

Preliminary & Field Evaluation Form

Owner Information			
Date	<u>6/20/2019</u>	Sec / Twp / Rng	<u>S-27, T-50, R-24</u>
Parcel ID	<u>18-0-046000</u>	LUG (county, city, township)	<u>Aitkin Co.</u>
Property Owner:	<u>Bebo Properties III LLC.</u>	Owners address (if different)	
Property Address:	<u>53511 Great River Rd Palisade MN 5646</u>	<u>1065 Tonkawa RD</u>	
City / State / Zip:		<u>Orono MN 55356</u>	

Flow Information and Waste Type / Strength			
Estimated Design flow	_____	Anticipated Waste strength	<input type="checkbox"/> Hi Strength <input checked="" type="checkbox"/> Domestic
Comments: Alternate site (2nd site, existing mound is Compliant)		Any Non-Domestic Waste	<input type="checkbox"/> Yes (class V) <input checked="" type="checkbox"/> No
		Sewage ejector/grinder pump	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Water softener	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Garbage Disposal	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Daycare / In home business	<input type="checkbox"/> Yes <input type="checkbox"/> No

Site Information					
Existing & proposed lot improvements located (see site map)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Well casing depth	Proposed deep well	
Easements on lot located (see site map)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Drainfield w/in 100' of residential well	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Property lines determined (see site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site w/in 200' of transient noncommunity water supply (TNCWS)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Req'd setbacks determined (see site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site w/in an inner wellhead mgmt zone (CWS/NTNCWS)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Utilities located & identified (gopher state one call)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Buried water supply pipe w/in 50' of system	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Access for system maintenance (shown on site map)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Site located in Shoreland (w/in 1000' of lake, 300' of river)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Soil treatment area protected	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site map prepared with previous items included	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Construction related issues	_____				

Soil Information

		Evidence of site:	
		Cut	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Filled	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Compacted	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Disturbed	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Original soils	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Soil logs completed and attached	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Perk test completed and attached (if applicable)
			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Soil loading rate (gpd/ft ²)	<u>0.78</u>		Percolation rate (if applicable)

Depth/elev to SHWT	<u>22"</u>		Flooding or run-on potential
			<input type="checkbox"/> Yes <input type="checkbox"/> No
Depth to system bottom maximum (or elev minimum)	<u>NA</u>		(comments)
Depth/elev to standing water (if applicable)	_____		Flood elevation (if applicable)

Depth/elev to bedrock (if applicable)	_____		Elevation of ordinary high water level (if applicable)

Soil Survey information determined (see attachment)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Floodplain designation and elev - 100 yr/10 yr (if applicable)

Differences between soil survey and field evaluation (if applicable)	_____		

I hereby certify this evaluation was completed in accordance with MN 7080 and any local req's.



 Designer/Signature

Brummer Septic LLC.

 Company

L-1347

 License #

Soil Observation Log

www.SepticResource.com vers 12.4

Owner Information	
Property Owner / project: <u>Bebo Properties III LLC.</u>	Date <u>6/20/2019</u>
Property Address / PID: <u>53511 Great River Rd Palisade MN 5</u>	

Soil Survey Information	
<input type="checkbox"/> refer to attached soil survey	
Parent mat'l's:	<input checked="" type="checkbox"/> Till <input checked="" type="checkbox"/> Outwash <input checked="" type="checkbox"/> Lacustrine <input type="checkbox"/> Alluvium <input type="checkbox"/> Organic <input type="checkbox"/> Bedrock
landscape position:	<input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input type="checkbox"/> Side slope <input type="checkbox"/> Toe slope Flat
soil survey map units:	<u>1353B & 133E</u> slope <u>0-1</u> % direction- <u>west</u>

Bench Mark Elevation =100' top of Existing Mound near inspection pipe

Soil Log #1							
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
		<input checked="" type="checkbox"/> Boring <input type="checkbox"/> Pit	Elevation <u>97.2'</u>		Depth to SHWT <u>22"</u>		
0 - 6	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
6 - 13	Sandy Loam	<35	10YR4/3		Loose	Loose	Granular
13 - 22	Sandy Loam	<35	10YR4/4	Wet Color	Loose	Loose	Granular
22 - 30	Sandy Loam	<35	10YR5/2		Loose	Loose	Granular
30 - 33	Loam with thin layers of clay loam	<35	10YR5/4	7.5YR5/4	Friable	Weak	Blocky
Comments:							

53511 Great River Rd Palisade MN 56469 **Soil Log #2**

<input checked="" type="checkbox"/> Boring		<input type="checkbox"/> Pit		Elevation <u>97.6'</u>		Depth to SHWT <u>35"</u>	
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 5	Topsoil Sandy Laom	<35	10YR3/2		Loose	Loose	Granular
5 - 14	Sandy Loam	<35	10YR4/3		Loose	Loose	Granular
14 - 24	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
24 - 35	Med Sand	<35	10YR5/4		Loose	Loose	Granular
35 - 37	Sandy Loam	<35	10YR5/3	Mottled 7.5YR5/6	Loose	Loose	Granular

53511 Great River Rd Palisade MN 56469 **Soil Log #3**

<input type="checkbox"/> Boring		<input type="checkbox"/> Pit		Elevation _____		Depth to SHWT _____	
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive

I hereby certify this work was completed in accordance with MN 7080 and any local req's.


 Designer Signature

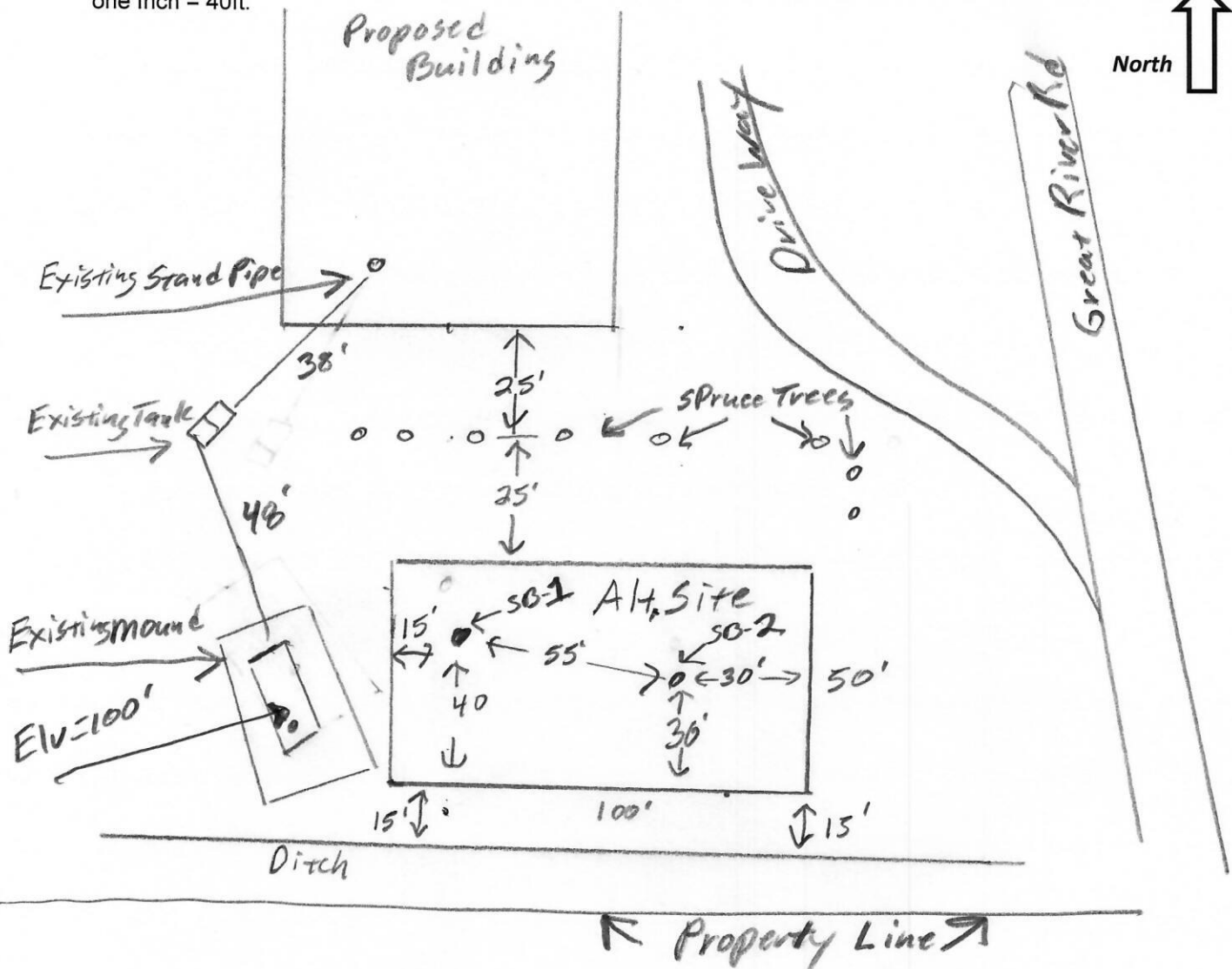
Brummer Septic LLC.
 Company

L-1347
 License #

Alternate Septic Site Owner to protect from any development.

{ Design Drawing }

Property Owner: Bebo Properties III LLC. Date: 6/20/19 Designer's Initials: JB
 Parcel ID. Number: 18-0-046000 Address: 53511 Great River Rd Palisade MN 56469
 one Inch = 40ft.



Grade near inspection pipe, at top of existing mound is Bench Mark = Elv. = 100'

Surface/ SHWT		Existing Grade	
Soil Bore 1	97.2'/22"	Bench Mark	100'
Soil Bore 2	97.6'/35"	Ground Elv. BM	
Soil Bore 3		Ground Elv. Tank	
Ground at Proposed house			98.5'

Please show all that apply (Existing)

- Wells within 100ft. Of Drain field.
- Water lines within 10 ft. of Drain field.
- Drain field Areas:

Please Draw to Scale with North to Top or Left Side of Page:

- Disturbed/Compacted Areas
- Component Location
- OHW ordinary high water
- Lot Easements
- Access Route for Tank Maintenance
- Property Lines
- Structures
- Setbacks



Detailed Parcel Report

Parcel Number: 18-0-046000

General Information

Township/City: LIBBY TWP
Taxpayer Name: BEBO PROPERTIES III LLC
Taxpayer Address: 1065 TONKAWA RD
 ORONO MN 55356
Property Address: 53511 GREAT RIVER RD
Township: 50 **Lake Number:** 0
Range: 24 **Lake Name:**
Section: 27 **Acres:** 9.50
Green Acres: No **School District:** 1.00
Plat:
Brief Legal Description: E1/2 SW NW & PT SE NW LYING W OF CO RD 10 EXCEPT N866.50 FT DOC 373736

Tax Information

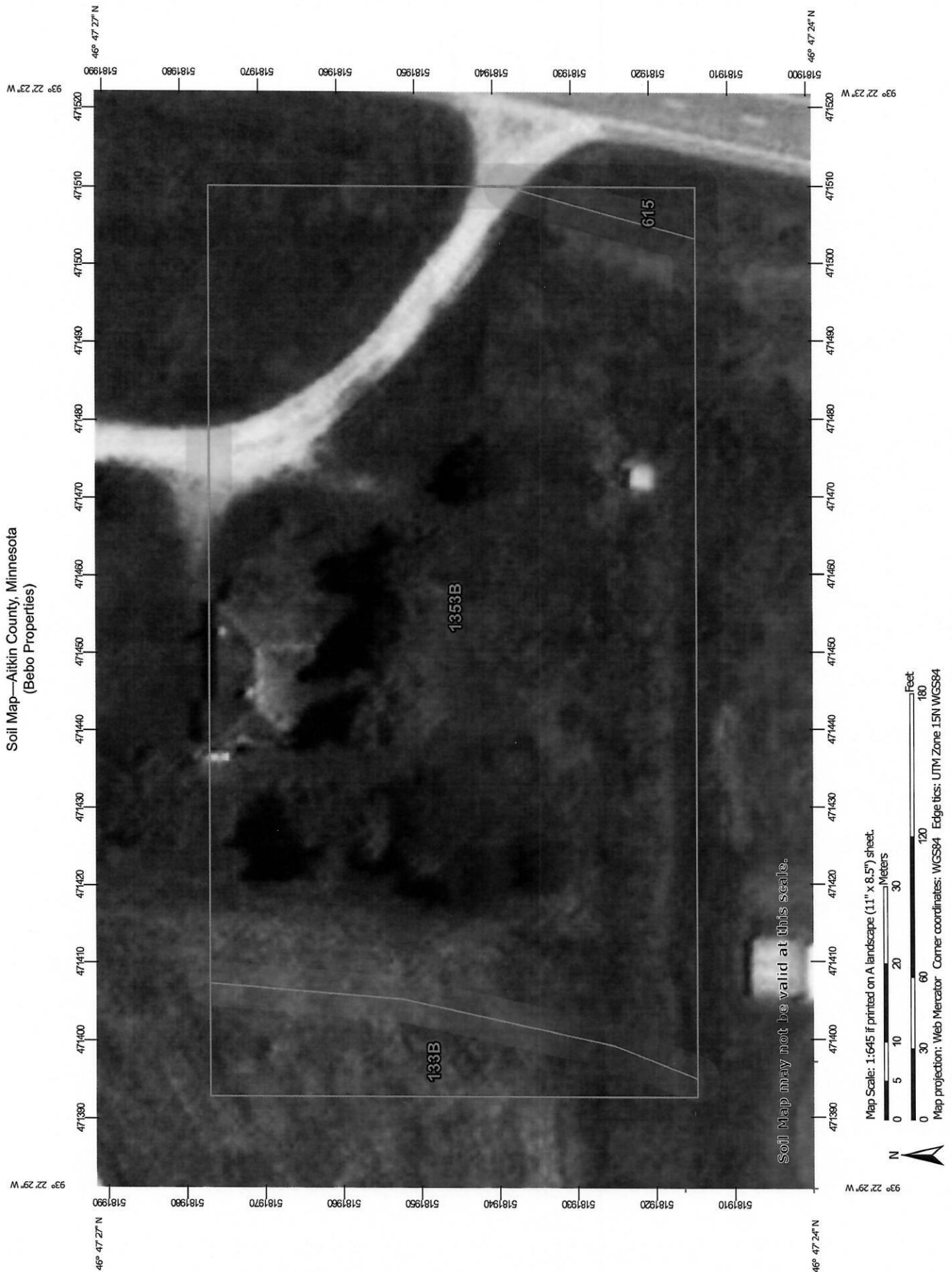
Class Code 1: Non-Homestead Qualifying Single Res Unit
Class Code 2: Unclassified
Class Code 3: Unclassified
Homestead: Non Homestead
Assessment Year: 2019

Estimated Land Value:	\$26,800.00
Estimated Building Value:	\$88,400.00
Estimated Total Value:	<u>\$115,200.00</u>
Prior Year Total Taxable Value:	\$109,000.00
Current Year Net Tax (Specials Not Included):	\$848.00
Total Special Assessments:	\$0.00
**Current Year Balance Not Including Penalty:	\$424.00
Delinquent Taxes:	No

*** For more information on delinquent taxes, please call the Aitkin County Treasurer's Office at 218-927-7325.**

**** Balance Due on a parcel does not include late payment penalties.**

Soil Map—Aitkin County, Minnesota
(Bebo Properties)



Soil Map may not be valid at this scale.

Map Scale: 1:645 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

- Area of Interest (AOI)
- Area of Interest (AOI)
- Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points
- Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features
- Water Features**
- Streams and Canals
- Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads
- Background**
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Aitkin County, Minnesota
Survey Area Data: Version 19, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 19, 2014—Aug 23, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
133B	Dalbo very fine sandy loam, 1 to 6 percent slopes	0.2	8.7%
615	Cowhorn loamy very fine sand	0.0	1.1%
1353B	Cutaway loamy fine sand, 1 to 6 percent slopes	1.6	90.2%
Totals for Area of Interest		1.8	100.0%

Aitkin County, Minnesota

1353B—Cutaway loamy fine sand, 1 to 6 percent slopes

Map Unit Setting

National map unit symbol: gjd4
Elevation: 980 to 1,310 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 37 to 41 degrees F
Frost-free period: 95 to 105 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Cutaway and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cutaway

Setting

Landform: Moraines
Landform position (two-dimensional): Backslope, summit
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy outwash over loamy till

Typical profile

A - 0 to 2 inches: loamy fine sand
E, Bw, E' - 2 to 26 inches: loamy sand
2E/B, 2B/E - 26 to 49 inches: loam
2C - 49 to 60 inches: loam

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 41 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 20 percent
Available water storage in profile: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: B
Forage suitability group: Sloping Upland, Acid (G088XN006MN)
Hydric soil rating: No

Minor Components

Northwood and similar soils

Percent of map unit: 6 percent

Landform: Depressions

Hydric soil rating: Yes

Sandwick and similar soils

Percent of map unit: 6 percent

Landform: Swales

Hydric soil rating: Yes

Dusler and similar soils

Percent of map unit: 3 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Aitkin County, Minnesota

Survey Area Data: Version 19, Sep 12, 2018

Aitkin County, Minnesota

133B—Dalbo very fine sandy loam, 1 to 6 percent slopes

Map Unit Setting

National map unit symbol: gjd0
Elevation: 980 to 1,310 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 37 to 41 degrees F
Frost-free period: 95 to 105 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Dalbo and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dalbo

Setting

Landform: Lake plains
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty and clayey lacustrine deposits

Typical profile

A - 0 to 3 inches: very fine sandy loam
E,Bt,BC - 3 to 35 inches: silty clay
C - 35 to 60 inches: silty clay loam

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Forage suitability group: Sloping Upland, Neutral (G088XN002MN)
Hydric soil rating: No

Minor Components

Brickton and similar soils

Percent of map unit: 5 percent

Landform: Flats

Hydric soil rating: Yes

Well drained

Percent of map unit: 2 percent

Hydric soil rating: No

Cathro and similar soils

Percent of map unit: 1 percent

Landform: Bogs

Hydric soil rating: Yes

Hassman and similar soils

Percent of map unit: 1 percent

Landform: Depressions

Hydric soil rating: Yes

Sandy substratum

Percent of map unit: 1 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Aitkin County, Minnesota
Survey Area Data: Version 19, Sep 12, 2018