

Barr Footer: Date: 6/13/2007 3:00:19 PM File: \\Projects\23711083\MapSite\img\_permit\figs\Fig4-1\_Land\_Use\_Map\_PrefSite\_Site.mxd User: bal

**Legend**

 GRE campus & proposed plant site

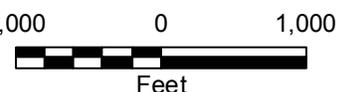
- |   |   |
|---|---|
|  Open Water                  |  Emergent Herbaceous Wetland |
|  Developed, Open Space       |  Mixed Forest                |
|  Developed, Low Intensity    |  Shrub/Scrub                 |
|  Developed, Medium Intensity |  Herbaceous                  |
|  Developed, High Intensity   |  Hay/Pasture                 |
|  Barren Land                 |  Cultivated Crops            |
|  Deciduous Forest            |  Woody Wetlands              |
|  Evergreen Forest            |   |

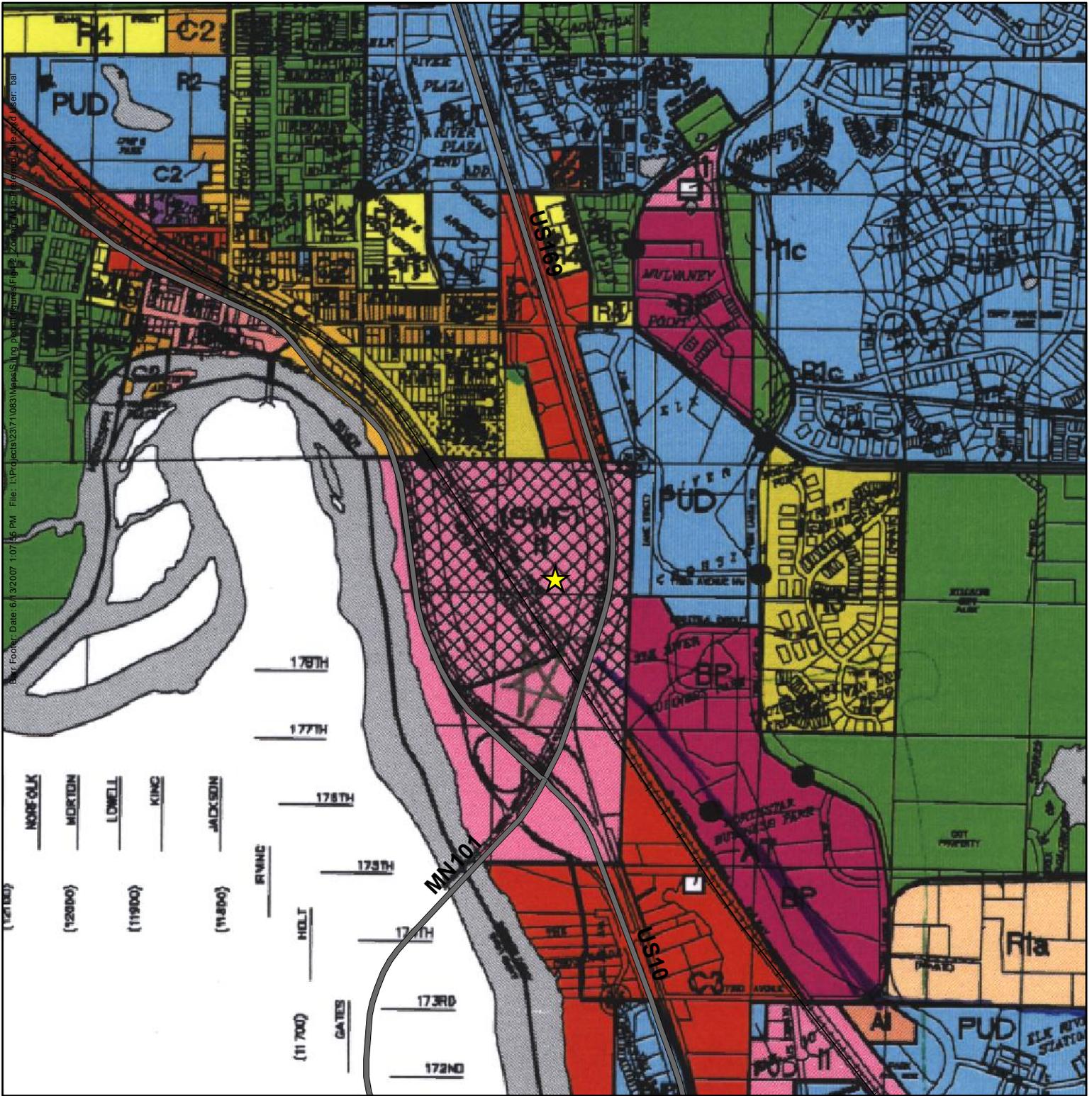
**Figure 4-1**  
**Land Use Map - Preferred Site**

Elk River Peaking Station  
Siting Permit Application  
Great River Energy  
Elk River, MN



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### Legend

GRE campus & proposed plant site

A1 Agricultural Conservation	RP Business Park
AR Agricultural Research	DD Downtown District
R1a Single Family Residential	C1 Central Commercial
R1b Single Family Residential	C2 Office District
R1c Single Family Residential	C3 Highway Commercial
R1d Single Family Residential	C4 Community Commercial
R2 Two Family Residential	I1 Light Industrial
R2b Two Family Residential	I2 Medium Industrial
R3 Townhouse/Multiple Family Res.	SWF Solid Waste Facility
R4 Multiple Family Residential	AT Antenna Tower
PUD Planned Unit Development	

**Figure 4-2**  
Zoning Map - Preferred Site

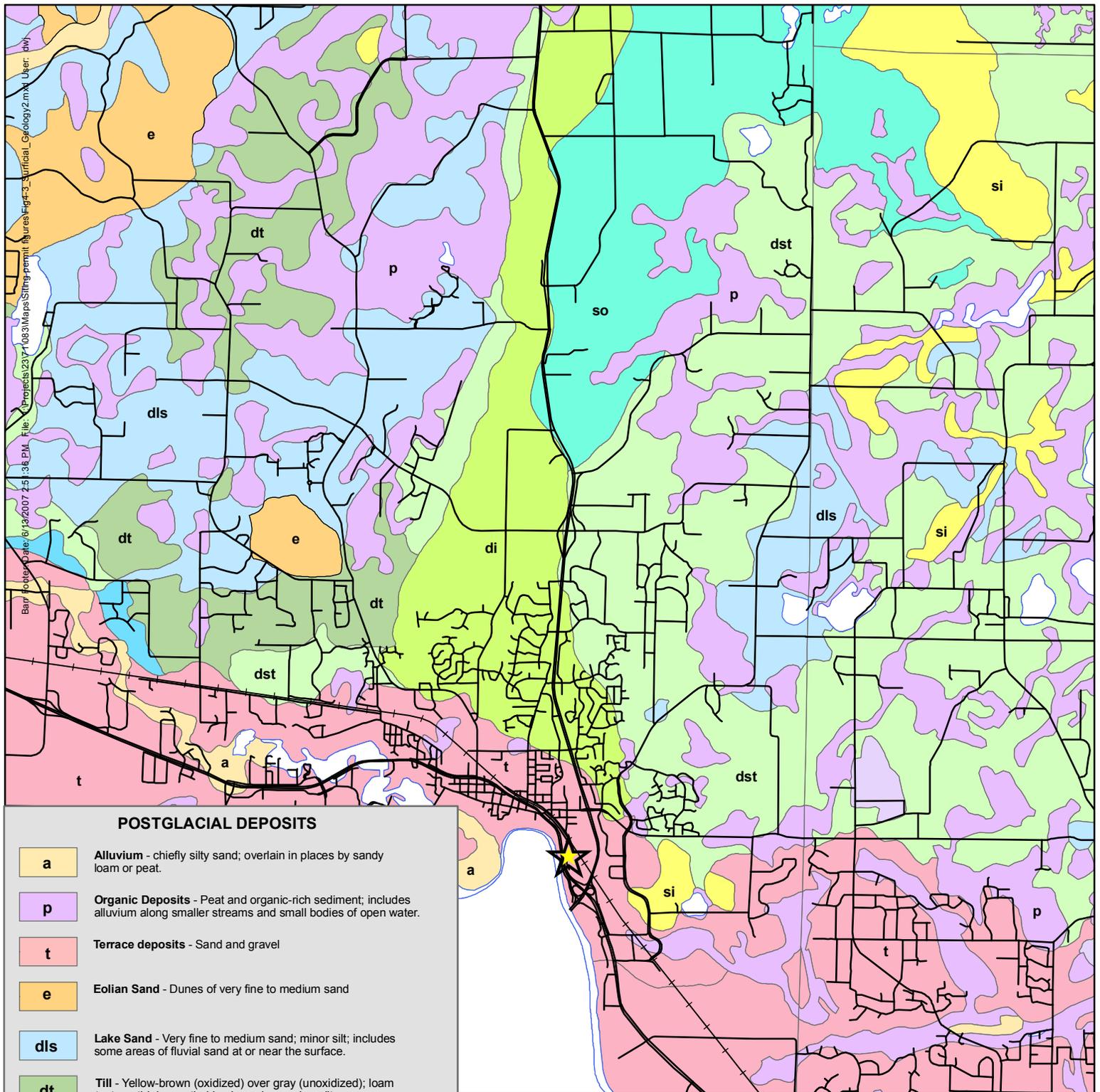
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**POSTGLACIAL DEPOSITS**

- a** Alluvium - chiefly silty sand; overlain in places by sandy loam or peat.
- p** Organic Deposits - Peat and organic-rich sediment; includes alluvium along smaller streams and small bodies of open water.
- t** Terrace deposits - Sand and gravel
- e** Eolian Sand - Dunes of very fine to medium sand
- dls** Lake Sand - Very fine to medium sand; minor silt; includes some areas of fluvial sand at or near the surface.
- dt** Till - Yellow-brown (oxidized) over gray (unoxidized); loam texture; thinly mantled in places by sand or silt.
- dst** Till of Mixed Composition - Yellow-brown (oxidized) over red-brown loam to sandy loam texture; less than 20 feet thick over Superior lobe deposits
- di** Ice-Contact Deposits - Sand and gravel; minor silt and till
- do** Outwash Deposits Grantsburg - Sand and gravel; minor silt and till

**SUPERIOR LOBE DEPOSITS**

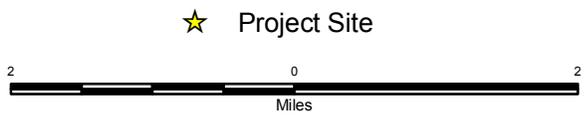
- so** Outwash Deposits Superior - Sand and gravel
- si** Ice-Contact Deposits - Sand and gravel; minor till and silt

**Figure 4-3  
Surficial Geology  
Preferred Site**

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Elk River, MN



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Geologic data from Meyer, G.N., C.J. Patterson, H.C. Hobbs, and J.D. Lehr, 1993. "Surficial Geology" in "Anoka Sand Plain Regional Hydrogeologic Assessment" Minnesota Department of Natural Resources Regional Assessment Series, RHA-1, Plate 1.