May 25, 2013

Karen Thornton,
American Viticultural Area Designations
Regulations and Rulings Division
Alcohol and Tobacco Tax and Trade Bureau
1310 G Street NW
Washington DC, 20005
(b) (6)

Dear Ms. Thornton,

Please find included here a revised petition for the declaration of a new American Viticultural Area, entitled the Champlain Valley AVA. This petition was created on behalf of the Lake Champlain Grape Growers Association. I previously included an endorsement from our local congressional representative, Bill Owens, whose interest is in the economic development of this region and through his participation as a member of the House Agricultural Committee. Finally, I include a set of USGS maps that define the trail.

I believe I have addressed the items you have requested in this revise and resubmit. Most importantly, I provided extensive climatological data to show how this region is differentiated from the Adirondack and western foothills region to the west, the Hudson Valley to the south, and Vermont to the east. Each of these regions has a growing season averaging two weeks longer than we do, and hence can grow the Vitis vinifera grapes that cannot be grown in this proposed region. Hence, the characteristic of grapes in the proposed region is almost exclusively North American hybrid. It is this factor that most profoundly defines and differentiates our proposed region.

Should you need any additional information, please do not hesitate to contact me.

Best regards,

Colin Read
North Star Vineyard
1383 North Star Road,
Mooers, NY, 12958
Telephone (b) (6)
Email (b) (6)

Regulations and Rulings Division

Alcohol and Tobacco Tax and Trade Bureau
1310 G Street NW
Washington DC, 20220

A Petition to the Alcohol and Tobacco Tax and Trade Bureau of the Department of the Treasury to Establish the:

Champlain Valley AVA (American Viticultural Area)

Submitted by: An Association of Wineries in the Champlain Valley of New York State

(1)Name Evidence

[i] Name Usage

The name of the viticultural area described is the Champlain Valley of New York.

[ii] Source of name and name evidence.

The Champlain Valley has been commonly used to describe the Lake Champlain Valley since the discovery and exploration of Lake Champlain by Samuel de Champlain in 1609. It is the area of land bordered by the Adirondack Mountains of New York to the west and the Green Mountains of Vermont to the east, the Taconic Mountains to the south and the St. Lawrence River Valley of Quebec to the north. Name evidence of Champlain Valley is widespread as the region has been known by the name since the exploration and settlement by early French and later English explorers. Lake Champlain and its valley were widely used for a route of travel and trade ever since its settlement by the Algonkians (various Algonquian speaking tribes) about 8000 years ago. One specific reference to Champlain Valley is on page 2 of the Soil Survey of Clinton County, NY [2], Another is on page 2 of the Soil Survey of Essex County, NY [3]. Multiple instances of the name appear in both publications. The Champlain Valley is home to one of only 49 National Heritage Areas in the United States, further evidencing the name usage [4]. Champlain Valley is also used extensively in the Lake Champlain Basin program (see map [5] physiographic regions).

(2)Boundary Evidence

The factor that most profoundly influences the types of grapes grown in this proposed region, and which differentiates this region with regions to the east, west, and south, is the length of the growing season. This predominant factor determines a preference for cold-hardy grape varieties, especially those developed by the University of Minnesota. The proposed region has a growing season about two weeks shorter than adjoining areas. However, across the proposed region, the temperature profile is remarkably consistent, despite its long and thin geography.

This geographical shape was defined by geophysical forces that occurred in conjunction with the last ice age. These forces created a region of homogeneous soil types based on glacial silt above bedrock, with additional soils based on erosion into the Champlain Valley from the adjoining Adirondack Mountains, and from organic matter created by decay in the hardwood forest to the west of our region.

The proposed boundary roughly corresponds to the portion of ancient Lake Vermont that lies in New York State, which was a glacial lake of about 12,000 years ago at the end of the last ice age that rose to an elevation that currently corresponds to the 500' elevation contour. This lake is further described in the Geology section below. The boundary defined an area of similar underlying soils and bedrock, yet varies significantly from the adjacent Adirondacks. The area within the proposed Champlain Valley AVA has common underlying bedrock, soil types, rainfall, snowfall and temperatures. These also contrast markedly with the adjacent Adirondacks to the west. To the north of the region is Canada, while the southern terminus of the region is the beginning of another valley system, the Hudson Valley. The region is also distinct from the region immediately to the east because prevailing westerly winds over Lake Champlain create a moderating influence and longer growing season to the east. The moderating influence creates both a longer growing season and much lower probability of frost to the immediate east of the proposed region. Because of this moderating effect of the lake, the region to the east is able to grow distinctly different types of grape vines than the cold-hardy variety that thrive in the proposed region.

(3)Distinguishing Features:

The following table compares temperature ranges by month for four stations that span the proposed region, from south to north, and averaged across the entire region. It demonstrates that there are no significant temperature variations across a long and narrow region in the eastern wind shadow of the Adirondack Range.

Maximum, Minimum, and Mean Temperatures Across the Proposed Region
(for Ticonderoga, Peru, Plattsburgh, and Chazy, South to North, and Average)

	Maximum Temperatures	Minimum Temperatures	Mean Temperatures
January	29.5/28.1/27.9/26.9/28.1	10/7.9/9/7.1/8.5	19.8/18/18.5/17/18.3
February	29.3/31.1/29.1/28.4/29.5	8.8/10.2/9.4/8/9.1	19/20.7/19.2/18.1/19.3
March	40.8/40.9/39.8/39/40.1	22.4/20.6/21.1/19.8/21	31.6/30.7/30.4/29.4/30.5
April	53.5/55.1/54.1/54/54.2	33.6/32.5/34/33/33.3	43.6/43.8/44/43.5/43.7
May	68/68.3/67.2/67.5/67.8	46/43.5/44.5/44.1/44.5	57/55.9/55.9/55.8/56.2
June	75.7/77.4/76.7/76.3/76.5	54.5/53.2/54.2/53.7/53.9	65.1/65.2/65.4/64.9/65.2
July	82.1/81.8/81.4/80.9/81.6	61/57.7/59.4/58.9/59.3	71.5/69.7/70.4/69.9/70.4
August	78.2/79.6/78.4/78.7/78.7	57.9/55.6/57.3/56.6/56.9	68/67.6/67.8/67.7/67.8
September	72/71/70.4/70.3/70.9	50.8/47.7/49.9/48.7/49.3	61.4/59.3/60.2/59.5/60.1
October	59.2/59.1/58.8/58.3/58.9	40/37.2/39.1/38.6/38.7	49.6/48.1/49/48.4/48.8
November	44.7/45.8/45/44.6/45	29.5/28.1/29.5/28.6/28.9	37.2/36.9/37.2/36.6/37
December	32.7/32.7/32.2/31.3/32.2	15.9/15/15.5/14.3/15.2	24.2/23.9/23.9/22.8/23.7
Annual Average	**55.5/55.9/55.1/54.7/55.3**	**35.9/34.1/35.2/34.3/34.9**	**45.7/45/45.2/44.5/45.1**

The proposed geography constitutes the relatively flat valley between the Adirondack Mountains to the west and Lake Champlain to the east. This valley land was once submerged when precursors to Lake Champlain were a larger lake and an inland sea during the last ice age. This Champlain Valley is differs from and is bounded by the north, south, west, and east in the following ways.

Northern Boundary: The proposed region is bounded to the north by the border with Canada.

In this next section, we establish that while temperature variations across the proposed region are minor, the growing season in the proposed region differs significantly from the growing seasons in the regions immediately to the west, south, and east of the proposed region.

Southern Boundary: The flat region that defines the Champlain Valley extends to the southern terminus of Lake Champlain. The southern terminus of the Champlain Valley marks the northern boundary of the Hudson Valley, drained by the Hudson River, along what is known at the Champlain-Hudson Divide. The Hudson Valley region is distinct because it does not have the influence of Lake Champlain and instead acts as the drainage of the Taconic Mountains to its east. The Hudson Valley region is subjected to weather patterns that funnel up along the Mohawk Valley south of the Adirondack Mountains. Its significantly greater cloud cover and precipitation, and its river valley topology creates a climate that is wetter, warmer, and cloudier than the Champlain Valley to its north. While the Champlain Valley drainage flows north into the St. Lawrence River, the Hudson Valley drainage flows south through the Hudson River to the Atlantic Ocean at New York City.

The growing season is the proposed region's most salient characteristic that is distinct from adjoining regions. For purposes of comparison, Peru, New York, in the middle of the proposed Champlain Valley AVA region, has 141 days below freezing, at the 50% probability level, according to the National Oceanic and Atmospheric Administration. The Hudson Valley to the south of the proposed region also has a significantly longer growing season that is almost identical to the area west of the proposed region and the Adirondack Mountains. To demonstrate, we compare Whitehall, NY, at the north end of the Hudson Valley just south of the proposed region with Peru, NY in the middle of the proposed region:

State And Station Name	Threshold (F)	Spring (Date)			Fall (Date)			Freeze Free Period (Days)			Probability Level (4)
		Probability Level (1)			Probability Level (2)			Probability Level (3)			
New York		90	50	10	10	50	90	10	50	90	
WHITEHALL	36	Apr28	May12	May27	Sep18	Sep28	Oct08	154	138	123	47
	32	Apr21	May01	May11	Sep24	Oct06	Oct19	173	157	142	40
	28	Apr11	Apr21	Apr30	Oct06	Oct22	Nov07	203	183	164	31
PERU 2 WSW	36	May10	May26	Jun11	Sep08	Sep20	Oct02	137	116	95	51
	32	Apr29	May12	May25	Sep21	Oct01	Oct11	159	141	124	44
	28	Apr18	Apr29	May09	Sep27	Oct09	Oct21	178	162	146	35

Notes:
(1) Probability of later date in spring (thru Jul 31) than indicated.
(2) Probability of earlier date in fall (beginning Aug 1) than indicated.
(3) Probability of longer than indicated freeze free period.
(4) Probability of Freeze/Frost in the yearly period (percent of days with temperatures at or below the threshold temperature).
*From: http://cdo.ncdc.noaa.gov/climatenormals/clim20supp1/states/VT.pdf and http://www.howdogardener.com/wordpress/wp-content/uploads/2011/09/NY.pdf

The reduction by more than two weeks of the growing season in the proposed region, compared with the Hudson Valley, is the single most determinative factor in the choice of grape vines in this proposed region.

Western Boundary: The Adirondack Mountains are steeply graded outcroppings underlain by middle Proterozoic metamorphic rock. Soil and sedimentary rock in this region have eroded into the Champlain Valley to its east. The boundary between the upland and lowland is abrupt, with a dramatic change in geology from rock to the sand of former river and lake beds. Above this boundary to the west are Frigid soils, from approximately 500 feet to 3000 feet elevation, while the Champlain Valley is primarily Mesic soils, from 500 feet to the mean lake height of 95 feet. This Mesic region has a mean soil temperature of 9 degrees Celsius. The difference is soil temperatures between the Adirondack region to the east and the proposed region is also demonstrated by the dramatic change in the growing season. The average number of days below freezing rises dramatically east of the Adirondacks. For example, Lake Placid, in the Adirondacks, 40 miles east of Peru, New York, has a growing season of only 141 days, compared with 184 days for Peru at the midpoint of the proposed region.

In the wind shadow of the Adirondacks, the Champlain Valley also has more sunshine, less rainfall, less snowfall, warmer summer temperatures, warmer winter temperatures, fewer late spring and early fall frosts and freezes, and more productive soils than the mountainous region immediately to its west. Farther west of the Adirondack Mountains is the Upper Mohawk Valley, with more rain and snowier winters in the western foothills of the Adirondacks. This region to the west of our proposed region is also less sheltered from westerly storms, and receives additional precipitation in the form of lake-effect snow from the influence of Lake Ontario, one of the Great Lakes. Lake Ontario

moderates its temperatures in the summer, causes greater rain in the summer as moist air is carried by westerly winds over the Adirondack Mountains, and provides a significantly deeper winter snow cover that tends to better preserve winter soil temperatures and allows a wider potential variety of viable grape vines. The prevailing westerly winds also bring warmer and moister air from Lake Ontario and allows an extended growing season than that found in the proposed region. We see this in a comparison of data for Peru, NY relative to Watertown, NY, a relatively flat region in the foothills west of the Adirondacks with a climate suitable for Vitis vinifera grape growing:

State And Station Name	Threshold (F)	Spring (Date)			Fall (Date)			Freeze Free Period (Days)			Probability Level (4)
		Probability Level (1)			Probability Level (2)			Probability Level (3)			
New York		90	50	10	10	50	90	10	50	90	
WATERTOWN	36	May03	May19	Jun05	Sep16	Sep27	Oct07	149	130	111	48
	32	Apr23	May04	May14	Sep23	Oct05	Oct18	169	154	139	40
	28	Apr11	Apr21	Apr30	Oct07	Oct19	Oct31	196	181	165	33
PERU 2 WSW	36	May10	May26	Jun11	Sep08	Sep20	Oct02	137	116	95	51
	32	Apr29	May12	May25	Sep21	Oct01	Oct11	159	141	124	44
	28	Apr18	Apr29	May09	Sep27	Oct09	Oct21	178	162	146	35

Notes:
(1) Probability of later date in spring (thru Jul 31) than indicated.
(2) Probability of earlier date in fall (beginning Aug 1) than indicated.
(3) Probability of longer than indicated freeze free period.
(4) Probability of Freeze/Frost in the yearly period (percent of days with temperatures at or below the threshold temperature).
*From: http://cdo.ncdc.noaa.gov/climatenormals/clim20supp1/states/VT.pdf and http://www.howdogardener.com/wordpress/wp-content/uploads/2011/09/NY.pdf

The wind and rain shadow of the Adirondacks, the soil composition of the former lakebed of the ancient Lake Champlain, the shorter growing season, and the greater sunshine determine the unique viticultural techniques practiced in the Champlain Valley, as differentiated from production and techniques found to the west of the proposed region.

Likewise, the region to the east of Lake Champlain in Vermont also differs as follows:

Eastern Boundary: The proposed region is bounded to the east by Lake Champlain. While the proposed region is in the wind shadow of the Adirondack Mountains, the more hilly land in Vermont on the eastern side of the Lake is on the windward side of Vermont's Green Mountains. This region to the east receives more snow, benefits from deeper winter snow cover, tends to be cloudier, and receives more rain. However, the greatest effect arises because of its location immediately to the east of the moderating Lake Champlain. Agricultural land between Lake Champlain and the Green Mountains benefits from the humidity and temperature moderation offered by Lake Champlain. For instance, at the 50% probability level and a 32 degree freeze point, South Hero, Vermont, just one mile farther east than the benchmark Peru, New York, and 5 miles

farther north, has 166 freeze-free days compared to 141 days in Peru. This results in a growing season that is almost four weeks longer to the immediate east of the proposed region.. Burlington, Vermont, still farther east, and about five miles south of Peru, also has a growing season more than a week longer than Peru. At the 28 degree and 36 degree freeze points and the 50% probability level, these differences are even wider, with a two week shorter growing season in Peru compared to Burlington to its east and south, while Peru has a growing season between four weeks and five weeks shorter than South Hero, Vermont, to its immediate north and east.

The various probabilities calculated by NOAA illustrate these dramatic differences:*

State And Station Name	Threshold (F)	Spring (Date)			Fall (Date)			Freeze Free Period (Days)			Probability Level (4)
		Probability Level (1)			Probability Level (2)			Probability Level (3)			
New York		90	50	10	10	50	90	10	50	90	
PERU 2 WSW	36	May10	May26	Jun11	Sep08	Sep20	Oct02	137	116	95	51
	32	Apr29	May12	May25	Sep21	Oct01	Oct11	159	141	124	44
	28	Apr18	Apr29	May09	Sep27	Oct09	Oct21	178	162	146	35
SOUTH HERO	36	Apr30	May13	May26	Sep22	Oct03	Oct13	158	142	126	46
	32	Apr18	Apr28	May09	Sep27	Oct12	Oct27	183	166	149	39
	28	Apr09	Apr17	Apr26	Oct14	Oct29	Nov13	212	194	175	32
BURLINGTON INTL AP	36	May03	May18	Jun02	Sep12	Sep25	Oct08	147	129	111	49
	32	Apr26	May08	May20	Sep23	Oct03	Oct13	164	147	131	41
	28	Apr16	Apr25	May04	Sep30	Oct16	Nov01	192	174	155	33

Notes:
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(2) Probability of earlier date in fall (beginning Aug 1) than indicated.
(3) Probability of longer than indicated freeze free period.
(4) Probability of Freeze/Frost in the yearly period (percent of days with temperatures at or below the threshold temperature).
*From: http://cdo.ncdc.noaa.gov/climatenormals/clim20supp1/states/VT.pdf and http://www.howdogardener.com/wordpress/wp-content/uploads/2011/09/NY.pdf

The lake's moderating effect provides a growing season that is between one and five weeks longer in Vermont to the east than that found in our proposed region. This difference of a 10% and 25% longer growing season allows land to the east of Lake Champlain to grow Vitis vinifera grape varieties that differ from those cold-hardy varieties optimized by Cornell University and the University of Minnesota for the proposed region.

Soil and climate details within the proposed region:

A) Temperatures

The following table compares temperature ranges by month for four stations that span the proposed region, from south to north. It demonstrates that there are no significant temperature variations across the region:

Maximum, Minimum, and Mean Temperatures Across the Proposed Region
(for Ticonderoga, Peru, Plattsburgh, and Chazy, South to North, and Average)

	Maximum Temperature	Minimum Temperature	Mean Temperature
January	29.5/28.1/27.9/26.9/28.1	10/7.9/9/7.1/8.5	19.8/18/18.5/17/18.3
February	29.3/31.1/29.1/28.4/29.5	8.8/10.2/9.4/8/9.1	19/20.7/19.2/18.1/19.3
March	40.8/40.9/39.8/39/40.1	22.4/20.6/21.1/19.8/21	31.6/30.7/30.4/29.4/30.5
April	53.5/55.1/54.1/54/54.2	33.6/32.5/34/33/33.3	43.6/43.8/44/43.5/43.7
May	68/68.3/67.2/67.5/67.8	46/43.5/44.5/44.1/44.5	57/55.9/55.9/55.8/56.2
June	75.7/77.4/76.7/76.3/76.5	54.5/53.2/54.2/53.7/53.9	65.1/65.2/65.4/64.9/65.2
July	82.1/81.8/81.4/80.9/81.6	61/57.7/59.4/58.9/59.3	71.5/69.7/70.4/69.9/70.4
August	78.2/79.6/78.4/78.7/78.7	57.9/55.6/57.3/56.6/56.9	68/67.6/67.8/67.7/67.8
September	72/71/70.4/70.3/70.9	50.8/47.7/49.9/48.7/49.3	61.4/59.3/60.2/59.5/60.1
October	59.2/59.1/58.8/58.3/58.9	40/37.2/39.1/38.6/38.7	49.6/48.1/49/48.4/48.8
November	44.7/45.8/45/44.6/45	29.5/28.1/29.5/28.6/28.9	37.2/36.9/37.2/36.6/37
December	32.7/32.7/32.2/31.3/32.2	15.9/15/15.5/14.3/15.2	24.2/23.9/23.9/22.8/23.7
Annual Average	**55.5/55.9/55.1/54.7/55.3**	**35.9/34.1/35.2/34.3/34.9**	**45.7/45/45.2/44.5/45.1**

Frost-free data is provided by only one federal government-sponsored weather station that serves the proposed region. Given that the above table demonstrates little temperature variation across the proposed region, it is reasonable to rely on the frost data for Peru, especially because it the station located midpoint in the proposed region:

State And Station Name	Threshold (F)	Spring (Date)			Fall (Date)			Freeze Free Period (Days)			Probability Level (4)
		Probability Level (1)			Probability Level (2)			Probability Level (3)			
New York		90	50	10	10	50	90	10	50	90	
PERU 2 WSW	36	May10	May26	Jun11	Sep08	Sep20	Oct02	137	116	95	51
	32	Apr29	May12	May25	Sep21	Oct01	Oct11	159	141	124	44
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Notes:
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B) Precipitation

1) Average yearly precipitation

a) Average Annual Precipitation- Clinton County-30-38" range
Essex County- 34-38" range

Washington County- 35-40"

b) Snowfall – about 60 inches in the Champlain Valley (over 100 inches in the Adirondacks)

c) Relative Humidity- average 55% summer

C) Wind

1) Prevailing wind direction

The prevailing wind is from the south and west at lower elevations, especially near Lake Champlain, and predominantly from the west at higher elevations. Average wind speed is highest in the winter and spring, when it is about 10 miles per hour.

D) Solar

The sun shines an average 62% of days in summer and 40% of days in winter. The Champlain Valley is at latitude of about 44 to 45 degrees, so the maximum solar elevation there would be about 67.5 to 68.5 degrees at the summer solstice.

[ii]Geology

Natural History of the Lake Champlain Valley:
The predecessor to Lake Champlain, the ancient Lake Vermont, was created by ice dams in the last major ice age to the north in Quebec. Lake Vermont, also called Glacial Lake Vermont, was a temporary lake created by the retreating glaciers during the close of the last ice age. The lake once included land in the Canadian province of Quebec and the American states Vermont and New York. It was a geographical predecessor of Lake Champlain. Once the glacier retreated far enough north, it drained into Glacial Lake Candona, the geologic predecessor of the St. Lawrence River. The surface of the lake was about 500 feet (150 m) above present day Lake Champlain. It was up to 900 feet (270 m) deep. Lake Vermont was a muddy lake as a result of all the glacial outwash. The ice damming the water at the north end, at what is now Warwick Quebec, failed catastrophically about 10,000 years ago. The lake dropped 300 feet (91 m) in a matter of days and laid down nutrient rich sediment. This sediment forms the rich and well drained to moderately well drained soils that are typical in the proposed region. Eventually when the glacier retreated far enough north, salt water swept in, replacing the larger, freshwater Lake Vermont with the smaller, saltwater Champlain Sea. Over time, surface water replaced the saltwater that had rushed in, the Champlain Sea lost its salinity and reverted back to the freshwater lake that remains today.

[iii]Soils:

Cornell University conducted extensive studies of the soils in the proposed region. The primary soil determinant is glacial activity. Most of the soil deposits were made by retreating glaciers 10,000 to 14,000 years ago, or as sandy sediments from the drainage of ancient Lake Vermont. On these sandy and clay bases are organic material left by hardwood forests and plant residue decay. Organic materials constitute about 4%

of the surface layer of soils in the proposed region. This sand and clay combination, with relatively little organic material is shared across the region that was once under ancient Lake Vermont. Glaciation resulted in a depression of the land and the creation of the giant Lake that rose an elevation of approximately 500 feet, well above the current 95 feet lake level, and along the approximate contour of this proposed region. As the glaciers retreated, a sudden break of an ice dam drained this region of fresh water within just hours or days. Seawater rushed in and left the Champlain Sea behind.

This Champlain Sea resulted as the land was depressed by ice during an ice age from 13,000 to 10,000 years ago. The Sea reached the southern terminus of present Lake Champlain (and the limit of this proposed region) but also extended well past Ottawa, Canada to the west, and Quebec City to the east. The sea did not inundate the Adirondack Mountains, nor the lowlands on the west side of the Adirondacks to Lake Ontario. This former sea resulted in significant clay deposits throughout the region, with fossils of ocean fish and whales.

This geological formation results in poorly sorted till formations that are relatively deep and typically above limestone bedrock. Streams running into the ancient Champlain Sea eventually created the freshwater Lake Champlain and also layered combinations of sediment on top of the marine deposits.

[iv]Physical Features:
Physiography

The Champlain Lowland (Champlain Valley) is a low to moderate relief and tapers southward with a north-south rift valley underlain by Paleozoic sedimentary rocks and unconsolidated Pleistocene glacial, lacustrine and marine deposits. The boundary between the Champlain Lowland and the Adirondack Uplands is marked by a prominent fault-line scarp along much of its extent in the southern portion of Clinton County and Eastern Essex County.

The common soils of this Lowland are particularly well suited for growing grapes in soils that are nutrient rich with minerals. They tend to be well drained and range from flat to gently sloping river valleys to rolling hills. Water holding capacity of many soils is typically good for grape vine growth. Soil pH is well within the optimal range for grapes. Grapes require the same general type of soils as apple trees. There are many commercial apple orchards in the Champlain Valley, especially around Peru in Clinton County and along Lake Champlain. Some viticulturists are establishing vineyards being in the Bombay soils in the apple growing areas around Peru.

[v] Elevation:

The minimum elevation of the Champlain Valley AVA is approximately 30.5 meters or 100 feet above sea level at Lake Champlain. The Champlain Valley AVA has an approximate maximum elevation of 200 meters or about 625 feet above sea level and 500 feet above the Lake Champlain water level.

(4)Maps and Boundary Description

[i] Maps:

These delineations can be found on the following U.S. Geological Survey maps Scale 1:250,000 (1 centimeter= 2.5 kilometers)

Lake Champlain, Eastern United States – 1:250,000, series V501, edition 2, rev. 1972
Glens Falls, Eastern United States -1:250,000, series V501, edition 4, rev. 1972

[ii]Boundaries of the Lake Champlain Valley AVA:
The region approximates an elevation contour of approximately 625' above sea level, or 500' above the mean high lake level. This corresponds to the approximate surface of the ancient Lake Vermont referenced above. To avoid confusion of the meanderings of the contours this demarcation on the New York State side of this Viticultural area can also be defined by the following road and river landmarks that approximately trace a contour line along the Adirondack Mountains that define the Champlain Valley to its west:

Beginning from the point of intersection of the borders of Quebec, Canada and the adjoining states of New York and Vermont, in Lake Champlain just north of Rouses Point, New York,

Then, south 109.4 miles direct (about 174 km.) along the western shore of Lake Champlain to the intersection of New York State Route 74 in Ticonderoga, NY,

Then westerly on State Route 74 about 1.6 miles (3 km) to the intersection with State Route 22,

Then, north on New York State Route 22 about 21 miles (32 km) to its intersection with Country Road 44, also known locally as Stevenson Road,

Then, north along County Route 44, about 5.8 miles (9 km) to its intersection with State Route 9N in Westport, NY,

Then, west along State Route 9N about 4.1 miles (7 km) to its intersection with U.S. Interstate 87,

Then, north along Interstate 87 about 21 miles (32 km) to exit 34 and its intersection with the Ausable River,

Then, west along the Ausable River about 6 miles (9.5 km) to Lower Rd,

Then, west along a road known locally as Lower Road about .6 mile (1 km) to State Route 9N,

Then, west along State Route 9N about .8 miles (1.2 km) to County Route 39, also known locally as Clintonville Road,

Then, north along County Route 39, about 4.5 miles 6 km to County Route 40, also known locally as Calkins Road,

Then, north on County Route 40 about 5.8 miles (9 km) to County Route 35, also known locally as Peasleeville Road,

Then, west on County Route 35 about .1 mile (0.2 km) to a road known locally as Connors Rd,

Then, north on Connors Rd about 2.1 miles (3.3 km) to County Road 33, also known locally as Norrisville Rd.,

Then, west on County Route 33 about 1.2 miles (2 km) to a street known locally as Shingle Street,

Then north on Shingle Street about 4 miles (7.5 km) to County Route 31 , also known locally as Rabideau Street,

Then, west on County Route 31 about .4 miles (0.7 km) to a road known locally as Goddeau Street,

Then, north on Goddeau St about .9 miles (1.5 km) to State Route 3,

Then, east on State Route 3 about .5 miles (0.8 km) to a road known locally as Akey Road

Then, north on Akey Road about .2 miles (0.3 km) to State Route 374,

Then, east on State Route 374 about 3.6 miles (5.5 km) to State Route 190, also known locally as the Military Turnpike,

Then, northwest along State Route 190 about 15.2 miles (24.5 km) to County Route 12, also known locally as Alder Bend Road,

Then, north on County Route 12 about 3 miles (4.5 km) to US Highway 11,

Then, west on US Route 11 about 1.7 miles (2.7 km) to County Route 10, also known locally as Cannon Corners Road,

Then, north along County Route 10 about 6 miles (9.4 km) to the New York/Quebec, Canada border,

Then, east along the New York/Quebec, Canada border about 19.8 miles (31 km) to the intersection of the New York/Quebec, Canada/Vermont border from whence the delineation began.

Total Road length is 109.4 miles.
Total length along Canada/US border is 19.8 miles.
Total direct length from border to southern extreme along Lake Champlain shoreline is 82.4 miles.

These delineations can be found on the following U.S. Geological Survey map
Scale 1:250,000 (1 centimeter=2.5 kilometer)
Lake Champlain New York, 1979
TNY2109 (Lake Champlain South- NY) 44073-A1-TM-100 1986 Metric

The road, river, and place names are all as officially defined by the appropriate USGS maps.

This region ranges in elevation from Lake Champlain mean high water level of 100 feet, (or 30.5 meters) to an approximate elevation of about 650 feet, or 200 meters. The entire region shares the climate defined by mountains to its entire east, and weather systems coming from the north and the south. In this region, all streams and rivers drain into Lake Champlain, and Lake Champlain drains north into the St. Lawrence River.

(5) Distribution of Existing and Proposed Vineyards:
A number of vineyards have been a part of our local association, the Lake Champlain Grape Growers Association, and have taken part in the grape growing experiments sponsored by the Cornell University Research Station in our region. These vineyards are:

Commercial Vineyards and Wineries:			acres	square feet
North Star Vineyard	1383 North Star Road	Mooers, NY	4.32	188,179
Vesco Ridge Vineyard	165 Stratton Hill Road	West Chazy, NY	0.75	32,791
Elfs Farm Winery	7411 State Route 9	Plattsburgh, NY	0.92	40,000
Amazing Grace Vineyard	9839 State Route 9	Chazy, NY	0.60	26,136
Hid-In-Pines Vineyard	456 Soper Street	Morrisonville, NY	1.85	80,376
Stonehouse Vineyard	73 Blair Road	Mooers, NY	0.97	42,253
Commercial Vineyards				
Purple Gate Vineyards	7843 State Route 9	Plattsburgh, NY	1.37	59,854
Four Maples Vineyard	446 Prospect Street	Champlain, NY	0.98	42,782
Blue Stone Vineyards	3175 Essex Road	Willsboro, NY	1.21	52,502
Bessboro Farm	72 Maple Way	Westport, NY	0.64	27,697
Edgewater Farm	470 Point Road	Willsboro, NY	1.86	80,937

In addition, there is a significant vineyard operated as a research facility operated by Cornell University near the southern edge of the proposed region. This vineyard is at:

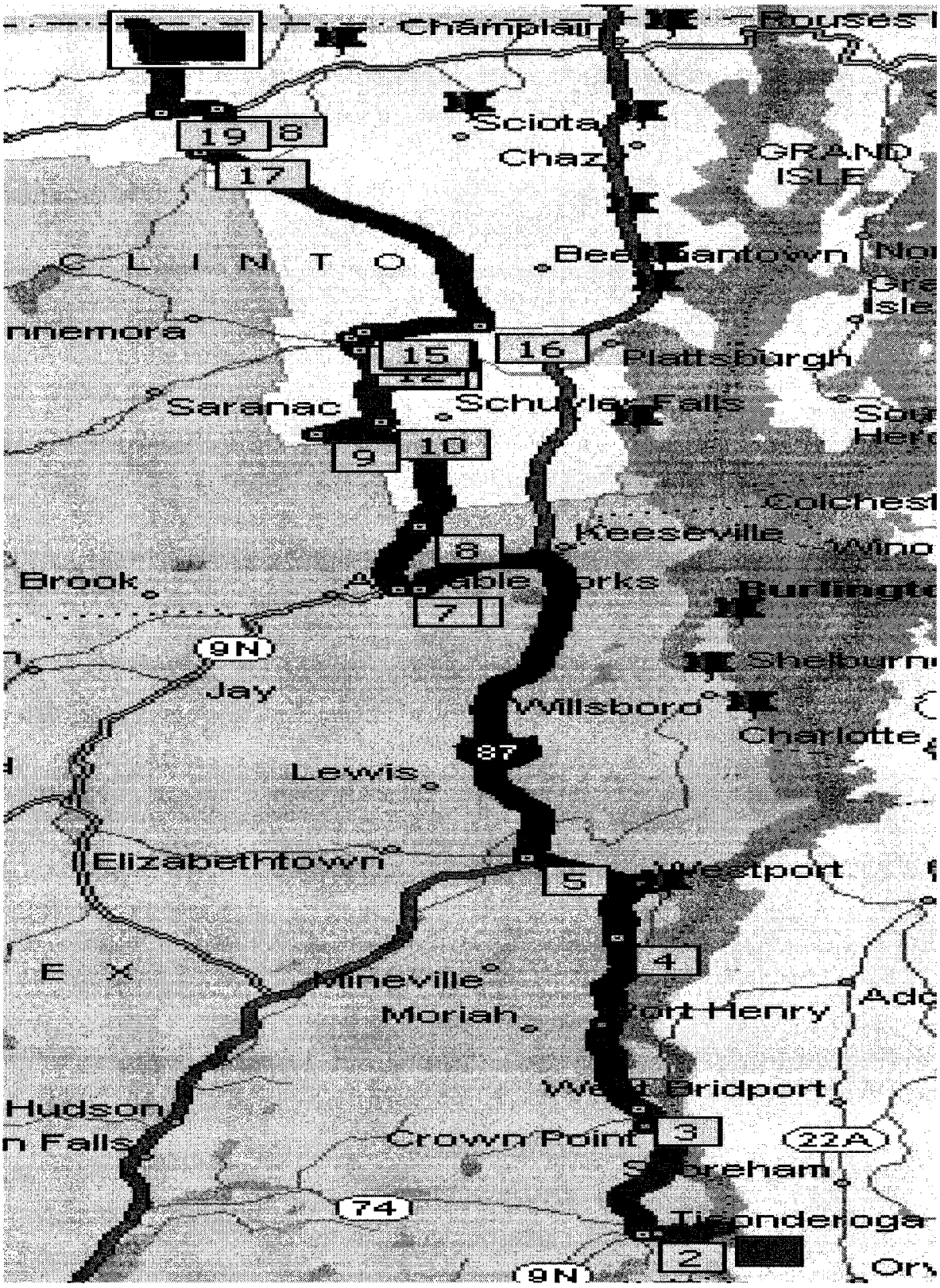
Experimental Stations				
Cornell University Willsboro Vineyard	48 Sayward Lane	Willsboro, NY	1.00	43,560

There are also proposed vineyards and non-commercial vineyards in the region. Most notable is:

Proposed Vineyards and Expansions				
Hidden Pines	456 Soper Road	Morrisonville, NY	4.0	174,240
Mark McDonough	70 Spitfire Drive	Plattsburgh, NY	6.00	261,360
North Star Vineyard	1383 North Star Rd	Mooers, NY	3.00	130,680
Jay White, Champlain Valley Vineyards	321 Duquette Road	West Chazy, NY	50.0	2,178,000

The following map demonstrates that these vineyards, denoted by pushpins, are relatively evenly distributed across the proposed region bounded to the west by the blue route line, the east by the western shore of Lake Champlain, and the north by the New York border with Canada.

Also, please find below it the physical boundaries description as defined by Google Maps, and the boundaries delineated on two large USGS maps.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Chaz
GRAND
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Brook
Jay
Wills
Lewis
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Westport
E X
Mineville
Moriah
Crown Point
Hudson
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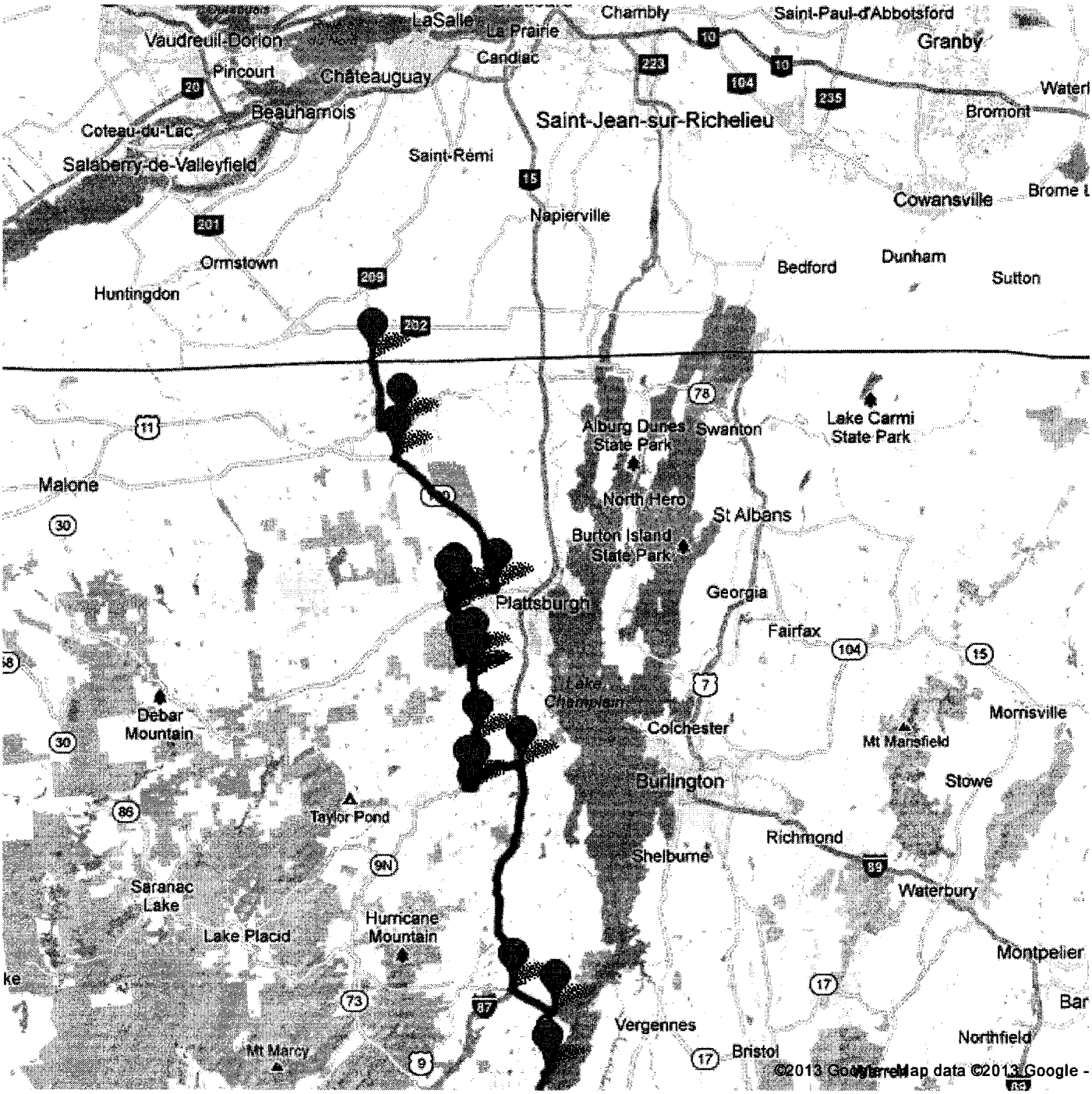
Google

Directions to Co Rd 10/Cannon Corners Rd
110 mi – about **2 hours 52 mins**



NY-74 W/Fort Ti Rd

74	1. Head **west** on **NY-74 W/Fort Ti Rd** toward **Fort Rd** About 2 mins	go 1.4 mi total 1.4 mi
	Total: **1.4 mi** – about **2 mins**	

NY-74 W/Fort Ti Rd

total 0.0 mi

22	2. Head **north** on **NY-22 N/NY-22 Scenic N/NY-74 W** toward **Rogers St** About 2 mins	go 1.6 mi total 1.6 mi
	Total: **1.6 mi** – about **2 mins**	

NY-22 N/NY-22 Scenic N/NY-74 W

total 0.0 mi

22	3. Head **west** on **NY-22 N/NY-22 Scenic N/NY-74 W** toward **Wicker St**	go 36 ft total 36 ft
22	4. Take the 1st right onto **NY-22 N/NY-22 Scenic N/NY-9N N/N Wicker** Continue to follow NY-22 N/NY-22 Scenic N/NY-9N N About 10 mins	go 7.7 mi total 7.7 mi
22	5. Turn right to stay on **NY-22 N/NY-22 Scenic N/NY-9N N** About 15 mins	go 11.7 mi total 19.4 mi
	Total: **19.4 mi** – about **25 mins**	

NY-22 N/NY-22 Scenic N/NY-9N N

total 0.0 mi

22	6. Head **northeast** on **NY-22 N/NY-22 Scenic N/NY-9N N** toward **Stevenson Rd** Continue to follow NY-22 N/NY-9N N About 3 mins	go 2.9 mi total 2.9 mi
↰	7. Turn left onto **Napper Rd** About 3 mins	go 1.0 mi total 3.9 mi
↱	8. Turn right onto **Stevenson Rd** About 7 mins	go 2.8 mi total 6.7 mi
↱	9. Turn right onto **Main St**	go 10 ft total 6.7 mi
	Total: **6.7 mi** – about **14 mins**	

Main St

total 0.0 mi

9N	10. Head **north** on **NY-9N N/Main St** toward **Stevenson Rd** Continue to follow NY-9N N About 6 mins	go 4.2 mi total 4.2 mi
	Total: **4.2 mi** – about **6 mins**	

NY-9N N

total 0.0 mi

	11. Head **north** toward **I-87 N**	go 0.3 mi total 0.3 mi
87	12. Merge onto **I-87 N** About 18 mins	go 20.5 mi total 20.8 mi
	Total: **20.8 mi** – about **18 mins**	

I-87 N

total 0.0 mi

13. Head **northwest** on **I-87 N** toward **Exit 34** — go 0.1 mi, total 0.1 mi

14. Take exit **34** for **New York 9N** toward **Ausable Forks/Keeseville** — go 0.3 mi, total 0.4 mi

15. Turn left onto **NY-9N S** — go 4.6 mi, total 5.0 mi
About 7 mins

16. Slight left onto **Lower Rd** — go 0.3 mi, total 5.2 mi
About 1 min

17. Take the 1st left to stay on **Lower Rd** — go 69 ft, total 5.3 mi

Total: **5.3 mi** – about **9 mins**

Lower Rd — total 0.0 mi

18. Head **north** on **Lower Rd** — go 69 ft, total 69 ft

19. Turn left to stay on **Lower Rd** — go 0.4 mi, total 0.4 mi
About 1 min

Total: **0.4 mi** – about **1 min**

Lower Rd — total 0.0 mi

20. Head **northwest** on **Lower Rd** toward **NY-9N N** — go 13 ft, total 13 ft

21. Turn left onto **NY-9N S** — go 0.3 mi, total 0.3 mi
About 2 mins

Total: **0.3 mi** – about **2 mins**

NY-9N S — total 0.0 mi

22. Head **east** on **NY-9N N** toward **Co Rd 39/Clintonville Rd** — go 138 ft, total 138 ft

23. Sharp left onto **Co Rd 39/Clintonville Rd** — go 4.6 mi, total 4.6 mi
About 12 mins

Total: **4.6 mi** – about **12 mins**

Co Rd 39/Clintonville Rd — total 0.0 mi

24. Head **northwest** on **County Road 40/Calkins Rd** toward **Fred Thew Rd** — go 0.2 mi, total 0.2 mi

25. Turn right to stay on **County Road 40/Calkins Rd** — go 5.6 mi, total 5.8 mi
Continue to follow County Road 40
About 14 mins

Total: **5.8 mi** – about **15 mins**

County Road 40/Clark Rd — total 0.0 mi

26. Head **north** on **County Road 40/Clark Rd** toward **Felton Rd** — go 115 ft, total 115 ft

27. Turn left onto **Co Rd 35/Peasleeville Rd** — go 0.1 mi

About 1 min — total 0.1 mi

Total: **0.1 mi** – about **2 mins**

Co Rd 35/Peasleeville Rd — total 0.0 mi

28. Head **north** on **Conners Rd** toward **Irwin Rd** — go 1.8 mi
About 4 mins — total 1.8 mi

Total: **1.8 mi** – about **4 mins**

Conners Rd — total 0.0 mi

29. Head **north** on **Conners Rd** toward **Co Rd 33/Norrisville Rd** — go 141 ft
total 141 ft

30. Turn left onto **Co Rd 33/Norrisville Rd** — go 1.2 mi
About 3 mins — total 1.2 mi

Total: **1.2 mi** – about **3 mins**

Co Rd 33/Norrisville Rd — total 0.0 mi

31. Head **north** on **Shingle St** toward **Sadie Morrow Rd** — go 5.0 mi
About 13 mins — total 5.0 mi

Total: **5.0 mi** – about **13 mins**

Peru Ln/Shingle St — total 0.0 mi

32. Head **north** on **Peru Ln/Shingle St** toward **Co Rd 31/Sand Rd** — go 23 ft
total 23 ft

33. Turn left onto **Co Rd 31/Rabideau St** — go 0.4 mi
About 1 min — total 0.4 mi

Total: **0.4 mi** – about **1 min**

Co Rd 31/Rabideau St — total 0.0 mi

34. Head **north** on **Goddeau Rd** — go 0.9 mi
About 2 mins — total 0.9 mi

Total: **0.9 mi** – about **2 mins**

Goddeau Rd — total 0.0 mi

35. Head **northeast** on **New York 3 E/Cornelia St** toward **Akey Rd** — go 0.5 mi
total 0.5 mi

Total: **0.5 mi**

New York 3 E/Cornelia St — total 0.0 mi

36. Head **east** on **New York 3 E/Cornelia St** toward **Akey Rd** — go 39 ft
total 39 ft

37. Take the 1st left onto **Akey Rd** — go 0.2 mi
About 1 min — total 0.2 mi

Total: **0.2 mi** – about **1 min**

Akey Rd — total 0.0 mi

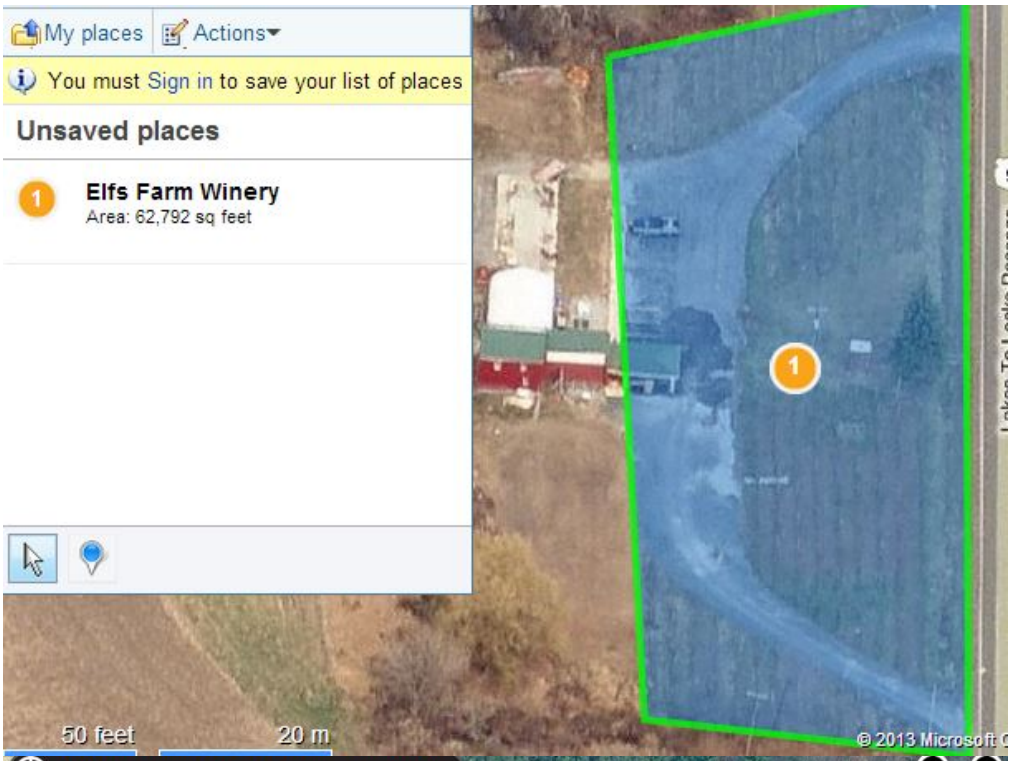
38. Head **east** on **NY-374 E** toward **Reservoir Rd** — go 3.6 mi

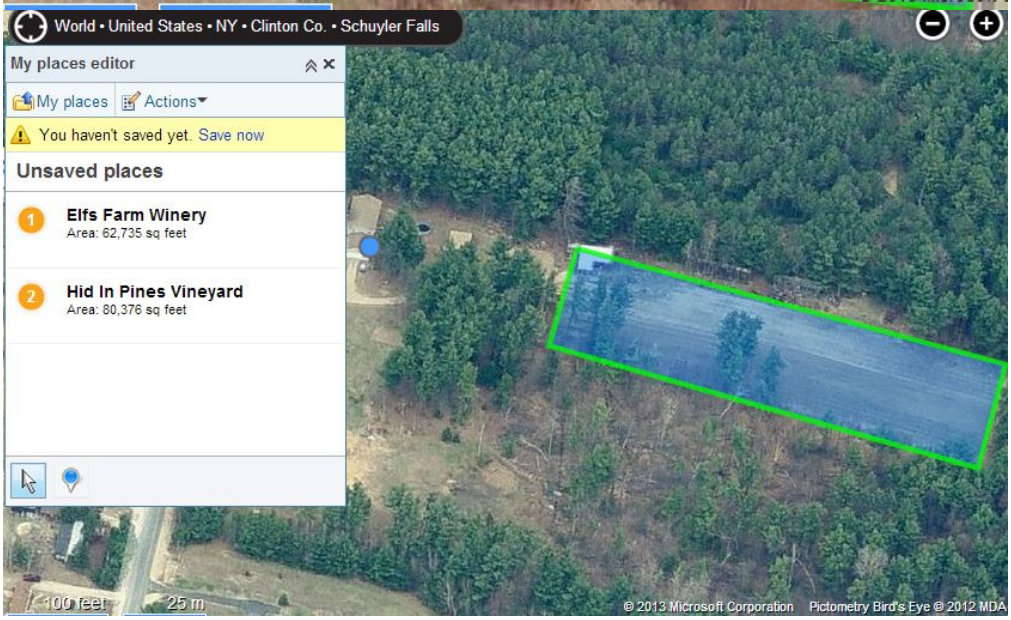
374	About 4 mins	total 3.6 mi
	Total: **3.6 mi** – about **4 mins**	
	NY-374 E	total 0.0 mi
374	39. Head **east** on **NY-374 E** toward **NY-190 E/Military Turnpike**	go 26 ft total 26 ft
190	40. Take the 1st left onto **NY-190 W/Military Turnpike** About 17 mins	go 15.2 mi total 15.2 mi
	Total: **15.2 mi** – about **17 mins**	
	NY-190 W/Military Turnpike	total 0.0 mi
190	41. Head **west** on **NY-190 W/Military Turnpike** toward **Co Rd 12/Alder Bend Rd**	go 52 ft total 52 ft
	42. Take the 1st right onto **Co Rd 12/Alder Bend Rd** About 6 mins	go 2.9 mi total 2.9 mi
	Total: **2.9 mi** – about **6 mins**	
	Co Rd 12/Alder Bend Rd	total 0.0 mi
	43. Head **north** on **Co Rd 12/Alder Bend Rd** toward **US-11 S**	go 184 ft total 184 ft
11	44. Turn left onto **US-11 S** About 3 mins	go 1.7 mi total 1.7 mi
	45. Turn right onto **Co Rd 10/Cannon Corners Rd** About 10 mins	go 6.0 mi total 7.7 mi
	Total: **7.7 mi** – about **12 mins**	
	Co Rd 10/Cannon Corners Rd	

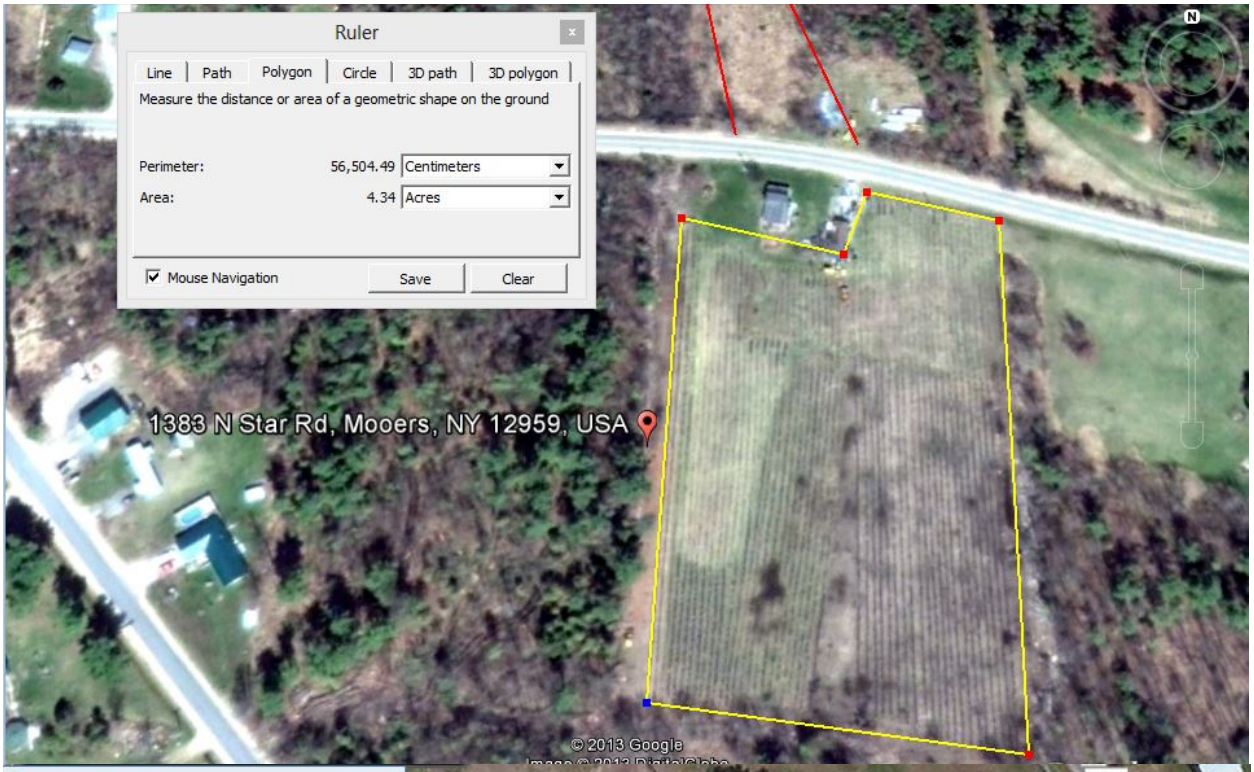
These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Directions weren't right? Please find your route on www.google.com and click "Report a problem" at the bottom left.

Vineyard	Street Address	Town	acres	square feet
North Star Vineyard	1383 North Star Road	Mooers, NY	4.32	188,179
Vesco Ridge Vineyard	165 Stratton Hill Road	West Chazy, NY	0.75	32,791
Elfs Farm Winery	7411 State Route 9	Plattsburgh, NY	0.92	40,000
Amazing Grace Vineyard	9839 State Route 9	Chazy, NY	0.60	26,136
Hid-In-Pines Vineyard	456 Soper Street	Morrisonville, NY	1.85	80,376
Stonehouse Vineyard	73 Blair Road	Mooers, NY	0.97	42,253
		totals:	9.41	409,735



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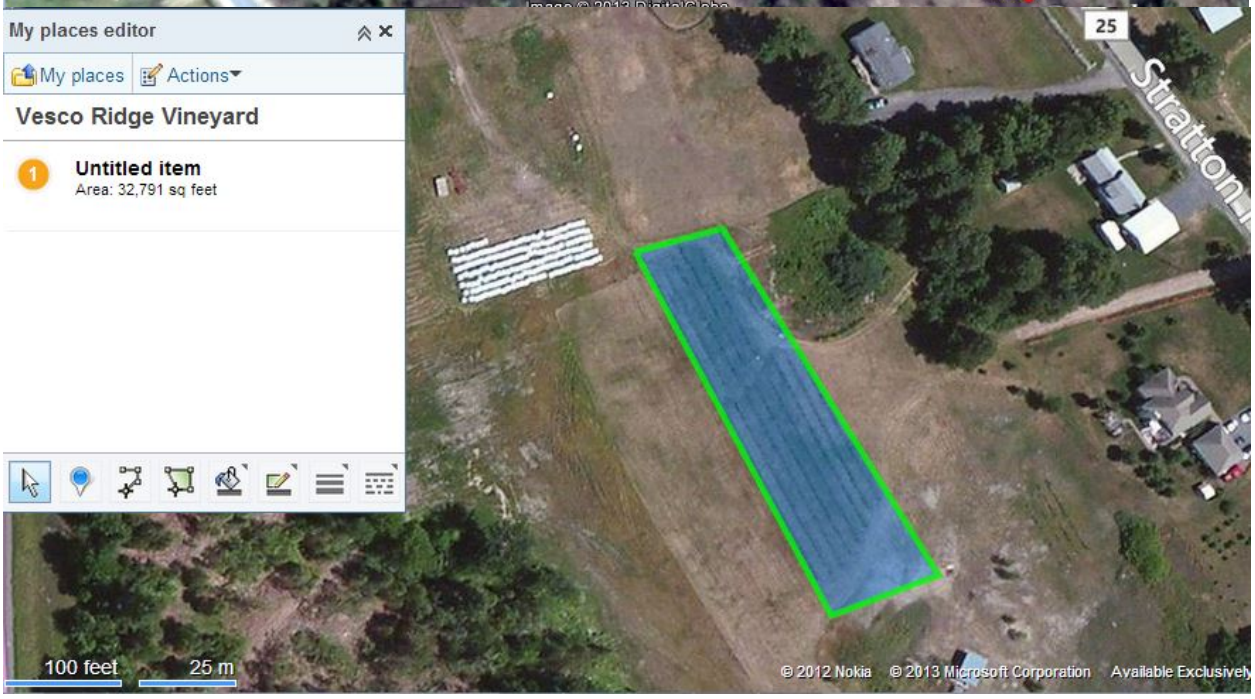
© 2013 Google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© 2012 Nokia
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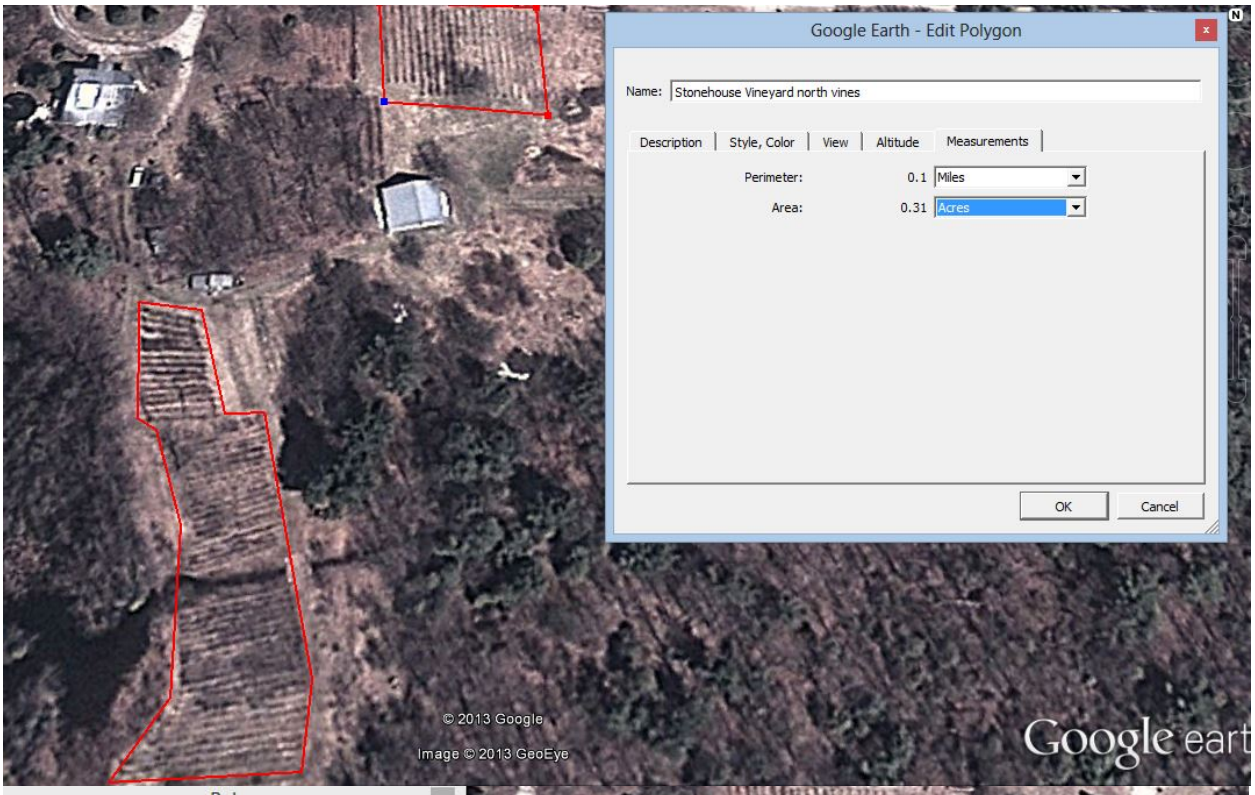
Available Exclusively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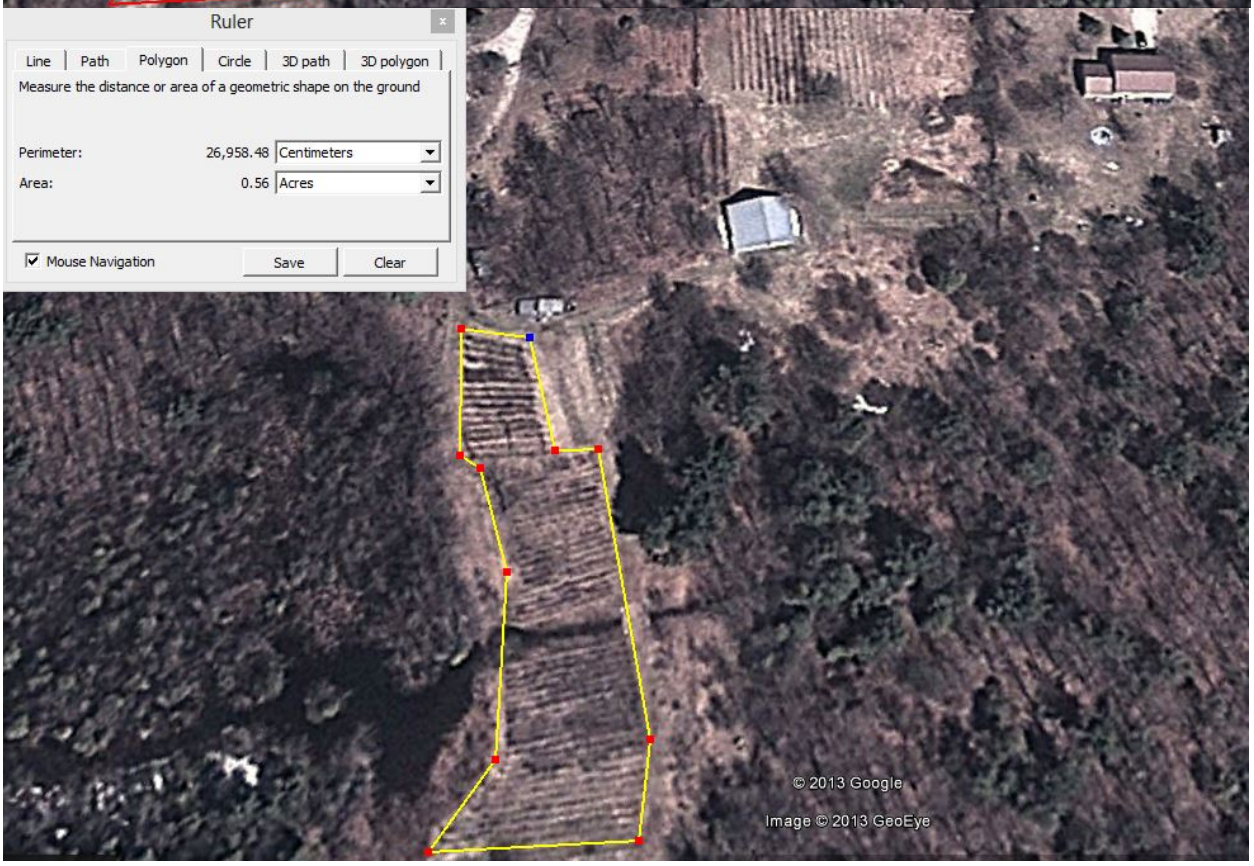
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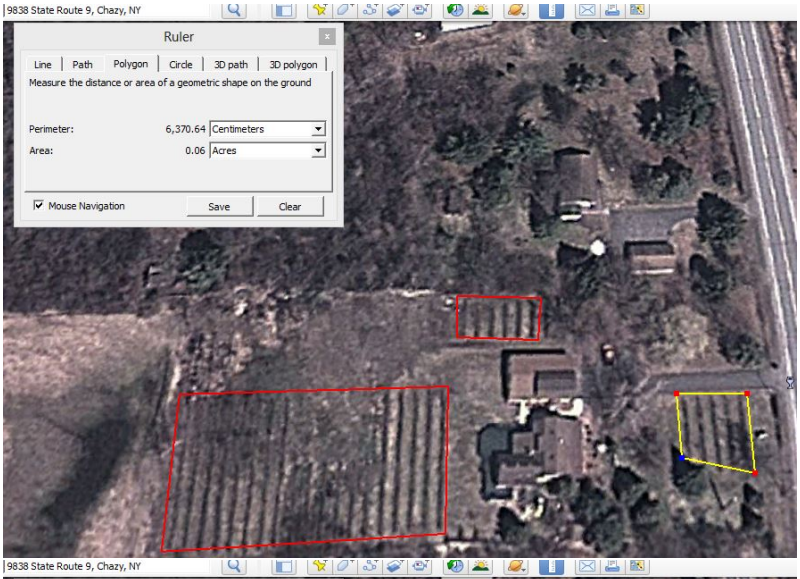
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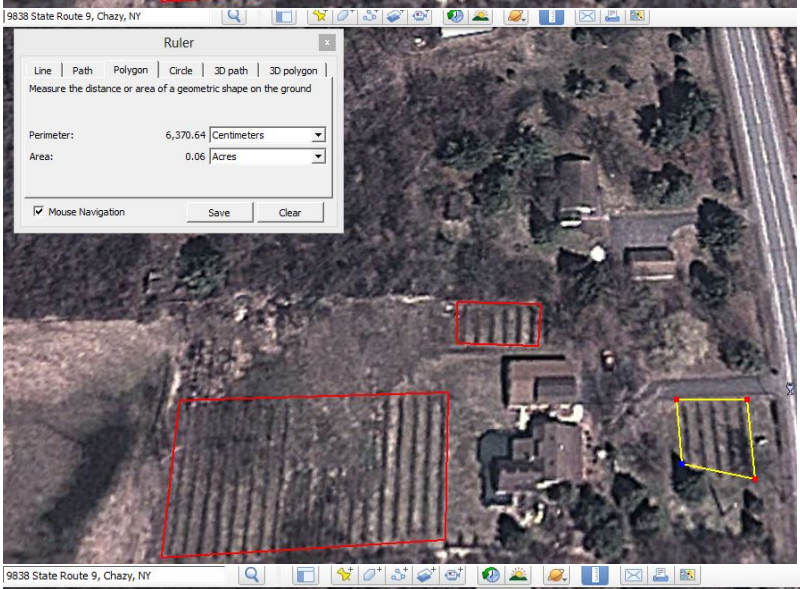
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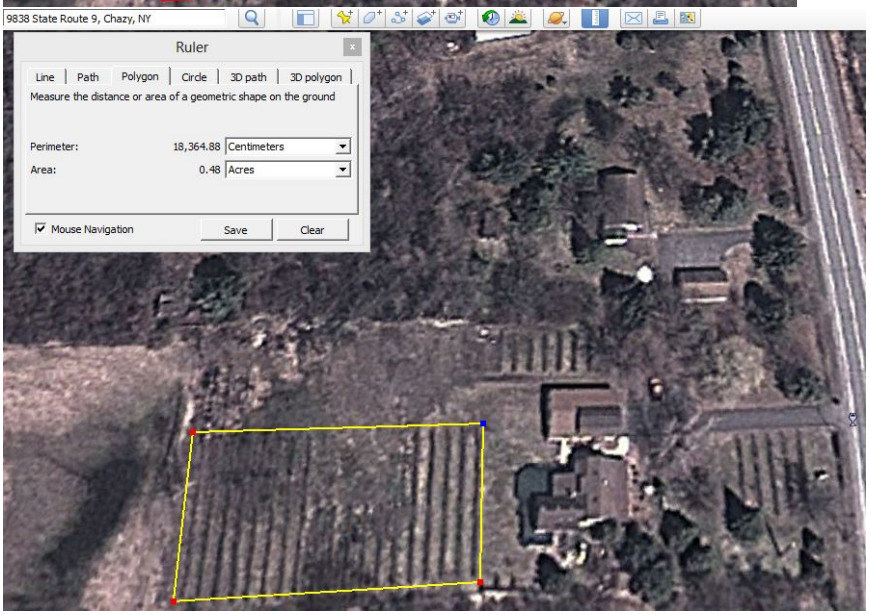
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