Appendix G

Agricultural Impact Mitigation Plan

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Agricultural Impact Mitigation Plan (AIMP)

Enbridge Solar (Plummer) LLC • Plummer Solar Project

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1.0 PURPOSE AND APPLICABILITY OF THE AGRICULTURAL IMPACT MITIGATION PLAN

This Agricultural Impact Mitigation Plan (AIMP or Plan) was developed by Enbridge Solar (Plummer), LLC (Plummer Solar), in consultation with the Minnesota Department of Agriculture (MDA). This Plan provides measures that Plummer Solar, including its staff and/or contractors, plan to use to avoid, lessen, and/or rectify possible adverse impacts to agricultural lands resulting from developing, operating, and ultimate decommissioning of the Plummer Solar Project (Project) Site in Red Lake County, Minnesota. This Plan also includes descriptions of best management practices (BMPs) that will be used during construction to minimize long-term adverse soil impacts. This Plan will be incorporated by reference into the Site Permit issued by the Minnesota Public Utilities Commission (Commission). The mitigation measures specified in this Plan will be implemented in accordance with the conditions discussed below.

Plummer Solar owns or leases land required for the Project. Agricultural production will temporarily cease during the approximate 35-year Project lifespan. This Plan contains measures to allow Project lands to return to agricultural production upon Project decommissioning. Plummer Solar and the construction contractor (Contractor) employed to develop the Project and associated infrastructure will follow this Plan. The Contractor may identify some procedures and methods that are more efficient and yield better results during Project construction with Plummer Solar approval.

This Plan and the associated Vegetation Management Plan (VMP) seek to maintain and/or emulate the Project Site's landscape characteristics. Plummer Solar and its contractors will select native and non-invasive naturalized plant species that grow well in shady conditions and do not hinder solar panel operation while providing benefits to pollinator species and soil conditions. In general, the lands occupied by the photovoltaic (PV) solar array will be seeded with a mix of shorter prairie plant species at the base of the solar arrays, a mix of taller prairie plant species will be utilized in the open spaces between fences and arrays, and a wetland plant species seed mix used for areas that will convey and/or retain water as part of the site’s stormwater management plan. The final details for seeding zones are detailed in the VMP. Plummer Solar and its contractors coordinated with applicable agencies and state plant specialists to formulate native and naturalized, non-invasive plant seed mixes. Plummer Solar will use seed mixes that can attain efficient operation of the PV solar array, maintain and/or reestablish stable perennial land cover, keep weeds in check, preclude soil erosion and minimize runoff, preserve water infiltration capabilities of the soil, and maintain or create habitat conducive to pollinator species.

Plummer Solar and its contractors will manage vegetation following the appropriate BMPs included in this Plan as part of an adaptive management approach. Plummer Solar and its contractors have prepared a detailed VMP to delineate vegetation parameters and procedures to protect and/or restore the existing agricultural land characteristics. Additional details on plans for seeding are in the VMP.

This Plan is organized into the following sections:

- Section 1 includes the Plan's purpose and applicability
- Section 2 includes a Project overview
- Section 3 discusses limitations and the suitability of the on-site soils
- Section 4 provides the BMPs to be used during construction and operation
- Section 5 summarizes the decommissioning process

2.0 PROJECT OVERVIEW

Plummer Solar is a renewable energy development company that will construct, own, and operate the Project. Plummer Solar is an independent power producer (IPP) and wholly-owned subsidiary of Enbridge Holdings (Green Energy) L.L.C.

The Project is a proposed solar energy generating system with a nameplate capacity up to 130 MW AC in Emardville Township, Red Lake County, Minnesota (Figure 1). The city of Plummer is northwest of the Project. The solar facility will be situated on predominantly agricultural land.

2.1 PROJECT COMPONENTS

The Project is situated on approximately 855 acres of privately-owned land under contract or owned by Plummer Solar and/or its affiliates (with the exception of public road right-of-way) (Land Control Area; Figure 2). Of the 855-acre Land Control Area, approximately 796.9 acres are currently designated to host Project infrastructure (Project Site; Figure 2). The Project Site is in Sections 12, 13, 14, and 15 of Township 151 North, and Range 42 West and is south of County State Aid Highway 1, west of County Highway 129, north of 190th Street SE, and east of U.S. Highway 59. The Land Control Area extends beyond the Project Site (Figure 2). The following major components, systems, and associated facilities will be constructed within the Project Site:

- Solar panels, racking system, and inverters
- Electrical collection system
- Project substation
- Operations and maintenance building (O&M)
- Access roads
- Several weather stations
- Aboveground 115 kV transmission line (<1,500 feet)
- Perimeter fencing
- Stormwater conveyance and management system

During construction activities, laydown areas within the Project Site will be used to stage equipment and for temporary construction-related needs. Final site design may necessitate development of temporary laydown areas beyond the anticipated Project Site and within the Land Control Area. Reclamation of temporary laydown areas would follow the same protocol as the rest of the site as detailed in Section 5.1, but would be completed as soon as construction is complete.

The solar panels deliver DC power to the inverters through cabling that will be buried in an underground trench or plowed in place (at least 3 feet deep). The AC collector system will transmit the power to the Project Substation adjacent to the interconnection point (Figure 2). The cables may need to be trenched deeper to avoid existing utilities or other features. The geotechnical analysis, constructability, and availability of materials will inform the site-specific electrical collection technology used.

The Project Substation will consist of supporting structures for high voltage electrical structures, breakers, transformers, lightning protection, and control equipment according to the Interconnection Agreement with the Midcontinent Independent System Operator (MISO) specifications. The Project Substation location will be graded and overlain with crushed rock, if necessary.

The O&M building location could also be subject to permanent disturbance. It will include the Supervisory Control and Data Acquisition (SCADA) system and provide a place for maintaining and storing equipment and tools.

The site will maintain access roads throughout the Project site, perimeter fencing to maintain security and prevent public access, and a stormwater management system as described in the Project's Stormwater Management Pollution Prevention Plan (SWPPP). This stormwater system will be designed to capture, route, and treat stormwater runoff for volume control and water quality per the Minnesota Construction Stormwater General Permit. These areas will be vegetated with seed mixes, as described in the VMP, to stabilize soils and minimize erosion.

2.2 CONSTRUCTION

Plummer Solar anticipates beginning construction in 2026 and commercial operation by the end of 2027. The construction activities will include:

- Clearing and vegetation removal activities
- Earthwork and grading
- Installing access roads, solar arrays, collection system, inverters, substation, and other permanent features
- Restoration

Multiple construction activity stages or phases will possibly occur at the same time. The SWPPP will outline measures to minimize erosion and the potential for off-site sediment transport. Timing and location of construction activities will be described in the SWPPP.

3.0 PROJECT LOCATION CHARACTERISTICS

The Project Site is in the Tallgrass Aspen Parklands Province in a sparsely populated rural agricultural area in the Aspen Parklands Subsection of the Lake Agassiz, Aspen Parklands.[1]

3.1 LAND USE AND LAND COVER

Land use in the Project vicinity is predominantly agricultural.[2] Wheat, corn, and soybeans were grown within the Project Site in 2022 and 2023. Based on aerial imagery, land in the Project vicinity has been used agriculturally for decades. Most of the Project Site is Prime Farmland, Farmland of Statewide Importance, and Prime Farmland if drained (Section 3.3).

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[1] Minnesota Department of Natural Resources. Aspen Parklands Subsection. Ecological Classification System. Accessed June 2023 at: https://www.dnr.state.mn.us/ecs/223Na/index.html

[2] U.S. Geological Survey. 2019. National Land Cover Database. https://www.mrlc.gov/data/nlcd-2019-land-cover-conus. Accessed August 2022.

The other land uses in the Project vicinity are rural residences, a commercial operation (Triple D Construction and Leasing located adjacent to the Project site and pump stations), and commercial and residential areas concentrated within the city of Plummer.

3.2 SOIL PROPERTIES AND QUALITIES

The Soil Survey Geographic Database (SSURGO) is the digitized county soil survey and provides datasets with map data relating soil map unit polygons to component soil characteristics and interpretations. The SSURGO soil map unit polygons are clipped in GIS to the Project Site and the Land Control Area. The Project soil varies considerably in the physical and chemical characteristics that strongly influence the soil's suitability and limitations for construction, reclamation, and restoration.

Figure 3 illustrates the mapped soil types within the Project Site and Land Control Area. Table 1 summarizes the soil properties and textures of the mapped soil types. Most of the Project Site contains I59A-Smiley loam, 0 to 1% slopes (Figure 3).

Table 1 Soil Properties and Qualities Summary Table

Total Acres	Surface Texture (acres)					Slope Range (acres)		Drainage Class (acres)						Topsoil Thickness (acres) [1]			Hydric Soils (acres) [2]	Avg Depth to Water Table <10" (acres)
	Sandy Loam	Fine-sandy Loam	Loamy	Muck	Mucky Loam	0-5%	>5-8%	E	W	MW	SWP	P	VP	0-12"	>12-15"	>15-18"		
PROJECT SITE																		
796.9	31.9	55.4	693.8	3.3	12.6	796.9	0.0	0.0	0.0	43.6	0.0	735.5	17.8	793.6	3.3	0.0	753.3	753.3
LAND CONTROL AREA (outside Project Site)																		
58.1	0.0	22.5	34.8	0.4	0.5	58.1	0.0	0.0	0.0	14.4	0.0	42.8	0.9	57.7	0.4	0.0	43.6	43.6
TOTAL																		
855.0	31.9	77.9	728.5	3.7	13.0	891.0	0.0	0.0	0.0	58.1	0.0	778.3	18.7	851.3	3.7	0.0	796.9	796.9

Resource: Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database (SSURGO)

1 Topsoil thickness is the aggregate thickness of the A horizon.

2 Soils included in the total acres reported for hydric soils include those with either a "predominantly hydric" (67% to 99%) rating or a "all hydric" (100%) rating.

3.2.1 Soil Surface Texture

The Soil Survey Geographic Database describes surface texture as:

> "Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. 'Loam,' for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand."

An appropriate modifier, e.g., "loamy," is added if the content of particles finer than sand is 15 percent or more.

Soil texture affects soil properties, including infiltration, structure, porosity, water-holding capacity, and chemistry.[3] Most soils in the Project Site and Land Control Area (approximately 90%) are loamy soils. Loams provide good water storage and aeration.[4] The second most prominent surface texture present is fine-sandy loam (approximately 9%). We anticipate these finer textures would retain more water as they are less parts sand.

3.2.2 Slope Range

The Project Site and Land Control Area consist of slopes in the 0 to 5% slope range. The flat nature is conducive to Project development but may also make the site more susceptible to wind erosion and difficulties with drainage, so these aspects are carefully considered in the design.

3.2.3 Drainage Class

The Soil Survey Geographic Database describes surface texture as:

> "'Drainage class (natural)' refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized: excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the 'Soil Survey Manual.'"

The soil drainage class indicates how quickly water drains from an area and the frequency and duration of wet soil periods and dictates the vegetation types that can grow and activities that can take place.[5] Most soils present within the Project Site and Land Control Area (or approximately 91%) are classified as

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[3] Soil classification - Minnesota Stormwater Manual (state.mn.us), accessed August 23, 2023.

[4] https://stormwater.pca.state.mn.us/index.php?title=Soil_physical_properties_and_processes, accessed August 23, 2023.

[5] https://mnatlas.org/resources/soils-drainage-class/, accessed August 23, 2023.

poorly drained and some (approximately 7%) are classified as moderately well drained. Soils in poor drainage classes are very productive when drained (drain tile is installed at the eastern parcels) and are well suited for and frequently converted to agriculture after installing subsurface drain tile.

3.2.4 Topsoil Thickness

SSURGO maps identify nearly all soils within the Land Control Area (or approximately 99%) as having shallow topsoil thickness between 0 and 12 inches.

3.2.5 Hydric Rating

Hydric soils form in areas permanently or seasonally saturated with water and, as a result, develop anaerobic conditions at some point during the growing season, which affect the types of vegetation they can support. Hydric soils are also an important indicator of wetlands, and models that predict wetland locations often include location information.[6]

SSURGO maps identify nearly all soils within the Project Site and Land Control Area (approximately 93%) as predominantly hydric or hydric.

3.2.6 Depth to Water Table

The depth to the water table is important for many ecological processes, including vegetation growth patterns, interactions with surface water, and pollutant transport.[7] Shallow groundwater also has implications for construction stormwater design, which requires 3 feet of separation from the bottom of an infiltration practice to the seasonal high water table.[8]

SSURGO data classifies the average depth to the water table within the Land Control Area as shallow. Specifically, SSURGO data suggests the depth to the water table to be less than 10" deep within 93% of the Project Site and Land Control Area. During a geotechnical analysis in August 2023, groundwater was encountered in seven of the thirty-one borings at depths ranging from 10 to 18 feet below the surface and in three of the ten test pits at shallower depths ranging from about 3.5 to 7.5 feet below the surface[9]

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[6] https://mnatlas.org/resources/soils-grid-hydric-rating/, accessed August 23, 2023.

[7] https://mnatlas.org/resources/water-table-depth/#:~:text=The%20depth%20to%20the%20water%20table%20is%20important%20for%20many,for%20drinking%20and%20irrigation%20water., accessed August 23, 2023.

[8] https://stormwater.pca.state.mn.us/index.php/Shallow_groundwater, accessed August 23, 2023.

[9] Report of Subsurface Exploration and Geotechnical Evaluation Plummer Solar Farm Plummer, Minnesota Building & Earth Project No.: BH230214, November 13, 2023.

3.3 CLASSIFICATION DATA: PRIME FARMLAND AND LAND CAPABILITY CLASS

Table 2 summarizes the total prime farmland and land capability class classifications within the Project Site and Land Control Area.

Table 2 Prime Farmland and Land Capability Class Summary Table

Total Acres	Prime Farmland					Land Capability Class						
	Prime	Statewide Importance	If Drained	If Protected	Not Prime	2c	2s	2w	3e	3w	4w	6w
PROJECT SITE												
796.9	11.8	102.4	679.5	0.0	3.3	2.4	9.4	679.5	31.9	56.0	0.0	17.8
LAND CONTROL AREA (outside of Project Site)												
58.1	14.4	5.9	37.3	0.0	0.4	2.1	12.3	37.3	0.0	5.5	0.0	0.9
TOTAL												
855.0	26.2	108.3	716.8	0.0	3.7	4.5	21.7	716.8	31.9	61.5	0.0	18.7

C.F.R. 657.5(a) provides, in part, that prime farmland is:

> "land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses… It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding."

Minnesota Rule 7850.4400, subpart 4, states that:

> "no large electric power generating plant site may be permitted where the developed portion of the plant site… includes more than 0.5 acres of prime farmland per megawatt of net generating capacity."

Most soils within the Project Site and Land Control Area (approximately 84%) are designated Prime Farmland If Drained (Figure 4). The remaining area is designated Prime Farmland of Statewide Importance (13%) and Prime Farmland (3%). Minnesota's Department of Commerce's guidance regarding evaluations when a project is on more prime farmland than Minnesota Rule 7850.4400 states is addressed in the Site Permit Application.

The Land Capability Class (LCC) soil grouping system is used to classify soils based on their suitability for most kinds of field crops. The soils are grouped according to their limitations for field crops, the risk of damage if used for crops, and how they respond to management. Capability classes are designated by

the numbers 1 through 8, indicating progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

- Class 1 soils have few limitations that restrict their use.
- Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.
- Class 3 soils have severe limitations that reduce the choice of plants, require special conservation practices, or both.
- Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.
- Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.
- Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Most of the soils (87%) fall within the 2 class (2c, 2s, and 2w); approximately 84% fall specifically within 2w. The letters after the class represent the main hazard where:

- "c" shows that the chief limitation is climate that is very cold or very dry;
- "s" shows that the soil is limited mainly because it is shallow, droughty, or stony; and
- "w" shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage).

Soils present within the Project Site and Land Control Area are suitable for agricultural purposes, particularly if drained, as supported by the Prime Farmland and LCC classifications.

3.4 Construction Related Soil Suitability and Limitation Ratings

The SSURGO soil data also includes designated soil suitability and limitations ratings as they relate to construction. Table 3 provides an acreage breakdown of selected soils ratings within the Project Site and Land Control Area.

Table 3 Construction Related Soil Suitability and Limited Ratings Table

Total Acres	Highly Erodible		Compact Prone	Rutting Hazard			Drought Susceptible (Y/N)
	Water	Wind		Slight	Moderate	Severe	
PROJECT SITE							
796.9	0.0	3.3	737.4	0.0	87.3	709.6	Y
LAND CONTROL AREA (outside of Project Site)							
58.1	0.0	0.4	49.2	0.0	22.5	35.6	Y
TOTAL							
855.0	0.0	3.7	786.6	0.0	109.8	745.2	Y

3.4.1 Erodibility

SSURGO maps do not deem the area within the Project Site and Land Control area as highly susceptible to erosion..

3.4.2 Compaction and Rutting Hazard

Most soils within the Project Site and Land Control Area (or 92%) are compaction-prone, and most (82%) have a severe rating for the rutting hazard. The severe rating indicates that ruts form readily.

The degree of soil rutting and compaction corresponds to the soil texture and moisture levels, which worsen when heavy equipment traffic impacts wet soils with fine or medium textures.

3.4.3 Drought

Some soils are prone to drought stress occurring in the plants growing on them. SSURGO maps deem all soils within the Project Site and Land Control Area as drought-susceptible and received a rating of either drought-vulnerable (SSURGO rating index is greater than 0.67 but less than 1.0) or moderately drought-vulnerable (SSURGO rating index is greater than 0.33 but less than 0.67). The soil and site properties are such that drought conditions generally occur annually. The soil may have low water storage capacity (5 to 15 cm), and the site may have low annual precipitation, high annual temperature, or both.

The soil and site properties are such that some water stress may occur in an average year, but plant-available water is generally adequate in a good year. Water storage is in the range of 15 to 25 cm in a good year. Rainfall and estimated potential evapotranspiration are nearly equal.

3.5 PROJECT LOCATION AND SOIL SUMMARY

The soils within the Project Site generally comprise loamy soils suitable for agricultural production. A large percentage of the soils are designated as Prime Farmland if drained. The Project Site lies mostly in flat to gently rolling hills, which are ideal for agricultural purposes; however, soils are also likely to be poorly drained and susceptible to rutting and compaction.

4.0 BMPS DURING CONSTRUCTION AND OPERATION

The Project will be constructed on property owned or leased by Plummer Solar. Plummer Solar does not anticipate direct impacts to adjacent lands.

Plummer Solar anticipates earth-disturbing activities will include:

- Grading, if necessary, for drainage improvements and building of interior access roads for long-term operantion and maintenance
- Digging trenches for the DC and AC collection system
- Installation of piles to support the racking system
- Foundational work for the Project substation and inverter skids, as necessary

Since the PV arrays can be designed to follow existing grades within certain tolerances, minimal site balancing (grading) is expected to be necessary..

4.1 ENVIRONMENTAL MONITOR

Plummer Solar will coordinate with the MDA to identify a suitable independent environmental monitor (Monitor). The Monitor will assist in overseeing any earthmoving activities, including but not limited to grading, trenching, soil stockpiling/storage, and potential for compaction, during Project construction to confirm appropriate measures are taken to properly segregate and handle the topsoil. The Monitor will have a variety of duties, including but not limited to:

- Perform regular inspections during the major earthmovingphases of Project construction, including grading, trenching, soil stockpiling/storage, and potential for compaction.
- Observe construction crews and activities to oversee that topsoil is segregated and managed appropriately.
- Monitor the site for areas of potential soil compaction (except within access roads) and make specific recommendations for decompaction.
- Assist in determining if "wet weather" conditions exist and provide recommendations to the construction manager on stormwater BMPs.
- Draft a weekly report confirming adherence to soil BMPs during the Project construction earthmoving phase and upon completing earthmoving activities. Weekly inspection reports will be available to the MDA upon request.

4.2 TEMPORARY EROSION AND SEDIMENT CONTROL

By adhering to a site-specific SWPPP required by the Minnesota Pollution Control Agency (MPCA) general construction stormwater permit, Plummer Solar will minimize the risk of excessive soil erosion on lands disturbed by construction.

Prior to construction, Plummer Solar will work with engineers or the Contractor to outline reasonable methods for erosion control and prepare the SWPPP. The primary control is minimizing earth work across the site. By commencing work on a fully vegetated and stable site, limiting earthwork will minimize erosion, compaction concerns, and mixing of soils. Additional controls that will be implemented as needed thoughout construction include appropriate perimeter controls on the downside of disturbed areas, near waterways, and near drain tile inlets. These perimeter controls would minimize sediment transport off site from stormwater. Check dams and straw wattles may also be used to slow water during rain events in areas with the potential for high-volume flow. In addition, the Contractor may use erosion control blankets in certain areas based on the site conditions and sequence of construction acitivies. Lastly, as outlined above, topsoil and sub-grade material will be piled, loosely compacted, and/or "tracked" while stored. The BMPs employed to mitigate wind and stormwater erosion on these soil stockpiles will include installing perimeter controls around the base of the piles and installing straw wattles as necessary to prevent

sedimentation off-site. Additional BMPs may be used if site conditions warrant. The SWPPP will identify designated on-site inspectors employed by the Contractor for routine and post-rain event stormwater inspections per the plan outlined in the SWPPP.

4.3 SOIL SEGREGATION AND DECOMPACTION

During construction, one of the primary means to protect and preserve the valuable topsoil within the Project will be to minimize earthwork. In areas where earthwork (grading, road construction, cable installation, foundation installation, etc.) is required, the topsoil will be separated from the other subgrade/subsoil materials. There may be limited situations where excavated subsoil must be stored on adjacent undisturbed topsoil. In these situations, subsoil will be returned to the excavation with as little disturbance of the underlying topsoil as practicable. Laying down a thin straw mulch layer as a buffer between the subsoil and topsoil may be used to facilitate more effective separation of the subsoil and underlying topsoil during the excavation backfill process.

As a preliminary recommendation, Plummer Solar suggests that the full depth of topsoil be stripped up to a maximum of 12 inches in areas of construction grading. It is not anticipated that areas with topsoil greater than 12 inches will be encountered; however, if deeper topsoil is identified,it will be treated as subsoil. During the activities that require temporary excavations and backfilling (e.g., trenching) the Contractor will first replace subgrade material in the excavations and compact as necessary, followed by replacing the topsoil to the approximate locations from which they removed it. The Contractor will grade topsoil to the approximate pre-construction contour. Plummer Solar will strive to avoid compaction in other areas where the design does not require it.

Most topsoil disturbance will occur during installation of roads and any needed drainage improvements. Other activities that impact topsoils are underground collection trenching and cable installation, inverter footing installation, installation of piles, and substation construction.

Following earthwork activities that require topsoil/subsoil segregation, topsoil materials will be re-spread on top of the backfilled subsoils or disturbed areas and de-compacted as needed or re-spread within the Land Control Area.

4.4 PROJECT PHASING

Plummer Solar will document plans for construction phases in the SWPPP. The first phase of work is anticipated to be the general civil work.

Based on the preliminary design, minimal grading, outside improvements to existing drainage, will be needed. The site will remain largely as-is; large-scale grading is not anticipated. Final design will dictate the grading requirements, if any.

The Contractor will start constructing the internal road network. This work would start by stripping topsoil materials from the roadbeds to a depth of up to 12 inches. Topsoil will be windrowed to the edges of each roadbed by pushing materials into rows of stockpiles adjacent to the road, loosely compacted, and/or "tracked" with stormwater and wind erosion BMPs in place. The Contractor will then compact the sub-grade materials, install gravel, and compact to engineers' requirements. During this phase of work, the Contractor will grade or shape the Project drainage ditches as identified on the final grading plan. This work will be completed by stripping and storing topsoils in a similar manner to the road installation, completing the grading/shaping per plan, replacing the topsoils, and stabilizing per the projects SWPPP

and/or governing permit requirements. Previously stripped and windrowed topsoil will be re-spread within the Project Site area.

Following drainage improvement grading and road construction, the Contractor will begin installing pile foundations for the solar PV array racking system. This work will either directly drive the pile into the soil with pile-driving equipment or screw helical piles into the ground. The pile design will be confirmed during detailed design.

Additional detail on project phasing will be addressed in the SWPPP.

4.5 FOUNDATIONS

Foundation work for the Project substation and inverters will consist of stripping topsoil, installing the pier-type foundations, compacting sub-grade materials, re-grading spoils around the substation yard, and installing clean rock on the surface of the substation area. Stripped topsoil from the substation area will be pushed outside of the substation area and collected in designated locations for later use, where topsoil piles will be windrowed or piled, loosely compacted, and/or "tracked" with stormwater and wind erosion BMPs in place. Once substation construction is advanced, the topsoil piles will be distributed in a thin layer adjacent to the substation area.

At locations where inverters are installed, topsoil will be stripped and placed adjacent to the inverter. The areas will be excavated by mechanical equipment (e.g., an excavator) and the foundations built within the excavation with rebar and concrete. After the concrete cures and strength testing, the area of subgrade soils around the inverters will be compacted. Topsoil will be re-spread around the inverter after the concrete is set.

4.6 TRENCHING

Trenching may be required for the DC and AC collection lines underground installation. AC and DC collection cables will be installed within at least 3 feet deep trenches using the "open trench" method for any buried collection lines.

Topsoil and subgrade materials will be removed from the trench using typical excavating equipment or backhoes and segregate the topsoil as described in Section 4.3. The bottom of each trench may be lined with clean fill or imported bedding to surround the cables. After installing cables on top of the fill or bedding materials in the trench, 1 foot of screened, native backfill subsoil will be placed on the cables, followed by an additional 2 feet of unscreened native backfill trench spoil. Fill material will be compacted as necessary. After settling, the last foot of each trench will be backfilled with topsoil to return the surface to its finished grade.

4.7 SITE DRAINAGE CONSIDERATIONS

Plummer solar recognizes the important function drain tile and crops provide to manage water within this region. The identification and mitigation efforts related to drain tile are discussed below. To offset the loss of function provided by the agricultural crops, the site will be seeded, per the VMP, in such a manner to provide vegetation with deep roots and capacity to uptake water so that the impact of agricultural crop removal on the site should not result in a substantial increase in excess water over the site to manage.

4.7.1 Drain Tile Identification, Avoidance, and Repair

Identifying and locating drain tiles is complicated because of missing, incomplete, and inaccurate mapping. Drain tiles are not present within the area west of 230th Avenue SE (land which is owned by Enbridge entities). No records of drain tile have been found and no evidence of drain tile has been noted during onsite work in this area. Additionally, in January 2023, Enbridge contacted Kurt Casavan, Red Lake County Environmental Services Officer, as well as Erik Nymann (tenant and former owner) to inquire about their knowledge of potential drain tiles installed within the Project Site and west of 230th Avenue SE. Neither were aware of any drain tile on the property.

Plummer Solar is aware of the presence of drain tile within the areas east of 230th Avenue SE (land which is being leased from a private landowner), which appears to adequately drain the Project Site and discharge off site, primarily into the county-managed ditches. To the extent practicable, maps of known existing tile will be referenced during planning and construction to minimize damage to the known tile.

Plummer Solar will attempt to avoid existing drainage systems during Project construction, but given the number of pilings to be installed, it's expected that some damage may occur despite prudent efforts. The Project will make plans to maintain drainage system integrity during construction, including rerouting, reinforcement or other methods.

Following completion of construction, the Project site will be inspected after significant snow melt or rainfall events for evidence that tile systems are functioning adequately. If localized wet areas or standing water are observed, it is likely the tile system is not operating as anticipated. After review, a wholistic plan will be developed and executed to address any functional drainage concerns.

New or modified drain tile systems installed by Plummer Solar will be located using GPS equipment and archived in the Project construction files and the Project Decommissioning Plan.

The following considerations will also apply:

- Tiles will be repaired with materials of the same or better quality as the damaged tiles.
- Tile repairs will be conducted and located consistent with industry-accepted methods.
- Plummer Solar will make efforts to rectify drainage within a reasonable time frame, considering weather and soil conditions.

4.8 WET WEATHER CONDITIONS

During the Project construction, periods of wet weather may necessitate a temporary halt of construction activities. The Plummer Solar Construction Manager will have the responsibility for halting activities if weather conditions pose a risk to worker safety or if heavy equipment would cause severe rutting. Following initial grading, some activities may proceed in wet weather but would be done with caution and after installing BMPs (e.g., matting) when necessary, given the existing soil types present. Plummer Solar's Construction Manager would be responsible to oversee that topsoil erosion, rutting, compaction, or damage to drain tiles (where present) is avoided or minimized to the extent possible.

If necessary, prior to seeding, the Construction Manager may direct crews to de-compact soils following wet weather conditions. De-compaction with chisel plows prior to disking and planting is a standard method of soil preparation in areas proposed for seeding to native grasses, forbs, and pollinator species.

4.9 RESTORATION

All necessary BMPs will be adhered to following the SWPPP and VMP. These BMPs include measures such as:

- ensuring proper site drainage by maintaining existing drainage patterns to the extent feasible, and identifying, avoiding, and/or repairing drain tile, as needed;
- revegetation after the solar array construction;
- maintenance of vegetation during operations;
- maintenance utilizing well-suited plants;
- scheduling seeding periods for late spring and early summer (for optimum soil moisture for germination); and
- mulching.

4.10 ADAPTIVE MANAGEMENT DURING CONSTRUCTION

When appropriate and necessary, Plummer Solar and its contractors will employ the following adaptive management measures:

- Changing the Construction Plan should unforeseeable conditions arise that render it unworkable.
- Working with the Monitor, MDA, and other appropriate agencies to discuss and select potential new approaches to the specific conditions encountered if weather or site conditions during construction require different BMPs than those described in associated plans
- Remaining flexible and implemening new practices/procedures while maintaining safe working conditions.

5.0 DECOMMISSIONING

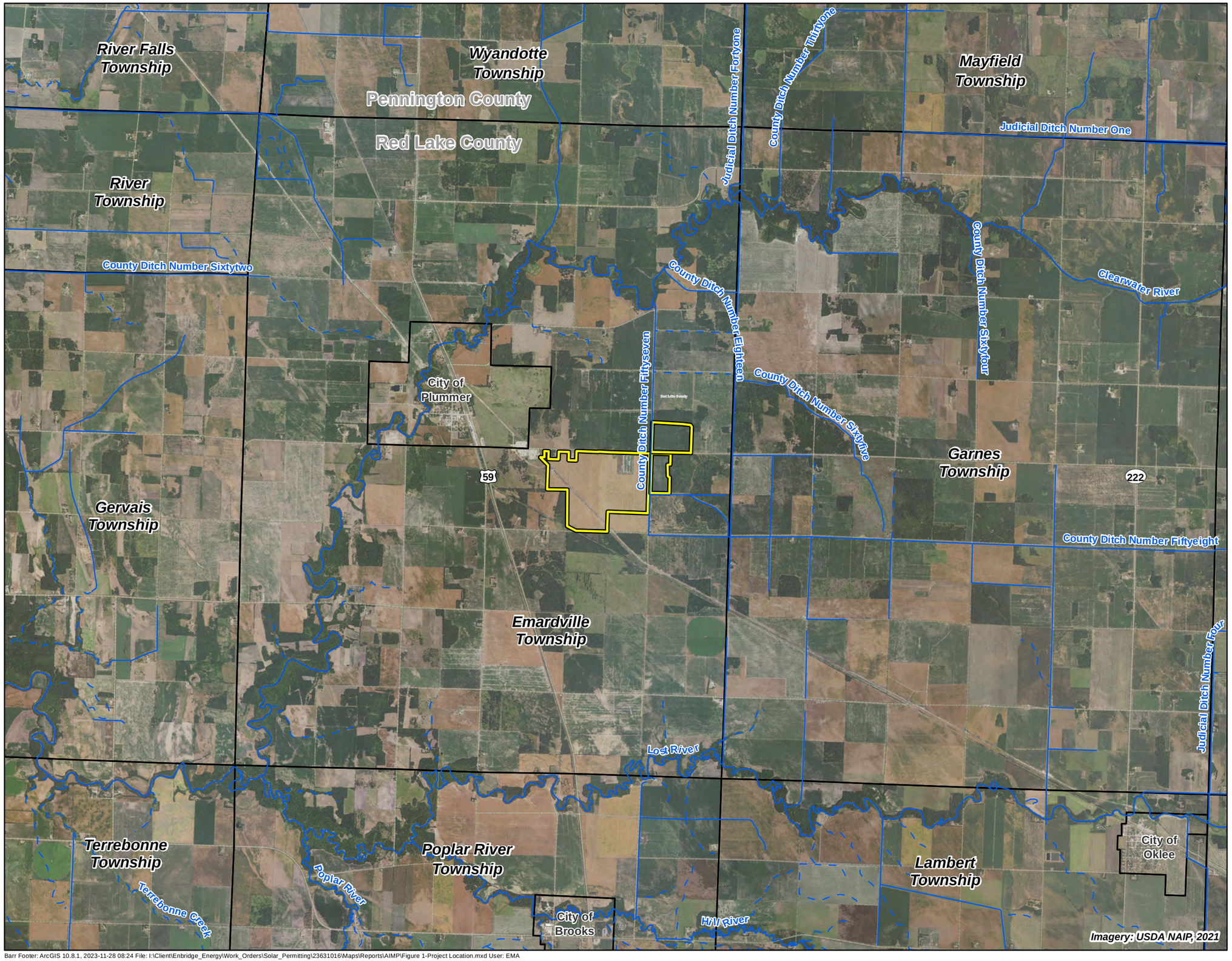
At the end of the Project's useful life, estimated to be 35 years, Plummer Solar will take necessary steps to either continue operation of the Project (such as re-permitting and potentially retrofitting) or decommission the Project and remove facilities. Plummer Solar reserves the right to extend operations instead of decommissioning at the end of the site permit term. Refer to the Project's Decommissioning Plan for additional details.

5.1 RECLAMATION OF FACILITY SITE

After removing all equipment, the area within the Project Site will be restored to agricultural use, according to the Decommissioning Plan, or to another use if the economic conditions and landowner intentions indicate another use is appropriate for the site. Holes created by steel pier foundations and fence poles, concrete pads, re-claimed access road corridors, and other equipment will be filled with stockpiled soil or via supplemented soil to pre-construction conditions. Grading and other soil disturbance activities during decommissioning will be kept to the minimum necessary, excepting any necessary drainage tile repairs or replacement, to effectively decommission the site and to maintain the soil benefits generated by the long-term operation of the Project. Decisions relating to drain tile repair or replacement at end of project life will be at the discretion of the landowner. As noted in the Decommissioning Plan, disturbed soils will be de-compacted to prepare the site for agricultural use.

6.0 LIST OF FIGURES

FIGURES



Project Site Boundary

NHD Perennial Stream

NHD Intermittent Stream

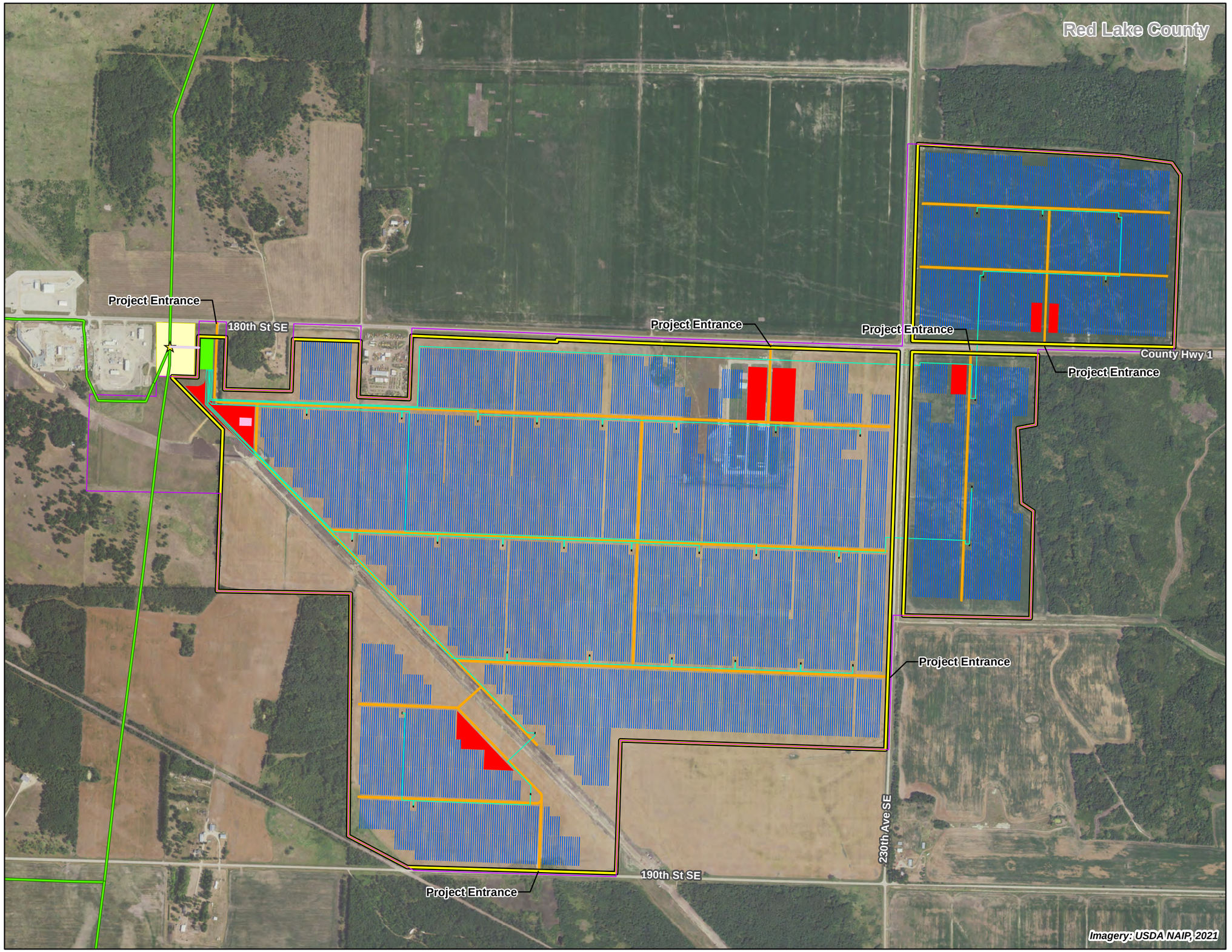
N

0 6,000 12,000

Feet

Figure 1
PROJECT LOCATION
Agricultural Impact Mitigation Plan
Enbridge Solar (Plummer),
LLC (Plummer Solar)

ENBRIDGE



- Project Site Boundary
- Land Control Area
- Solar Arrays
- Access Roads
- AC Collector
- Inverters
- O&M Building
- Project Substation
- Laydown
- Point of Interconnection
- Transmission Line
- Gen Tie
- Otter Tail Power-Owned Lands

N

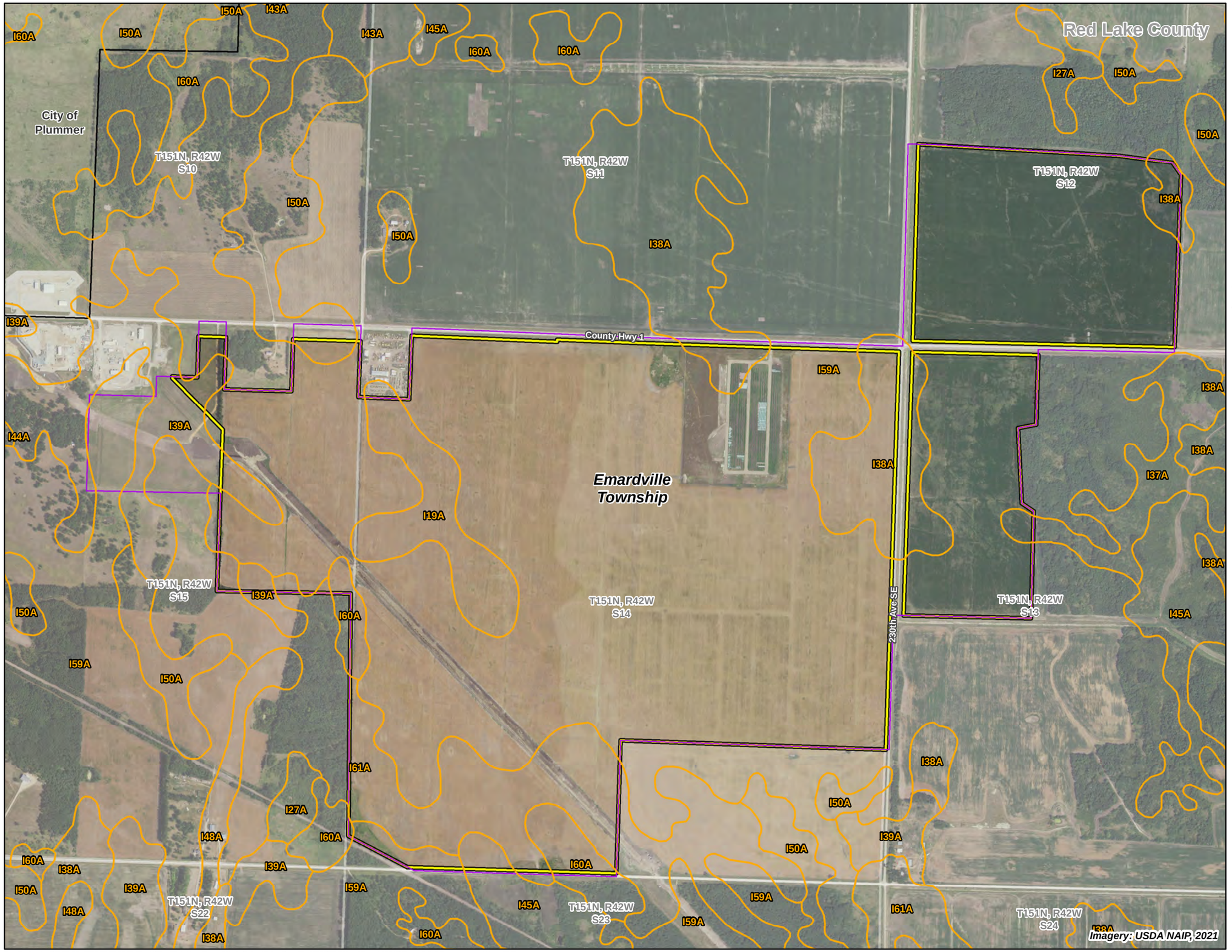
0 900 1,800

Feet

Figure 2
PRELIMINARY PROJECT LAYOUT
Agricultural Impact Mitigation Plan
Enbridge Solar (Plummer),
LLC (Plummer Solar)

ENBRIDGE

Barr Footer: ArcGIS 10.8.1, 2023-12-01 09:24 File: I:\Client\Enbridge_Energy\Work_Orders\Solar_Permitting\23631016\Maps\Reports\AIMP\Figure 2-Preliminary Project Layout.mxd User: EMA



Project Site Boundary

Land Control Area

Soil Map Unit

I19A-Foxhome sandy loam, 0 to 2% slopes
I27A-Hamre muck, 0 to 1% slopes
I37A-Kratka and Strathcona soils, 0 to 1% slopes
I38A-Kratka fine sandy loam, loamy till substratum, 0 to 1% slopes
I39A-Linveldt fine sandy loam, 0 to 2% slopes
I43A-Mavie fine sandy loam, 0 to 1% slopes
I44A-Newfolden loam, 0 to 2% slopes
I45A-Northwood muck, 0 to 1% slopes
I48A-Radium loamy sand, 0 to 2% slopes
I50A-Reiner fine sandy loam, 0 to 2% slopes
I59A-Smiley loam, 0 to 1% slopes
I60A-Smiley mucky loam, 0 to 1% slopes
I61A-Strandquist loam, 0 to 1% slopes

N

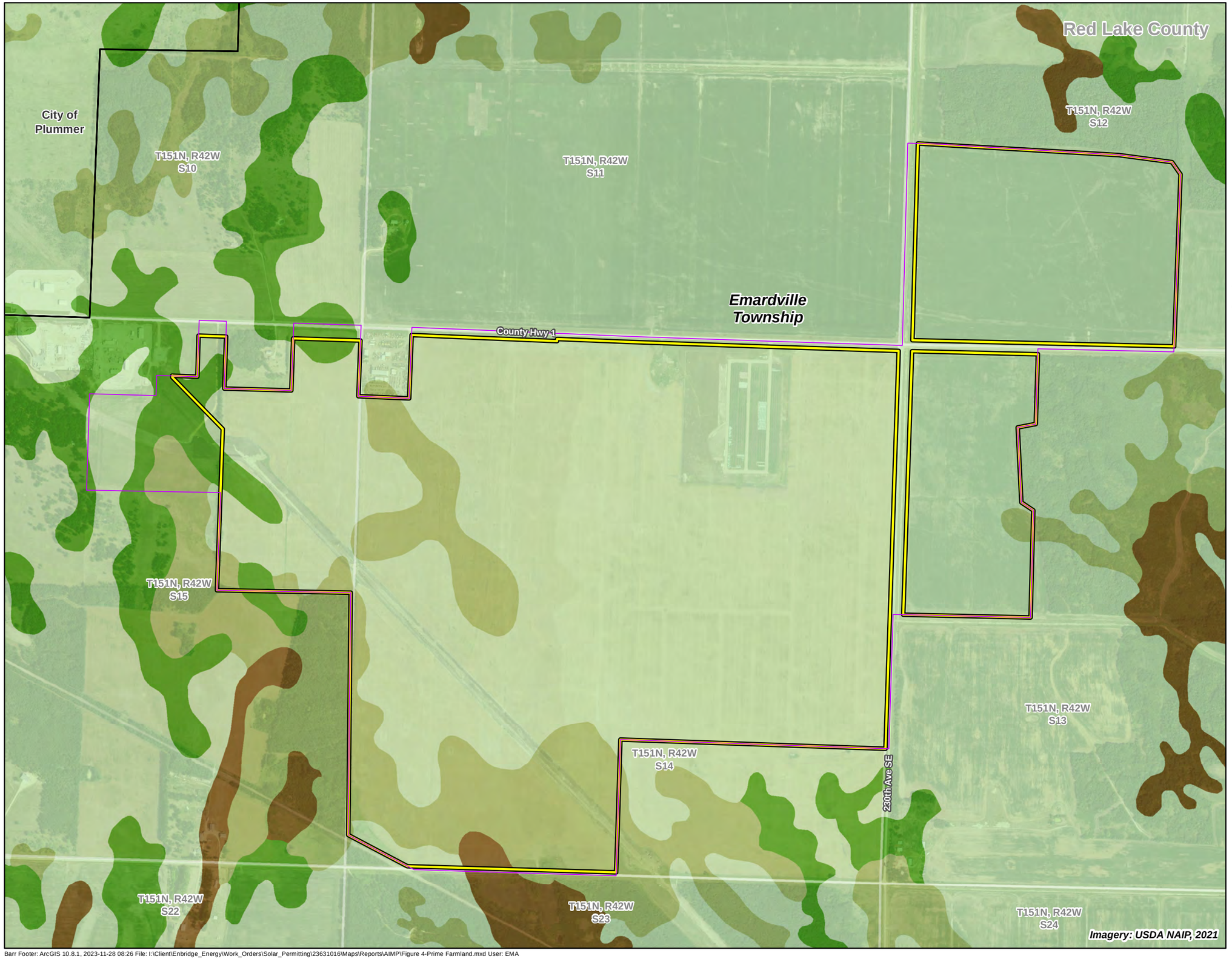
0 900 1,800

Feet

Figure 3
SOIL RESOURCES
Agricultural Impact Mitigation Plan
Enbridge Solar (Plummer), LLC (Plummer Solar)

ENBRIDGE

Barr Footer: ArcGIS 10.8.1, 2023-08-23 16:39 File: I:\Client\Enbridge_Energy\Work_Orders\Solar_Permitting\23631016\Maps\Reports\AIMP\Figure 3-Soil Resources.mxd User: EMA



Project Site Boundary

Land Control Area

Farmland Classification

- Prime farmland
- Farmland of statewide importance
- Prime farmland if drained
- Not prime farmland

N

0 900 1,800

Feet

Figure 4
PRIME FARMLAND
Agricultural Impact Mitigation Plan
Enbridge Solar (Plummer), LLC (Plummer Solar)

ENBRIDGE

Barr Footer: ArcGIS 10.8.1, 2023-11-28 08:26 File: I:\Client\Enbridge_Energy\Work_Orders\Solar_Permitting\23631016\Maps\Reports\AIMP\Figure 4-Prime Farmland.mxd User: EMA