

**Impacts to Agricultural Land (from new Lawrence Creek Substation and New Route into and out of Lawrence Creek Substation)**

	Temporary Impacts		Permanent Impacts	
	sq. feet	acres	sq. feet	acres
Substation	178,596	4.10	178,596	4.10
115 kV line	0	0.00	120	0.00
161 kV line	12,000	0.28	360	0.01
Total	190,596	4.38	179,076	4.11

Substation Impacts include the ultimate 4.1 acre substation layout (assumed Xcel will lease remainder of 8.0 acre parcel)

Impacts to 115 kV line are calculated by assuming 2,000 square ft of temporary impact per pole, 60 square ft of permanent impact per pole, and an average span of 280 feet

Impacts to 161 kV line are calculated by assuming 2,000 square ft of temporary impact per pole, 60 square ft of permanent impact per pole, and an average span of 245 feet

**Number of Residences Adjacent to Proposed Transmission Line**

Within 100'	100' - 150'	150' - 300'	300' - 500'	500' - 1000'
42	44	126	153	410

Distances are from edge of ROW (assumed 25' on either side of ROW)

Residences within 300' of transmission line ROW = 212  
Businesses within 300' of transmission line ROW = 48

**Land Cover for Chisago Transmission Line and Substations**

<b>Land Cover</b>	<b>Route (acres)</b>	<b>Lawrence Creek (acres)</b>	<b>Total (acres)</b>	<b>Total Percent</b>
Urban and Industrial	51.17	0	51.17	11.50%
Farmsteads and Rural Residences	18.23	0	18.23	4.10%
Rural Residential Development Complex	4.23	0	4.23	0.95%
Other Rural Developments	1.81	0	1.81	0.41%
Cultivated Land	109.38	3.85	113.23	25.44%
Grassland (Roadway shoulder, pasture)	152.94	0.25	153.19	34.42%
Grassland-Shrub-Tree (deciduous)	8.88	0	8.88	2.00%
Grassland-Shrub-Tree (coniferous)	5.21	0	5.21	1.17%
Deciduous Forest	74.16	0	74.16	16.66%
Conifer Forest	2.33	0	2.33	0.52%
Water	3.59	0	3.59	0.81%
Wetlands	9.05	0	9.05	2.03%
<b>Total</b>	<b>440.99</b>	<b>4.10</b>	<b>445.09</b>	

Route calculations assume 100 feet on either side of transmission line centerline. This includes the expansion area at Lindstrom Substation  
 Lawrence Creek Substation calculations based on ultimate build out configuration of 4.1 acres.  
 Source: International Coalition Land Use/Land Cover data (1990)