TO: Interested Parties (Including Minnesota Environmental Quality Board Distribution List)

FROM: Eric Johnson
Community Development Director
City of Hermantown

DATE: March 24, 2026

SUBJECT: Draft Order for the Updated City of Hermantown Industrial project Alternative Urban Areawide Review (AUAR)

As the Responsible Governmental Unit (RGU), the City of Hermantown has determined that an Alternative Urban Areawide Review (AUAR) is required for the proposed Hermantown Industrial project.

The City of Hermantown adopted the Hermantown Industrial Alternative Urban Areawide Review (AUAR) on October 6, 2025[1] that studied one development scenario which included a total of 1.8 million square feet of light industrial.

Since that time, the project proposer, Harmony Group LLC, has developed additional project design details, completed additional analyses, and announced that the proposed light industrial development will include a master planned large-scale data center campus and related infrastructure within a reduced Study Area. To provide the public an opportunity for comment on the specifics of the development scenario – including a chance for the public to propose alternatives and issues to be analyzed in environmental review – the City of Hermantown and Harmony Group LLC announced that they will voluntarily complete an Updated AUAR.

This document constitutes an updated draft order for review for changes to the study area and scenario as originally proposed in the 2025 AUAR. Enclosed is the Scoping Document for the proposed redevelopment. The Scoping Document is available for review and comment as part of the AUAR process as described in Minnesota Rules, part 4410.3610, subpart 5a. The order for review will be finalized after scoping. *See* Minn. R. 4410.3610, subp. 5a(B).

Pursuant to Minnesota Rules, part 4410.3610, subpart 5a(C), the purpose of the comments on a Scoping Document for an AUAR is to suggest additional development scenarios and relevant issues to be analyzed in the review. Comments may suggest alternatives to the specific large project or projects proposed to be included in the review, including development at sites outside of the proposed geographic boundary. The comments must provide reasons why a suggested development scenario or

[1] More information on the original AUAR is available here: https://hermantownmn.com/departments/community-development/planning-studies-analysis/

alternative to a specific project is potentially environmentally superior to those identified in the RGU's draft order.

AUAR Study Area

This AUAR study area encompasses an area totaling approximately 278 acres on 26 parcels in the City of Hermantown, St. Louis County, Minnesota. The study area is bounded to the north by Morris Thomas Road, to the east by Midway Road, and to the west by Solway Road. The southern boundary of the study area extends parallel to Saint Louis River Road, approximately 0.25 miles to the north. The AUAR Study Area is a smaller geographic footprint and scale than the AUAR Study Area within the adopted Hermantown Industrial Alternative Urban Areawide Review (AUAR) on October 6, 2025.

Development Scenario

The development scenario defined in Table 1 and shown in Figure 2, is proposed to be evaluated in the AUAR. The scenario reflects the density and land uses presently allowed under the City of Hermantown's current *2045 Comprehensive Plan*.

Table 1: AUAR Development Scenario

Component	Scenario 1
Industrial Building Area (square feet)	1.8 million
Total Project Area (acres)	**278 acres**

Public Comment Period

The public is invited to comment on the proposed development scenario and relevant issues to be evaluated in the AUAR prior to issuance of a final order for review. *See* Minn. R. 4410.3610, subp. 5a(B). The 30-day comment period will begin on March 31, 2026. Comments will be accepted through April 30, 2026, and should be addressed to:

RGU: City of Hermantown
Eric Johnson
5105 Maple Grove Road
Hermantown, MN 55811
AUARcomments@hermantownmn.com

Figure 1: AUAR Study Area

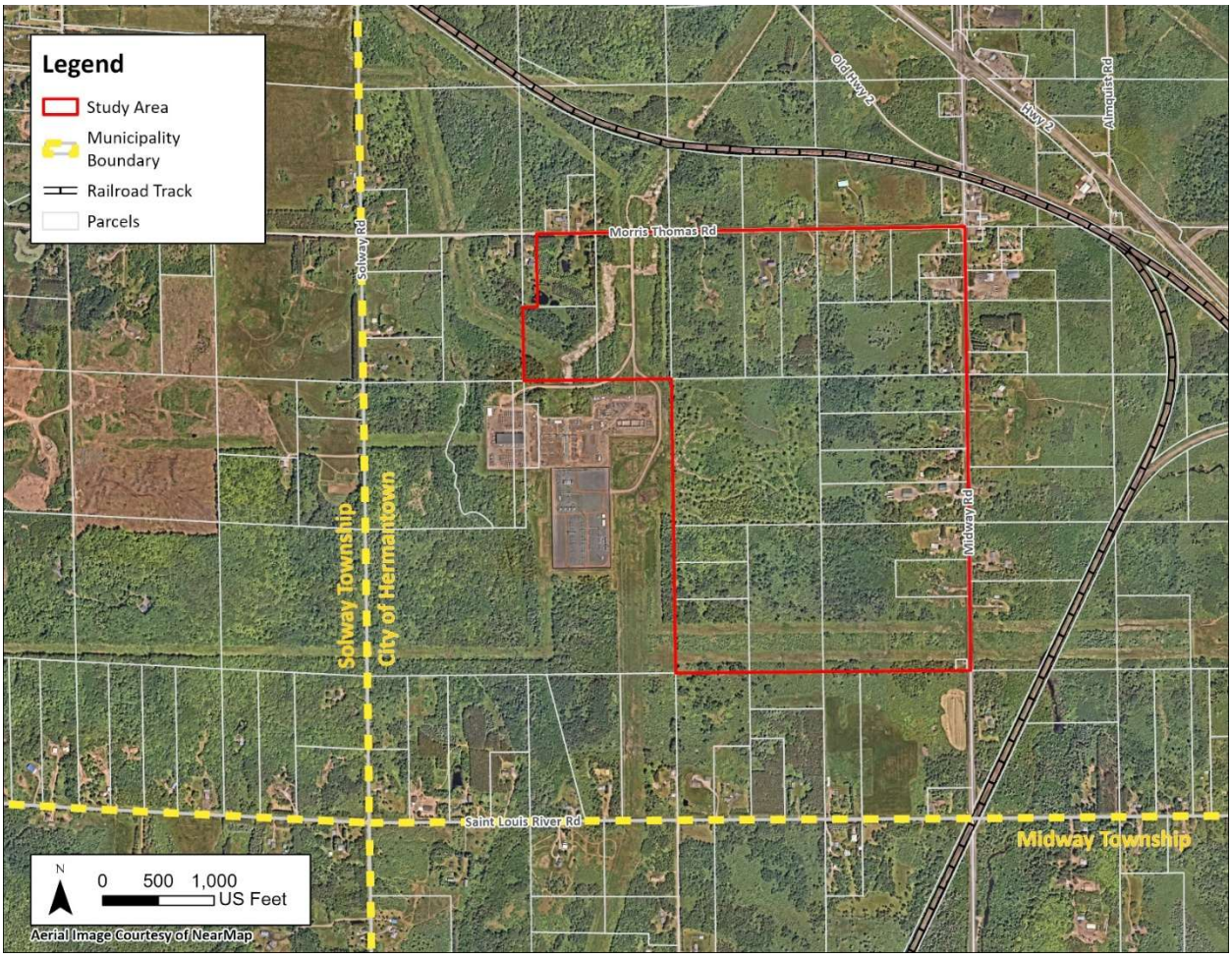
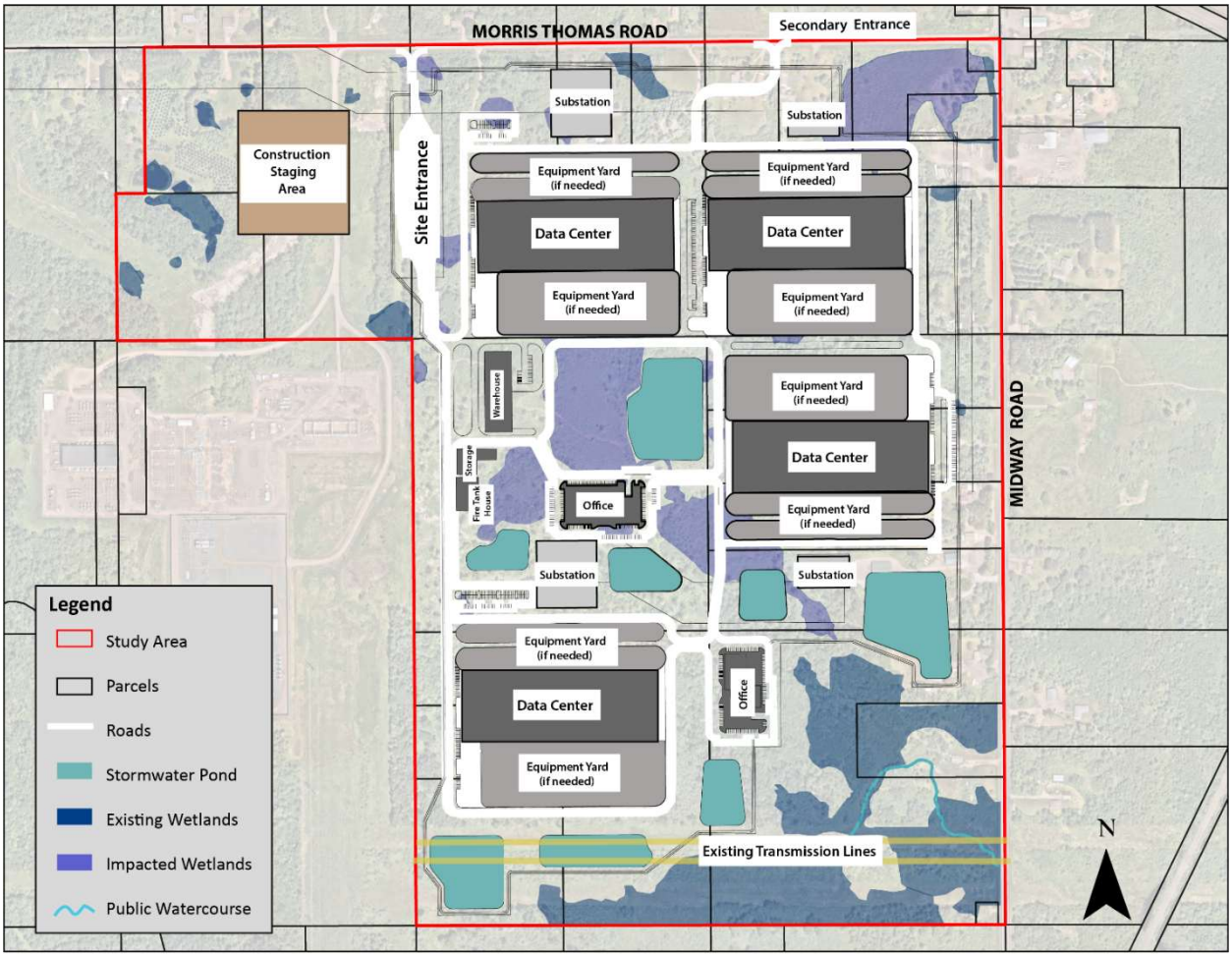


Figure 2: AUAR Development Scenario



Introduction

The City of Hermantown adopted the Hermantown Industrial Alternative Urban Areawide Review (AUAR) on October 6, 2025[1] that studied a development scenario which included a total of up to 1.8 million square feet of light industrial. Since that time, the project proposer, Harmony Group LLC has developed additional detail on project specifics, completed additional analyses, and announced that the proposed light industrial development scenario consists primarily of a master planned large-scale data center campus and related infrastructure within a reduced Study Area. To provide the public an opportunity for comment on the specifics of the development scenario – including a chance for the public to propose issues, identify topics, and explore alternatives to be analyzed in environmental review – the City of Hermantown and Harmony Group LLC announced that they will voluntarily complete an updated AUAR.

The updated AUAR process will follow the procedures of Minn. R. 4410.3610, subps. 5 and 5a, which apply to an AUAR that evaluates certain large, specific projects like this one. Given that the 1.8 million square feet of light industrial buildings would otherwise meet the threshold for a mandatory Environmental Impact Statement (EIS) under Minn. R. 4410.4400, the scope of the environmental review in the updated AUAR will be consistent with an EIS, where applicable.

[1] More information on the original AUAR is available here: https://hermantownmn.com/departments/community-development/planning-studies-analysis/

Updated Hermantown Industrial AUAR

SCOPING DOCUMENT

MARCH 2026

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Scoping Document

This Environmental Assessment Worksheet (EAW) form is being used to delineate the issues and analyses to be reviewed in an Alternative Urban Areawide Review (AUAR). Where the AUAR guidance provided by the Minnesota Environmental Quality Board (EQB) indicates that an AUAR response should differ notably from what is required for an EAW, the guidance is noted in *italics.*

Note to reviewers: Comments must be submitted to the Responsible Governmental Unit (RGU) during the 30-day comment period following notice of the Scoping Document in the *EQB Monitor*.

1. PROJECT TITLE

Updated Hermantown Industrial AUAR

2. PROPOSER

Proposer: Harmony Group LLC
Contact Person: Margot Wickman
Address: 60 S. 6th Street, Suite 3400
City, State, ZIP: Minneapolis, MN 55402-4018
Phone: 612-334-5017
Email: Margot.Wickman@KutakRock.com

3. RGU

RGU: City of Hermantown
Contact Person: Eric Johnson
Title: Community Development Director
Address: 5105 Maple Grove Road
City, State, ZIP: Hermantown, MN 55811
Phone: 218-729-3600
Email: AUARcomments@hermantownmn.com

4. REASON FOR PREPARATION

AUAR Guidance: Not applicable to an AUAR.

The City of Hermantown and project proposer are voluntarily preparing an updated AUAR to provide the public with additional opportunities to comment on newly available project details on a reduced Study Area and to provide the City of Hermantown with additional analysis about environmental impacts from the proposed project.

An AUAR is an appropriate avenue for environmental review because at 1.8 million square feet of light industrial use, the project may be reviewed using an AUAR. *See* Minn. R. 4410.3610, subp. 1: "A local unit of government may use the procedures of this part . . . to review anticipated . . . light industrial development and associated infrastructure in a particular geographic area within its jurisdiction . . . ". The proposed development scenario meets the State's mandatory requirements for an environmental review process based on Minnesota Rules 4410.4400. Minnesota Rule 4410.3610 allows for an alternative form of review through an AUAR for qualifying projects, including this scenario.

5. PROJECT LOCATION

County: St. Louis County
City/Township: Hermantown
PLS Location (¼, ¼, Section, Township, Range): Section 31, Township 50N, Range 15W
Watershed (81 major watershed scale): MW# 3 - St. Louis River
Tax Parcel Numbers: 395-0010-09100, 395-0010-09102, 395-0010-09103, 395-0010-09090, 395-0010-09095, 395-0010-09131, 395-0010-09135, 395-0010-09140, 395-0010-09155, 395-0010-09160, 395-0010-09170, 395-0010-09182, 395-0010-09110, 395-0010-09120, 395-0010-09130, 395-0010-09150, 395-0010-09161, 395-0010-09180, 395-0010-09305, 395-0010-09310, 395-0010-09320, 395-0010-09330, 395-0010-09340, 395-0010-09300, 395-0010-09302, 395-0010-09080.

At a minimum, attach each of the following to the AUAR:

- **US Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries** (See Figure 1)
- **Map depicting the boundaries of the AUAR and any subdistricts used in the AUAR analysis** (see Figure 2 and Figure 3)
- List of data sources, models, and other resources (from the Item-by-Item Guidance: Climate Adaptation and Resilience or other) used for information about current Minnesota climate trends and how climate change is anticipated to affect the general location of the project during the life of the project (as detailed below in Item 7)
- **Cover type map as required for Item 8** (See Figure 6)
- **Land use and planning and zoning maps as required in conjunction with Item 10** (See Figure 7, Figure 8, and Figure 9)

Figure 1: USGS Map

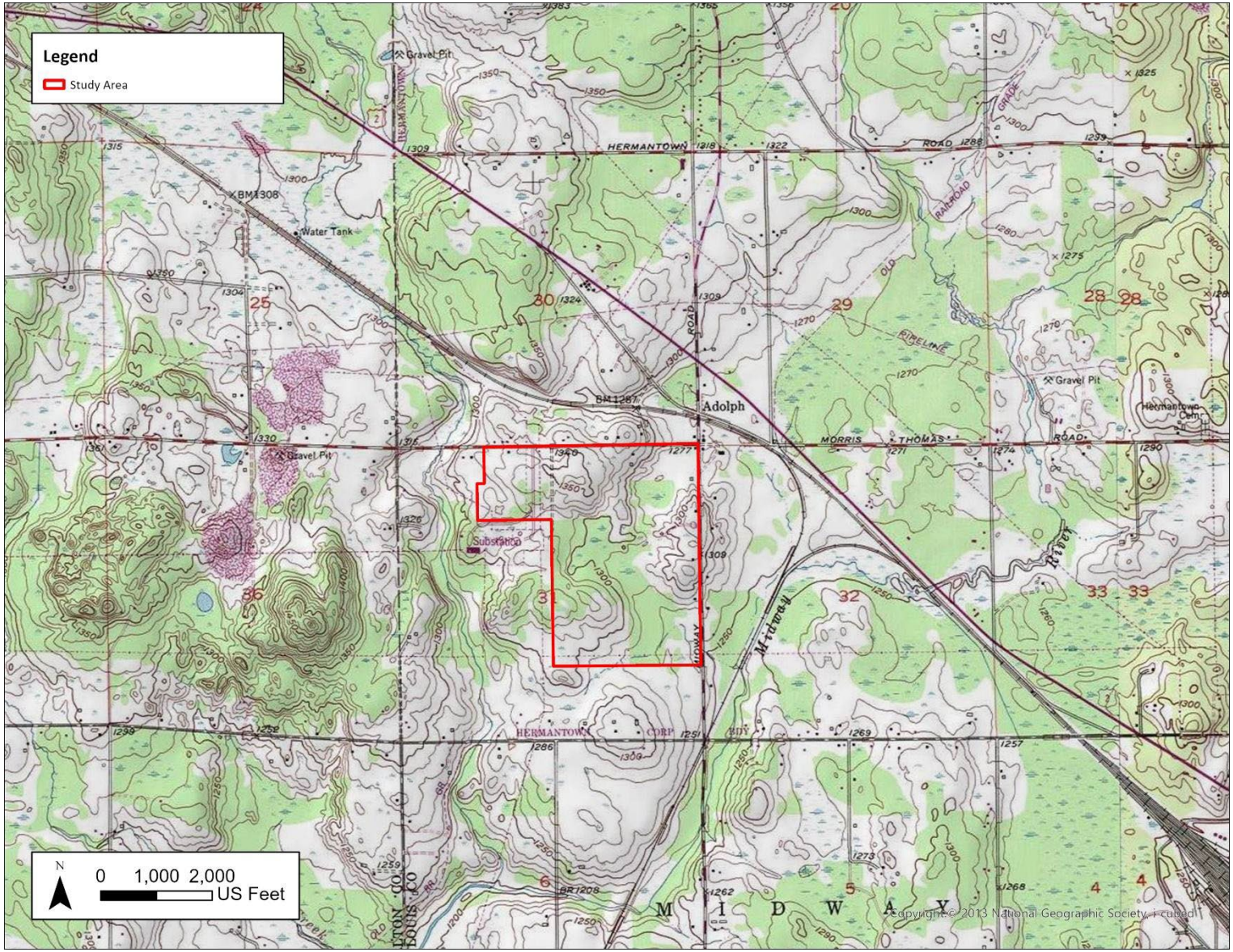
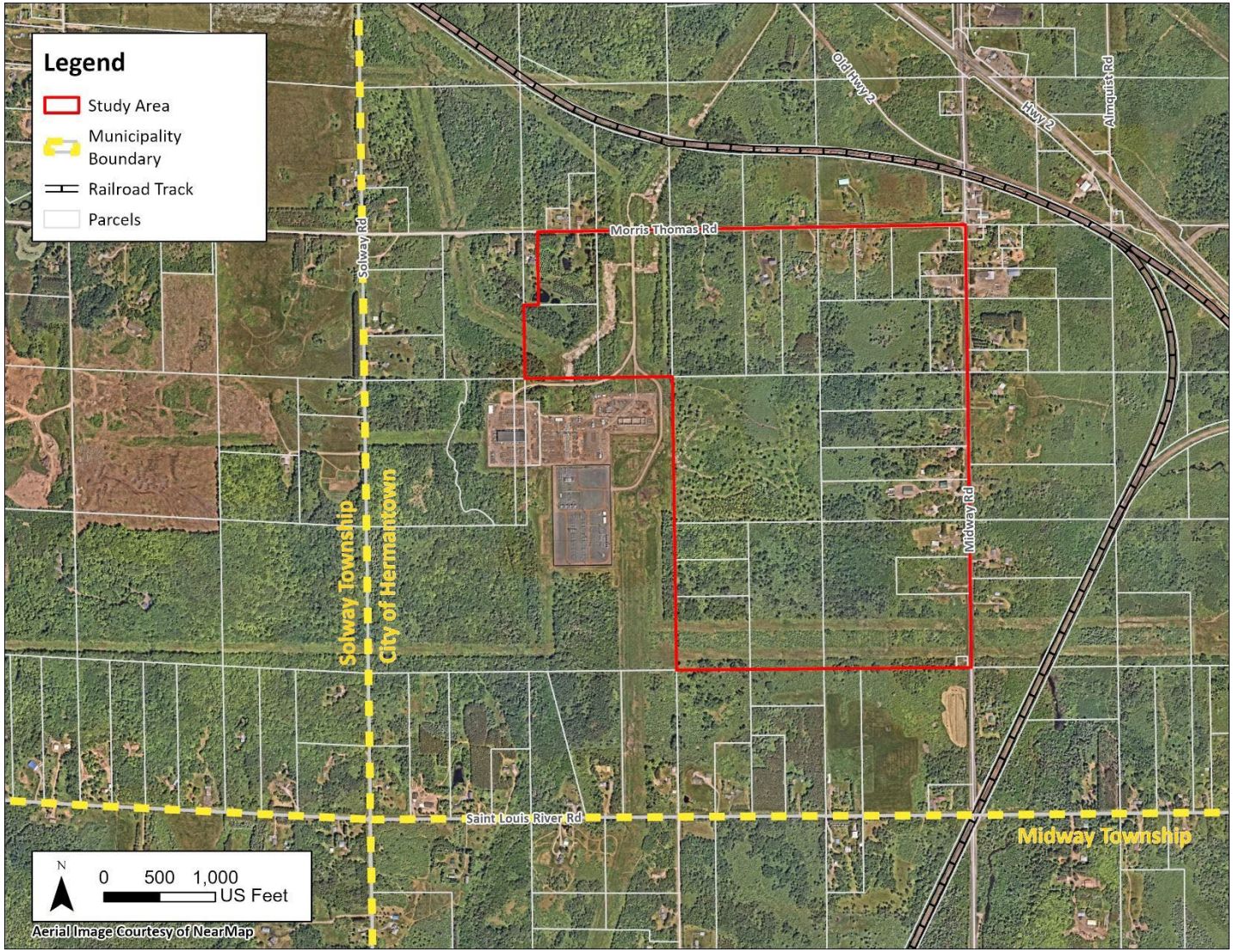


Figure 2: AUAR Study Area Boundary



6. PROJECT DESCRIPTION

AUAR Guidance: Instead of the information called for on the EAW form, the description section of an AUAR should include the following elements for each major development scenario included:

- *Anticipated types and intensity (density) of residential and commercial/warehouse/light industrial development throughout the AUAR area.*
- *Infrastructure planned to serve development (roads, sewers, water, stormwater system, etc.). Roadways intended primarily to serve as adjoining land uses within an AUAR area are normally expected to be reviewed as part of an AUAR. More "arterial" types of roadways that would cross an AUAR area are an optional inclusion in the AUAR analysis; if they are included, a more intensive level of review, generally including an analysis of alternative routes, is necessary.*
- *Information about the anticipated staging of various developments, to the extent known, and of the infrastructure, and how the infrastructure staging will influence the development schedule.*

Existing Conditions

The AUAR Study Area encompasses an area totaling approximately 278 acres on 26 parcels in the City of Hermantown, St. Louis County, Minnesota (shown on Figure 1 and Figure 2). Since the 2025 AUAR was published, an end user for the development has been identified and intends to own and operate a data center. With those additional design specifics, the Study Area boundary has been reduced by two parcels (excluding the existing substation) from 403 to 278 acres. The Study Area is bounded to the north by Morris Thomas Road, to the east by Midway Road, and to the west by Solway Road. The southern boundary of the Study Area extends parallel to Saint Louis River Road, approximately 0.25 miles to the north.

Proposed Development

This updated AUAR evaluates a data center campus (defined as Communication Services in the Hermantown zoning code) that includes multiple buildings, constructed in distinct sequential phases, for a total of 1.8 million square feet of proposed light industrial development. Up to four data center buildings are proposed, each one story tall (see Figure 3 for the conceptual layout). The data center buildings will use non-evaporative mechanical cooling equipment. Several utility pads are proposed for overhead electric line connections that will be located at the areas indicated on Figure 3 as substations. The areas labeled as equipment yards would house electrical and cooling equipment as well as backup generators; however, the specific number of equipment yard areas needed, as well as the number of backup generators and locations, will be determined as site planning advances. The campus also includes several office and storage buildings.

The data center development will be supported by new roadways, parking areas, utilities, landscaping, stormwater, perimeter fencing, and other associated infrastructure; including substations, transmission lines and mechanical/electrical equipment.

Additionally, new public infrastructure would be required for City water service, sanitary sewer, stormwater management, streets, and utilities extending from or upgrading existing publicly-owned systems to accommodate the new development. A new private driveway access will be needed on the northwest side of the Study Area from Morris Thomas Road that will include a shared access with the parcels on the western half of the Study Area as well as a construction staging area. No development is anticipated near the southern portions of the Study Area where the existing transmission lines are located.

Construction Activities and Timing

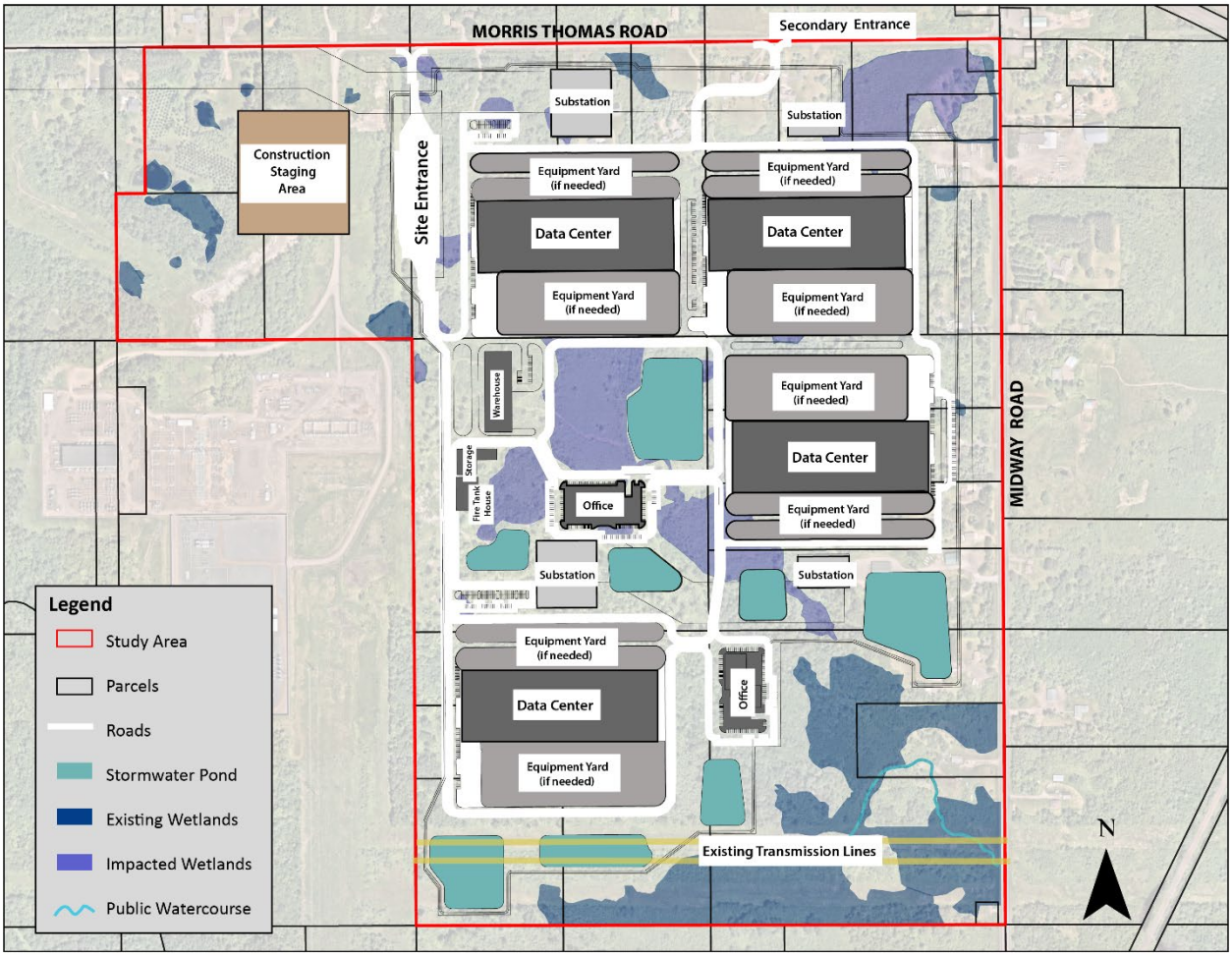
Construction activities would include the construction of buildings, structures, access roadways, parking areas, and infrastructure improvements. Site preparation would include grading, excavation, and vegetation removal. A staging area for construction is planned to be located on the northwest portion of the Study Area. Preliminary construction work (i.e. tree clearing) is anticipated to begin as early as fall 2026 or early 2027. Mass grading activities could start as early as spring 2027; however, this is dependent on permitting approvals. The campus will be constructed in distinct sequential phases, with the full master-planned campus anticipated to take more than 5 years to complete. Construction on public utility extensions, including sanitary sewer and water, is anticipated to start as early as spring 2027 and will take approximately two years to complete..

This AUAR will address all components or stages for which permits or approvals are sought from the City of Hermantown (*See* Minn. R. 4410.1000, subp. 4). The proposed development includes elements that may be subject to separate permitting and/or separate environmental review by other RGUs, depending on final design and applicable thresholds (e.g., certain utility-scale transmission improvements, backup generation, fuel storage, battery energy storage, or other air-permitted equipment - *See* Minn. R. 4410.3610, subp. 1). The updated AUAR will (i) identify such elements to the extent reasonably known at the time of AUAR preparation, (ii) explain the basis for the AUAR's treatment of those elements (included, bounded, or addressed as cumulative effects), and (iii) describe how subsequent environmental review—if required—will incorporate the AUAR analysis and will evaluate the remaining elements with sufficient detail for the applicable.

Table 1: Development Scenario

Component	Scenario 1
Industrial Building Area (square feet)	1,800,000
Total Project Area (acres)	**278 acres**

Figure 3: Conceptual Development Scenario Site Layout



Alternatives

Consistent with Minn. Rules 4410.3610, the updated AUAR will evaluate reasonable alternatives identified through the scoping process and any alternatives directed by the City of Hermantown's scoping decision, including alternatives related to site layout, infrastructure routing within the AUAR area, stormwater management approaches, and other design level alternatives that would avoid or minimize significant environmental effects while meeting the project purpose and need**.**

Potential On-Site Energy Storage or Backup Generation

The Proposer anticipates that some combination of battery energy storage and/or emergency backup generation may be required to support data center reliability. At the time of scoping; however, the type, number, capacity, location, operating profile, and fuel storage volumes for any backup generation are

not final and may vary based on final interconnection requirements, reliability standards, and equipment selection.

The updated AUAR will therefore:

1. **Describe** backup power concepts to the extent reasonably available for environmental review purposes;
2. **Analyze potential environmental effects** using reasonable worst-case or envelope assumptions where sufficient information exists to do so; and
3. **Identify circumstances under which additional environmental review may be required** for backup generation, fuel storage, or associated air emissions, and describe how those components would be evaluated at that time.

7. CLIMATE ADAPTION AND RESILIENCE

a. Describe the climate trends in the general location of the project (see guidance: Climate Adaptation and Resilience) and how climate change is anticipated to affect that location during the life of the project.

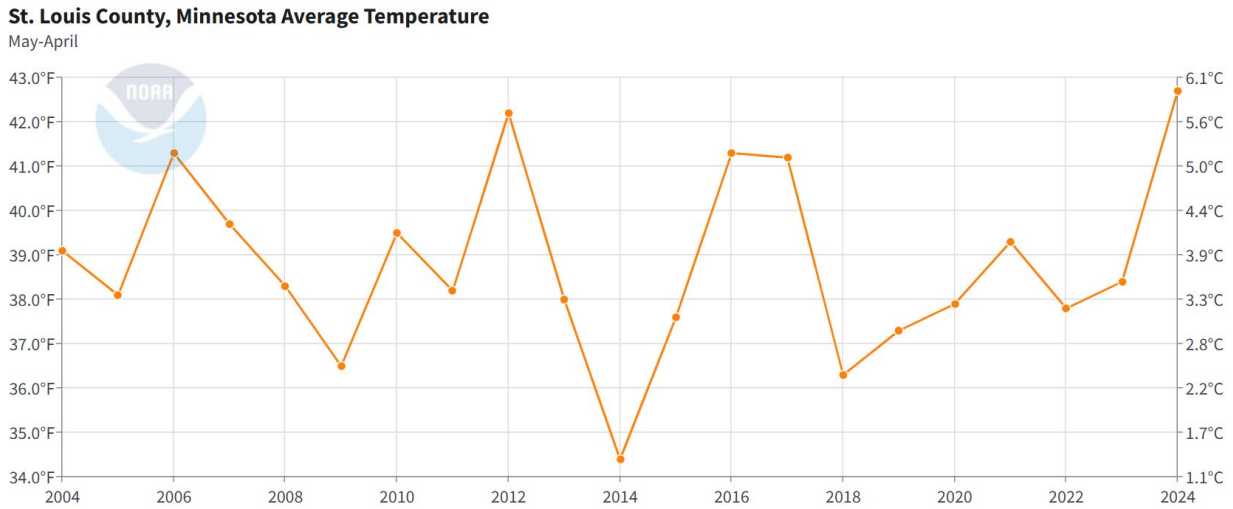
Trends in temperature, precipitation, flood risk, and cooling degree days are described below for the general project location. Some of the climate projections summarized below use shared socioeconomic pathways (SSPs), which are greenhouse gas concentration scenarios used by the Intergovernmental Panel on Climate Change. The SSPs reflect assumptions about how industrialization, fossil fuel dependence, land use, and population density evolve in the future. The assumptions are based on population growth, urbanization, economic growth, technological advances, greenhouse gas and aerosol emissions, energy supply and demand, land-use changes, and more. SSP 245 is an intermediate scenario in which emissions decline after peaking around 2040, and SSP 370 is a high-emission scenario in which emissions continue to rise through the 21st Century.

Temperature

According to the National Centers for Environmental Information (NCEI), the historical average temperature in St. Louis County between 2004 and 2024 was approximately 38.8°F, with the lowest average in 2014 (34.4°F) and the highest average in 2024 (48.°F).[2] According to the Minnesota Climate Mapping and Analysis Tool, the annual daily average temperature in the Study Area is projected to increase to 52.8°F from 2040 to 2059 under an intermediate emissions pathway (SSP 245). In 2080-2099, the annual daily average temperature is projected to further increase to 55.7°F and 57.8°F under an intermediate (SSP 245) and high emissions pathway (SSP 370), respectively.[3]

[2] National Centers for Environmental Information, National Oceanic and Atmospheric Administration. *County Time Series*. Available at: https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series.
[3] Minnesota CliMAT. University of Minnesota. Available at https://app.climate.umn.edu/?output_type=modelVal&scenario=ssp370_2080-2099&model=ensemble&variable=tmax-degF&time_frame=yearly&aoi=none#intro_pane

Figure 4: NCEI County Time Series - Average Temperature in St. Louis County



Urban Heat Island

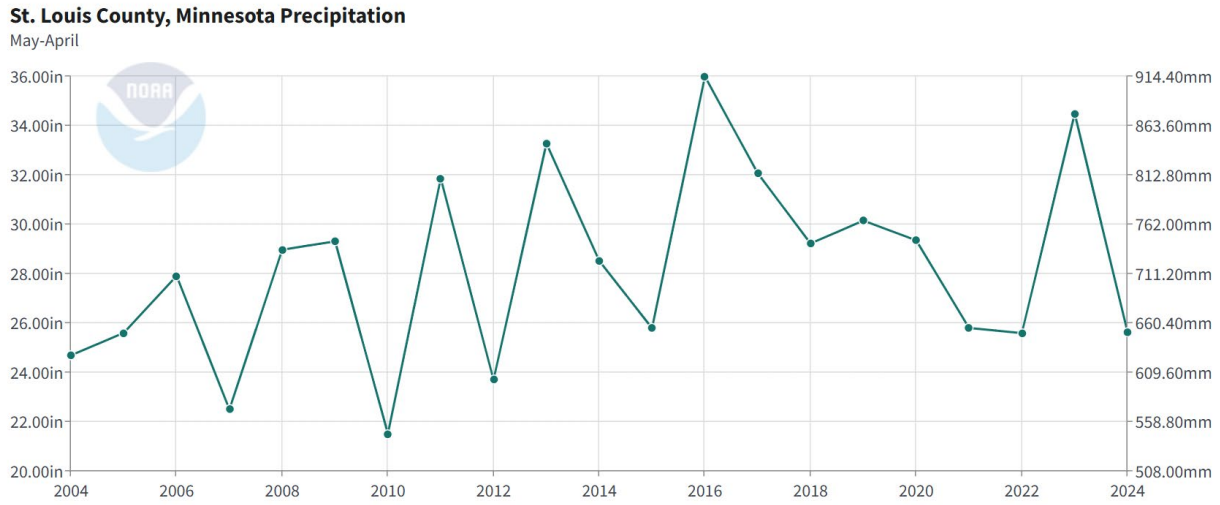
Surfaces and structures such as roads, parking lots, and buildings absorb and re-emit more heat from the sun than natural landscapes. This can significantly raise air temperature and overall extreme heat vulnerability in urban areas where there are dense concentrations of these surfaces. This is referred to as the urban heat island effect. According to the University of Minnesota's Heat Vulnerability Map Tool, the AUAR Study Area is located in an area of low heat vulnerability.[4]

Precipitation

According to the National Centers for Environmental Information (NCEIS), historic average annual precipitation in St. Louis County between 2004 and 2024 was approximately 28.2 inches, with the lowest average in 2010 (21.52 inches) and the highest average in 2016 (36 inches). Average annual precipitation under an immediate emissions pathway (SSP 245) in St. Louis County from 2040-2059 is projected to be 33.2 inches. From 2080-2099, average annual precipitation is projected to be 33 inches under RCP 4.5 and 32.7 inches under an intermediate (SSP 245) and high emissions pathway (SSP 370), respectively.

[4] Heat Vulnerability in Minnesota. University of Minnesota. Available at https://maps.umn.edu/climatehealthtool/heat_app/

Figure 5: NCEI County Time Series - Average Precipitation Trends in St. Louis County



Flood Risk

In many places, climate change is exacerbating the frequency and intensity of extreme rainfall events and associated flooding. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (panels 27137C3743E, effective on 3/25/2025 and 27137C3744E, effective on 3/25/2025), the entirety of the AUAR Study Area is located outside of the FEMA 100-year flood zones (see Figure 12).

Cooling Degree Days

As defined by the National Weather Service, cooling degree days, which are often used as a proxy to estimate cooling needs for buildings, can be examined as a baseline and projected exposure indicator under the RCP 4.5 and RCP 8.5 scenarios. Cooling degree days are indexed units, not actual days, which roughly describe the demand to heat or cool a building. Cooling degree days accumulate on days warmer than 65°F when cooling is required. For example, if a weather station recorded an average daily temperature of 78°F, cooling degree days for that station would be 13.

According to Heat Vulnerability in Minnesota,[5] the number of cooling degree days in 2019 for St. Louis County was 73. The number of cooling degree days in 2050 for St. Louis County is projected to be 142 and 214 for RCP 4.5 and RCP 8.5, respectively.

For each resource category in the table below, describe the project's proposed activities and how the project's design will interact with those climate trends. Describe proposed adaptations to address the project effects identified.

[5] Heat Vulnerability in Minnesota. Minnesota Department of Health and the University of Minnesota. Available at https://maps.umn.edu/climatehealthtool/heat_app/.

Table 2: Interaction of Proposed Activities with Each Climate Trend and Projection Listed in 7a

Resource Category	Climate Trends and Climate Projections	Project Components	Potential Environmental Effects	Adaptation Strategies
Project Design	In the coming decades, the location of the Study Area is anticipated to experience: • Increased annual temperatures • Increased annual precipitation and more frequent heavy rainfall events	To be discussed in AUAR	To be discussed in AUAR	To be discussed in AUAR
Land Use	Reduction of tree cover may lead to more intense stormwater runoff, increased urban heat island effect, loss of shade for protection during extreme heat, and potential reduction in air quality.	To be discussed in AUAR	To be discussed in AUAR	To be discussed in AUAR
Water Resources	Current Minnesota climate trends and anticipated climate change in the general location of the project may influence water resources such as extreme storm events, drought, groundwater depletion.	To be discussed in AUAR	To be discussed in AUAR	To be discussed in AUAR

Resource Category	Climate Trends and Climate Projections	Project Components	Potential Environmental Effects	Adaptation Strategies
Contamination / Hazardous Materials/ Wastes	Current Minnesota climate trends and anticipated climate change in the general location of the project may influence the potential environmental effects of the generation/use/storage of hazardous waste and materials.	To be discussed in AUAR	To be discussed in AUAR	To be discussed in AUAR
Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	Current Minnesota climate trends and anticipated climate change in the general location of the project may influence the local species and suitable habitat.	To be discussed in AUAR	To be discussed in AUAR	To be discussed in AUAR

8. COVER TYPES

AUAR Guidance: The following information should be provided:

- *A cover type map, at least at the scale of a USGS topographic map, depicting:*
  - *Wetlands (identified by Circular 39 type)*
  - *Watercourses (rivers, streams, creeks, ditches)*
  - *Lakes (identify public waters status and shoreland management classification)*
  - *Woodlands (break down by classes where possible)*
  - *Grassland (identify native and old field)*
  - *Cropland*
  - *Current development*
- *An overlay map showing anticipated development in relation to the cover types. This map should also depict any "protection areas," existing or proposed, that will preserve sensitive cover types. Separate maps for each major development scenario should be generally provided.*

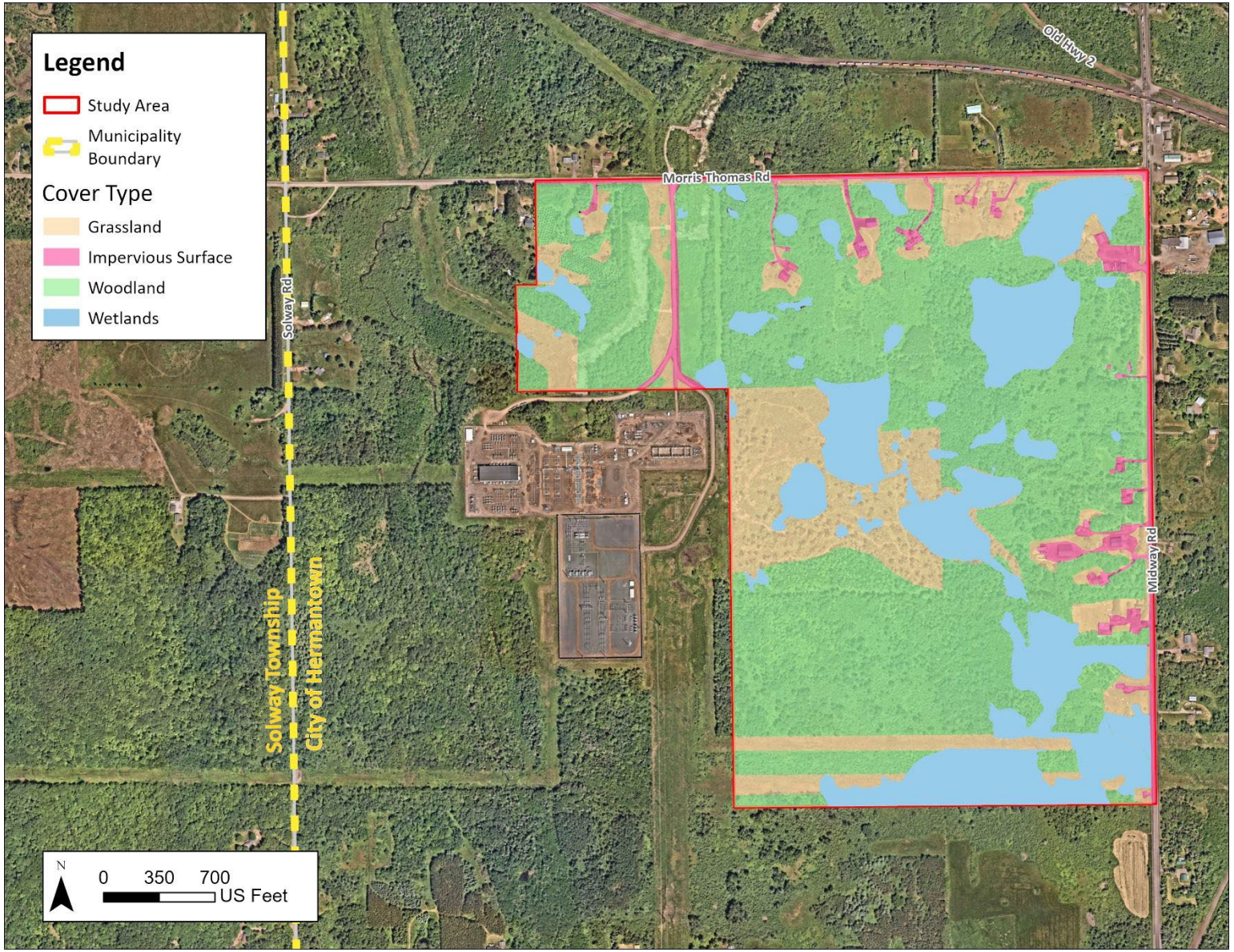
The AUAR Study Area is approximately 278 acres of woodland, wetland, grassland, and impervious surface. There are several structures within the Study Area. These existing cover types were determined by reviewing recent aerial photography (see Figure 6).

The AUAR will identify proposed land cover types, green infrastructure, and tree cover for the development scenarios.

Table 3: Existing Cover Types

Cover Type	Existing (Acres)	Proposed
Woodland	142	TBD
Grassland/Landscaping	67	TBD
Wetlands	58	TBD
Impervious Surface	11	TBD
Stormwater	0	TBD
Total	**278**	**278**

Figure 6: Existing Cover Types



9. PERMITS AND APPROVALS REQUIRED

AUAR Guidance: A listing of major approvals (including any comprehensive plan amendments and zoning amendments) and public financial assistance and infrastructure likely to be required by the anticipated types of development projects should be given for each major development scenario. This list will help orient reviewers to the framework that will protect environmental resources. The list can also serve as a starting point for the development of the implementation aspects of the mitigation plan to be developed as part of the AUAR.

Approvals and Decisions Intended to be Supported by the AUAR. The updated AUAR is intended to support the City of Hermantown's environmental review obligations for City approvals that implement the development scenario analyzed in the AUAR, including as applicable: preliminary/final plat approvals, light industrial development permits, site plan approvals, conditional/special use permits, development agreements, and City-issued grading/erosion control/stormwater approvals (see Table 4). The updated AUAR will identify the specific City approvals anticipated for the current proposal and will explain how the AUAR's mitigation plan will be implemented and enforced through those approvals.

Approvals Not Supported / Other RGUs. Certain permits or approvals may be issued by other state or federal agencies and may require additional environmental review depending on final design and applicable thresholds (e.g., certain air permits; certain utility or transmission approvals; large fuel storage; or other mandatory thresholds). The updated AUAR will identify these potential approvals and describe how AUAR information may be used to inform such reviews, while recognizing that the scope and RGU for any additional review will be determined by applicable rules and final project details.

Public Finance Assistance. The project proposer has applied for public financial assistance in accordance with the City of Hermantown's adopted Business Subsidy Policy. The City is conducting a financial analysis to determine the viability of providing potential tax abatement. City approvals for public financial assistance and the corresponding development obligations would be implemented and enforced by Development Agreement and Tax Abatement Agreement.

The updated AUAR will identify reasonably anticipated public infrastructure improvements associated with the development scenario and will describe any known public actions related to those improvements at the time of AUAR publication.

Table 4: Anticipated Permits and Approvals[6]

Unit of Government	Type of Application	Status
Federal		
US Army Corps of Engineers	Section 404 Permit	To be applied for
U.S. Fish & Wildlife Service	Section 7 Endangered Species Act Consultation	To be applied for, if applicable
State		
Minnesota Public Utilities Commission	Certificate of Need	To be applied for, if applicable
	Site Permit	To be applied for, if applicable
Minnesota Pollution Control Agency	Section 401 Water Quality Certification	To be applied for, if applicable
	Sanitary Sewer Extension Permit	To be applied for
	Construction Contingency Plan and Response Action Plan approval	To be completed, if applicable
	Notice of Intent of Demolition	To be applied for
	Industrial Wastewater Permit	To be applied for, if applicable
	Construction Stormwater General Permit	To be applied for
	Fuel Storage Tank	To be applied for, if applicable
	Air Permit	To be applied for, if applicable
	Wastewater Discharge Permit	To be applied for, if applicable
Minnesota Department of Natural Resources	Temporary Water Appropriation Permit for Construction Dewatering	To be applied for, if applicable
Minnesota Department of Health	Watermain Installation Permit	To be applied for
	Notification of Intent to Perform a Demolition	To be applied for
	Notification of Asbestos Related Work	To be applied for, if applicable
	Well and Boring Sealing Record	To be applied for
Minnesota Department of Labor	Industrial plumbing review and electrical permit	To be applied for
Minnesota Department of Transportation	Right-of-Way Permit	To be applied for, if applicable
	Utility Permit	To be applied for, if applicable

[6] Additional environmental review may be necessary should potential improvements and supporting infrastructure for the development scenario exceed mandatory environmental thresholds. In addition to the permits and approvals listed in Table 6 that are the responsibility of either the city or the project proposer, the local utility company will design and obtain site or route permit and approvals needed for any potential grid infrastructure projects that may be required through the MN Public Utilities Commission (PUC).

Unit of Government	Type of Application	Status
County		
St. Louis County	Street and Utility Permits	To be applied for, if applicable
	Right-of-Way Permit	To be applied for, if applicable
City		
City of Hermantown	Preliminary/Final Plat	To be applied for
	Sign Permit	To be applied for
	Site Plan Approval	To be applied for
	Building Permit	To be applied for
	Erosion Control, Grading, and Stormwater Permit	To be applied for
	Right-of-Way permit	To be applied for, if applicable
	Wetland Conservation Act (Boundary & Type, Exemption, Replacement Plan) Review and Approval	To be applied for
	Wetland Buffer Zone Management Plan approval	To be applied for
	Zoning Map Amendment	To be applied for
	Demolition Permit	To be applied for, if applicable
	Sewer Connection Permit	To be applied for
	Utility Permit	To be applied for
	Water Connection Permit	To be applied for
	Commercial Industrial Development Permit	To be applied for
	Special Use Permit	To be applied for

10. LAND USE

a. Describe:

i. Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, and prime or unique farmlands.

The AUAR Study Area is located in a semi-rural area in the southwest corner of Hermantown, Minnesota. The Study Area consists of 26 existing parcels. According to the City's existing land use map[7], the majority of the Study Area is designated as vacant, utility, and single-family residential (see Figure 7). An electrical substation is located west of the Study Area and associated transmission lines are within the southern portion of the Study Area. Existing land uses adjacent to the Study Area also include agricultural land to the east and south, and residential land to the east, south, and north.

There are no existing parks within or adjacent to the Study Area. According to the Natural Resources Conservation Service (NRCS), 62.4% of the Study Area is considered

[7] Source: https://hermantownmn.com/wp-content/uploads/2025/03/Hermantown-Comprehensive-Plan-Update_20250305_reduced.pdf

farmland of statewide importance (see Table 6); however, there are no active or fallow farmland uses within the Study Area.

ii. Planned land use as identified in comprehensive plans (if available) and any other applicable plan for land use, water, or resource management by a local, regional, state, or federal agency.

Hermantown 2045 Comprehensive Plan

The Hermantown 2045 Comprehensive Plan is used to guide the city's housing, transportation, community facilities, parks, and land use planning over the next 20 years. According to this plan, the Study Area is designated as Business and Light Manufacturing (BLM).[8] (see Figure 9).

Table 5: Hermantown 2045 Comprehensive Plan designations within the AUAR Study Area

Future Land Use Designation	Purpose
Business and Light Manufacturing	Land guided for the integration of commercial and industrial land uses which are compatible with each other, including office, light industrial, and retail/service uses. The intent of this land use category is to provide additional flexibility that supports the creation of significant employment centers, generally characterized by a broader diversity of jobs, higher development densities and jobs per acre, higher quality site and architectural design, and increased tax revenues.

St. Louis River Comprehensive Watershed Management Plan

The St. Louis River Comprehensive Watershed Management Plan[9] is used to guide and prioritize projects that will protect the watershed's natural resources and solve water quality issues. The watershed is split into five sub-planning areas, with the Study Area being part of the Duluth Urban Area and Lake Superior Streams. The primary concerns for the area are high-quality resource protection and restoration.

iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

AUAR Guidance: Water-related land use management districts should be delineated on appropriate maps, and the land use restrictions applicable in those districts should be described. If any variances or deviations from these restrictions within the AUAR area are envisioned, this should be discussed.

[8] Source: https://hermantownmn.com/wp-content/uploads/2025/03/Hermantown-Comprehensive-Plan-Update_20250305_reduced.pdf

[9] Source: https://www.nslswcd.org/wp-content/uploads/2025/02/A_StLouis-Comprehensive-Watershed-Management-Plan-Final-11032022.pdf

Existing Zoning

The Study Area parcels are zoned as BLM and the parcels surrounding the Study Area are BLM and Rural Residential (S-1) as shown on Figure 8. According to Hermantown's City Code[10], the BLM zoning regulation is designed mainly for businesses that need substantial facilities, like warehouses, to operate and S-1 zoning is intended to provide suitable areas within the community for one and two family residential dwellings.

FEMA National Flood Hazard

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (panels 27137C3743E, effective on 3/25/2025 and 27137C3744E, effective on 3/25/2025), the entirety of the AUAR Study Area is located outside of the FEMA 100-year flood zones (see Figure 12). The floodplain mapped east of the Study Area generally aligns with the Midway River and the floodplain mapped to the west of the Study Area generally aligns with West Rocky Run Creek.

Other Special Districts and Zoning Overlays

There are no other special districts or zoning overlays within the AUAR Study Area.

iv. If any critical facilities (i.e., facilities necessary for public health and safety, those storing hazardous materials, or those housing occupants who may be insufficiently mobile) are proposed in floodplain areas and other areas identified as at risk for localized flooding, describe the risk potential considering changing precipitation and event intensity.

No critical facilities are proposed in floodplain areas. No hazardous materials are proposed to be stored in floodplain areas.

b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.

AUAR Guidance: The extent of conversion of existing farmlands anticipated in the AUAR should be described. If any farmland will be preserved by special protection programs, this should be discussed.

If development of the AUAR will interfere or change the use of any existing designated parks, recreation areas, or trails, this should be described in the AUAR. The RGU may also want to discuss under this item any proposed parks, recreation areas, or trails to be developed in conjunction with development of the AUAR area.

The AUAR must include a statement of certification from the RGU that its comprehensive plan complies with the requirements set out at Minnesota Rules, part 4410.3610, subpart 1. The AUAR document should discuss the proposed AUAR area development in the context of the comprehensive plan. If this has not been done as part of the responses to Items 6, 9, 11, 18, and others, it must be addressed here; a brief synopsis should be presented here if the material has been presented in detail under other items. Necessary amendments to comprehensive plan

[10]Source: https://hermantownmn.com/government/city-ordinances/

elements to allow for the development scenario should be noted. If there are any management plans of any other local, state, or federal agencies applicable to the AUAR area, the document must discuss the compatibility of the plan with the development scenario studied, with emphasis on any incompatible elements.

There are no existing active or fallow farmlands within the Study Area. The AUAR will discuss the project's compatibility with nearby land uses, zoning, parks and trails, and other relevant plans. In considering compatibility with other land uses, the AUAR will consider visual impacts, including lighting impacts, and noise from the proposed project. The AUAR will also include a statement of certification from the RGU that its comprehensive plan complies with the requirements set out at Minnesota Rules, part 4410.3610, subpart 1.

c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

The proposed development scenario is anticipated to be compatible with planned land use in the project vicinity. The AUAR will identify measures to mitigate any potential incompatibilities.

Figure 7: Existing Land Use

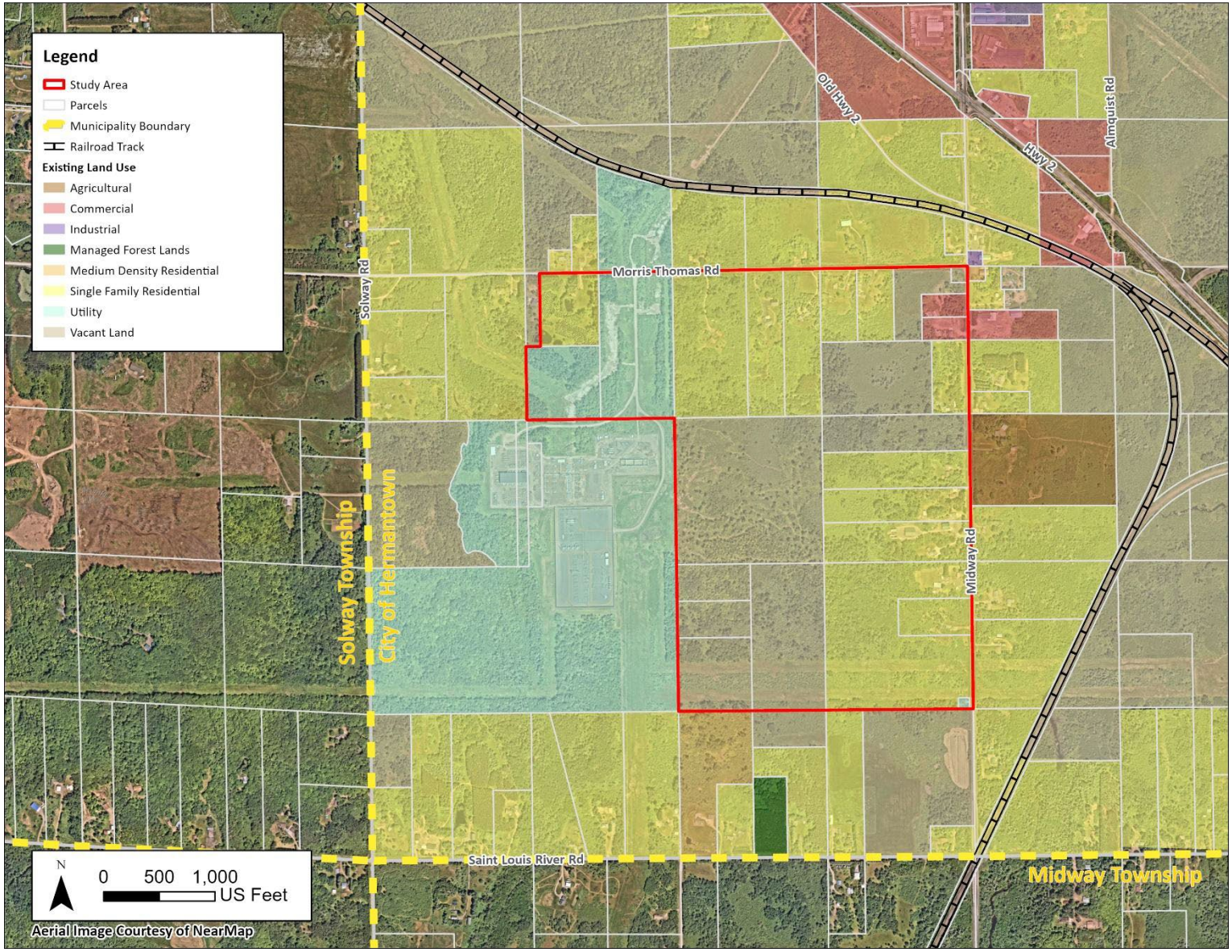


Figure 8: Existing Zoning

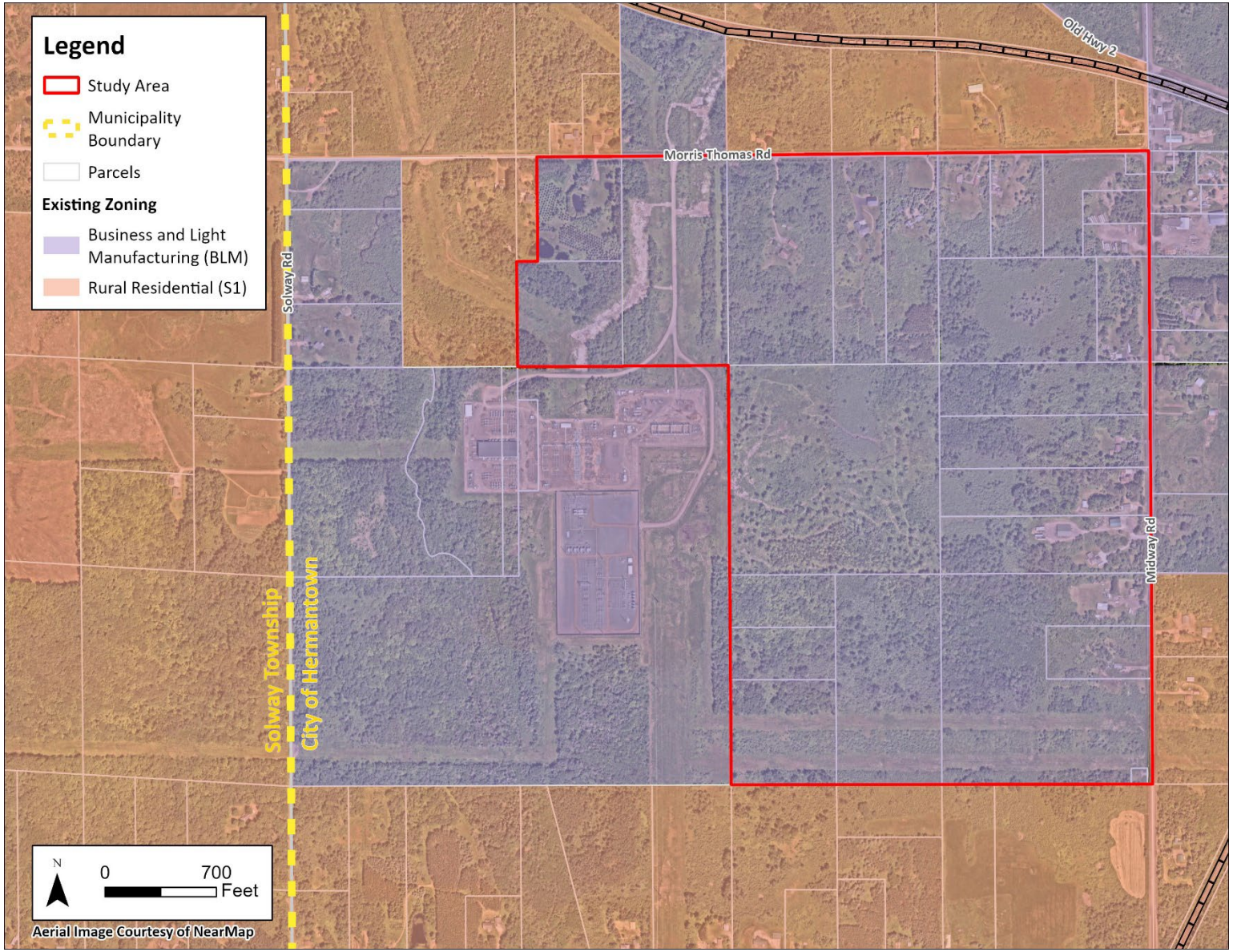
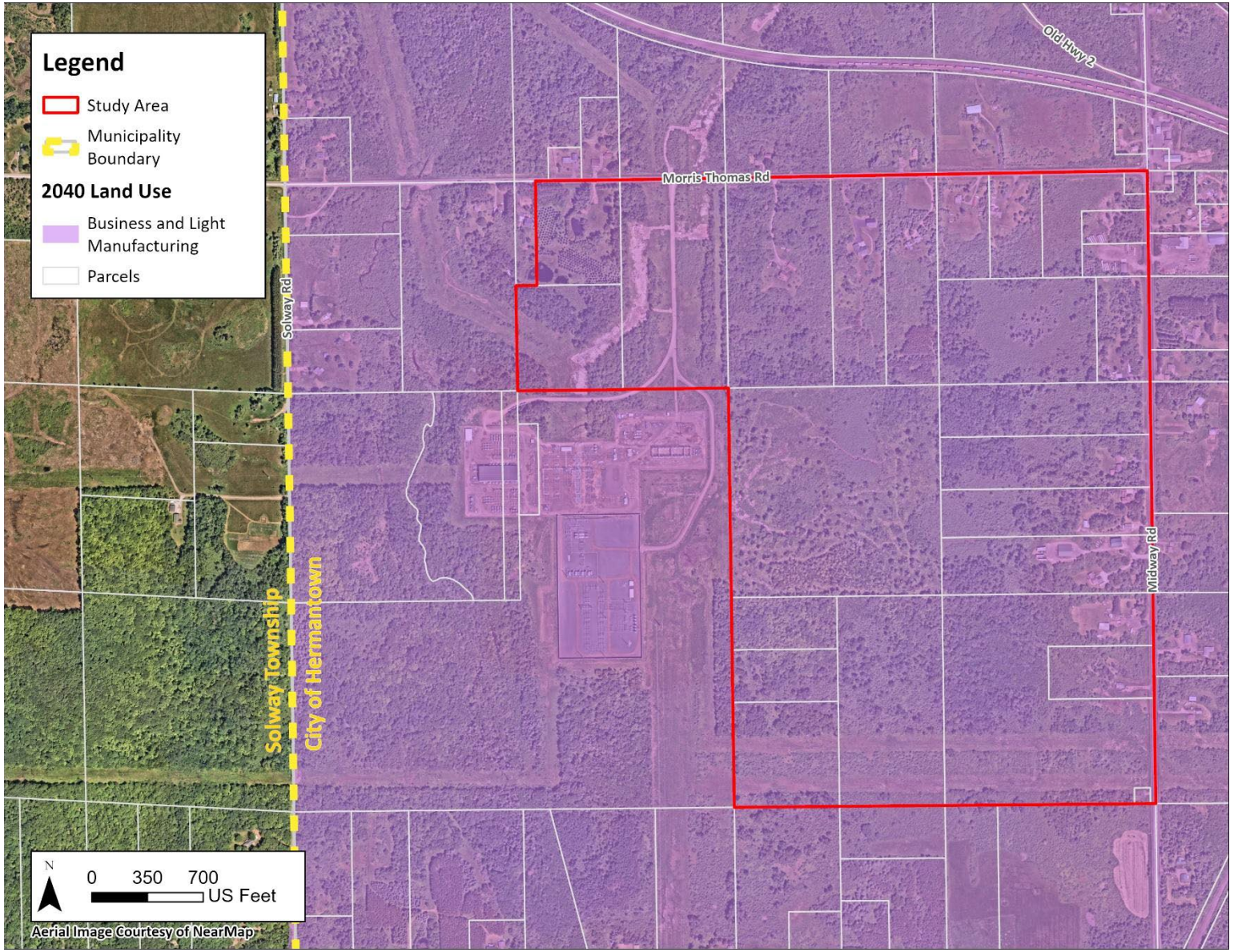


Figure 9: Future Land Use



11. GEOLOGY, SOILS, AND TOPOGRAPHY/LANDFORMS

a. Geology – Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.

AUAR Guidance: A map should be included to show any groundwater hazards identified.

According to the Geologic Atlas of St. Louis County (Minnesota Geological Survey, 2020), the AUAR Study Area is underlain by glacial till. The mean depth to bedrock is approximately 50-250 feet below ground surface. Bedrock is comprised of basalt, slate, and graywacke. In descending order, the upper formations are the Ely's Peak basalts and the Virginia and Thompson formations.

There are no known sinkholes, shallow limestone formations, or unconfined/shallow aquifers located within the AUAR Study Area. There is no known karst conditions located within the Study Area or within approximately 500 feet from the Study Area.

The AUAR will discuss the geology of the area, any possible issues, and mitigation.

b. Soils and Topography – Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability, or other soil limitations, such as steep slopes or highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections, or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

AUAR Guidance: The number of acres to be graded and number of cubic yards of soil to be moved need not be given; instead, a general discussion of the likely earthmoving needs for development of the area should be given, with an emphasis on unusual or problem areas. In discussing mitigation measures, both the standard requirements of the local ordinances and any special measures that would be added for AUAR purposes should be included. A standard soils map for the area should be included.

According to the NRCS Web Soil Survey, the area is comprised of 11 different soil types. Soil information is included in Table 6 and Figure 10. The erosion hazard rating included in Table 6 indicates the hazard of soil loss from off-road areas after the soil surface is exposed from disturbance activities. Within the Study Area, approximately 69% of the soil surface is mapped with a "moderate" erosion rating, indicating that some erosion is likely in these areas and that erosion control measures may be needed. Less than 1% of the Study Area, roughly 0.1 acres

along its northern border, is mapped with a "very severe" erosion rating, indicating that erosion is expected, soil productivity will likely be lost, off-site damage is probable, and erosion-control measures are both costly and generally impractical. The remaining 31% of the Study Area is mapped was not rated or was mapped with a “slight” rating, meaning that erosion is unlikely under ordinary climatic conditions.

Topography within the Study Area varies from 1,256 feet in elevation in the southeast corner of the site to 1,360 feet in elevation in the northwest portion of the site. The site generally drains to the south and east.

The AUAR will include a general discussion of the likely earthmoving equipment and will identify measures to minimize erosion and identify short-term and long-term best management practices.

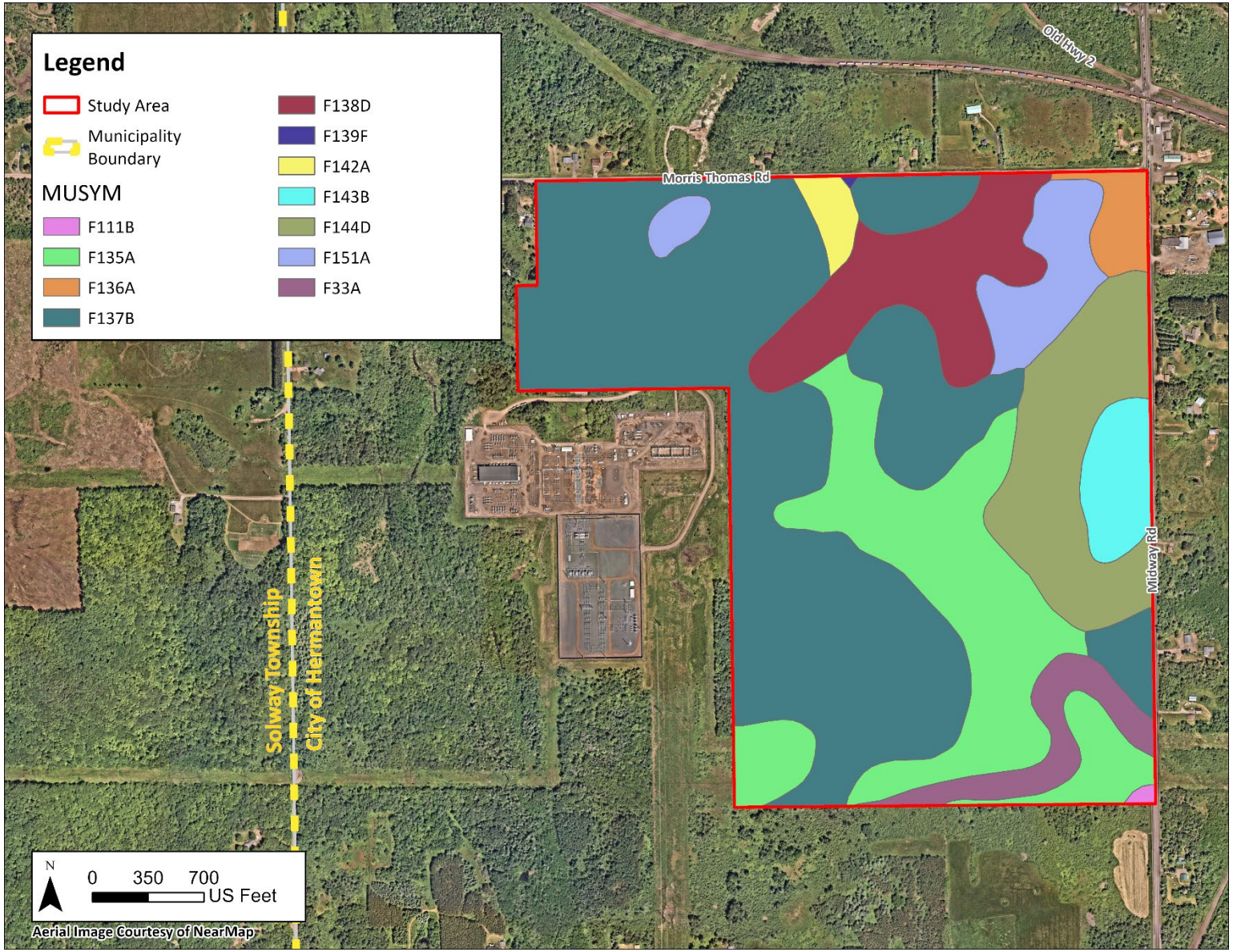
Any additional information provided by the developer will be utilized to supplement the information provided above.

Table 6: Soil Types

Map unit symbol	Map unit name	Acres in AOI	Percent of AOI	Farmland Rating	Hydric Rating	Hydrologic Soil Group	Erosion Hazard Rating
F33A	Cathro muck, depressional, dense substratum, 0 to 1 percent slopes	9.9	3.5%	Not prime farmland	Hydric soil	B/D	Slight
F111B	Augustana-Hegberg complex, 1 to 8 percent slopes	0.4	0.1%	Farmland of statewide importance	Predominantly non-hydric soil	B/D	Slight
F135A	Hermantown-Canosia-Giese, depressional, complex, 0 to 3 percent slopes	54.5	19.5%	Farmland of statewide importance	Partially hydric soil	C/D	Slight
F136A	Hermantown silt loam, 1 to 3 percent slopes	5.1	1.8%	Farmland of statewide importance	Predominantly non-hydric soil	C/D	Slight

Map unit symbol	Map unit name	Acres in AOI	Percent of AOI	Farmland Rating	Hydric Rating	Hydrologic Soil Group	Erosion Hazard Rating
F137B	Normanna-Canosia-Hermantown complex, 0 to 8 percent slopes	127.4	45.6%	Farmland of statewide importance	Predominantly non-hydric soil	B/D	Moderate
F138D	Ahmeek-Normanna-Canosia complex, 0 to 18 percent slopes	25.9	9.3%	Not prime farmland	Predominantly non-hydric soil	C	Moderate
F139F	Ahmeek-Canosia complex, 0 to 45 percent slopes	0.1	0.0%	Not prime farmland	Predominantly non-hydric soil	C	Very Severe
F142A	Canosia loam, 0 to 2 percent slopes	3.2	1.2%	Not prime farmland	Predominantly hydric soil	C/D	Slight
F143B	Normanna-Aldenlake-Canosia complex, 0 to 8 percent slopes	8.8	3.2%	Farmland of statewide importance	Predominantly non-hydric soil	B/D	Moderate
F144D	Aldenlake-Ahmeek complex, 8 to 18 percent slopes	29.6	10.6%	Not prime farmland	Predominantly non-hydric soil	A	Moderate
F151A	Tacoosh mucky peat, dense substratum, 0 to 1 percent slopes	14.4	5.1%	Not prime farmland	Hydric soil	A/D	Slight

Figure 10: Soil Types



12. WATER RESOURCES

AUAR Guidance: The information called for on the EAW form should be supplied for any of the infrastructure associated with the AUAR development scenario, and for any development expected to physically impact any water resources. Where it is uncertain whether water resources will be impacted depending on the exact design of future development, the AUAR should cover the possible impacts through a "worst case scenario" or else prevent impacts through the provisions of the mitigation plan.

a. Describe surface water and groundwater features on or near the site below.

i. Surface Water – lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within one mile of the project. Include MnDNR Public Waters Inventory number(s), if any.

A comprehensive level 2 field wetland delineation was completed for the Study Area in September and October of 2024, and in June and September of 2025 (see Figure 11). Within the Study Area, the level 2 field wetland delineation identified 36 wetlands, 1 wet ditch, 7 ephemeral streams, and 1 erosional feature. Of the ephemeral streams delineated, the southeastern channel was identified as a segment of a Minnesota Department of Natural Resources (MnDNR) public watercourse (ID: S-002-010-003.4-001), designated trout stream, and is mapped in the National Hydrography Dataset (NHD) as a flowline. Coordination with the MnDNR regarding the jurisdiction and classification of this feature is ongoing. There are no waters designated as impaired by the Minnesota Pollution Control Agency (MPCA) within the Study Area.

Additional surface water resources were identified outside, but within the immediate vicinity of the Study Area. West Rocky Run Creek is mapped flowing parallel to the western border of the Study Area. West Rocky Run Creek is identified as a NHD flowline, a MnDNR trout stream and public watercourse (S-002-010-003), and a 2024 MPCA impaired stream due to E. coli. The Midway River is mapped east of the Study Area as a NHD flowline and a MnDNR Public Water and Trout Stream. National Wetlands Inventory (NWI) features are mapped in all directions of the Study Area vicinity. Any additional water resources or surface water constraints identified during the wetland delineation will be discussed in the AUAR.

Runoff from the Study Area generally drains west and south towards offsite streams including West Rocky Run Creek and the Midway River respectively.

Figure 11: Surface Water Resources

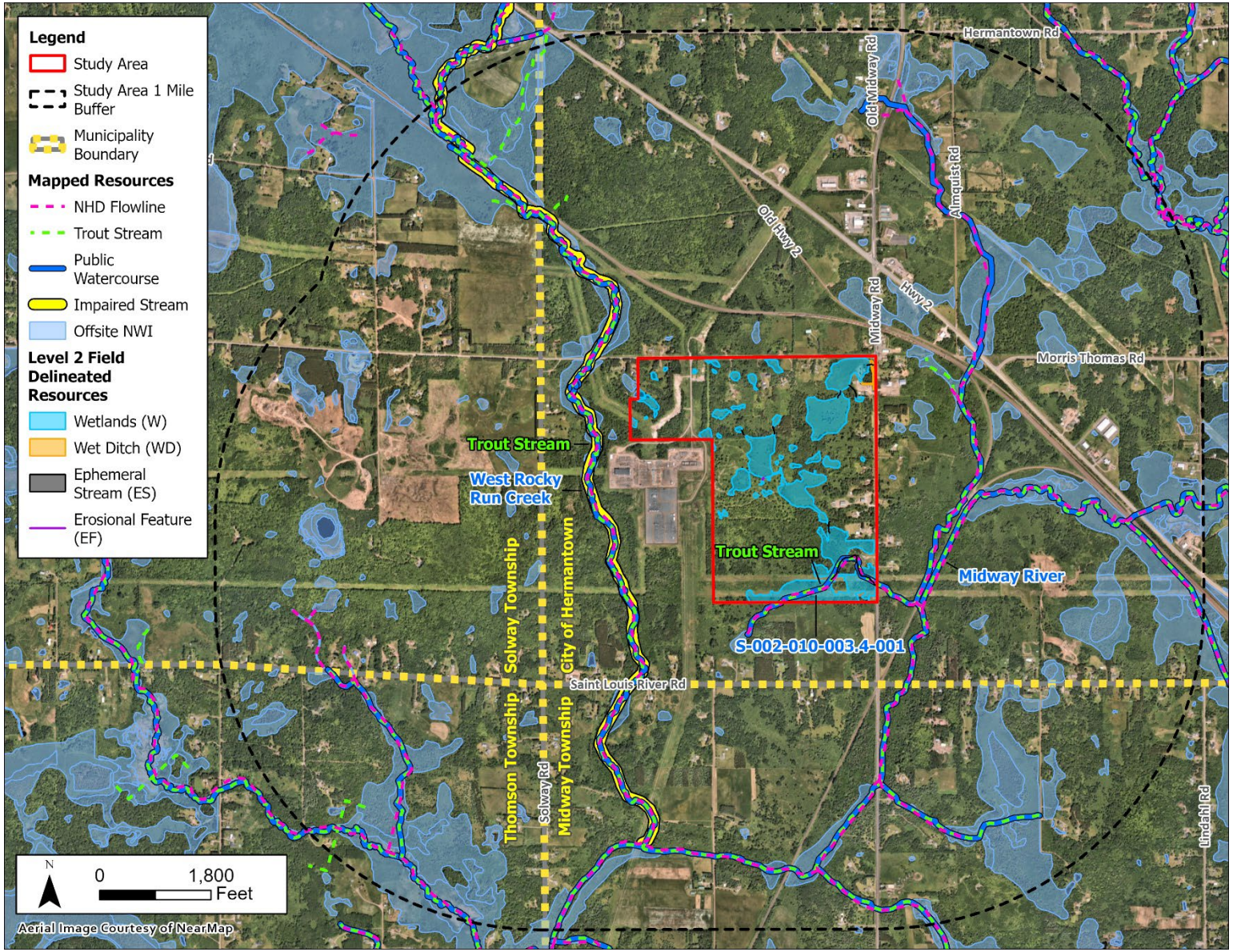
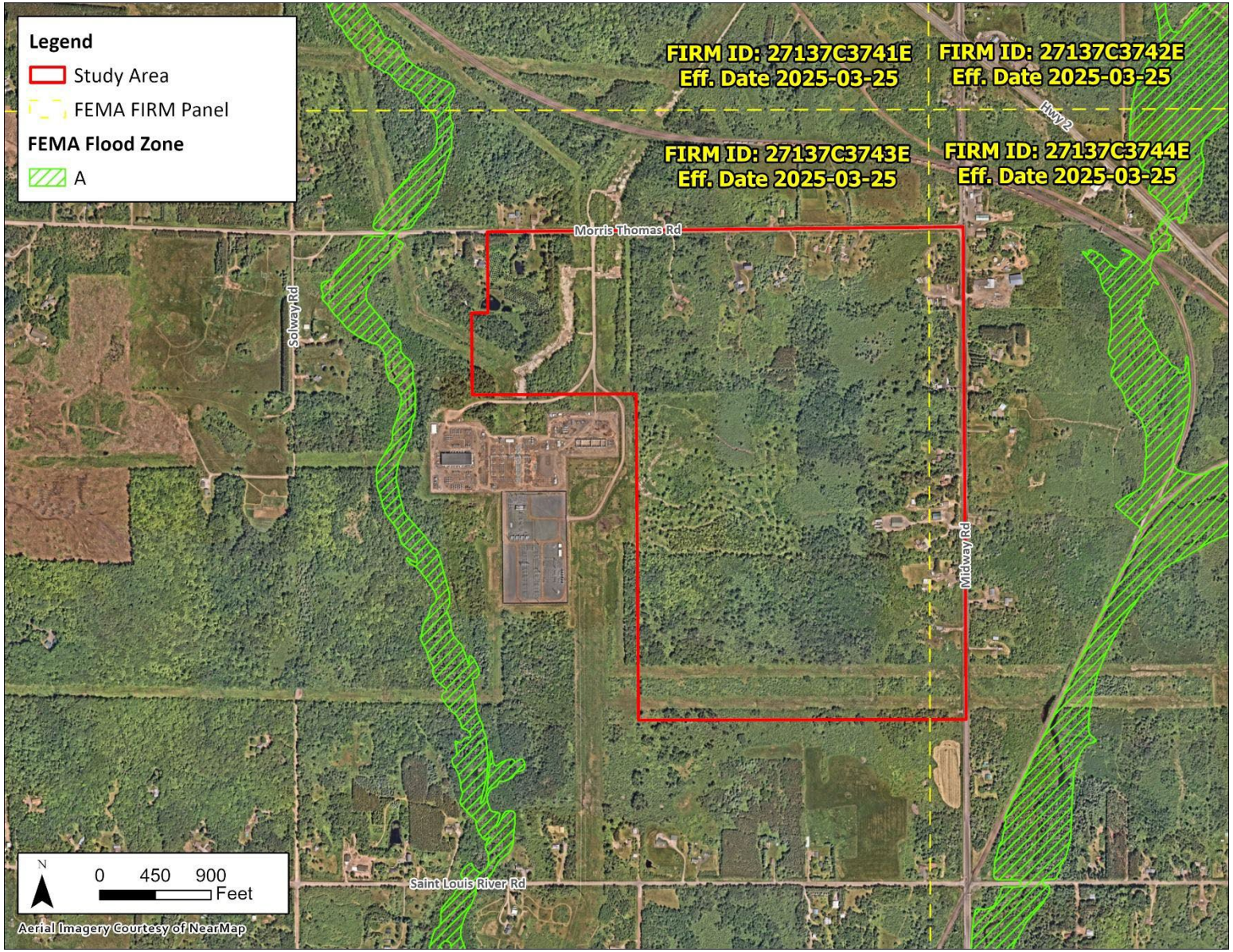


Figure 12: FEMA Floodplain Map



ii. Groundwater – aquifers, springs, and seeps. Include 1) depth to groundwater; 2) if project is within a MDH well protection area; and 3) identification of any onsite and/or nearby wells, including unique numbers and well logs, if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

According to the Minnesota Spring Inventory there are no known springs or seeps within the Study Area.

According to historical well records provided by the Minnesota Department of Health (MDH) and geotechnical soil boring tests conducted within the Study Area, groundwater is typically present 7-60 feet beneath the current ground surface. The Minnesota Hydrogeology Atlas (Minnesota DNR, 2016) indicates that groundwater is likely present between 0-10 feet below the ground surface within and surrounding the wetlands within the Study Area.

Based on the MDH Minnesota Well Index (MWI), there are four wells located within the AUAR Study Area and six wells within 250 feet of the AUAR Study Area (see Table 7, Table 8 and Figure 13). Wells located within the Study Area would be properly sealed by a licensed well contractor prior to development within the Study Area per MPCA and MDH well sealing requirements. Additional analysis on the surrounding wells near the Study Area will be provided in the AUAR.

The Study Area is not located within a wellhead protection area or Drinking Water Supply Management Area (DWSMA).

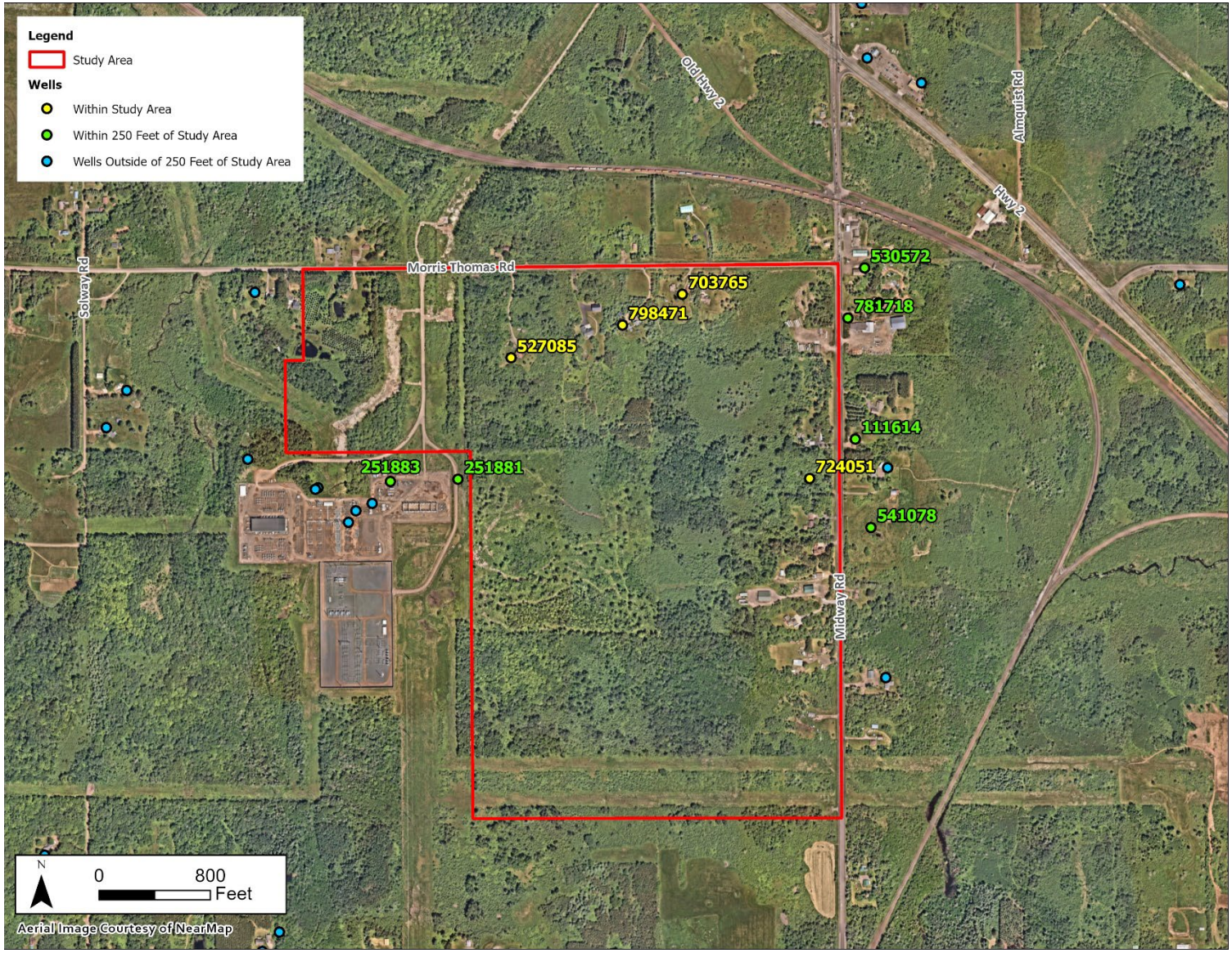
Table 7: MWI Wells within the AUAR Study Area

Well ID Number	Index Status	Well Use	Well Diameter (inches)	Well Depth (feet)
527085	Active	Domestic	6	155
703765	Active	Domestic	6	99
724051	Active	Domestic	6	92
798471	Active	Domestic	6	79

Table 8: MWI Wells within 250 feet of the Study Area

Well ID Number	Index Status	Well Use	Well Diameter (inches)	Well Depth (feet)
111614	Active	Domestic	6	86
251881	Active	Industrial	6	152
251883	Active	Industrial	6	92
530572	Active	Domestic	6	47
541078	Active	Domestic	6	92
781718	Active	Industrial	6	52

Figure 13: Groundwater Resources



b. Describe effects from project activities on water resources and measures to minimize or mitigate the effects below.

i. Wastewater – For each of the following, describe the sources, quantities, and composition of all sanitary, municipal/domestic, and industrial wastewaters projected or treated at the site.

AUAR Guidance: Observe the following points of guidance in an AUAR:

- *Only domestic wastewater should be considered in an AUAR—industrial wastewater would be coming from industrial uses that are excluded from review through an AUAR process*
- *Wastewater flows should be estimated by land use subareas of the AUAR area; the basis of flow estimates should be explained*
- *The major sewer system features should be shown on a map and the expected flows should be identified*
- *If not explained under Item 6, the expected staging of the sewer system construction should be described*
- *The relationship of the sewer system extension to the RGU's comprehensive sewer plan and (for metro area AUARs) to Metropolitan Council regional systems plans, including MUSA expansions, should be discussed. For non-metro area AUARs, the AUAR must discuss the capacity of the RGU's wastewater treatment system compared to the flows from the AUAR area; any necessary improvements should be described.*
- *If on-site systems will serve part of the AUAR, the guidance in the February 2000 edition of the EAW Guidelines on page 16 regarding item 18b under Residential development should be followed.*

1) If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.

Wastewater from the proposed development scenario will be limited to wastewater from domestic sources (i.e., no industrial wastewater) and will be discharged to the City of Hermantown collection system. The existing Hermantown collection infrastructure would need to be extended to the Study Area. The Hermantown collection system discharges to the Western Lake Superior Sanitary District (WLSSD). The facility treats an average daily flow of approximately 36 million gallons per day (MGD). The city is limited by a user agreement to the quantity and concentration of pollutants discharged to the facility. The AUAR will identify maximum flows and characterize the wastewater concentrations, determine any pretreatment measures, if applicable, and address any anticipated infrastructure needs for the scenario.

2) If the wastewater discharge is to a subsurface sewage treatment system (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.

No SSTS are anticipated within the AUAR Study Area for the proposed development scenario.

3) If the wastewater discharge is to surface water, identify the wastewater treatment methods, discharge points, and proposed effluent limitations to mitigation impacts. Discuss any effects to surface or groundwater from wastewater discharges.

No wastewater discharge to surface waters is anticipated for the proposed development scenario.

ii. Stormwater – Describe changes in surface hydrology resulting from change of land cover. Describe the routes and receiving water bodies for runoff from the project site (major downstream water bodies as well as the immediate receiving waters). Discuss environmental effects from stormwater discharges on receiving waters post-construction, including how the project will affect runoff volume, discharge rate, and change in pollutants. Consider the effects of current Minnesota climate trends and anticipated changes in rainfall frequency, intensity, and amount with this discussion. For projects requiring NPDES/SDS Construction Stormwater permit coverage, state the total number of acres that will be disturbed by the project and describe the stormwater pollution prevention plan (SWPPP), including specific best management practices to address soil erosion and sedimentation during and after project construction. Discuss permanent stormwater management plans, including methods of achieving volume reduction to restore or maintain the natural hydrology of the site using green infrastructure practices or other stormwater management practices. Identify any receiving waters that have construction-related water impairments or are classified as special as defined in the Construction Stormwater permit. Describe additional requirements for special and/or impaired waters.

AUAR Guidance: For an AUAR the following additional guidance should be followed in addition to that in EAW Guidelines:

- *It is expected that an AUAR will have a detailed analysis of stormwater issues*
- *A map of the proposed stormwater management system and of the water bodies that will receive stormwater should be provided*
- *The description of the stormwater systems would identify on-site and "regional" detention ponding and also indicate whether the various ponds will be new water bodies or converted existing ponds or wetlands. Where on-site ponds will be used but have not yet been designed, the discussion should indicate the design standards that will be followed.*

- *If present in or adjoining the AUAR area, the following types of water bodies must be given special analyses:*
    - *Lakes: Within the Twin Cities metro area, a nutrient budget analysis must be prepared for any "priority lake" identified by the Metropolitan Council. Outside of the metro area, lakes needing a nutrient budget analysis must be determined by consultation with the MPCA and DNR staffs.*
    - *Trout streams: If stormwater discharges will enter or affect a trout stream, an evaluation of the impacts on the chemical composition and temperature regime of the stream and the consequent impacts on the trout population (and other species of concern) must be included.*

Existing stormwater runoff from the Study Area generally drains west to West Rocky Run Creek and east to a tributary of Midway River. The proposed development is anticipated to maintain the existing drainage patterns.

There is currently minimal impervious surface area and no existing permanent stormwater management features within the Study Area. The total amount of impervious surface under the development scenario will be documented in the AUAR.

The AUAR will address stormwater rates, water quality, and volumes for the AUAR Study Area, and temporary and permanent stormwater best management practices. An existing and proposed conditions analysis will be completed showing the locations of the temporary and permanent stormwater best management practices.

West Rocky Run Creek is listed as an impaired water body on the 2024 MPCA impaired waters list. Additionally, both West Rocky Run Creek and Midway River are designated as trout streams. As part of the AUAR process, a temperature and nutrient analysis of stormwater discharges to these receiving waters is expected to be required by MPCA via the National Pollution Discharge Elimination System (NPDES) general Construction Stormwater permit application. The AUAR will identify and evaluate mitigation measures to reduce impacts on these water bodies. Because both receiving waters are either impaired or classified as special waters under the Construction Stormwater Permit, the project will implement more stringent BMPs and follow the enhanced requirements outlined in the NPDES Construction Stormwater Permit.

The NPDES permit, City of Hermantown Municipal Separate Storm Sewer System (MS4), and regulatory requirements will be considered in the AUAR analysis.

Based on the results of the climate trends analysis and flooding risk assessment, additional volume and rate control needed for stormwater management will be discussed in the AUAR. Stormwater management strategies including any proposed green infrastructure will be documented in the AUAR. Considerations for proposed stormwater basins will be identified based on soils and depths to groundwater and

bedrock. According to desktop resources, the Study Area contains poor infiltrating soils so infiltration will not be an option; however, there are no known areas of shallow bedrock or shallow groundwater within the Study Area that would limit the location of proposed stormwater basins.

iii. Water Appropriation – Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use, and purpose of the water use and if a MnDNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Discuss how the proposed water use is resilient in the event of changes in total precipitation, large precipitation events, drought, increased temperatures, variable surface water flows and elevations, and longer growing seasons. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation. Describe contingency plans should the appropriation volume increase beyond infrastructure capacity or water supply for the project diminish in quantity or quality, such as reuse of water, connections with another water source, or emergency connections.

AUAR Guidance: If the area requires new water supply wells, specific information about that appropriation and its potential impacts on groundwater levels should be given; if groundwater levels would be affected, any impacts resulting on other resources should be addressed.

The City of Hermantown purchases all potable water from the City of Duluth. Lake Superior is the source of drinking water for the cities of Hermantown, Duluth, Proctor, and Rice Lake. The project will purchase water supply from the City of Hermantown. The AUAR will evaluate the existing and proposed infrastructure needs.

Wells located within the Study Area would be properly sealed by a licensed well contractor prior to development within the Study Area per MPCA and MDH well sealing requirements. Additional analysis on the long-term groundwater impacts and surrounding wells near the Study Area will be provided in the AUAR.

No permanent dewatering is proposed. Handling of any required temporary construction dewatering discharge will be addressed in the AUAR. The AUAR will also discuss the potable water demands for the site and the existing water system capacity. Mitigation strategies or system improvements, if applicable, will be identified in the AUAR.

iv. Surface Waters

1) Wetlands – Describe any anticipated physical effects or alterations to wetland features, such as draining, filling, permanent inundation, dredging, and vegetative

removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed, taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed and identify those probable locations.

Wetlands were identified during level 2 wetland delineation in fall 2025. The delineation including wetland type and boundary have been submitted for approval by the Technical Evaluation Panel and is pending approval at the time of this assessment. Surface water alterations, including wetland impacts and mitigation strategies, will be discussed in the AUAR.

2) **Other surface waters – Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal, and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features, taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.**

AUAR Guidance: Water surface use need only be addressed if the AUAR area would include or adjoin recreational water bodies.

Other surface water features such as streams are present within the AUAR Study Area. Surface water alterations will be discussed in the AUAR.

13. CONTAMINATION/HAZARDOUS MATERIALS/WASTES

a. **Pre-project Site Conditions – Describe existing contamination or potential environmental hazards on or in close proximity to the project site, such as soil or groundwater contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize, or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.**

A Phase 1 Environmental Site Assessment was completed for the Study Area in January 2026. Based on a database review obtained from the Environmental Risk Information Services (ERIS), the following sites were identified.

Within the Study Area

- A petroleum tank release (Leak #4518) was reported at the 3687 Midway Road parcel in 1991. Petroleum impacted soil and groundwater were documented at the parcel. Approximately 685 cubic yards of petroleum impacted soils were excavated during the removal of one underground storage tank (UST) in September of 1991. The MPCA closed the file in 1995.
    - MPCA's letter to the property owner dated November 14, 1995 notes that the Minnesota Pollution Control Agency (MPCA) Tanks and Emergency Response Section (TERS) staff determined that the site investigation and/or cleanup has adequately addressed the petroleum tank release at the site. TERS staff closed the release site file. Closure of the file means that the TERS staff does not require any additional investigation and/or cleanup work at this time or in the foreseeable future. The letter closure does not necessarily mean that all petroleum contamination has been removed from this site. However, the TERS staff has concluded that any remaining contamination, if present, does not appear to pose a threat to public health or the environment.
    - The documented soil and groundwater impacts at the parcel represent a REC for the Site in consideration of the proposed redevelopment of the Site.

Adjoining Properties

- *Minnesota Power - Transformer and Allete/Minnesota Power, 3646 Midway Road*
- *Minnesota Power Inc/Arrowhead HVDC Terminal, 5816-18 Morris Thomas Road*
- *Hill-Melvin Property (Gibbings) and Gibbings-Lundberg, 3598 Midway Road*
- *Michael Giddings Property, 3690 Midway Road*
- *Adolph Welding & Steel Sales, 3704 Midway Road*

Based on the field reconnaissance and interviews, no Controlled Recognized Environmental Conditions (CRECs) were identified for the Study Area. It was also determined that there were no significant data gaps identified for the Study Area. The AUAR will review the Phase I Environmental Site Assessment that was completed in January 2026 for the Study Area and discuss any environmental hazards and applicable next steps.

b. Project Related Generation/Storage of Solid Wastes – Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage, and disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

AUAR Guidance: Generally, only the estimated total quantity of municipal solid waste generated and information about any recycling or source separation programs of the RGU need to be included.

The AUAR will provide information on the estimated quantity of municipal solid waste to be generated during construction and operational phases of the development scenario.

c. Project Related Use/Storage of Hazardous Materials – Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location, and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spills or releases of hazardous materials. Identify measures to avoid, minimize, or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

AUAR Guidance: Not required for an AUAR. Potential locations of storage tanks associated with commercial uses in the AUAR should be identified (e.g., gasoline tanks at service stations).

Any demolition activities must comply with state and federal regulations that require inspection of the structure for hazardous materials such as asbestos, lead based paint, light ballasts, thermostats, stored chemicals, and ozone depleting chemicals. The AUAR will identify any potential future storage tank locations anticipated as part of the proposed development scenario and if any existing storage tanks are anticipated to be used under the development scenario.

The development scenario will include backup generators for emergency use. Backup generation specific needs will be further evaluated outside of the AUAR as site planning advances. Depending on the capacity needs for fuel storage for backup generators, an EAW will be required for these components of the project per Minnesota Rules 4410.4300 Subp. 3 and either the PUC or MPCA will be the RGU in that case. For the purposes of evaluating noise from the generators in the AUAR, the generators are expected to be located near the truck docks of each building. Each of these generators will be designed to be capable of utilizing renewable diesel as a fuel and will be installed and maintained in compliance with applicable state regulations for aboveground storage tanks, including:

- New tanks and piping would be designed to applicable industry standards and guidance.
- Tank upgrades and repairs would follow applicable industry standards.
- Tank owners would clearly label all tanks and piping.
- Underground storage tanks of any size will not be used as above ground storage tanks.

b. Project Related Generation/Storage of Hazardous Wastes – Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of hazardous wastes including source reduction and recycling.

AUAR Guidance: Not required for an AUAR.

Not applicable.

14. FISH, WILDLIFE, PLANT COMMUNITIES, AND SENSITIVE ECOLOGICAL RESOURCES (RARE FEATURES)

a. Describe fish and wildlife resources as well as habitats and vegetation on or near the site.

AUAR Guidance: The description of fish and wildlife resources should be related to the habitat types depicted on the cover types map. Any differences in impacts between development scenario should be highlighted in the discussion.

There are no MnDNR designated Native Plant Communities (NPC), Sites of Biodiversity Significance (SBS), or Regionally Significant Ecological Areas (RSEA) within the Study Area. Most of the central portion of the Study Area is currently mixed forest, with areas of deciduous forest, boreal forest, grassland, and wetlands. Forest, grassland, and wetlands may provide habitat for wildlife. Wildlife that can be found within the Study Area include birds, mammals, and insects. There are several residences along the northern and eastern outside perimeter of the Study Area, and an industrial area with impervious surface in the western portion of the Study Area. The southern forested portion of the Study Area exhibits evidence of recent logging.

The AUAR will address the cover types for the existing conditions and the post-construction scenario.

b. Describe rare features such as state-listed (endangered, threatened, or special concern) species, NPC, Minnesota County Biological Survey SBS, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number and/or correspondence number (ERDB) from which the data were obtained and attach the Natural Heritage letter from the MnDNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe results.

AUAR Guidance: For an AUAR, prior consultation with the DNR Division of Ecological Resources for information about reports of rare plant and animal species in the vicinity is required. Include the reference numbers called for on the EAW form in the AUAR and include the DNR's response letter. If such consultation indicates the need, an on-site habitat survey for rare species in the appropriate portions of the AUAR area is required. Areas of on-site surveys should be depicted on a map, as should any "protection zones" established as a result.

State-Listed Species

Kimley-Horn reviewed the Natural Heritage Information System (NHIS) data per license agreement LA-2024-006 for state listed species within one mile of the project Study Area. The database includes known occurrences of any state endangered, threatened, or special concern listed species. One state-listed species, the American Goshawk (*Astur atricapillus*), was identified within one mile of the Study Area. The identification of this species is consistent with the Natural Heritage Review received from the MnDNR in 2025. A new Natural Heritage Review request has been submitted for the revised Study Area proposed in this Scoping Document and

AUAR will be updated to reflect any changes, if needed. Any potential impacts to wildlife habitat, federally listed species, and state-listed species will be provided in the AUAR.

American Goshawk

There is a record for American goshawk, a state-listed species of special concern located within one mile of the Study Area. This is a species of bird that prefers large tracts of mature and older upland forest. Preferred cover types for hunting include aspen, paper birch, pine, and spruce forests, and nesting areas tend to have taller and larger diameter trees and fewer understory trees than hunting areas. The project may include disturbance to forested areas. Potential impacts to the American Goshawk will be discussed in the AUAR.

Federally-Listed Species

The U.S. Fish and Wildlife (USFWS) Service Information for Planning and Conservation (IPaC) tool was used to identify federally-listed species that may be present in the Study Area. This review identified two federally-listed threatened species, the Canada lynx (*Lynx canadensis*) and gray wolf (*Canis lupus*). This review also identified the proposed threatened monarch butterfly (*Danus Plexippus*) and proposed endangered Suckley's cuckoo bumble bee (*Bombus suckley*). While not included in the IPaC official species list, all of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota.

Canada Lynx

The Canada lynx (*Lynx canadensis*) was identified by the IPaC species list. The Canada lynx was classified as threatened in 2000. The Canada lynx generally inhabits boreal forested ecosystems but also extends south to subalpine forests in the western United States and boreal/hardwood transitional zones in the eastern United States. Lynx are most commonly found in areas that receive heavy snowfall and support populations of snowshoe hares, the species primary prey. The project may include disturbance to forest and grassland ecosystems. Potential impacts to the Canada lynx and mitigation measures will be discussed in the AUAR.

Gray Wolf

The gray wolf (*Canis Lupus*) was identified by the IPaC species list. The gray wolf was classified as threatened in 1978. Gray wolves are found in a wide range of habitats including temperate forests and grasslands. Wolves' habitat depends on availability of prey such as moose, elk, deer, and caribou. The project may include disturbance to forest and grassland ecosystems. Potential impacts to the gray wolf and mitigation measures will be discussed in the AUAR.

Monarch Butterfly

The monarch butterfly was identified by the IPaC species list and is classified as a proposed threatened species by the USFWS. The preferred habitat for this species is prairie where milkweed and flowers are present. According to the USFWS, there are many potential reasons for the butterfly's decline, including habitat loss at breeding and overwintering sites, disease, pesticides, logging at overwintering sites, and climate change. The project may include

disturbance to grassland ecosystems. Potential impacts to the monarch butterfly and mitigation measures will be discussed in the AUAR.

Suckley's cuckoo bumble bee

Suckley's cuckoo bumble bee was identified by the IPaC species list and is listed as proposed endangered. Suckley's cuckoo bumble bee is typically found throughout northern America in prairies, grasslands, and meadows. It is considered a parasitic bee and lives primary of nests of western bumblebees, which are typically found underground cavities but can also be seen in stumps and logs as well. Potential impacts to the bumble bee and mitigation measures will be discussed in the AUAR.

c. Discuss how the identified fish, wildlife, plant communities, rare features, and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

Invasive Species

Invasive species are a major cause of biodiversity loss and are considered biological pollutants by the MnDNR. Invasive species can be moved on construction equipment, landscaping equipment, and other debris. The AUAR will include a discussion on best management practices to prevent the introduction and spread of invasive species during construction and operation.

Stormwater

Stormwater run-off can cause a number of environmental problems. When stormwater drains off a construction site, it can carry sediment and pollutants that harm lakes, rivers, streams, and wetlands which in turn may harm wildlife. Strategies for stormwater management and treatment of stormwater run-off within the Study Area will be discussed in Section 12 of the AUAR.

Impacts to protected species and habitats

The AUAR will further investigate the potential for impacts to any federally listed species, state-listed species, or protected wildlife habitats.

d. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

The AUAR will address any mitigation measures identified by the MnDNR and USFWS to minimize and avoid potential adverse impacts to any protected species and wildlife habitats from the proposed development scenario.

15. HISTORIC PROPERTIES

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include 1) historic designations; 2) known artifact areas; and 3) architectural features. Attach letter received from the Minnesota State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction

and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

AUAR Guidance: For an AUAR, contact with the State Historic Preservation Office and State Archeologist is required to determine whether there are areas of potential impacts to these resources. If any exist, an appropriate site survey of high probability areas is needed to address the issue in more detail. The mitigation plan must include mitigation for any impacts identified.

According to the Minnesota Office of the State Archaeologist (OSA) Public Viewer, within Section 31, Township 50N, Range 15W, one archaeological site is present within the Study Area. According to the Minnesota Statewide Historic Inventory Portal, six historical sites were identified outside, but within one mile of the AUAR Study Area (see Table 9).

Table 9: Historic Properties

Address	Property Name	National Register Listing Status	Distance from Study Area
Lindahl Road over Midway River	Bridge 88790	Unevaluated	1 mile west of Study Area
5513 Highway 2	Parrott's Auto Shop	Not Eligible	0.9 miles west of the Study Area
Stark Junction Road over Midway River	Bridge 88789	Unevaluated	0.5 miles south of Study Area
Trunk Highway 2 from the Wisconsin state line in Duluth to the North Dakota state line in East Grand Forks	Trunk Highway 2	Unevaluated	1 mile northwest of Study Area
Estends from the Spirit Lake shoreline between 63rd Avenue West and approximately 75th Avenue West	Spirit Lake Transfer Railway Company/Duluth Missabe and Iron Range Railway Company	Unevaluated	0.12 miles southeast of the Study Area
Extends from the Mesabi Iron Range in northeastern Minnesota to the Duluth–Superior harbor on Lake Superior	Duluth Missabe and Northern Railway Company/Duluth Missabe and Iron Range Railway Company: Main Line	Not Eligible	0.1 miles northeast of the Study Area

The AUAR will discuss the results of this database review as well as a Phase I Archaeological Study completed for the Study Area. The AUAR will discuss any potential impacts on archaeological, historical, and/or architectural resources as well as any applicable mitigation strategies. SHPO, OSA and MIAC reviews are pending.

16. VISUAL

Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

AUAR Guidance: Any impacts on scenic views and vistas present in the AUAR should be addressed. This would include both direct physical impacts and impacts on visual quality or integrity. EAW Guidelines contains a list of possible scenic resources.

If any non-routine visual impacts would occur from the anticipated development, this should be discussed here along with appropriate mitigation.

There are no scenic views or vistas in or near the Study Area. The AUAR will discuss any potential visual impacts of the proposed development scenario, including potential lighting impacts, on the surrounding area and any applicable mitigation strategies.

17. AIR

a. **Stationary Source Emissions – Describe the type, sources, quantities, and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any GHGs. Discuss effects to air quality including any sensitive receptors, human health, or applicable regulatory criteria. Include a discussion of any methods used to assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.**

   AUAR Guidance: This item is not applicable to an AUAR. Any stationary air emissions source large enough to merit environmental review requires individual review.

   The development scenario evaluated in the AUAR involves a data center use that will require backup generators. The backup generation needs will be identified through a separate environmental review process outside of this AUAR and the specifics will depend on a number of factors associated with the operational needs of the data center, which are not yet definitive.

   The AUAR will not be used to support any Air Permits or Backup Generation Site Permits (if any) required from state agencies. If any potential generation produces emissions (e.g., from generators) above the threshold for an air quality permit/environmental review, then the backup generation would be subject to additional environmental review beyond what is evaluated in this AUAR. This would be a separate environmental review completed as design advances.

b. **Vehicle Emissions – Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g., traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.**

AUAR Guidance: Although the MPCA no longer issues Indirect Source Permits, traffic-related air quality may still be an issue if the analysis in Item 18 indicates that development would cause or worsen traffic congestion. The general guidance from the EAW form should still be followed. Questions about the details of air quality analysis should be directed to MPCA staff.

The Minnesota Department of Transportation (MnDOT) has developed a screening method designed to identify intersections that will not cause a carbon monoxide (CO) impact above state standards. MnDOT has demonstrated that even the 10 highest traffic volume intersections in the Twin Cities do not experience CO impacts[11]. Therefore, intersections with traffic volumes lower than these 10 highest intersections will not cause a CO impact above state standards. MnDOT's screening method demonstrates that intersections with total daily approaching traffic volumes below 82,300 vehicles per day will not have the potential for causing CO air pollution problems. The AUAR will include an analysis of future traffic volumes for the intersections in the Study Area and will determine if any future conditions exceed the criteria that would lead to a violation of the air quality standards.

c. Dust and Odors – Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under Item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

AUAR Guidance: Dust and odors need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any dust control ordinances in effect.

The AUAR will include discussion of dust control ordinances, this would include best management practices that would be applicable during demolition and construction within the Study Area.

18. GREENHOUSE GAS (GHG) EMISSIONS/CARBON FOOTPRINT

a. GHG Quantification – For all proposed projects, provide quantification and discussion of project GHG emissions. Include additional rows in the tables as necessary to provide project-specific emission sources. Describe the methods used to quantify emissions. If calculation methods are not readily available to quantify GHG emissions for a source, describe the process used to come to that conclusion and any GHG emission sources not included in the total calculation.

About Greenhouse Gases (GHGs)

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A

[11] Source: MnDOT CO Hot Spot Screening Method. https://www.dot.state.mn.us/project-development/subject-guidance/airquality/process.html#:~:text=The%20Twin%20Cities%20area%20has,carbon%20monoxide%20(CO)%20violations

portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming.[12]

Project Related GHG Emissions

The AUAR will include an estimated quantification of the following GHG emissions associated with the proposed scenario:

- Carbon dioxide (CO_2)
- Nitrous oxide (N_2O)
- Methane (CH_4)

The projected GHG emissions will be provided on an average annual basis using the CO_2 equivalent (CO_2e) and include the proposer's best estimate of average annual emissions over the proposed life/design service life of future development. The estimates will also include emissions from the construction and operating phases of the scenario. Emissions will be estimated using the were estimated using the Minnesota EQB's Climate Calculator Tool[13] and will be summarized by project phase (i.e., construction and operations) and source type (e.g., combustion from mobile equipment, off-site electricity).

b. GHG Assessment

i. Describe any mitigation considered to reduce the project's GHG emissions.

The AUAR will describe potential design strategies and sustainability measures for the proposed scenario to reduce emissions.

ii. Describe and quantify reductions from selected mitigation, if proposed to reduce the project's GHG emissions. Explain why the selected mitigation was preferred.

[12] Summarized from U.S. EPA, Overview of Greenhouse Gases: https://www.epa.gov/ghgemissions/overview-greenhouse-gases

[13] Available at: https://www.eqb.state.mn.us/environmental-review/climate-assessments

The AUAR will describe and quantify reductions from selected mitigation options.

iii. **Quantify the proposed project's predicted net lifetime GHG emissions (total tons per number of years) and how those predicted emissions may affect achievement of the Minnesota Next Generation Energy Act goals and/or other more stringent state or local GHG reduction goals.**

The Next Generation Energy Act requires the state to reduce GHG emissions in the state by 80 percent between 2005 and 2050, while supporting clean energy, energy efficiency, and supplementing other renewable energy standards in Minnesota. The MPCA's biennial GHG emissions reduction report from 2021 identifies strategies for reducing emissions in the three economic sectors with the highest emissions – transportation, electricity generation, and agriculture, forestry, and land use.

The AUAR will discuss the expected lifespan of the project and calculate how many estimated metric tons of CO2 will be emitted over the project's lifespan. The proposer will evaluate implementing the sustainability measures described in the AUAR. To reduce operational emissions to the extent practicable. The proposed development scenario will be built in compliance with state regulations and city code.

19. NOISE

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area; 2) nearby sensitive receptors; 3) conformance to state noise standards; and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

AUAR Guidance: Construction noise need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any construction noise ordinances in effect.

If the area will include or adjoin major noise sources, a noise analysis is needed to determine if any noise levels in excess of standards would occur, and if so, to identify appropriate mitigation measures. With respect to traffic-generated noise, the noise analysis should be based on the traffic analysis of Item 18.

Existing Noise

The Study Area is currently single family residential, utility, and undeveloped forested land. Surrounding nearby receptors are single family residential homes to the east, west, and north of the Study Area.

The existing ambient noise sources in the Study Area consist mainly of the surrounding roadways.

A sound increase of 3 dBA is barely noticeable by the human ear, a 5 dBA increase is clearly noticeable, and a 10 dBA increase is heard as twice as loud.

Construction Noise

As stated in the AUAR guidelines, construction noise need not be addressed unless there is some unusual reason to do so. No unusual circumstances have been identified that would necessitate a detailed construction noise analysis. The City of Hermantown limits construction activities from 10 p.m. to 7 a.m.

Traffic Generated Noise

The AUAR will provide traffic volumes from the proposed development scenario to determine noise impacts related to changes in traffic levels attributable to the project.

The change in traffic noise levels is not anticipated to be readily perceptible.

Operational Noise

The main source of noise from both development scenario could include mechanical equipment, ventilation systems, heavy machinery, and the testing of generators which may also operate in the case of an emergency. Depending on manufacturer specifications for various pieces of operational equipment, it is possible for low frequency noise to be emitted. Any equipment requirements to mitigate general or low-frequency noise will be addressed in the AUAR.

The State of Minnesota regulates noise from industrial operations in Chapter 7030 of the Minnesota Administrative Rules.[14] This chapter establishes thresholds for areas of frequent human by noise area classification, see Table 10. The City of Hermantown Zoning Code regulates mechanical noise using these state-determined thresholds. [15] The proposed development scenario will be required to comply with these thresholds. The AUAR will include a discussion of operational noise and identify potential operational noise mitigation measures based on a preliminary noise analysis.

Table 10: Minnesota Noise Standards

	Maximum Permissible Hourly Sound Pressure Levels (dBA)	
Noise Area Classification	Daytime/Nighttime	
	L_{10}	L_{50}
Residential Housing, religious activities, camping and picnicking areas, health services, hotels, educational services	65/55	60/50
Retail, business and government services, recreational activities, transit passenger terminals	70/70	65/65
Manufacturing, fairgrounds and amusement parks, agricultural and forestry activities	80/80	75/75

[14] Source: Minnesota Administrative Rules, Chapter 7030 accessed at https://www.revisor.mn.gov/rules/7030/

[15] Source: Hermantown Zoning Code, MN accessed at https://hermantownmn.com/government/city-ordinances/

	Maximum Permissible Hourly Sound Pressure Levels (dBA)
dBA: An A-weighted decibel is a unit for measuring sound levels that is adjusted to represent how the human ear hears sound L_{10}: sound level, in dBA, which is exceeded ten percent of the time for a one-hour survey L_{50}: sound level, in dBA, which is exceeded fifty percent of the time for a one-hour survey	

20. TRANSPORTATION

a. Describe traffic-related aspects of project construction and operation. Include 1) existing and proposed additional parking spaces; 2) estimated total average daily traffic generated; 3) estimated maximum peak hour traffic generated and time of occurrence; 4) source of trip generation rates used in the estimates; and 5) availability of transit and/or other alternative transportation modes.

The information listed above will be provided in the traffic and transportation analysis that will be included in the AUAR. Coordination will occur with the City of Hermantown and St. Louis County to determine the scope and locations of the analysis for the traffic study. The trip generation will be calculated based on trip generation rates from existing sites which are similar to the development scenario's operational size and scope.

Transit

Currently, there are no transit routes serving the Study Area. It is not anticipated that there will be significant change in transit usage.

Bike and Pedestrian Infrastructure

There is currently no dedicated bike or pedestrian infrastructure serving the Study Area. Future City and County Bike and Pedestrian Plans will be reviewed as part of the AUAR.

b. Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system. If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Use the format and procedures described in the MnDOT's Access Management Manual, Chapter 5 (available at: http://www.dot.state.mn.us/accessmanagement/resources.html) or a similar local guidance.

AUAR Guidance: For AUAR reviews, a detailed traffic analysis will be needed, conforming to the MnDOT guidance as listed on the EAW form. The results of the traffic analysis must be used in the response to Items 16 and 17.

A traffic impact study will be completed as part of the AUAR because the trip generation is anticipated to exceed the 250-trip peak hour vehicle threshold. The traffic impact study will be summarized in the AUAR, including information on estimated traffic generation, traffic impacts, relevant information from relevant transportation plans and traffic studies, and potential improvements and mitigation measures. The analysis will be completed for the following scenarios:

- Existing Conditions
- Opening Year No-Build Conditions
- Opening Year Partial Buildout Conditions
- Peak Construction Traffic Conditions
- Horizon Year No-Build Conditions
- Horizon Year Buildout Conditions

The AUAR will include intersection capacity analyses for intersections adjacent to the Study Area and will include the review of intersection operations at site access points. St. Louis County staff were consulted, and the following intersections will be included in the analysis and are shown in Figure 14:

- US Highway 2 & Midway Road
- Midway Road & Morris Thomas Road
- Midway Road & St. Louis River Road
- US Highway 2 & St. Louis River Road
- US Highway 2 & Morris Thomas Road

Additionally, the following intersections will be included in the analysis but are not currently shown in Figure 12.

- Proposed Primary Access Intersection(s)
- Proposed Construction Access Intersection(s)

Construction Conditions Analysis

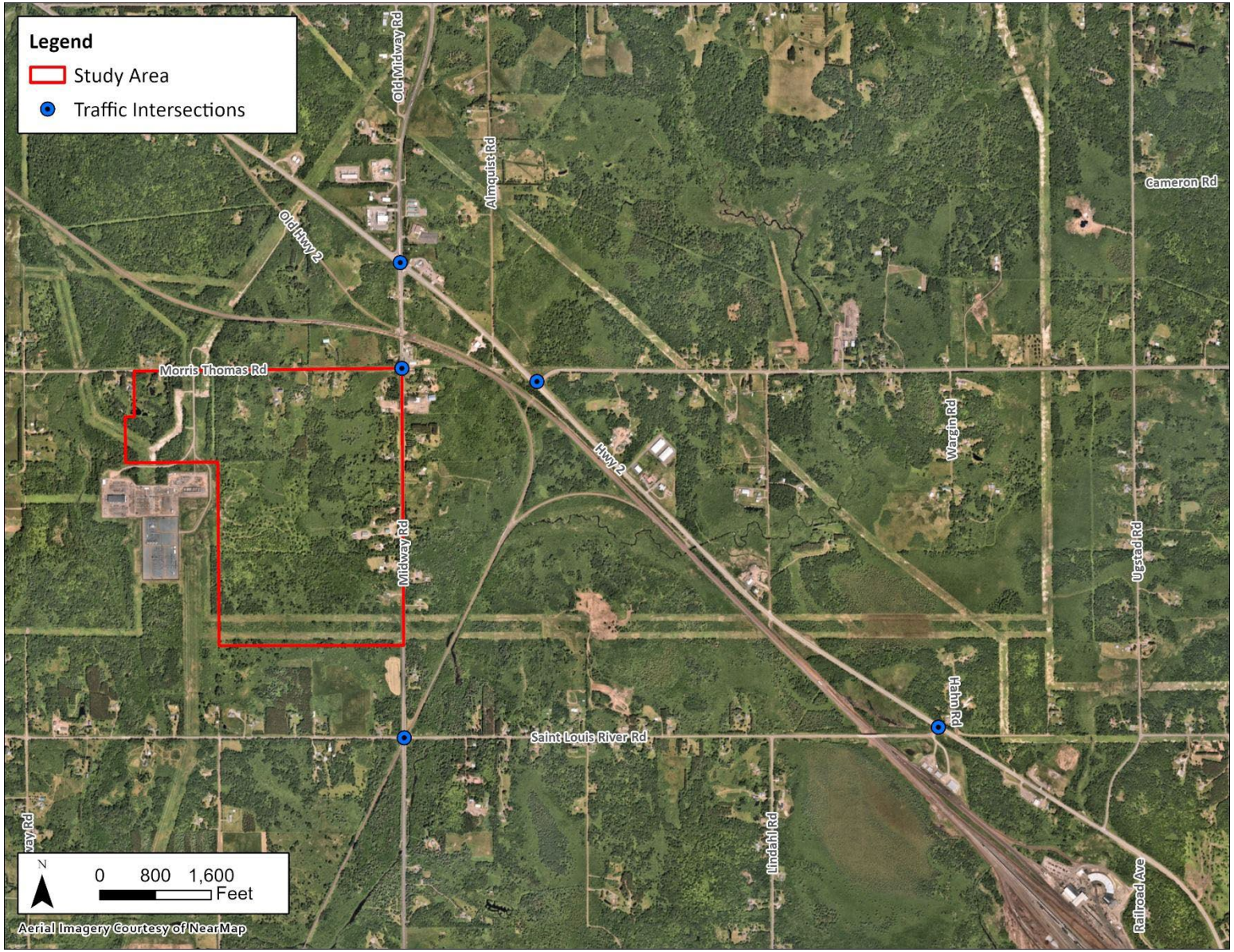
In addition to the traffic study, a construction conditions analysis will also be completed for the data center scenario as the construction period is anticipated to see significantly higher trip generation than what will occur at full build out during typical operations of this type of development.

Construction trip generation of the development will be estimated to determine the Peak Construction Conditions (2030) traffic volumes. A capacity analysis will be conducted for this scenario to determine the impacts of the projected construction traffic on the roadway network.

c. Identify measures that will be taken to minimize or mitigate project related transportation effects.

The AUAR will address any mitigation measures identified through the traffic analysis.

Figure 14: Traffic Study Intersections



21. CUMULATIVE POTENTIAL EFFECTS

AUAR Guidance: Because the AUAR process by its nature is intended to deal with cumulative potential effects from all future developments within the AUAR area, it is presumed that the responses to all items on the EAW form automatically encompass the impacts from all anticipated developments within the AUAR area.

However, the total impact on the environment with respect to any of the items on the EAW form may also be influenced by past, present, and reasonably foreseeable future projects outside of the AUAR area. The cumulative potential effect descriptions may be provided as part of the responses to other appropriate EAW items, or in response to this item.

a. Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

Cumulative effects are defined as the "effect on the environment that results from the incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid, regardless of what person undertakes the other projects or what jurisdictions have authority over the projects."[16] Because the AUAR process is intended to evaluate future development within the Study Area, the updated AUAR will address cumulative effects both (i) within the Study Area (by analyzing buildout of the development scenario) and (ii) outside the Study Area where other projects may contribute to cumulative effects on shared resources. The timeframe considered includes projects that would be constructed in the reasonably foreseeable future (by 2030) by other private and public entities that have made future project plans and timelines publicly available.

b. Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

The AUAR will identify any additional reasonably foreseeable projects that may interact with the environmental effects of the development scenario.

c. Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

The AUAR will include a discussion of potential cumulative effects associated with nearby ongoing or planned projects. Regardless of whether additional environmental review is required for backup generation or energy storage, the updated AUAR will treat those elements, to the extent not fully analyzed, as cumulative potential effects or as part of the environmental context for the development scenario, consistent with Minn. R. 4410.0200, subp. 11a.

[16] Minnesota Rules, part 4410.0200, subpart 11a

22. OTHER POTENTIAL ENVIRONMENTAL EFFECTS

AUAR Guidance: If the project may cause any additional environmental effects not addressed by Items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

Energy Use

While AUAR Guidance does not require consideration of energy resources as a separate consideration, in light of heightened public interest in energy resources needed for a data center development, the AUAR will discuss energy use, including an estimate of peak electricity demand, and an explanation of the factors that go in to determining backup generation needs. The AUAR will also discuss the existing utility infrastructure in and adjacent to the Study Area and potential additions needed to serve the development scenario (i.e. new transmission or distribution infrastructure).

Electromagnetic Fields (EMF)

The AUAR will include a high-level overview of EMF potential effects from the scenario.

MITIGATION PLAN

AUAR Guidance: The draft and final AUAR documents must include an explicit mitigation plan. It must be understood that the mitigation plan is a commitment by the RGU to prevent potentially significant impacts from occurring from specific projects. It is more than just a list of ways to reduce impacts—it must include information about how the mitigation will be applied and assurance that it will. Otherwise, the AUAR may not be adequate and/or specific projects may lose their exemption from the individual review.

Mitigation Plan

A mitigation plan specifies the mitigation measures that will be imposed upon future development within the area in order to avoid or mitigate potential environmental impacts. Minn. R. 4410.3610, subp. 5(C). The AUAR will include a detailed and explicit mitigation plan, which is a commitment by the RGU to prevent potentially significant impacts from the proposed project. The mitigation plan will include information about how the mitigation will be applied, and assurances that it will be applied.