# Appendix C-4
# Cultural Resources

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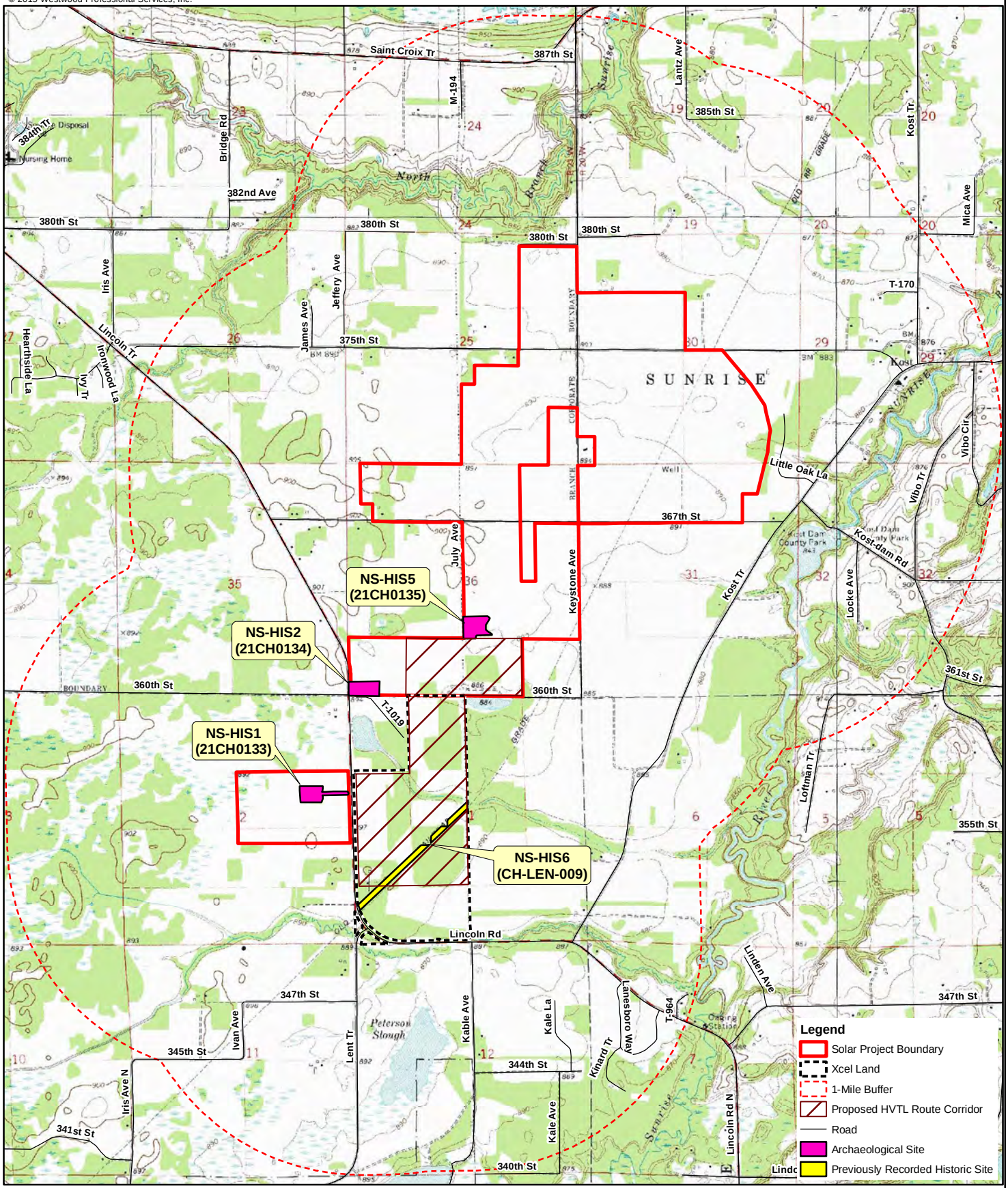


Data Source(s): Data and map are approximate. Westwood (2014); MNDOT Basemap (2014); USDA/NRCS - National Cartography & Geospatial Center, Chisago County DRG (various dates); North Star Solar PV LLC (2014).

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# North Star Solar Project and NS HVTL Project

North Branch, Sunrise Township, and Lent Township; Chisago County, Minnesota

N

0 Feet 3,000

Cultural Resources

Appendix C-4

Map Document: P:\0004493.00\GIS\Permit\NS_CulturalResource01B_150203.mxd 2/3/2015 9:42:35 AM

# Appendix C-5
# NRCS Soils

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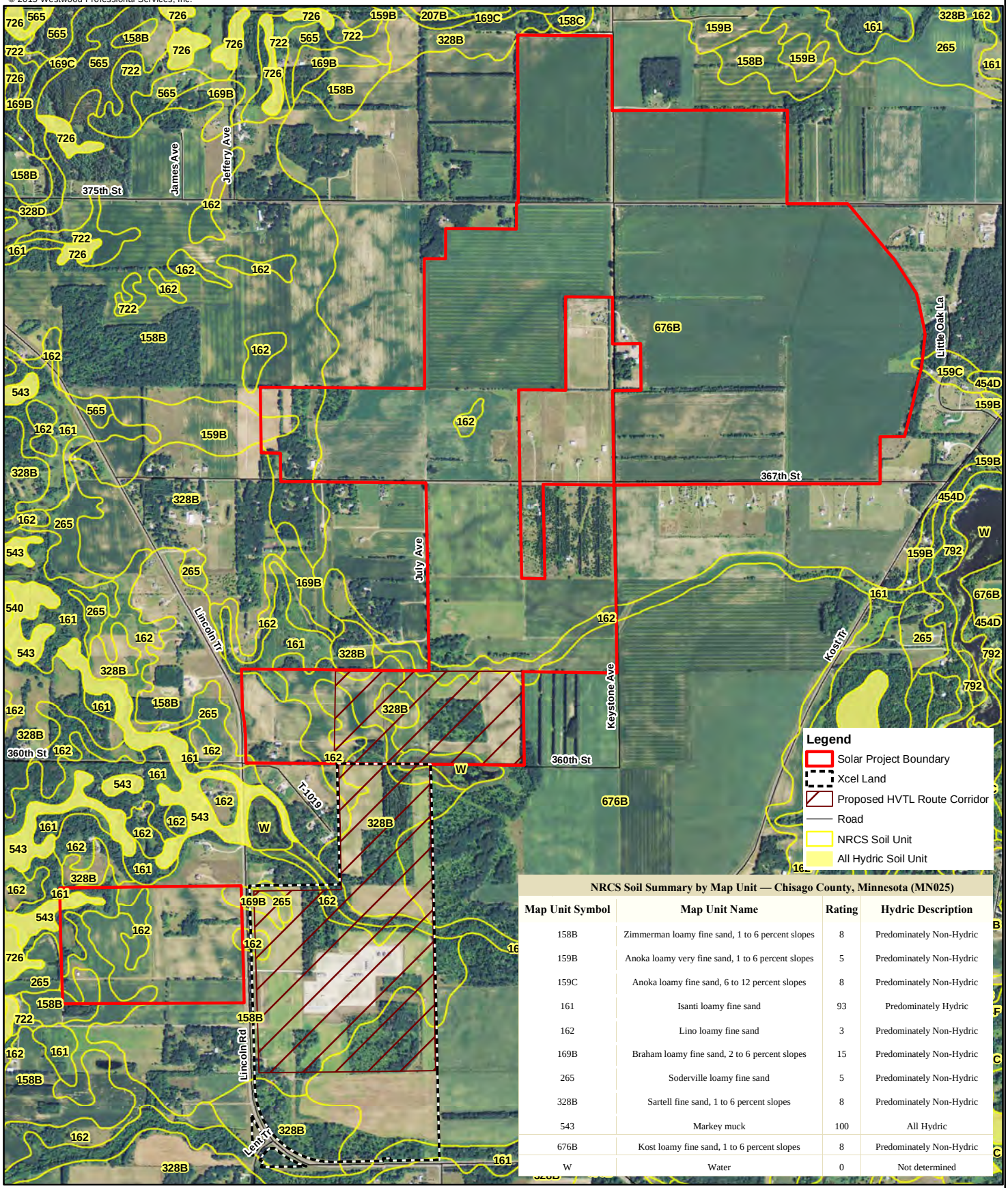


**NRCS Soil Summary by Map Unit — Chisago County, Minnesota (MN025)**

| Map Unit Symbol | Map Unit Name | Rating | Hydric Description |
|---|---|---|---|
| 158B | Zimmerman loamy fine sand, 1 to 6 percent slopes | 8 | Predominately Non-Hydric |
| 159B | Anoka loamy very fine sand, 1 to 6 percent slopes | 5 | Predominately Non-Hydric |
| 159C | Anoka loamy fine sand, 6 to 12 percent slopes | 8 | Predominately Non-Hydric |
| 161 | Isanti loamy fine sand | 93 | Predominately Hydric |
| 162 | Lino loamy fine sand | 3 | Predominately Non-Hydric |
| 169B | Braham loamy fine sand, 2 to 6 percent slopes | 15 | Predominately Non-Hydric |
| 265 | Soderville loamy fine sand | 5 | Predominately Non-Hydric |
| 328B | Sartell fine sand, 1 to 6 percent slopes | 8 | Predominately Non-Hydric |
| 543 | Markey muck | 100 | All Hydric |
| 676B | Kost loamy fine sand, 1 to 6 percent slopes | 8 | Predominately Non-Hydric |
| W | Water | 0 | Not determined |

Data Source(s): Data and map are approximate. Westwood (2014); Ventyx Velocity Suite (Nov. 2014); MNDOT Basemap (2014); USGS - Geographic Names Information System (2014); MNDNR (various dates); Chisago County GIS (2014); NAIP (2013); ESRI (2008); U.S. Department of Agriculture, Natural Resources Conservation Service (2014).

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N

0 Feet 1,850

# North Star Solar Project and NS HVTL Project

North Branch, Sunrise Township, and Lent Township; Chisago County, Minnesota

NRCS Soils

Appendix C-5

Map Document: P:\0004493.00\GIS\PermitNS_Soils01B_150203.mxd 2/3/2015 10:03:01 AM

# Appendix C-6
# Water Resources

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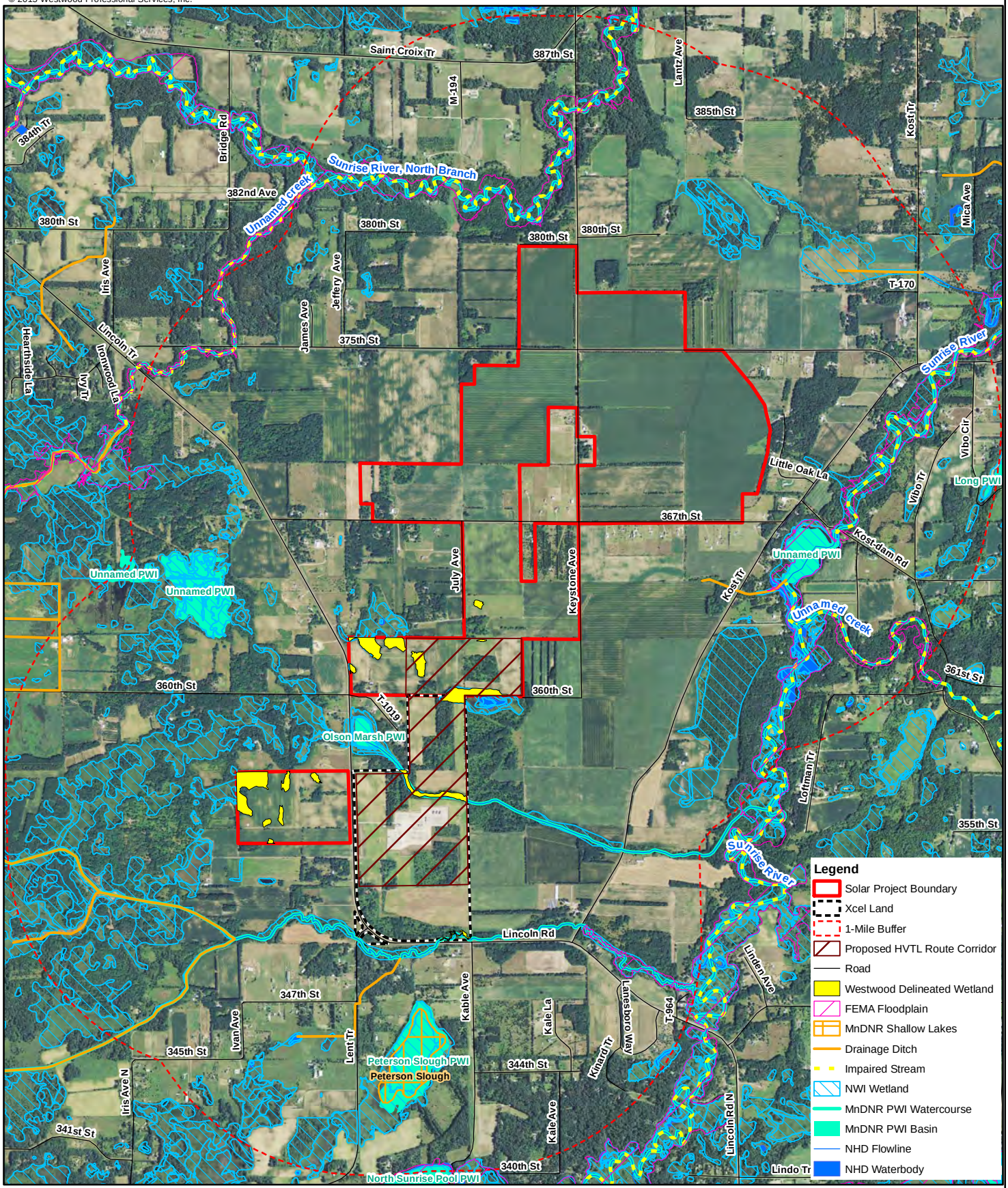


**Legend**

- Solar Project Boundary
- Xcel Land
- 1-Mile Buffer
- Proposed HVTL Route Corridor
- Road
- Westwood Delineated Wetland
- FEMA Floodplain
- MnDNR Shallow Lakes
- Drainage Ditch
- Impaired Stream
- NWI Wetland
- MnDNR PWI Watercourse
- MnDNR PWI Basin
- NHD Flowline
- NHD Waterbody

Data Source(s): Data and map are approximate. Westwood (2014); Ventyx Velocity Suite (Nov. 2014); MNDOT Basemap (2014); USGS - Geographic Names Information System (2014); MNDNR (various dates); Chisago County GIS (2014); NAIP (2013); ESRI (2008); FEMA (2013); MnDOT Ditches (accessed 2014); USGS NHD (various dates); NWI, MNDNR and Ducks Unlimited, Inc. (2013).

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# North Star Solar Project and NS HVTL Project

North Branch, Sunrise Township, and Lent Township; Chisago County, Minnesota

N

0 3,000 Feet

Water Resources

Appendix C-6

Map Document: P:\0004493.00\GIS\PermitNS_WaterResources\01B_150203.mxd 2/3/2015 10:10:49 AM

# Appendix C-8
# Land Cover

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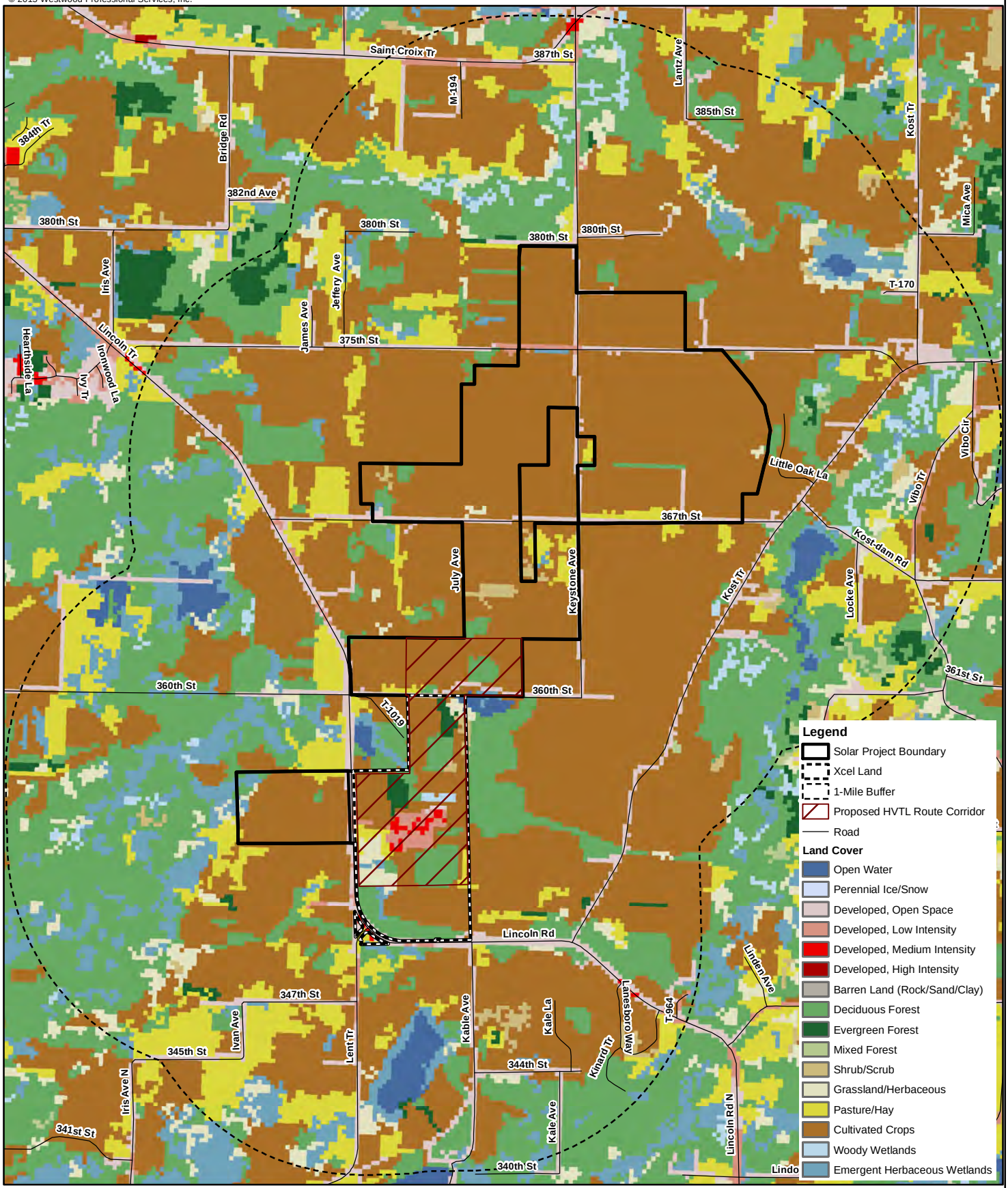


Data Source(s): Data and map are approximate. Westwood (2014); MNDOT Basemap (2014); USGS - Geographic Names Information System (2014); Chisago County GIS (2014); ESRI (2008); U.S. Geological Survey, NLCD 2011 Land Cover (2011 Edition).

# North Star Solar Project and NS HVTL Project

North Branch, Sunrise Township, and Lent Township; Chisago County, Minnesota

NLCD Land Cover

Appendix C-7

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N

0 3,000 Feet

Map Document: P:\0004493.00\GIS\PermitNS_LandCover01B_150203.mxd 2/3/2015 9:49:28 AM

# Appendix C-9
# Rare and Unique Natural Resources and Sensitive Lands

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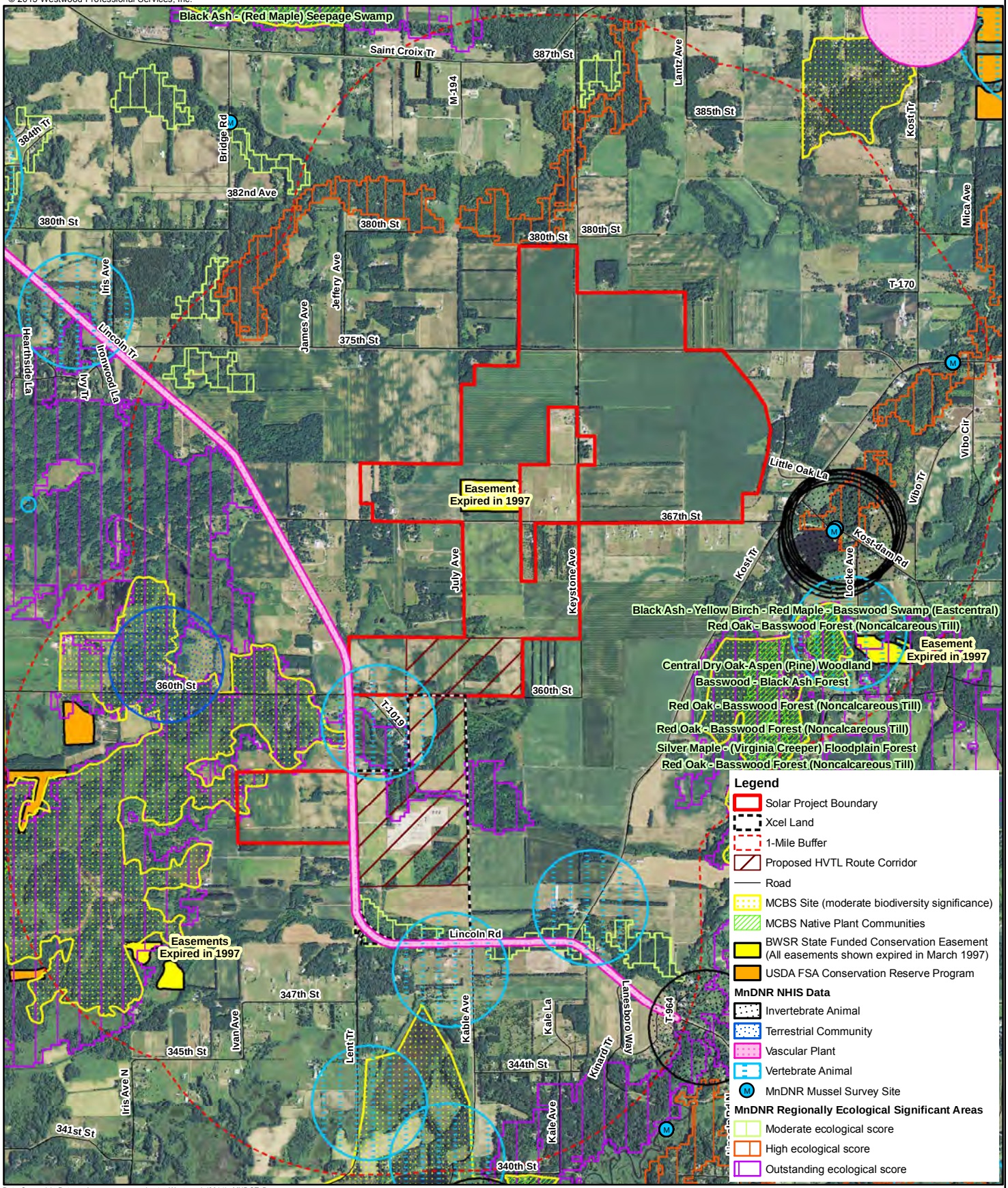


Data Source(s): Data and map are approximate. Westwood (2014); MNDOT Basemap (2014); Chisago County GIS (2014); NAIP (2013); ESRI (2008); MnDNR NHIS (2014); Minnesota County Biological Survey, MnDNR-Division of Ecological Resources-Natural Hertiage and Nongame Research Program (various dates); Regionally Significant Ecological Areas - MLCCS derived 2008, MnDNR-Central Region (2008); Minnesota Board of Water and Soil Resources (2010); USDA FSA Minnesota State Office (2007).

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Note: Copyright 2014 State of Minnesota, Department of Natural Resources, "NHIS data included here were provided by the Division of Ecological Resources, Minnesota Department of Natural Resources (DNR), and were current as of April 2014. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present."

N

0 3,000 Feet

# North Star Solar Project and NS HVTL Project

North Branch, Sunrise Township, and Lent Township; Chisago County, Minnesota

Rare and Unique Natural Features and Sensitive Lands

Appendix C-8

Map Document: P:\0004493.00\GIS\PermitNS_RareNaturalFeatures01B_150203.mxd 2/3/2015 10:00:53 AM