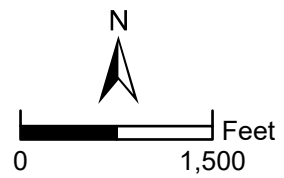
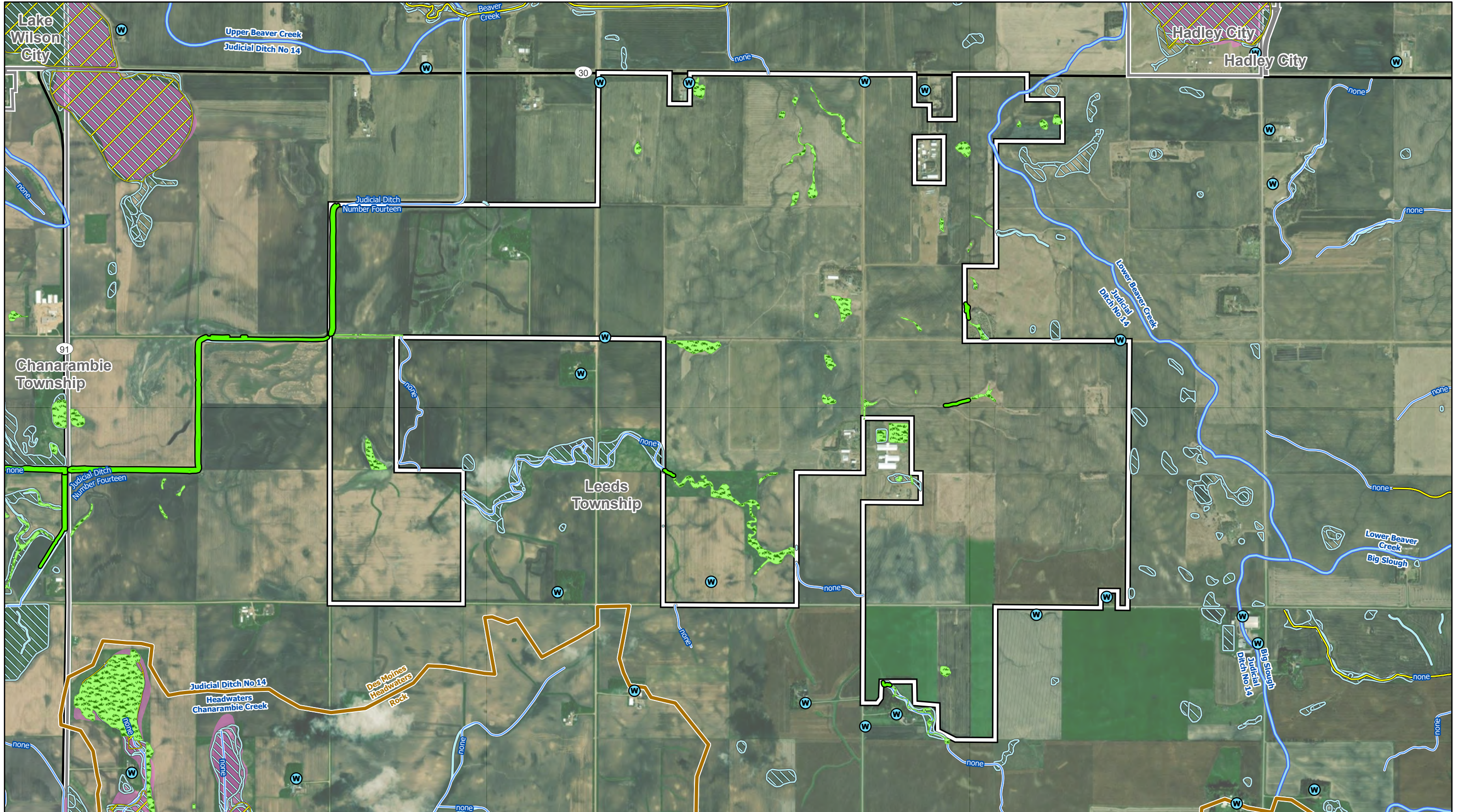
 Project Area

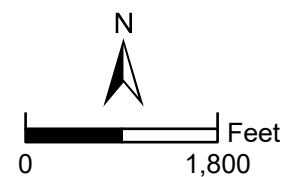
EXHIBIT 6



Data Source(s): Westwood (2022); ESRI WMS Imagery Basemap (Accessed 2021); U.S. Census Bureau (2021); USDA NHD (2021); USGS NWI (2021); Mn Geospatial Commons (2021).

Legend

- | | | | |
|--------------------------|--------------------|--------------------------|--------------------|
| Project Area | PWI Watercourse | Major Watershed Boundary | Municipal Boundary |
| Well | PWI Basin | Minor Watershed Boundary | County Boundary |
| Delineated Watercourse | Named NHD Flowline | 1% Annual Flood Chance | |
| Field Delineated Wetland | NWI Wetland | Major Road | |

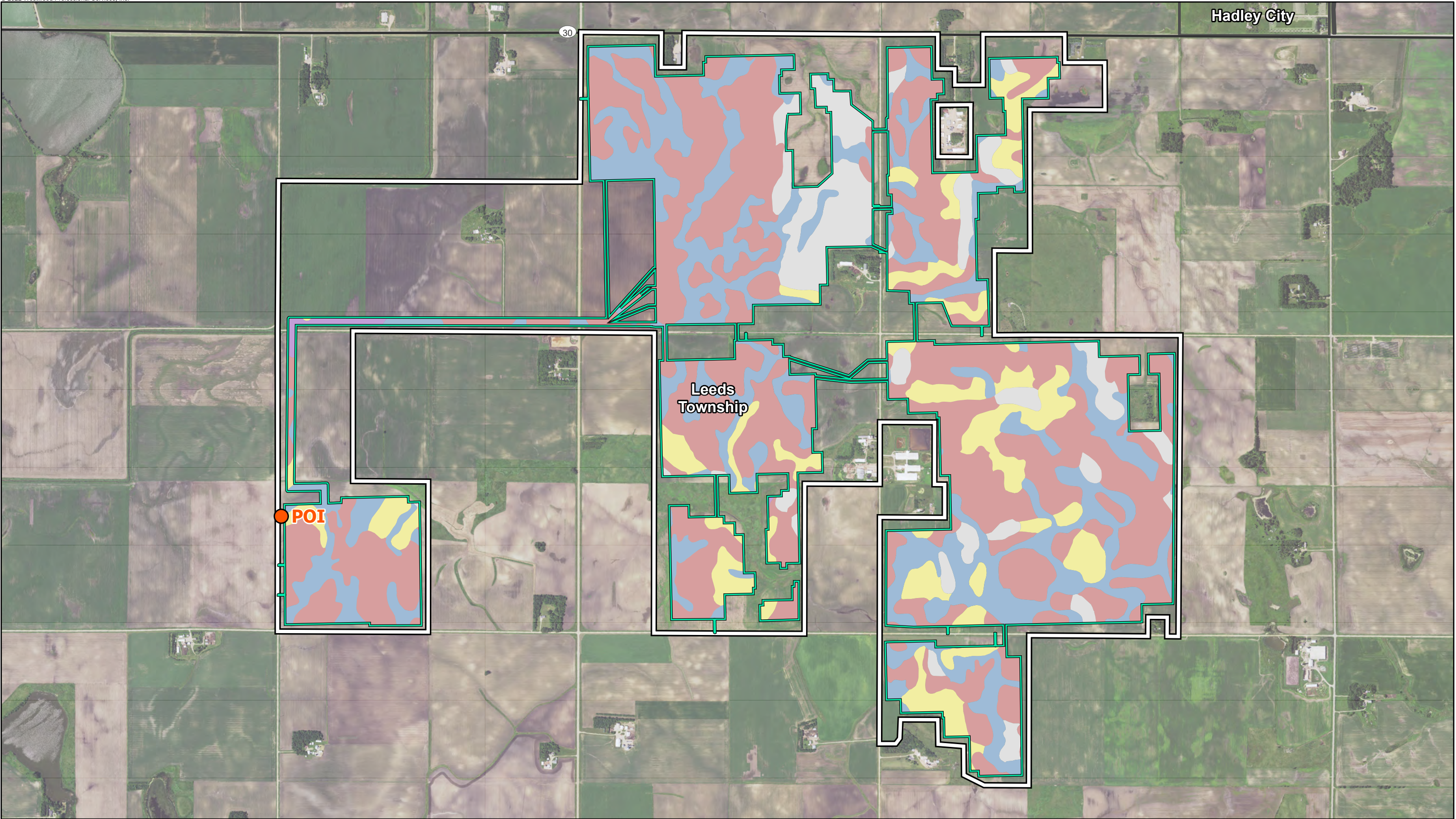


Lake Wilson Solar Project

Murray County, Minnesota

Drainage Ways, Surface Waters & Watersheds in Project Area

EXHIBIT 7



Data Source(s): Westwood (2022); ESRI WMS Imagery Basemap (Accessed 2021); U.S. Census Bureau (2020); Natural Resources Conservation Services (Accessed 2021); Ventyx Velocity Suite (2021).

Westwood

Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

Legend

Project Area

Preliminary Development Area

Project Point of Connection (POI)

Existing Substation Near Project Area

Major Road

Municipal Boundary

Existing Transmission Lines

Chandler Tap to East Ridge Tap 69 kV

Fenton Wind Power Plant to Chanarambie 115 kV

Hadley to Lake Wilson 69 kV

Lake Wilson to Chandler Tap 69 kV

South Ridge to Chandler Tap 69 kV

Woodstock Windfarm Tap to South Ridge 69 kV

Prime Farmland Classification - Preliminary Development Area Acreage (Percent Total)

All areas are prime farmland - 762.26 Acres (49.96%)

Farmland of statewide importance - 191.16 Acres (12.53%)

Not prime farmland - 149.78 Acres (9.82%)

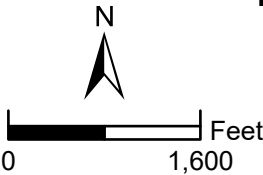
Prime farmland if drained - 415.13 Acres (27.21%)

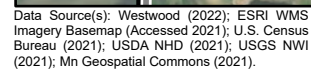
Prime farmland if protected from flooding or not frequently flooded during the growing season - 7.48 Acres (0.49%)

Lake Wilson Solar Project

Murray County, Minnesota

Prime Farmland within the Preliminary Development Area





 Project Area
 Preliminary Development Area
 Municipal Boundary
 Major Road

Prime Farmland Classification - Project Area Acreage (Percent Total)

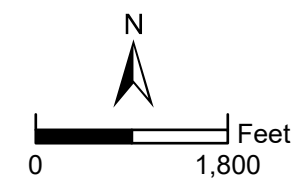
 All areas are prime farmland
- 1,139 Acres (43.46%)

Farmland of statewide importance - 266 Acres (10.17%)

Not prime farmland - 241 Acres (9.20%)

Prime farmland if drained - 842 Acres (32.02%)

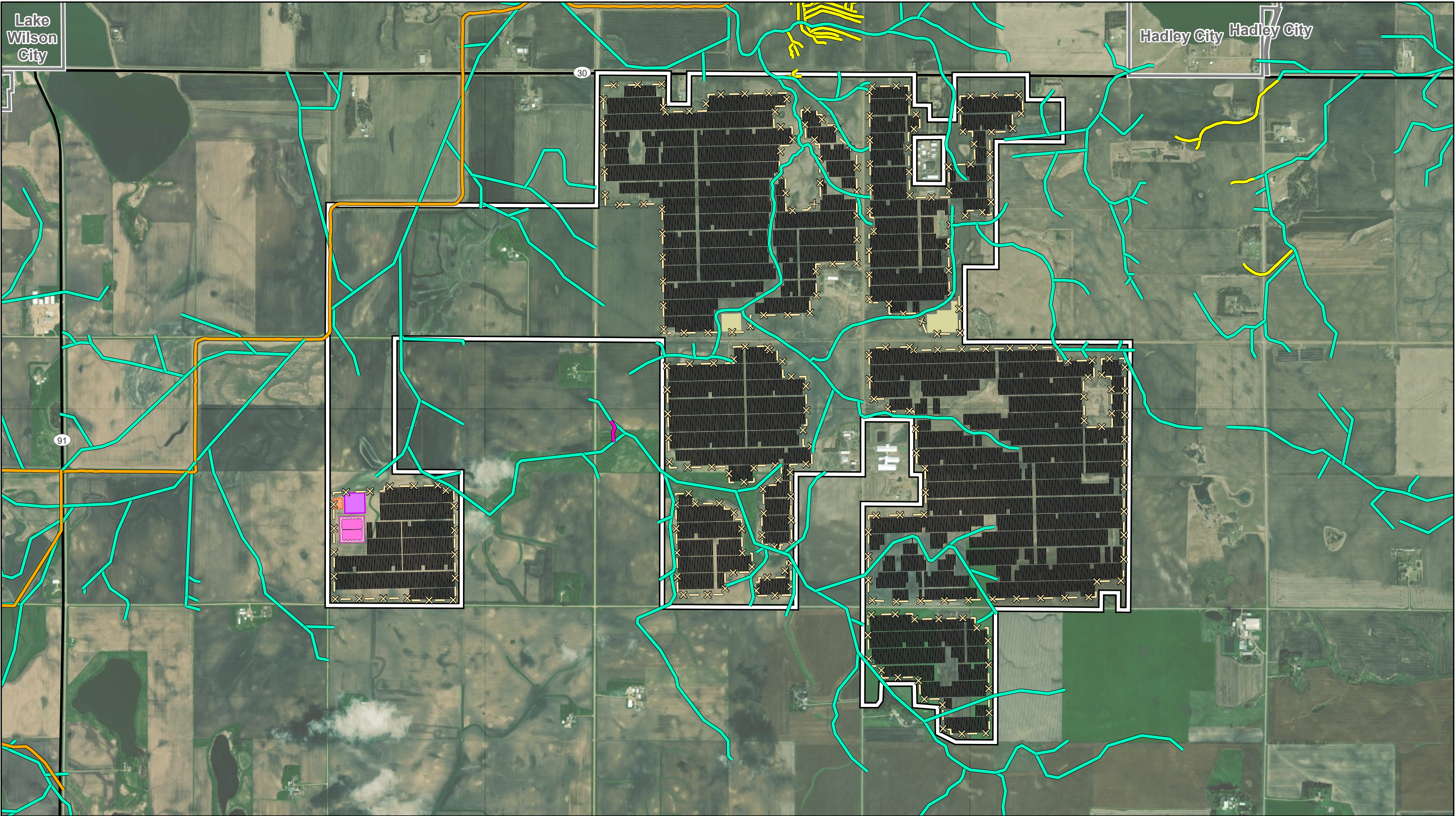
Prime farmland if protected from flooding or not frequently flooded during the growing season - 135 Acres (5.16%)



Murray County, Minnesota

Project Area	
Prime Farmland	

EXHIBIT 8a



Data Source(s): Westwood (2022); ESRI WMS Imagery Basemap (Accessed 2021); U.S. Census Bureau (2021); USDA NHD (2021); USGS NWI (2021); Mn Geospatial Commons (2021).



Legend

- Project Area
- Proposed Trackers
- Proposed PVcase Fence

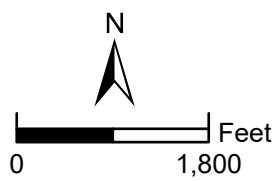
- Proposed Switchyard
- Proposed Substation
- Proposed Battery Energy Storage System

- Proposed Laydown Yard
- Major Road
- Municipal Boundary

- County Boundary
- Ditch Type**
- Abandoned
- Open

- Private
- Tile

Lake Wilson Solar Project
Murray County, Minnesota



Drain Tiles & Ditches
EXHIBIT 9

Appendix A

Selected Soil Physical Features, Classifications, and Interpretations and Limitations

**Lake Wilson Solar Energy Center
Agricultural Impact Mitigation Plan
Murray County, Minnesota**

Appendix A: Selected Soil Physical Features, Classifications, and Interpretations and Limitations															
Feature Type	Acres ²	Map Unit Symbol ³		Selected Soil Physical Features					Selected Soil Classifications				Construction/Reclamation Interpretations and Limitations		
			Map Unit Name ³	Particle Size Family ³	Slope Range ⁴	Drainage Class ⁵	Topsoil Thickness ⁶	Prime Farmland ³	Land Capability Classification ³	Hydric Soil Rating ³	Highly Erodible Water ⁷	Highly Erodible Wind ⁸	Compact Prone ⁹	Rutting Hazard ¹⁰	Droughty ¹¹
Access Road	0.24	J1A	Parnell silty clay loam, depressional, 0 to 1 percent slopes	fine	0-5	Very poorly drained	22	Prime farmland if drained	3w	Yes	No	No	No	Severe	No
Access Road	11.40	J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	fine-loamy	0-5	Poorly drained	27	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Access Road	1.30	J26B	Darnen loam, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	24	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Access Road	6.39	J101B	Hokans-Svea complex, 1 to 4 percent slopes	fine-loamy	0-5	Well drained	15	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Access Road	3.22	J104A	Svea loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	10	All areas are prime farmland	1	No	No	No	No	Severe	No
Access Road	1.20	J57A	Balaton loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	13	All areas are prime farmland	2s	No	No	No	No	Severe	No
Access Road	3.26	J31B	Arvilla-Sandberg complex, 2 to 6 percent slopes	sandy	0-5	Somewhat excessively drained	9	Not prime farmland	4e	No	Yes	No	No	Moderate	No
Access Road	1.17	J42C	Sandberg-Arvilla complex, 6 to 12 percent slopes	sandy	>5-16	Excessively drained	10	Not prime farmland	6s	No	Yes	No	No	Moderate	No
Access Road	2.61	J11A	Vallers clay loam, 0 to 2 percent slopes	fine-loamy	0-5	Poorly drained	14	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Access Road	15.91	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Access Road	4.35	J232B	Barnes-Buse-Arvilla complex, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Access Road	0.56	J235C2	Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Access Road	5.47	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Access Road	1.59	J100D2	Buse, eroded-Wilno complex, 12 to 18 percent slopes	fine-loamy	>5-16	Well drained	8	Not prime farmland	4e	No	Yes	No	No	Severe	Yes
Access Road	0.64	J12A	Marysland loam, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Poorly drained	12	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Access Road	0.01	J199A	Fulda silty clay, 0 to 2 percent slopes	fine	0-5	Poorly drained	13	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Access Road	0.11	J196A	Forada loam, 0 to 2 percent slopes	coarse-loamy	0-5	Poorly drained	16	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Access Road	0.15	J105A	Arvilla sandy loam, Till Prairie, 0 to 2 percent slopes	sandy	0-5	Somewhat excessively drained	9	Farmland of statewide importance	3s	No	No	No	No	Moderate	No
Access Road	0.63	J7B	Sverdrup sandy loam, 2 to 6 percent slopes	sandy	0-5	Well drained	12	Farmland of statewide importance	3e	No	No	No	No	Moderate	No
Access Road	0.09	J75A	Fordville loam, coteau, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Well drained	8	All areas are prime farmland	2s	No	No	No	No	Severe	No

Access Road	0.66	J75B	Renshaw-Fordville loams, coteau, 2 to 6 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Somewhat excessively drained	8	All areas are prime farmland	4s	No	Yes	No	No	Severe	Yes
Access Road	0.81	J195B	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	fine-silty	0-5	Well drained	8	All areas are prime farmland	2e	No	No	No	No	Severe	No
Fenced Area	1.21	J1A	Parnell silty clay loam, depressional, 0 to 1 percent slopes	fine	0-5	Very poorly drained	22	Prime farmland if drained	3w	Yes	No	No	No	Severe	No
Fenced Area	63.32	J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	fine-loamy	0-5	Poorly drained	27	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	7.76	J26B	Darnen loam, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	24	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Fenced Area	0.48	J8A	Egeland sandy loam, 0 to 2 percent slopes	coarse-loamy	0-5	Well drained	9	All areas are prime farmland	3s	No	No	No	No	Moderate	Yes
Fenced Area	49.48	J101B	Hokans-Svea complex, 1 to 4 percent slopes	fine-loamy	0-5	Well drained	15	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Fenced Area	14.21	J104A	Svea loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	10	All areas are prime farmland	1	No	No	No	No	Severe	No
Fenced Area	5.34	J57A	Balaton loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	13	All areas are prime farmland	2s	No	No	No	No	Severe	No
Fenced Area	0.03	J77A	Lamoure silty clay loam, 0 to 2 percent slopes, frequently flooded	fine-silty	0-5	Poorly drained	27	Not prime farmland	5w	Yes	Yes	No	No	Severe	No
Fenced Area	0.04	J23A	Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded	fine-silty	0-5	Poorly drained	27	Prime farmland if protected from flooding or not frequently flooded during the growing season	2w	Yes	No	No	No	Severe	No
Fenced Area	21.68	J31B	Arvilla-Sandberg complex, 2 to 6 percent slopes	sandy	0-5	Somewhat excessively drained	9	Not prime farmland	4e	No	Yes	No	No	Moderate	No
Fenced Area	5.94	J42C	Sandberg-Arvilla complex, 6 to 12 percent slopes	sandy	>5-16	Excessively drained	10	Not prime farmland	6s	No	Yes	No	No	Moderate	No
Fenced Area	18.52	J11A	Vallers clay loam, 0 to 2 percent slopes	fine-loamy	0-5	Poorly drained	14	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	0.02	J32A	Bigstone silty clay loam, depressional, 0 to 1 percent slopes	fine-silty	0-5	Very poorly drained	10	Prime farmland if drained	3w	Yes	No	No	No	Severe	No
Fenced Area	72.64	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Fenced Area	29.09	J232B	Barnes-Buse-Arvilla complex, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Fenced Area	2.28	J227D2	Buse, moderately eroded-Sandberg complex, 12 to 18 percent slopes	fine-loamy	>5-16	Well drained	8	Not prime farmland	4e	No	Yes	No	No	Severe	Yes
Fenced Area	11.67	J235C2	Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Fenced Area	28.27	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes

Fenced Area	5.71	J100D2	Buse, eroded-Wilno complex, 12 to 18 percent slopes	fine-loamy	>5-16	Well drained	8	Not prime farmland	4e	No	Yes	No	No	Severe	Yes
Fenced Area	3.76	J12A	Marysland loam, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Poorly drained	12	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	2.55	J199A	Fulda silty clay, 0 to 2 percent slopes	fine	0-5	Poorly drained	13	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	3.53	J196A	Forada loam, 0 to 2 percent slopes	coarse-loamy	0-5	Poorly drained	16	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	1.97	J105A	Arvilla sandy loam, Till Prairie, 0 to 2 percent slopes	sandy	0-5	Somewhat excessively drained	9	Farmland of statewide importance	3s	No	No	No	No	Moderate	No
Fenced Area	3.49	J7B	Sverdrup sandy loam, 2 to 6 percent slopes	sandy	0-5	Well drained	12	Farmland of statewide importance	3e	No	No	No	No	Moderate	No
Fenced Area	1.28	J75A	Fordville loam, coteau, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Well drained	8	All areas are prime farmland	2s	No	No	No	No	Severe	No
Fenced Area	2.77	J75B	Renshaw-Fordville loams, coteau, 2 to 6 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Somewhat excessively drained	8	All areas are prime farmland	4s	No	Yes	No	No	Severe	No
Fenced Area	7.33	J195B	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	fine-silty	0-5	Well drained	8	All areas are prime farmland	2e	No	No	No	No	Severe	No
BESS	1.38	J104A	Svea loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	10	All areas are prime farmland	1	No	No	No	No	Severe	No
BESS	2.52	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
BESS	0.10	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Collection Line	2.84	J1A	Parnell silty clay loam, depressional, 0 to 1 percent slopes	fine	0-5	Very poorly drained	22	Prime farmland if drained	3w	Yes	No	No	No	Severe	No
Collection Line	13.41	J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	fine-loamy	0-5	Poorly drained	27	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Collection Line	1.23	J26B	Darnen loam, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	24	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Collection Line	0.48	J8B	Egeland sandy loam, 2 to 6 percent slopes	coarse-loamy	0-5	Well drained	9	All areas are prime farmland	3e	No	No	No	No	Moderate	Yes
Collection Line	0.31	J8A	Egeland sandy loam, 0 to 2 percent slopes	coarse-loamy	0-5	Well drained	9	All areas are prime farmland	3s	No	No	No	No	Moderate	Yes
Collection Line	14.21	J101B	Hokans-Svea complex, 1 to 4 percent slopes	fine-loamy	0-5	Well drained	15	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Collection Line	2.70	J104A	Svea loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	10	All areas are prime farmland	1	No	No	No	No	Severe	No
Collection Line	2.52	J57A	Balaton loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	13	All areas are prime farmland	2s	No	No	No	No	Severe	No
Collection Line	0.51	J77A	Lamoure silty clay loam, 0 to 2 percent slopes, frequently flooded	fine-silty	0-5	Poorly drained	27	Not prime farmland	5w	Yes	Yes	No	No	Severe	No
Collection Line	7.04	J23A	Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded	fine-silty	0-5	Poorly drained	27	Prime farmland if protected from flooding or not frequently flooded during the growing season	2w	Yes	No	No	No	Severe	No

Collection Line	5.17	J31B	Arvilla-Sandberg complex, 2 to 6 percent slopes	sandy	0-5	Somewhat excessively drained	9	Not prime farmland	4e	No	Yes	No	No	Moderate	No
Collection Line	0.94	J42C	Sandberg-Arvilla complex, 6 to 12 percent slopes	sandy	>5-16	Excessively drained	10	Not prime farmland	6s	No	Yes	No	No	Moderate	No
Collection Line	8.85	J11A	Vallers clay loam, 0 to 2 percent slopes	fine-loamy	0-5	Poorly drained	14	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Collection Line	17.68	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Collection Line	3.31	J232B	Barnes-Buse-Arvilla complex, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Collection Line	1.45	J235C2	Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Collection Line	4.15	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Collection Line	1.41	J100D2	Buse, eroded-Wilno complex, 12 to 18 percent slopes	fine-loamy	>5-16	Well drained	8	Not prime farmland	4e	No	Yes	No	No	Severe	Yes
Collection Line	0.13	J12A	Marysland loam, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Poorly drained	12	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Collection Line	0.70	J199A	Fulda silty clay, 0 to 2 percent slopes	fine	0-5	Poorly drained	13	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Collection Line	1.95	J196A	Forada loam, 0 to 2 percent slopes	coarse-loamy	0-5	Poorly drained	16	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Collection Line	0.18	J105A	Arvilla sandy loam, Till Prairie, 0 to 2 percent slopes	sandy	0-5	Somewhat excessively drained	9	Farmland of statewide importance	3s	No	No	No	No	Moderate	No
Collection Line	0.21	J7B	Sverdrup sandy loam, 2 to 6 percent slopes	sandy	0-5	Well drained	12	Farmland of statewide importance	3e	No	No	No	No	Moderate	No
Collection Line	0.17	J75A	Fordville loam, coteau, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Well drained	8	All areas are prime farmland	2s	No	No	No	No	Severe	No
Collection Line	0.74	J75B	Renshaw-Fordville loams, coteau, 2 to 6 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Somewhat excessively drained	8	All areas are prime farmland	4s	No	Yes	No	No	Severe	No
Collection Line	1.02	J195B	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	fine-silty	0-5	Well drained	8	All areas are prime farmland	2e	No	No	No	No	Severe	No
Fenced Area	8.11	J1A	Parnell silty clay loam, depressional, 0 to 1 percent slopes	fine	0-5	Very poorly drained	22	Prime farmland if drained	3w	Yes	No	No	No	Severe	No
Fenced Area	168.66	J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	fine-loamy	0-5	Poorly drained	27	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	27.96	J26B	Darnen loam, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	24	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Fenced Area	2.14	J8A	Egeland sandy loam, 0 to 2 percent slopes	coarse-loamy	0-5	Well drained	9	All areas are prime farmland	3s	No	No	No	No	Moderate	Yes
Fenced Area	124.19	J101B	Hokans-Svea complex, 1 to 4 percent slopes	fine-loamy	0-5	Well drained	15	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Fenced Area	35.74	J104A	Svea loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	10	All areas are prime farmland	1	No	No	No	No	Severe	No

Fenced Area	15.24	J57A	Balaton loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	13	All areas are prime farmland	2s	No	No	No	No	Severe	No
Fenced Area	0.57	J77A	Lamoure silty clay loam, 0 to 2 percent slopes, frequently flooded	fine-silty	0-5	Poorly drained	27	Not prime farmland	5w	Yes	Yes	No	No	Severe	No
Fenced Area	0.36	J23A	Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded	fine-silty	0-5	Poorly drained	27	Prime farmland if protected from flooding or not frequently flooded during the growing season	2w	Yes	No	No	No	Severe	No
Fenced Area	60.13	J31B	Arvilla-Sandberg complex, 2 to 6 percent slopes	sandy	0-5	Somewhat excessively drained	9	Not prime farmland	4e	No	Yes	No	No	Moderate	No
Fenced Area	13.32	J42C	Sandberg-Arvilla complex, 6 to 12 percent slopes	sandy	>5-16	Excessively drained	10	Not prime farmland	6s	No	Yes	No	No	Moderate	No
Fenced Area	73.35	J11A	Vallers clay loam, 0 to 2 percent slopes	fine-loamy	0-5	Poorly drained	14	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	1.06	J32A	Bigstone silty clay loam, depressional, 0 to 1 percent slopes	fine-silty	0-5	Very poorly drained	10	Prime farmland if drained	3w	Yes	No	No	No	Severe	No
Fenced Area	177.62	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Fenced Area	73.33	J232B	Barnes-Buse-Arvilla complex, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Fenced Area	5.32	J227D2	Buse, moderately eroded-Sandberg complex, 12 to 18 percent slopes	fine-loamy	>5-16	Well drained	8	Not prime farmland	4e	No	Yes	No	No	Severe	Yes
Fenced Area	29.21	J235C2	Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Fenced Area	82.17	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Fenced Area	20.56	J100D2	Buse, eroded-Wilno complex, 12 to 18 percent slopes	fine-loamy	>5-16	Well drained	8	Not prime farmland	4e	No	Yes	No	No	Severe	Yes
Fenced Area	10.60	J12A	Marysland loam, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Poorly drained	12	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	5.68	J199A	Fulda silty clay, 0 to 2 percent slopes	fine	0-5	Poorly drained	13	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	9.88	J196A	Forada loam, 0 to 2 percent slopes	coarse-loamy	0-5	Poorly drained	16	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Fenced Area	6.43	J105A	Arvilla sandy loam, Till Prairie, 0 to 2 percent slopes	sandy	0-5	Somewhat excessively drained	9	Farmland of statewide importance	3s	No	No	No	No	Moderate	No
Fenced Area	8.12	J7B	Sverdrup sandy loam, 2 to 6 percent slopes	sandy	0-5	Well drained	12	Farmland of statewide importance	3e	No	No	No	No	Moderate	No
Fenced Area	2.61	J75A	Fordville loam, coteau, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Well drained	8	All areas are prime farmland	2s	No	No	No	No	Severe	No
Fenced Area	5.74	J75B	Renshaw-Fordville loams, coteau, 2 to 6 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Somewhat excessively drained	8	All areas are prime farmland	4s	No	Yes	No	No	Severe	No

Fenced Area	17.04	J195B	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	fine-silty	0-5	Well drained	8	All areas are prime farmland	2e	No	No	No	No	Severe	No
Inverter	0.43	J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	fine-loamy	0-5	Poorly drained	27	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Inverter	0.04	J26B	Darnen loam, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	24	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Inverter	0.36	J101B	Hokans-Svea complex, 1 to 4 percent slopes	fine-loamy	0-5	Well drained	15	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Inverter	0.05	J104A	Svea loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	10	All areas are prime farmland	1	No	No	No	No	Severe	No
Inverter	0.04	J57A	Balaton loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	13	All areas are prime farmland	2s	No	No	No	No	Severe	No
Inverter	0.17	J31B	Arvilla-Sandberg complex, 2 to 6 percent slopes	sandy	0-5	Somewhat excessively drained	9	Not prime farmland	4e	No	Yes	No	No	Moderate	No
Inverter	0.08	J42C	Sandberg-Arvilla complex, 6 to 12 percent slopes	sandy	>5-16	Excessively drained	10	Not prime farmland	6s	No	Yes	No	No	Moderate	No
Inverter	0.05	J11A	Vallers clay loam, 0 to 2 percent slopes	fine-loamy	0-5	Poorly drained	14	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Inverter	0.61	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Inverter	0.24	J232B	Barnes-Buse-Arvilla complex, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Inverter	0.03	J235C2	Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Inverter	0.15	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Inverter	0.03	J100D2	Buse, eroded-Wilno complex, 12 to 18 percent slopes	fine-loamy	>5-16	Well drained	8	Not prime farmland	4e	No	Yes	No	No	Severe	Yes
Inverter	0.04	J12A	Marysland loam, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Poorly drained	12	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Inverter	0.03	J199A	Fulda silty clay, 0 to 2 percent slopes	fine	0-5	Poorly drained	13	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Inverter	0.05	J196A	Forada loam, 0 to 2 percent slopes	coarse-loamy	0-5	Poorly drained	16	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Inverter	0.06	J7B	Sverdrup sandy loam, 2 to 6 percent slopes	sandy	0-5	Well drained	12	Farmland of statewide importance	3e	No	No	No	No	Moderate	No
Inverter	0.05	J75B	Renshaw-Fordville loams, coteau, 2 to 6 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Somewhat excessively drained	8	All areas are prime farmland	4s	No	Yes	No	No	Severe	No
Inverter	0.05	J195B	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	fine-silty	0-5	Well drained	8	All areas are prime farmland	2e	No	No	No	No	Severe	No
Laydown Yard	0.94	J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	fine-loamy	0-5	Poorly drained	27	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Laydown Yard	0.89	J26B	Darnen loam, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	24	All areas are prime farmland	2e	No	No	No	No	Severe	Yes

Laydown Yard	2.32	J101B	Hokans-Svea complex, 1 to 4 percent slopes	fine-loamy	0-5	Well drained	15	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Laydown Yard	0.02	J104A	Svea loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	10	All areas are prime farmland	1	No	No	No	No	Severe	No
Laydown Yard	0.14	J11A	Vallers clay loam, 0 to 2 percent slopes	fine-loamy	0-5	Poorly drained	14	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Laydown Yard	1.83	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Laydown Yard	3.38	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
O&M	0.19	J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	fine-loamy	0-5	Poorly drained	27	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
O&M	0.55	J57A	Balaton loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	13	All areas are prime farmland	2s	No	No	No	No	Severe	No
Substation	0.15	J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	fine-loamy	0-5	Poorly drained	27	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Substation	0.01	J11A	Vallers clay loam, 0 to 2 percent slopes	fine-loamy	0-5	Poorly drained	14	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Substation	0.88	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Substation	2.62	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Switchyard	0.01	J11A	Vallers clay loam, 0 to 2 percent slopes	fine-loamy	0-5	Poorly drained	14	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Switchyard	0.01	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Switchyard	0.68	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Undeveloped Area	2.506148	J100D2	Buse, eroded-Wilno complex, 12 to 18 percent slopes	fine-loamy	>5-16	Well drained	8	Not prime farmland	4e	No	Yes	No	No	Severe	Yes
Undeveloped Area	114.29267	J101B	Hokans-Svea complex, 1 to 4 percent slopes	fine-loamy	0-5	Well drained	15	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Undeveloped Area	36.101221	J104A	Svea loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	10	All areas are prime farmland	1	No	No	No	No	Severe	No
Undeveloped Area	7.988519	J105A	Arvilla sandy loam, Till Prairie, 0 to 2 percent slopes	sandy	0-5	Somewhat excessively drained	9	Farmland of statewide importance	3s	No	No	No	No	Moderate	No
Undeveloped Area	139.77191	J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Undeveloped Area	137.43346	J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	fine-loamy	0-5	Poorly drained	27	Prime farmland if drained	2w	Yes	No	No	No	Severe	No

Undeveloped Area	176.93699	J11A	Vallers clay loam, 0 to 2 percent slopes	fine-loamy	0-5	Poorly drained	14	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Undeveloped Area	25.899432	J12A	Marysland loam, 0 to 2 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Poorly drained	12	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Undeveloped Area	11.17746	J17A	Quam silty clay loam, depressional, 0 to 1 percent slopes	fine-silty	0-5	Very poorly drained	10	Prime farmland if drained	3w	Yes	No	No	No	Severe	No
Undeveloped Area	6.798669	J195B	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	fine-silty	0-5	Well drained	8	All areas are prime farmland	2e	No	No	No	No	Severe	No
Undeveloped Area	8.738613	J196A	Forada loam, 0 to 2 percent slopes	coarse-loamy	0-5	Poorly drained	16	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Undeveloped Area	3.10431	J199A	Fulda silty clay, 0 to 2 percent slopes	fine	0-5	Poorly drained	13	Prime farmland if drained	2w	Yes	No	No	No	Severe	No
Undeveloped Area	49.400203	J1A	Parnell silty clay loam, depressional, 0 to 1 percent slopes	fine	0-5	Very poorly drained	22	Prime farmland if drained	3w	Yes	No	No	No	Severe	No
Undeveloped Area	2.870796	J227D2	Buse, moderately eroded-Sandberg complex, 12 to 18 percent slopes	fine-loamy	>5-16	Well drained	8	Not prime farmland	4e	No	Yes	No	No	Severe	Yes
Undeveloped Area	27.442368	J232B	Barnes-Buse-Arvilla complex, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	11	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Undeveloped Area	27.221876	J235C2	Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes
Undeveloped Area	127.54089	J23A	Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded	fine-silty	0-5	Poorly drained	27	Prime farmland if protected from flooding or not frequently flooded	2w	Yes	No	No	No	Severe	No
Undeveloped Area	15.484333	J26B	Darnen loam, 2 to 6 percent slopes	fine-loamy	0-5	Well drained	24	All areas are prime farmland	2e	No	No	No	No	Severe	Yes
Undeveloped Area	59.916178	J31B	Arvilla-Sandberg complex, 2 to 6 percent slopes	sandy	0-5	Somewhat excessively drained	9	Not prime farmland	4e	No	Yes	No	No	Moderate	No
Undeveloped Area	11.4234	J32A	Bigstone silty clay loam, depressional, 0 to 1 percent slopes	fine-silty	0-5	Very poorly drained	10	Prime farmland if drained	3w	Yes	No	No	No	Severe	No
Undeveloped Area	5.590428	J42C	Sandberg-Arvilla complex, 6 to 12 percent slopes	sandy	>5-16	Excessively drained	10	Not prime farmland	6s	No	Yes	No	No	Moderate	No
Undeveloped Area	28.300579	J57A	Balaton loam, 1 to 3 percent slopes	fine-loamy	0-5	Moderately well drained	13	All areas are prime farmland	2s	No	No	No	No	Severe	No
Undeveloped Area	5.196028	J75B	Renshaw-Fordville loams, coteau, 2 to 6 percent slopes	fine-loamy over sandy or sandy-skeletal	0-5	Somewhat excessively drained	8	All areas are prime farmland	4s	No	Yes	No	No	Severe	No
Undeveloped Area	18.752528	J77A	Lamoure silty clay loam, 0 to 2 percent slopes, frequently flooded	fine-silty	0-5	Poorly drained	27	Not prime farmland	5w	Yes	Yes	No	No	Severe	No
Undeveloped Area	2.97856	J7B	Sverdrup sandy loam, 2 to 6 percent slopes	sandy	0-5	Well drained	12	Farmland of statewide importance	3e	No	No	No	No	Moderate	No

Undeveloped Area	1.799251	J8A	Egeland sandy loam, 0 to 2 percent slopes	coarse-loamy	0-5	Well drained	9	All areas are prime farmland	3s	No	No	No	No	Moderate	Yes
Undeveloped Area	2.050126	J8B	Egeland sandy loam, 2 to 6 percent slopes	coarse-loamy	0-5	Well drained	9	All areas are prime farmland	3e	No	No	No	No	Moderate	Yes
Undeveloped Area	1.363713	J95F	Buse, stony-Wilno complex, 25 to 40 percent slopes	fine-loamy	>5-16	Well drained	45	Not prime farmland	7e	No	Yes	No	No	Severe	No
Undeveloped Area	36.897898	J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	fine-loamy	>5-16	Well drained	8	Farmland of statewide importance	3e	No	Yes	No	No	Severe	Yes

-
- - Data obtained by merging facility polygons with the SSURGO spatial date in ArcGIS. Summations were performed in Microsoft Excel.
 - Obtained directly by query of the SSURGO geospatial database.
 - Representative slope values are taken directly from the SSURGO database. The SSURGO2 database provides representative slope values for all component soil series. Slope classes represent the slope class grouping in percent that contains the representative slope value for a major component soil series. For example, a soil mapped in the 2-6% slope class has an average slope of 4%, which is within the 0-5% slope range.
 - Drainage class as taken directly from the SSURGO database. ED, PD, and VPD indicate Excessively Drained, Poorly Drained, and Very Poorly Drained soils, respectively.
 - Topsoil thickness is the aggregate thickness of the A horizons described in the SSURGO database.
 - Includes soils in land capability classes 4e through 8e or that have a representative slope value greater than or equal to 9%.
 - Includes soils in wind erodibility groups 1 and 2.
 - Includes soils that are somewhat poorly drained to very poorly drained soils in loamy sands and finer textural classes.
 - Rutting potential hazard based on the soil strength as indicated by engineering texture classification, drainage class, and slope. In general, soils on low slopes in wetter drainage classes, and comprised of sediments with low strength will have potential rutting hazards.
 - Includes soils with a surface texture of sandy loam or coarser that are moderately well to excessively drained.

Appendix B

Soil Map

**Lake Wilson Solar Energy Center
Agricultural Impact Mitigation Plan**
Murray County, Minnesota

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Murray County, Minnesota

Survey Area Data: Version 22, Sep 6, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 9, 2021—Jun 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
J1A	Parnell silty clay loam, depressional, 0 to 1 percent slopes	61.8	2.4%
J7B	Sverdrup sandy loam, 2 to 6 percent slopes	15.5	0.6%
J8A	Egeland sandy loam, 0 to 2 percent slopes	4.7	0.2%
J8B	Egeland sandy loam, 2 to 6 percent slopes	2.5	0.1%
J11A	Vallers clay loam, 0 to 2 percent slopes	280.4	10.7%
J12A	Marysland loam, 0 to 2 percent slopes	41.1	1.6%
J17A	Quam silty clay loam, depressional, 0 to 1 percent slopes	11.2	0.4%
J23A	Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded	135.0	5.2%
J26B	Darnen loam, 2 to 6 percent slopes	54.7	2.1%
J31B	Arvilla-Sandberg complex, 2 to 6 percent slopes	150.3	5.7%
J32A	Bigstone silty clay loam, depressional, 0 to 1 percent slopes	12.5	0.5%
J42C	Sandberg-Arvilla complex, 6 to 12 percent slopes	27.0	1.0%
J57A	Balaton loam, 1 to 3 percent slopes	53.2	2.0%
J75A	Fordville loam, coteau, 0 to 2 percent slopes	4.2	0.2%
J75B	Renshaw-Fordville loams, coteau, 2 to 6 percent slopes	15.2	0.6%
J77A	Lamoure silty clay loam, 0 to 2 percent slopes, frequently flooded	19.9	0.8%
J95F	Buse, stony-Wilno complex, 25 to 40 percent slopes	1.4	0.1%
J96C2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	163.9	6.3%
J100D2	Buse, eroded-Wilno complex, 12 to 18 percent slopes	31.8	1.2%
J101B	Hokans-Svea complex, 1 to 4 percent slopes	311.2	11.9%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
J104A	Svea loam, 1 to 3 percent slopes	93.4	3.6%
J105A	Arvilla sandy loam, Till Prairie, 0 to 2 percent slopes	16.7	0.6%
J106B	Barnes-Buse-Svea complex, 1 to 6 percent slopes	429.4	16.4%
J107A	Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	395.9	15.1%
J195B	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	33.1	1.3%
J196A	Forada loam, 0 to 2 percent slopes	24.2	0.9%
J199A	Fulda silty clay, 0 to 2 percent slopes	12.1	0.5%
J227D2	Buse, moderately eroded-Sandberg complex, 12 to 18 percent slopes	10.5	0.4%
J232B	Barnes-Buse-Arvilla complex, 2 to 6 percent slopes	137.7	5.3%
J235C2	Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded	70.1	2.7%
Totals for Area of Interest		2,620.4	100.0%