



**WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE
AND CONSUMER PROTECTION**
**AGRICULTURAL IMPACT STATEMENT
ADDENDUM**

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**DATCP
#4356**

**Western Wisconsin Natural Gas Expansion
Project Addendum
PSC # 6680-CG-168
Monroe County**

I. INTRODUCTION

On January 17, 2020, the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) published an Agricultural Impact Statement (AIS) entitled, "Western Wisconsin Natural Gas Expansion Project" (DATCP #4311) in accordance with Wis. Stat. §32.035 (DATCP, 2020). The AIS was prepared in response to a project proposal from Wisconsin Power and Light (WPL) to construct 12 miles of new 10-inch pipeline in Monroe County. The Public Service Commission (PSC) of Wisconsin has authority over this project and designated it as case number 6680-CG-168. Following publication of AIS #4311, WPL has since modified the original pipeline route to avoid properties WPL was unable to negotiate voluntary easements with and did not wish to exercise eminent domain to obtain.

The three route modifications denoted as RMS-1, RMS-2, and RMS-9, shown in Appendix 1: Figures 2-4, occur along the section of the route known as Segment 1A (Appendix 1: Figure 1). These route modifications will not affect new landowners and will only shift the impact of the pipeline route within the existing pool of landowners from the original AIS. The landowners affected by route modifications RMS-1, RMS-2, and RMS-9 and the acreage of agricultural lands impacted are listed in Table 2. The project right of way (ROW) requirements for the route modifications are unchanged from the original AIS; that being 25-foot wide permanent and 75 feet wide temporary easements.

Pipeline construction for the modified routes on the agricultural lands will be consistent with the construction methods described within the AIS #4311 (DATCP, 2020), including

open trench through agricultural lands. The open trench method calls for the excavation of a trench approximately 5 feet deep and 3 feet wide at the base and up to 18 feet wide at ground surface. In agricultural lands, trench depth will be sufficiently deep to allow a minimum of 4 feet of soil cover over the top of the pipeline to avoid possible interference with farming equipment. Large equipment required to excavate soil and place the pipeline within the trench will operate within the trench and along the temporary ROW.

II. AGRICULTURAL IMPACTS

Soils

The soils impacted within the ROW of the Western Wisconsin Natural Gas Expansion (WWGE) route modifications RMS-1, RMS-2 and RMS-9 were cataloged and examined for impacts to soils designated as prime farmland (including prime if drained) or farmland of statewide importance (Table 1). Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and may be utilized for cropland, pastureland, rangeland, forest land, or other lands excluding urban built-up land or water. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. Farmlands of statewide importance include those that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable.

Table 1: Soils impacted by the ROW of the WWGE route modifications RMS-1, RMS-2 and RMS-9. Prime farmland includes acres of prime farmland if drained.

Route	Soils		Prime Farmland (acre)	Farmland of Statewide Importance (acre)
	Texture	Acres		
RMS-1	Sandy Loam	2.94	1.29	0.40
	Silt Loam	1.90		
RMS-2	Sandy Loam	0.62	2.53	0.41
	Silt Loam	2.32		
RMS-9	Sandy Loam	0.27	0.05	0.00

Affected Property

The proposed acquisition of land for the reconfigured of the WWGE Project will affect nine parcels of property and eight landowners. DATCP attempted to contact via phone and email landowners whom had an increase of one or more acres of newly affected agricultural land (Table 2) to assess the impacts the route modifications will have to their agricultural operations. Of the landowners contacted, Chapman Farms-Land LLC and Craig M Herold Trust responded and were willing to provide comments. Terry & Jean A. Boak were unable to be reached for comment.

Table 2: Agricultural landowners and agricultural lands (acres) affected by route modifications RMS-1, RMS-2, and RMS-9. The original route acreages shown are the sum of both temporary and permanent easements specifically for the area of the route no longer utilized.

Route	Agricultural Landowner	Original Route Impact (acres)	Newly Affected Agricultural Lands		Net Acreage Change (acres)
			Permant ROW (acres)	Temporay ROW (acres)	
RMS-1	Terry & Jean A. Boak	1.68	0.37	1.06	-0.25
	Robert G. Raese	0.15	0.00	0.00	-0.15
	Hartung Investments LLC	0.90	0.00	0.00	-0.90
	Chapman Farms-Land LLC	1.69	0.83	2.58	1.72
	David J Bloom	0.20	0.00	0.00	-0.20
RMS-2	Chapman Farms-Land LLC	0.68	0.50	1.54	1.36
	Kathleen M Johnson	0.93	0.00	0.00	-0.93
	Craig M Herold Trust	1.32	0.29	0.62	-0.42
RMS-9	Unimin Corporation	0.36	0.06	0.21	-0.09

Chapman Farms-Land LLC owns or rents essentially all of the agricultural production lands that border the WWGE route between RMS-1 and RMS-2, including rental lands owned by the Craig M Herold Trust. They grow corn and hay and milk 1,000 cows. They also raise 800 head of replacement dairy cattle and 700 head of beef cattle. The newly proposed acquisitions would impact an additional 3.08 acres of agricultural lands in addition to the approximately 9 acres already impacted as part of WWGE Segment 1A, an increase of 34%. The majority of prime farmland or prime farmland if drained (2.42 acres or 63%) and all of the farmland of statewide importance impacted by the route modifications shown in Table 1 is directly owned by Chapman Farms-Land LLC. The owners of Chapman Farms-Land LLC reported several concerns regarding the delayed project timeline and the overall impact of the potential route modifications:

- The corn silage harvest is a critical time for their operation, as the silage needs to be harvested at the proper time and in good condition to supply their dairy operation. The delayed timeline may now schedule WWGE construction crews to excavate open trenches and install pipeline during the same fall (September/October) 2020 period they would typically harvest corn silage on fields they own or rent.
- The impacts trenching and heavily equipment traffic will have on the health and productivity of the soil as well as drainage.
- The owners stated WPL has mentioned the use of three-lift soil handling procedure during pipeline construction to reduce impacts to soil health and productivity. However, the owners expressed doubt the excavated soils would return to prior levels of productivity, post-pipeline installation.
- Concerns regarding how WPL would install the pipeline through drainage channels and whether or not the channels would be temporary blocked in order to install the pipeline.

The owners of the Craig M Herold Trust agricultural lands live on the property impacted by RMS-2 and rent impacted agricultural lands, including 0.91 acres of prime farmland or prime farmland if drained, to Chapman Farms-Land LLC. The owners expressed concerns about the impact of the inward movement of the pipeline farther into their property and the loss of future development rights on an increasing area of property. The owners were also concerned about heavy equipment compacting surface soil and subsoil and that this compaction would worsen existing water ponding issues.

The addition of RMS-1 and RMS-2 as well as the delayed timeline has the potential to increase the level of previously known impacts established within AIS #4311 (DATCP, 2020) to the operation of Chapman Farms-Land LLC and Craig M Herold Trust. As planned, the ROW's for both RMS-1 and RMS-2 are located farther within the affected parcels and this will create larger agricultural impacts than would otherwise occur when located along the parcel boundary. For example, under RMS-1 and RMS-2 heavy construction equipment such as excavators potentially weighing over 50 tons will now directly move across agricultural fields. UW-Extension report A3367 states that heavy equipment with axle loads that exceed 10 tons increase the risk of soil compaction into subsoil layers that cannot be removed by conventional tillage (Wolkowski and Lowery, 2008); suggesting the Chapman Farms' fields and Craig M Herold Trust fields are at risk of

soil and sub-soil compaction. In addition, research has shown that construction of pipelines, such as the WWGE, can negatively impact soil properties, soil health and crop yields for up to a decade within the ROW depending on the type and severity of construction impacts (e.g equipment axle weight, use of excavation, intermixing of soil layer etc.) (Culley and DOW 1988; Shi *et al.*, 2014). Consequently, the additional 3.87 acres of prime agricultural soils spread across RMS-1, RMS-2, and RMS-9 may experience several negative impacts for years after the WWGE has been completed, including but not limited to:

- Soil compaction, potentially subsoil compaction, within the temporary ROW from construction equipment
- Intermixing of topsoil and subsoil layers within the permanent ROW from trench excavation and pipeline installation
- Decreased soil health and fertility throughout the entire ROW
- Decreased crop yield throughout the entire ROW

The delayed project timeline has also generated the possibility of overlapping and conflicting activities between WPL and Chapman Farms that could impact field access. Once WWGE project modifications are approved by the PSC, there is the potential for WPL to initial pipeline construction yet in 2020, including the excavation of open trenches along fields and field access points owned or rented by Chapman Farms-Land LLC. However, the fall harvest of corn silage is known to be a critically important time to Chapman Farms and the creation of open trenches at field access points has the potential to limit or temporary eliminate access to a portion of Chapman Farms’ agricultural fields.

III. RECOMMENDATIONS

DATCP continues to support all of the recommendations made in the original AIS and re-emphasizes the following subset of recommendations pertaining to the addendum #4356:

- WPL retains an agricultural inspector to assist with pre-construction discussions between the utility and the agricultural property owners, conduct inspections of construction activities through agricultural properties, and monitor the implementation of the project-specific Agricultural Mitigation Plan (AMP) and Best Management Practices (BMPs).

- The Agricultural Inspector share periodic construction reports with DATCP staff.
- WPL work with agricultural landowners to minimize impacts to farmland and farm operations. Including drainage tiles, erosion controls, grassed waterways, fencing, drainage channels and farm access roads.
- WPL should attempt to ensure that both owners and renters of agricultural land affected by the proposed project are kept up-to-date and informed of construction schedules and potential impacts.
- WPL implement appropriate training for all construction supervisors, inspectors, and crews to ensure that they understand and properly implement the AMP and BMPs so that the integrity of agricultural lands and operations are protected during project construction and restoration.
- WPL should work with landowners to restore agricultural properties impacted by construction activities to pre-construction function and address concerns resulting from construction.
- Landowners should identify to WPL, prior to the start of construction, where construction activities may interfere with farm operations and where farm facilities are located including, drainage tiles, drainage channels, wells, watering systems, fencing, farm access roads, or grain bins.
- Landowners should work with WPL on how agricultural operations will continue during the different phases of pipeline construction. If any infrastructure such as drainage tiles or fencing is damaged by construction activities, landowners should document and photograph the damage and any repair efforts conducted on behalf of WPL to ensure the repair is adequate
- After construction is completed, landowners and the utility should carefully monitor for the emergence of drainage problems. If problems are observed that can be attributed to pipeline construction, the landowner and the utility should work together to develop a mutually agreeable solution.

Copies of the original AIS or this addendum are available on the DATCP website datcp.wi.gov and search for AIS. At the AIS home page look under, "Other Current Projects."

For questions or comments, call or email Zach Zopp at (608)224-4650 or zach.zopp@wisconsin.gov.

IV. REFERENCES

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<https://doi.org/10.4141/cjss88-018>

Shi, P., Xiao, J., Wang, Y. et al. 2014. The effects of pipeline construction disturbance on soil properties and restoration cycle. *Environ Monit Assess*. 186, 1825–1835.
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Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). 2020. Agricultural Impact Statement DATCP #4311: *Western Wisconsin Natural Gas Expansion Project*. Retrieved from https://datcp.wi.gov/Pages/Programs_Services/AISPipelineProjects.aspx

Wolkowski, R., and B. Lowery. 2008. A3367: Soil Compaction: Causes, concerns, and cures. University of Wisconsin-Extension. Retrieved from <https://cdn.shopify.com/s/files/1/0145/8808/4272/files/A3367.pdf>

V. APPENDIX ONE: MAPS

Figure 1: Western Wisconsin Natural Gas Expansion project route with modifications RMS-1, RMS-2 and RMS-9 (Pedretti, S., Alliant Energy, personal communication 7/31/2020).

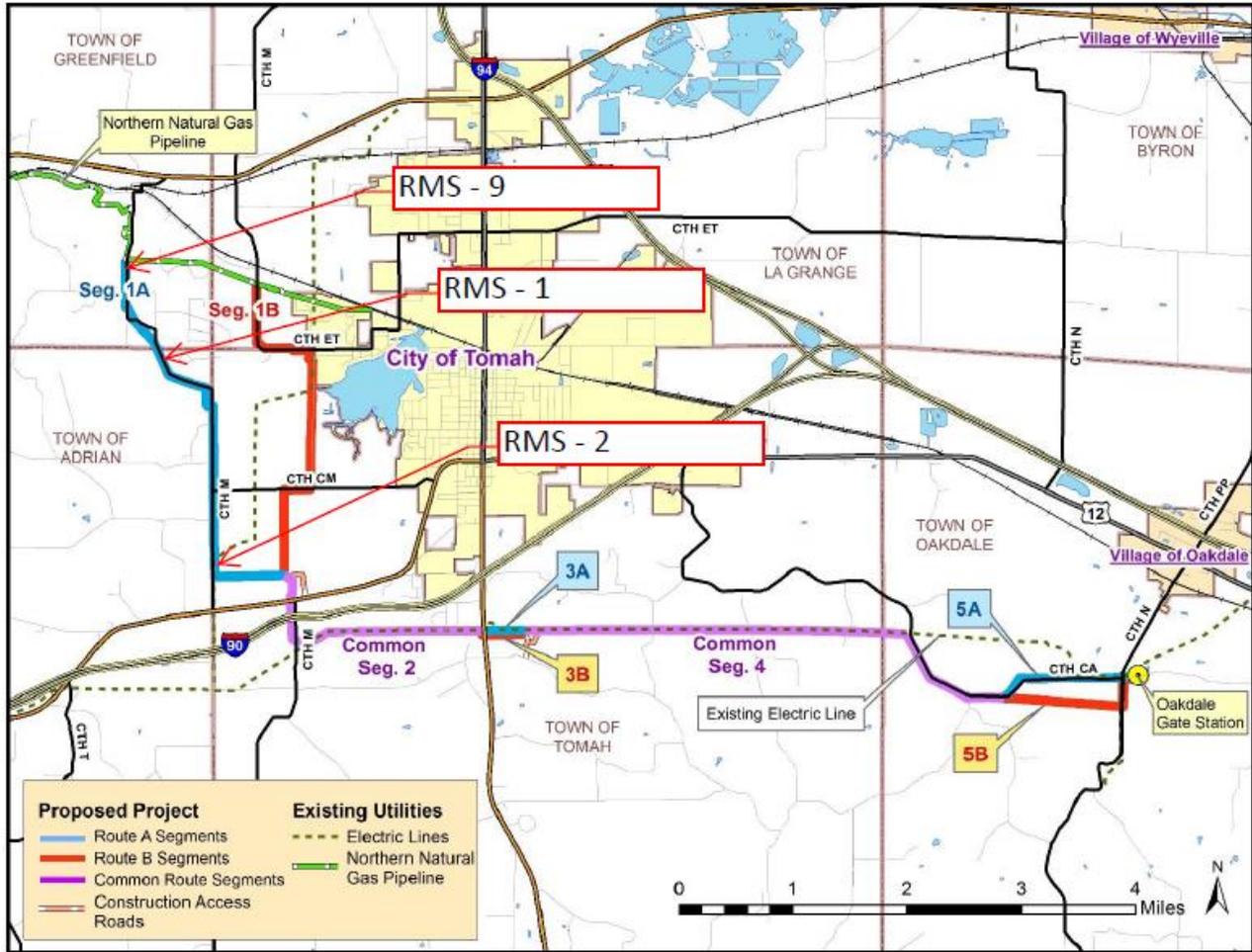


Figure 2: Western Wisconsin Natural Gas Expansion Route modification RMS-1.

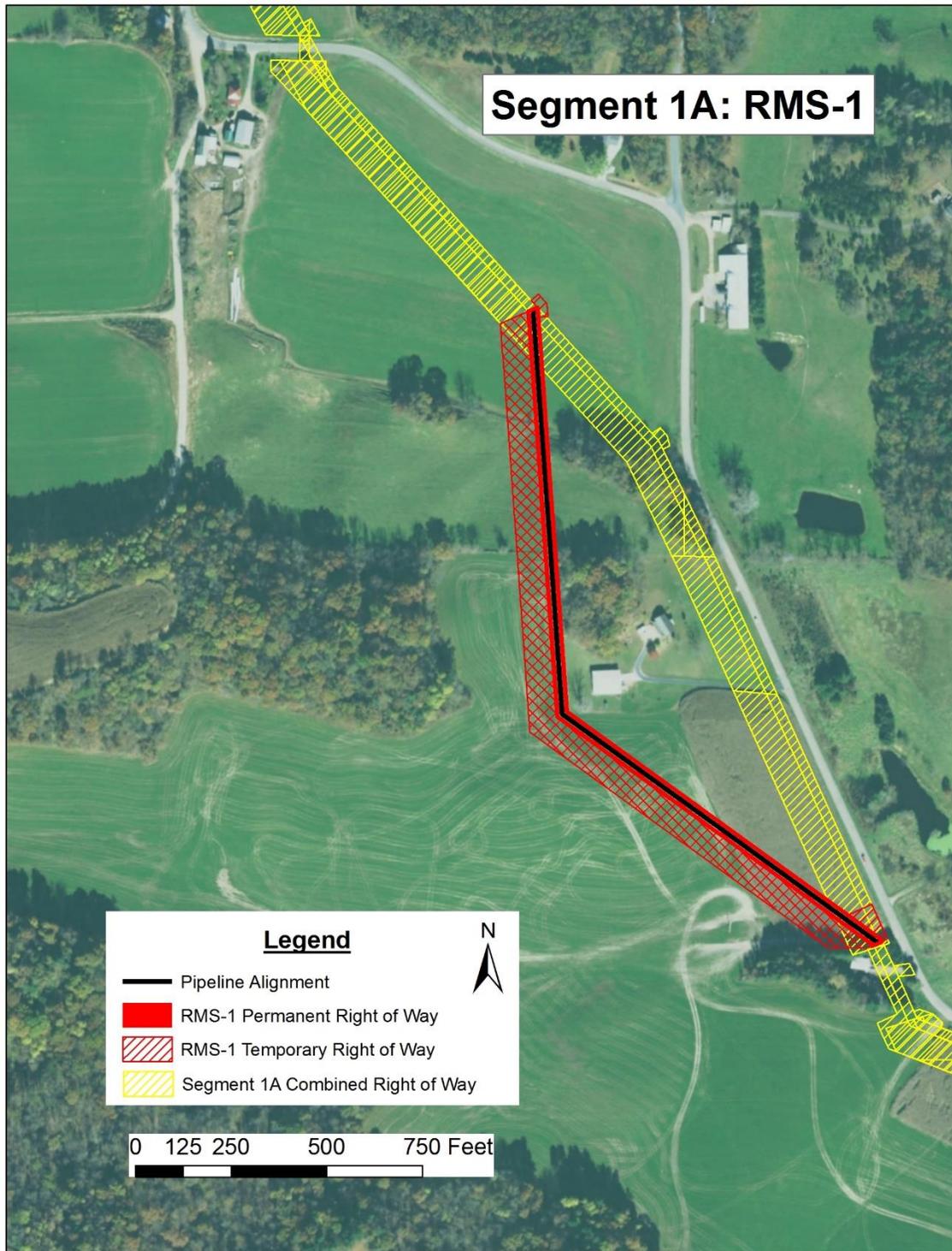


Figure 3: Western Wisconsin Natural Gas Expansion Route modification RMS-2.

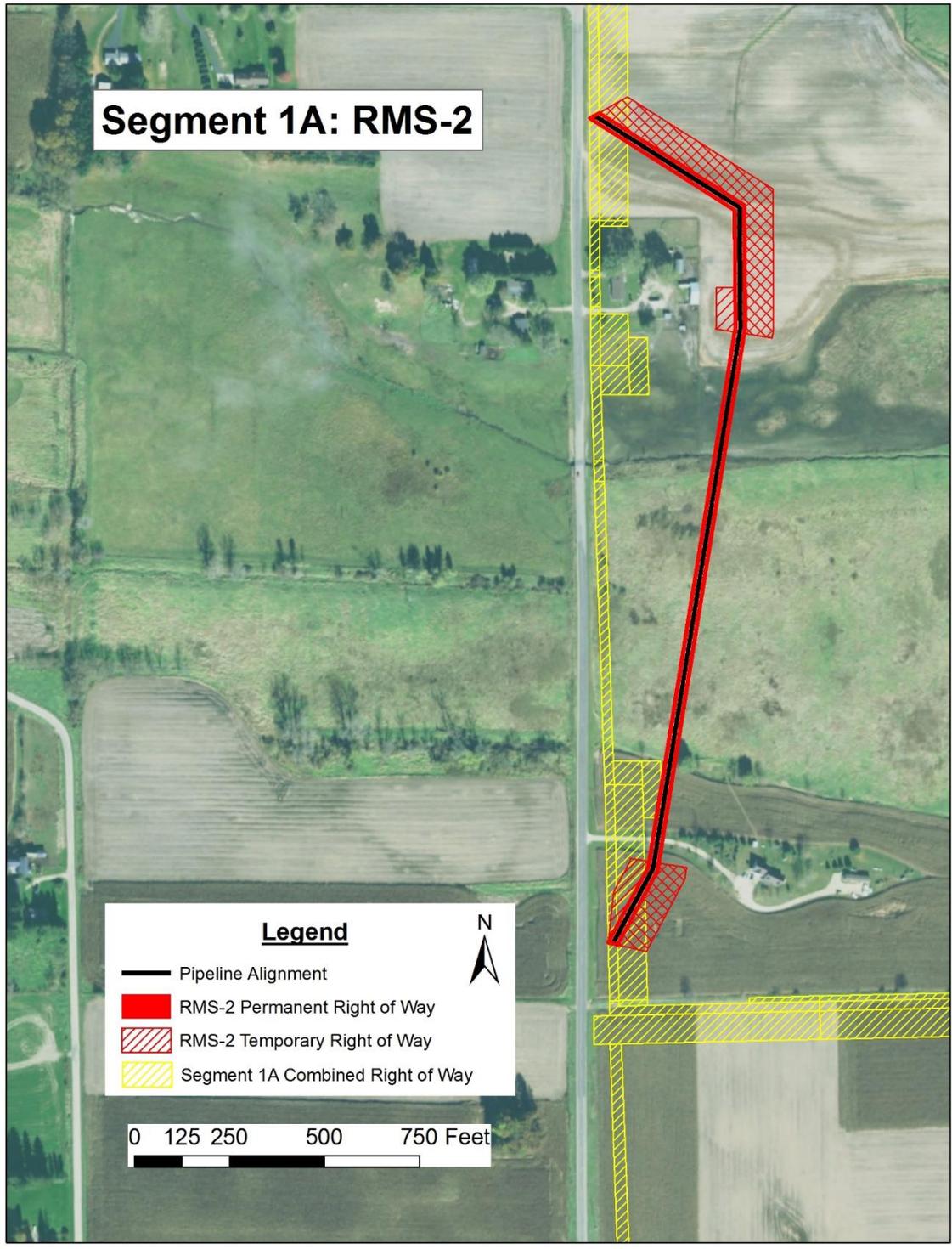


Figure 4: Western Wisconsin Natural Gas Expansion Route modification RMS-9.

