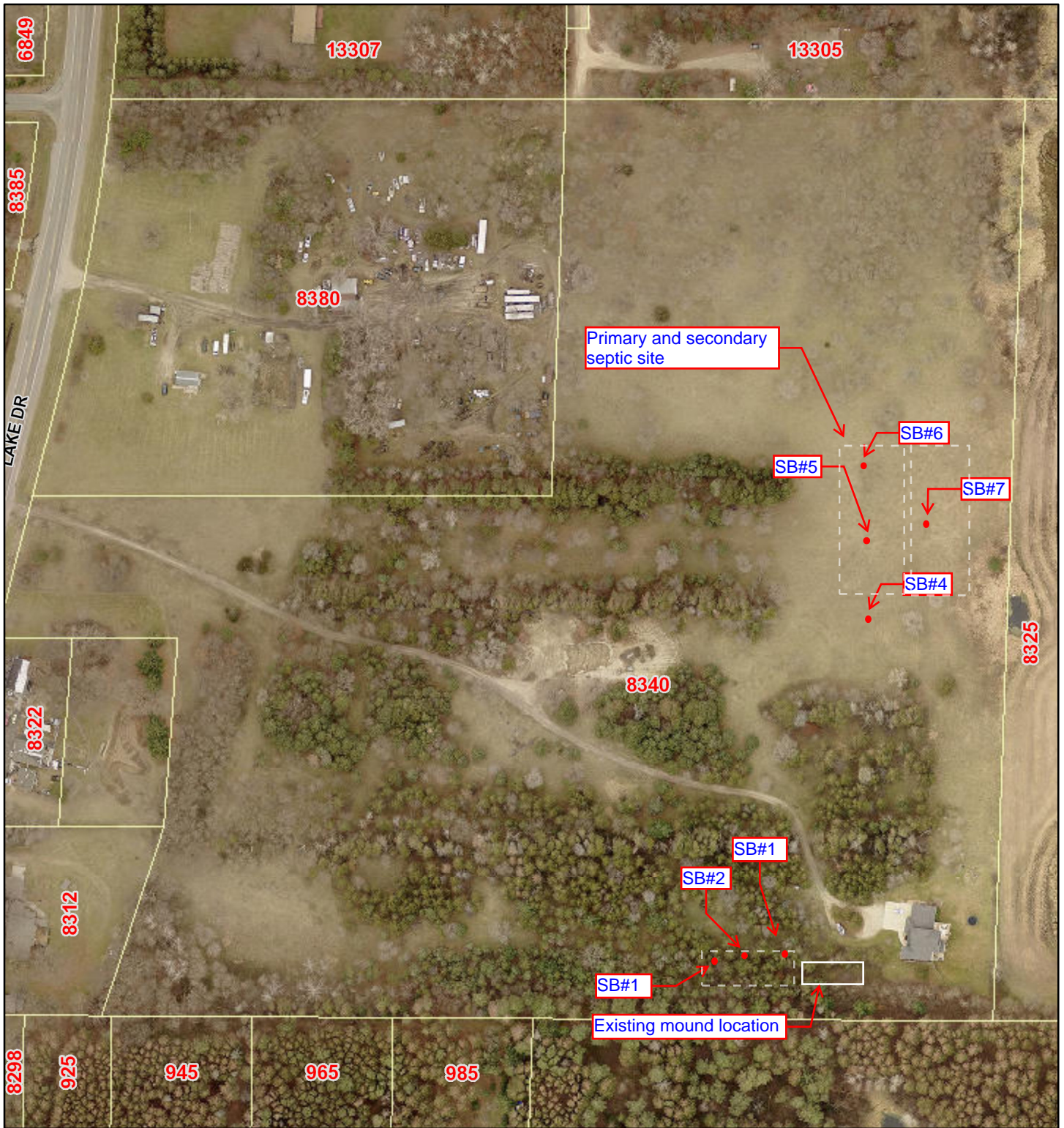
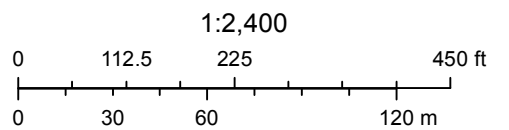


Anoka County, MN



August 23, 2018



OSTP Soil Observation Log

Project ID: #REF!

v 04.06.2017



Client/ Address:		8340 Lake Drive, Lino Lakes			Legal Description/ GPS:				
Soil parent material(s): (Check all that apply) <input checked="" type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter									
Landscape Position: (check one) <input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input checked="" type="checkbox"/> Back/Side Slope <input type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope <input type="checkbox"/> Flat Slope shape							Linear, Linear		
Vegetation:		Grass		Soil survey map units:		ZmB	Slope %:	3.0	Elevation:
Weather Conditions/Time of Day:			Sunny				Date:		
Observation #/Location:		SB#1				Observation Type:		Auger	
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	----- Structure-----		
							Shape	Grade	Consistence
0-8	Fine Sandy Loam	<35%	10YR 3/3				Granular	Weak	Loose
-18	Fine Sandy Loam	<35%	10YR 4/4				Granular	Weak	Loose
-34	Fine Sandy Loam	<35%	10YR 5/4				Granular	Weak	Loose
		35-50%	7.5YR 5/4	10YR 5/2	Depletions		Granular	Weak	Loose

Comments: Redoximorphic mottling at 18"

I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

Ryan Lashinski		L65	#REF!
(Designer/Inspector)	(Signature)	(License #)	(Date)

Additional Soil Observation Logs

Project ID: #REF!



Client/ Address:		8340 Lake Drive, Lino Lakes			Legal Description/ GPS:		#REF!					
Soil parent material(s): (Check all that apply) <input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter												
Landscape Position: (check one) <input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input checked="" type="checkbox"/> Back/Side Slope <input checked="" type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope <input type="checkbox"/> Flat Slope shape												
Vegetation:		Forest		Soil survey map units:		ZmB		Slope %:		2.0	Elevation:	
Weather Conditions/Time of Day:			Sunny						Date:			
Observation #/Location:			SB#2				Observation Type:			Auger		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	I----- Structure-----I					
							Shape	Grade	Consistence			
0-8	Fine Sand	<35%	10YR 3/3				Granular	Weak	Loose			
-16	Fine Sand	<35%	10YR 4/4				Granular	Weak	Loose			
-30	Fine Sand	<35%	10YR 5/4				Granular	Weak	Loose			
		35-50%	10YR 6/8	10YR 5/2	Depletions		Granular	Weak	Loose			
Comments: Redoximorphic mottling at 16"												

#/Location/Elevation:		SB#3 elev				Observation Type:			Auger		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	I----- Structure-----I				
							Shape	Grade	Consistence		
0-8	Fine Sand	<35%	10YR 3/3				Granular	Weak	Loose		
-14	Fine Sand	<35%	10YR 4/4				Granular	Weak	Loose		
-24	Fine Sand	<35%	10YR 5/4				Granular	Weak	Loose		
		35-50%	10YR 6/8	10YR 5/2	Depletions		Granular	Weak	Loose		
Comments: Redoximorphic mottling at 14"											

Additional Soil Observation Logs

Project ID: #REF!



Client/ Address:		8340 Lake Drive, Lino Lakes			Legal Description/ GPS:		#REF!					
Soil parent material(s): (Check all that apply) <input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter												
Landscape Position: (check one) <input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input checked="" type="checkbox"/> Back/Side Slope <input checked="" type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope <input type="checkbox"/> Flat Slope shape												
Vegetation:		Forest		Soil survey map units:		ZmB		Slope %:		2.0	Elevation:	
Weather Conditions/Time of Day:			Sunny						Date:			
Observation #/Location:			SB#4				Observation Type:			Auger		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	I----- Structure-----I					
							Shape	Grade	Consistence			
0-8	Fine Sand	<35%	10YR 3/3				Granular	Weak	Loose			
-31	Fine Sand	<35%	10YR 4/4				Granular	Weak	Loose			
-48	Fine Sand	<35%	10YR 5/4				Granular	Weak	Loose			
		35-50%	10YR 6/8	10YR 5/2	Depletions		Granular	Weak	Loose			
Comments: Redoximorphic mottling at 31"												

#/Location/Elevation:		SB#5 elev				Observation Type:			Auger		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	I----- Structure-----I				
							Shape	Grade	Consistence		
0-8	Fine Sand	<35%	10YR 3/3				Granular	Weak	Loose		
-36	Fine Sand	<35%	10YR 4/4				Granular	Weak	Loose		
-48	Fine Sand	<35%	10YR 5/4				Granular	Weak	Loose		
		35-50%	10YR 6/8	10YR 5/2	Depletions		Granular	Weak	Loose		
Comments: Redoximorphic mottling at 36"											

Additional Soil Observation Logs

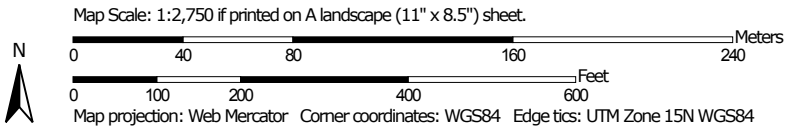
Project ID: #REF!



Client/ Address:		8340 Lake Drive, Lino Lakes			Legal Description/ GPS:		#REF!							
Soil parent material(s): (Check all that apply) <input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter														
Landscape Position: (check one) <input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input checked="" type="checkbox"/> Back/Side Slope <input checked="" type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope <input type="checkbox"/> Flat Slope shape														
Vegetation:		Forest		Soil survey map units:		ZmB		Slope %:		2.0	Elevation:			
Weather Conditions/Time of Day:			Sunny						Date:					
Observation #/Location:			SB#6						Observation Type:			Auger		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	I----- Structure-----I							
							Shape	Grade	Consistence					
0-8	Fine Sand	<35%	10YR 3/3				Granular	Weak	Loose					
-26	Fine Sand	<35%	10YR 4/4				Granular	Weak	Loose					
-36	Fine Sand	<35%	10YR 5/4				Granular	Weak	Loose					
		35-50%	10YR 6/8	10YR 5/2	Depletions		Granular	Weak	Loose					
Comments: Redoximorphic mottling at 26"														

#/Location/Elevation:		SB#5 elev						Observation Type:			Auger		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	I----- Structure-----I						
							Shape	Grade	Consistence				
0-8	Fine Sand	<35%	10YR 3/3				Granular	Weak	Loose				
-32	Fine Sand	<35%	10YR 4/4				Granular	Weak	Loose				
-40	Fine Sand	<35%	10YR 5/4				Granular	Weak	Loose				
		35-50%	10YR 6/8	10YR 5/2	Depletions		Granular	Weak	Loose				
Comments: Redoximorphic mottling at 32"													

Soil Map—Anoka County, Minnesota



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 1:15,800.

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: Anoka County, Minnesota

Survey Area Data: Version 14, Oct 4, 2017

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

Date(s) aerial images were photographed: Apr 3, 2015—Sep 13, 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
lw	Isanti fine sandy loam	0.1	0.4%
SoA	Soderville fine sand, 0 to 3 percent slopes	6.3	16.6%
ZmA	Zimmerman fine sand, 0 to 2 percent slopes	12.9	34.0%
ZmB	Zimmerman fine sand, 1 to 6 percent slopes	18.6	48.9%
Totals for Area of Interest		38.0	100.0%