NONTECHNICAL SOIL DESCRIPTIONS
McHenry County, North Dakota

Nontechnical soil descriptions describe soil properties or management considerations specific to a soil map unit or group of map units, shown in the NonTechnical Descriptions report. These descriptions are written in terminology that Non-technical users of soil survey information can understand. Nontechnical soil descriptions are a powerful tool for creating reports. These high quality, easy to read reports can be generated by conservation planners and other NRCS employees for distribution to land users. Soil map unit descriptions and National Soil Information System records are the basis for these descriptions.

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1 Tonka Silt Loam

Tonka soils make up 93 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Wet Meadow range site. It is in the nonirrigated land capability class 2w.

2 Parnell Silty Clay Loam

Parnell soils make up 85 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is very poorly drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 3 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Wetland range site. It is in the nonirrigated land capability class 3w.

5 Southam Silt Loam

Southam soils make up 82 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is very poorly drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is slightly sodic. It is in the nonirrigated land capability class 8w.

6 Rifle Mucky Peat

Rifle soils make up 82 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is very poorly drained. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. This soil does not have a salinity problem. This soil does not have a sodium problem. It is in the nonirrigated land capability class 8w.

10 Aberdeen-Great Bend Complex, 0 To 3 Percent Slopes

Aberdeen soils make up 55 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Clayey range site. It is in the nonirrigated land capability class 3s.

Great Bend soils make up 27 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 2c.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
McHenry County, North Dakota

17B Arvilla Sandy Loam, 0 To 6 Percent Slopes

Arvilla soils make up 74 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is somewhat excessively drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Shallow To Gravel range site. It is in the nonirrigated land capability class 3e.

18B Aylmer-Bantry Fine Sands, 0 To 6 Percent Slopes

Aylmer soils make up 62 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. This soil does not have a salinity problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 6e.

Bantry soils make up 29 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 18 inches. This soil does not have a salinity problem. This soil is in the Subirrigated Sands range site. It is in the nonirrigated land capability class 6e.

19B Aylmer-Minnewaukan Complex, 0 To 6 Percent Slopes

Aylmer soils make up 40 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. This soil does not have a salinity problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 6e.

Minnewaukan soils make up 26 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Subirrigated range site. It is in the nonirrigated land capability class 4w.

24B Barnes-Buse Loams, 3 To 6 Percent Slopes

Barnes soils make up 56 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 2e.

Buse soils make up 28 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Thin Upland range site. It is in the nonirrigated land capability class 3e.

24C Barnes-Buse Loams, 6 To 9 Percent Slopes

Barnes soils make up 40 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 3e.

Buse soils make up 35 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Thin Upland range site. It is in the nonirrigated land capability class 4e.

24D Buse-Barnes Loams, 9 To 15 Percent Slopes

Buse soils make up 39 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Thin Upland range site. It is in the nonirrigated land capability class 6e.

Barnes soils make up 32 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 4e.

24E Buse-Barnes, Loams, 15 To 25 Percent Slopes

Buse soils make up 51 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Thin Upland range site. It is in the nonirrigated land capability class 7e.

Barnes soils make up 32 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 6e.

29 Svea-Barnes Loams, 0 To 2 Percent Slopes

Svea soils make up 54 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 15 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Overflow range site. It is in the nonirrigated land capability class 2c.

Barnes soils make up 29 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 2c.

29B Barnes-Svea Loams, 2 To 5 Percent Slopes

Barnes soils make up 54 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 2e.

Svea soils make up 29 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 15 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 2e.

36 Miranda-Cavour Loams

Miranda soils make up 49 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is very slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 36 inches. The soil contains a maximum amount of 15 percent calcium carbonate. This soil contains a moderately saline horizon. This soil has a horizon that is strongly sodic. This soil is in the Thin Claypan range site. It is in the nonirrigated land capability class 6s.

Cavour soils make up 40 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 60 inches. This soil contains a moderately saline horizon. This soil is in the Claypan range site. It is in the nonirrigated land capability class 4s.

37 Cavour-Cresbard Loams, 0 To 3 Percent Slopes

Cavour soils make up 45 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 60 inches. This soil contains a moderately saline horizon. This soil is in the Claypan range site. It is in the nonirrigated land capability class 4s.

Cresbard soils make up 41 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 60 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Clayey range site. It is in the nonirrigated land capability class 2s.

44B Claire-Lohnes Coarse Sands, 1 To 6 Percent Slopes Hummocky

Claire soils make up 56 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. This soil does not have a salinity problem. This soil is in the Thin Sands range site. It is in the nonirrigated land capability class 6e.

Lohnes soils make up 30 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 4e.

50 Colvin Silt Loam

Colvin soils make up 60 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 9 inches. The soil contains a maximum amount of 45 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Subirrigated range site. It is in the nonirrigated land capability class 4w.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
McHenry County, North Dakota

51 Colvin Silt Loam, Saline

Colvin, Saline soils make up 90 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 9 inches. The soil contains a maximum amount of 45 percent calcium carbonate. This soil contains a moderately saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Saline Lowland range site. It is in the nonirrigated land capability class 3s.

52 Colvin Silt Loam, Wet

Colvin, Wet soils make up 75 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is very poorly drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 35 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Wetland range site. It is in the nonirrigated land capability class 3w.

54 Barnes-Cresbard Loams, 0 To 3 Percent Slopes

Cresbard soils make up 41 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 60 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Clayey range site. It is in the nonirrigated land capability class 2s.

Barnes soils make up 28 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 2c.

54B Barnes-Cresbard Loams, 3 To 6 Percent Slopes

Barnes soils make up 37 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 2e.

Cresbard soils make up 35 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 60 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Clayey range site. It is in the nonirrigated land capability class 2e.

56 Divide Loam, 0 To 3 Percent Slopes

Divide soils make up 76 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderately slow. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. The soil contains a maximum amount of 35 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 3s.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
McHenry County, North Dakota

62B Egeland Fine Sandy Loam, 0 To 6 Percent Slopes

Egeland soils make up 72 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately rapid. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sandy range site. It is in the nonirrigated land capability class 3e.

65 Embden Fine Sandy Loam, 0 To 3 Percent Slopes

Embden soils make up 60 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately rapid. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 15 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sandy range site. It is in the nonirrigated land capability class 3e.

68 Fargo Silty Clay

Fargo soils make up 60 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 15 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Clayey range site. It is in the nonirrigated land capability class 2w.

72 Verendrye Loamy Coarse Sand

Verendrye soils make up 93 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 21 inches. This soil does not have a salinity problem. This soil is in the Subirrigated range site. It is in the nonirrigated land capability class 4w.

73 Fossum And Arveson Soils

Fossum soils make up 44 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 12 inches. This soil is in the Subirrigated range site. It is in the nonirrigated land capability class 3w.

Arveson soils make up 44 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 12 inches. This soil does not have a salinity problem. This soil is in the Subirrigated range site. It is in the nonirrigated land capability class 2w.

74 Fossum Fine Sandy Loam, Wet

Fossum, Wet soils make up 80 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is very poorly drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. This soil does not have a salinity problem. This soil is in the Wetland range site. It is in the nonirrigated land capability class 4w.

76 Gardena Loam, 0 To 3 Percent Slopes

Gardena soils make up 70 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 15 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 2e.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
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79 Glyndon Loam, Saline

Glyndon soils make up 62 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 27 inches. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a moderately saline horizon. This soil does not have a sodium problem. This soil is in the Saline Lowland range site. It is in the nonirrigated land capability class 3s.

80 Glyndon Loam

Glyndon soils make up 71 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 51 inches. This soil contains a very slightly saline horizon. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 2e.

82 Great Bend-Overly Complex, 0 To 3 Percent Slopes

Great Bend soils make up 59 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 2c.

Overly soils make up 31 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 2c.

88 Hamerly Loam, Saline, 0 To 3 Percent Slopes

Hamerly, Saline soils make up 81 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderately slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. The soil contains a maximum amount of 35 percent calcium carbonate. This soil contains a moderately saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Saline Lowland range site. It is in the nonirrigated land capability class 3s.

89 Hamerly Loam, 0 To 3 Percent Slopes

Hamerly soils make up 83 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. The soil contains a maximum amount of 35 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 2e.

90 Hamerly-Tonka Complex, 0 To 3 Percent Slopes

Hamerly soils make up 58 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. The soil contains a maximum amount of 35 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 2e.

Tonka soils make up 34 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Wet Meadow range site. It is in the nonirrigated land capability class 2w.

91 Hecla Loamy Fine Sand, 0 To 3 Percent Slopes

Hecla soils make up 78 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 4e.

104 Colvin Silt Loam, Channeled

Colvin, Channeled soils make up 64 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 9 inches. The soil contains a maximum amount of 45 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Subirrigated range site. It is in the nonirrigated land capability class 6w.

105 Letcher Fine Sandy Loam, 0 To 3 Percent Slopes

Letcher soils make up 63 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 51 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Sandy Claypan range site. It is in the nonirrigated land capability class 4s.

106 Swenoda–Larson Fine Sandy Loams, 0 To 3 Percent Slopes

Swenoda soils make up 43 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Sandy range site. It is in the nonirrigated land capability class 3e.

Larson soils make up 33 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 35 percent calcium carbonate. This soil contains a moderately saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Claypan range site. It is in the nonirrigated land capability class 4s.

106B Swenoda–Larson Fine Sandy Loams, 3 To 6 Percent Slopes

Swenoda soils make up 43 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Sandy range site. It is in the nonirrigated land capability class 3e.

Larson soils make up 34 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 35 percent calcium carbonate. This soil contains a moderately saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Claypan range site. It is in the nonirrigated land capability class 4s.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
McHenry County, North Dakota

107B Lohnes-Claire Coarse Sands, 0 To 6 Percent Slopes

Lohnes soils make up 74 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 6e.

Claire soils make up 18 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. This soil does not have a salinity problem. This soil is in the Thin Sands range site. It is in the nonirrigated land capability class 6e.

108 Falsen-Karlsruhe Complex, 0 To 3 Percent Slopes

Falsen soils make up 70 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 39 inches. This soil does not have a salinity problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 6e.

Karlsruhe soils make up 26 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. This soil does not have a salinity problem. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 4e.

109D Lohnes And Maddock Soils, 6 To 15 Percent Slopes

Lohnes soils make up 51 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 6e.

Maddock soils make up 29 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 6e.

110 Ludden Clay, Ponded

Ludden, Ponded soils make up 90 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is very poorly drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is slightly sodic. It is in the nonirrigated land capability class 8w.

111 Ludden Clay

Ludden soils make up 88 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is occasionally flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Overflow range site. It is in the nonirrigated land capability class 2w.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
McHenry County, North Dakota

112B Maddock-Hecla Loamy Fine Sands, 1 To 6 Percent Slopes

Maddock soils make up 68 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 4e.

Hecla soils make up 28 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 4e.

124 Marysland Silt Loam

Marysland soils make up 74 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is moderately slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 9 inches. The soil contains a maximum amount of 35 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Subirrigated range site. It is in the nonirrigated land capability class 2w.

136 Ryan Loam

Ryan soils make up 78 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is very slow. It has a moderate available water capacity and a high shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 25 percent calcium carbonate. This soil contains a moderately saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Thin Claypan range site. It is in the nonirrigated land capability class 6s.

137 Harriet Silt Loam

Harriet soils make up 63 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is very slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 6 inches. The soil contains a maximum amount of 45 percent calcium carbonate. This soil contains a moderately saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Saline Lowland range site. It is in the nonirrigated land capability class 6s.

139F Serden Sand, 3 To 50 Percent Slopes

Serden soils make up 93 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 3 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Thin Sands range site. It is in the nonirrigated land capability class 7e.

145B Sioux Gravelly Sandy Loam, 1 To 6 Percent Slopes

Sioux soils make up 84 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is excessively drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 15 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Very Shallow range site. It is in the nonirrigated land capability class 6s.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
McHenry County, North Dakota

145E Sioux Gravelly Sandy Loam, 6 To 25 Percent Slopes

Sioux soils make up 90 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is excessively drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 15 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Very Shallow range site. It is in the nonirrigated land capability class 7s.

151 Stirum Fine Sandy Loam

Stirum soils make up 88 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is poorly drained. The slowest permeability is moderately slow. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 45 percent calcium carbonate. This soil contains a moderately saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Subirrigated range site. It is in the nonirrigated land capability class 4s.

157 Swenoda Fine Sandy Loam, 0 To 3 Percent Slopes

Swenoda soils make up 67 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Sandy range site. It is in the nonirrigated land capability class 3e.

158B Swenoda-Barnes Complex, 0 To 6 Percent Slopes

Swenoda soils make up 47 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Sandy range site. It is in the nonirrigated land capability class 3e.

Barnes soils make up 31 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 2e.

163B Towner Loamy Fine Sand, 0 To 6 Percent Slopes

Towner soils make up 67 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 30 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 4e.

164C Towner-Buse-Maddock Complex, 3 To 9 Percent Slopes

Towner soils make up 38 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 30 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 4e.

Buse soils make up 20 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Thin Upland range site. It is in the nonirrigated land capability class 4e.

Maddock soils make up 13 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 4e.

165E Dickey–Buse–Maddock Complex, 9 To 25 Percent Slopes

Dickey soils make up 26 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil does not have a salinity problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 7e.

Buse soils make up 24 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Thin Upland range site. It is in the nonirrigated land capability class 7e.

Maddock soils make up 16 percent of the map unit. This map unit is in the Central Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 7e.

172 Ulen Fine Sandy Loam, 0 To 3 Percent Slopes

Ulen soils make up 86 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 51 inches. This soil contains a very slightly saline horizon. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 3e.

175 Ulen–Hecla Loamy Fine Sands, 0 To 3 Percent Slopes

Ulen soils make up 55 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 51 inches. This soil contains a very slightly saline horizon. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 4e.

Hecla soils make up 31 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 48 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sands range site. It is in the nonirrigated land capability class 4e.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
McHenry County, North Dakota

176B Velva Loam, 0 To 6 Percent Slopes

Velva soils make up 75 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Sandy range site. It is in the nonirrigated land capability class 2e.

177 Ladelle Silty Clay Loam, 0 To 3 Percent Slopes

Ladelle soils make up 74 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 60 inches. The soil contains a maximum amount of 25 percent calcium carbonate. This soil contains a very slightly saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Overflow range site. It is in the nonirrigated land capability class 2c.

180 Wyndmere Fine Sandy Loam, Saline

Wyndmere, Saline soils make up 72 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 36 inches. The soil contains a maximum amount of 40 percent calcium carbonate. This soil contains a moderately saline horizon. This soil has a horizon that is slightly sodic. This soil is in the Saline Lowland range site. It is in the nonirrigated land capability class 3s.

181 Wyndmere Fine Sandy Loam

Wyndmere soils make up 77 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderately rapid. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. The soil contains a maximum amount of 35 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 3e.

184 Wyrene Sandy Loam

Wyrene soils make up 77 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is moderately rapid. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. The soil contains a maximum amount of 30 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 3e.

185 Karlsruhe Coarse Sandy Loam

Karlsruhe soils make up 73 percent of the map unit. This map unit is in the Northern Black Glaciated Plains Major Land Resource Area. It is somewhat poorly drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. This soil does not have a salinity problem. This soil is in the Limy Subirrigated range site. It is in the nonirrigated land capability class 4e.

186 Williams Loam, 0 To 3 Percent Slopes

Williams soils make up 76 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 20 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 2c.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
McHenry County, North Dakota

186B Williams Loam, 3 To 6 Percent Slopes

Williams soils make up 75 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 20 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 2e.

187C Williams-Zahl Loams, 6 To 9 Percent Slopes

Williams soils make up 40 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 20 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 3e.

Zahl soils make up 28 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 25 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Thin Upland range site. It is in the nonirrigated land capability class 4e.

188E Zahl-Williams Loams, 9 To 20 Percent Slopes

Zahl soils make up 48 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 25 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Thin Upland range site. It is in the nonirrigated land capability class 6e.

Williams soils make up 35 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 20 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 4e.

188F Zahl-Max-Svea Loams, 6 To 60 Percent Slopes

Zahl soils make up 36 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 25 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Thin Upland range site. It is in the nonirrigated land capability class 7e.

Max soils make up 23 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil does not have a salinity problem. This soil does not have a sodium problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 7e.

Svea soils make up 19 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. This soil does not have a salinity problem. This soil is in the Silty range site. It is in the nonirrigated land capability class 6e.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
McHenry County, North Dakota

189 Williams–Niobell Loams, 0 To 3 Percent Slopes

Williams soils make up 41 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 20 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 2c.

Niobell soils make up 41 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 51 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Clayey range site. It is in the nonirrigated land capability class 3s.

189B Williams–Niobell Loams, 3 To 6 Percent Slopes

Niobell soils make up 37 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 51 inches. The soil contains a maximum amount of 20 percent calcium carbonate. This soil contains a slightly saline horizon. This soil has a horizon that is moderately sodic. This soil is in the Clayey range site. It is in the nonirrigated land capability class 3e.

Williams soils make up 33 percent of the map unit. This map unit is in the Central Dark Brown Glaciated Plains Major Land Resource Area. It is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The water table depth is greater than 6 feet. The soil contains a maximum amount of 20 percent calcium carbonate. This soil does not have a salinity problem. This soil has a horizon that is slightly sodic. This soil is in the Silty range site. It is in the nonirrigated land capability class 2e.