

Map Unit Description (MN)

Todd County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

7A--Hubbard loamy sand, 0 to 2 percent slopes

Hubbard

Extent: 90 percent of the unit

Landform(s): flats on outwash plains, rises on outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 15 in	loamy sand	rapid	1.20 to 1.80 in	5.1 to 7.3
Bw -- 15 to 30 in	loamy sand	rapid	0.45 to 1.05 in	5.1 to 7.3
C -- 30 to 60 in	sand	rapid	0.90 to 2.09 in	5.6 to 7.8

7B--Hubbard loamy sand, 2 to 6 percent slopes

Hubbard

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 15 in	loamy sand	rapid	1.20 to 1.80 in	5.1 to 7.3
Bw1,Bw2 -- 15 to 30 in	loamy sand	rapid	0.45 to 1.05 in	5.1 to 7.3
C -- 30 to 60 in	sand	rapid	0.90 to 2.09 in	5.6 to 7.8

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36--Flom loam

Flom

Extent: 85 percent of the unit

Landform(s): drainageways on moraines, flats on moraines

Slope gradient: 0 to 1 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.55 to 3.40 in	6.1 to 7.8
Bg -- 14 to 24 in	loam	moderately slow	1.48 to 1.87 in	6.6 to 8.4
Cg -- 24 to 60 in	loam	moderately slow	5.02 to 6.81 in	7.4 to 8.4

38B--Waukon loam, 2 to 6 percent slopes

Waukon

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .20

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,E -- 0 to 10 in	loam	moderate	1.97 to 2.36 in	6.1 to 7.3
Bt -- 10 to 31 in	loam	moderate	3.19 to 4.04 in	6.1 to 8.4
Bk,C -- 31 to 60 in	loam	moderate	4.31 to 5.46 in	7.4 to 8.4

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38C--Waukon loam, 6 to 12 percent slopes

Waukon

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .20

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,E -- 0 to 10 in	loam	moderate	1.97 to 2.36 in	6.1 to 7.3
Bt -- 10 to 31 in	loam	moderate	3.19 to 4.04 in	6.1 to 8.4
Bk,C -- 31 to 60 in	loam	moderate	4.31 to 5.46 in	7.4 to 8.4

53B--Kandota sandy loam, 2 to 6 percent slopes

Kandota

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .10

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	sandy loam	moderately rapid	0.83 to 1.00 in	5.6 to 7.3
E,BE -- 6 to 26 in	sandy loam	moderately rapid	2.21 to 3.41 in	5.1 to 6.5
Bt -- 26 to 33 in	sandy clay loam	moderate	1.13 to 1.35 in	5.6 to 7.3
BC,C -- 33 to 60 in	sandy loam	moderate	3.21 to 4.55 in	7.4 to 8.4

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53C--Kandota sandy loam, 6 to 12 percent slopes

Kandota

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .10

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	sandy loam	moderately rapid	0.83 to 1.00 in	5.6 to 7.3
E, BE -- 6 to 26 in	sandy loam	moderately rapid	2.21 to 3.41 in	5.1 to 6.5
Bt -- 26 to 33 in	sandy clay loam	moderate	1.13 to 1.35 in	5.6 to 7.3
BC, C -- 33 to 60 in	sandy loam	moderate	3.21 to 4.55 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

53D--Kandota sandy loam, 12 to 25 percent slopes

Kandota

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 25 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .10

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	sandy loam	moderately rapid	0.83 to 1.00 in	5.6 to 7.3
E, BE -- 6 to 26 in	sandy loam	moderately rapid	2.21 to 3.41 in	5.1 to 6.5
Bt -- 26 to 33 in	sandy clay loam	moderate	1.13 to 1.35 in	5.6 to 7.3
BC, C -- 33 to 60 in	sandy loam	moderate	3.21 to 4.55 in	7.4 to 8.4

75--Bluffton loam

Bluffton

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy alluvium over loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1, A2, A3 -- 0 to 20 in	loam	moderate	4.02 to 4.82 in	5.6 to 7.3
Bg -- 20 to 44 in	clay loam	moderate	3.60 to 4.08 in	5.6 to 7.3
Cg -- 44 to 60 in	sandy loam	moderately slow	2.36 to 2.99 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

82B--Redeye loamy sand, 2 to 6 percent slopes

Redeye

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins, hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: sandy outwash over dense basal till

Restrictive feature(s): densic material at 35 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 7.3
E -- 3 to 22 in	loamy sand	rapid	1.32 to 1.89 in	5.6 to 6.5
2Bt1,2Bt2 -- 22 to 35 in	sandy loam	moderately slow	1.43 to 1.69 in	5.1 to 7.3
2Cd1,2Cd2 -- 35 to 60 in	sandy loam	slow	0.00 to 0.99 in	6.6 to 8.4

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82C--Redeye loamy sand, 6 to 12 percent slopes

Redeye

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins, hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: sandy outwash over dense basal till

Restrictive feature(s): densic material at 35 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 7.3
E -- 3 to 22 in	loamy sand	rapid	1.32 to 1.89 in	5.6 to 6.5
2Bt1,2Bt2 -- 22 to 35 in	sandy loam	moderately slow	1.43 to 1.69 in	5.1 to 7.3
2Cd1,2Cd2 -- 35 to 60 in	sandy loam	slow	0.00 to 0.99 in	6.6 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

111--Hangaard sandy loam

Hangaard

Extent: 90 percent of the unit

Landform(s): drainageways on outwash plains, flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: thin loamy mantle over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer): .10

Land capability, nonirrigated: 4w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,BA -- 0 to 14 in	sandy loam	moderately rapid	1.42 to 1.98 in	6.6 to 7.8
2Bg -- 14 to 18 in	loamy sand	rapid	0.28 to 0.43 in	6.6 to 7.8
2C1,2C2 -- 18 to 60 in	gravelly coarse sand	very rapid	0.83 to 1.67 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

121--Wykeham fine sandy loam

Wykeham

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 3 percent

Parent material: loamy dense basal till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	fine sandy loam	moderately rapid	0.92 to 1.28 in	5.1 to 6.5
E, BE -- 7 to 19 in	fine sandy loam	moderate	1.18 to 2.01 in	5.1 to 6.5
Bt1, Bt2 -- 19 to 28 in	sandy clay loam	moderate	1.09 to 1.63 in	5.6 to 7.3
BC, C -- 28 to 60 in	fine sandy loam	moderately slow	1.28 to 2.55 in	7.4 to 8.4

127A--Sverdrup sandy loam, 0 to 2 percent slopes

Sverdrup

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap, A -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.13 in	6.1 to 7.3
Bw, BC -- 14 to 28 in	loamy sand	moderately rapid	1.10 to 1.93 in	6.1 to 7.8
C -- 28 to 60 in	sand	rapid	0.64 to 1.91 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

127B--Sverdrup sandy loam, 2 to 6 percent slopes

Sverdrup

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loamy mantle over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.13 in	6.1 to 7.3
Bw -- 14 to 28 in	loamy sand	moderately rapid	1.10 to 1.93 in	6.1 to 7.8
BC,C -- 28 to 60 in	sand	rapid	0.64 to 1.91 in	7.4 to 8.4

139B--Huntersville loamy sand, 1 to 4 percent slopes

Huntersville

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins, hillslopes on moraines

Slope gradient: 1 to 4 percent

Parent material: sandy outwash over dense basal till

Restrictive feature(s): densic material at 53 to 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	loamy sand	rapid	0.59 to 0.71 in	6.1 to 7.3
E1,E2 -- 6 to 27 in	sand	rapid	0.83 to 2.09 in	6.1 to 7.3
2BE,2Bt -- 27 to 53 in	sandy loam	moderately slow	2.90 to 3.43 in	6.1 to 7.3
2Cd -- 53 to 60 in	sandy loam	slow	0.00 to 0.27 in	6.6 to 7.8

Map Unit Description (MN)

Todd County, Minnesota

142--Nokay sandy loam

Nokay

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 0 to 2 percent

Parent material: dense basal till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	sandy loam	moderately rapid	0.67 to 0.92 in	4.5 to 5.5
E1,E2 -- 5 to 18 in	sandy loam	moderately rapid	1.56 to 2.47 in	4.5 to 5.5
Bt1,Bt2 -- 18 to 43 in	sandy loam	moderate	2.98 to 4.71 in	5.1 to 6.5
BC -- 43 to 60 in	sandy loam	slow	0.00 to 1.35 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

144B--Flak sandy loam, 2 to 6 percent slopes

Flak

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 2 to 6 percent

Parent material: dense basal till

Restrictive feature(s): densic material at 33 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	4.5 to 6.5
E -- 8 to 14 in	sandy loam	moderately rapid	0.76 to 1.01 in	5.1 to 6.5
B/E,Bt -- 14 to 33 in	sandy loam	moderate	2.27 to 3.02 in	5.1 to 6.5
Cd -- 33 to 60 in	sandy loam	impermeable	0.00 to 1.07 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

144C--Flak sandy loam, 6 to 12 percent slopes

Flak

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 6 to 12 percent

Parent material: dense basal till

Restrictive feature(s): densic material at 33 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	4.5 to 6.5
E -- 8 to 14 in	sandy loam	moderately rapid	0.76 to 1.01 in	5.1 to 6.5
B/E,Bt -- 14 to 33 in	sandy loam	moderate	2.27 to 3.02 in	5.1 to 6.5
Cd -- 33 to 60 in	sandy loam	impermeable	0.00 to 1.07 in	5.6 to 7.3

158B--Zimmerman loamy fine sand, 1 to 6 percent slopes

Zimmerman

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 6 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	loamy fine sand	rapid	0.39 to 0.47 in	5.1 to 6.5
E,E&Bt,C -- 4 to 60 in	fine sand	rapid	3.35 to 5.59 in	5.1 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

158C--Zimmerman loamy fine sand, 6 to 15 percent slopes

Zimmerman

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 15 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	loamy fine sand	rapid	0.39 to 0.47 in	5.1 to 6.5
E,E&Bt,C -- 4 to 60 in	loamy fine sand	rapid	3.35 to 5.59 in	5.1 to 7.3

163B--Brainerd sandy loam, 1 to 4 percent slopes

Brainerd

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 1 to 4 percent

Parent material: dense basal till

Restrictive feature(s): densic material at 42 to 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	4.5 to 6.0
E -- 8 to 18 in	sandy loam	moderately rapid	1.23 to 1.64 in	4.5 to 6.0
Bt -- 18 to 36 in	sandy loam	moderate	2.13 to 2.83 in	5.1 to 6.5
BC -- 36 to 42 in	sandy loam	slow	0.19 to 0.50 in	5.1 to 7.3
Cd -- 42 to 60 in	sandy loam	impermeable	0.00 to 0.71 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

169B--Braham loamy sand, 1 to 6 percent slopes

Braham

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 6 percent

Parent material: sandy outwash deposits over silty glaciolacustrine sediments or glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	loamy sand	rapid	0.91 to 1.09 in	5.6 to 7.3
E --	9 to 24 in	sand	rapid	1.20 to 1.50 in	5.6 to 7.3
2Bt1,2Bt2 --	24 to 40 in	silty clay loam	moderate	2.42 to 2.91 in	5.1 to 7.3
2C --	40 to 60 in	silt loam	moderate	2.95 to 3.54 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

170--Blomford loamy sand

Blomford

Extent: 90 percent of the unit

Landform(s): drainageways on moraines, flats on moraines

Slope gradient: 0 to 2 percent

Parent material: sandy outwash deposits over silty
glaciolacustrine sediments or glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loamy sand	rapid	0.72 to 1.09 in	5.1 to 7.3
Eg1,Eg2 -- 9 to 31 in	sand	rapid	1.10 to 1.76 in	5.1 to 7.3
2Btg -- 31 to 48 in	silt loam	moderate	2.20 to 2.88 in	5.1 to 7.3
2C -- 48 to 60 in	silt loam	moderate	1.18 to 1.77 in	6.1 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

180--Gonvick loam

Gonvick

Extent: 90 percent of the unit

Landform(s): flats on moraines, rises on moraines

Slope gradient: 1 to 3 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	loam	moderate	2.36 to 2.60 in	6.1 to 7.3
Bt1,Bt2,Bt3 -- 12 to 32 in	loam	moderate	3.01 to 3.81 in	6.6 to 7.3
Bk,C -- 32 to 60 in	loam	moderate	4.19 to 5.31 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

183--Dassel mucky sandy loam

Dassel

Extent: 90 percent of the unit

Landform(s): depressions on outwash plains, drainageways on outwash plains

Slope gradient: 0 to 1 percent

Parent material: stratified loamy outwash sediments

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .10

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	mucky sandy loam	moderately rapid	1.45 to 1.81 in	5.6 to 7.3
AB,Bg --	9 to 31 in	stratified loamy fine sand to fine sandy loam	moderately rapid	2.65 to 3.75 in	5.6 to 7.3
Cg1,Cg2 --	31 to 60 in	stratified sand to fine sand to loamy fine sand	rapid	2.30 to 2.87 in	6.1 to 7.8

Map Unit Description (MN)

Todd County, Minnesota

200B--Holdingford sandy loam, 2 to 6 percent slopes

Holdingford

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	sandy loam	moderate	0.77 to 0.89 in	5.1 to 7.3
E -- 6 to 13 in	sandy loam	moderate	0.78 to 0.99 in	5.1 to 7.3
E/B,Bt -- 13 to 47 in	sandy loam	moderate	4.06 to 6.43 in	5.1 to 7.3
C -- 47 to 60 in	sandy loam	moderate	1.56 to 1.82 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

200C--Holdingford sandy loam, 6 to 12 percent slopes

Holdingford

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	sandy loam	moderate	0.77 to 0.89 in	5.1 to 7.3
E -- 6 to 13 in	sandy loam	moderate	0.78 to 0.99 in	5.1 to 7.3
E/B,Bt -- 13 to 47 in	sandy loam	moderate	4.06 to 6.43 in	5.1 to 7.3
C -- 47 to 60 in	sandy loam	moderate	1.56 to 1.82 in	7.4 to 8.4

202--Meehan loamy sand

Meehan

Extent: 90 percent of the unit

Landform(s): flats on outwash plains, rises on outwash plains

Slope gradient: 0 to 3 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loamy sand	moderately rapid	0.79 to 0.94 in	3.5 to 7.3
Bw1,Bw2,Bw3 -- 8 to 35 in	coarse sand	rapid	1.63 to 2.99 in	3.5 to 6.5
C1,C2 -- 35 to 60 in	sand	rapid	0.50 to 1.74 in	3.5 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

204B--Cushing sandy loam, 2 to 8 percent slopes

Cushing

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 8 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderate	0.31 to 0.69 in	5.1 to 7.4
E,E/B -- 3 to 17 in	sandy loam	moderate	1.38 to 3.03 in	5.1 to 7.4
B/E,Bt -- 17 to 54 in	sandy clay loam	moderate	3.70 to 7.03 in	5.1 to 7.4
C -- 54 to 60 in	sandy loam	moderately slow	0.53 to 1.12 in	5.1 to 7.4

Map Unit Description (MN)

Todd County, Minnesota

204C--Cushing sandy loam, 8 to 15 percent slopes

Cushing

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderate	0.31 to 0.69 in	5.1 to 7.4
E,E/B -- 3 to 17 in	sandy loam	moderate	1.38 to 3.03 in	5.1 to 7.4
B/E,Bt -- 17 to 54 in	sandy clay loam	moderate	3.70 to 7.03 in	5.1 to 7.4
C -- 54 to 60 in	sandy loam	moderately slow	0.53 to 1.12 in	5.1 to 7.4

Map Unit Description (MN)

Todd County, Minnesota

204E--Cushing sandy loam, 15 to 45 percent slopes

Cushing

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 15 to 45 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderate	0.31 to 0.69 in	5.1 to 7.4
E,E/B -- 3 to 17 in	sandy loam	moderate	1.38 to 3.03 in	5.1 to 7.4
B/E,Bt -- 17 to 54 in	sandy clay loam	moderate	3.70 to 7.03 in	5.1 to 7.4
C -- 54 to 60 in	sandy loam	moderately slow	0.53 to 1.12 in	5.1 to 7.4

207B--Nymore loamy sand, 1 to 6 percent slopes

Nymore

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 1 to 6 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 9 in	loamy sand	rapid	0.91 to 1.09 in	5.1 to 6.5
Bw,BC,C -- 9 to 60 in	sand	rapid	1.02 to 4.06 in	5.1 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

207C--Nymore loamy sand, 6 to 12 percent slopes

Nymore

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 9 in	loamy sand	rapid	0.91 to 1.09 in	5.1 to 6.5
Bw,BC,C -- 9 to 60 in	sand	rapid	1.02 to 4.06 in	5.1 to 7.3

260--Duelm loamy sand

Duelm

Extent: 90 percent of the unit

Landform(s): flats on outwash plains, rises on outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 15 in	loamy sand	rapid	1.20 to 1.80 in	5.6 to 7.3
BA,Bw -- 15 to 44 in	coarse sand	rapid	1.75 to 3.20 in	5.1 to 7.3
C -- 44 to 60 in	coarse sand	rapid	0.31 to 1.10 in	5.6 to 7.8

Map Unit Description (MN)

Todd County, Minnesota

261--Isan loamy sand

Isan

Extent: 85 percent of the unit

Landform(s): drainageways on outwash plains, flats on outwash plains

Slope gradient: 0 to 1 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 --	0 to 19 in	loamy sand	rapid	1.51 to 2.27 in	5.6 to 7.3
Bg --	19 to 27 in	loamy sand	rapid	0.47 to 0.79 in	5.1 to 6.5
C --	27 to 60 in	sand	rapid	1.32 to 1.98 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

292--Alstad sandy loam

Alstad

Extent: 90 percent of the unit

Landform(s): flats on moraines, rises on moraines

Slope gradient: 1 to 3 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	sandy loam	moderate	1.18 to 1.63 in	5.1 to 7.3
E -- 9 to 14 in	sandy loam	moderate	0.67 to 1.13 in	5.1 to 7.3
Bt -- 14 to 34 in	sandy clay loam	moderate	2.76 to 4.33 in	5.1 to 7.3
BC -- 34 to 48 in	sandy loam	moderate	1.84 to 2.69 in	5.6 to 7.4
C -- 48 to 60 in	sandy loam	moderately slow	1.06 to 2.24 in	6.1 to 7.4

Map Unit Description (MN)

Todd County, Minnesota

325--Prebish fine sandy loam

Prebish

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 17 in	fine sandy loam	moderately rapid	2.71 to 3.05 in	5.6 to 7.3
Bg -- 17 to 45 in	sandy loam	moderate	3.91 to 4.47 in	5.6 to 7.3
2C -- 45 to 60 in	sandy loam	impermeable	0.00 to 0.60 in	5.6 to 7.4

341A--Arvilla sandy loam, 0 to 2 percent slopes

Arvilla

Extent: 90 percent of the unit

Landform(s): flats on outwash plains, rises on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 11 in	sandy loam	moderately rapid	1.43 to 1.65 in	6.1 to 8.4
AB,Bw -- 11 to 21 in	sandy loam	moderately rapid	1.08 to 1.38 in	6.6 to 8.4
2Bw,2BC,2C -- 21 to 60 in	gravelly coarse sand	very rapid	0.78 to 1.95 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

341B--Arvilla sandy loam, 2 to 6 percent slopes

Arvilla

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on outwash plains</p> <p><i>Slope gradient:</i> 2 to 6 percent</p> <p><i>Parent material:</i> loamy mantle over sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 3</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .17</p> <p><i>Land capability, nonirrigated</i> 4s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 11 in	sandy loam	moderately rapid	1.43 to 1.65 in	6.1 to 8.4
AB,Bw -- 11 to 21 in	sandy loam	moderately rapid	1.08 to 1.38 in	6.6 to 8.4
2Bw,2BC,2C -- 21 to 60 in	gravelly coarse sand	very rapid	0.78 to 1.95 in	7.4 to 8.4

341C--Arvilla sandy loam, 6 to 12 percent slopes

Arvilla

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on outwash plains</p> <p><i>Slope gradient:</i> 6 to 12 percent</p> <p><i>Parent material:</i> loamy mantle over sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 3</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .17</p> <p><i>Land capability, nonirrigated</i> 4e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 11 in	sandy loam	moderately rapid	1.43 to 1.65 in	6.1 to 8.4
AB,Bw -- 11 to 21 in	sandy loam	moderately rapid	1.08 to 1.38 in	6.6 to 8.4
2Bw,2BC,2C -- 21 to 60 in	gravelly coarse sand	very rapid	0.78 to 1.95 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

374B--Rockwood sandy loam, 2 to 6 percent slopes

Rockwood

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 2 to 6 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 46 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderate	1.02 to 1.42 in	5.1 to 6.5
E -- 8 to 16 in	sandy loam	moderate	0.99 to 1.24 in	5.1 to 6.5
BE1, BE2 -- 16 to 37 in	sandy loam	moderate	2.50 to 3.13 in	5.6 to 7.3
Bt -- 37 to 46 in	sandy loam	moderately slow	1.09 to 1.36 in	5.6 to 7.3
Cd -- 46 to 60 in	sandy loam	impermeable	0.00 to 0.55 in	6.1 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

374C--Rockwood sandy loam, 6 to 12 percent slopes

Rockwood

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 6 to 12 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 46 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderate	1.02 to 1.42 in	5.1 to 6.5
E -- 8 to 16 in	sandy loam	moderate	0.99 to 1.24 in	5.1 to 6.5
BE1, BE2 -- 16 to 37 in	sandy loam	moderate	2.50 to 3.13 in	5.6 to 7.3
Bt -- 37 to 46 in	sandy loam	moderately slow	1.09 to 1.36 in	5.6 to 7.3
Cd -- 46 to 60 in	sandy loam	impermeable	0.00 to 0.55 in	6.1 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

374D--Rockwood sandy loam, 12 to 25 percent slopes

Rockwood

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 12 to 25 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 46 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderate	1.02 to 1.42 in	5.1 to 6.5
E -- 8 to 16 in	sandy loam	moderate	0.99 to 1.24 in	5.1 to 6.5
BE1, BE2 -- 16 to 37 in	sandy loam	moderate	2.50 to 3.13 in	5.6 to 7.3
Bt -- 37 to 46 in	sandy loam	moderately slow	1.09 to 1.36 in	5.6 to 7.3
Cd -- 46 to 60 in	sandy loam	impermeable	0.00 to 0.55 in	6.1 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

375--Forada sandy loam

Forada

Extent: 90 percent of the unit

Landform(s): drainageways on outwash plains, flats on outwash plains

Slope gradient: 0 to 1 percent

Parent material: loamy outwash sediments over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 18 in	sandy loam	moderately rapid	2.35 to 2.72 in	6.1 to 7.8
Bg,BC -- 18 to 33 in	sandy loam	moderately rapid	1.80 to 2.84 in	6.1 to 7.8
2C -- 33 to 60 in	coarse sand	rapid	0.54 to 2.68 in	6.6 to 8.4

402C--Sioux loamy sand, 2 to 12 percent slopes

Sioux

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 12 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loamy sand	moderately rapid	0.63 to 0.94 in	6.6 to 8.4
AC,C -- 8 to 60 in	very gravelly coarse sand	very rapid	1.56 to 3.12 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

402E--Sioux loamy sand, 12 to 25 percent slopes

Sioux

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 25 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loamy sand	moderately rapid	0.63 to 0.94 in	6.6 to 8.4
AC,C -- 8 to 60 in	very gravelly coarse sand	very rapid	1.56 to 3.12 in	7.4 to 8.4

406B--Dorset sandy loam, 2 to 6 percent slopes

Dorset

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loamy mantle over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	5.6 to 7.3
Bt -- 8 to 14 in	sandy loam	moderately rapid	0.76 to 1.20 in	5.6 to 7.3
2Bt,2BC -- 14 to 34 in	gravelly sand	rapid	1.18 to 1.97 in	7.4 to 8.4
2C -- 34 to 60 in	gravelly coarse sand	rapid	0.52 to 1.04 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

406C--Dorset sandy loam, 6 to 12 percent slopes

Dorset

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: loamy mantle over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	5.6 to 7.3
Bt --	8 to 14 in	sandy loam	moderately rapid	0.76 to 1.20 in	5.6 to 7.3
2Bt,2BC --	14 to 34 in	gravelly sand	rapid	1.18 to 1.97 in	7.4 to 8.4
2C --	34 to 60 in	gravelly coarse sand	rapid	0.52 to 1.04 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

413--Osakis sandy loam

Osakis

Extent: 90 percent of the unit

Landform(s): flats on outwash plains, swales on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 13 in	sandy loam	moderately rapid	1.82 to 2.34 in	6.1 to 7.3
Bw -- 13 to 17 in	sandy loam	moderately rapid	0.55 to 0.75 in	6.1 to 7.3
2Bw -- 17 to 23 in	gravelly loamy sand	rapid	0.24 to 0.35 in	6.1 to 7.3
2C -- 23 to 60 in	gravelly coarse sand	rapid	0.74 to 1.48 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

421B--Ves loam, 2 to 6 percent slopes

Ves

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	loam	moderate	2.41 to 3.12 in	6.1 to 7.8
Bw --	14 to 26 in	loam	moderate	1.77 to 2.24 in	6.6 to 7.8
Bk --	26 to 35 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
C --	35 to 60 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

421C--Ves loam, 6 to 12 percent slopes

Ves

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.41 to 3.12 in	6.1 to 7.8
Bw -- 14 to 26 in	loam	moderate	1.77 to 2.24 in	6.6 to 7.8
Bk -- 26 to 35 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
C -- 35 to 60 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

446--Normania loam

Normania

Extent: 90 percent of the unit

Landform(s): flats on moraines, rises on moraines

Slope gradient: 1 to 3 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	loam	moderate	2.36 to 2.60 in	6.1 to 7.3
Bw -- 12 to 29 in	loam	moderate	2.60 to 3.29 in	6.6 to 7.8
Bk -- 29 to 39 in	loam	moderate	1.48 to 1.87 in	7.4 to 8.4
C -- 39 to 60 in	loam	moderate	3.13 to 3.96 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

453B--DeMontreville loamy sand, 2 to 8 percent slopes

DeMontreville

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 8 percent

Parent material: sandy outwash over loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: C

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 7.3
E -- 3 to 23 in	loamy sand	rapid	1.18 to 1.77 in	5.1 to 7.3
2Bt -- 23 to 48 in	sandy loam	moderately slow	2.02 to 3.53 in	5.6 to 6.5
2C -- 48 to 60 in	sandy loam	moderately slow	0.71 to 1.18 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

453C--DeMontreville loamy sand, 8 to 15 percent slopes

DeMontreville

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: sandy outwash over loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 7.3
E -- 3 to 23 in	loamy sand	rapid	1.18 to 1.77 in	5.1 to 7.3
2Bt -- 23 to 48 in	sandy loam	moderately slow	2.02 to 3.53 in	5.6 to 6.5
2C -- 48 to 60 in	sandy loam	moderately slow	0.71 to 1.18 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

454B--Mahtomedi loamy sand, 1 to 8 percent slopes

Mahtomedi

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines, hillslopes on outwash plains

Slope gradient: 1 to 8 percent

Parent material: sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,E --	0 to 11 in	loamy sand	rapid	1.10 to 1.32 in	5.1 to 6.5
Bw --	11 to 23 in	gravelly coarse sand	rapid	0.59 to 0.83 in	5.1 to 6.5
C --	23 to 60 in	gravelly coarse sand	rapid	1.48 to 3.33 in	5.1 to 6.5

Map Unit Description (MN)

Todd County, Minnesota

454C--Mahtomedi loamy coarse sand, 8 to 15 percent slopes

Mahtomedi

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines, hillslopes on outwash plains</p> <p><i>Slope gradient:</i> 8 to 15 percent</p> <p><i>Parent material:</i> sandy and gravelly outwash deposits</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .10</p> <p><i>Land capability, nonirrigated</i> 6s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loamy coarse sand	rapid	0.20 to 0.24 in	5.1 to 6.5
E -- 2 to 5 in	sand	rapid	0.19 to 0.25 in	5.1 to 6.5
Bw -- 5 to 25 in	gravelly coarse sand	rapid	1.00 to 1.41 in	5.1 to 6.5
C -- 25 to 60 in	gravelly coarse sand	rapid	1.39 to 3.12 in	5.1 to 6.5

Map Unit Description (MN)

Todd County, Minnesota

454E--Mahtomedi loamy coarse sand, 15 to 45 percent slopes

Mahtomedi

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines, hillslopes on outwash plains

Slope gradient: 15 to 45 percent

Parent material: sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 2 in	loamy coarse sand	rapid	0.20 to 0.24 in	5.1 to 6.5
E --	2 to 5 in	sand	rapid	0.19 to 0.25 in	5.1 to 6.5
Bw --	5 to 25 in	gravelly coarse sand	rapid	1.00 to 1.41 in	5.1 to 6.5
C --	25 to 60 in	gravelly coarse sand	rapid	1.39 to 3.12 in	5.1 to 6.5

Map Unit Description (MN)

Todd County, Minnesota

458B--Menahga loamy sand, 2 to 6 percent slopes

Menahga

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.5
Bw -- 3 to 29 in	sand	rapid	1.30 to 1.82 in	4.5 to 6.5
C -- 29 to 60 in	sand	rapid	1.54 to 2.15 in	5.6 to 7.8

458C--Menahga loamy sand, 6 to 12 percent slopes

Menahga

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.5
Bw -- 3 to 29 in	sand	rapid	1.30 to 1.82 in	4.5 to 6.5
C -- 29 to 60 in	sand	rapid	1.54 to 2.15 in	5.6 to 7.8

Map Unit Description (MN)

Todd County, Minnesota

458E--Menahga loamy sand, 12 to 25 percent slopes

Menahga

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 25 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.5
Bw -- 3 to 29 in	sand	rapid	1.30 to 1.82 in	4.5 to 6.5
C -- 29 to 60 in	sand	rapid	1.54 to 2.15 in	5.6 to 7.8

514--Tacoosh mucky peat

Tacoosh

Extent: 90 percent of the unit

Landform(s): depressions on interdrumlins, depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: moderately decomposed herbaceous organic material over loamy glacial deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 9 in	mucky peat	rapid	4.07 to 4.98 in	
Oe2,Oe3 -- 9 to 30 in	mucky peat	rapid	9.39 to 11.48 in	
Cg -- 30 to 60 in	sandy loam	moderate	3.59 to 5.98 in	

Map Unit Description (MN)

Todd County, Minnesota

540--Seelyeville muck

Seelyeville

Extent: 90 percent of the unit

Landform(s): depressions on moraines, depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa3 -- 10 to 60 in	muck	rapid	17.50 to 22.50 in	

541--Rifle muck

Rifle

Extent: 90 percent of the unit

Landform(s): depressions on interdrumlins, depressions on moraines, depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: moderately decomposed herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 -- 0 to 9 in	muck	rapid	4.35 to 5.25 in	
Oe2,Oe3 -- 9 to 60 in	mucky peat	rapid	24.38 to 29.46 in	

Map Unit Description (MN)

Todd County, Minnesota

543--Markey muck

Markey

Extent: 90 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1,Oa2,Oa3 -	0 to 38 in muck	moderately rapid	13.23 to 17.01 in	
Cg --	38 to 60 in sand	rapid	0.66 to 1.76 in	

Map Unit Description (MN)

Todd County, Minnesota

544--Cathro muck

Cathro

Extent: 90 percent of the unit

Landform(s): depressions on interdrumlins, depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over loamy glacial deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 -- 0 to 12 in	muck	moderately rapid	5.31 to 6.50 in	
Oa2 -- 12 to 30 in	muck	moderately rapid	6.34 to 8.15 in	
Cg -- 30 to 60 in	sandy loam	moderate	3.29 to 5.69 in	

Map Unit Description (MN)

Todd County, Minnesota

545--Rondeau muck

Rondeau

Extent: 90 percent of the unit

Landform(s): depressions on interdrumlins, depressions on moraines, depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over coprogenous earth or marl

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1,Oa2 --	0 to 30 in muck	moderately rapid	10.47 to 14.36 in	
Cg --	30 to 60 in marl	moderate	4.19 to 6.58 in	

565--Eckvoll loamy sand

Eckvoll

Extent: 90 percent of the unit

Landform(s): flats on moraines, rises on moraines

Slope gradient: 1 to 3 percent

Parent material: sandy mantled loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in loamy sand	rapid	0.91 to 1.09 in	6.1 to 7.3
E.EB --	9 to 27 in sand	rapid	1.06 to 1.42 in	6.1 to 7.3
2Bt --	27 to 39 in loam	moderate	1.95 to 2.20 in	6.6 to 7.8
2C --	39 to 60 in loam	moderate	3.55 to 3.96 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

571--Coriff sandy loam

Coriff

<i>Extent:</i> 85 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> flats on moraines, swales on moraines	<i>Wind erodibility group (WEG):</i> 3
<i>Slope gradient:</i> 0 to 2 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> loamy and sandy outwash over loamy glacial till	<i>Kw factor (surface layer)</i> .17
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> none	<i>Hydrologic group:</i> B/D
<i>Drainage class:</i> poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 19 in	sandy loam	moderately rapid	2.46 to 2.83 in	7.4 to 8.4
Bg1 --	19 to 29 in	loamy sand	moderately rapid	1.23 to 1.54 in	7.4 to 8.4
Bg2 --	29 to 35 in	sandy loam	rapid	0.53 to 0.83 in	7.4 to 8.4
2Cg --	35 to 60 in	loam	moderate	4.22 to 4.71 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

572--Lowlein sandy loam

Lowlein

Extent: 90 percent of the unit

Landform(s): flats on moraines, rises on moraines

Slope gradient: 0 to 1 percent

Parent material: loamy and sandy outwash over loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	6.1 to 7.3
Bw1 --	15 to 20 in	loamy sand	moderately rapid	0.61 to 0.72 in	6.1 to 7.3
Bw2 --	20 to 31 in	sandy loam	rapid	0.66 to 1.21 in	6.1 to 7.3
2C --	31 to 60 in	loam	moderate	4.89 to 5.46 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

582--Roliss loam

Roliss

Extent: 90 percent of the unit

Landform(s): drainageways on moraines, flats on moraines

Slope gradient: 0 to 1 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	loam	moderate	2.74 to 3.87 in	6.6 to 8.4
Bg -- 16 to 24 in	loam	moderate	1.18 to 1.50 in	7.4 to 8.4
Cg1,Cg2,Cg3 - 24 to 60 in	loam	moderate	5.37 to 6.81 in	7.4 to 8.4

701--Runeberg sandy loam, depressional

Runeberg

Extent: 85 percent of the unit

Landform(s): depressions on interdrumlins

Slope gradient: 0 to 2 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	sandy loam	moderate	1.28 to 2.17 in	6.1 to 7.3
Bg1,Bg2 -- 10 to 26 in	sandy loam	moderately slow	1.94 to 2.91 in	6.1 to 7.3
Cg -- 26 to 60 in	sandy loam	moderately slow	2.03 to 4.40 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

703--Paddock sandy loam

Paddock

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 0 to 2 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 43 to 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	sandy loam	moderate	1.18 to 1.63 in	5.6 to 7.3
E, BE -- 9 to 22 in	sandy loam	moderate	1.56 to 2.08 in	5.6 to 6.5
Bt1, Bt2 -- 22 to 43 in	sandy loam	moderately slow	2.50 to 3.34 in	6.6 to 7.3
Cd1, Cd2 -- 43 to 60 in	sandy loam	impermeable	0.00 to 0.68 in	6.6 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

720B--Blowers sandy loam, 1 to 5 percent slopes

Blowers

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 1 to 5 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	sandy loam	moderate	0.77 to 1.06 in	5.1 to 7.3
E,E/B -- 6 to 17 in	sandy loam	moderate	1.32 to 1.65 in	5.1 to 6.5
B/E -- 17 to 27 in	sandy loam	moderate	1.18 to 1.48 in	5.6 to 7.3
BC -- 27 to 40 in	sandy loam	moderately slow	1.61 to 2.01 in	5.6 to 7.3
Cd -- 40 to 60 in	sandy loam	impermeable	0.00 to 0.79 in	6.6 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

800B--Kandota-Dorset sandy loams, 2 to 6 percent slopes

Kandota

<p><i>Extent:</i> 50 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 2 to 6 percent</p> <p><i>Parent material:</i> loamy dense basal till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .17</p> <p><i>Land capability, nonirrigated</i> 2e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> C</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.28 in	5.1 to 6.5
E, BE -- 7 to 11 in	sandy loam	moderate	0.47 to 0.67 in	5.1 to 6.5
Bt -- 11 to 28 in	sandy loam	moderate	2.03 to 3.05 in	5.6 to 7.3
C -- 28 to 60 in	sandy loam	slow	1.28 to 2.55 in	7.4 to 8.4

Dorset

<p><i>Extent:</i> 40 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 2 to 6 percent</p> <p><i>Parent material:</i> loamy mantle over sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .17</p> <p><i>Land capability, nonirrigated</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	5.6 to 7.3
Bt -- 8 to 15 in	sandy loam	moderately rapid	0.85 to 1.35 in	5.6 to 7.3
2Bt, 2BC -- 15 to 34 in	gravelly sand	rapid	1.13 to 1.89 in	7.4 to 8.4
2C -- 34 to 60 in	gravelly coarse sand	rapid	0.52 to 1.04 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

800C--Kandota-Dorset sandy loams, 6 to 15 percent slopes

Kandota

Extent: 50 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 15 percent
Parent material: loamy dense basal till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.28 in	5.1 to 6.5
E, BE -- 7 to 15 in	sandy loam	moderate	0.94 to 1.34 in	5.1 to 6.5
Bt -- 15 to 29 in	sandy clay loam	moderate	1.70 to 2.55 in	5.6 to 7.3
C -- 29 to 60 in	sandy loam	slow	1.23 to 2.46 in	7.4 to 8.4

Dorset

Extent: 40 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 15 percent
Parent material: loamy mantle over sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.06 in	5.6 to 7.3
Bt -- 7 to 15 in	sandy loam	moderately rapid	0.94 to 1.50 in	5.6 to 7.3
2Bt, 2BC -- 15 to 34 in	gravelly sand	rapid	1.13 to 1.89 in	7.4 to 8.4
2C -- 34 to 60 in	gravelly coarse sand	rapid	0.52 to 1.04 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

800E--Kandota-Dorset sandy loams, 15 to 40 percent slopes

Kandota

Extent: 50 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 40 percent
Parent material: loamy dense basal till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	sandy loam	moderately rapid	0.77 to 1.06 in	5.1 to 6.5
E, BE -- 6 to 26 in	sandy loam	moderate	2.41 to 3.41 in	5.1 to 6.5
Bt -- 26 to 33 in	sandy clay loam	moderate	0.85 to 1.28 in	5.6 to 7.3
BC, C -- 33 to 60 in	sandy loam	slow	1.07 to 2.14 in	7.4 to 8.4

Dorset

Extent: 40 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 25 percent
Parent material: loamy mantle over sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.06 in	5.6 to 7.3
Bt -- 7 to 15 in	sandy loam	moderately rapid	0.94 to 1.50 in	5.6 to 7.3
2Bt, 2BC -- 15 to 29 in	gravelly sand	rapid	0.85 to 1.42 in	7.4 to 8.4
2C -- 29 to 60 in	gravelly coarse sand	rapid	0.61 to 1.23 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

808--Wykeham-Runeberg sandy loams

Wykeham

Extent: 50 percent of the unit
Landform(s): flats on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: loamy dense basal till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.1 to 6.5
E, BE -- 8 to 14 in	sandy loam	moderate	0.63 to 1.07 in	5.1 to 6.5
Bt1, Bt2 -- 14 to 40 in	sandy clay loam	moderate	3.12 to 4.68 in	5.6 to 7.3
BC, C -- 40 to 60 in	sandy loam	moderately slow	0.79 to 1.57 in	7.4 to 8.4

Runeberg

Extent: 40 percent of the unit
Landform(s): flats, drainageways on moraines
Slope gradient: 0 to 2 percent
Parent material: loamy glacial till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 12 in	sandy loam	moderate	1.54 to 2.13 in	6.1 to 7.3
Bg -- 12 to 26 in	sandy loam	moderately slow	1.70 to 2.55 in	6.1 to 7.3
Cg -- 26 to 60 in	sandy loam	moderately slow	2.03 to 4.40 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

823--Hangaard-Sioux complex

Hangaard

Extent: 60 percent of the unit

Landform(s): flats on beaches, swales on beaches

Slope gradient: 0 to 2 percent

Parent material: thin loamy mantle over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .10

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 9 in	sandy loam	moderately rapid	0.91 to 1.27 in	6.6 to 7.8
2Bg -- 9 to 14 in	loamy sand	rapid	0.36 to 0.56 in	6.6 to 7.8
2Cg -- 14 to 60 in	gravelly sand	very rapid	0.91 to 1.83 in	7.4 to 8.4

Sioux

Extent: 30 percent of the unit

Landform(s): hillslopes on beaches

Slope gradient: 1 to 5 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	loamy sand	moderately rapid	0.57 to 0.85 in	6.6 to 8.4
AC,C -- 7 to 60 in	gravelly sand	very rapid	1.58 to 3.17 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

824C--Dorset-Sioux sandy loams, 6 to 15 percent slopes

Dorset

Extent: 45 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 6 to 15 percent
Parent material: loamy mantle over sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	5.6 to 7.3
Bt -- 8 to 11 in	gravelly sandy loam	moderately rapid	0.38 to 0.60 in	5.6 to 7.3
2Bt,2BC -- 11 to 33 in	gravelly loamy sand	rapid	1.32 to 2.20 in	7.4 to 8.4
2C -- 33 to 60 in	gravelly coarse sand	rapid	0.54 to 1.07 in	7.4 to 8.4

Sioux

Extent: 35 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 6 to 15 percent
Parent material: sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	sandy loam	moderately rapid	0.65 to 0.89 in	6.6 to 8.4
AC -- 6 to 20 in	gravelly loamy sand	moderately rapid	1.42 to 2.13 in	7.4 to 8.4
C -- 20 to 60 in	gravelly coarse sand	very rapid	1.19 to 2.39 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

824E--Dorset-Sioux complex, 15 to 30 percent slopes

Dorset

Extent: 50 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 15 to 25 percent
Parent material: loamy mantle over sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	5.6 to 7.3
Bt -- 8 to 11 in	sandy loam	moderately rapid	0.38 to 0.60 in	5.6 to 7.3
2Bt,2BC -- 11 to 33 in	gravelly loamy coarse sand	rapid	1.32 to 2.20 in	7.4 to 8.4
2C -- 33 to 60 in	gravelly sand	rapid	0.54 to 1.07 in	7.4 to 8.4

Sioux

Extent: 35 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 15 to 30 percent
Parent material: sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .17
Land capability, nonirrigated 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy sand	moderately rapid	0.41 to 0.61 in	6.6 to 8.4
AC,C -- 5 to 60 in	gravelly coarse sand	very rapid	1.64 to 3.28 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

825--Gonvick-Flom loams

Gonvick

Extent: 60 percent of the unit

Landform(s): flats on moraines, rises on moraines

Slope gradient: 1 to 3 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	loam	moderate	2.60 to 2.86 in	6.1 to 7.3
Bt -- 13 to 25 in	loam	moderate	1.83 to 2.32 in	6.6 to 7.3
C -- 25 to 60 in	loam	moderate	5.20 to 6.58 in	7.4 to 8.4

Flom

Extent: 30 percent of the unit

Landform(s): drainageways on moraines, flats on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	loam	moderate	2.69 to 3.59 in	6.1 to 7.8
Bg -- 15 to 30 in	loam	moderately slow	2.24 to 2.84 in	6.6 to 8.4
Cg -- 30 to 60 in	loam	moderately slow	4.19 to 5.69 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

873--Prebish-Nokay sandy loams

Prebish

Extent: 45 percent of the unit

Landform(s): depressions on moraines, swales on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy dense basal till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 20 in	sandy loam	moderately rapid	3.21 to 3.61 in	5.6 to 7.3
Bg -- 20 to 30 in	sandy loam	moderate	1.38 to 1.57 in	5.6 to 7.3
2Cg -- 30 to 60 in	sandy loam	impermeable	0.00 to 1.20 in	5.6 to 7.4

Nokay

Extent: 35 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 1 to 2 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.28 in	4.5 to 5.5
E -- 7 to 17 in	sandy loam	moderately rapid	1.18 to 1.87 in	4.5 to 5.5
Bt -- 17 to 30 in	sandy loam	moderate	1.56 to 2.47 in	5.1 to 6.5
BC -- 30 to 40 in	sandy loam	slow	0.00 to 0.82 in	5.6 to 7.3
Cd -- 40 to 60 in	sandy loam	impermeable	0.00 to 0.79 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

928B--Cushing-DeMontreville-Mahtomedi complex, 2 to 8 percent slopes

Cushing

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 8 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderate	0.31 to 0.69 in	5.1 to 7.4
E,E/B -- 3 to 17 in	sandy loam	moderate	1.38 to 3.03 in	5.1 to 7.4
B/E,Bt -- 17 to 54 in	sandy loam	moderate	3.70 to 7.03 in	5.1 to 7.4
C -- 54 to 60 in	sandy loam	moderately slow	0.53 to 1.12 in	5.1 to 7.4

DeMontreville

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 8 percent

Parent material: sandy outwash over loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: C

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 7.3
E -- 3 to 23 in	loamy sand	rapid	1.18 to 1.77 in	5.1 to 7.3
2Bt -- 23 to 48 in	sandy loam	moderately slow	2.02 to 3.53 in	5.6 to 6.5
2C -- 48 to 60 in	sandy loam	moderately slow	0.71 to 1.18 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

928B--Cushing-DeMontreville-Mahtomedi complex, 2 to 8 percent slopes

Mahtomedi

Extent: 25 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 8 percent

Parent material: sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy sand	rapid	0.51 to 0.61 in	5.1 to 6.5
E -- 5 to 18 in	sand	rapid	0.78 to 1.04 in	5.1 to 6.5
Bw -- 18 to 30 in	gravelly coarse sand	rapid	0.59 to 0.83 in	5.1 to 6.5
C -- 30 to 60 in	gravelly coarse sand	rapid	1.20 to 2.69 in	5.1 to 6.5

Map Unit Description (MN)

Todd County, Minnesota

928C--Cushing-DeMontreville-Mahtomedi complex, 8 to 15 percent slopes

Cushing

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderate	0.31 to 0.69 in	5.1 to 7.4
E,E/B -- 3 to 17 in	sandy loam	moderate	1.38 to 3.03 in	5.1 to 7.4
B/E,Bt -- 17 to 54 in	sandy loam	moderate	3.70 to 7.03 in	5.1 to 7.4
C -- 54 to 60 in	sandy loam	moderately slow	0.53 to 1.12 in	5.1 to 7.4

DeMontreville

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: sandy outwash over loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 7.3
E -- 3 to 23 in	loamy sand	rapid	1.18 to 1.77 in	5.1 to 7.3
2Bt -- 23 to 48 in	sandy loam	moderately slow	2.02 to 3.53 in	5.6 to 6.5
2C -- 48 to 60 in	sandy loam	moderately slow	0.71 to 1.18 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

928C--Cushing-DeMontreville-Mahtomedi complex, 8 to 15 percent slopes

Mahtomedi

Extent: 25 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy sand	rapid	0.51 to 0.61 in	5.1 to 6.5
E -- 5 to 18 in	sand	rapid	0.78 to 1.04 in	5.1 to 6.5
Bw -- 18 to 30 in	gravelly coarse sand	rapid	0.59 to 0.83 in	5.1 to 6.5
C -- 30 to 60 in	gravelly coarse sand	rapid	1.20 to 2.69 in	5.1 to 6.5

Map Unit Description (MN)

Todd County, Minnesota

928E--Cushing-DeMontreville-Mahtomedi complex, 15 to 45 percent slopes

Cushing

<i>Extent:</i> 35 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on moraines	<i>Wind erodibility group (WEG):</i> 3
<i>Slope gradient:</i> 15 to 30 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> loamy glacial till	<i>Kw factor (surface layer)</i> .28
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 6e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> B
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderate	0.31 to 0.69 in	5.1 to 7.4
E,E/B -- 3 to 17 in	sandy loam	moderate	1.38 to 3.03 in	5.1 to 7.4
B/E,Bt -- 17 to 54 in	sandy loam	moderate	3.70 to 7.03 in	5.1 to 7.4
C -- 54 to 60 in	sandy loam	moderately slow	0.53 to 1.12 in	5.1 to 7.4

DeMontreville

<i>Extent:</i> 30 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on moraines	<i>Wind erodibility group (WEG):</i> 2
<i>Slope gradient:</i> 15 to 45 percent	<i>Wind erodibility index (WEI):</i> 134
<i>Parent material:</i> sandy outwash over loamy glacial till	<i>Kw factor (surface layer)</i> .20
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 7e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> C
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 7.3
E -- 3 to 23 in	loamy sand	rapid	1.18 to 1.77 in	5.1 to 7.3
2Bt -- 23 to 48 in	sandy loam	moderately slow	2.02 to 3.53 in	5.6 to 6.5
2C -- 48 to 60 in	sandy loam	moderately slow	0.71 to 1.18 in	5.6 to 7.3

Map Unit Description (MN)

Todd County, Minnesota

928E--Cushing-DeMontreville-Mahtomedi complex, 15 to 45 percent slopes

Mahtomedi

Extent: 25 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 15 to 45 percent

Parent material: sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy sand	rapid	0.51 to 0.61 in	5.1 to 6.5
E -- 5 to 18 in	sand	rapid	0.78 to 1.04 in	5.1 to 6.5
Bw -- 18 to 30 in	gravelly coarse sand	rapid	0.59 to 0.83 in	5.1 to 6.5
C -- 30 to 60 in	gravelly coarse sand	rapid	1.20 to 2.69 in	5.1 to 6.5

Map Unit Description (MN)

Todd County, Minnesota

967C--Waukon-Langhei loams, 4 to 12 percent slopes

Waukon

<i>Extent:</i> 55 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on moraines	<i>Wind erodibility group (WEG):</i> 5
<i>Slope gradient:</i> 4 to 12 percent	<i>Wind erodibility index (WEI):</i> 56
<i>Parent material:</i> loamy glacial till	<i>Kw factor (surface layer)</i> .20
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 3e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> B
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,E -- 0 to 8 in	loam	moderate	1.57 to 1.89 in	6.1 to 7.3
Bt -- 8 to 26 in	loam	moderate	2.72 to 3.44 in	6.1 to 8.4
Bk,C -- 26 to 60 in	loam	moderate	5.08 to 6.43 in	7.4 to 8.4

Langhei

<i>Extent:</i> 35 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on moraines	<i>Wind erodibility group (WEG):</i> 4L
<i>Slope gradient:</i> 4 to 12 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> loamy glacial till	<i>Kw factor (surface layer)</i> .32
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 4e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> B
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Apk -- 0 to 10 in	loam	moderate	1.67 to 2.17 in	6.6 to 8.4
Bk,C -- 10 to 60 in	loam	moderate	7.50 to 9.50 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

967D--Waukon-Langhei loams, 12 to 25 percent slopes

Waukon

Extent: 50 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 25 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .20

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,E -- 0 to 8 in	loam	moderate	1.57 to 1.89 in	6.1 to 7.3
Bt -- 8 to 26 in	clay loam	moderate	2.72 to 3.44 in	6.1 to 8.4
Bk,C -- 26 to 60 in	loam	moderate	5.08 to 6.43 in	7.4 to 8.4

Langhei

Extent: 40 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 25 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ak -- 0 to 10 in	loam	moderate	1.67 to 2.17 in	6.6 to 8.4
Bk,C -- 10 to 60 in	loam	moderate	7.50 to 9.50 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

1015--Psamments, nearly level to sloping

Psamments, nearly level to sloping

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines, hillslopes on outwash plains

Slope gradient: 0 to 50 percent

Parent material: sandy deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated

Hydric soil: no

Hydrologic group: A

Potential for frost action: none

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
AC --	0 to 60 in loamy sand	moderately rapid	2.99 to 5.98 in	5.1 to 7.3

1029--Pits, gravel

Pits, gravel

Extent: 100 percent of the unit

Landform(s): hillslopes on moraines, hillslopes on outwash plains

Slope gradient:

Parent material: gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Todd County, Minnesota

1054--Prebish and Histosols, ponded

Prebish, ponded

Extent: 45 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: loamy dense basal till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 18 in	sandy loam	moderately rapid	2.90 to 3.26 in	5.6 to 7.3
Bg -- 18 to 46 in	sandy loam	moderate	3.91 to 4.47 in	5.6 to 7.3
Cg -- 46 to 60 in	sandy loam	impermeable	0.00 to 0.55 in	5.6 to 8.4

Histosols, ponded

Extent: 45 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated 8w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe -- 0 to 40 in	mucky peat	moderately rapid	14.06 to 18.07 in	
Cg -- 40 to 60 in	sand	rapid	1.18 to 1.38 in	

Map Unit Description (MN)

Todd County, Minnesota

1055--Aquolls and Histosols, ponded

Aquolls, ponded

Extent: 50 percent of the unit

Landform(s): depressions on moraines, depressions on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy glacial till or outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated 8w

Hydric soil: yes

Hydrologic group:

Potential for frost action: none

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Histosols, ponded

Extent: 50 percent of the unit

Landform(s): depressions on moraines, depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated 8w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Oe --	0 to 40 in	mucky peat		
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		rapid	14.06 to 18.07 in	
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Cg --	40 to 60 in	sand		
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		rapid	1.18 to 1.38 in	
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Map Unit Description (MN)

Todd County, Minnesota

1356--Water, miscellaneous

Water, miscellaneous

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Todd County, Minnesota

1926--Bowstring-Aquents complex

Bowstring, frequently flooded

Extent: 70 percent of the unit

Landform(s): channels on flood plains on outwash plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material and sandy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1,Oa2 -- 0 to 18 in	muck	moderately rapid	6.34 to 8.15 in	
Cg -- 18 to 23 in	stratified sand to fine sandy loam	rapid	0.38 to 0.66 in	
Oa3 -- 23 to 60 in	muck	moderately rapid	12.95 to 16.65 in	

Aquents, frequently flooded

Extent: 20 percent of the unit

Landform(s): flats on flood plains on outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Todd County, Minnesota

1927--Clotho sandy loam

Clotho

Extent: 85 percent of the unit

Landform(s): flats on interdrumlins, flats on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,Ag -- 0 to 16 in	sandy loam	moderate	2.10 to 2.91 in	7.4 to 8.4
Bg,Bw -- 16 to 26 in	sandy loam	moderately slow	1.18 to 1.67 in	7.4 to 8.4
C -- 26 to 60 in	sandy loam	moderately slow	2.03 to 4.74 in	7.4 to 8.4

1932--Runeberg sandy loam

Runeberg

Extent: 90 percent of the unit

Landform(s): drainageways on moraines, flats on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 12 in	sandy loam	moderate	1.54 to 2.13 in	6.1 to 7.3
Bg1,Bg2 -- 12 to 27 in	sandy loam	moderately slow	1.80 to 2.69 in	6.1 to 7.3
Cg -- 27 to 60 in	sandy loam	moderately slow	1.98 to 4.30 in	7.4 to 8.4

Map Unit Description (MN)

Todd County, Minnesota

1943--Roscommon loamy sand

Roscommon

Extent: 85 percent of the unit

Landform(s): depressions on outwash plains, drainageways on outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 9 in	loamy sand	rapid	0.72 to 1.81 in	5.6 to 7.8
Bg,BCg,C -- 9 to 60 in	sand	rapid	2.54 to 4.57 in	5.6 to 8.4

1956--Staples loamy sand

Staples

Extent: 90 percent of the unit

Landform(s): drainageways on drumlins, flats on drumlins, drainageways on moraines, flats on moraines

Slope gradient: 0 to 2 percent

Parent material: sandy outwash over dense basal till

Restrictive feature(s): densic material at 44 to 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	loamy sand	rapid	0.59 to 0.71 in	5.1 to 7.3
Eg -- 6 to 25 in	sand	rapid	1.35 to 1.93 in	5.1 to 7.3
2Btg -- 25 to 44 in	sandy loam	moderately slow	1.13 to 2.46 in	5.1 to 7.3
2Cd -- 44 to 60 in	sandy loam	slow	0.00 to 0.63 in	6.6 to 7.8

Map Unit Description (MN)

Todd County, Minnesota

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.