Grand Forks County, North Dakota
Soil Irrigation Groups

Map Unit Symbol	Map Unit Name	Soil Component	Percent Composition	KW	*Upper Slope RV	**Irrigation Group
2	Parnell silt loam	Parnell	85	0.28	1	27n
3	Vallers loam	Vallers	85	0.28	1	15c
4	Arveson loam	Arveson	85	0.24	1	19c
8	Colvin silty clay loam	Colvin	85	0.28	1	15c
10	Lamoure silty clay loam	Lamoure	57	0.28	1	28n
11	Dovray clay	Dovray	95	0.28	1	22c
12	Svea loam, 0 to 3 percent slopes	Svea	83	0.28	3	8c
13B	Barnes loam, 3 to 6 percent slopes	Barnes	85	0.24	6	8c
15D	Buse-Svea loams, 1 to 15 percent slopes	Buse	50	0.28	15	23n
		Svea	35	0.28	9	23n
15E	Buse-Svea loams, 1 to 25 percent slopes	Buse	50	0.28	25	23n
		Svea	30	0.28	9	23n
16	Lallie silty clay loam, ponded	Lallie	90	0.37	1	27n
17	Vang loam, 0 to 3 percent slopes	Vang	85	0.24	3	6i
19	Hamerly loam, 1 to 3 percent slopes	Hamerly	85	0.24	3	15c
23	Cresbard-Cavour loams, 0 to 3 percent slopes	Cavour	30	0.37	3	24n
		Cresbard	50	0.32	3	11c
23B	Barnes-Cresbard loams, 1 to 6 percent slopes	Barnes	55	0.24	6	8c
		Cresbard	25	0.32	6	11c
25	Overly silty clay loam, 0 to 3 percent slopes	Overly	85	0.28	3	8c
26	Bearden-Overly silty clay loams, 0 to 3 percent slopes	Bearden	65	0.28	3	15c
		Overly	25	0.28	3	8c
29	Velva sandy loam, 1 to 3 percent slopes	Velva	85	0.2	3	4i
30	Walsh loam, 0 to 3 percent slopes	Walsh	85	0.28	3	8c
35	Rauville silt loam	Rauville	51	0.28	1	28n
39	Vallers-Manfred clay loams, saline	Manfred	35	0.32	1	24n
		Vallers	50	0.28	1	25n
41	Bearden-Perella silty clays	Bearden	50	0.28	1	15c
		Perella	35	0.28	1	15c
42	Nutley silty clay	Nutley	85	0.28	1	21c
43B	Cashel silty clay loam, 1 to 6 percent slopes	Cashel	82	0.32	6	15c
43E	Cashel silty clay loam, 6 to 25 percent slopes	Cashel	50	0.32	25	23n
45	Wahpeton silty clay, 1 to 3 percent slopes	Wahpeton	83	0.28	3	21c
46	LaDelle silt loam, 0 to 3 percent slopes	Ladelle	82	0.28	3	8c
48	Wyndmere sandy loam	Wyndmere	85	0.2	1	19c
50B	Hecla fine sandy loam, 1 to 6 percent slopes	Hecla	85	0.2	6	3i
51B	Hecla-Maddock fine sandy loams, 1 to 6 percent slopes	Hecla	50	0.2	3	3i

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		Maddock	35	0.2	6	3i
51E	Maddock sandy loam, 9 to 25 percent slopes	Maddock	85	0.2	25	23n
53	Hamar sandy loam	Hamar	85	0.2	1	18c
54B	Embden fine sandy loam, 1 to 6 percent slopes	Embden	85	0.2	6	4i
55	Tiffany loam	Tiffany	85	0.24	1	20c
59	Towner fine sandy loam, 1 to 3 percent slopes	Towner	87	0.2	3	14c
60	Grimstad fine sandy loam	Grimstad	85	0.2	1	20c
62	Rockwell fine sandy loam	Rockwell	85	0.24	1	19c
64	Antler silt loam	Antler	85	0.37	1	15c
65	Antler silty clay loam, saline	Antler	80	0.28	1	25n
67	Gilby loam	Gilby	85	0.28	1	15c
70	Antler-Tonka silty clay loams, saline	Antler	50	0.28	1	25n
		Tonka	35	0.37	1	22c
71	Hamerly-Tonka complex, 0 to 3 percent slopes	Hamerly	45	0.24	3	15c
		Tonka	35	0.37	1	22c
72	Gardena silt loam, 0 to 3 percent slopes	Gardena	88	0.28	3	7i
73	Glyndon silt loam, 0 to 3 percent slopes	Glyndon	87	0.28	3	17c
76	Borup silt loam	Borup	90	0.28	1	17c
78B	Zell-Gardena silt loams, 1 to 6 percent slopes	Gardena	35	0.28	3	7i
		Zell	45	0.32	6	9c
78C	Zell-Gardena silt loams, 1 to 9 percent slopes	Gardena	35	0.28	6	7i
		Zell	50	0.32	9	23n
79B	Zell-LaDelle silt loams, 1 to 6 percent slopes	Ladelle	40	0.28	3	8c
		Zell	45	0.32	6	9c
79C	Zell-LaDelle silt loams, 1 to 9 percent slopes	Ladelle	35	0.28	6	8c
		Zell	50	0.32	9	23n
79D	Zell-LaDelle silt loams, 1 to 15 percent slopes	Ladelle	30	0.28	6	8c
		Zell	55	0.32	15	23n
84	Wyndmere-Embden sandy loams	Embden	40	0.2	1	4i
		Wyndmere	45	0.2	1	19c
86	Divide loam, 1 to 3 percent slopes	Divide	85	0.24	3	16c
87	Marysland loam	Marysland	85	0.28	1	16c
89	Renshaw loam, 1 to 3 percent slopes	Renshaw	85	0.28	3	5i
89B	Renshaw loam, 3 to 6 percent slopes	Renshaw	85	0.28	6	5i
90B	Arvilla sandy loam, 1 to 6 percent slopes	Arvilla	85	0.2	6	3i
93	Inkster sandy loam, 0 to 3 percent slopes	Inkster	85	0.2	3	4i
94	Pits, gravel and sand	Pits, Gravel	90	0.1	60	29n

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Map Unit Symbol	Map Unit Name	Soil Component	Percent Composition	KW	*Upper Slope RV	**Irrigation Group
95	Ojata silty clay loam	Ojata	83	0.32	1	25n
96D	Sioux-Barnes loams, 6 to 15 percent slopes	Barnes	35	0.24	15	23n
		Sioux	45	0.28	15	23n
97D	Sioux loam, 1 to 15 percent slopes	Sioux	80	0.28	15	23n
98E	Edgeley-Kloten loams, 6 to 25 percent slopes	Edgeley	50	0.32	15	23n
		Kloten	30	0.32	25	23n
99	Cavour-Miranda loams, 0 to 3 percent slopes	Cavour	45	0.37	3	24n
		Miranda	35	0.32	3	24n
106	Dumps and Pits	Dumps	50	0.28	60	29n
		Pits	50	0.1	60	29n
126	Bearden silty clay loam	Bearden	85	0.28	1	15c
130B	Svea-Buse loams, 1 to 6 percent slopes	Buse	32	0.28	6	9c
		Svea	53	0.28	3	8c
130C	Buse-Svea loams, 1 to 9 percent slopes	Buse	51	0.28	9	23n
		Svea	31	0.28	6	8c
148	Wyndmere-Tiffany fine sandy loams	Tiffany	35	0.2	1	19c
		Wyndmere	50	0.2	1	19c
171	Antler-Tonka silt loams	Antler	50	0.37	1	15c
		Tonka	35	0.37	1	22c
173	Glyndon-Tiffany silt loams	Glyndon	55	0.28	1	17c
		Tiffany	30	0.28	1	19c
199D	Miranda variant loam, 1 to 15 percent slopes	Miranda Variant	85	0.24	15	23n
226	Bearden-Perella silty clay loams	Bearden	55	0.28	1	15c
		Perella	30	0.28	1	15c
270	Bearden silty clay loam, saline	Bearden	85	0.28	1	25n
401	Aberdeen-Nutley silty clays	Aberdeen	55	0.32	1	11c
		Nutley	30	0.28	1	21c
402	Exline-Aberdeen silty clays	Aberdeen	30	0.32	1	11c
		Exline	55	0.28	1	24n

* Actual field slope limit may be less then soil mapping unit upper slope limit. A lower upper slope limit can be used to calculate Water Erosion Hazard if verified in the field.
** Irrigation Group assigned for conventional tillage using Water Erosion Slope Hazard (RV slope x Kw) <2.0 and undrained phase for poorly or very poorly drained soil components.
Refer to the Water Erosion Slope Hazard Table in the North Dakota Irrigation Guide for irrigation group assignment if assessing a perennial or no-till cropping system or drained phase of a poorly or very poorly drained soil component.