3	10	63,500	10	180	18.3	49.5	0.0	0.0	60.3	82.6
217	1,3,4,6,9,12,14,16,21,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	529,440	100.3	18	12	104	422,340	510,220	3	10	59,570	10	181	15.7	50	0.0	0.0	60.3	82.6
218	1,3,4,6,9,12,14,16,21,24,27,30,31,36,37,38A,45,46,38E,42,44	516,670	97.9	19	12	102	409,570	507,230	3	10	53,860	10	182	15.6	44.7	71.6	3.4	60.3	78.6
219	1,3,4,6,9,12,14,16,21,24,27,30,31,36,37,38A,45,47,41B,42,44	519,630	98.4	19	12	104	412,520	510,180	3	10	54,020	12	177	16.5	45.3	141.0	11.6	60.3	86.9
220	1,3,4,6,9,12,14,16,21,24,27,30,31,36,37,39,41A,41B,42,44	515,350	97.6	17	12	107	408,250	483,220	3	10	56,110	12	175	18.3	46	146.5	21.6	60.3	94.2
221	1,3,4,6,9,12,14,16,21,24,27,30,31,40,41A,41B,42,44	506,830	96	16	13	102	384,980	484,780	3	12	54,060	12	176	15.1	40.7	201.4	32.8	60.3	92.6
222	1,3,4,6,9,12,14,16,21,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	537,650	101.8	17	12	98	503,940	525,870	1	12	63,500	12	156	15.2	47.4	0.0	0.0	60.3	106.8
223	1,3,4,6,9,12,14,16,21,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	545,530	103.3	19	12	101	511,810	526,310	1	12	59,570	12	157	12.6	48	0.0	0.0	60.3	106.8
224	1,3,4,6,9,12,14,16,21,24,27,30,32,34,36,37,38A,45,46,38E,42,44	532,760	100.9	20	12	99	499,040	523,310	1	12	53,860	12	158	12.6	42.7	71.6	3.4	60.3	102.8
225	1,3,4,6,9,12,14,16,21,24,27,30,32,34,36,37,38A,45,47,41B,42,44	535,710	101.5	20	12	101	502,000	526,270	1	12	54,020	14	153	13.4	43.2	141.0	11.6	60.3	111.1
226	1,3,4,6,9,12,14,16,21,24,27,30,32,34,36,37,39,41A,41B,42,44	531,440	100.7	18	12	104	497,720	499,310	1	12	56,110	14	151	15.3	43.9	146.5	21.6	60.3	118.4
227	1,3,4,6,9,12,14,16,21,24,27,30,32,34,40,41A,41B,42,44	522,920	99	19	13	99	474,450	500,860	1	14	54,060	14	152	12.1	38.7	201.4	32.8	60.3	116.8
228	1,3,4,6,9,12,14,16,21,24,27,30,32,35,43,44	518,540	98.2	17	13	100	499,540	508,750	1	11	20,220	13	153	10.5	37.8	88.3	25.0	60.3	105.2
229	1,3,4,6,9,12,14,16,21,24,28,33,43,44	525,450	99.5	18	13	102	464,580	515,650	1	11	20,220	13	171	14.9	43.3	88.3	25.0	60.3	116.4
230	1,3,4,6,9,12,14,16,22,33,43,44	501,480	95	16	13	104	483,890	491,690	3	11	20,220	11	157	14	42	88.3	25.0	60.3	105.4
231	1,3,4,7,10,12,13,17,18,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	553,970	104.9	18	10	102	493,400	522,070	0	10	69,380	10	172	15.6	54.9	0.0	0.0	28.6	246.1
232	1,3,4,7,10,12,13,17,18,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	561,840	106.4	20	10	105	501,270	522,520	0	10	65,450	10	173	13	55.4	0.0	0.0	28.6	246.1
233	1,3,4,7,10,12,13,17,18,19,25,26,27,29,37,38A,45,46,38E,42,44	549,070	104	21	10	103	488,500	519,520	0	10	59,730	10	174	13	50.1	71.6	3.4	28.6	242.0
234	1,3,4,7,10,12,13,17,18,19,25,26,27,29,37,38A,45,47,41B,42,44	552,030	104.6	21	10	105	491,460	522,480	0	10	59,890	12	169	13.8	50.7	141.0	11.6	28.6	250.3
235	1,3,4,7,10,12,13,17,18,19,25,26,27,29,37,39,41A,41B,42,44	547,760	103.7	19	10	108	487,190	495,510	0	10	61,990	12	167	15.7	51.4	146.5	21.6	28.6	257.6
236	1,3,4,7,10,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	519,770	98.4	14	12	102	380,190	495,850	2	10	63,500	10	185	18.3	52.4	0.0	0.0	28.6	115.0
237	1,3,4,7,10,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	527,640	99.9	16	12	105	388,060	496,290	2	10	59,570	10	186	15.7	52.9	0.0	0.0	28.6	115.0
238	1,3,4,7,10,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	514,870	97.5	17	12	103	375,290	493,300	2	10	53,860	10	187	15.7	47.7	71.6	3.4	28.6	110.9
239	1,3,4,7,10,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	517,830	98.1	17	12	105	378,250	496,250	2	10	54,020	12	182	16.5	48.2	141.0	11.6	28.6	119.2
240	1,3,4,7,10,12,13,17,18,19,25,26,27,30,31,36,37,39,41A,41B,42,44	513,560	97.3	15	12	108	373,980	469,290	2	10	56,110	12	180	18.4	48.9	146.5	21.6	28.6	126.5
241	1,3,4,7,10,12,13,17,18,19,25,26,27,30,31,40,41A,41B,42,44	505,030	95.6	14	13	103	350,710	470,850	2	12	54,060	12	181	15.2	43.6	201.4	32.8	28.6	124.9
242	1,3,4,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	535,850	101.5	15	12	99	469,660	511,930	0	12	63,500	12	161	15.3	50.3	0.0	0.0	28.6	139.2
243	1,3,4,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	543,730	103	17	12	102	477,540	512,380	0	12	59,570	12	162	12.7	50.9	0.0	0.0	28.6	139.2
244	1,3,4,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	530,960	100.6	18	12	100	464,770	509,380	0	12	53,860	12	163	12.6	45.6	71.6	3.4	28.6	135.1
245	1,3,4,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	533,920	101.1	18	12	102	467,730	512,340	0	12	54,020	14	158	13.5	46.1	141.0	11.6	28.6	143.4
246	1,3,4,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	529,640	100.3	16	12	105	463,450	485,380	0	12	56,110	14	156	15.3	46.9	146.5	21.6	28.6	150.7
247	1,3,4,7,10,12,13,17,18,19,25,26,27,30,32,34,40,41A,41B,42,44	521,120	98.7	17	13	100	440,180	486,930	0	14	54,060	14	157	12.1	41.6	201.4	32.8	28.6	149.1
248	1,3,4,7,10,12,13,17,18,19,25,26,27,30,32,35,43,44	516,740	97.9	15	13	101	465,270	494,810	0	11	20,220	13	158	10.6	40.7	88.3	25.0	28.6	137.5
249	1,3,4,7,10,12,13,17,18,19,25,26,28,33,43,44	523,650	99.2	14	13	103	430,310	501,720	0	11	20,220	13	176	15	46.2	88.3	25.0	28.6	148.7
250	1,3,4,7,10,12,13,17,20,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	536,990	101.7	19	10	102	476,960	523,550	0	10	69,380	10	157	15.9	53.5	0.0	0.0	28.6	212.1
251	1,3,4,7,10,12,13,17,20,23,26,27,29,37,38A,38B,48,38D,38E,42,44	544,870	103.2	21	10	105	484,830	524,000	0	10	65,450	10	158	13.3	54	0.0	0.0	28.6	212.1
252	1,3,4,7,10,12,13,17,20,23,26,27,29,37,38A,45,46,38E,42,44	532,100	100.8	22	10	103	472,060	521,000	0	10	59,730	10	159	13.2	48.7	71.6	3.4	28.6	208.0

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
253	1,3,4,7,10,12,13,17,20,23,26,27,29,37,38A,45,47,41B,42,44	535,050	101.3	22	10	105	475,020	523,960	0	10	59,890	12	154	14.1	49.2	141.0	11.6	28.6	216.3
254	1,3,4,7,10,12,13,17,20,23,26,27,29,37,39,41A,41B,42,44	530,780	100.5	20	10	108	470,750	497,000	0	10	61,990	12	152	15.9	50	146.5	21.6	28.6	223.6
255	1,3,4,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	502,790	95.2	15	12	102	363,750	497,330	2	10	63,500	10	170	18.5	51	0.0	0.0	28.6	81.0
256	1,3,4,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	510,670	96.7	17	12	105	371,620	497,780	2	10	59,570	10	171	15.9	51.5	0.0	0.0	28.6	81.0
257	1,3,4,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	497,900	94.3	18	12	103	358,850	494,780	2	10	53,860	10	172	15.9	46.2	71.6	3.4	28.6	76.9
258	1,3,4,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,45,47,41B,42,44	500,850	94.9	18	12	105	361,810	497,740	2	10	54,020	12	167	16.7	46.8	141.0	11.6	28.6	85.2
259	1,3,4,7,10,12,13,17,20,23,26,27,30,31,36,37,39,41A,41B,42,44	496,580	94	16	12	108	357,540	470,770	2	10	56,110	12	165	18.6	47.5	146.5	21.6	28.6	92.5
260	1,3,4,7,10,12,13,17,20,23,26,27,30,31,40,41A,41B,42,44	488,060	92.4	15	13	103	334,260	472,330	2	12	54,060	12	166	15.4	42.2	201.4	32.8	28.6	90.9
261	1,3,4,7,10,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	518,880	98.3	16	12	99	453,220	513,420	0	12	63,500	12	146	15.5	48.9	0.0	0.0	28.6	105.2
262	1,3,4,7,10,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	526,750	99.8	18	12	102	461,100	513,860	0	12	59,570	12	147	12.9	49.5	0.0	0.0	28.6	105.2
263	1,3,4,7,10,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	513,980	97.3	19	12	100	448,320	510,870	0	12	53,860	12	148	12.8	44.2	71.6	3.4	28.6	101.1
264	1,3,4,7,10,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	516,940	97.9	19	12	102	451,280	513,820	0	12	54,020	14	143	13.7	44.7	141.0	11.6	28.6	109.4
265	1,3,4,7,10,12,13,17,20,23,26,27,30,32,34,36,37,39,41A,41B,42,44	512,670	97.1	17	12	105	447,010	486,860	0	12	56,110	14	141	15.6	45.5	146.5	21.6	28.6	116.7
266	1,3,4,7,10,12,13,17,20,23,26,27,30,32,34,40,41A,41B,42,44	504,140	95.5	18	13	100	423,740	488,420	0	14	54,060	14	142	12.4	40.2	201.4	32.8	28.6	115.1
267	1,3,4,7,10,12,13,17,20,23,26,27,30,32,35,43,44	499,770	94.7	16	13	101	448,830	496,300	0	11	20,220	13	143	10.8	39.3	88.3	25.0	28.6	103.5
268	1,3,4,7,10,12,13,17,20,23,26,28,33,43,44	506,670	96	15	13	103	413,870	503,210	0	11	20,220	13	161	15.2	44.8	88.3	25.0	28.6	114.7
269	1,3,4,7,10,12,13,17,20,24,27,29,37,38A,38B,38C,38D,38E,42,44	534,220	101.2	16	10	102	475,830	520,780	0	10	69,380	10	157	15.9	53.2	0.0	0.0	28.6	210.8
270	1,3,4,7,10,12,13,17,20,24,27,29,37,38A,38B,48,38D,38E,42,44	542,090	102.7	18	10	105	483,700	521,220	0	10	65,450	10	158	13.3	53.7	0.0	0.0	28.6	210.8
271	1,3,4,7,10,12,13,17,20,24,27,29,37,38A,45,46,38E,42,44	529,320	100.3	19	10	103	470,930	518,230	0	10	59,730	10	159	13.2	48.4	71.6	3.4	28.6	206.7
272	1,3,4,7,10,12,13,17,20,24,27,29,37,38A,45,47,41B,42,44	532,280	100.8	19	10	105	473,890	521,180	0	10	59,890	12	154	14.1	48.9	141.0	11.6	28.6	215.0
273	1,3,4,7,10,12,13,17,20,24,27,29,37,39,41A,41B,42,44	528,010	100	17	10	108	469,620	494,220	0	10	61,990	12	152	15.9	49.7	146.5	21.6	28.6	222.3
274	1,3,4,7,10,12,13,17,20,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	500,020	94.7	12	12	102	362,620	494,560	2	10	63,500	10	170	18.5	50.7	0.0	0.0	28.6	79.7
275	1,3,4,7,10,12,13,17,20,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	507,890	96.2	14	12	105	370,490	495,000	2	10	59,570	10	171	15.9	51.2	0.0	0.0	28.6	79.7
276	1,3,4,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	495,120	93.8	15	12	103	357,720	492,000	2	10	53,860	10	172	15.9	45.9	71.6	3.4	28.6	75.6
277	1,3,4,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	498,080	94.3	15	12	105	360,680	494,960	2	10	54,020	12	167	16.7	46.5	141.0	11.6	28.6	83.9
278	1,3,4,7,10,12,13,17,20,24,27,30,31,36,37,39,41A,41B,42,44	493,810	93.5	13	12	108	356,410	468,000	2	10	56,110	12	165	18.6	47.2	146.5	21.6	28.6	91.2
279	1,3,4,7,10,12,13,17,20,24,27,30,31,40,41A,41B,42,44	485,280	91.9	12	13	103	333,130	469,560	2	12	54,060	12	166	15.4	41.9	201.4	32.8	28.6	89.6
280	1,3,4,7,10,12,13,17,20,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	516,110	97.7	13	12	99	452,090	510,640	0	12	63,500	12	146	15.5	48.6	0.0	0.0	28.6	103.9
281	1,3,4,7,10,12,13,17,20,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	523,980	99.2	15	12	102	459,960	511,090	0	12	59,570	12	147	12.9	49.2	0.0	0.0	28.6	103.9
282	1,3,4,7,10,12,13,17,20,24,27,30,32,34,36,37,38A,45,46,38E,42,44	511,210	96.8	16	12	100	447,190	508,090	0	12	53,860	12	148	12.8	43.9	71.6	3.4	28.6	99.8
283	1,3,4,7,10,12,13,17,20,24,27,30,32,34,36,37,38A,45,47,41B,42,44	514,170	97.4	16	12	102	450,150	511,050	0	12	54,020	14	143	13.7	44.4	141.0	11.6	28.6	108.1
284	1,3,4,7,10,12,13,17,20,24,27,30,32,34,36,37,39,41A,41B,42,44	509,890	96.6	14	12	105	445,880	484,090	0	12	56,110	14	141	15.6	45.2	146.5	21.6	28.6	115.4
285	1,3,4,7,10,12,13,17,20,24,27,30,32,34,40,41A,41B,42,44	501,370	95	15	13	100	422,610	485,640	0	14	54,060	14	142	12.4	39.9	201.4	32.8	28.6	113.8
286	1,3,4,7,10,12,13,17,20,24,27,30,32,35,43,44	496,990	94.1	13	13	101	447,700	493,520	0	11	20,220	13	143	10.8	39	88.3	25.0	28.6	102.2
287	1,3,4,7,10,12,13,17,20,24,28,33,43,44	503,900	95.4	14	13	103	412,740	500,430	0	11	20,220	13	161	15.2	44.5	88.3	25.0	28.6	113.5
288	1,3,4,7,10,12,14,16,21,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	551,330	104.4	19	10	103	521,600	537,310	0	10	69,380	10	160	17.2	53.9	0.0	0.0	28.6	215.1
289	1,3,4,7,10,12,14,16,21,23,26,27,29,37,38A,38B,48,38D,38E,42,44	559,210	105.9	21	10	106	529,470	537,750	0	10	65,450	10	161	14.6	54.4	0.0	0.0	28.6	215.1
290	1,3,4,7,10,12,14,16,21,23,26,27,29,37,38A,45,46,38E,42,44	546,440	103.5	22	10	104	516,700	534,750	0	10	59,730	10	162	14.6	49.2	71.6	3.4	28.6	211.0
291	1,3,4,7,10,12,14,16,21,23,26,27,29,37,38A,45,47,41B,42,44	549,390	104.1	22	10	106	519,660	537,710	0	10	59,890	12	157	15.4	49.7	141.0	11.6	28.6	219.3
292	1,3,4,7,10,12,14,16,21,23,26,27,29,37,39,41A,41B,42,44	545,120	103.2	20	10	109	515,380	510,750	0	10	61,990	12	155	17.3	50.4	146.5	21.6	28.6	226.6
293	1,3,4,7,10,12,14,16,21,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	517,130	97.9	15	12	103	408,390	511,080	2	10	63,500	10	173	19.9	51.4	0.0	0.0	28.6	83.9
294	1,3,4,7,10,12,14,16,21,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	525,010	99.4	17	12	106	416,260	511,530	2	10	59,570	10	174	17.3	52	0.0	0.0	28.6	83.9
295	1,3,4,7,10,12,14,16,21,23,26,27,30,31,36,37,38A,45,46,38E,42,44	512,240	97	18	12	104	403,490	508,530	2	10	53,860	10	175	17.3	46.7	71.6	3.4	28.6	79.8
296	1,3,4,7,10,12,14,16,21,23,26,27,30,31,36,37,38A,45,47,41B,42,44	515,190	97.6	18	12	106	406,450	511,490	2	10	54,020	12	170	18.1	47.2	141.0	11.6	28.6	88.2
297	1,3,4,7,10,12,14,16,21,23,26,27,30,31,36,37,39,41A,41B,42,44	510,920	96.8	16	12	109	402,170	484,530	2	10	56,110	12	168	20	47.9	146.5	21.6	28.6	95.4
298	1,3,4,7,10,12,14,16,21,23,26,27,30,31,40,41A,41B,42,44	502,400	95.2	15	13	104	378,900	486,080	2	12	54,060	12	169	16.8	42.7	201.4	32.8	28.6	93.9
299	1,3,4,7,10,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	533,220	101	16	12	100	497,860	527,170	0	12	63,500	12	149	16.8	49.4	0.0	0.0	28.6	108.1
300	1,3,4,7,10,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	541,090	102.5	18	12	103	505,730	527,620	0	12	59,570	12	150	14.2	49.9	0.0	0.0	28.6	108.1
301	1,3,4,7,10,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	528,320	100.1	19	12	101	492,960	524,620	0	12	53,860	12	151	14.2	44.6	71.6	3.4	28.6	104.0
302	1,3,4,7,10,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	531,280	100.6	19	12	103	495,920	527,580	0	12	54,020	14	146	15	45.2	141.0	11.6	28.6	112.4
303	1,3,4,7,10,12,14,16,21,23,26,27,30,32,34,36,37,39,41A,41B,42,44	527,010	99.8	17	12	106	491,650	500,610	0	12	56,110	14	144	16.9	45.9	146.5	21.6	28.6	119.6
304	1,3,4,7,10,12,14,16,21,23,26,27,30,32,34,40,41A,41B,42,44	518,480	98.2	18	13	101	468,370	502,170	0	14	54,060	14	145	13.7	40.6	201.4	32.8	28.6	118.1
305	1,3,4,7,10,12,14,16,21,23,26,27,30,32,35,43,44	514,100	97.4	16	13	102	493,460	510,050	0	11	20,220	13	146	12.1	39.7	88.3	25.0	28.6	106.5
306	1,3,4,7,10,12,14,16,21,23,26,28,33,43,44	521,010	98.7	15	13	104	458,510	516,960	0	11	20,220	13	164	16.6	45.2	88.3	25.0	28.6	117.7
307	1,3,4,7,10,12,14,16,21,24,27,29,37,38A,38B,38C,38D,38E,42,44	548,560	103.9	18	10	103	520,470	534,530	0	10	69,380	10	160	17.2	53.6	0.0	0.0	28.6	213.8
308	1,3,4,7,10,12,14,16,21,24,27,29,37,38A,38B,48,38D,38E,42,44	556,430	105.4	20	10	106	528,340	534,980	0	10	65,450	10	161	14.6	54.1	0.0	0.0	28.6	213.8
309	1,3,4,7,10,12,14,16,21,24,27,29,37,38A,45,46,38E,42,44	543,660	103	21	10	104	515,570	531,980	0	10	59,730	10	162	14.6	48.9	71.6	3.4	28.6	209.7
310	1,3,4,7,10,12,14,16,21,24,27,29,37,38A,45,47,41B,42,44	546,620	103.5	21	10	106	518,530	534,940	0	10	59,890	12	157	15.4	49.4	141.0	11.6	28.6	218.0
311	1,3,4,7,10,12,14,16,21,24,27,29,37,39,41A,41B,42,44	542,350	102.7	19	10	109	514,250	507,980	0	10	61,990	12	155	17.3	50.1	146.5	21.6	28.6	225.3
312	1,3,4,7,10,12,14,16,21,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	514,360	97.4	14	12	103	407,260	508,310	2	10	63,500	10	173	19.9	51.1	0.0	0.0	28.6	82.6
313	1,3,4,7,10,12,14,16,21,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	522,230	98.9	16	12	106	415,130	508,750	2	10	59,570	10	174	17.3	51.6	0.0	0.0	28.6	82.6
314	1,3,4,7,10,12,14,16,21,24,27,30,31,36,37,38A,45,46,38E,42,44	509,460	96.5	17	12	104	402,360	505,760	2	10	53,860	10	175	17.3	46.4	71.6	3.4	28.6	78.6
315	1,3,4,7,10,12,14,16,21,24,27,30,31,36,37,38A,45,47,41B,42,44	512,420	97	17	12	106	405,320	508,720	2	10	54,020	12	170	18.1	46.9	141.0	11.6	28.6	86.9

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
316	1,3,4,7,10,12,14,16,21,24,27,30,31,36,37,39,41A,41B,42,44	508,150	96.2	15	12	109	401,040	481,750	2	10	56,110	12	168	20	47.6	146.5	21.6	28.6	94.2
317	1,3,4,7,10,12,14,16,21,24,27,30,31,40,41A,41B,42,44	499,620	94.6	14	13	104	377,770	483,310	2	12	54,060	12	169	16.8	42.3	201.4	32.8	28.6	92.6
318	1,3,4,7,10,12,14,16,21,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	530,450	100.5	15	12	100	496,730	524,400	0	12	63,500	12	149	16.8	49.1	0.0	0.0	28.6	106.8
319	1,3,4,7,10,12,14,16,21,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	538,320	102	17	12	103	504,600	524,840	0	12	59,570	12	150	14.2	49.6	0.0	0.0	28.6	106.8
320	1,3,4,7,10,12,14,16,21,24,27,30,32,34,36,37,38A,45,46,38E,42,44	525,550	99.5	18	12	101	491,830	521,840	0	12	53,860	12	151	14.2	44.3	71.6	3.4	28.6	102.8
321	1,3,4,7,10,12,14,16,21,24,27,30,32,34,36,37,38A,45,47,41B,42,44	528,510	100.1	18	12	103	494,790	524,800	0	12	54,020	14	146	15	44.9	141.0	11.6	28.6	111.1
322	1,3,4,7,10,12,14,16,21,24,27,30,32,34,36,37,39,41A,41B,42,44	524,230	99.3	16	12	106	490,520	497,840	0	12	56,110	14	144	16.9	45.6	146.5	21.6	28.6	118.4
323	1,3,4,7,10,12,14,16,21,24,27,30,32,34,40,41A,41B,42,44	515,710	97.7	17	13	101	467,240	499,400	0	14	54,060	14	145	13.7	40.3	201.4	32.8	28.6	116.8
324	1,3,4,7,10,12,14,16,21,24,27,30,32,35,43,44	511,330	96.8	15	13	102	492,330	507,280	0	11	20,220	13	146	12.1	39.4	88.3	25.0	28.6	105.2
325	1,3,4,7,10,12,14,16,21,24,28,33,43,44	518,240	98.2	16	13	104	457,370	514,180	0	11	20,220	13	164	16.6	44.9	88.3	25.0	28.6	116.4
326	1,3,4,7,10,12,14,16,22,33,43,44	494,270	93.6	14	13	106	476,680	490,220	2	11	20,220	11	150	15.7	43.7	88.3	25.0	28.6	105.4
327	1,3,4,7,11,15,17,18,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	559,390	105.9	20	10	103	498,820	527,490	0	11	69,380	10	171	13.8	52.4	0.0	0.0	26.2	246.1
328	1,3,4,7,11,15,17,18,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	567,260	107.4	22	10	106	506,700	527,940	0	11	65,450	10	172	11.2	52.9	0.0	0.0	26.2	246.1
329	1,3,4,7,11,15,17,18,19,25,26,27,29,37,38A,45,46,38E,42,44	554,490	105	23	10	104	493,930	524,940	0	11	59,730	10	173	11.2	47.7	71.6	3.4	26.2	242.0
330	1,3,4,7,11,15,17,18,19,25,26,27,29,37,38A,45,47,41B,42,44	557,450	105.6	23	10	106	496,880	527,900	0	11	59,890	12	168	12	48.2	141.0	11.6	26.2	250.3
331	1,3,4,7,11,15,17,18,19,25,26,27,29,37,39,41A,41B,42,44	553,180	104.8	21	10	109	492,610	500,940	0	11	61,990	12	166	13.9	48.9	146.5	21.6	26.2	257.6
332	1,3,4,7,11,15,17,18,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	525,190	99.5	16	12	103	385,610	501,270	2	11	63,500	10	184	16.5	49.9	0.0	0.0	26.2	115.0
333	1,3,4,7,11,15,17,18,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	533,060	101	18	12	106	393,490	501,710	2	11	59,570	10	185	13.9	50.5	0.0	0.0	26.2	115.0
334	1,3,4,7,11,15,17,18,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	520,290	98.5	19	12	104	380,720	498,720	2	11	53,860	10	186	13.9	45.2	71.6	3.4	26.2	110.9
335	1,3,4,7,11,15,17,18,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	523,250	99.1	19	12	106	383,670	501,670	2	11	54,020	12	181	14.7	45.7	141.0	11.6	26.2	119.2
336	1,3,4,7,11,15,17,18,19,25,26,27,30,31,36,37,39,41A,41B,42,44	518,980	98.3	17	12	109	379,400	474,710	2	11	56,110	12	179	16.6	46.5	146.5	21.6	26.2	126.5
337	1,3,4,7,11,15,17,18,19,25,26,27,30,31,40,41A,41B,42,44	510,450	96.7	16	13	104	356,130	476,270	2	13	54,060	12	180	13.4	41.2	201.4	32.8	26.2	124.9
338	1,3,4,7,11,15,17,18,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	541,280	102.5	17	12	100	475,090	517,360	0	13	63,500	12	160	13.5	47.9	0.0	0.0	26.2	139.2
339	1,3,4,7,11,15,17,18,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	549,150	104	19	12	103	482,960	517,800	0	13	59,570	12	161	10.9	48.4	0.0	0.0	26.2	139.2
340	1,3,4,7,11,15,17,18,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	536,380	101.6	20	12	101	470,190	514,800	0	13	53,860	12	162	10.8	43.1	71.6	3.4	26.2	135.1
341	1,3,4,7,11,15,17,18,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	539,340	102.1	20	12	103	473,150	517,760	0	13	54,020	14	157	11.7	43.7	141.0	11.6	26.2	143.4
342	1,3,4,7,11,15,17,18,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	535,070	101.3	18	12	106	468,880	490,800	0	13	56,110	14	155	13.5	44.4	146.5	21.6	26.2	150.7
343	1,3,4,7,11,15,17,18,19,25,26,27,30,32,34,40,41A,41B,42,44	526,540	99.7	19	13	101	445,600	492,360	0	15	54,060	14	156	10.3	39.1	201.4	32.8	26.2	149.1
344	1,3,4,7,11,15,17,18,19,25,26,27,30,32,35,43,44	522,160	98.9	17	13	102	470,690	500,240	0	12	20,220	13	157	8.8	38.2	88.3	25.0	26.2	137.5
345	1,3,4,7,11,15,17,18,19,25,26,28,33,43,44	529,070	100.2	16	13	104	435,730	507,140	0	12	20,220	13	175	13.2	43.7	88.3	25.0	26.2	148.7
346	1,3,4,7,11,15,17,20,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	542,420	102.7	21	10	103	482,380	528,980	0	11	69,380	10	156	14.1	51	0.0	0.0	26.2	212.1
347	1,3,4,7,11,15,17,20,23,26,27,29,37,38A,38B,48,38D,38E,42,44	550,290	104.2	23	10	106	490,250	529,420	0	11	65,450	10	157	11.5	51.5	0.0	0.0	26.2	212.1
348	1,3,4,7,11,15,17,20,23,26,27,29,37,38A,45,46,38E,42,44	537,520	101.8	24	10	104	477,480	526,420	0	11	59,730	10	158	11.4	46.2	71.6	3.4	26.2	208.0
349	1,3,4,7,11,15,17,20,23,26,27,29,37,38A,45,47,41B,42,44	540,480	102.4	24	10	106	480,440	529,380	0	11	59,890	12	153	12.3	46.8	141.0	11.6	26.2	216.3
350	1,3,4,7,11,15,17,20,23,26,27,29,37,39,41A,41B,42,44	536,200	101.6	22	10	109	476,170	502,420	0	11	61,990	12	151	14.1	47.5	146.5	21.6	26.2	223.6
351	1,3,4,7,11,15,17,20,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	508,220	96.3	17	12	103	369,170	502,750	2	11	63,500	10	169	16.7	48.5	0.0	0.0	26.2	81.0
352	1,3,4,7,11,15,17,20,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	516,090	97.7	19	12	106	377,040	503,200	2	11	59,570	10	170	14.1	49	0.0	0.0	26.2	81.0
353	1,3,4,7,11,15,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	503,320	95.3	20	12	104	364,270	500,200	2	11	53,860	10	171	14.1	43.8	71.6	3.4	26.2	76.9
354	1,3,4,7,11,15,17,20,23,26,27,30,31,36,37,38A,45,47,41B,42,44	506,280	95.9	20	12	106	367,230	503,160	2	11	54,020	12	166	14.9	44.3	141.0	11.6	26.2	85.2
355	1,3,4,7,11,15,17,20,23,26,27,30,31,36,37,39,41A,41B,42,44	502,000	95.1	18	12	109	362,960	476,200	2	11	56,110	12	164	16.8	45	146.5	21.6	26.2	92.5
356	1,3,4,7,11,15,17,20,23,26,27,30,31,40,41A,41B,42,44	493,480	93.5	17	13	104	339,690	477,750	2	13	54,060	12	165	13.6	39.7	201.4	32.8	26.2	90.9
357	1,3,4,7,11,15,17,20,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	524,300	99.3	18	12	100	458,640	518,840	0	13	63,500	12	145	13.7	46.5	0.0	0.0	26.2	105.2
358	1,3,4,7,11,15,17,20,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	532,180	100.8	20	12	103	466,520	519,280	0	13	59,570	12	146	11.1	47	0.0	0.0	26.2	105.2
359	1,3,4,7,11,15,17,20,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	519,410	98.4	21	12	101	453,750	516,290	0	13	53,860	12	147	11	41.7	71.6	3.4	26.2	101.1
360	1,3,4,7,11,15,17,20,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	522,360	98.9	21	12	103	456,700	519,240	0	13	54,020	14	142	11.9	42.3	141.0	11.6	26.2	109.4
361	1,3,4,7,11,15,17,20,23,26,27,30,32,34,36,37,39,41A,41B,42,44	518,090	98.1	19	12	106	452,430	492,280	0	13	56,110	14	140	13.8	43	146.5	21.6	26.2	116.7
362	1,3,4,7,11,15,17,20,23,26,27,30,32,34,40,41A,41B,42,44	509,570	96.5	20	13	101	429,160	493,840	0	15	54,060	14	141	10.6	37.7	201.4	32.8	26.2	115.1
363	1,3,4,7,11,15,17,20,23,26,27,30,32,35,43,44	505,190	95.7	18	13	102	454,250	501,720	0	12	20,220	13	142	9	36.8	88.3	25.0	26.2	103.5
364	1,3,4,7,11,15,17,20,23,26,28,33,43,44	512,100	97	17	13	104	419,290	508,630	0	12	20,220	13	160	13.4	42.3	88.3	25.0	26.2	114.7
365	1,3,4,7,11,15,17,20,24,27,29,37,38A,38B,38C,38D,38E,42,44	539,640	102.2	18	10	103	481,250	526,200	0	11	69,380	10	156	14.1	50.7	0.0	0.0	26.2	210.8
366	1,3,4,7,11,15,17,20,24,27,29,37,38A,38B,48,38D,38E,42,44	547,520	103.7	20	10	106	489,120	526,650	0	11	65,450	10	157	11.5	51.2	0.0	0.0	26.2	210.8
367	1,3,4,7,11,15,17,20,24,27,29,37,38A,45,46,38E,42,44	534,750	101.3	21	10	104	476,350	523,650	0	11	59,730	10	158	11.4	45.9	71.6	3.4	26.2	206.7
368	1,3,4,7,11,15,17,20,24,27,29,37,38A,45,47,41B,42,44	537,700	101.8	21	10	106	479,310	526,610	0	11	59,890	12	153	12.3	46.5	141.0	11.6	26.2	215.0
369	1,3,4,7,11,15,17,20,24,27,29,37,39,41A,41B,42,44	533,430	101	19	10	109	475,040	499,650	0	11	61,990	12	151	14.1	47.2	146.5	21.6	26.2	222.3
370	1,3,4,7,11,15,17,20,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	505,440	95.7	14	12	103	368,040	499,980	2	11	63,500	10	169	16.7	48.2	0.0	0.0	26.2	79.7
371	1,3,4,7,11,15,17,20,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	513,310	97.2	16	12	106	375,910	500,420	2	11	59,570	10	170	14.1	48.7	0.0	0.0	26.2	79.7
372	1,3,4,7,11,15,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	500,540	94.8	17	12	104	363,140	497,430	2	11	53,860	10	171	14.1	43.5	71.6	3.4	26.2	75.6
373	1,3,4,7,11,15,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	503,500	95.4	17	12	106	366,100	500,380	2	11	54,020	12	166	14.9	44	141.0	11.6	26.2	83.9
374	1,3,4,7,11,15,17,20,24,27,30,31,36,37,39,41A,41B,42,44	499,230	94.6	15	12	109	361,830	473,420	2	11	56,110	12	164	16.8	44.7	146.5	21.6	26.2	91.2
375	1,3,4,7,11,15,17,20,24,27,30,31,40,41A,41B,42,44	490,700	92.9	14	13	104	338,550	474,980	2	13	54,060	12	165	13.6	39.4	201.4	32.8	26.2	89.6
376	1,3,4,7,11,15,17,20,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	521,530	98.8	15	12	100	457,510	516,070	0	13	63,500	12	145	13.7	46.2	0.0	0.0	26.2	103.9
377	1,3,4,7,11,15,17,20,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	529,400	100.3	17	12	103	465,390	516,510	0	13	59,570	12	146	11.1	46.7	0.0	0.0	26.2	103.9
378	1,3,4,7,11,15,17,20,24,27,30,32,34,36,37,38A,45,46,38E,42,44	516,630	97.8	18	12	101	452,620	513,510	0	13	53,860	12	147	11	41.4	71.6	3.4	26.2	99.8

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
379	1,3,4,7,11,15,17,20,24,27,30,32,34,36,37,38A,45,47,41B,42,44	519,590	98.4	18	12	103	455,570	516,470	0	13	54,020	14	142	11.9	42	141.0	11.6	26.2	108.1
380	1,3,4,7,11,15,17,20,24,27,30,32,34,36,37,39,41A,41B,42,44	515,320	97.6	16	12	106	451,300	489,510	0	13	56,110	14	140	13.8	42.7	146.5	21.6	26.2	115.4
381	1,3,4,7,11,15,17,20,24,27,30,32,34,40,41A,41B,42,44	506,790	96	17	13	101	428,030	491,060	0	15	54,060	14	141	10.6	37.4	201.4	32.8	26.2	113.8
382	1,3,4,7,11,15,17,20,24,27,30,32,35,43,44	502,410	95.2	15	13	102	453,120	498,950	0	12	20,220	13	142	9	36.5	88.3	25.0	26.2	102.2
383	1,3,4,7,11,15,17,20,24,28,33,43,44	509,320	96.5	16	13	104	418,160	505,850	0	12	20,220	13	160	13.4	42	88.3	25.0	26.2	113.5
384	1,3,4,7,11,16,21,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	554,500	105	20	10	104	524,760	544,170	0	11	69,380	10	158	15.4	51.2	0.0	0.0	26.2	215.1
385	1,3,4,7,11,16,21,23,26,27,29,37,38A,38B,48,38D,38E,42,44	562,370	106.5	22	10	107	532,630	544,620	0	11	65,450	10	159	12.8	51.8	0.0	0.0	26.2	215.1
386	1,3,4,7,11,16,21,23,26,27,29,37,38A,45,46,38E,42,44	549,600	104.1	23	10	105	519,860	541,620	0	11	59,730	10	160	12.8	46.5	71.6	3.4	26.2	211.0
387	1,3,4,7,11,16,21,23,26,27,29,37,38A,45,47,41B,42,44	552,560	104.7	23	10	107	522,820	544,580	0	11	59,890	12	155	13.6	47	141.0	11.6	26.2	219.3
388	1,3,4,7,11,16,21,23,26,27,29,37,39,41A,41B,42,44	548,290	103.8	21	10	110	518,550	517,620	0	11	61,990	12	153	15.5	47.7	146.5	21.6	26.2	226.6
389	1,3,4,7,11,16,21,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	520,300	98.5	16	12	104	411,550	517,950	2	11	63,500	10	171	18.1	48.7	0.0	0.0	26.2	83.9
390	1,3,4,7,11,16,21,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	528,170	100	18	12	107	419,420	518,400	2	11	59,570	10	172	15.5	49.3	0.0	0.0	26.2	83.9
391	1,3,4,7,11,16,21,23,26,27,30,31,36,37,38A,45,46,38E,42,44	515,400	97.6	19	12	105	406,650	515,400	2	11	53,860	10	173	15.5	44	71.6	3.4	26.2	79.8
392	1,3,4,7,11,16,21,23,26,27,30,31,36,37,38A,45,47,41B,42,44	518,360	98.2	19	12	107	409,610	518,360	2	11	54,020	12	168	16.3	44.5	141.0	11.6	26.2	88.2
393	1,3,4,7,11,16,21,23,26,27,30,31,36,37,39,41A,41B,42,44	514,080	97.4	17	12	110	405,340	491,400	2	11	56,110	12	166	18.2	45.3	146.5	21.6	26.2	95.4
394	1,3,4,7,11,16,21,23,26,27,30,31,40,41A,41B,42,44	505,560	95.7	16	13	105	382,060	492,950	2	13	54,060	12	167	15	40	201.4	32.8	26.2	93.9
395	1,3,4,7,11,16,21,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	536,380	101.6	17	12	101	501,020	534,040	0	13	63,500	12	147	15	46.7	0.0	0.0	26.2	108.1
396	1,3,4,7,11,16,21,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	544,260	103.1	19	12	104	508,900	534,480	0	13	59,570	12	148	12.4	47.2	0.0	0.0	26.2	108.1
397	1,3,4,7,11,16,21,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	531,490	100.7	20	12	102	496,130	531,490	0	13	53,860	12	149	12.4	42	71.6	3.4	26.2	104.0
398	1,3,4,7,11,16,21,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	534,440	101.2	20	12	104	499,080	534,440	0	13	54,020	14	144	13.3	42.5	141.0	11.6	26.2	112.4
399	1,3,4,7,11,16,21,23,26,27,30,32,34,36,37,39,41A,41B,42,44	530,170	100.4	18	12	107	494,810	507,480	0	13	56,110	14	142	15.1	43.2	146.5	21.6	26.2	119.6
400	1,3,4,7,11,16,21,23,26,27,30,32,34,40,41A,41B,42,44	521,650	98.8	19	13	102	471,540	509,040	0	15	54,060	14	143	11.9	37.9	201.4	32.8	26.2	118.1
401	1,3,4,7,11,16,21,23,26,27,30,32,35,43,44	517,270	98	17	13	103	496,630	516,920	0	12	20,220	13	144	10.4	37.1	88.3	25.0	26.2	106.5
402	1,3,4,7,11,16,21,23,26,28,33,43,44	524,180	99.3	16	13	105	461,670	523,830	0	12	20,220	13	162	14.8	42.5	88.3	25.0	26.2	117.7
403	1,3,4,7,11,16,21,24,27,29,37,38A,38B,38C,38D,38E,42,44	551,720	104.5	19	10	104	523,630	541,400	0	11	69,380	10	158	15.4	50.9	0.0	0.0	26.2	213.8
404	1,3,4,7,11,16,21,24,27,29,37,38A,38B,48,38D,38E,42,44	559,600	106	21	10	107	531,500	541,850	0	11	65,450	10	159	12.8	51.4	0.0	0.0	26.2	213.8
405	1,3,4,7,11,16,21,24,27,29,37,38A,45,46,38E,42,44	546,830	103.6	22	10	105	518,730	538,850	0	11	59,730	10	160	12.8	46.2	71.6	3.4	26.2	209.7
406	1,3,4,7,11,16,21,24,27,29,37,38A,45,47,41B,42,44	549,780	104.1	22	10	107	521,690	541,810	0	11	59,890	12	155	13.6	46.7	141.0	11.6	26.2	218.0
407	1,3,4,7,11,16,21,24,27,29,37,39,41A,41B,42,44	545,510	103.3	20	10	110	517,420	514,840	0	11	61,990	12	153	15.5	47.4	146.5	21.6	26.2	225.3
408	1,3,4,7,11,16,21,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	517,520	98	15	12	104	410,420	515,180	2	11	63,500	10	171	18.1	48.4	0.0	0.0	26.2	82.6
409	1,3,4,7,11,16,21,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	525,400	99.5	17	12	107	418,290	515,620	2	11	59,570	10	172	15.5	49	0.0	0.0	26.2	82.6
410	1,3,4,7,11,16,21,24,27,30,31,36,37,38A,45,46,38E,42,44	512,630	97.1	18	12	105	405,520	512,630	2	11	53,860	10	173	15.5	43.7	71.6	3.4	26.2	78.6
411	1,3,4,7,11,16,21,24,27,30,31,36,37,38A,45,47,41B,42,44	515,580	97.6	18	12	107	408,480	515,580	2	11	54,020	12	168	16.3	44.2	141.0	11.6	26.2	86.9
412	1,3,4,7,11,16,21,24,27,30,31,36,37,39,41A,41B,42,44	511,310	96.8	16	12	110	404,210	488,620	2	11	56,110	12	166	18.2	45	146.5	21.6	26.2	94.2
413	1,3,4,7,11,16,21,24,27,30,31,40,41A,41B,42,44	502,790	95.2	15	13	105	380,930	490,180	2	13	54,060	12	167	15	39.7	201.4	32.8	26.2	92.6
414	1,3,4,7,11,16,21,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	533,610	101.1	16	12	101	499,890	531,260	0	13	63,500	12	147	15	46.4	0.0	0.0	26.2	106.8
415	1,3,4,7,11,16,21,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	541,480	102.6	18	12	104	507,760	531,710	0	13	59,570	12	148	12.4	46.9	0.0	0.0	26.2	106.8
416	1,3,4,7,11,16,21,24,27,30,32,34,36,37,38A,45,46,38E,42,44	528,710	100.1	19	12	102	494,990	528,710	0	13	53,860	12	149	12.4	41.6	71.6	3.4	26.2	102.8
417	1,3,4,7,11,16,21,24,27,30,32,34,36,37,38A,45,47,41B,42,44	531,670	100.7	19	12	104	497,950	531,670	0	13	54,020	14	144	13.3	42.2	141.0	11.6	26.2	111.1
418	1,3,4,7,11,16,21,24,27,30,32,34,36,37,39,41A,41B,42,44	527,400	99.9	17	12	107	493,680	504,710	0	13	56,110	14	142	15.1	42.9	146.5	21.6	26.2	118.4
419	1,3,4,7,11,16,21,24,27,30,32,34,40,41A,41B,42,44	518,870	98.3	18	13	102	470,410	506,260	0	15	54,060	14	143	11.9	37.6	201.4	32.8	26.2	116.8
420	1,3,4,7,11,16,21,24,27,30,32,35,43,44	514,490	97.4	16	13	103	495,500	514,140	0	12	20,220	13	144	10.4	36.8	88.3	25.0	26.2	105.2
421	1,3,4,7,11,16,21,24,28,33,43,44	521,400	98.8	17	13	105	460,540	521,050	0	12	20,220	13	162	14.8	42.2	88.3	25.0	26.2	116.4
422	1,3,4,7,11,16,22,33,43,44	497,440	94.2	15	13	107	479,840	497,090	2	12	20,220	11	148	13.9	41	88.3	25.0	26.2	105.4
423	1,3,5,6,8,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	623,550	118.1	23	11	103	495,330	519,670	0	14	69,380	10	195	13.4	49.6	0.0	0.0	200.6	246.1
424	1,3,5,6,8,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	631,420	119.6	25	11	106	503,200	520,110	0	14	65,450	10	196	10.8	50.2	0.0	0.0	200.6	246.1
425	1,3,5,6,8,19,25,26,27,29,37,38A,45,46,38E,42,44	618,650	117.2	26	11	104	490,430	517,120	0	14	59,730	10	197	10.8	44.9	71.6	3.4	200.6	242.0
426	1,3,5,6,8,19,25,26,27,29,37,38A,45,47,41B,42,44	621,610	117.7	26	11	106	493,390	520,070	0	14	59,890	12	192	11.6	45.4	141.0	11.6	200.6	250.3
427	1,3,5,6,8,19,25,26,27,29,37,39,41A,41B,42,44	617,340	116.9	24	11	109	489,110	493,110	0	14	61,990	12	190	13.5	46.1	146.5	21.6	200.6	257.6
428	1,3,5,6,8,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	589,350	111.6	19	13	103	382,110	493,450	2	14	63,500	10	208	16.1	47.1	0.0	0.0	200.6	115.0
429	1,3,5,6,8,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	597,220	113.1	21	13	106	389,990	493,890	2	14	59,570	10	209	13.5	47.7	0.0	0.0	200.6	115.0
430	1,3,5,6,8,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	584,450	110.7	22	13	104	377,220	490,890	2	14	53,860	10	210	13.5	42.4	71.6	3.4	200.6	110.9
431	1,3,5,6,8,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	587,410	111.3	22	13	106	380,180	493,850	2	14	54,020	12	205	14.3	42.9	141.0	11.6	200.6	119.2
432	1,3,5,6,8,19,25,26,27,30,31,36,37,39,41A,41B,42,44	583,140	110.4	20	13	109	375,900	466,890	2	14	56,110	12	203	16.2	43.7	146.5	21.6	200.6	126.5
433	1,3,5,6,8,19,25,26,27,30,31,40,41A,41B,42,44	574,610	108.8	19	14	104	352,630	468,440	2	16	54,060	12	204	13	38.4	201.4	32.8	200.6	124.9
434	1,3,5,6,8,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	605,440	114.7	20	13	100	471,590	509,530	0	16	63,500	12	184	13	45.1	0.0	0.0	200.6	139.2
435	1,3,5,6,8,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	613,310	116.2	22	13	103	479,460	509,980	0	16	59,570	12	185	10.4	45.6	0.0	0.0	200.6	139.2
436	1,3,5,6,8,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	600,540	113.7	23	13	101	466,690	506,980	0	16	53,860	12	186	10.4	40.4	71.6	3.4	200.6	135.1
437	1,3,5,6,8,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	603,500	114.3	23	13	103	469,650	509,940	0	16	54,020	14	181	11.2	40.9	141.0	11.6	200.6	143.4
438	1,3,5,6,8,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	599,220	113.5	21	13	106	465,380	482,970	0	16	56,110	14	179	13.1	41.6	146.5	21.6	200.6	150.7
439	1,3,5,6,8,19,25,26,27,30,32,34,40,41A,41B,42,44	590,700	111.9	22	14	101	442,100	484,530	0	18	54,060	14	180	9.9	36.3	201.4	32.8	200.6	149.1
440	1,3,5,6,8,19,25,26,27,30,32,35,43,44	586,320	111	20	14	102	467,190	492,410	0	15	20,220	13	181	8.4	35.5	88.3	25.0	200.6	137.5
441	1,3,5,6,8,19,25,26,28,33,43,44	593,230	112.4	19	14	104	432,230	499,320	0	15	20,220	13	199	12.8	40.9	88.3	25.0	200.6	148.7

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
442	1,3,5,6,9,12,13,17,18,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	574,340	108.8	23	10	99	496,550	534,830	1	10	69,380	11	181	13.1	51.1	0.0	0.0	60.3	246.1
443	1,3,5,6,9,12,13,17,18,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	582,210	110.3	25	10	102	504,420	535,280	1	10	65,450	11	182	10.5	51.6	0.0	0.0	60.3	246.1
444	1,3,5,6,9,12,13,17,18,19,25,26,27,29,37,38A,45,46,38E,42,44	569,440	107.8	26	10	100	491,650	532,280	1	10	59,730	11	183	10.5	46.3	71.6	3.4	60.3	242.0
445	1,3,5,6,9,12,13,17,18,19,25,26,27,29,37,38A,45,47,41B,42,44	572,400	108.4	26	10	102	494,610	535,240	1	10	59,890	13	178	11.4	46.9	141.0	11.6	60.3	250.3
446	1,3,5,6,9,12,13,17,18,19,25,26,27,29,37,39,41A,41B,42,44	568,120	107.6	24	10	105	490,330	508,270	1	10	61,990	13	176	13.2	47.6	146.5	21.6	60.3	257.6
447	1,3,5,6,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	540,130	102.3	19	12	99	383,340	508,610	3	10	63,500	11	194	15.8	48.6	0.0	0.0	60.3	115.0
448	1,3,5,6,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	548,010	103.8	21	12	102	391,210	509,050	3	10	59,570	11	195	13.2	49.1	0.0	0.0	60.3	115.0
449	1,3,5,6,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	535,240	101.4	22	12	100	378,440	506,060	3	10	53,860	11	196	13.2	43.9	71.6	3.4	60.3	110.9
450	1,3,5,6,9,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	538,190	101.9	22	12	102	381,400	509,010	3	10	54,020	13	191	14	44.4	141.0	11.6	60.3	119.2
451	1,3,5,6,9,12,13,17,18,19,25,26,27,30,31,36,37,39,41A,41B,42,44	533,920	101.1	20	12	105	377,120	482,050	3	10	56,110	13	189	15.9	45.1	146.5	21.6	60.3	126.5
452	1,3,5,6,9,12,13,17,18,19,25,26,27,30,31,40,41A,41B,42,44	525,400	99.5	19	13	100	353,850	483,610	3	12	54,060	13	190	12.7	39.8	201.4	32.8	60.3	124.9
453	1,3,5,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	556,220	105.3	20	12	96	472,810	524,690	1	12	63,500	13	170	12.8	46.6	0.0	0.0	60.3	139.2
454	1,3,5,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	564,090	106.8	22	12	99	480,680	525,140	1	12	59,570	13	171	10.2	47.1	0.0	0.0	60.3	139.2
455	1,3,5,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	551,320	104.4	23	12	97	467,910	522,140	1	12	53,860	13	172	10.1	41.8	71.6	3.4	60.3	135.1
456	1,3,5,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	554,280	105	23	12	99	470,870	525,100	1	12	54,020	15	167	11	42.3	141.0	11.6	60.3	143.4
457	1,3,5,6,9,12,13,17,18,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	550,010	104.2	21	12	102	466,600	498,140	1	12	56,110	15	165	12.8	43.1	146.5	21.6	60.3	150.7
458	1,3,5,6,9,12,13,17,18,19,25,26,27,30,32,34,40,41A,41B,42,44	541,480	102.6	22	13	97	443,320	499,690	1	14	54,060	15	166	9.6	37.8	201.4	32.8	60.3	149.1
459	1,3,5,6,9,12,13,17,18,19,25,26,27,30,32,35,43,44	537,110	101.7	20	13	98	468,410	507,570	1	11	20,220	14	167	8.1	36.9	88.3	25.0	60.3	137.5
460	1,3,5,6,9,12,13,17,18,19,25,26,28,33,43,44	544,010	103	19	13	100	433,450	514,480	1	11	20,220	14	185	12.5	42.4	88.3	25.0	60.3	148.7
461	1,3,5,6,9,12,13,17,20,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	557,360	105.6	24	10	99	480,100	536,320	1	10	69,380	11	166	13.4	49.7	0.0	0.0	60.3	212.1
462	1,3,5,6,9,12,13,17,20,23,26,27,29,37,38A,38B,48,38D,38E,42,44	565,230	107.1	26	10	102	487,980	536,760	1	10	65,450	11	167	10.8	50.2	0.0	0.0	60.3	212.1
463	1,3,5,6,9,12,13,17,20,23,26,27,29,37,38A,45,46,38E,42,44	552,460	104.6	27	10	100	475,210	533,760	1	10	59,730	11	168	10.7	44.9	71.6	3.4	60.3	208.0
464	1,3,5,6,9,12,13,17,20,23,26,27,29,37,38A,45,47,41B,42,44	555,420	105.2	27	10	102	478,160	536,720	1	10	59,890	13	163	11.6	45.5	141.0	11.6	60.3	216.3
465	1,3,5,6,9,12,13,17,20,23,26,27,29,37,39,41A,41B,42,44	551,150	104.4	25	10	105	473,890	509,760	1	10	61,990	13	161	13.4	46.2	146.5	21.6	60.3	223.6
466	1,3,5,6,9,12,13,17,20,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	523,160	99.1	20	12	99	366,890	510,090	3	10	63,500	11	179	16	47.2	0.0	0.0	60.3	81.0
467	1,3,5,6,9,12,13,17,20,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	531,030	100.6	22	12	102	374,770	510,540	3	10	59,570	11	180	13.4	47.7	0.0	0.0	60.3	81.0
468	1,3,5,6,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	518,260	98.2	23	12	100	362,000	507,540	3	10	53,860	11	181	13.4	42.5	71.6	3.4	60.3	76.9
469	1,3,5,6,9,12,13,17,20,23,26,27,30,31,36,37,38A,45,47,41B,42,44	521,220	98.7	23	12	102	364,950	510,500	3	10	54,020	13	176	14.2	43	141.0	11.6	60.3	85.2
470	1,3,5,6,9,12,13,17,20,23,26,27,30,31,36,37,39,41A,41B,42,44	516,950	97.9	21	12	105	360,680	483,540	3	10	56,110	13	174	16.1	43.7	146.5	21.6	60.3	92.5
471	1,3,5,6,9,12,13,17,20,23,26,27,30,31,40,41A,41B,42,44	508,420	96.3	20	13	100	337,410	485,090	3	12	54,060	13	175	12.9	38.4	201.4	32.8	60.3	90.9
472	1,3,5,6,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	539,250	102.1	21	12	96	456,370	526,180	1	12	63,500	13	155	13	45.1	0.0	0.0	60.3	105.2
473	1,3,5,6,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	547,120	103.6	23	12	99	464,240	526,620	1	12	59,570	13	156	10.4	45.7	0.0	0.0	60.3	105.2
474	1,3,5,6,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	534,350	101.2	24	12	97	451,470	523,630	1	12	53,860	13	157	10.4	40.4	71.6	3.4	60.3	101.1
475	1,3,5,6,9,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	537,310	101.8	24	12	99	454,430	526,580	1	12	54,020	15	152	11.2	40.9	141.0	11.6	60.3	109.4
476	1,3,5,6,9,12,13,17,20,23,26,27,30,32,34,36,37,39,41A,41B,42,44	533,030	101	22	12	102	450,150	499,620	1	12	56,110	15	150	13.1	41.7	146.5	21.6	60.3	116.7
477	1,3,5,6,9,12,13,17,20,23,26,27,30,32,34,40,41A,41B,42,44	524,510	99.3	23	13	97	426,880	501,180	1	14	54,060	15	151	9.9	36.4	201.4	32.8	60.3	115.1
478	1,3,5,6,9,12,13,17,20,23,26,27,30,32,35,43,44	520,130	98.5	21	13	98	451,970	509,060	1	11	20,220	14	152	8.3	35.5	88.3	25.0	60.3	103.5
479	1,3,5,6,9,12,13,17,20,23,26,28,33,43,44	527,040	99.8	20	13	100	417,010	515,970	1	11	20,220	14	170	12.7	41	88.3	25.0	60.3	114.7
480	1,3,5,6,9,12,13,17,20,24,27,29,37,38A,38B,38C,38D,38E,42,44	554,590	105	21	10	99	478,970	533,540	1	10	69,380	11	166	13.4	49.4	0.0	0.0	60.3	210.8
481	1,3,5,6,9,12,13,17,20,24,27,29,37,38A,38B,48,38D,38E,42,44	562,460	106.5	23	10	102	486,840	533,990	1	10	65,450	11	167	10.8	49.9	0.0	0.0	60.3	210.8
482	1,3,5,6,9,12,13,17,20,24,27,29,37,38A,45,46,38E,42,44	549,690	104.1	24	10	100	474,070	530,990	1	10	59,730	11	168	10.7	44.6	71.6	3.4	60.3	206.7
483	1,3,5,6,9,12,13,17,20,24,27,29,37,38A,45,47,41B,42,44	552,650	104.7	24	10	102	477,030	533,950	1	10	59,890	13	163	11.6	45.2	141.0	11.6	60.3	215.0
484	1,3,5,6,9,12,13,17,20,24,27,29,37,39,41A,41B,42,44	548,370	103.9	22	10	105	472,760	506,980	1	10	61,990	13	161	13.4	45.9	146.5	21.6	60.3	222.3
485	1,3,5,6,9,12,13,17,20,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	520,390	98.6	17	12	99	365,760	507,320	3	10	63,500	11	179	16	46.9	0.0	0.0	60.3	79.7
486	1,3,5,6,9,12,13,17,20,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	528,260	100	19	12	102	373,630	507,760	3	10	59,570	11	180	13.4	47.4	0.0	0.0	60.3	79.7
487	1,3,5,6,9,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	515,490	97.6	20	12	100	360,860	504,770	3	10	53,860	11	181	13.4	42.1	71.6	3.4	60.3	75.6
488	1,3,5,6,9,12,13,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	518,450	98.2	20	12	102	363,820	507,720	3	10	54,020	13	176	14.2	42.7	141.0	11.6	60.3	83.9
489	1,3,5,6,9,12,13,17,20,24,27,30,31,36,37,39,41A,41B,42,44	514,170	97.4	18	12	105	359,550	480,760	3	10	56,110	13	174	16.1	43.4	146.5	21.6	60.3	91.2
490	1,3,5,6,9,12,13,17,20,24,27,30,31,40,41A,41B,42,44	505,650	95.8	17	13	100	336,280	482,320	3	12	54,060	13	175	12.9	38.1	201.4	32.8	60.3	89.6
491	1,3,5,6,9,12,13,17,20,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	536,470	101.6	18	12	96	455,230	523,400	1	12	63,500	13	155	13	44.8	0.0	0.0	60.3	103.9
492	1,3,5,6,9,12,13,17,20,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	544,340	103.1	20	12	99	463,110	523,850	1	12	59,570	13	156	10.4	45.4	0.0	0.0	60.3	103.9
493	1,3,5,6,9,12,13,17,20,24,27,30,32,34,36,37,38A,45,46,38E,42,44	531,570	100.7	21	12	97	450,340	520,850	1	12	53,860	13	157	10.4	40.1	71.6	3.4	60.3	99.8
494	1,3,5,6,9,12,13,17,20,24,27,30,32,34,36,37,38A,45,47,41B,42,44	534,530	101.2	21	12	99	453,300	523,810	1	12	54,020	15	152	11.2	40.6	141.0	11.6	60.3	108.1
495	1,3,5,6,9,12,13,17,20,24,27,30,32,34,36,37,39,41A,41B,42,44	530,260	100.4	19	12	102	449,020	496,850	1	12	56,110	15	150	13.1	41.4	146.5	21.6	60.3	115.4
496	1,3,5,6,9,12,13,17,20,24,27,30,32,34,40,41A,41B,42,44	521,740	98.8	20	13	97	425,750	498,400	1	14	54,060	15	151	9.9	36.1	201.4	32.8	60.3	113.8
497	1,3,5,6,9,12,13,17,20,24,27,30,32,35,43,44	517,360	98	18	13	98	450,840	506,280	1	11	20,220	14	152	8.3	35.2	88.3	25.0	60.3	102.2
498	1,3,5,6,9,12,13,17,20,24,28,33,43,44	524,270	99.3	19	13	100	415,880	513,190	1	11	20,220	14	170	12.7	40.7	88.3	25.0	60.3	113.5
499	1,3,5,6,9,12,14,16,21,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	571,700	108.3	24	10	100	524,740	550,070	1	10	69,380	11	169	14.7	50.1	0.0	0.0	60.3	215.1
500	1,3,5,6,9,12,14,16,21,23,26,27,29,37,38A,38B,48,38D,38E,42,44	579,570	109.8	26	10	103	532,610	550,510	1	10	65,450	11	170	12.1	50.6	0.0	0.0	60.3	215.1
501	1,3,5,6,9,12,14,16,21,23,26,27,29,37,38A,45,46,38E,42,44	566,800	107.3	27	10	101	519,840	547,520	1	10	59,730	11	171	12.1	45.4	71.6	3.4	60.3	211.0
502	1,3,5,6,9,12,14,16,21,23,26,27,29,37,38A,45,47,41B,42,44	569,760	107.9	27	10	103	522,800	550,470	1	10	59,890	13	166	12.9	45.9	141.0	11.6	60.3	219.3
503	1,3,5,6,9,12,14,16,21,23,26,27,29,37,39,41A,41B,42,44	565,490	107.1	25	10	106	518,530	523,510	1	10	61,990	13	164	14.8	46.6	146.5	21.6	60.3	226.6
504	1,3,5,6,9,12,14,16,21,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	537,500	101.8	20	12	100	411,530	523,850	3	10	63,500	11	182	17.4	47.6	0.0	0.0	60.3	83.9

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
505	1,3,5,6,9,12,14,16,21,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	545,370	103.3	22	12	103	419,400	524,290	3	10	59,570	11	183	14.8	48.2	0.0	0.0	60.3	83.9
506	1,3,5,6,9,12,14,16,21,23,26,27,30,31,36,37,38A,45,46,38E,42,44	532,600	100.9	23	12	101	406,630	521,290	3	10	53,860	11	184	14.8	42.9	71.6	3.4	60.3	79.8
507	1,3,5,6,9,12,14,16,21,23,26,27,30,31,36,37,38A,45,47,41B,42,44	535,560	101.4	23	12	103	409,590	524,250	3	10	54,020	13	179	15.6	43.4	141.0	11.6	60.3	88.2
508	1,3,5,6,9,12,14,16,21,23,26,27,30,31,36,37,39,41A,41B,42,44	531,290	100.6	21	12	106	405,320	497,290	3	10	56,110	13	177	17.5	44.2	146.5	21.6	60.3	95.4
509	1,3,5,6,9,12,14,16,21,23,26,27,30,31,40,41A,41B,42,44	522,760	99	20	13	101	382,050	498,840	3	12	54,060	13	178	14.3	38.9	201.4	32.8	60.3	93.9
510	1,3,5,6,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	553,590	104.8	21	12	97	501,000	539,930	1	12	63,500	13	158	14.3	45.6	0.0	0.0	60.3	108.1
511	1,3,5,6,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	561,460	106.3	23	12	100	508,880	540,380	1	12	59,570	13	159	11.7	46.1	0.0	0.0	60.3	108.1
512	1,3,5,6,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	548,690	103.9	24	12	98	496,110	537,380	1	12	53,860	13	160	11.7	40.8	71.6	3.4	60.3	104.0
513	1,3,5,6,9,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	551,650	104.5	24	12	100	499,060	540,340	1	12	54,020	15	155	12.5	41.4	141.0	11.6	60.3	112.4
514	1,3,5,6,9,12,14,16,21,23,26,27,30,32,34,36,37,39,41A,41B,42,44	547,370	103.7	22	12	103	494,790	513,370	1	12	56,110	15	153	14.4	42.1	146.5	21.6	60.3	119.6
515	1,3,5,6,9,12,14,16,21,23,26,27,30,32,34,40,41A,41B,42,44	538,850	102.1	23	13	98	471,520	514,930	1	14	54,060	15	154	11.2	36.8	201.4	32.8	60.3	118.1
516	1,3,5,6,9,12,14,16,21,23,26,27,30,32,35,43,44	534,470	101.2	21	13	99	496,610	522,810	1	11	20,220	14	155	9.7	36	88.3	25.0	60.3	106.5
517	1,3,5,6,9,12,14,16,21,23,26,28,33,43,44	541,380	102.5	20	13	101	461,650	529,720	1	11	20,220	14	173	14.1	41.4	88.3	25.0	60.3	117.7
518	1,3,5,6,9,12,14,16,21,24,27,29,37,38A,38B,38C,38D,38E,42,44	568,930	107.8	23	10	100	523,610	547,290	1	10	69,380	11	169	14.7	49.8	0.0	0.0	60.3	213.8
519	1,3,5,6,9,12,14,16,21,24,27,29,37,38A,38B,48,38D,38E,42,44	576,800	109.2	25	10	103	531,480	547,740	1	10	65,450	11	170	12.1	50.3	0.0	0.0	60.3	213.8
520	1,3,5,6,9,12,14,16,21,24,27,29,37,38A,45,46,38E,42,44	564,030	106.8	26	10	101	518,710	544,740	1	10	59,730	11	171	12.1	45.1	71.6	3.4	60.3	209.7
521	1,3,5,6,9,12,14,16,21,24,27,29,37,38A,45,47,41B,42,44	566,990	107.4	26	10	103	521,670	547,700	1	10	59,890	13	166	12.9	45.6	141.0	11.6	60.3	218.0
522	1,3,5,6,9,12,14,16,21,24,27,29,37,39,41A,41B,42,44	562,710	106.6	24	10	106	517,400	520,740	1	10	61,990	13	164	14.8	46.3	146.5	21.6	60.3	225.3
523	1,3,5,6,9,12,14,16,21,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	534,720	101.3	19	12	100	410,400	521,070	3	10	63,500	11	182	17.4	47.3	0.0	0.0	60.3	82.6
524	1,3,5,6,9,12,14,16,21,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	542,600	102.8	21	12	103	418,270	521,520	3	10	59,570	11	183	14.8	47.9	0.0	0.0	60.3	82.6
525	1,3,5,6,9,12,14,16,21,24,27,30,31,36,37,38A,45,46,38E,42,44	529,830	100.3	22	12	101	405,500	518,520	3	10	53,860	11	184	14.8	42.6	71.6	3.4	60.3	78.6
526	1,3,5,6,9,12,14,16,21,24,27,30,31,36,37,38A,45,47,41B,42,44	532,790	100.9	22	12	103	408,460	521,480	3	10	54,020	13	179	15.6	43.1	141.0	11.6	60.3	86.9
527	1,3,5,6,9,12,14,16,21,24,27,30,31,36,37,39,41A,41B,42,44	528,510	100.1	20	12	106	404,190	494,510	3	10	56,110	13	177	17.5	43.9	146.5	21.6	60.3	94.2
528	1,3,5,6,9,12,14,16,21,24,27,30,31,40,41A,41B,42,44	519,990	98.5	19	13	101	380,910	496,070	3	12	54,060	13	178	14.3	38.6	201.4	32.8	60.3	92.6
529	1,3,5,6,9,12,14,16,21,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	550,810	104.3	20	12	97	499,870	537,160	1	12	63,500	13	158	14.3	45.3	0.0	0.0	60.3	106.8
530	1,3,5,6,9,12,14,16,21,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	558,680	105.8	22	12	100	507,740	537,600	1	12	59,570	13	159	11.7	45.8	0.0	0.0	60.3	106.8
531	1,3,5,6,9,12,14,16,21,24,27,30,32,34,36,37,38A,45,46,38E,42,44	545,910	103.4	23	12	98	494,970	534,600	1	12	53,860	13	160	11.7	40.5	71.6	3.4	60.3	102.8
532	1,3,5,6,9,12,14,16,21,24,27,30,32,34,36,37,38A,45,47,41B,42,44	548,870	104	23	12	100	497,930	537,560	1	12	54,020	15	155	12.5	41.1	141.0	11.6	60.3	111.1
533	1,3,5,6,9,12,14,16,21,24,27,30,32,34,36,37,39,41A,41B,42,44	544,600	103.1	21	12	103	493,660	510,600	1	12	56,110	15	153	14.4	41.8	146.5	21.6	60.3	118.4
534	1,3,5,6,9,12,14,16,21,24,27,30,32,34,40,41A,41B,42,44	536,070	101.5	22	13	98	470,390	512,160	1	14	54,060	15	154	11.2	36.5	201.4	32.8	60.3	116.8
535	1,3,5,6,9,12,14,16,21,24,27,30,32,35,43,44	531,700	100.7	20	13	99	495,480	520,040	1	11	20,220	14	155	9.7	35.6	88.3	25.0	60.3	105.2
536	1,3,5,6,9,12,14,16,21,24,28,33,43,44	538,600	102	21	13	101	460,520	526,950	1	11	20,220	14	173	14.1	41.1	88.3	25.0	60.3	116.4
537	1,3,5,6,9,12,14,16,22,33,43,44	514,640	97.5	19	13	103	479,820	502,980	3	11	20,220	12	159	13.2	39.9	88.3	25.0	60.3	105.4
538	1,3,5,7,10,12,13,17,18,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	567,130	107.4	23	10	101	489,340	533,360	0	10	69,380	11	174	14.8	52.7	0.0	0.0	28.6	246.1
539	1,3,5,7,10,12,13,17,18,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	575,000	108.9	25	10	104	497,210	533,810	0	10	65,450	11	175	12.2	53.3	0.0	0.0	28.6	246.1
540	1,3,5,7,10,12,13,17,18,19,25,26,27,29,37,38A,45,46,38E,42,44	562,230	106.5	26	10	102	484,440	530,810	0	10	59,730	11	176	12.2	48	71.6	3.4	28.6	242.0
541	1,3,5,7,10,12,13,17,18,19,25,26,27,29,37,38A,45,47,41B,42,44	565,190	107	26	10	104	487,400	533,770	0	10	59,890	13	171	13	48.5	141.0	11.6	28.6	250.3
542	1,3,5,7,10,12,13,17,18,19,25,26,27,29,37,39,41A,41B,42,44	560,920	106.2	24	10	107	483,130	506,810	0	10	61,990	13	169	14.9	49.3	146.5	21.6	28.6	257.6
543	1,3,5,7,10,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	532,930	100.9	19	12	101	376,130	507,140	2	10	63,500	11	187	17.5	50.3	0.0	0.0	28.6	115.0
544	1,3,5,7,10,12,13,17,18,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	540,800	102.4	21	12	104	384,000	507,580	2	10	59,570	11	188	14.9	50.8	0.0	0.0	28.6	115.0
545	1,3,5,7,10,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	528,030	100	22	12	102	371,230	504,590	2	10	53,860	11	189	14.8	45.5	71.6	3.4	28.6	110.9
546	1,3,5,7,10,12,13,17,18,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	530,990	100.6	22	12	104	374,190	507,540	2	10	54,020	13	184	15.7	46	141.0	11.6	28.6	119.2
547	1,3,5,7,10,12,13,17,18,19,25,26,27,30,31,36,37,39,41A,41B,42,44	526,720	99.8	20	12	107	369,920	480,580	2	10	56,110	13	182	17.6	46.8	146.5	21.6	28.6	126.5
548	1,3,5,7,10,12,13,17,18,19,25,26,27,30,31,40,41A,41B,42,44	518,190	98.1	19	13	102	346,640	482,140	2	12	54,060	13	183	14.3	41.5	201.4	32.8	28.6	124.9
549	1,3,5,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	549,010	104	20	12	98	465,600	523,230	0	12	63,500	13	163	14.4	48.2	0.0	0.0	28.6	139.2
550	1,3,5,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	556,890	105.5	22	12	101	473,470	523,670	0	12	59,570	13	164	11.8	48.7	0.0	0.0	28.6	139.2
551	1,3,5,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	544,120	103.1	23	12	99	460,700	520,670	0	12	53,860	13	165	11.8	43.5	71.6	3.4	28.6	135.1
552	1,3,5,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	547,070	103.6	23	12	101	463,660	523,630	0	12	54,020	15	160	12.6	44	141.0	11.6	28.6	143.4
553	1,3,5,7,10,12,13,17,18,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	542,800	102.8	21	12	104	459,390	496,670	0	12	56,110	15	158	14.5	44.7	146.5	21.6	28.6	150.7
554	1,3,5,7,10,12,13,17,18,19,25,26,27,30,32,34,40,41A,41B,42,44	534,280	101.2	22	13	99	436,120	498,220	0	14	54,060	15	159	11.3	39.4	201.4	32.8	28.6	149.1
555	1,3,5,7,10,12,13,17,18,19,25,26,27,30,32,35,43,44	529,900	100.4	20	13	100	461,210	506,110	0	11	20,220	14	160	9.7	38.6	88.3	25.0	28.6	137.5
556	1,3,5,7,10,12,13,17,18,19,25,26,28,33,43,44	536,810	101.7	19	13	102	426,250	513,010	0	11	20,220	14	178	14.1	44.1	88.3	25.0	28.6	148.7
557	1,3,5,7,10,12,13,17,20,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	550,150	104.2	24	10	101	472,900	534,850	0	10	69,380	11	159	15	51.3	0.0	0.0	28.6	212.1
558	1,3,5,7,10,12,13,17,20,23,26,27,29,37,38A,38B,48,38D,38E,42,44	558,030	105.7	26	10	104	480,770	535,290	0	10	65,450	11	160	12.4	51.9	0.0	0.0	28.6	212.1
559	1,3,5,7,10,12,13,17,20,23,26,27,29,37,38A,45,46,38E,42,44	545,260	103.3	27	10	102	468,000	532,290	0	10	59,730	11	161	12.4	46.6	71.6	3.4	28.6	208.0
560	1,3,5,7,10,12,13,17,20,23,26,27,29,37,38A,45,47,41B,42,44	548,210	103.8	27	10	104	470,960	535,250	0	10	59,890	13	156	13.2	47.1	141.0	11.6	28.6	216.3
561	1,3,5,7,10,12,13,17,20,23,26,27,29,37,39,41A,41B,42,44	543,940	103	25	10	107	466,680	508,290	0	10	61,990	13	154	15.1	47.8	146.5	21.6	28.6	223.6
562	1,3,5,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	515,950	97.7	20	12	101	359,690	508,620	2	10	63,500	11	172	17.7	48.8	0.0	0.0	28.6	81.0
563	1,3,5,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	523,830	99.2	22	12	104	367,560	509,070	2	10	59,570	11	173	15.1	49.4	0.0	0.0	28.6	81.0
564	1,3,5,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	511,060	96.8	23	12	102	354,790	506,070	2	10	53,860	11	174	15.1	44.1	71.6	3.4	28.6	76.9
565	1,3,5,7,10,12,13,17,20,23,26,27,30,31,36,37,38A,45,47,41B,42,44	514,010	97.4	23	12	104	357,750	509,030	2	10	54,020	13	169	15.9	44.6	141.0	11.6	28.6	85.2
566	1,3,5,7,10,12,13,17,20,23,26,27,30,31,36,37,39,41A,41B,42,44	509,740	96.5	21	12	107	353,470	482,070	2	10	56,110	13	167	17.8	45.4	146.5	21.6	28.6	92.5
567	1,3,5,7,10,12,13,17,20,23,26,27,30,31,40,41A,41B,42,44	501,220	94.9	20	13	102	330,200	483,620	2	12	54,060	13	168	14.6	40.1	201.4	32.8	28.6	90.9

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
568	1,3,5,7,10,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	532,040	100.8	21	12	98	449,160	524,710	0	12	63,500	13	148	14.6	46.8	0.0	0.0	28.6	105.2
569	1,3,5,7,10,12,13,17,20,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	539,910	102.3	23	12	101	457,030	525,150	0	12	59,570	13	149	12	47.3	0.0	0.0	28.6	105.2
570	1,3,5,7,10,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	527,140	99.8	24	12	99	444,260	522,160	0	12	53,860	13	150	12	42.1	71.6	3.4	28.6	101.1
571	1,3,5,7,10,12,13,17,20,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	530,100	100.4	24	12	101	447,220	525,110	0	12	54,020	15	145	12.8	42.6	141.0	11.6	28.6	109.4
572	1,3,5,7,10,12,13,17,20,23,26,27,30,32,34,36,37,39,41A,41B,42,44	525,830	99.6	22	12	104	442,950	498,150	0	12	56,110	15	143	14.7	43.3	146.5	21.6	28.6	116.7
573	1,3,5,7,10,12,13,17,20,23,26,27,30,32,34,40,41A,41B,42,44	517,300	98	23	13	99	419,670	499,710	0	14	54,060	15	144	11.5	38	201.4	32.8	28.6	115.1
574	1,3,5,7,10,12,13,17,20,23,26,27,30,32,35,43,44	512,920	97.1	21	13	100	444,760	507,590	0	11	20,220	14	145	9.9	37.2	88.3	25.0	28.6	103.5
575	1,3,5,7,10,12,13,17,20,23,26,28,33,43,44	519,830	98.5	20	13	102	409,800	514,500	0	11	20,220	14	163	14.3	42.6	88.3	25.0	28.6	114.7
576	1,3,5,7,10,12,13,17,20,24,27,29,37,38A,38B,38C,38D,38E,42,44	547,380	103.7	21	10	101	471,760	532,070	0	10	69,380	11	159	15	51	0.0	0.0	28.6	210.8
577	1,3,5,7,10,12,13,17,20,24,27,29,37,38A,38B,48,38D,38E,42,44	555,250	105.2	23	10	104	479,640	532,520	0	10	65,450	11	160	12.4	51.5	0.0	0.0	28.6	210.8
578	1,3,5,7,10,12,13,17,20,24,27,29,37,38A,45,46,38E,42,44	542,480	102.7	24	10	102	466,870	529,520	0	10	59,730	11	161	12.4	46.3	71.6	3.4	28.6	206.7
579	1,3,5,7,10,12,13,17,20,24,27,29,37,38A,45,47,41B,42,44	545,440	103.3	24	10	104	469,820	532,480	0	10	59,890	13	156	13.2	46.8	141.0	11.6	28.6	215.0
580	1,3,5,7,10,12,13,17,20,24,27,29,37,39,41A,41B,42,44	541,170	102.5	22	10	107	465,550	505,510	0	10	61,990	13	154	15.1	47.5	146.5	21.6	28.6	222.3
581	1,3,5,7,10,12,13,17,20,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	513,180	97.2	17	12	101	358,550	505,850	2	10	63,500	11	172	17.7	48.5	0.0	0.0	28.6	79.7
582	1,3,5,7,10,12,13,17,20,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	521,050	98.7	19	12	104	366,430	506,290	2	10	59,570	11	173	15.1	49.1	0.0	0.0	28.6	79.7
583	1,3,5,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	508,280	96.3	20	12	102	353,660	503,300	2	10	53,860	11	174	15.1	43.8	71.6	3.4	28.6	75.6
584	1,3,5,7,10,12,13,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	511,240	96.8	20	12	104	356,610	506,250	2	10	54,020	13	169	15.9	44.3	141.0	11.6	28.6	83.9
585	1,3,5,7,10,12,13,17,20,24,27,30,31,36,37,39,41A,41B,42,44	506,970	96	18	12	107	352,340	479,290	2	10	56,110	13	167	17.8	45.1	146.5	21.6	28.6	91.2
586	1,3,5,7,10,12,13,17,20,24,27,30,31,40,41A,41B,42,44	498,440	94.4	17	13	102	329,070	480,850	2	12	54,060	13	168	14.6	39.8	201.4	32.8	28.6	89.6
587	1,3,5,7,10,12,13,17,20,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	529,260	100.2	18	12	98	448,030	521,930	0	12	63,500	13	148	14.6	46.5	0.0	0.0	28.6	103.9
588	1,3,5,7,10,12,13,17,20,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	537,140	101.7	20	12	101	455,900	522,380	0	12	59,570	13	149	12	47	0.0	0.0	28.6	103.9
589	1,3,5,7,10,12,13,17,20,24,27,30,32,34,36,37,38A,45,46,38E,42,44	524,370	99.3	21	12	99	443,130	519,380	0	12	53,860	13	150	12	41.7	71.6	3.4	28.6	99.8
590	1,3,5,7,10,12,13,17,20,24,27,30,32,34,36,37,38A,45,47,41B,42,44	527,320	99.9	21	12	101	446,090	522,340	0	12	54,020	15	145	12.8	42.3	141.0	11.6	28.6	108.1
591	1,3,5,7,10,12,13,17,20,24,27,30,32,34,36,37,39,41A,41B,42,44	523,050	99.1	19	12	104	441,820	495,380	0	12	56,110	15	143	14.7	43	146.5	21.6	28.6	115.4
592	1,3,5,7,10,12,13,17,20,24,27,30,32,34,40,41A,41B,42,44	514,530	97.4	20	13	99	418,540	496,930	0	14	54,060	15	144	11.5	37.7	201.4	32.8	28.6	113.8
593	1,3,5,7,10,12,13,17,20,24,27,30,32,35,43,44	510,150	96.6	18	13	100	443,630	504,810	0	11	20,220	14	145	9.9	36.9	88.3	25.0	28.6	102.2
594	1,3,5,7,10,12,13,17,20,24,28,33,43,44	517,060	97.9	19	13	102	408,670	511,720	0	11	20,220	14	163	14.3	42.3	88.3	25.0	28.6	113.5
595	1,3,5,7,10,12,14,16,21,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	564,490	106.9	24	10	102	517,530	548,600	0	10	69,380	11	162	16.4	51.8	0.0	0.0	28.6	215.1
596	1,3,5,7,10,12,14,16,21,23,26,27,29,37,38A,38B,48,38D,38E,42,44	572,370	108.4	26	10	105	525,410	549,040	0	10	65,450	11	163	13.8	52.3	0.0	0.0	28.6	215.1
597	1,3,5,7,10,12,14,16,21,23,26,27,29,37,38A,45,46,38E,42,44	559,600	106	27	10	103	512,640	546,050	0	10	59,730	11	164	13.7	47	71.6	3.4	28.6	211.0
598	1,3,5,7,10,12,14,16,21,23,26,27,29,37,38A,45,47,41B,42,44	562,550	106.5	27	10	105	515,590	549,000	0	10	59,890	13	159	14.6	47.5	141.0	11.6	28.6	219.3
599	1,3,5,7,10,12,14,16,21,23,26,27,29,37,39,41A,41B,42,44	558,280	105.7	25	10	108	511,320	522,040	0	10	61,990	13	157	16.5	48.3	146.5	21.6	28.6	226.6
600	1,3,5,7,10,12,14,16,21,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	530,290	100.4	20	12	102	404,320	522,380	2	10	63,500	11	175	19	49.3	0.0	0.0	28.6	83.9
601	1,3,5,7,10,12,14,16,21,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	538,160	101.9	22	12	105	412,200	522,820	2	10	59,570	11	176	16.4	49.8	0.0	0.0	28.6	83.9
602	1,3,5,7,10,12,14,16,21,23,26,27,30,31,36,37,38A,45,46,38E,42,44	525,390	99.5	23	12	103	399,430	519,820	2	10	53,860	11	177	16.4	44.5	71.6	3.4	28.6	79.8
603	1,3,5,7,10,12,14,16,21,23,26,27,30,31,36,37,38A,45,47,41B,42,44	528,350	100.1	23	12	105	402,380	522,780	2	10	54,020	13	172	17.2	45.1	141.0	11.6	28.6	88.2
604	1,3,5,7,10,12,14,16,21,23,26,27,30,31,36,37,39,41A,41B,42,44	524,080	99.3	21	12	108	398,110	495,820	2	10	56,110	13	170	19.1	45.8	146.5	21.6	28.6	95.4
605	1,3,5,7,10,12,14,16,21,23,26,27,30,31,40,41A,41B,42,44	515,550	97.6	20	13	103	374,840	497,380	2	12	54,060	13	171	15.9	40.5	201.4	32.8	28.6	93.9
606	1,3,5,7,10,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	546,380	103.5	21	12	99	493,800	538,460	0	12	63,500	13	151	16	47.2	0.0	0.0	28.6	108.1
607	1,3,5,7,10,12,14,16,21,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	554,250	105	23	12	102	501,670	538,910	0	12	59,570	13	152	13.4	47.8	0.0	0.0	28.6	108.1
608	1,3,5,7,10,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	541,480	102.6	24	12	100	488,900	535,910	0	12	53,860	13	153	13.4	42.5	71.6	3.4	28.6	104.0
609	1,3,5,7,10,12,14,16,21,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	544,440	103.1	24	12	102	491,860	538,870	0	12	54,020	15	148	14.2	43	141.0	11.6	28.6	112.4
610	1,3,5,7,10,12,14,16,21,23,26,27,30,32,34,36,37,39,41A,41B,42,44	540,170	102.3	22	12	105	487,580	511,910	0	12	56,110	15	146	16.1	43.8	146.5	21.6	28.6	119.6
611	1,3,5,7,10,12,14,16,21,23,26,27,30,32,34,40,41A,41B,42,44	531,640	100.7	23	13	100	464,310	513,460	0	14	54,060	15	147	12.9	38.5	201.4	32.8	28.6	118.1
612	1,3,5,7,10,12,14,16,21,23,26,27,30,32,35,43,44	527,260	99.9	21	13	101	489,400	521,340	0	11	20,220	14	148	11.3	37.6	88.3	25.0	28.6	106.5
613	1,3,5,7,10,12,14,16,21,23,26,28,33,43,44	534,170	101.2	20	13	103	454,440	528,250	0	11	20,220	14	166	15.7	43.1	88.3	25.0	28.6	117.7
614	1,3,5,7,10,12,14,16,21,24,27,29,37,38A,38B,38C,38D,38E,42,44	561,720	106.4	23	10	102	516,400	545,820	0	10	69,380	11	162	16.4	51.5	0.0	0.0	28.6	213.8
615	1,3,5,7,10,12,14,16,21,24,27,29,37,38A,38B,48,38D,38E,42,44	569,590	107.9	25	10	105	524,270	546,270	0	10	65,450	11	163	13.8	52	0.0	0.0	28.6	213.8
616	1,3,5,7,10,12,14,16,21,24,27,29,37,38A,45,46,38E,42,44	556,820	105.5	26	10	103	511,500	543,270	0	10	59,730	11	164	13.7	46.7	71.6	3.4	28.6	209.7
617	1,3,5,7,10,12,14,16,21,24,27,29,37,38A,45,47,41B,42,44	559,780	106	26	10	105	514,460	546,230	0	10	59,890	13	159	14.6	47.2	141.0	11.6	28.6	218.0
618	1,3,5,7,10,12,14,16,21,24,27,29,37,39,41A,41B,42,44	555,510	105.2	24	10	108	510,190	519,270	0	10	61,990	13	157	16.5	48	146.5	21.6	28.6	225.3
619	1,3,5,7,10,12,14,16,21,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	527,520	99.9	19	12	102	403,190	519,600	2	10	63,500	11	175	19	49	0.0	0.0	28.6	82.6
620	1,3,5,7,10,12,14,16,21,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	535,390	101.4	21	12	105	411,060	520,050	2	10	59,570	11	176	16.4	49.5	0.0	0.0	28.6	82.6
621	1,3,5,7,10,12,14,16,21,24,27,30,31,36,37,38A,45,46,38E,42,44	522,620	99	22	12	103	398,290	517,050	2	10	53,860	11	177	16.4	44.2	71.6	3.4	28.6	78.6
622	1,3,5,7,10,12,14,16,21,24,27,30,31,36,37,38A,45,47,41B,42,44	525,580	99.5	22	12	105	401,250	520,010	2	10	54,020	13	172	17.2	44.8	141.0	11.6	28.6	86.9
623	1,3,5,7,10,12,14,16,21,24,27,30,31,36,37,39,41A,41B,42,44	521,310	98.7	20	12	108	396,980	493,040	2	10	56,110	13	170	19.1	45.5	146.5	21.6	28.6	94.2
624	1,3,5,7,10,12,14,16,21,24,27,30,31,40,41A,41B,42,44	512,780	97.1	19	13	103	373,710	494,600	2	12	54,060	13	171	15.9	40.2	201.4	32.8	28.6	92.6
625	1,3,5,7,10,12,14,16,21,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	543,600	103	20	12	99	492,660	535,690	0	12	63,500	13	151	16	46.9	0.0	0.0	28.6	106.8
626	1,3,5,7,10,12,14,16,21,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	551,480	104.4	22	12	102	500,540	536,130	0	12	59,570	13	152	13.4	47.5	0.0	0.0	28.6	106.8
627	1,3,5,7,10,12,14,16,21,24,27,30,32,34,36,37,38A,45,46,38E,42,44	538,710	102	23	12	100	487,770	533,140	0	12	53,860	13	153	13.4	42.2	71.6	3.4	28.6	102.8
628	1,3,5,7,10,12,14,16,21,24,27,30,32,34,36,37,38A,45,47,41B,42,44	541,660	102.6	23	12	102	490,720	536,090	0	12	54,020	15	148	14.2	42.7	141.0	11.6	28.6	111.1
629	1,3,5,7,10,12,14,16,21,24,27,30,32,34,36,37,39,41A,41B,42,44	537,390	101.8	21	12	105	486,450	509,130	0	12	56,110	15	146	16.1	43.5	146.5	21.6	28.6	118.4
630	1,3,5,7,10,12,14,16,21,24,27,30,32,34,40,41A,41B,42,44	528,870	100.2	22	13	100	463,180	510,690	0	14	54,060	15	147	12.9	38.2	201.4	32.8	28.6	116.8

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
631	1,3,5,7,10,12,14,16,21,24,27,30,32,35,43,44	524,490	99.3	20	13	101	488,270	518,570	0	11	20,220	14	148	11.3	37.3	88.3	25.0	28.6	105.2
632	1,3,5,7,10,12,14,16,21,24,28,33,43,44	531,400	100.6	21	13	103	453,310	525,480	0	11	20,220	14	166	15.7	42.8	88.3	25.0	28.6	116.4
633	1,3,5,7,10,12,14,16,22,33,43,44	507,430	96.1	19	13	105	472,620	501,510	2	11	20,220	12	152	14.8	41.5	88.3	25.0	28.6	105.4
634	1,3,5,7,11,15,17,18,19,25,26,27,29,37,38A,38B,38C,38D,38E,42,44	572,550	108.4	25	10	102	494,760	538,780	0	11	69,380	11	173	13	50.3	0.0	0.0	26.2	246.1
635	1,3,5,7,11,15,17,18,19,25,26,27,29,37,38A,38B,48,38D,38E,42,44	580,420	109.9	27	10	105	502,630	539,230	0	11	65,450	11	174	10.4	50.8	0.0	0.0	26.2	246.1
636	1,3,5,7,11,15,17,18,19,25,26,27,29,37,38A,45,46,38E,42,44	567,650	107.5	28	10	103	489,860	536,230	0	11	59,730	11	175	10.4	45.5	71.6	3.4	26.2	242.0
637	1,3,5,7,11,15,17,18,19,25,26,27,29,37,38A,45,47,41B,42,44	570,610	108.1	28	10	105	492,820	539,190	0	11	59,890	13	170	11.2	46	141.0	11.6	26.2	250.3
638	1,3,5,7,11,15,17,18,19,25,26,27,29,37,39,41A,41B,42,44	566,340	107.3	26	10	108	488,550	512,230	0	11	61,990	13	168	13.1	46.8	146.5	21.6	26.2	257.6
639	1,3,5,7,11,15,17,18,19,25,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	538,350	102	21	12	102	381,550	512,560	2	11	63,500	11	186	15.7	47.8	0.0	0.0	26.2	115.0
640	1,3,5,7,11,15,17,18,19,25,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	546,220	103.5	23	12	105	389,420	513,010	2	11	59,570	11	187	13.1	48.3	0.0	0.0	26.2	115.0
641	1,3,5,7,11,15,17,18,19,25,26,27,30,31,36,37,38A,45,46,38E,42,44	533,450	101	24	12	103	376,650	510,010	2	11	53,860	11	188	13	43	71.6	3.4	26.2	110.9
642	1,3,5,7,11,15,17,18,19,25,26,27,30,31,36,37,38A,45,47,41B,42,44	536,410	101.6	24	12	105	379,610	512,970	2	11	54,020	13	183	13.9	43.6	141.0	11.6	26.2	119.2
643	1,3,5,7,11,15,17,18,19,25,26,27,30,31,36,37,39,41A,41B,42,44	532,140	100.8	22	12	108	375,340	486,000	2	11	56,110	13	181	15.8	44.3	146.5	21.6	26.2	126.5
644	1,3,5,7,11,15,17,18,19,25,26,27,30,31,40,41A,41B,42,44	523,610	99.2	21	13	103	352,060	487,560	2	13	54,060	13	182	12.5	39	201.4	32.8	26.2	124.9
645	1,3,5,7,11,15,17,18,19,25,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	554,440	105	22	12	99	471,020	528,650	0	13	63,500	13	162	12.6	45.7	0.0	0.0	26.2	139.2
646	1,3,5,7,11,15,17,18,19,25,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	562,310	106.5	24	12	102	478,900	529,090	0	13	59,570	13	163	10	46.3	0.0	0.0	26.2	139.2
647	1,3,5,7,11,15,17,18,19,25,26,27,30,32,34,36,37,38A,45,46,38E,42,44	549,540	104.1	25	12	100	466,130	526,100	0	13	53,860	13	164	10	41	71.6	3.4	26.2	135.1
648	1,3,5,7,11,15,17,18,19,25,26,27,30,32,34,36,37,38A,45,47,41B,42,44	552,500	104.6	25	12	102	469,080	529,050	0	13	54,020	15	159	10.8	41.5	141.0	11.6	26.2	143.4
649	1,3,5,7,11,15,17,18,19,25,26,27,30,32,34,36,37,39,41A,41B,42,44	548,220	103.8	23	12	105	464,810	502,090	0	13	56,110	15	157	12.7	42.3	146.5	21.6	26.2	150.7
650	1,3,5,7,11,15,17,18,19,25,26,27,30,32,34,40,41A,41B,42,44	539,700	102.2	24	13	100	441,540	503,650	0	15	54,060	15	158	9.5	37	201.4	32.8	26.2	149.1
651	1,3,5,7,11,15,17,18,19,25,26,27,30,32,35,43,44	535,320	101.4	22	13	101	466,630	511,530	0	12	20,220	14	159	7.9	36.1	88.3	25.0	26.2	137.5
652	1,3,5,7,11,15,17,18,19,25,26,28,33,43,44	542,230	102.7	21	13	103	431,670	518,440	0	12	20,220	14	177	12.3	41.6	88.3	25.0	26.2	148.7
653	1,3,5,7,11,15,17,20,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	555,580	105.2	26	10	102	478,320	540,270	0	11	69,380	11	158	13.2	48.8	0.0	0.0	26.2	212.1
654	1,3,5,7,11,15,17,20,23,26,27,29,37,38A,38B,48,38D,38E,42,44	563,450	106.7	28	10	105	486,190	540,710	0	11	65,450	11	159	10.6	49.4	0.0	0.0	26.2	212.1
655	1,3,5,7,11,15,17,20,23,26,27,29,37,38A,45,46,38E,42,44	550,680	104.3	29	10	103	473,420	537,720	0	11	59,730	11	160	10.6	44.1	71.6	3.4	26.2	208.0
656	1,3,5,7,11,15,17,20,23,26,27,29,37,38A,45,47,41B,42,44	553,640	104.9	29	10	105	476,380	540,670	0	11	59,890	13	155	11.4	44.6	141.0	11.6	26.2	216.3
657	1,3,5,7,11,15,17,20,23,26,27,29,37,39,41A,41B,42,44	549,360	104	27	10	108	472,110	513,710	0	11	61,990	13	153	13.3	45.4	146.5	21.6	26.2	223.6
658	1,3,5,7,11,15,17,20,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	521,370	98.7	22	12	102	365,110	514,050	2	11	63,500	11	171	15.9	46.4	0.0	0.0	26.2	81.0
659	1,3,5,7,11,15,17,20,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	529,250	100.2	24	12	105	372,980	514,490	2	11	59,570	11	172	13.3	46.9	0.0	0.0	26.2	81.0
660	1,3,5,7,11,15,17,20,23,26,27,30,31,36,37,38A,45,46,38E,42,44	516,480	97.8	25	12	103	360,210	511,490	2	11	53,860	11	173	13.3	41.6	71.6	3.4	26.2	76.9
661	1,3,5,7,11,15,17,20,23,26,27,30,31,36,37,38A,45,47,41B,42,44	519,430	98.4	25	12	105	363,170	514,450	2	11	54,020	13	168	14.1	42.2	141.0	11.6	26.2	85.2
662	1,3,5,7,11,15,17,20,23,26,27,30,31,36,37,39,41A,41B,42,44	515,160	97.6	23	12	108	358,900	487,490	2	11	56,110	13	166	16	42.9	146.5	21.6	26.2	92.5
663	1,3,5,7,11,15,17,20,23,26,27,30,31,40,41A,41B,42,44	506,640	96	22	13	103	335,620	489,040	2	13	54,060	13	167	12.8	37.6	201.4	32.8	26.2	90.9
664	1,3,5,7,11,15,17,20,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	537,460	101.8	23	12	99	454,580	530,130	0	13	63,500	13	147	12.8	44.3	0.0	0.0	26.2	105.2
665	1,3,5,7,11,15,17,20,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	545,330	103.3	25	12	102	462,450	530,580	0	13	59,570	13	148	10.2	44.9	0.0	0.0	26.2	105.2
666	1,3,5,7,11,15,17,20,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	532,560	100.9	26	12	100	449,680	527,580	0	13	53,860	13	149	10.2	39.6	71.6	3.4	26.2	101.1
667	1,3,5,7,11,15,17,20,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	535,520	101.4	26	12	102	452,640	530,540	0	13	54,020	15	144	11	40.1	141.0	11.6	26.2	109.4
668	1,3,5,7,11,15,17,20,23,26,27,30,32,34,36,37,39,41A,41B,42,44	531,250	100.6	24	12	105	448,370	503,570	0	13	56,110	15	142	12.9	40.9	146.5	21.6	26.2	116.7
669	1,3,5,7,11,15,17,20,23,26,27,30,32,34,40,41A,41B,42,44	522,720	99	25	13	100	425,100	505,130	0	15	54,060	15	143	9.7	35.6	201.4	32.8	26.2	115.1
670	1,3,5,7,11,15,17,20,23,26,27,30,32,35,43,44	518,350	98.2	23	13	101	450,190	513,010	0	12	20,220	14	144	8.1	34.7	88.3	25.0	26.2	103.5
671	1,3,5,7,11,15,17,20,23,26,28,33,43,44	525,250	99.5	22	13	103	415,230	519,920	0	12	20,220	14	162	12.5	40.2	88.3	25.0	26.2	114.7
672	1,3,5,7,11,15,17,20,24,27,29,37,38A,38B,38C,38D,38E,42,44	552,800	104.7	23	10	102	477,190	537,490	0	11	69,380	11	158	13.2	48.5	0.0	0.0	26.2	210.8
673	1,3,5,7,11,15,17,20,24,27,29,37,38A,38B,48,38D,38E,42,44	560,670	106.2	25	10	105	485,060	537,940	0	11	65,450	11	159	10.6	49.1	0.0	0.0	26.2	210.8
674	1,3,5,7,11,15,17,20,24,27,29,37,38A,45,46,38E,42,44	547,900	103.8	26	10	103	472,290	534,940	0	11	59,730	11	160	10.6	43.8	71.6	3.4	26.2	206.7
675	1,3,5,7,11,15,17,20,24,27,29,37,38A,45,47,41B,42,44	550,860	104.3	26	10	105	475,250	537,900	0	11	59,890	13	155	11.4	44.3	141.0	11.6	26.2	215.0
676	1,3,5,7,11,15,17,20,24,27,29,37,39,41A,41B,42,44	546,590	103.5	24	10	108	470,970	510,940	0	11	61,990	13	153	13.3	45.1	146.5	21.6	26.2	222.3
677	1,3,5,7,11,15,17,20,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	518,600	98.2	19	12	102	363,980	511,270	2	11	63,500	11	171	15.9	46.1	0.0	0.0	26.2	79.7
678	1,3,5,7,11,15,17,20,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	526,470	99.7	21	12	105	371,850	511,720	2	11	59,570	11	172	13.3	46.6	0.0	0.0	26.2	79.7
679	1,3,5,7,11,15,17,20,24,27,30,31,36,37,38A,45,46,38E,42,44	513,700	97.3	22	12	103	359,080	508,720	2	11	53,860	11	173	13.3	41.3	71.6	3.4	26.2	75.6
680	1,3,5,7,11,15,17,20,24,27,30,31,36,37,38A,45,47,41B,42,44	516,660	97.9	22	12	105	362,040	511,680	2	11	54,020	13	168	14.1	41.9	141.0	11.6	26.2	83.9
681	1,3,5,7,11,15,17,20,24,27,30,31,36,37,39,41A,41B,42,44	512,390	97	20	12	108	357,760	484,710	2	11	56,110	13	166	16	42.6	146.5	21.6	26.2	91.2
682	1,3,5,7,11,15,17,20,24,27,30,31,40,41A,41B,42,44	503,860	95.4	19	13	103	334,490	486,270	2	13	54,060	13	167	12.8	37.3	201.4	32.8	26.2	89.6
683	1,3,5,7,11,15,17,20,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	534,690	101.3	20	12	99	453,450	527,360	0	13	63,500	13	147	12.8	44	0.0	0.0	26.2	103.9
684	1,3,5,7,11,15,17,20,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	542,560	102.8	22	12	102	461,320	527,800	0	13	59,570	13	148	10.2	44.6	0.0	0.0	26.2	103.9
685	1,3,5,7,11,15,17,20,24,27,30,32,34,36,37,38A,45,46,38E,42,44	529,790	100.3	23	12	100	448,550	524,800	0	13	53,860	13	149	10.2	39.3	71.6	3.4	26.2	99.8
686	1,3,5,7,11,15,17,20,24,27,30,32,34,36,37,38A,45,47,41B,42,44	532,750	100.9	23	12	102	451,510	527,760	0	13	54,020	15	144	11	39.8	141.0	11.6	26.2	108.1
687	1,3,5,7,11,15,17,20,24,27,30,32,34,36,37,39,41A,41B,42,44	528,470	100.1	21	12	105	447,240	500,800	0	13	56,110	15	142	12.9	40.5	146.5	21.6	26.2	115.4
688	1,3,5,7,11,15,17,20,24,27,30,32,34,40,41A,41B,42,44	519,950	98.5	22	13	100	423,960	502,360	0	15	54,060	15	143	9.7	35.2	201.4	32.8	26.2	113.8
689	1,3,5,7,11,15,17,20,24,27,30,32,35,43,44	515,570	97.6	20	13	101	449,050	510,240	0	12	20,220	14	144	8.1	34.4	88.3	25.0	26.2	102.2
690	1,3,5,7,11,15,17,20,24,28,33,43,44	522,480	99	21	13	103	414,100	517,150	0	12	20,220	14	162	12.5	39.9	88.3	25.0	26.2	113.5
691	1,3,5,7,11,16,21,23,26,27,29,37,38A,38B,38C,38D,38E,42,44	567,660	107.5	25	10	103	520,700	555,470	0	11	69,380	11	160	14.6	49.1	0.0	0.0	26.2	215.1
692	1,3,5,7,11,16,21,23,26,27,29,37,38A,38B,48,38D,38E,42,44	575,530	109	27	10	106	528,570	555,910	0	11	65,450	11	161	12	49.6	0.0	0.0	26.2	215.1
693	1,3,5,7,11,16,21,23,26,27,29,37,38A,45,46,38E,42,44	562,760	106.6	28	10	104	515,800	552,910	0	11	59,730	11	162	12	44.3	71.6	3.4	26.2	211.0

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Segments	Total Length (ft)	Total Length (mi)	Angles Over 30 Degrees (count)	Highway Crossings (count)	Other Roadway Crossings (count)	Length Not Along Existing Transmission Line (feet)	Length Not Along Roads (feet)	Oil/Gas Wells/Tanks in ROW (count)	Number of Pipeline Crossings (count)	Length Through Previously Mined Area (feet)	Transmission Line Crossings (count)	Stream Crossings (count)	Waterbodies in ROW (acres)	Wetlands in ROW (acres)	Gray Bat Critical Habitat in ROW (acres)	Woodland within Gray Bat Critical Habitat in ROW (acres)	Eastern Spotted Skunk Critical Habitat in ROW (acres)	Broadhead Skink State Critical Habitat in ROW (acres)
694	1,3,5,7,11,16,21,23,26,27,29,37,38A,45,47,41B,42,44	565,720	107.1	28	10	106	518,760	555,870	0	11	59,890	13	157	12.8	44.9	141.0	11.6	26.2	219.3
695	1,3,5,7,11,16,21,23,26,27,29,37,39,41A,41B,42,44	561,440	106.3	26	10	109	514,480	528,910	0	11	61,990	13	155	14.7	45.6	146.5	21.6	26.2	226.6
696	1,3,5,7,11,16,21,23,26,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	533,460	101	21	12	103	407,490	529,240	2	11	63,500	11	173	17.3	46.6	0.0	0.0	26.2	83.9
697	1,3,5,7,11,16,21,23,26,27,30,31,36,37,38A,38B,48,38D,38E,42,44	541,330	102.5	23	12	106	415,360	529,690	2	11	59,570	11	174	14.7	47.1	0.0	0.0	26.2	83.9
698	1,3,5,7,11,16,21,23,26,27,30,31,36,37,38A,45,46,38E,42,44	528,560	100.1	24	12	104	402,590	526,690	2	11	53,860	11	175	14.6	41.9	71.6	3.4	26.2	79.8
699	1,3,5,7,11,16,21,23,26,27,30,31,36,37,38A,45,47,41B,42,44	531,520	100.7	24	12	106	405,550	529,650	2	11	54,020	13	170	15.5	42.4	141.0	11.6	26.2	88.2
700	1,3,5,7,11,16,21,23,26,27,30,31,36,37,39,41A,41B,42,44	527,240	99.9	22	12	109	401,270	502,690	2	11	56,110	13	168	17.3	43.1	146.5	21.6	26.2	95.4
701	1,3,5,7,11,16,21,23,26,27,30,31,40,41A,41B,42,44	518,720	98.2	21	13	104	378,000	504,240	2	13	54,060	13	169	14.1	37.8	201.4	32.8	26.2	93.9
702	1,3,5,7,11,16,21,23,26,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	549,540	104.1	22	12	100	496,960	545,330	0	13	63,500	13	149	14.2	44.6	0.0	0.0	26.2	108.1
703	1,3,5,7,11,16,21,23,26,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	557,410	105.6	24	12	103	504,830	545,770	0	13	59,570	13	150	11.6	45.1	0.0	0.0	26.2	108.1
704	1,3,5,7,11,16,21,23,26,27,30,32,34,36,37,38A,45,46,38E,42,44	544,640	103.2	25	12	101	492,060	542,780	0	13	53,860	13	151	11.6	39.8	71.6	3.4	26.2	104.0
705	1,3,5,7,11,16,21,23,26,27,30,32,34,36,37,38A,45,47,41B,42,44	547,600	103.7	25	12	103	495,020	545,730	0	13	54,020	15	146	12.4	40.3	141.0	11.6	26.2	112.4
706	1,3,5,7,11,16,21,23,26,27,30,32,34,36,37,39,41A,41B,42,44	543,330	102.9	23	12	106	490,750	518,770	0	13	56,110	15	144	14.3	41.1	146.5	21.6	26.2	119.6
707	1,3,5,7,11,16,21,23,26,27,30,32,34,40,41A,41B,42,44	534,800	101.3	24	13	101	467,470	520,330	0	15	54,060	15	145	11.1	35.8	201.4	32.8	26.2	118.1
708	1,3,5,7,11,16,21,23,26,27,30,32,35,43,44	530,430	100.5	22	13	102	492,560	528,210	0	12	20,220	14	146	9.5	34.9	88.3	25.0	26.2	106.5
709	1,3,5,7,11,16,21,23,26,28,33,43,44	537,340	101.8	21	13	104	457,600	535,120	0	12	20,220	14	164	13.9	40.4	88.3	25.0	26.2	117.7
710	1,3,5,7,11,16,21,24,27,29,37,38A,38B,38C,38D,38E,42,44	564,880	107	24	10	103	519,560	552,690	0	11	69,380	11	160	14.6	48.8	0.0	0.0	26.2	213.8
711	1,3,5,7,11,16,21,24,27,29,37,38A,38B,48,38D,38E,42,44	572,750	108.5	26	10	106	527,440	553,140	0	11	65,450	11	161	12	49.3	0.0	0.0	26.2	213.8
712	1,3,5,7,11,16,21,24,27,29,37,38A,45,46,38E,42,44	559,980	106.1	27	10	104	514,670	550,140	0	11	59,730	11	162	12	44	71.6	3.4	26.2	209.7
713	1,3,5,7,11,16,21,24,27,29,37,38A,45,47,41B,42,44	562,940	106.6	27	10	106	517,630	553,100	0	11	59,890	13	157	12.8	44.6	141.0	11.6	26.2	218.0
714	1,3,5,7,11,16,21,24,27,29,37,39,41A,41B,42,44	558,670	105.8	25	10	109	513,350	526,140	0	11	61,990	13	155	14.7	45.3	146.5	21.6	26.2	225.3
715	1,3,5,7,11,16,21,24,27,30,31,36,37,38A,38B,38C,38D,38E,42,44	530,680	100.5	20	12	103	406,350	526,470	2	11	63,500	11	173	17.3	46.3	0.0	0.0	26.2	82.6
716	1,3,5,7,11,16,21,24,27,30,31,36,37,38A,38B,48,38D,38E,42,44	538,550	102	22	12	106	414,230	526,910	2	11	59,570	11	174	14.7	46.8	0.0	0.0	26.2	82.6
717	1,3,5,7,11,16,21,24,27,30,31,36,37,38A,45,46,38E,42,44	525,780	99.6	23	12	104	401,460	523,920	2	11	53,860	11	175	14.6	41.6	71.6	3.4	26.2	78.6
718	1,3,5,7,11,16,21,24,27,30,31,36,37,38A,45,47,41B,42,44	528,740	100.1	23	12	106	404,410	526,870	2	11	54,020	13	170	15.5	42.1	141.0	11.6	26.2	86.9
719	1,3,5,7,11,16,21,24,27,30,31,36,37,39,41A,41B,42,44	524,470	99.3	21	12	109	400,140	499,910	2	11	56,110	13	168	17.3	42.8	146.5	21.6	26.2	94.2
720	1,3,5,7,11,16,21,24,27,30,31,40,41A,41B,42,44	515,940	97.7	20	13	104	376,870	501,470	2	13	54,060	13	169	14.1	37.5	201.4	32.8	26.2	92.6
721	1,3,5,7,11,16,21,24,27,30,32,34,36,37,38A,38B,38C,38D,38E,42,44	546,770	103.6	21	12	100	495,830	542,560	0	13	63,500	13	149	14.2	44.2	0.0	0.0	26.2	106.8
722	1,3,5,7,11,16,21,24,27,30,32,34,36,37,38A,38B,48,38D,38E,42,44	554,640	105	23	12	103	503,700	543,000	0	13	59,570	13	150	11.6	44.8	0.0	0.0	26.2	106.8
723	1,3,5,7,11,16,21,24,27,30,32,34,36,37,38A,45,46,38E,42,44	541,870	102.6	24	12	101	490,930	540,000	0	13	53,860	13	151	11.6	39.5	71.6	3.4	26.2	102.8
724	1,3,5,7,11,16,21,24,27,30,32,34,36,37,38A,45,47,41B,42,44	544,830	103.2	24	12	103	493,890	542,960	0	13	54,020	15	146	12.4	40	141.0	11.6	26.2	111.1
725	1,3,5,7,11,16,21,24,27,30,32,34,36,37,39,41A,41B,42,44	540,560	102.4	22	12	106	489,620	516,000	0	13	56,110	15	144	14.3	40.8	146.5	21.6	26.2	118.4
726	1,3,5,7,11,16,21,24,27,30,32,34,40,41A,41B,42,44	532,030	100.8	23	13	101	466,340	517,550	0	15	54,060	15	145	11.1	35.5	201.4	32.8	26.2	116.8
727	1,3,5,7,11,16,21,24,27,30,32,35,43,44	527,650	99.9	21	13	102	491,430	525,440	0	12	20,220	14	146	9.5	34.6	88.3	25.0	26.2	105.2
728	1,3,5,7,11,16,21,24,28,33,43,44	534,560	101.2	22	13	104	456,470	532,340	0	12	20,220	14	164	13.9	40.1	88.3	25.0	26.2	116.4
729	1,3,5,7,11,16,22,33,43,44	510,590	96.7	20	13	106	475,780	508,380	2	12	20,220	12	150	13	38.9	88.3	25.0	26.2	105.4

Max		631,420	119.6	29	14	110	538,570	555,910	3	18	69,380	15	210	20	55.4	201.4	32.8	205.9	257.6
Average		536,299.7	101.6	20.2	11.8	102.7	448,736.2	510,908.0	1.0	11.5	54,359.5	12.1	164.0	13.6	44.4	87.2	12.0	54.8	138.2
Min		485,280	91.9	12	10	96	329,070	449,800	0	10	20,220	9	137	7.9	32.2	0.0	0.0	26.2	75.6
St. Dev		24,691.7	4.7	3.2	1.1	2.9	52,450.1	19,658.9	1.1	1.6	13,005.5	1.5	14.4	2.3	4.5	69.2	11.6	46.1	54.3

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
1	876.3	424.3	490.2	1024.8	0	1	335	2	14	14	50	0	1	5	250,090	124,420	152,130	63,280	213.1	0	339,830
2	860.0	408.0	521.8	1044.9	0	1	343	2	13	15	49	0	0	5	254,550	124,420	152,130	63,280	215.9	0	339,830
3	846.4	391.7	520.9	1047.3	0	1	337	1	12	13	41	0	0	5	251,170	124,420	152,130	63,280	216.2	0	339,830
4	868.0	388.6	526.8	1053.5	0	1	347	1	12	13	41	0	0	5	250,890	124,420	152,130	63,280	209.5	0	339,830
5	902.5	395.8	509.2	1040.9	0	1	340	2	17	15	57	1	0	5	231,590	124,420	152,130	63,280	212.1	0	339,830
6	613.5	292.6	599.5	965.3	0	0	315	5	15	17	67	0	1	5	294,630	151,300	135,790	49,850	215.4	0	336,940
7	597.1	276.2	631.1	985.4	0	0	323	5	14	18	66	0	0	5	299,090	151,300	135,790	49,850	218.2	0	336,940
8	583.6	260.0	630.2	987.9	0	0	317	4	13	16	58	0	0	5	295,710	151,300	135,790	49,850	218.5	0	336,940
9	605.2	256.9	636.1	994.0	0	0	327	4	13	16	58	0	0	5	295,440	151,300	135,790	49,850	211.8	0	336,940
10	639.7	264.1	618.5	981.5	0	0	320	5	18	18	74	1	0	5	276,140	151,300	135,790	49,850	214.4	0	336,940
11	658.5	262.1	654.8	925.5	0	0	324	1	22	15	63	0	0	6	309,580	140,480	133,410	49,850	237.7	0	323,740
12	662.4	317.3	647.9	949.6	0	0	317	4	14	16	60	0	2	3	283,170	158,200	138,900	49,850	222.6	0	346,950
13	646.0	300.9	679.6	969.7	0	0	325	4	13	17	59	0	1	3	287,630	158,200	138,900	49,850	225.4	0	346,950
14	632.5	284.7	678.7	972.1	0	0	319	3	12	15	51	0	1	3	284,250	158,200	138,900	49,850	225.7	0	346,950
15	654.1	281.6	684.6	978.3	0	0	329	3	12	15	51	0	1	3	283,970	158,200	138,900	49,850	219.0	0	346,950
16	688.6	288.8	667.0	965.7	0	0	322	4	17	17	67	1	1	3	264,680	158,200	138,900	49,850	221.6	0	346,950
17	707.4	286.8	703.2	909.7	0	0	326	0	21	14	56	0	1	4	298,120	147,380	136,520	49,850	244.9	0	333,750
18	680.7	287.3	691.9	919.2	0	1	321	2	15	10	48	0	1	4	299,280	171,380	119,430	49,850	253.1	0	340,660
19	702.4	297.8	667.3	952.6	0	1	319	0	15	8	38	0	0	4	323,930	152,990	119,990	56,310	267.8	0	329,290
20	678.9	367.1	554.8	859.0	0	1	327	2	15	14	52	0	1	3	353,810	114,490	137,840	56,210	213.6	0	308,540
21	662.5	350.7	586.5	879.1	0	1	335	2	14	15	51	0	0	3	358,270	114,490	137,840	56,210	216.4	0	308,540
22	649.0	334.5	585.6	881.6	0	1	329	1	13	13	43	0	0	3	354,890	114,490	137,840	56,210	216.7	0	308,540
23	670.6	331.4	591.4	887.7	0	1	339	1	13	13	43	0	0	3	354,620	114,490	137,840	56,210	210.0	0	308,540
24	705.1	338.6	573.9	875.2	0	1	332	2	18	15	59	1	0	3	335,320	114,490	137,840	56,210	212.6	0	308,540
25	416.1	235.4	664.2	799.5	0	0	307	5	16	17	69	0	1	3	398,360	141,380	121,510	42,780	215.9	0	305,670
26	399.7	219.0	695.8	819.7	0	0	315	5	15	18	68	0	0	3	402,820	141,380	121,510	42,780	218.7	0	305,670
27	386.1	202.7	694.9	822.1	0	0	309	4	14	16	60	0	0	3	399,440	141,380	121,510	42,780	219.0	0	305,670
28	407.7	199.6	700.8	828.2	0	0	319	4	14	16	60	0	0	3	399,160	141,380	121,510	42,780	212.3	0	305,670
29	442.3	206.9	683.2	815.7	0	0	312	5	19	18	76	1	0	3	379,860	141,370	121,510	42,780	214.9	0	305,660
30	461.1	204.9	719.4	759.7	0	0	316	1	23	15	65	0	0	4	413,300	130,550	119,130	42,780	238.2	0	292,460
31	465.0	260.1	712.6	783.8	0	0	309	4	15	16	62	0	2	1	386,890	148,280	124,620	42,780	223.1	0	315,680
32	448.6	243.7	744.2	803.9	0	0	317	4	14	17	61	0	1	1	391,350	148,280	124,620	42,780	225.9	0	315,680
33	435.0	227.4	743.3	806.3	0	0	311	3	13	15	53	0	1	1	387,970	148,280	124,620	42,780	226.2	0	315,680
34	456.6	224.3	749.2	812.5	0	0	321	3	13	15	53	0	1	1	387,700	148,280	124,620	42,780	219.5	0	315,680
35	491.2	231.6	731.7	799.9	0	0	314	4	18	17	69	1	1	1	368,400	148,270	124,620	42,780	222.1	0	315,670
36	510.0	229.6	767.9	743.9	0	0	318	0	22	14	58	0	1	2	401,840	137,450	122,240	42,780	245.4	0	302,470
37	483.3	230.1	756.6	753.5	0	1	313	2	16	10	50	0	1	2	403,000	161,450	105,140	42,780	253.6	0	309,370
38	504.9	240.5	732.0	786.8	0	1	311	0	16	8	40	0	0	2	427,650	143,060	105,700	49,240	268.3	0	298,000
39	609.9	332.1	513.3	885.7	0	1	316	2	14	14	50	0	1	2	386,950	118,040	126,070	68,900	195.0	0	313,010
40	593.5	315.7	544.9	905.8	0	1	324	2	13	15	49	0	0	2	391,410	118,040	126,070	68,900	197.8	0	313,010
41	579.9	299.4	544.0	908.2	0	1	318	1	12	13	41	0	0	2	388,030	118,040	126,070	68,900	198.1	0	313,010
42	601.5	296.3	549.9	914.4	0	1	328	1	12	13	41	0	0	2	387,750	118,040	126,070	68,900	191.4	0	313,010
43	636.1	303.6	532.3	901.8	0	1	321	2	17	15	57	1	0	2	368,450	118,030	126,070	68,900	193.9	0	313,000
44	347.0	200.3	622.6	826.2	0	0	296	5	15	17	67	0	1	2	431,490	144,920	109,730	55,470	197.3	0	310,120
45	330.7	184.0	654.3	846.3	0	0	304	5	14	18	66	0	0	2	435,950	144,920	109,730	55,470	200.1	0	310,120
46	317.1	167.7	653.4	848.7	0	0	298	4	13	16	58	0	0	2	432,570	144,920	109,730	55,470	200.4	0	310,120
47	338.7	164.6	659.3	854.9	0	0	308	4	13	16	58	0	0	2	432,300	144,920	109,730	55,470	193.7	0	310,120
48	373.2	171.8	641.7	842.3	0	0	301	5	18	18	74	1	0	2	413,000	144,910	109,730	55,470	196.3	0	310,110
49	392.1	169.9	677.9	786.3	0	0	305	1	22	15	63	0	0	3	446,440	134,090	107,350	55,470	219.5	0	296,910
50	395.9	225.0	671.1	810.4	0	0	298	4	14	16	60	0	2	0	420,030	151,820	112,840	55,470	204.5	0	320,130
51	379.6	208.7	702.7	830.6	0	0	306	4	13	17	59	0	1	0	424,490	151,820	112,840	55,470	207.3	0	320,130
52	366.0	192.4	701.8	833.0	0	0	300	3	12	15	51	0	1	0	421,110	151,820	112,840	55,470	207.6	0	320,130
53	387.6	189.3	707.7	839.1	0	0	310	3	12	15	51	0	1	0	420,830	151,820	112,840	55,470	200.9	0	320,130
54	422.1	196.5	690.1	826.6	0	0	303	4	17	17	67	1	1	0	401,530	151,810	112,840	55,470	203.4	0	320,120
55	441.0	194.6	726.4	770.6	0	0	307	0	21	14	56	0	1	1	434,970	140,990	110,460	55,470	226.7	0	306,920
56	414.3	195.1	715.1	780.1	0	1	302	2	15	10	48	0	1	1	436,130	164,990	93,370	55,470	235.0	0	313,830
57	435.9	205.5	690.4	813.4	0	1	300	0	15	8	38	0	0	1	460,780	146,600	93,930	61,930	249.7	0	302,460
58	607.3	330.8	511.1	879.1	0	1	314	2	14	14	50	0	1	2	388,340	118,040	126,070	66,090	195.0	0	310,200
59	590.9	314.4	542.7	899.3	0	1	322	2	13	15	49	0	0	2	392,800	118,040	126,070	66,090	197.8	0	310,200
60	577.3	298.1	541.8	901.7	0	1	316	1	12	13	41	0	0	2	389,420	118,040	126,070	66,090	198.1	0	310,200
61	598.9	295.0	547.7	907.8	0	1	326	1	12	13	41	0	0	2	389,140	118,040	126,070	66,090	191.4	0	310,200
62	633.5	302.3	530.1	895.3	0	1	319	2	17	15	57	1	0	2	369,840	118,030	126,070	66,090	193.9	0	310,190
63	344.5	199.1	620.4	819.6	0	0	294	5	15	17	67	0	1	2	432,880	144,920	109,730	52,660	197.3	0	307,310

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
64	328.1	182.7	652.1	839.8	0	0	302	5	14	18	66	0	0	2	437,340	144,920	109,730	52,660	200.1	0	307,310
65	314.5	166.4	651.2	842.2	0	0	296	4	13	16	58	0	0	2	433,960	144,920	109,730	52,660	200.4	0	307,310
66	336.1	163.3	657.0	848.4	0	0	306	4	13	16	58	0	0	2	433,690	144,920	109,730	52,660	193.7	0	307,310
67	370.6	170.5	639.5	835.8	0	0	299	5	18	18	74	1	0	2	414,390	144,910	109,730	52,660	196.3	0	307,300
68	389.5	168.6	675.7	779.8	0	0	303	1	22	15	63	0	0	3	447,830	134,090	107,350	52,660	219.5	0	294,100
69	393.4	223.8	668.9	803.9	0	0	296	4	14	16	60	0	2	0	421,420	151,820	112,840	52,660	204.5	0	317,320
70	377.0	207.4	700.5	824.0	0	0	304	4	13	17	59	0	1	0	425,880	151,820	112,840	52,660	207.3	0	317,320
71	363.4	191.1	699.6	826.4	0	0	298	3	12	15	51	0	1	0	422,500	151,820	112,840	52,660	207.6	0	317,320
72	385.0	188.0	705.5	832.6	0	0	308	3	12	15	51	0	1	0	422,220	151,820	112,840	52,660	200.9	0	317,320
73	419.5	195.2	687.9	820.0	0	0	301	4	17	17	67	1	1	0	402,920	151,810	112,840	52,660	203.4	0	317,310
74	438.4	193.3	724.2	764.0	0	0	305	0	21	14	56	0	1	1	436,370	140,990	110,460	52,660	226.7	0	304,110
75	411.7	193.8	712.9	773.6	0	1	300	2	15	10	48	0	1	1	437,520	164,990	93,370	52,660	235.0	0	311,020
76	433.4	204.2	688.2	806.9	0	1	298	0	15	8	38	0	0	1	462,170	146,600	93,930	59,120	249.7	0	299,650
77	655.7	374.9	515.6	885.3	0	1	341	2	13	18	52	0	1	2	355,970	112,880	144,680	72,840	201.5	0	330,400
78	639.3	358.5	547.2	905.4	0	1	349	2	12	19	51	0	0	2	360,430	112,880	144,680	72,840	204.3	0	330,400
79	625.8	342.3	546.3	907.8	0	1	343	1	11	17	43	0	0	2	357,050	112,880	144,680	72,840	204.6	0	330,400
80	647.4	339.2	552.2	914.0	0	1	353	1	11	17	43	0	0	2	356,780	112,880	144,680	72,840	197.9	0	330,400
81	681.9	346.4	534.6	901.4	0	1	346	2	16	19	59	1	0	2	337,480	112,870	144,680	72,840	200.5	0	330,390
82	392.8	243.2	624.9	825.8	0	0	321	5	14	21	69	0	1	2	400,520	139,760	128,350	59,420	203.8	0	327,530
83	376.4	226.8	656.5	845.9	0	0	329	5	13	22	68	0	0	2	404,980	139,760	128,350	59,420	206.6	0	327,530
84	362.8	210.5	655.6	848.3	0	0	323	4	12	20	60	0	0	2	401,600	139,760	128,350	59,420	206.9	0	327,530
85	384.5	207.4	661.5	854.5	0	0	333	4	12	20	60	0	0	2	401,320	139,760	128,350	59,420	200.2	0	327,530
86	419.0	214.7	644.0	841.9	0	0	326	5	17	22	76	1	0	2	382,020	139,750	128,350	59,420	202.8	0	327,520
87	437.9	212.7	680.2	786.0	0	0	330	1	21	19	65	0	0	3	415,470	128,940	125,970	59,420	226.1	0	314,330
88	441.7	267.9	673.4	810.0	0	0	323	4	13	20	62	0	2	0	389,050	146,660	131,460	59,420	211.0	0	337,540
89	425.3	251.5	705.0	830.2	0	0	331	4	12	21	61	0	1	0	393,510	146,660	131,460	59,420	213.8	0	337,540
90	411.7	235.2	704.1	832.6	0	0	325	3	11	19	53	0	1	0	390,130	146,660	131,460	59,420	214.1	0	337,540
91	433.4	232.1	710.0	838.8	0	0	335	3	11	19	53	0	1	0	389,860	146,660	131,460	59,420	207.4	0	337,540
92	467.9	239.4	692.4	826.2	0	0	328	4	16	21	69	1	1	0	370,560	146,650	131,460	59,420	210.0	0	337,530
93	486.8	237.4	728.6	770.2	0	0	332	0	20	18	58	0	1	1	404,000	135,840	129,080	59,420	233.3	0	324,340
94	460.1	237.9	717.3	779.7	0	1	327	2	14	14	50	0	1	1	405,160	159,830	111,990	59,420	241.5	0	331,240
95	481.7	248.3	692.7	813.1	0	1	325	0	14	12	40	0	0	1	429,810	141,440	112,540	65,870	256.2	0	319,850
96	653.1	373.6	513.4	878.7	0	1	339	2	13	18	52	0	1	2	357,360	112,880	144,680	70,030	201.5	0	327,590
97	636.7	357.2	545.0	898.9	0	1	347	2	12	19	51	0	0	2	361,820	112,880	144,680	70,030	204.3	0	327,590
98	623.2	341.0	544.1	901.3	0	1	341	1	11	17	43	0	0	2	358,440	112,880	144,680	70,030	204.6	0	327,590
99	644.8	337.9	550.0	907.5	0	1	351	1	11	17	43	0	0	2	358,170	112,880	144,680	70,030	197.9	0	327,590
100	679.3	345.1	532.4	894.9	0	1	344	2	16	19	59	1	0	2	338,870	112,870	144,680	70,030	200.5	0	327,580
101	390.2	241.9	622.7	819.3	0	0	319	5	14	21	69	0	1	2	401,910	139,760	128,350	56,600	203.8	0	324,710
102	373.8	225.5	654.3	839.4	0	0	327	5	13	22	68	0	0	2	406,370	139,760	128,350	56,600	206.6	0	324,710
103	360.4	209.3	653.4	841.8	0	0	321	4	12	20	60	0	0	2	402,990	139,760	128,350	56,600	206.9	0	324,710
104	381.9	206.1	659.3	848.0	0	0	331	4	12	20	60	0	0	2	402,710	139,760	128,350	56,600	200.2	0	324,710
105	416.5	213.4	641.8	835.4	0	0	324	5	17	22	76	1	0	2	383,420	139,750	128,350	56,600	202.8	0	324,700
106	435.3	211.4	678.0	779.4	0	0	328	1	21	19	65	0	0	3	416,860	128,940	125,970	56,600	226.1	0	311,510
107	439.1	266.6	671.2	803.5	0	0	321	4	13	20	62	0	2	0	390,440	146,660	131,460	56,600	211.0	0	334,720
108	422.7	250.2	702.8	823.6	0	0	329	4	12	21	61	0	1	0	394,910	146,660	131,460	56,600	213.8	0	334,720
109	409.3	234.0	701.9	826.1	0	0	323	3	11	19	53	0	1	0	391,520	146,660	131,460	56,600	214.1	0	334,720
110	430.8	230.8	707.8	832.2	0	0	333	3	11	19	53	0	1	0	391,250	146,660	131,460	56,600	207.4	0	334,720
111	465.4	238.1	690.2	819.7	0	0	326	4	16	21	69	1	1	0	371,950	146,650	131,460	56,600	210.0	0	334,710
112	484.2	236.1	726.4	763.7	0	0	330	0	20	18	58	0	1	1	405,390	135,840	129,080	56,600	233.3	0	321,520
113	457.5	236.6	715.1	773.2	0	1	325	2	14	14	50	0	1	1	406,550	159,830	111,990	56,600	241.5	0	328,420
114	479.1	247.0	690.5	806.5	0	1	323	0	14	12	40	0	0	1	431,200	141,440	112,540	63,060	256.2	0	317,040
115	457.8	236.7	674.5	750.7	0	1	312	0	14	11	39	0	0	1	437,840	149,050	93,490	66,980	257.7	0	309,520
116	877.9	431.2	537.2	977.1	0	2	334	2	15	20	58	0	1	5	243,720	124,610	141,840	63,280	232.4	0	329,730
117	861.5	414.8	568.8	997.2	0	2	342	2	14	21	57	0	0	5	248,180	124,610	141,840	63,280	235.2	0	329,730
118	847.9	398.5	567.9	999.7	0	2	336	1	13	19	49	0	0	5	244,800	124,610	141,840	63,280	235.5	0	329,730
119	869.5	395.4	573.8	1005.8	0	2	346	1	13	19	49	0	0	5	244,530	124,610	141,840	63,280	228.8	0	329,730
120	904.1	402.7	556.2	993.3	0	2	339	2	18	21	65	1	0	5	225,230	124,600	141,840	63,280	231.3	0	329,720
121	615.0	299.4	646.5	917.6	0	1	314	5	16	23	75	0	1	5	288,270	151,490	125,500	49,850	234.7	0	326,840
122	598.7	283.1	678.1	937.8	0	1	322	5	15	24	74	0	0	5	292,730	151,490	125,500	49,850	237.5	0	326,840
123	585.1	266.8	677.2	940.2	0	1	316	4	14	22	66	0	0	5	289,350	151,490	125,500	49,850	237.8	0	326,840
124	606.7	263.7	683.1	946.3	0	1	326	4	14	22	66	0	0	5	289,070	151,490	125,500	49,850	231.1	0	326,840
125	641.2	270.9	665.6	933.8	0	1	319	5	19	24	82	1	0	5	269,770	151,480	125,500	49,850	233.7	0	326,830
126	660.1	269.0	701.8	877.8	0	1	323	1	23	21	71	0	0	6	303,220	140,670	123,120	49,850	256.9	0	313,640

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
127	663.9	324.1	695.0	901.9	0	1	316	4	15	22	68	0	2	3	276,800	158,390	128,610	49,850	241.9	0	336,850
128	647.6	307.8	726.6	922.0	0	1	324	4	14	23	67	0	1	3	281,270	158,390	128,610	49,850	244.7	0	336,850
129	634.0	291.5	725.7	924.4	0	1	318	3	13	21	59	0	1	3	277,880	158,390	128,610	49,850	245.0	0	336,850
130	655.6	288.4	731.6	930.6	0	1	328	3	13	21	59	0	1	3	277,610	158,390	128,610	49,850	238.3	0	336,850
131	690.1	295.6	714.0	918.0	0	1	321	4	18	23	75	1	1	3	258,310	158,380	128,610	49,850	240.9	0	336,840
132	709.0	293.7	750.2	862.0	0	1	325	0	22	20	64	0	1	4	291,750	147,570	126,230	49,850	264.1	0	323,650
133	682.3	294.2	738.9	871.5	0	2	320	2	16	16	56	0	1	4	292,910	171,560	109,140	49,850	272.4	0	330,550
134	703.9	304.6	714.3	904.9	0	2	318	0	16	14	46	0	0	4	317,560	153,170	109,690	56,310	287.1	0	319,170
135	680.3	373.9	601.9	811.3	0	2	326	2	16	20	60	0	1	3	347,450	114,680	127,550	56,210	232.9	0	298,440
136	664.0	357.6	633.5	831.5	0	2	334	2	15	21	59	0	0	3	351,910	114,680	127,550	56,210	235.7	0	298,440
137	650.4	341.3	632.6	833.9	0	2	328	1	14	19	51	0	0	3	348,530	114,680	127,550	56,210	236.0	0	298,440
138	672.0	338.2	638.5	840.0	0	2	338	1	14	19	51	0	0	3	348,250	114,680	127,550	56,210	229.3	0	298,440
139	706.5	345.4	620.9	827.5	0	2	331	2	19	21	67	1	0	3	328,950	114,670	127,550	56,210	231.9	0	298,430
140	417.5	242.2	711.2	751.8	0	1	306	5	17	23	77	0	1	3	391,990	141,560	111,210	42,780	235.2	0	295,550
141	401.2	225.9	742.8	772.0	0	1	314	5	16	24	76	0	0	3	396,450	141,560	111,210	42,780	238.0	0	295,550
142	387.6	209.6	741.9	774.4	0	1	308	4	15	22	68	0	0	3	393,070	141,560	111,210	42,780	238.3	0	295,550
143	409.2	206.5	747.8	780.6	0	1	318	4	15	22	68	0	0	3	392,800	141,560	111,210	42,780	231.6	0	295,550
144	443.7	213.7	730.2	768.0	0	1	311	5	20	24	84	1	0	3	373,500	141,560	111,210	42,780	234.2	0	295,550
145	462.5	211.7	766.5	712.0	0	1	315	1	24	21	73	0	0	4	406,940	130,740	108,840	42,780	257.5	0	282,360
146	466.4	266.9	759.6	736.1	0	1	308	4	16	22	70	0	2	1	380,530	148,460	114,330	42,780	242.4	0	305,570
147	450.1	250.6	791.3	756.2	0	1	316	4	15	23	69	0	1	1	384,990	148,460	114,330	42,780	245.2	0	305,570
148	436.5	234.3	790.4	758.6	0	1	310	3	14	21	61	0	1	1	381,610	148,460	114,330	42,780	245.5	0	305,570
149	458.1	231.2	796.2	764.8	0	1	320	3	14	21	61	0	1	1	381,330	148,460	114,330	42,780	238.8	0	305,570
150	492.6	238.4	778.7	752.2	0	1	313	4	19	23	77	1	1	1	362,030	148,460	114,330	42,780	241.4	0	305,570
151	511.4	236.4	814.9	696.2	0	1	317	0	23	20	66	0	1	2	395,480	137,640	111,950	42,780	264.7	0	292,370
152	484.8	237.0	803.6	705.8	0	2	312	2	17	16	58	0	1	2	396,640	161,630	94,850	42,780	272.9	0	299,260
153	506.4	247.4	779.0	739.1	0	2	310	0	17	14	48	0	0	2	421,280	143,250	95,410	49,240	287.6	0	287,900
154	611.3	338.9	560.3	838.0	0	2	315	2	15	20	58	0	1	2	380,580	118,220	115,780	68,900	214.2	0	302,900
155	594.9	322.5	592.0	858.1	0	2	323	2	14	21	57	0	0	2	385,040	118,220	115,780	68,900	217.0	0	302,900
156	581.4	306.3	591.1	860.5	0	2	317	1	13	19	49	0	0	2	381,660	118,220	115,780	68,900	217.3	0	302,900
157	603.0	303.2	596.9	866.7	0	2	327	1	13	19	49	0	0	2	381,390	118,220	115,780	68,900	210.6	0	302,900
158	637.5	310.4	579.4	854.1	0	2	320	2	18	21	65	1	0	2	362,090	118,220	115,780	68,900	213.2	0	302,900
159	348.5	207.2	669.7	778.5	0	1	295	5	16	23	75	0	1	2	425,130	145,100	99,440	55,470	216.6	0	300,010
160	332.1	190.8	701.3	798.6	0	1	303	5	15	24	74	0	0	2	429,590	145,100	99,440	55,470	219.4	0	300,010
161	318.6	174.6	700.4	801.0	0	1	297	4	14	22	66	0	0	2	426,210	145,100	99,440	55,470	219.7	0	300,010
162	340.1	171.4	706.3	807.2	0	1	307	4	14	22	66	0	0	2	425,930	145,100	99,440	55,470	213.0	0	300,010
163	374.7	178.7	688.7	794.6	0	1	300	5	19	24	82	1	0	2	406,630	145,100	99,440	55,470	215.5	0	300,010
164	393.5	176.7	724.9	738.6	0	1	304	1	23	21	71	0	0	3	440,070	134,280	97,060	55,470	238.8	0	286,810
165	397.4	231.9	718.1	762.7	0	1	297	4	15	22	68	0	2	0	413,660	152,000	102,550	55,470	223.8	0	310,020
166	381.0	215.5	749.7	782.9	0	1	305	4	14	23	67	0	1	0	418,120	152,000	102,550	55,470	226.6	0	310,020
167	367.5	199.3	748.8	785.3	0	1	299	3	13	21	59	0	1	0	414,740	152,000	102,550	55,470	226.9	0	310,020
168	389.0	196.1	754.7	791.5	0	1	309	3	13	21	59	0	1	0	414,470	152,000	102,550	55,470	220.2	0	310,020
169	423.6	203.4	737.2	778.9	0	1	302	4	18	23	75	1	1	0	395,170	152,000	102,550	55,470	222.7	0	310,020
170	442.4	201.4	773.4	722.9	0	1	306	0	22	20	64	0	1	1	428,610	141,180	100,170	55,470	246.0	0	296,820
171	415.7	201.9	762.1	732.4	0	2	301	2	16	16	56	0	1	1	429,770	165,170	83,080	55,470	254.3	0	303,720
172	437.3	212.3	737.5	765.7	0	2	299	0	16	14	46	0	0	1	454,420	146,790	83,640	61,930	268.9	0	292,360
173	608.7	337.6	558.1	831.4	0	2	313	2	15	20	58	0	1	2	381,970	118,220	115,780	66,090	214.2	0	300,090
174	592.4	321.3	589.7	851.6	0	2	321	2	14	21	57	0	0	2	386,430	118,220	115,780	66,090	217.0	0	300,090
175	578.8	305.0	588.9	854.0	0	2	315	1	13	19	49	0	0	2	383,050	118,220	115,780	66,090	217.3	0	300,090
176	600.4	301.9	594.7	860.1	0	2	325	1	13	19	49	0	0	2	382,780	118,220	115,780	66,090	210.6	0	300,090
177	634.9	309.1	577.2	847.6	0	2	318	2	18	21	65	1	0	2	363,480	118,220	115,780	66,090	213.2	0	300,090
178	345.9	205.9	667.5	771.9	0	1	293	5	16	23	75	0	1	2	426,520	145,100	99,440	52,660	216.6	0	297,200
179	329.5	189.5	699.1	792.1	0	1	301	5	15	24	74	0	0	2	430,980	145,100	99,440	52,660	219.4	0	297,200
180	316.0	173.3	698.2	794.5	0	1	295	4	14	22	66	0	0	2	427,600	145,100	99,440	52,660	219.7	0	297,200
181	337.6	170.2	704.1	800.7	0	1	305	4	14	22	66	0	0	2	427,320	145,100	99,440	52,660	213.0	0	297,200
182	372.1	177.4	686.5	788.1	0	1	298	5	19	24	82	1	0	2	408,020	145,100	99,440	52,660	215.5	0	297,200
183	390.9	175.4	722.7	732.1	0	1	302	1	23	21	71	0	0	3	441,460	134,280	97,060	52,660	238.8	0	284,000
184	394.8	230.6	715.9	756.2	0	1	295	4	15	22	68	0	2	0	415,050	152,000	102,550	52,660	223.8	0	307,210
185	378.4	214.2	747.5	776.3	0	1	303	4	14	23	67	0	1	0	419,510	152,000	102,550	52,660	226.6	0	307,210
186	364.9	198.0	746.6	778.7	0	1	297	3	13	21	59	0	1	0	416,130	152,000	102,550	52,660	226.9	0	307,210
187	386.5	194.9	752.5	784.9	0	1	307	3	13	21	59	0	1	0	415,860	152,000	102,550	52,660	220.2	0	307,210
188	421.0	202.1	735.0	772.3	0	1	300	4	18	23	75	1	1	0	396,560	152,000	102,550	52,660	222.7	0	307,210
189	439.8	200.1	771.2	716.4	0	1	304	0	22	20	64	0	1	1	430,000	141,180	100,170	52,660	246.0	0	294,010

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
190	413.1	200.6	759.9	725.9	0	2	299	2	16	16	56	0	1	1	431,160	165,170	83,080	52,660	254.3	0	300,910
191	434.9	211.1	735.3	759.2	0	2	297	0	16	14	46	0	0	1	455,810	146,790	83,640	59,120	268.9	0	289,550
192	657.1	381.7	562.6	837.6	0	2	340	2	14	24	60	0	1	2	349,610	113,060	134,390	72,840	220.8	0	320,290
193	640.8	365.4	594.2	857.7	0	2	348	2	13	25	59	0	0	2	354,070	113,060	134,390	72,840	223.6	0	320,290
194	627.2	349.1	593.3	860.1	0	2	342	1	12	23	51	0	0	2	350,690	113,060	134,390	72,840	223.9	0	320,290
195	648.8	346.0	599.2	866.3	0	2	352	1	12	23	51	0	0	2	350,410	113,060	134,390	72,840	217.2	0	320,290
196	683.3	353.2	581.6	853.7	0	2	345	2	17	25	67	1	0	2	331,120	113,060	134,390	72,840	219.7	0	320,290
197	394.2	250.0	671.9	778.1	0	1	320	5	15	27	77	0	1	2	394,150	139,940	118,060	59,420	223.1	0	317,420
198	377.9	233.7	703.6	798.2	0	1	328	5	14	28	76	0	0	2	398,610	139,940	118,060	59,420	225.9	0	317,420
199	364.3	217.4	702.7	800.6	0	1	322	4	13	26	68	0	0	2	395,230	139,940	118,060	59,420	226.2	0	317,420
200	386.0	214.3	708.5	806.8	0	1	332	4	13	26	68	0	0	2	394,960	139,940	118,060	59,420	219.5	0	317,420
201	420.4	221.5	691.0	794.3	0	1	325	5	18	28	84	1	0	2	375,660	139,940	118,060	59,420	222.1	0	317,420
202	439.4	219.6	727.2	738.3	0	1	329	1	22	25	73	0	0	3	409,100	129,120	115,680	59,420	245.4	0	304,220
203	443.1	274.7	720.4	762.4	0	1	322	4	14	26	70	0	2	0	382,690	146,840	121,170	59,420	230.3	0	327,430
204	426.8	258.4	752.0	782.5	0	1	330	4	13	27	69	0	1	0	387,150	146,840	121,170	59,420	233.1	0	327,430
205	413.2	242.1	751.1	784.9	0	1	324	3	12	25	61	0	1	0	383,770	146,840	121,170	59,420	233.4	0	327,430
206	434.9	239.0	757.0	791.1	0	1	334	3	12	25	61	0	1	0	383,490	146,840	121,170	59,420	226.7	0	327,430
207	469.3	246.2	739.4	778.5	0	1	327	4	17	27	77	1	1	0	364,200	146,840	121,170	59,420	229.3	0	327,430
208	488.3	244.3	775.7	722.5	0	1	331	0	21	24	66	0	1	1	397,640	136,020	118,790	59,420	252.5	0	314,230
209	461.6	244.8	764.4	732.0	0	2	326	2	15	20	58	0	1	1	398,800	160,020	101,690	59,420	260.8	0	321,130
210	483.2	255.2	739.7	765.4	0	2	324	0	15	18	48	0	0	1	423,450	141,630	102,250	65,870	275.5	0	309,750
211	654.6	380.5	560.4	831.0	0	2	338	2	14	24	60	0	1	2	351,000	113,060	134,390	70,030	220.8	0	317,480
212	638.2	364.1	592.0	851.2	0	2	346	2	13	25	59	0	0	2	355,460	113,060	134,390	70,030	223.6	0	317,480
213	624.6	347.8	591.1	853.6	0	2	340	1	12	23	51	0	0	2	352,080	113,060	134,390	70,030	223.9	0	317,480
214	646.2	344.7	597.0	859.8	0	2	350	1	12	23	51	0	0	2	351,800	113,060	134,390	70,030	217.2	0	317,480
215	680.7	351.9	579.4	847.2	0	2	343	2	17	25	67	1	0	2	332,510	113,060	134,390	70,030	219.7	0	317,480
216	391.6	248.7	669.7	771.6	0	1	318	5	15	27	77	0	1	2	395,540	139,940	118,060	56,600	223.1	0	314,600
217	375.3	232.4	701.4	791.7	0	1	326	5	14	28	76	0	0	2	400,000	139,940	118,060	56,600	225.9	0	314,600
218	361.8	216.1	700.5	794.1	0	1	320	4	13	26	68	0	0	2	396,620	139,940	118,060	56,600	226.2	0	314,600
219	383.4	213.0	706.3	800.3	0	1	330	4	13	26	68	0	0	2	396,350	139,940	118,060	56,600	219.5	0	314,600
220	417.9	220.2	688.8	787.7	0	1	323	5	18	28	84	1	0	2	377,050	139,940	118,060	56,600	222.1	0	314,600
221	436.8	218.3	725.0	731.7	0	1	327	1	22	25	73	0	0	3	410,490	129,120	115,680	56,600	245.4	0	301,400
222	440.5	273.4	718.2	755.8	0	1	320	4	14	26	70	0	2	0	384,080	146,840	121,170	56,600	230.3	0	324,610
223	424.2	257.1	749.8	776.0	0	1	328	4	13	27	69	0	1	0	388,540	146,840	121,170	56,600	233.1	0	324,610
224	410.7	240.8	748.9	778.4	0	1	322	3	12	25	61	0	1	0	385,160	146,840	121,170	56,600	233.4	0	324,610
225	432.3	237.7	754.8	784.5	0	1	332	3	12	25	61	0	1	0	384,890	146,840	121,170	56,600	226.7	0	324,610
226	466.8	244.9	737.2	772.0	0	1	325	4	17	27	77	1	1	0	365,590	146,840	121,170	56,600	229.3	0	324,610
227	485.7	243.0	773.5	716.0	0	1	329	0	21	24	66	0	1	1	399,030	136,020	118,790	56,600	252.5	0	311,410
228	459.0	243.5	762.2	725.5	0	2	324	2	15	20	58	0	1	1	400,190	160,020	101,690	56,600	260.8	0	318,310
229	480.6	253.9	737.5	758.8	0	2	322	0	15	18	48	0	0	1	424,840	141,630	102,250	63,060	275.5	0	306,940
230	459.3	243.6	721.5	703.0	0	2	311	0	15	17	47	0	0	1	431,480	149,230	83,200	66,980	276.9	0	299,410
231	658.5	383.8	551.0	828.6	0	2	329	2	13	20	54	0	1	3	361,800	118,990	127,000	56,210	221.0	0	302,200
232	642.2	367.5	582.6	848.7	0	2	337	2	12	21	53	0	0	3	366,260	118,990	127,000	56,210	223.8	0	302,200
233	628.6	351.2	581.7	851.1	0	2	331	1	11	19	45	0	0	3	362,880	118,990	127,000	56,210	224.1	0	302,200
234	650.2	348.1	587.6	857.3	0	2	341	1	11	19	45	0	0	3	362,600	118,990	127,000	56,210	217.4	0	302,200
235	684.7	355.3	570.1	844.7	0	2	334	2	16	21	61	1	0	3	343,300	118,990	127,000	56,210	220.0	0	302,200
236	395.7	252.1	660.4	769.1	0	1	309	5	14	23	71	0	1	3	406,340	145,880	110,670	42,780	223.4	0	299,330
237	379.3	235.7	692.0	789.2	0	1	317	5	13	24	70	0	0	3	410,800	145,880	110,670	42,780	226.1	0	299,330
238	365.8	219.5	691.1	791.6	0	1	311	4	12	22	62	0	0	3	407,420	145,880	110,670	42,780	226.4	0	299,330
239	387.4	216.4	697.0	797.8	0	1	321	4	12	22	62	0	0	3	407,150	145,880	110,670	42,780	219.7	0	299,330
240	421.9	223.6	679.4	785.2	0	1	314	5	17	24	78	1	0	3	387,850	145,870	110,670	42,780	222.3	0	299,320
241	440.7	221.6	715.6	729.2	0	1	318	1	21	21	67	0	0	4	421,290	135,050	108,290	42,780	245.6	0	286,120
242	444.6	276.8	708.8	753.3	0	1	311	4	13	22	64	0	2	1	394,880	152,780	113,780	42,780	230.5	0	309,340
243	428.2	260.4	740.4	773.5	0	1	319	4	12	23	63	0	1	1	399,340	152,780	113,780	42,780	233.3	0	309,340
244	414.7	244.2	739.5	775.9	0	1	313	3	11	21	55	0	1	1	395,960	152,780	113,780	42,780	233.6	0	309,340
245	436.3	241.1	745.4	782.1	0	1	323	3	11	21	55	0	1	1	395,680	152,780	113,780	42,780	226.9	0	309,340
246	470.8	248.3	727.8	769.5	0	1	316	4	16	23	71	1	1	1	376,380	152,770	113,780	42,780	229.5	0	309,330
247	489.6	246.3	764.1	713.5	0	1	320	0	20	20	60	0	1	2	409,830	141,950	111,400	42,780	252.8	0	296,130
248	462.9	246.8	752.8	723.0	0	2	315	2	14	16	52	0	1	2	410,990	165,950	94,310	42,780	261.0	0	303,040
249	484.6	257.3	728.2	756.3	0	2	313	0	14	14	42	0	0	2	435,640	147,560	94,860	49,240	275.7	0	291,660
250	589.5	348.8	509.5	855.2	0	2	318	2	12	20	52	0	1	2	394,930	122,540	115,230	68,900	202.4	0	306,670
251	573.1	332.4	541.1	875.3	0	2	326	2	11	21	51	0	0	2	399,390	122,540	115,230	68,900	205.2	0	306,670
252	559.6	316.2	540.2	877.8	0	2	320	1	10	19	43	0	0	2	396,010	122,540	115,230	68,900	205.5	0	306,670

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
253	581.2	313.1	546.1	883.9	0	2	330	1	10	19	43	0	0	2	395,740	122,540	115,230	68,900	198.8	0	306,670
254	615.7	320.3	528.5	871.4	0	2	323	2	15	21	59	1	0	2	376,440	122,530	115,230	68,900	201.3	0	306,660
255	326.7	217.1	618.8	795.7	0	1	298	5	13	23	69	0	1	2	439,480	149,420	98,890	55,470	204.7	0	303,780
256	310.3	200.7	650.5	815.9	0	1	306	5	12	24	68	0	0	2	443,940	149,420	98,890	55,470	207.5	0	303,780
257	296.7	184.4	649.6	818.3	0	1	300	4	11	22	60	0	0	2	440,560	149,420	98,890	55,470	207.8	0	303,780
258	318.3	181.3	655.4	824.4	0	1	310	4	11	22	60	0	0	2	440,280	149,420	98,890	55,470	201.1	0	303,780
259	352.9	188.6	637.9	811.9	0	1	303	5	16	24	76	1	0	2	420,980	149,410	98,890	55,470	203.7	0	303,770
260	371.7	186.6	674.1	755.9	0	1	307	1	20	21	65	0	0	3	454,420	138,590	96,510	55,470	226.9	0	290,570
261	375.6	241.8	667.3	780.0	0	1	300	4	12	22	62	0	2	0	428,010	156,320	102,000	55,470	211.9	0	313,790
262	359.2	225.4	698.9	800.1	0	1	308	4	11	23	61	0	1	0	432,470	156,320	102,000	55,470	214.7	0	313,790
263	345.6	209.1	698.0	802.5	0	1	302	3	10	21	53	0	1	0	429,090	156,320	102,000	55,470	215.0	0	313,790
264	367.2	206.0	703.9	808.7	0	1	312	3	10	21	53	0	1	0	428,820	156,320	102,000	55,470	208.3	0	313,790
265	401.8	213.3	686.3	796.1	0	1	305	4	15	23	69	1	1	0	409,520	156,310	102,000	55,470	210.9	0	313,780
266	420.6	211.3	722.6	740.1	0	1	309	0	19	20	58	0	1	1	442,960	145,490	99,620	55,470	234.1	0	300,580
267	393.9	211.8	711.3	749.6	0	2	304	2	13	16	50	0	1	1	444,120	169,490	82,530	55,470	242.4	0	307,490
268	415.5	222.2	686.6	783.0	0	2	302	0	13	14	40	0	0	1	468,770	151,100	83,090	61,930	257.1	0	296,120
269	586.9	347.5	507.3	848.7	0	2	316	2	12	20	52	0	1	2	396,320	122,540	115,230	66,090	202.4	0	303,860
270	570.6	331.2	538.9	868.8	0	2	324	2	11	21	51	0	0	2	400,780	122,540	115,230	66,090	205.2	0	303,860
271	557.0	314.9	538.0	871.2	0	2	318	1	10	19	43	0	0	2	397,400	122,540	115,230	66,090	205.5	0	303,860
272	578.6	311.8	543.9	877.4	0	2	328	1	10	19	43	0	0	2	397,130	122,540	115,230	66,090	198.8	0	303,860
273	613.1	319.0	526.3	864.8	0	2	321	2	15	21	59	1	0	2	377,830	122,530	115,230	66,090	201.3	0	303,850
274	324.1	215.8	616.6	789.2	0	1	296	5	13	23	69	0	1	2	440,870	149,420	98,890	52,660	204.7	0	300,970
275	307.7	199.4	648.3	809.3	0	1	304	5	12	24	68	0	0	2	445,330	149,420	98,890	52,660	207.5	0	300,970
276	294.2	183.2	647.4	811.7	0	1	298	4	11	22	60	0	0	2	441,950	149,420	98,890	52,660	207.8	0	300,970
277	315.7	180.0	653.2	817.9	0	1	308	4	11	22	60	0	0	2	441,670	149,420	98,890	52,660	201.1	0	300,970
278	350.3	187.3	635.7	805.3	0	1	301	5	16	24	76	1	0	2	422,370	149,410	98,890	52,660	203.7	0	300,960
279	369.1	185.3	671.9	749.3	0	1	305	1	20	21	65	0	0	3	455,820	138,590	96,510	52,660	226.9	0	287,760
280	373.0	240.5	665.1	773.4	0	1	298	4	12	22	62	0	2	0	429,400	156,320	102,000	52,660	211.9	0	310,980
281	356.6	224.1	696.7	793.6	0	1	306	4	11	23	61	0	1	0	433,860	156,320	102,000	52,660	214.7	0	310,980
282	343.1	207.9	695.8	796.0	0	1	300	3	10	21	53	0	1	0	430,480	156,320	102,000	52,660	215.0	0	310,980
283	364.6	204.7	701.7	802.2	0	1	310	3	10	21	53	0	1	0	430,210	156,320	102,000	52,660	208.3	0	310,980
284	399.2	212.0	684.1	789.6	0	1	303	4	15	23	69	1	1	0	410,910	156,310	102,000	52,660	210.9	0	310,970
285	418.0	210.0	720.4	733.6	0	1	307	0	19	20	58	0	1	1	444,350	145,490	99,620	52,660	234.1	0	297,770
286	391.3	210.5	709.1	743.1	0	2	302	2	13	16	50	0	1	1	445,510	169,490	82,530	52,660	242.4	0	304,680
287	413.0	220.9	684.4	776.4	0	2	300	0	13	14	40	0	0	1	470,160	151,100	83,090	59,120	257.1	0	293,310
288	635.3	391.6	511.8	854.8	0	2	343	2	11	24	54	0	1	2	363,960	117,380	133,840	72,840	208.9	0	324,060
289	619.0	375.3	543.4	875.0	0	2	351	2	10	25	53	0	0	2	368,420	117,380	133,840	72,840	211.7	0	324,060
290	605.4	359.0	542.5	877.4	0	2	345	1	9	23	45	0	0	2	365,040	117,380	133,840	72,840	212.0	0	324,060
291	627.0	355.9	548.4	883.6	0	2	355	1	9	23	45	0	0	2	364,760	117,380	133,840	72,840	205.3	0	324,060
292	661.5	363.1	530.8	871.0	0	2	348	2	14	25	61	1	0	2	345,470	117,370	133,840	72,840	207.9	0	324,050
293	372.4	259.9	621.1	795.3	0	1	323	5	12	27	71	0	1	2	408,500	144,260	117,510	59,420	211.2	0	321,190
294	356.1	243.6	652.7	815.5	0	1	331	5	11	28	70	0	0	2	412,960	144,260	117,510	59,420	214.0	0	321,190
295	342.5	227.3	651.8	817.9	0	1	325	4	10	26	62	0	0	2	409,580	144,260	117,510	59,420	214.3	0	321,190
296	364.2	224.2	657.7	824.1	0	1	335	4	10	26	62	0	0	2	409,310	144,260	117,510	59,420	207.6	0	321,190
297	398.6	231.4	640.1	811.5	0	1	328	5	15	28	78	1	0	2	390,010	144,250	117,510	59,420	210.2	0	321,180
298	417.5	229.4	676.4	755.5	0	1	332	1	19	25	67	0	0	3	423,450	133,440	115,130	59,420	233.5	0	307,990
299	421.3	284.6	669.6	779.6	0	1	325	4	11	26	64	0	2	0	397,040	151,160	120,620	59,420	218.4	0	331,200
300	405.0	268.3	701.2	799.7	0	1	333	4	10	27	63	0	1	0	401,500	151,160	120,620	59,420	221.2	0	331,200
301	391.4	252.0	700.3	802.1	0	1	327	3	9	25	55	0	1	0	398,120	151,160	120,620	59,420	221.5	0	331,200
302	413.1	248.9	706.2	808.3	0	1	337	3	9	25	55	0	1	0	397,840	151,160	120,620	59,420	214.8	0	331,200
303	447.5	256.1	688.6	795.8	0	1	330	4	14	27	71	1	1	0	378,550	151,150	120,620	59,420	217.4	0	331,190
304	466.4	254.1	724.8	739.8	0	1	334	0	18	24	60	0	1	1	411,990	140,340	118,240	59,420	240.7	0	318,000
305	439.8	254.7	713.5	749.3	0	2	329	2	12	20	52	0	1	1	413,150	164,330	101,150	59,420	248.9	0	324,900
306	461.4	265.1	688.9	782.6	0	2	327	0	12	18	42	0	0	1	437,800	145,940	101,700	65,870	263.6	0	313,510
307	632.8	390.4	509.6	848.3	0	2	341	2	11	24	54	0	1	2	365,350	117,380	133,840	70,030	208.9	0	321,250
308	616.4	374.0	541.2	868.4	0	2	349	2	10	25	53	0	0	2	369,810	117,380	133,840	70,030	211.7	0	321,250
309	602.8	357.7	540.3	870.8	0	2	343	1	9	23	45	0	0	2	366,430	117,380	133,840	70,030	212.0	0	321,250
310	624.4	354.6	546.2	877.0	0	2	353	1	9	23	45	0	0	2	366,160	117,380	133,840	70,030	205.3	0	321,250
311	658.9	361.8	528.6	864.4	0	2	346	2	14	25	61	1	0	2	346,860	117,370	133,840	70,030	207.9	0	321,240
312	369.8	258.6	618.9	788.8	0	1	321	5	12	27	71	0	1	2	409,900	144,260	117,510	56,600	211.2	0	318,370
313	353.5	242.3	650.5	808.9	0	1	329	5	11	28	70	0	0	2	414,360	144,260	117,510	56,600	214.0	0	318,370
314	340.0	226.0	649.6	811.4	0	1	323	4	10	26	62	0	0	2	410,970	144,260	117,510	56,600	214.3	0	318,370
315	361.6	222.9	655.5	817.5	0	1	333	4	10	26	62	0	0	2	410,700	144,260	117,510	56,600	207.6	0	318,370

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
316	396.1	230.1	637.9	805.0	0	1	326	5	15	28	78	1	0	2	391,400	144,250	117,510	56,600	210.2	0	318,360
317	415.0	228.2	674.2	749.0	0	1	330	1	19	25	67	0	0	3	424,840	133,440	115,130	56,600	233.5	0	305,170
318	418.7	283.3	667.4	773.1	0	1	323	4	11	26	64	0	2	0	398,430	151,160	120,620	56,600	218.4	0	328,380
319	402.4	267.0	699.0	793.2	0	1	331	4	10	27	63	0	1	0	402,890	151,160	120,620	56,600	221.2	0	328,380
320	388.9	250.7	698.1	795.6	0	1	325	3	9	25	55	0	1	0	399,510	151,160	120,620	56,600	221.5	0	328,380
321	410.5	247.6	704.0	801.8	0	1	335	3	9	25	55	0	1	0	399,240	151,160	120,620	56,600	214.8	0	328,380
322	445.0	254.8	686.4	789.2	0	1	328	4	14	27	71	1	1	0	379,940	151,150	120,620	56,600	217.4	0	328,370
323	463.9	252.9	722.6	733.2	0	1	332	0	18	24	60	0	1	1	413,380	140,340	118,240	56,600	240.7	0	315,180
324	437.2	253.4	711.3	742.7	0	2	327	2	12	20	52	0	1	1	414,540	164,330	101,150	56,600	248.9	0	322,080
325	458.8	263.8	686.7	776.1	0	2	325	0	12	18	42	0	0	1	439,190	145,940	101,700	63,060	263.6	0	310,700
326	437.5	253.5	670.7	720.3	0	2	314	0	12	17	41	0	0	1	445,830	153,550	82,650	66,980	265.1	0	303,180
327	654.0	381.7	576.1	827.9	0	2	328	2	11	18	48	0	1	3	363,920	113,400	137,690	56,260	219.9	0	307,350
328	637.7	365.4	607.8	848.0	0	2	336	2	10	19	47	0	0	3	368,380	113,400	137,690	56,260	222.7	0	307,350
329	624.1	349.1	606.9	850.4	0	2	330	1	9	17	39	0	0	3	365,000	113,400	137,690	56,260	223.0	0	307,350
330	645.7	346.0	612.8	856.6	0	2	340	1	9	17	39	0	0	3	364,720	113,400	137,690	56,260	216.3	0	307,350
331	680.2	353.2	595.2	844.0	0	2	333	2	14	19	55	1	0	3	345,420	113,390	137,690	56,260	218.8	0	307,340
332	391.2	250.0	685.5	768.4	0	1	308	5	12	21	65	0	1	3	408,460	140,280	121,350	42,830	222.2	0	304,460
333	374.8	233.6	717.1	788.5	0	1	316	5	11	22	64	0	0	3	412,920	140,280	121,350	42,830	225.0	0	304,460
334	361.3	217.4	716.2	790.9	0	1	310	4	10	20	56	0	0	3	409,540	140,280	121,350	42,830	225.3	0	304,460
335	382.9	214.3	722.1	797.1	0	1	320	4	10	20	56	0	0	3	409,270	140,280	121,350	42,830	218.6	0	304,460
336	417.4	221.5	704.5	784.5	0	1	313	5	15	22	72	1	0	3	389,970	140,280	121,350	42,830	221.2	0	304,460
337	436.2	219.5	740.8	728.5	0	1	317	1	19	19	61	0	0	4	423,410	129,460	118,980	42,830	244.5	0	291,270
338	440.1	274.7	733.9	752.6	0	1	310	4	11	20	58	0	2	1	397,000	147,180	124,470	42,830	229.4	0	314,480
339	423.7	258.3	765.6	772.8	0	1	318	4	10	21	57	0	1	1	401,460	147,180	124,470	42,830	232.2	0	314,480
340	410.2	242.1	764.7	775.2	0	1	312	3	9	19	49	0	1	1	398,080	147,180	124,470	42,830	232.5	0	314,480
341	431.8	239.0	770.5	781.4	0	1	322	3	9	19	49	0	1	1	397,800	147,180	124,470	42,830	225.8	0	314,480
342	466.3	246.2	753.0	768.8	0	1	315	4	14	21	65	1	1	1	378,500	147,170	124,470	42,830	228.4	0	314,470
343	485.1	244.2	789.2	712.8	0	1	319	0	18	18	54	0	1	2	411,950	136,360	122,090	42,830	251.6	0	301,280
344	458.4	244.7	777.9	722.3	0	2	314	2	12	14	46	0	1	2	413,110	160,350	104,990	42,830	259.9	0	308,170
345	480.1	255.2	753.3	755.6	0	2	312	0	12	12	36	0	0	2	437,750	141,970	105,550	49,290	274.6	0	296,810
346	585.0	346.7	534.6	854.5	0	2	317	2	10	18	46	0	1	2	397,050	116,940	125,920	68,950	201.2	0	311,810
347	568.6	330.3	566.2	874.7	0	2	325	2	9	19	45	0	0	2	401,510	116,940	125,920	68,950	204.0	0	311,810
348	555.1	314.1	565.3	877.1	0	2	319	1	8	17	37	0	0	2	398,130	116,940	125,920	68,950	204.3	0	311,810
349	576.7	311.0	571.2	883.2	0	2	329	1	8	17	37	0	0	2	397,860	116,940	125,920	68,950	197.6	0	311,810
350	611.2	318.2	553.7	870.7	0	2	322	2	13	19	53	1	0	2	378,560	116,930	125,920	68,950	200.2	0	311,800
351	322.2	215.0	644.0	795.0	0	1	297	5	11	21	63	0	1	2	441,600	143,820	109,580	55,520	203.6	0	308,920
352	305.8	198.6	675.6	815.2	0	1	305	5	10	22	62	0	0	2	446,060	143,820	109,580	55,520	206.3	0	308,920
353	292.2	182.3	674.7	817.6	0	1	299	4	9	20	54	0	0	2	442,680	143,820	109,580	55,520	206.6	0	308,920
354	313.8	179.2	680.6	823.8	0	1	309	4	9	20	54	0	0	2	442,400	143,820	109,580	55,520	199.9	0	308,920
355	348.4	186.5	663.0	811.2	0	1	302	5	14	22	70	1	0	2	423,100	143,820	109,580	55,520	202.5	0	308,920
356	367.2	184.5	699.2	755.2	0	1	306	1	18	19	59	0	0	3	456,540	133,000	107,200	55,520	225.8	0	295,720
357	371.1	239.7	692.4	779.3	0	1	299	4	10	20	56	0	2	0	430,130	150,720	112,690	55,520	210.7	0	318,930
358	354.7	223.3	724.0	799.4	0	1	307	4	9	21	55	0	1	0	434,590	150,720	112,690	55,520	213.5	0	318,930
359	341.1	207.0	723.1	801.8	0	1	301	3	8	19	47	0	1	0	431,210	150,720	112,690	55,520	213.8	0	318,930
360	362.7	203.9	729.0	808.0	0	1	311	3	8	19	47	0	1	0	430,940	150,720	112,690	55,520	207.1	0	318,930
361	397.3	211.2	711.4	795.4	0	1	304	4	13	21	63	1	1	0	411,640	150,720	112,690	55,520	209.7	0	318,930
362	416.1	209.2	747.7	739.4	0	1	308	0	17	18	52	0	1	1	445,080	139,900	110,310	55,520	233.0	0	305,730
363	389.4	209.7	736.4	749.0	0	2	303	2	11	14	44	0	1	1	446,240	163,890	93,220	55,520	241.2	0	312,630
364	411.0	220.1	711.7	782.3	0	2	301	0	11	12	34	0	0	1	470,890	145,510	93,770	61,980	255.9	0	301,260
365	582.4	345.4	532.4	848.0	0	2	315	2	10	18	46	0	1	2	398,440	116,940	125,920	66,130	201.2	0	308,990
366	566.1	329.1	564.0	868.1	0	2	323	2	9	19	45	0	0	2	402,900	116,940	125,920	66,130	204.0	0	308,990
367	552.5	312.8	563.1	870.5	0	2	317	1	8	17	37	0	0	2	399,520	116,940	125,920	66,130	204.3	0	308,990
368	574.1	309.7	569.0	876.7	0	2	327	1	8	17	37	0	0	2	399,250	116,940	125,920	66,130	197.6	0	308,990
369	608.6	316.9	551.5	864.1	0	2	320	2	13	19	53	1	0	2	379,950	116,930	125,920	66,130	200.2	0	308,980
370	319.6	213.7	641.8	788.5	0	1	295	5	11	21	63	0	1	2	442,990	143,820	109,580	52,710	203.6	0	306,110
371	303.2	197.3	673.4	808.6	0	1	303	5	10	22	62	0	0	2	447,450	143,820	109,580	52,710	206.3	0	306,110
372	289.7	181.1	672.5	811.0	0	1	297	4	9	20	54	0	0	2	444,070	143,820	109,580	52,710	206.6	0	306,110
373	311.2	177.9	678.4	817.2	0	1	307	4	9	20	54	0	0	2	443,790	143,820	109,580	52,710	199.9	0	306,110
374	345.8	185.2	660.8	804.6	0	1	300	5	14	22	70	1	0	2	424,490	143,820	109,580	52,710	202.5	0	306,110
375	364.6	183.2	697.0	748.6	0	1	304	1	18	19	59	0	0	3	457,930	133,000	107,200	52,710	225.8	0	292,910
376	368.5	238.4	690.2	772.7	0	1	297	4	10	20	56	0	2	0	431,520	150,720	112,690	52,710	210.7	0	316,120
377	352.1	222.0	721.8	792.9	0	1	305	4	9	21	55	0	1	0	435,980	150,720	112,690	52,710	213.5	0	316,120
378	338.6	205.8	720.9	795.3	0	1	299	3	8	19	47	0	1	0	432,600	150,720	112,690	52,710	213.8	0	316,120

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
379	360.1	202.6	726.8	801.5	0	1	309	3	8	19	47	0	1	0	432,330	150,720	112,690	52,710	207.1	0	316,120
380	394.7	209.9	709.2	788.9	0	1	302	4	13	21	63	1	1	0	413,030	150,720	112,690	52,710	209.7	0	316,120
381	413.5	207.9	745.5	732.9	0	1	306	0	17	18	52	0	1	1	446,470	139,900	110,310	52,710	233.0	0	302,920
382	386.8	208.4	734.2	742.4	0	2	301	2	11	14	44	0	1	1	447,630	163,890	93,220	52,710	241.2	0	309,820
383	408.5	218.8	709.5	775.8	0	2	299	0	11	12	34	0	0	1	472,280	145,510	93,770	59,170	255.9	0	298,450
384	628.6	387.3	537.9	847.5	0	2	344	2	9	21	47	0	1	2	367,520	111,290	144,290	71,360	209.2	0	326,940
385	612.2	370.9	569.5	867.7	0	2	352	2	8	22	46	0	0	2	371,980	111,290	144,290	71,360	212.0	0	326,940
386	598.6	354.6	568.6	870.1	0	2	346	1	7	20	38	0	0	2	368,600	111,290	144,290	71,360	212.3	0	326,940
387	620.2	351.5	574.5	876.3	0	2	356	1	7	20	38	0	0	2	368,330	111,290	144,290	71,360	205.6	0	326,940
388	654.8	358.8	557.0	863.7	0	2	349	2	12	22	54	1	0	2	349,030	111,290	144,290	71,360	208.2	0	326,940
389	365.7	255.6	647.3	788.1	0	1	324	5	10	24	64	0	1	2	412,070	138,170	127,950	57,940	211.6	0	324,060
390	349.3	239.2	678.9	808.2	0	1	332	5	9	25	63	0	0	2	416,530	138,170	127,950	57,940	214.3	0	324,060
391	335.7	222.9	678.0	810.6	0	1	326	4	8	23	55	0	0	2	413,150	138,170	127,950	57,940	214.6	0	324,060
392	357.4	219.8	683.9	816.8	0	1	336	4	8	23	55	0	0	2	412,870	138,170	127,950	57,940	208.0	0	324,060
393	391.8	227.0	666.3	804.2	0	1	329	5	13	25	71	1	0	2	393,580	138,170	127,950	57,940	210.5	0	324,060
394	410.8	225.1	702.5	748.2	0	1	333	1	17	22	60	0	0	3	427,020	127,350	125,570	57,940	233.8	0	310,860
395	414.6	280.3	695.7	772.3	0	1	326	4	9	23	57	0	2	0	400,600	145,070	131,060	57,940	218.7	0	334,070
396	398.2	263.9	727.3	792.5	0	1	334	4	8	24	56	0	1	0	405,070	145,070	131,060	57,940	221.5	0	334,070
397	384.6	247.6	726.4	794.9	0	1	328	3	7	22	48	0	1	0	401,680	145,070	131,060	57,940	221.8	0	334,070
398	406.3	244.5	732.3	801.0	0	1	338	3	7	22	48	0	1	0	401,410	145,070	131,060	57,940	215.1	0	334,070
399	440.7	251.7	714.7	788.5	0	1	331	4	12	24	64	1	1	0	382,110	145,070	131,060	57,940	217.7	0	334,070
400	459.7	249.8	751.0	732.5	0	1	335	0	16	21	53	0	1	1	415,550	134,250	128,690	57,940	241.0	0	320,880
401	433.0	250.3	739.7	742.0	0	2	330	2	10	17	45	0	1	1	416,710	158,250	111,590	57,940	249.2	0	327,780
402	454.6	260.7	715.1	775.3	0	2	328	0	10	15	35	0	0	1	441,360	139,860	112,150	64,390	263.9	0	316,400
403	626.0	386.0	535.7	841.0	0	2	342	2	9	21	47	0	1	2	368,910	111,290	144,290	68,550	209.2	0	324,130
404	609.6	369.6	567.3	861.1	0	2	350	2	8	22	46	0	0	2	373,380	111,290	144,290	68,550	212.0	0	324,130
405	596.1	353.4	566.4	863.6	0	2	344	1	7	20	38	0	0	2	369,990	111,290	144,290	68,550	212.3	0	324,130
406	617.6	350.2	572.3	869.7	0	2	354	1	7	20	38	0	0	2	369,720	111,290	144,290	68,550	205.6	0	324,130
407	652.2	357.5	554.8	857.2	0	2	347	2	12	22	54	1	0	2	350,420	111,290	144,290	68,550	208.2	0	324,130
408	363.1	254.3	645.1	781.5	0	1	322	5	10	24	64	0	1	2	413,460	138,170	127,950	55,120	211.6	0	321,240
409	346.7	237.9	676.7	801.7	0	1	330	5	9	25	63	0	0	2	417,920	138,170	127,950	55,120	214.3	0	321,240
410	333.2	221.6	675.8	804.1	0	1	324	4	8	23	55	0	0	2	414,540	138,170	127,950	55,120	214.6	0	321,240
411	354.8	218.5	681.7	810.2	0	1	334	4	8	23	55	0	0	2	414,260	138,170	127,950	55,120	208.0	0	321,240
412	389.4	225.8	664.1	797.7	0	1	327	5	13	25	71	1	0	2	394,970	138,170	127,950	55,120	210.5	0	321,240
413	408.2	223.8	700.3	741.7	0	1	331	1	17	22	60	0	0	3	428,410	127,350	125,570	55,120	233.8	0	308,040
414	412.0	279.0	693.5	765.8	0	1	324	4	9	23	57	0	2	0	402,000	145,070	131,060	55,120	218.7	0	331,250
415	395.6	262.6	725.1	785.9	0	1	332	4	8	24	56	0	1	0	406,460	145,070	131,060	55,120	221.5	0	331,250
416	382.1	246.3	724.2	788.3	0	1	326	3	7	22	48	0	1	0	403,080	145,070	131,060	55,120	221.8	0	331,250
417	403.7	243.2	730.1	794.5	0	1	336	3	7	22	48	0	1	0	402,800	145,070	131,060	55,120	215.1	0	331,250
418	438.3	250.5	712.5	781.9	0	1	329	4	12	24	64	1	1	0	383,500	145,070	131,060	55,120	217.7	0	331,250
419	457.1	248.5	748.8	725.9	0	1	333	0	16	21	53	0	1	1	416,940	134,250	128,690	55,120	241.0	0	318,060
420	430.4	249.0	737.5	735.5	0	2	328	2	10	17	45	0	1	1	418,100	158,250	111,590	55,120	249.2	0	324,960
421	452.0	259.4	712.8	768.8	0	2	326	0	10	15	35	0	0	1	442,750	139,860	112,150	61,580	263.9	0	313,590
422	430.7	249.1	696.8	713.0	0	2	315	0	10	14	34	0	0	1	449,390	147,460	93,090	65,500	265.4	0	306,050
423	906.1	459.4	522.0	1008.3	0	1	346	2	15	17	55	0	2	5	227,590	126,440	150,950	63,280	236.8	0	340,670
424	889.8	443.1	553.6	1028.4	0	1	354	2	14	18	54	0	1	5	232,050	126,440	150,950	63,280	239.6	0	340,670
425	876.2	426.8	552.7	1030.8	0	1	348	1	13	16	46	0	1	5	228,670	126,440	150,950	63,280	239.9	0	340,670
426	897.8	423.7	558.6	1037.0	0	1	358	1	13	16	46	0	1	5	228,390	126,440	150,950	63,280	233.2	0	340,670
427	932.3	430.9	541.0	1024.4	0	1	351	2	18	18	62	1	1	5	209,100	126,440	150,950	63,280	235.8	0	340,670
428	643.3	327.7	631.3	948.8	0	0	326	5	16	20	72	0	2	5	272,130	153,330	134,610	49,850	239.1	0	337,790
429	626.9	311.3	662.9	968.9	0	0	334	5	15	21	71	0	1	5	276,590	153,330	134,610	49,850	241.9	0	337,790
430	613.4	295.1	662.0	971.3	0	0	328	4	14	19	63	0	1	5	273,210	153,330	134,610	49,850	242.2	0	337,790
431	634.9	291.9	667.9	977.5	0	0	338	4	14	19	63	0	1	5	272,940	153,330	134,610	49,850	235.5	0	337,790
432	669.5	299.2	650.3	965.0	0	0	331	5	19	21	79	1	1	5	253,640	153,320	134,610	49,850	238.1	0	337,780
433	688.3	297.2	686.6	909.0	0	0	335	1	23	18	68	0	1	6	287,080	142,500	132,230	49,850	261.4	0	324,580
434	692.2	352.4	679.8	933.1	0	0	328	4	15	19	65	0	3	3	260,670	160,220	137,720	49,850	246.3	0	347,790
435	675.8	336.0	711.4	953.2	0	0	336	4	14	20	64	0	2	3	265,130	160,220	137,720	49,850	249.1	0	347,790
436	662.3	319.8	710.5	955.6	0	0	330	3	13	18	56	0	2	3	261,750	160,220	137,720	49,850	249.4	0	347,790
437	683.8	316.6	716.4	961.8	0	0	340	3	13	18	56	0	2	3	261,470	160,220	137,720	49,850	242.7	0	347,790
438	718.4	323.9	698.8	949.2	0	0	333	4	18	20	72	1	2	3	242,180	160,220	137,720	49,850	245.3	0	347,790
439	737.2	321.9	735.0	893.2	0	0	337	0	22	17	61	0	2	4	275,620	149,400	135,350	49,850	268.6	0	334,600
440	710.5	322.4	723.7	902.7	0	1	332	2	16	13	53	0	2	4	276,780	173,400	118,250	49,850	276.8	0	341,500
441	732.1	332.8	699.1	936.1	0	1	330	0	16	11	43	0	1	4	301,430	155,010	118,810	56,310	291.5	0	330,130

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
442	708.6	402.2	586.6	842.5	0	1	338	2	16	17	57	0	2	3	331,310	116,520	136,670	56,210	237.3	0	309,400
443	692.2	385.8	618.3	862.6	0	1	346	2	15	18	56	0	1	3	335,770	116,520	136,670	56,210	240.1	0	309,400
444	678.7	369.6	617.4	865.0	0	1	340	1	14	16	48	0	1	3	332,390	116,520	136,670	56,210	240.4	0	309,400
445	700.2	366.4	623.2	871.2	0	1	350	1	14	16	48	0	1	3	332,120	116,520	136,670	56,210	233.7	0	309,400
446	734.8	373.7	605.7	858.6	0	1	343	2	19	18	64	1	1	3	312,820	116,510	136,670	56,210	236.3	0	309,390
447	445.8	270.5	696.0	783.0	0	0	318	5	17	20	74	0	2	3	375,860	143,400	120,330	42,780	239.7	0	306,510
448	429.4	254.1	727.6	803.2	0	0	326	5	16	21	73	0	1	3	380,320	143,400	120,330	42,780	242.4	0	306,510
449	415.8	237.8	726.7	805.6	0	0	320	4	15	19	65	0	1	3	376,940	143,400	120,330	42,780	242.7	0	306,510
450	437.4	234.7	732.6	811.7	0	0	330	4	15	19	65	0	1	3	376,660	143,400	120,330	42,780	236.0	0	306,510
451	472.0	242.0	715.0	799.2	0	0	323	5	20	21	81	1	1	3	357,360	143,390	120,330	42,780	238.6	0	306,500
452	490.8	240.0	751.3	743.2	0	0	327	1	24	18	70	0	1	4	390,800	132,570	117,950	42,780	261.9	0	293,300
453	494.7	295.2	744.4	767.3	0	0	320	4	16	19	67	0	3	1	364,390	150,300	123,440	42,780	246.8	0	316,520
454	478.3	278.8	776.1	787.4	0	0	328	4	15	20	66	0	2	1	368,850	150,300	123,440	42,780	249.6	0	316,520
455	464.7	262.5	775.2	789.8	0	0	322	3	14	18	58	0	2	1	365,470	150,300	123,440	42,780	249.9	0	316,520
456	486.3	259.4	781.0	796.0	0	0	332	3	14	18	58	0	2	1	365,200	150,300	123,440	42,780	243.2	0	316,520
457	520.9	266.7	763.5	783.4	0	0	325	4	19	20	74	1	2	1	345,900	150,290	123,440	42,780	245.8	0	316,510
458	539.7	264.7	799.7	727.4	0	0	329	0	23	17	63	0	2	2	379,340	139,470	121,060	42,780	269.1	0	303,310
459	513.0	265.2	788.4	736.9	0	1	324	2	17	13	55	0	2	2	380,500	163,470	103,970	42,780	277.3	0	310,220
460	534.6	275.6	763.8	770.3	0	1	322	0	17	11	45	0	1	2	405,150	145,080	104,520	49,240	292.0	0	298,840
461	639.6	367.2	545.1	869.1	0	1	327	2	15	17	55	0	2	2	364,450	120,060	124,890	68,900	218.7	0	313,850
462	623.2	350.8	576.7	889.3	0	1	335	2	14	18	54	0	1	2	368,910	120,060	124,890	68,900	221.5	0	313,850
463	609.6	334.5	575.8	891.7	0	1	329	1	13	16	46	0	1	2	365,530	120,060	124,890	68,900	221.8	0	313,850
464	631.2	331.4	581.7	897.9	0	1	339	1	13	16	46	0	1	2	365,250	120,060	124,890	68,900	215.1	0	313,850
465	665.7	338.6	564.2	885.3	0	1	332	2	18	18	62	1	1	2	345,950	120,050	124,890	68,900	217.6	0	313,840
466	376.7	235.4	654.5	809.7	0	0	307	5	16	20	72	0	2	2	408,990	146,940	108,550	55,470	221.0	0	310,960
467	360.4	219.1	686.1	829.8	0	0	315	5	15	21	71	0	1	2	413,450	146,940	108,550	55,470	223.8	0	310,960
468	346.8	202.8	685.2	832.2	0	0	309	4	14	19	63	0	1	2	410,070	146,940	108,550	55,470	224.1	0	310,960
469	368.4	199.7	691.1	838.4	0	0	319	4	14	19	63	0	1	2	409,800	146,940	108,550	55,470	217.4	0	310,960
470	402.9	206.9	673.5	825.8	0	0	312	5	19	21	79	1	1	2	390,500	146,930	108,550	55,470	220.0	0	310,950
471	421.8	205.0	709.7	769.8	0	0	316	1	23	18	68	0	1	3	423,940	136,120	106,170	55,470	243.2	0	297,760
472	425.6	260.1	702.9	793.9	0	0	309	4	15	19	65	0	3	0	397,530	153,840	111,660	55,470	228.2	0	320,970
473	409.3	243.8	734.5	814.1	0	0	317	4	14	20	64	0	2	0	401,990	153,840	111,660	55,470	231.0	0	320,970
474	395.7	227.5	733.6	816.5	0	0	311	3	13	18	56	0	2	0	398,610	153,840	111,660	55,470	231.3	0	320,970
475	417.3	224.4	739.5	822.6	0	0	321	3	13	18	56	0	2	0	398,330	153,840	111,660	55,470	224.6	0	320,970
476	451.8	231.6	721.9	810.1	0	0	314	4	18	20	72	1	2	0	379,030	153,830	111,660	55,470	227.2	0	320,960
477	470.7	229.7	758.2	754.1	0	0	318	0	22	17	61	0	2	1	412,470	143,020	109,290	55,470	250.4	0	307,780
478	444.0	230.2	746.9	763.6	0	1	313	2	16	13	53	0	2	1	413,630	167,010	92,190	55,470	258.7	0	314,670
479	465.6	240.6	722.2	796.9	0	1	311	0	16	11	43	0	1	1	438,280	148,620	92,750	61,930	273.4	0	303,300
480	637.0	365.9	542.9	862.6	0	1	325	2	15	17	55	0	2	2	365,840	120,060	124,890	66,090	218.7	0	311,040
481	620.6	349.5	574.5	882.7	0	1	333	2	14	18	54	0	1	2	370,300	120,060	124,890	66,090	221.5	0	311,040
482	607.0	333.2	573.6	885.2	0	1	327	1	13	16	46	0	1	2	366,920	120,060	124,890	66,090	221.8	0	311,040
483	628.6	330.1	579.5	891.3	0	1	337	1	13	16	46	0	1	2	366,640	120,060	124,890	66,090	215.1	0	311,040
484	663.2	337.4	562.0	878.8	0	1	330	2	18	18	62	1	1	2	347,340	120,050	124,890	66,090	217.6	0	311,030
485	374.1	234.1	652.3	803.1	0	0	305	5	16	20	72	0	2	2	410,380	146,940	108,550	52,660	221.0	0	308,150
486	357.8	217.8	683.9	823.3	0	0	313	5	15	21	71	0	1	2	414,840	146,940	108,550	52,660	223.8	0	308,150
487	344.2	201.5	683.0	825.7	0	0	307	4	14	19	63	0	1	2	411,460	146,940	108,550	52,660	224.1	0	308,150
488	365.8	198.4	688.9	831.8	0	0	317	4	14	19	63	0	1	2	411,190	146,940	108,550	52,660	217.4	0	308,150
489	400.3	205.6	671.3	819.3	0	0	310	5	19	21	79	1	1	2	391,890	146,930	108,550	52,660	220.0	0	308,140
490	419.2	203.7	707.5	763.3	0	0	314	1	23	18	68	0	1	3	425,330	136,120	106,170	52,660	243.2	0	294,950
491	423.0	258.8	700.7	787.4	0	0	307	4	15	19	65	0	3	0	398,920	153,840	111,660	52,660	228.2	0	318,160
492	406.7	242.5	732.3	807.5	0	0	315	4	14	20	64	0	2	0	403,380	153,840	111,660	52,660	231.0	0	318,160
493	393.1	226.2	731.4	809.9	0	0	309	3	13	18	56	0	2	0	400,000	153,840	111,660	52,660	231.3	0	318,160
494	414.7	223.1	737.3	816.1	0	0	319	3	13	18	56	0	2	0	399,720	153,840	111,660	52,660	224.6	0	318,160
495	449.2	230.3	719.7	803.5	0	0	312	4	18	20	72	1	2	0	380,420	153,830	111,660	52,660	227.2	0	318,150
496	468.1	228.4	756.0	747.5	0	0	316	0	22	17	61	0	2	1	413,870	143,020	109,290	52,660	250.4	0	304,970
497	441.4	228.9	744.7	757.0	0	1	311	2	16	13	53	0	2	1	415,020	167,010	92,190	52,660	258.7	0	311,860
498	463.1	239.3	720.0	790.4	0	1	309	0	16	11	43	0	1	1	439,670	148,620	92,750	59,120	273.4	0	300,490
499	685.4	410.0	547.4	868.8	0	1	352	2	14	21	57	0	2	2	333,470	114,900	143,510	72,840	225.2	0	331,250
500	669.0	393.6	579.0	888.9	0	1	360	2	13	22	56	0	1	2	337,930	114,900	143,510	72,840	228.0	0	331,250
501	655.5	377.4	578.1	891.3	0	1	354	1	12	20	48	0	1	2	334,550	114,900	143,510	72,840	228.3	0	331,250
502	677.1	374.3	584.0	897.5	0	1	364	1	12	20	48	0	1	2	334,280	114,900	143,510	72,840	221.6	0	331,250
503	711.6	381.5	566.4	884.9	0	1	357	2	17	22	64	1	1	2	314,980	114,890	143,510	72,840	224.2	0	331,240
504	422.5	278.3	656.7	809.3	0	0	332	5	15	24	74	0	2	2	378,020	141,780	127,170	59,420	227.5	0	328,370

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
505	406.1	261.9	688.3	829.4	0	0	340	5	14	25	73	0	1	2	382,480	141,780	127,170	59,420	230.3	0	328,370
506	392.5	245.6	687.4	831.8	0	0	334	4	13	23	65	0	1	2	379,100	141,780	127,170	59,420	230.6	0	328,370
507	414.2	242.5	693.3	838.0	0	0	344	4	13	23	65	0	1	2	378,820	141,780	127,170	59,420	223.9	0	328,370
508	448.7	249.8	675.8	825.4	0	0	337	5	18	25	81	1	1	2	359,520	141,780	127,170	59,420	226.5	0	328,370
509	467.6	247.8	712.0	769.4	0	0	341	1	22	22	70	0	1	3	392,970	130,960	124,790	59,420	249.8	0	315,170
510	471.4	303.0	705.2	793.5	0	0	334	4	14	23	67	0	3	0	366,550	148,680	130,280	59,420	234.7	0	338,380
511	455.0	286.6	736.8	813.7	0	0	342	4	13	24	66	0	2	0	371,010	148,680	130,280	59,420	237.5	0	338,380
512	441.4	270.3	735.9	816.1	0	0	336	3	12	22	58	0	2	0	367,630	148,680	130,280	59,420	237.8	0	338,380
513	463.1	267.2	741.8	822.3	0	0	346	3	12	22	58	0	2	0	367,360	148,680	130,280	59,420	231.1	0	338,380
514	497.6	274.5	724.2	809.7	0	0	339	4	17	24	74	1	2	0	348,060	148,670	130,280	59,420	233.7	0	338,370
515	516.5	272.5	760.5	753.7	0	0	343	0	21	21	63	0	2	1	381,500	137,860	127,900	59,420	257.0	0	325,180
516	489.8	273.0	749.1	763.2	0	1	338	2	15	17	55	0	2	1	382,660	161,850	110,810	59,420	265.2	0	332,080
517	511.4	283.4	724.5	796.5	0	1	336	0	15	15	45	0	1	1	407,310	143,470	111,370	65,870	279.9	0	320,710
518	682.8	408.7	545.2	862.2	0	1	350	2	14	21	57	0	2	2	334,860	114,900	143,510	70,030	225.2	0	328,440
519	666.4	392.3	576.8	882.4	0	1	358	2	13	22	56	0	1	2	339,330	114,900	143,510	70,030	228.0	0	328,440
520	652.9	376.1	575.9	884.8	0	1	352	1	12	20	48	0	1	2	335,940	114,900	143,510	70,030	228.3	0	328,440
521	674.5	373.0	581.8	891.0	0	1	362	1	12	20	48	0	1	2	335,670	114,900	143,510	70,030	221.6	0	328,440
522	709.0	380.2	564.2	878.4	0	1	355	2	17	22	64	1	1	2	316,370	114,890	143,510	70,030	224.2	0	328,430
523	419.9	277.0	654.5	802.7	0	0	330	5	15	24	74	0	2	2	379,410	141,780	127,170	56,600	227.5	0	325,550
524	403.5	260.6	686.1	822.9	0	0	338	5	14	25	73	0	1	2	383,870	141,780	127,170	56,600	230.3	0	325,550
525	390.0	244.3	685.2	825.3	0	0	332	4	13	23	65	0	1	2	380,490	141,780	127,170	56,600	230.6	0	325,550
526	411.6	241.2	691.1	831.5	0	0	342	4	13	23	65	0	1	2	380,210	141,780	127,170	56,600	223.9	0	325,550
527	446.2	248.5	673.6	818.9	0	0	335	5	18	25	81	1	1	2	360,920	141,780	127,170	56,600	226.5	0	325,550
528	465.0	246.5	709.8	762.9	0	0	339	1	22	22	70	0	1	3	394,360	130,960	124,790	56,600	249.8	0	312,350
529	468.8	301.7	703.0	787.0	0	0	332	4	14	23	67	0	3	0	367,950	148,680	130,280	56,600	234.7	0	335,560
530	452.4	285.3	734.6	807.1	0	0	340	4	13	24	66	0	2	0	372,410	148,680	130,280	56,600	237.5	0	335,560
531	439.0	269.1	733.7	809.5	0	0	334	3	12	22	58	0	2	0	369,020	148,680	130,280	56,600	237.8	0	335,560
532	460.5	265.9	739.6	815.7	0	0	344	3	12	22	58	0	2	0	368,750	148,680	130,280	56,600	231.1	0	335,560
533	495.1	273.2	722.0	803.2	0	0	337	4	17	24	74	1	2	0	349,450	148,670	130,280	56,600	233.7	0	335,550
534	513.9	271.2	758.3	747.2	0	0	341	0	21	21	63	0	2	1	382,890	137,860	127,900	56,600	257.0	0	322,360
535	487.2	271.7	746.9	756.7	0	1	336	2	15	17	55	0	2	1	384,050	161,850	110,810	56,600	265.2	0	329,260
536	508.8	282.1	722.3	790.0	0	1	334	0	15	15	45	0	1	1	408,700	143,470	111,370	63,060	279.9	0	317,900
537	487.5	271.8	706.3	734.2	0	1	323	0	15	14	44	0	1	1	415,340	151,070	92,310	66,980	281.4	0	310,360
538	686.8	412.1	535.8	859.7	0	1	341	2	13	17	51	0	2	3	345,660	120,830	136,120	56,210	225.5	0	313,160
539	670.4	395.7	567.4	879.9	0	1	349	2	12	18	50	0	1	3	350,120	120,830	136,120	56,210	228.2	0	313,160
540	656.9	379.5	566.5	882.3	0	1	343	1	11	16	42	0	1	3	346,740	120,830	136,120	56,210	228.5	0	313,160
541	678.4	376.3	572.4	888.5	0	1	353	1	11	16	42	0	1	3	346,470	120,830	136,120	56,210	221.8	0	313,160
542	713.0	383.6	554.8	875.9	0	1	346	2	16	18	58	1	1	3	327,170	120,830	136,120	56,210	224.4	0	313,160
543	424.0	280.4	645.1	800.2	0	0	321	5	14	20	68	0	2	3	390,210	147,710	119,780	42,780	227.8	0	310,270
544	407.6	264.0	676.8	820.4	0	0	329	5	13	21	67	0	1	3	394,670	147,710	119,780	42,780	230.6	0	310,270
545	394.0	247.7	675.9	822.8	0	0	323	4	12	19	59	0	1	3	391,290	147,710	119,780	42,780	230.9	0	310,270
546	415.6	244.6	681.8	829.0	0	0	333	4	12	19	59	0	1	3	391,010	147,710	119,780	42,780	224.2	0	310,270
547	450.2	251.9	664.2	816.4	0	0	326	5	17	21	75	1	1	3	371,710	147,710	119,780	42,780	226.7	0	310,270
548	469.0	249.9	700.4	760.4	0	0	330	1	21	18	64	0	1	4	405,160	136,890	117,400	42,780	250.0	0	297,070
549	472.9	305.1	693.6	784.5	0	0	323	4	13	19	61	0	3	1	378,740	154,610	122,890	42,780	235.0	0	320,280
550	456.5	288.7	725.2	804.6	0	0	331	4	12	20	60	0	2	1	383,200	154,610	122,890	42,780	237.8	0	320,280
551	442.9	272.4	724.3	807.1	0	0	325	3	11	18	52	0	2	1	379,820	154,610	122,890	42,780	238.1	0	320,280
552	464.5	269.3	730.2	813.2	0	0	335	3	11	18	52	0	2	1	379,550	154,610	122,890	42,780	231.4	0	320,280
553	499.1	276.6	712.6	800.7	0	0	328	4	16	20	68	1	2	1	360,250	154,610	122,890	42,780	233.9	0	320,280
554	517.9	274.6	748.9	744.7	0	0	332	0	20	17	57	0	2	2	393,690	143,790	120,510	42,780	257.2	0	307,080
555	491.2	275.1	737.6	754.2	0	1	327	2	14	13	49	0	2	2	394,850	167,780	103,420	42,780	265.5	0	313,980
556	512.8	285.5	712.9	787.5	0	1	325	0	14	11	39	0	1	2	419,500	149,400	103,980	49,240	280.1	0	302,620
557	617.8	377.1	494.3	886.4	0	1	330	2	12	17	49	0	2	2	378,800	124,370	124,340	68,900	206.8	0	317,610
558	601.4	360.7	525.9	906.5	0	1	338	2	11	18	48	0	1	2	383,260	124,370	124,340	68,900	209.6	0	317,610
559	587.8	344.4	525.0	908.9	0	1	332	1	10	16	40	0	1	2	379,880	124,370	124,340	68,900	209.9	0	317,610
560	609.4	341.3	530.9	915.1	0	1	342	1	10	16	40	0	1	2	379,600	124,370	124,340	68,900	203.2	0	317,610
561	643.9	348.5	513.3	902.5	0	1	335	2	15	18	56	1	1	2	360,300	124,370	124,340	68,900	205.8	0	317,610
562	354.9	245.3	603.6	826.9	0	0	310	5	13	20	66	0	2	2	423,340	151,250	108,000	55,470	209.1	0	314,720
563	338.6	229.0	635.2	847.0	0	0	318	5	12	21	65	0	1	2	427,800	151,250	108,000	55,470	211.9	0	314,720
564	325.0	212.7	634.3	849.4	0	0	312	4	11	19	57	0	1	2	424,420	151,250	108,000	55,470	212.2	0	314,720
565	346.6	209.6	640.2	855.6	0	0	322	4	11	19	57	0	1	2	424,150	151,250	108,000	55,470	205.5	0	314,720
566	381.1	216.8	622.7	843.1	0	0	315	5	16	21	73	1	1	2	404,850	151,250	108,000	55,470	208.1	0	314,720
567	400.0	214.9	658.9	787.1	0	0	319	1	20	18	62	0	1	3	438,290	140,430	105,620	55,470	231.4	0	301,520

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
568	403.8	270.0	652.1	811.2	0	0	312	4	12	19	59	0	3	0	411,880	158,150	111,110	55,470	216.3	0	324,730
569	387.5	253.7	683.7	831.3	0	0	320	4	11	20	58	0	2	0	416,340	158,150	111,110	55,470	219.1	0	324,730
570	373.9	237.4	682.8	833.7	0	0	314	3	10	18	50	0	2	0	412,960	158,150	111,110	55,470	219.4	0	324,730
571	395.5	234.3	688.7	839.9	0	0	324	3	10	18	50	0	2	0	412,680	158,150	111,110	55,470	212.7	0	324,730
572	430.0	241.5	671.1	827.3	0	0	317	4	15	20	66	1	2	0	393,380	158,150	111,110	55,470	215.3	0	324,730
573	448.9	239.6	707.3	771.3	0	0	321	0	19	17	55	0	2	1	426,830	147,330	108,740	55,470	238.6	0	311,540
574	422.2	240.1	696.0	780.8	0	1	316	2	13	13	47	0	2	1	427,980	171,320	91,640	55,470	246.8	0	318,430
575	443.8	250.5	671.4	814.2	0	1	314	0	13	11	37	0	1	1	452,630	152,940	92,200	61,930	261.5	0	307,070
576	615.2	375.8	492.1	879.8	0	1	328	2	12	17	49	0	2	2	380,190	124,370	124,340	66,090	206.8	0	314,800
577	598.8	359.4	523.7	900.0	0	1	336	2	11	18	48	0	1	2	384,650	124,370	124,340	66,090	209.6	0	314,800
578	585.2	343.1	522.8	902.4	0	1	330	1	10	16	40	0	1	2	381,270	124,370	124,340	66,090	209.9	0	314,800
579	606.8	340.0	528.7	908.6	0	1	340	1	10	16	40	0	1	2	380,990	124,370	124,340	66,090	203.2	0	314,800
580	641.4	347.3	511.1	896.0	0	1	333	2	15	18	56	1	1	2	361,690	124,370	124,340	66,090	205.8	0	314,800
581	352.3	244.0	601.4	820.4	0	0	308	5	13	20	66	0	2	2	424,730	151,250	108,000	52,660	209.1	0	311,910
582	336.0	227.7	633.0	840.5	0	0	316	5	12	21	65	0	1	2	429,190	151,250	108,000	52,660	211.9	0	311,910
583	322.4	211.4	632.1	842.9	0	0	310	4	11	19	57	0	1	2	425,810	151,250	108,000	52,660	212.2	0	311,910
584	344.0	208.3	638.0	849.1	0	0	320	4	11	19	57	0	1	2	425,540	151,250	108,000	52,660	205.5	0	311,910
585	378.5	215.5	620.5	836.5	0	0	313	5	16	21	73	1	1	2	406,240	151,250	108,000	52,660	208.1	0	311,910
586	397.4	213.6	656.7	780.5	0	0	317	1	20	18	62	0	1	3	439,680	140,430	105,620	52,660	231.4	0	298,710
587	401.2	268.7	649.9	804.6	0	0	310	4	12	19	59	0	3	0	413,270	158,150	111,110	52,660	216.3	0	321,920
588	384.9	252.4	681.5	824.8	0	0	318	4	11	20	58	0	2	0	417,730	158,150	111,110	52,660	219.1	0	321,920
589	371.3	236.1	680.6	827.2	0	0	312	3	10	18	50	0	2	0	414,350	158,150	111,110	52,660	219.4	0	321,920
590	392.9	233.0	686.5	833.3	0	0	322	3	10	18	50	0	2	0	414,070	158,150	111,110	52,660	212.7	0	321,920
591	427.4	240.2	668.9	820.8	0	0	315	4	15	20	66	1	2	0	394,770	158,150	111,110	52,660	215.3	0	321,920
592	446.3	238.3	705.1	764.8	0	0	319	0	19	17	55	0	2	1	428,220	147,330	108,740	52,660	238.6	0	308,730
593	419.6	238.8	693.8	774.3	0	1	314	2	13	13	47	0	2	1	429,380	171,320	91,640	52,660	246.8	0	315,620
594	441.3	249.2	669.2	807.6	0	1	312	0	13	11	37	0	1	1	454,030	152,940	92,200	59,120	261.5	0	304,260
595	663.6	419.9	496.6	886.0	0	1	355	2	11	21	51	0	2	2	347,820	119,210	142,960	72,840	213.3	0	335,010
596	647.2	403.5	528.2	906.1	0	1	363	2	10	22	50	0	1	2	352,280	119,210	142,960	72,840	216.1	0	335,010
597	633.7	387.3	527.3	908.6	0	1	357	1	9	20	42	0	1	2	348,900	119,210	142,960	72,840	216.4	0	335,010
598	655.3	384.2	533.2	914.7	0	1	367	1	9	20	42	0	1	2	348,630	119,210	142,960	72,840	209.7	0	335,010
599	689.8	391.4	515.6	902.2	0	1	360	2	14	22	58	1	1	2	329,330	119,210	142,960	72,840	212.3	0	335,010
600	400.7	288.2	605.9	826.5	0	0	335	5	12	24	68	0	2	2	392,370	146,100	126,620	59,420	215.7	0	332,140
601	384.3	271.8	637.5	846.7	0	0	343	5	11	25	67	0	1	2	396,830	146,100	126,620	59,420	218.5	0	332,140
602	370.7	255.5	636.6	849.1	0	0	337	4	10	23	59	0	1	2	393,450	146,100	126,620	59,420	218.7	0	332,140
603	392.4	252.4	642.5	855.2	0	0	347	4	10	23	59	0	1	2	393,170	146,100	126,620	59,420	212.1	0	332,140
604	426.9	259.7	624.9	842.7	0	0	340	5	15	25	75	1	1	2	373,880	146,090	126,620	59,420	214.6	0	332,130
605	445.8	257.7	661.2	786.7	0	0	344	1	19	22	64	0	1	3	407,320	135,270	124,240	59,420	237.9	0	318,930
606	449.6	312.9	654.4	810.8	0	0	337	4	11	23	61	0	3	0	380,900	152,990	129,730	59,420	222.9	0	342,140
607	433.2	296.5	686.0	830.9	0	0	345	4	10	24	60	0	2	0	385,370	152,990	129,730	59,420	225.6	0	342,140
608	419.6	280.2	685.1	833.3	0	0	339	3	9	22	52	0	2	0	381,980	152,990	129,730	59,420	225.9	0	342,140
609	441.3	277.1	691.0	839.5	0	0	349	3	9	22	52	0	2	0	381,710	152,990	129,730	59,420	219.2	0	342,140
610	475.8	284.4	673.4	826.9	0	0	342	4	14	24	68	1	2	0	362,410	152,990	129,730	59,420	221.8	0	342,140
611	494.7	282.4	709.6	770.9	0	0	346	0	18	21	57	0	2	1	395,850	142,170	127,350	59,420	245.1	0	328,940
612	468.0	282.9	698.3	780.4	0	1	341	2	12	17	49	0	2	1	397,010	166,170	110,260	59,420	253.3	0	335,850
613	489.6	293.3	673.7	813.8	0	1	339	0	12	15	39	0	1	1	421,660	147,780	110,820	65,870	268.0	0	324,470
614	661.0	418.6	494.4	879.5	0	1	353	2	11	21	51	0	2	2	349,220	119,210	142,960	70,030	213.3	0	332,200
615	644.6	402.2	526.0	899.6	0	1	361	2	10	22	50	0	1	2	353,680	119,210	142,960	70,030	216.1	0	332,200
616	631.1	386.0	525.1	902.0	0	1	355	1	9	20	42	0	1	2	350,290	119,210	142,960	70,030	216.4	0	332,200
617	652.7	382.9	531.0	908.2	0	1	365	1	9	20	42	0	1	2	350,020	119,210	142,960	70,030	209.7	0	332,200
618	687.2	390.1	513.4	895.6	0	1	358	2	14	22	58	1	1	2	330,720	119,210	142,960	70,030	212.3	0	332,200
619	398.1	286.9	603.7	820.0	0	0	333	5	12	24	68	0	2	2	393,760	146,100	126,620	56,600	215.7	0	329,320
620	381.7	270.5	635.3	840.1	0	0	341	5	11	25	67	0	1	2	398,220	146,100	126,620	56,600	218.5	0	329,320
621	368.2	254.2	634.4	842.5	0	0	335	4	10	23	59	0	1	2	394,840	146,100	126,620	56,600	218.7	0	329,320
622	389.8	251.1	640.3	848.7	0	0	345	4	10	23	59	0	1	2	394,560	146,100	126,620	56,600	212.1	0	329,320
623	424.4	258.4	622.7	836.1	0	0	338	5	15	25	75	1	1	2	375,270	146,090	126,620	56,600	214.6	0	329,310
624	443.2	256.4	659.0	780.1	0	0	342	1	19	22	64	0	1	3	408,710	135,270	124,240	56,600	237.9	0	316,110
625	447.0	311.6	652.2	804.2	0	0	335	4	11	23	61	0	3	0	382,300	152,990	129,730	56,600	222.9	0	339,320
626	430.6	295.2	683.8	824.4	0	0	343	4	10	24	60	0	2	0	386,760	152,990	129,730	56,600	225.6	0	339,320
627	417.1	278.9	682.9	826.8	0	0	337	3	9	22	52	0	2	0	383,380	152,990	129,730	56,600	225.9	0	339,320
628	438.7	275.8	688.8	833.0	0	0	347	3	9	22	52	0	2	0	383,100	152,990	129,730	56,600	219.2	0	339,320
629	473.3	283.1	671.2	820.4	0	0	340	4	14	24	68	1	2	0	363,800	152,990	129,730	56,600	221.8	0	339,320
630	492.1	281.1	707.4	764.4	0	0	344	0	18	21	57	0	2	1	397,240	142,170	127,350	56,600	245.1	0	326,120

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
631	465.4	281.6	696.1	773.9	0	1	339	2	12	17	49	0	2	1	398,400	166,170	110,260	56,600	253.3	0	333,030
632	487.0	292.0	671.5	807.2	0	1	337	0	12	15	39	0	1	1	423,050	147,780	110,820	63,060	268.0	0	321,660
633	465.7	281.7	655.5	751.5	0	1	326	0	12	14	38	0	1	1	429,690	155,380	91,760	66,980	269.5	0	314,120
634	682.3	410.0	560.9	859.0	0	1	340	2	11	15	45	0	2	3	347,780	115,230	146,800	56,260	224.3	0	318,290
635	665.9	393.6	592.6	879.2	0	1	348	2	10	16	44	0	1	3	352,240	115,230	146,800	56,260	227.1	0	318,290
636	652.4	377.4	591.7	881.6	0	1	342	1	9	14	36	0	1	3	348,860	115,230	146,800	56,260	227.4	0	318,290
637	673.9	374.2	597.5	887.8	0	1	352	1	9	14	36	0	1	3	348,590	115,230	146,800	56,260	220.7	0	318,290
638	708.5	381.5	580.0	875.2	0	1	345	2	14	16	52	1	1	3	329,290	115,230	146,800	56,260	223.3	0	318,290
639	419.5	278.3	670.3	799.6	0	0	320	5	12	18	62	0	2	3	392,330	142,120	130,470	42,830	226.6	0	315,420
640	403.1	261.9	701.9	819.7	0	0	328	5	11	19	61	0	1	3	396,790	142,120	130,470	42,830	229.4	0	315,420
641	389.5	245.6	701.0	822.1	0	0	322	4	10	17	53	0	1	3	393,410	142,120	130,470	42,830	229.7	0	315,420
642	411.1	242.5	706.9	828.3	0	0	332	4	10	17	53	0	1	3	393,130	142,120	130,470	42,830	223.0	0	315,420
643	445.7	249.8	689.3	815.7	0	0	325	5	15	19	69	1	1	3	373,830	142,110	130,470	42,830	225.6	0	315,410
644	464.5	247.8	725.5	759.7	0	0	329	1	19	16	58	0	1	4	407,270	131,290	128,090	42,830	248.9	0	302,210
645	468.4	303.0	718.7	783.8	0	0	322	4	11	17	55	0	3	1	380,860	149,020	133,580	42,830	233.8	0	325,430
646	452.0	286.6	750.3	804.0	0	0	330	4	10	18	54	0	2	1	385,320	149,020	133,580	42,830	236.6	0	325,430
647	438.4	270.3	749.4	806.4	0	0	324	3	9	16	46	0	2	1	381,940	149,020	133,580	42,830	236.9	0	325,430
648	460.0	267.2	755.3	812.5	0	0	334	3	9	16	46	0	2	1	381,670	149,020	133,580	42,830	230.2	0	325,430
649	494.6	274.5	737.8	800.0	0	0	327	4	14	18	62	1	2	1	362,370	149,010	133,580	42,830	232.8	0	325,420
650	513.4	272.5	774.0	744.0	0	0	331	0	18	15	51	0	2	2	395,810	138,190	131,200	42,830	256.1	0	312,220
651	486.7	273.0	762.7	753.5	0	1	326	2	12	11	43	0	2	2	396,970	162,190	114,110	42,830	264.3	0	319,130
652	508.3	283.4	738.1	786.8	0	1	324	0	12	9	33	0	1	2	421,620	143,800	114,660	49,290	279.0	0	307,750
653	613.3	375.0	519.4	885.7	0	1	329	2	10	15	43	0	2	2	380,920	118,780	135,030	68,950	205.7	0	322,760
654	596.9	358.6	551.0	905.8	0	1	337	2	9	16	42	0	1	2	385,380	118,780	135,030	68,950	208.4	0	322,760
655	583.3	342.3	550.1	908.2	0	1	331	1	8	14	34	0	1	2	382,000	118,780	135,030	68,950	208.7	0	322,760
656	604.9	339.2	556.0	914.4	0	1	341	1	8	14	34	0	1	2	381,720	118,780	135,030	68,950	202.0	0	322,760
657	639.4	346.4	538.4	901.8	0	1	334	2	13	16	50	1	1	2	362,420	118,770	135,030	68,950	204.6	0	322,750
658	350.4	243.2	628.7	826.2	0	0	309	5	11	18	60	0	2	2	425,460	145,660	118,690	55,520	208.0	0	319,870
659	334.1	226.9	660.4	846.3	0	0	317	5	10	19	59	0	1	2	429,920	145,660	118,690	55,520	210.8	0	319,870
660	320.5	210.6	659.5	848.8	0	0	311	4	9	17	51	0	1	2	426,540	145,660	118,690	55,520	211.1	0	319,870
661	342.1	207.5	665.3	854.9	0	0	321	4	9	17	51	0	1	2	426,270	145,660	118,690	55,520	204.4	0	319,870
662	376.6	214.7	647.8	842.4	0	0	314	5	14	19	67	1	1	2	406,970	145,650	118,690	55,520	206.9	0	319,860
663	395.5	212.8	684.0	786.4	0	0	318	1	18	16	56	0	1	3	440,410	134,830	116,310	55,520	230.2	0	306,660
664	399.3	267.9	677.2	810.5	0	0	311	4	10	17	53	0	3	0	414,000	152,560	121,800	55,520	215.2	0	329,880
665	383.0	251.6	708.8	830.6	0	0	319	4	9	18	52	0	2	0	418,460	152,560	121,800	55,520	218.0	0	329,880
666	369.4	235.3	707.9	833.0	0	0	313	3	8	16	44	0	2	0	415,080	152,560	121,800	55,520	218.3	0	329,880
667	391.0	232.2	713.8	839.2	0	0	323	3	8	16	44	0	2	0	414,800	152,560	121,800	55,520	211.6	0	329,880
668	425.5	239.4	696.2	826.6	0	0	316	4	13	18	60	1	2	0	395,500	152,550	121,800	55,520	214.1	0	329,870
669	444.4	237.5	732.5	770.6	0	0	320	0	17	15	49	0	2	1	428,940	141,730	119,420	55,520	237.4	0	316,670
670	417.7	238.0	721.2	780.1	0	1	315	2	11	11	41	0	2	1	430,100	165,730	102,330	55,520	245.7	0	323,580
671	439.3	248.4	696.5	813.5	0	1	313	0	11	9	31	0	1	1	454,750	147,340	102,890	61,980	260.3	0	312,210
672	610.7	373.7	517.2	879.2	0	1	327	2	10	15	43	0	2	2	382,310	118,780	135,030	66,130	205.7	0	319,940
673	594.3	357.3	548.8	899.3	0	1	335	2	9	16	42	0	1	2	386,770	118,780	135,030	66,130	208.4	0	319,940
674	580.7	341.0	547.9	901.7	0	1	329	1	8	14	34	0	1	2	383,390	118,780	135,030	66,130	208.7	0	319,940
675	602.3	337.9	553.8	907.9	0	1	339	1	8	14	34	0	1	2	383,110	118,780	135,030	66,130	202.0	0	319,940
676	636.9	345.2	536.2	895.3	0	1	332	2	13	16	50	1	1	2	363,810	118,770	135,030	66,130	204.6	0	319,930
677	347.8	241.9	626.5	819.7	0	0	307	5	11	18	60	0	2	2	426,850	145,660	118,690	52,710	208.0	0	317,060
678	331.5	225.6	658.2	839.8	0	0	315	5	10	19	59	0	1	2	431,310	145,660	118,690	52,710	210.8	0	317,060
679	317.9	209.3	657.3	842.2	0	0	309	4	9	17	51	0	1	2	427,930	145,660	118,690	52,710	211.1	0	317,060
680	339.5	206.2	663.1	848.4	0	0	319	4	9	17	51	0	1	2	427,660	145,660	118,690	52,710	204.4	0	317,060
681	374.0	213.4	645.6	835.8	0	0	312	5	14	19	67	1	1	2	408,360	145,650	118,690	52,710	206.9	0	317,050
682	392.9	211.5	681.8	779.8	0	0	316	1	18	16	56	0	1	3	441,800	134,830	116,310	52,710	230.2	0	303,850
683	396.7	266.6	675.0	803.9	0	0	309	4	10	17	53	0	3	0	415,390	152,560	121,800	52,710	215.2	0	327,070
684	380.4	250.3	706.6	824.1	0	0	317	4	9	18	52	0	2	0	419,850	152,560	121,800	52,710	218.0	0	327,070
685	366.8	234.0	705.7	826.5	0	0	311	3	8	16	44	0	2	0	416,470	152,560	121,800	52,710	218.3	0	327,070
686	388.4	230.9	711.6	832.6	0	0	321	3	8	16	44	0	2	0	416,190	152,560	121,800	52,710	211.6	0	327,070
687	422.9	238.1	694.0	820.1	0	0	314	4	13	18	60	1	2	0	396,890	152,550	121,800	52,710	214.1	0	327,060
688	441.8	236.2	730.3	764.1	0	0	318	0	17	15	49	0	2	1	430,340	141,730	119,420	52,710	237.4	0	313,860
689	415.1	236.7	719.0	773.6	0	1	313	2	11	11	41	0	2	1	431,490	165,730	102,330	52,710	245.7	0	320,770
690	436.8	247.1	694.3	806.9	0	1	311	0	11	9	31	0	1	1	456,140	147,340	102,890	59,170	260.3	0	309,400
691	656.8	415.5	522.7	878.7	0	1	356	2	9	18	44	0	2	2	351,390	113,130	153,400	71,360	213.7	0	337,890
692	640.5	399.2	554.3	898.9	0	1	364	2	8	19	43	0	1	2	355,850	113,130	153,400	71,360	216.4	0	337,890
693	626.9	382.9	553.4	901.3	0	1	358	1	7	17	35	0	1	2	352,470	113,130	153,400	71,360	216.7	0	337,890

Appendix A - Route Data for All Routes
Wolf Creek - Blackberry

Route	Sensitive Species Score (score)	Woodland in ROW (acres)	Cropland in ROW (acres)	Rangeland in ROW (acres)	NRHP Sites within 1/4 Mile (count)	Archaeological Sites within ROW (count)	Parcels Crossed (count)	Residences within 150 feet (count)	Residences within 300 feet (count)	Residences within 500 feet (count)	Residential Proximity Score (score)	Businesses within 300 feet (count)	Public Facilities within 500 feet (count)	Outbuildings in ROW (count)	Length Not Along Parcel Boundary (feet)	Low Karst Risk (feet)	Medium Karst Risk (feet)	High Karst Risk (feet)	Floodplain (acres)	Outbuildings in ROW in Eastern Spotted Skunk Habitat (count)	Total Length Karst (feet)
694	648.5	379.8	559.3	907.4	0	1	368	1	7	17	35	0	1	2	352,190	113,130	153,400	71,360	210.1	0	337,890
695	683.0	387.0	541.7	894.9	0	1	361	2	12	19	51	1	1	2	332,900	113,120	153,400	71,360	212.6	0	337,880
696	393.9	283.8	632.0	819.2	0	0	336	5	10	21	61	0	2	2	395,930	140,010	137,070	57,940	216.0	0	335,020
697	377.5	267.4	663.7	839.4	0	0	344	5	9	22	60	0	1	2	400,390	140,010	137,070	57,940	218.8	0	335,020
698	364.0	251.2	662.8	841.8	0	0	338	4	8	20	52	0	1	2	397,010	140,010	137,070	57,940	219.1	0	335,020
699	385.7	248.1	668.6	848.0	0	0	348	4	8	20	52	0	1	2	396,740	140,010	137,070	57,940	212.4	0	335,020
700	420.1	255.3	651.1	835.4	0	0	341	5	13	22	68	1	1	2	377,440	140,010	137,070	57,940	214.9	0	335,020
701	439.0	253.3	687.3	779.4	0	0	345	1	17	19	57	0	1	3	410,880	129,190	134,690	57,940	238.2	0	321,820
702	442.8	308.5	680.5	803.5	0	0	338	4	9	20	54	0	3	0	384,470	146,910	140,180	57,940	223.2	0	345,030
703	426.4	292.1	712.1	823.6	0	0	346	4	8	21	53	0	2	0	388,930	146,910	140,180	57,940	226.0	0	345,030
704	412.9	275.9	711.2	826.0	0	0	340	3	7	19	45	0	2	0	385,550	146,910	140,180	57,940	226.3	0	345,030
705	434.6	272.8	717.1	832.2	0	0	350	3	7	19	45	0	2	0	385,270	146,910	140,180	57,940	219.6	0	345,030
706	469.0	280.0	699.5	819.6	0	0	343	4	12	21	61	1	2	0	365,980	146,900	140,180	57,940	222.1	0	345,020
707	487.9	278.0	735.8	763.7	0	0	347	0	16	18	50	0	2	1	399,420	136,090	137,800	57,940	245.4	0	331,830
708	461.2	278.5	724.5	773.2	0	1	342	2	10	14	42	0	2	1	400,580	160,080	120,710	57,940	253.7	0	338,730
709	482.9	289.0	699.8	806.5	0	1	340	0	10	12	32	0	1	1	425,230	141,700	121,260	64,390	268.3	0	327,350
710	654.2	414.2	520.5	872.2	0	1	354	2	9	18	44	0	2	2	352,780	113,130	153,400	68,550	213.7	0	335,080
711	637.9	397.9	552.1	892.3	0	1	362	2	8	19	43	0	1	2	357,240	113,130	153,400	68,550	216.4	0	335,080
712	624.3	381.6	551.2	894.7	0	1	356	1	7	17	35	0	1	2	353,860	113,130	153,400	68,550	216.7	0	335,080
713	645.9	378.5	557.1	900.9	0	1	366	1	7	17	35	0	1	2	353,580	113,130	153,400	68,550	210.1	0	335,080
714	680.4	385.7	539.5	888.3	0	1	359	2	12	19	51	1	1	2	334,290	113,120	153,400	68,550	212.6	0	335,070
715	391.3	282.5	629.8	812.7	0	0	334	5	10	21	61	0	2	2	397,320	140,010	137,070	55,120	216.0	0	332,200
716	374.9	266.1	661.5	832.8	0	0	342	5	9	22	60	0	1	2	401,790	140,010	137,070	55,120	218.8	0	332,200
717	361.5	249.9	660.6	835.2	0	0	336	4	8	20	52	0	1	2	398,400	140,010	137,070	55,120	219.1	0	332,200
718	383.1	246.8	666.4	841.4	0	0	346	4	8	20	52	0	1	2	398,130	140,010	137,070	55,120	212.4	0	332,200
719	417.6	254.0	648.9	828.9	0	0	339	5	13	22	68	1	1	2	378,830	140,010	137,070	55,120	214.9	0	332,200
720	436.4	252.0	685.1	772.9	0	0	343	1	17	19	57	0	1	3	412,270	129,190	134,690	55,120	238.2	0	319,000
721	440.2	307.2	678.3	797.0	0	0	336	4	9	20	54	0	3	0	385,860	146,910	140,180	55,120	223.2	0	342,210
722	423.8	290.8	709.9	817.1	0	0	344	4	8	21	53	0	2	0	390,320	146,910	140,180	55,120	226.0	0	342,210
723	410.4	274.6	709.0	819.5	0	0	338	3	7	19	45	0	2	0	386,940	146,910	140,180	55,120	226.3	0	342,210
724	432.0	271.5	714.9	825.7	0	0	348	3	7	19	45	0	2	0	386,670	146,910	140,180	55,120	219.6	0	342,210
725	466.5	278.7	697.3	813.1	0	0	341	4	12	21	61	1	2	0	367,370	146,900	140,180	55,120	222.1	0	342,200
726	485.3	276.7	733.6	757.1	0	0	345	0	16	18	50	0	2	1	400,810	136,090	137,800	55,120	245.4	0	329,010
727	458.6	277.2	722.3	766.6	0	1	340	2	10	14	42	0	2	1	401,970	160,080	120,710	55,120	253.7	0	335,910
728	480.3	287.7	697.6	800.0	0	1	338	0	10	12	32	0	1	1	426,620	141,700	121,260	61,580	268.3	0	324,540
729	458.9	277.3	681.6	744.2	0	1	327	0	10	11	31	0	1	1	433,260	149,300	102,210	65,500	269.8	0	317,010

	932.3	459.4	814.9	1053.5	0	2	368	5	24	28	84	1	3	6	472,280	173,400	153,400	72,840	292	0	347,790
	489.7	272.7	661.3	827.1	0.0	0.8	325.3	2.7	13.4	19.4	57.0	0.2	0.9	1.8	386,360.6	139,760.8	121,529.9	56,925.8	225.6	0.0	318,216.4
	289.7	163.3	490.2	696.2	0	0	293	0	7	8	31	0	0	0	209,100	111,290	82,530	42,780	191	0	282,360
	126.6	62.1	72.8	61.4	0.0	0.7	15.6	1.6	3.6	3.8	10.8	0.4	0.8	1.3	44,892.5	14,919.4	14,634.4	8,048.6	19.1	0.0	13,062.3

APPENDIX B – WEIGHTED SCORES

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
65	-9.31	-3.98	-12.49	-0.15	-2.82	0.83	-5.67	-12.45	-0.42	-2.30	0.89	-1.22	1.06	-3.96	-0.83	-52.83
68	-11.70	-7.74	-16.24	-0.09	-0.17	-0.41	-10.19	-7.12	0.59	-2.30	5.51	-1.22	1.37	-0.96	-1.85	-52.52
76	-7.18	-5.23	-4.10	-10.50	1.16	-1.45	-7.32	-4.00	1.11	0.59	-17.60	-1.22	1.69	3.78	-1.42	-51.70
75	-8.86	-6.49	1.23	-10.50	1.16	-5.19	-13.38	-5.54	2.13	0.59	-8.35	0.07	1.14	1.47	-0.55	-51.08
57	-6.50	-3.98	-3.93	-10.50	1.16	-1.45	-6.99	-3.82	1.20	0.59	-17.60	-1.22	1.66	3.78	-1.21	-48.81
66	-8.59	-3.98	-12.04	-0.10	-0.17	-0.21	-5.12	-10.92	-0.18	-2.30	0.89	-1.22	1.05	-5.02	-0.83	-48.73
372	-8.69	-3.98	-13.06	-0.15	-2.82	1.46	-0.94	-14.21	0.46	0.59	-2.81	-1.22	1.29	-2.99	-0.93	-47.99
375	-11.08	-7.74	-16.81	-0.09	-0.17	0.21	-5.45	-8.89	1.47	0.59	1.81	-1.22	1.59	0.03	-1.94	-47.68
46	-8.64	-0.21	-12.32	-0.15	-2.82	0.83	-5.34	-12.27	-0.33	-2.30	0.89	-1.22	1.03	-3.96	-0.62	-47.42
49	-11.03	-3.98	-16.07	-0.09	-0.17	-0.41	-9.86	-6.94	0.68	-2.30	5.51	-1.22	1.34	-0.96	-1.63	-47.12
383	-6.56	-5.23	-4.66	-10.50	1.16	-0.83	-2.59	-5.77	1.99	3.48	-21.30	-1.22	1.91	4.76	-1.51	-46.87
115	-9.52	-5.23	5.65	-10.50	-1.49	-3.74	-8.21	-2.27	0.54	0.59	-16.67	-1.22	1.15	5.04	-0.67	-46.54
382	-8.24	-6.49	0.67	-10.50	1.16	-4.57	-8.65	-7.31	3.00	3.48	-12.05	0.07	1.36	2.45	-0.64	-46.25
56	-8.18	-2.72	1.40	-10.50	1.16	-5.19	-13.05	-5.36	2.22	0.59	-8.35	0.07	1.11	1.47	-0.34	-45.67
422	-9.44	-6.49	4.74	-10.50	-1.49	-3.32	-3.69	-4.19	1.46	3.48	-21.30	-1.22	1.40	6.25	-0.93	-45.24
276	-10.01	-6.49	-13.88	-0.15	-2.82	1.67	1.71	-13.89	-0.57	0.59	2.74	-1.22	1.24	-2.80	-1.32	-45.22
279	-12.40	-10.26	-17.63	-0.09	-0.17	0.42	-2.70	-8.57	0.44	0.59	7.36	-1.22	1.55	0.20	-2.33	-44.81
287	-7.87	-7.74	-5.49	-10.50	1.16	-0.62	0.16	-5.45	0.95	3.48	-15.75	-1.22	1.87	4.94	-1.91	-43.99
364	-5.88	-3.98	-4.49	-10.50	1.16	-0.83	-2.26	-5.59	2.08	3.48	-21.30	-1.22	1.88	4.76	-1.30	-43.98
373	-7.97	-3.98	-12.60	-0.10	-0.17	0.42	-0.39	-12.69	0.70	0.59	-2.81	-1.22	1.28	-4.04	-0.93	-43.90
286	-9.55	-9.00	-0.16	-10.50	1.16	-4.36	-5.89	-6.99	1.97	3.48	-6.51	0.07	1.32	2.63	-1.04	-43.36
47	-7.92	-0.21	-11.87	-0.10	-0.17	-0.21	-4.79	-10.73	-0.08	-2.30	0.89	-1.22	1.02	-5.02	-0.62	-43.32
353	-8.01	-0.21	-12.88	-0.15	-2.82	1.46	-0.61	-14.04	0.55	0.59	-2.81	-1.22	1.25	-2.99	-0.71	-42.59
356	-10.41	-3.98	-16.63	-0.09	-0.17	0.21	-5.12	-8.71	1.56	0.59	1.81	-1.22	1.56	0.03	-1.72	-42.27
679	-5.49	2.30	-13.67	-0.15	-1.49	1.87	-3.36	-12.21	-0.16	-2.30	-5.58	0.07	0.93	-2.28	-0.09	-41.62
682	-7.88	-1.46	-17.43	-0.09	1.16	0.63	-7.76	-6.88	0.84	-2.30	-0.96	0.07	1.23	0.72	-1.10	-41.21
268	-7.20	-6.49	-5.32	-10.50	1.16	-0.62	0.49	-5.27	1.04	3.48	-15.75	-1.22	1.84	4.94	-1.69	-41.10
277	-9.29	-6.49	-13.43	-0.10	-0.17	0.63	2.37	-12.37	-0.33	0.59	2.74	-1.22	1.23	-3.85	-1.32	-41.01
363	-7.56	-2.72	0.84	-10.50	1.16	-4.57	-8.32	-7.13	3.09	3.48	-12.05	0.07	1.33	2.45	-0.43	-40.84
690	-3.36	1.05	-5.28	-10.50	2.49	-0.41	-4.90	-3.76	1.36	0.59	-24.07	0.07	1.55	5.45	-0.67	-40.40
257	-9.33	-2.72	-13.71	-0.15	-2.82	1.67	2.04	-13.72	-0.48	0.59	2.74	-1.22	1.21	-2.80	-1.11	-39.82
689	-5.04	-0.21	0.05	-10.50	2.49	-4.15	-10.96	-5.30	2.38	0.59	-14.83	1.37	1.01	3.15	0.20	-39.76
260	-11.72	-6.49	-17.46	-0.09	-0.17	0.42	-2.37	-8.39	0.53	0.59	7.36	-1.22	1.52	0.20	-2.12	-39.40
326	-10.21	-7.74	4.26	-10.50	-1.49	-2.91	-0.72	-3.71	0.39	3.48	-14.83	-1.22	1.32	6.20	-1.15	-38.82
729	-6.25	-0.21	4.12	-10.50	-0.17	-2.91	-6.00	-2.19	0.84	0.59	-24.07	0.07	1.04	6.94	-0.09	-38.77
583	-6.81	-0.21	-14.50	-0.15	-1.49	2.08	-0.61	-11.89	-1.20	-2.30	-0.03	0.07	0.88	-2.11	-0.48	-38.76
354	-7.29	-0.21	-12.43	-0.10	-0.17	0.42	-0.06	-12.50	0.79	0.59	-2.81	-1.22	1.25	-4.04	-0.71	-38.49
586	-9.20	-3.98	-18.25	-0.09	1.16	0.83	-5.01	-6.56	-0.19	-2.30	4.59	0.07	1.19	0.91	-1.49	-38.32
267	-8.88	-5.23	0.01	-10.50	1.16	-4.36	-5.56	-6.81	2.06	3.48	-6.51	0.07	1.29	2.63	-0.82	-37.96
594	-4.68	-1.46	-6.11	-10.50	2.49	-0.21	-2.26	-3.44	0.33	0.59	-18.52	0.07	1.51	5.64	-1.07	-37.62
671	-2.69	2.30	-5.11	-10.50	2.49	-0.41	-4.57	-3.58	1.45	0.59	-24.07	0.07	1.52	5.45	-0.46	-37.51
680	-4.77	2.30	-13.22	-0.10	1.16	0.83	-2.70	-10.67	0.07	-2.30	-5.58	0.07	0.92	-3.34	-0.09	-37.41
63	-8.12	-7.74	-11.75	2.81	-2.82	0.42	-0.50	-10.32	-1.68	-2.30	9.21	0.07	1.04	-4.45	-0.83	-36.97
593	-6.35	-2.72	-0.78	-10.50	2.49	-3.95	-8.21	-4.98	1.34	0.59	-9.28	1.37	0.96	3.33	-0.20	-36.90

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
71	-5.40	-2.72	1.15	-0.15	-0.17	-4.15	-7.98	-8.98	1.58	-2.30	-5.58	0.07	0.81	-2.83	-0.07	-36.73
660	-4.82	6.07	-13.50	-0.15	-1.49	1.87	-3.03	-12.03	-0.07	-2.30	-5.58	0.07	0.90	-2.28	0.13	-36.22
663	-7.21	2.30	-17.25	-0.09	1.16	0.63	-7.43	-6.69	0.93	-2.30	-0.96	0.07	1.20	0.72	-0.88	-35.80
258	-8.61	-2.72	-13.26	-0.10	-0.17	0.63	2.70	-12.18	-0.24	0.59	2.74	-1.22	1.20	-3.85	-1.11	-35.61
67	-9.63	-6.49	-12.69	0.54	-0.17	-0.62	-4.35	-8.46	-0.90	-2.30	15.68	-1.22	0.62	-4.61	-0.84	-35.43
575	-4.00	-0.21	-5.94	-10.50	2.49	-0.21	-1.93	-3.26	0.42	0.59	-18.52	0.07	1.48	5.64	-0.85	-34.74
584	-6.09	-0.21	-14.05	-0.10	1.16	1.04	-0.06	-10.35	-0.96	-2.30	-0.03	0.07	0.87	-3.16	-0.48	-34.65
670	-4.36	3.56	0.22	-10.50	2.49	-4.15	-10.63	-5.12	2.47	0.59	-14.83	1.37	0.97	3.15	0.41	-34.36
74	-7.80	-3.98	-2.60	-0.09	2.49	-5.40	-12.39	-3.65	2.59	-2.30	-0.96	0.07	1.11	0.17	-1.08	-33.80
564	-6.13	3.56	-14.33	-0.15	-1.49	2.08	-0.28	-11.71	-1.11	-2.30	-0.03	0.07	0.85	-2.11	-0.27	-33.35
64	-6.21	-5.23	-10.55	1.60	-2.82	0.63	0.05	-11.48	-0.38	-2.30	8.29	-1.22	1.14	-4.01	-0.83	-33.33
567	-8.52	-0.21	-18.08	-0.09	1.16	0.83	-4.68	-6.37	-0.10	-2.30	4.59	0.07	1.16	0.91	-1.28	-32.92
72	-4.68	-2.72	1.60	-0.10	2.49	-5.19	-7.43	-7.44	1.82	-2.30	-5.58	0.07	0.80	-3.89	-0.07	-32.63
633	-7.02	-1.46	3.64	-10.50	-0.17	-2.49	-3.14	-1.70	-0.24	0.59	-17.60	0.07	0.97	6.89	-0.31	-32.47
370	-7.50	-7.74	-12.31	2.81	-2.82	1.04	4.24	-12.09	-0.80	0.59	5.51	0.07	1.26	-3.46	-0.93	-32.12
103	-5.83	-1.46	-5.69	-0.15	-2.82	1.46	-5.23	-9.19	-0.33	-2.30	2.74	-1.22	0.37	-2.94	0.50	-32.09
661	-4.10	6.07	-13.05	-0.10	1.16	0.83	-2.37	-10.49	0.16	-2.30	-5.58	0.07	0.89	-3.34	0.13	-32.01
378	-4.78	-2.72	0.59	-0.15	-0.17	-3.53	-3.25	-10.74	2.45	0.59	-9.28	0.07	1.03	-1.86	-0.16	-31.89
106	-8.22	-5.23	-9.44	-0.09	-0.17	0.21	-9.64	-3.87	0.69	-2.30	7.36	-1.22	0.68	0.07	-0.51	-31.66
44	-7.45	-3.98	-11.57	2.81	-2.82	0.42	-0.17	-10.14	-1.59	-2.30	9.21	0.07	1.01	-4.45	-0.62	-31.57
574	-5.68	1.05	-0.61	-10.50	2.49	-3.95	-7.87	-4.80	1.43	0.59	-9.28	1.37	0.93	3.33	0.02	-31.49
52	-4.73	1.05	1.33	-0.15	-0.17	-4.15	-7.65	-8.79	1.67	-2.30	-5.58	0.07	0.77	-2.83	0.15	-31.32
114	-3.70	-2.72	2.70	-10.50	1.16	-0.83	-6.88	-0.75	1.20	0.59	-15.75	-1.22	1.00	4.80	-0.09	-30.98
410	-5.75	-2.72	-6.59	-0.15	-2.82	1.87	-0.72	-11.12	0.60	0.59	-1.88	-1.22	0.63	-1.73	0.23	-30.79
374	-9.01	-6.49	-13.26	0.54	-0.17	0.00	0.38	-10.23	-0.02	0.59	11.98	-1.22	0.85	-3.63	-0.93	-30.59
95	-3.02	-3.98	2.88	-10.50	1.16	-0.83	-6.44	-0.57	1.29	0.59	-15.75	-1.22	0.97	4.80	0.13	-30.48
413	-8.14	-6.49	-10.34	-0.09	-0.17	0.63	-5.12	-5.79	1.61	0.59	2.74	-1.22	0.94	1.28	-0.78	-30.36
113	-5.38	-3.98	8.04	-10.50	1.16	-4.57	-12.83	-2.29	2.22	0.59	-6.51	0.07	0.45	2.49	0.78	-30.24
48	-8.96	-2.72	-12.52	0.54	-0.17	-0.62	-4.02	-8.28	-0.81	-2.30	15.68	-1.22	0.59	-4.61	-0.62	-30.03
180	-8.25	-3.98	-12.78	-0.15	-2.82	3.12	-0.06	-12.34	1.52	0.59	8.29	-1.22	0.92	-0.93	-1.61	-29.71
421	-3.62	-3.98	1.80	-10.50	1.16	-0.41	-2.37	-2.68	2.12	3.48	-20.37	-1.22	1.26	6.01	-0.35	-29.67
183	-10.65	-7.74	-16.53	-0.09	-0.17	1.87	-4.46	-7.02	2.53	0.59	12.91	-1.22	1.23	2.07	-2.62	-29.30
402	-2.95	-5.23	1.97	-10.50	1.16	-0.41	-2.04	-2.49	2.22	3.48	-20.37	-1.22	1.23	6.01	-0.14	-29.28
274	-8.82	-10.26	-13.13	2.81	-2.82	1.25	6.99	-11.77	-1.84	0.59	11.06	0.07	1.21	-3.29	-1.32	-29.25
565	-5.42	3.56	-13.88	-0.10	1.16	1.04	0.27	-10.17	-0.87	-2.30	-0.03	0.07	0.84	-3.16	-0.27	-29.25
84	-5.15	-0.21	-5.51	-0.15	-2.82	1.46	-4.90	-9.02	-0.23	-2.30	2.74	-1.22	0.34	-2.94	0.71	-29.21
282	-6.10	-5.23	-0.24	-0.15	-0.17	-3.32	-0.50	-10.42	1.42	0.59	-3.73	0.07	0.98	-1.67	-0.55	-29.01
381	-7.17	-3.98	-3.16	-0.09	2.49	-4.78	-7.65	-5.41	3.47	0.59	-4.66	0.07	1.34	1.16	-1.17	-28.96
420	-5.30	-5.23	7.13	-10.50	1.16	-4.15	-8.32	-4.21	3.14	3.48	-11.13	0.07	0.71	3.70	0.52	-28.93
87	-7.54	-3.98	-9.26	-0.09	-0.17	0.21	-9.31	-3.68	0.78	-2.30	7.36	-1.22	0.65	0.07	-0.30	-28.77
191	-6.12	-5.23	-4.39	-10.50	1.16	0.83	-1.71	-3.89	3.05	3.48	-10.20	-1.22	1.55	6.80	-2.19	-28.59
371	-5.59	-5.23	-11.11	1.60	-2.82	1.25	4.79	-13.25	0.50	0.59	4.59	-1.22	1.36	-3.04	-0.93	-28.50
38	-2.38	-5.23	-1.42	-10.50	1.16	1.67	-5.45	1.08	2.91	0.59	-15.75	-1.22	0.92	6.70	-1.55	-28.47
55	-7.12	-0.21	-2.42	-0.09	2.49	-5.40	-12.06	-3.46	2.68	-2.30	-0.96	0.07	1.08	0.17	-0.86	-28.40

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
104	-5.11	-1.46	-5.23	-0.10	-0.17	0.42	-4.68	-7.66	-0.08	-2.30	2.74	-1.22	0.36	-4.00	0.50	-28.00
45	-5.54	-1.46	-10.37	1.60	-2.82	0.63	0.38	-11.30	-0.29	-2.30	8.29	-1.22	1.10	-4.01	-0.62	-27.93
391	-5.08	-1.46	-6.42	-0.15	-2.82	1.87	-0.39	-10.94	0.69	0.59	-1.88	-1.22	0.60	-1.73	0.45	-27.90
190	-7.80	-6.49	0.94	-10.50	1.16	-2.91	-7.65	-5.44	4.06	3.48	-0.96	0.07	1.00	4.50	-1.32	-27.86
278	-10.32	-9.00	-14.08	0.54	-0.17	0.21	3.14	-9.91	-1.05	0.59	17.53	-1.22	0.80	-3.45	-1.32	-27.71
379	-4.06	-2.72	1.04	-0.10	2.49	-4.57	-2.59	-9.21	2.70	0.59	-9.28	0.07	1.02	-2.91	-0.16	-27.69
394	-7.47	-5.23	-10.17	-0.09	-0.17	0.63	-4.79	-5.61	1.70	0.59	2.74	-1.22	0.91	1.28	-0.56	-27.47
94	-4.70	-2.72	8.21	-10.50	1.16	-4.57	-12.50	-2.10	2.31	0.59	-6.51	0.07	0.42	2.49	1.00	-27.35
53	-4.01	1.05	1.78	-0.10	2.49	-5.19	-6.99	-7.26	1.91	-2.30	-5.58	0.07	0.77	-3.89	0.15	-27.12
27	-4.51	-1.46	-9.81	-0.15	-2.82	3.95	-3.80	-7.36	1.38	-2.30	2.74	-1.22	0.29	-1.04	-0.96	-27.08
30	-6.90	-5.23	-13.56	-0.09	-0.17	2.71	-8.32	-2.03	2.39	-2.30	7.36	-1.22	0.60	1.97	-1.97	-26.76
351	-6.82	-3.98	-12.14	2.81	-2.82	1.04	4.57	-11.90	-0.71	0.59	5.51	0.07	1.23	-3.46	-0.71	-26.71
411	-5.03	-2.72	-6.14	-0.10	-0.17	0.83	-0.17	-9.59	0.84	0.59	-1.88	-1.22	0.62	-2.77	0.23	-26.67
359	-4.10	1.05	0.76	-0.15	-0.17	-3.53	-2.92	-10.56	2.55	0.59	-9.28	0.07	1.00	-1.86	0.05	-26.50
285	-8.49	-6.49	-3.98	-0.09	2.49	-4.57	-4.90	-5.10	2.43	0.59	0.89	0.07	1.29	1.33	-1.57	-26.09
401	-4.62	-3.98	7.31	-10.50	1.16	-4.15	-7.98	-4.03	3.23	3.48	-11.13	0.07	0.68	3.70	0.73	-26.03
487	-5.06	-0.21	-13.40	-0.15	-1.49	3.54	-2.48	-10.34	0.89	-2.30	5.51	0.07	0.56	-0.24	-0.77	-25.87
172	-5.45	-3.98	-4.22	-10.50	1.16	0.83	-1.38	-3.72	3.14	3.48	-10.20	-1.22	1.52	6.80	-1.98	-25.72
677	-4.30	-1.46	-12.93	2.81	-1.49	1.46	1.93	-10.08	-1.43	-2.30	2.74	1.37	0.90	-2.77	-0.09	-25.66
275	-6.90	-7.74	-11.93	1.60	-2.82	1.46	7.54	-12.93	-0.54	0.59	10.13	-1.22	1.31	-2.85	-1.32	-25.62
181	-7.54	-3.98	-12.33	-0.10	-0.17	2.08	0.49	-10.81	1.76	0.59	8.29	-1.22	0.91	-1.98	-1.61	-25.61
490	-7.45	-3.98	-17.15	-0.09	1.16	2.29	-6.88	-5.01	1.90	-2.30	10.13	0.07	0.87	2.76	-1.78	-25.45
685	-1.58	3.56	-0.03	-0.15	1.16	-3.12	-5.56	-8.73	1.83	-2.30	-12.05	1.37	0.67	-1.15	0.68	-25.41
37	-4.06	-3.98	3.91	-10.50	1.16	-2.08	-11.51	-0.45	3.92	0.59	-6.51	0.07	0.37	4.39	-0.68	-25.33
355	-8.33	-2.72	-13.08	0.54	-0.17	0.00	0.71	-10.04	0.07	0.59	11.98	-1.22	0.82	-3.63	-0.71	-25.19
85	-4.43	-0.21	-5.06	-0.10	-0.17	0.42	-4.35	-7.48	0.01	-2.30	2.74	-1.22	0.33	-4.00	0.71	-25.10
283	-5.38	-5.23	0.22	-0.10	2.49	-4.36	0.05	-8.89	1.66	0.59	-3.73	0.07	0.98	-2.72	-0.55	-24.91
498	-2.92	-1.46	-5.01	-10.50	2.49	1.25	-4.02	-1.89	2.42	0.59	-12.98	0.07	1.19	7.50	-1.36	-24.63
314	-6.52	-3.98	-7.07	-0.15	-2.82	2.29	2.26	-10.64	-0.48	0.59	4.59	-1.22	0.55	-1.78	0.01	-24.38
161	-7.58	-0.21	-12.61	-0.15	-2.82	3.12	0.27	-12.16	1.61	0.59	8.29	-1.22	0.89	-0.93	-1.39	-24.31
717	-2.56	3.56	-7.21	-0.15	-1.49	2.29	-3.03	-9.11	-0.03	-2.30	-4.66	0.07	0.27	-1.03	1.07	-24.30
681	-5.81	-0.21	-13.88	0.54	1.16	0.42	-1.93	-8.22	-0.65	-2.30	9.21	0.07	0.49	-2.94	-0.09	-24.13
317	-8.91	-7.74	-10.82	-0.09	-0.17	1.04	-2.26	-5.31	0.53	0.59	9.21	-1.22	0.86	1.24	-1.00	-24.05
497	-4.60	-2.72	0.32	-10.50	2.49	-2.49	-10.08	-3.43	3.43	0.59	-3.73	1.37	0.64	5.20	-0.49	-24.01
720	-4.95	-0.21	-10.96	-0.09	1.16	1.04	-7.54	-3.79	0.98	-2.30	-0.03	0.07	0.58	1.97	0.06	-24.01
164	-9.97	-3.98	-16.36	-0.09	-0.17	1.87	-4.13	-6.84	2.62	0.59	12.91	-1.22	1.20	2.07	-2.40	-23.90
255	-8.14	-6.49	-12.96	2.81	-2.82	1.25	7.32	-11.58	-1.75	0.59	11.06	0.07	1.18	-3.29	-1.11	-23.85
392	-4.36	-1.46	-5.97	-0.10	-0.17	0.83	0.16	-9.40	0.93	0.59	-1.88	-1.22	0.59	-2.77	0.45	-23.78
345	-1.76	-5.23	-1.98	-10.50	1.16	2.29	-0.72	-0.68	3.79	3.48	-19.45	-1.22	1.14	7.69	-1.64	-23.62
263	-5.42	-1.46	-0.06	-0.15	-0.17	-3.32	-0.17	-10.24	1.51	0.59	-3.73	0.07	0.95	-1.67	-0.34	-23.61
362	-6.50	-0.21	-2.99	-0.09	2.49	-4.78	-7.32	-5.23	3.56	0.59	-4.66	0.07	1.31	1.16	-0.96	-23.55
230	-8.46	-5.23	5.36	-10.50	-1.49	-1.45	-2.59	-2.16	2.48	3.48	-9.28	-1.22	1.01	8.05	-1.44	-23.44
325	-4.39	-5.23	1.32	-10.50	1.16	0.00	0.60	-2.20	1.05	3.48	-13.90	-1.22	1.18	5.97	-0.58	-23.26
728	-0.42	2.30	1.18	-10.50	2.49	0.00	-4.68	-0.67	1.49	0.59	-23.15	0.07	0.90	6.70	0.48	-23.20

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
352	-4.91	-1.46	-10.94	1.60	-2.82	1.25	5.12	-13.07	0.59	0.59	4.59	-1.22	1.33	-3.04	-0.71	-23.10
28	-3.80	-1.46	-9.36	-0.10	-0.17	2.91	-3.25	-5.83	1.63	-2.30	2.74	-1.22	0.29	-2.09	-0.96	-22.98
581	-5.62	-3.98	-13.76	2.81	-1.49	1.67	4.57	-9.76	-2.47	-2.30	8.29	1.37	0.85	-2.60	-0.48	-22.90
306	-3.72	-6.49	1.49	-10.50	1.16	0.00	0.93	-2.01	1.14	3.48	-13.90	-1.22	1.15	5.97	-0.36	-22.88
709	0.25	1.05	1.35	-10.50	2.49	0.00	-4.35	-0.48	1.59	0.59	-23.15	0.07	0.87	6.70	0.70	-22.82
589	-2.90	1.05	-0.86	-0.15	1.16	-2.91	-2.92	-8.41	0.79	-2.30	-6.51	1.37	0.62	-0.98	0.28	-22.66
324	-6.07	-6.49	6.65	-10.50	1.16	-3.74	-5.45	-3.73	2.06	3.48	-4.66	0.07	0.63	3.66	0.30	-22.63
688	-3.97	2.30	-3.78	-0.09	3.81	-4.36	-10.08	-3.40	2.84	-2.30	-7.43	1.37	0.98	1.85	-0.33	-22.60
727	-2.10	1.05	6.51	-10.50	2.49	-3.74	-10.74	-2.21	2.51	0.59	-13.90	1.37	0.35	4.41	1.35	-22.56
171	-7.13	-2.72	1.11	-10.50	1.16	-2.91	-7.32	-5.26	4.15	3.48	-0.96	0.07	0.97	4.50	-1.11	-22.45
259	-9.65	-5.23	-13.91	0.54	-0.17	0.21	3.47	-9.72	-0.96	0.59	17.53	-1.22	0.77	-3.45	-1.11	-22.31
360	-3.39	1.05	1.21	-0.10	2.49	-4.57	-2.26	-9.03	2.79	0.59	-9.28	0.07	0.99	-2.91	0.05	-22.29
334	-3.89	-1.46	-10.37	-0.15	-2.82	4.58	0.93	-9.13	2.26	0.59	-0.96	-1.22	0.52	-0.05	-1.05	-22.23
678	-2.39	1.05	-11.73	1.60	-1.49	1.67	2.48	-11.24	-0.13	-2.30	1.81	0.07	1.00	-2.33	-0.09	-22.01
337	-6.28	-5.23	-14.12	-0.09	-0.17	3.33	-3.47	-3.80	3.27	0.59	3.66	-1.22	0.83	2.96	-2.06	-21.80
479	-2.25	-0.21	-4.84	-10.50	2.49	1.25	-3.69	-1.71	2.51	0.59	-12.98	0.07	1.16	7.50	-1.14	-21.75
488	-4.34	-0.21	-12.95	-0.10	1.16	2.50	-1.82	-8.81	1.14	-2.30	5.51	0.07	0.55	-1.29	-0.77	-21.65
295	-5.85	-2.72	-6.90	-0.15	-2.82	2.29	2.59	-10.46	-0.39	0.59	4.59	-1.22	0.52	-1.78	0.23	-21.49
698	-1.88	4.82	-7.04	-0.15	-1.49	2.29	-2.70	-8.93	0.06	-2.30	-4.66	0.07	0.24	-1.03	1.29	-21.41
686	-0.86	3.56	0.42	-0.10	3.81	-4.15	-5.01	-7.20	2.07	-2.30	-12.05	1.37	0.66	-2.20	0.68	-21.31
585	-7.13	-2.72	-14.70	0.54	1.16	0.63	0.82	-7.90	-1.68	-2.30	14.76	0.07	0.44	-2.75	-0.48	-21.25
701	-4.27	1.05	-10.79	-0.09	1.16	1.04	-7.21	-3.60	1.07	-2.30	-0.03	0.07	0.55	1.97	0.28	-21.11
298	-8.24	-6.49	-10.65	-0.09	-0.17	1.04	-1.82	-5.13	0.62	0.59	9.21	-1.22	0.83	1.24	-0.78	-21.06
69	-4.21	-6.49	1.90	2.81	-0.17	-4.57	-2.70	-6.84	0.31	-2.30	2.74	1.37	0.78	-3.32	-0.07	-20.76
249	-3.07	-7.74	-2.81	-10.50	1.16	2.50	2.04	-0.36	2.76	3.48	-13.90	-1.22	1.10	7.87	-2.03	-20.75
266	-7.81	-2.72	-3.81	-0.09	2.49	-4.57	-4.57	-4.91	2.52	0.59	0.89	0.07	1.26	1.33	-1.35	-20.68
344	-3.44	-3.98	3.35	-10.50	1.16	-1.45	-6.77	-2.22	4.80	3.48	-10.20	0.07	0.60	5.38	-0.77	-20.49
468	-4.38	3.56	-13.23	-0.15	-1.49	3.54	-2.04	-10.16	0.98	-2.30	5.51	0.07	0.53	-0.24	-0.56	-20.35
315	-5.80	-3.98	-6.62	-0.10	-0.17	1.25	2.81	-9.10	-0.24	0.59	4.59	-1.22	0.54	-2.83	0.01	-20.27
60	-1.00	1.05	4.77	1.65	-2.82	-1.87	-3.03	6.23	-4.92	0.59	-14.83	-1.22	0.07	-4.33	-0.61	-20.26
658	-3.63	2.30	-12.76	2.81	-1.49	1.46	2.26	-9.90	-1.34	-2.30	2.74	1.37	0.87	-2.77	0.13	-20.25
256	-6.23	-3.98	-11.76	1.60	-2.82	1.46	7.87	-12.75	-0.44	0.59	10.13	-1.22	1.28	-2.85	-1.11	-20.21
162	-6.86	-0.21	-12.16	-0.10	-0.17	2.08	0.82	-10.63	1.85	0.59	8.29	-1.22	0.88	-1.98	-1.39	-20.21
718	-1.84	3.56	-6.76	-0.10	1.16	1.25	-2.48	-7.58	0.21	-2.30	-4.66	0.07	0.26	-2.08	1.07	-20.20
471	-6.77	-0.21	-16.98	-0.09	1.16	2.29	-6.55	-4.82	1.99	-2.30	10.13	0.07	0.84	2.76	-1.57	-20.05
666	-0.91	7.33	0.14	-0.15	1.16	-3.12	-5.23	-8.55	1.92	-2.30	-12.05	1.37	0.64	-1.15	0.89	-20.01
305	-5.39	-5.23	6.82	-10.50	1.16	-3.74	-5.12	-3.55	2.15	3.48	-4.66	0.07	0.60	3.66	0.51	-19.74
592	-5.29	-0.21	-4.61	-0.09	3.81	-4.15	-7.32	-3.08	1.80	-2.30	-1.88	1.37	0.93	2.04	-0.73	-19.71
708	-1.43	2.30	6.68	-10.50	2.49	-3.74	-10.41	-2.02	2.60	0.59	-13.90	1.37	0.32	4.41	1.57	-19.67
264	-4.70	-1.46	0.39	-0.10	2.49	-4.36	0.38	-8.71	1.75	0.59	-3.73	0.07	0.95	-2.72	-0.34	-19.51
537	-5.26	-1.46	4.74	-10.50	-0.17	-1.04	-4.90	-0.16	1.85	0.59	-12.05	0.07	0.65	8.76	-0.60	-19.47
238	-5.21	-3.98	-11.20	-0.15	-2.82	4.78	3.69	-8.81	1.23	0.59	4.59	-1.22	0.47	0.12	-1.45	-19.36
73	-5.72	-5.23	0.95	0.54	2.49	-5.61	-6.55	-4.99	1.10	-2.30	9.21	0.07	0.37	-3.49	-0.07	-19.24
582	-3.71	-1.46	-12.55	1.60	-1.49	1.87	5.23	-10.92	-1.17	-2.30	7.36	0.07	0.95	-2.16	-0.48	-19.15

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
241	-7.60	-7.74	-14.95	-0.09	-0.17	3.54	-0.83	-3.48	2.24	0.59	9.21	-1.22	0.78	3.14	-2.46	-19.05
662	-5.14	3.56	-13.70	0.54	1.16	0.42	-1.60	-8.04	-0.56	-2.30	9.21	0.07	0.46	-2.94	0.13	-18.73
478	-3.93	1.05	0.49	-10.50	2.49	-2.49	-9.75	-3.25	3.53	0.59	-3.73	1.37	0.61	5.20	-0.27	-18.60
590	-2.18	1.05	-0.40	-0.10	3.81	-3.95	-2.26	-6.88	1.04	-2.30	-6.51	1.37	0.62	-2.03	0.28	-18.44
335	-3.17	-1.46	-9.92	-0.10	-0.17	3.54	1.49	-7.59	2.50	0.59	-0.96	-1.22	0.51	-1.10	-1.05	-18.13
621	-3.32	2.30	-7.69	-0.15	-1.49	2.71	-0.17	-8.63	-1.11	-2.30	1.81	0.07	0.19	-1.09	0.85	-18.02
248	-4.75	-6.49	2.52	-10.50	1.16	-1.24	-4.02	-1.90	3.77	3.48	-4.66	0.07	0.55	5.56	-1.16	-17.62
624	-5.72	-1.46	-11.44	-0.09	1.16	1.46	-4.57	-3.30	-0.09	-2.30	6.44	0.07	0.50	1.93	-0.16	-17.59
562	-4.94	-0.21	-13.58	2.81	-1.49	1.67	4.90	-9.58	-2.38	-2.30	8.29	1.37	0.82	-2.60	-0.27	-17.49
296	-5.13	-2.72	-6.45	-0.10	-0.17	1.25	3.14	-8.92	-0.15	0.59	4.59	-1.22	0.51	-2.83	0.23	-17.38
699	-1.16	4.82	-6.59	-0.10	1.16	1.25	-2.15	-7.39	0.30	-2.30	-4.66	0.07	0.23	-2.08	1.29	-17.31
652	1.44	1.05	-2.60	-10.50	2.49	2.71	-3.03	1.32	3.16	0.59	-22.22	0.07	0.79	8.38	-0.80	-17.15
570	-2.23	4.82	-0.68	-0.15	1.16	-2.91	-2.48	-8.23	0.89	-2.30	-6.51	1.37	0.59	-0.98	0.50	-17.14
70	-2.30	-3.98	3.10	1.60	-0.17	-4.36	-2.15	-8.01	1.61	-2.30	1.81	0.07	0.88	-2.88	-0.07	-17.13
669	-3.30	6.07	-3.61	-0.09	3.81	-4.36	-9.64	-3.22	2.93	-2.30	-7.43	1.37	0.95	1.85	-0.12	-17.08
632	-1.19	1.05	0.70	-10.50	2.49	0.42	-1.71	-0.19	0.42	0.59	-16.67	0.07	0.82	6.66	0.26	-16.79
659	-1.71	4.82	-11.55	1.60	-1.49	1.67	2.81	-11.06	-0.04	-2.30	1.81	0.07	0.97	-2.33	0.13	-16.61
613	-0.52	-0.21	0.87	-10.50	2.49	0.42	-1.38	-0.01	0.51	0.59	-16.67	0.07	0.79	6.66	0.48	-16.41
469	-3.66	3.56	-12.78	-0.10	1.16	2.50	-1.49	-8.62	1.23	-2.30	5.51	0.07	0.52	-1.29	-0.56	-16.25
101	-4.64	-5.23	-4.94	2.81	-2.82	1.04	-0.06	-7.07	-1.59	-2.30	11.06	0.07	0.35	-3.43	0.50	-16.24
631	-2.87	-0.21	6.03	-10.50	2.49	-3.32	-7.76	-1.73	1.43	0.59	-7.43	1.37	0.27	4.35	1.13	-16.16
61	-0.28	1.05	5.22	1.70	-0.17	-2.91	-2.37	7.76	-4.68	0.59	-14.83	-1.22	0.06	-5.38	-0.61	-16.05
376	-3.59	-6.49	1.34	2.81	-0.17	-3.95	2.04	-8.61	1.19	0.59	-0.96	1.37	1.01	-2.35	-0.16	-15.93
667	-0.19	7.33	0.60	-0.10	3.81	-4.15	-4.68	-7.01	2.16	-2.30	-12.05	1.37	0.63	-2.20	0.89	-15.91
109	-1.92	-0.21	7.96	-0.15	-0.17	-3.53	-7.43	-5.71	1.67	-2.30	-3.73	0.07	0.11	-1.81	1.26	-15.88
641	-0.69	4.82	-11.00	-0.15	-1.49	4.99	-1.49	-7.12	1.63	-2.30	-3.73	0.07	0.16	0.64	-0.21	-15.87
566	-6.45	1.05	-14.53	0.54	1.16	0.63	1.15	-7.72	-1.59	-2.30	14.76	0.07	0.41	-2.75	-0.27	-15.84
644	-3.08	1.05	-14.75	-0.09	1.16	3.74	-5.89	-1.79	2.64	-2.30	0.89	0.07	0.47	3.66	-1.23	-15.45
367	-0.38	1.05	4.21	1.65	-2.82	-1.24	1.71	4.46	-4.04	3.48	-18.52	-1.22	0.29	-3.35	-0.71	-15.43
50	-3.54	-2.72	2.07	2.81	-0.17	-4.57	-2.37	-6.67	0.40	-2.30	2.74	1.37	0.75	-3.32	0.15	-15.36
239	-4.49	-3.98	-10.75	-0.10	-0.17	3.74	4.24	-7.27	1.47	0.59	4.59	-1.22	0.46	-0.93	-1.45	-15.26
602	-2.65	3.56	-7.52	-0.15	-1.49	2.71	0.16	-8.46	-1.02	-2.30	1.81	0.07	0.16	-1.09	1.07	-15.14
408	-4.56	-6.49	-5.84	2.81	-2.82	1.46	4.46	-9.00	-0.67	0.59	6.44	0.07	0.60	-2.20	0.23	-14.92
41	-0.33	4.82	4.95	1.65	-2.82	-1.87	-2.70	6.41	-4.83	0.59	-14.83	-1.22	0.04	-4.33	-0.40	-14.86
605	-5.04	-0.21	-11.27	-0.09	1.16	1.46	-4.24	-3.12	0.00	-2.30	6.44	0.07	0.47	1.93	0.05	-14.70
416	-1.84	-1.46	7.05	-0.15	-0.17	-3.12	-3.03	-7.65	2.59	0.59	-8.35	0.07	0.37	-0.60	1.00	-14.69
105	-6.15	-3.98	-5.89	0.54	-0.17	0.00	-3.80	-5.20	-0.80	-2.30	17.53	-1.22	-0.07	-3.59	0.50	-14.58
380	-5.10	-5.23	0.39	0.54	2.49	-4.99	-1.82	-6.75	1.97	0.59	5.51	0.07	0.59	-2.50	-0.16	-14.39
573	-4.62	3.56	-4.43	-0.09	3.81	-4.15	-6.99	-2.90	1.89	-2.30	-1.88	1.37	0.90	2.04	-0.51	-14.31
556	0.12	-1.46	-3.43	-10.50	2.49	2.91	-0.28	1.64	2.13	0.59	-16.67	0.07	0.74	8.56	-1.19	-14.29
651	-0.24	2.30	2.73	-10.50	2.49	-1.04	-9.09	-0.21	4.18	0.59	-12.98	1.37	0.24	6.08	0.07	-14.01
178	-7.06	-7.74	-12.04	2.81	-2.82	2.71	5.12	-10.22	0.26	0.59	16.61	0.07	0.89	-1.42	-1.61	-13.85
54	-5.05	-1.46	1.12	0.54	2.49	-5.61	-6.22	-4.80	1.19	-2.30	9.21	0.07	0.34	-3.49	0.15	-13.84
622	-2.60	2.30	-7.24	-0.10	1.16	1.67	0.49	-7.10	-0.87	-2.30	1.81	0.07	0.18	-2.13	0.85	-13.80

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
563	-3.03	2.30	-12.38	1.60	-1.49	1.87	5.56	-10.74	-1.08	-2.30	7.36	0.07	0.92	-2.16	-0.27	-13.74
186	-4.34	-2.72	0.86	-0.15	-0.17	-1.87	-2.37	-8.87	3.51	0.59	1.81	0.07	0.66	0.20	-0.84	-13.61
82	-3.96	-3.98	-4.77	2.81	-2.82	1.04	0.27	-6.89	-1.50	-2.30	11.06	0.07	0.32	-3.43	0.71	-13.35
412	-6.07	-5.23	-6.79	0.54	-0.17	0.42	0.71	-7.13	0.12	0.59	12.91	-1.22	0.19	-2.38	0.23	-13.28
612	-2.20	1.05	6.20	-10.50	2.49	-3.32	-7.43	-1.54	1.52	0.59	-7.43	1.37	0.24	4.35	1.35	-13.27
280	-4.91	-9.00	0.51	2.81	-0.17	-3.74	4.68	-8.29	0.16	0.59	4.59	1.37	0.96	-2.16	-0.55	-13.15
112	-4.31	-1.46	4.21	-0.09	2.49	-4.78	-11.95	-0.39	2.68	-2.30	0.89	0.07	0.42	1.21	0.25	-13.06
571	-1.51	4.82	-0.23	-0.10	3.81	-3.95	-1.93	-6.69	1.13	-2.30	-6.51	1.37	0.59	-2.03	0.50	-13.04
90	-1.24	1.05	8.13	-0.15	-0.17	-3.53	-7.10	-5.54	1.76	-2.30	-3.73	0.07	0.08	-1.81	1.48	-13.00
545	-2.01	2.30	-11.82	-0.15	-1.49	5.20	1.27	-6.80	0.60	-2.30	1.81	0.07	0.11	0.83	-0.61	-12.99
548	-4.40	-1.46	-15.57	-0.09	1.16	3.95	-3.14	-1.47	1.61	-2.30	6.44	0.07	0.42	3.83	-1.62	-12.58
271	-1.70	-1.46	3.39	1.65	-2.82	-1.04	4.46	4.78	-5.08	3.48	-12.98	-1.22	0.25	-3.16	-1.10	-12.54
102	-2.72	-2.72	-3.74	1.60	-2.82	1.25	0.60	-8.24	-0.29	-2.30	10.13	-1.22	0.45	-2.99	0.50	-12.50
377	-1.68	-3.98	2.54	1.60	-0.17	-3.74	2.59	-9.78	2.49	0.59	-1.88	0.07	1.11	-1.91	-0.16	-12.29
182	-8.57	-6.49	-12.98	0.54	-0.17	1.67	1.38	-8.36	1.04	0.59	23.08	-1.22	0.48	-1.59	-1.61	-12.22
389	-3.89	-5.23	-5.67	2.81	-2.82	1.46	4.79	-8.81	-0.58	0.59	6.44	0.07	0.57	-2.20	0.45	-12.02
110	-1.20	-0.21	8.41	-0.10	2.49	-4.57	-6.88	-4.19	1.92	-2.30	-3.73	0.07	0.11	-2.86	1.26	-11.79
419	-4.24	-2.72	3.31	-0.09	2.49	-4.36	-7.43	-2.32	3.60	0.59	-3.73	0.07	0.68	2.41	-0.01	-11.75
51	-1.63	-0.21	3.27	1.60	-0.17	-4.36	-1.82	-7.82	1.70	-2.30	1.81	0.07	0.85	-2.88	0.15	-11.72
86	-5.47	-2.72	-5.71	0.54	-0.17	0.00	-3.47	-5.02	-0.71	-2.30	17.53	-1.22	-0.10	-3.59	0.71	-11.70
397	-1.17	-0.21	7.23	-0.15	-0.17	-3.12	-2.59	-7.47	2.68	0.59	-8.35	0.07	0.34	-0.60	1.21	-11.70
642	0.03	4.82	-10.54	-0.10	1.16	3.95	-0.83	-5.59	1.88	-2.30	-3.73	0.07	0.15	-0.41	-0.21	-11.66
284	-6.42	-7.74	-0.44	0.54	2.49	-4.78	0.93	-6.43	0.94	0.59	11.06	0.07	0.55	-2.31	-0.55	-11.51
25	-3.32	-5.23	-9.07	2.81	-2.82	3.54	1.38	-5.23	0.12	-2.30	11.06	0.07	0.27	-1.53	-0.96	-11.22
368	0.34	1.05	4.66	1.70	-0.17	-2.28	2.37	6.00	-3.80	3.48	-18.52	-1.22	0.29	-4.40	-0.71	-11.22
409	-2.65	-3.98	-4.64	1.60	-2.82	1.67	5.12	-10.16	0.63	0.59	5.51	-1.22	0.70	-1.78	0.23	-11.19
555	-1.56	-0.21	1.90	-10.50	2.49	-0.83	-6.33	0.11	3.14	0.59	-7.43	1.37	0.19	6.26	-0.32	-11.13
33	-0.60	-0.21	3.83	-0.15	-0.17	-1.04	-6.11	-3.89	3.38	-2.30	-3.73	0.07	0.04	0.09	-0.19	-10.98
603	-1.93	3.56	-7.07	-0.10	1.16	1.67	0.82	-6.91	-0.77	-2.30	1.81	0.07	0.15	-2.13	1.07	-10.90
189	-6.74	-3.98	-2.89	-0.09	2.49	-3.12	-6.77	-3.55	4.53	0.59	6.44	0.07	0.97	3.20	-1.85	-10.69
42	0.39	4.82	5.40	1.70	-0.17	-2.91	-2.04	7.95	-4.59	0.59	-14.83	-1.22	0.03	-5.38	-0.40	-10.65
357	-2.92	-2.72	1.51	2.81	-0.17	-3.95	2.37	-8.43	1.28	0.59	-0.96	1.37	0.97	-2.35	0.05	-10.52
417	-1.12	-1.46	7.51	-0.10	2.49	-4.15	-2.37	-6.11	2.83	0.59	-8.35	0.07	0.37	-1.65	1.00	-10.48
393	-5.40	-3.98	-6.62	0.54	-0.17	0.42	1.04	-6.96	0.21	0.59	12.91	-1.22	0.16	-2.38	0.45	-10.40
93	-3.64	-0.21	4.38	-0.09	2.49	-4.78	-11.62	-0.20	2.77	-2.30	0.89	0.07	0.39	1.21	0.47	-10.16
179	-5.15	-5.23	-10.83	1.60	-2.82	2.91	5.78	-11.39	1.56	0.59	15.68	-1.22	0.99	-0.98	-1.61	-10.11
348	0.30	4.82	4.38	1.65	-2.82	-1.24	2.04	4.65	-3.95	3.48	-18.52	-1.22	0.26	-3.35	-0.49	-10.02
485	-3.87	-3.98	-12.66	2.81	-1.49	3.12	2.81	-8.22	-0.37	-2.30	13.83	1.37	0.54	-0.73	-0.77	-9.90
29	-4.83	-3.98	-10.01	0.54	-0.17	2.50	-2.48	-3.37	0.90	-2.30	17.53	-1.22	-0.14	-1.69	-0.96	-9.68
493	-1.15	1.05	0.24	-0.15	1.16	-1.45	-4.68	-6.86	2.89	-2.30	-0.96	1.37	0.30	0.89	0.00	-9.66
83	-2.05	-1.46	-3.57	1.60	-2.82	1.25	0.93	-8.05	-0.20	-2.30	10.13	-1.22	0.41	-2.99	0.71	-9.61
683	-0.39	-0.21	0.72	2.81	1.16	-3.53	-0.39	-6.61	0.56	-2.30	-3.73	2.66	0.65	-1.64	0.68	-9.56
281	-2.99	-6.49	1.71	1.60	-0.17	-3.53	5.34	-9.46	1.46	0.59	3.66	0.07	1.06	-1.72	-0.55	-9.41
187	-3.63	-2.72	1.32	-0.10	2.49	-2.91	-1.71	-7.33	3.76	0.59	1.81	0.07	0.66	-0.85	-0.84	-9.40

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
361	-4.42	-1.46	0.56	0.54	2.49	-4.99	-1.49	-6.57	2.06	0.59	5.51	0.07	0.56	-2.50	0.05	-8.99
218	-4.77	-1.46	-5.97	-0.15	-2.82	3.74	0.38	-9.09	1.61	0.59	10.13	-1.22	0.23	0.09	-0.28	-8.98
674	2.82	7.33	3.59	1.65	-1.49	-0.83	-0.61	6.47	-4.67	0.59	-21.30	0.07	-0.07	-2.66	0.13	-8.96
91	-0.53	1.05	8.58	-0.10	2.49	-4.57	-6.55	-4.00	2.01	-2.30	-3.73	0.07	0.08	-2.86	1.48	-8.90
546	-1.29	2.30	-11.37	-0.10	1.16	4.16	1.82	-5.27	0.84	-2.30	1.81	0.07	0.10	-0.22	-0.61	-8.89
400	-3.56	-1.46	3.48	-0.09	2.49	-4.36	-7.10	-2.13	3.69	0.59	-3.73	0.07	0.65	2.41	0.20	-8.85
221	-7.16	-5.23	-9.72	-0.09	-0.17	2.50	-4.02	-3.76	2.62	0.59	14.76	-1.22	0.54	3.11	-1.29	-8.55
312	-5.33	-7.74	-6.33	2.81	-2.82	1.87	7.43	-8.52	-1.75	0.59	12.91	0.07	0.52	-2.27	0.01	-8.53
715	-1.37	-0.21	-6.46	2.81	-1.49	1.87	2.15	-6.99	-1.30	-2.30	3.66	1.37	0.24	-1.51	1.07	-8.46
159	-6.39	-3.98	-11.86	2.81	-2.82	2.71	5.45	-10.03	0.35	0.59	16.61	0.07	0.86	-1.42	-1.39	-8.45
272	-0.98	-1.46	3.84	1.70	-0.17	-2.08	5.01	6.32	-4.84	3.48	-12.98	-1.22	0.24	-4.22	-1.10	-8.44
489	-5.38	-2.72	-13.60	0.54	1.16	2.08	-1.05	-6.35	0.41	-2.30	20.30	0.07	0.12	-0.88	-0.77	-8.36
390	-1.98	-2.72	-4.47	1.60	-2.82	1.67	5.45	-9.98	0.72	0.59	5.51	-1.22	0.67	-1.78	0.45	-8.30
320	-2.61	-2.72	6.57	-0.15	-0.17	-2.70	-0.06	-7.16	1.52	0.59	-1.88	0.07	0.29	-0.65	0.78	-8.28
167	-3.67	1.05	1.04	-0.15	-0.17	-1.87	-2.04	-8.68	3.60	0.59	1.81	0.07	0.63	0.20	-0.63	-8.21
723	1.35	4.82	6.44	-0.15	1.16	-2.70	-5.34	-5.64	1.96	-2.30	-11.13	1.37	0.01	0.11	1.84	-8.21
36	-3.00	-1.46	0.08	-0.09	2.49	-2.28	-10.52	1.44	4.39	-2.30	0.89	0.07	0.34	3.11	-1.21	-8.04
687	-1.90	1.05	-0.23	0.54	3.81	-4.57	-4.24	-4.75	1.35	-2.30	2.74	1.37	0.23	-1.81	0.68	-8.04
261	-4.23	-5.23	0.68	2.81	-0.17	-3.74	5.01	-8.11	0.25	0.59	4.59	1.37	0.93	-2.16	-0.34	-7.75
229	-2.64	-2.72	2.42	-10.50	1.16	1.46	-1.16	-0.65	3.14	3.48	-8.35	-1.22	0.86	7.83	-0.86	-7.75
398	-0.45	-0.21	7.68	-0.10	2.49	-4.15	-2.04	-5.93	2.92	0.59	-8.35	0.07	0.34	-1.65	1.21	-7.59
26	-1.41	-2.72	-7.87	1.60	-2.82	3.74	2.04	-6.40	1.42	-2.30	10.13	-1.22	0.37	-1.09	-0.96	-7.47
210	-1.96	-3.98	2.59	-10.50	1.16	1.46	-0.83	-0.46	3.23	3.48	-8.35	-1.22	0.83	7.83	-0.65	-7.37
252	-1.02	2.30	3.56	1.65	-2.82	-1.04	4.79	4.97	-4.99	3.48	-12.98	-1.22	0.21	-3.16	-0.88	-7.14
228	-4.32	-3.98	7.75	-10.50	1.16	-2.28	-7.21	-2.18	4.16	3.48	0.89	0.07	0.31	5.53	0.01	-7.12
316	-6.84	-6.49	-7.27	0.54	-0.17	0.83	3.58	-6.65	-0.96	0.59	19.38	-1.22	0.11	-2.42	0.01	-6.98
719	-2.87	1.05	-7.41	0.54	1.16	0.83	-1.71	-5.12	-0.51	-2.30	10.13	0.07	-0.17	-1.69	1.07	-6.92
358	-1.00	-0.21	2.71	1.60	-0.17	-3.74	2.92	-9.59	2.58	0.59	-1.88	0.07	1.07	-1.91	0.05	-6.89
163	-7.90	-2.72	-12.81	0.54	-0.17	1.67	1.71	-8.17	1.13	0.59	23.08	-1.22	0.45	-1.59	-1.39	-6.82
34	0.11	-0.21	4.29	-0.10	2.49	-2.08	-5.45	-2.35	3.62	-2.30	-3.73	0.07	0.03	-0.96	-0.19	-6.77
496	-3.54	-0.21	-3.51	-0.09	3.81	-2.70	-9.09	-1.53	3.90	-2.30	3.66	1.37	0.61	3.89	-1.01	-6.73
587	-1.71	-2.72	-0.11	2.81	1.16	-3.32	2.37	-6.29	-0.47	-2.30	1.81	2.66	0.60	-1.47	0.28	-6.69
332	-2.70	-5.23	-9.63	2.81	-2.82	4.16	6.11	-7.00	1.00	0.59	7.36	0.07	0.49	-0.54	-1.05	-6.37
486	-1.95	-1.46	-11.46	1.60	-1.49	3.33	3.36	-9.37	0.93	-2.30	12.91	0.07	0.63	-0.29	-0.77	-6.26
340	0.02	-0.21	3.27	-0.15	-0.17	-0.41	-1.38	-5.65	4.26	0.59	-7.43	0.07	0.26	1.08	-0.29	-6.13
265	-5.74	-3.98	-0.26	0.54	2.49	-4.78	1.27	-6.25	1.03	0.59	11.06	0.07	0.52	-2.31	-0.34	-6.10
199	-4.10	-0.21	-5.80	-0.15	-2.82	3.74	0.71	-8.91	1.70	0.59	10.13	-1.22	0.20	0.09	-0.06	-6.09
578	1.50	4.82	2.77	1.65	-1.49	-0.62	2.15	6.79	-5.70	0.59	-15.75	0.07	-0.11	-2.47	-0.26	-6.08
349	1.02	4.82	4.84	1.70	-0.17	-2.28	2.70	6.18	-3.71	3.48	-18.52	-1.22	0.26	-4.40	-0.49	-5.81
684	1.52	2.30	1.92	1.60	1.16	-3.32	0.27	-7.77	1.87	-2.30	-4.66	1.37	0.75	-1.20	0.68	-5.81
202	-6.49	-3.98	-9.55	-0.09	-0.17	2.50	-3.69	-3.57	2.71	0.59	14.76	-1.22	0.51	3.11	-1.07	-5.66
293	-4.66	-6.49	-6.15	2.81	-2.82	1.87	7.76	-8.34	-1.66	0.59	12.91	0.07	0.49	-2.27	0.23	-5.64
696	-0.69	1.05	-6.29	2.81	-1.49	1.87	2.48	-6.81	-1.21	-2.30	3.66	1.37	0.21	-1.51	1.29	-5.56
494	-0.43	1.05	0.70	-0.10	3.81	-2.49	-4.13	-5.33	3.13	-2.30	-0.96	1.37	0.30	-0.16	0.00	-5.56

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
301	-1.94	-1.46	6.75	-0.15	-0.17	-2.70	0.27	-6.99	1.61	0.59	-1.88	0.07	0.26	-0.65	0.99	-5.39
323	-5.00	-3.98	2.82	-0.09	2.49	-3.95	-4.46	-1.83	2.52	0.59	2.74	0.07	0.60	2.37	-0.23	-5.34
704	2.03	6.07	6.61	-0.15	1.16	-2.70	-5.01	-5.46	2.06	-2.30	-11.13	1.37	-0.02	0.11	2.05	-5.32
170	-6.06	-0.21	-2.71	-0.09	2.49	-3.12	-6.44	-3.36	4.62	0.59	6.44	0.07	0.94	3.20	-1.64	-5.29
726	-1.04	3.56	2.69	-0.09	3.81	-3.95	-9.75	-0.31	2.98	-2.30	-6.51	1.37	0.32	3.11	0.83	-5.28
153	-1.32	-5.23	-1.71	-10.50	1.16	3.95	0.27	1.19	4.85	3.48	-8.35	-1.22	0.78	9.74	-2.32	-5.24
591	-3.22	-1.46	-1.05	0.54	3.81	-4.36	-1.49	-4.43	0.31	-2.30	8.29	1.37	0.19	-1.62	0.28	-5.15
525	-1.57	2.30	-6.59	-0.15	-1.49	4.16	-1.93	-7.09	0.98	-2.30	7.36	0.07	-0.13	0.78	0.56	-5.03
313	-3.42	-5.23	-5.13	1.60	-2.82	2.08	7.98	-9.68	-0.44	0.59	11.98	-1.22	0.62	-1.83	0.01	-4.89
675	3.54	7.33	4.04	1.70	1.16	-1.87	-0.06	8.00	-4.43	0.59	-21.30	0.07	-0.07	-3.71	0.13	-4.86
716	0.55	2.30	-5.26	1.60	-1.49	2.08	2.70	-8.16	0.01	-2.30	2.74	0.07	0.34	-1.07	1.07	-4.82
219	-4.05	-1.46	-5.52	-0.10	-0.17	2.71	1.04	-7.55	1.85	0.59	10.13	-1.22	0.22	-0.96	-0.28	-4.77
336	-4.21	-3.98	-10.58	0.54	-0.17	3.12	2.37	-5.14	1.78	0.59	13.83	-1.22	0.08	-0.70	-1.05	-4.72
160	-4.48	-1.46	-10.66	1.60	-2.82	2.91	6.11	-11.20	1.65	0.59	15.68	-1.22	0.96	-0.98	-1.39	-4.71
19	9.58	-2.72	-1.61	-10.50	-0.17	4.58	-6.99	15.12	0.25	0.59	-17.60	-1.22	-1.39	6.63	0.85	-4.61
528	-3.96	-1.46	-10.35	-0.09	1.16	2.91	-6.33	-1.75	2.00	-2.30	11.98	0.07	0.18	3.80	-0.45	-4.60
466	-3.19	-0.21	-12.48	2.81	-1.49	3.12	3.14	-8.03	-0.28	-2.30	13.83	1.37	0.50	-0.73	-0.56	-4.50
58	0.19	-2.72	5.52	4.62	-2.82	-2.28	2.26	8.36	-6.19	0.59	-6.51	0.07	0.04	-4.81	-0.61	-4.29
474	-0.47	4.82	0.42	-0.15	1.16	-1.45	-4.35	-6.68	2.98	-2.30	-0.96	1.37	0.27	0.89	0.21	-4.26
209	-3.64	-2.72	7.92	-10.50	1.16	-2.28	-6.88	-2.00	4.25	3.48	0.89	0.07	0.28	5.53	0.22	-4.23
664	0.28	3.56	0.89	2.81	1.16	-3.53	-0.06	-6.42	0.65	-2.30	-3.73	2.66	0.62	-1.64	0.89	-4.15
724	2.07	4.82	6.89	-0.10	3.81	-3.74	-4.79	-4.10	2.21	-2.30	-11.13	1.37	0.01	-0.95	1.84	-4.10
297	-6.17	-5.23	-7.10	0.54	-0.17	0.83	3.91	-6.47	-0.87	0.59	19.38	-1.22	0.08	-2.42	0.23	-4.10
321	-1.89	-2.72	7.02	-0.10	2.49	-3.74	0.60	-5.63	1.76	0.59	-1.88	0.07	0.29	-1.70	0.78	-4.06
700	-2.20	2.30	-7.24	0.54	1.16	0.83	-1.38	-4.95	-0.42	-2.30	10.13	0.07	-0.20	-1.69	1.29	-4.04
262	-2.32	-2.72	1.89	1.60	-0.17	-3.53	5.67	-9.27	1.55	0.59	3.66	0.07	1.03	-1.72	-0.34	-4.01
168	-2.95	1.05	1.49	-0.10	2.49	-2.91	-1.38	-7.16	3.85	0.59	1.81	0.07	0.63	-0.85	-0.63	-4.00
142	-3.46	-1.46	-10.10	-0.15	-2.82	6.24	1.82	-7.26	3.32	0.59	10.13	-1.22	0.15	1.99	-1.74	-3.96
536	0.56	1.05	1.80	-10.50	2.49	1.87	-3.58	1.36	2.51	0.59	-11.13	0.07	0.50	8.53	-0.02	-3.91
655	3.49	11.09	3.76	1.65	-1.49	-0.83	-0.28	6.65	-4.58	0.59	-21.30	0.07	-0.10	-2.66	0.35	-3.56
145	-5.85	-5.23	-13.85	-0.09	-0.17	4.99	-2.59	-1.93	4.33	0.59	14.76	-1.22	0.46	5.01	-2.75	-3.54
517	1.23	-0.21	1.97	-10.50	2.49	1.87	-3.25	1.54	2.60	0.59	-11.13	0.07	0.47	8.53	0.19	-3.53
236	-4.02	-7.74	-10.46	2.81	-2.82	4.37	8.86	-6.68	-0.04	0.59	12.91	0.07	0.45	-0.35	-1.45	-3.49
8	7.45	1.05	-10.00	-0.15	-4.14	6.86	-5.45	6.68	-1.28	-2.30	0.89	-1.22	-2.02	-1.12	1.43	-3.33
535	-1.12	-0.21	7.13	-10.50	2.49	-1.87	-9.64	-0.18	3.53	0.59	-1.88	1.37	-0.05	6.22	0.85	-3.28
244	-1.30	-2.72	2.45	-0.15	-0.17	-0.21	1.38	-5.33	3.22	0.59	-1.88	0.07	0.21	1.25	-0.68	-3.26
343	-2.37	-1.46	-0.48	-0.09	2.49	-1.66	-5.78	-0.33	5.27	0.59	-2.81	0.07	0.57	4.08	-1.30	-3.21
588	0.20	-0.21	1.09	1.60	1.16	-3.12	2.92	-7.45	0.83	-2.30	0.89	1.37	0.70	-1.03	0.28	-3.05
253	-0.30	2.30	4.01	1.70	-0.17	-2.08	5.34	6.50	-4.74	3.48	-12.98	-1.22	0.21	-4.22	-0.88	-3.04
470	-4.70	1.05	-13.43	0.54	1.16	2.08	-0.72	-6.17	0.50	-2.30	20.30	0.07	0.09	-0.88	-0.56	-2.96
11	5.05	-2.72	-13.75	-0.09	-1.49	5.62	-9.86	12.00	-0.27	-2.30	5.51	-1.22	-1.71	1.90	0.42	-2.91
62	-1.32	-1.46	4.57	2.35	-0.17	-3.32	-1.60	10.22	-5.40	0.59	-0.03	-1.22	-0.37	-4.98	-0.61	-2.76
333	-0.79	-2.72	-8.43	1.60	-2.82	4.37	6.77	-8.17	2.30	0.59	6.44	-1.22	0.59	-0.10	-1.05	-2.63
668	-1.23	4.82	-0.06	0.54	3.81	-4.57	-3.80	-4.56	1.44	-2.30	2.74	1.37	0.20	-1.81	0.89	-2.52

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
304	-4.33	-2.72	2.99	-0.09	2.49	-3.95	-4.13	-1.65	2.62	0.59	2.74	0.07	0.57	2.37	-0.02	-2.45
707	-0.36	4.82	2.86	-0.09	3.81	-3.95	-9.42	-0.13	3.07	-2.30	-6.51	1.37	0.29	3.11	1.04	-2.39
506	-0.90	3.56	-6.42	-0.15	-1.49	4.16	-1.60	-6.91	1.07	-2.30	7.36	0.07	-0.16	0.78	0.78	-2.14
152	-3.00	-3.98	3.62	-10.50	1.16	0.21	-5.78	-0.35	5.86	3.48	0.89	0.07	0.23	7.43	-1.45	-2.10
619	-2.13	-1.46	-6.95	2.81	-1.49	2.29	5.12	-6.51	-2.37	-2.30	10.13	1.37	0.16	-1.56	0.85	-2.04
579	2.22	4.82	3.22	1.70	1.16	-1.66	2.70	8.32	-5.46	0.59	-15.75	0.07	-0.12	-3.52	-0.26	-1.98
240	-5.53	-6.49	-11.40	0.54	-0.17	3.33	5.01	-4.82	0.75	0.59	19.38	-1.22	0.03	-0.52	-1.45	-1.96
697	1.22	3.56	-5.09	1.60	-1.49	2.08	3.03	-7.97	0.10	-2.30	2.74	0.07	0.31	-1.07	1.29	-1.92
341	0.74	-0.21	3.72	-0.10	2.49	-1.45	-0.72	-4.11	4.50	0.59	-7.43	0.07	0.25	0.03	-0.29	-1.92
294	-2.74	-3.98	-4.95	1.60	-2.82	2.08	8.42	-9.49	-0.35	0.59	11.98	-1.22	0.59	-1.83	0.23	-1.88
200	-3.38	-0.21	-5.35	-0.10	-0.17	2.71	1.38	-7.37	1.94	0.59	10.13	-1.22	0.19	-0.96	-0.06	-1.88
627	0.59	3.56	5.95	-0.15	1.16	-2.28	-2.37	-5.16	0.89	-2.30	-4.66	1.37	-0.07	0.04	1.62	-1.81
509	-3.29	-0.21	-10.17	-0.09	1.16	2.91	-6.00	-1.57	2.09	-2.30	11.98	0.07	0.15	3.80	-0.23	-1.70
18	7.90	-1.46	3.72	-10.50	-0.17	0.83	-13.05	13.58	1.26	0.59	-8.35	0.07	-1.94	4.32	1.72	-1.48
460	1.87	-1.46	-2.33	-10.50	2.49	4.37	-2.15	3.19	4.22	0.59	-11.13	0.07	0.42	10.43	-1.48	-1.40
477	-2.86	3.56	-3.33	-0.09	3.81	-2.70	-8.76	-1.35	3.99	-2.30	3.66	1.37	0.58	3.89	-0.80	-1.33
568	-1.04	1.05	0.06	2.81	1.16	-3.32	2.70	-6.10	-0.38	-2.30	1.81	2.66	0.57	-1.47	0.50	-1.28
705	2.75	6.07	7.06	-0.10	3.81	-3.74	-4.46	-3.92	2.30	-2.30	-11.13	1.37	-0.02	-0.95	2.05	-1.21
302	-1.22	-1.46	7.20	-0.10	2.49	-3.74	0.93	-5.44	1.85	0.59	-1.88	0.07	0.26	-1.70	0.99	-1.17
526	-0.85	2.30	-6.14	-0.10	1.16	3.12	-1.38	-5.55	1.23	-2.30	7.36	0.07	-0.14	-0.27	0.56	-0.93
467	-1.28	2.30	-11.28	1.60	-1.49	3.33	3.69	-9.19	1.02	-2.30	12.91	0.07	0.60	-0.29	-0.56	-0.86
559	2.18	8.58	2.94	1.65	-1.49	-0.62	2.48	6.97	-5.61	0.59	-15.75	0.07	-0.14	-2.47	-0.05	-0.67
59	2.10	-0.21	6.72	3.41	-2.82	-2.08	2.81	7.19	-4.88	0.59	-7.43	-1.22	0.14	-4.37	-0.61	-0.65
623	-3.64	-0.21	-7.89	0.54	1.16	1.25	1.27	-4.64	-1.59	-2.30	16.61	0.07	-0.25	-1.73	0.85	-0.51
665	2.19	6.07	2.09	1.60	1.16	-3.32	0.60	-7.58	1.96	-2.30	-4.66	1.37	0.72	-1.20	0.89	-0.40
247	-3.69	-3.98	-1.31	-0.09	2.49	-1.45	-3.03	-0.01	4.23	0.59	2.74	0.07	0.52	4.27	-1.69	-0.32
516	-0.44	1.05	7.30	-10.50	2.49	-1.87	-9.20	0.01	3.62	0.59	-1.88	1.37	-0.08	6.22	1.06	-0.28
475	0.25	4.82	0.87	-0.10	3.81	-2.49	-3.80	-5.14	3.22	-2.30	-0.96	1.37	0.27	-0.16	0.21	-0.15
107	-0.73	-3.98	8.71	2.81	-0.17	-3.95	-2.26	-3.60	0.41	-2.30	4.59	1.37	0.09	-2.30	1.26	-0.03
449	-0.26	2.30	-10.72	-0.15	-1.49	6.66	-0.50	-5.25	2.69	-2.30	7.36	0.07	-0.21	2.68	-0.90	-0.01
639	0.50	1.05	-10.25	2.81	-1.49	4.58	3.80	-4.99	0.37	-2.30	4.59	1.37	0.13	0.15	-0.21	0.10
237	-2.10	-5.23	-9.25	1.60	-2.82	4.58	9.41	-7.85	1.26	0.59	11.98	-1.22	0.54	0.07	-1.45	0.13
143	-2.74	-1.46	-9.65	-0.10	-0.17	5.20	2.37	-5.72	3.56	0.59	10.13	-1.22	0.14	0.94	-1.74	0.14
572	-2.54	2.30	-0.88	0.54	3.81	-4.36	-1.16	-4.24	0.40	-2.30	8.29	1.37	0.16	-1.62	0.50	0.25
452	-2.65	-1.46	-14.47	-0.09	1.16	5.41	-5.01	0.08	3.71	-2.30	11.98	0.07	0.10	5.70	-1.91	0.31
647	3.22	6.07	2.65	-0.15	1.16	0.00	-3.69	-3.65	3.63	-2.30	-10.20	1.37	-0.10	1.77	0.55	0.33
365	0.81	-2.72	4.96	4.62	-2.82	-1.66	6.99	6.59	-5.31	3.48	-10.20	0.07	0.27	-3.84	-0.71	0.54
656	4.21	11.09	4.22	1.70	1.16	-1.87	0.27	8.19	-4.34	0.59	-21.30	0.07	-0.10	-3.71	0.35	0.55
98	2.48	3.56	11.58	1.65	-2.82	-1.24	-2.48	9.49	-4.83	0.59	-12.98	-1.22	-0.62	-3.30	0.72	0.59
9	8.16	1.05	-9.55	-0.10	-1.49	5.82	-4.90	8.21	-1.04	-2.30	0.89	-1.22	-2.03	-2.17	1.43	0.77
245	-0.58	-2.72	2.90	-0.10	2.49	-1.24	1.93	-3.79	3.46	0.59	-1.88	0.07	0.21	0.20	-0.68	0.84
600	-1.46	-0.21	-6.77	2.81	-1.49	2.29	5.45	-6.32	-2.28	-2.30	10.13	1.37	0.13	-1.56	1.07	0.85
608	1.26	4.82	6.13	-0.15	1.16	-2.28	-2.04	-4.98	0.98	-2.30	-4.66	1.37	-0.10	0.04	1.83	1.07
39	0.86	1.05	5.69	4.62	-2.82	-2.28	2.59	8.54	-6.10	0.59	-6.51	0.07	0.01	-4.81	-0.40	1.12

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
630	-1.81	2.30	2.20	-0.09	3.81	-3.53	-6.77	0.17	1.90	-2.30	-0.03	1.37	0.24	3.06	0.61	1.13
414	-0.65	-5.23	7.80	2.81	-0.17	-3.53	2.26	-5.52	1.33	0.59	-0.03	1.37	0.35	-1.09	1.00	1.27
111	-2.24	-2.72	7.76	0.54	2.49	-4.99	-6.11	-1.73	1.19	-2.30	11.06	0.07	-0.32	-2.46	1.26	1.51
620	-0.22	1.05	-5.75	1.60	-1.49	2.50	5.67	-7.68	-1.07	-2.30	9.21	0.07	0.26	-1.12	0.85	1.59
643	-1.01	2.30	-11.19	0.54	1.16	3.54	-0.06	-3.13	1.15	-2.30	11.06	0.07	-0.28	0.00	-0.21	1.64
459	0.20	-0.21	3.00	-10.50	2.49	0.63	-8.21	1.66	5.23	0.59	-1.88	1.37	-0.13	8.12	-0.61	1.74
405	2.56	2.30	10.68	1.65	-2.82	-0.83	2.04	7.56	-3.91	3.48	-17.60	-1.22	-0.36	-2.09	0.45	1.89
507	-0.18	3.56	-5.97	-0.10	1.16	3.12	-1.05	-5.37	1.32	-2.30	7.36	0.07	-0.17	-0.27	0.78	1.97
369	-0.70	-1.46	4.01	2.35	-0.17	-2.70	3.14	8.45	-4.52	3.48	-3.73	-1.22	-0.14	-4.00	-0.71	2.08
628	1.30	3.56	6.40	-0.10	3.81	-3.32	-1.82	-3.62	1.13	-2.30	-4.66	1.37	-0.07	-1.01	1.62	2.29
184	-3.16	-6.49	1.61	2.81	-0.17	-2.28	2.92	-6.74	2.25	0.59	10.13	1.37	0.64	-0.29	-0.84	2.35
569	0.88	3.56	1.27	1.60	1.16	-3.12	3.25	-7.26	0.92	-2.30	0.89	1.37	0.67	-1.03	0.50	2.35
604	-2.97	1.05	-7.72	0.54	1.16	1.25	1.60	-4.46	-1.50	-2.30	16.61	0.07	-0.28	-1.73	1.07	2.37
43	-0.65	2.30	4.75	2.35	-0.17	-3.32	-1.27	10.41	-5.31	0.59	-0.03	-1.22	-0.40	-4.98	-0.40	2.64
418	-2.16	-3.98	6.86	0.54	2.49	-4.57	-1.60	-3.65	2.11	0.59	6.44	0.07	-0.06	-1.25	1.00	2.82
88	-0.06	-2.72	8.88	2.81	-0.17	-3.95	-1.93	-3.41	0.50	-2.30	4.59	1.37	0.06	-2.30	1.48	2.86
175	0.06	1.05	4.48	1.65	-2.82	0.42	2.70	6.33	-2.98	3.48	-7.43	-1.22	-0.07	-1.31	-1.39	2.95
543	-0.82	-1.46	-11.07	2.81	-1.49	4.78	6.55	-4.67	-0.67	-2.30	10.13	1.37	0.09	0.34	-0.61	2.98
551	1.90	3.56	1.82	-0.15	1.16	0.21	-0.94	-3.33	2.59	-2.30	-4.66	1.37	-0.15	1.96	0.16	3.22
650	0.83	4.82	-1.10	-0.09	3.81	-1.24	-8.09	1.69	4.64	-2.30	-5.58	1.37	0.21	4.79	-0.46	3.28
560	2.89	8.58	3.39	1.70	1.16	-1.66	3.03	8.51	-5.37	0.59	-15.75	0.07	-0.15	-3.52	-0.05	3.43
269	-0.51	-5.23	4.13	4.62	-2.82	-1.45	9.74	6.91	-6.34	3.48	-4.66	0.07	0.22	-3.65	-1.10	3.43
79	3.16	4.82	11.75	1.65	-2.82	-1.24	-2.15	9.67	-4.74	0.59	-12.98	-1.22	-0.65	-3.30	0.93	3.48
108	1.18	-1.46	9.91	1.60	-0.17	-3.74	-1.71	-4.76	1.71	-2.30	3.66	0.07	0.19	-1.86	1.26	3.60
640	2.41	3.56	-9.05	1.60	-1.49	4.78	4.35	-6.15	1.67	-2.30	3.66	0.07	0.23	0.59	-0.21	3.73
188	-4.67	-5.23	0.66	0.54	2.49	-3.32	-0.94	-4.88	3.04	0.59	16.61	0.07	0.23	-0.46	-0.84	3.88
611	-1.13	3.56	2.38	-0.09	3.81	-3.53	-6.44	0.36	1.99	-2.30	-0.03	1.37	0.21	3.06	0.82	4.02
450	0.46	2.30	-10.27	-0.10	1.16	5.62	0.05	-3.72	2.94	-2.30	7.36	0.07	-0.22	1.63	-0.90	4.09
395	0.02	-3.98	7.97	2.81	-0.17	-3.53	2.59	-5.34	1.42	0.59	-0.03	1.37	0.32	-1.09	1.21	4.16
366	2.73	-0.21	6.16	3.41	-2.82	-1.45	7.54	5.43	-4.01	3.48	-11.13	-1.22	0.37	-3.40	-0.71	4.18
92	-1.56	-1.46	7.93	0.54	2.49	-4.99	-5.78	-1.55	1.28	-2.30	11.06	0.07	-0.35	-2.46	1.48	4.40
648	3.94	6.07	3.10	-0.10	3.81	-1.04	-3.14	-2.11	3.87	-2.30	-10.20	1.37	-0.10	0.72	0.55	4.43
601	0.45	2.30	-5.57	1.60	-1.49	2.50	6.00	-7.49	-0.98	-2.30	9.21	0.07	0.23	-1.12	1.07	4.48
547	-2.33	-0.21	-12.02	0.54	1.16	3.74	2.70	-2.81	0.12	-2.30	16.61	0.07	-0.33	0.17	-0.61	4.51
99	3.20	3.56	12.03	1.70	-0.17	-2.28	-1.93	11.03	-4.58	0.59	-12.98	-1.22	-0.63	-4.36	0.72	4.69
40	2.78	3.56	6.89	3.41	-2.82	-2.08	3.14	7.38	-4.79	0.59	-7.43	-1.22	0.11	-4.37	-0.40	4.75
386	3.23	3.56	10.85	1.65	-2.82	-0.83	2.37	7.74	-3.82	3.48	-17.60	-1.22	-0.40	-2.09	0.67	4.78
415	1.26	-2.72	9.00	1.60	-0.17	-3.32	2.81	-6.69	2.63	0.59	-0.96	0.07	0.45	-0.65	1.00	4.91
273	-2.01	-3.98	3.19	2.35	-0.17	-2.49	5.89	8.77	-5.56	3.48	1.81	-1.22	-0.19	-3.82	-1.10	4.95
31	0.59	-3.98	4.58	2.81	-0.17	-1.45	-0.83	-1.75	2.11	-2.30	4.59	1.37	0.01	-0.40	-0.19	4.99
609	1.98	4.82	6.58	-0.10	3.81	-3.32	-1.49	-3.44	1.22	-2.30	-4.66	1.37	-0.10	-1.01	1.83	5.18
22	3.80	3.56	7.45	1.65	-2.82	1.25	-1.05	11.32	-3.12	0.59	-12.98	-1.22	-0.70	-1.40	-0.74	5.61
399	-1.49	-2.72	7.03	0.54	2.49	-4.57	-1.27	-3.48	2.20	0.59	6.44	0.07	-0.09	-1.25	1.21	5.70
346	1.49	1.05	5.13	4.62	-2.82	-1.66	7.32	6.77	-5.22	3.48	-10.20	0.07	0.24	-3.84	-0.49	5.95

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
406	3.28	2.30	11.13	1.70	-0.17	-1.87	2.59	9.09	-3.67	3.48	-17.60	-1.22	-0.37	-3.15	0.45	5.99
185	-1.24	-3.98	2.81	1.60	-0.17	-2.08	3.47	-7.91	3.55	0.59	9.21	0.07	0.74	0.15	-0.84	5.99
554	-0.49	2.30	-1.92	-0.09	3.81	-1.04	-5.45	2.01	3.61	-2.30	-0.03	1.37	0.16	4.96	-0.85	6.04
491	0.04	-2.72	0.99	2.81	1.16	-1.87	0.49	-4.74	1.62	-2.30	7.36	2.66	0.28	0.40	0.00	6.19
89	1.86	-0.21	10.08	1.60	-0.17	-3.74	-1.38	-4.58	1.80	-2.30	3.66	0.07	0.16	-1.86	1.48	6.49
35	-0.92	-2.72	3.63	0.54	2.49	-2.49	-4.68	0.11	2.90	-2.30	11.06	0.07	-0.40	-0.55	-0.19	6.53
544	1.09	1.05	-9.87	1.60	-1.49	4.99	7.10	-5.83	0.64	-2.30	9.21	0.07	0.19	0.78	-0.61	6.62
482	3.25	4.82	3.86	1.65	-1.49	0.83	0.27	8.34	-3.61	0.59	-10.20	0.07	-0.43	-0.60	-0.55	6.81
672	4.01	3.56	4.34	4.62	-1.49	-1.24	4.57	8.60	-5.94	0.59	-12.98	1.37	-0.09	-3.13	0.13	6.92
216	-3.58	-5.23	-5.23	2.81	-2.82	3.33	5.67	-6.97	0.35	0.59	18.45	0.07	0.20	-0.40	-0.28	6.98
176	0.78	1.05	4.94	1.70	-0.17	-0.62	3.25	7.87	-2.74	3.48	-7.43	-1.22	-0.08	-2.36	-1.39	7.05
270	1.41	-2.72	5.33	3.41	-2.82	-1.24	10.29	5.75	-5.04	3.48	-5.58	-1.22	0.32	-3.21	-1.10	7.07
224	-0.86	-0.21	7.67	-0.15	-0.17	-1.24	-1.82	-5.61	3.61	0.59	3.66	0.07	-0.03	1.22	0.49	7.23
552	2.62	3.56	2.28	-0.10	3.81	-0.83	-0.39	-1.79	2.84	-2.30	-4.66	1.37	-0.15	0.91	0.16	7.32
350	-0.02	2.30	4.18	2.35	-0.17	-2.70	3.47	8.64	-4.43	3.48	-3.73	-1.22	-0.17	-4.00	-0.49	7.49
80	3.88	4.82	12.21	1.70	-0.17	-2.28	-1.60	11.21	-4.49	0.59	-12.98	-1.22	-0.66	-4.36	0.93	7.58
721	2.54	1.05	7.18	2.81	1.16	-3.12	-0.17	-3.52	0.70	-2.30	-2.81	2.66	-0.01	-0.38	1.84	7.64
318	-1.42	-6.49	7.32	2.81	-0.17	-3.12	5.23	-5.05	0.25	0.59	6.44	1.37	0.27	-1.14	0.78	7.68
165	-2.48	-2.72	1.78	2.81	-0.17	-2.28	3.25	-6.56	2.34	0.59	10.13	1.37	0.61	-0.29	-0.63	7.76
396	1.93	-1.46	9.18	1.60	-0.17	-3.32	3.14	-6.50	2.72	0.59	-0.96	0.07	0.42	-0.65	1.21	7.80
495	-1.47	-1.46	0.04	0.54	3.81	-2.91	-3.25	-2.88	2.41	-2.30	13.83	1.37	-0.13	0.25	-0.01	7.84
712	5.75	8.58	10.06	1.65	-1.49	-0.41	-0.39	9.57	-4.53	0.59	-20.37	0.07	-0.72	-1.40	1.29	8.25
309	1.79	1.05	10.19	1.65	-2.82	-0.41	5.01	8.04	-4.98	3.48	-11.13	-1.22	-0.44	-2.14	0.23	8.30
156	0.73	4.82	4.66	1.65	-2.82	0.42	3.03	6.52	-2.89	3.48	-7.43	-1.22	-0.10	-1.31	-1.17	8.36
220	-5.09	-3.98	-6.18	0.54	-0.17	2.29	1.82	-5.10	1.13	0.59	24.93	-1.22	-0.21	-0.55	-0.28	8.53
676	2.50	4.82	3.39	2.35	1.16	-2.28	0.82	10.46	-5.15	0.59	-6.51	0.07	-0.50	-3.30	0.13	8.55
32	2.50	-1.46	5.78	1.60	-0.17	-1.24	-0.28	-2.92	3.41	-2.30	3.66	0.07	0.11	0.04	-0.19	8.62
250	0.17	-1.46	4.30	4.62	-2.82	-1.45	10.07	7.09	-6.25	3.48	-4.66	0.07	0.19	-3.65	-0.88	8.83
387	3.95	3.56	11.30	1.70	-0.17	-1.87	2.92	9.28	-3.58	3.48	-17.60	-1.22	-0.40	-3.15	0.67	8.88
322	-2.93	-5.23	6.37	0.54	2.49	-4.15	1.38	-3.18	1.03	0.59	12.91	0.07	-0.14	-1.29	0.78	9.23
725	1.04	2.30	6.24	0.54	3.81	-4.15	-3.91	-1.65	1.48	-2.30	3.66	1.37	-0.42	-0.55	1.84	9.28
169	-3.99	-1.46	0.84	0.54	2.49	-3.32	-0.61	-4.70	3.13	0.59	16.61	0.07	0.20	-0.46	-0.63	9.29
347	3.40	3.56	6.33	3.41	-2.82	-1.45	7.87	5.61	-3.92	3.48	-11.13	-1.22	0.34	-3.40	-0.49	9.58
23	4.51	3.56	7.90	1.70	-0.17	0.21	-0.50	12.86	-2.88	0.59	-12.98	-1.22	-0.71	-2.46	-0.74	9.70
576	2.69	1.05	3.51	4.62	-1.49	-1.04	7.32	8.92	-6.97	0.59	-7.43	1.37	-0.14	-2.96	-0.26	9.79
338	1.21	-3.98	4.02	2.81	-0.17	-0.83	3.91	-3.52	2.99	0.59	0.89	1.37	0.24	0.59	-0.29	9.84
197	-2.91	-3.98	-5.06	2.81	-2.82	3.33	6.00	-6.79	0.44	0.59	18.45	0.07	0.17	-0.40	-0.06	9.87
492	1.95	-0.21	2.19	1.60	1.16	-1.66	1.15	-5.90	2.92	-2.30	6.44	1.37	0.38	0.84	0.00	9.94
205	-0.19	1.05	7.84	-0.15	-0.17	-1.24	-1.49	-5.44	3.70	0.59	3.66	0.07	-0.06	1.22	0.71	10.11
227	-3.25	-1.46	3.92	-0.09	2.49	-2.49	-6.22	-0.28	4.62	0.59	8.29	0.07	0.28	4.22	-0.52	10.16
254	-1.34	-0.21	3.36	2.35	-0.17	-2.49	6.22	8.96	-5.47	3.48	1.81	-1.22	-0.22	-3.82	-0.88	10.35
329	4.42	3.56	6.89	1.65	-2.82	1.87	3.69	9.55	-2.24	3.48	-16.67	-1.22	-0.48	-0.41	-0.83	10.45
299	-0.75	-5.23	7.49	2.81	-0.17	-3.12	5.56	-4.86	0.34	0.59	6.44	1.37	0.24	-1.14	0.99	10.57
217	-1.67	-2.72	-4.03	1.60	-2.82	3.54	6.22	-8.13	1.65	0.59	17.53	-1.22	0.30	0.04	-0.28	10.62

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
673	5.92	6.07	5.54	3.41	-1.49	-1.04	5.23	7.44	-4.63	0.59	-13.90	0.07	0.01	-2.71	0.13	10.65
702	3.22	2.30	7.36	2.81	1.16	-3.12	0.27	-3.33	0.79	-2.30	-2.81	2.66	-0.04	-0.38	2.05	10.65
523	-0.38	-1.46	-5.85	2.81	-1.49	3.74	3.25	-4.96	-0.28	-2.30	15.68	1.37	-0.15	0.29	0.56	10.83
483	3.97	4.82	4.32	1.70	1.16	-0.21	0.93	9.87	-3.37	0.59	-10.20	0.07	-0.44	-1.65	-0.55	11.02
531	2.34	3.56	7.05	-0.15	1.16	-0.83	-4.24	-3.60	2.98	-2.30	0.89	1.37	-0.39	1.91	1.33	11.07
693	6.43	9.84	10.23	1.65	-1.49	-0.41	-0.06	9.75	-4.44	0.59	-20.37	0.07	-0.75	-1.40	1.51	11.14
290	2.46	2.30	10.37	1.65	-2.82	-0.41	5.34	8.22	-4.89	3.48	-11.13	-1.22	-0.47	-2.14	0.45	11.19
319	0.49	-3.98	8.52	1.60	-0.17	-2.91	5.78	-6.20	1.55	0.59	5.51	0.07	0.37	-0.70	0.78	11.32
580	1.18	2.30	2.56	2.35	1.16	-2.08	3.47	10.78	-6.19	0.59	-0.96	0.07	-0.55	-3.12	-0.26	11.33
225	-0.14	-0.21	8.12	-0.10	2.49	-2.28	-1.27	-4.08	3.85	0.59	3.66	0.07	-0.03	0.17	0.49	11.33
342	-0.30	-2.72	3.07	0.54	2.49	-1.87	0.05	-1.66	3.78	0.59	7.36	0.07	-0.18	0.44	-0.29	11.38
722	4.46	3.56	8.38	1.60	1.16	-2.91	0.49	-4.68	2.00	-2.30	-3.73	1.37	0.09	0.06	1.84	11.39
166	-0.57	-0.21	2.98	1.60	-0.17	-2.08	3.80	-7.72	3.64	0.59	9.21	0.07	0.71	0.15	-0.63	11.39
201	-4.42	-2.72	-6.00	0.54	-0.17	2.29	2.15	-4.92	1.22	0.59	24.93	-1.22	-0.24	-0.55	-0.06	11.41
472	0.72	1.05	1.16	2.81	1.16	-1.87	0.82	-4.55	1.71	-2.30	7.36	2.66	0.25	0.40	0.21	11.60
140	-2.26	-5.23	-9.36	2.81	-2.82	5.82	6.99	-5.13	2.06	0.59	18.45	0.07	0.13	1.50	-1.74	11.89
303	-2.26	-3.98	6.55	0.54	2.49	-4.15	1.71	-3.00	1.12	0.59	12.91	0.07	-0.17	-1.29	0.99	12.11
706	1.71	3.56	6.41	0.54	3.81	-4.15	-3.58	-1.47	1.57	-2.30	3.66	1.37	-0.45	-0.55	2.05	12.17
463	3.93	8.58	4.04	1.65	-1.49	0.83	0.60	8.52	-3.52	0.59	-10.20	0.07	-0.46	-0.60	-0.33	12.21
148	0.45	-0.21	3.55	-0.15	-0.17	1.25	-0.39	-3.78	5.32	0.59	3.66	0.07	-0.11	3.12	-0.97	12.25
653	4.69	7.33	4.51	4.62	-1.49	-1.24	4.90	8.79	-5.84	0.59	-12.98	1.37	-0.12	-3.13	0.35	12.33
310	2.51	1.05	10.65	1.70	-0.17	-1.45	5.56	9.58	-4.74	3.48	-11.13	-1.22	-0.45	-3.19	0.23	12.40
157	1.45	4.82	5.11	1.70	-0.17	-0.62	3.58	8.05	-2.65	3.48	-7.43	-1.22	-0.11	-2.36	-1.17	12.45
251	2.08	1.05	5.51	3.41	-2.82	-1.24	10.63	5.93	-4.95	3.48	-5.58	-1.22	0.29	-3.21	-0.88	12.47
713	6.47	8.58	10.51	1.70	1.16	-1.45	0.27	11.10	-4.29	0.59	-20.37	0.07	-0.73	-2.44	1.29	12.47
527	-1.89	-0.21	-6.79	0.54	1.16	2.71	-0.50	-3.09	0.51	-2.30	22.15	0.07	-0.57	0.14	0.56	12.49
242	-0.11	-6.49	3.19	2.81	-0.17	-0.62	6.55	-3.20	1.96	0.59	6.44	1.37	0.19	0.77	-0.68	12.59
6	8.64	-2.72	-9.25	2.81	-4.14	6.45	-0.17	8.80	-2.55	-2.30	9.21	0.07	-2.04	-1.61	1.43	12.63
14	11.36	2.30	3.65	-0.15	-1.49	1.87	-7.65	10.15	0.72	-2.30	-5.58	0.07	-2.27	0.01	2.20	12.88
208	-2.58	-0.21	4.09	-0.09	2.49	-2.49	-5.89	-0.10	4.71	0.59	8.29	0.07	0.25	4.22	-0.31	13.05
233	3.10	1.05	6.07	1.65	-2.82	2.08	6.33	9.87	-3.28	3.48	-11.13	-1.22	-0.52	-0.24	-1.23	13.20
476	-0.79	2.30	0.22	0.54	3.81	-2.91	-2.92	-2.69	2.50	-2.30	13.83	1.37	-0.16	0.25	0.21	13.25
577	4.60	3.56	4.71	3.41	-1.49	-0.83	7.87	7.76	-5.67	0.59	-8.35	0.07	-0.04	-2.52	-0.26	13.42
339	3.12	-1.46	5.22	1.60	-0.17	-0.62	4.46	-4.69	4.30	0.59	-0.03	0.07	0.34	1.03	-0.29	13.47
198	-0.99	-1.46	-3.85	1.60	-2.82	3.54	6.55	-7.95	1.74	0.59	17.53	-1.22	0.27	0.04	-0.06	13.51
144	-3.78	-3.98	-10.30	0.54	-0.17	4.78	3.25	-3.27	2.84	0.59	24.93	-1.22	-0.29	1.35	-1.74	13.54
504	0.29	-0.21	-5.67	2.81	-1.49	3.74	3.58	-4.78	-0.19	-2.30	15.68	1.37	-0.19	0.29	0.78	13.72
657	3.17	8.58	3.57	2.35	1.16	-2.28	1.15	10.64	-5.06	0.59	-6.51	0.07	-0.53	-3.30	0.35	13.95
512	3.01	4.82	7.23	-0.15	1.16	-0.83	-3.91	-3.43	3.07	-2.30	0.89	1.37	-0.42	1.91	1.54	13.96
534	-0.06	2.30	3.30	-0.09	3.81	-2.08	-8.65	1.72	3.99	-2.30	5.51	1.37	-0.08	4.93	0.32	14.01
625	1.77	-0.21	6.70	2.81	1.16	-2.70	2.81	-3.03	-0.37	-2.30	3.66	2.66	-0.09	-0.43	1.62	14.06
10	7.13	-1.46	-10.20	0.54	-1.49	5.41	-4.02	10.66	-1.76	-2.30	15.68	-1.22	-2.46	-1.76	1.43	14.17
300	1.16	-2.72	8.69	1.60	-0.17	-2.91	6.11	-6.02	1.64	0.59	5.51	0.07	0.34	-0.70	0.99	14.21
206	0.53	1.05	8.30	-0.10	2.49	-2.28	-0.94	-3.89	3.94	0.59	3.66	0.07	-0.06	0.17	0.71	14.22

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
246	-1.62	-5.23	2.24	0.54	2.49	-1.66	2.81	-1.34	2.74	0.59	12.91	0.07	-0.22	0.61	-0.68	14.24
703	5.13	4.82	8.56	1.60	1.16	-2.91	0.82	-4.50	2.09	-2.30	-3.73	1.37	0.06	0.06	2.05	14.28
330	5.14	3.56	7.34	1.70	-0.17	0.83	4.24	11.09	-2.00	3.48	-16.67	-1.22	-0.48	-1.47	-0.83	14.55
524	1.53	1.05	-4.65	1.60	-1.49	3.95	3.91	-6.13	1.02	-2.30	14.76	0.07	-0.06	0.73	0.56	14.57
616	4.99	7.33	9.57	1.65	-1.49	0.00	2.59	10.05	-5.61	0.59	-13.90	0.07	-0.80	-1.45	1.07	14.66
151	-1.94	-1.46	-0.21	-0.09	2.49	0.00	-4.90	1.54	6.33	0.59	8.29	0.07	0.20	6.14	-1.98	15.07
557	3.37	4.82	3.69	4.62	-1.49	-1.04	7.65	9.11	-6.88	0.59	-7.43	1.37	-0.17	-2.96	-0.05	15.19
532	3.05	3.56	7.50	-0.10	3.81	-1.87	-3.58	-2.07	3.22	-2.30	0.89	1.37	-0.39	0.86	1.33	15.28
291	3.18	2.30	10.82	1.70	-0.17	-1.45	5.89	9.76	-4.65	3.48	-11.13	-1.22	-0.48	-3.19	0.45	15.29
473	2.63	3.56	2.36	1.60	1.16	-1.66	1.49	-5.71	3.01	-2.30	6.44	1.37	0.35	0.84	0.21	15.35
694	7.15	9.84	10.68	1.70	1.16	-1.45	0.60	11.29	-4.20	0.59	-20.37	0.07	-0.76	-2.44	1.51	15.37
508	-1.22	1.05	-6.62	0.54	1.16	2.71	-0.17	-2.91	0.60	-2.30	22.15	0.07	-0.60	0.14	0.78	15.37
141	-0.35	-2.72	-8.15	1.60	-2.82	6.03	7.65	-6.29	3.36	0.59	17.53	-1.22	0.22	1.94	-1.74	15.64
629	0.26	1.05	5.75	0.54	3.81	-3.74	-0.94	-1.16	0.41	-2.30	10.13	1.37	-0.50	-0.60	1.62	15.70
17	8.96	1.05	-0.10	-0.09	1.16	0.63	-12.17	15.47	1.73	-2.30	-0.96	0.07	-1.97	3.03	1.19	15.70
447	0.93	-1.46	-9.97	2.81	-1.49	6.24	4.68	-3.12	1.43	-2.30	15.68	1.37	-0.23	2.21	-0.90	15.87
134	10.64	-5.23	-1.90	-10.50	-0.17	6.86	-1.38	15.23	2.18	3.48	-10.20	-1.22	-1.53	9.66	0.07	15.99
654	6.60	9.84	5.71	3.41	-1.49	-1.04	5.56	7.62	-4.54	0.59	-13.90	0.07	-0.02	-2.71	0.35	16.05
455	3.65	3.56	2.92	-0.15	1.16	1.67	-2.81	-1.78	4.69	-2.30	0.89	1.37	-0.47	3.81	-0.13	16.09
645	4.41	2.30	3.40	2.81	1.16	-0.41	1.49	-1.51	2.36	-2.30	-1.88	2.66	-0.12	1.28	0.55	16.20
7	10.55	-0.21	-8.05	1.60	-4.14	6.66	0.38	7.63	-1.24	-2.30	8.29	-1.22	-1.94	-1.17	1.43	16.27
243	1.81	-3.98	4.39	1.60	-0.17	-0.41	7.21	-4.37	3.26	0.59	5.51	0.07	0.29	1.21	-0.68	16.34
149	1.17	-0.21	4.00	-0.10	2.49	0.21	0.16	-2.24	5.56	0.59	3.66	0.07	-0.11	2.07	-0.97	16.34
464	4.65	8.58	4.49	1.70	1.16	-0.21	1.27	10.06	-3.28	0.59	-10.20	0.07	-0.47	-1.65	-0.33	16.42
96	3.67	-0.21	12.33	4.62	-2.82	-1.66	2.70	11.62	-6.09	0.59	-4.66	0.07	-0.65	-3.79	0.72	16.44
561	1.86	6.07	2.74	2.35	1.16	-2.08	3.80	10.96	-6.10	0.59	-0.96	0.07	-0.58	-3.12	-0.05	16.72
636	7.62	9.84	6.27	1.65	-1.49	2.29	1.27	11.57	-2.87	0.59	-19.45	0.07	-0.84	0.28	0.01	16.81
515	0.62	3.56	3.48	-0.09	3.81	-2.08	-8.32	1.91	4.09	-2.30	5.51	1.37	-0.11	4.93	0.53	16.91
606	2.45	1.05	6.87	2.81	1.16	-2.70	3.14	-2.85	-0.28	-2.30	3.66	2.66	-0.12	-0.43	1.83	16.95
15	12.07	2.30	4.10	-0.10	1.16	0.83	-7.10	11.69	0.96	-2.30	-5.58	0.07	-2.28	-1.04	2.20	16.98
123	8.50	-1.46	-10.29	-0.15	-4.14	9.15	0.16	6.78	0.65	0.59	8.29	-1.22	-2.16	1.91	0.66	17.27
451	-0.58	-0.21	-10.92	0.54	1.16	5.20	0.82	-1.26	2.21	-2.30	22.15	0.07	-0.65	2.04	-0.90	17.39
234	3.82	1.05	6.52	1.70	-0.17	1.04	6.99	11.41	-3.04	3.48	-11.13	-1.22	-0.53	-1.29	-1.23	17.42
505	2.20	2.30	-4.47	1.60	-1.49	3.95	4.24	-5.94	1.11	-2.30	14.76	0.07	-0.09	0.73	0.78	17.46
597	5.66	8.58	9.75	1.65	-1.49	0.00	2.92	10.24	-5.52	0.59	-13.90	0.07	-0.83	-1.45	1.29	17.55
126	6.11	-5.23	-14.04	-0.09	-1.49	7.90	-4.24	12.11	1.67	0.59	12.91	-1.22	-1.85	4.91	-0.35	17.69
403	3.75	-1.46	11.42	4.62	-2.82	-1.24	7.21	9.69	-5.17	3.48	-9.28	0.07	-0.39	-2.58	0.45	17.75
626	3.69	2.30	7.90	1.60	1.16	-2.49	3.47	-4.20	0.93	-2.30	2.74	1.37	0.01	0.00	1.62	17.79
649	2.90	3.56	2.45	0.54	3.81	-1.45	-2.26	0.35	3.15	-2.30	4.59	1.37	-0.53	1.13	0.55	17.85
100	2.16	1.05	11.38	2.35	-0.17	-2.70	-1.16	13.48	-5.31	0.59	1.81	-1.22	-1.06	-3.95	0.72	17.98
513	3.73	4.82	7.68	-0.10	3.81	-1.87	-3.25	-1.89	3.32	-2.30	0.89	1.37	-0.42	0.86	1.54	18.18
610	0.94	2.30	5.92	0.54	3.81	-3.74	-0.61	-0.99	0.50	-2.30	10.13	1.37	-0.53	-0.60	1.83	18.58
617	5.71	7.33	10.02	1.70	1.16	-1.04	3.14	11.59	-5.37	0.59	-13.90	0.07	-0.81	-2.50	1.07	18.76
173	1.25	-2.72	5.23	4.62	-2.82	0.00	7.87	8.46	-4.25	3.48	0.89	0.07	-0.10	-1.80	-1.39	18.81

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
558	5.28	7.33	4.89	3.41	-1.49	-0.83	8.31	7.94	-5.58	0.59	-8.35	0.07	-0.07	-2.52	-0.05	18.94
458	1.26	2.30	-0.83	-0.09	3.81	0.42	-7.21	3.56	5.70	-2.30	5.51	1.37	-0.16	6.83	-1.14	19.03
549	3.09	-0.21	2.57	2.81	1.16	-0.21	4.24	-1.19	1.33	-2.30	3.66	2.66	-0.17	1.47	0.16	19.08
133	8.96	-3.98	3.44	-10.50	-0.17	3.12	-7.43	13.69	3.20	3.48	-0.96	0.07	-2.08	7.35	0.94	19.13
407	2.24	-0.21	10.48	2.35	-0.17	-2.28	3.36	11.55	-4.39	3.48	-2.81	-1.22	-0.80	-2.74	0.45	19.29
77	4.35	1.05	12.50	4.62	-2.82	-1.66	3.03	11.80	-6.00	0.59	-4.66	0.07	-0.68	-3.79	0.93	19.34
448	2.85	1.05	-8.77	1.60	-1.49	6.45	5.23	-4.28	2.73	-2.30	14.76	0.07	-0.13	2.63	-0.90	19.49
540	6.30	7.33	5.45	1.65	-1.49	2.50	4.02	11.89	-3.90	0.59	-13.90	0.07	-0.88	0.45	-0.39	19.68
441	13.83	-1.46	-2.52	-10.50	1.16	7.28	-3.80	17.23	1.56	0.59	-12.98	0.07	-1.89	10.35	0.91	19.84
646	6.32	4.82	4.60	1.60	1.16	-0.21	2.15	-2.68	3.67	-2.30	-2.81	1.37	-0.02	1.72	0.55	19.94
456	4.37	3.56	3.38	-0.10	3.81	0.63	-2.26	-0.24	4.93	-2.30	0.89	1.37	-0.47	2.76	-0.13	20.19
97	5.59	2.30	13.53	3.41	-2.82	-1.45	3.36	10.45	-4.79	0.59	-5.58	-1.22	-0.55	-3.35	0.72	20.19
177	-0.26	-1.46	4.28	2.35	-0.17	-1.04	4.02	10.32	-3.46	3.48	7.36	-1.22	-0.51	-1.95	-1.39	20.35
553	1.58	1.05	1.62	0.54	3.81	-1.24	0.38	0.67	2.11	-2.30	10.13	1.37	-0.58	1.30	0.16	20.60
384	4.42	-0.21	11.60	4.62	-2.82	-1.24	7.54	9.87	-5.08	3.48	-9.28	0.07	-0.42	-2.58	0.67	20.64
607	4.36	3.56	8.07	1.60	1.16	-2.49	3.80	-4.01	1.02	-2.30	2.74	1.37	-0.02	0.00	1.83	20.68
637	8.34	9.84	6.72	1.70	1.16	1.25	1.82	13.09	-2.63	0.59	-19.45	0.07	-0.84	-0.77	0.01	20.90
81	2.84	2.30	11.55	2.35	-0.17	-2.70	-0.72	13.66	-5.22	0.59	1.81	-1.22	-1.09	-3.95	0.93	20.99
430	11.70	2.30	-10.91	-0.15	-2.82	9.57	-2.15	8.79	0.03	-2.30	5.51	0.07	-2.52	2.60	1.50	21.23
404	5.66	1.05	12.62	3.41	-2.82	-1.04	7.76	8.52	-3.87	3.48	-10.20	-1.22	-0.29	-2.14	0.45	21.39
20	4.99	-0.21	8.20	4.62	-2.82	0.83	4.13	13.45	-4.39	0.59	-4.66	0.07	-0.73	-1.89	-0.74	21.46
124	9.22	-1.46	-9.84	-0.10	-1.49	8.11	0.82	8.32	0.90	0.59	8.29	-1.22	-2.17	0.86	0.66	21.48
598	6.38	8.58	10.20	1.70	1.16	-1.04	3.47	11.77	-5.28	0.59	-13.90	0.07	-0.84	-2.50	1.29	21.65
433	9.31	-1.46	-14.66	-0.09	-0.17	8.32	-6.55	14.12	1.04	-2.30	10.13	0.07	-2.21	5.62	0.49	21.66
388	2.91	1.05	10.65	2.35	-0.17	-2.28	3.69	11.74	-4.30	3.48	-2.81	-1.22	-0.83	-2.74	0.67	22.19
174	3.16	-0.21	6.43	3.41	-2.82	0.21	8.42	7.30	-2.95	3.48	-0.03	-1.22	0.00	-1.36	-1.39	22.45
550	5.00	2.30	3.77	1.60	1.16	0.00	4.79	-2.36	2.63	-2.30	2.74	1.37	-0.07	1.91	0.16	22.71
480	4.44	1.05	4.61	4.62	-1.49	0.42	5.56	10.47	-4.88	0.59	-1.88	1.37	-0.46	-1.09	-0.55	22.78
24	3.48	1.05	7.25	2.35	-0.17	-0.21	0.27	15.31	-3.60	0.59	1.81	-1.22	-1.14	-2.05	-0.74	23.00
222	0.33	-3.98	8.42	2.81	-0.17	-1.66	3.36	-3.50	2.34	0.59	11.98	1.37	-0.05	0.73	0.49	23.08
78	6.26	3.56	13.70	3.41	-2.82	-1.45	3.69	10.63	-4.70	0.59	-5.58	-1.22	-0.58	-3.35	0.93	23.08
440	12.15	-0.21	2.81	-10.50	1.16	3.54	-9.75	15.69	2.57	0.59	-3.73	1.37	-2.44	8.04	1.78	23.08
213	3.54	3.56	11.29	1.65	-2.82	1.04	3.14	9.59	-2.89	3.48	-5.58	-1.22	-0.76	-0.27	-0.06	23.69
541	7.02	7.33	5.90	1.70	1.16	1.46	4.57	13.41	-3.66	0.59	-13.90	0.07	-0.89	-0.60	-0.39	23.77
307	2.98	-2.72	10.94	4.62	-2.82	-0.83	10.18	10.17	-6.25	3.48	-2.81	0.07	-0.47	-2.63	0.23	24.17
154	1.92	1.05	5.40	4.62	-2.82	0.00	8.20	8.64	-4.16	3.48	0.89	0.07	-0.13	-1.80	-1.17	24.21
710	6.94	4.82	10.80	4.62	-1.49	-0.83	4.90	11.69	-5.80	0.59	-12.05	1.37	-0.75	-1.87	1.29	24.23
484	2.93	2.30	3.66	2.35	1.16	-0.62	1.71	12.33	-4.09	0.59	4.59	0.07	-0.87	-1.26	-0.55	24.31
385	6.34	2.30	12.80	3.41	-2.82	-1.04	8.20	8.71	-3.78	3.48	-10.20	-1.22	-0.32	-2.14	0.67	24.39
226	-1.18	-2.72	7.47	0.54	2.49	-2.70	-0.50	-1.63	3.13	0.59	18.45	0.07	-0.46	0.58	0.49	24.62
21	6.90	2.30	9.40	3.41	-2.82	1.04	4.68	12.28	-3.08	0.59	-5.58	-1.22	-0.63	-1.45	-0.74	25.10
431	12.42	2.30	-10.46	-0.10	-0.17	8.53	-1.60	10.32	0.27	-2.30	5.51	0.07	-2.53	1.55	1.50	25.33
311	1.47	-1.46	9.99	2.35	-0.17	-1.87	6.33	12.03	-5.47	3.48	3.66	-1.22	-0.88	-2.79	0.23	25.70
714	5.44	6.07	9.86	2.35	1.16	-1.87	1.04	13.56	-5.02	0.59	-5.58	0.07	-1.16	-2.05	1.29	25.75

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
158	0.41	2.30	4.46	2.35	-0.17	-1.04	4.35	10.51	-3.37	3.48	7.36	-1.22	-0.54	-1.95	-1.17	25.75
203	1.00	-2.72	8.59	2.81	-0.17	-1.66	3.69	-3.31	2.43	0.59	11.98	1.37	-0.08	0.73	0.71	25.97
327	5.61	-0.21	7.64	4.62	-2.82	1.46	8.86	11.68	-3.51	3.48	-8.35	0.07	-0.50	-0.90	-0.83	26.30
481	6.36	3.56	5.81	3.41	-1.49	0.63	6.11	9.31	-3.58	0.59	-2.81	0.07	-0.36	-0.65	-0.55	26.42
194	4.21	4.82	11.47	1.65	-2.82	1.04	3.47	9.77	-2.80	3.48	-5.58	-1.22	-0.79	-0.27	0.16	26.59
223	2.24	-1.46	9.62	1.60	-0.17	-1.45	4.02	-4.65	3.64	0.59	11.06	0.07	0.05	1.17	0.49	26.83
529	3.53	-0.21	7.80	2.81	1.16	-1.24	1.04	-1.48	1.72	-2.30	9.21	2.66	-0.41	1.42	1.33	27.04
288	3.65	-1.46	11.11	4.62	-2.82	-0.83	10.51	10.35	-6.16	3.48	-2.81	0.07	-0.50	-2.63	0.45	27.05
691	7.62	6.07	10.98	4.62	-1.49	-0.83	5.23	11.88	-5.71	0.59	-12.05	1.37	-0.78	-1.87	1.51	27.13
207	-0.51	-1.46	7.65	0.54	2.49	-2.70	-0.06	-1.45	3.22	0.59	18.45	0.07	-0.49	0.58	0.71	27.62
520	6.74	7.33	10.67	1.65	-1.49	1.46	0.82	11.60	-3.52	0.59	-8.35	0.07	-1.12	0.42	0.78	27.65
214	4.26	3.56	11.74	1.70	-0.17	0.00	3.69	11.12	-2.65	3.48	-5.58	-1.22	-0.77	-1.32	-0.06	27.80
308	4.89	-0.21	12.14	3.41	-2.82	-0.62	10.74	9.01	-4.95	3.48	-3.73	-1.22	-0.37	-2.19	0.23	27.80
331	4.10	1.05	6.69	2.35	-0.17	0.42	5.01	13.54	-2.72	3.48	-1.88	-1.22	-0.91	-1.07	-0.83	27.83
155	3.83	3.56	6.60	3.41	-2.82	0.21	8.75	7.48	-2.85	3.48	-0.03	-1.22	-0.03	-1.36	-1.17	27.85
711	8.86	7.33	12.00	3.41	-1.49	-0.62	5.45	10.53	-4.50	0.59	-12.98	0.07	-0.65	-1.45	1.29	27.85
146	1.64	-3.98	4.29	2.81	-0.17	0.83	4.79	-1.65	4.05	0.59	11.98	1.37	-0.13	2.63	-0.97	28.10
461	5.12	4.82	4.78	4.62	-1.49	0.42	5.89	10.66	-4.79	0.59	-1.88	1.37	-0.49	-1.09	-0.33	28.19
533	2.02	1.05	6.85	0.54	3.81	-2.28	-2.81	0.38	2.50	-2.30	15.68	1.37	-0.82	1.27	1.33	28.58
292	2.14	-0.21	10.16	2.35	-0.17	-1.87	6.66	12.21	-5.37	3.48	3.66	-1.22	-0.91	-2.79	0.45	28.59
695	6.11	7.33	10.03	2.35	1.16	-1.87	1.38	13.74	-4.93	0.59	-5.58	0.07	-1.19	-2.05	1.51	28.64
137	4.86	3.56	7.16	1.65	-2.82	3.54	4.57	11.42	-1.18	3.48	-5.58	-1.22	-0.84	1.63	-1.51	28.71
12	12.54	-1.46	4.39	2.81	-1.49	1.46	-2.48	12.28	-0.55	-2.30	2.74	1.37	-2.30	-0.48	2.20	28.73
231	4.29	-2.72	6.81	4.62	-2.82	1.67	11.62	12.00	-4.54	3.48	-2.81	0.07	-0.55	-0.73	-1.23	29.17
3	15.76	6.07	7.27	1.65	-4.14	4.16	-2.70	25.35	-5.78	0.59	-14.83	-1.22	-3.01	-1.48	1.65	29.34
150	0.13	-2.72	3.34	0.54	2.49	-0.21	0.93	0.21	4.84	0.59	18.45	0.07	-0.54	2.48	-0.97	29.64
465	3.61	6.07	3.84	2.35	1.16	-0.62	2.04	12.51	-4.00	0.59	4.59	0.07	-0.90	-1.26	-0.34	29.71
204	2.92	-0.21	9.79	1.60	-0.17	-1.45	4.35	-4.47	3.74	0.59	11.06	0.07	0.02	1.17	0.71	29.72
510	4.20	1.05	7.97	2.81	1.16	-1.24	1.38	-1.30	1.81	-2.30	9.21	2.66	-0.44	1.42	1.54	29.93
328	7.52	2.30	8.84	3.41	-2.82	1.67	9.41	10.52	-2.20	3.48	-9.28	-1.22	-0.40	-0.46	-0.83	29.95
16	11.03	-0.21	3.45	0.54	1.16	0.42	-6.33	14.14	0.23	-2.30	9.21	0.07	-2.71	-0.63	2.20	30.27
501	7.41	8.58	10.85	1.65	-1.49	1.46	1.15	11.79	-3.43	0.59	-8.35	0.07	-1.15	0.42	1.00	30.55
614	6.18	3.56	10.32	4.62	-1.49	-0.41	7.87	12.18	-6.87	0.59	-5.58	1.37	-0.83	-1.94	1.07	30.63
530	5.44	2.30	9.00	1.60	1.16	-1.04	1.60	-2.65	3.02	-2.30	8.29	1.37	-0.31	1.86	1.33	30.67
195	4.93	4.82	11.92	1.70	-0.17	0.00	4.02	11.31	-2.56	3.48	-5.58	-1.22	-0.80	-1.32	0.16	30.69
289	5.57	1.05	12.31	3.41	-2.82	-0.62	11.07	9.19	-4.86	3.48	-3.73	-1.22	-0.40	-2.19	0.45	30.69
235	2.78	-1.46	5.87	2.35	-0.17	0.63	7.76	13.86	-3.76	3.48	3.66	-1.22	-0.96	-0.88	-1.23	30.72
692	9.53	8.58	12.18	3.41	-1.49	-0.62	5.78	10.72	-4.41	0.59	-12.98	0.07	-0.68	-1.45	1.51	30.75
514	2.69	2.30	7.02	0.54	3.81	-2.28	-2.48	0.56	2.59	-2.30	15.68	1.37	-0.85	1.27	1.54	31.47
147	3.56	-1.46	5.49	1.60	-0.17	1.04	5.34	-2.81	5.35	0.59	11.06	0.07	-0.03	3.07	-0.97	31.75
521	7.46	7.33	11.12	1.70	1.16	0.42	1.38	13.14	-3.27	0.59	-8.35	0.07	-1.13	-0.63	0.78	31.76
462	7.03	7.33	5.99	3.41	-1.49	0.63	6.44	9.49	-3.48	0.59	-2.81	0.07	-0.39	-0.65	-0.33	31.82
453	4.84	-0.21	3.67	2.81	1.16	1.25	2.48	0.36	3.42	-2.30	9.21	2.66	-0.49	3.33	-0.13	32.06
618	4.67	4.82	9.37	2.35	1.16	-1.45	4.02	14.04	-6.09	0.59	0.89	0.07	-1.24	-2.09	1.07	32.17

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
13	14.46	1.05	5.60	1.60	-1.49	1.67	-1.93	11.11	0.75	-2.30	1.81	0.07	-2.20	-0.04	2.20	32.37
444	8.05	7.33	6.55	1.65	-1.49	3.95	2.15	13.43	-1.81	0.59	-8.35	0.07	-1.20	2.32	-0.67	32.57
634	8.81	6.07	7.02	4.62	-1.49	1.87	6.55	13.69	-4.14	0.59	-11.13	1.37	-0.86	-0.21	0.01	32.78
232	6.21	-0.21	8.01	3.41	-2.82	1.87	12.17	10.84	-3.24	3.48	-3.73	-1.22	-0.45	-0.29	-1.23	32.81
138	5.57	3.56	7.62	1.70	-0.17	2.50	5.12	12.96	-0.94	3.48	-5.58	-1.22	-0.85	0.58	-1.51	32.82
121	9.69	-5.23	-9.54	2.81	-4.14	8.73	5.45	8.91	-0.61	0.59	16.61	0.07	-2.19	1.42	0.66	33.24
4	16.48	6.07	7.72	1.70	-1.49	3.12	-2.15	26.89	-5.54	0.59	-14.83	-1.22	-3.02	-2.53	1.65	33.45
129	12.41	-0.21	3.36	-0.15	-1.49	4.16	-2.04	10.26	2.65	0.59	1.81	0.07	-2.42	3.04	1.43	33.48
595	6.85	4.82	10.49	4.62	-1.49	-0.41	8.20	12.36	-6.78	0.59	-5.58	1.37	-0.86	-1.94	1.29	33.52
511	6.11	3.56	9.17	1.60	1.16	-1.04	1.93	-2.47	3.11	-2.30	8.29	1.37	-0.34	1.86	1.54	33.56
457	3.33	1.05	2.72	0.54	3.81	0.21	-1.38	2.22	4.21	-2.30	15.68	1.37	-0.90	3.17	-0.13	33.60
615	8.09	6.07	11.52	3.41	-1.49	-0.21	8.42	11.01	-5.57	0.59	-6.51	0.07	-0.73	-1.50	1.07	34.26
638	7.30	7.33	6.07	2.35	1.16	0.83	2.70	15.55	-3.35	0.59	-4.66	0.07	-1.27	-0.37	0.01	34.32
502	8.13	8.58	11.30	1.70	1.16	0.42	1.71	13.32	-3.18	0.59	-8.35	0.07	-1.16	-0.63	1.00	34.65
125	8.18	-3.98	-10.49	0.54	-1.49	7.69	1.60	10.77	0.18	0.59	23.08	-1.22	-2.60	1.27	0.66	34.78
599	5.34	6.07	9.55	2.35	1.16	-1.45	4.35	14.22	-6.00	0.59	0.89	0.07	-1.27	-2.09	1.29	35.06
538	7.49	3.56	6.19	4.62	-1.49	2.08	9.19	14.01	-5.17	0.59	-5.58	1.37	-0.91	-0.02	-0.39	35.55
454	6.75	2.30	4.87	1.60	1.16	1.46	3.03	-0.81	4.73	-2.30	8.29	1.37	-0.39	3.77	-0.13	35.69
132	10.02	-1.46	-0.39	-0.09	1.16	2.91	-6.44	15.59	3.66	0.59	6.44	0.07	-2.11	6.04	0.42	36.41
635	10.72	8.58	8.22	3.41	-1.49	2.08	7.10	12.52	-2.83	0.59	-12.05	0.07	-0.76	0.23	0.01	36.41
445	8.77	7.33	7.00	1.70	1.16	2.91	2.81	14.96	-1.57	0.59	-8.35	0.07	-1.21	1.27	-0.67	36.77
122	11.61	-2.72	-8.34	1.60	-4.14	8.94	6.00	7.75	0.69	0.59	15.68	-1.22	-2.09	1.86	0.66	36.88
428	12.89	-1.46	-10.16	2.81	-2.82	9.15	3.03	10.92	-1.24	-2.30	13.83	1.37	-2.54	2.12	1.50	37.09
596	8.76	7.33	11.69	3.41	-1.49	-0.21	8.75	11.20	-5.48	0.59	-6.51	0.07	-0.76	-1.50	1.29	37.16
542	5.98	4.82	5.25	2.35	1.16	1.04	5.45	15.87	-4.39	0.59	0.89	0.07	-1.32	-0.19	-0.39	37.19
436	15.61	3.56	2.74	-0.15	-0.17	4.58	-4.35	12.27	2.03	-2.30	-0.96	1.37	-2.78	3.73	2.26	37.44
130	13.13	-0.21	3.81	-0.10	1.16	3.12	-1.49	11.79	2.90	0.59	1.81	0.07	-2.42	1.99	1.43	37.58
432	11.38	-0.21	-11.11	0.54	-0.17	8.11	-0.72	12.78	-0.45	-2.30	20.30	0.07	-2.96	1.96	1.50	38.74
539	9.40	6.07	7.39	3.41	-1.49	2.29	9.85	12.84	-3.87	0.59	-6.51	0.07	-0.81	0.40	-0.39	39.28
211	4.73	-0.21	12.04	4.62	-2.82	0.63	8.31	11.72	-4.16	3.48	2.74	0.07	-0.79	-0.76	-0.06	39.56
439	13.22	2.30	-1.01	-0.09	2.49	3.33	-8.87	17.59	3.04	-2.30	3.66	1.37	-2.47	6.75	1.25	40.27
429	14.80	1.05	-8.96	1.60	-2.82	9.36	3.69	9.75	0.07	-2.30	12.91	0.07	-2.45	2.56	1.50	40.83
215	3.22	1.05	11.09	2.35	-0.17	-0.41	4.57	13.58	-3.37	3.48	9.21	-1.22	-1.20	-0.93	-0.06	41.19
437	16.33	3.56	3.19	-0.10	2.49	3.54	-3.80	13.80	2.27	-2.30	-0.96	1.37	-2.78	2.68	2.26	41.54
192	5.40	1.05	12.21	4.62	-2.82	0.63	8.75	11.90	-4.07	3.48	2.74	0.07	-0.82	-0.76	0.16	42.56
212	6.64	2.30	13.24	3.41	-2.82	0.83	8.97	10.56	-2.85	3.48	1.81	-1.22	-0.69	-0.32	-0.06	43.30
518	7.93	3.56	11.42	4.62	-1.49	1.04	6.00	13.73	-4.78	0.59	-0.03	1.37	-1.15	-0.07	0.78	43.51
196	3.90	2.30	11.26	2.35	-0.17	-0.41	4.90	13.76	-3.28	3.48	9.21	-1.22	-1.23	-0.93	0.16	44.08
135	6.05	-0.21	7.91	4.62	-2.82	3.12	9.74	13.55	-2.45	3.48	2.74	0.07	-0.87	1.14	-1.51	44.57
522	6.42	4.82	10.47	2.35	1.16	0.00	2.15	15.59	-4.00	0.59	6.44	0.07	-1.56	-0.22	0.78	45.05
1	16.95	2.30	8.01	4.62	-4.14	3.74	2.48	27.48	-7.05	0.59	-6.51	0.07	-3.04	-1.97	1.65	45.20
139	4.53	1.05	6.96	2.35	-0.17	2.08	5.89	15.41	-1.66	3.48	9.21	-1.22	-1.28	0.99	-1.51	46.11
193	7.32	3.56	13.41	3.41	-2.82	0.83	9.30	10.74	-2.76	3.48	1.81	-1.22	-0.72	-0.32	0.16	46.20
499	8.60	4.82	11.59	4.62	-1.49	1.04	6.33	13.91	-4.69	0.59	-0.03	1.37	-1.18	-0.07	1.00	46.41

Appendix B - Sorted, Weighted Route Scores for All Evaluated Routes
Wolf Creek - Blackberry

Weights	6	4	8	4	2	3	5	9	3	2	10	1	1	3	1	
Route	Total Length	Angles Over 30 Degrees (count)	Length Not Along Existing Transmission Line	Length Through Previously Mined Area	Transmission Line Crossings	Stream Crossings	Wetlands in ROW	Sensitive Species Score	Cropland in ROW	Archaeological Sites within ROW	Residential Proximity Score	Public Facilities within 500 feet	Length Not Along Parcel Boundary	Floodplain in ROW	Total Length Karst	Total
5	15.44	3.56	7.07	2.35	-1.49	2.71	-1.27	29.34	-6.26	0.59	-0.03	-1.22	-3.45	-2.13	1.65	46.85
519	9.84	6.07	12.62	3.41	-1.49	1.25	6.55	12.56	-3.48	0.59	-0.96	0.07	-1.05	0.37	0.78	47.15
503	7.09	6.07	10.65	2.35	1.16	0.00	2.48	15.77	-3.91	0.59	6.44	0.07	-1.59	-0.22	1.00	47.95
136	7.96	2.30	9.11	3.41	-2.82	3.33	10.40	12.39	-1.15	3.48	1.81	-1.22	-0.77	1.58	-1.51	48.32
442	9.24	3.56	7.29	4.62	-1.49	3.54	7.43	15.56	-3.08	0.59	-0.03	1.37	-1.23	1.83	-0.67	48.53
2	18.86	4.82	9.21	3.41	-4.14	3.95	3.14	26.32	-5.75	0.59	-7.43	-1.22	-2.94	-1.53	1.65	48.95
127	13.60	-3.98	4.11	2.81	-1.49	3.74	3.14	12.38	1.39	0.59	10.13	1.37	-2.44	2.56	1.43	49.34
118	16.81	3.56	6.98	1.65	-4.14	6.45	2.92	25.46	-3.85	3.48	-7.43	-1.22	-3.15	1.55	0.88	49.95
500	10.51	7.33	12.79	3.41	-1.49	1.25	6.88	12.75	-3.39	0.59	-0.96	0.07	-1.08	0.37	1.00	50.04
446	7.73	4.82	6.34	2.35	1.16	2.50	3.58	17.42	-2.29	0.59	6.44	0.07	-1.64	1.68	-0.68	50.07
131	12.09	-2.72	3.16	0.54	1.16	2.71	-0.61	14.24	2.17	0.59	16.61	0.07	-2.85	2.40	1.43	50.99
443	11.16	6.07	8.49	3.41	-1.49	3.74	7.98	14.39	-1.77	0.59	-0.96	0.07	-1.13	2.27	-0.67	52.17
128	15.52	-1.46	5.31	1.60	-1.49	3.95	3.80	11.22	2.69	0.59	9.21	0.07	-2.34	3.00	1.43	53.09
434	16.80	-0.21	3.49	2.81	-0.17	4.16	0.82	14.39	0.76	-2.30	7.36	2.66	-2.80	3.25	2.26	53.30
425	20.01	7.33	6.36	1.65	-2.82	6.86	0.60	27.47	-4.47	0.59	-10.20	0.07	-3.51	2.24	1.72	53.91
119	17.53	3.56	7.43	1.70	-1.49	5.41	3.47	27.00	-3.60	3.48	-7.43	-1.22	-3.16	0.50	0.88	54.05
438	15.29	1.05	2.54	0.54	2.49	3.12	-3.03	16.26	1.54	-2.30	13.83	1.37	-3.21	3.09	2.26	54.84
435	18.71	2.30	4.69	1.60	-0.17	4.37	1.38	13.23	2.06	-2.30	6.44	1.37	-2.70	3.69	2.26	56.93
426	20.73	7.33	6.81	1.70	-0.17	5.82	1.15	29.01	-4.23	0.59	-10.20	0.07	-3.52	1.19	1.72	58.01
116	18.00	-0.21	7.73	4.62	-4.14	6.03	8.20	27.59	-5.11	3.48	0.89	0.07	-3.18	1.06	0.88	65.93
120	16.49	1.05	6.78	2.35	-1.49	4.99	4.35	29.46	-4.33	3.48	7.36	-1.22	-3.59	0.89	0.88	67.45
117	19.92	2.30	8.93	3.41	-4.14	6.24	8.75	26.43	-3.81	3.48	-0.03	-1.22	-3.08	1.50	0.88	69.56
423	21.20	3.56	7.11	4.62	-2.82	6.45	5.78	29.60	-5.74	0.59	-1.88	1.37	-3.54	1.75	1.72	69.77
427	19.69	4.82	6.16	2.35	-0.17	5.41	1.93	31.46	-4.95	0.59	4.59	0.07	-3.95	1.60	1.72	71.31
424	23.11	6.07	8.31	3.41	-2.82	6.66	6.44	28.44	-4.44	0.59	-2.81	0.07	-3.44	2.19	1.72	73.52

APPENDIX C – PROJECT WEBSITE SCREENSHOTS; WEBSITE MATERIALS

NEXTera ENERGY TRANSMISSION SOUTHWEST

PROJECTS FAQ CONTACT US

Wolf Creek-Blackberry

A 345 kV Transmission Line Project

Project Overview

In October 2021, NEET Southwest was awarded to construct a new approximately 94 circuit miles of 345 kV transmission facilities from the Wolf Creek substation in Coffey County, Kansas to the Blackberry substation in Jasper County, Missouri. NEET Southwest finances, developes, constructs, owns, operates and maintains the Wolf Creek-Blackberry 345-kilovolt (kV) transmission project. The project requires regulatory approval in both Kansas and Missouri. Assuming timely regulatory approvals, the project is expected to be in-service in January 2025, and NEET Southwest will become a transmission-owning member in SPP.

The project is part of the 2019 Integrated Transmission Plan approved by SPP in October 2019 to address the needs for a more reliable and cost-effective grid. This project will reduce congestion and provide market efficiencies and benefits to ratepayers.

DOWNLOAD MAP

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PROJECTS FAQ CONTACT US

Virtual Open House

NEET Southwest hosted a virtual public meeting for the project on March 22nd, 2022.

VIRTUAL OPEN HOUSE PRESENTATION >

Project Benefits

Economic Development And Investment

- Greater access to more affordable power in the region
- Expected to provide approximately $23.7 million in congestion savings in its first year and additional $377 million over the next 40 years
- Additional investment in the local economy during construction and the life of the project
- Ongoing collaboration and support of local businesses, contractors and community members

Minimal Environmental And Visual Impact

- Project is designed to provide most value to customers with safe, reliable and cost-effective components and materials
- Project will utilize monopole structures to minimize tree clearing and agricultural impacts

DOWNLOAD FACT SHEET

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PROJECTS FAQ CONTACT US

Project Timeline

Project Design

NEET Southwest's design provides most value to customers with safe, reliable, and cost-effective components and materials.

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PROJECTS FAQ CONTACT US

Frequently Asked Questions

Learn more about the Wolf Creek-Blackberry 345 kV Transmission Project.

Who is NextEra Energy Transmission Southwest?

NextEra Energy Transmission Southwest, LLC (NEET Southwest), is a direct subsidiary of NextEra Energy Transmission, LLC (NEET), both members of the NextEra Energy, Inc. (NextEra Energy) family. NextEra Energy is a leading clean-energy company and one of America's largest infrastructure capital investors in any industry.

NEET Southwest is pursuing opportunities to finance, develop, build, own, operate and maintain new transmission facilities to address economic needs in the SPP region. NEET Southwest is committed to creating long-term relationships in the communities in which it works and believes that early engagement with project stakeholders is integral to a successful project. There will be several opportunities throughout the project for stakeholders to ask questions and provide comments to the project team.

What is the Wolf Creek-Blackberry project?

Wolf Creek-Blackberry is an approximately 94 miles of 345 kV transmission line from the Wolf Creek substation in Coffey County in Kansas to the Blackberry substation in Jasper County, Missouri. Subject to receiving regulatory approvals, the project will have a proposed 150 feet easement width with typical above-ground transmission line structures of 125 feet tall. Final design details are not yet available and will be determined based on the results of technical studies (e.g., geotechnical, environmental) as the project progresses.

What is the need for this project?

SPP plans all public utility transmission throughout the region. This project is part of the 2019 Integrated Transmission Plan that identified projects to address needs for a more reliable and cost-effective grid capable of enabling a rapidly changing generation mix and new technologies and was approved by the SPP in October 2019. The Wolf Creek-Blackberry Project is one of the projects proposed as part of this plan.

What are the benefits of this project?

The Wolf Creek-Blackberry Project will facilitate the reliable delivery of lower-cost electricity generation. The Project will also create local employment opportunities during construction and operation of the line.

What governmental approvals will be required before you build?

Federal, state and county-level permits and approvals will be required to support construction and operation of the line, including environmental and county permits. NEET Southwest also plans to seek a Certificate of Convenience and Necessity and line siting approval from the Kansas Corporation Commission and a Certificate of Public Convenience and Necessity from Missouri Public Service Commission.

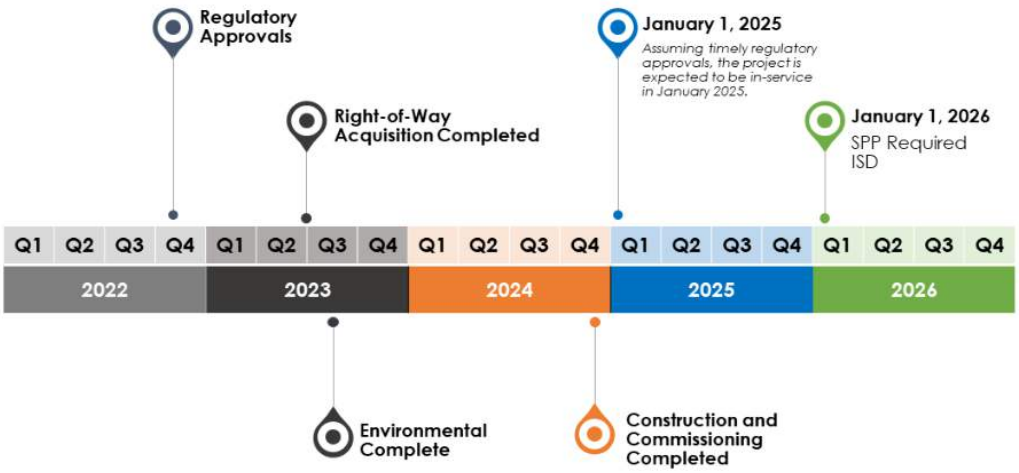
How do I get more information about these state approval processes?

NEET Southwest will be hosting virtual public meetings for the project in March 2022. Register online and learn more about the project and the state approval process.

Virtual Open House Registration

What is the proposed timing for this project?

NEET Southwest is targeting all regulatory approvals by end of 2022 and plans to start construction in 2023 in order to have the Wolf Creek to Blackberry transmission line in-service by 2025.



Have a question for our project team?

Call (620)205-2051 or submit your question.

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PROJECTS FAQ CONTACT US

Contact Us

NEET Southwest Transmission Project

Let's Connect

Contact us at (620)205-2051 between business hours from 9am-5pm EST, email us at neetsw@nexteraenergy.com or fill out the form below.
*All fields required.

*Full Name

*Project Name

*Email

*Comment

*Phone Number

I'm not a robot

reCAPTCHA
Privacy - Terms

SUBMIT

By clicking submit, you agree to be contacted by NextEra Energy Transmission Southwest at the email and/or phone number provided in an effort to respond to your inquiry.

NEXTera ENERGY TRANSMISSION SOUTHWEST

PROJECTS FAQ CONTACT US

Virtual Open House Materials March 22, 2022

Wolf Creek-Blackberry Transmission Line Project

Virtual Open House Recordings

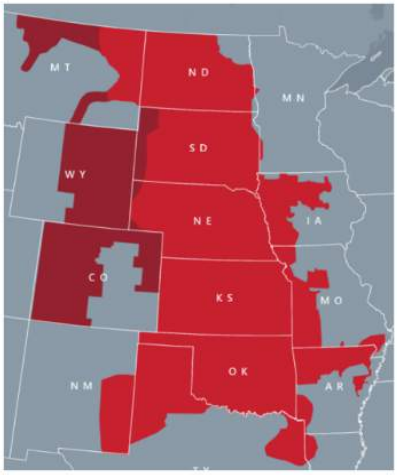
Meeting Recording 10am-11am CT

Meeting Recording 6pm-7pm CT

Virtual Open House Presentation

Background - Project Need

Background – Project Need



Southwest Power Pool (SPP)

- A non-for-profit, regional transmission organization (RTO) mandated by the Federal Energy Regulatory Commission (FERC) to ensure safe, reliable and cost-effective transmission infrastructure in the central region of the country
- In 2019, SPP identified the need for this project in its annual Integrated Transmission Plan (ITP)
- In 2021, through a competitive solicitation process which included 7 qualified bids, SPP selected NextEra Energy Transmission Southwest (NEET Southwest) to design, finance, build, operate and maintain this project

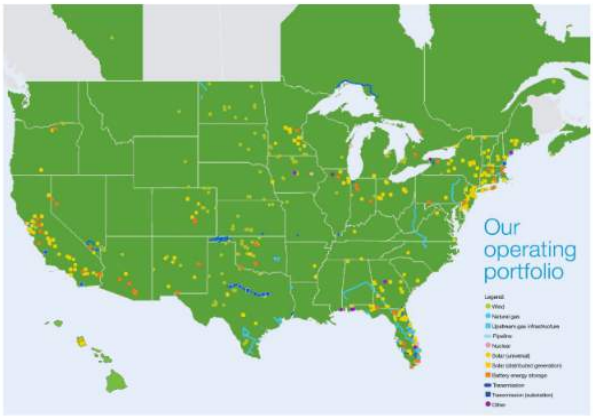
For more information please visit: https://www.spp.org/

NEXTera ENERGY TRANSMISSION SOUTHWEST

PROJECTS FAQ CONTACT US

Investing in America's Energy Infrastructure

NextEra Energy Inc. (NextEra) is a leading clean energy utility infrastructure company active across North America.



- ~55,300 MW generating capacity as of year-end 2021
- ~$119 billion in infrasturcture capital deployed since 2011
- ~81,500 miles of transmission and distribution lines
- ~15,000 employess as os year-end 2021
- 49 states with operations and development projects
- 4 provinces in Canada with operations and development projects

Our Affiliates' Existing Assets in Kansas and Missouri

Map Key:
Green circle - NEER Wind
Blue line - NEET Transmission

Existing Assets:

- Approximately $2.2 billion total capital investment
- Approximately $10.8 milion annual payroll
- $7.9 million annual land payments
- $5.9 million inproperty taxes, 2020*
- Approximately 260 miles of transmission lines operating in Kansas and Missouri

*Annual Property Taxes: Includes property tax and other indirect taxes. Internal data based on 2020 full year.

Wolf Creek – Blackberry 345 kV Transmission Line Project

Wolf Creek - Blackberry Project

What Is The Project?

This project is a new 94-mile, 345 kilovolt (kV) regulated transmission line that runs from the Wolf Creek substation (Evergy) in Kansas to the Blackberry substation (AECI) in Missouri.

Why Is It Needed?

The Wolf Creek-Blackberry Project is part of SPP's 2019 Integrated Transmission Plan to address the needs for a more reliable and cost-effective grid. This project will reduce congestion and provide market efficiencies and benefits to customers.

Where?

The project route traverses Coffey, Anderson, Allen, Bourbon and Crawford counties in Kansas, and Barton and Jasper counties in Missouri.

Project Benefits

Project Benefits

Project Benefits

The Southwest Power Pool identified the Wolf Creek-Blackberry project as needed through its Integrated Transmission Planning Process in 2019 to provide more affordable power in the region.

- Expected to provide customers $23.7 million in congestion savings in its first year and an additional $377 million over the next 40 years
- Additional investment in the local economy during construction and the life of the project
- NEET Southwest is committed to using domestically-sourced materials, local vendors and workers as much as possible
- Estimated to provide over $28 MM in tax revenue to Kansas and $4 MM to Missouri over the next 40 years

Routing Considerations

Routing Considerations

Socioeconomic, Landowners Impacts

- Most direct route possible; lower cost for customers
- Reducing greenfield routing impacts for landowners by paralleling or co-locating with existing transmission lines, roads, and property lines
- Maximizing distances from residences and public facilities
- Minimizing impacts to public airports (FAA) and Military Training Zones

Environmental Impacts

- Minimizing impacts to forested wetland and known cultural and archeological resources
- Minimizing/avoiding protected or sensitive species and habitat impacts
- Minimizing impacts to federal, state-owned, and tribal lands

Infrastructure Impacts

- Optimize clearances to existing structures, including bridges, culverts, oil and gas wells, transmission lines, telecom towers, and wind turbines

The Electric System

Transmission is a critical component of the electric system.

Power is generated at the plant and this could be a nuclear power plant, solar site, or wind farm. It is transmitted via the transmission power lines to the substation, where high voltage power is stepped down to a lower voltage. This lower voltage power is then distributed over distribution power lines to neighborhoods, businesses, and residences and ultimately into your homes.

Engineering Design and Construction Activities

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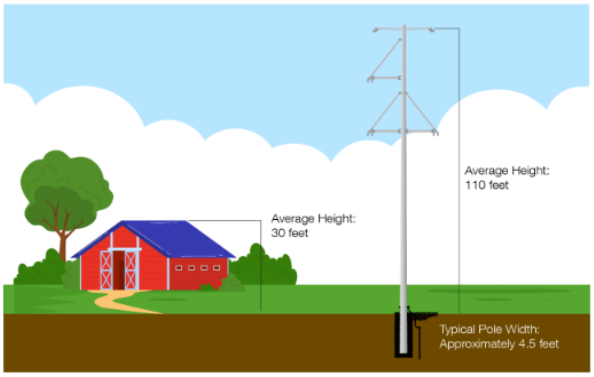
PROJECTS FAQ CONTACT US

Engineering Design and Construction Activities

Engineering Design

The project was designed to use safe, reliable and cost-effective materials.



1 Conductor

Twin-Bundled 1590 kcmil "Falcon" ACSS/TW HS conductor will be installed, exceeding SPP minimum capacity requirements to reduce loss throughout the line and offer excellent structural reliability.

2 Structures

Steel and spun concrete monopole structures will be installed, allowing minimal visual impact on the environment given their slim profile while exceeding structural reliability and durability requirements. The average above ground pole height will be 110 feet, the average span length will be 900 feet, and the right-of-way width will be 150', which is typical for 345-kV transmission lines.

3 Insulators

Braced post insulator assemblies will be installed in a delta configuration on the pole to support the conductor wires.

4 OPGW

Optical Ground Wire (OPGW) will provide the best possible protection for optical fibers, reliable lightning shielding, excellent corrosion performance, and will exceed the required fault current carrying capacity.

5 Foundation

Typical foundations installed will include direct embedded poles with crushed rock or unreinforced concrete backfill with an average pole diameter of 4.5 feet at the groundline. Angle structures will also be direct embedded poles supported by guy wires. Self-supporting structures placed on drilled shaft foundations will be installed at select locations to support line crossings and other constraints.

Construction Activities

With Safety at the Forefront of Everything We Do, NEET Southwest Will:

- Construct the line with qualified, insured, experienced contractors with proven safety records and that use protocols to help prevent the spread of COVID-19
- Require its contractors to minimize disturbances, protect landowners and their property

Activities That Will Happen Along the Project's Right-of-Way (ROW):

- Meet with landowners to address issues and questions
- Clear ROW for construction access
- Install new foundations, poles and wires
- Clean up and restore the ROW as close to original condition as possible

Right-Of-Way Easements

Right-Of-Way Easements

Right-of-Way Easements

Working with Landowners

NEET Southwest is securing options for easements from landowners whose land will be crossed by the transmission line. Following regulatory approvals of the project, NEET Southwest will finalize the purchase of the easements.

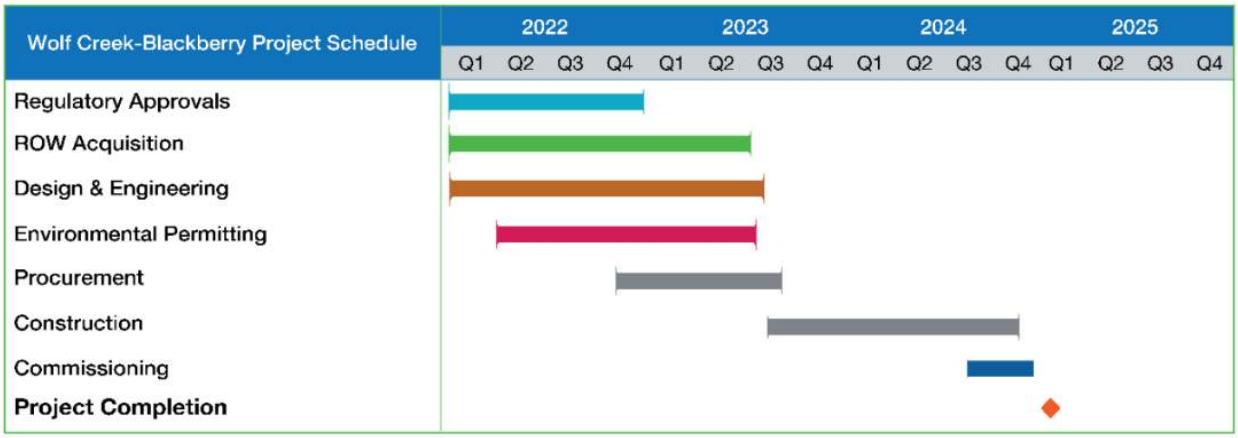
Crews and contractors may access the rights of way to conduct the following activities while the project approval process is underway:

- Surveying
- Cultural and natural resources assessments
- Wetlands delineations
- Soils testing

NEET Southwest will work with landowners on an ongoing basis throughout the construction, clean up phase of the project, and beyond.

Project Timeline

Project Timeline



Regulatory Approvals: 2022 Q1-Q4
ROW Acquisition: 2022 Q1-2023 Q2
Design and Engineering: 2022 Q1-2023 Q3
Environmental Permitting: 2022 Q2-2023 Q2
Procurement: 2022 Q4-2023 Q3
Construction: 2023 Q3-2024 Q4
Commissioning: 2024 Q3-2024 Q4
Project In-Service: 2025 Q1

Note: Subject to Regulatory approvals.

Operations and Maintenance

Operations and Maintenance

NEET Southwest focuses on reliability and safety standards for operating transmission assets.

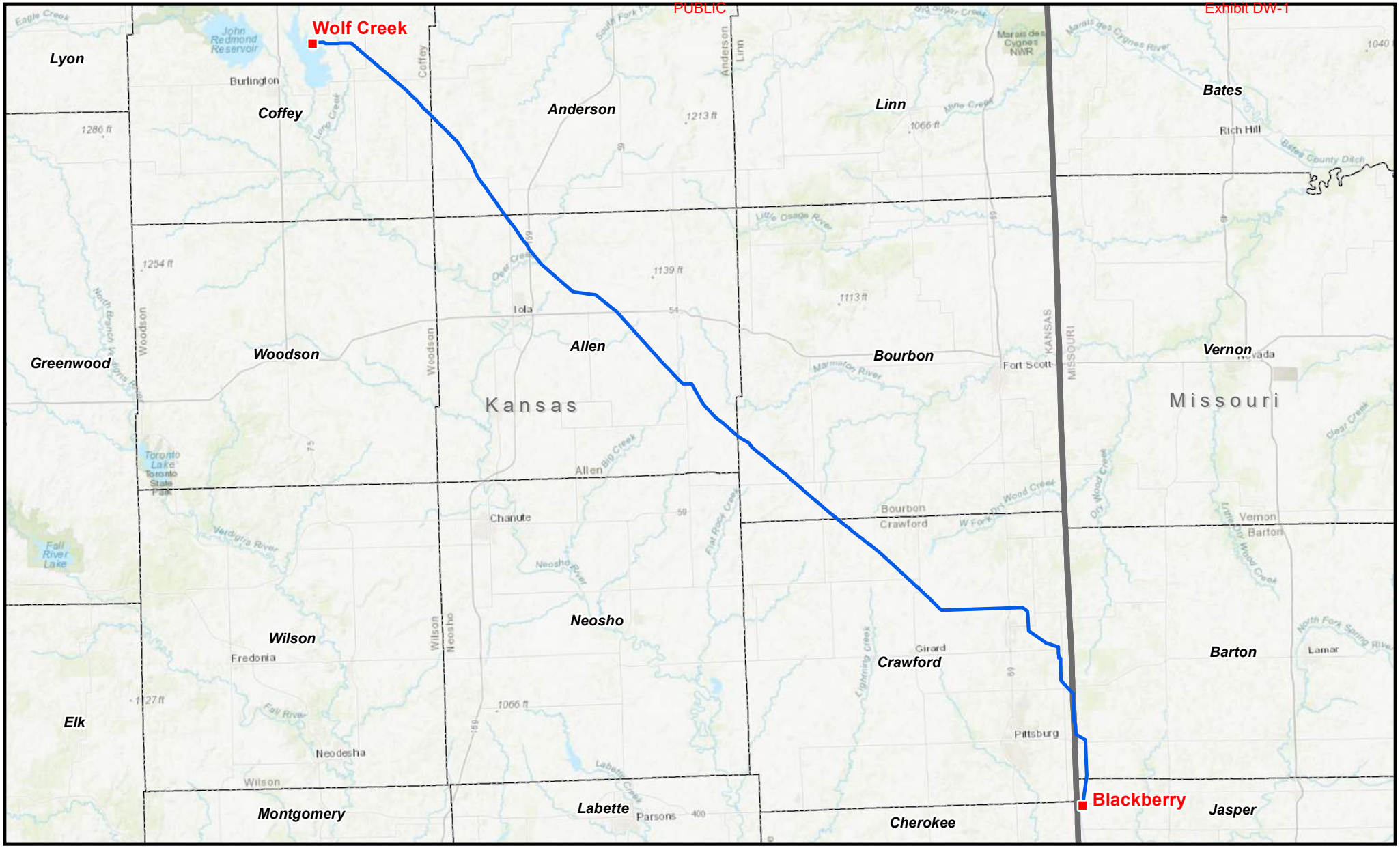
To do this, NEET Southwest:

- Monitors system on a 24-hour basis from its state-of-the-art operations control center
- Performs regular, preventative, time-based inspections
- Makes timely repairs when needed
- Monitors and removes vegetation in ROW to help ensure the safe and reliable operation of the transmission line
- Supports by 70 technical staff in locations near the Project and one location within 30-minute drive from the Project mid-point

NEET Southwest provides landowners notice before accessing the ROW to perform scheduled maintenance. In the unlikely event of an emergency, NEET Southwest will immediately deploy local crews to ensure safety and resolve any issues.

Have a question for our project team?

Call (620)205-2051 or submit your question.



Project Substation

Wolf Creek to Blackberry Proposed Route

County Boundary

State Boundary

NEET Southwest
Wolf Creek to Blackberry
345kV Transmission Line

0 5 10 15 20 25 Miles

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Fact Sheet

Meeting the Transmission Needs for the Region

An Experienced Partner

NextEra Energy Transmission, LLC (NEET) is a leading competitive transmission company in North America. The company and its parent, NextEra Energy, Inc. (NextEra Energy), have a successful track record of working with local communities and regulators to build and operate complex transmission projects across North America.

On October 27, 2021, NextEra Energy Transmission Southwest, LLC (NEET Southwest) a subsidiary of NEET, was awarded the Wolf Creek-Blackberry transmission project by Southwest Power Pool (SPP).

Project Overview

- **Developer:** NEET Southwest to finance, develop, construct, own, operate and maintain the Wolf Creek-Blackberry 345-kilovolt (kV) transmission project.
- **Project:** Construct approximately 94 miles of new 345 kV transmission line that will run from Wolf Creek substation in Coffey County, Kansas to the Blackberry substation in Jasper County, Missouri.
- **Construction:** The project requires regulatory approval in both Kansas and Missouri. Assuming timely regulatory approvals, the project is expected to be in-service in January 2025.

About NextEra Energy Transmission

- A leading competitive transmission company, which develops, finances, constructs and operates transmission assets across North America.
- Affiliated with Florida Power & Light, America's largest electric utility, and NextEra Energy Resources, the world's largest generator of renewable energy from the wind and sun and a world leader in battery storage.
- Current assets include: operating transmission facilities in California Indiana, Texas, New Hampshire, Nevada, Illinois, Kentucky, Missouri, Kansas and Oklahoma; a project under construction in Ontario, Canada and New York as well as numerous other projects in development throughout the United States.

Benefits of NextEra Energy's energy investments in Kansas and Missouri

Approximately
$2.2 billion
total capital investment

Approximately
$10.8 million
annual payroll

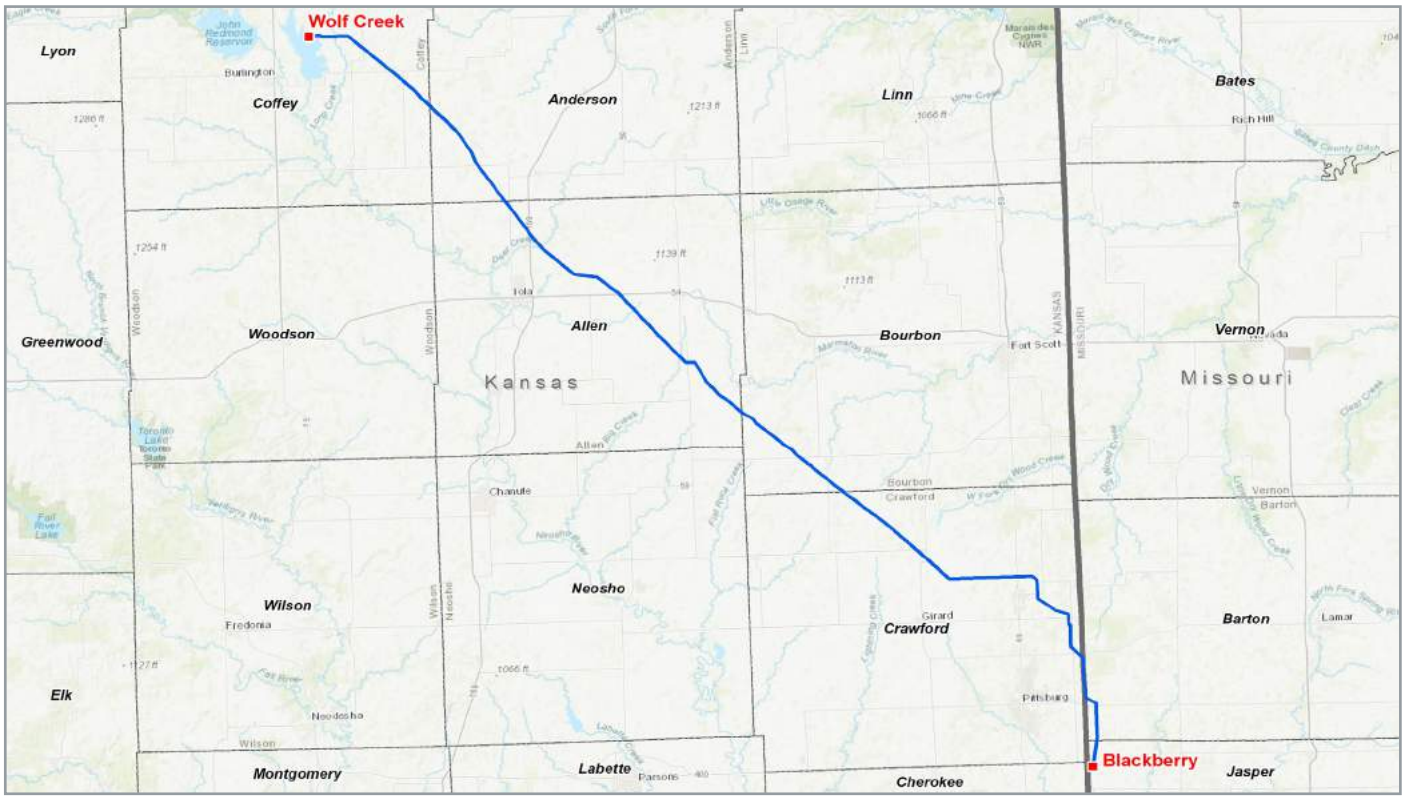
$7.9 million
annual land payments

$5.9 million
in property taxes, 2020*

*** Annual Property Taxes:** Includes property tax and other indirect taxes. Internal data based on 2020 full year.

Approximately
247 miles
of transmission lines operating in Kansas and Missouri

NEXTera ENERGY TRANSMISSION SOUTHWEST



Project Benefits

» **Economic Development And Investment**
- Greater access to more affordable power in the region
- Expected to provide approximately $23.7 million in congestion savings in its first year and additional $377 million over the next 40 years
- Additional investment in the local economy during construction and the life of the project
- Ongoing collaboration and support of local businesses, contractors and community members

» **Minimal Environmental And Visual Impact**
- Project is designed to provide most value to customers with safe, reliable and cost-effective components and materials
- Project will utilize monopole structures to minimize tree clearing and agricultural impacts

Regulatory Oversight and Permitting

» NEET Southwest plans to file its application for a Certificate of Convenience and Necessity (CCN) Application with Kansas Corporation Commission (KCC) in February 2022 and the Missouri Public Service Commission (MPSC) in April 2022

» NEET Southwest plans to file its Siting Application at the KCC in the second quarter of 2022, with statutory deadlines in Kansas running through approximately August 2022

» It is NEET Southwest's goal to diligently work with the KCC and MPSC during the CCN review and approval process

» Assuming timely regulatory approvals, NEET Southwest's planned early in-service date of January 1, 2025, which represents an estimated $14.5 MM of additional Adjusted Production Cost (APC) savings to SPP customers

For more information, please visit nexteraenergytransmission.com/subsidiaries/neetsw.html

APPENDIX D – VIRTUAL OPEN HOUSE POSTCARD INVITATIONS & NEWSPAPER ADVERTISEMENTS

NextEra Energy Transmission Southwest is hosting a virtual open house to discuss the **Wolf Creek to Blackberry 345kV Transmission Line Project.** Join us to learn more about our project and the state approval process.

Due to COVID-19 and associated social distancing measures, the presentation will be held as a virtual online event. **You must pre-register** to receive an access code to **"join" the virtual open house** at the designated time.

VIRTUAL OPEN HOUSE

Date: **Tuesday, March 22, 2022**

Morning Session: **10:00 – 11:00 a.m.**

OR

Evening Session: **6:00 – 7:00 p.m.**

JOIN MEETING BY PHONE

Morning Session
Dial in: 816-298-0271
Code: 853 4019#

Evening Session
Dial in: 816-298-0271
Code: 869 083 596#

REGISTER TO JOIN VIRTUAL MEETING

https://www.surveymonkey.com/r/WCBB_nw

If you have questions in advance of the meeting, please email them to:
neetsw@nexteraenergy.com *or contact us at* **620-205-2051.**

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contributed three assists and three steals. Kylee Scott hit a three pointer early in the second half. She was also tasked with the job of slowing down McAuley's best player, senior Kennedy DeRuy, who hit only one shot from the field on her way to 11 points.

state sectional where they will face Drexel.

"We are excited to see how the girls play now that we've got the monkey of winning that game off our backs," said Judd.

Golden City advanced to the championship with a 46-

23 points and eclipsing the 1,000-point mark for her career in the process. She hit five three pointers. Reed buried four threes and finished with 12 points. Kyndall Scott had six, Lutes four and Kylee Scott one. Sheldon was led by

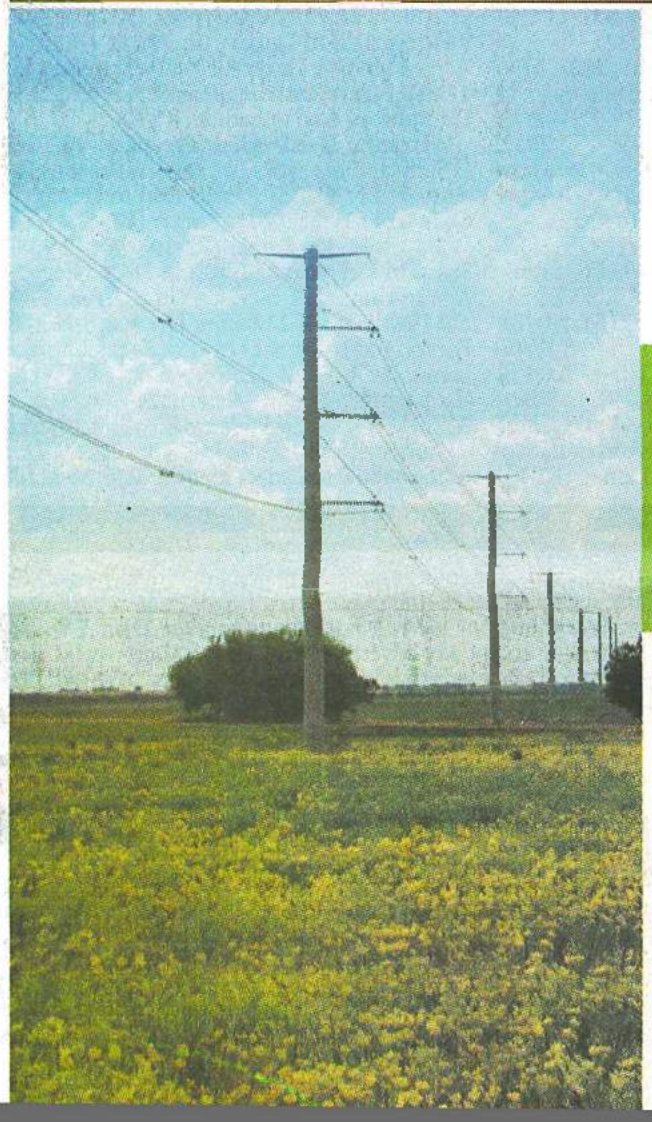
Golden City and Drexel will square off at Webb City High School Tuesday. Tip-off is set for 6 p.m. The winner advances to Saturday's quarterfinal against the winner of the Walnut Grove/St. Elizabeth contest.

Athlete Of The Week

GUNNAR DILLON

SENIOR - BOYS BASKETBALL

AGAINST CASSVILLE AND EAST NEWTON,
GUNNAR AVERAGED
8.5 PTS
6 BLOCKS
AND 7 REBOUNDS



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Morning Session
Dial in: 816-298-0271
Code: 853 4019#

Evening Session
Dial in: 816-298-0271
Code: 869 083 596#

REGISTER TO JOIN VIRTUAL MEETING

https://www.surveymonkey.com/r/WCBB_nw

If you have questions in advance of the meeting, please email them to: **neetsw@nexteraenergy.com** *or contact us at* **620-205-2051.**

NEXTera ENERGY TRANSMISSION SOUTHWEST

New Biden pandemic plan: Closer to normal for nation

THE ASSOCIATED PRESS

WASHINGTON — It's time for America to stop letting the coronavirus "dictate how we live," President Joe Biden's White House declared Wednesday, outlining a strategy to allow people to return to many normal activities safely after two years of pandemic disruptions.

One highlight is a new "test to treat" plan to provide free antiviral pills at pharmacies to people who test positive for the virus.

The 90-page National COVID-19 Preparedness Plan spells out initiatives and investments to continue to drive down serious illness and deaths from the virus, while preparing for potential new variants and providing employers and schools the resources to remain open.

"We know how to keep our businesses and our schools open with the tools that we have at our disposal," said White House COVID-19 coordinator Jeff Zients.

Meanwhile, 140 million Americans, or 43% have now had COVID-19, according to a new assessment from the Centers for Disease Control and Prevention. That estimate comes from a surveillance program that tested nearly 72,000 blood samples that were sent to commercial labs from late December to late January. The samples were checked for antibodies from infection and were distinguishable from antibodies that came from vaccination.

Wednesday's White House announcement follows Biden's Tuesday night State of the Union speech, in which he pointed to progress against the pandemic since last year, with a dramatic reduction in cases, along with readily available vaccines and the likelihood of new tests and therapeutics soon becoming more accessible.

"This plan lays out the roadmap to help us fight COVID-19 in the future as we move America from crisis to a time when COVID-19 does not disrupt our daily lives and is something we prevent, protect against, and treat," the White House said. "We are not going to just 'live with COVID.' Because of our work, we are no longer going to let COVID-19 dictate how we live."

That tracked Biden's speech statement, "Tonight, I can say we are moving forward safely, back to more normal routines. It's time for Americans to get back to work and fill our great downtowns again."

COVID-19 cases have fallen to their lowest level since last summer in recent weeks, after a winter spike from the highly transmissible omicron variant. Deaths, though, which lag cases by weeks, are still elevated, with an average of nearly 1,700 people dying in the U.S. each day. Officials emphasize that most instances of serious illnesses and death in the U.S. occur among those who are unvaccinated or who have not received a booster dose of vaccine.

The White House's strategy comes days after the CDC loosened its guidance for when face masks should be worn in public indoor settings, placing more emphasis on local capacity to treat serious disease than overall case counts. Now more than 70% of the country can safely remove masks indoors, the CDC says, and the percentage is expected to grow as cases continue to decline.

While most states and localities moved to relax their mask requirements even before the CDC change, many have kept mandates in place for schools, and the federal government continues to require face masks on public transportation, including airplanes. The federal mandate is to expire March 18, and health officials did not provide any indication whether it would be extended.

DRESS

FROM 1A

workplace attire based on their career prospects. There were 40 to 45 volunteers and mentors on hand Wednesday.

"Around half of our students, about 50%, are first-generation (college students)," Gandy said. "When you want to try to help a student feel supported and equipped for their career, it's one thing for them to become a curriculum expert, but there's all of these intangibles outside of curriculum like feeling confident upon entering their profession. When we surveyed students on the direct leads that can help them feel more successful in their careers, professional dress clothes was one of them.

"From that, we created two different events — Dress to Impress and then we facilitate a partnership with J.C. Penney," he added. "We can't do this every semester, so in the fall, we do Suit Up with J.C. Penney where they can get up to 60% off dress clothes."

The program is held in partnership with MSSU and the Joplin Area Chamber of Commerce. Since its inception, the event has provided professional clothing to more than 1,000 MSSU students and alumni.

"We feel that it's important to connect with our future workforce and making sure that they're equipped and set up for success," said Erin Slifka, marketing and public information manager with the Joplin chamber. "It allows us to connect the community to the students here at MSSU by providing professional attire and accessories to help those students ease into the jobs and the interviews where they can focus on the skills and assets that they've acquired."

Cali Koenig, Missouri Southern State University senior, looks at accessories at the Dress to Impress event Wednesday at MSSU. Organizers of the event say they assisted 95 students in the first hour Wednesday. Also present were 40 to 45 volunteers who were helping the students make selections. GLOBE | ROGER NOMER

The one-day event had approximately 2,000 items to choose from, including blazers, suits, pants, dresses, shoes, ties and jewelry. There's no item limit per student, which gives them the opportunity to build a professional wardrobe without having to pay a cent.

"When a young man walks out of here and he has a full suit, a button-up shirt and a tie, he feels confident, and when he walks into that job interview, it's one less thing that he has to worry about," Gandy said.

'VERY THANKFUL'

Joshua Samuel, a 19-year-old MSSU sophomore majoring in accounting, stocked up with an array of suits and ties for future job interviews and internships Wednesday morning. He picked out a black pair of shiny dress shoes. With the amount of high-quality apparel he had selected, the cost could've easily surpassed $300.

Samuel said he was grateful for the community and the university for caring about students enough to host an event like Dress to Impress.

"Going to these kinds of events can save students a lot of money, so I'm very thankful for events like this," he said. "It's been a very good experience so far, and I will absolutely come back next year. I think these kinds of events show that the community is willing to give and that MSSU is willing to contribute to students, which to me is very important as a college student. It makes us feel included, more confident and that they want to see us succeed."

Samuel was paired up with Cameo Harrington, a senior account executive at Stealth Creative Joplin, as a volunteer and personal shopper.

"This is my favorite volunteer day because it's so much fun to really help these kids feel good about themselves and to feel confident," she said. "I have a lot of retail background, so I think that helps. The career services team has really done an amazing job growing this event every year."

Margarita Antillon, a 23-year-old junior majoring in studio art, attended Dress to Impress for the first time and selected a shirt and dress pants.

"I love the fact that this exists, and I hope to use some of these clothes for meetings or for work," she said. "I work as a gallery assistant, so these are clothes I'll definitely need. It also changes your attitude. When you dress nice, you feel nice. Especially with professional clothes, you feel more confident, and all of that really helps."

The Dress to Impress program was established by MSSU's career services office and Alumni Association in conjunction with the Joplin Area Chamber of Commerce's Young Professionals Network.

DINNER

FROM 1A

represents Missouri's 4th Congressional District, including Barton County and points north of Joplin; U.S. Rep Billy Long, who represents Missouri's 7th Congressional District, including Joplin, Springfield and much of Southwest Missouri; St. Louis attorney Mark McCloskey; state Sen. Dave Schatz, president pro tem of the Missouri Senate; and Missouri Attorney General Eric Schmitt.

Myers said former Missouri Gov. Eric Greitens, who resigned from office in 2018 under a criminal investigation, was invited.

- **FOR STATE AUDITOR:** incumbent state Treasurer Scott Fitzpatrick, of Shell Knob; and state Rep. Dave Gregory, from St. Louis.
- **FOR 7TH DISTRICT U.S. HOUSE:** Sam Alexander, an emergency room doctor with Cox Health System in Springfield; state Sen. Eric Burlison, of Battlefield; state Sen. Mike Moon, of Ash Grove; Joplin native Audrey Richards, of Kimberling City; and former state Sen. Jay Wasson, from Christian County.

Myers said the candidates will take part in a forum where each group will take the stage according to the office for which they are running. They will then have an allotted time to speak.

Newton County Judge Greg Stremel will act as timekeeper.

After the forum, attendees will gather for a dinner and hear from the three speakers.

Myers said Missouri U.S. Sen. Josh Hawley was invited to speak as well, but no word has been received on whether he'll attend.

Myers said he expects the candidates for federal office to talk about current events and their visions about the role of the federal government.

"I think they'll talk about what part should the federal government play in what's happening today," Myers said. "You know, I read today we had 17 miles of truckers drive through our area (on Monday). That's 17 miles of freedom. I also read that there were 40 miles of Russian tanks and vehicles lined up on the road to Kyiv in Ukraine. That's 40 miles of tyranny and evil. We need to focus on freedom, and the trucks were a good example of that."

Myers said tickets were still available for the event. Cost is $45 per person. Go to **https://joplinlincolnday.com** for updates or to buy tickets online.

Myers said seating is limited to about 400, so people should register as soon as possible.

TULSA

FROM 1A

Tulsa officials also announced that they've hired a DNA company based out of Salt Lake City to try to identify the remains of the eight adult males, six adult females and five children who were excavated and then reinterred as part of their investigation. That analysis is expected to be completed in the next three to five months.

But members of the 1921 Race Mass Grave Investigation Committee criticized the expanded search parameters, saying it's not enough to only search for male victims of what is believed to be the deadliest race massacre in American history.

There's only one shot to get it right, said Chief Egunwale Amusan, president of the African Ancestral Society.

For more than two decades now, teams with the Oklahoma Archaeological Survey have been trying to piece together what happened to Black victims of the 1921 massacre in Tulsa's Greenwood District.

In October 2020, crews first located the graves of at least 12 individuals inside the mass burial site, but it wasn't until June 1, 2021 — exactly 100 years since the two-day massacre — that they returned to the site to exhume the bodies and search for additional remains.

Officially, 38 deaths have been confirmed after a white mob murdered, looted and burned the Greenwood District over about 16 hours starting on May 31, 1921, but historians now estimate between 100 and 300 people may have been killed, with many of the Black victims quickly buried in unmarked mass graves without a coroner's report or a death certificate.

"We are investigating as homicides, but it is not a homicide investigation in the legal sense in which we will be able to contribute to charges," Stubblefield said. "There will be no charges derived from these investigations that are about one person killing another person. We don't have the actors. We don't have the weapons, and right now actually, we don't have the decedents, but we will have the decedents, of that I am confident."

Stubblefield said that they'll only look closely at the plain casket containing males so that they can focus their energies and time on the spirit of the investigation, which is to return the Tulsa Race Massacre victims to history and hopefully to their families.

Amusan, though, said officials are relying on historical information of those who potentially participated in the massacre to determine the search parameters, "which I find absurd."

He also questioned why, if they're investigating a homicide, they wouldn't also search for women and children who might have been victims of the massacre.

Kristi Williams, a member of the oversight committee, said archaeologists should expand their search parameters to include unmarked coffins as well.

"We have to understand it was a massacre," Williams said. "No one would have been buried with any dignity, right? We can't leave any stone unturned."

Stubblefield said moving forward like that requires disturbing graves of people who aren't the target, and with limited resources, they run the risk of not recovering the individuals who need to be recovered. Many of the people buried in the Black potter's field, including children, were clearly memorialized and loved. Many died before and after 1921, she said.

City of Tulsa officials said that they have budgeted about $800,600 to pay for the effort; as of Tuesday, they had spent over $585,000 of that. A little more than $215,000 remained.

Stubblefield urged the committee to continue supporting their excavation work even if they don't agree with the specific focus moving forward.

"We've been doing this for two or three years now, and you're still angry, and I get it," Stubblefield said. "I get that there are things you want that even finding these dead people, you won't get it from us finding them. But we need to follow up with these decedents because they've got families. They were thrown out."

NextEra Energy Transmission Southwest is hosting a virtual open house to discuss the **Wolf Creek to Blackberry 345kV Transmission Line Project.**

Join us to learn more about our project.

VIRTUAL OPEN HOUSE

Date: **Tuesday, March 22, 2022**

Morning Session: **10:00 – 11:00 a.m.**

OR

Evening Session: **6:00 – 7:00 p.m.**

JOIN MEETING BY PHONE

Morning Session
Dial in: 816-298-0271
Code: 853 4019#

Evening Session
Dial in: 816-298-0271
Code: 869 083 596#

REGISTER TO JOIN VIRTUAL MEETING

https://www.surveymonkey.com/r/WCBB

NEXTera ENERGY TRANSMISSION SOUTHWEST

NEXTera ENERGY TRANSMISSION SOUTHWEST

700 Universe Blvd., UST/JB
Juno Beach, FL 33408

Join NEET Southwest's virtual open house on March 22, 2022 to learn more about **Wolf Creek to Blackberry 345kV Transmission Line Project.** Team members will be available to discuss the project and the state approval process.

Due to COVID-19 and associated social distancing measures, the presentation will be held as a virtual online event. **You must pre-register** to receive an access code to **"join" the virtual open house** at the designated time.

REGISTER TO JOIN VIRTUAL MEETING

https://www.surveymonkey.com/r/WCBB

If you have questions in advance of the meeting, please email them to: **neetsw@nexteraenergy.com** *or contact us at* **620-205-2051.**

APPENDIX E – VIRTUAL OPEN HOUSE PRESENTATION SLIDES; PRESENTATION TRANSCRIPT; Q&A QUESTIONS

Wolf Creek – Blackberry 345 kV Transmission Line Project

Welcome!

Notes:

- This meeting will be recorded
- Please submit your questions and comments in the chat feature throughout the session
- We consider input from the community critical for the success of the project!

How to Contact Us?

For more information or if you have any questions, please contact us at:

620-205-2051

neetsw@nexteraenergy.com

Nexteraenergytransmission.com/subsidiaries/neetsw.html

2

Agenda

About Us
- NextEra Energy and NextEra Energy Transmission Southwest

Project Overview
- Background – Project Need
- Wolf Creek – Blackberry 345 kV Transmission Line Project
- Project Benefits
- Routing Considerations
- Engineering Design and Construction Activities
- Right-Of-Way Easements
- Anticipated Project Schedule
- Operations and Maintenance

Wrap Up
- Q&A Session

3

Presenters

Marcos Mora
Executive Director
Development

Natalie Borrelli
Engineering Leader
Engineering & Construction

David Alger
Project Manager
Development

Additional Subject Matter Experts

Collin Constantin
Land Specialist

Kim Austin
Senior Environmental Project Manager

James Alligan
Project Director Operations

Tracy Davis
Senior General Counsel

NEXTera ENERGY TRANSMISSION SOUTHWEST

Marcos Mora

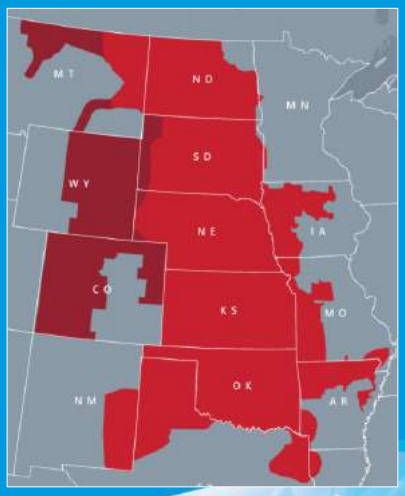
Executive Director
Development

- **Background – Project Need**
- **NextEra Energy and NextEra Energy Transmission Southwest**
- **Wolf Creek – Blackberry 345 kV Transmission Line Project**
- **Project Benefits**
- **Routing Considerations**

Background – Project Need

Southwest Power Pool (SPP)

- A non-for-profit, regional transmission organization (RTO) mandated by the Federal Energy Regulatory Commission (FERC) to ensure safe, reliable and cost-effective transmission infrastructure in the central region of the country
- In 2019, SPP identified the need for this project in its annual Integrated Transmission Plan (ITP)
- In 2021, through a competitive solicitation process which included 7 qualified bids, SPP selected NextEra Energy Transmission Southwest (NEET Southwest) to design, finance, build, operate and maintain this project



For more information please visit: https://www.spp.org/

6

NEXTera ENERGY TRANSMISSION SOUTHWEST

Investing in America's Energy Infrastructure

NextEra Energy Inc. (NextEra) is a leading clean energy utility infrastructure company active across North America

~55,300 MW
generating capacity as of year-end 2021

~$119
infrastructure capital deployed since 2011

~81,500 miles
of transmission & distribution lines

~15,000
employees as of year-end 2021

49 states
with operations and development projects

4 provinces
in Canada with operations and development projects

7

Our Affiliates' Existing Assets in Kansas and Missouri

NEE Operating Asset
- NEER Wind
- NEER Solar
- NEER Storage
- NEET Transmission

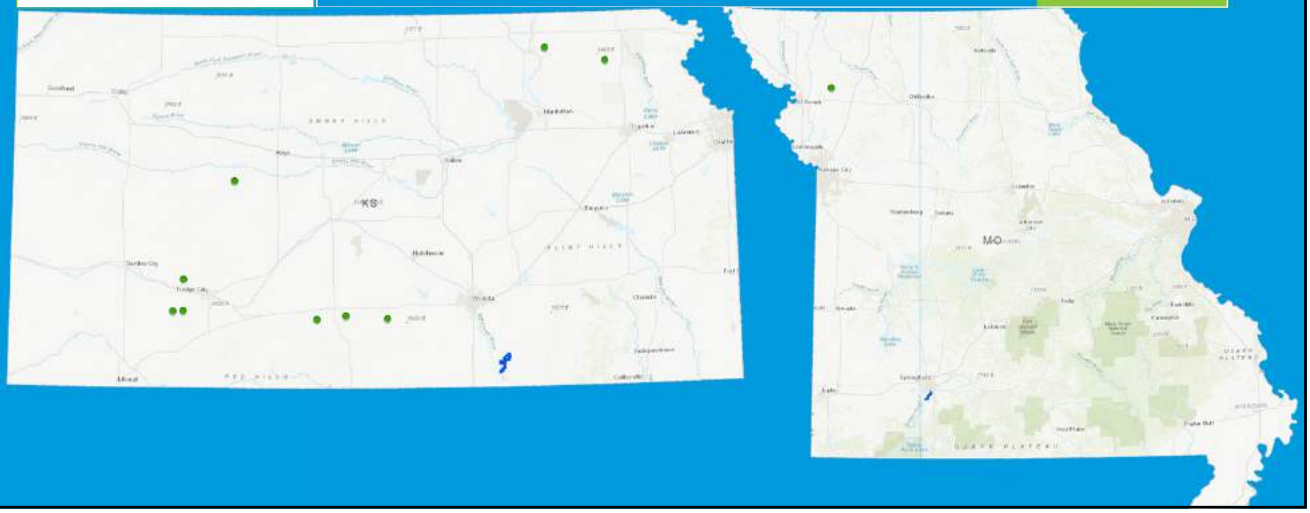
Approximately **$2.2 billion** total capital investment

Approximately **$10.8 million** annual payroll

$7.9 million annual land payments

$5.9 million in property taxes, 2020*

Approximately **260 miles** of transmission lines operating in Kansas and Missouri



Wolf Creek – Blackberry Project

What Is The Project?

This project is a new 94-mile, 345 kilovolt (kV) regulated transmission line that runs from the Wolf Creek substation (Evergy) in Kansas to the Blackberry substation (AECI) in Missouri.

Why Is It Needed?

The Wolf Creek-Blackberry Project is part of SPP's 2019 Integrated Transmission Plan to address the needs for a more reliable and cost-effective grid.

This project will reduce congestion and provide market efficiencies and benefits to customers.

Where?

The project route traverses Coffey, Anderson, Allen, Bourbon and Crawford counties in Kansas, and Barton and Jasper counties in Missouri.

9

Project Benefits

The Southwest Power Pool identified the Wolf Creek-Blackberry project as needed through its Integrated Transmission Planning Process in 2019 to provide more affordable power in the region.

- Expected to provide customers $23.7 million in congestion savings in its first year and an additional $377 million over the next 40 years
- Additional investment in the local economy during construction and the life of the project
  - NEET Southwest is committed to using domestically-sourced materials, local vendors and workers as much as possible
- Estimated to provide over $28 MM in tax revenue to Kansas and $4 MM to Missouri over the next 40 years

10

Routing Considerations

Socioeconomic, Landowners Impacts

- ✓ Most direct route possible; lower cost for customers
- ✓ Reducing greenfield routing impacts for landowners by paralleling or co-locating with existing transmission lines, roads, and property lines
- ✓ Maximizing distances from residences and public facilities
- ✓ Minimizing impacts to public airports (FAA) and Military Training Zones

Environmental Impacts

- ✓ Minimizing impacts to forested wetland and known cultural and archeological resources
- ✓ Minimizing/avoiding protected or sensitive species and habitat impacts
- ✓ Minimizing impacts to federal, state-owned, and tribal lands

Infrastructure Impacts

- ✓ Optimize clearances to existing structures, including bridges, culverts, oil and gas wells, transmission lines, telecom towers, and wind turbines

11

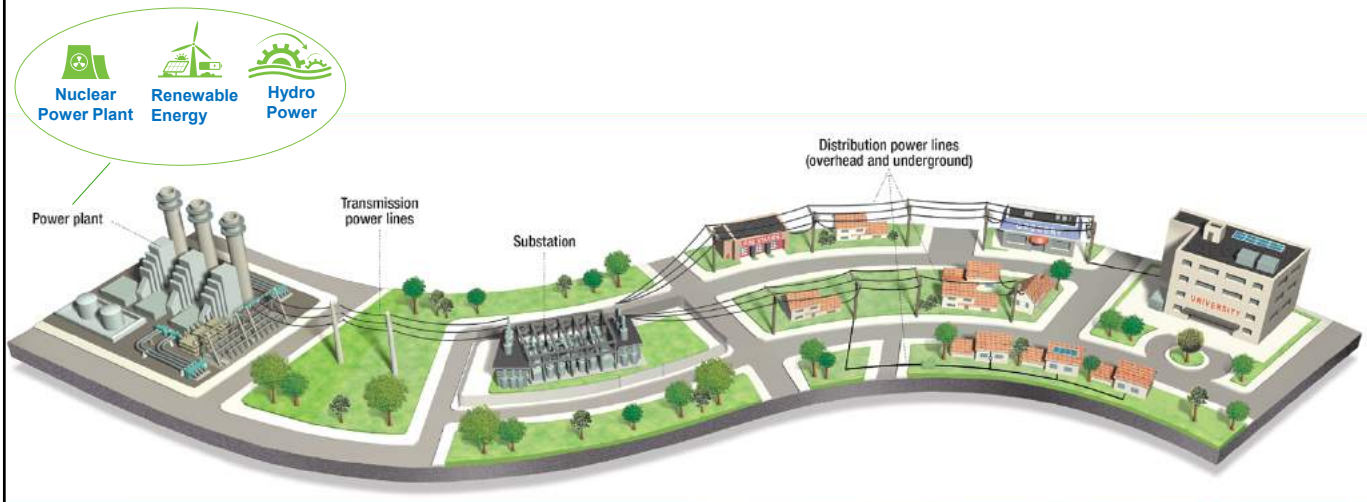
NEXTera ENERGY TRANSMISSION SOUTHWEST

Natalie Borrelli
Engineering Leader
Engineering and Construction

- ▶ **The Electric System**
- ▶ **Engineering Design**
- ▶ **Construction Activities**

The Electric System

Transmission is a critical component of the electric system

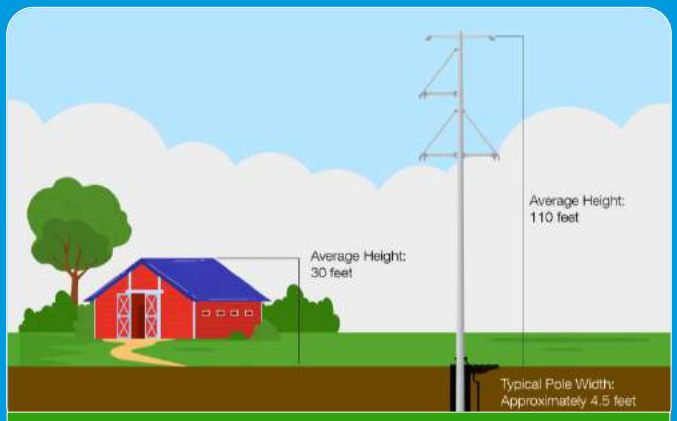


13

NEXTera ENERGY TRANSMISSION SOUTHWEST

Engineering Design

The project was designed to use safe, reliable and cost-effective materials



Project will primarily utilize monopole structures to the extent possible to minimize tree clearing and agricultural impacts

1 Conductor	Twin-Bundled 1590 kcmil "Falcon" ACSS/TW HS conductor will be installed, exceeding SPP minimum capacity requirements to reduce loss throughout the line and offer excellent structural reliability.
2 Structures	Steel and spun concrete monopole structures will be installed, allowing minimal visual impact on the environment given their slim profile while exceeding structural reliability and durability requirements. The average above ground pole height will be 110 feet, the average span length will be 900 feet, and the right-of-way width will be 150', which is typical for 345-kV transmission lines.
3 Insulators	Braced post insulator assemblies will be installed in a delta configuration on the pole to support the conductor wires.
4 OPGW	Optical Ground Wire (OPGW) will provide the best possible protection for optical fibers, reliable lightning shielding, excellent corrosion performance, and will exceed the required fault current carrying capacity.
5 Foundation	Typical foundations installed will include direct embedded poles with crushed rock or unreinforced concrete backfill with an average pole diameter of 4.5 feet at the groundline. Angle structures will also be direct embedded poles supported by guy wires. Self-supporting structures placed on drilled shaft foundations will be installed at select locations to support line crossings and other constraints.

14

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Construction Activities

With Safety at the Forefront of Everything We Do, NEET Southwest Will:

- Construct the line with qualified, insured, experienced contractors with proven safety records and that use protocols to help prevent the spread of COVID-19
- Require its contractors to minimize disturbances, protect landowners and their property

Activities That Will Happen Along the Project's Right-of-Way (ROW):

- Meet with landowners to address issues and questions
- Clear ROW for construction access
- Install new foundations, poles and wires
- Clean up and restore the ROW as close to original condition as possible

15

NEXTera ENERGY TRANSMISSION SOUTHWEST

David Alger

Project Manager
Development

- **Right-Of-Way Easements**
- **Anticipated Project Schedule**
- **Operations and Maintenance**

Right-of-Way Easements

Working with Landowners

NEET Southwest is securing options for easements from landowners whose land will be crossed by the transmission line. Following regulatory approvals of the project, NEET Southwest will finalize the purchase of the easements.

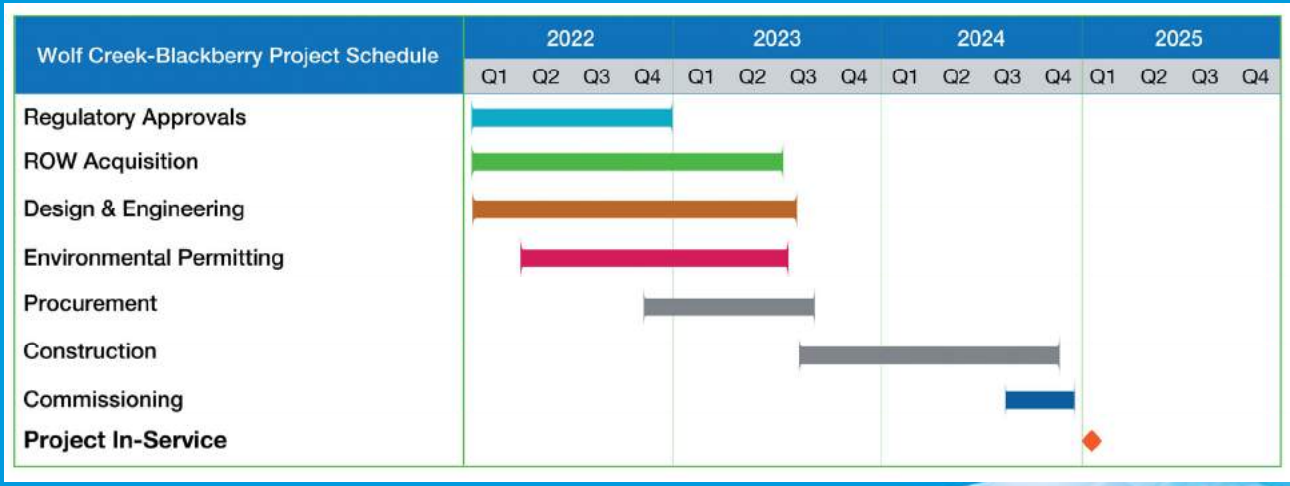
Crews and contractors may access the rights of way to conduct the following activities while the project approval process is underway:

- Surveying
- Cultural and natural resources assessments
- Wetlands delineations
- Soils testing

NEET Southwest will work with landowners on an ongoing basis throughout the construction, clean up phase of the project, and beyond.

17

Project Timeline



Note: Subject to Regulatory approvals

18

Operations and Maintenance

NEET Southwest focuses on reliability and safety standards for operating transmission assets

To do this, NEET Southwest:

- Monitors system on a 24-hour basis from its state-of-the-art operations control center
- Performs regular, preventative, time-based inspections
- Makes timely repairs when needed
- Monitors and removes vegetation in ROW to help ensure the safe and reliable operation of the transmission line
- Supports by 70 technical staff in locations near the Project and one location within 30-minute drive from the Project mid-point

NEET Southwest provides landowners notice before accessing the ROW to perform scheduled maintenance. In the unlikely event of an emergency, NEET Southwest will immediately deploy local crews to ensure safety and resolve any issues.

19

How to Contact Us?

For more information or if you have any questions, please contact us at:

620-205-2051

neetsw@nexteraenergy.com

Nexteraenergytransmission.com/subsidiaries/neetsw.html

20

Questions?

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Senior General Counsel

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Wolf Creek-Blackberry Public Meeting - Morning Session

M Marcos Mora 00:15

Good morning we will begin the presentation in five minutes.

M Marcos Mora 04:10

Good morning we will begin the presentation in one minute Okay,

M Marcos Mora 05:02

We are right at the hour, so we will begin the presentation. Good morning everyone. My name is Marcos Mora. I'm the developer for the Wolf Creek to Blackberry 345kV Transmission Line Project. On behalf of NextEra Energy Transmission Southwest and the team on the project, I'd like to welcome you to the project's open house session. We thank you for your participation and your interest in the project. We hope to provide any information that you may be interested in regarding the project.

M Marcos Mora 05:40

Let's move on to some housekeeping items. This session is being recorded. So if you would like to replay it, the replay will be available on our website after the session in case there's anything that you'd like to come back to. Also, please submit your questions and comments in the chat feature throughout the session. Don't feel like you have to wait until the end or until we get to the Q&A session to submit your question. We encourage you to submit those as they come to mind. Once we get to the Q&A session, we will be able to provide responses to the questions submitted in the queue. We really value the input. So, these sessions are very important and critical to make sure that, you know, that we can deliver the project successfully. There are several ways to communicate with us. So, if you have any other questions that come

to mind after the session, please feel free to reach out to us and we welcome any comments or questions that you may have, you can contact us through our project hotline, which is 620-205-2051, or you can send us an email to the project email address you see on the screen. So, that's neetsw@nexteraenergy.com. You can also submit a request through the project website. And that is at nexteratransmission.com/subsidiaries/neetsw.html.

M Marcos Mora 07:31

Our agenda for today: we'll introduce ourselves, we'll talk a little bit about who we are, who is NextEra Energy and NextEra Energy Transmission Southwest, then we'll dive into the project. We'll go through our project overview, the background, you know, what drove the need for this project, the project itself, benefits, considerations for the proposed route, engineering design, construction activities, as well as what's going on with the right-of-way easements, the project schedule, and what are the plans for post-construction, once the project is built, in terms of operation and maintenance, and then we will go into our Q&A session and wrap it up. So, as I mentioned, my name is Marcos Mora. I'm the lead developer for the project. Assisting me with the presentation today is Natalie Borrelli, our engineering leader, as well as David Alger, project manager for the project. Assisting us with any particular questions that we may not be the subject matter experts on we also have four additional team members joining us today in for the Q&A: Collin Constantin, our land specialist, Kim Austin, our environmental lead, James Alligan, our operations and maintenance expert, and Tracy Davis, our regulatory and senior general counsel.

M Marcos Mora 09:13

So, I will begin talking a little bit about the project, the background and the need for the project, a little bit about who we are, the project itself, the benefits, and considerations that we took in place for the proposed route.

M Marcos Mora 09:33

Offering some context for the project, it's important to start with understanding who is the Southwest Power Pool, or SPP. SPP is a non-profit regional transmission organization that is mandated by FERC, the Federal Energy Regulatory Commission, to ensure the safe, reliable and cost effective transmission infrastructure in the central region of the country. SPP runs an integrated transmission planning process every year. It's an annual process where an analysis is done to assess and determine the needs for the grid. In particular, in terms of transmission, there's a 10-year outlook, where SPP is proactively identifying what those needs are in terms of reliability or economic needs to ensure cost-effective delivery of energy. Through that process, in 2019, SPP identified the need for this project and ran a competitive solicitation process, analyzed and performed an evaluative comparison of seven qualified bids. Through that process, SPP selected NextEra Energy Transmission Southwest to be the designated transmission owner and design, finance, build, operate, and maintain this project.

M Marcos Mora 11:05

So, a little bit about us. NextEra Energy is a leading clean energy utility infrastructure company

So, a little bit about us. NextEra Energy is a leading clean energy utility infrastructure company active across North America. So, a fairly big footprint, we have deployed nearly $120 billion of capital in the last decade. We have over 55,000 megawatts of generating capacity, 81,500 miles of transmission and distribution lines, approximately 15,000 employees, and we operate in 49 states as well as four Canadian provinces. As you can see on the map, we have a pretty diverse portfolio. That's an important part of our strategy as a company. So, we operate natural gas pipelines and upstream gas infrastructure, as well as nuclear, wind, solar, battery storage, and transmission, which is the division for this project. Diving a little bit more into the project area and our presence in both the states of Kansas and Missouri, we've invested about $2.2 billion in capital in between both states, with nearly $11 million in annual payroll for jobs, as well as nearly $8 million annually in land payments through your long-term land lease payments and easements, as well as almost $6 million annually in property taxes. We own and operate approximately 260 miles of transmission lines between both states.

M Marcos Mora 13:01

So talking a little bit about the project itself now, going into the details. What is the project? The project is a new 94-mile long, 345kV, regulated transmission line that runs from the Wolf Creek substation, owned by Evergy in Coffey County, Kansas, to the Blackberry substation owned by Associated Electric Co-op in Jasper County, Missouri. One important item to highlight here is when it comes to the definition of the project is that it's a regulated transmission line. So, it's important to clarify, what that means is that this project is not a purely commercial or also known as a merchant transmission line. It is not a transmission line that gets built for the purpose of then interconnecting multiple entities nor is it a wind gen-tie, which is normally a line that is intended to move wind power from a wind farm to a certain load center. This is a regulated transmission line, and it's FERC regulated, with the purpose of moving energy from the Wolf Creek nuclear substation into the southeast portion of Kansas as well as the southwest portion of Missouri. So, the project came out of the SPP 2019 Integrated Transmission Plan with the goal of providing more cost-effective delivery of energy as well as achieving some additional reliability benefits. It is primarily an economic project but also has some some side reliability benefits that come with it. The way that works is this project then provides an additional lane, if you will, to reduce congestion and, therefore, provide lower cost of energy through market efficiencies which lower the cost for customers. So, as you can see on the map, the project starting up at Wolf Creek, it'll traverse through Coffey, Anderson, Allen, Bourbon and Crawford counties in Kansas, and then across the border into Missouri, traversing Barton and Jasper counties. So one of the questions I'll address here, because it's a very common question particularly from landowners, is "Does this project, go through my property?" If you do have that question, you know, please make sure to submit that question to us through the email, or the website or hotline, and we will be able to get back with you individually. With your information and your address we'll be able to locate if you are and let you know if your property is affected by the by the proposed route. If it is, we'll have further discussions. If your property is affected you may have already heard from our land agent, or will be shortly. But, we can initiate those discussions now if they haven't yet begun. So, moving into the project benefits, the project is estimated to provide customers almost $24 million in congestion savings in its first year, and then an additional $377 million in congestion savings over the next 40 years. Just like any other large investment or capital investment project, it is expected to benefit the local economy during construction and throughout the life of the project through the creation of jobs and investment in the local economy. NextEra Energy Southwest is committed to using domestically-sourced materials, as well as using local vendors and local workforce as much as

possible. Additionally, the project is estimated to provide over $28 million in tax revenue in the state of Kansas and an estimated $4 million in tax revenue in the state of Missouri over the next four years.

M Marcos Mora 17:40

Moving into the routes, there were several key categories of factors that drove our assessment of of the proposed route. You can see there on the left side of the screen. So primarily fitting into one of those three categories, socio-economic landowner impacts, environmental impacts or infrastructure impacts. Expanding a little bit into those and offering some examples of those, in terms of the socio-economic and landowner impacts, we wanted to make sure we identified the most direct route possible. A lower route means shorter distances, therefore, lower cost of the project and lower cost to customers. We are also making sure to reduce any type of impacts to greenfield, any farming operations, and minimizing disruptions to any operations done by landowners along the route. So, the way to achieve that is, you know, paralleling or colocating with any existing transmission lines, roads, or property lines as much as possible. We are also maximizing distances from residences and public facilities as well as minimizing any impacts to public airports, FAA restrictions, or military training zones. In terms of environmental impact, there was significant focus placed on minimizing impacts to forests, forested wetlands, and any known cultural and archaeological resources. There was also focus placed on avoiding any protected or sensitive species and habitats, and minimizing impact or completely avoiding impacts to any federal-, state- or tribal-owned lands. In terms of infrastructure impacts, an important consideration was also made to optimize clearances from any existing structures such as bridges, culverts, any existing oil and gas facilities, as well as telecommunication towers and wind turbines that already exist along the route. Now, turn it over to Natalie Borrelli.

N Natalie Borrelli 20:06

Thanks, Marcos. Good morning everyone. My name is Natalie Borelli. I am the engineer overseeing the transmission line engineering for the project. I'll be providing a brief overview of some of the engineering aspects of the project: the electric system, the design of the transmission line and then some typical construction activities that can be expected on the project. So let's first take a brief look at the electric system and how power is moved through the system. Power is generated at the plant and this could be a nuclear power plant, solar site, or wind farm. It is transmitted via the transmission power lines to the substation, where high voltage power is stepped down to a lower voltage. This lower voltage power is then distributed over distribution power lines to neighborhoods, businesses, and residences and ultimately into your homes. This project is focused on the installation of the transmission power line between the Wolf Creek substation and the Blackberry substation.

N Natalie Borrelli 21:23

So, now a little bit about the engineering design aspects of the line. The transmission power line will use mostly monopole structures as shown in the picture there. This project will not use lattice-type or H-frame structures that you might be more familiar with. The monopole structure has a very slim profile and that minimizes visual and agricultural impacts, and also minimizes

tree-clearing requirements. The powerline consists of three phases arranged in a triangular or delta configuration and each of these phases will have two or twin-bundled conductors. The poles will be predominantly concrete poles. There will be some steel poles where the design strength or the height warrants that. Poles will be on average 110 feet tall, above the ground line, with a ground line diameter of about 4.5 feet. There will be about 900 feet in between the structures on average. The optical ground wire or OPGW will be installed at the top of the pole. This will OPGW provides lightning protection as well as communication. The typical structure foundation includes the direct embedment of the poles that will be backfilled with concrete or crushed rock. Some of the poles will be supported by guidewires and others will be installed on top of drill shaft foundations.

N Natalie Borrelli 23:14

Next, a little bit about construction activities. As always, an especially from a construction standpoint, safety is first and foremost for NextEra Energy. As such the line home will be built using qualified, experienced contractors with the same mindset on safety and having the safety records that demonstrate that. We will meet and work with landowners to minimize disturbances to their properties while conducting construction activities such as clearing of the right-of-way, installing structures, wires and foundations that make up the transmission line, and then performing cleanup and restoration of the right-of-way. Now, I'll turn it over to my colleague David Alger.

D David Alger 24:06

Thank you Natalie. Good morning everyone. My name is David Alger. I'm a project manager here at NextEra Energy Transmission. Thank you for joining today. I'll be covering right-of-way easements, project schedule, and then we'll talk a little bit about the operations and maintenance plan. So, right-of-way easements. Here at NextEra, we take the approach of working with landowners early on before the route is finalized to secure amendable transmission easement options. Upon regulatory approvals from the KCC and the Missouri Public Service Commission and after incorporating landowner feedback, NEET Southwest will finalize the purchase of those easements. During this time, we may ask landowners for permission to access properties to conduct surveys, contractors or crews may need to access the property to conduct land survey, cultural and natural resource assessments, wetland delineations, and soil testings. We will work with landowners on an ongoing basis through the construction and the cleanup phase of the project and beyond.

D David Alger 25:14

So, looking at a project schedule standpoint, we are seeking to have all regulatory approvals by the end of this year. Right now we have right-of-way acquisition, design, engineering, and as well as environmental permitting, are all underway now. And will we expect those items to be wrapping up in the middle of 2023 ordering of delivery of materials will be occurring in the procurement stage following with the start of construction in the fall of 2023. And this will lead us into the commissioning stage of the transmission line which we are aiming to have the project placed into service January 1 of 2025. So after the the transmission line gets placed into service, the project then gets handed off to our operations and maintenance team where we

focus on reliability and safety of the transmission line. We have a state-of-the-art operations facility where we can monitor the transmission line on a 24-hour basis. From time to time, line maintenance inspections will be needed to ensure the safe and reliability of the transmission line. With that, we have over 70 technical staff and locations near the project with one in particular that's a 30-minute drive of the project midpoint. We will also give landowners notice before accessing right away to perform scheduled maintenance. But in the unlikely event of an emergency, we will deploy local crews immediately to ensure safety and resolve any issues of the line. And with that, I will turn it back over to Marcos for our Q&A session. Thank you.

M Marcos Mora 27:03

All right. Thank you, David. Thank you, Natalie. I appreciate your presentations. So again, if you could please submit any questions you may have through the live chat. And again, if you prefer to submit it individually, or after the session at any point feel free to do so through any of the three channels that we have on the screen. We have, once again, the hotline 620-205-2051. The project email is neetsw@nexteraenergy.com. The project website is nexteraenergytransmission.com/subsidiaries/neetsw.html.

M Marcos Mora 28:05

So, let's then proceed with taking a look at the queue and seeing if there are any questions and we will proceed with answering them as they come in. Alright, so a we see a first question in the queue. The question is: Can the landowners get a full map of the the proposed route? The answer is yes, we do have the map that was shown in this presentation on the project website. So that that's one way to get that map. If you want more detailed information about the route and where it is relative to your property, then please send us an email, call us, or submit a request through our project website and one of our team members will get back to you within two business days to make sure that we can provide any more detailed information that you may may require. Okay, let's see. Another question? Yes. There's a second question on the queue. Will eminent domain be used to acquire right-of-way for this project? So, Tracy, if you don't mind taking this question, please?

T Tracy Davis 29:49

Sure, Marcos. Good morning. My name is Tracy Davis. I'm senior counsel for NextEra, working on this project. Yeah, as Marcos and David mentioned in the discussion, our first priority is to work closely with landowners. So, our preference is to acquire land voluntarily as much as possible. That is easier for us, it is better for us, we want to be good neighbors and establish good relationships with landowners for the life of the project, because we're going to be in this area for a long time. So, you know, starting that process off with eminent domain is a little bit of a challenge. You know, so our preference is definitely to obtain land voluntarily, as much as we can. That being said, at the end of the day, this will be a regulated public utility transmission line. And that'll be approved by the the Kansas Corporation Commission and the Missouri Public Service Commission. Once we do have those approved routes, you know, to the extent that we can't get voluntary agreement from landowners, then, yes, we would have

eminent domain authority. But as I said, you know, that is not our first preference, our first preference is to work closely with landowners. And if we need to, you know, make small adjustments here and there, you know, that is our goal. Hopefully that answers that question.

M Marcos Mora 31:14

Yes, thank you, Tracy. Okay, next question: When will construction on the project begin? So, David, if you don't mind answering that one, please?

D David Alger 31:31

Sure. Thank you, Marcos. We are aiming to start construction November 1st of 2023.

M Marcos Mora 31:42

All right, thank you, David. See another question coming through the queue: Will there be any additional land purchased for facilities, offices, or laydown yards? So I'll take that one. So the answer is yes, there are plans to utilize laydown yards. We will not necessarily be looking to purchase those. The goal is to use them only during construction and then once construction is complete they can go back to whatever used to let the landowner has for those areas. But we will be seeking some temporary use and land option agreements to utilize those areas.

M Marcos Mora 32:42

Let's see, another question. So, What if I don't want another power line on my property? It's a good question. Obviously, there's always a concern if there are already existing lines on the property and adding another line. It's a pretty common concern when that's the case. So what I would say is, let's maybe first look at the specifics of where the line is relative to your property. So again, if you have a concern, if you could please submit that to us with your address, so that we can look at the specifics of the location and then properly understand your concern and see what what we can do about it. Generally, you know, we will do our best to address any concerns that landowners may have as far as the line not being on their property, if that's a concern, to try and reach some agreement that is mutually beneficial. If that effort fails, then you know, there's always depending on on the proximity of of the line to the property line, there may be an opportunity to shift the line off of the property if that's something that can be done reasonably within the cost because obviously, there's an impact of cost that customers have to bear when with any changes of that nature, but that doesn't mean that it's not possible. It just requires further analysis and review to understand what can be done. So again, if that's a very specific concern that you may have, please send us your information with the address so we can circle back and and talk more specifics about the location.

M Marcos Mora 34:47

Alright. Let's see, other questions. I have another question coming in. The question is: Will survey crews contact landowners for consultation and discussion? David, I'm thinking you could take that one?

take that one?

D David Alger 35:11

Yes, of course, we will definitely make sure we are coordinating with landowners and have them in our discussions prior to any surveys. So we will have our land agents work with you and the surveyors to make sure we have permission to access your properties before any survey crews are out in the field.

M Marcos Mora 35:39

Okay, thank you, David. Alright, let's see. another question: What impact do you see on previous projects that these lines impact the landowners' property value? So Collin I'm thinking you might be best equipped to answer this one. So I'll repeat the question. What impact do you see on previous projects that these lines impact the landowners' property value?

D David Alger 36:26

Marcos, I can take this one too, if Collin's having some trouble with audio. There's a multitude of studies on this topic. It is NextEra's goal to compensate landowners fairly in order to reduce or negate any potential adverse impacts to their properties. We will keep that in mind working with you all.

M Marcos Mora 36:54

Okay, thank you, David. All right. Next question is: Will damages be paid to landowners based on the crop planted or grassland damage due to routine or emergency maintenance operations? So, David, maybe you can help with this one as well. I'll repeat the question. Will damages be paid to landowners based on the crop planted or grassland damage due to routine or emergency maintenance operations?

D David Alger 37:29

Yes, crop damages will be paid anytime crops are damaged or lost as a result of our use of the property for a total crop loss in one crop year. We will get prices from the Chicago Board of Trade to see how much the prices are for your crops and we will make sure we pay landowners for any damage based on the unit yield per acre and the price.

M Marcos Mora 38:04

Okay, very good. Thank you, David. Okay, I see another question here: What if I think the power line will be too close to my home? So I'll take that. So generally throughout the routing considerations we make sure that there are, first of all, no structures within the right-of-way so that the route is not, you know, there's no homes that are directly impacted by the line right-of-

way itself. In addition to that, when it comes to habitable infrastructure, residences, we make sure that or we do our best to try and keep those, whenever possible, at least 300 feet away from the line. We don't believe we have any concerns of that nature throughout this proposed route. But then again, if you want, you know, to confirm this and where the line is relative to your home specifically, we can review that with you one-on-one, directly, if you can submit a request through our hotline, email, or our website, and we can get into the specifics of where you're at, your home, residences, relative to the line to make sure that you're comfortable with the distance.

M Marcos Mora 39:38

I see the next question. Natalie, I think I'll need your help with this one. So the question is: Will landowners have the opportunity to work with NextEra to clear their own land and be compensated for such? I'll repeat the question, will landowners have the opportunity to work with NextEra to clear their own land and be compensated for such when it comes to construction and when getting ready to clear for construction?

N Natalie Borrelli 40:20

Right. Thanks, Marcos. I think NextEra typically, we use our own contractors for clearing the right-of-way for safety reasons, as well as, there's certain standards that have to be met when you're clearing the right-of-way. So typically, it would be the contractor that we hire to do that.

M Marcos Mora 40:51

Okay. Thank you, Natalie. Okay, next question is: Can you post the web address for the project website? So, if we could put that back up on the screen? Yes, thank you. So, there it is. On the screen, the project website is nexteraenergytransmission.com/subsidiaries/neetsw.html. A recorded version of this presentation will be uploaded to the website. So again, nexteraenergytransmission.com/subsidiaries/neetsw.html.

M Marcos Mora 42:13

I see another question. It says: I have other power lines crossing my property now are your lines using the same easement or sharing these lines? So I'll take that one. The answer is no. This line will have its own easements, even when it may be paralleling an existing transmission line. It will not share easements with existing transmission lines. So it will be having its own as well as you know, the line itself will be not being shared. It is its own separate line.

M Marcos Mora 43:03

Okay. Let's see. Next question. Let me catch up here with the queue. Do you know about how many landowners will be affected in Allen County? So yes, we do know that. I'm sure we can pull that up here quickly. Collin, I don't know if you can help me out with that. Just pulling up the numbers?

D David Alger 43:40

I have it here, Marcos.

M Marcos Mora 43:41

Oh, you have it David? Okay, great.

D David Alger 43:42

Yeah. In Allen County we expect there to be a little bit under 16 landowners affected in Allen County. But because the alignment has not been finalized, the number can change.

M Marcos Mora 44:02

Thank you. Okay. Very good. Next question: I am in the design process of a large shop, a cabin to begin in the next six to 12 months. The lines are going right through the middle. What do I do now? So I think, let's have a detailed conversation to understand the plans and the timing. Let's see what the what the impact is and then we can figure things out from there. So, I would say, again, if you could please send us your information with your address and we will contact you within two business days to go through in more detail about that specific situation and then come up with a plan. Obviously, a plan that's mutually beneficial.

M Marcos Mora 45:15

All right, let me see other questions. There's a question coming in: Is there any regulation on how close the lines can be to a structure? So, generally...

N Natalie Borrelli 45:46

I'm sorry, Marcus, I could take that on. We do have minimum clearance requirements that's governed by the National Electric Safety Code that we are bound to conform to. The structures being in that 150-foot right-of-way will ensure that we make those those minimum clearance requirements.

M Marcos Mora 46:22

Okay, very good. Thank you, Natalie. And then I think there's another question here coming up that I think you might be the best one for it as well. So the question is: Are there any health concerns with high voltage power lines that are close to homes? I think this one might deal with EMF.

N Natalie Borrelli 46:43

Sure, yeah. I think that might be referring to electric and magnetic fields or EMF. EMF is found everywhere, especially where electricity is used, in household items, cell phones, hair dryers, that type of thing. There are no health standards relating to EMF that had been established either on a state or federal level. Our company monitors studies that are conducted related to any health effects from EMF. The scientific community has studied this and they have not found a definitive link between exposure to EMF and any increased risk of any disease.

M Marcos Mora 47:36

Okay, thank you, Natalie. Another question coming in: Who pays the property taxes on lines and poles? Will landowners have to pay anything additional than what we currently pay? So I'll take that one. NextEra Energy Transmission, when we become the owners of the easements and the right-of-way, we are responsible for paying the property taxes on on the project itself. So, entirely, including lines poles, and everything belongs to the project. Having the project go through your property will not cause any any tax burden or any other additional payment or cost to the landowner.

M Marcos Mora 48:46

Have another question coming in: Will all landowners be paid the same per acre for right-of-way or might it vary? So, Collin, I don't know if maybe your audio is back? Let's give that a try and see maybe if it is then you could help us with that one. If not, David, you might help. I'll cue you up for that one if Collins audio is still not working?

C Collin Constantin 49:20

Marcos, I'm here!

M Marcos Mora 49:21

Okay, perfect.

C Collin Constantin 49:22

All right. Thanks. So landowners will be paid the same if they're in the same general area and the market data in that area is the same. So just like if you buy a house in a different neighborhood, the per acre amounts will differ based upon that. If you need any additional information, if you want to know specifics on your property, please get in touch with the land agent and we'd be happy to give you any more information that you would like.

M Marcos Mora 50:01

Okay. Thank you, Collin. Another question coming in: What company will own these lines once the project is completed? NextEra Energy Transmission Southwest is the designated transmission owner for the project and, therefore, will own the lines once the project is complete and we will be responsible for not just constructing it but then you know because we own it we will be operating and maintaining the line. That's been consistent with our approach for all our our assets, our transmission assets, in the United States.

M Marcos Mora 50:55

Now, another question I see coming in: Is there an automated map that can be used to zoom in on the proposed route? We don't have that feature at the moment. I think that's something that we'll be looking at doing maybe once we have a more final route. But again, if there's any particular detail that you can't see through the map that we have available now please reach out to us and we can circle back and respond to any specific address or address any specific questions you may have if we need to zoom into any particular section to show where the project is relative to your property and if your property is affected or not.

M Marcos Mora 51:52

Okay, just a follow up question to confirm: The developer pays the property tax of the right-of-way acreage once it's in commission? Yes, that is correct. If we own the easement, we pay the property tax on that acreage.

M Marcos Mora 52:25

Okay, I see another question coming through: Where does the proposed line enter the state of Kansas? If you're looking at it from the Kansas side and from where the line crosses the border between Kansas and Missouri. Maybe we can pull up the map the map slide, but generally just trying to trying to find an ideal location spot or landmark that we can use. It's coming across on the south east of Pittsburgh right around the Camo Ranch area, a little bit east of that is where the line is crossing the border between Kansas and Missouri. So, going from Crawford County into Barton County and then heading south on to Jasper County to make it to the Blackberry substation. So it's just a few miles southeast of the city of Pittsburgh. It's only a few miles away from that Camo Ranch area where your crossing over the border.

M Marcos Mora 54:15

Let's see the questions coming in: Can farmers farm up to, around, and under the poles and lines? How close can trees be planted to poles and lines to hide them from sight? So, David, I'm thinking you can help me with this one. So again, the question is, can farmers farm up to, around, and under the poles and lines? How close can trees be planted to poles and lines to hide them from sight?

D David Alger 55:26

Sure, thanks, Marcos. Farmers can farm underneath the poles and the lines. We recommend that you let us know what you intend to be planting. Trees within the right-of-way, which is 150 feet... I would recommend not planting anything within that right-of-way that are trees. They will be able to farm on the ground if you let us know what you intend to plant. Does that help answer your question?

M Marcos Mora 56:13

Yes. Thank you, David. I'm just reading through here to see if there's any other questions coming up? Okay, we see a question coming in here: What is the anticipated annual tax revenue to be realized by Coffey County? So I will have to take that back. I know we have the tax revenue estimates at the state level, but I'm sure we can we can figure that out at the county level as well. I don't have that on hand with me to provide an answer right away. But I am going to take that back. So, if we do have your information when you submitted this question, I'll use your email address or your phone number and we'll get back to you on this. If you didn't provide that and you're still interested in getting the answer to this question, please let us know how to reach out to you and I'll be able to get an answer for this.

M Marcos Mora 57:34

Alright. Next question I see coming in: What is the anticipated serviceable lifespan of the proposed transmission line? So in other words, what is the maybe like the what the expected service life of the project? So Natalie, do you mind taking this one?

N Natalie Borrelli 58:00

Sure. I think typically, concrete pole lines have like an 80-year lifespan?

M Marcos Mora 58:13

Yeah, that's correct. From the material experts, based on the materials and components used on this project, this particular project would be expected to have approximately an 80-year service life.

M Marcos Mora 58:41

Thank you, Natalie. There's a follow up question about the number of landowners in Allen County: Can you share the impacted numbers in each of the counties? So, David, I don't know if if you have the numbers still in front of you or if you have them for all the counties?

D David Alger 59:00

Yeah, sure. So across all seven counties, we have roughly 201 landowners total. I'll start from Missouri and work our way up.

D David Alger 59:16

D David Alger 59:18

Jasper County: 7, Barton County: 16, Crawford County: 60, Bourbon: 8, Allen: 58, Anderson: 25, and Coffey County: 27. This number is not exact. The route has not been finalized yet. So, this number can change, but that's roughly what we're looking at.

M Marcos Mora 59:44

Yep, thank you David. Next question coming in: Is the right away going to be a gravel pathway or open ground? I'm assuming it might be more of a construction question. So, maybe Natalie?

N Natalie Borrelli 1:00:13

Yeah, I don't think we're, we're not going to gravel or finish the right-of-way. I think it's going to be cleared, but not developed.

M Marcos Mora 1:00:25

Yep. Okay, very good. Thank you. Another question coming in: Since path isn't final, what's the likelihood of changes to the path and the magnitude of the line shift? I'll take this one. So, generally, what we're aiming for, at this point, based on all the work that went into the proposed route, up to this point in the project is that it is as close to final as possible. So at this point, our goal is to just work with landowners to address any, you know, any specific concerns that landowners may have, relative to the route. So maybe the short answer to the question is we're not looking at any major line shifts, but we are definitely working with landowners to make sure that we can address any, you know, specific issues that may drive some minor line shifts and adjustments. Those are certainly ones that... The line is not final, because we understand that there's always going to be some amount of that. But generally, we would be we'd hope that we're not, you know, looking at the need for any major shifts in the route.

M Marcos Mora 1:02:03

Okay, next question: Will fences be disrupted during the construction phase? Natalie, I'll send that over to you.

N Natalie Borrelli 1:02:16

Sure. We may need to to temporarily move fences, if those fences are in, you know, the access route toward the the pole location, but we will definitely work with landowners you know, to

remove and replace those fences.

M Marcos Mora 1:02:46

Yep. And so the goal is, of course, then to restore those to as closest to the original state as possible once construction is completed.

M Marcos Mora 1:03:11

No other questions so far? So let's give it another couple of minutes. Let's see if we get any other last minute questions. You know, again, like I mentioned earlier, if anything comes to mind after the session, please feel free to submit your question through our phone number, our email address or our project website and we'll reply to your requests. Like I said, we're aiming to do that as soon as possible. Within a couple of business days, you should hear back from us with an answer or with a meeting request or something to further the conversation based on the on the task at hand. We're almost at the at the end here then. So we'll just give it another minute in case we get any last minute questions.

M Marcos Mora 1:04:37

Well, seeing that we're done with questions, I think we'll proceed with wrapping it up and closing out the session. Once again, we'd like to thank you very much for your participation and your interest in the project. I look forward to working with landowners in the area and bringing this product to reality here soon. Feel free to reach out to us at any time and we'll be interested in working together going forward. So thank you very much and take care. Have a great day.

Wolf Creek-Blackberry Public Meeting - Evening Session

M Marcos Mora 00:12

Good evening, everyone. The presentation will begin in approximately five minutes.

M Marcos Mora 02:34

Good evening. The presentation will begin in one minute.

M Marcos Mora 03:36

Good evening. We are at the top of the hour so we will get started with the presentation. I would like to welcome everyone. Thank you for your time and your interest today. Welcome to the Wolf Creek to Blackberry 345kV Transmission Line Project Open House. On behalf of NextEra Energy Transmission Southwest, I would like to welcome you and thank you again for your time and interest in the project. My name is Marcos Mora. I'm the lead developer for the project and it'll be my honor to walk you through the introduction of the project. Well, let's get into it.

M Marcos Mora 04:23

So, a few logistics for the meeting. This meeting is being recorded and will be posted within the next two days to the project website so that you will have the ability to go back and watch the recording if there's anything specific that you want to go back to and watch again or listen to again. If any other comments or questions come up there will be an opportunity to submit those to us through our project website as well. For this live session, we ask that you please submit any questions that you may have through the live chat. We will use that as the feed for getting any questions submitted. Then at the end, we will have a Q&A session where we will be able to pull all your questions from the live chat queue and answer those questions in this

session to the best of our ability. If there's anything that we don't have the answer to on hand, we will, of course, make a note of that and get back to you with an answer within two business days. We do consider your input extremely important and critical for the success of the project. So, we really do appreciate any questions that you may have. So, please bring these forward. In order to contact us after the session, or really at any time, but if any questions come up, that you prefer to have more on a one-on-one basis, or a question that just comes to mind after the session is over, you can reach us through several different channels. The first one being the project hotline, which you see on the screen. So, it's 620-205-2051. That's the phone number. You can also submit any questions through our email, which is neetsw@nexteraenergy.com. You can also go to our project website and through the Contact Us link submit any question and your contact information, and we will respond to you. Again, we're trying to do that as quickly as possible. Within two business days you should hear back from us. The project website link is nexteraenergytransmission.com/subsidiaries/neetsw.html.

M Marcos Mora 07:02

Alright, as far as the agenda goes, here are the items that we're gonna cover today in this presentation: a little bit about us, the background of who we are as a company, then we'll talk specifically about the project, what originated this project, what was the project need, details of the project itself, the benefits, considerations that went into developing the proposed route, some details of the engineering design, the construction activities that are planned for the project, as well as what's happening in terms of right-of-way easements, a high-level schedule for the project, and then some of the plans of what happens after the project is built in terms of operations and maintenance. Then we will go into the Q&A session and wrap it up.

M Marcos Mora 08:03

So, as I mentioned, my name is Marcos Mora and joining me today, and presenting with me today, are Natalie Borrelli, our engineering leader for the project, and David Alger, a project manager for the Wolf Creek to Blackberry project. Then also supporting us with subject matter expertise once we get to the Q&A section: Collin Constantin, who's our land specialist, Kim Austin, who's our environmental lead, James Alligan, our operations and maintenance expert, and Tracy Davis, our regulatory and senior general counsel.

M Marcos Mora 08:53

So, I will begin. I will talk to you about the project need, give you some background on the project, a little bit about us, who we are: NextEra Energy and NextEra Energy Transmission Southwest. Then we'll dive into details about the project. I will talk to you about the project itself, the benefits and the considerations that went into putting together the proposed route for the project.

M Marcos Mora 09:22

So, when we talk about the background and the project need, it's important to explain who is the Southwest Power Pool. Not everyone knows. So, SPP is a non-profit regional transmission organization, or RTO, that is mandated by FERC, the Federal Energy Regulatory Commission, to

ensure safe, reliable and cost-effective transmission infrastructure in the central region of the United States. SPP has, as part of its transmission planning process, an annual process where they look at a 10-year outlook to proactively identify the needs for the grid in order to ensure and maintain reliability, as well as economic availability and delivery of energy for customers. So as part of this annual process, in 2019, SPP identified the need for this project and ran a competitive solicitation process in 2020. Then in 2021, through the outcome of that competitive solicitation process where SPP evaluated seven qualified bids, it selected NextEra Energy Transmission Southwest to be the designated transmission owner in order to design, finance, build, operate and maintain this transmission line.

M Marcos Mora 10:56

So a little bit about us as a company. So NextEra Energy is a leading clean energy utility infrastructure company operating in North America. We have a fairly big footprint. We have deployed nearly $120 billion in infrastructure over the last decade. We have over 55,000 megawatts of generating capacity, over 81,000 miles of transmission and distribution line. We have approximately 15,000 employees and we operate in 49 states in the US and four provinces in Canada. You can see in the map, we have a pretty diverse portfolio, which is an important part of NextEra's strategy in maintaining a diverse energy portfolio. So we have everything from natural gas, upstream gas infrastructure, pipeline, nuclear, wind, solar, battery storage, and, of course, transmission, which is what we're talking about today with the Wolf Creek to Blackberry project.

M Marcos Mora 12:12

Zooming in a little bit into our presence within the project area, specifically in Kansas and Missouri. We've invested over $2 billion dollars, about $2.2 billion, in total capital. We maintain nearly $11 million in annual payroll and almost $8 million annually in land payments, that is through long term lease payments and easements, and almost $6 million paid annually in property taxes. Between both states we own and operate approximately 260 miles of transmission line.

M Marcos Mora 12:56

So now diving a little bit into what the project is. The project is a new 94-mile long 345kV line. It is a regulated transmission line that runs from the Wolf Creek substation owned by Evergy in Coffey County, Kansas, and then runs in a southeast direction towards the Blackberry substation and interconnecting at that substation, which is owned by Associated Electric Co-Op in the state of Missouri.

M Marcos Mora 13:30

So it's important to explain, when we talk about what is the project also important to clarify what it is not because there can be some confusion when it comes to transmission lines. This project is not a commercial or merchant transmission line that is to be built for the purpose of

then interconnecting you know just any interested party into the line. It is also not a wind gen-tie, which typically have the purpose of moving energy from a wind farm out to a load center. This project is neither of those it is a regulated transmission line. It will be regulated by FERC.

M Marcos Mora 14:14

The need of the project as I mentioned earlier, was determined by SPP out of its 2019 integrated transmission plan for a more reliable and cost-effective grid and primarily it's an economic project that will solve some congestion needs. That will lower cost of energy for customers in the region and then has some additional reliability benefits as well. But the line will run, from a location standpoint, it will traverse from Coffey County through Anderson, Allen, Bourbon, and Crawford counties in Kansas, and then crossover into Missouri and traverse the southwest corner of Barton County and the northwest corner of Jasper County, in Missouri. So the project will reduce congestion as I mentioned. And then we'll provide benefits to customers which are outlined here in this next slide. So, from a benefit standpoint, the project is estimated to provide nearly $24 million in congestion savings in its first year, and then an additional $377 million over the following 40 years. Like any other, you know, major infrastructure investment, it also brings the additional benefit of investment in the local economy during the construction period, as well as throughout the life of the project in the form of jobs and additional capital investment. So NEET Southwest is proudly committed to as part of his strategy to using domestically sourced materials, as well as local contractors and local workforce as much as possible. Another benefit is in terms of tax revenue, the project is estimated to provide over $28 million in tax revenue to the state of Kansas and $4 million in tax revenue to the state of Missouri over the next four years.

M Marcos Mora 16:26

So, talking about the route and the considerations that went into the proposed route, NEET Southwest did significant amount of studying both on-site and through desktop and survey on boots on the ground studies to understand major considerations for the route and come up with a route that will deliver the most value for customers. And so, the three main categories of considerations for the route were understanding and minimizing any socio-economic impacts to landowners, minimizing environmental impacts, and optimizing any impacts related to existing infrastructure. And so, a little bit of detail on that, when we talk about impacted landowners and socio-economic impacts, the first one was identifying the most direct route possible, obviously, a shorter route means lower cost and therefore lower cost to customers. So that was the starting point but then also making sure that any Greenfield routing impacts for landowners were minimized. And what that means is making sure that any farming operations were not disrupted, or minimal disruption to any existing farming operations. And one enabler for that is paralleling or Co-locating the route with existing transmission lines, roads and properly property lines to the best extent possible.

M Marcos Mora 18:11

Also includes maximizing distance from residences and public facilities. So that's always an important consideration, making sure that we're keeping the line as far away as possible from homes, and also minimizing any impacts related to FAA and public airports, as well as military

training zones. The other important category in terms of considerations for the project were environmental impacts. So we looked at play around with the proposed route minimizes impacts to forested wetlands, as well as any known cultural and archaeological resources areas. Also minimizing and avoiding protective or sensitive species and habitats, and minimizing impacts to federal state-owned or tribal-owned lands. And then in the infrastructure impacts category, making sure that we optimized any clearances from existing infrastructure such as bridges, culverts, any oil and gas infrastructure, along the route, as well as telecommunication towers and wind turbines for any wind farms that may already exist in the right-of-way. And now I will turn it over to Natalie Borrelli. Thank you.

N Natalie Borrelli 19:35

Good afternoon, everyone. My name is Natalie Borrelli and I am the engineer overseeing the transmission line engineering. I'll be providing for you this evening. A brief overview of a few of the engineering aspects of the project, the electric system, design of the transmission line and then some typical construction activities that can be expected. First, let's take a look brief look at the electric system and how power is moved through the system power is generated at the plant, whether it be a nuclear power plant or a solar site or a wind farm and it is transmitted via transmission power lines to the substation or high voltage power is stepped down to a lower voltage. This lower voltage is then distributed to over distribution power lines to neighborhood businesses and residences and ultimately into your homes. This project here is focused on the installation of the transmission power line between Wolf Creek substation and the Blackberry substation. Now a little bit about the engineering design aspects of the line. The transmission power line will use mostly monopole structures shown in the in the picture to the left there. This project will not use lattice type or H frame structures that you might be more familiar with. The monopole structure has a slim profile that minimizes the visual and agricultural impacts and also minimizes tree clearing requirements. The powerline consists of three phases arranged in a triangular configuration and each phase will have two or twin bundle conductors. The structures will be predominantly concrete poles, there will be some steel poles where the design strength or height might warrant it. And structures that are an average of 110 feet tall above the ground line with a ground line diameter of about four and a half feet and the structures are spaced on average about 900 feet. The optical ground wire or OPGW will be installed at the top of the pole and this OPGW provides for lightning protection as well as for communication. The typical structure foundation includes direct embedment of the poles and that will be back filled with crushed rock or concrete. Some of the poles will be supported by guy wires and others will be installed on top of drilled shaft foundations. Next, a little bit about construction activities. As always, and especially from a construction standpoint, safety is a top priority for NEET. As such the line will be built using experienced qualified contractors with the same mindset on safety and having the same safety records that having the safety records that will demonstrate that we will meet and work with landowners to minimize disturbances to their properties while conducting the construction activities like right-of-way clearing, installing structures and foundations and wires that make up the transmission line. And then also performing cleanup and restoration of the right of way. Now I'll turn it over to David Alger.

D David Alger 23:34

Thank you Natalie. And good afternoon everyone. My name is David Alger. I'm a project manager here at NextEra Energy Transmission. Thank you for joining today I will cover right-of-way easements, project schedule, and then we'll talk a little bit about operations and

maintenance plan. So a little bit about right-of-way easements, here at NextEra we take the approach by working with landowners early on before the route has been finalized to secure amendable transmission easement options. Upon regulatory approvals from the KCC and the Missouri Public Service Commission. And after incorporating landowner feedback, we will finalize the purchase of those easements. During this time we may ask landowners for permission to access properties to conduct surveys, contractors and crews may need access to the property to conduct land survey Cultural and Natural Resources assessments wetland delineations and soil testings and we will work with landowners on an ongoing basis throughout the construction cleanup phase of the project and beyond. So from a project schedule standpoint, we are seeking to have all regulatory approvals by the end of this year. Right now we have right-of-way acquisition, design, engineering and as well as environmental permitting are all underway now. And we expect those items to wrap up in the middle of 2023. Ordering and delivery of materials will be occurring in the procurement stage. You see, they're following the start of construction in the fall of 2023, which will continue through q4 of 2024. And this will lead us to the commissioning stage of the line, which we are aiming to have the project put into service January 1 of 2025. So after the transmission line gets placed into service, the project then gets handed off to our operations and maintenance team where we focus on reliability and safety of the transmission line. Here at NextEra, we have a state of the art operations facility where we can monitor the transmission line on a 24 hour basis. From time to time, inspections and maintenance will be needed to ensure the safe and reliable operation of the line. With that we have over 70 technical staff and locations near the project location with one that's 30 minute drive of the project bid point. We will also give landowners notice before accessing the right-of-way to perform scheduled maintenance. But in the unlikelihood of emergency we will deploy local crews immediately to ensure the safety has been resolved of any issues. And with that, I will hand it back over to Marcos for the q&a session. Thank you.

M Marcos Mora 26:41

All right. Thank you, David. Thank you, Natalie. So we would like to, you know, at this point, take your questions, if you could please, once again see the information on the screen for the questions in this live session, please send those and submit those through the live chat. We will go through those here today in the session. And if you would rather us getting back to you individually, on a one-on-one basis or if you have questions today, you submit them in the live chat and then come up with other questions that come to mind later, please feel free to submit them through any one of these three channels: the hotline is 620-205-2051, our email address is neetsw@nexteraenergy.com, or our project website, which is nexteraenergytransmision.com/subsidiaries/neetsw.html. For questions to be brought up in this session, again, we'll be pulling any questions that you submit through the live chat and we will pull from those from the queue of questions from there and address those during the session at this moment.

M Marcos Mora 28:12

Let's take a look at the chat and we see a first question come in. So that question says: Where can I find a detailed map showing where the transmission line will be constructed? So the the map that we shared today in this presentation will also be available on the project website, which will give you the opportunity to see it in a little bit more detail. However, because it's a 94-mile long line we understand that if you want or need more detail, or if you want to confirm

where the line is exactly, relative to your property and if your property is affected by the proposed route, what we would ask is that you please send us a request or just an email communication or, again, through any one of our communication channels with your information and your address or the address of your property and we'll be able to return your message and get back in touch with you within two business days to provide more detailed mapping information as well as, you know, if your property is affected by the route or not.

M Marcos Mora 29:42

I see, also, a very similar question: Can you show a more blown up map of Anderson County, Kansas? So we don't have here in this presentation that map available and we would like to do more detailed communication with the property. So, in terms of where your property is, we can show you exactly where the route is relative to your property if you can, again please submit that request through our email and we'll get back to you with that more precise information.

M Marcos Mora 30:32

Okay, see have another question coming through let me see this here for a minute. See, it's coming. Okay, so let's see the question says, Can you please explain the need for mortgage rights? So, Collin, I will maybe ask for your help on this question. If you happen to know the answer to this. So, let me repeat the question. It is: Can you please explain the need for mortgage rights? I'm assuming this relates to land and land easements. Alright, don't think Collin's mic is working. Collin you might be on mute or might be having audio issues. Alright, let's table this one for a minute so Collin can chime in. So we'll come back to this question.

M Marcos Mora 31:58

The next one is: If a landowner signs the agreement, can the landowner build a fence around the perimeter of their property? So, David, would you mind taking this one?

D David Alger 32:18

Sure. Thank you, Marcos. Of course, yes, you will be able to build a fence around the perimeter, we may need to install a fence at the right-of-way entrance, just so that we can get in and do line maintenance. But yes, you will be able to continue to build a fence around the perimeter.

M Marcos Mora 32:40

Thanks. Okay. Great. Thank you, David. Okay, next question to see in the queue: Are there any regulations around hunting in or through the easement? So, David or James, I guess, since this is more of like an ongoing. Is this something you know the answer to? Or Kim, I think you might have some experience in this arena as well?

K Kim Austin 33:13

Kim Austin 33:13

Yes, thank you, Marcos. And thank you for the question. To repeat the question: Are there any regulations around hunting in or through the easement? The easement and the right-of-way, there are no regulations that prevent the landowner from going back to original land use. So hunting would not be prevented in the easement. And if there is maintenance or operation work that needs to be done, that would be coordinated with the landowner to make sure there's no conflict with hunting. Same with surveyors.

M Marcos Mora 34:01

Okay. Very good. Thank you, Kim. Alright, let's see another question coming through. The question is, and Natalie I'm thinking this might be a construction-related question. So, what ground activities will take place within the 150-foot right-of-way during construction? And in the future? For example, if the line happens to occur over a tree line, will the trees be removed and maintained permanently?

N Natalie Borrelli 34:37

Yeah, Marcos, I'll answer that one. During construction, one of the first activities you might see is the preparation of the right-of-way and that'll include tree clearing, staking pole locations and the edges of the right away. During installation of the poles, you'll probably see various types of vehicles: trucks delivering poles. auger trucks, they're digging holes, concrete trucks if there are drill shaft foundations, and cranes to install the poles in the holes. And then of course, during restoration activities, you might notice folks cleaning up the soil that is removed from the hole, perhaps flattening out ruts that have been made during construction activities. We would return the right-of-way back to as close as possible or better to the conditions that they were before. For future, yes, we would need to maintain that right-of-way, clear it of trees to ensure that we maintain minimum clearance requirements in accordance with the National Electric Safety Code.

M Marcos Mora 36:03

Thank you, Natalie. Alright, see you next question. The question reads: It was said that the cost savings for the first year were $23.7 million. How many users is this based upon? So this number is was estimated based on the SPP calculations for the benefits of the project. So the way SPP looks at this is just from more from a regional standpoint. I don't know that they look at a specific number of users. That is certainly something that we can we can research some more and coordinate with SPP to understand if there is a specific number of users that feeds into that calculation. But I believe they do it more at a bulk level based on regional consumption. And by increasing the availability and reducing the congestion that drives down the overall cost of energy. That's how I believe they calculate and estimate the benefits and the savings for the project.

M Marcos Mora 37:37

Okay, see another question coming in and that is: What are the township and section numbers the transmission line will cross in Allen County? I don't know if we happen to have that. Collin, I

don't know if your audio issues were addressed. I don't know if you can chime in and let me know. If I don't hear from you, then I'm going to assume that your mic is still having some issues. I believe that is information that our land specialist may have, but if Collin is not available to provide that at this moment, what we will do is we will make sure to take this question and if you could please just make sure that you provide us your contact information and we can provide you the detailed answer for that with the section numbers that the transmission line will cross in Allen County.

C Collin Constantin 38:47

Marcos, my mic is working now. I was gonna provide the same answer as you. I don't know that off the top of my head, but we'd be happy to provide property specific information if somebody just wants to email us.

M Marcos Mora 39:02

Okay. Okay. All right. So, yes, if you believe you submitted this question, if you could please just send us your contact information, we'll make sure to get you the response. And then Collin, I guess let's take advantage of your mic working. I don't know if you had a chance to listen to that earlier question that dealt with a mortgage rights. So if there's a need for mortgage rights and I'm assuming the question ties back to land, but I don't know if you're familiar with this term or not?

C Collin Constantin 39:39

I'm not sure exactly what they're asking, but I think what they're asking is: Why do we need mortgage rights? I guess the answer would be because we need the ability to assign our interests in the property or encumber them just like you would mortgage your own home and so we buy the easements. I think that they're referring to the portion of the easement that discusses our assignment rights and our mortgage rights. If they have any more specific questions, I'd be glad to answer them in more detail. They just need to get in touch with us.

M Marcos Mora 40:10

Yep. Okay. Thank you, Collin. So yeah, hopefully that answered the question. But if not, if you submitted this question again, please, feel free to send us a follow up note with that, and we'll make sure to get a more detailed response to the to the mortgage rights question if that wasn't exactly what, what you're asking. All right, thank you, Collin.

M Marcos Mora 40:48

Okay, there's a question come up: Wolf Creek is only supposed to be permitted until 2040 or 2045. The Waverly Wind Farm is already seven years into its 15 year cycle. Why are we doing all this now? So, I'll take this one. And obviously, I'll speak to my understanding of the process that SPP follows to derive the need for the project. And when when they're looking at the region

they're looking at the increasing cost of energy, they're looking at local zone pricing, a number of factors. And in this case, it's typically a 40-year economic valuation. So when they perform that analysis and they anticipate that the Wolf Creek generating facility will be there for a sufficient period of time, that will still make the project viable. So, in this instance, if the Wolf Creek to Blackberry generating facility, which initially will provide most of the additional incremental energy that's going to flow through this line, if at some point after let's say 2045 the Wolf Creek facility were to no longer provide that energy, the line will still remain and generally those generating sites become an injection point for any other source of local energy. So, the line would still be able to serve and provide that channel that will that will address the congestion concern. But again, normally, what the way SPP is looking at these studies, is they're ensuring that over a period of at least 40 years, that the project is beneficial from an from an economic standpoint to customers.

M Marcos Mora 43:07

Alright. Let's see another question coming in. And the question is: Is it anticipated or planned to allow joint-use or possible underbuild? Natalie, would you mind taking this one, please?

N Natalie Borrelli 43:24

Yeah, I'll take that one. Marcos, thank you. This route is predominantly cross-country, greenfield. So, where we will probably be crossing existing distribution lines I don't anticipate us actually underbuilding distribution lines on our on our poles or joint use.

M Marcos Mora 43:53

Yep. Thank you, Natalie. That's correct. There are no plans for either of those scenarios at this time. Okay, see another question coming through, and I'm thinking Natalie it may be for you as well. The question is: I'm wondering if WiFi and personal health will be affected by having these lines close to our homes?

N Natalie Borrelli 44:18

Okay, I think what you might be referring to is electric and magnetic fields or EMF with this question. EMFs can be found everywhere, especially where electricity is used, you know, including inside your house, cell phones, hair dryers, microwave ovens, that type of thing. There are no health standards relating to EMF that have been established on a state or federal level. And our company monitors studies that are conducted related to health effects from EMF. The scientific community has studied this issue, but they haven't found a definitive link yet between exposure to magnetic fields and increased risk of any disease.

M Marcos Mora 45:25

Okay, very good. Thank you, Natalie.

M Marcos Mora 45:30

Okay, see another question coming through. The question says: How much taxes do you pay to Crawford County? So I'll take this one. So the the estimate for the calculation for taxes and property taxes to be paid by the project. Those have been calculated at the state level, we can certainly take it a level deeper and calculate those or estimate those at the county level. So, we can certainly do that calculation. If you submitted that question, if you can, make sure that we have your contact information. We can provide you that calculation. What we have at this moment is at a state level, not at a county level. I can tell you just more just, you know, kind of at a high level, right, typically the way that those numbers are calculated is based on the mileage and understanding the tax rates, both by the state and by each county. A general kind of back of the napkin estimate, right, if you consider that the state of Kansas will receive approximately $28 million over 40 years in property taxes and, you know, if we know the percentage of the miles for the total project that will be in Crawford County, then we can roughly get a get a high level number of what percentage that is out of the 28 million that will be in Crawford County. But again, to give you a more correct and precise estimate, or calculation, of what those taxes will be, please give us your contact information. And we'll be able to give you that as I don't have it with me at this moment.

M Marcos Mora 47:46

Okay. I see another question coming through: Are the easements a one-time payment or an annual payment? David, maybe I'll send this one over to you, if you don't mind helping me out with this one.

D David Alger 48:08

Sure, thank you, Marcos. Are the easements a one-time payment or an annual payment? NextEra, for a transmission easement, we will pay a one-time payment to purchase that easement from the landowner. It won't be an annual lease.

M Marcos Mora 48:31

Okay, yep. Thank you, David. There was also a very similar question that just came through, asking: Will there be annual lease payments in addition to the initial easement purchase? And I guess, you know, correct me if I'm wrong, but I guess based on what you just said, it's a one time initial easement purchase, and it will not be a an annual lease setup.

M Marcos Mora 49:01

I see another question coming through: Do you sell any part of this 150-foot easement to any other companies? For example, a gas line company? So, James, maybe you can help me with this. Is this something that maybe you might deal with more frequently on an ongoing

operations and maintenance standpoint? I'll start by saying I don't believe that we do. I mean, we typically need the 150-foot easement in order to to ensure operations and maintenance capabilities, but if you don't mind maybe providing an answer to that.

M Marcos Mora 49:56

Let's see, James, you might be muted or your mic be might be delayed.

M Marcos Mora 50:15

All right, well, let's table that, but I do believe that's our answer. I don't think we would be selling any part of the easement for any particular reason to make sure that there's the proper access for operations and maintenance, but I'll get confirmation on that answer and provide the response.

M Marcos Mora 50:56

All right, I see a question: If a landowner were to take the option payment, instead of the one-time payment, how long would the option payments be made? So, Collin, if your mic is still good maybe you can help us out with this question. I'm thinking that the way I read the question, there maybe a little bit of confusion between the land option payments and the actual easement purchase. Maybe if you can clarify that. And I believe that clarifying that will answer the question. If Collin's mic is not working, then, maybe, David, would you mind taking a stab at that?

D David Alger 51:51

Yeah, sure. I can cover this one. Thanks, Marcos. So for right now we are pursuing option transmission easements with landowners. The option payments are yearly, so we will pay landowners a yearly fee for that option. And then upon us executing that option, we will pay you a lump sum for the acreage and fair market value for that right-of-way.

M Marcos Mora 52:26

Yep, thank you, David. So I guess a you know, another way I think of saying that, too, I'm just kind of following your answer, is the option payment is just part of reaching an agreement that will be in place between now and the final execution of the easements. And once that final execution of the easement comes which will be upon receiving regulatory approvals for finalizing the route of the project, that's when we would look to finalize the purchase and then execute that option agreement. So you know, you could expect that the duration of that will probably be basically between now and the end of the year, which is the time we expect to attain regulatory approvals and get ready for our construction activity. So presumably, you know, we think that, second part of that question was how long that option payments would be made? So seems to me like that would be for one year. That sound correct to you, David?

D David Alger 53:39

Yep, that sounds about right. Okay. Thanks, Marcos.

M Marcos Mora 53:43

All right. Thank you. Another question I see coming through: If it is going to cross crop fields, is it going to affect or interfere with GPS signals? So let's see. Natalie, I don't know, is that something that you have dealt with when it comes to the engineering side in terms of line interference with GPS signals?

N Natalie Borrelli 54:16

No, I haven't I have not heard of, of that issue before.

M Marcos Mora 54:21

Yep. Yeah. And so generally transmission lines are, you know, sometimes we were driving by it, and we're driving by them. And I don't think I've experienced any GPS signal failure due to proximity of a transmission lines. So, we can always get some final confirmation on that but I believe the correct answer to that is, no. It should not affect and I'm assuming that maybe if you have GPS-driven equipment, if you have crop equipment that is operated with using GPS coordinates it should not affect the operation of the equipment. If that's more of the reason for the question, if that's the specific part of the question, then the line should not affect the GPS capabilities of any crop equipment.

M Marcos Mora 55:45

Alright, I see a similar question coming through from one before. So there was a question about how much annual tax payments will be made to Crawford County. There's a similar question also to Allen County. So, like I indicated before, we have the annual tax payments bundled at the state level, but we can definitely provide that at the county level. And if you're interested in that, specifically for Allen County, just please make sure that we have your contact information and we can provide you the information here within the next two business days.

M Marcos Mora 56:56

Okay, another question is: How wide will the easements be? So, the easement, the right-of-way are 150-foot wide. So 150 feet is the width of the easement.

M Marcos Mora 57:16

Let's see: Just to clarify, I understand the easement is 150 feet, but how much land would be restricted in use?

restricted in use?

D David Alger 57:29

I think I understand what they're asking.

M Marcos Mora 57:33

Go ahead.

D David Alger 57:36

So within 150-foot right-of-way, landowners will be able to continue to plant crops and graze with cattle. For building of structures that might be prohibited underneath the line, such as buildings or structures of that nature, but you will still be able to utilize your land for farming. Just make sure that you contact us and let us know what what you intend to be planting.

M Marcos Mora 58:16

Okay, I understand now. Thank you, David. Okay, see another question. And Natalie, maybe this might be one you can help with? Do the transmission lines give off any auditory vibrations? Right. So in other words, I guess that kind of humming noise that sometimes you can hear through the ultra-high voltage transmission lines.

N Natalie Borrelli 58:56

You might hear some buzzing, which might occur on this line. I think when on the higher voltage lines such as this, which is 345kV, you may hear some buzzing.

M Marcos Mora 59:17

Okay, thank you, Natalie. Another question: What happens if a landowner does not agree to allow this project across their land? So, Tracy, I'm thinking this one you be able to help us with? So again, the question is: What happens if a landowner does not agree to allow this project across their land?

T Tracy Davis 59:45

Sure, Marcos, thanks for that question. So, yeah, I mean, as you've mentioned in your discussion, you know, our goal is to really be a good partner. We're going to be here for quite a long time in the area and we want to have good collaborative relationships with our landowners and neighbors. So, you know, understanding that there may be some folks that just don't want it on their land. We certainly understand that. So, you know, I think that part of this process is

understanding where landowners are and understanding, you know, feedback that they may have. I think, at the end of the day, you know, this project will be a regulated public utility project. So, you know, once the route is finally approved by the applicable regulatory agencies, the Kansas Corporation Commission and the Missouri Public Service Commission, then, you know, we would have eminent domain authority for the line. That's certainly not our preference to start there, you know, we would hope to, you know, get voluntary agreements with landowners as much as we can before going to that process.

M Marcos Mora 1:00:56

Okay, thank you very much. Thank you, Tracy. Alright, let's see, any questions come through? Let's see what else. Okay, please, go ahead and submit any additional questions you may have.

M Marcos Mora 1:02:11

Okay, I see a question. It says: If I got an invite to the meeting, does this mean that my property is affected by the proposed route? And so I guess I'll provide an answer on that. Not necessarily. If you received an invite its because you are in the project area. If you are in in the state of Kansas, you more than likely live within 1000 feet of the proposed route of the project. If you are in Missouri, you more likely live within 300 feet of the project. And those are just, you know, thresholds that each state has for notifications. And so that's why you received an invite. It doesn't necessarily mean that your property is affected by the proposed route. It just means you fell within the distance from the project for the purpose of notifications and invitations. So, in order to know if your property is specifically affected by the route, please, send us a request through email or leave us a message through the website with your property address/your property location and we can give you exact information on whether your property is, in fact, affected by the project or not.

M Marcos Mora 1:04:00

All right, let's see. I have another question coming in: Of the 94 miles, roughly what percentages of the proposed route are greenfield or are utilizing existing right-of-ways with current facilities installed? And so, this route will have its own right-of-way for the entirety of the route. So when we say 150-foot wide, it is for the entire 94-mile route. So within the context of the question, I guess the answer is the entire route will be greenfield because we will not be utilizing any existing right-of-way or sharing any existing right-of-way with current facilities. What this line does... I'll go back and have to go back to my notes. But I know we're we're somewhere around in the 20-some percent of paralleling existing facilities and that has a lower impact to greenfield if you're just paralleling any existing facility, instead of just going through an entirely separate right-of-way. However, even when this route or this line will be paralleling any existing lines, it will do so in its own separate 150-foot wide tract.

M Marcos Mora 1:05:54

Okay, another question just came in. James, you might be the ideal person for this one I think since I believe it happens more during the operations and maintenance. So the question is: If there is crop damage at a later date, while doing maintenance in the easement area, will

damages be paid? I know, James, you were experiencing some some audio issues earlier. So if that is still the case? David, maybe?

D David Alger 1:06:40

Yep. Sure. And that is a great question. I know for a fact that for crop damages will be paid anytime crops are lost or damaged due to a result of our use of the property up to a single total crop loss of any particular year. I will have to get back with you on after the transmission line is in service. Will they still be paid for crops planted underneath the transmission line? And I want to say yes, but if you can leave your you can send us a request, we will get back to you with an exact answer.

M Marcos Mora 1:07:29

Okay. It is a good question, right? Because I think it's pretty, pretty straightforward. Definitely yes, during construction, but once the easement is acquired, you know, on an ongoing basis, how does that work? So, yes, definitely appreciate the question. And thanks, David, for that. And if you submitted the question, please make sure that we have your contact information so that we can give you the final confirmation for how that works in terms of an ongoing basis, just during regular maintenance work.

M Marcos Mora 1:08:15

Okay. Okay, let's see. Next question: Will there be stability issues setting poles in mined land that exists in Crawford County? So, Kim, you may have some experience here to assist with this question. I'll repeat it. The question reads: Will there be stability issues, setting poles in mined land that exists in Crawford County?

K Kim Austin 1:08:50

Yes, thank you, Marcos. I can take the question. So what we did with this route was we avoided mined lands to the extent possible. So at this time, we do not have poles sitting in mined lands that have been mapped in Crawford County. Therefore avoiding stability issues.

M Marcos Mora 1:09:29

Thank you, Kim. Okay, all right. I see another question: Would you repeat all contact information so that we can follow up with unanswered questions. Sure, let's put the contact information back up, please. Yes, thank you. So you can reach us at once again, our hotline, 620-205-2051, the email address is neetsw@nexteraenergy.com, and the project website is nexteraenergytransmission.com/subsidiaries/neetsw.html.

M Marcos Mora 1:10:54

I know we've gone a few minutes over but I think it's it's worth the time to answer any questions you may have. So if anything else is coming to mind, we're definitely willing to keep this going]if there are any other additional questions right now. Like I mentioned before, after this meeting if there's any other questions that you think of, please feel to submit them through any of these and within two business days we'll do our best to have a response for you and address any concerns that you may have.

M Marcos Mora 1:12:35

Okay, still no new questions yet. All right, well, it seems like there's no additional questions coming through the queue. So maybe that's the indication to wrap up. Again, I know I've said it, it may sound like a broken record, but if any other questions come to mind, please, please, let us know what those are. Reach out to us through any of the three avenues on the screen. And and we will circle back with you. But as of right now, no additional questions are coming through. So it appears that we might be reaching the end of today's session. So I will then proceed to close it out. Thank you all for your time. I think that this is very important to us and for the success of the project and so we appreciate your time, your interest in the project. We look forward to working with you in the future. Thank you very much and have a good evening.

Source	Type	Identity	Timestamp	Content
Moderator	Announcement	Nettels, Sarah C (scnettels@burns	3/22/2022 9:37	Welcome to our virtual open house event! The presentation will begin shortly
Attendee	Question	Homesteader (Unverified)	3/22/2022 10:12	can the landowners get a full map of the proposed line?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:13	Will eminent domain be used to acquire right of way for this project?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:22	When will construction on this project begin?
Attendee	Question	Homesteader (Unverified)	3/22/2022 10:22	will there be any additional land purchased for facilities, offices or laydown yards?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:23	What if I do not want another power line on my property?
Attendee	Question	JIm A (Unverified)	3/22/2022 10:23	Will survey crews contct land owners for consultation and discussion?
Attendee	Question	Homesteader (Unverified)	3/22/2022 10:23	what impact do you see on previous projects that these lines impact the landowners property value?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:23	Will damages be paid to landowners based on the crop planted or grassland damaged due to routine or emergency maintanence operations?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:23	Will landowners have the opportunity to work with NextEra to clear the own land and be compensated for such?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:24	What if I think the power line will be too close to my home?
Attendee	Response	Anonymous (Unverified)	3/22/2022 10:24	*their own land...(Will landowners have the opportunity to work with NextEra to clear the own land and be compensated for such?)
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:25	Can you post the web address for the project website?
Attendee	Question	Bob Davis (Unverified)	3/22/2022 10:25	I have WCNOC power lines crossing my property now. Are your lines using the same easement or sharing these lines??
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:26	Do you know about how many landowners will be affected in Allen County?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:29	I am in the design process of a large shop, a cabin and a large lake to begin in the next 6-12 months. The lines are going right through the middle. What do I do now?
Moderator	Response	Sumpter, Hanna (hsumpter@burn	3/22/2022 10:31	Thank you for your question! If you could provide us with your address and/or contact information we will have a project representative reach out to discuss this in more detail.(What if I do not want another power line on my property?)
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:31	Is there any regulation on how close the lines can be to a structure?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:34	Are there any health concerns with high voltage powerlines that are close the homes.
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:34	Who pays the property taxes on lines/poles and will landowners have to pay anything additional then we currently pay
Moderator	Response	Sumpter, Hanna (hsumpter@burn	3/22/2022 10:36	https://www.nexteraenergytransmission.com/subsidiaries/neetsw.html(Can you post the web address for the project website?)
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:36	I am in the design process of a large shop, a cabin and a large lake to begin construction in the next 6-12 months. I bought this property for the picturesque view and to build my retirement home. What do I do now???
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:38	Will all landowners be paid the same per acre for right of way or might it vary?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:38	What company will own these lines once the project is completed
Attendee	Question	Bob Davis (Unverified)	3/22/2022 10:39	Is there an automated map that can used to zoom in on the proposed route?
Moderator	Response	Sumpter, Hanna (hsumpter@burn	3/22/2022 10:40	Thank you for your question! If you could provide us with your address and/or contact information we will have a project representative reach out within 2 business days to discuss this in more detail.(I am in the design process of a large shop, a cabin and a large lake to begin in the next 6-12 months. The lines are going right through the middle. What do I do now?)
Attendee	Question	Homesteader (Unverified)	3/22/2022 10:44	to confirm....the developer pays the property tax on the ROW acreage once its in commission?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:45	What is the anticipated annual tax revenue to be realized by Coffey County?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:45	Where does the proposed line inter the state of Kansas?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:45	Can farmers farm up to, around and under the poles/lines? How close can trees be planted to poles/lines to hide them from site?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:46	What is the anticipated serviceable lifespan of the proposed transmission line?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:51	You talked about the number of landowners in Allen County, but can you share the impacted numbers in each of the counties?
Moderator	Response	Sumpter, Hanna (hsumpter@burn	3/22/2022 10:52	Please share your contact information with us and we'll be happy to get back to you with more information on this!(What is the anticipated annual tax revenue to be realized by Coffey County?)
Attendee	Question	JIm A (Unverified)	3/22/2022 10:52	Is the ROW going to be gravel pathway or open ground?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:53	Since path isn't final what's the likely hood of changes to the path and the magnitude of the line shift?
Attendee	Question	Anonymous (Unverified)	3/22/2022 10:56	Will fences be disrupted during the construction phase?
Attendee	Question	Anonymous (Unverified)	3/22/2022 11:01	Would there be any issues with crop dusting under the high voltage lines?

Wolf Creek-Blackberry Public Meeting - Morning Session Q&A

M Marcos Mora

So, let's then proceed with taking a look at the queue and seeing if there are any questions and we will proceed with answering them as they come in. Alright, so a we see a first question in the queue. The question is: Can the landowners get a full map of the the proposed route? The answer is yes, we do have the map that was shown in this presentation on the project website. So that that's one way to get that map. If you want more detailed information about the route and where it is relative to your property, then please send us an email, call us, or submit a request through our project website and one of our team members will get back to you within two business days to make sure that we can provide any more detailed information that you may may require. Okay, let's see. Another question? Yes. There's a second question on the queue. Will eminent domain be used to acquire right-of-way for this project? So, Tracy, if you don't mind taking this question, please?

T Tracy Davis

Sure, Marcos. Good morning. My name is Tracy Davis. I'm senior counsel for NextEra, working on this project. Yeah, as Marcos and David mentioned in the discussion, our first priority is to work closely with landowners. So, our preference is to acquire land voluntarily as much as possible. That is easier for us, it is better for us, we want to be good neighbors and establish good relationships with landowners for the life of the project, because we're going to be in this area for a long time. So, you know, starting that process off with eminent domain is a little bit of a challenge. You know, so our preference is definitely to obtain land voluntarily, as much as we can. That being said, at the end of the day, this will be a regulated public utility transmission line. And that'll be approved by the the Kansas Corporation Commission and the Missouri Public Service Commission. Once we do have those approved routes, you know, to the

extent that we can't get voluntary agreement from landowners, then, yes, we would have eminent domain authority. But as I said, you know, that is not our first preference, our first preference is to work closely with landowners. And if we need to, you know, make small adjustments here and there, you know, that is our goal. Hopefully that answers that question.

M Marcos Mora

Yes, thank you, Tracy. Okay, next question: When will construction on the project begin? So, David, if you don't mind answering that one, please?

D David Alger

Sure. Thank you, Marcos. We are aiming to start construction November 1st of 2023.

M Marcos Mora

All right, thank you, David. See another question coming through the queue: Will there be any additional land purchased for facilities, offices, or laydown yards? So I'll take that one. So the answer is yes, there are plans to utilize laydown yards. We will not necessarily be looking to purchase those. The goal is to use them only during construction and then once construction is complete they can go back to whatever used to let the landowner has for those areas. But we will be seeking some temporary use and land option agreements to utilize those areas.

M Marcos Mora

Let's see, another question. So, What if I don't want another power line on my property? It's a good question. Obviously, there's always a concern if there are already existing lines on the property and adding another line. It's a pretty common concern when that's the case. So what I would say is, let's maybe first look at the specifics of where the line is relative to your property. So again, if you have a concern, if you could please submit that to us with your address, so that we can look at the specifics of the location and then properly understand your concern and see what what we can do about it. Generally, you know, we will do our best to address any concerns that landowners may have as far as the line not being on their property, if that's a concern, to try and reach some agreement that is mutually beneficial. If that effort fails, then you know, there's always depending on on the proximity of of the line to the property line, there may be an opportunity to shift the line off of the property if that's something that can be done reasonably within the cost because obviously, there's an impact of cost that customers have to bear when with any changes of that nature, but that doesn't mean that it's not possible. It just requires further analysis and review to understand what can be done. So again, if that's a very specific concern that you may have, please send us your information with the address so we can circle back and and talk more specifics about the location.

M Marcos Mora

Alright. Let's see, other questions. I have another question coming in. The question is: Will survey crews contact landowners for consultation and discussion? David, I'm thinking you could

survey crews contact landowners for consultation and discussion? David, I'm thinking you could take that one?

D David Alger

Yes, of course, we will definitely make sure we are coordinating with landowners and have them in our discussions prior to any surveys. So we will have our land agents work with you and the surveyors to make sure we have permission to access your properties before any survey crews are out in the field.

M Marcos Mora

Okay, thank you, David. Alright, let's see. another question: What impact do you see on previous projects that these lines impact the landowners' property value? So Collin I'm thinking you might be best equipped to answer this one. So I'll repeat the question. What impact do you see on previous projects that these lines impact the landowners' property value?

D David Alger

Marcos, I can take this one too, if Collin's having some trouble with audio. There's a multitude of studies on this topic. It is NextEra's goal to compensate landowners fairly in order to reduce or negate any potential adverse impacts to their properties. We will keep that in mind working with you all.

M Marcos Mora

Okay, thank you, David. All right. Next question is: Will damages be paid to landowners based on the crop planted or grassland damage due to routine or emergency maintenance operations? So, David, maybe you can help with this one as well. I'll repeat the question. Will damages be paid to landowners based on the crop planted or grassland damage due to routine or emergency maintenance operations?

D David Alger

Yes, crop damages will be paid anytime crops are damaged or lost as a result of our use of the property for a total crop loss in one crop year. We will get prices from the Chicago Board of Trade to see how much the prices are for your crops and we will make sure we pay landowners for any damage based on the unit yield per acre and the price.

M Marcos Mora

Okay, very good. Thank you, David. Okay, I see another question here: What if I think the power line will be too close to my home? So I'll take that. So generally throughout the routing considerations we make sure that there are, first of all, no structures within the right-of-way so

that the route is not, you know, there's no homes that are directly impacted by the line right-of-way itself. In addition to that, when it comes to habitable infrastructure, residences, we make sure that or we do our best to try and keep those, whenever possible, at least 300 feet away from the line. We don't believe we have any concerns of that nature throughout this proposed route. But then again, if you want, you know, to confirm this and where the line is relative to your home specifically, we can review that with you one-on-one, directly, if you can submit a request through our hotline, email, or our website, and we can get into the specifics of where you're at, your home, residences, relative to the line to make sure that you're comfortable with the distance.

M Marcos Mora

I see the next question. Natalie, I think I'll need your help with this one. So the question is: Will landowners have the opportunity to work with NextEra to clear their own land and be compensated for such? I'll repeat the question, will landowners have the opportunity to work with NextEra to clear their own land and be compensated for such when it comes to construction and when getting ready to clear for construction?

N Natalie Borrelli

Right. Thanks, Marcos. I think NextEra typically, we use our own contractors for clearing the right-of-way for safety reasons, as well as, there's certain standards that have to be met when you're clearing the right-of-way. So typically, it would be the contractor that we hire to do that.

M Marcos Mora

Okay. Thank you, Natalie. Okay, next question is: Can you post the web address for the project website? So, if we could put that back up on the screen? Yes, thank you. So, there it is. On the screen, the project website is nexteraenergytransmission.com/subsidiaries/neetsw.html. A recorded version of this presentation will be uploaded to the website. So again, nexteraenergytransmission.com/subsidiaries/neetsw.html.

M Marcos Mora

I see another question. It says: I have other power lines crossing my property now are your lines using the same easement or sharing these lines? So I'll take that one. The answer is no. This line will have its own easements, even when it may be paralleling an existing transmission line. It will not share easements with existing transmission lines. So it will be having its own as well as you know, the line itself will be not being shared. It is its own separate line.

M Marcos Mora

Okay. Let's see. Next question. Let me catch up here with the queue. Do you know about how many landowners will be affected in Allen County? So yes, we do know that. I'm sure we can pull that up here quickly. Collin, I don't know if you can help me out with that. Just pulling up

the numbers?

D David Alger

I have it here, Marcos.

M Marcos Mora

Oh, you have it David? Okay, great.

D David Alger

Yeah. In Allen County we expect there to be a little bit under 16 landowners affected in Allen County. But because the alignment has not been finalized, the number can change.

M Marcos Mora

Thank you. Okay. Very good. Next question: I am in the design process of a large shop, a cabin to begin in the next six to 12 months. The lines are going right through the middle. What do I do now? So I think, let's have a detailed conversation to understand the plans and the timing. Let's see what the what the impact is and then we can figure things out from there. So, I would say, again, if you could please send us your information with your address and we will contact you within two business days to go through in more detail about that specific situation and then come up with a plan. Obviously, a plan that's mutually beneficial.

M Marcos Mora

All right, let me see other questions. There's a question coming in: Is there any regulation on how close the lines can be to a structure? So, generally...

N Natalie Borrelli

I'm sorry, Marcus, I could take that on. We do have minimum clearance requirements that's governed by the National Electric Safety Code that we are bound to conform to. The structures being in that 150-foot right-of-way will ensure that we make those those minimum clearance requirements.

M Marcos Mora

Okay, very good. Thank you, Natalie. And then I think there's another question here coming up that I think you might be the best one for it as well. So the question is: Are there any health concerns with high voltage power lines that are close to homes? I think this one might deal with EMF.

N Natalie Borrelli

Sure, yeah. I think that might be referring to electric and magnetic fields or EMF. EMF is found everywhere, especially where electricity is used, in household items, cell phones, hair dryers, that type of thing. There are no health standards relating to EMF that had been established either on a state or federal level. Our company monitors studies that are conducted related to any health effects from EMF. The scientific community has studied this and they have not found a definitive link between exposure to EMF and any increased risk of any disease.

M Marcos Mora

Okay, thank you, Natalie. Another question coming in: Who pays the property taxes on lines and poles? Will landowners have to pay anything additional than what we currently pay? So I'll take that one. NextEra Energy Transmission, when we become the owners of the easements and the right-of-way, we are responsible for paying the property taxes on on the project itself. So, entirely, including lines poles, and everything belongs to the project. Having the project go through your property will not cause any any tax burden or any other additional payment or cost to the landowner.

M Marcos Mora

Have another question coming in: Will all landowners be paid the same per acre for right-of-way or might it vary? So, Collin, I don't know if maybe your audio is back? Let's give that a try and see maybe if it is then you could help us with that one. If not, David, you might help. I'll cue you up for that one if Collins audio is still not working?

C Collin Constantin

Marcos, I'm here!

M Marcos Mora

Okay, perfect.

C Collin Constantin

All right. Thanks. So landowners will be paid the same if they're in the same general area and the market data in that area is the same. So just like if you buy a house in a different neighborhood, the per acre amounts will differ based upon that. If you need any additional information, if you want to know specifics on your property, please get in touch with the land agent and we'd be happy to give you any more information that you would like.

M Marcos Mora

Okay. Thank you, Collin. Another question coming in: What company will own these lines once the project is completed? NextEra Energy Transmission Southwest is the designated transmission owner for the project and, therefore, will own the lines once the project is complete and we will be responsible for not just constructing it but then you know because we own it we will be operating and maintaining the line. That's been consistent with our approach for all our our assets, our transmission assets, in the United States.

M Marcos Mora

Now, another question I see coming in: Is there an automated map that can be used to zoom in on the proposed route? We don't have that feature at the moment. I think that's something that we'll be looking at doing maybe once we have a more final route. But again, if there's any particular detail that you can't see through the map that we have available now please reach out to us and we can circle back and respond to any specific address or address any specific questions you may have if we need to zoom into any particular section to show where the project is relative to your property and if your property is affected or not.

M Marcos Mora

Okay, just a follow up question to confirm: The developer pays the property tax of the right-of-way acreage once it's in commission? Yes, that is correct. If we own the easement, we pay the property tax on that acreage.

M Marcos Mora

Okay, I see another question coming through: Where does the proposed line enter the state of Kansas? If you're looking at it from the Kansas side and from where the line crosses the border between Kansas and Missouri. Maybe we can pull up the map the map slide, but generally just trying to trying to find an ideal location spot or landmark that we can use. It's coming across on the south east of Pittsburgh right around the Camo Ranch area, a little bit east of that is where the line is crossing the border between Kansas and Missouri. So, going from Crawford County into Barton County and then heading south on to Jasper County to make it to the Blackberry substation. So it's just a few miles southeast of the city of Pittsburgh. It's only a few miles away from that Camo Ranch area where your crossing over the border.

M Marcos Mora

Let's see the questions coming in: Can farmers farm up to, around, and under the poles and lines? How close can trees be planted to poles and lines to hide them from sight? So, David, I'm thinking you can help me with this one. So again, the question is, can farmers farm up to, around, and under the poles and lines? How close can trees be planted to poles and lines to hide them from sight?

D David Alger

Sure, thanks, Marcos. Farmers can farm underneath the poles and the lines. We recommend that you let us know what you intend to be planting. Trees within the right-of-way, which is 150 feet... I would recommend not planting anything within that right-of-way that are trees. They will be able to farm on the ground if you let us know what you intend to plant. Does that help answer your question?

M Marcos Mora

Yes. Thank you, David. I'm just reading through here to see if there's any other questions coming up? Okay, we see a question coming in here: What is the anticipated annual tax revenue to be realized by Coffey County? So I will have to take that back. I know we have the tax revenue estimates at the state level, but I'm sure we can we can figure that out at the county level as well. I don't have that on hand with me to provide an answer right away. But I am going to take that back. So, if we do have your information when you submitted this question, I'll use your email address or your phone number and we'll get back to you on this. If you didn't provide that and you're still interested in getting the answer to this question, please let us know how to reach out to you and I'll be able to get an answer for this.

M Marcos Mora

Alright. Next question I see coming in: What is the anticipated serviceable lifespan of the proposed transmission line? So in other words, what is the maybe like the what the expected service life of the project? So Natalie, do you mind taking this one?

N Natalie Borrelli

Sure. I think typically, concrete pole lines have like an 80-year lifespan?

M Marcos Mora

Yeah, that's correct. From the material experts, based on the materials and components used on this project, this particular project would be expected to have approximately an 80-year service life.

M Marcos Mora

Thank you, Natalie. There's a follow up question about the number of landowners in Allen County: Can you share the impacted numbers in each of the counties? So, David, I don't know if if you have the numbers still in front of you or if you have them for all the counties?

D David Alger

Yeah, sure. So across all seven counties, we have roughly 201 landowners total. I'll start from

Missouri and work our way up.

D David Alger

Jasper County: 7, Barton County: 16, Crawford County: 60, Bourbon: 8, Allen: 58, Anderson: 25, and Coffey County: 27. This number is not exact. The route has not been finalized yet. So, this number can change, but that's roughly what we're looking at.

M Marcos Mora

Yep, thank you David. Next question coming in: Is the right away going to be a gravel pathway or open ground? I'm assuming it might be more of a construction question. So, maybe Natalie?

N Natalie Borrelli

Yeah, I don't think we're, we're not going to gravel or finish the right-of-way. I think it's going to be cleared, but not developed.

M Marcos Mora

Yep. Okay, very good. Thank you. Another question coming in: Since path isn't final, what's the likelihood of changes to the path and the magnitude of the line shift? I'll take this one. So, generally, what we're aiming for, at this point, based on all the work that went into the proposed route, up to this point in the project is that it is as close to final as possible. So at this point, our goal is to just work with landowners to address any, you know, any specific concerns that landowners may have, relative to the route. So maybe the short answer to the question is we're not looking at any major line shifts, but we are definitely working with landowners to make sure that we can address any, you know, specific issues that may drive some minor line shifts and adjustments. Those are certainly ones that... The line is not final, because we understand that there's always going to be some amount of that. But generally, we would be we'd hope that we're not, you know, looking at the need for any major shifts in the route.

M Marcos Mora

Okay, next question: Will fences be disrupted during the construction phase? Natalie, I'll send that over to you.

N Natalie Borrelli

Sure. We may need to to temporarily move fences, if those fences are in, you know, the access

route toward the the pole location, but we will definitely work with landowners you know, to remove and replace those fences.

Marcos Mora

M Yep. And so the goal is, of course, then to restore those to as closest to the original state as possible once construction is completed.

Marcos Mora

M No other questions so far? So let's give it another couple of minutes. Let's see if we get any other last minute questions. You know, again, like I mentioned earlier, if anything comes to mind after the session, please feel free to submit your question through our phone number, our email address or our project website and we'll reply to your requests. Like I said, we're aiming to do that as soon as possible. Within a couple of business days, you should hear back from us with an answer or with a meeting request or something to further the conversation based on the on the task at hand. We're almost at the at the end here then. So we'll just give it another minute in case we get any last minute questions.

Marcos Mora

M Well, seeing that we're done with questions, I think we'll proceed with wrapping it up and closing out the session. Once again, we'd like to thank you very much for your participation and your interest in the project. I look forward to working with landowners in the area and bringing this product to reality here soon. Feel free to reach out to us at any time and we'll be interested in working together going forward. So thank you very much and take care. Have a great day.

Source	Type	Identity	Timestamp	Content
Moderator	Announcer	Nettels, Sarah C (scnettels@burnsmcd.com)	3/22/2022 17:56	Welcome to our virtual open house event! The presentation will begin shortly
Attendee	Question	Anonymous (Unverified)	3/22/2022 17:58	Where can I find a detailed map showing where the transmission line will be constructed?
Attendee	Question	Scott (Unverified)	3/22/2022 18:24	Please explain the need for mortgage rights
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:24	Can you show a more blown up map of Anderson county ks
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:24	If a land owner signs the agreement, can the land owner build a fence around the perimeter of their property?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:25	Are there any regulations around hunting in/thru the easement?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:26	What ground activities will take place within the 150' right of way during construction and in the future? For example; if the line happens to occur over a tree line, will the trees be removed and maintained permanently?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:27	It was said the cost savings was 23.7 million in the first year, how many users is this based upon?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:27	What are the township and sections numbers the transmission line will cross in Allen County?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:27	Wolf Creek is only supposed to be permitted until 2040 - 2045. The Waverly windfarm is already 7 years into it's 15 year cycle. Why are we doing all this now?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:28	Is it anticipated or planned to allow joint use or possible underbuild?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:28	I'm wondering if wi-fi and personal health will be affected by having these lines close to our homes?
Attendee	Question	Mike (Unverified)	3/22/2022 18:29	How much taxes do you pay to Crawford County?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:29	Are the easements a one time fee or an annual payment?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:29	Will there be annual lease payments in addition to the initial easement purchase?
Attendee	Question	Mike (Unverified)	3/22/2022 18:31	Do you sell any part of this 150 ft easement to any other companies...for example a gasline company
Attendee	Question	Scott (Unverified)	3/22/2022 18:31	If a landowner were to take the option payment instead of the one-time payment, how long would the option payments be made?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:31	How much will annual tax payments be to Allen county?
Attendee	Question	Gerald Gr (Unverified)	3/22/2022 18:31	I live on 1800 Rd. between Texas and North Dakota Rd. in Allen County. Your proposed line involves approximately one acre of my 40 ac. tract. The line is planned to go across my driveway, both drainage ditches and between my house and my neighbors house directly across the road. The line would be approximately 100 yards from either house. I have researched the health affects of the lines and know the latest study in Canada showed a 69% increase in Leukemia in children with 200 meters of a house and 23% increase within 600 meters. The line will be across my driveway and I will have to go under every time I enter or leave my home. This line will decrease the value of my home and be a health concern. The line could have went east along Texas Rd and would not be a concern to any of the four home along 1800 rd. Only two vacant houses lay along Texas rd. and only one house along South Dakota. Can the route be changed. I have severe safety concerns and decreased home value.
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:32	How many feet wide will be easements be?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:33	2263
Moderator	Response	Sumpter, Hanna (hsumpter@burnsmcd.com)	3/22/2022 18:35	Thank you for your question! Please share your contact information with us and we will be happy to get back to you.(What are the township and sections numbers the transmission line will cross in Allen County?)
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:40	Do the transmission lines give off any auditory vibrations?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:40	What happens if a landowner does not agree to allow this project across their land?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:44	If it is going to cross crop fields is it going to affect/ interfere with GPS signals
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:44	If I got an invite to the meeting, does this mean my property is affected by the proposed route.
Moderator	Response	Sumpter, Hanna (hsumpter@burnsmcd.com)	3/22/2022 18:44	Thank you for your question. Please share your contact information with us and we'd be happy to get you some more information on this!(Mike (Unverified) asked "How much taxes do you pay to Crawford County?")
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:44	Of the 94 miles, roughly what percentages of the proposed route are greenfield or are utilizing existing ROWs with current facilities installed?
Attendee	Question	Darren (Unverified)	3/22/2022 18:46	If it is going to cross crop fields is it going to affect/ interfere with GPS signals
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:50	Just to clarify my last question I understand the easement is 150 feet, but how much land wound be restricted in use?
Attendee	Response	Scott (Unverified)	3/22/2022 18:50	Thank you(Scott (Unverified) asked "If a landowner were to take the option payment instead of the one-time payment, how long would the option payments be made?")
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:51	If there is crop damage at a later date, doing maintenance, in the easement area- will damages be paid?
Attendee	Question	Anonymous (Unverified)	3/22/2022 18:58	Will there be stability issues setting poles in mined land that exists in Crawford County?
Attendee	Question	Gerald Gray (Unverified)	3/22/2022 18:59	Would you repeat all contact information so we can follow up with unanswered questions.
Attendee	Question	Anonymous (Unverified)	3/22/2022 19:00	Do any of you (the presenters) live under the proposed line
Moderator	Response	Nettels, Sarah C (scnettels@burnsmcd.com)	3/22/2022 19:02	Absolutely, Gerald, and we appreciate your concerns! If you wouldn't mind sending us your name and contact information, we will have a project team member reach out to discuss this further.(Gerald Gr (Unverified) asked "I live on 1800 Rd. between Texas and North Dakota Rd. in Allen County. Your proposed line involves approximately one acre of my 40 ac. tract. The line is planned to go across my driveway, both drainage ditches and between my house and my neighbors house directly across the road. The line would be approximately 100 yards from either house. I have researched the health affects of the lines and know the latest study in Canada showed a 69% increase in Leukemia in children with 200 meters of a house and 23% increase within 600 meters. The line will be across my driveway and I will have to go under every time I enter or leave my home. This line will decrease the value of my home and be a health concern. The line could have went east along Texas Rd and would not be a concern to any of the four home along 1800 rd. Only two vacant houses lay along Texas rd. and only one house along South Dakota. Can the route be changed. I have severe safety concerns and decreased home value. ")
Moderator	Response	Sumpter, Hanna (hsumpter@burnsmcd.com)	3/22/2022 19:04	Thank you for your question! Please share your contact information so we can follow up on this in more detail.(If there is crop damage at a later date, doing maintenance, in the easement area- will damages be paid?)
Attendee	Response	Gerald Gr (Unverified)	3/22/2022 19:04	Gerald Gray, 1747 1800 St. Iola, KS., phone 785-630-1017. email: grays_auction_service@yahoo.com(Gerald Gr (Unverified) asked "I live on 1800 Rd. between Texas and North Dakota Rd. in Allen County. Your proposed line involves approximately one acre of my 40 ac. tract. The line is planned to go across my driveway, both drainage ditches and between my house and my neighbors house directly across the road. The line would be approximately 100 yards from either house. I have researched the health affects of the lines and know the latest study in Canada showed a 69% increase in Leukemia in children with 200 meters of a house and 23% increase within 600 meters. The line will be across my driveway and I will have to go under every time I enter or leave my home. This line will decrease the value of my home and be a health concern. The line could have went east along Texas Rd and would not be a concern to any of the four home along 1800 rd. Only two vacant houses lay along Texas rd. and only one house along South Dakota. Can the route be changed. I have severe safety concerns and decreased home value. ")
Moderator	Response	Nettels, Sarah C (scnettels@burnsmcd.com)	3/22/2022 19:05	Thanks so much!(Gerald Gr (Unverified) asked "I live on 1800 Rd. between Texas and North Dakota Rd. in Allen County. Your proposed line involves approximately one acre of my 40 ac. tract. The line is planned to go across my driveway, both drainage ditches and between my house and my neighbors house directly across the road. The line would be approximately 100 yards from either house. I have researched the health affects of the lines and know the latest study in Canada showed a 69% increase in Leukemia in children with 200 meters of a house and 23% increase within 600 meters. The line will be across my driveway and I will have to go under every time I enter or leave my home. This line will decrease the value of my home and be a health concern. The line could have went east along Texas Rd and would not be a concern to any of the four home along 1800 rd. Only two vacant houses lay along Texas rd. and only one house along South Dakota. Can the route be changed. I have severe safety concerns and decreased home value. ")

Wolf Creek-Blackberry Public Meeting - Evening Session Q&A

M Marcos Mora

Let's take a look at the chat and we see a first question come in. So that question says: Where can I find a detailed map showing where the transmission line will be constructed? So the the map that we shared today in this presentation will also be available on the project website, which will give you the opportunity to see it in a little bit more detail. However, because it's a 94-mile long line we understand that if you want or need more detail, or if you want to confirm where the line is exactly, relative to your property and if your property is affected by the proposed route, what we would ask is that you please send us a request or just an email communication or, again, through any one of our communication channels with your information and your address or the address of your property and we'll be able to return your message and get back in touch with you within two business days to provide more detailed mapping information as well as, you know, if your property is affected by the route or not.

M Marcos Mora

I see, also, a very similar question: Can you show a more blown up map of Anderson County, Kansas? So we don't have here in this presentation that map available and we would like to do more detailed communication with the property. So, in terms of where your property is, we can show you exactly where the route is relative to your property if you can, again please submit that request through our email and we'll get back to you with that more precise information.

M Marcos Mora

Okay, see have another question coming through let me see this here for a minute. See, it's coming. Okay, so let's see the question says, Can you please explain the need for mortgage rights? So, Collin, I will maybe ask for your help on this question. If you happen to know the answer to this. So, let me repeat the question. It is: Can you please explain the need for

mortgage rights? I'm assuming this relates to land and land easements. Alright, don't think Collin's mic is working. Collin you might be on mute or might be having audio issues. Alright, let's table this one for a minute so Collin can chime in. So we'll come back to this question.

M Marcos Mora

The next one is: If a landowner signs the agreement, can the landowner build a fence around the perimeter of their property? So, David, would you mind taking this one?

D David Alger

Sure. Thank you, Marcos. Of course, yes, you will be able to build a fence around the perimeter, we may need to install a fence at the right-of-way entrance, just so that we can get in and do line maintenance. But yes, you will be able to continue to build a fence around the perimeter.

M Marcos Mora

Thanks. Okay. Great. Thank you, David. Okay, next question to see in the queue: Are there any regulations around hunting in or through the easement? So, David or James, I guess, since this is more of like an ongoing. Is this something you know the answer to? Or Kim, I think you might have some experience in this arena as well?

K Kim Austin

Yes, thank you, Marcos. And thank you for the question. To repeat the question: Are there any regulations around hunting in or through the easement? The easement and the right-of-way, there are no regulations that prevent the landowner from going back to original land use. So hunting would not be prevented in the easement. And if there is maintenance or operation work that needs to be done, that would be coordinated with the landowner to make sure there's no conflict with hunting. Same with surveyors.

M Marcos Mora

Okay. Very good. Thank you, Kim. Alright, let's see another question coming through. The question is, and Natalie I'm thinking this might be a construction-related question. So, what ground activities will take place within the 150-foot right-of-way during construction? And in the future? For example, if the line happens to occur over a tree line, will the trees be removed and maintained permanently?

N Natalie Borrelli

Yeah, Marcos, I'll answer that one. During construction, one of the first activities you might see is the preparation of the right-of-way and that'll include tree clearing, staking pole locations and the edges of the right away. During installation of the poles, you'll probably see various types

of vehicles: trucks delivering poles. auger trucks, they're digging holes, concrete trucks if there are drill shaft foundations, and cranes to install the poles in the holes. And then of course, during restoration activities, you might notice folks cleaning up the soil that is removed from the hole, perhaps flattening out ruts that have been made during construction activities. We would return the right-of-way back to as close as possible or better to the conditions that they were before. For future, yes, we would need to maintain that right-of-way, clear it of trees to ensure that we maintain minimum clearance requirements in accordance with the National Electric Safety Code.

M Marcos Mora

Thank you, Natalie. Alright, see you next question. The question reads: It was said that the cost savings for the first year were $23.7 million. How many users is this based upon? So this number is was estimated based on the SPP calculations for the benefits of the project. So the way SPP looks at this is just from more from a regional standpoint. I don't know that they look at a specific number of users. That is certainly something that we can we can research some more and coordinate with SPP to understand if there is a specific number of users that feeds into that calculation. But I believe they do it more at a bulk level based on regional consumption. And by increasing the availability and reducing the congestion that drives down the overall cost of energy. That's how I believe they calculate and estimate the benefits and the savings for the project.

M Marcos Mora

Okay, see another question coming in and that is: What are the township and section numbers the transmission line will cross in Allen County? I don't know if we happen to have that. Collin, I don't know if your audio issues were addressed. I don't know if you can chime in and let me know. If I don't hear from you, then I'm going to assume that your mic is still having some issues. I believe that is information that our land specialist may have, but if Collin is not available to provide that at this moment, what we will do is we will make sure to take this question and if you could please just make sure that you provide us your contact information and we can provide you the detailed answer for that with the section numbers that the transmission line will cross in Allen County.

C Collin Constantin

Marcos, my mic is working now. I was gonna provide the same answer as you. I don't know that off the top of my head, but we'd be happy to provide property specific information if somebody just wants to email us.

M Marcos Mora

Okay. Okay. All right. So, yes, if you believe you submitted this question, if you could please just send us your contact information, we'll make sure to get you the response. And then Collin, I guess let's take advantage of your mic working. I don't know if you had a chance to listen to

that earlier question that dealt with a mortgage rights. So if there's a need for mortgage rights and I'm assuming the question ties back to land, but I don't know if you're familiar with this term or not?

C Collin Constantin

I'm not sure exactly what they're asking, but I think what they're asking is: Why do we need mortgage rights? I guess the answer would be because we need the ability to assign our interests in the property or encumber them just like you would mortgage your own home and so we buy the easements. I think that they're referring to the portion of the easement that discusses our assignment rights and our mortgage rights. If they have any more specific questions, I'd be glad to answer them in more detail. They just need to get in touch with us.

M Marcos Mora

Yep. Okay. Thank you, Collin. So yeah, hopefully that answered the question. But if not, if you submitted this question again, please, feel free to send us a follow up note with that, and we'll make sure to get a more detailed response to the to the mortgage rights question if that wasn't exactly what, what you're asking. All right, thank you, Collin.

M Marcos Mora

Okay, there's a question come up: Wolf Creek is only supposed to be permitted until 2040 or 2045. The Waverly Wind Farm is already seven years into its 15 year cycle. Why are we doing all this now? So, I'll take this one. And obviously, I'll speak to my understanding of the process that SPP follows to derive the need for the project. And when when they're looking at the region they're looking at the increasing cost of energy, they're looking at local zone pricing, a number of factors. And in this case, it's typically a 40-year economic valuation. So when they perform that analysis and they anticipate that the Wolf Creek generating facility will be there for a sufficient period of time, that will still make the project viable. So, in this instance, if the Wolf Creek to Blackberry generating facility, which initially will provide most of the additional incremental energy that's going to flow through this line, if at some point after let's say 2045 the Wolf Creek facility were to no longer provide that energy, the line will still remain and generally those generating sites become an injection point for any other source of local energy. So, the line would still be able to serve and provide that channel that will that will address the congestion concern. But again, normally, what the way SPP is looking at these studies, is they're ensuring that over a period of at least 40 years, that the project is beneficial from an from an economic standpoint to customers.

M Marcos Mora

Alright. Let's see another question coming in. And the question is: Is it anticipated or planned to allow joint-use or possible underbuild? Natalie, would you mind taking this one, please?

N Natalie Borrelli

Yeah, I'll take that one. Marcos, thank you. This route is predominantly cross-country, greenfield. So, where we will probably be crossing existing distribution lines I don't anticipate us actually underbuilding distribution lines on our on our poles or joint use.

M Marcos Mora

Yep. Thank you, Natalie. That's correct. There are no plans for either of those scenarios at this time. Okay, see another question coming through, and I'm thinking Natalie it may be for you as well. The question is: I'm wondering if WiFi and personal health will be affected by having these lines close to our homes?

N Natalie Borrelli

Okay, I think what you might be referring to is electric and magnetic fields or EMF with this question. EMFs can be found everywhere, especially where electricity is used, you know, including inside your house, cell phones, hair dryers, microwave ovens, that type of thing. There are no health standards relating to EMF that have been established on a state or federal level. And our company monitors studies that are conducted related to health effects from EMF. The scientific community has studied this issue, but they haven't found a definitive link yet between exposure to magnetic fields and increased risk of any disease.

M Marcos Mora

Okay, very good. Thank you, Natalie.

M Marcos Mora

Okay, see another question coming through. The question says: How much taxes do you pay to Crawford County? So I'll take this one. So the the estimate for the calculation for taxes and property taxes to be paid by the project. Those have been calculated at the state level, we can certainly take it a level deeper and calculate those or estimate those at the county level. So, we can certainly do that calculation. If you submitted that question, if you can, make sure that we have your contact information. We can provide you that calculation. What we have at this moment is at a state level, not at a county level. I can tell you just more just, you know, kind of at a high level, right, typically the way that those numbers are calculated is based on the mileage and understanding the tax rates, both by the state and by each county. A general kind of back of the napkin estimate, right, if you consider that the state of Kansas will receive approximately $28 million over 40 years in property taxes and, you know, if we know the percentage of the miles for the total project that will be in Crawford County, then we can roughly get a get a high level number of what percentage that is out of the 28 million that will be in Crawford County. But again, to give you a more correct and precise estimate, or calculation, of what those taxes will be, please give us your contact information. And we'll be able to give you that as I don't have it with me at this moment.

M Marcos Mora

Okay. I see another question coming through: Are the easements a one-time payment or an annual payment? David, maybe I'll send this one over to you, if you don't mind helping me out with this one.

D David Alger

Sure, thank you, Marcos. Are the easements a one-time payment or an annual payment? NextEra, for a transmission easement, we will pay a one-time payment to purchase that easement from the landowner. It won't be an annual lease.

M Marcos Mora

Okay, yep. Thank you, David. There was also a very similar question that just came through, asking: Will there be annual lease payments in addition to the initial easement purchase? And I guess, you know, correct me if I'm wrong, but I guess based on what you just said, it's a one time initial easement purchase, and it will not be a an annual lease setup.

M Marcos Mora

I see another question coming through: Do you sell any part of this 150-foot easement to any other companies? For example, a gas line company? So, James, maybe you can help me with this. Is this something that maybe you might deal with more frequently on an ongoing operations and maintenance standpoint? I'll start by saying I don't believe that we do. I mean, we typically need the 150-foot easement in order to to ensure operations and maintenance capabilities, but if you don't mind maybe providing an answer to that.

M Marcos Mora

Let's see, James, you might be muted or your mic be might be delayed.

M Marcos Mora

All right, well, let's table that, but I do believe that's our answer. I don't think we would be selling any part of the easement for any particular reason to make sure that there's the proper access for operations and maintenance, but I'll get confirmation on that answer and provide the response.

M Marcos Mora

All right, I see a question: If a landowner were to take the option payment, instead of the one-time payment, how long would the option payments be made? So, Collin, if your mic is still good maybe you can help us out with this question. I'm thinking that the way I read the

question, there maybe a little bit of confusion between the land option payments and the actual easement purchase. Maybe if you can clarify that. And I believe that clarifying that will answer the question. If Collin's mic is not working, then, maybe, David, would you mind taking a stab at that?

D David Alger

Yeah, sure. I can cover this one. Thanks, Marcos. So for right now we are pursuing option transmission easements with landowners. The option payments are yearly, so we will pay landowners a yearly fee for that option. And then upon us executing that option, we will pay you a lump sum for the acreage and fair market value for that right-of-way.

M Marcos Mora

Yep, thank you, David. So I guess a you know, another way I think of saying that, too, I'm just kind of following your answer, is the option payment is just part of reaching an agreement that will be in place between now and the final execution of the easements. And once that final execution of the easement comes which will be upon receiving regulatory approvals for finalizing the route of the project, that's when we would look to finalize the purchase and then execute that option agreement. So you know, you could expect that the duration of that will probably be basically between now and the end of the year, which is the time we expect to attain regulatory approvals and get ready for our construction activity. So presumably, you know, we think that, second part of that question was how long that option payments would be made? So seems to me like that would be for one year. That sound correct to you, David?

D David Alger

Yep, that sounds about right. Okay. Thanks, Marcos.

M Marcos Mora

All right. Thank you. Another question I see coming through: If it is going to cross crop fields, is it going to affect or interfere with GPS signals? So let's see. Natalie, I don't know, is that something that you have dealt with when it comes to the engineering side in terms of line interference with GPS signals?

N Natalie Borrelli

No, I haven't I have not heard of, of that issue before.

M Marcos Mora

Yep. Yeah. And so generally transmission lines are, you know, sometimes we were driving by it, and we're driving by them. And I don't think I've experienced any GPS signal failure due to

proximity of a transmission lines. So, we can always get some final confirmation on that but I believe the correct answer to that is, no. It should not affect and I'm assuming that maybe if you have GPS-driven equipment, if you have crop equipment that is operated with using GPS coordinates it should not affect the operation of the equipment. If that's more of the reason for the question, if that's the specific part of the question, then the line should not affect the GPS capabilities of any crop equipment.

M Marcos Mora

Alright, I see a similar question coming through from one before. So there was a question about how much annual tax payments will be made to Crawford County. There's a similar question also to Allen County. So, like I indicated before, we have the annual tax payments bundled at the state level, but we can definitely provide that at the county level. And if you're interested in that, specifically for Allen County, just please make sure that we have your contact information and we can provide you the information here within the next two business days.

M Marcos Mora

Okay, another question is: How wide will the easements be? So, the easement, the right-of-way are 150-foot wide. So 150 feet is the width of the easement.

M Marcos Mora

Let's see: Just to clarify, I understand the easement is 150 feet, but how much land would be restricted in use?

D David Alger

I think I understand what they're asking.

M Marcos Mora

Go ahead.

D David Alger

So within 150-foot right-of-way, landowners will be able to continue to plant crops and graze with cattle. For building of structures that might be prohibited underneath the line, such as buildings or structures of that nature, but you will still be able to utilize your land for farming. Just make sure that you contact us and let us know what what you intend to be planting.

M Marcos Mora

Okay, I understand now. Thank you, David. Okay, see another question. And Natalie, maybe this might be one you can help with? Do the transmission lines give off any auditory vibrations? Right. So in other words, I guess that kind of humming noise that sometimes you can hear through the ultra-high voltage transmission lines.

N Natalie Borrelli

You might hear some buzzing, which might occur on this line. I think when on the higher voltage lines such as this, which is 345kV, you may hear some buzzing.

M Marcos Mora

Okay, thank you, Natalie. Another question: What happens if a landowner does not agree to allow this project across their land? So, Tracy, I'm thinking this one you be able to help us with? So again, the question is: What happens if a landowner does not agree to allow this project across their land?

T Tracy Davis

Sure, Marcos, thanks for that question. So, yeah, I mean, as you've mentioned in your discussion, you know, our goal is to really be a good partner. We're going to be here for quite a long time in the area and we want to have good collaborative relationships with our landowners and neighbors. So, you know, understanding that there may be some folks that just don't want it on their land. We certainly understand that. So, you know, I think that part of this process is understanding where landowners are and understanding, you know, feedback that they may have. I think, at the end of the day, you know, this project will be a regulated public utility project. So, you know, once the route is finally approved by the applicable regulatory agencies, the Kansas Corporation Commission and the Missouri Public Service Commission, then, you know, we would have eminent domain authority for the line. That's certainly not our preference to start there, you know, we would hope to, you know, get voluntary agreements with landowners as much as we can before going to that process.

M Marcos Mora

Okay, thank you very much. Thank you, Tracy. Alright, let's see, any questions come through? Let's see what else. Okay, please, go ahead and submit any additional questions you may have.

M Marcos Mora

Okay, I see a question. It says: If I got an invite to the meeting, does this mean that my property is affected by the proposed route? And so I guess I'll provide an answer on that. Not necessarily. If you received an invite its because you are in the project area. If you are in in the state of Kansas, you more than likely live within 1000 feet of the proposed route of the project. If you are in Missouri, you more likely live within 300 feet of the project. And those are just, you know, thresholds that each state has for notifications. And so that's why you received an invite.

It doesn't necessarily mean that your property is affected by the proposed route. It just means you fell within the distance from the project for the purpose of notifications and invitations. So, in order to know if your property is specifically affected by the route, please, send us a request through email or leave us a message through the website with your property address/your property location and we can give you exact information on whether your property is, in fact, affected by the project or not.

M Marcos Mora

All right, let's see. I have another question coming in: Of the 94 miles, roughly what percentages of the proposed route are greenfield or are utilizing existing right-of-ways with current facilities installed? And so, this route will have its own right-of-way for the entirety of the route. So when we say 150-foot wide, it is for the entire 94-mile route. So within the context of the question, I guess the answer is the entire route will be greenfield because we will not be utilizing any existing right-of-way or sharing any existing right-of-way with current facilities. What this line does... I'll go back and have to go back to my notes. But I know we're we're somewhere around in the 20-some percent of paralleling existing facilities and that has a lower impact to greenfield if you're just paralleling any existing facility, instead of just going through an entirely separate right-of-way. However, even when this route or this line will be paralleling any existing lines, it will do so in its own separate 150-foot wide tract.

M Marcos Mora

Okay, another question just came in. James, you might be the ideal person for this one I think since I believe it happens more during the operations and maintenance. So the question is: If there is crop damage at a later date, while doing maintenance in the easement area, will damages be paid? I know, James, you were experiencing some some audio issues earlier. So if that is still the case? David, maybe?

D David Alger

Yep. Sure. And that is a great question. I know for a fact that for crop damages will be paid anytime crops are lost or damaged due to a result of our use of the property up to a single total crop loss of any particular year. I will have to get back with you on after the transmission line is in service. Will they still be paid for crops planted underneath the transmission line? And I want to say yes, but if you can leave your you can send us a request, we will get back to you with an exact answer.

M Marcos Mora

Okay. It is a good question, right? Because I think it's pretty, pretty straightforward. Definitely yes, during construction, but once the easement is acquired, you know, on an ongoing basis, how does that work? So, yes, definitely appreciate the question. And thanks, David, for that. And if you submitted the question, please make sure that we have your contact information so that we can give you the final confirmation for how that works in terms of an ongoing basis, just during regular maintenance work.

M Marcos Mora

Okay. Okay, let's see. Next question: Will there be stability issues setting poles in mined land that exists in Crawford County? So, Kim, you may have some experience here to assist with this question. I'll repeat it. The question reads: Will there be stability issues, setting poles in mined land that exists in Crawford County?

K Kim Austin

Yes, thank you, Marcos. I can take the question. So what we did with this route was we avoided mined lands to the extent possible. So at this time, we do not have poles sitting in mined lands that have been mapped in Crawford County. Therefore avoiding stability issues.

M Marcos Mora

Thank you, Kim. Okay, all right. I see another question: Would you repeat all contact information so that we can follow up with unanswered questions. Sure, let's put the contact information back up, please. Yes, thank you. So you can reach us at once again, our hotline, 620-205-2051, the email address is neetsw@nexteraenergy.com, and the project website is nexteraenergytransmission.com/subsidiaries/neetsw.html.

M Marcos Mora

I know we've gone a few minutes over but I think it's it's worth the time to answer any questions you may have. So if anything else is coming to mind, we're definitely willing to keep this going]if there are any other additional questions right now. Like I mentioned before, after this meeting if there's any other questions that you think of, please feel to submit them through any of these and within two business days we'll do our best to have a response for you and address any concerns that you may have.

M Marcos Mora

Okay, still no new questions yet. All right, well, it seems like there's no additional questions coming through the queue. So maybe that's the indication to wrap up. Again, I know I've said it, it may sound like a broken record, but if any other questions come to mind, please, please, let us know what those are. Reach out to us through any of the three avenues on the screen. And and we will circle back with you. But as of right now, no additional questions are coming through. So it appears that we might be reaching the end of today's session. So I will then proceed to close it out. Thank you all for your time. I think that this is very important to us and for the success of the project and so we appreciate your time, your interest in the project. We look forward to working with you in the future. Thank you very much and have a good evening.

APPENDIX F – LANDOWNER POSTCARDS AND NEWSPAPER ADVERTISEMENTS

NextEra Energy Transmission Southwest is hosting an open house to discuss the **Wolf Creek to Blackberry 345kV Transmission Line Project.**

Join us to learn more about our project.

OPEN HOUSE

Monday, December 12, 2022

6 – 8 p.m. (Central Time)

Burlington Recreation Center
1110 Shea St | Burlington, KS 66839

NEXTera ENERGY TRANSMISSION SOUTHWEST

NEXTera ENERGY TRANSMISSION SOUTHWEST

700 Universe Blvd., UST/JB
Juno Beach, FL 33408

Join NEET Southwest's open house on December 12, 2022 to learn more about **Wolf Creek to Blackberry 345kV Transmission Line Project.**

Monday, December 12, 2022
Burlington Recreation Center
1110 Shea St | Burlington | KS 66839
6 – 8 p.m. (Central Time)

If you have questions in advance of the meeting, please email them to: **neetsw@nexteraenergy.com** *or contact us at* **620-205-2051.**

NextEra Energy Transmission Southwest is hosting an open house to discuss the **Wolf Creek to Blackberry 345kV Transmission Line Project.**

Join us to learn more about our project.

OPEN HOUSE

Tuesday, January 10, 2023

6 – 8 p.m. (Central Time)

Empress Event Center
7 N. Main St | Fort Scott, KS 66701

NEXTera ENERGY TRANSMISSION SOUTHWEST

NEXTera ENERGY TRANSMISSION SOUTHWEST

700 Universe Blvd., UST/JB
Juno Beach, FL 33408

Join NEET Southwest's open house on January 10, 2023 to learn more about **Wolf Creek to Blackberry 345kV Transmission Line Project.**

Tuesday, January 10, 2023
Empress Event Center
7 N. Main St I Fort Scott I KS 66701
6 – 8 p.m. (Central Time)

If you have questions in advance of the meeting, please email them to: **neetsw@nexteraenergy.com** *or contact us at* **620-205-2051.**

THE ANDERSON COUNTY REVIEW 12-6-2022 / **PHOTO SUBMITTED**

Aubrey Ellington with the Seekers Not Slackers 4-H Club in Colonly recently had one of her Kansas State Fair photographs selected for special recoginition and display in Kansas State University offices for the 2022-23 school year. Ellington is shown above presenting the photo to Richard Linton, President of KSU.

Lady Bulldogs notch road win to start season

BY KEVIN GAINES THE ANDERSON COUNTY REVIEW

IOLA – It was a solid opening night for the Anderson County girls as they never trailed in a 52-32 win over Iola on the road Friday night.

Anderson County jumped out to a 17-9 lead after the first quarter and stretched their advantage to 26-14 at intermission, then opened up a commanding 43-21 lead heading into the final 8 minutes. Iola held a slight 11 to 9 advantage in the final quarter to account for the final score.

Anderson County forced 24 turnovers, including 16 steals on the night.

Leading all scorers on the night was Kylie Disbrow with 20 points on 9 of 19 shooting. Disbrow added 11 rebounds, 3 blocks and 2 steals to lead the way.

Addie Fudge had 13 points on 6 of 10 shooting with 4 rebounds, 4 assists and 3 steals.

Kalina Edgecomb recorded 8 points, 6 rebounds, 4 assists and 3 steals to go along with 8 points by Caitlyn Foltz, who also recorded 7 rebounds, 4 assists and a pair of steals.

Lexi Overstreet was the only other Bulldog to score, finishing the night with 3 points.

Rilyn Sommer had a rough shooting night, but did chip in with 7 rebounds, 2 steals and an assist.

This week will be a great early barometer for the Lady Bulldogs as head coach Amy Disbrow expects some of the toughest competition of the season.

"This will be a challenging week for us. We are at home against Baldwin on Tuseday and travel to Louisburg on Friday. They are usually among the toughest games of the season."

Probe underway in Chaunte man's death

IOLA – The Kansas Bureau of Investigation, the Allen County Sheriff's Office, and the Neosho County Sheriff's Office are investigating a homicide after a man was found dead Saturday evening in Chanute, Kansas, according to a statement from the KBI.

At around 4:50 p.m., Casey M. Dye, 43, of Petrolia, Kansas, arrived at the Allen County Sheriff's Office and provided a statement to sheriff's deputies. KBI teams responded with assistance in an investigation later that Saturday.

Shortly after, law enforcement officers located a deceased man in a vehicle inside an automotive glass shop at 7545 Kansas Highway 39, in Chanute. The man, who was identified as Ryan M. Holcomb, 45, from Chanute, had suffered fatal gunshot wounds. He was pronounced dead at the scene.

Dye was arrested for first-degree murder and was booked into the Allen County Jail. Formal charges are pending, and additional charges are expected.

Investigators allege Dye killed Holcomb Saturday morning at a rural property in Allen County, and then moved his body to the business in Chanute where he was discovered.

All suspects are presumed innocent until proven guilty in a court of law.

The investigation is ongoing.

RECORD...

FROM PAGE 1

20; Tract 2: the South half of the Southwest quarter of section 24 range 20.

Cattleman's Place to Shon C. Price a tract of land located in the Northeast quarter of section 10 Township 23.

Cattleman's Place incorporated to Gary E. Price and Terrie L Price all of section 10 23 South Range 20.

Carol A. Johnson and Sandra L Lewandowski to Larry R Johnson lots 9, 10, 11 and 12 in block 5 in the town of Reeve, commonly called Lone Elm.

Charles Dixon and Mary Dixon to Shon C. Price, a tract of land located in the Northeast quarter of section 10 Township 23.

Charles & Mary Dixon to Gary E. Price and Terry L Price all of section 10 Township 23 South Range 21.

HIGH SCHOOL WRESTLING

Wildcats fourth in home dual tournament

BURLINGTON — The Burlington Wildcat boys' wrestling team opened their season Friday, Dec. 2, when they hosted and competed in the 10th annual Burlington Wildcat Duals tournament.

The tournament featured 10 teams that were put into two pools for pool competition. Pool A included Blue Valley Southwest, Marion, Washburn Rural, West Elk and host team Burlington. Pool B included Baldwin, Eudora, Iola, Maize South and Wellsville.

The Wildcats got their dual season off to a 3-2 start. In pool competition, they took a tough loss to Blue Valley Southwest in their opener, 57-15. They then picked up wins over West Elk, 42-27; Washburn Rural, 48-36; and Marion, 48-24. Burlington finished second in the pool and advanced to the third-place dual, where they faced Eudora. The Wildcats fell to Eudora, 45-27, and finished fourth as a team in the tournament.

Burlington had 10 wrestlers compete. Owen McManus and Tucker Williams both went 5-0, while Ryan Hoyt went 4-1. Aden McManus, Karson Bangs and Brayden Riggs each went 3-2. Ethan Bartley, Tristan Devening, Hunter Cole and Damon Cook all went 2-3. In total the Wildcats won 31 matches and lost 19, recording a 62 percent winning percentage on the evening.

Burlington will next compete in the Fredonia Shively Memorial Dual at Fredonia. Wrestling will begin at 5 p.m.

Michaela Divoll/The Republican

Wildcat Brayden Riggs wrestles toward a win by pin over Blue Valley Southwest's Landon Bartlett during Burlington's first dual of the evening, against Blue Valley Southwest, on Friday Dec. 2.

2022 Burlington Wildcat Duals
Team Results

1. Blue Valley Southwest, 2. Baldwin, 3. Eudora, 4. Burlington, 5. Maize South, 6. Marion, 7. Washburn Rural, 8. Wellsville, 9. West Elk, 10. Iola.

Pool A Standings

1. Blue Valley Southwest, 4-0; 2. Burlington, 3-1; 3. Marion, 1-3; 4. Washburn Rural, 1-3; 5. West Elk, 1-3.

Pool A Scores

Blue Valley Southwest 57, Burlington 15
Marion 39, Washburn Rural 27
Burlington 42, West Elk 27
Blue Valley Southwest 66, Marion 11
West Elk 36, Marion 30
Blue Valley Southwest 66, Washburn Rural 15
Burlington 48, Washburn Rural 36
Blue Valley Southwest 72, West Elk 3
Burlington 48, Marion 24
Washburn Rural 42, West Elk 30

Pool B Standings

1. Baldwin, 4-0; 2. Eudora, 3-1; 3. Maize South, 2-2; 4. Wellsville, 1-3; 5. Iola, 0-4.

Pool B Scores

Baldwin 69, Maize South 12
Eudora 60, Iola 18
Baldwin 72, Wellsville 9
Eudora 48, Maize South 36
Eudora 54, Wellsville 29
Maize South 66, Iola 18
Baldwin 81, Iola 0
Maize South 56, Wellsville 23
Baldwin 70, Eudora 12
Wellsville 60, Iola 16

Placement Match Scores

First place - Blue Valley Southwest 49, Baldwin 24
Third place - Eudora 45, Burlington 27
Fifth place - Maize South 42, Marion 39
Seventh place - Washburn Rural 42, Wellsville 35
Ninth place - West Elk 42, Iola 30

Blue Valley Southwest 57, Burlington 15

106 - Double Forfeit
113 - Wyatt McCulley (Blue Valley Southwest) over Ryan Hoyt (Burlington), Fall 3:57
120 - Lucas Skouse (Blue Valley Southwest) over Unknown (Unattached), Forfeit
126 - Kaden Markley (Blue Valley Southwest) over Ethan Bartley (Burlington), Fall 1:27
132 - Owen McManus (Burlington) over Evan Richardson (Blue Valley Southwest), Sudden Victory-1 8-6
138 - Parker Gillen (Blue Valley Southwest) over Tristan Devening (Burlington), Fall 4:45
144 - Tucker Williams (Burlington) over Karter Moore (Blue Valley Southwest), Fall 1:10
150 - Collin Gessner (Blue Valley Southwest) over Aden McManus (Burlington), Dec 6-1
157 - Cole Cronk (Blue Valley Southwest) over Hunter Cole (Burlington), Fall 1:01
165 - Tad Forsyth (Blue Valley Southwest) over Unknown (Unattached), Forfeit
175 - Ryan Richardson (Blue Valley Southwest) over Karson Bangs (Burlington), Fall 0:54
190 - Brayden Riggs (Burlington) over Landon Bartlett (Blue Valley Southwest), Fall 5:30
215 - Andrew Uko (Blue Valley Southwest) over Damon Cook (Burlington), Fall 5:55
285 - Torin Forsyth (Blue Valley Southwest) over Unknown (Unattached), Forfeit

Burlington 42, West Elk 27

106 - Double Forfeit
113 - Ryan Hoyt (Burlington) over Unknown (Unattached), Forfeit
120 - Morgan Anderson (West Elk) over Unknown (Unattached), Forfeit
126 - Evan Coble (West Elk) over Ethan Bartley (Burlington), Fall 1:21
132 - Owen McManus (Burlington) over Nolan Denton (West Elk), Fall 1:55
138 - Tristan Devening (Burlington) over Unknown (Unattached), Forfeit
144 - Tucker Williams (Burlington) over Unknown (Unattached), Forfeit
150 - Aden McManus (Burlington) over John Bliss (West Elk), Fall 1:36
157 - Creyo Koop (West Elk) over Hunter Cole (Burlington), Fall 0:07
165 - Double Forfeit
175 - Karson Bangs (Burlington) over Joshua Patteson (West Elk), Fall 1:19
190 - Brayden Riggs (Burlington) over Edward Metcalf (West Elk), Fall 0:50
215 - Boedy Murphy (West Elk) over Damon Cook (Burlington), Dec 6-4
285 - Bryson Coble (West Elk) over Unknown (Unattached), Forfeit

Burlington 48, Washburn Rural 36

106 - Ryder Harrison (Washburn Rural) over Unknown (Unattached), Forfeit
113 - Ryan Hoyt (Burlington) over Unknown (Unattached), Forfeit
120 - Sam Nichols (Washburn Rural) over Unknown (Unattached), Forfeit
126 - Ethan Bartley (Burlington) over Unknown (Unattached), Forfeit
132 - Owen McManus (Burlington) over Noah Johnson (Washburn Rural), Fall 0:55
138 - Tristan Devening (Burlington) over Jesse Woodward (Washburn Rural), Fall 1:12
144 - Tucker Williams (Burlington) over Unknown (Unattached), Forfeit
150 - Aden McManus (Burlington) over Brenner Beninga (Washburn Rural), Fall 3:09
157 - Hunter Cole (Burlington) over Brody Haas (Washburn Rural), Fall 2:36
165 - Bryce Shaffer (Washburn Rural) over Unknown (Unattached), Forfeit
175 - Karson Bangs (Burlington) over Unknown (Unattached), Forfeit
190 - Makenttis Adams (Washburn Rural) over Brayden Riggs (Burlington), Fall 1:37
215 - Dylan Tajchman (Washburn Rural) over Damon Cook (Burlington), Fall 0:53
285 - Dallas Koellking (Washburn Rural) over Unknown (Unattached), Forfeit

Burlington 48, Marion 24

106 - Double Forfeit
113 - Ryan Hoyt (Burlington) over Unknown (Unattached), Forfeit
120 - Double Forfeit
126 - Ethan Bartley (Burlington) over Wyatt Soyez (Marion), Fall 4:34
132 - Owen McManus (Burlington) over Chance Shults (Marion), Fall 5:22
138 - Colby Lollar (Marion) over Tristan Devening (Burlington), Fall 0:54
144 - Tucker Williams (Burlington) over Unknown (Unattached), Forfeit
150 - Aden McManus (Burlington) over Jameson Looper (Marion), Fall 1:04
157 - Hunter Cole (Burlington) over Caleb Darrow (Marion), Fall 3:58
165 - Arthur Thornhill (Marion) over Unknown (Unattached), Forfeit
175 - Karson Bangs (Burlington) over Cooper Brewer (Marion), Fall 0:23
190 - Brian Nguyen (Marion) over Brayden Riggs (Burlington), Fall 3:12
215 - Damon Cook (Burlington) over Unknown (Unattached), Forfeit
285 - Jackson Bitonti (Marion) over Unknown (Unattached), Forfeit

Eudora 45, Burlington 27

106 - Double Forfeit
113 - Ryan Hoyt (Burlington) over Unknown (Unattached), Forfeit
120 - Hawken Andrews (Eudora) over Unknown (Unattached), Forfeit
126 - Noah Van Foeken (Eudora) over Ethan Bartley (Burlington), Dec 7-2
132 - Owen McManus (Burlington) over Tanner Yankovich (Eudora), Fall 1:50
138 - Wesley Borger (Eudora) over Tristan Devening (Burlington), Fall 1:11
144 - Tucker Williams (Burlington) over Alex Clobes (Eudora), Fall 1:09
150 - Mason Cox (Eudora) over Aden McManus (Burlington), Fall 1:38
157 - Braedon Van Donge (Eudora) over Hunter Cole (Burlington), Fall 2:22
165 - Brayden Speer (Eudora) over Unknown (Unattached), Forfeit
175 - Max Mitchell (Eudora) over Karson Bangs (Burlington), Fall 1:52
190 - Brayden Riggs (Burlington) over Christian Koehn (Eudora), Fall 3:59
215 - Damon Cook (Burlington) over Brandon Gregory (Eudora), Dec 5-4
285 - Kevin Whitten (Eudora) over Unknown (Unattached), Forfeit

Wildcats

Continued from Page 10

slow down for our new varsity players. I am really proud of the leadership from the three seniors, and it trickled into the entire bench. We played a very experienced and good Holton team tonight. Now, it's time to take from the many learning moments in this game and apply them to continue to improve each and every day. We are proud of the guys, but we aren't satisfied. We have a long way to go this season, but the starting block is in a pleasing position!"

Sage Fejfar led the Wildcats' effort with 21 points and was one of four Wildcats to finish in double figures in scoring. Hayden Sides was the second-leading scorer for Burlington and had 14 points. Brody Felts and Grant Hegg each added 13 points.

Burlington played at Louisburg Tuesday, Dec. 6. They will next play at Baldwin 4:30 p.m. Friday, Dec. 9.

Holton 53, Burlington 22

Holton	17	13	17	6 – 53
Burlington	1	6	8	7 – 22

Burlington – Young 11, Birk 4, Booker 3, Fejfar 2, Over 2. Totals 22.
Holton – Wisdom 16, Dodd 10, Etzell 6, Schuster 6, B. Willcott 5, Flewelling 4, Taylor 3, Allen 2, N. Willcott 1. Totals 53.

Holton 65, Burlington 62 20T

Holton	12	18	6	18	4	7 – 65
Burlington	8	14	16	16	4	4 – 62

Holton – Snyder 23, Lierz 19, Black 8, Crouch 7, Kathrens 4, Miller 4. Total 65.
Burlington – Fejfar 21, Sides 14, Felts 13, G. Hegg 13, C. Hegg 1. Total 62.

Sports Schedule

December 8

Middle school basketball
Burlington girls vs. Osawatomie, 4 p.m.

High school basketball
Lebo at Richmond-Central Heights Tournament, TBD

High school wrestling
Burlington in Fredonia Shively Memorial Dual at Fredonia, 5 p.m.
Burlington girls in Fredonia Shively Memorial Dual at Fredonia, 5 p.m.
Burlington JV in Fredonia Shively Memorial Dual at Fredonia, 5 p.m.
Burlington JV girls in Fredonia Shively Memorial Dual at Fredonia, 5 p.m.

December 8-9

High school basketball
Hartford in Wildcat Winter Classic Preseason Tournament at Yates Center, TBD

December 9

High school basketball
Burlington at Baldwin, 4:30 p.m.
Waverly at Shawnee-Maranatha Christian Academy, 5 p.m.

High school wrestling
Burlington in Winter Duals at Louisburg, 3 p.m.

December 10

High School basketball
Burlington JV at Fort Scott, 9 a.m.
Lebo at Richmond-Central Heights Tournament, TBD

High school wrestling
Burlington girls at Baldwin, 10 a.m.

December 12

Middle school basketball
Lebo vs. Hartford, 5 p.m.
SCC vs. Madison, 5 p.m.
Waverly at Burlingame, 5 p.m.

December 13

High school basketball
Burlington at Iola, 4:30 p.m.
Lebo vs. Hartford, 4:45 p.m.
SCC vs. Olpe, 5 p.m.
Waverly at Madison, 5 p.m.

December 15

High school basketball
Hartford vs. SCC, 4:45 p.m.
Lebo vs. Olpe, 5 p.m.

December 16

Middle school basketball
Hartford vs. MdCV, 5 p.m.

High school basketball
Burlington at Wellsville, 4:30 p.m.
Waverly vs. Burlingame, 5 p.m.

High school wrestling
Burlington in Marion/Hillsboro winter Duals at Marion, 3 p.m.
Burlington girls in Columbus Lady Titan Dual Tournament at Columbus, 2 p.m.
Burlington JV in Council Grove JV Tournament at Council Grove, 3 p.m.
Burlington JV girls in Council Grove JV Tournament at Council Grove, 3 p.m.

Seekers Not Slackers went Christmas caroling during December meeting

THE ANDERSON COUNTY REVIEW 1-3-2023 / SUBMITTED

Pictured are from left: Easton King, Blaine King, Lizzie Ellington, Madison Holloway, Chrissy Womelsdorf, McKenna Powell, Hudson Powell, Haylee Powell, Colton Boone, Bailey Boone, McKayla Powell.

Seeker not Slackers 4H Club had a fun Christmas themed December meeting.

The members met up and went Christmas Caroling around Colony. Then they went back and had a short meeting led by their Vice President Blaine King.

Each family was asked to bring a dozen cookies to make Christmas Goodie Plates to deliver to their Seeker not Slackers supporters. After the meeting they had a baked potato bar followed by a little gift exchange.

The club leader then asked the members in foods to bring a dessert and members in visual arts to bring table decorations. There were prizes for the best desserts and the best table decorations!

The evening was closed out with an ugly sweater contest!

December Pieces & Patches Quilt Guild minutes

The Pieces and Patches Quilt Guild was called to order by President Mary Parrott on Thursday, December 15th, 2022 at 9:30 a.m. The meeting was held at Kansas State Extension Office Conference Room. There were 23 members in attendance.

Minutes of the November 17th, 2022 meeting were approved as printed.

Helen Norman gave the treasurer's report for December 15th, 2022.

Committee Reports

Programs: Connie Hatch reported that the January meeting will have 3 demonstrations by members. She encouraged members to bring soup &/or potluck and stay for a Sew-in time in the afternoon. In February, the club will host Judy Vore and the program will be "All about Applique". There will be a trunk show in the morning and a workshop in the afternoon. The workshop will feature freezer paper applique. The workshop fee is $20 for members and $30 for non-members. Please be sure to pay on or before the January meeting. The March program will be a description of the Quilts of Valor program and its guidelines.

BOM: Joyce and Sharon will share next month.

Opportunity Quilt: All members who worked on the 2023 Opportunity quilt posed in front of the quilt and had their picture taken. The quilt will be displayed at the Wichita Quilt Show in January and will then be on display at different locations in Burlington and Garnett. The 2024 quilt is being discussed and Jeanette asked for members to suggest different patterns. The 2025 Opportunity Quilt committee checked out donated fabrics (from Lynda Feuerborn's friend) that could be used with the 16" embroidered blocks already completed.

Challenge: Connie and Lori will share the idea next month.

Quilter's Hugs quilts: Quilts are needed.

Old Business

Anderson County Fair: Terrie Gifford submitted some designs for the 4-H quilt and asked members to help make some blocks for the quilt.

New Business

None.

Secret Sister Gifts

Connie Hatch received a birthday gift of 2 charm packs, a notepad. Irene Eilenstine received a Cutie packet of black and white prints and some red fabrics, all in a decorated chicken wire basket.

Show and Tell

Many beautiful and creative quilting projects were shared. Judy Stukey showed Sharon Rich's BOM quilt done in red colorway and a Christmas tree lap quilt made of the 3-1yard quilt patterns. Judy Stukey showed a quilt top of appliqued Sunbonnet Sues for a great grandbaby; it was done in pinks and polka dots. Jackie Gardner made about 15-20 potholders using Christmas fabrics to be given to her church. Mary Cubit showed a Christmas table runner using the Milky Way star pattern and she quilted it on her domestic sewing machine. Shirley Allen showed a table runner using the old red truck with Christmas tree in it fabric. She also made 2 pillowcases to go with her BOM quilt. Shirley showed 2 gorgeous queen sized quilt tops using the Cactus Wreath pattern. Connie Hatch showed a Quilts of Valor quilt using strip piecing of red/blue/and white fabrics. Joyce Buckley showed a bag made in golds/browns for her friend in Minnesota. Donna Sutton showed a stuffed Christmas tree table decoration. Lori Hoyt showed 2 Quilts of Valor quilts; done with panels in the center and blocks around the sides. She showed a garage mechanic lap quilt and an I Spy quilt of hexagons prints on a white background. Terrie Gifford showed a Bricks quilt based on the Stash Bandit's ideas of contrast. She also showed 9 mug rugs that were paper pieced and added embellishments.

The meeting was adjourned.

Minutes recorded by Bonnie Deiter

Here's a great New Year's Resolution: Learn more about quilting in 2023

Do you think you would like to learn to quilt, or would you like to learn better quilting skills?

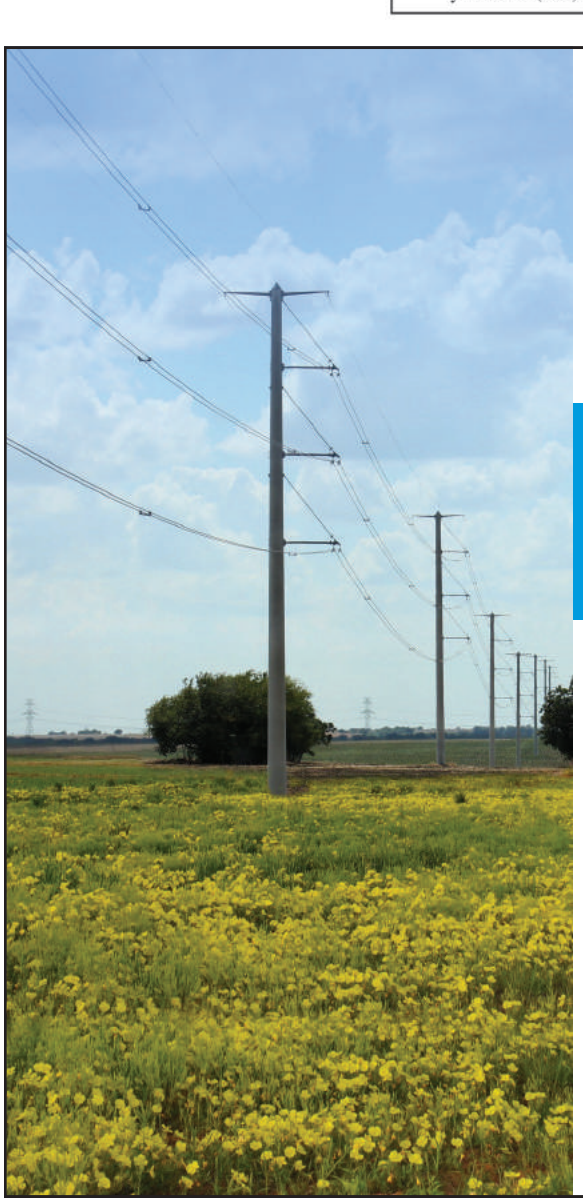
Pieces and Patches Quilt Guild wants to invite you to attend our meetings. Our focus is to learn and help others to learn about quilting.

Our January 26th meeting will focus on basic skills. You can stay for a soup and pot luck lunch, then stick around in the afternoon for a sew-in where you can get basic questions answered by experienced quilters.

In February, we will have a special presentation in the morning on "All About Applique," by Judy Vore of Parkville MO.

In the afternoon, we will have a four-hour workshop to learn about one method of hand-applique, which is a great class for beginners.

We meet at the Anderson County Extension Office Conference Room in Garnett at 9:30 a.m. on the 4th Thursday of the month. For more information, contact Connie Hatch at 785-232-2816.



LOOKING BACK

FROM OUR HISTORY

A Walnut man was shot to death in a train-truck collision

By Phil Burgert
news@morningsun.net

Excerpted stories in Crawford County newspaper archives

100 Years Ago
Jan. 4, 1923

A baby boy, apparently about two days old, was found shortly before 6 o'clock this morning abandoned in an out building in the rear of the home of Frank Dewey, 303 E. Monroe. The child was alive and had not been in the building long as the cold morning air had not penetrated the scant covering placed around the child. He was turned over to Mrs. Elizabeth Drake, secretary of the board of public welfare.

Bank clearings in Pittsburg during 1922 were $32,218,583.36 cents, lacking in round numbers only $200,000 of equaling the record of 1920, when the peak of the prosperity was enjoyed throughout the United States, according to the Pittsburg Clearing House. While clearings were greatly reduced in the summer because of the coal strike, Pittsburg did the greatest volume of a business in her history during December, reaching $7,304,000 or an increase of $4,825,814.67 over December 1921.

Members of the department of chemistry at the State Manual Training Normal have named themselves "official smellers for the federal hootch hounds of Crawford county" since it has been their work several times in the past year to test contraband mash and liquor which authorities sent in. They have some mash which they are testing this week.

50 Years Ago
Jan. 4, 1973

An extensive street improvement program for 1973, involving substantial work in all four quadrants of the city, has been approved by the City Commission, City Manager Marty Stricklan reports. The cost of the work is estimated at nearly $122,000. It involves some 15,000 tons of hot mix asphalt material. This is only for streets scheduled for reconstruction or overlay. It does not include slurry seal work.

Ronald E. Westhoff, 20, of Walnut, was shot to death in a train-truck collision. Highway patrolmen said Westhoff was northbound alone in a pickup truck on a county road, one half mile north of Walnut and was struck by an eastbound Santa Fe freight train at 10 a.m. Following the collision, a rifle Westhoff was carrying in the pickup discharged. The bullet struck Westhoff in the head. Death was instantaneous. The death was ruled a traffic fatality.

A purse, belonging to Susie Deill of Route 3 Pittsburg, was stolen while Miss Deill was shopping in Newman's Department store on the Mall. Miss Deill reported to police that while trying on shoes in Newman's shoe department she laid her purse beside her chair only to find it missing a few minutes later. The purse is described as beige, krinkle pattern, patent leather containing a purple key case.

25 Years Ago
Jan. 4, 1998

The name of the sleepy little farming community of Greenbush has become synonymous with progressive education over the last 20 or so years. Everyone, it seems, has heard of "Greenbush" – more appropriately the Southeast Kansas Education Service Center at Greenbush. But not many people can explain just what Green Bush is or how it works. "It is one of a kind," said Executive Director Dave DeMoss.

Sam Nicoletti, 72, mayor of Arma since 1989, died at 11:57 p.m. Jan. 2 at St John's Regional Medical Center in Joplin. Mr. Nicoletti was a retired superintendent of schools at Northeast USD 246 at Arma. He taught school and coached at Mulberry and later taught high school at Arma. He became principal at Arma Grade School, and superintendent of schools in 1965. He retired in 1988.

When it was all said and done, it was a game of numbers yesterday at John Lance Arena. Most of those numbers were in favor of the No. 11-ranked Pittsburg State Gorillas, who knocked off the Truman State Bulldogs 93-64 in the opening game of the Mid-America Intercollegiate Athletics Association season. Some numbers in Pitt State's favor: six players in double figures, 12 steals, and 57.1 percent field goal shooting.

TODAY IN HISTORY

In 2015, Pope Francis named 156 new cardinals

Associated Press
news@morningsun.net

Today is Wednesday, Jan. 4, the fourth day of 2023. There are 361 days left in the year.

Today's Highlight in History:

On Jan. 4, 2007, Nancy Pelosi was elected the first female speaker of the House as Democrats took control of Congress.

On this date:

In 1821, the first native-born American saint, Elizabeth Ann Seton, died in Emmitsburg, Maryland.

In 1935, President Franklin D. Roosevelt, in his State of the Union address, called for legislation to provide assistance for the jobless, elderly, impoverished children and the disabled.

In 1948, Burma (now called Myanmar) became independent of British rule.

In 1964, Pope Paul VI began a visit to the Holy Land, the first papal pilgrimage of its kind

In 1965, President Lyndon B. Johnson delivered his State of the Union address in which he outlined the goals of his "Great Society."

In 1974, President Richard Nixon refused to hand over tape recordings and documents subpoenaed by the Senate Watergate Committee.

In 1987, 16 people were killed when an Amtrak train bound from Washington, D.C., to Boston collided with Conrail locomotives that had crossed into its path from a side track in Chase, Maryland.

In 1990, Charles Stuart, who'd claimed that he'd been wounded and his pregnant wife fatally shot by a robber, leapt to his death off a Boston bridge after he himself became a suspect.

In 1999, Europe's new currency, the euro, got off to a strong start on its first trading day, rising against the dollar on world currency markets. Former professional wrestler Jesse Ventura took the oath of office as Minnesota's governor.

In 2002, Sgt. 1st Class Nathan Ross Chapman, a U.S. Army Special Forces soldier, was killed by small-arms fire during an ambush in eastern Afghanistan; he was the first American military death from enemy fire in the war against terrorism.

In 2006, Israeli Prime Minister Ariel Sharon suffered a significant stroke; his official powers were transferred to his deputy, Ehud Olmert (EH'-hood OHL'-murt). (Sharon remained in a coma until his death in January 2014.)

In 2015, Pope Francis named 156 new cardinals, selecting them from 14 countries, including far-flung corners of the world, to reflect the diversity of the Roman Catholic church and its growth in places like Asia and Africa.

Ten years ago: The new Congress passed a $9.7 billion bill to help pay flood insurance claims to homeowners, renters and businesses damaged by Superstorm Sandy. No. 10 Texas A&M beat No. 12 Oklahoma, 41-13, in the Cotton Bowl.

Almanac for PITTSBURG, KS
January 3, 2023

Daily Data	Observed	Normal	Record Highest	Record Lowest
Max Temperature	73	42	73 in 2023	20 in 2014
Min Temperature	49	24	59 in 2004	-2 in 2001
Avg Temperature	61.0	33.0	65.5 in 2004	10.5 in 2001
Precipitation	0.05	0.06	1.08 in 1951	0.00 in 2022
Snowfall	M	0.0	2.3 in 2010	0.0 in 2022
Snow Depth	M	-	3 in 2010	0 in 2022
HDD (base 65)	4	32	54 in 2001	0 in 2004
CDD (base 65)	0	0	1 in 2004	0 in 2023
Month-to-Date Summary	**Observed**	**Normal**	**Record Highest**	**Record Lowest**
Avg Max Temperature	67.3	42.2	67.3 in 2023	18.0 in 2018
Avg Min Temperature	41.0	24.0	55.0 in 2004	0.3 in 2018
Avg Temperature	54.2	33.1	59.2 in 2004	9.2 in 2018
Total Precipitation	0.05	0.19	2.16 in 1985	0.00 in 2020
Total Snowfall	M	0.2	2.8 in 1979	0.0 in 2020
Max Snow Depth	M	-	4 in 1959	0 in 2020
Total HDD (base 65)	32	96	167 in 2018	17 in 2004
Total CDD (base 65)	0	0	1 in 2004	0 in 2023
Year-to-Date Summary	**Observed**	**Normal**	**Record Highest**	**Record Lowest**
Avg Max Temperature	67.3	42.2	67.3 in 2023	18.0 in 2018
Avg Min Temperature	41.0	24.0	55.0 in 2004	0.3 in 2018
Avg Temperature	54.2	33.1	59.2 in 2004	9.2 in 2018
Total Precipitation	0.05	0.19	2.16 in 1985	0.00 in 2020
Total Snowfall (since July 1)	0.0	3.7	19.3 in 2001	0.0 in 2005
Max Snow Depth (since July 1)	0	-	13 in 1951	0 in 2016
Total HDD (since July 1)	1716	1796	2089 in 2001	40 in 2000
Total CDD (since Jan 1)	0	0	1 in 2004	0 in 2023

COMMODITIES

Chicago Merchantile Exchange

	Open	High	Low	Settle	Chg
CATTLE					
40,000 lbs.; cents per lb.					
Feb	158.15	158.15	156.65	156.85	–1.05
Apr	161.95	161.97	160.75	160.87	–.93
Jun	157.82	157.95	156.75	156.82	–1.00
Aug	157.52	157.65	156.65	156.70	–.87
Oct	161.42	161.65	160.80	160.95	–.70
Dec	164.87	165.02	164.22	164.52	–.40
Feb	167.17	167.20	166.37	166.75	–.25
Apr	169.00	169.00	168.00	168.55	–.05
Jun	165.60	165.60	163.20	163.37	–2.23
Est. sales 57,387. Fri.'s sales 40,541					
Fri.'s open int 328,209, up 4,202					
Wed.'s open int 297,976					
FEEDER CATTLE					
50,000 lbs.; cents per lb.					
Jan	183.50	183.50	182.45	182.70	–1.00
Mar	186.10	186.27	184.30	184.77	–1.45
Apr	189.50	189.60	188.27	188.77	–.85
May	192.75	192.80	191.67	192.25	–.60
Aug	202.27	202.97	202.00	202.55	–.07
Sep	204.92	205.35	204.52	205.10	–.10
Oct	206.80	207.07	206.02	207.02	–.23
Nov	207.75	208.25	206.70	208.17	–.08
Est. sales 10,629. Fri.'s sales 6,847					
Fri.'s open int 43,890					
HOGS,LEAN					
40,000 lbs.; cents per lb.					
Feb	87.42	87.97	84.60	85.07	–2.63
Apr	95.27	95.40	92.92	93.80	–1.50
May	100.40	100.45	98.87	99.80	–.90
Jun	108.87	109.12	107.12	108.15	–1.02
Jul	109.45	109.57	107.72	108.87	–.80
Aug	108.47	108.60	106.90	108.12	–.53
Oct	93.20	93.32	92.05	93.15	–.12
Est. sales 47,445. Fri.'s sales 24,559					
Fri.'s open int 187,528					
PORK BELLIES					
40,000 lbs.; cents per lb.					
No open contracts..					

Chicago Board of Trade

	Open	High	Low	Settle	Chg.
WHEAT					
5,000 bu minimum; cents per bushel					
Mar	786	794½	769¾	775½	–16½
May	793¾	800½	776¾	782¾	–16
Jul	799¼	804½	780¼	786½	–16½
Sep	804½	810¾	787	794	–15½
Dec	815¼	821¾	798¾	806¼	–14
Mar	824	827	806½	812¾	–12¾
May	821½	825	807¼	811½	–12½
Est. sales 74,047. Fri.'s sales 53,693					
Fri.'s open int 333,740					
CORN					
5,000 bu minimum; cents per bushel					
Mar	677¼	681¼	668	670½	–8
May	677	680½	667¾	670¼	–7¾
Jul	670¼	674	662	664¾	–7
Sep	625¾	627¾	620	622	–5
Dec	609	611	604¼	606¾	–4
Mar	616¾	618	612	614½	–3½
May	620¼	620¼	617	617¾	–3½
Jul	620	620	616¾	616¾	–3½
Sep	576	576	569	575	+2
Dec	564¼	566½	561¾	566¼	+4¼
Mar	573¾	+4¼			
Est. sales 242,377. Fri.'s sales 143,683					
Fri.'s open int 1,215,466, up 7,809					
OATS					
5,000 bu minimum; cents per bushel					
Mar	366	367½	360	363½	–3¾
May	361½	362¼	359	362¼	–1¾
Jul	361¼	–2¾			
Sep	360¾	–2¼			
Dec	369	+½			
Mar	361¼	+½			
May	377¾	+½			
Jul	370¼	+½			
Sep	386	+½			
Dec	386	+½			
Est. sales 407. Fri.'s sales 187					
Fri.'s open int 3,652					
SOYBEANS					
5,000 bu minimum; cents per bushel					
Jan	1519¼	1523¼	1485	1487¼	–32
Mar	1524¼	1529	1490	1492¼	–31¾
May	1530	1534¼	1497	1499	–31
Jul	1533	1537	1500½	1502¾	–30½
Aug	1507	1509½	1477¼	1479¼	–28
Sep	1446¼	1448	1422¾	1425½	–23½
Nov	1413½	1415¾	1392¼	1397	–19¾
Jan	1413¼	1415¼	1394¼	1399	–17¼
Est. sales 191,215. Fri.'s sales 146,703					
Fri.'s open int 589,934, up 4,383					
SOYBEAN OIL					
60,000 lbs; cents per lb					
Jan	64.06	65.25	63.15	63.16	–.65
Mar	64.44	65.40	63.12	63.20	–.87
May	64.25	65.07	62.83	62.91	–1.03
Jul	63.83	64.56	62.41	62.49	–1.07
Aug	63.25	63.96	61.84	61.93	–1.08
Sep	62.64	63.21	61.26	61.39	–1.08
Oct	62.07	62.85	60.72	60.86	–1.10
Dec	61.95	62.61	60.50	60.63	–1.11
Jan	61.73	61.92	60.39	60.42	–1.08
Est. sales 91,775. Fri.'s sales 105,383					
Fri.'s open int 375,112					
SOYBEAN MEAL					
100 tons; dollars per ton					
Jan	475.60	480.10	471.00	476.80	–1.70
Mar	471.00	472.20	461.00	465.10	–5.90
May	460.00	462.40	451.60	455.40	–5.60
Jul	454.00	456.10	445.60	449.00	–5.30
Aug	444.00	445.40	435.40	438.60	–4.50
Sep	429.00	431.00	421.50	424.90	–3.30
Oct	414.00	417.00	407.60	411.50	–2.10
Dec	414.70	414.70	405.90	409.90	–1.70
Jan	407.30	408.20	404.70	408.00	–.80
Est. sales 106,237. Fri.'s sales 91,554					
Fri.'s open int 400,618, up 3,439					

Producers Cooperative Association

Bushel
Soft wheat $7.55
Soybean $14.97
Yellow shell corn $7.70
Milo $6.80

Columbus Grain

Bushel
Hard wheat $7.94
Soft wheat $7.56
Soybean $15.03
Yellow shell corn $7.66
Milo $6.66

McCune Farmers Union Coop Association

Bushel
Hard wheat $7.94
Soft wheat $7.56
Soybean $15.03
Yellow shell corn $7.66
Milo $6.66

Kansas lottery sales rise in wake of legal sports wagering

By TIM CARPENTER
Kansas Reflector

TOPEKA — A lucky northeast Kansas lottery player nailed the Powerball jackpot on Nov. 19 to claim $92.9 million.

"The Kansas Lottery had the pleasure of making someone out there a little more thankful," said Stephen Durrell, executive director of the Kansas Lottery. "Nothing makes us happier than giving away a big jackpot to our players."

That followed by less than two weeks the giddy Powerball action leading to folks in California pocketing a $2.04 billion jackpot. Interest in Powerball, and the Mega Millions game, pushed Kansas lottery revenue to $35.5 million in November. That represented a 46% rise from $24.2 million in November 2021.

This transpired while Kansas sought to find its footing in the sports wagering world. Introduction of legal sports betting in Kansas resulted in monthly wagering on athletic events of $160.5 million in September, $189.9 million in October and $186.3 million in November. The three-month total: $536.7 million.

Those hefty numbers, fueled by promotional incentives lavished on sports bettors, were robust enough to raise questions about whether the advent of sports betting in Kansas would slice into consumer enthusiasm for the state's routine casino gambling or lottery ticket sales.

Durrell said there would be a sorting out period in Kansas' gambling and lottery sectors, but there was no evidence the traditional lottery or casino operations would collapse under the weight of sports books.

"They like to stay in their individual silos. They don't typically cannibalize each other," Durrell said.

LaHarpe: Sewer repairs on horizon

Continued from A1

But with personnel changes within LaHarpe's maintenance department since then, it's unlikely any repairs have been done, he noted.

The sewer failures have come to light in recent months, with "manhole fountains" spotted during torrential rain storms along Monroe Street.

Manhole fountains are caused when rainwater breaches the sewer system at such a rate that it sends water up through manhole openings.

"It means your system has failed," one engineer told the city in October.

LaHarpe is utilizing federal COVID relief funds and a $30,000 USDA grant for the inspections.

"With the inspections, we will know what everything looks like before we start," Ware said. "We can focus on what areas will need to be addressed first, in the hopes that it will eliminate unforeseen problems down the road."

Torrential downpours in LaHarpe occasionally result in "manhole fountains" because of rainwater breaching the city's sewer system. FILE PHOTO

HOW TO pay for the project remains a topic of discussion at City Hall.

The city is anxious to learn whether the federal government will once again allow Community Development Block Grants for municipal infrastructure projects such as sewer repairs.

The problem is that the feds decided last year to target CDBG opportunities for such things as sidewalks and trails only, much to LaHarpe's chagrin.

"We'll have to see if they change it this year," Ware said.

If no such grant materializes, LaHarpe will utilize a Kansas Department of Health and Environment loan. And the city also may be eligible for a Rural Development loan/grant match from the United States Department of Agriculture.

But in order to qualify for any kind of grant funding, the city must justify to the state and federal agencies it has measures in place to pay for an improved sewer system, Ware explained.

That's where the fee increases come in.

At $32 a month, LaHarpe's fees are substantially less than comparable cities across the state, Ware said. "Most are at the $50 range," he said. "We didn't want to jump that high just yet."

LaHarpe's current rates are so low that the Council has had to transfer money into the sewer fund at the end of the past three years to prevent it from ending those years with a negative balance, Ware said.

Adding the surcharge for customers who use larger quantities of water also should make the fees equitable, he continued.

"We have some older people in town who don't use 1,000 gallons a month," Ware noted. "Yet right now, they're paying the same amount as a large family. We're hoping this is a more fair average."

Crews to reroute Mill Creek after spill

By ALLISON KITE
Kansas Reflector

KANSAS CITY, Mo. — Crews will reroute Mill Creek to avoid the site of the Keystone Pipeline's largest-ever oil spill, the oil pipeline's parent company announced Tuesday.

The Keystone pipeline, which runs from Canada to Texas and Illinois, spilled 14,000 barrels of oil near the Kansas-Nebraska border in early December. The spill — the latest in a number of spills and deficiencies along the pipeline — turned Mill Creek black and deposited oil on farmland near Washington, Kansas.

Efforts are underway to clean up the largest spill in the Keystone pipeline's history, which happened near Washington, Kansas. The pipeline's owner announced Mill Creek will be temporarily rerouted to help with cleanup. (TC ENERGY)

Within two weeks after the spill, more than 400 people were onsite cleaning up the oil, including personnel from the pipeline's owner, TC Energy, the Environmental Protection Agency and state and local officials. Crews built dams to contain the spill and began vacuuming oil from the creek and surrounding areas.

Now, those responders are working to "temporarily divert (Mill) Creek from a location upstream of the pipeline spill to downstream of the containment dams," TC Energy said in a statement.

"The diversion will assist in the cleanup and reclamation of the creek," the statement said.

TC Energy did not say in its news release how diverting the creek would assist in cleanup.

The company also has not announced an update on how much oil it has removed from the creek. As of Dec. 21, it had removed 7,599 barrels of oil from the creek, a little more than half of the estimated amount spilled.

TC Energy said it would give $7,500 to purchase new mobile and radio equipment for the Washington County Emergency Management Office. It also pledged to match donations to the Washington County Hospital.

The site of the spill on Tuesday was still subject to a no-fly zone for drones requested by TC Energy.

Following the spill, the federal government ordered TC Energy to investigate the cause of the pipeline's spill. It also required the company to submit a plan before resuming operations. The Cushing Extension — the part of the pipeline where the spill occurred — started operating again on Dec. 29.

First tanker carrying US gas arrives in Germany

BERLIN (AP) — The first regular shipment of liquefied natural gas from the United States arrived in Germany on Tuesday, part of a wide-reaching effort to help the country replace energy supplies it previously received from Russia.

The tanker vessel Maria Energy arrived at the North Sea port of Wilhelmshaven, where its shipment of LNG will be converted back into gas at a special floating terminal that was inaugurated last month by German Chancellor Olaf Scholz.

Germany has rushed to find a replacement for Russian gas supplies following Russia's invasion of Ukraine. The facility in Wilhelmshaven is one of several such terminals being put in place to help avert an energy supply shortage.

Germany has also temporarily reactivated old oil- and coal-fired power stations and extended the life of its last three nuclear power plants until mid-April.

Environmental campaigners said they planned to protest the arrival of the Maria Energy, arguing Germany shouldn't be importing fossil fuels, particularly gas obtained through fracking.

Reserves in Germany's gas storage facilities rose above 90% at the start of the year as unseasonably warm temperatures across much of central Europe reduced heating demand.

PUBLIC RECORD

HOW TO SUBMIT

OBITUARIES You can fax a written obituary to (620) 223-2110 or email to thelm@fstribune.com. All obits must include a contact name and telephone number for verification before publication.

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800-899 words - $110
900-999 words - $125
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Photos FREE

SPECIAL OCCASION engagement, wedding and anniversary announcements can be submitted to the Fort Scott Tribune office at 22 N. Main St, submitted, online or emailed to thelm@fstribune.com. Time-sensitive announcements must be submitted in advance to assure timely publication. 50-year and above anniversaries, 90th and above birthdays are free. No charge to subscribers or their family members.

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BIRTH ANNOUNCEMENTS
Birth notices and announcements may be sent to thelm@fstribune.com or stop by the Tribune at 22 N. Main St.
$10 Includes family members (Siblings, grandparents, etc.) and photo.
Free – Notice does NOT include family members or photo.

QUESTIONS? Contact the Fort Scott Tribune at thelm@fstribune or 620-223-2110

Information on this page appears as it is received from the Bourbon County Law Enforcement Center, Bourbon County Register of Deeds and Fort Scott City.

Death Notices

Russell Wallace "Wally" Bradford

Russell Wallace "Wally" Bradford, age 72, passed away Monday, Jan. 2, 2023, at the Medicalodge in Fort Scott, Kan. There was cremation and no services are planned at this time. Arrangements are under the direction of the Cheney Witt Chapel, 201 S. Main, Ft. Scott, KS.

Marlene Gettler

Marlene Gettler, 91, of Fort Scott, passed away Monday evening Jan. 2, 2023. Arrangements will be announced by the Konantz-Cheney Funeral Home.

Don Robert "Butch" McCarty

Don Robert "Butch" McCarty, Overland Park, Kan., formerly of Mound City, Kan., passed away early Friday, Dec. 30, 2022, at Maggie's Place Memory Care in Overland Park, Kan.

A graveside service will be held at 3 p.m. Saturday, Jan. 7, 202 at the Curry Cemetery near Mound City, Kan. Visitation will be held from 1 to 2:30 p.m. Saturday at the Schneider Funeral Home and Crematory, Mound City Chapel. Memorial contributions are suggested to American Legion Post #248 or Shriner Children's Hospital in care of Schneider Funeral Home, P.O. Box J, Mound City, KS 66056. Online condolences can be left at www.schneiderfunerals.com.

Arthur Ray Wisdom

Arthur Ray Wisdom, age 75, Worland, Mo., passed away Thursday, Dec. 29, 2022.

A funeral service will be held at 2 p.m. Friday Jan. 6, 2023 at the Schneider Funeral Home and Crematory, Pleasanton Chapel. Burial will be in the Green Valley Cemetery. Visitation will be held from 5 to 7 p.m. Thursday, Jan. 5 at the Pleasanton Chapel. Contributions are suggested to the Arthur Wisdom Memorial Fund, in care of Schneider Funeral Home, P.O. Box 525, Pleasanton, KS 66075. Online condolences can be left at www.schneiderfunerals.com.

Obituaries

Dee Ronald Ward

Dee Ronald Ward, 87, of Pittsburg, Kan., died 5:45 a.m. Tuesday, Dec. 27, 2022 at Via Christi Village in Pittsburg, Kan.

Mr. Ward was born Nov. 19, 1935 in Arcadia, Kan., the son of J.C. and Gracie (Koppa) Phillips. He was adopted by Dee C. and Ida L.(Schilling) Ward of Mulberry, Kan., when he was 9 months old. He was formerly of Olathe, Kan., moving to Pittsburg in 1991. He attended school in Mulberry and graduated from Mulberry High School in 1953. He attended Kansas State Teachers College in Pittsburg for two years. Dee married Reva Ro Jean Stwalley on June I, 1958 in Mulberry, Kan. Mrs. Ward preceded him in death May 31, 2015. He worked as a litho pressman, accounting clerk, and regional accounts receivable clerk for DeLuxe Check Printers of DeLuxe Corporation for 34 years in the Kansas City plant and the Kansas City Distribution Center, retiring in December 1990. Membership was in the Mulberry United Presbyterian Church, where he was an elder, stated supply lay minister and past Sunday school teacher, Club DeLuxe Retires Club, past master of Pittsburg Masonic Lodge #187, member of the Mirza Shrine, Hospital Dads and Past Masters, member and past president of Four States Mended Hearts Chapter#146 Joplin, Mo., member of Pittsburg Noon Kiwanis Club, former member Family Campers, Kansas Campers Association, former member and past president Wyandots Camping Chapter FC/RVs of Kansas City, Kan., former board member Crawford County Chapter of American Red Cross, Cub Master of Pack #3083 Northview School of Olathe, Kan., Scout Master Troop #83 Northview School/Olathe, Kan., member of Order of the Arrow Boy Scouts of America, former manager/coach Olathe Girls Softball Association, and former coach Boys Minor League Baseball in Olathe.

Survivors include two sons, Paul D. (Darlene) Ward of Lafayette, La., Jeffrey D. Ward of Pittsburg, and a daughter, Gina A. Ward of Pittsburg. He was preceded in death by his parents, wife Reva Ro Jean Ward, four sisters, Earlene Phillips, Wanda Spence, Mary Wescoat, and Alpha Swaim, and four brothers, Fredrick Phillips, Murrel Phillips, Clarence Phillips, and Darrell Phillips.

Funeral services will be at 10 a.m. Tuesday, Jan. 3, 2023 at the Bedene Funeral Home in Arma, Kan., with Pastor Don Talent officiating. Burial will be at the Rosebank Cemetery at Mulberry, Kan. Masonic services will be at 5 p.m. Monday at the Bedene Chapel in Arma where the family will receive friends following the Masonic Rites until 6 p.m. Friends may call after l0 A.M. Monday at the Bedene Funeral Home. The family suggests memorials to the Mulberry Funeral Dinner Fund. Donations may be sent to or left at the Bedene Funeral Home, 517 E. Washington, Box 621, Arma, KS 66712.

Arrests

• Daniel Todd Ornstein, 58, was arrested at noon Dec. 29 by the FSPD on a Bourbon County warrant for failure to appear. Ornstein was being held on no bond.

• Bobby Joe Hussong, 41, was arrested at 2:25 p.m. Dec. 29 by the BCSO on a Bourbon County warrant for failure to appear. Hussong was being held on a $2,500 cash/surety bond.

• George Miles Weyant, 47, was arrested at 3:07 p.m. Dec. 29 by the BCSO and charged with possession opiates/opium/narcotic drug and certain stimulants, and use/possession drug paraphernalia on the human body. Weyant was being held on a $5,000 cash/surety bond.

• Kayla Jena Haley, 32, was arrested at 9:06 p.m. Dec. 29 by the FSPD and charged with aggravated burglary and criminal threat; unknown circumstance. Haley was released at 1:52 p.m. Dec. 31 to probation.

• Jonah Isiah Eisenbrandt, 42, was arrested at 5:58 p.m. Dec. 30 by the BCSO on a sanction. Eisenbrandt was released at 6 p.m. Jan. 1 for time served.

• Sabrina Eileen Robison, 38, was arrested at 9:01 p.m. Dec. 30 by the BCSO and charged with possession opiates/opium/narcotic drug and certain stimulants, and use/possession drug paraphernalia on the human body. Robison was released at 6:13 p.m. Jan. 2 on a $2,500 cash/surety bond.

• Curtis Douglas McReynolds, 39, was arrested at 3:11 p.m. Dec. 31 by the FSPD and charged with disorderly conduct; unknown circumstance, and domestic battery; knowing/reckless bodily harm. McReynolds was released at 10:53 a.m. Jan. 2 on a $1,500 cash/surety bond.

• Christina Gbenado, 22, was arrested at 6:50 p.m. Dec. 31 by the BCSO and charged with possession paraphernalia to cultivate less than five plants, possession of certain illegal drugs, and possession of certain stimulants. Gbenado was released at 7 p.m. Jan. 2 on a $2,500 cash/surety bond.

• Tyler Lane Weber, 27, was arrested at 3:22 a.m. Jan. 2 by the FSPD and charged with domestic battery; knowing/reckless bodily harm. Weber was being held on a $2,500 cash/surety bond.

Released

• Durand Cole Denyer, 39, booked Dec. 24, was released at 2 p.m. Dec. 30 on a surety bond.

• Troy Thunder Mallory, 35, booked Dec. 27, was released at 1:27 p.m. Dec. 29 for time served.

Jail populations

As of Jan. 3

Bourbon County Jail: 39

Osawatomie State Hospital: 1

Total inmates: 40

Deeds

Dec. 27

Sheriff's Deed, Sheriff of Bourbon County to Fort Scott Land Bank, Couchs Addition, Block 7, Lot5, Fort Scott, Block 66, Lot 6; Couchs Addition, Block 19, Lots 5, 6.

Warranty Deed, Edward T. Oswald, etux, and Lisa D. Oswald, etvir, to Jeff Larue, Section 32, Township 24, Range 22, part of the northwest quarter.

Warranty Deed, L6 Rentals, LLC, to Starlene Bowden-McClellan, Andricks Addition, Block 3, Lot 5.

Warranty Deed, Mark Muller, etux, and Emalea Ann Miller, etvir, to Paul Waid, etal, and Deborah Waid, etal, Hidden Valley, Plat 6, Lot 18.

Dec. 28

Quit Claim Deed, Thresa Marie Gunnels, to Thresa M. Gunnels Trust, Section 21, Township 23, Range 23, southwest quarter of the southwest quarter.

Sheriff's Deed, Sheriff of Bourbon County to Elaine Danley, administrator, Section 34, Township 23, Range 22, northeast, northwest quarter of the southeast quarter.

Quit Claim Deed, Orval R. Doty, etux, and Shirley M. Doty, etvir, to John B. Doty, etal, and David E. Doty, etal, Gunn and Marrs Place, Lot 82.

Trustee's Deed, Leo A. Hartman, trustee, etal, and Arla E. Hartman, trustee, etal, to Revocable Trust of Larry G. and Debra M. Martin, Section 20, Township 26, Range 23, northwest quarter of the northwest quarter; Section 19, Township 26, Range 23, northeast quarter of the northeast quarter.

Dec. 29

Trustee's Deed, Melvin L. Norman, trustee, etal, and Melva Norman, trustee, etal, to Ashley R. Norman, Section 11, Township 24, Range 21, all of the northeast quarter.

Warranty Deed, Debra C. Shaw to Andrew J. Burenheide, Durkee & Stout Addition, Block 1, Lot 2.

Warranty Deed, PJW Investments, LLC, to Coon Rentals, LLC, Fort Scott, Block 88, Lots 2, 4.

Quit Claim Deed, Jason R. Bryant to Regan D. Bryant, Hidden Valley, Plat 7, Lots 44, 45, 54.

Trustee's Deed, Betty P. Ruddick, trustee, to Blue Lake Properties, LLC, Section 31, Township 25, Range 25, part of the southwest quarter of the northeast quarter.

Quit Claim Deed, Brian Crapson, etal, and Karen Crapson, etal, to Sydney Crapson, Gunn and Marrs Place, Lot 65.

Dec. 30

Quit Claim Deed, Rebecca Fife, etvir, and David Leroy Fife, etux, to Sarah Thurston, Mapleton, Block 16.

Quit Claim Deed, Tammy Baughn, etal, James Baughn, etal, Teresa Saunders, etal, and William Saunders, etal, to Tina Kerr, Fort Scott, Block 114, Lot 10.

Quit Claim Deed, Jason R. Love, etux, and Kelly J. Love, etvir, to Galen R. Love, etal, and Melissa J. Love, etal, Section 32, Township 26, Range 24, part of the southeast quarter.

Warranty Deed, Patrica Giltner to Patricia Giltner, Lakeview Estates, Lots 7, 8.

Warranty Deed, Ward-Kraft, Inc., to Christian Learning Center Foundation, Section 8, Township 26, Range 25, part of the northwest quarter.

Quit Claim Deed, Frank Gordon Hays to Chad Bennett Hays, Section 36, Township 23, Range 22, part of the northwest, part of the southwest quarter of the southeast quarter.

Quit Claim Deed, Frank Gordon hays to Amanda Lynn Hinrichs, Section 36, Township 23, Range 22, part of the northwest, part of the southwest quarter of the southeast quarter.

Warranty Deed, Mary Townsend, etvir, to Matthew Townsend, etux, to Christopher A. Garrett, etal, and Danielle Y. Cliffman, etal, Tower Hill Subdivision Blacketts, Block 12, Lots 15, 17.

MEALS ON WHEELS

WEDNESDAY, JANUARY 4
Hearty Stew
(meat,stew vegetables)
Spinach Salad w/Drsg.
Peaches
Cornbread

THURSDAY, JANUARY 5
Biscuit/Sausage Gravy
Hard Boiled Egg
Mini Baby Carrots
Red Applesauce
Orange Juice

FRIDAY, JANUARY 6
CLOSED
FROZEN MEAL AVAILABLE
UPON REQUEST

MONDAY, JANUARY 9
Meatballs/Gravy
Steamed Brown Rice
Zucchini/Tomatoes
Peaches

TUESDAY, JANUARY 10
Chicken/Dressing/Gravy
California Blend Vegetables
Cranberry Sauce
Mixed Fruit

Wheat Bread, Margarine & 1% Milk served with all menus unless otherwise specified.

Find obituaries and death notices on our website at

www.fstribune.com

Updated each weekday, except holidays.

2022

Continued from page 7

County, along with 10 other counties. Much of Kansas has experienced above normal temperatures with precipitation averaging well below normal in the last year. 67 counties were placed in a drought emergency status, and 27 in a watch status for October 2022.

Coffey County Commissioners took the next step to create a Community Improvement District (CID) in the BETO Junction area. The intent of creating the district is to collect a sales tax that will fund improvements for a new county industrial park located with the CID boundaries.

An evening family fun event, Boofest, was held in Kelley Park Oct. 15. Food, music, games, pumpkin decorating and a costume contest. The Burlington Rotary Club held an eating competition as a fundraiser. Ten sponsored high school contestants competed to see who could eat the most hot wings, which got progressively hotter. Jaycee Belcher, a freshman at Burlington High School, outlasted nine other contestants, and won $200 for the Class of 2026.

Officials with Bomgaars, a local business, confirmed at its Sioux City,Iowa headquarters, that it has acquired 73 stores from Orscheln Farm and Home as part of a larger industry mega-deal. The transaction will make Bomgaars the second largest farm and ranch retailer in the nation based on total store count.

The Coffey County Board of Trustees voted Oct. 24 to discontinue long-term care in Waverly. Sunset Manor will close effective January 15, 2023. The decision was made in large part due to an inability to hire sufficient staffing because of wages and impending regulation changes.

November

Coffey County voters favored Republican candidates in the Nov. 8 General Election. More than half of the county's registered voters voted in the election, which included the governor's race and other state officials. Coffey County voters had no locally contested races.

Southern Coffey County High School completed its 20th Veterans Honor Flight in 15 years, taking 47 veterans to Washington, D.C., Nov. 9-10, to see the memorials of the respective war they fought. Sixteen adults and 48 student guardians escorted the veterans.

Burlington Elementary held its annual Veterans Day program to recognize and honor local veterans involving several classes from the elementary and high schools in presentations and music. Lebo High School held its 23rd Annual Veterans Day program. Waverly schools celebrated veterans at the elementary school, all on Friday, Nov. 11. Due to the timing of the Honor Flight, Lebo and Gridley schools, did not have a program.

The 4th Judicial District Nominating Commission has selected Kara Reynolds to fill a magistrate judge position in Coffey County by a unanimous vote after a long search over several months of extending the deadline for applicants. After serving one year in office, the new magistrate judge must stand for a retention vote in the next general election to remain in office.

Users of water produced at the Burlington water plant were notified they are no longer under a water warning, affecting consumers in Burlington, New Strawn, LeRoy, Gridley, and Coffey County Rural Water District Nos. 2 and 3.

The Burlington Lions Club donated a bench to the Burlington Branch Library after their first year of participating in the TREX Community Recycling Challenge. Other community organizations are also collecting soft plastic to keep it from going into the Coffey County Landfill. There are collection bins around the county for others to donate with information what is acceptable posted on the bins.

The Burlington City Council approved the appointment of Lila VanHorn to fill an unexpired term in Ward 1, Position 1. The seat will come up for election in November 2023.

The Lebo Lady Wolves Volleyball team finished their Class 1A Division II as state champions with a 39-1 record. The Coffey County Commissioners proclaimed Nov. 21-25 as Lebo Lady Wolves Volleyball Week in Coffey County, and the team with their coaches were invited to the courthouse for the announcement.

Wolf Creek Generating Station is operating at 100 percent power following the successful conclusion of its 25th refueling and maintenance outage, ending Nov. 20.

December

Coffey County Commissioners took action to complete the issuance of $9,745,000 of tax-exempt general obligation bonds to be used to partially finance a 92-bed jail and law enforcement center approved by the Coffey County Voters in the August primary election.

New Strawn City Council's Nov. 10 meeting resulted in an update concerning the proposed Mae's Landing subdivision and the search for a code enforcement officer. The developer of the proposed subdivision southeast of 16th Road and U.S. 75, Texal Jenkins, suggested the city and Coffey County Rural Water District No. 3 should meet to discuss Kansas Rural Water Association guidelines for the transfer of water service territory between cities and rural water districts.

Coffey County Commissioners heard a proposal to revive a project for an 8.9-acre subdivision on the west edge of LeRoy. A local family is willing to deed the lots for one dollar to developers to build homes. LeRoy City Council has taken no action on the proposal which comes with a hefty price tag. Discussion continued with other avenues of financial support and involvement from both the city and Coffey County. An update was also given at the LeRoy City Council Bryson Meats.

Local cowboy, Jess Pope, Waverly, captured his first-ever Montana Silversmiths Gold Buckle, and earned the title of world bareback riding champion at the 2022 Wrangler National Finals Rodeo in Las Vegas.

Longtime Burlington High School wrestling coach Doug Vander Linden will be inducted posthumously into the Kansas State High School Activities Association Hall of Fame. The recognition will be in February 2023 at the Class 4A Boys' State Wrestling Championships.

Coffey County resident Kara Reynolds was sworn in as District Magistrate Judge in the 4th Judicial District, selected from four candidates by the 4th Judicial District Nominating Commission.

Eighth-grader Jule Rolf correctly spelled "superfluity" to win the 2022-23 Burlington Middle School Spelling Bee in Round 17. Twelve BMS students from fifth through eighth grade competed in the school spelling bee. All 12 spellers correctly spelled every word through the first six rounds.

The Coffey County Sheriff's office immediately responded Dec. 12 to a report of a verbal threat with the use of a firearm made by an elementary student toward other elementary students at Waverly Elementary School. No students were injured and no physical altercation was reported. An investigation is under way.

Coffey County is experiencing a "tridemic," with rising cases of COVID, flu and RSV, as reported by Coffey Health System. Fortunately, with many having been vaccinated, people are not extremely sick. A persistent cough over several weeks is a sign it may be RSV. Coffey County Hospital will be receiving a new in-house MRI unit sometime in February 2023.

Coffey County Commissioners approved a proposal to create a Communications Technician position within the department of Coffey County Emergency Management. This position will be dedicated to programing and maintaining all radios, maintaining county sirens and other duties.

An elderly resident was scammed of $48,000, as reported by Police Chief Doug Jones.

Burlington's Lighted Christmas Parade, Dec. 10, organized by Burlington Promotions, had several entries from businesses and local organizations, an appearance of Santa, music provided holiday cheer by the Burlington High School Marching Band, and a chili contest prior to the parade.

Downtown Burlington has seen many changes in 2022, with more to come in 2023. Several businesses have changed locations on Neosho Street or left completely, due to personal matters or retirement. New businesses have opened their doors to fill community needs. Several exterior storefronts have been restored, with some buildings being remodeled on the interior as well – one in which has become an individual's home and business space, and above are two separate rental apartments. Owners of the old twin theater building have plans to begin renovations this winter.

Waverly celebrated with a Sunday afternoon parade to recognize Jess Pope's world championship title in bareback riding, earned at the National Finals Rodeo in Las Vegas. Waverly has designated Dec. 18 as "Jess Pope Day" of every year.

A ceremonial groundbreaking took place to begin the installation of turf on the USD 244 schools' baseball, softball and football fields.

APPENDIX G – OPEN HOUSE POSTERBOARDS

Welcome to NextEra Energy Transmission Southwest's

OPEN HOUSE

Wolf-Creek to Blackberry

345-kV Transmission Line Project

NEXTera™ ENERGY

TRANSMISSION SOUTHWEST

Project Purpose and Need

What is the project?

This project is a new 94-mile, 345 kilovolt (kV) regulated transmission line that runs from the Wolf Creek substation in Kansas to the Blackberry substation in Missouri.

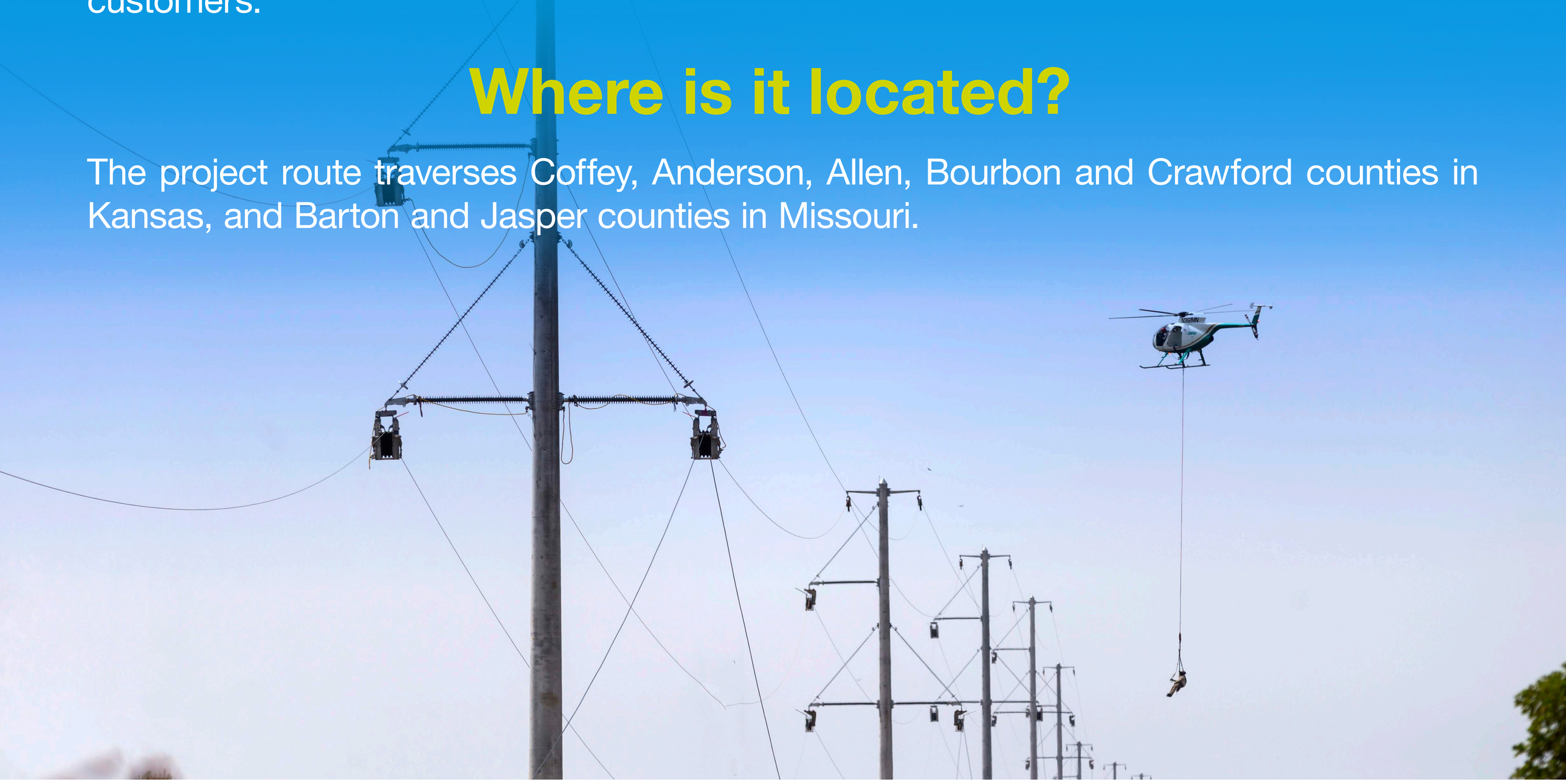
Why is it needed?

The Wolf Creek-Blackberry Project is part of SPP's 2019 Integrated Transmission Plan to address the needs for a more reliable and cost-effective grid.

This project will reduce congestion and provide market efficiencies and benefits to customers.

Where is it located?

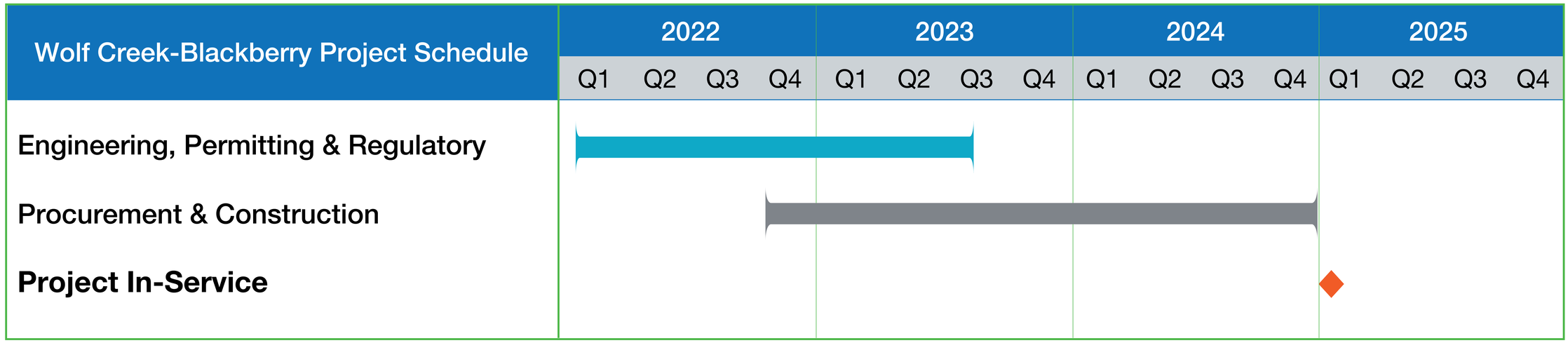
The project route traverses Coffey, Anderson, Allen, Bourbon and Crawford counties in Kansas, and Barton and Jasper counties in Missouri.



NEXTera™ ENERGY

TRANSMISSION SOUTHWEST

Project Schedule



Note: The proposed project schedule is subject to change based on Regulatory Approvals.

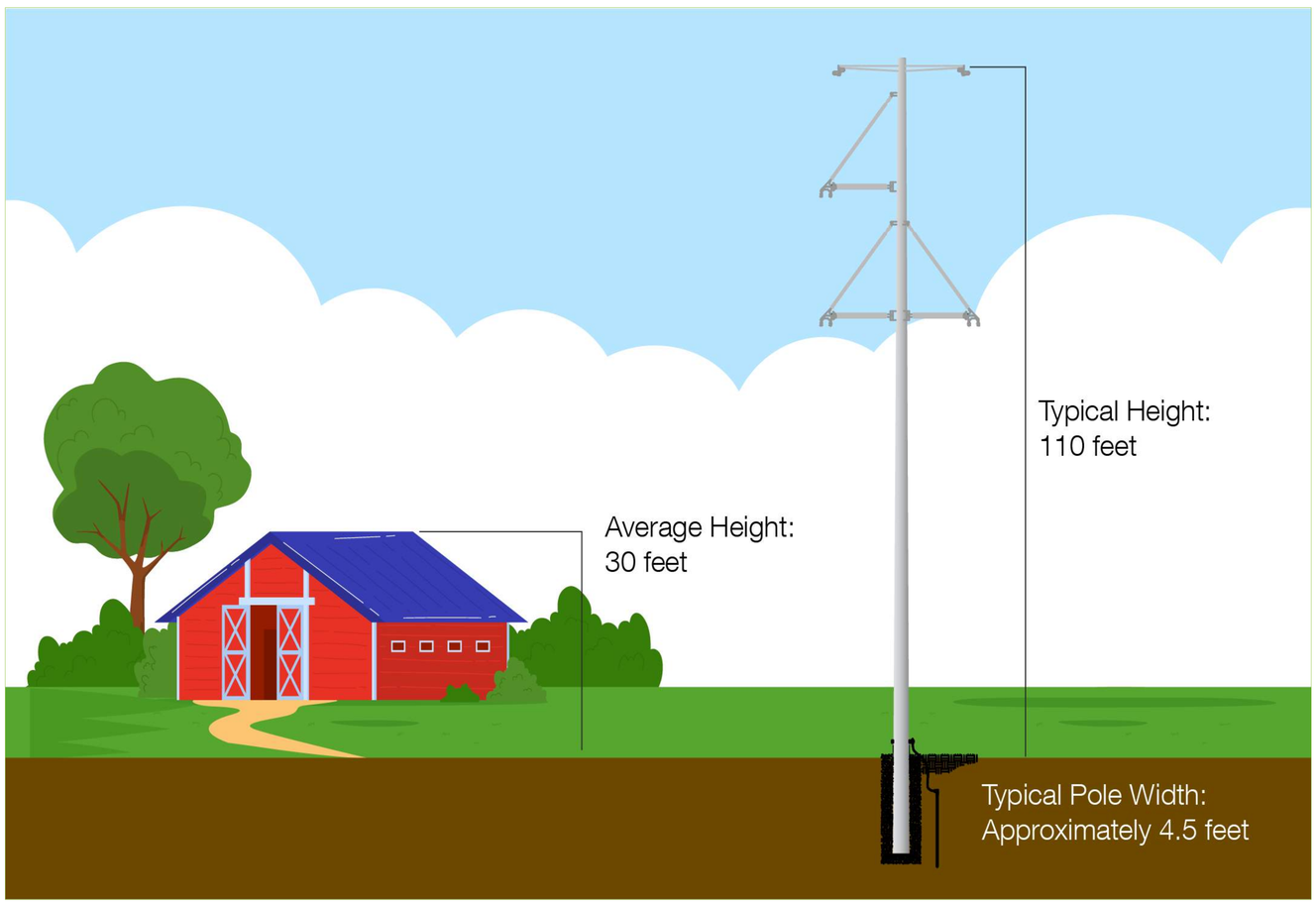
NEXTera™ ENERGY
TRANSMISSION SOUTHWEST

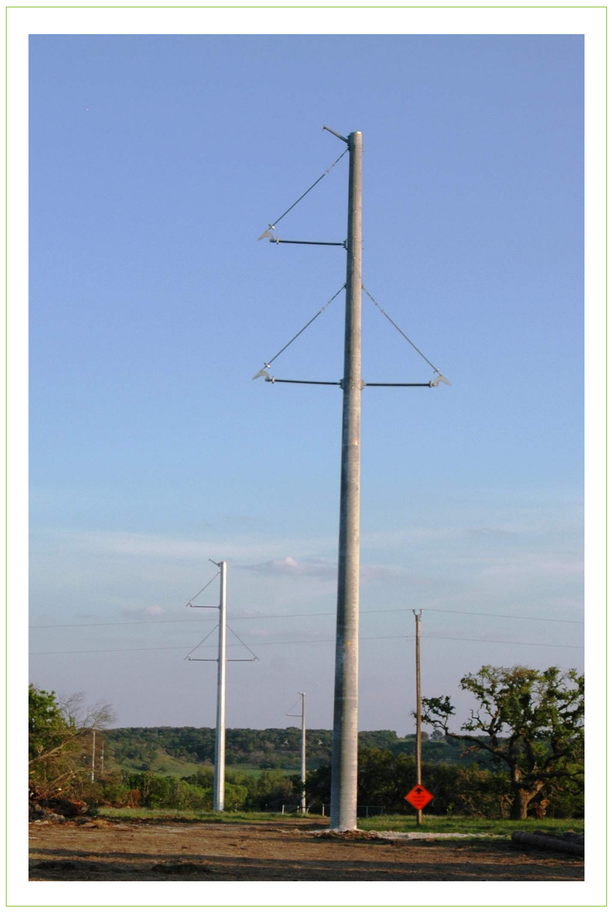
Transmission Line Design

What will the transmission line look like?

- Steel and spun concrete monopole structures
- Typical structure heights up to 110 feet
- Typical line spans approximately 900 feet
- Typical right-of-way width will generally be 150 feet wide
- Guy wires will be used to support and stabilize angle structures
- Self-supporting structures placed on drilled shaft foundations will be installed at select locations to support line crossings and other constraints

Typical structures





Project will primarily utilize monopole structures to the extent possible to minimize tree clearing and agricultural impacts.

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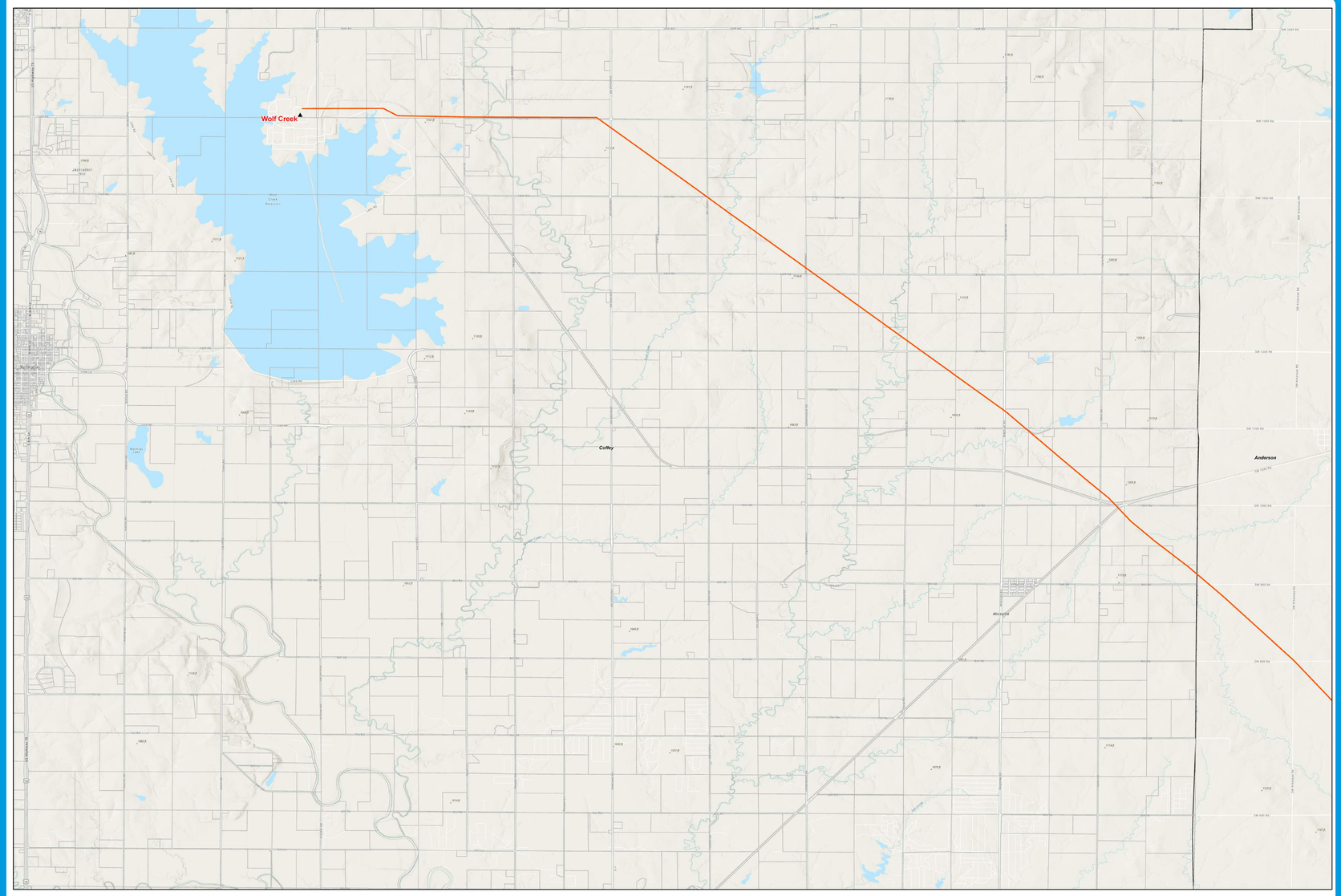
TRANSMISSION
SOUTHWEST

Project Location

Coffey County



▲ Project Substation
— Proposed Route – Subject to Final KCC Approval
Parcel Boundary
County Boundary

NextEra Energy Transmission
Wolf Creek to Blackberry
Coffey County
December 07, 2022

0 0.38 0.75 1.5 2.25 3 Miles

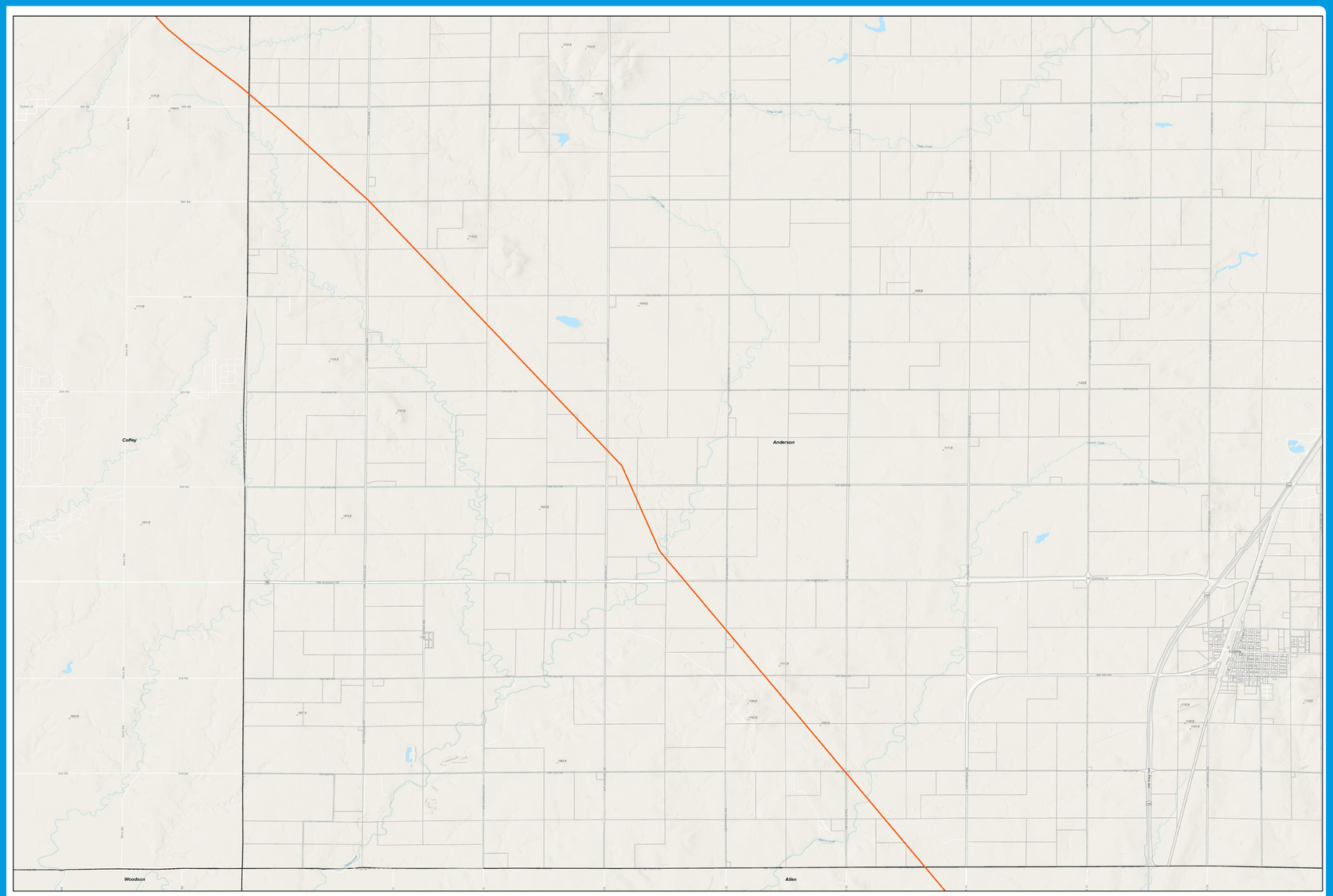
NEXTera™ ENERGY TRANSMISSION SOUTHWEST

Note: The proposed project route is subject to change and may be altered by the relevant permitting agencies.

NEXTera™ ENERGY TRANSMISSION SOUTHWEST

Project Location

Anderson County

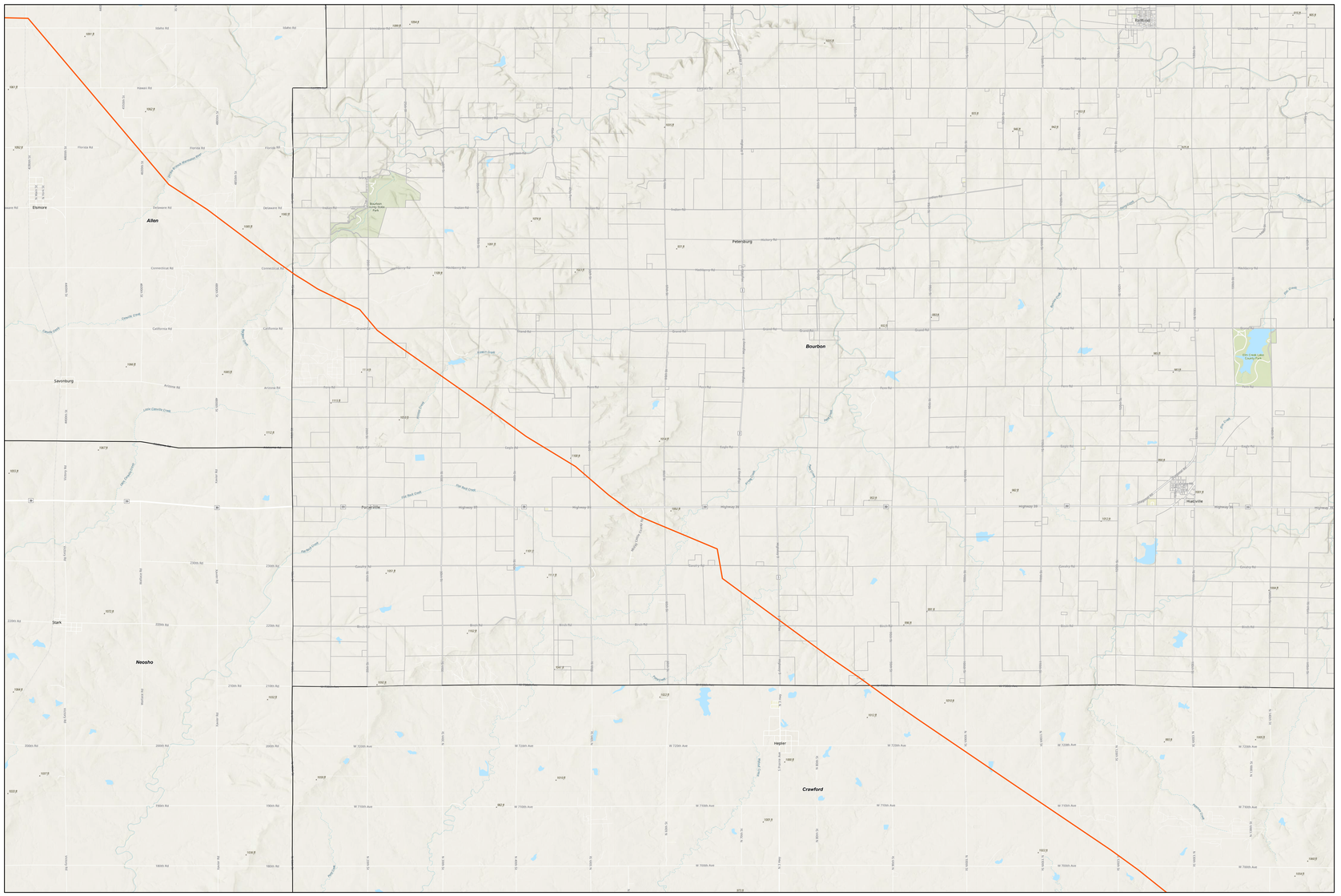


Note: The proposed project route is subject to change and may be altered by the relevant permitting agencies.

NEXTera ENERGY TRANSMISSION SOUTHWEST

Project Location

Bourbon County



Note: The proposed project route is subject to change and may be altered by the relevant permitting agencies.

NEXTera ENERGY TRANSMISSION SOUTHWEST