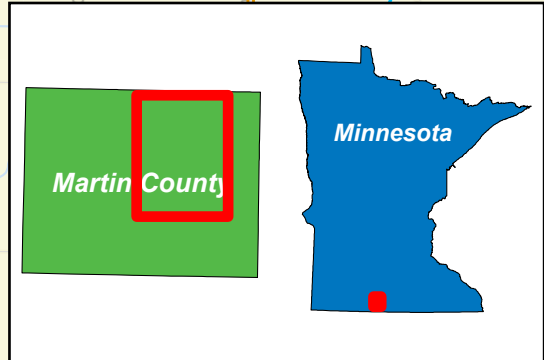
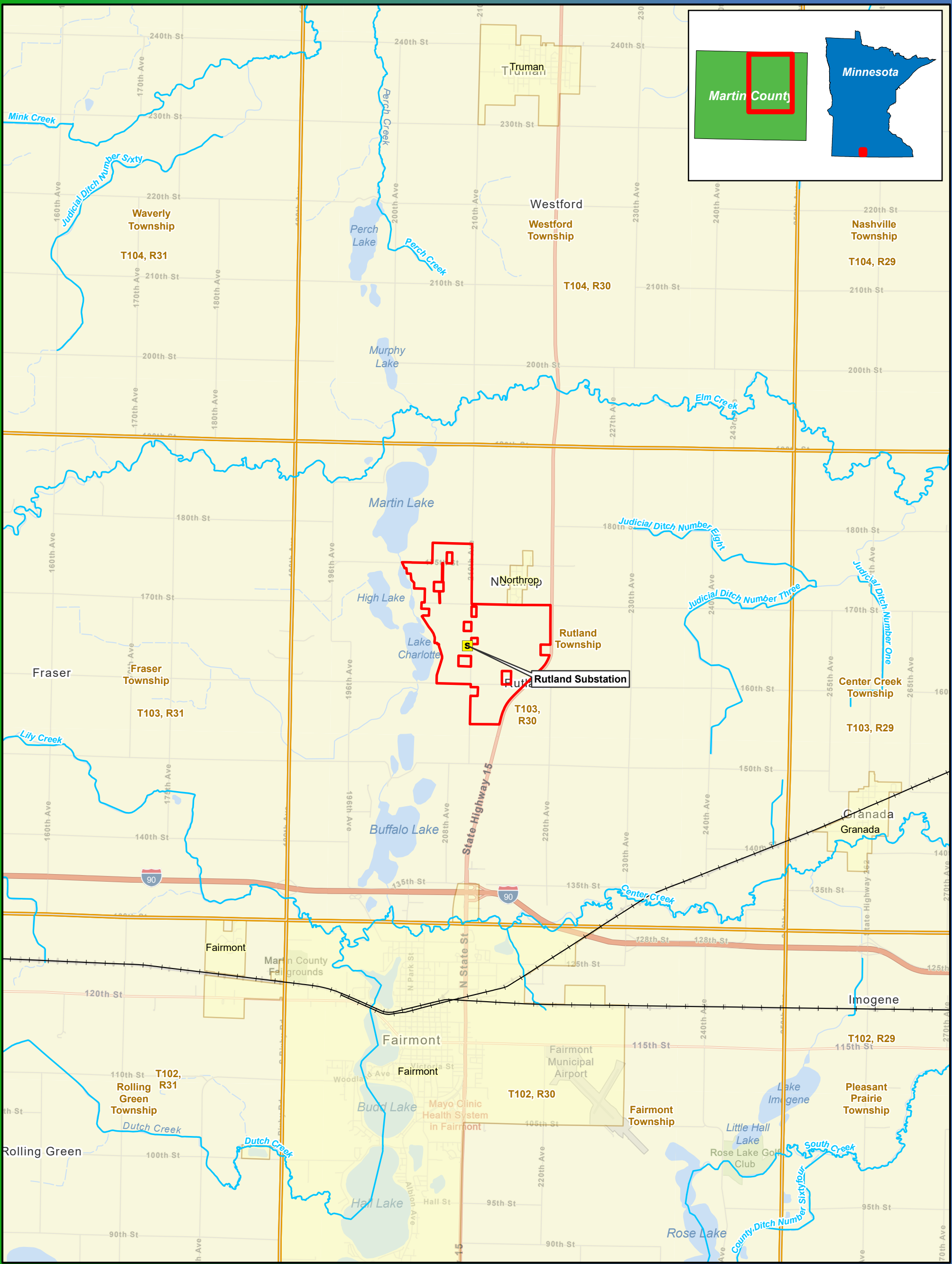


Maps

Lake Charlotte Solar Facility and Battery Energy Storage System
Joint Site Permits Application
June 2025
MPUC Docket Nos. IP-7159/GS-25-206 and IP-7159/ESS-25-205

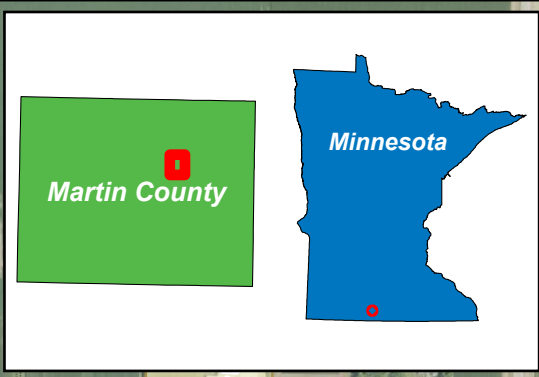
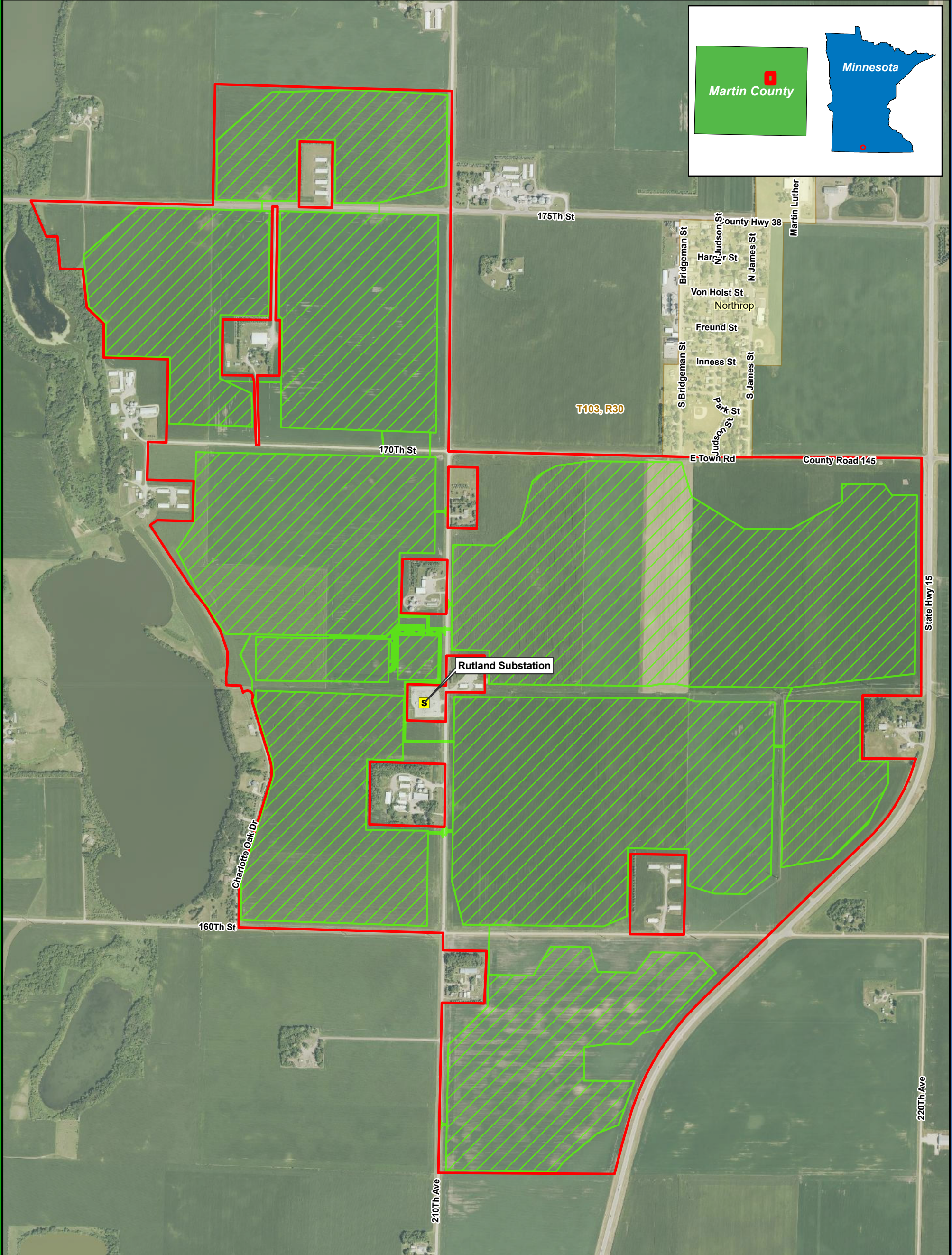


Map 1
 Project Location
 Lake Charlotte Solar and
 BESS Projects
 Martin County, MN

- S Existing Substation
- Land Control Area
- City/Town
- Township
- County Boundary
- ~ NHD Named Stream
- +— Railroad

1:72,000

Imagery: USGS
 Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI

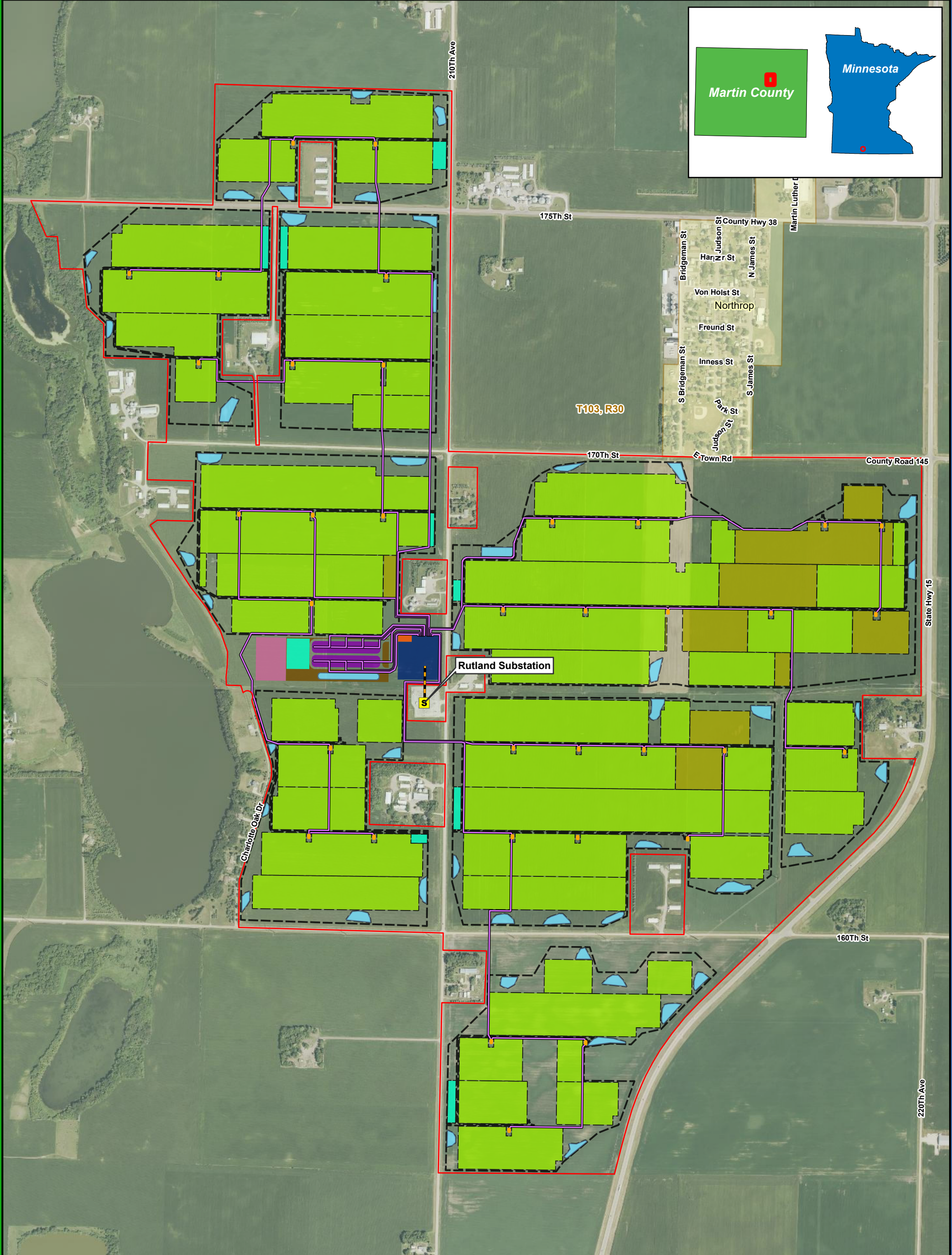
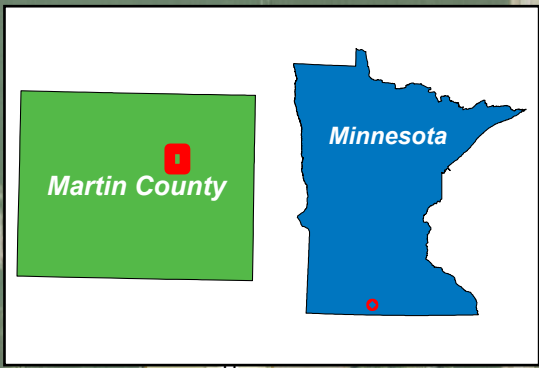


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Map 2
 Land Control and
 Preliminary Development Areas
 Lake Charlotte Solar and
 BESS Projects
 Martin County, MN

- Existing Substation
- Land Control Area
- Preliminary Development Area
- City/Town
- Township
- County Boundary

Imagery Source: 2021 FSA
 Sources: National Grid Renewables, MN Geospatial Commons,
 MDNR, ESRI

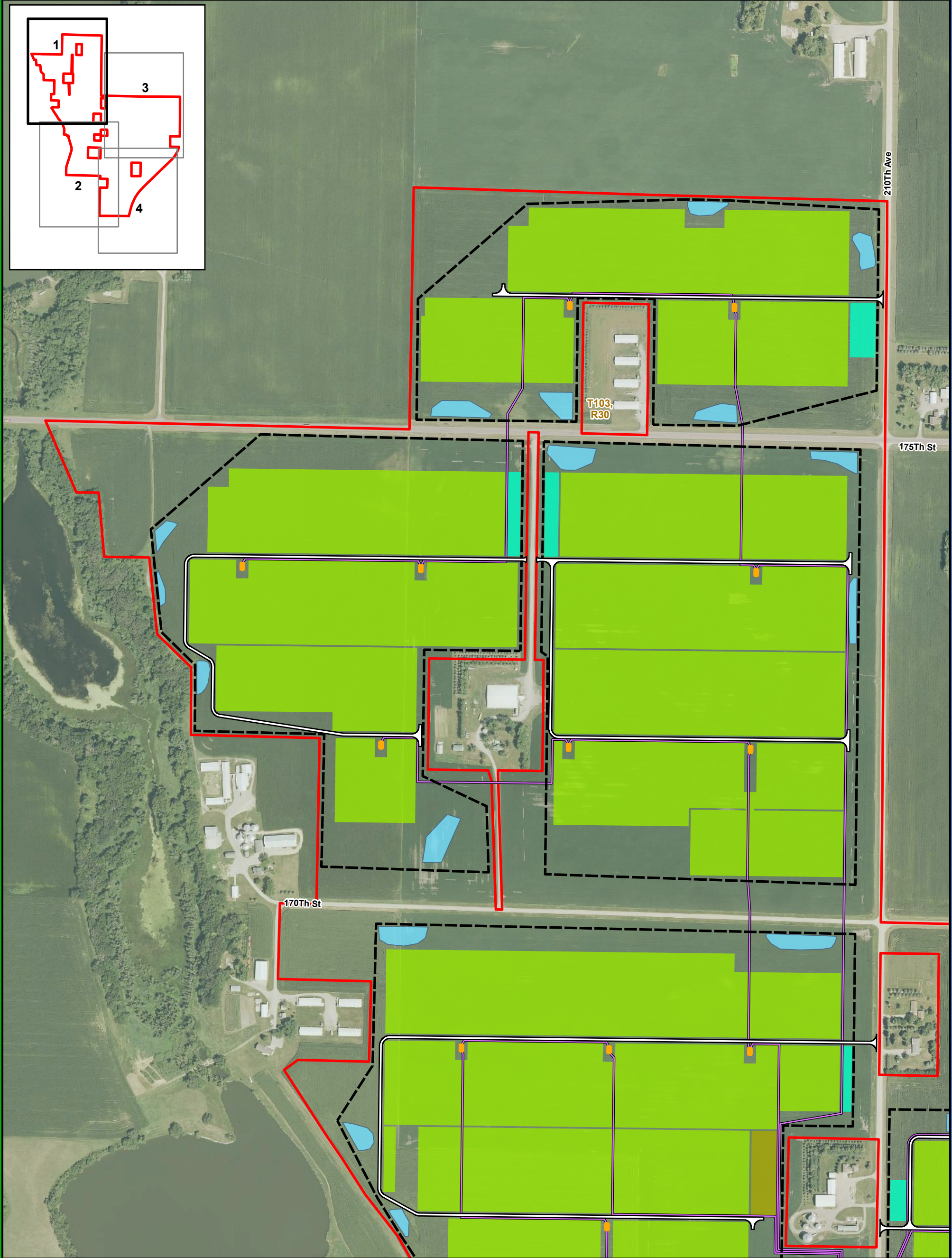
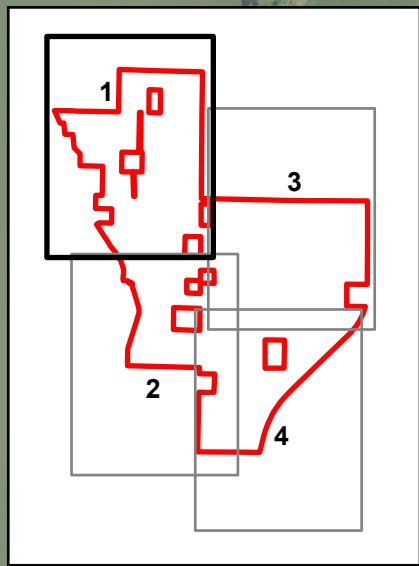


1:12,000

Map 3 Preliminary Project Layout Lake Charlotte Solar and BESS Projects Martin County, MN

- S Existing Substation
- Gen-Tie Line
- Collection and Communication Line
- Land Control Area
- Security Fence
- Additional Temporary Workspace
- BESS
- Graveled Area
- Inverter
- Laydown Yard
- O&M Facility
- Solar Array
- Solar Array - Alternate
- Project Substation
- Stormwater Pond
- City/Town
- Township

Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI



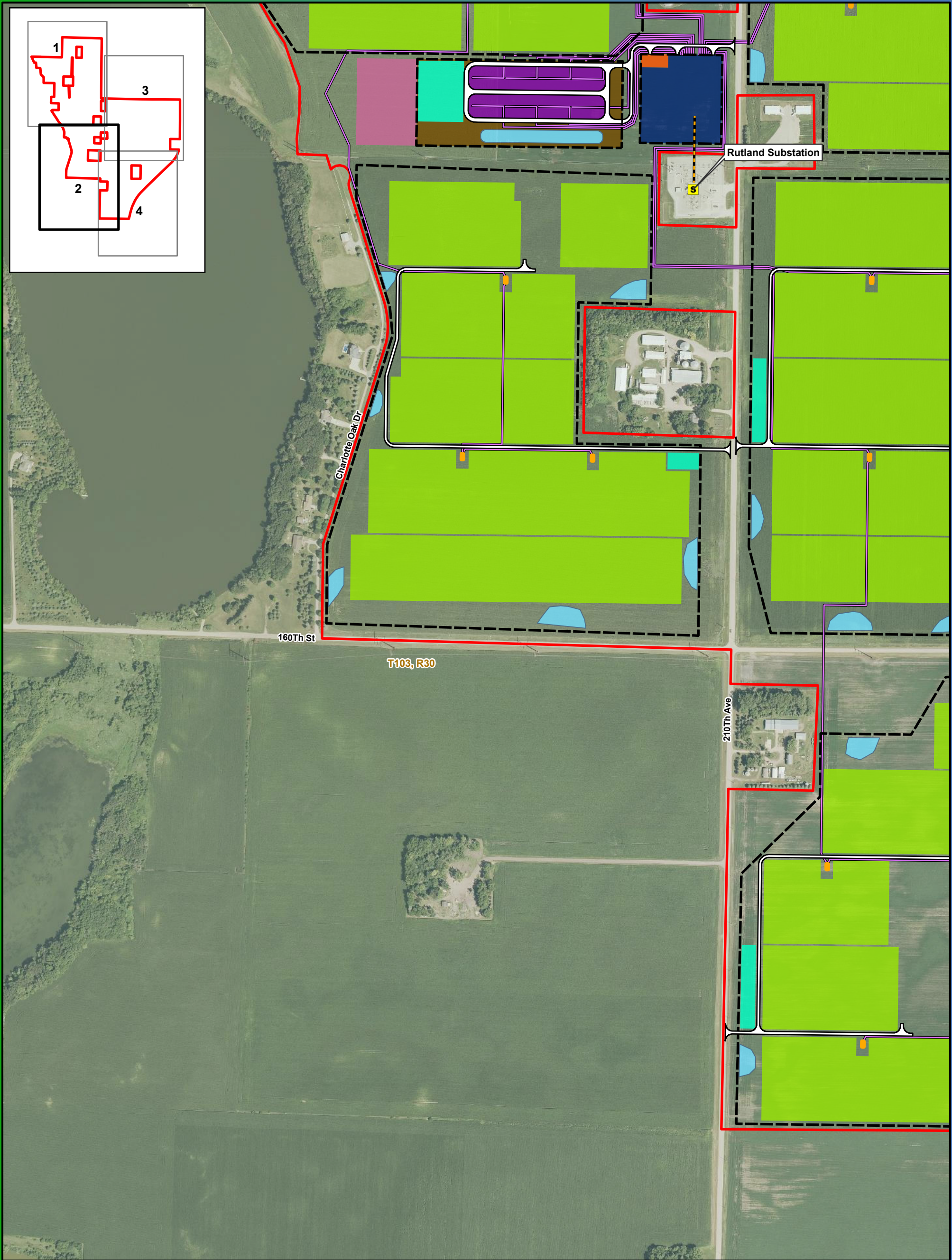
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Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI

Map 4 Detailed Preliminary Project Layout Lake Charlotte Solar and BESS Projects Martin County, MN

- | | |
|-----------------------------------|-------------------------|
| Land Control Area | Graveled Area |
| Collection and Communication Line | Inverter |
| Access Road | Laydown Yard |
| Security Fence | O&M Facility |
| Additional | Solar Array |
| Temporary Workspace | Solar Array - Alternate |
| BESS | Project Substation |
| | Stormwater Pond |
| | Township |



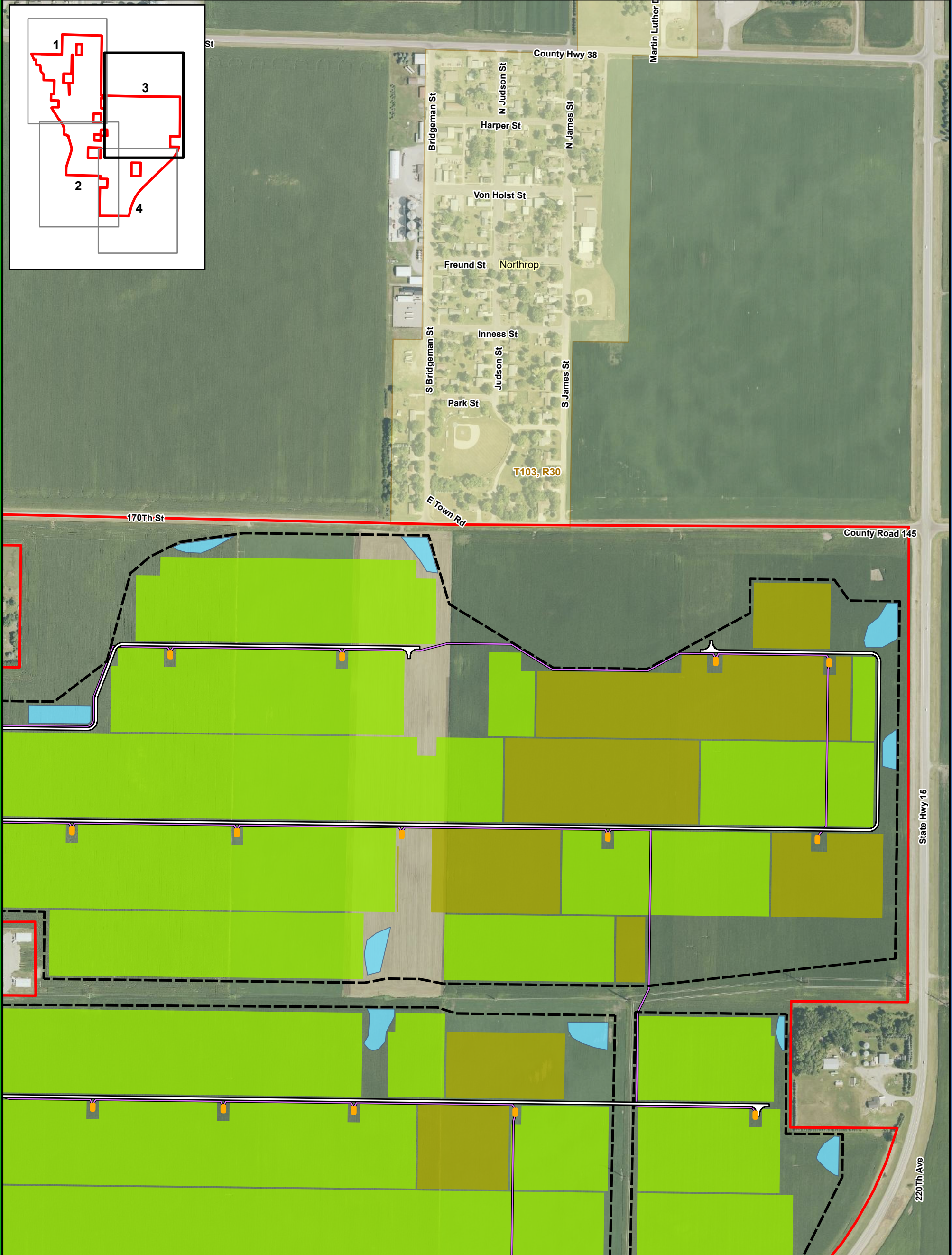
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Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI

Map 4 Detailed Preliminary Project Layout Lake Charlotte Solar and BESS Projects Martin County, MN

- Existing Substation
- BESS
- Graveled Area
- Inverter
- Laydown Yard
- O&M Facility
- Solar Array
- Solar Array - Alternate
- Project Substation
- Stormwater Pond
- Township
- Gen-Tie Line
- Land Control Area
- Collection and Communication Line
- Access Road
- Security Fence
- Additional Temporary Workspace



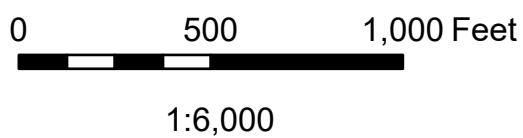
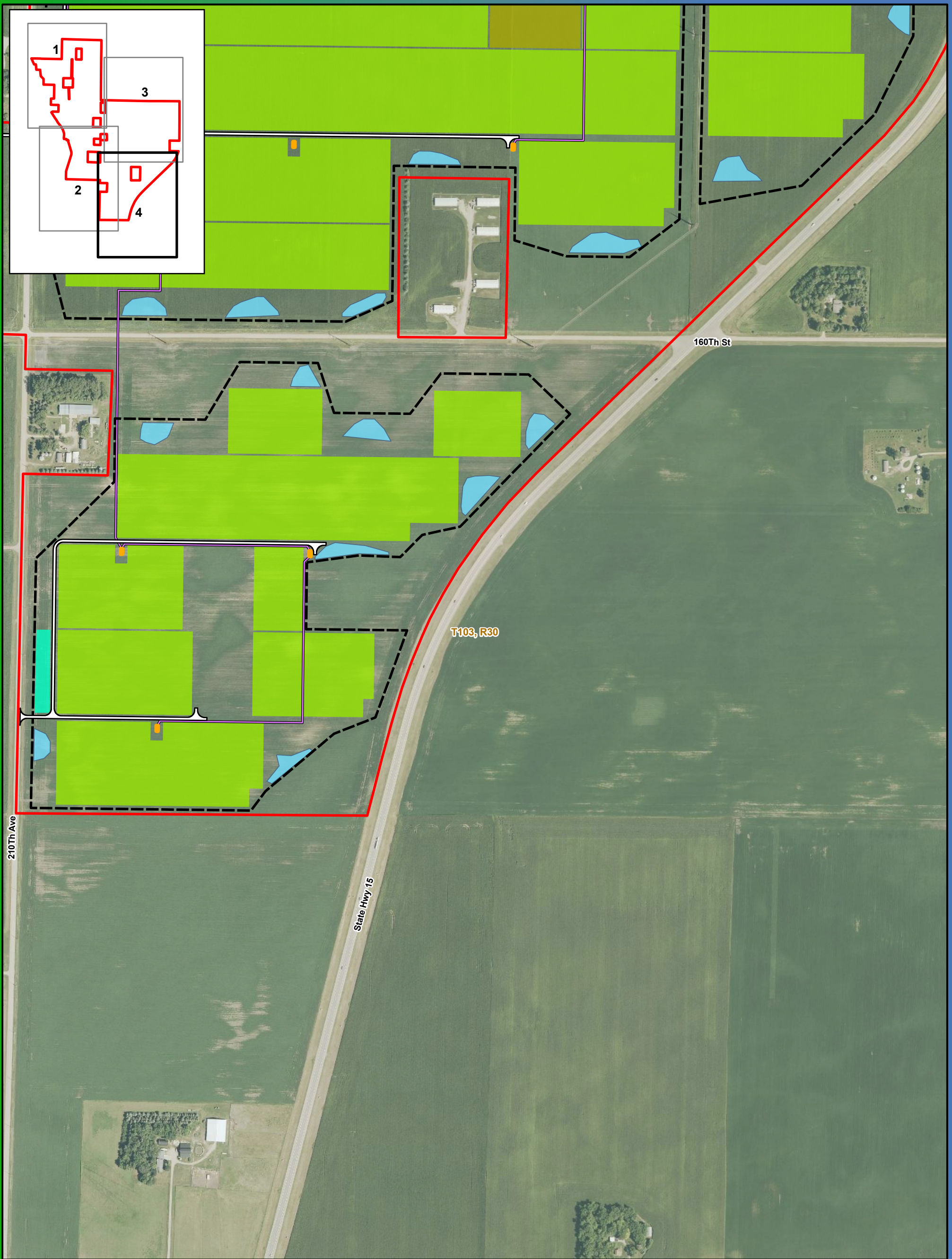
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Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI

Map 4 Detailed Preliminary Project Layout Lake Charlotte Solar and BESS Projects Martin County, MN

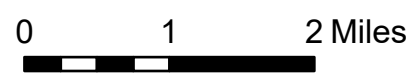
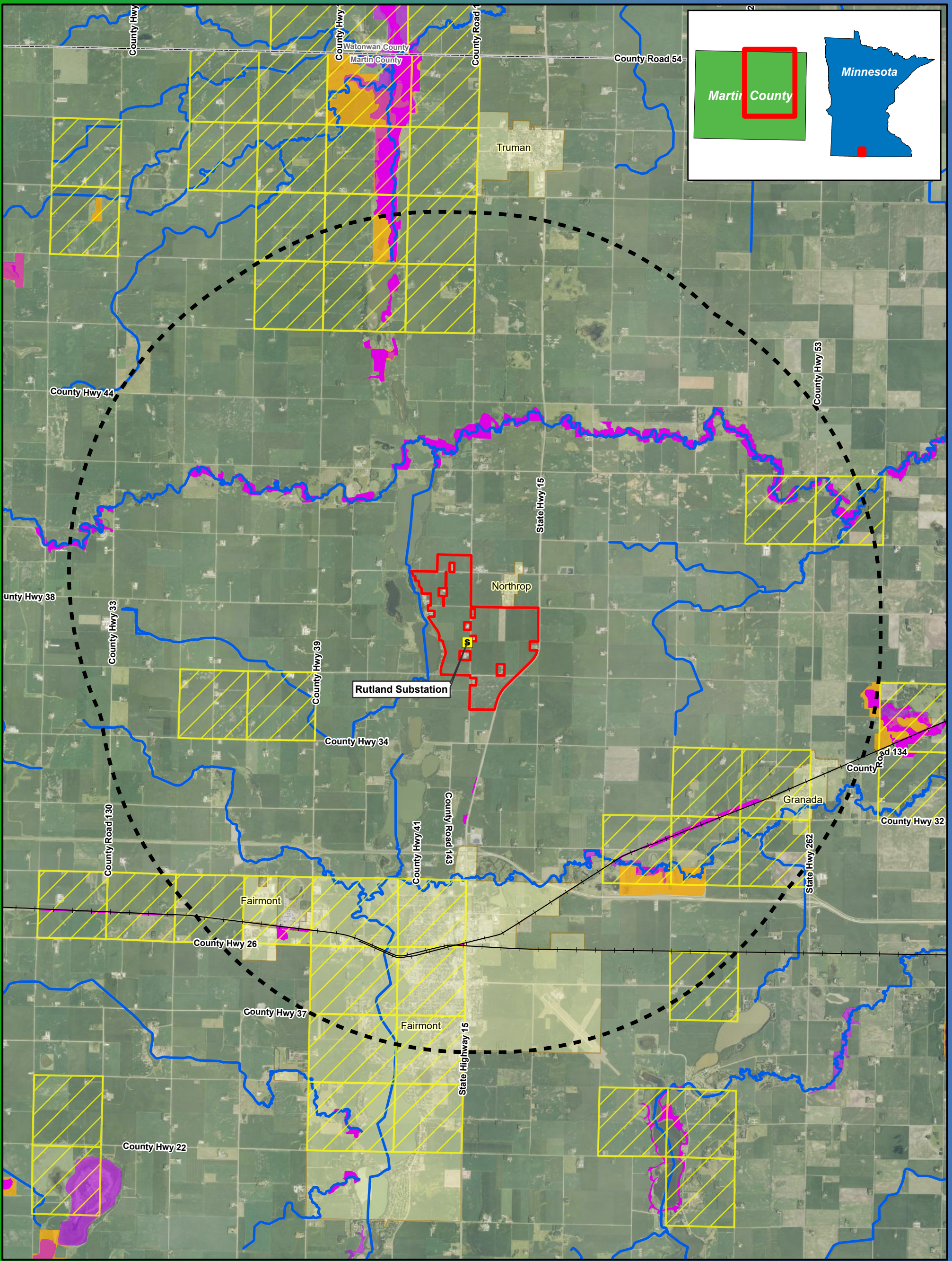
- ▭ Land Control Area
- Collection and Communication Line
- Access Road
- Security Fence
- Additional Temporary Workspace
- BESS
- Graveled Area
- Inverter
- Laydown Yard
- O&M Facility
- Solar Array
- Solar Array - Alternate
- Project Substation
- ~ Stormwater Pond
- City/Town
- Township



Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI

Map 4 Detailed Preliminary Project Layout Lake Charlotte Solar and BESS Projects Martin County, MN

- | | |
|-----------------------------------|-------------------------|
| Land Control Area | Graveled Area |
| Collection and Communication Line | Inverter |
| Access Road | Laydown Yard |
| Security Fence | O&M Facility |
| Additional Temporary Workspace | Solar Array |
| BESS | Solar Array - Alternate |
| | Project Substation |
| | Stormwater Pond |
| | Township |

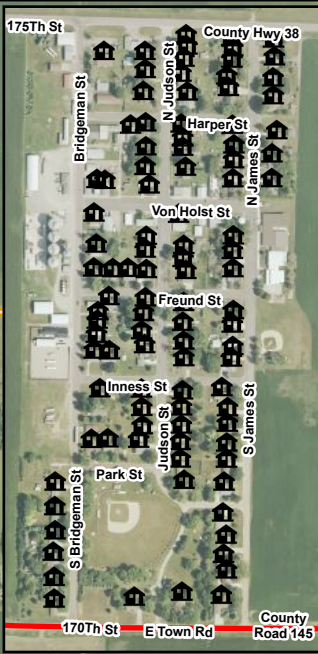
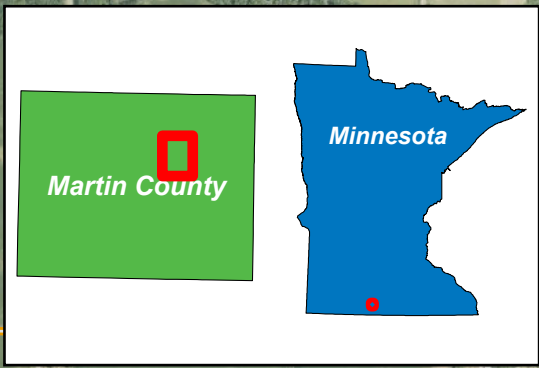
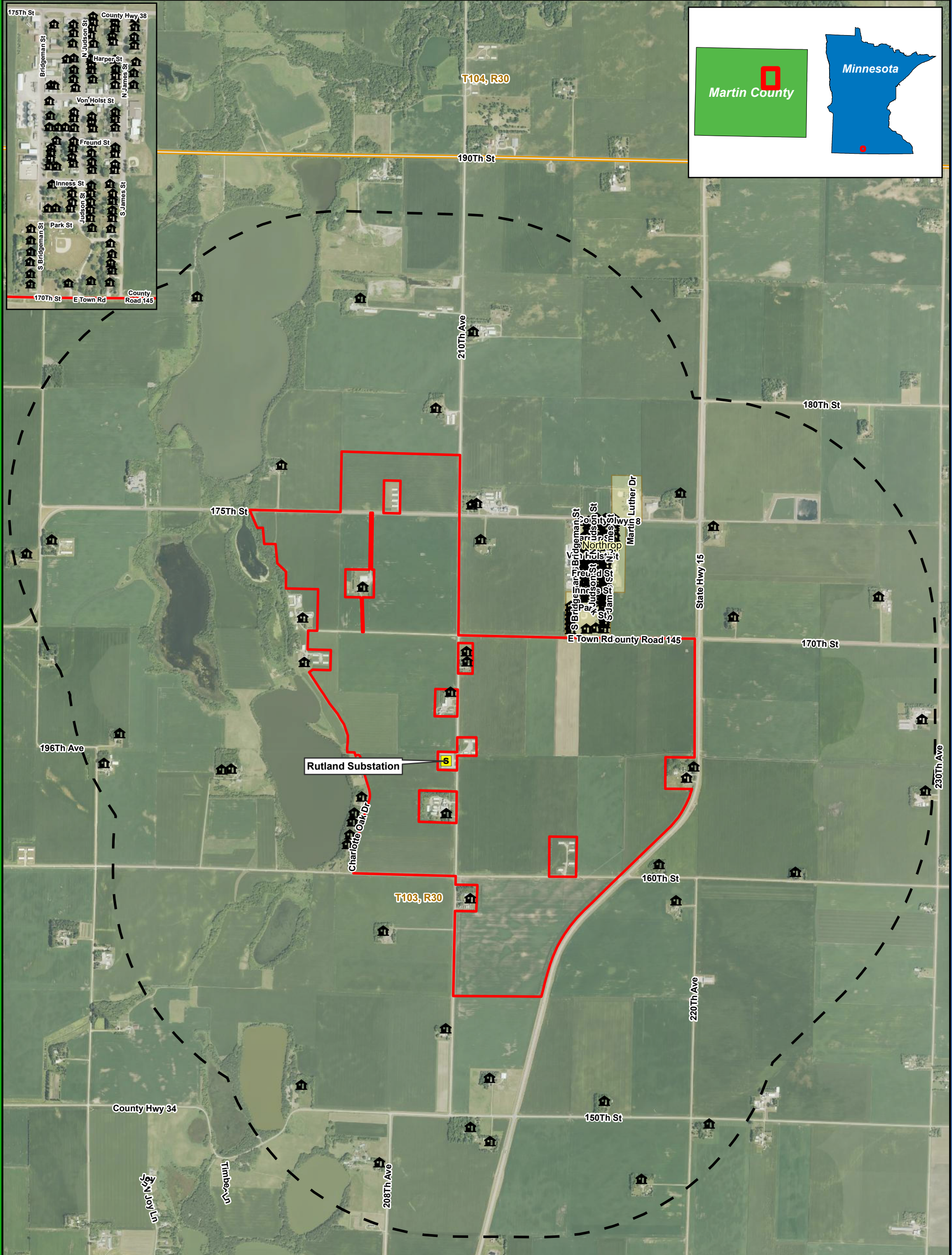


1:84,000

Map 5 Potential Solar Development Constraints Lake Charlotte Solar and BESS Projects Martin County, MN

- | | |
|---------------------------------------|------------------------------------|
| Existing Substation | Sites of Biodiversity Significance |
| Land Control Area | Public Waters Inventory (PWI) |
| Land Control Area - 5 Mile Buffer | Railroad |
| Management Area (WMA) | NHIS Record within Section |
| Native Plant Community/Native Prairie | City/Town |
| | County Boundary |

Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI



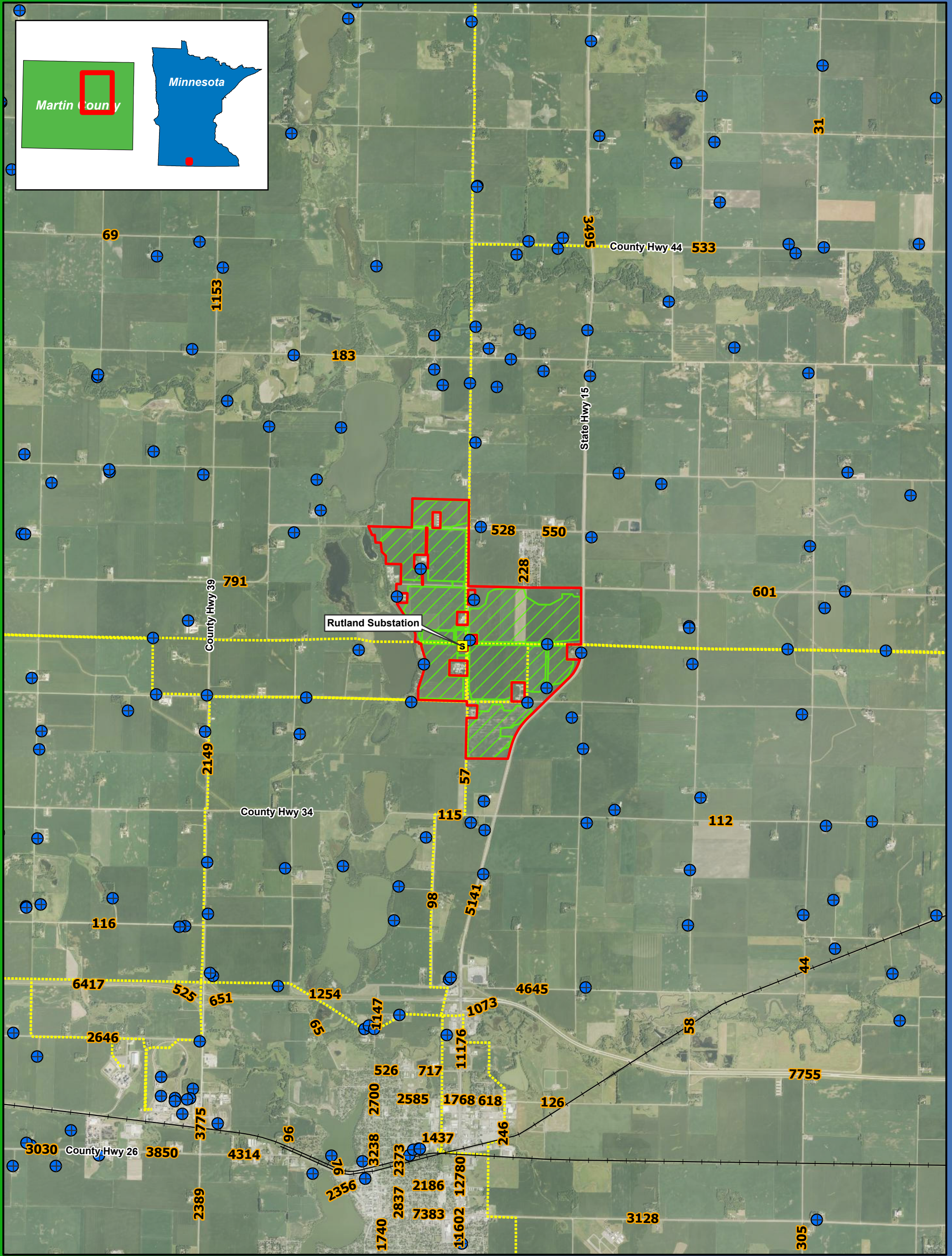
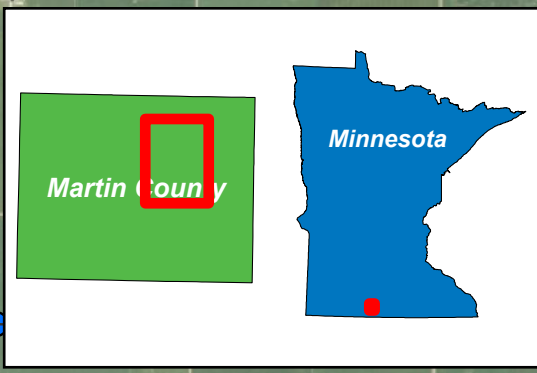
0 2,000 4,000 Feet

1:24,000

Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI

Map 6
Residences within One Mile of
the Land Control Area
Lake Charlotte Solar and
BESS Projects
Martin County, MN

- Residence
- Existing Substation
- Land Control Area
- Land Control Area - One Mile Buffer
- City/Town
- Township



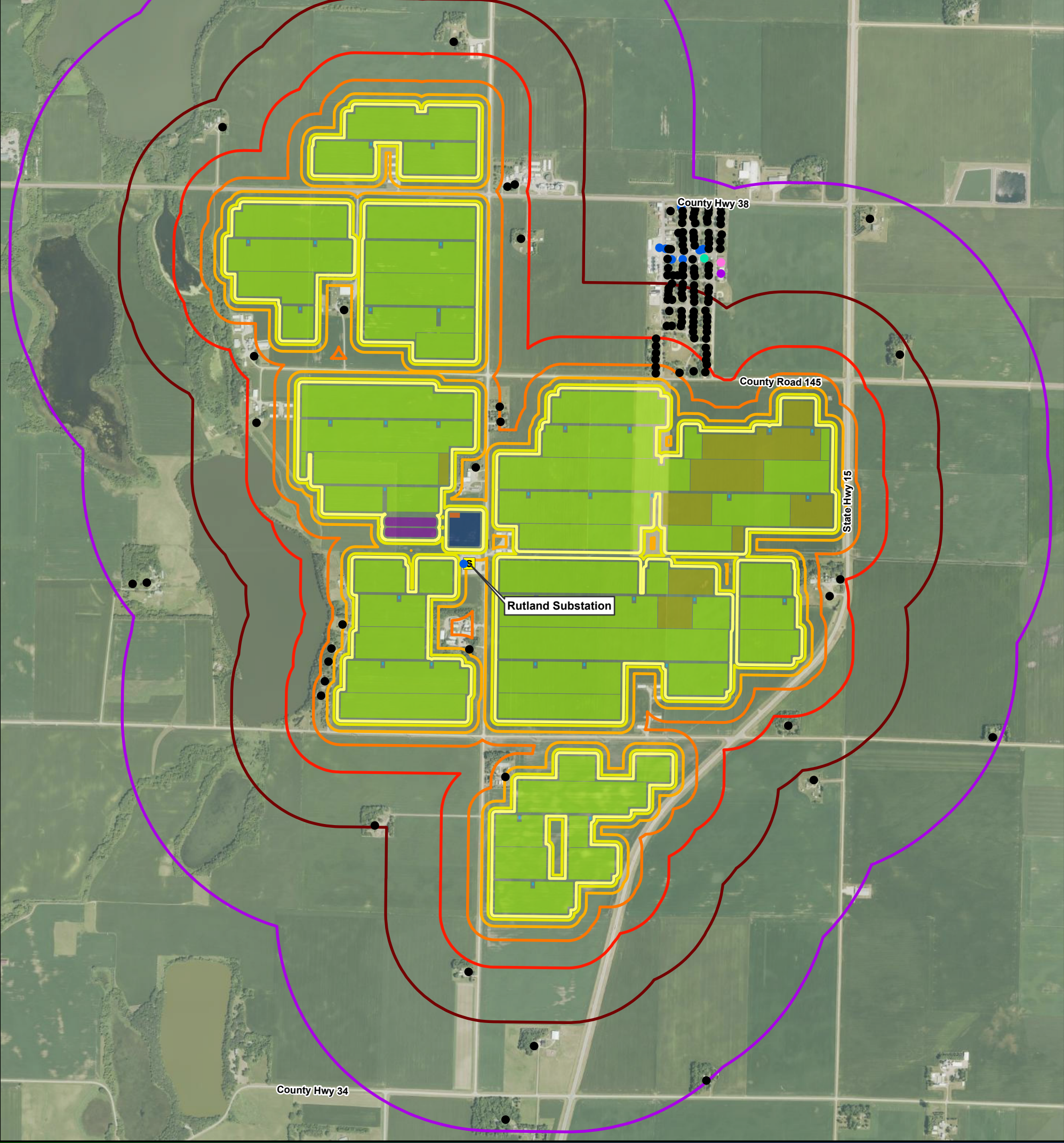
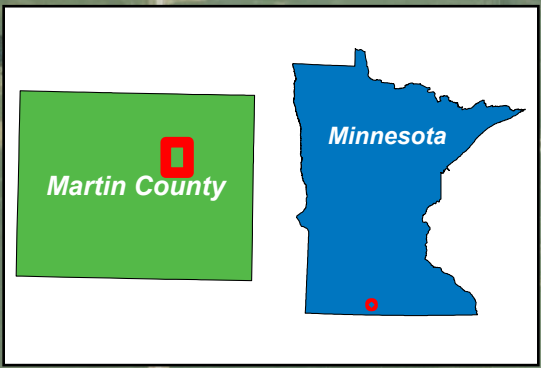
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1:50,000

Map 7
Existing Infrastructure and AADT
Lake Charlotte Solar and
BESS Projects
Martin County, MN

- Existing Substation
- Well
- Land Control Area
- Preliminary Development Area
- Transmission Line
- Railroad
- # AADT**

Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons,
MDNR, MNDOT, ESRI



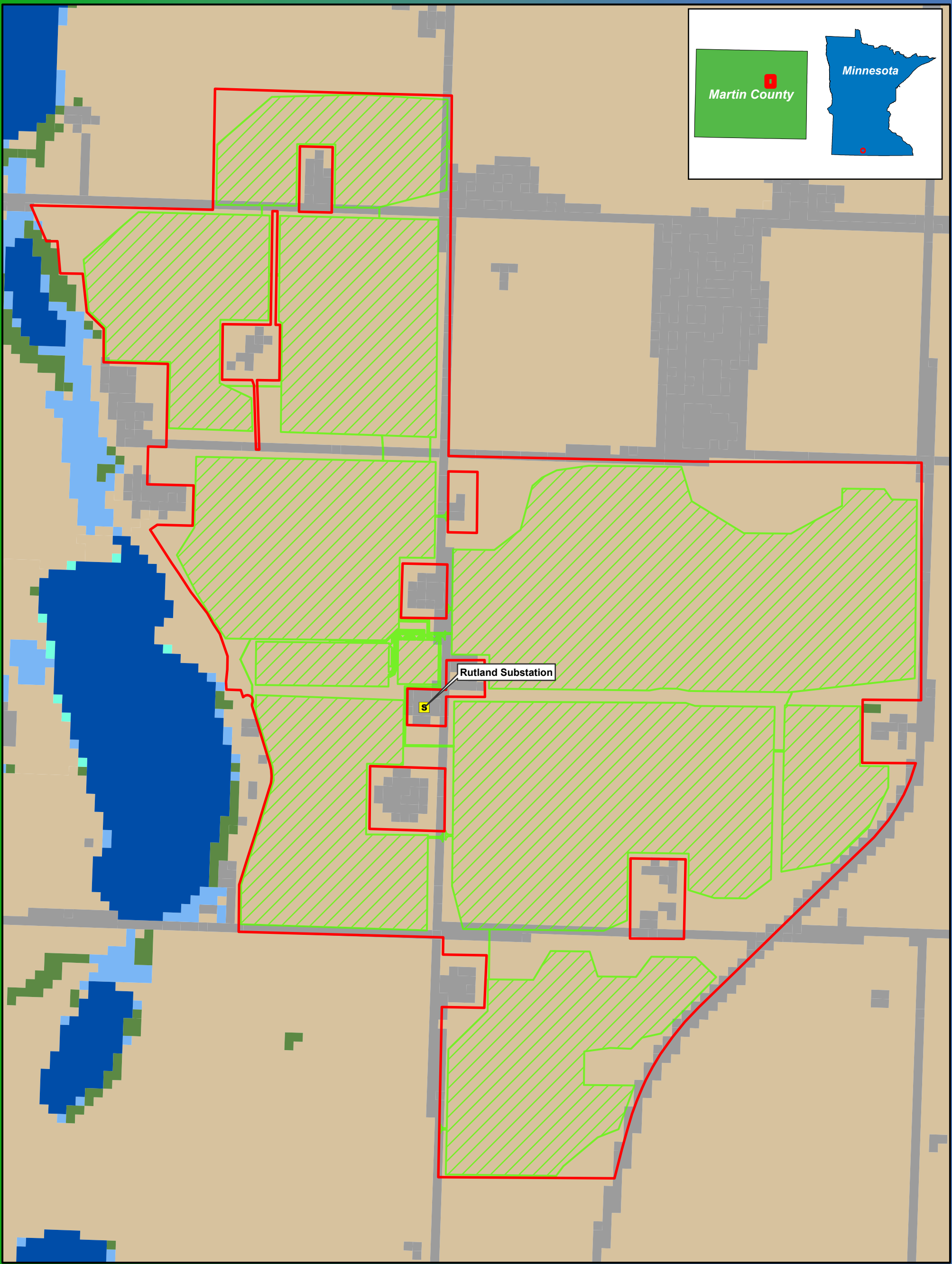
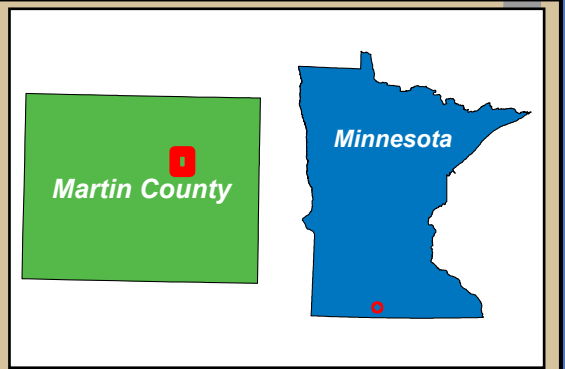
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1:18,000

Map 8 Noise Receptors Lake Charlotte Solar and BESS Projects Martin County, MN

- | | |
|-----------------------|---------------------------|
| ● Noise Receptor | ■ BESS Facility |
| ● Business | ■ Inverter |
| ● Church | ■ O&M Facility |
| ● Government | ■ Solar Array |
| ● Residence | ■ Solar Array - Alternate |
| ● School | ■ Project Substation |
| ■ Existing Substation | |

Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI, USGS



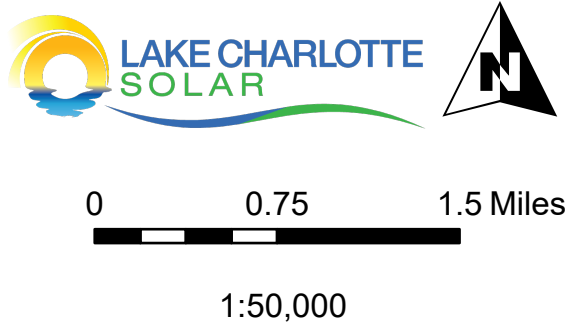
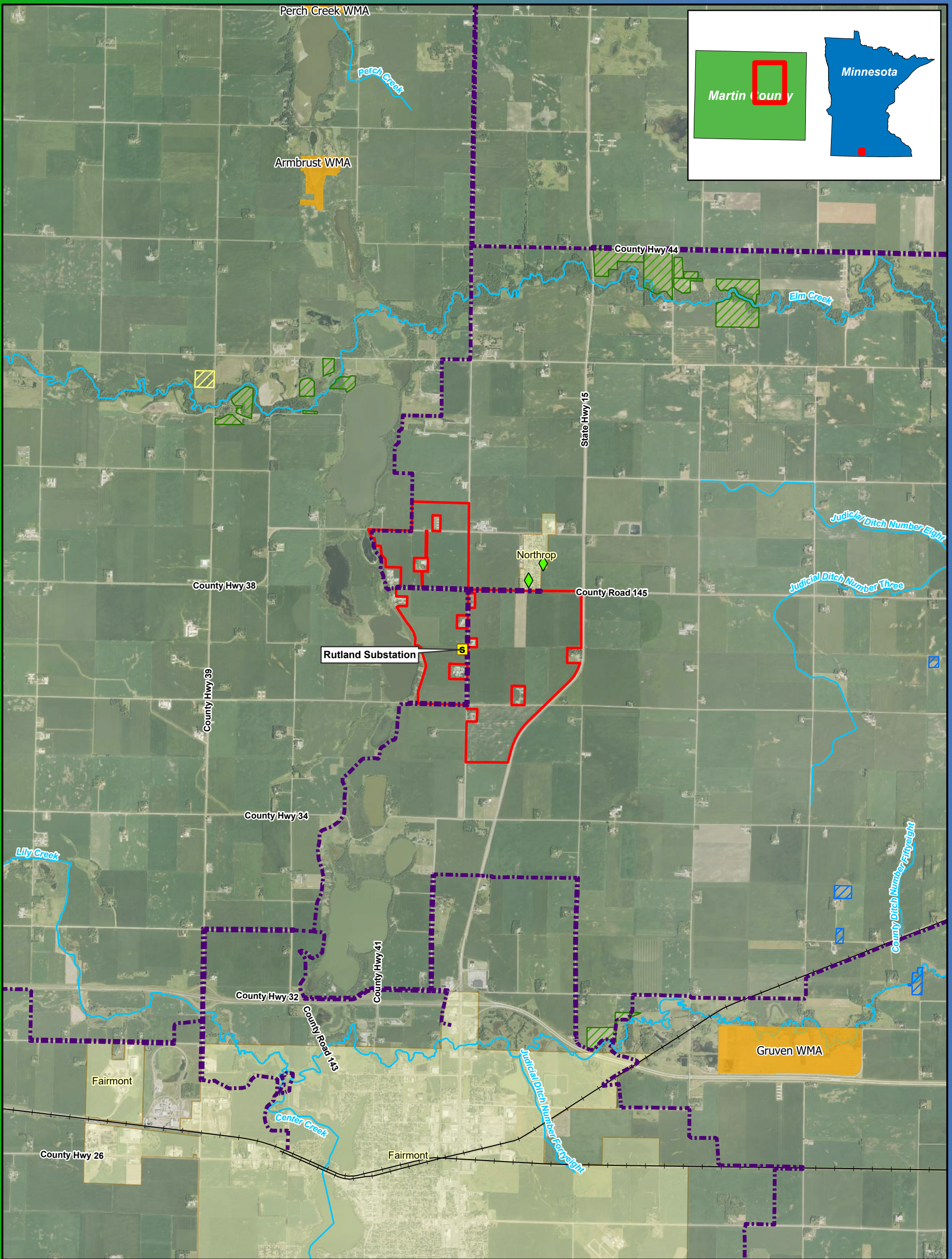
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Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI, USGS NLCD Database

Map 9 Land Cover/Land Use Lake Charlotte Solar and BESS Projects Martin County, MN

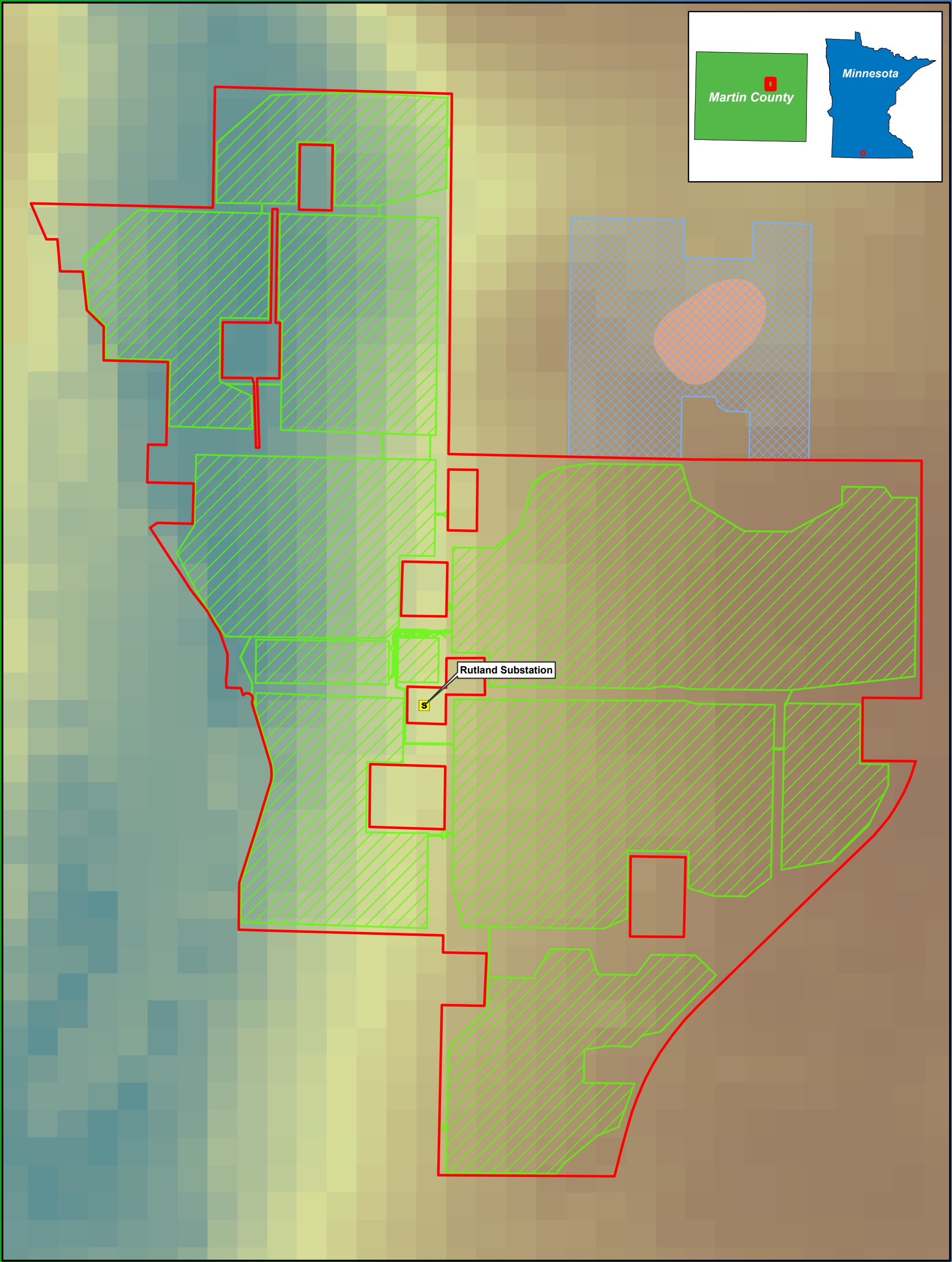
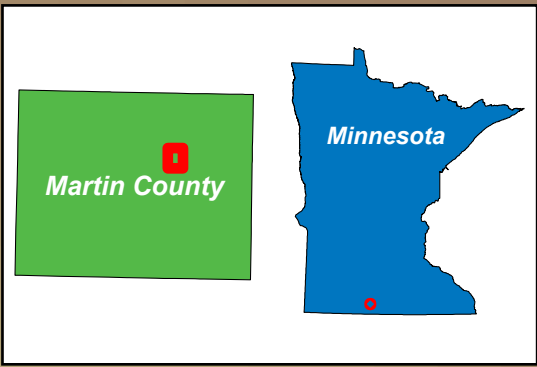
- | | |
|------------------------------|----------------------|
| Existing Substation | Agricultural Land |
| Land Control Area | Developed Land |
| Preliminary Development Area | Emergent Wetlands |
| | Herbaceous Wetlands |
| | Forested Land |
| | Grassland/Herbaceous |
| | Open Water |



Map 11
Public Land Ownership
and Recreation
Lake Charlotte Solar and
BESS Projects
Martin County, MN

- | | |
|--------------------------------|---------------------------|
| Existing Substation | PWP Conservation Easement |
| Land Control Area | RIM Conservation Easement |
| Softball Field | NHD Named Stream |
| Wildlife Management Area (WMA) | Snowmobile Trail |
| CREP III Conservation Easement | Railroad |
| | City/Town |

Imagery Source: 2021 FSA
 Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI



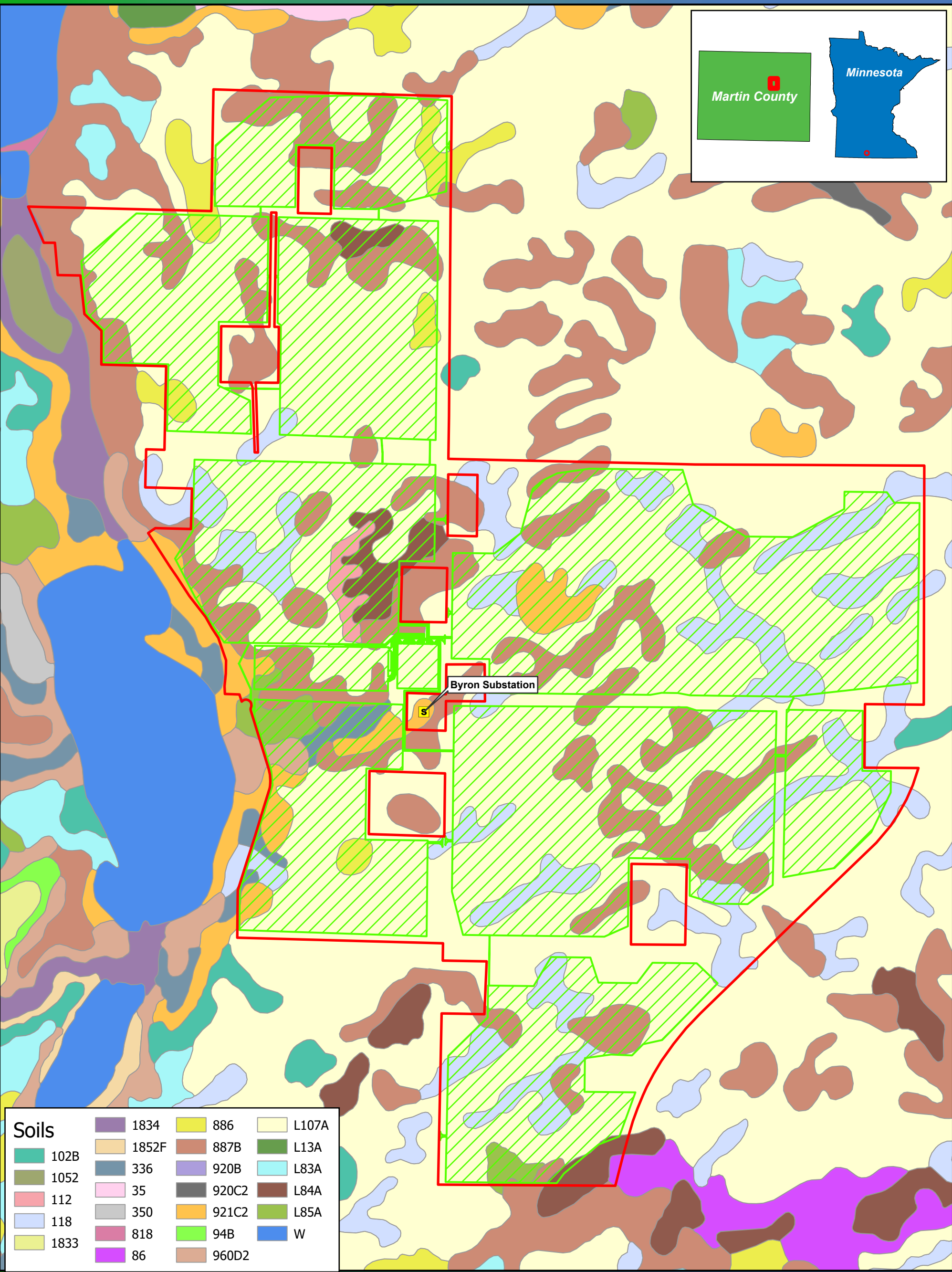
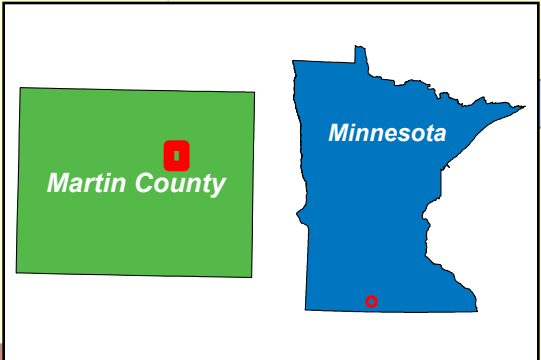
0 1,000 2,000 Feet

1:12,000

Map 12
 Site Geology and
 Depth to Bedrock
 Lake Charlotte Solar and
 BESS Projects
 Martin County, MN

- S Existing Substation
 - Land Control Area
 - Preliminary Development Area
 - Drinking Water Supply Management Area
 - Wellhead Protection Area
- Depth to Bedrock (Ft)
- 398.7
120.7

Imagery Source: 2021 FSA
 Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI



Soils		
102B	1834	886
1052	1852F	887B
112	336	920B
118	35	920C2
1833	350	921C2
	818	94B
	86	960D2
	L107A	L13A
	L83A	L84A
	L85A	W

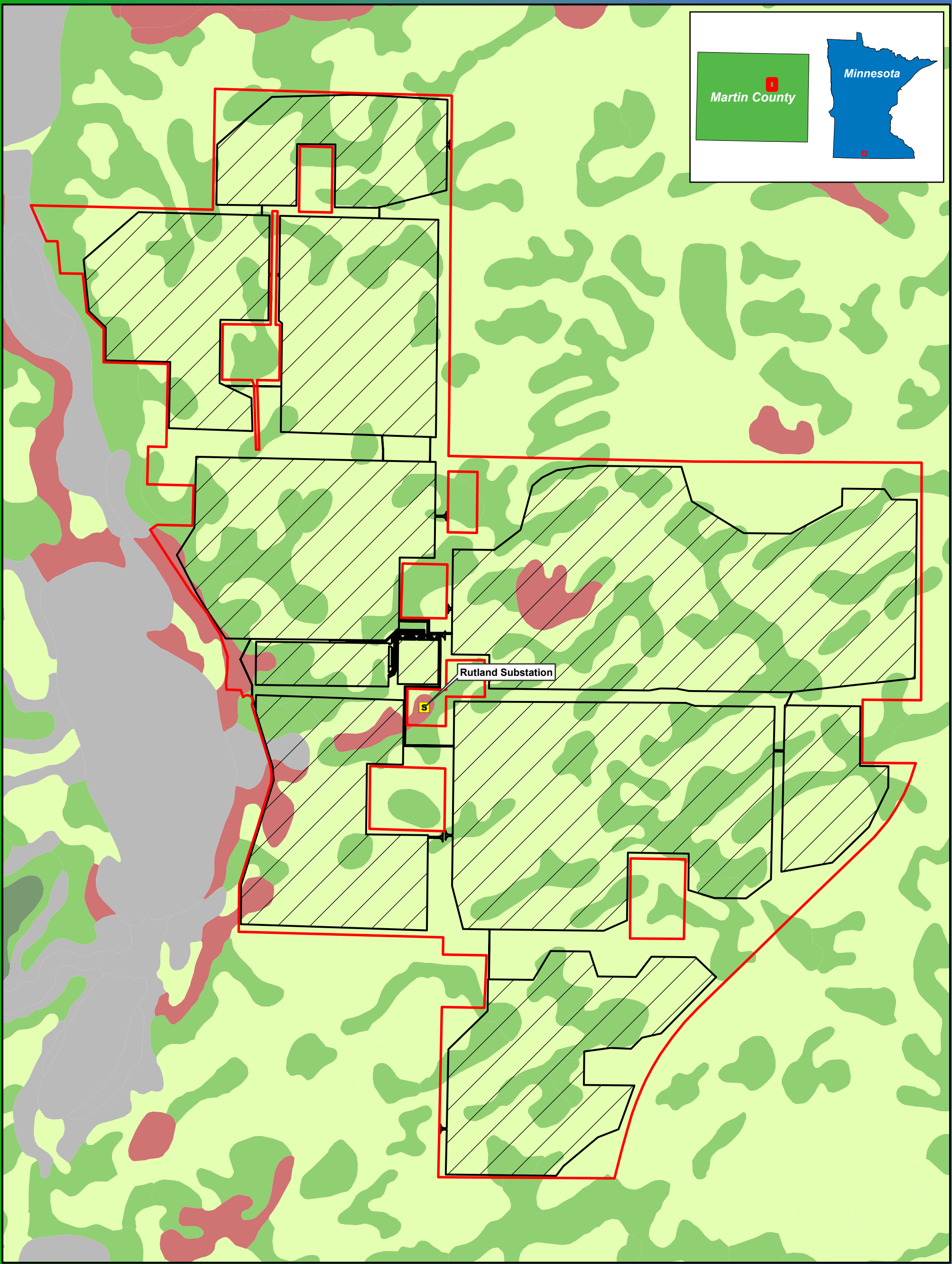
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Map 13
 NRCS Soils Map
 Lake Charlotte Solar and
 BESS Projects
 Martin County, MN

- S Existing Substation
- Land Control Area
- Preliminary Development Area

Imagery Source: 2021 FSA
 Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI, NRCS Web Soil Survey



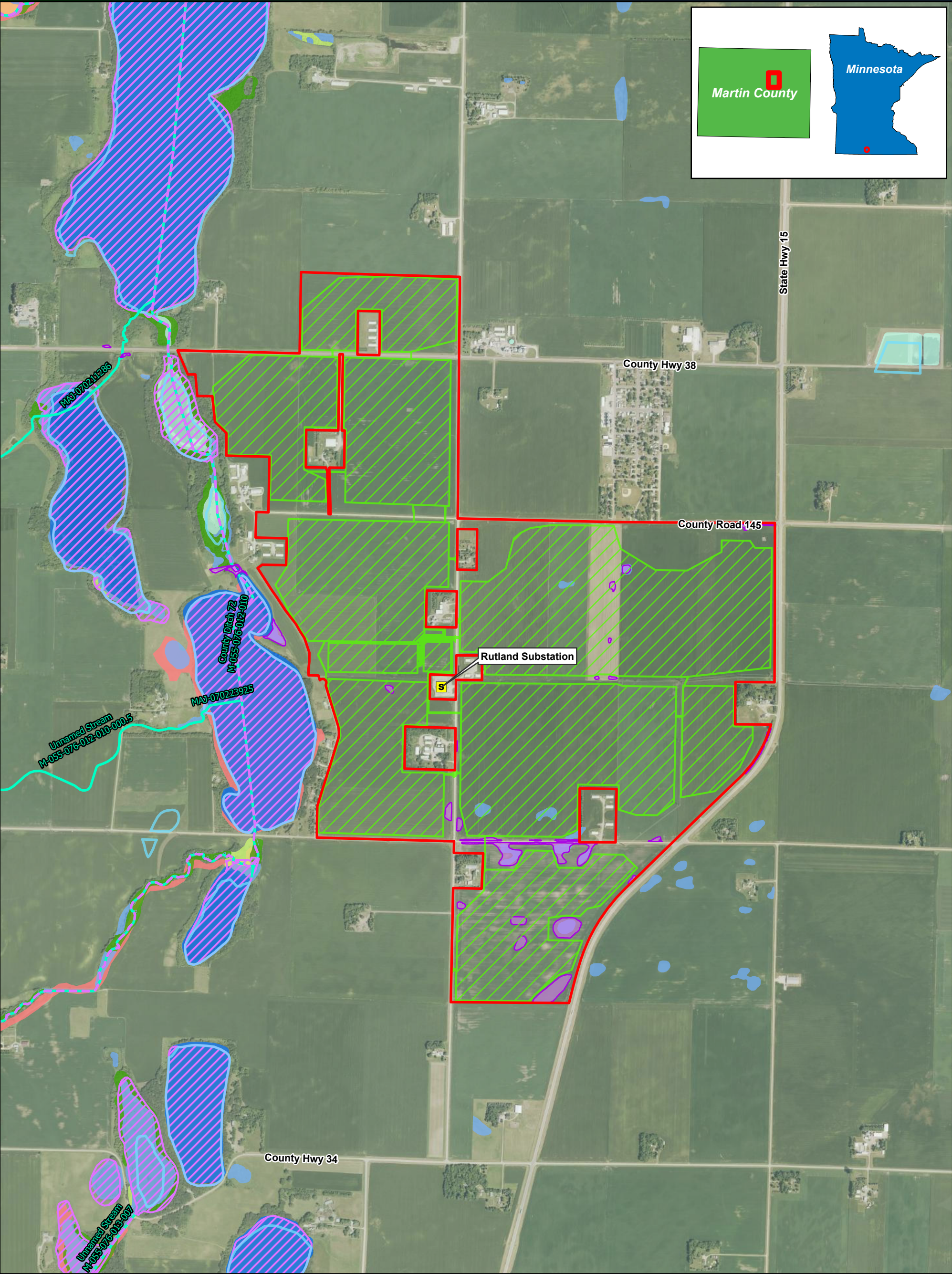
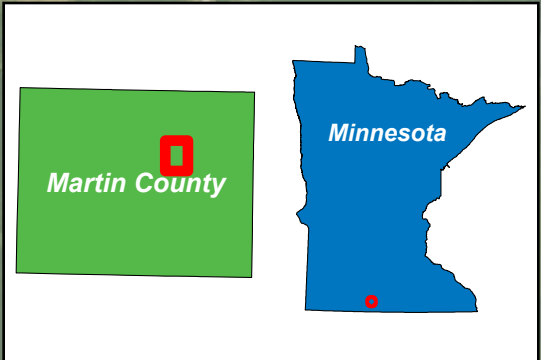
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1:12,000

Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI, NRCS Web Soil Survey

Map 14 Farmland Classifications Lake Charlotte Solar and BESS Projects Martin County, MN

- Existing Substation
- Land Control Area
- Preliminary Development Area
- Farmland Classification**
- Prime Farmland
- Prime Farmland if Drained
- Prime Farmland - Other Categories
- Farmland of Statewide Importance
- Not Prime Farmland



0 1,500 3,000 Feet
1:18,000

Map 15 Surface Waters Lake Charlotte Solar and BESS Projects Martin County, MN

- | | |
|--|---|
| <ul style="list-style-type: none"> ■ Existing Substation ■ Land Control Area ▨ Preliminary Development Area — Watercourse (MDNR) — PWI Watercourse ▨ PWI Waterbody ▭ Lake/Pond (MDNR) ▨ Delineated Wetland | <ul style="list-style-type: none"> ▭ Freshwater Emergent Wetland ▭ Freshwater Forested Wetland ▭ Freshwater Pond ▭ Freshwater Shrub Wetland ▭ Freshwater Forested/Shrub Wetland ▭ Lake ▭ Riverine ▭ Floodplain Zone A |
|--|---|

Imagery Source: 2021 FSA
Sources: National Grid Renewables, MN Geospatial Commons, MDNR, ESRI

