SCI ENGINEERING, INC.
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St. Charles, Missouri 63301
636-949-8200
www.sciengineering.com

Wetland and Waterbody Delineation Report

WVPA SALEM BULK – VALLEY VIEW 69kV TRANSMISSION LINE – SALEM TO TOWER ROAD
STE. GENEVIEVE COUNTY, MISSOURI

November 29, 2023

Prepared for:

COMMONWEALTH ASSOCIATES, INC

SCI No. 2023-0860.30

SCI ENGINEERING, INC.
EARTH • SCIENCE • SOLUTIONS
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

November 29, 2023

Mark E. Walker
Manager, Environmental Services and Licensing
Commonwealth Associates, Inc.
245 W. Michigan Avenue
Jackson, Michigan 49201

RE: Wetland and Waterbody Delineation Report
WVPA Salem Bulk – Valley View 69kV Transmission Line (Salem to Tower Road)
Ste. Genevieve County, Missouri
SCI No. 2023-0860.30

Dear Mark Walker:

SCI Engineering, Inc. (SCI) is pleased to submit the attached *Wetland and Waterbody Delineation Report*, dated November 29, 2023. SCI understands that the approximately 21 miles of transmission line construction is being proposed to complete a loop between Farmington and Bloomsdale, Missouri. The overall project will include the construction of a new transmission line, including the clearing and construction of new poles and guy wires. The western-most segment of the proposed transmission line, approximately 8.8 miles, located between the Salem Bulk Substation and Tower Road was recently surveyed by SCI to identify wetland waterbody features within the project corridor. An executive summary of the report is provided below.

- SCI conducted a wetland and waterbody delineation of the approximately 8.8-mile survey corridor and 3 proposed access roads on August 29, August 30, September 1, September 6, and October 17, 2023.

- The project corridor was found to contain 17 relatively permanent waterways (RPW) and 19 non-relatively permanent waterways (NRPW) within the project corridor. We anticipate that all the RPWs would likely be considered jurisdictional waters of the U.S. (WOTUS) as identified under the definitions described in Section 328.3 of the *Code of Federal Regulations* and the May 25, 2023, *Sackett V. the U.S. Environmental Protection Agency* supreme court case decision.

- The remaining features *do not* display characteristics which would classify them as WOTUS, which includes the 19 NRPWs.

- Any impact to a WOTUS, including filling, crossing, piping, relocating, or discharging into, will require a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from Missouri Department of Natural Resources (MDNR).

The attached report should be read in its entirety.

We appreciate the opportunity to provide you with our natural resource services. If you have any questions or comments, please do not hesitate to contact us.

Respectfully,

SCI ENGINEERING, INC.

Michael S. Holm, CESSWI
Staff Scientist

Scott E. Billings
Senior Project Scientist

MSH/JEL/SEB/rah

Enclosure
Wetland and Waterbody Delineation Report

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Wetland and Waterbody Delineation Report

WVPA SALEM BULK – VALLEY VIEW 69kV TRANSMISSION LINE –
SALEM TO TOWER ROAD
STE. GENEVIEVE COUNTY, MISSOURI

1.0 INTRODUCTION

SCI Engineering, Inc. (SCI) was retained by Commonwealth Associates, Inc. to conduct a wetland and waterbody delineation along an approximately 8.8-mile proposed transmission corridor and access roads located within the western section of Ste. Genevieve County, Missouri. The project is part of an overall 21-mile transmission line project. It is our understanding that the project will include the construction of a new transmission line and will include clearing and construction of new poles and guy wires. SCI's scope of services included performing site reconnaissance to characterize the soils, vegetation, and hydrology for the delineation of wetlands and waterbodies within the project corridor. Our services were provided in general accordance with our proposal dated June 19, 2023.

The August 29, August 30, September 1, September 6, and October 17, 2023, field explorations resulted in the identification of 17 Relatively Permanent Waterways (RPW) and 19 Non-Relatively Permanent Waterways (NRPW). Traditional navigable waterways (TNW), RPWs, and some wetlands and impoundments of Waters of the United States (WOTUS) are considered regulated resources as identified under the definitions described in Section 328.3 of the *Code of Federal Regulations (33 CFR*) and the May 25, 2023 *Sackett V. U.S. Environmental Protection Agency (USEPA)* supreme court case decision. We anticipate that the 17 RPWs would likely be regulated by the U.S. Army of Engineers (USACE). Any impact to a WOTUS, including filling, crossing, piping, relocating, or discharging into, will require a Section 404 Permit from the USACE and a Section 401 Water Quality Certification from the Missouri Department of Natural Resources (MDNR).

2.0 SITE LOCATION

The subject site is located between the existing Salem Bulk substation to Tower Road in Ste. Genevieve County, Missouri near Desloge. The surrounding land use consists mainly of forested tracts and agricultural fields with some residential developments. The *Vicinity and Topographic Map* depicting the site location is enclosed as Figure 1.

3.0 DESKTOP REVIEW

3.1 United States Geological Survey (USGS)

The United States Geological Survey (USGS) topographic map depicts the project corridor crossing seven blue line tributaries. The geography of the site ranges from flat plains to steep ridges and valleys. The USGS topographic map is enclosed as Figure 1 - *Vicinity and Topographic Map*.

3.2 National Wetlands Inventory (NWI)

The NWI map depicts the transmission line corridor crossing or paralleling ten riverine habitats (R4SBC, R3UBG), with many overlapping the USGS blue-line features mentioned previously. Several freshwater ponds (PUBFh, PUBGh) are located adjacent to the project corridor. The *National Wetlands Inventory (NWI)* map is enclosed as Figures 2.1 through 2.6.

3.3 Web Soil Survey

The Natural Resources Conservation Service (NRCS) Web Soil Survey (http://websoilsurvey.nrcs.usda.gov) was utilized to determine the mapped soil types and hydric rating of the soils located within the project corridor. Hydric soils are described as those soils that are sufficiently wet in the upper part to develop anaerobic conditions during the growing season. The soils mapped within the project corridor are summarized in Table 3.1 below and shown on Figures 2.1 through 2.6 - *NWI & USDA Soil Survey Map*. Please note that no hydric soils were mapped within the project corridor.

Table 3.1 – Soil Map =Units and Hydric Rating

Soil Map Unit Name	Hydric rating
Caneyville silt loam, 3to 8 percent slopes	Non-hydric
Fourche silt loam, 1 to 3 percent slopes	Non-hydric
Fourche silt loam, 3 to 8 percent slopes	Non-hydric
Gerald silt loam, 1 to 4 percent slopes	Non-hydric
Lamotte silt loam, 3 to 8 percent slopes	Non-hydric
Lily loam, 8 to 15 percent slopes	Non-hydric
Jonca silt loam, 3 to 8 percent slopes	Non-hydric
Ransey-Rock outcrop complex, 8 to 50 percent slopes	Non-hydric
Lamotte silt loam, 8 to 15 percent slopes	Non-hydric
Caneyville silt loam, 8 to 15 percent slopes	Non-hydric

3.4 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM)

Review of the FIRM panel maps 29186C0275E (Effective date: February 15, 2019), 29186C0150E (Effective date: February 15, 2019), and 29186C0175E (Effective date: February 15, 2019) indicates 2 separate locations along the survey corridor that are in a Special Flood Hazard Area Zone A, designated as an area Without Base Flood Elevation. One floodway includes the area along Salem Creek and the second is the floodway along a portion of Terre Bleue Creek. The *FIRM Map* is enclosed as Figures 3.1 through 3.6 - *FEMA Flood Map*.

3.5 Antecedent Precipitation Evaluation

The USACE Antecedent Precipitation Tool (APT) was utilized to calculate the normal range of precipitation for the project area, including whether the area was experiencing a drought at the time of the delineation. Five separate site visits occurred and the APT was utilized for each visit.

For the first site visit on Tuesday August 29, 2023, the APT calculation indicates that the area was experiencing "Wetter than Normal" conditions within the 3 months prior to the survey compared against 30 years of climate data, and that the area was also within the "Dry Season" at the time of the wetland and waterbody delineation. According to the drought index for August 2023, there was no data available.

For the second site visit on Wednesday August 30, 2023, the APT calculation indicates that the area was experiencing "Normal Conditions" within the 3 months prior to the survey compared against 30 years of climate data, and that the area was also within the "Dry Season" at the time of the wetland and waterbody delineation. According to the drought index for August 2023, there was no data available.

For the third site visit on Friday September 1, 2023, the APT calculation indicates that the area was experiencing "Wetter than Normal" conditions within the 3 months prior to the survey compared against 30 years of climate data, and that the area was also within the "Dry Season" at the time of the wetland and waterbody delineation. According to the drought index for August 2023, there was no data available.

For the fourth site visit on Wednesday September 6, 2023, the APT calculation indicates that the area was experiencing "Normal Conditions" within the 3 months prior to the survey compared against 30 years of climate data, and that the area was also within the "Dry Season" at the time of the wetland and waterbody delineation. According to the drought index for September 2023, there was no data available.

For the fifth site visit on Tuesday October 17, 2023, the APT calculation indicates that the area was experiencing "Drier than Normal" conditions within the 3 months prior to the survey compared against 30 years of climate data, and that the area was also within the "Wet Season" at the time of the wetland and waterbody delineation. According to the drought index for October 2023, there was no data available.

The APT data is included as Appendix A.

4.0 SITE RECONNAISSANCE

On August 29, August 30, September 1, September 6, and October 17, 2023, a team of SCI Natural Resource Scientists conducted a field exploration to delineate the extent of wetlands and waterbodies that may exist within the project corridor, 50 feet on either side of the proposed transmission line. Suspect areas that were identified during the desktop review were explored for wetland and waterbody characteristics utilizing methods as described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Version 2.0). Additionally, both banks of each RPW and NRPW features were mapped while in the field using sub-meter accuracy GPS units.

Dominant trees and shrubs within the forested portions of the project site included white oak (*Quercus alba*), pin oak (*Q. palustris*) shagbark hickory (*Carya ovata*), eastern red cedar (*Juniperus virginiana*), loblolly pine (*Pinus taeda*), sugar maple (*Acer saccharum*) and bush honeysuckle (*Lonicera maackii*).

5.0 CONDITION SUMMARY

Our site visits confirmed the presence of 17 RPWs and 19 NRPWs within the project corridor. SCI anticipates that the 17 RPWs would be considered jurisdictional WOTUS by the USACE. The following discussion provides a narrative description of these features. All tributaries are summarized below in Table 5.1 – Waterbody Summary (RPWs). A photographic summary of the representative site conditions and identified features is included as Appendix B. The *Wetland Determination Data Forms* are enclosed as Appendix C. In addition, the features identified are illustrated on the *Wetland Delineation & Aerial Photograph Plan*, Figures 4.1 through 4.22.

5.1 Waterbodies

A total of 36 tributaries were identified within the project corridor and proposed access routes. Of the waterbody features identified, 17 were considered to be RPWs and 19 were considered NRPWs. All RPWs are anticipated to be considered WOTUS and were found to possess characteristics of jurisdictional features, including a defined bed and bank and ordinary high-water mark (OHWM). The NRPWs lacked

the characteristics of a WOTUS including evidence of relatively permanent water flow and an established surface connection to a jurisidictional waterbody. Table 5.1 below includes the characteristics of each RPW.

Table 5.1 – Waterbody Summary (RPWs)

Feature ID	Flow Type	RPW/ Non-RPW	Photos	OHWM Width (feet)	Top of Bank (Average feet)	Substrate	Comments
Tributary B	Intermittent	RPW	5, 6, 7	3	8	Silt, clay, gravel	wide shallow channel, pools of water observed
Tributary C	Perennial	RPW	8	2	10	Vegetation, silt, clay, sand, gravel, cobble	wide channel, low flow of water observed
Tributary F	Perennial	RPW	37, 38	6	8	Silt, clay, sand, gravel, cobble, bedrock	wide shallow channel, low water flow observed, fish and crayfish observed
Tributary I	Perennial	RPW	13	6	8	Silt, clay, loam, sand, gravel, cobble, bedrock	wide channel, low water flow observed, macroinvertebrates observed
Tributary J	Perennial	RPW	14	10	12	Silt, clay, loam, sand, gravel, cobble, bedrock	wide channel, water present up to 1 foot deep, fish observed
Terre Bleue Creek	Perennial	RPW	16	20	30	Silt, loam, clay, gravel, cobble, sand, bedrock	large wide channel, rock cliff 40-50 feet tall at northeast bank, water up to 2 feet observed, fish present
Tributary L	Intermittent	RPW	28	3	8	Silt, clay, sand, gravel, cobble, bedrock	Deep channel, streambed damaged by cattle, pools of water observed
Tributary M	Perennial	RPW	30	6	8	Silt, loam, clay, sand, gravel, cobble, bedrock	small shallow channel, low water flow observed, macroinvertebrates observed
Tributary Q	Perennial	RPW	32	6	10	Silt, clay, loam, sand, gravel, cobble, bedrock	wide shallow channel, low water flow observed, macroinvertebrates observed

Table 5.1 – Waterbody Summary (continued)

Feature ID	Flow Type	RPW/ Non-RPW	Photos	OHWM Width (feet)	Top of Bank (Average feet)	Substrate	Comments
Tributary S	Perennial	RPW	33	8	10	Silt, loam, clay, sand, gravel, cobble, bedrock	wide shallow channel, low water flow observed, macroinvertebrates observed
Tributary T	Intermittent	RPW	34	5	6	Silt, clay, loam, sand, gravel, cobble, bedrock	medium channel, pools of water observed, macroinvertebrates observed
Tributary U	Perennial	RPW	35	12	15	Silt, clay, loam, sand, gravel, cobble, bedrock	wide shallow channel, low water flow observed, macroinvertebrates observed
Tributary W	Intermittent	RPW	18	2	3	Silt, clay, loam, sand, gravel, cobble, bedrock	small narrow channel, pools of water observed
Tributary X	Perennial	RPW	20	5	8	Silt, clay, loam, sand, gravel, cobble, bedrock	medium shallow channel, low water flow observed
Tributary Z	Intermittent	RPW	25	1	8	Silt, clay, loam, sand, gravel, cobble, bedrock	wide shallow channel with bedrock present in parts of the streambed, low water flow observed
Tributary AA	Intermittent	RPW	N/A	1	2	Silt, loam, clay, sand, gravel, cobble	small narrow channel, low water flow observed
Tributary AB	Intermittent	RPW	26	2	10	Bedrock	wide shallow channel with bedrock streambed

Nineteen Non-RPWs were also identified on site. All identified features were determined to be ephemeral tributaries or erosional drainages that drained across the transmission line and proposed access road corridors. These NRPWs were identified at various locations throughout the project survey corridor. None of the observed features possess the characteristics of a WOTUS including evidence of a relatively permanent water flow and therefore will likely not be regulated by the USACE.

6.0 CONCLUSION

SCI performed a wetland and waterbody delineation of the project corridor on August 29, August 30, September 1, September 6, and October 17, 2023, in an effort to identify wetland and waterbody features within the defined project corridor. The proposed 8.8-mile transmission line project will include the installation of a new transmission line and is the western-most portion of an overall 21-mile transmission line project. Three proposed access roads were also included in the project survey.

A total of 36 waterbody features were identified during the survey, including 17 RPWs and 19 NRPWs. The 17 RPWs will likely be considered WOTUS by the USACE. Impacts below the stream OHWM would likely require a Section 404/401 permit. However, we understand that work is planned to avoid tributaries so that impacts will be eliminated.

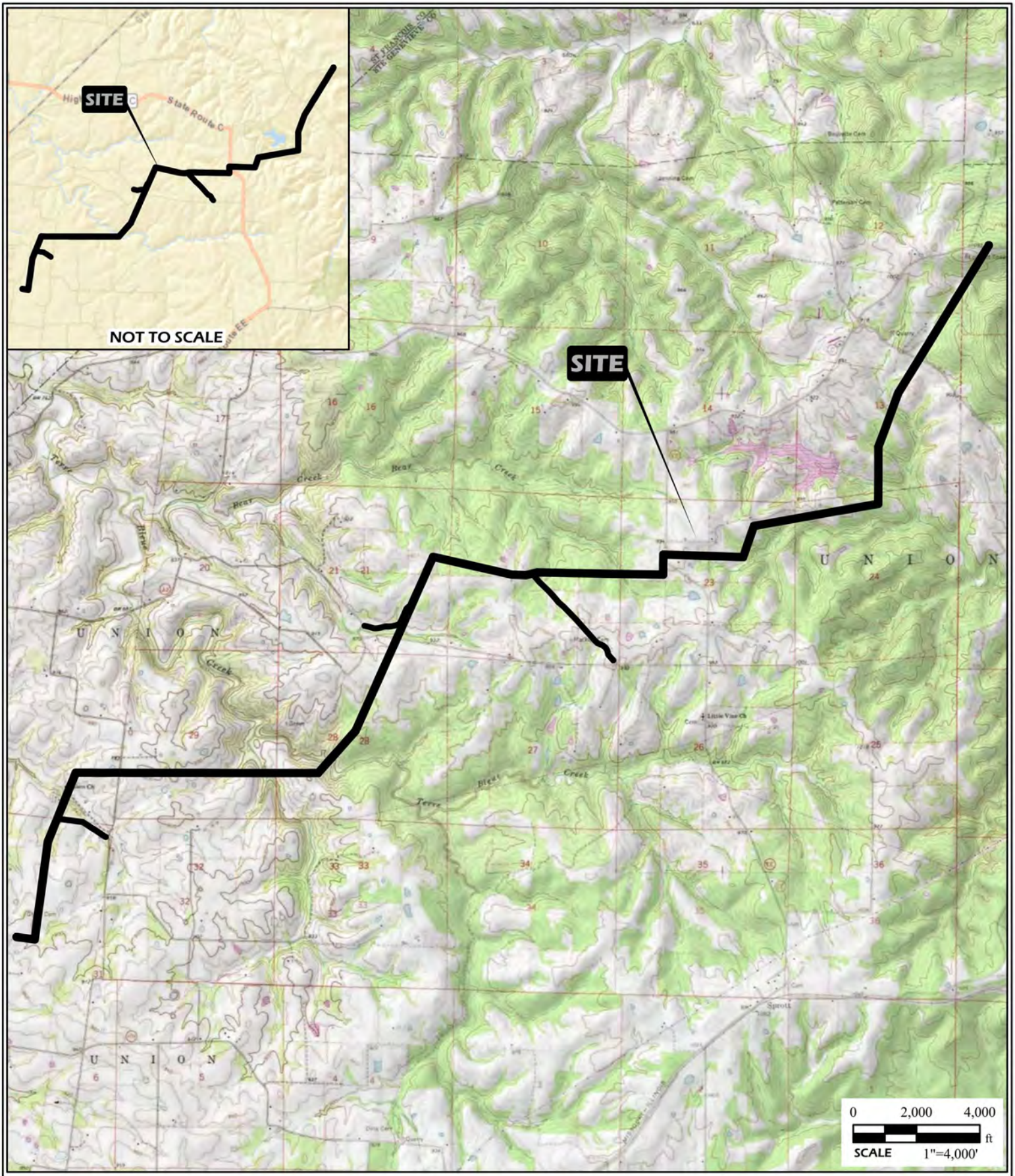
If it appears that the identified waterbodies will be avoided during project construction, SCI is available to submit the wetland delineation report and site plan and request a "No Permit Required" determination from the USACE in lieu of the Section 404 Permit. However, if wetland and waterbody impacts cannot be avoided, SCI can submit the report and the Section 404/401 Permit Application to the regulatory agencies to initiate the permitting process. Appropriate best management practices should be taken during construction to reduce the potential for unintentional sedimentation and sediment runoff into adjacent regulated waters.

7.0 LIMITATIONS

This report has been prepared for the exclusive use of Commonwealth Associates, Inc. SCI is not responsible for independent conclusions or recommendations made by others. The size and location of all identified wetland and waterbody features have been delineated and quantified using a sub-meter accurate GPS unit. Furthermore, written consent must be provided by SCI should anyone other than our client wish to excerpt or rely on the contents of this report. The findings of this report are valid as of the present date of the delineation. SCI is not responsible for surveys, calculations, or plans that were prepared by others.

This delineation is based on professional experience in the approved methodology and from experience with the USACE; however, this delineation does not constitute a jurisdictional determination of waters of the United States. This delineation has been based on the professional experience of SCI staff and our interpretation of USACE regulations at 33 CFR 328.3 and joint USACE/EPA guidance documents. The USACE has the sole authority to determine if any of the features identified would be under their jurisdiction.

Changes in surface and subsurface conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, the broadening of knowledge, or other reasons. Accordingly, the findings of this report may be invalidated in whole or in part by changes outside our control.



PROJECT NAME WVPA SALEM BULK VALLEY VIEW 69KV TRANSMISSION LINE STE. GENEVIEVE COUNTY, MISSOURI			
VICINITY AND TOPOGRAPHIC MAP			
DRAWN BY ACV	DATE	JOB NUMBER	
CHECKED BY SEB	11/2023	2023-0860.30	

GENERAL NOTES/LEGEND

USGS TOPOGRAPHIC MAP
FRENCH VILLAGE MISSOURI QUADRANGLE
DATED 1964
10' CONTOURS

USGS TOPOGRAPHIC MAP
LAWRENCETON MISSOURI QUADRANGLE
DATED 1964
10' CONTOURS

FARMINGTON MISSOURI QUADRANGLE
DATED 1982
20' CONTOURS

SPROTT MISSOURI QUADRANGLE
DATED 1964
20' CONTOURS

STREET MAP
HTTP://GOTO.ARCGISONLINE.COM/MAPS/WORLD_STREET_MAP

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W E
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FIGURE
1

Map Unit Symbol	Map Unit Name
73147	Fourche silt loam, 3 to 8 percent slopes
73148	Jonca silt loam, 3 to 8 percent slopes
73204	Ramsey-Rock outcrop complex, 8 to 50 percent slopes
73207	Caneyville silt loam, 3 to 8 percent slopes
73208	Caneyville silt loam, 8 to 15 percent slopes
73423	Fourche silt loam, 1 to 3 percent slopes
73445	Gerald silt loam, 1 to 4 percent slopes
73459	Lamotte silt loam, 3 to 8 percent slopes
73460	Lamotte silt loam, 8 to 15 percent slopes
73469	Lily loam, 8 to 15 percent slopes

GENERAL NOTES/LEGEND

SOILS DATA OBTAINED FROM https://websoilsurvey.sc.egov.usda.gov/

MO WETLAND DATA OBTAINED FROM https://www.fws.gov/wetlands/

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.
DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

PROJECT NAME
WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

NATIONAL WETLAND INVENTORY & USDA SOIL SURVEY MAP

JOB NUMBER 2023-0860.30
DATE 11/2023
DRAWN BY ACV
CHECKED BY SEB
FIGURE 2.1

Map Unit Symbol	Map Unit Name
73147	Fourche silt loam, 3 to 8 percent slopes
73148	Jonca silt loam, 3 to 8 percent slopes
73204	Ramsey-Rock outcrop complex, 8 to 50 percent slopes
73207	Caneyville silt loam, 3 to 8 percent slopes
73208	Caneyville silt loam, 8 to 15 percent slopes
73423	Fourche silt loam, 1 to 3 percent slopes
73445	Gerald silt loam, 1 to 4 percent slopes
73459	Lamotte silt loam, 3 to 8 percent slopes
73460	Lamotte silt loam, 8 to 15 percent slopes
73469	Lily loam, 8 to 15 percent slopes

0 300 600 ft
SCALE 1"=600'

GENERAL NOTES/LEGEND

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PROJECT NAME
WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

NATIONAL WETLAND INVENTORY & USDA SOIL SURVEY MAP

N W E S

JOB NUMBER 2023-0860.30
DATE 11/2023
DRAWN BY ACV
CHECKED BY SEB
FIGURE 2.2

Map Unit Symbol	Map Unit Name
73147	Fourche silt loam, 3 to 8 percent slopes
73148	Jonca silt loam, 3 to 8 percent slopes
73204	Ramsey-Rock outcrop complex, 8 to 50 percent slopes
73207	Caneyville silt loam, 3 to 8 percent slopes
73208	Caneyville silt loam, 8 to 15 percent slopes
73423	Fourche silt loam, 1 to 3 percent slopes
73445	Gerald silt loam, 1 to 4 percent slopes
73459	Lamotte silt loam, 3 to 8 percent slopes
73460	Lamotte silt loam, 8 to 15 percent slopes
73469	Lily loam, 8 to 15 percent slopes

GENERAL NOTES/LEGEND

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STE. GENEVIEVE COUNTY, MISSOURI

NATIONAL WETLAND INVENTORY & USDA SOIL SURVEY MAP

JOB NUMBER 2023-0860.30
DATE 11/2023
DRAWN BY ACV
CHECKED BY SEB
FIGURE 2.3

Map Unit Symbol	Map Unit Name
73147	Fourche silt loam, 3 to 8 percent slopes
73148	Jonca silt loam, 3 to 8 percent slopes
73204	Ramsey-Rock outcrop complex, 8 to 50 percent slopes
73207	Caneyville silt loam, 3 to 8 percent slopes
73208	Caneyville silt loam, 8 to 15 percent slopes
73423	Fourche silt loam, 1 to 3 percent slopes
73445	Gerald silt loam, 1 to 4 percent slopes
73459	Lamotte silt loam, 3 to 8 percent slopes
73460	Lamotte silt loam, 8 to 15 percent slopes
73469	Lily loam, 8 to 15 percent slopes

GENERAL NOTES/LEGEND

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MO WETLAND DATA OBTAINED FROM https://www.fws.gov/wetlands/

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PROJECT NAME
WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

NATIONAL WETLAND INVENTORY & USDA SOIL SURVEY MAP

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JOB NUMBER 2023-0860.30
DATE 11/2023
DRAWN BY ACV
CHECKED BY SEB
FIGURE 2.4

Map Unit Symbol	Map Unit Name
73147	Fourche silt loam, 3 to 8 percent slopes
73148	Jonca silt loam, 3 to 8 percent slopes
73204	Ramsey-Rock outcrop complex, 8 to 50 percent slopes
73207	Caneyville silt loam, 3 to 8 percent slopes
73208	Caneyville silt loam, 8 to 15 percent slopes
73423	Fourche silt loam, 1 to 3 percent slopes
73445	Gerald silt loam, 1 to 4 percent slopes
73459	Lamotte silt loam, 3 to 8 percent slopes
73460	Lamotte silt loam, 8 to 15 percent slopes
73469	Lily loam, 8 to 15 percent slopes

GENERAL NOTES/LEGEND

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NATIONAL WETLAND INVENTORY & USDA SOIL SURVEY MAP

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DATE 11/2023
DRAWN BY ACV
CHECKED BY SEB
FIGURE 2.5

Map Unit Symbol	Map Unit Name
73147	Fourche silt loam, 3 to 8 percent slopes
73148	Jonca silt loam, 3 to 8 percent slopes
73204	Ramsey-Rock outcrop complex, 8 to 50 percent slopes
73207	Caneyville silt loam, 3 to 8 percent slopes
73208	Caneyville silt loam, 8 to 15 percent slopes
73423	Fourche silt loam, 1 to 3 percent slopes
73445	Gerald silt loam, 1 to 4 percent slopes
73459	Lamotte silt loam, 3 to 8 percent slopes
73460	Lamotte silt loam, 8 to 15 percent slopes
73469	Lily loam, 8 to 15 percent slopes

GENERAL NOTES/LEGEND

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NATIONAL WETLAND INVENTORY & USDA SOIL SURVEY MAP

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DATE 11/2023

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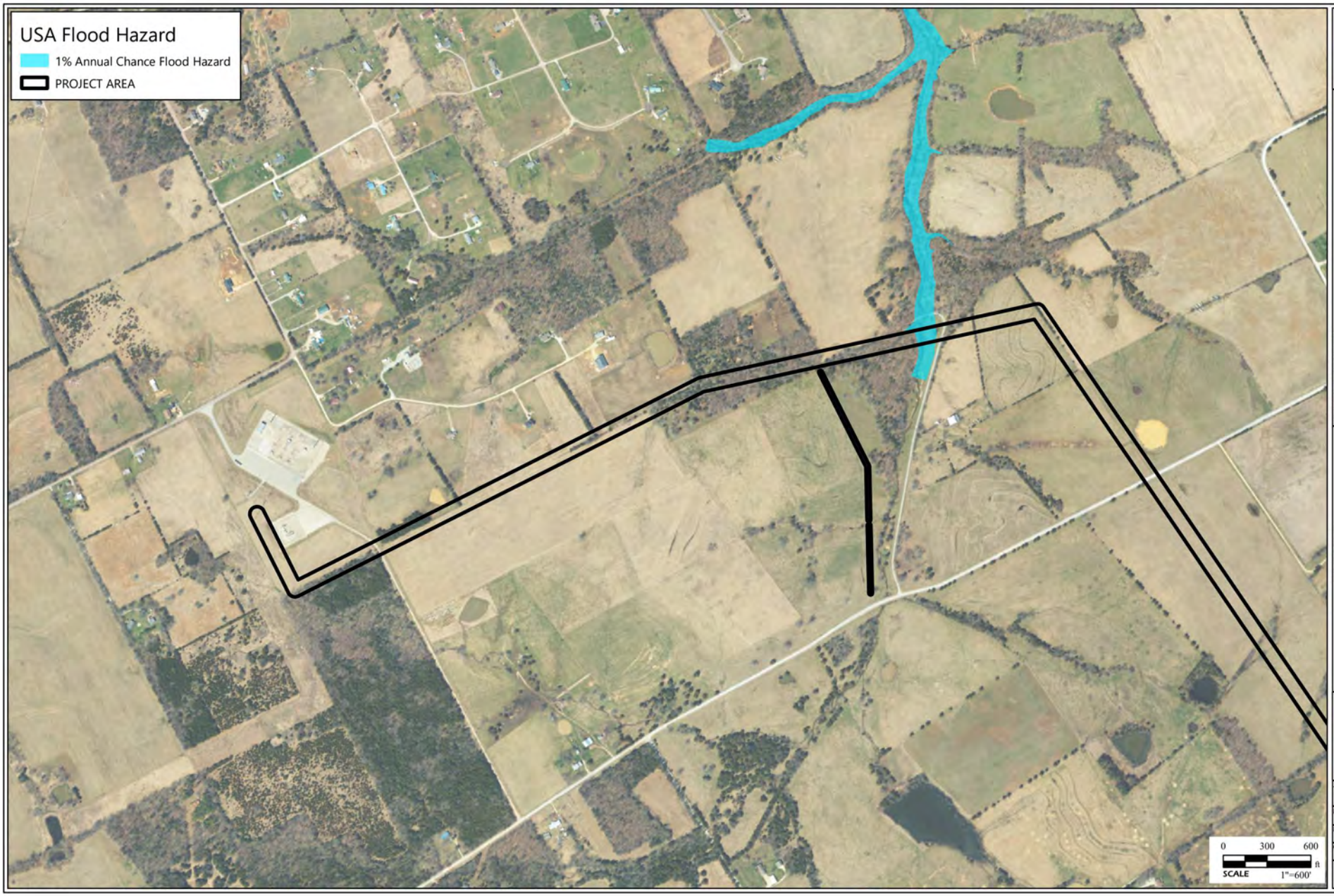
CHECKED BY SEB

FIGURE 2.6



GENERAL NOTES/LEGEND

STE. GENEVIEVE COUNTY, MISSOURI
PANEL: 29187C0175D, 29186C0175E
EFFECTIVE DATE: 06/16/2011, 06/16/2011, 02/15/2019

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FEMA FLOOD MAP

JOB NUMBER 2023-0860.30
DATE 11/2023
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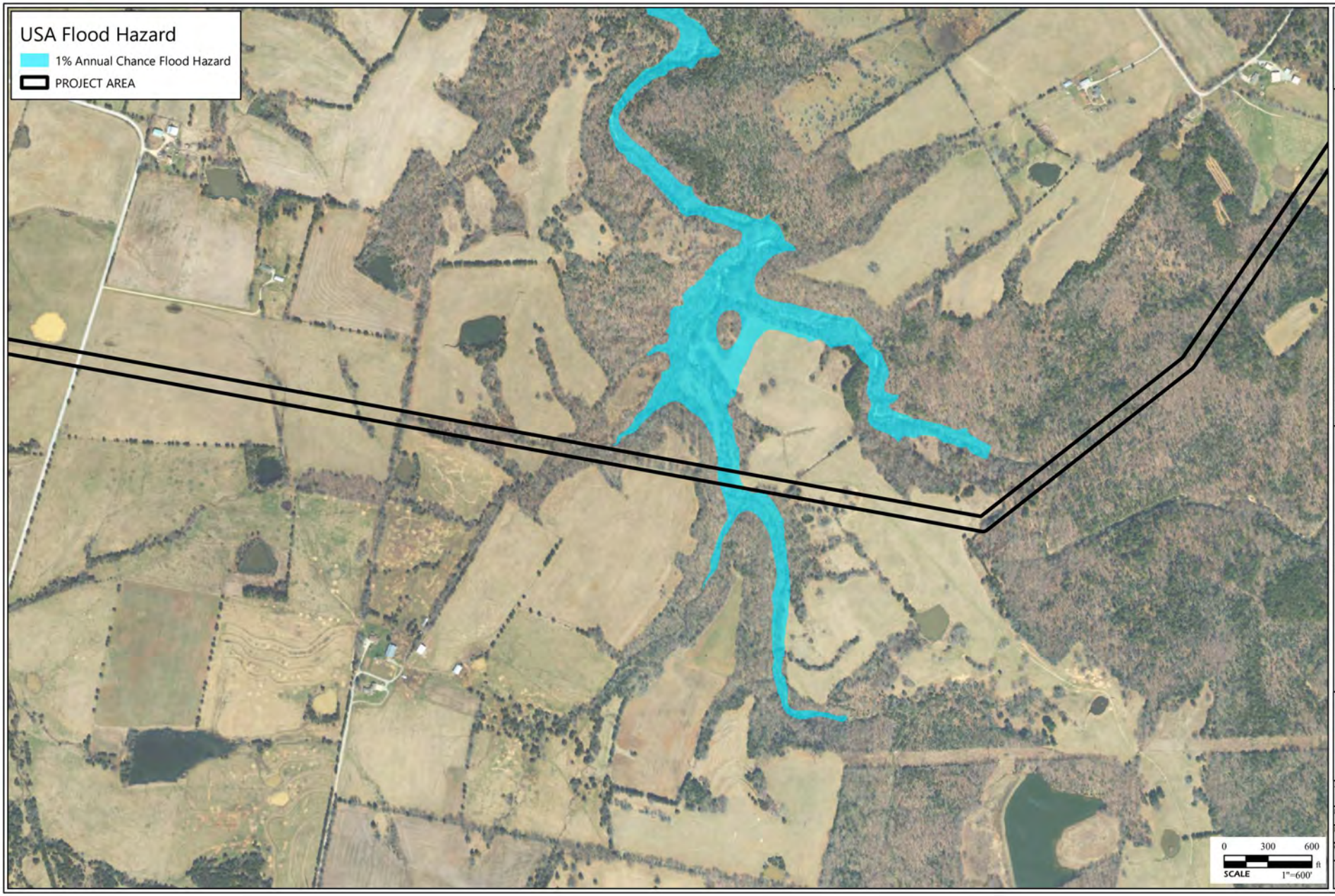
CHECKED BY SEB
FIGURE 3.1



GENERAL NOTES/LEGEND

STE. GENEVIEVE COUNTY, MISSOURI
PANEL: 29187C0175D, 29186C0175E
EFFECTIVE DATE: 06/16/2011, 06/16/2011, 02/15/2019

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.
DIMENSIONS AND LOCATIONS ARE APPROXIMATE, ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

PROJECT NAME
WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

FEMA FLOOD MAP

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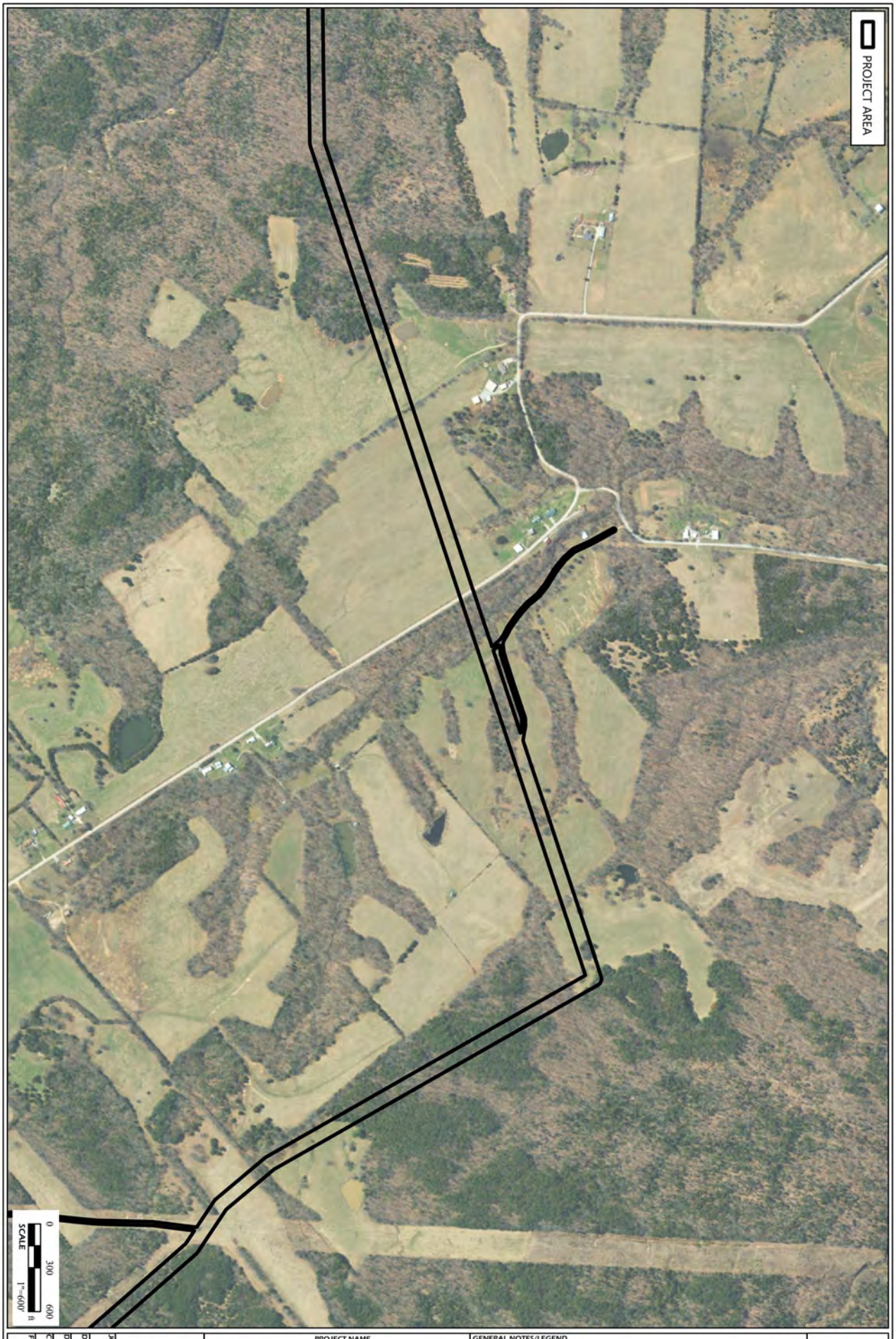
JOB NUMBER 2023-0860.30
DATE 11/2023
DRAWN BY ACV
CHECKED BY SEB
FIGURE 3.2



PROJECT NAME	WVPA SALEM BULK VALLEY VIEW 69KV TRANSMISSION LINE STE. GENEVIEVE COUNTY, MISSOURI
	FEMA FLOOD MAP

GENERAL NOTES/LEGEND

STE. GENEVIEVE COUNTY, MISSOURI
PANEL: 29187C0260D, 29187C0175D, 29186C0175E
EFFECTIVE DATE: 06/16/2011, 06/16/2011, 02/15/2019

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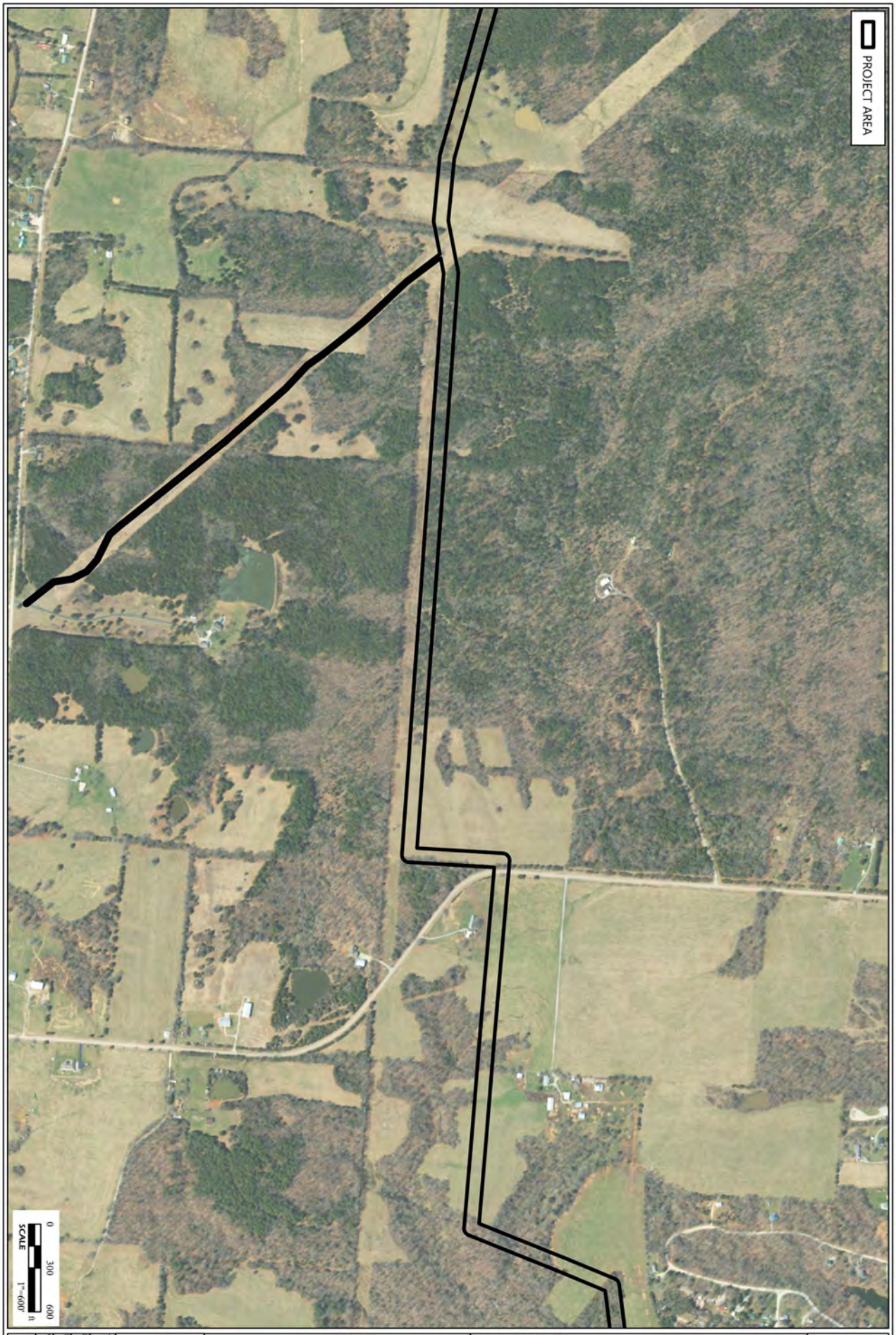
JOB NUMBER	2023-08660.30
DATE	11/2023
DRAWN BY	ACV
CHECKED BY	SEB
FIGURE	3.3



PROJECT NAME	WVPA SALEM BULK VALLEY VIEW 69KV TRANSMISSION LINE STE. GENEVIEVE COUNTY, MISSOURI
	FEMA FLOOD MAP

GENERAL NOTES/LEGEND

STE. GENEVIEVE COUNTY, MISSOURI
PANEL: 29187C0260D, 29187C0175D, 29186C0175E
EFFECTIVE DATE: 06/16/2011, 06/16/2011, 02/15/2019

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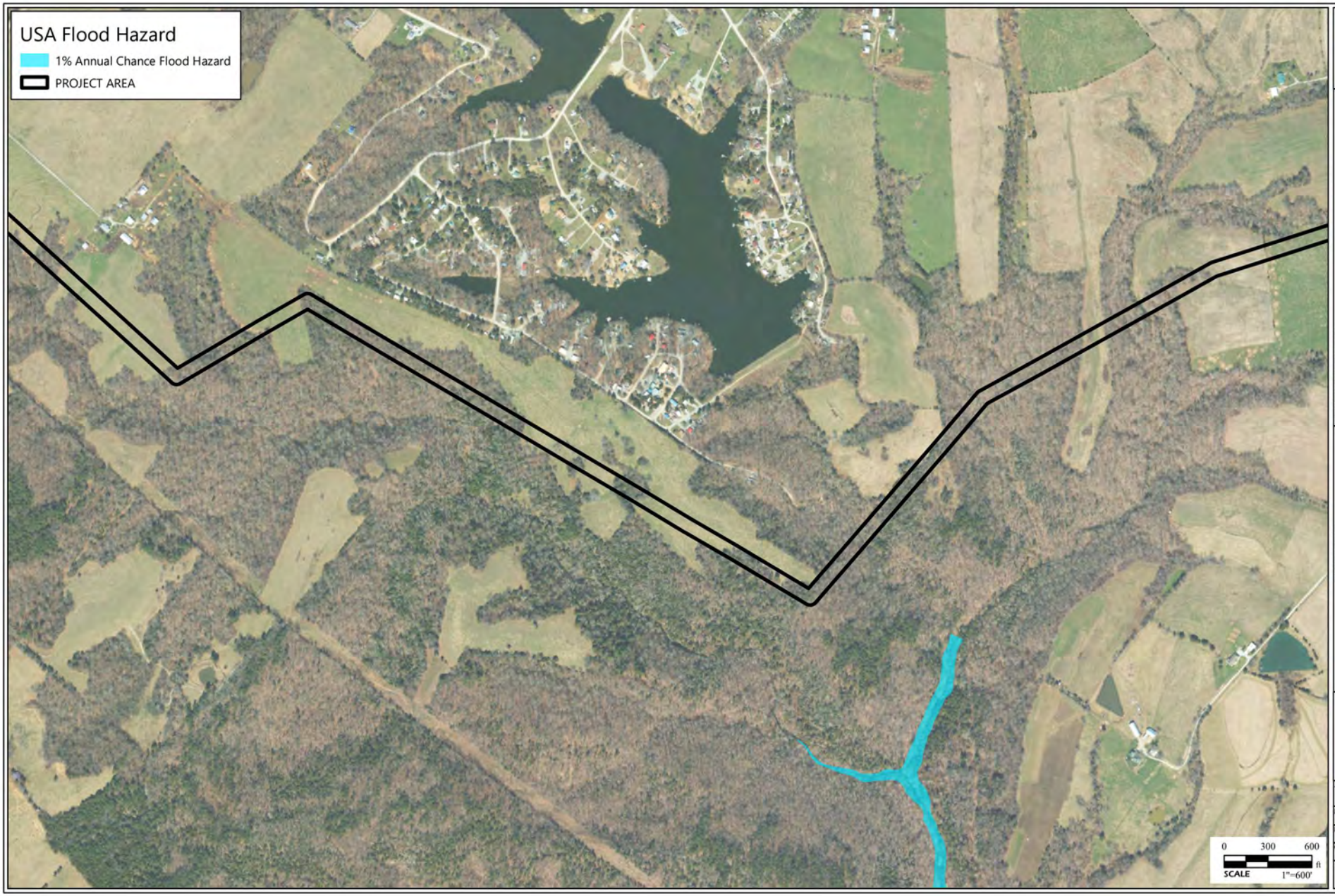
FIGURE	3.4
CHECKED BY	SEB
DRAWN BY	ACV
DATE	11/2023
JOB NUMBER	2023-08860.30



GENERAL NOTES/LEGEND

STE. GENEVIEVE COUNTY, MISSOURI
PANEL: 29187C0175D, 29186C0175E
EFFECTIVE DATE: 06/16/2011, 06/16/2011, 02/15/2019

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.
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PROJECT NAME
WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

FEMA FLOOD MAP

JOB NUMBER 2023-0860.30
DATE 11/2023
DRAWN BY ACV
CHECKED BY SEB
FIGURE 3.5

FIGURE 3.6	PROJECT NAME: WVPA SALEM BULK VALLEY VIEW 69KV TRANSMISSION LINE STE. GENEVIEVE COUNTY, MISSOURI	GENERAL NOTES/LEGEND
CHECKED BY: SEB	FEMA FLOOD MAP	STE. GENEVIEVE COUNTY, MISSOURI PANEL: 29187C0260D, 29187C0175D, 29186C0175E EFFECTIVE DATE: 06/16/2011, 06/16/2011, 02/15/2019
DRAWN BY: ACV		AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY. DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.
DATE: 11/2023		
JOB NUMBER: 2023-0860.30		

GENERAL NOTES/LEGEND

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PROJECT NAME

WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

WETLAND DELINEATION & AERIAL PHOTOGRAPH

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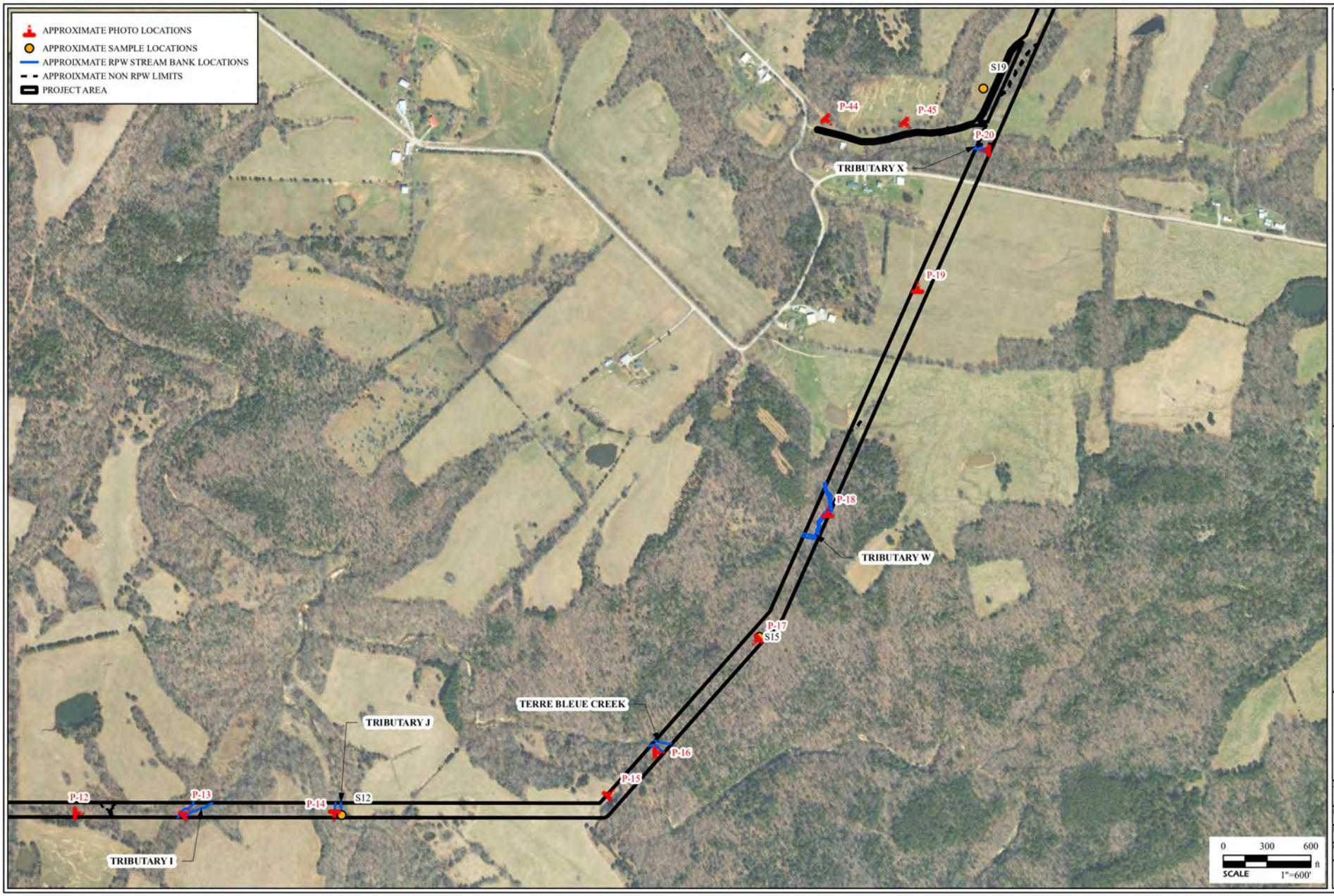
JOB NUMBER 2023-0860.30

DATE 11/2023

DRAWN BY ACV

CHECKED BY SEB

FIGURE 4.1



GENERAL NOTES/LEGEND

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.

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PROJECT NAME
WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

WETLAND DELINEATION & AERIAL PHOTOGRAPH

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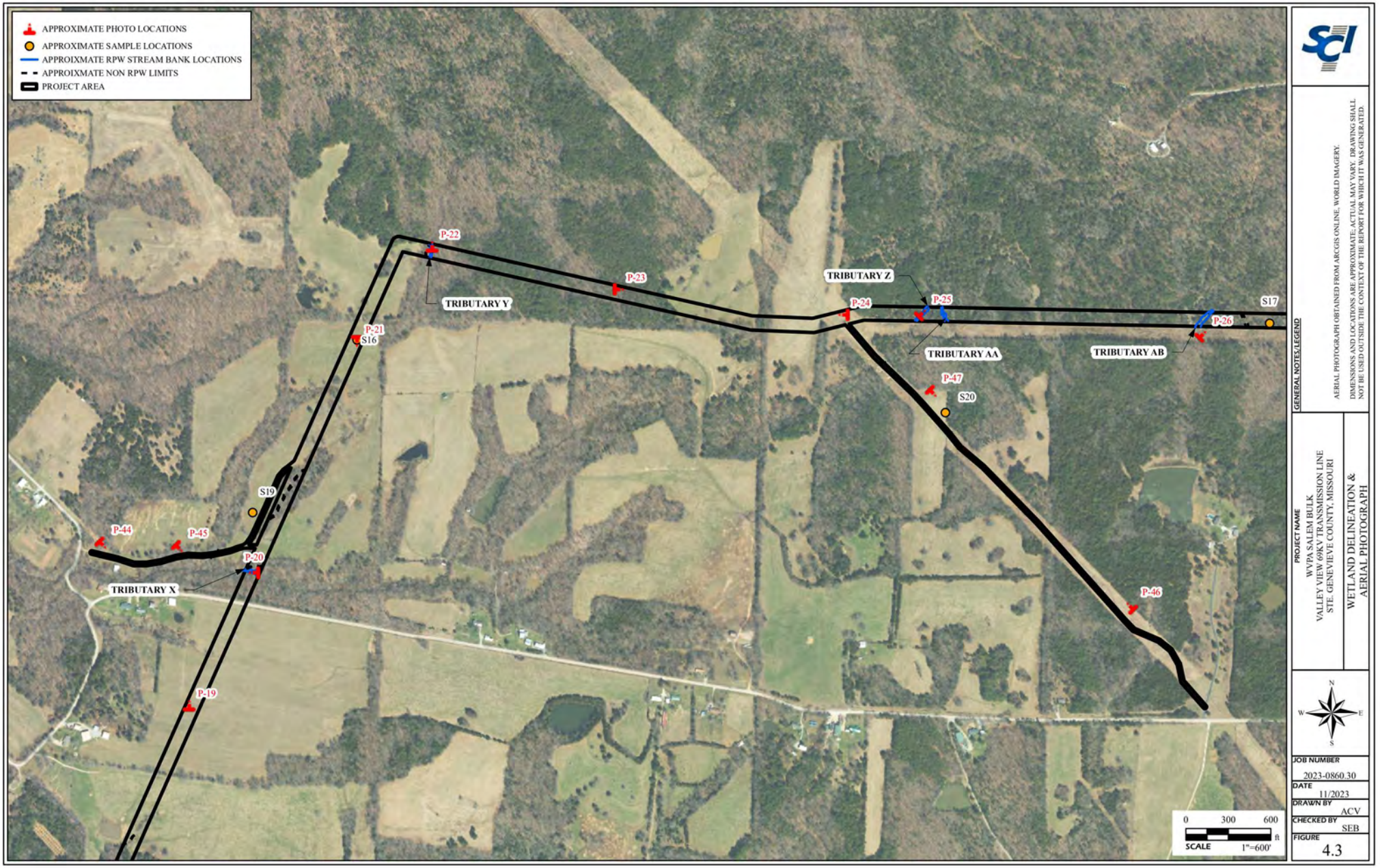
JOB NUMBER	2023-0860.30
DATE	11/2023
DRAWN BY	ACV
CHECKED BY	SEB
FIGURE	4.2



GENERAL NOTES/LEGEND

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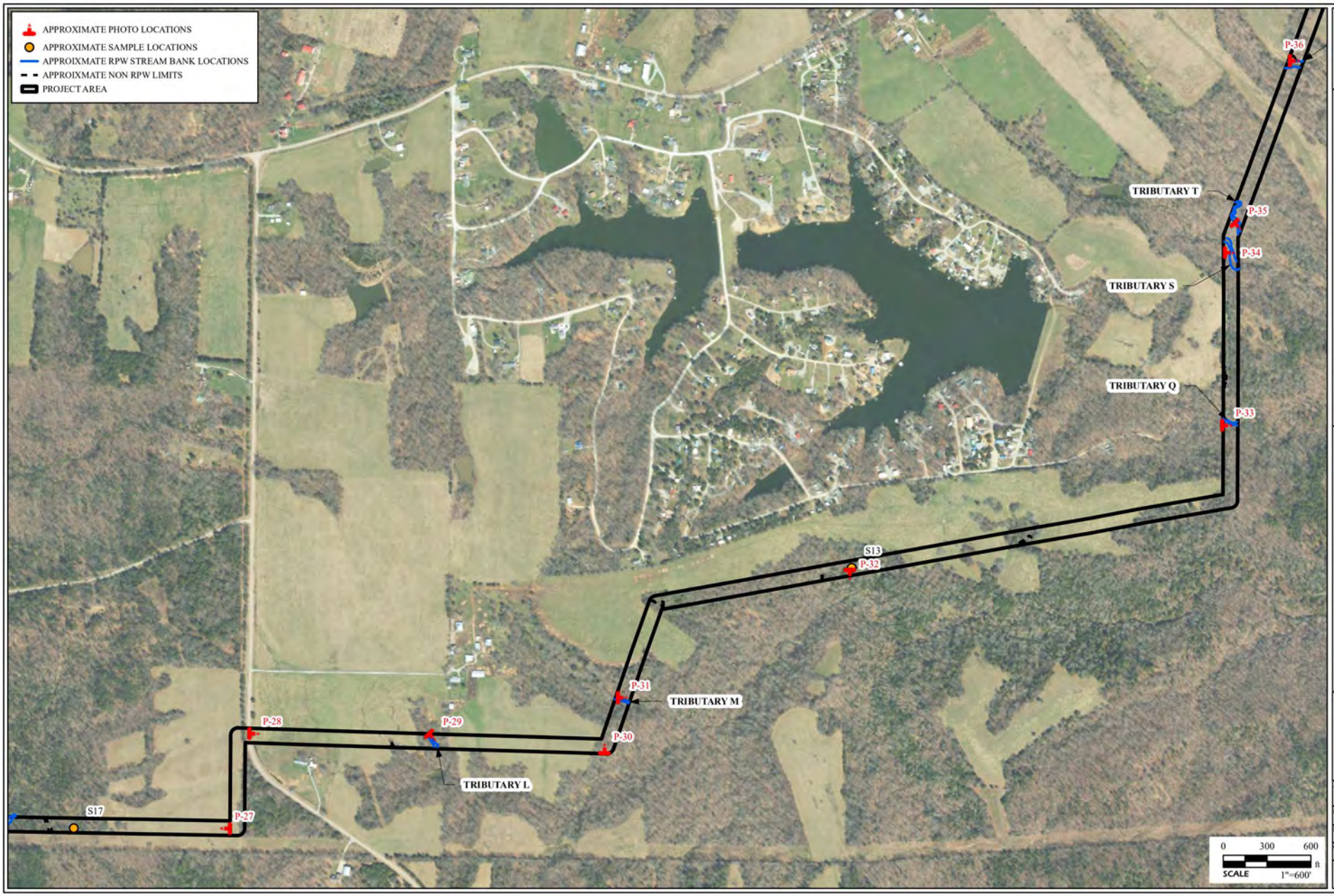
PROJECT NAME
WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

WETLAND DELINEATION & AERIAL PHOTOGRAPH

JOB NUMBER 2023-0860.30
DATE 11/2023
DRAWN BY ACV
CHECKED BY SEB
FIGURE 4.3



GENERAL NOTES/LEGEND

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.

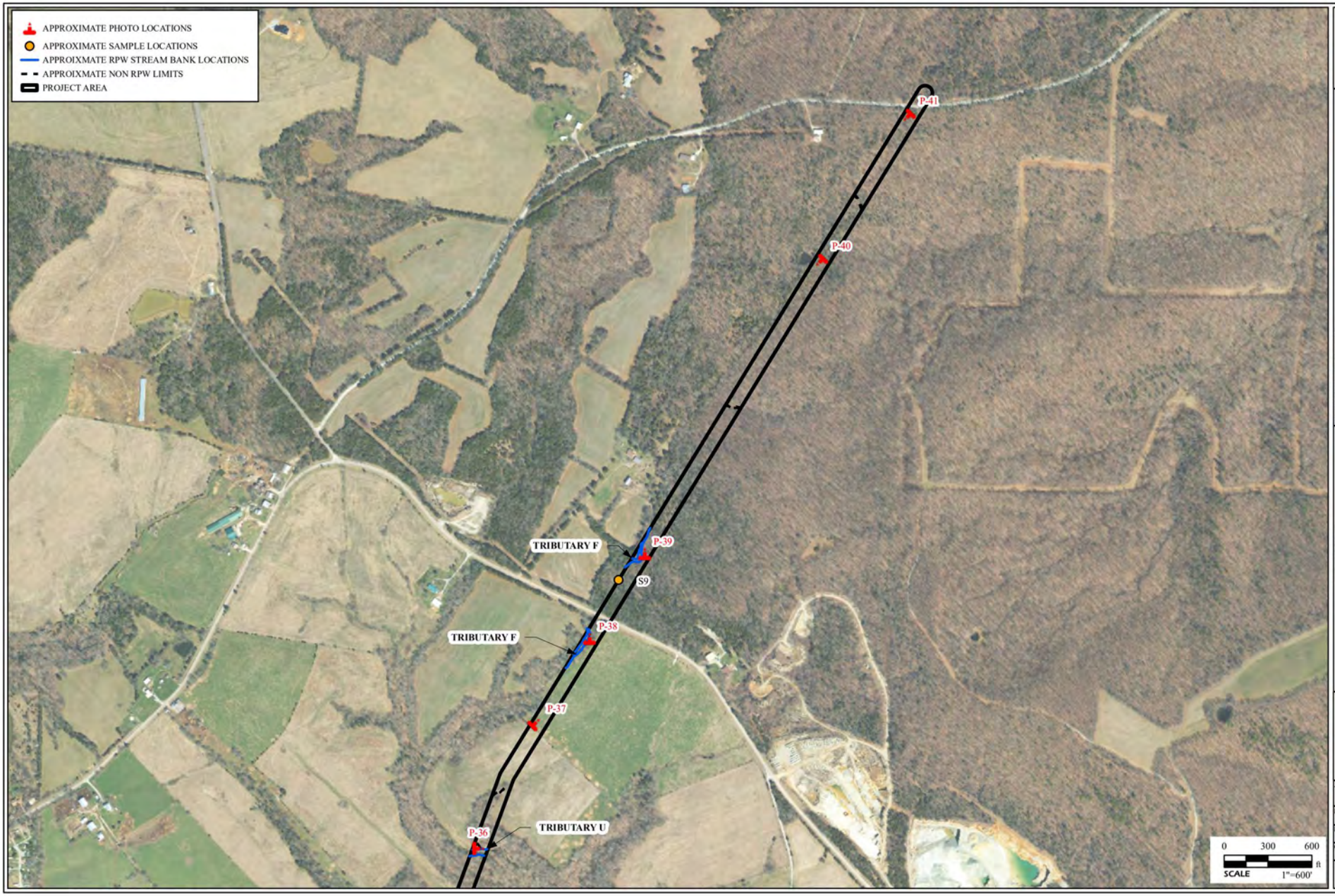
DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

PROJECT NAME

WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

WETLAND DELINEATION & AERIAL PHOTOGRAPH

JOB NUMBER	2023-0860.30
DATE	11/2023
DRAWN BY	ACV
CHECKED BY	SEB
FIGURE	4.4



GENERAL NOTES/LEGEND

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PROJECT NAME

WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

WETLAND DELINEATION & AERIAL PHOTOGRAPH

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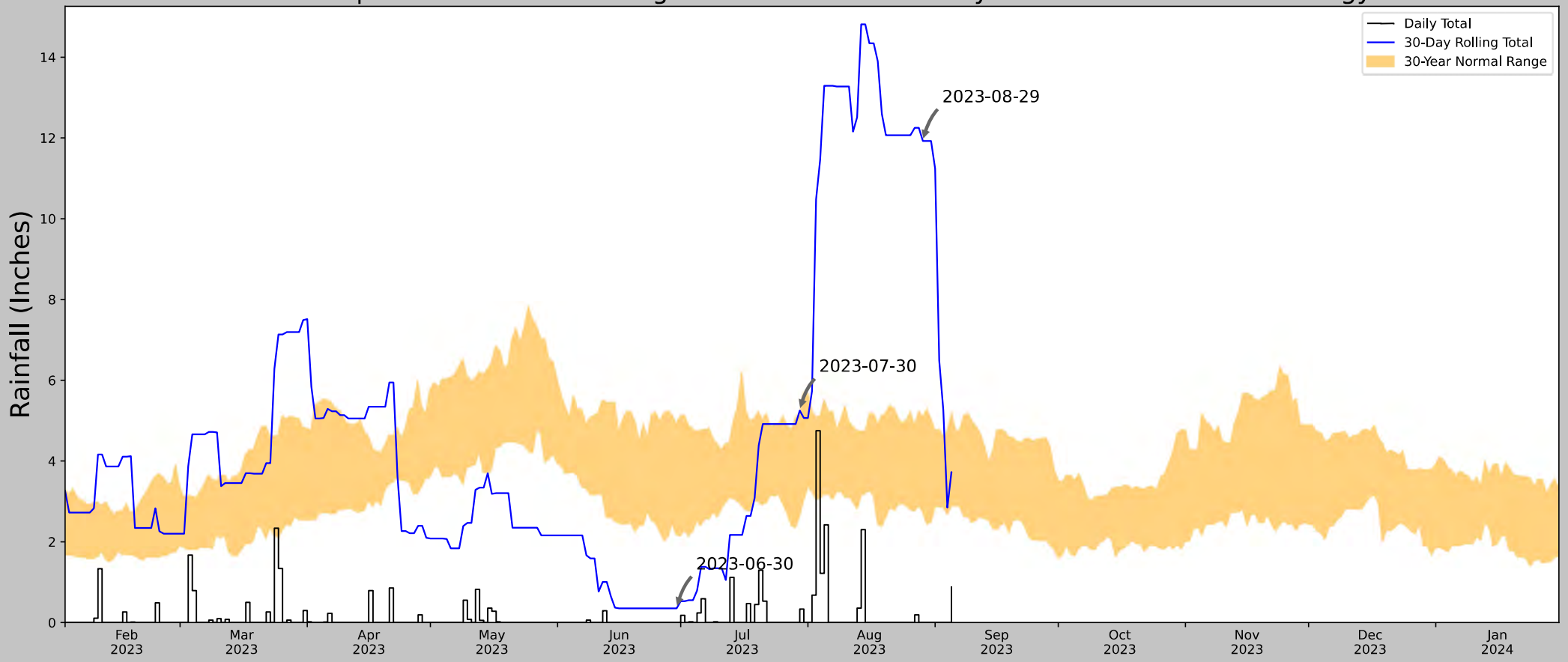
JOB NUMBER	2023-0860.30
DATE	11/2023
DRAWN BY	ACV
CHECKED BY	SEB
FIGURE	4.5

Appendix A

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	37.878420, -90.406951
Observation Date	2023-08-29
Elevation (ft)	857.103
Drought Index (PDSI)	Not available
WebWIMP H_2O Balance	Dry Season

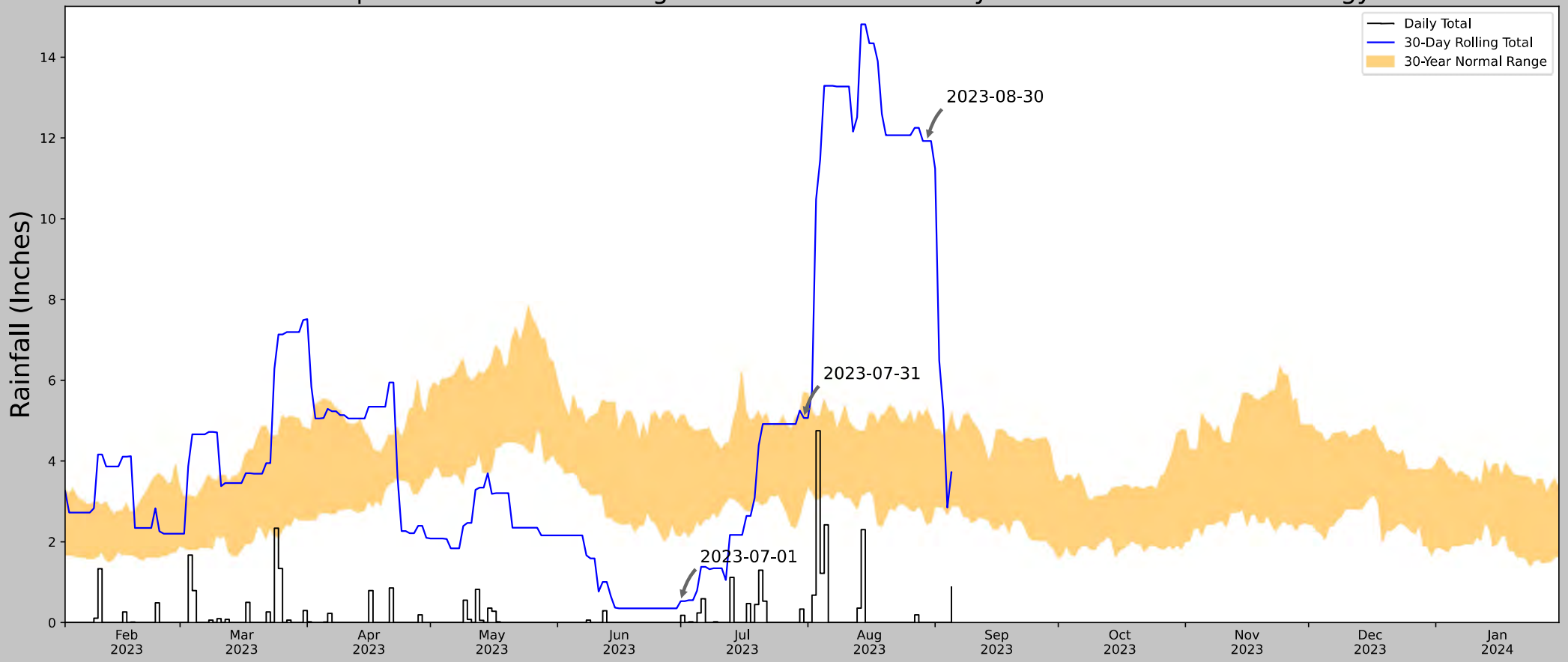
30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-08-29	2.754331	5.109055	11.92126	Wet	3	3	9
2023-07-30	2.659055	5.132284	5.248032	Wet	3	2	6
2023-06-30	2.191732	4.926378	0.350394	Dry	1	1	1
Result							Wetter than Normal - 16

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
FARMINGTON	37.7919, -90.4097	899.934	5.98	42.831	2.947	10502	89
FARMINGTON 0.3 ENE	37.7815, -90.4212	904.856	0.954	4.922	0.434	0	1
FARMINGTON FAA AP	37.7667, -90.4	898.95	1.82	0.984	0.821	3	0
FARMINGTON 1.7 S	37.7563, -90.4213	878.937	2.54	20.997	1.196	2	0
FARMINGTON 1.5 WSW	37.7693, -90.4489	889.108	2.65	10.826	1.221	41	0
HAWN SP	37.8369, -90.2339	859.908	10.087	40.026	4.943	15	0
STE. GENEVIEVE 12.5 WSW	37.8888, -90.2521	783.137	10.898	116.797	6.177	7	0
BISMARCK 1.3 S	37.7483, -90.6253	1013.123	12.155	113.189	6.846	1	0
ARCADIA	37.5981, -90.6264	917.979	17.879	18.045	8.368	488	0
FREDERICKTOWN	37.5742, -90.3075	759.843	16.046	140.091	9.469	294	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	37.883773, -90.385787
Observation Date	2023-08-30
Elevation (ft)	858.879
Drought Index (PDSI)	Not available
WebWIMP H_2O Balance	Dry Season

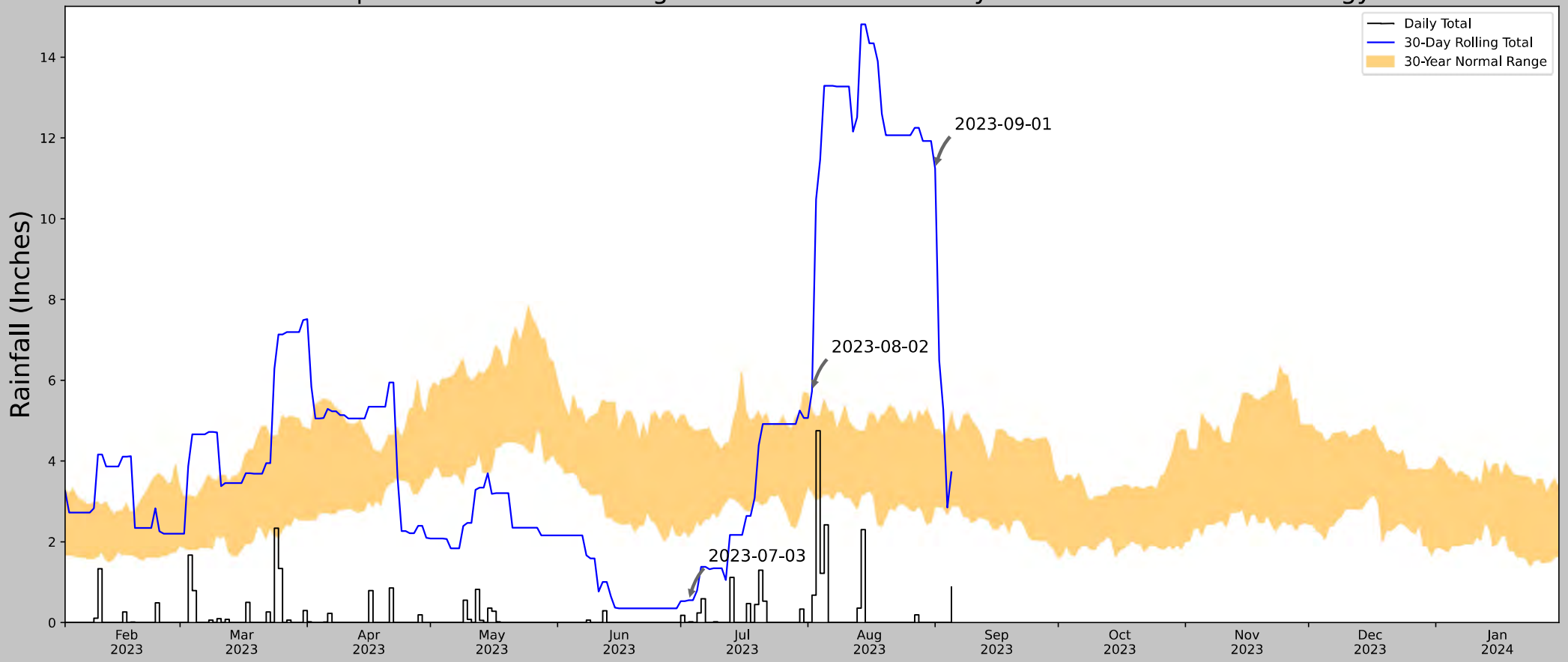
30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-08-30	2.450394	5.29252	11.92126	Wet	3	3	9
2023-07-31	3.051181	5.701181	5.066929	Normal	2	2	4
2023-07-01	2.157874	5.112205	0.531496	Dry	1	1	1
Result							Normal Conditions - 14

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
FARMINGTON	37.7919, -90.4097	899.934	6.481	41.055	3.183	10502	89
FARMINGTON 0.3 ENE	37.7815, -90.4212	904.856	0.954	4.922	0.434	0	1
FARMINGTON FAA AP	37.7667, -90.4	898.95	1.82	0.984	0.821	3	0
FARMINGTON 1.7 S	37.7563, -90.4213	878.937	2.54	20.997	1.196	2	0
FARMINGTON 1.5 WSW	37.7693, -90.4489	889.108	2.65	10.826	1.221	41	0
HAWN SP	37.8369, -90.2339	859.908	10.087	40.026	4.943	15	0
STE. GENEVIEVE 12.5 WSW	37.8888, -90.2521	783.137	10.898	116.797	6.177	7	0
BISMARCK 1.3 S	37.7483, -90.6253	1013.123	12.155	113.189	6.846	1	0
ARCADIA	37.5981, -90.6264	917.979	17.879	18.045	8.368	488	0
FREDERICKTOWN	37.5742, -90.3075	759.843	16.046	140.091	9.469	294	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	37.906471, -90.320323
Observation Date	2023-09-01
Elevation (ft)	919.279
Drought Index (PDSI)	Not available
WebWIMP H_2O Balance	Dry Season

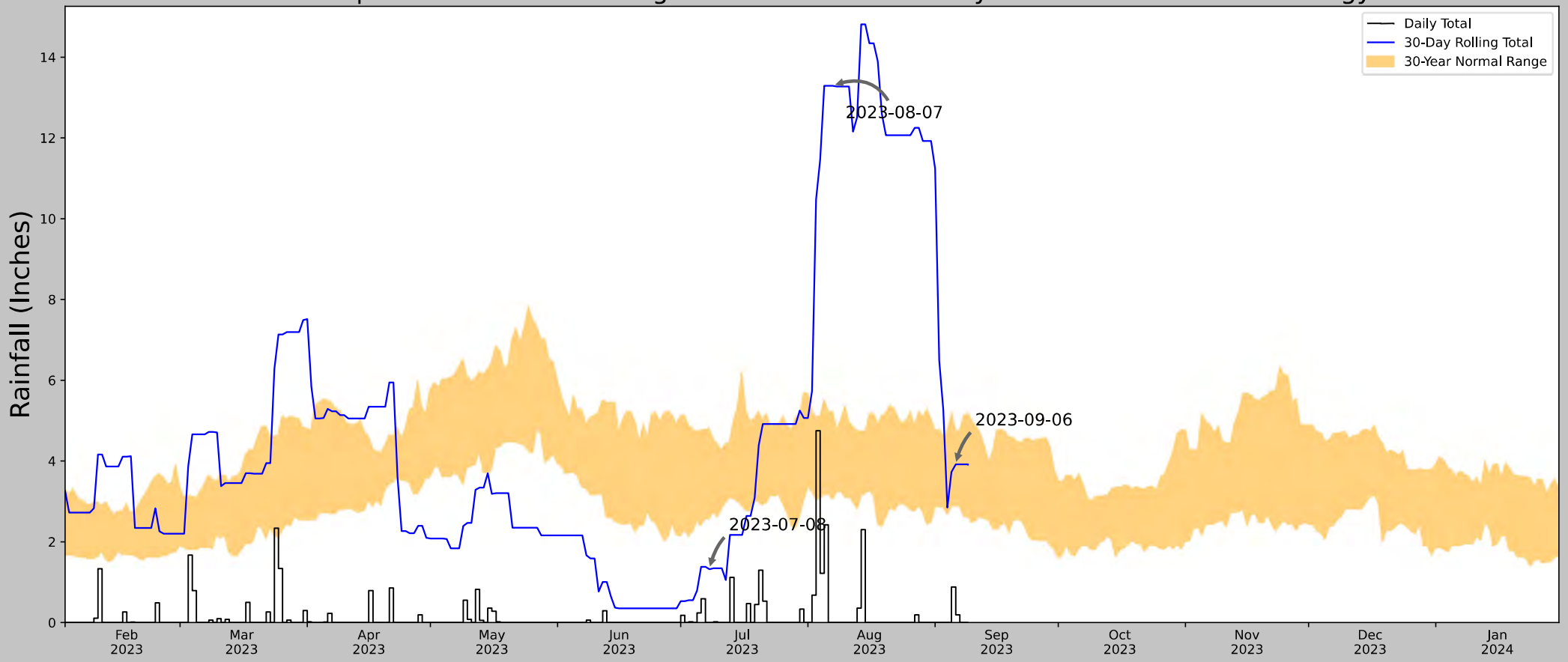
30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-09-01	2.883465	4.762992	11.240158	Wet	3	3	9
2023-08-02	3.248425	5.232677	5.728347	Wet	3	2	6
2023-07-03	2.161417	4.895276	0.551181	Dry	1	1	1
Result							Wetter than Normal - 16

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
FARMINGTON	37.7919, -90.4097	899.934	9.297	19.345	4.364	10502	89
FARMINGTON 0.3 ENE	37.7815, -90.4212	904.856	0.954	4.922	0.434	0	1
FARMINGTON FAA AP	37.7667, -90.4	898.95	1.82	0.984	0.821	3	0
FARMINGTON 1.7 S	37.7563, -90.4213	878.937	2.54	20.997	1.196	2	0
FARMINGTON 1.5 WSW	37.7693, -90.4489	889.108	2.65	10.826	1.221	41	0
HAWN SP	37.8369, -90.2339	859.908	10.087	40.026	4.943	15	0
STE. GENEVIEVE 12.5 WSW	37.8888, -90.2521	783.137	10.898	116.797	6.177	7	0
BISMARCK 1.3 S	37.7483, -90.6253	1013.123	12.155	113.189	6.846	1	0
ARCADIA	37.5981, -90.6264	917.979	17.879	18.045	8.368	488	0
FREDERICKTOWN	37.5742, -90.3075	759.843	16.046	140.091	9.469	294	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	37.906471, -90.32023
Observation Date	2023-09-06
Elevation (ft)	921.379
Drought Index (PDSI)	Not available
WebWIMP H_2O Balance	Dry Season

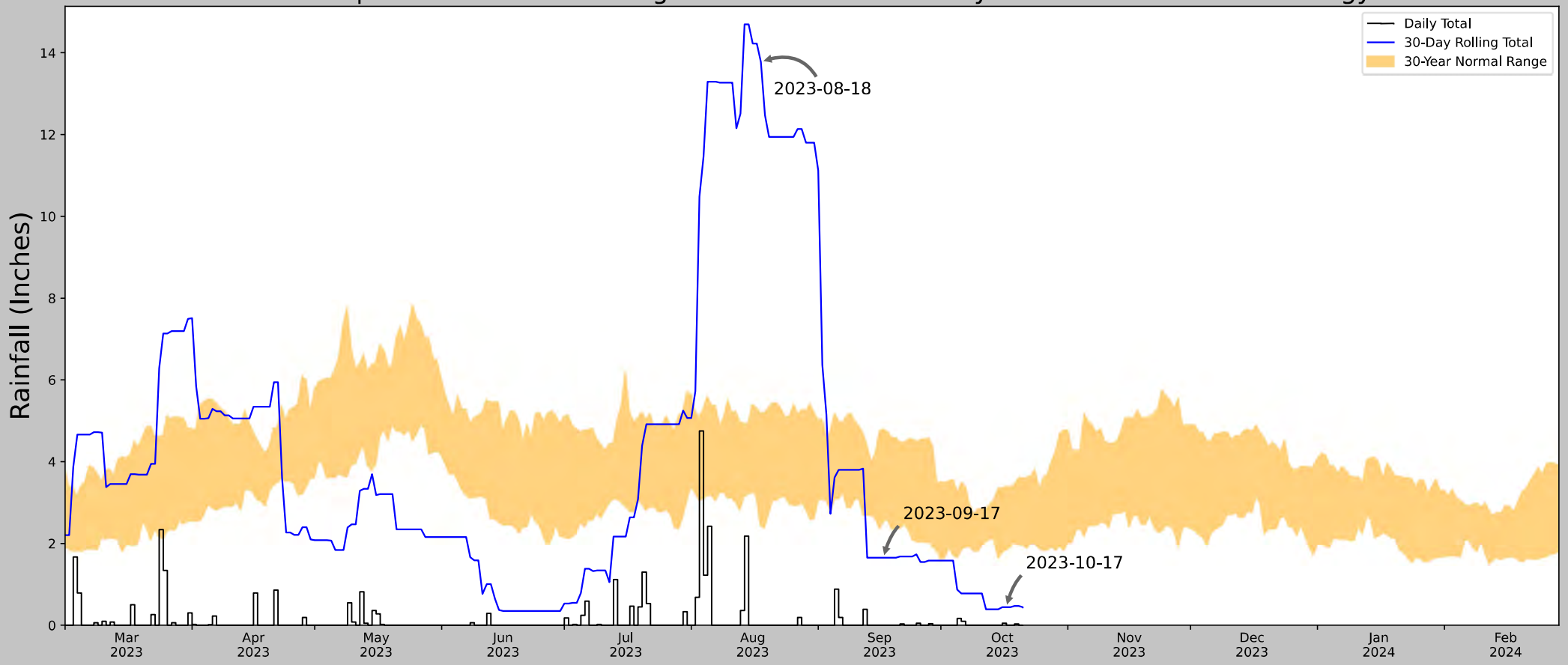
30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-09-06	2.905512	4.75315	3.917323	Normal	2	3	6
2023-08-07	3.060236	5.225591	13.291339	Wet	3	2	6
2023-07-08	2.578347	4.818898	1.322835	Dry	1	1	1
Result							Normal Conditions - 13

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
FARMINGTON	37.7919, -90.4097	899.934	9.3	21.445	4.384	10502	89
FARMINGTON 0.3 ENE	37.7815, -90.4212	904.856	0.954	4.922	0.434	0	1
FARMINGTON FAA AP	37.7667, -90.4	898.95	1.82	0.984	0.821	3	0
FARMINGTON 1.7 S	37.7563, -90.4213	878.937	2.54	20.997	1.196	2	0
FARMINGTON 1.5 WSW	37.7693, -90.4489	889.108	2.65	10.826	1.221	41	0
HAWN SP	37.8369, -90.2339	859.908	10.087	40.026	4.943	15	0
STE. GENEVIEVE 12.5 WSW	37.8888, -90.2521	783.137	10.898	116.797	6.177	7	0
BISMARCK 1.3 S	37.7483, -90.6253	1013.123	12.155	113.189	6.846	1	0
ARCADIA	37.5981, -90.6264	917.979	17.879	18.045	8.368	488	0
FREDERICKTOWN	37.5742, -90.3075	759.843	16.046	140.091	9.469	294	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	37.897739, -90.350269
Observation Date	2023-10-17
Elevation (ft)	969.851
Drought Index (PDSI)	Not available
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-17	1.862598	3.401969	0.440945	Dry	1	3	3
2023-09-17	2.552756	4.797638	1.649606	Dry	1	2	2
2023-08-18	2.448425	5.196851	13.775591	Wet	3	1	3
Result							Drier than Normal - 8

Figure and tables made by the **Antecedent Precipitation Tool** Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
FARMINGTON	37.7919, -90.4097	899.934	7.999	69.917	4.159	10508	90
FARMINGTON FAA AP	37.7667, -90.4	898.95	1.82	0.984	0.821	4	0
FARMINGTON 1.7 S	37.7563, -90.4213	878.937	2.54	20.997	1.196	2	0
FARMINGTON 1.5 WSW	37.7693, -90.4489	889.108	2.65	10.826	1.221	41	0
HAWN SP	37.8369, -90.2339	859.908	10.087	40.026	4.943	15	0
STE. GENEVIEVE 12.5 WSW	37.8888, -90.2521	783.137	10.898	116.797	6.177	7	0
BISMARCK 1.3 S	37.7483, -90.6253	1013.123	12.155	113.189	6.846	1	0
ARCADIA	37.5981, -90.6264	917.979	17.879	18.045	8.368	480	0
FREDERICKTOWN	37.5583, -90.3033	725.066	17.157	174.868	10.721	294	0

Appendix B

Photo 1. Overview of grass field, facing east.

Photo 2. View along treeline with fence, facing north.

Photo 3. Overview of grass field, facing north.

Photo 4. Overview of forested tract, facing north.

Photo 5. Upstream view of Tributary B, facing south.

Photo 6. Upstream view of Tributary B, facing west.

Photo 7. Upstream view of Tributary B, facing south.

Photo 8. Upstream view of Tributary C, facing west.

Photo 9. Overview of treeline and grass field, facing east.

Photo 10. View of grass field, facing east.

Photo 11. View of grass field, facing east.

Photo 12. View of fence line and clearing, facing east.

Photo 13. Downstream view of Tributary I, facing northeast..

Photo 14. Downstream view of Tributary J, facing south.

Photo 15. View of tree line corner, facing northeast.

Photo 16. Upstream view of Terre Bleue Creek, facing east.

Photo 17. Downslope view of forested tract, facing southwest.

Photo 18. Upstream view of Tributary W, facing north.

Photo 19. View of grass field, facing north.

Photo 20. Downstream view of Tributary X, facing west.

Photo 21. Overview of grass field, facing south.

Photo 22. Downstream view of Tributary Y, facing north.

Photo 23. View of forested tract, facing east.

Photo 24. View of open grass field with existing transmission lines, facing west.

Photo 25. Downstream view of Tributary AA, facing northeast.

Photo 26. Downstream view of Tributary AB, facing northeast..

Photo 27. View of grass field, facing east.

Photo 28. Downstream view of Tributary G, facing southeast.

Photo 29. Downstream view of Tributary L, facing southeast.

Photo 30. View of forested tract, facing north.

Photo 31. Downstream view of Tributary M, facing east.

Photo 32. Overview of forested area with sand, facing south.

Photo 33. Downstream view of Tributary Q, facing east.

Photo 34. Downstream view of Tributary S, facing east.

Photo 35. Upstream view of Tributary T, facing southeast.

Photo 36. Upstream view of Tributary U, facing east.

Photo 37. Overview of grass field, facing northeast.

Photo 38. Upstream view of Tributary F, facing north.

Photo 39. Upstream view of Tributary F, facing north.

Photo 40. View of forested area in the northern section of the site, facing southwest.

Photo 41. View of forested area with logs, facing southwest.

Photo 42. View of grass field at the beginning of an access road, facing northwest.

Photo 43. Overview of grass field at the end of an access road, facing east.

Photo 44. View of beginning of an access road, facing east.

Photo 45. View of path for an access road, facing east.

Photo 46. View of grass field for an access road, facing northwest.

Photo 47. Overview of grass field for an access road, facing southeast.

Appendix C

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/29/23
Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S1
Investigator(s): SCI - Michael Holm, Jacob Travelstead Section, Township, Range: S23, T37N, R6E
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
Slope (%): 2-5 Lat: 37.869434 Long: -90.409975 Datum: WGS84
Soil Map Unit Name: Fourche silt loam, 1 to 3 precent slopes NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Sample point 1 is located in a grass field in the southern most section of the project site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Tridens flavus*	60	Yes	UPL
2. *Vernonia gigantea*	25	Yes	FAC
3. *Panicum anceps*	15	No	FACW
4. *Setaria pumila*	10	No	FAC
5. *Trifolium pratense*	10	No	FACU
6.			
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	35	x 3 =	105
FACU species	10	x 4 =	40
UPL species	60	x 5 =	300
Column Totals:	120 (A)		475 (B)

Prevalence Index = B/A = 3.96

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/3	100					Loamy/Clayey	
12-20	10YR 4/4	95	10YR 5/6	5	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/29/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S2

Investigator(s): SCI - Michael Holm, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Flatland Local relief (concave, convex, none): None

Slope (%): 0-2 Lat: 37.87028 Long: -90.408494 Datum: WGS84

Soil Map Unit Name: Fourche silt loam, 1 to 3 precent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area within a Wetland?** Yes No X
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Remarks:
Sample point 2 is located in a small forested tract in the southern section of the project site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	50	Yes	FACU
2. *Ulmus americana*	10	No	FACW
3.			
4.			
5.			
	60	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Fraxinus pennsylvanica*	30	Yes	FACW
2. *Lonicera tatarica*	10	Yes	FACU
3.			
4.			
5.			
	40	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Tridens flavus*	60	Yes	UPL
2. *Lonicera japonica*	10	No	FACU
3. *Geum canadense*	10	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. *Toxicodendron radicans*	15	Yes	FAC
2.			
	15	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	25	x 3 =	75
FACU species	70	x 4 =	280
UPL species	60	x 5 =	300
Column Totals:	195 (A)		735 (B)
Prevalence Index = B/A =			3.77

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					Loamy/Clayey	
8-10	10YR 4/2	90	10YR 4/1	5	D	M	Loamy/Clayey	
			10YR 5/8	5	C	M		Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? Yes ____ No X Depth (inches): ____

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/29/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S3

Investigator(s): SCI - Michael Holm, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 37.872275 Long: -90.408263 Datum: WGS84

Soil Map Unit Name: Fourche silt loam, 1 to 3 precent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 3 is located in a grass field in the southern section of the project site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Panicum anceps*	40	Yes	FACW
2. *Tridens flavus*	30	Yes	UPL
3. *Ambrosia artemisiifolia*	20	No	FACU
4. *Daucus carota*	5	No	UPL
5. *Cichorium intybus*	5	No	FACU
6. *Trifolium pratense*	5	No	FACU
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	35	x 5 =	175
Column Totals:	105 (A)		375 (B)
Prevalence Index = B/A =			3.57

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR 4/3	100					Loamy/Clayey	
11-20	10YR 4/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/29/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S4

Investigator(s): SCI - Michael Holm, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Slope Local relief (concave, convex, none): Concave

Slope (%): 5 Lat: 37.877189 Long: -90.407322 Datum: WGS84

Soil Map Unit Name: Fourche silt loam, 1 to 3 precent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 4 is located in a small forested tract in the southern section of the project site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	40	Yes	FACU
2. *Fraxinus pennsylvanica*	5	No	FACW
3. *Quercus stellata*	5	No	FACU
4.			
5.			
	50	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Lonicera tatarica*	25	Yes	FACU
2.			
3.			
4.			
5.			
	25	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Leersia oryzoides*	40	Yes	OBL
2. *Trifolium pratense*	25	Yes	FACU
3. *Convolvulus arvensis*	15	No	UPL
4. *Ambrosia trifida*	15	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	5	x 2 =	10
FAC species	15	x 3 =	45
FACU species	95	x 4 =	380
UPL species	15	x 5 =	75
Column Totals:	170 (A)		550 (B)
Prevalence Index = B/A =			3.24

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	100					Loamy/Clayey	
2-6	10YR 4/3	100					Loamy/Clayey	
6-20	10YR 4/2	95	10YR 6/4	5	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/29/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S5

Investigator(s): SCI - Michael Holm, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave

Slope (%): 2-5 Lat: 37.879451 Long: -90.406626 Datum: WGS84

Soil Map Unit Name: Caneyville silt loam, 3 to 8 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 5 is located in a small forested tract in the southern section of the project site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Carya ovata*	40	Yes	FACU
2. *Quercus muehlenbergii*	10	No	FACU
3. *Juglans nigra*	10	No	FACU
4. *Quercus rubra*	10	No	FACU
5.			
	70	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Lonicera tatarica*	25	Yes	FACU
2. *Fraxinus pennsylvanica*	10	Yes	FACW
3. *Carya ovata*	10	Yes	FACU
4.			
5.			
	45	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Rosa multiflora*	10	Yes	FACU
2. *Parthenocissus quinquefolia*	10	Yes	FACU
3. *Desmodium paniculatum*	10	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 14.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	135	x 4 =	540
UPL species	0	x 5 =	0
Column Totals:	145 (A)		560 (B)
Prevalence Index = B/A =			3.86

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 6

Hydric Soil Present? Yes ____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/29/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S6

Investigator(s): SCI - Michael Holm, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 2-5 Lat: 37.882507 Long: -90.404899 Datum: WGS84

Soil Map Unit Name: Lamotte silt loam, 3 to 8 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Sample point 6 is located in an open grass field in the southern section of the project site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Juglans nigra*	5	Yes	FACU
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Agrostis gigantea*	60	Yes	FACW
2. *Ambrosia artemisiifolia*	15	No	FACU
3. *Vernonia gigantea*	10	No	FAC
4. *Trifolium pratense*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	10	x 3 =	30
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals:	95 (A)		250 (B)

Prevalence Index = B/A = 2.63

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/4	100					Loamy/Clayey	
2-15	10YR 4/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/29/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S7

Investigator(s): SCI - Michael Holm, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Slope Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 37.883842 Long: -90.400404 Datum: WGS84

Soil Map Unit Name: Gerald silt loam, 1 to 4 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Sample point 7 is located in an open grass field in the southern section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Paspalum dilatatum*	40	Yes	FAC
2. *Juncus effusus*	20	Yes	OBL
3. *Trifolium pratense*	15	No	FACU
4. *Rubus flagellaris*	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	85 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals:	85 (A)		240 (B)

Prevalence Index = B/A = 2.82

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compacted Soil

Depth (inches): 6

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/29/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S8

Investigator(s): SCI - Michael Holm, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 37.920336 Long: -90.311437 Datum: WGS84

Soil Map Unit Name: Caneyville silt loam, 8 to 15 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 8 is located in a forested tract in the northern section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	40	Yes	FACW
2. *Quercus muehlenbergii*	10	No	FACU
3. *Quercus alba*	10	No	FACU
4. *Juniperus virginiana*	10	No	FACU
5.			
	70	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Celtis occidentalis*	15	Yes	FAC
2.			
3.			
4.			
5.			
	15	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Hybanthus concolor*	15	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	15	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	15	x 3 =	45
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	100 (A)		305 (B)
Prevalence Index = B/A =			3.05

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Loamy/Clayey	
4-20	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/30/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S9

Investigator(s): SCI - Michael Holm, Justin Loos, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave

Slope (%): 2-5 Lat: 37.883836 Long: -90.394508 Datum: WGS84

Soil Map Unit Name: Gerald silt loam, 1 to 4 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 9 is located in an open field in the southern section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Andropogon virginicus*	30	Yes	FACU
2. *Vernonia gigantea*	30	Yes	FAC
3. *Panicum virgatum*	20	No	FAC
4. *Solidago canadensis*	20	No	FACU
5. *Cyperus esculentus*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	50	x 3 =	150
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	105 (A)		360 (B)

Prevalence Index = B/A = 3.43

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	100					Loamy/Clayey	
2-20	10YR 5/1	95	10YR 5/8	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 08/30/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S10

Investigator(s): SCI - Michael Holm, Justin Loos, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 37.883664 Long: -90.383881 Datum: WGS84

Soil Map Unit Name: Ramsey-Rock Outcrop complex, 8 to 50 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 10 is located in a forested tract near a perenial stream in the central section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus americana*	40	Yes	FACW
2. *Acer saccharum*	20	Yes	FACU
3.			
4.			
5.			
	60	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Acer saccharum*	20	Yes	FACU
2. *Ulmus americana*	10	Yes	FACW
3.			
4.			
5.			
	30	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Parthenocissus quinquefolia*	10	Yes	FACU
2. *Asarum canadense*	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	0	x 3 =	0
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	110 (A)		340 (B)
Prevalence Index = B/A =			3.09

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	100					Loamy/Clayey	
2-20	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 09/1/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S11

Investigator(s): SCI - Michael Holm, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 37.905791 Long: -90.325287 Datum: WGS84

Soil Map Unit Name: Lily loam, 8 to 15 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 11 is located in a forested tract in the northern section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus palustris*	20	Yes	FACW
2. *Quercus rubra*	15	Yes	FACU
3. *Ulmus rubra*	10	No	FAC
4. *Juglans nigra*	10	No	FACU
5.			
	55	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Ulmus rubra*	30	Yes	FAC
2. *Juglans nigra*	15	Yes	FACU
3. *Lonicera tatarica*	15	Yes	FACU
4. *Tilia americana*	10	No	FACU
5. *Juniperus virginiana*	5	No	FACU
	75	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Ribes uva-crispa*	20	Yes	UPL
2. *Verbena urticifolia*	10	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 42.9% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	50	x 3 =	150
FACU species	70	x 4 =	280
UPL species	20	x 5 =	100
Column Totals:	160 (A)		570 (B)
Prevalence Index = B/A =			3.56

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/1	100					Sandy	
2-20	10YR 4/4	100					Loamy/Clayey	Sandy texture

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? Yes ____ No X Depth (inches): ____

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 09/6/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S12

Investigator(s): SCI - Justin Loos, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): None

Slope (%): 0-2 Lat: 37.886999 Long: -90.373966 Datum: WGS84

Soil Map Unit Name: Jonca silt loam, 3 to 8 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point 12 is located in a forested tract in the central section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus alba*	20	Yes	
2. *Juniperus virginiana*	20	Yes	FACU
3. *Carya glabra*	15	Yes	FACU
4. *Carya ovata*	5	No	FACU
5.			
	60	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Quercus alba*	30	Yes	FACU
2. *Rhus aromatica*	20	Yes	UPL
3. *Carya glabra*	10	No	FACU
4. *Quercus velutina*	5	No	UPL
5. *Carya cordiformis*	5	No	FACU
	70	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Oryzopsis asperifolia*	5	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	5	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	85	x 4 =	340
UPL species	30	x 5 =	150
Column Totals:	115 (A)		490 (B)
Prevalence Index = B/A =			4.26

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 5/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 4

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 09/6/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S13

Investigator(s): SCI - Justin Loos, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 37.900631 Long: -90.366077 Datum: WGS84

Soil Map Unit Name: Jonca silt loam, 3 to 8 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Sample point 13 is located in an open grass field in the central section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Rosa multiflora*	5	Yes	FACU
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Deschampsia cespitosa*	40	Yes	UPL
2. *Panicum anceps*	30	Yes	FACW
3. *Kummerowia striata*	15	No	FACU
4. *Rhynchosida physocalyx*	5	No	UPL
5. *Ambrosia artemisiifolia*	5	No	FACU
6. *Solanum carolinense*	5	No	FACU
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	45	x 5 =	225
Column Totals:	105 (A)		405 (B)
Prevalence Index = B/A =			3.86

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 5/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compacted Soil

Depth (inches): 4

Hydric Soil Present? Yes ____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 09/6/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S14

Investigator(s): SCI - Justin Loos, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 10 Lat: 37.900926 Long: -90.343751 Datum: WGS84

Soil Map Unit Name: Ramsey-Rock outscrop complex, 8 to 50 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Sample point 14 is located in a forested tract in the northern section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	10	Yes	FACU
2. *Quercus alba*	10	Yes	FACU
3. *Carya glabra*	10	Yes	FACU
4. *Quercus palustris*	5	No	FACW
5.			
	35	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. *Quercus alba*	20	Yes	FACU
2. *Quercus rubra*	10	Yes	FACU
3. *Juniperus virginiana*	10	Yes	FACU
4. *Cunila origanoides*	5	No	UPL
5.			
	45	=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Deschampsia cespitosa*	5	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	5	=Total Cover	

Woody Vine Stratum (Plot size: 15)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	70	x 4 =	280
UPL species	10	x 5 =	50
Column Totals:	85 (A)		340 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 5/3	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 2

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____
Water Table Present? Yes ____ No X Depth (inches): ____
Saturation Present? Yes ____ No X Depth (inches): ____
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 09/6/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S15

Investigator(s): SCI - Justin Loos, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 2-5 Lat: 37.900926 Long: -90.343751 Datum: WGS84

Soil Map Unit Name: Ramsey-Rock outscrop complex, 8 to 50 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample Point 15 is located in a field in the southern section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Festuca arundinacea*	60	Yes	FACU
2. *Setaria pumila*	15	No	FAC
3. *Tridens flavus*	10	No	UPL
4. *Andropogon virginicus*	5	No	FACU
5. *Eupatorium serotinum*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	65	x 4 =	260
UPL species	10	x 5 =	50
Column Totals:	95 (A)		370 (B)

Prevalence Index = B/A = 3.89

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 5/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compacted soil

Depth (inches): 3

Hydric Soil Present? Yes ____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 09/6/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S16

Investigator(s): SCI - Justin Loos, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 2-5 Lat: 37.900926 Long: -90.343751 Datum: WGS84

Soil Map Unit Name: Ramsey-Rock outcrop complex, 8 to 50 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample Point 16 is located in a field in the central section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Andropogon virginicus*	40	Yes	FACU
2. *Festuca arundinacea*	30	Yes	FACU
3. *Setaria pumila*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	75 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	75 (A)		295 (B)

Prevalence Index = B/A = 3.93

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 5/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compacted soil
Depth (inches): 2

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___
Water Table Present? Yes ___ No X Depth (inches): ___
Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 09/6/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S17

Investigator(s): SCI - Justin Loos, Jacob Travelstead Section, Township, Range: S23, T37N, R6E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 2-5 Lat: 37.900926 Long: -90.343751 Datum: WGS84

Soil Map Unit Name: Ramsey-Rock outcrop complex, 8 to 50 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample Point 17 is located in a field in the central section of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Andropogon virginicus*	20	Yes	FACU
2. *Festuca arundinacea*	15	Yes	FACU
3. *Symphyotrichum pilosum*	10	No	FACU
4. *Tridens flavus*	10	No	UPL
5. *Setaria pumila*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	60 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	45	x 4 =	180
UPL species	10	x 5 =	50
Column Totals:	60 (A)		245 (B)

Prevalence Index = B/A = 4.08

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 6/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 2

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 10/17/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S18

Investigator(s): SCI - Justin Loos, Jacob Travelstead Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave

Slope (%): 2-5 Lat: 37.879555 Long: -90.403753 Datum: WGS84

Soil Map Unit Name: Caneyville silt loam, 8 to 15 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Sample Point 18 is located in a field in the central section of the site within a proposed access raod corridor.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Poa pratensis*	65	Yes	FAC
2. *Setaria pumila*	15	No	FAC
3. *Tridens flavus*	10	No	UPL
4. *Tridens flavus*	5	No	UPL
5. *Eupatorium serotinum*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	85	x 3 =	255
FACU species	0	x 4 =	0
UPL species	15	x 5 =	75
Column Totals:	100 (A)		330 (B)

Prevalence Index = B/A = 3.30

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 5/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compacted soil

Depth (inches): 3

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 10/17/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S19

Investigator(s): SCI - Justin Loos, Jacob Travelstead Section, Township, Range: S21, T37N, R6E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave

Slope (%): 2-5 Lat: 37.897469 Long: -90.368235 Datum: WGS84

Soil Map Unit Name: Lily loam, 8 to 15 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample Point 19 is located in a field in the central section of the site within a proposed access road corridor.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Andropogon virginicus*	40	Yes	FACU
2. *Festuca arundinacea*	30	Yes	FACU
3. *Setaria pumila*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	75 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	75 (A)		295 (B)

Prevalence Index = B/A = 3.93

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 5/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compacted soil

Depth (inches): 2

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: WVPA Salem Bulk-Valley View Transmission Line City/County: St. Genevieve Sampling Date: 10/17/23

Applicant/Owner: Commonwealth Associates, Inc. State: MO Sampling Point: S20

Investigator(s): SCI - Justin Loos, Jacob Travelstead Section, Township, Range: S22, T37N, R6E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 0-2 Lat: 37.899377 Long: -90.352238 Datum: WGS84

Soil Map Unit Name: Lily loam, 8 to 15 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample Point 20 is located in a grass field in an existing transmision line corridor in the northern portion of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Andropogon virginicus*	20	Yes	FACU
2. *Festuca arundinacea*	15	Yes	FACU
3. *Symphyotrichum pilosum*	10	No	FACU
4. *Tridens flavus*	10	No	UPL
5. *Setaria pumila*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	60 =Total Cover		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	45	x 4 =	180
UPL species	10	x 5 =	50
Column Totals:	60 (A)		245 (B)

Prevalence Index = B/A = 4.08

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 6/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 2

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: