Attachment 9 Soil Characteristics Crossed by Project

Map Unit	Map Unit	Component	Percen	t Slope	Surface	Drainage		Taxonomic	Parent		Prime	Hydric	
Symbol	Name	Name	Low	High	Texture	Class	Permeability	Classification	Material	Landforms	Farmland <sup>a</sup>	Soil <sup>a</sup>	Acres
1280B	Sanborg- Odanah complex, 2 to 6 percent slopes	Odanah	2	6	Silt loam	Well drained	Moderate	Fine, mixed, active, frigid Haplic Glossudalfs	clayey till	till plains	State	No	2.1
		Sanborg	0	6	Silt loam	Moderatel y well drained	Moderate	Fine, mixed, active, frigid Oxyaquic Glossudalfs	clayey till	till plains	State	No	2.6
193A	Minocqua muck, 0 to 2 percent slopes	Minocqua	0	2	Muck	Poorly drained	Moderately Rapid	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid, frigid Typic Endoaquepts	silty and loamy glaciofluvial deposits over sandy and gravelly outwash	depressions, outwash plains	Prime	Yes	2.4
2015	Pits	Pits	N/A	N/A	N/A	N/A	N/A	N/A	N/A	outwash plains	No	N/A	19.8
2030	Udorthents and Udipsamments, cut or fill	Udipsamme nts	N/A	N/A	N/A	N/A	N/A	Udipsamments	N/A	N/A	No	No	8.0
		Udorthents	N/A	N/A	N/A	N/A	N/A	Udorthents	N/A	N/A	No	No	8.0
204D	Denomie silt loam, 15 to 30 percent slopes	Denomie	15	30	Silt loam	Well drained	Moderate	Fine-silty, mixed, active, frigid Haplic Glossudalfs	silty and loamy till	till plains	No	No	0.0
204F	Denomie silt loam, 30 to 60 percent slopes	Denomie	30	60	Silt loam	Well drained	Moderate	Fine-silty, mixed, active, frigid Haplic Glossudalfs	silty and loamy till	till plains	No	No	2.6
215C	Pence sandy loam, 6 to 15 percent slopes	Pence	6	15	Sandy loam	Somewhat excessivel y drained	Moderately Rapid	Sandy, isotic, frigid Typic Haplorthods	loamy glaciofluvial deposits over stratified sandy and gravelly outwash	hillslopes, outwash plains	No	No	13.9

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
215D	Pence sandy loam, 15 to 35 percent slopes	Pence	15	35	Sandy loam	Somewhat excessivel y drained	Moderately Rapid	Sandy, isotic, frigid Typic Haplorthods	loamy glaciofluvial deposits over stratified sandy and gravelly outwash	hillslopes, outwash plains	No	No	0.0
226A	Allendale loamy fine sand, 0 to 3 percent slopes	Allendale	0	3	Loamy fine sand	Somewhat poorly drained	Rapid	Sandy over clayey, mixed, semiactive, frigid Alfic Epiaquods	sandy sediments and underlying clayey lacustrine or till deposits	ground moraines, lake plains, lake terraces, outwash plains	No	No	12.4
262B	Amnicon-Cuttre complex, 0 to 4 percent slopes	Amnicon	0	4	Silty clay loam	Moderatel y well drained	Moderately Slow	Very-fine, mixed, active, frigid Oxyaquic Vertic Glossudalfs	clayey till	till plains	State	No	9.0
		Cuttre	0	3	Clay	Somewhat poorly drained	Moderately Slow	Very-fine, mixed, active, frigid Aeric Glossaqualfs	clayey till	till plains	State	No	7.2
280C	Odanah silt loam, 6 to 15 percent slopes	Odanah	6	15	Silt loam	Well drained	Moderate	Fine, mixed, active, frigid Haplic Glossudalfs	clayey till	till plains	No	No	8.0
280D	Odanah silt loam, 15 to 25 percent slopes	Odanah	15	25	Silt loam	Well drained	Moderate	Fine, mixed, active, frigid Haplic Glossudalfs	clayey till	till plains	No	No	9.4
280F	Odanah silt loam, 25 to 60 percent slopes	Odanah	25	60	Silt loam	Well drained	Moderate	Fine, mixed, active, frigid Haplic Glossudalfs	clayey till	till plains	No	No	4.3
319A	Tonkey sandy loam, 0 to 2 percent slopes	Tonkey	0	2	Sandy loam	Poorly drained	Moderate	Coarse-loamy, mixed, semiactive, nonacid, frigid Mollic Endoaquepts	stratified loamy and sandy glaciofluvial deposits	depressions, drainageways , lake plains	Prime	Yes	2.2

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
3243A	Spear silt loam, lake terrace, 0 to 3 percent slopes	Spear	0	3	Silt loam	Somewhat poorly drained	Moderate	Coarse-silty, mixed, superactive, frigid Aquic Glossudalfs	glacio- lacustrine deposits	lake plains	Prime	No	1.8
375A	Robago fine sandy loam, lake terrace, 0 to 3 percent slopes	Robago	0	3	Highly decompose d plant material	Somewhat poorly drained	Rapid	Coarse-loamy, mixed, superactive, frigid Argic Endoaquods	stratified sandy and loamy glaciofluvial and glaciolacustrin e deposits	lake plains	Prime	No	4.9
3826B	Allendale- Wakeley- Kinross complex, 0 to 6 percent slopes	Allendale	0	6	Loamy fine sand	Somewhat poorly drained	Rapid	Sandy over clayey, mixed, semiactive, frigid Alfic Epiaquods	sandy sediments and underlying clayey lacustrine or till deposits	ground moraines, lake plains, lake terraces, outwash plains	No	No	0.7
		Kinross	0	2	Muck	Very poorly drained	Rapid	Sandy, mixed, frigid Typic Endoaquods	glaciofluvial material	lake plains, outwash plains, stream terraces	No	Yes	0.4
		Wakeley	0	2	Muck	Very poorly drained	Rapid	Sandy over clayey, mixed, semiactive, nonacid, frigid Aeric Epiaquents	sandy outwash and lacustrine material underlain by clayey lacustrine deposits	lake plains, outwash plains	No	Yes	0.6
388B	Pelkie, occasionally flooded- Dechamps, frequently flooded complex, 0 to 4 percent slopes	Dechamps	0	2	Fine sand loam	Somewhat poorly drained	Moderately Rapid	Sandy, mixed, frigid Aquic Udifluvents	predominantly loamy alluvium	flood plains	No	No	0.6

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
		Pelkie	0	4	Loamy very fine sand	Moderatel y well drained	Rapid	Mixed, frigid Oxyaquic Udipsamments	sandy alluvium	flood plains	No	No	1.0
405A	Lupton, Cathro, and Tawas soils, 0 to 1 percent slopes	Cathro	0	1	Muck	Very poorly drained	Moderately Rapid	Loamy, mixed, euic, frigid Terric Haplosaprists	herbaceous organic material 16 to 51 inches thick underlain by loamy deposits	depressions, disintegration moraines	No	Yes	0.3
		Lupton	0	1	Muck	Very poorly drained	Moderately Rapid	Euic, frigid Typic Haplosaprists	herbaceous and woody organic material more than 51 inches thick	depressions, disintegration moraines	No	Yes	0.4
		Tawas	0	1	Muck	Very poorly drained	Moderately Rapid	Sandy or sandy- skeletal, mixed, euic, frigid Terric Haplosaprists	herbaceous organic material 16 to 51 inches thick over sandy deposits	depressions, disintegration moraines	No	Yes	0.3
444B	Gichigami- Oronto complex, 0 to 6 percent slopes	Gichigami	0	6	Silt loam	Moderatel y well drained	Moderate	Fine-silty, mixed, superactive, frigid Oxyaquic Glossudalfs	silty and loamy till	N/A	State	No	2.2
		Oronto	0	3	Silty clay loam	Somewhat poorly drained	Moderately Slow	Fine-silty, mixed, active, frigid Aeric Glossaqualfs	silty and loamy till	till plains	State	No	0.8
479A	Lerch-Herbster complex, 0 to 3 percent slopes	Herbster	0	3	Silt loam	Somewhat poorly drained	Moderate	Fine, mixed, active, frigid Aeric Glossaqualfs	clayey till and underlying loamy and sandy stratified lacustrine deposits	till plains	No	No	0.5

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
		Lerch	0	2	Muck	Poorly drained	Rapid	Very-fine, mixed, active, nonacid, frigid Vertic Epiaquepts	clayey till and/or clayey lacustrine deposits modified by wave action over loamy and/or sandy stratified lacustrine depositss	lake plains, till plains	No	Yes	0.7
480B	Portwing- Herbster complex, 0 to 6 percent slopes	Herbster	0	3	Silt loam	Somewhat poorly drained	Moderate	Fine, mixed, active, frigid Aeric Glossaqualfs	clayey till and underlying loamy and sandy stratified lacustrine deposits	till plains	State	No	20.6
		Portwing	2	6	Silt loam	Moderatel y well drained	Moderate	Fine, mixed, active, frigid Oxyaquic Glossudalfs	clayey till over underlying stratified loamy and sandy lacustrine deposits	till plains	State	No	34.4
481C	Cornucopia silt loam, 6 to 15 percent slopes	Cornucopia	6	15	Silt loam	Well drained	Moderate	Fine, mixed, active, frigid Haplic Glossudalfs	clayey till and underlying stratified loamy and sandy lacustrine deposits	till plains	No	No	1.3
481E	Cornucopia silt loam, 15 to 45 percent slopes	Cornucopia	15	45	Silt loam	Well drained	Moderate	Fine, mixed, active, frigid Haplic Glossudalfs	clayey till and underlying stratified loamy and sandy lacustrine deposits	till plains	No	No	4.2

Map Unit	Map Unit	Component	Percen	t Slope	Surface	Drainage		Taxonomic	Parent		Prime	Hydric	
Symbol	Name	Name	Low	High	Texture	Class	Permeability	Classification	Material	Landforms	Farmland <sup>a</sup>	Soil <sup>a</sup>	Acres
5141A	Lupton-Pleine- Cathro complex, 0 to 1 percent slopes	Cathro	0	1	Muck	Very poorly drained	Moderately Rapid	Loamy, mixed, euic, frigid Terric Haplosaprists	herbaceous organic material over loamy drift	drainageways	No	Yes	0.8
		Lupton	0	1	Muck	Very poorly drained	Moderately Rapid	Euic, frigid Typic Haplosaprists	highly decomposed woody organic material	swamps, till plains	No	Yes	3.3
		Pleine	0	1	Very cobbly muck	Poorly drained	Moderately Rapid	Coarse-loamy, mixed, superactive, nonacid, frigid Histic Humaquepts	coarse-loamy till	depressions	No	Yes	1.3
5170A	Minocqua- Pleine-Cathro complex, 0 to 2 percent slopes	Cathro	0	1	Muck	Very poorly drained	Moderately Rapid	Loamy, mixed, euic, frigid Terric Haplosaprists	herbaceous organic material 16 to 51 inches thick underlain by loamy deposits	depressions, disintegration moraines, drainageways	No	Yes	0.6
		Minocqua	0	2	Muck	Poorly drained	Moderately Rapid	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid, frigid Typic Endoaquepts	silty and loamy alluvium underlain by sandy and gravelly outwash	depressions, drainageways	No	Yes	1.9
		Pleine	0	2	Very cobbly muck	Poorly drained	Rapid	Coarse-loamy, mixed, superactive, nonacid, frigid Histic Humaquepts	loamy till	depressions, drainageways , moraines	No	Yes	1.1

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
5171B	Tula-Wormet- Gogebic complex, 0 to 6 percent slopes, very stony	Gogebic	2	6	Slightly decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till over sandy till	till plains	No	No	1.0
		Tula	0	4	Highly decompose d plant material	Somewhat poorly drained	Rapid	Coarse-loamy, mixed, superactive, frigid Argic Fragiaquods	modified loamy eolian material and underlying loamy till	end moraines, ground moraines	No	No	3.9
		Wormet	0	3	Moderately decompose d plant material	Somewhat poorly drained	Rapid	Sandy, mixed, frigid Typic Endoaquods	loamy alluvium or eolian deposits and underlying stratified sandy and gravelly outwash	outwash terraces	No	No	1.0
5172B	Gogebic, very stony-Pence, very stony- Cathro complex, 0 to 6 percent slopes	Cathro	0	1	Muck	Very poorly drained	Moderately Rapid	Loamy, mixed, euic, frigid Terric Haplosaprists	herbaceous organic material 16 to 51 inches thick underlain by loamy deposits	depressions, disintegration moraines, drainageways	No	Yes	8.7
		Gogebic	2	6	Slightly decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till over sandy till	till plains	No	No	34.9
		Pence	0	6	Moderately decompose d plant material	Somewhat excessivel y drained	Moderately Rapid	Sandy, isotic, frigid Typic Haplorthods	loamy alluvium underlain by sandy and gravelly glacial outwash	moraines	No	No	8.7

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
5172C	Gogebic, very stony-Pence, very stony- Cathro complex, 0 to 18 percent slopes	Cathro	0	1	Muck	Very poorly drained	Moderately Rapid	Loamy, mixed, euic, frigid Terric Haplosaprists	herbaceous organic material 16 to 51 inches thick underlain by loamy deposits	depressions, disintegration moraines, drainageways	No	Yes	2.8
		Gogebic	6	18	Slightly decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till over sandy till	till plains	No	No	11.4
		Pence	6	18	Moderately decompose d plant material	Somewhat excessivel y drained	Moderately Rapid	Sandy, isotic, frigid Typic Haplorthods	loamy alluvium underlain by sandy and gravelly glacial outwash	moraines	No	No	2.8
5173D	Gogebic-Pence complex, 18 to 35 percent slopes, very stony	Gogebic	18	35	Slightly decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till over sandy till	till plains	No	No	2.6
		Pence	18	35	Moderately decompose d plant material	Somewhat excessivel y drained	Moderately Rapid	Sandy, isotic, frigid Typic Haplorthods	loamy alluvium underlain by sandy and gravelly glacial outwash	moraines	No	No	1.3
517B	Annalake fine sandy loam, lake terrace, 2 to 6 percent slopes	Annalake	2	6	Fine sand loam	Moderatel y well drained	Moderate	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Haplorthods	stratified sandy and loamy glaciofluvial and glaciolacustrin e deposits	lake terraces	1	No	0.2

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
517C	Annalake fine sandy loam, lake terrace, 6 to 15 percent slopes	Annalake	6	15	Fine sand loam	Moderatel y well drained	Moderate	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Haplorthods	stratified sandy and loamy glaciofluvial and glaciolacustrin e deposits	lake terraces	State	No	<0.1
526A	Flink sand, 0 to 3 percent slopes	Flink	0	3	Moderately decompose d plant material	Somewhat poorly drained	Rapid	Sandy, mixed, frigid Typic Epiaquods	sandy outwash underlain by stratified silty, loamy, and sandy glaciofluvial deposits	lake plains, lake terraces, outwash plains, outwash terraces	No	No	3.9
5351B	Gogebic silt loam, 2 to 6 percent slopes, very stony, rocky	Gogebic	1	6	Slightly decompose d plant material	Moderatel y well drained	Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till	till plains	No	No	40.9
5351C	Gogebic silt loam, 6 to 18 percent slopes, very stony, rocky	Gogebic	6	18	Slightly decompose d plant material	Moderatel y well drained	Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till	till plains	No	No	96.0
5351D	Gogebic silt loam, 18 to 35 percent slopes, very stony, rocky	Gogebic	18	35	Slightly decompose d plant material	Moderatel y well drained	Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till	till plains	No	No	17.5
5353B	Tula-Gogebic complex, 0 to 6 percent slopes, stony	Gogebic	1	6	Slightly decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till	till plains	4	No	7.2
		Tula	0	2	Highly decompose d plant material	Somewhat poorly drained	Rapid	Coarse-loamy, mixed, superactive, frigid Argic Fragiaquods	modified loamy eolian deposits over loamy till	N/A	4	No	8.1

Мар		_	Percen	t Slope	_				_				
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
5354B	Gogebic fine sandy loam, 1 to 6 percent slopes, very stony, rocky	Gogebic	1	6	Slightly decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till	till plains	No	No	11.9
5369D	Dishno- Gogebic- Peshekee- Rock outcrop complex, 18 to 35 percent slopes, very stony	Dishno	18	35	Moderately decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Oxyaquic Haplorthods	silty or loamy eolian deposits over sandy and gravelly till over basalt and/or conglomerate	moraines	No	No	0.2
		Gogebic	18	35	Slightly decompose d plant material	Moderatel y well drained	Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till	till plains	No	No	0.2
		Peshekee	18	35	Cobbly moderately decompose d plant material	Well drained	Moderately Rapid	Loamy, mixed, semiactive, frigid Lithic Haplorthods	coarse-loamy till	moraines	No	No	0.1
		Rock outcrop	18	35	N/A	N/A	N/A	N/A	N/A	knolls	No	N/A	0.1
5369E	Michigamme- Schweitzer- Peshekee- Rock outcrop complex, 35 to 55 percent slopes, very stony	Michigamme	35	55	Slightly decompose d plant material	Well drained	Rapid	Coarse-loamy, mixed, superactive, frigid Fragic Haplorthods	coarse-loamy till	hills, till plains	No	No	1.6
		Peshekee	35	55	Cobbly moderately decompose d plant material	Well drained	Moderately Rapid	Loamy, mixed, semiactive, frigid Lithic Haplorthods	coarse-loamy till	moraines	No	No	1.1
		Rock outcrop	35	55	N/A	N/A	N/A	N/A	N/A	knolls	No	N/A	0.8

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
		Schweitzer	35	55	Cobbly very fine sand loam	Well drained	Moderate	Coarse-loamy, mixed, superactive, frigid Alfic Fragiorthods	modified loamy eolian deposits over cobbly and gravelly loamy and sandy till	hills	No	No	1.4
5369F	Michigamme- Schweitzer- Peshekee- Rock outcrop complex, 55 to 75 percent slopes, very stony	Michigamme	55	75	Slightly decompose d plant material	Well drained	Rapid	Coarse-loamy, mixed, superactive, frigid Fragic Haplorthods	coarse-loamy till	hills, till plains	No	No	0.4
		Peshekee	55	75	Cobbly moderately decompose d plant material	Well drained	Moderately Rapid	Loamy, mixed, semiactive, frigid Lithic Haplorthods	coarse-loamy till	moraines	No	No	0.3
		Rock outcrop	55	75	N/A	N/A	N/A	N/A	N/A	knolls	No	N/A	0.2
		Schweitzer	55	75	Cobbly very fine sand loam	Well drained	Moderate	Coarse-loamy, mixed, superactive, frigid Alfic Fragiorthods	modified loamy eolian deposits over cobbly and gravelly loamy and sandy till	hills	No	No	0.3
5373A	Cathro muck, drainageway, 0 to 1 percent slopes	Cathro	0	1	Muck	Very poorly drained	Moderately Rapid	Loamy, mixed, euic, frigid Terric Haplosaprists	herbaceous organic material over loamy drift	drainageways	No	Yes	2.8
5374A	Bowstring- Arnheim complex, 0 to 1 percent slopes, frequently flooded	Arnheim	0	1	Mucky silt loam	Poorly drained	Moderate	Coarse-loamy, mixed, superactive, nonacid, frigid Typic Fluvaquents	loamy alluvium	flood plains	No	Yes	0.4

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
		Bowstring	0	1	Muck	Very poorly drained	Moderately Rapid	Euic, frigid Fluvaquentic Haplosaprists	organic material over sandy alluvium and/or loamy alluvium	flood plains	No	Yes	0.5
5425A	Foxpaw-Gay, stony complex, 0 to 2 percent slopes	Foxpaw	0	1	Slightly decompose d plant material	Poorly drained	Moderately Rapid	Coarse-loamy, isotic, frigid Typic Endoaquods	coarse-loamy till	depressions, drainageways , moraines	No	Yes	0.6
		Gay	0	2	Mucky peat	Poorly drained	Moderately Rapid	Coarse-loamy, mixed, active, nonacid, frigid Aeric Endoaquepts	coarse-loamy till	depressions, moraines	No	Yes	0.6
548A	Pickford- Badriver complex, 0 to 3 percent slopes	Badriver	0	3	Clay loam	Somewhat poorly drained	Moderate	Fine, mixed, active, frigid Aeric Glossaqualfs	clayey till	till plains	No	No	3.1
		Pickford	0	2	Muck	Poorly drained	Rapid	Fine, mixed, active, nonacid, frigid Aeric Epiaquepts	clayey till or lacustrine material	depressions, lake plains, moraines	No	Yes	4.4
5504A	Moquah- Arnheim complex, 0 to 3 percent slopes, frequently flooded	Arnheim	0	1	Mucky silt loam	Poorly drained	Moderate	Coarse-loamy, mixed, superactive, nonacid, frigid Typic Fluvaquents	loamy alluvium	flood plains	No	Yes	0.9
		Moquah	0	3	Loam	Moderatel y well drained	Moderate	Coarse-loamy, mixed, superactive, nonacid, frigid Typic Udifluvents	coarse-loamy alluvium	flood plains	No	No	1.7
5519B	Pence-Gogebic complex, 2 to 6 percent slopes, stony	Gogebic	2	6	Slightly decompose d plant material	Moderatel y well drained	Rapid	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits and underlying loamy till	end moraines	No	No	4.9

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
		Pence	0	6	Sandy loam	Somewhat excessivel y drained	Moderately Rapid	Sandy, isotic, frigid Typic Haplorthods	loamy alluvium underlain by sandy and gravelly glacial outwash	moraines	No	No	11.6
5519C	Pence-Gogebic complex, 6 to 18 percent slopes, stony	Gogebic	6	18	Slightly decompose d plant material	Moderatel y well drained	Rapid	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits and underlying loamy till	end moraines	No	No	1.5
		Pence	6	18	Sandy loam	Somewhat excessivel y drained	Moderately Rapid	Sandy, isotic, frigid Typic Haplorthods	loamy alluvium underlain by sandy and gravelly glacial outwash	moraines	No	No	3.6
5527C	Wakefield loam, 6 to 18 percent slopes, stony	Wakefield	6	18	Slightly decompose d plant material	Moderatel y well drained	Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	loamy eolian deposits over coarse-loamy till	till plains	No	No	3.8
5543B	Chabeneau- Annalake complex, 0 to 6 percent slopes	Annalake	1	6	Very fine sand loam	Moderatel y well drained	Moderate	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Haplorthods	coarse-loamy glaciofluvial deposits	lake plains, moraines, outwash plains, stream terraces	4	No	10.5
		Chabeneau	0	3	Moderately decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Oxyaquic Haplorthods	coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits	lake plains, moraines, outwash plains, stream terraces	4	No	13.1

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
5684B	Amasa cobbly fine sandy loam, 1 to 6 percent slopes	Amasa	1	6	Moderately decompose d plant material	Well drained	Moderately Rapid	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Typic Haplorthods	coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits	eskers	No	No	4.2
5684C	Amasa cobbly fine sandy loam, 6 to 18 percent slopes	Amasa	6	18	Moderately decompose d plant material	Well drained	Moderately Rapid	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Typic Haplorthods	coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits	lake plains, moraines, outwash plains, stream terraces	No	No	1.0
5684D	Amasa cobbly fine sandy loam, 18 to 35 percent slopes	Amasa	18	35	Moderately decompose d plant material	Well drained	Moderately Rapid	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Typic Haplorthods	coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits	kames, moraines, outwash plains, stream terraces	No	No	0.3
5689B	Chabeneau- Channing- Gogebic complex, 0 to 6 percent slopes, stony	Chabeneau	0	3	Moderately decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Oxyaquic Haplorthods	coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits	eskers, outwash plains, stream terraces	No	No	4.3
		Channing	0	3	Slightly decompose d plant material	Somewhat poorly drained	Moderately Rapid	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Typic Endoaquods	coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits	moraines, outwash plains, stream terraces	No	No	3.7
		Gogebic	1	6	Slightly decompose d plant material	Moderatel y well drained	Moderately Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits over loamy till	till plains	No	No	3.1

Map Unit	Map Unit	Component	Percen	t Slope	Surface	Drainage		Taxonomic	Parent		Prime	Hydric	
Symbol	Name	Name	Low	High	Texture	Class	Permeability	Classification	Material	Landforms	Farmland <sup>a</sup>	Soil <sup>a</sup>	Acres
574B	Sayner loamy sand, 0 to 6 percent slopes	Sayner	0	6	Loam Sand	Excessivel y drained	Moderately Rapid	Sandy, mixed, frigid Entic Haplorthods	statified sandy and gravelly outwash	eskers, outwash plains, outwash terraces	No	No	7.0
580B	Sanborg- Badriver complex, 0 to 6 percent slopes	Badriver	0	3	Clay loam	Somewhat poorly drained	Moderate	Fine, mixed, active, frigid Aeric Glossaqualfs	clayey till	till plains	State	No	58.7
		Sanborg	0	6	Silt loam	Moderatel y well drained	Moderate	Fine, mixed, active, frigid Oxyaquic Glossudalfs	clayey till	till plains	State	No	97.8
5A	Arnheim mucky silt loam, 0 to 1 percent slopes, frequently flooded	Arnheim	0	1	Mucky silt loam	Poorly drained	Moderately Rapid	Coarse-loamy, mixed, superactive, nonacid, frigid Typic Fluvaquents	loamy alluvium	flood plains	No	Yes	0.9
674B	Sultz sand, 0 to 6 percent slopes	Sultz	0	6	Highly decompose d plant material	Well drained	Rapid	Sandy, mixed, frigid Entic Haplorthods	sandy outwash underlain by stratified loamy, or loamy and sandy alluvium or lacustrine deposits	lake terraces	No	No	21.1
674C	Sultz sand, 6 to 15 percent slopes	Sultz	6	15	Highly decompose d plant material	Well drained	Rapid	Sandy, mixed, frigid Entic Haplorthods	sandy outwash underlain by stratified loamy, or loamy and sandy alluvium or lacustrine deposits	lake plains, lake terraces, outwash plains, outwash terraces	No	No	4.2

Map Unit	Map Unit	Component	Percen	t Slope	Surface	Drainage		Taxonomic	Parent		Prime	Hydric	
Symbol	Name	Name	Low	High	Texture	Class	Permeability	Classification	Material	Landforms	Farmland <sup>a</sup>	Soil <sup>a</sup>	Acres
6A	Moquah fine sandy loam, 0 to 3 percent slopes, frequently flooded	Moquah	0	3	Fine sand loam	Moderatel y well drained	Moderate	Coarse-loamy, mixed, superactive, nonacid, frigid Typic Udifluvents	loamy alluvium	flood plains	No	No	0.8
705B	Cublake- Croswell- Ashwabay complex, 0 to 6 percent slopes	Ashwabay	0	6	Loam Sand	Moderatel y well drained	Rapid	Sandy, isotic, frigid Alfic Oxyaquic Haplorthods	sandy outwash or beach deposits underlain by clayey till or lacustrine deposits	ground moraines, lake plains, outwash plains	No	No	7.6
		Croswell	0	6	Sand	Moderatel y well drained	Rapid	Sandy, mixed, frigid Oxyaquic Haplorthods	sandy glacial drift	lake plains, lake terraces, outwash plains, stream terraces	No	No	7.6
		Cublake	0	6	Sand	Moderatel y well drained	Rapid	Sandy, mixed, frigid Oxyaquic Haplorthods	sandy outwash underlain by stratified silty, loamy, and sandy glaciofuvial deposits	N/A	No	No	13.4
713B	Kellogg- Allendale- Ashwabay complex, 2 to 6 percent slopes	Allendale	2	6	Loamy fine sand	Somewhat poorly drained	Rapid	Sandy over clayey, mixed, semiactive, frigid Alfic Epiaquods	sandy sediments and underlying clayey lacustrine or till deposits	ground moraines, lake plains, lake terraces, outwash plains	No	No	20.7
		Ashwabay	2	6	Loam Sand	Moderatel y well drained	Rapid	Sandy, isotic, frigid Alfic Oxyaquic Haplorthods	sandy outwash or beach deposits underlain by clayey till or lacustrine deposits	ground moraines, lake plains, outwash plains	No	No	16.5

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
		Kellogg	2	6	Moderately decompose d plant material	Moderatel y well drained	Rapid	Sandy over clayey, mixed, active, frigid Alfic Oxyaquic Haplorthods	sandy lacustrine or outwash sediments and underlying clayey lacustrine deposits	lake plains	No	No	29.0
713C	Kellogg- Allendale- Ashwabay complex, 0 to 15 percent slopes	Allendale	6	12	Loamy fine sand	Somewhat poorly drained	Rapid	Sandy over clayey, mixed, semiactive, frigid Alfic Epiaquods	sandy sediments and underlying clayey lacustrine or till deposits	ground moraines, lake plains, lake terraces, outwash plains	No	No	3.3
		Ashwabay	6	15	Loam Sand	Moderatel y well drained	Rapid	Sandy, isotic, frigid Alfic Oxyaquic Haplorthods	sandy outwash or beach deposits underlain by clayey till or lacustrine deposits	ground moraines, lake plains, outwash plains	No	Soil <sup>a</sup> No	2.6
		Kellogg	6	15	Moderately decompose d plant material	Moderatel y well drained	Rapid	Sandy over clayey, mixed, active, frigid Alfic Oxyaquic Haplorthods	sandy lacustrine or outwash sediments and underlying clayey lacustrine deposits	lake plains	No	No	5.3
74B	Vilas loamy sand, 0 to 6 percent slopes	Vilas	0	6	Loam Sand	Excessivel y drained	Rapid	Sandy, isotic, frigid Entic Haplorthods	sandy outwash	outwash plains, outwash terraces	No	No	0.2
756B	Superior- Sedgwick complex, 0 to 6 percent slopes	Sedgwick	0	3	Loam Sand	Somewhat poorly drained	Moderate	Coarse-loamy over clayey, mixed, active, frigid Alfic Epiaquods	loamy alluvium and underlying clayey till	till plains	State	No	5.6

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
		Superior	2	6	Fine sand loam	Moderatel y well drained	Moderate	Coarse-loamy over clayey, mixed, active, frigid Alfic Oxyaquic Haplorthods	loamy water- laid deposits and underlying clayey lacustrine deposits	lake plains	State	No	9.3
805E	Sultz- Ashwabay- Rubicon complex, 15 to 45 percent slopes	Ashwabay	15	30	Loam Sand	Moderatel y well drained	Rapid	Sandy, isotic, frigid Alfic Oxyaquic Haplorthods	sandy outwash or beach deposits underlain by clayey till or lacustrine deposits	ground moraines, lake plains, outwash plains	No	No	0.5
		Rubicon	15	45	Sand	Excessivel y drained	Rapid	Sandy, mixed, frigid Entic Haplorthods	sandy deposits	outwash plains	No	No	0.4
		Sultz	15	45	Highly decompose d plant material	Well drained	Rapid	Sandy, mixed, frigid Entic Haplorthods	sandy outwash underlain by stratified loamy, or loamy and sandy alluvium or lacustrine deposits	lake plains, lake terraces, outwash plains, outwash terraces	No	No	0.7
809C	Gogebic- Metonga-Rock outcrop complex, 6 to 18 percent slopes, very stony	Gogebic	6	18	Slightly decompose d plant material	Moderatel y well drained	Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits and underlying loamy till	end moraines	No	No	14.4
		Metonga	6	18	Silt loam	Well drained	Moderate	Coarse-loamy, mixed, superactive, frigid Entic Haplorthods	N/A	N/A	No	No	10.8

Мар			Percen	t Slope				_					
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	Hydric Soil <sup>a</sup>	Acres
		Rock outcrop	N/A	N/A	N/A	N/A	N/A	N/A	N/A	moraines	No	No	7.2
809D	Gogebic- Metonga-Rock outcrop complex, 10 to 35 percent slopes, very stony	Gogebic	10	35	Slightly decompose d plant material	Moderatel y well drained	Rapid	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods	modified loamy eolian deposits and underlying loamy till	end moraines	No	No	0.9
		Metonga	10	35	Silt loam	Well drained	Moderate	Coarse-loamy, mixed, superactive, frigid Entic Haplorthods	N/A	N/A	No	No	0.7
		Rock outcrop	N/A	N/A	N/A	N/A	N/A	N/A	N/A	moraines	No	No	0.5
813E	Manistee- Kellogg- Ashwabay complex, 15 to 45 percent slopes	Ashwabay	15	45	Loam Sand	Moderatel y well drained	Rapid	Sandy, isotic, frigid Alfic Oxyaquic Haplorthods	sandy outwash or beach deposits underlain by clayey till or lacustrine deposits	ground moraines, lake plains, outwash plains	No	No	0.1
		Kellogg	15	30	Moderately decompose d plant material	Moderatel y well drained	Rapid	Sandy over clayey, mixed, active, frigid Alfic Oxyaquic Haplorthods	sandy lacustrine or outwash sediments and underlying clayey lacustrine deposits	lake terraces	No	No	0.1
		Manistee	15	45	Sand	Well drained	Rapid	Sandy over clayey, mixed, active, frigid Alfic Haplorthods	sandy lacustrine and outwash sediments underlain by clayey lacustrine deposits	lake plains	No	No	0.1

### **Soil Characteristics Crossed by Project**

Мар			Percen	t Slope									
Unit Symbol	Map Unit Name	Component Name	Low	High	Surface Texture	Drainage Class	Permeability	Taxonomic Classification	Parent Material	Landforms	Prime Farmland <sup>a</sup>	No A	Acres
815A	Wormet sandy loam, 0 to 3 percent slopes	Wormet	0	3	Moderately decompose d plant material	Somewhat poorly drained	Moderately Rapid	Sandy, mixed, frigid Typic Endoaquods	loamy glaciofluvial deposits over stratified sandy outwash	flats, outwash plains	No	No	11.3
92F	Udorthents, ravines and escarpments, 25 to 60 percent slopes	Udorthents	25	60	N/A	N/A	N/A	Udorthents	N/A	N/A	No	No	7.7
W	Water	Water	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	0.1

N/A = Not Applicable

<sup>&</sup>lt;sup>a</sup> As designated by the Natural Resources Conservation Service. Prime = prime farmland; State = farmland of statewide importance. Prime farmland includes land that is considered prime farmland if limiting factor is mitigated for (e.g., flooding).