



April 15, 2025

Mr. Victor Shock  
Director, Public Utilities Division  
North Dakota Public Service Commission  
600 East Boulevard; Department 408  
Bismarck, ND 58505-0480

Re: Basin Electric Power Cooperative  
Roundup to Kummer Ridge 345-kV Transmission Line Project – Dunn and McKenzie  
Counties  
Case No. PU-23-361 Tree and Shrub Mitigation Plan

Dear Mr. Shock:

Basin Electric Power Cooperative (Basin Electric) recently completed construction on the Roundup to Kummer Ridge 345-kV transmission line project (Project). During the construction process and to operate the transmission line safely, trees were needed to be removed. This Plan outlines the multiple tree and shrub inventories that took place and Basin Electric's proposed replacement plan and requests ND Public Service Commission approval of this Plan.

### **Tree and Shrub Inventory**

Prior to construction activities, Basin Electric, through its consultant Western EcoSystems Technologies (WEST), conducted a tree and shrub inventory of areas within the construction right-of-way and access routes that may be potentially cleared, grubbed, cut, or otherwise removed during construction. WEST's inventory documented 1,124 trees that were to be removed. The attached letter report, prepared by WEST, details the species and locations of the trees and shrubs that were to be affected by construction activities.

During construction, additional treed areas were identified as needed to be cleared to complete construction. Prior to removal, these areas were inventoried for species and count. These areas accounted for an additional 113 trees that were removed. In total, Basin Electric removed 1,237 trees during construction.

### **Replacement Plan**

The Tree and Shrub Mitigation Specifications for Case No. PU-23-361 states that both trees and shrubs must be replaced on a minimum two-to-one basis. Construction activities did not grub or otherwise remove shrub roots; therefore, are anticipated to regenerate naturally. 2,474 tree replacements are needed for the Project.

Basin Electric contacted all 12 landowners for which trees were removed on their property. 11 waived the option to have trees replaced on their property; one landowner requested the removed six trees on her property to be replaced. Basin Electric contacted the remaining landowners along

the route who did not have trees removed and ask if they would like trees planted on their property; all declined. Basin Electric also contacted the North Dakota Game and Fish department to check if they had any upcoming plantings in the area and they did not. Basin Electric then reached out to landowners not impacted by the Project, but within the impacted counties. One landowner was found willing to have the remaining 2,462 trees on their property to create a wildlife friendly planting area. A portion of the trees will be used to fill gaps in aging shelterbelts, while the remaining will be planted along a creek to create wildlife habitat.

Basin Electric and the landowner will consult with the local Natural Resources Conservation Service (NRCS) office to help guide the planting to ensure maximum benefit to wildlife and the environment. The table below displays the species, total number removed, and total number to be replanted.

Species		Number Removed	Number to be Replanted
Common Name	Scientific Name		
American Elm	<i>Ulmus Americana</i>	125	250
Bur Oak	<i>Quercus macrocarpa</i>	134	268
Eastern Cottonwood	<i>Populus deltoides</i>	504	1008
Green Ash	<i>Fraxinus pennsylvanica</i>	421	842
Peachleaf Willow	<i>Salix amygdaloides</i>	7	14
Rocky Mountain Juniper	<i>Juniperus scopulorum</i>	38	76
Siberian Elm	<i>Ulmus pumila</i>	8	16
<b>Totals</b>		<b>1237</b>	<b>2474</b>

Due to nursery availability and NRCS preference, some removed species may not be replanted and a different, wildlife friendly species may be chosen.

The plantings are proposed to occur in the spring of 2025. Yearly survival inspections will be completed, and, if deemed necessary to achieve the overall goal of a 75% survival rate after 2 years, Basin Electric will replant lost trees. Two years after completion of the planting, Basin Electric will file a summary document detailing the benefits of the tree and shrub mitigation to landowners, farmers and ranchers, the community, wildlife, and the environment. The summary will also report the number of surviving replacement trees and shrubs.

Basin Electric requests NDPSC approval for the Tree and Shrub Mitigation Plan for Case No. PU-23-361. Please contact me at [rking@becp.com](mailto:rking@becp.com) or 701.557.5558 if you have any questions, comments, or concerns regarding this submittal.

Sincerely,



Ryan King  
Environmental Coordinator

Enclosure: Roundup to Kummer Ridge Transmission Line Project – Tree Inventory



**ENVIRONMENTAL & STATISTICAL CONSULTANTS**

4007 State Street, Suite 109, Bismarck, ND 58503  
Phone: 701-250-1756 ♦ www.west-inc.com ♦ Fax: 701-250-1761

February 8, 2024

Erin Fox-Dukart  
Basin Electric Power Cooperative  
1717 East Interstate Avenue  
Bismarck, North Dakota 58503

**RE: Roundup to Kummer Ridge Transmission Line Project -Tree Inventory**

Mrs. Fox-Dukart,

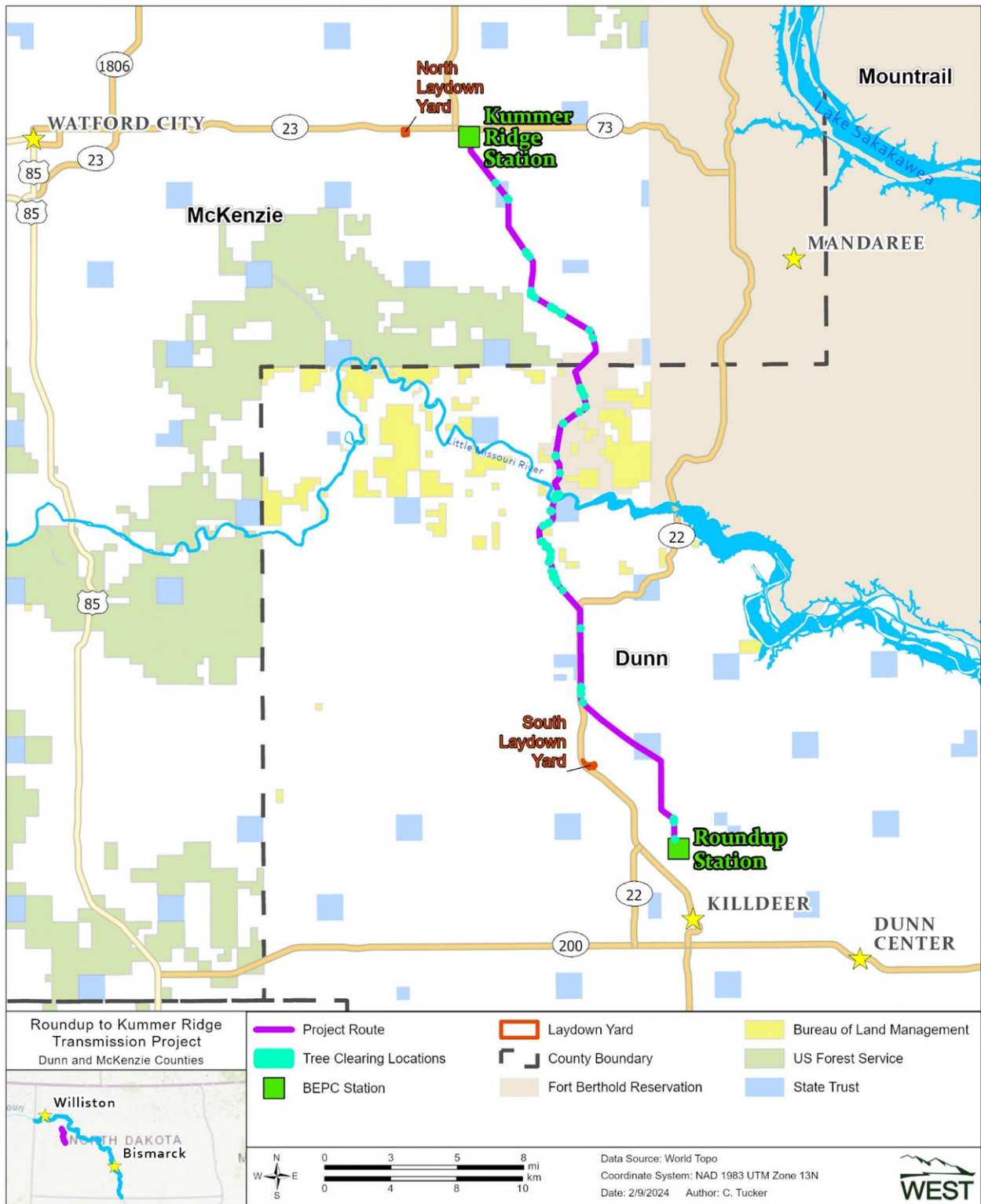
Basin Electric Power Cooperative (BEPC) proposes to construct and operate the Roundup to Kummer Ridge 345-kilovolt (kV) Transmission Project (Project). Western EcoSystems Technology, Inc. (WEST), was retained by BEPC to provide a woody vegetation inventory for the Project. The Project begins at BEPC's Roundup Station north of the city of Killdeer and extends north for 32.50 miles (mi; 52.3 kilometers [km]), terminating at the Kummer Ridge Station located southeast of Johnsons Corner (Figure 1).

The tree inventory took place within the areas identified by the tree clearing shapefile supplied by BEPC. The shapefile contains 62 polygon locations covering a total of 10.16 acres which are dispersed throughout the Project. Eleven polygons identified for clearing did not contain trees. Table 1 identifies the Public Land Survey System Sections within which tree clearing is anticipated. The included map figures depict the locations of the inventoried trees.

**Table 1. Legal descriptions of the tree clearing polygons.**

<b>Section</b>	<b>Township</b>	<b>Range</b>
3	145	95
6, 34, 35	146	95
30	147	95
2, 11, 12, 13,	147	96
12, 13, 24, 25, 35, 36	148	96
7, 19, 20, 27, 28	149	95
36	150	96

Trees that are cut down, run over, or otherwise removed should be replaced at a ration of 2:1. Shrub species were not inventoried as significant disturbance to the soil seed bank is not anticipated and shrubs that are impacted will be allowed to regenerate naturally.



**Figure 1.** Tree clearing locations for the Roundup to Kummer Ridge 345-kV Transmission Project in Dunn and McKenzie Counties, North Dakota.

## Procedures

The tree inventory utilized a methodology previously approved by the North Dakota Public Service Commission. Trees were recorded within the identified tree clearing areas, including those that are considered non-native species. The location, number, and species of each tree was documented for this inventory. The trees were enumerated by one of two methods: individual count; or by inference utilizing a representative subsample plot to count and then extrapolate the number of individuals or stems based upon the area. Individual points were taken for all planted trees. The field effort took place between August 30 and September 6, 2023.

## Results

The inventory documented 1,124 trees in total. Eastern cottonwood (*Populus deltoides*), native, was the most common tree species at 473 natural growth stems. Green ash (*Fraxinus pennsylvanica*), native, was the next most common tree species at 365 natural growth stems. Other tree species documented included American elm (*Ulmus americana*), native, at 123 natural growth stems, peachleaf willow (*Salix amygdaloides*), native, at 4 natural growth stems, bur oak (*Quercus macrocarpa*), native, at 123 natural growth stems; Rocky Mountain juniper (*Juniperus scopulorum*), native, at 29 natural growth stems; and Siberian elm, non-native, at 7 planted trees. Table 2 summarizes the data. Table 3 and Table 4 contain the point and polygon attributes.

**Table 2. Results of the tree inventory.**

<b>Species</b>		<b>Count</b>
American elm	Native	123
Bur oak	Native	123
Eastern cottonwood	Native	473
Green ash	Native	365
Peachleaf willow	Native	4
Rocky mountain juniper	native	29
Siberian elm*	Non-native	7
<b>Total trees</b>		<b>1,124</b>

\*Planted

**Table 3. Tree point data.**

<b>Feature</b>	<b>Growth</b>	<b>Location</b>	<b>Species</b>	<b>Count</b>
T-1	Planted	Sec. 34, T146N, R95W	Siberian elm	1
T-2	Planted	Sec. 34, T146N, R95W	Siberian elm	1
T-3	Planted	Sec. 34, T146N, R95W	Siberian elm	1
T-4	Planted	Sec. 34, T146N, R95W	Siberian elm	1
T-5	Planted	Sec. 34, T146N, R95W	Siberian elm	1
T-6	Natural	Sec. 6, T146N, R95W	Green ash	1
T-7	Natural	Sec. 6, T146N, R95W	Green ash	1
T-8	Natural	Sec. 6, T146N, R95W	Green ash	1
T-9	Natural	Sec. 6, T146N, R95W	Green ash	1
T-10	Natural	Sec. 6, T146N, R95W	Green ash	1
T-11	Natural	Sec. 6, T146N, R95W	Green ash	1
T-15	Natural	Sec. 6, T146N, R95W	A. elm	1
T-16	Natural	Sec. 6, T146N, R95W	A. elm	1
T-18	Planted	Sec. 13, T147N, R96W	Siberian elm	1
T-19	Planted	Sec. 13, T147N, R96W	Siberian elm	1
T-28	Natural	Sec.11, T147N, R96W	Green ash	1
T-29	Natural	Sec. 11, T147N, R96W	Bur oak	2
T-41	Natural	Sec. 25, T148N, R96W	RM juniper	1
T-47	Natural	Sec. 7, T148N, R95W	RM juniper	1
T-48	Natural	Sec. 7, T148N, R95W	Green Ash	1
T-51	Natural	Sec. 7, T148N, R95W	Bur oak	1
T-53	Natural	Sec. 6, T148N, R95W	Green ash	1
T-54	Natural	Sec. 6, T148N, R95W	Bur oak	1
T-58	Natural	Sec. 29, T149N, R95W	Green ash	1
T-59	Natural	Sec. 29, T149N, R95W	Green ash	1
T-60	Natural	Sec. 29, T149N, R95W	Green ash	1
<b>Total</b>				<b>27</b>

N = north, R = Range, Sec. = Section, T = Township, W = west

**Table 3. Tree polygon data.**

Feature	Location	Species 1	Count 1	Species 2	Count 2	Species 3	Count 3	Species 4	Count 4
T-12	Sec. 6, T146N, R95W	A. elm	5						
T-13	Sec. 6, T146N, R95W	A. elm	15	Green ash	1				
T-14	Sec. 6, T146N, R95W	A. elm	101	Green ash	11				
T-17	Sec. 30, T147N, R95W	E. cottonwood	6						
T-20	Sec. 13, T147N, R96W	E. cottonwood	2	Green ash	2				
T-21	Sec. 13, T147N, R96W	E. cottonwood	18	Green Ash	1				
T-22	Sec. 13, T147N, R96W	Green ash	17	E. cottonwood	33	Bur oak	4		
T-23	Sec. 13, T147N, R96W	Green Ash	8						
T-24	Sec. 13, T147N, R96W	Green Ash	3						
T-25	Sec. 13, T147N, R96W	Green ash	38	E. cottonwood	19				
T-26	Sec. 12, T147N, R96W	Green ash	3						
T-27	Sec. 11,12, T147N, R96W	Bur oak	11	Green ash	24	E. cottonwood	143	RM juniper	2
T-30	Sec. 11, T147N, R96W	Green ash	1	RM juniper	1				
T-31	Sec. 11, T147N, R96W	Green ash	2	Bur oak	1				
T-32	Sec. 11, T147N, R96W	Oak	1	RM juniper	3	Green ash	4		
T-33	Sec. 11, T147N, R96W	Green ash	4	Peachleaf willow	4	RM juniper	1		
T-34	Sec. 2, T147N, R96W	RM juniper	4	Green ash	2				
T-35	Sec. 2, T147N, R96W	Green ash	11	RM juniper	5				
T-36	Sec. 2, T147N, R96W	Green ash	5	Bur oak	2				
T-37	Sec. 2, T147N, R96W	RM juniper	3						
T-38	Sec. 2, T147N, R96W	Green ash	5	Bur oak	2				
T-39	Sec. 35, T148N, R96W	Green Ash	4						
T-40	Sec. 25, 36, T148N, R96W	Green ash	48	E. cottonwood	252				
T-42	Sec. 24, T148N, R96W	Green Ash	17	Bur oak	9				
T-43	Sec. 13, T148N, R96W	Bur oak	31						
T-44	Sec. 7, T148N, R95W	Bur oak	11						
T-45	Sec. 7, T148N, R95W	Bur oak	31						
T-46	Sec. 7, T148N, R95W	Green Ash	6						

Feature	Location	Species 1	Count 1	Species 2	Count 2	Species 3	Count 3	Species 4	Count 4
T-49	Sec. 7, T148N, R95W	RM juniper	3						
T-50	Sec. 7, T148N, R95W	Green Ash	4	RM juniper	3				
T-52	Sec. 6, T148N, R95W	Green ash	1						
T-55	Sec. 27, T149N, R95W	Bur oak	7						
T-56	Sec. 27, T149N, R95W	Bur oak	9						
T-57	Sec. 28, 29, T149N, R95W	Green ash	18						
T-61	Sec. 20, T149N, R95W	Green ash	1						
T-62	Sec. 20, T149N, R95W	Green ash	19						
T-63	Sec. 19, T149N, R95W	Green ash	10						
T-64	Sec. 19, T149N, R95W	Green ash	10						
T-65	Sec. 19, T149N, R95W	Green ash	5	RM juniper	2				
T-66	Sec. 19, T149N, R95W	Green ash	9						
T-67	Sec. 19, T149N, R95W	Green ash	12						
T-68	Sec. 7, T149N, R95W	Green ash	15						
T-69	Sec. 7, T149N, R95W	Green ash	16						
T-70	Sec. 36, T150N, R96W	Green ash	7						
T-71	Sec. 36, T150N, R96W	Green ash	9						
<b>Totals</b>			<b>566</b>		<b>377</b>		<b>152</b>		<b>2</b>

N = north, R = Range, Sec. = Section, T = Township, W = west

E. cottonwood = eastern cottonwood, A. elm = American elm, RM juniper = rocky mountain juniper

Please let me know if you need any further information regarding this effort.

Sincerely,

*Chad Tucker*

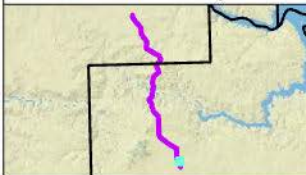
Chad Tucker  
Biologist / Project Manager



Tree Inventory  
Roundup to Kummer Ridge  
Transmission Project

-  Project Route
-  Access Road
-  Tree Clearing Area

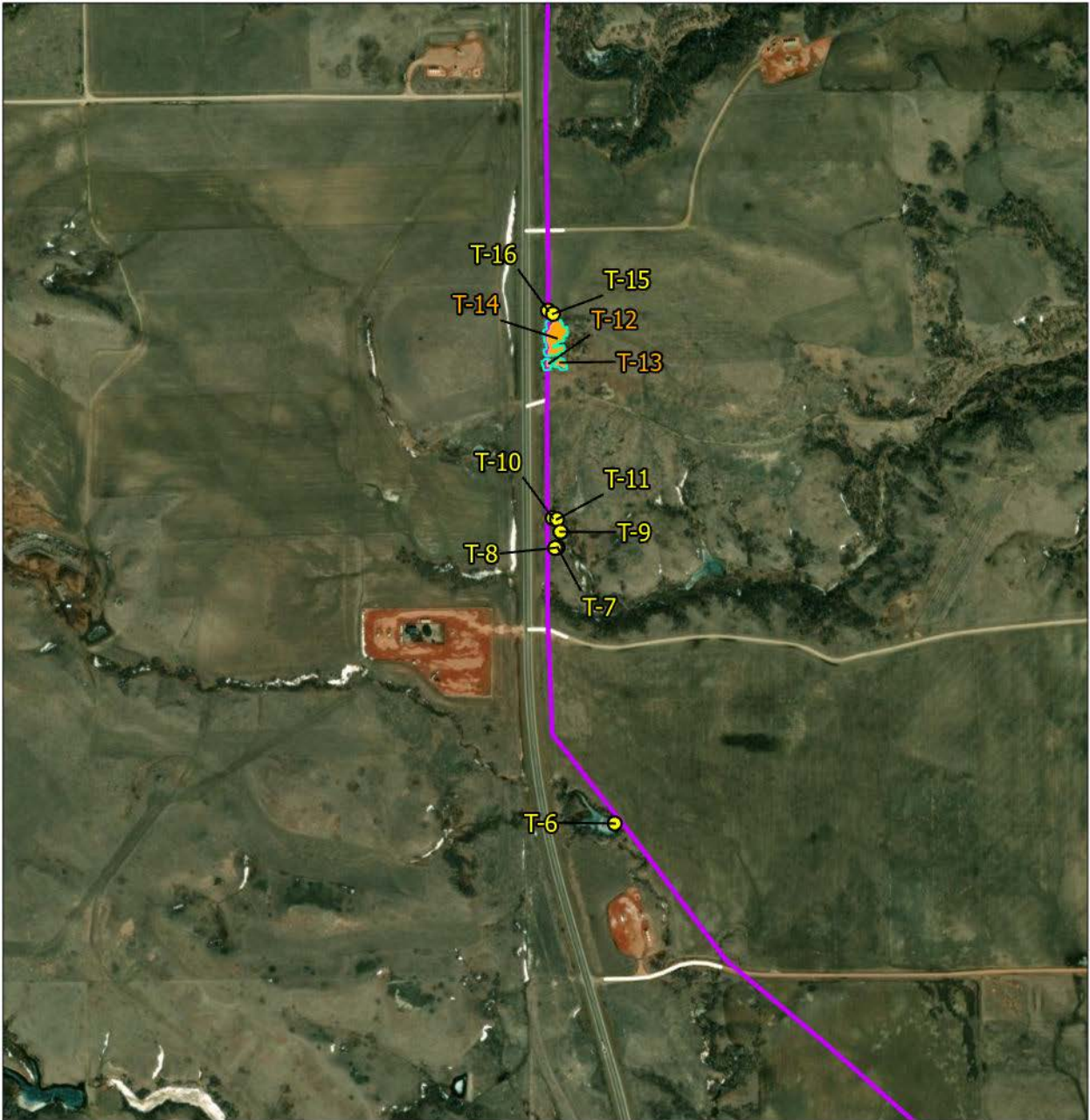
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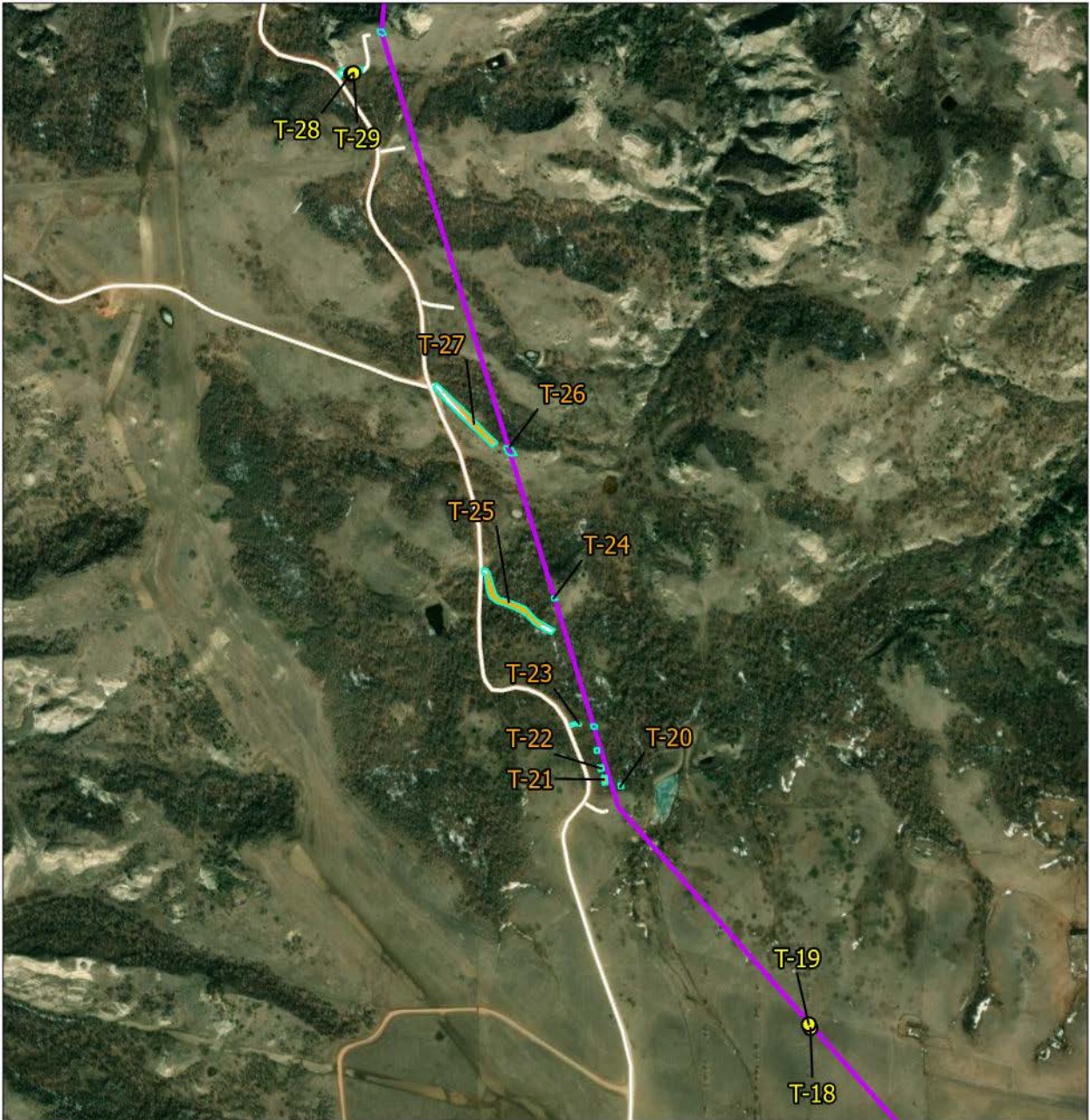
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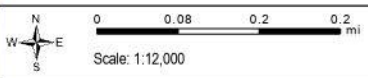
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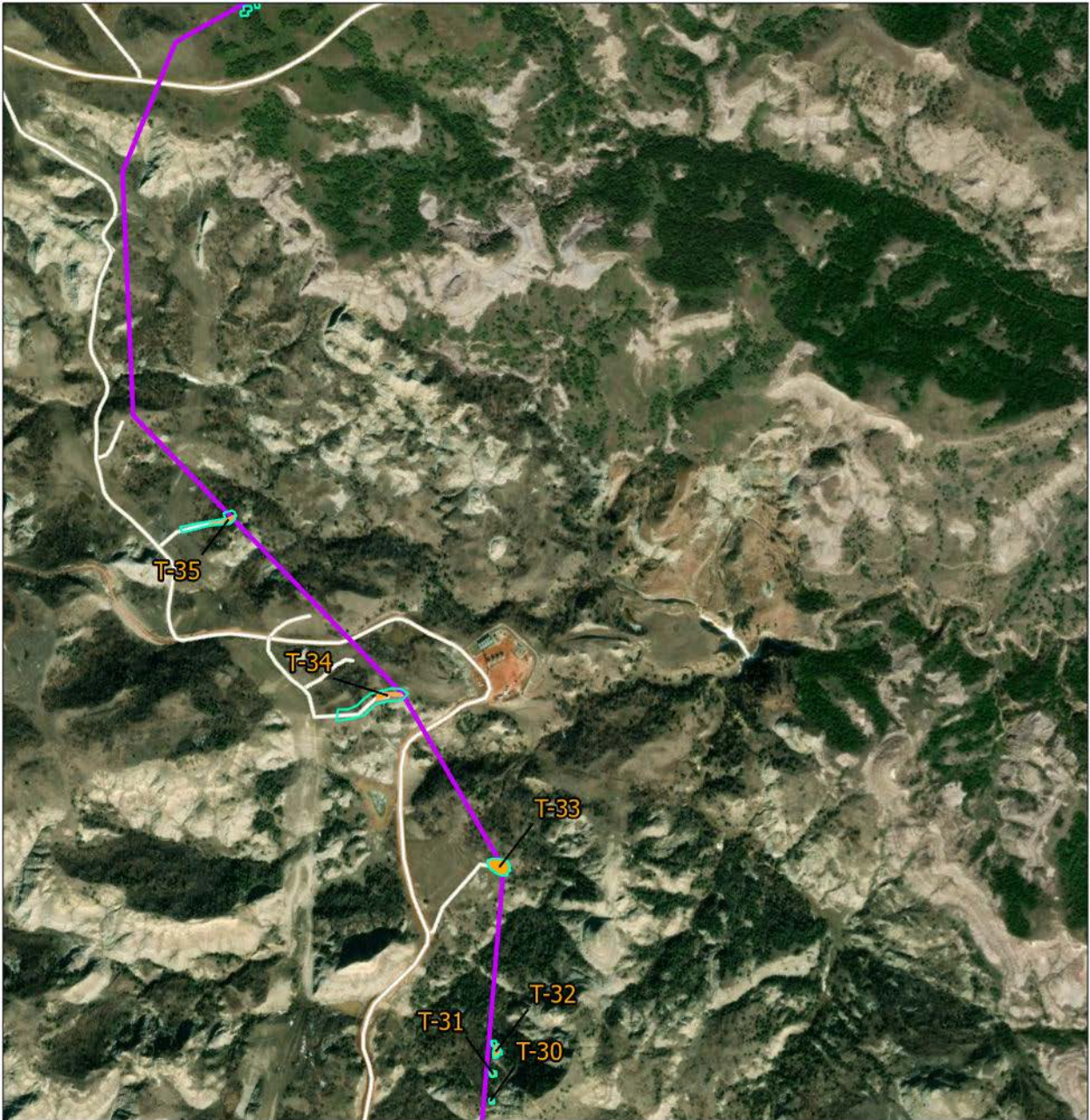
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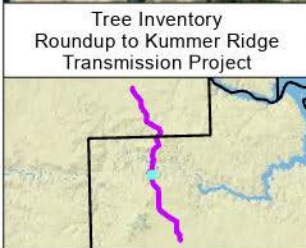




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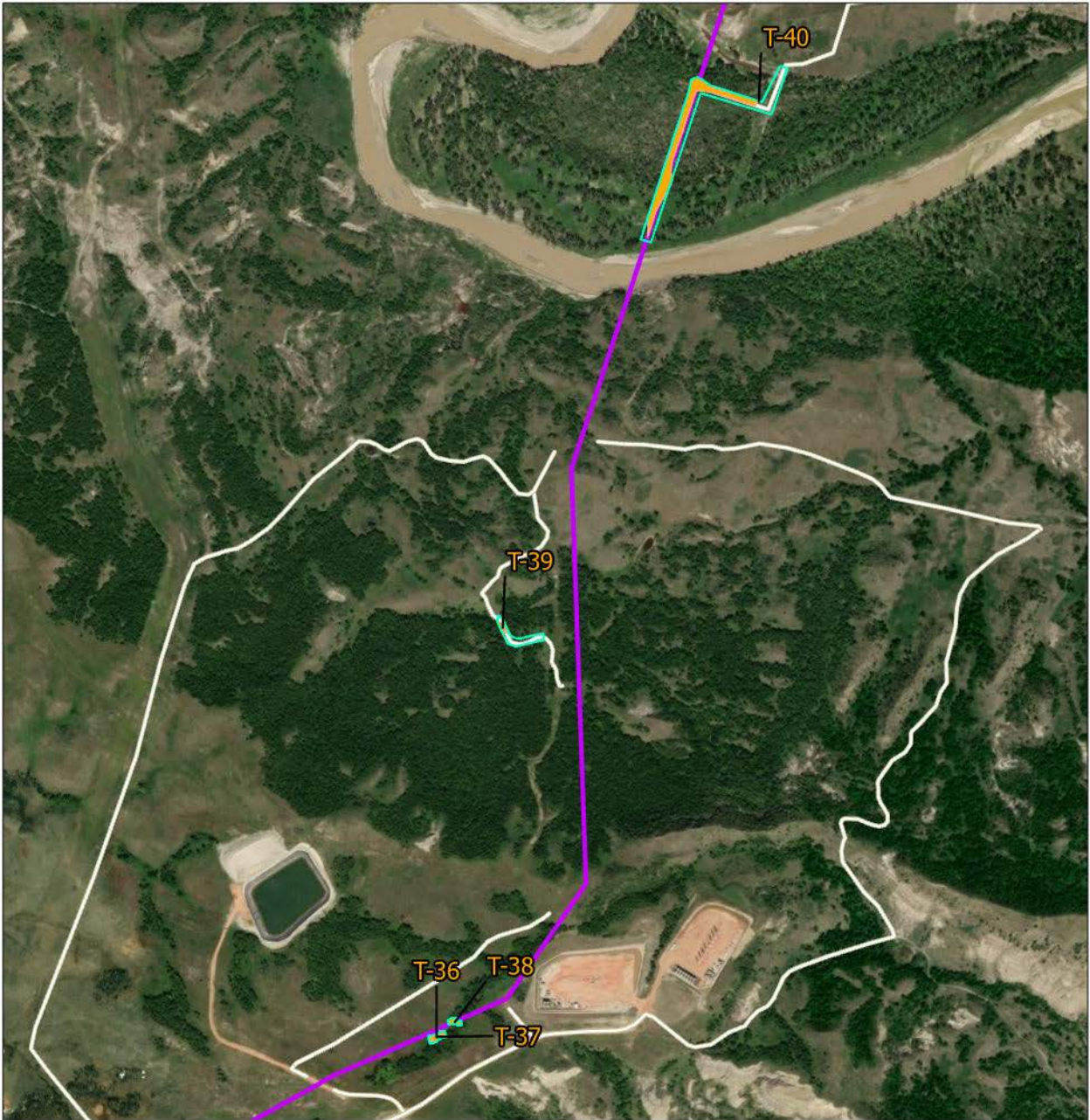
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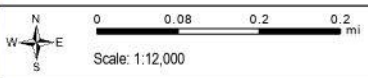
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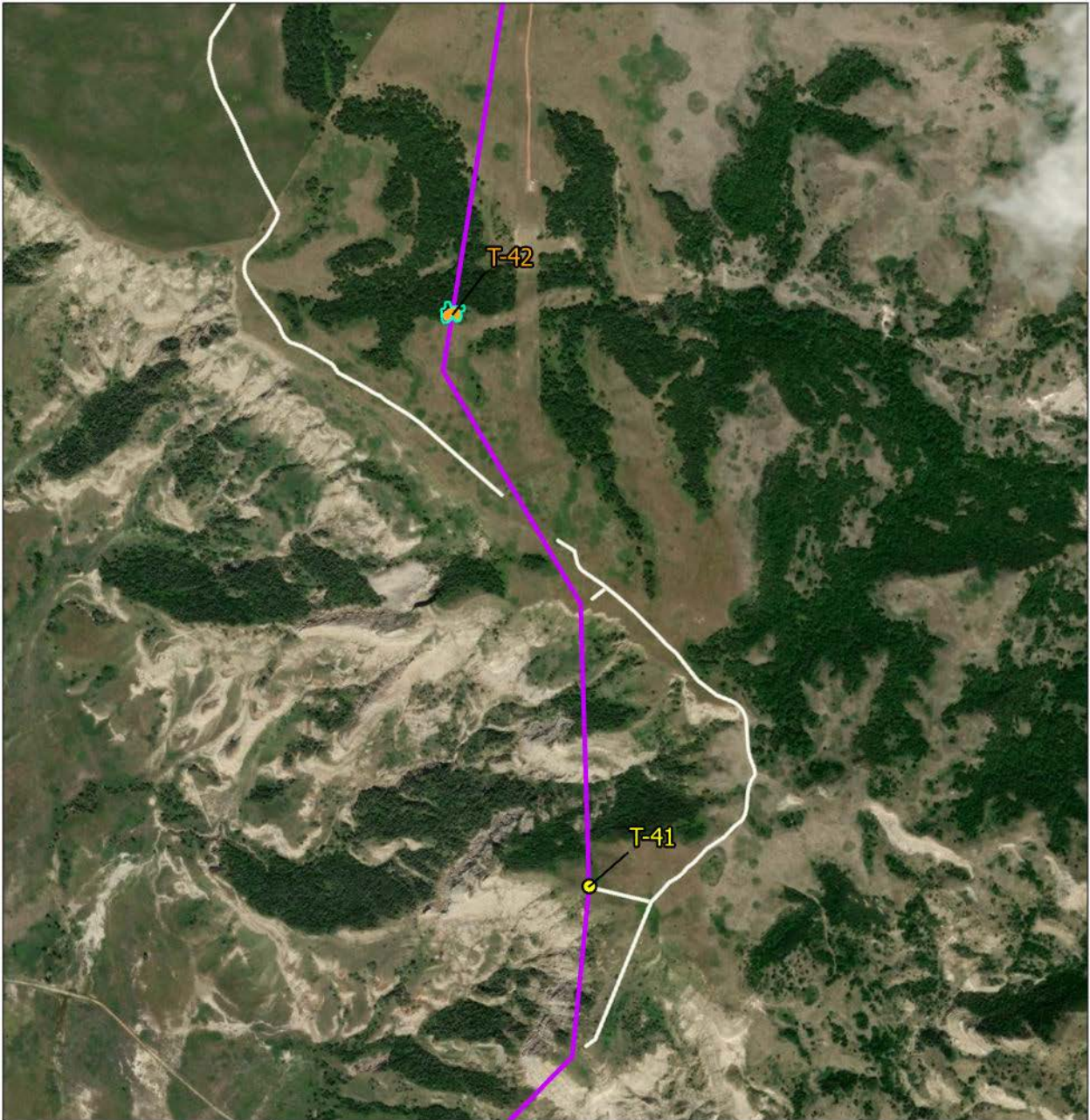
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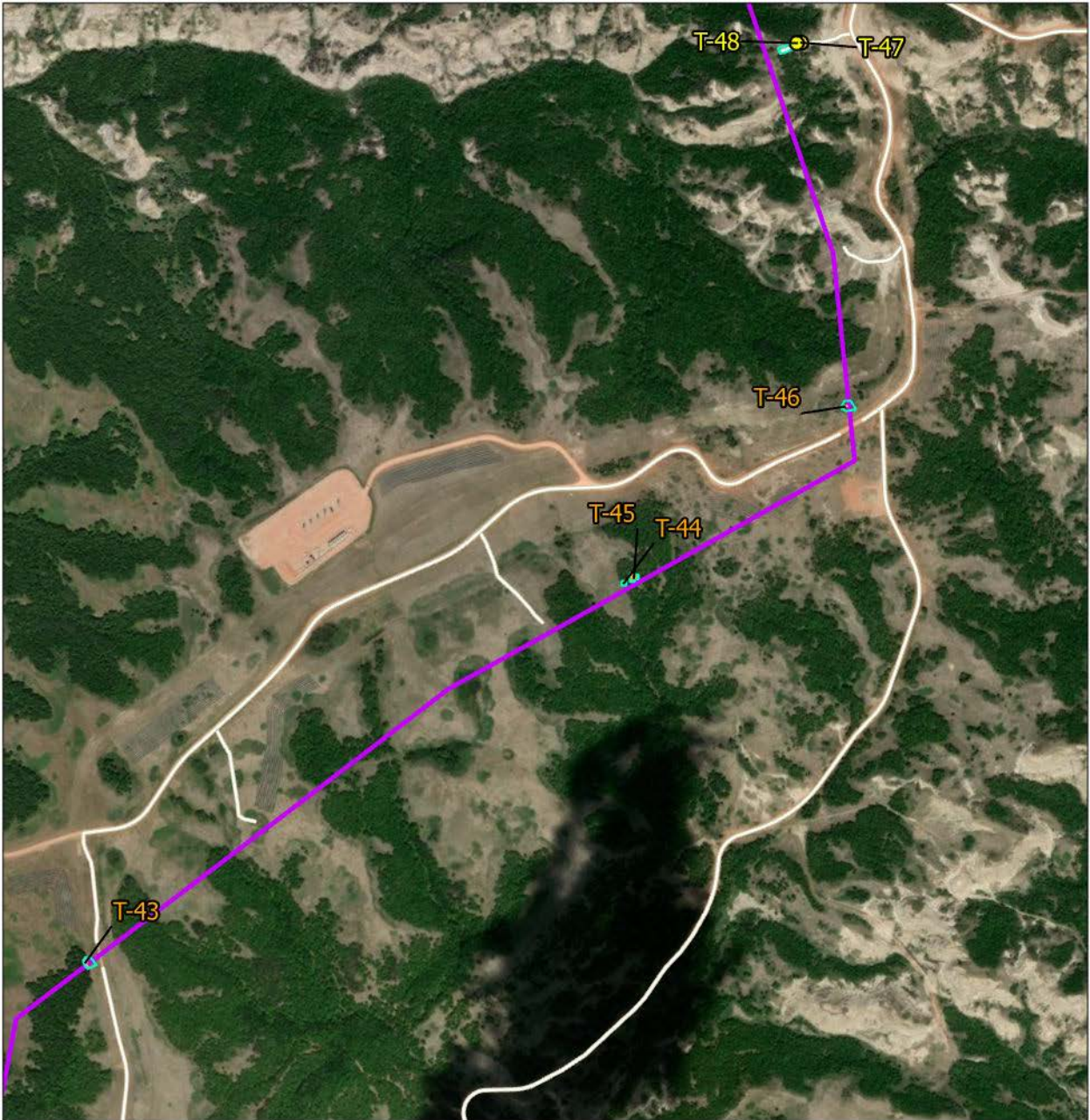
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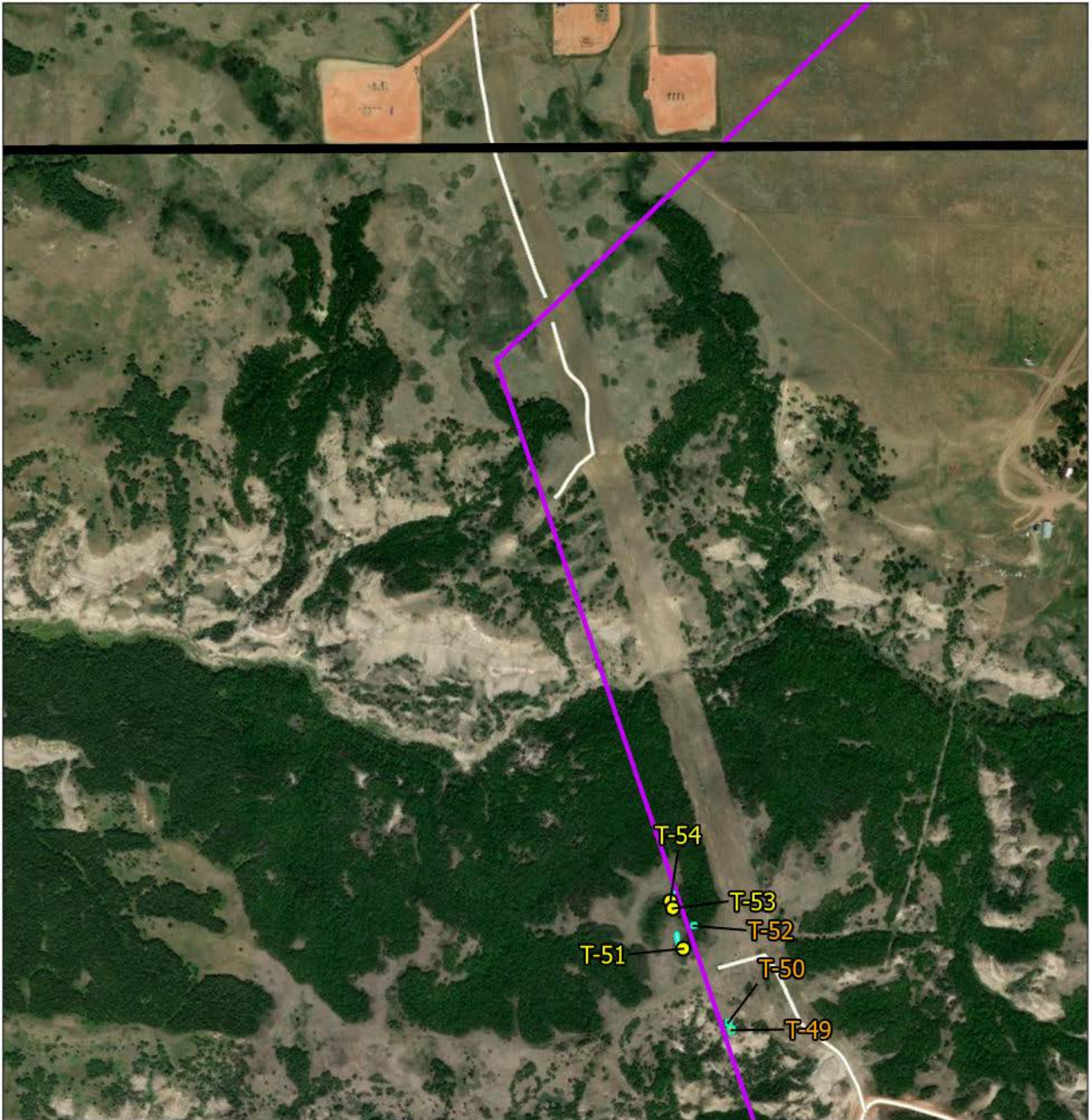
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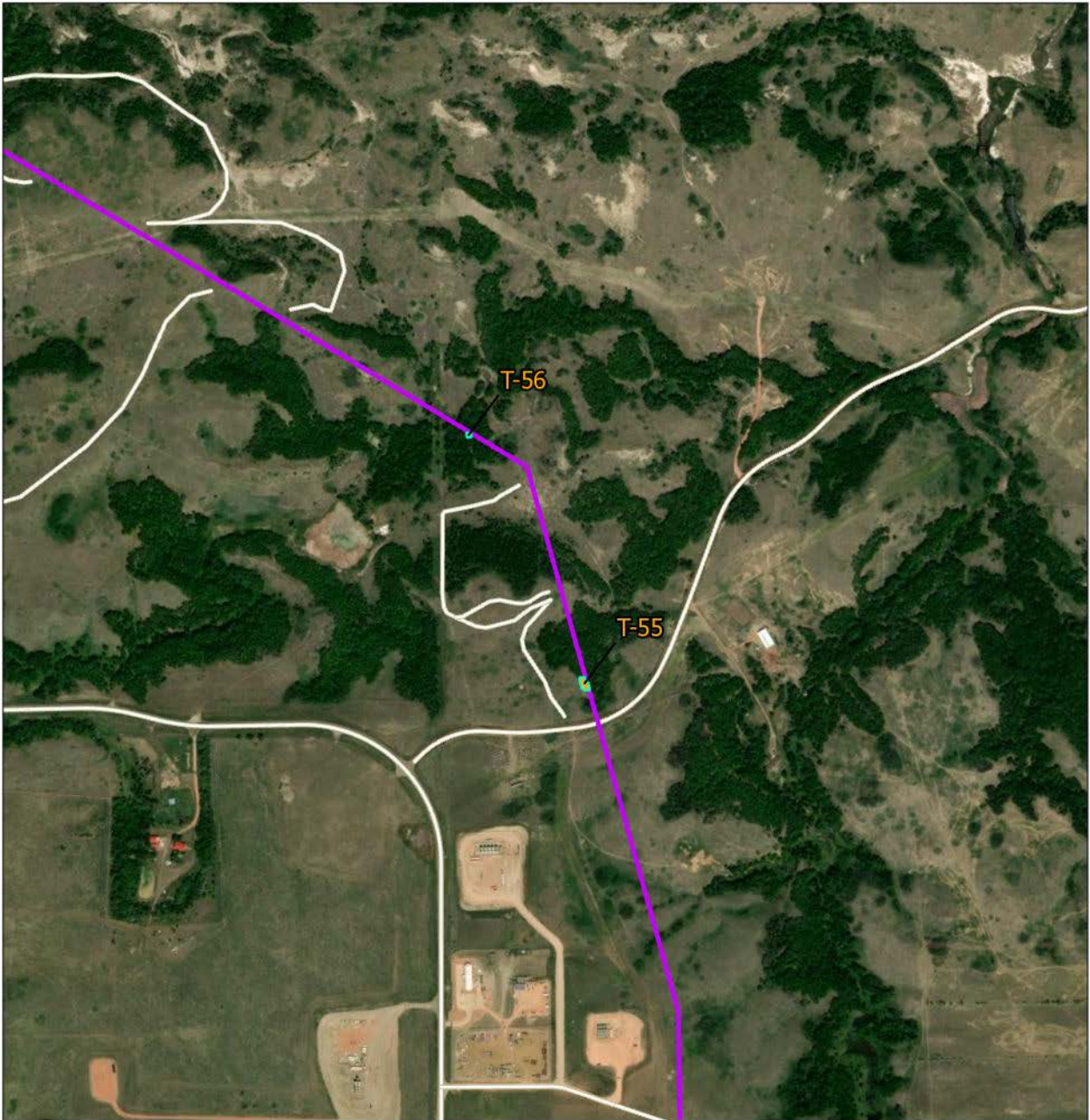
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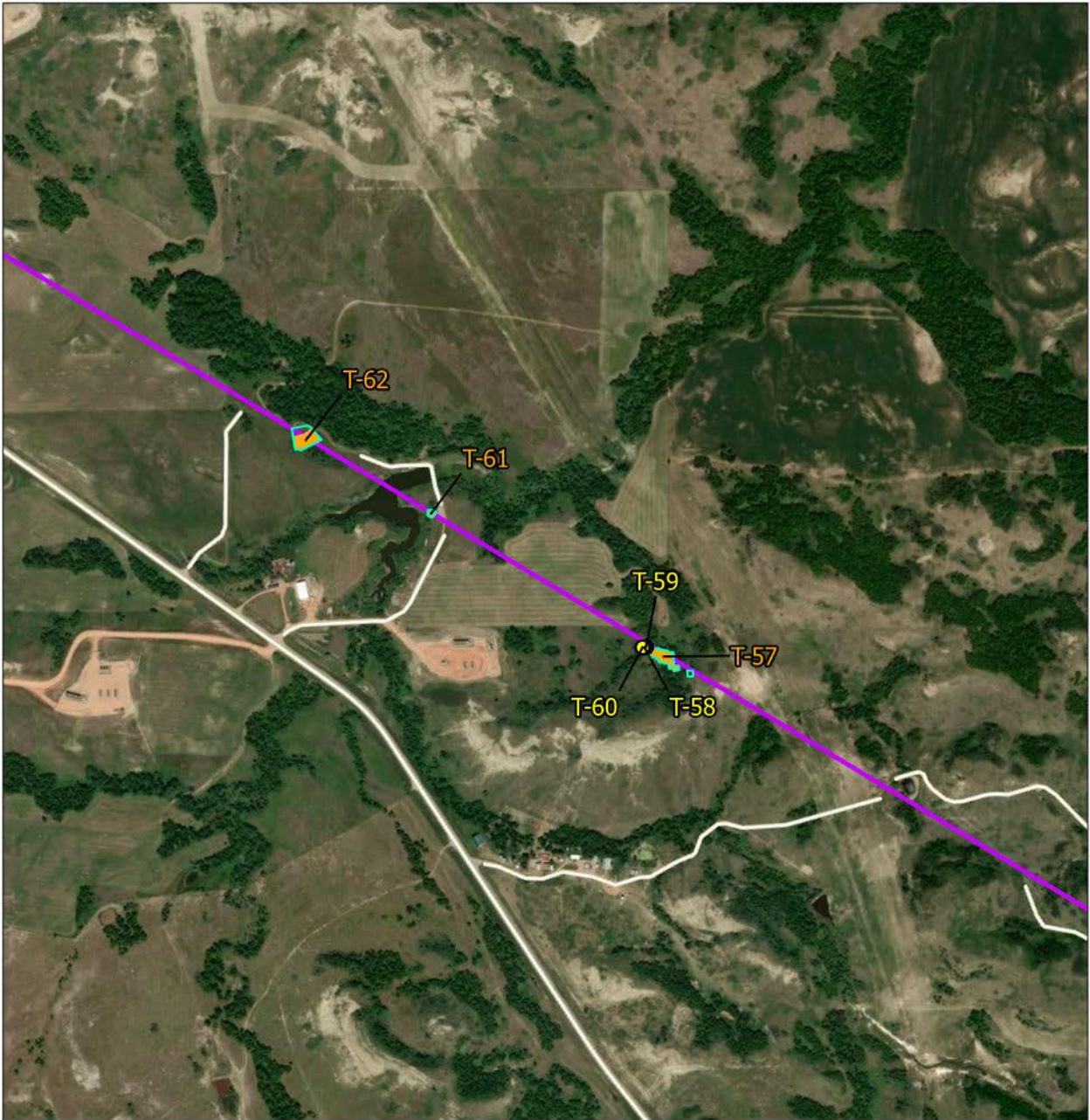
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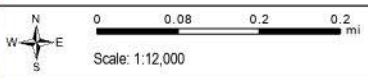
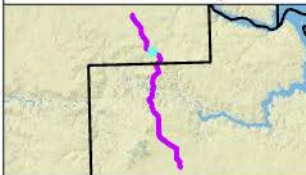
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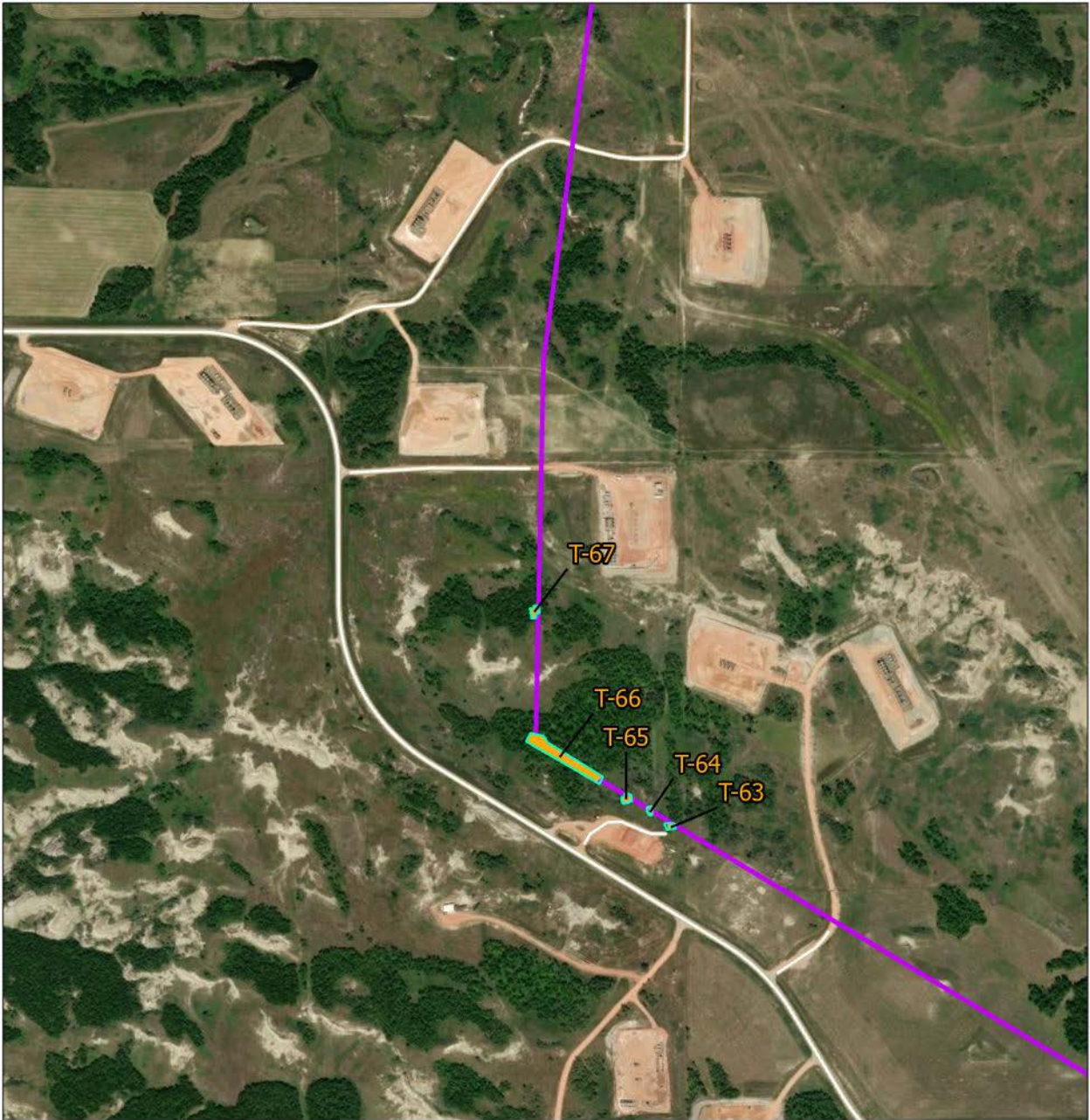
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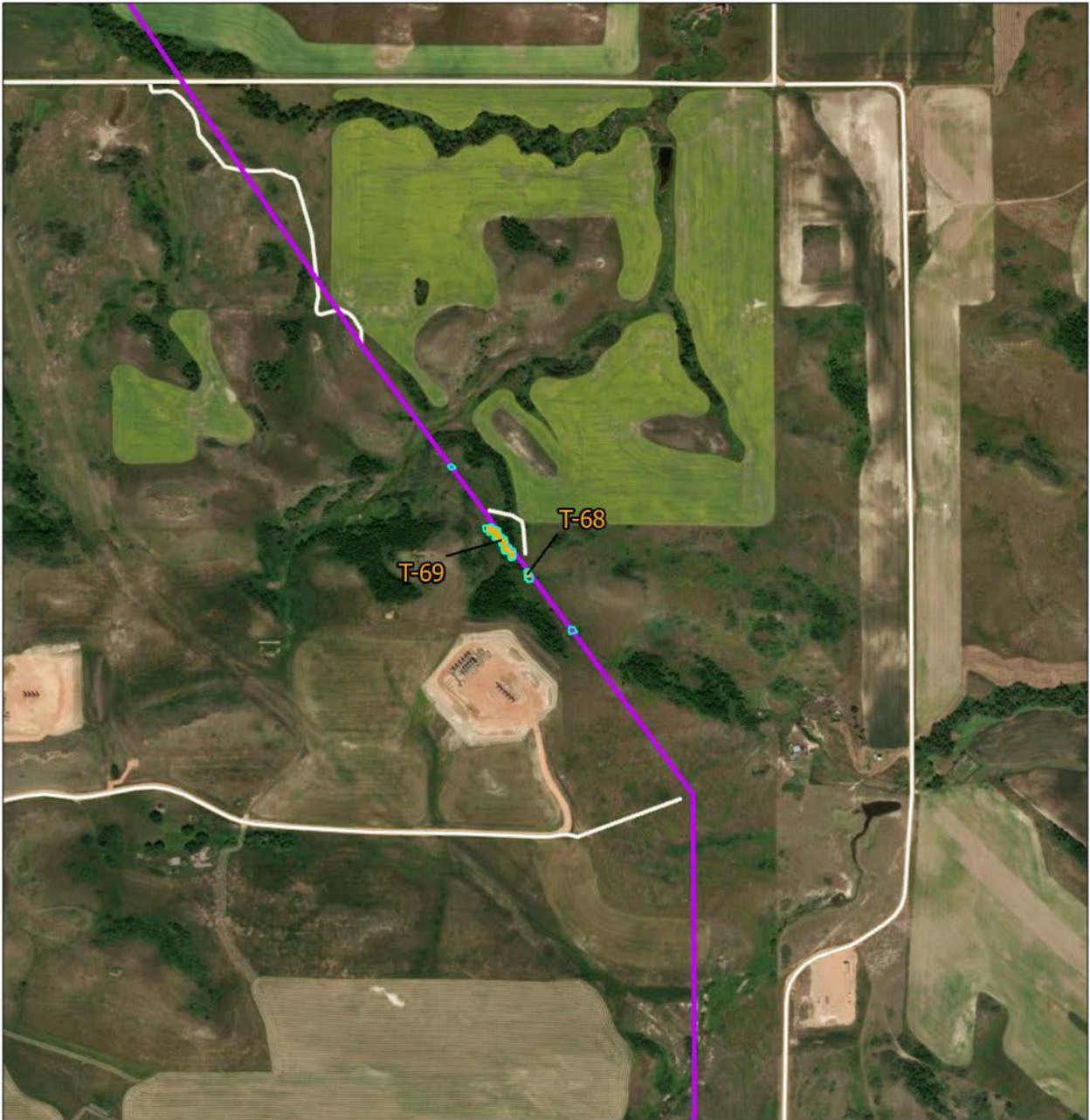
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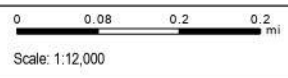
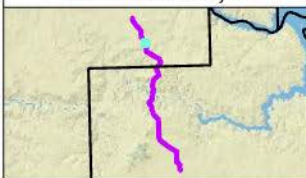
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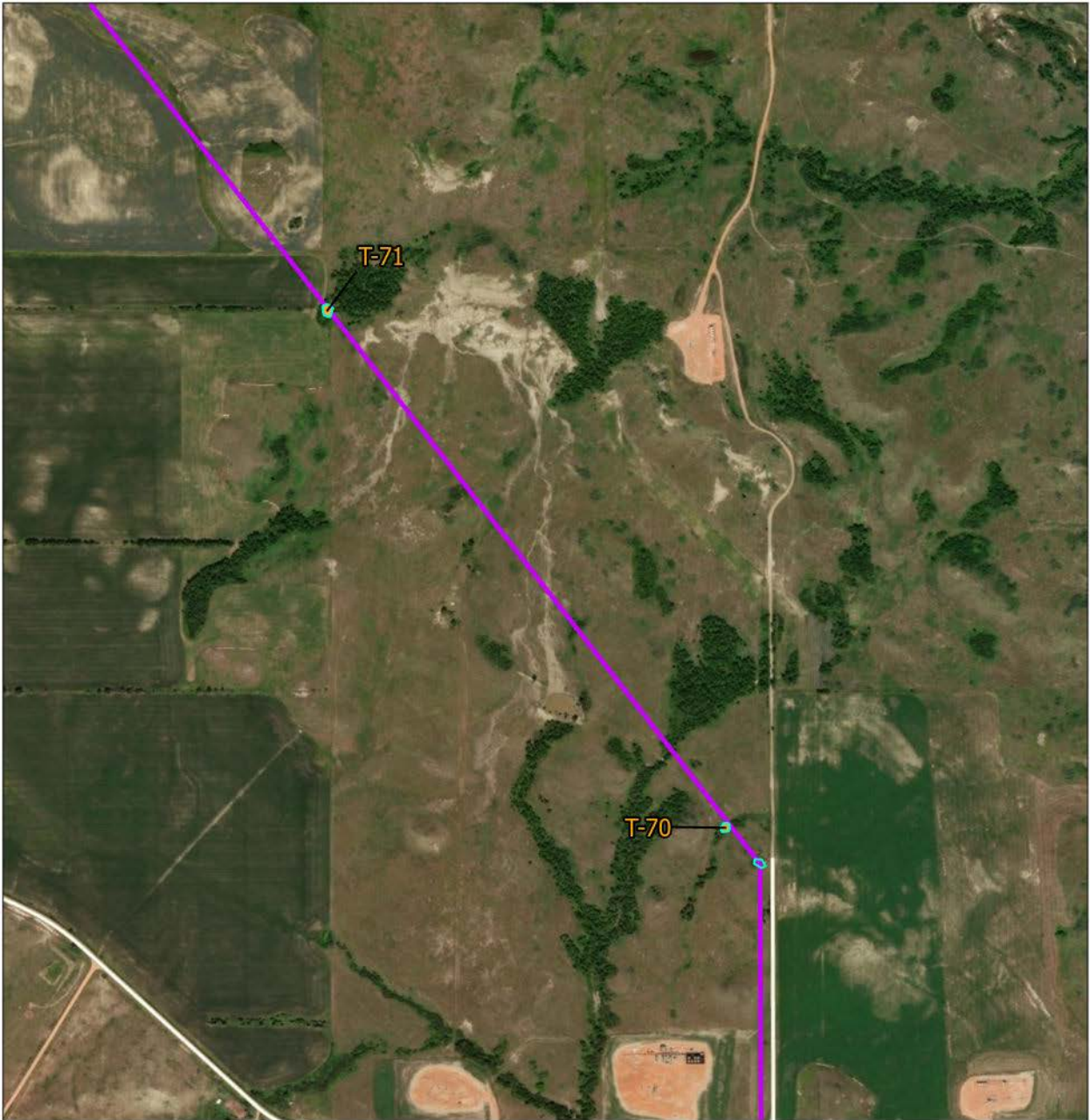
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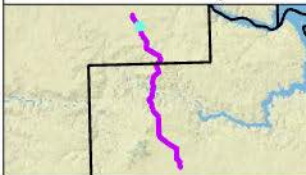




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