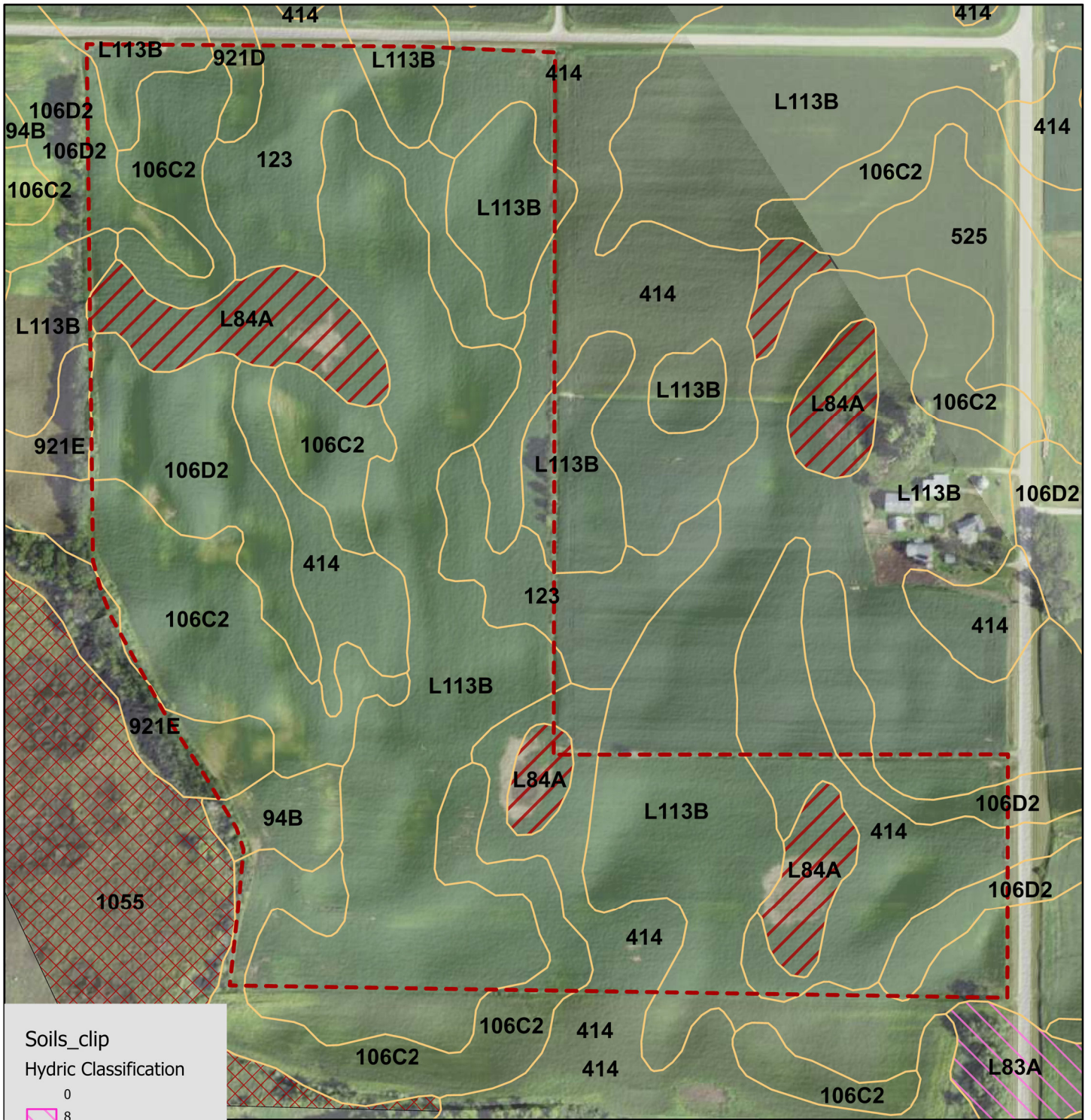
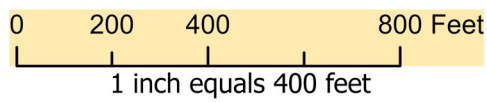


Topo Map





2017 photo



Soils Map

Report—Engineering Properties (MN)

Engineering Properties (MN)—Freeborn County, Minnesota														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASTHO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>					<i>Pct</i>					<i>Pct</i>	
94B—Terril loam, 2 to 6 percent slopes														
Terril	80	B	0-9	Clay loam, sandy clay loam, loam	CL, MH, SC	A-7-5, A-7-6, A-6	0-3	0-1	87-100	71-98	63-96	41-66	32-51	12-19
			9-34	Clay loam, sandy clay loam, loam	CL, SC	A-7-6, A-6	0-3	0-1	87-100	72-98	64-97	41-66	32-46	12-19
			34-52	Sandy loam, loam, sandy clay loam	CL, SC	A-4, A-6	0-3	0-1	88-100	73-98	62-94	38-62	27-40	10-18
			52-79	Clay loam, sandy loam, loam	CL, SC	A-4, A-7-6, A-6	0-3	0-1	89-100	75-98	64-98	43-72	25-43	8-23
106C2—Lester loam, 6 to 10 percent slopes, moderately eroded														
Lester, moderately eroded	85	C	0-6	Loam	CL	A-7-6, A-6	0	0-5	95-99	84-98	72-91	52-68	32-44	13-19
			6-38	Clay loam, loam, sandy clay loam	CL	A-7-6	0-3	0-4	95-99	85-99	72-91	55-72	35-44	16-23
			38-79	Clay loam, loam	CL	A-6	0-3	0-4	95-99	86-99	74-95	54-72	28-40	11-20

Engineering Properties (MN)---Freeborn County, Minnesota														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AAASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>					<i>Pct</i>					<i>Pct</i>	
106D2—Lester loam, 10 to 16 percent slopes, moderately eroded														
Lester, moderately eroded	85	C	0-6	Loam	CL	A-7-6, A-6	0	0-5	95-99	84-98	72-91	52-68	32-44	13-19
			6-38	Clay loam, loam, sandy clay loam	CL	A-7-6	0-3	0-4	95-99	85-99	72-91	55-72	35-44	16-23
			38-79	Clay loam, loam	CL	A-6	0-3	0-4	95-99	86-99	74-95	54-72	28-40	11-20
123—Dundas silt loam, 0 to 2 percent slopes														
Dundas	85	C/D	0-7	Loam, clay loam, silt loam	ML	A-4, A-7-6	0-3	0-1	87-100	75-100	68-100	56-90	34-54	9-20
			7-10	Silt loam, loam, clay loam	CL	A-4, A-6	0-3	0-1	87-100	75-100	68-100	56-90	30-50	9-21
			10-12	Silt loam, loam, fine sandy loam	CL-ML	A-4, A-6	0-3	0-1	87-100	75-98	63-97	40-67	18-34	2-13
			12-38	Clay loam, loam	CL	A-7-6, A-6	0-3	0-1	88-100	76-98	63-96	46-73	31-47	13-25
			38-79	Clay loam, loam	CL	A-6	0-3	0-1	89-100	75-98	65-95	47-72	28-40	11-20
259C—Grays silt loam, 6 to 12 percent slopes														
Grays	90	B	0-12	Silt loam	CL	A-4, A-6	0	0	100	95-100	90-100	80-95	31-45	11-18
			12-47	Silt loam, silty clay loam	CL	A-7, A-6	0	0	100	95-100	90-100	80-90	35-46	17-25
			47-60	Silt loam	CL-ML, CL, ML	A-4, A-6	0	0	95-100	95-100	90-100	80-90	16-32	2-13

Engineering Properties (MN)---Freeborn County, Minnesota														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>					<i>Pct</i>					<i>Pct</i>	
414—Hamel loam, 0 to 2 percent slopes														
Hamel	85	C/D	0-10	Loam, clay loam	CL, ML, OH, SM	A-7-5, A-6	0-4	0-2	66-98	60-97	41-70	38-60	13-20	
			10-24	Loam, clay loam	CL, MH, ML, SC	A-7-5, A-7-6, A-6	0-3	0-1	72-98	63-96	44-70	34-52	13-21	
			24-46	Clay loam, loam	CH, CL, SC	A-7-6, A-6	0-3	0-1	73-98	66-98	48-74	36-51	17-25	
			46-79	Clay loam, loam	CL, SC	A-7-6, A-6	0-3	0-1	75-98	65-97	49-75	30-44	12-24	
921D—Omsrud-Storden complex, 10 to 16 percent slopes, moderately eroded														
Omsrud, moderately eroded	55	B	0-9	Loam, sandy loam	CL, ML	A-7-6, A-6	0-3	0-1	71-98	59-93	39-64	27-43	9-18	
			9-24	Loam, clay loam, sandy clay loam, sandy loam	CL	A-7-6, A-6	0-3	0-1	73-98	63-95	42-66	29-42	12-19	
			24-36	Loam, sandy loam, clay loam	CL	A-6	0-3	0-1	75-98	62-98	42-72	26-45	9-23	
			36-79	Loam, clay loam, sandy loam	CL	A-6	0-3	0-1	75-98	64-98	43-72	25-43	8-23	
Storden, moderately eroded	35	B	0-8	Sandy loam, loam	CL, ML	A-4, A-6, A-7-6	0-3	0-1	71-98	59-93	39-64	27-43	8-17	
			8-55	Loam	CL	A-4, A-6	0-3	0-1	75-98	64-92	44-66	25-37	9-16	
			55-79	Loam, clay loam, sandy loam	CL	A-4, A-6, A-7-6	0-3	0-1	75-98	64-98	43-72	25-43	8-23	



Engineering Properties (MN)---Freeborn County, Minnesota														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In					Pct	Pct				Pct	
L84A—Glencoe clay loam, 0 to 1 percent slopes														
Glencoe	80	C/D	0-9	Silty clay loam, clay loam	CL, MH, ML, OH, OL	A-7-5, A-7-6	0-5	0-2	98-100	85-100	79-100	66-88	47-71	19-26
			9-39	Silty clay loam, clay loam	CL, MH, OH, OL	A-7-5, A-7-6, A-6	0-3	0-1	98-100	89-100	81-100	64-83	40-62	18-25
			39-50	Silty clay loam, clay loam	CH, CL	A-7-6, A-6	0-3	0-1	88-100	73-98	67-98	56-84	38-51	19-25
			50-79	Clay loam, loam	CL, SC	A-7-6, A-6	0-3	0-1	89-100	75-98	65-97	49-75	30-44	12-24

Engineering Properties (MN)---Freeborn County, Minnesota														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>					<i>Pct</i>					<i>Pct</i>	
L113B---Reedslake-Le Sueur complex, 1 to 6 percent slopes														
Reedslake	59	C	0-6	Loam	CL, ML, SC	A-6, A-7-6	0	0-5	95-99	84-98	73-92	48-62	32-43	12-16
			6-15	Loam	CL, SC	A-6, A-7-6	0	0-5	95-99	84-98	74-92	48-62	32-41	12-16
			15-33	Sandy clay loam, loam, clay loam	CL	A-6, A-7-6	0-3	0-4	95-99	85-99	74-95	50-66	32-42	14-21
			33-54	Loam, clay loam	CL	A-6	0-3	0-4	95-99	85-99	74-93	55-71	30-40	12-20
			54-79	Loam, clay loam	CL	A-6	0-3	0-4	95-99	86-99	74-95	54-72	28-40	11-21
Le sueur	30	C/D	0-6	Loam, clay loam	CL, MH, ML	A-7-5, A-6	0	0-5	95-99	84-98	75-97	57-76	39-57	15-22
			6-11	Loam, clay loam	CL, MH	A-7-5, A-6, A-7-6	0	0-5	95-99	84-98	75-97	58-76	37-55	16-22
			11-24	Clay loam, loam	CL	A-6, A-7-6	0-3	0-4	95-99	85-99	74-97	53-72	36-48	17-26
			24-36	Loam, clay loam	CL	A-6	0-3	0-4	95-99	85-99	74-93	55-71	30-40	12-20
			36-55	Clay loam, loam	CL	A-6	0-3	0-4	95-99	86-99	73-94	53-71	28-40	11-21
			55-79	Loam, clay loam	CL	A-6	0-3	0-4	95-99	86-99	74-95	54-72	28-40	11-21

Data Source Information

Soil Survey Area: Freeborn County, Minnesota
 Survey Area Data: Version 19, Sep 10, 2023