

## Step-by-Step Map Tutorial for Kansas Commercial Industrial Hemp Producer Applicants and Licensees

All Kansas commercial industrial hemp producer license applications must include a legible map. Failure to include the required information may result in the application being returned or denied. An example of an acceptable map is located within the *Commercial Industrial Hemp Producer License Application*. Additionally, each time a licensed growing area or lot is requested to be modified, you must provide an updated map.

The map must include the following items:

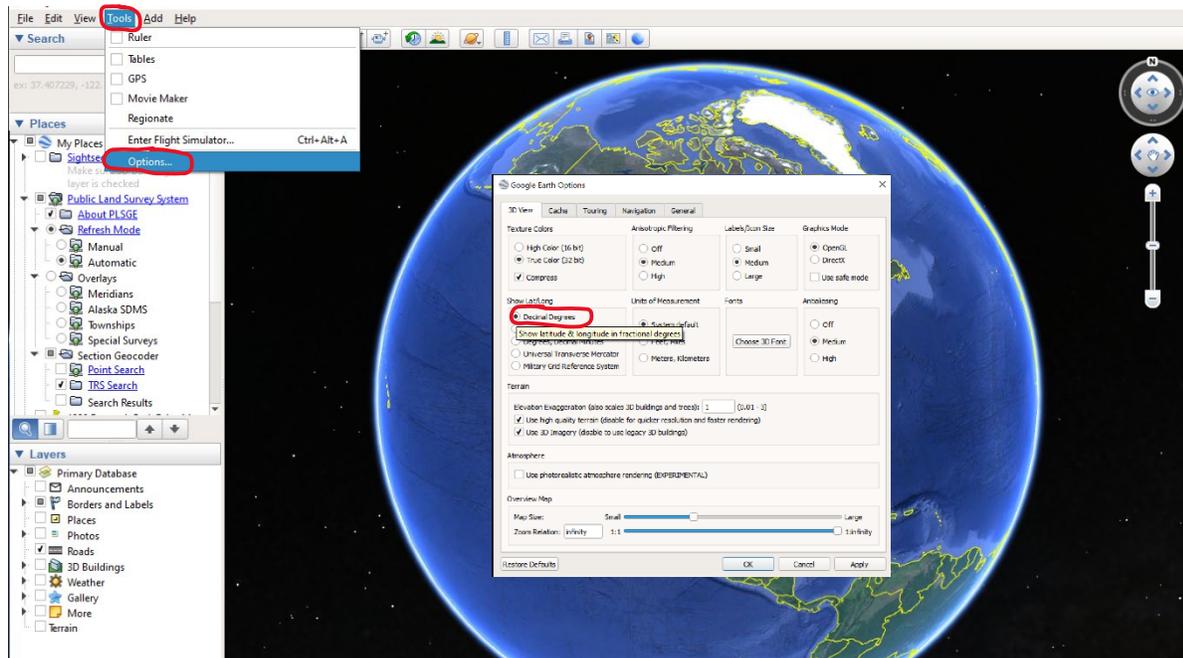
1. The global positioning location coordinates taken at the entry of the proposed licensed growing area in decimal degrees.
2. The global positioning location coordinates taken at the approximate center of each lot in decimal degrees.
3. The boundaries and dimensions of each lot must be outlined with one single boundary line.
4. The exact area (acreage or square feet) of each proposed lot.

The following pages provide step by step directions. At the end of this tutorial, you will find examples of acceptable maps.

If you are using Google Earth Pro, follow the visual directions on how to complete each step. If you are not using Google Earth, follow the written steps and use the photos as examples as what your map should look like.

<https://www.google.com/earth/versions/#earth-pro>

Google Earth Pro Users: Before you get started, be sure you have your GPS settings on Decimal Degrees. Go to “Tools,” pick “Options” and check the box for “Decimal Degrees” as shown below.



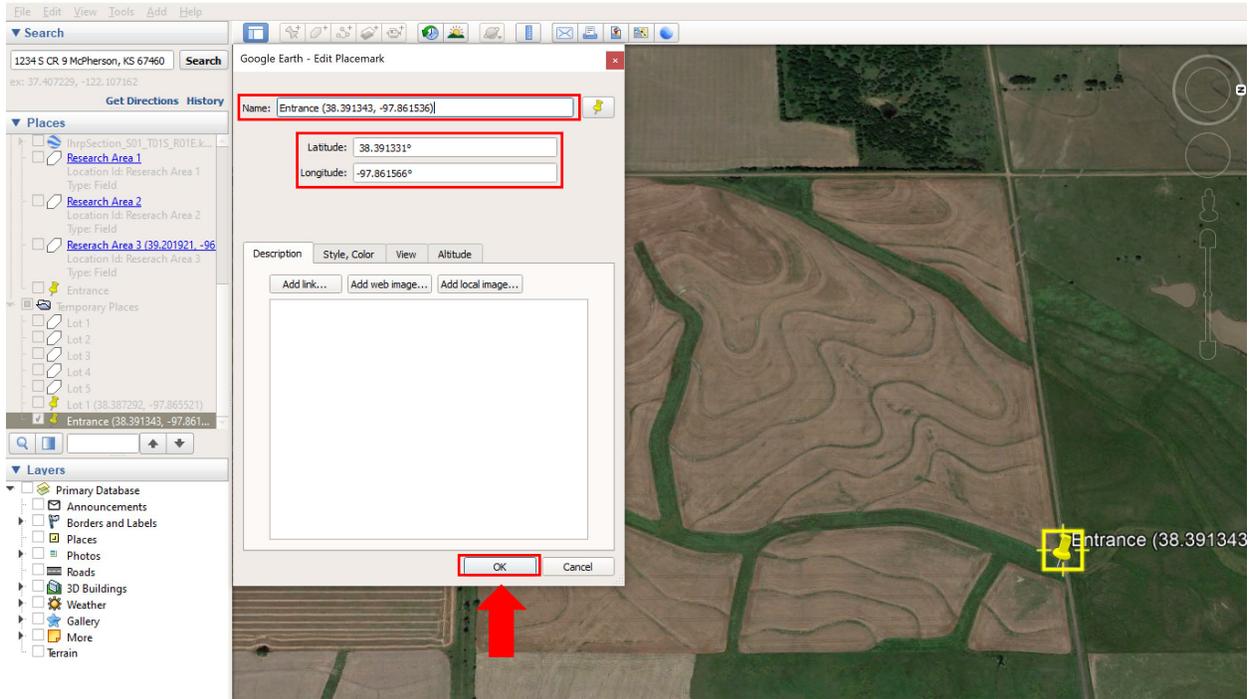
**Step 1:** Find the entrance of the growing area you are proposing for licensure. Determine the licensed growing area entrance latitude and longitude in decimal degrees. These are your GPS coordinates. Whether handwritten or computer generated, make sure this information is stated on the map.

Google Earth Pro Users: Click the thumbtack icon at the top of the tool bar.



When you click the thumbtack icon, the pin will appear, and a dialogue box will open. Place your cursor on the thumbtack. Left-Click and hold it down: this will allow you to grab and drag the icon to the center of your location. In the Dialogue box, it will show you the GPS coordinates for wherever the thumbtack is pointing.

When you are pointing it at the location of the proposed licensed growing area, write down the GPS coordinates shown in the box. Additionally, you will need to write the GPS coordinates on your map. You will also use these same GPS coordinates on page 3 your of application.

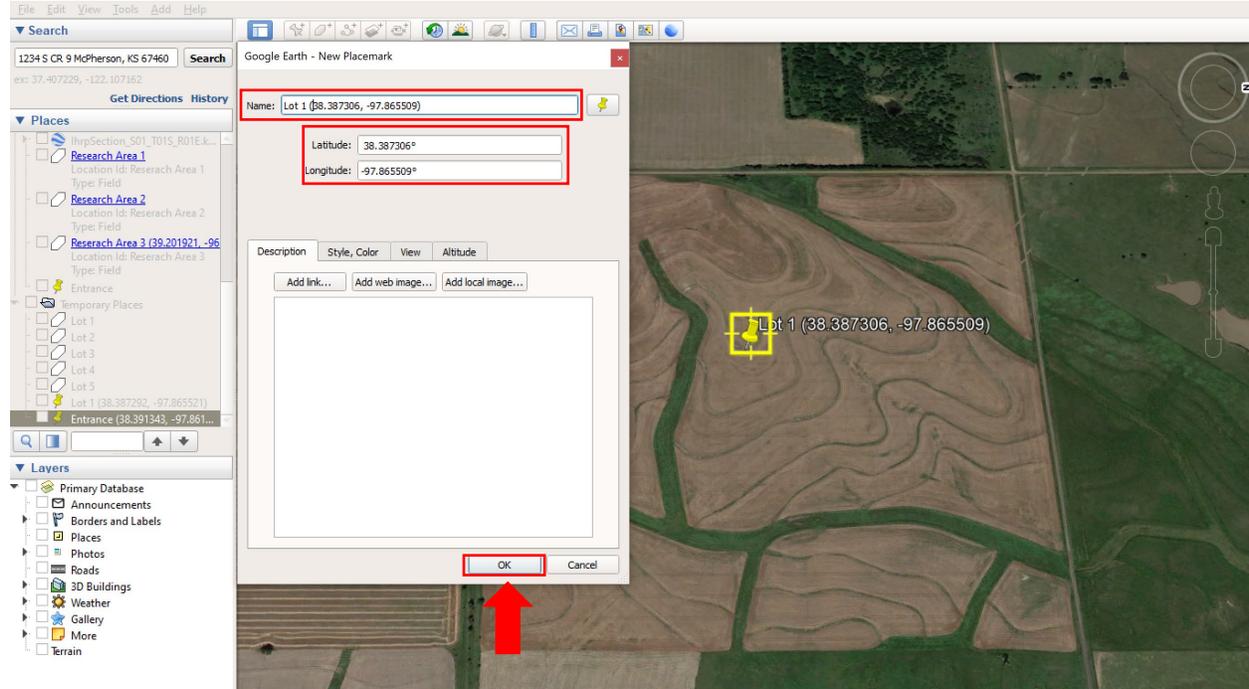


**Step 2:** Find the approximate center of each lot you are proposing to license. For each lot, determine the latitude and longitude in decimal degrees. These are the lot's GPS coordinates. Whether handwritten or computer generated, make sure this information is stated on the map.

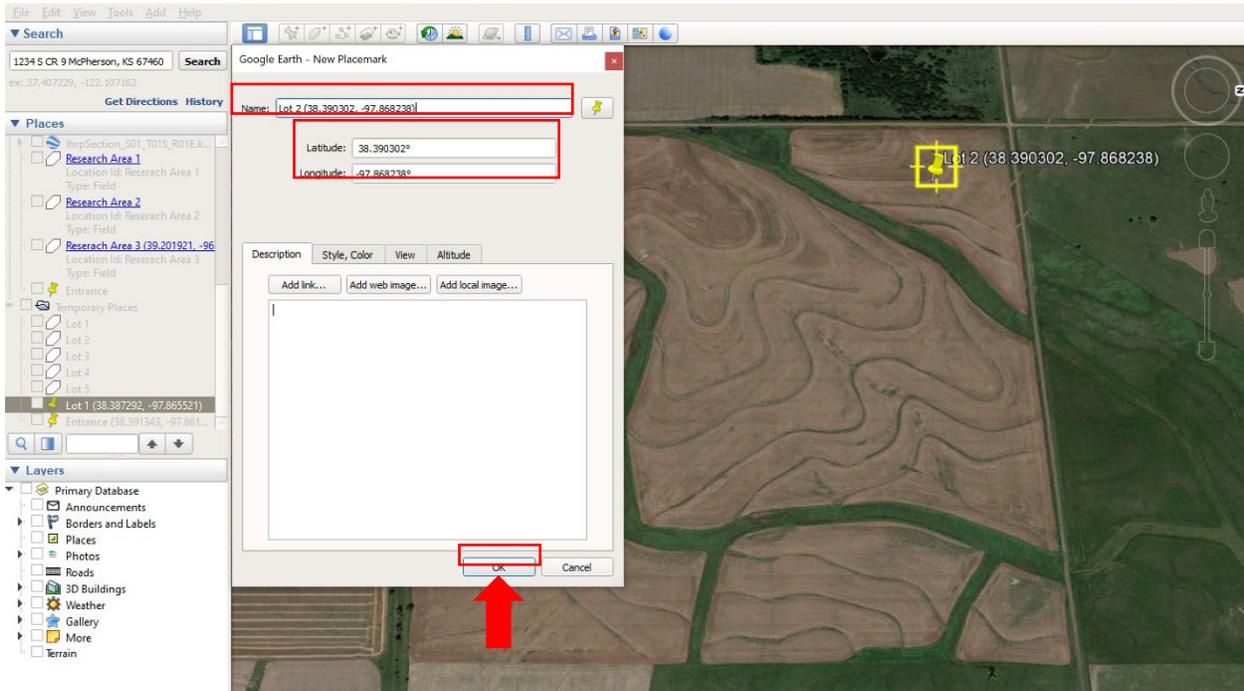
This example includes the identification of GPS coordinates boundaries for five individual lots.

Google Earth Users: Click the thumbtack icon, and a dialogue box will pop up. You may name each thumbtack to include the lot designation, lot area and lot GPS coordinates.

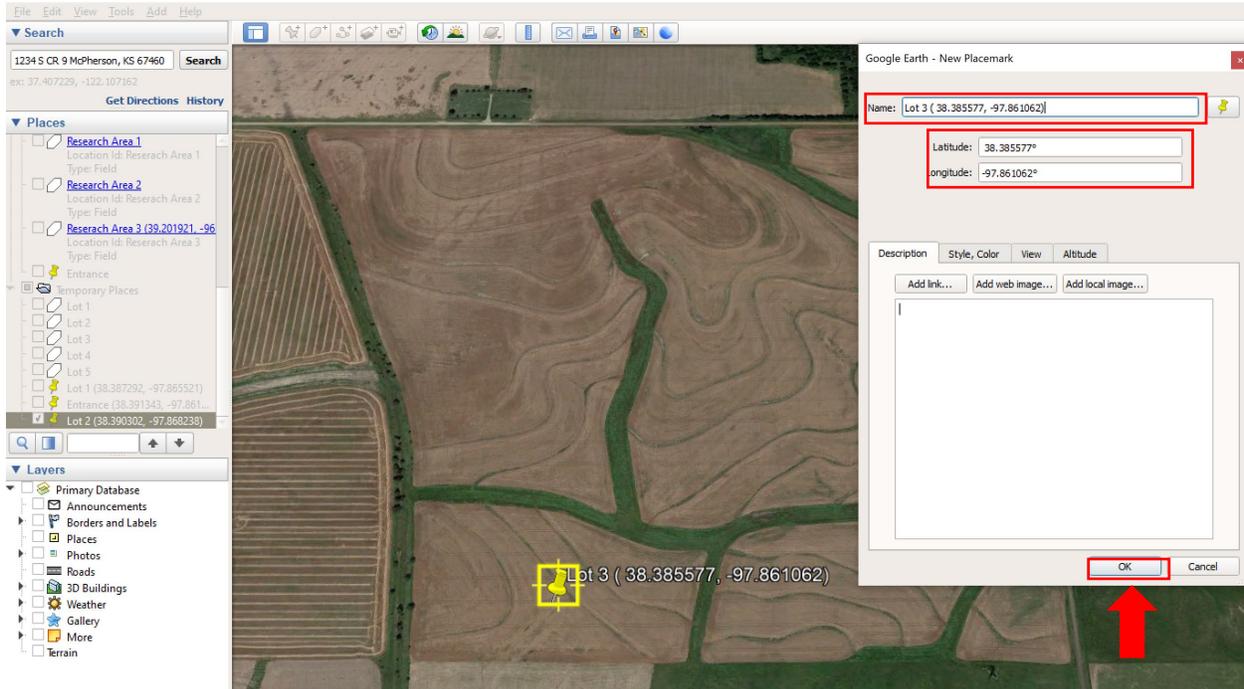
### Lot 1



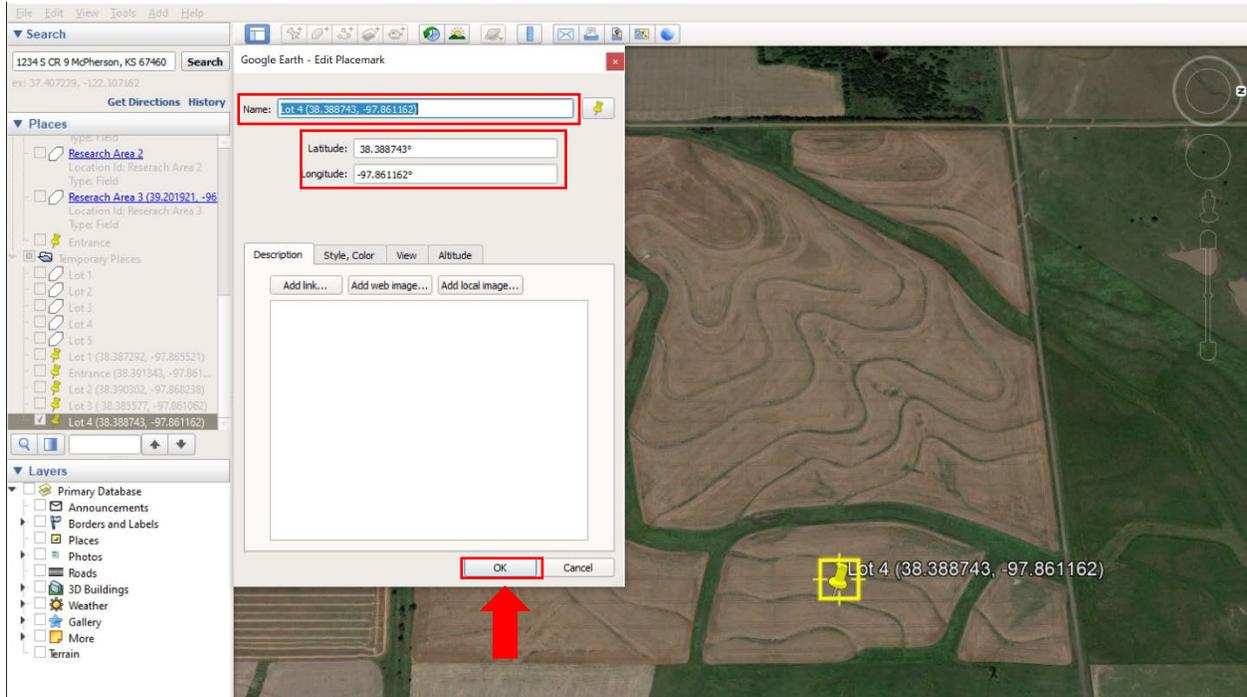
## Lot 2



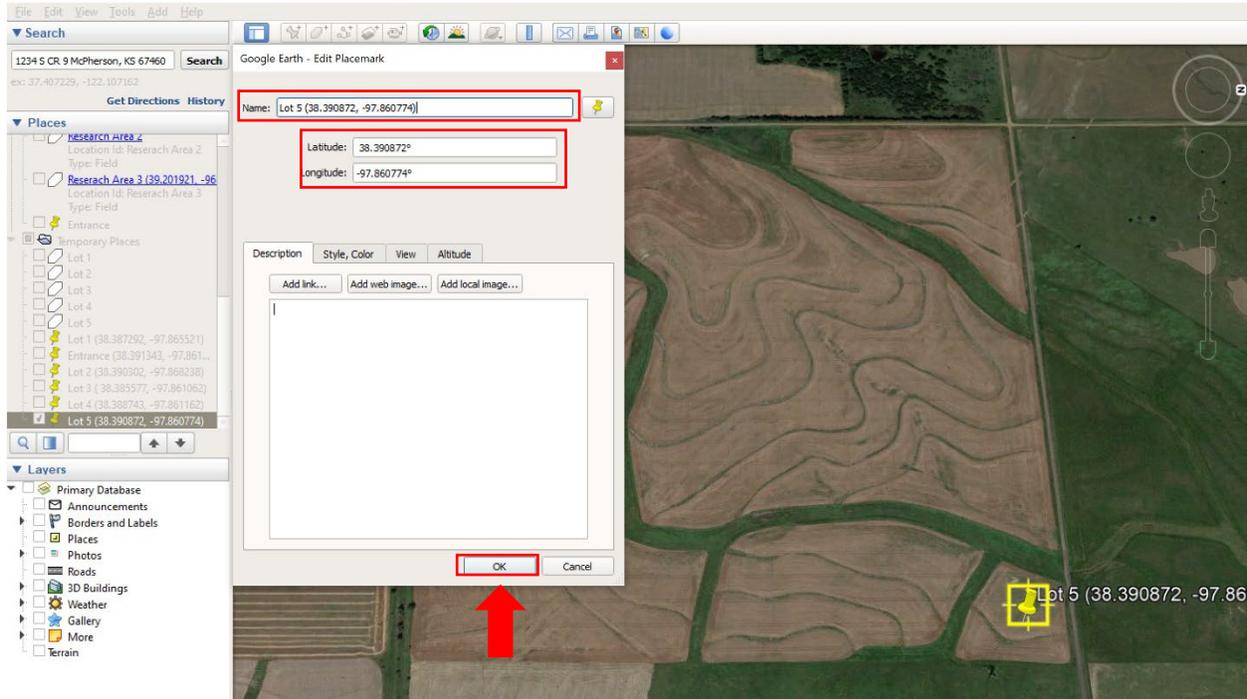
## Lot 3



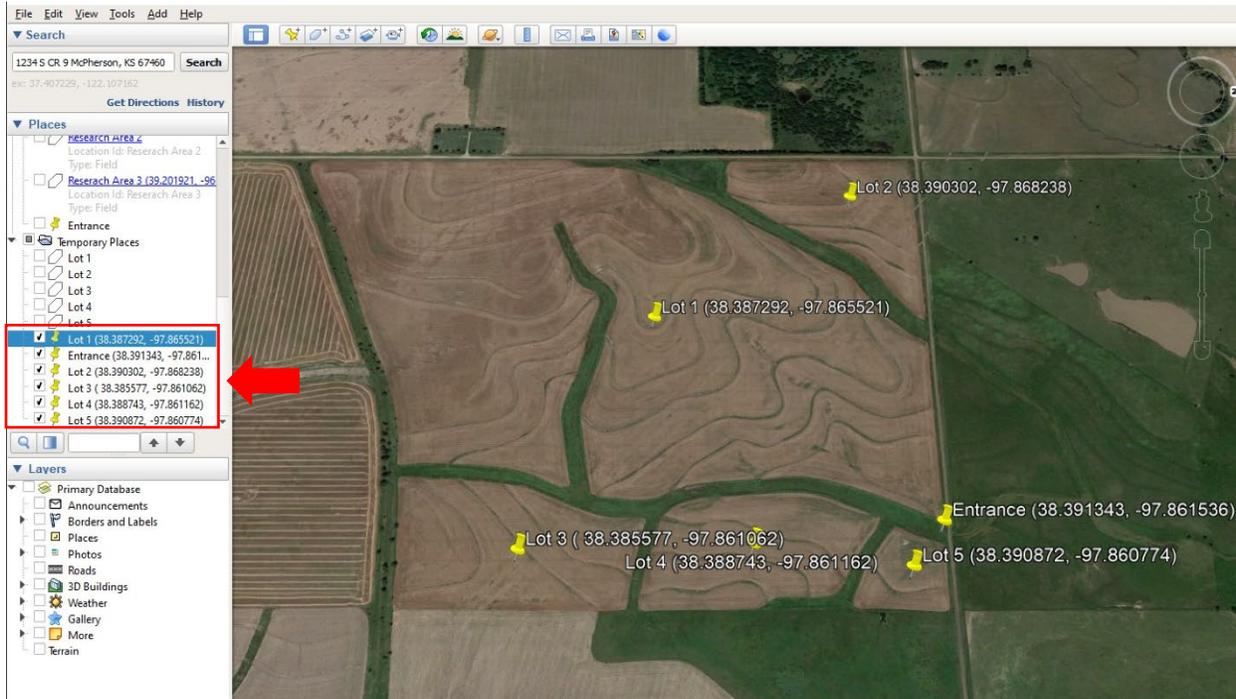
# Lot 4



# Lot 5



Toggle thumbtack to show/hide the identified lots.



**Step 3:** Outline each proposed lot with one singular, clearly visible boundary line. This is not a rough estimate. The area must be exact! Boundaries for each lot must be easily identifiable and must be equal to the land area measurements you are applying for when measured.

Other areas such as greenhouses, high tunnels, warehouses, barns, etc. must be located within your one single boundary line.

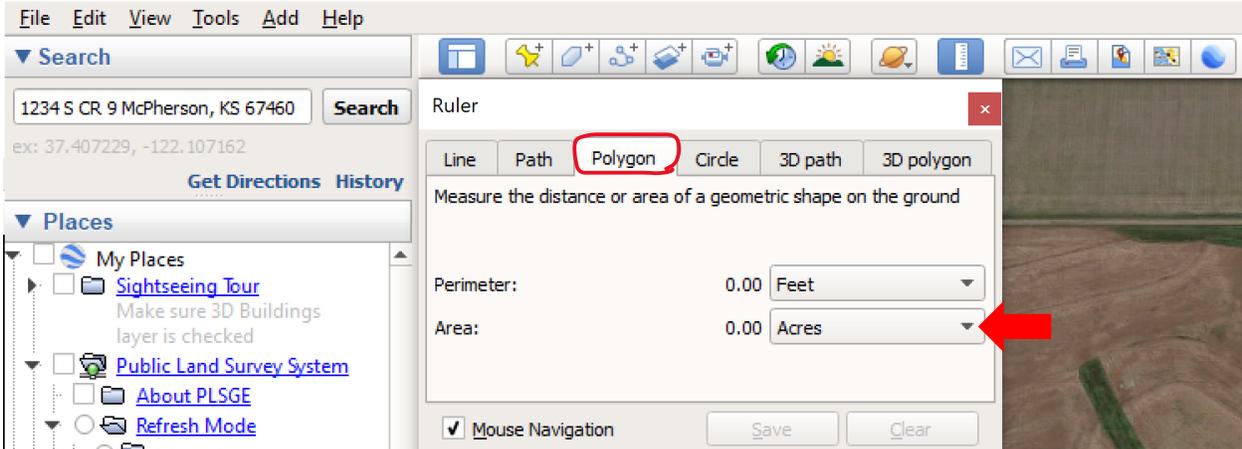
Do not include extraneous boundary lines (i.e. property lines, individual variety locations, etc.) on your map. Do not include in your outline, or encircle, ANY area that you do not want included in your registration. You can use a marker or computer program.

There cannot be any public roads running through, or separating, your mapped area. All roads inside your provided boundary line must be private roads.

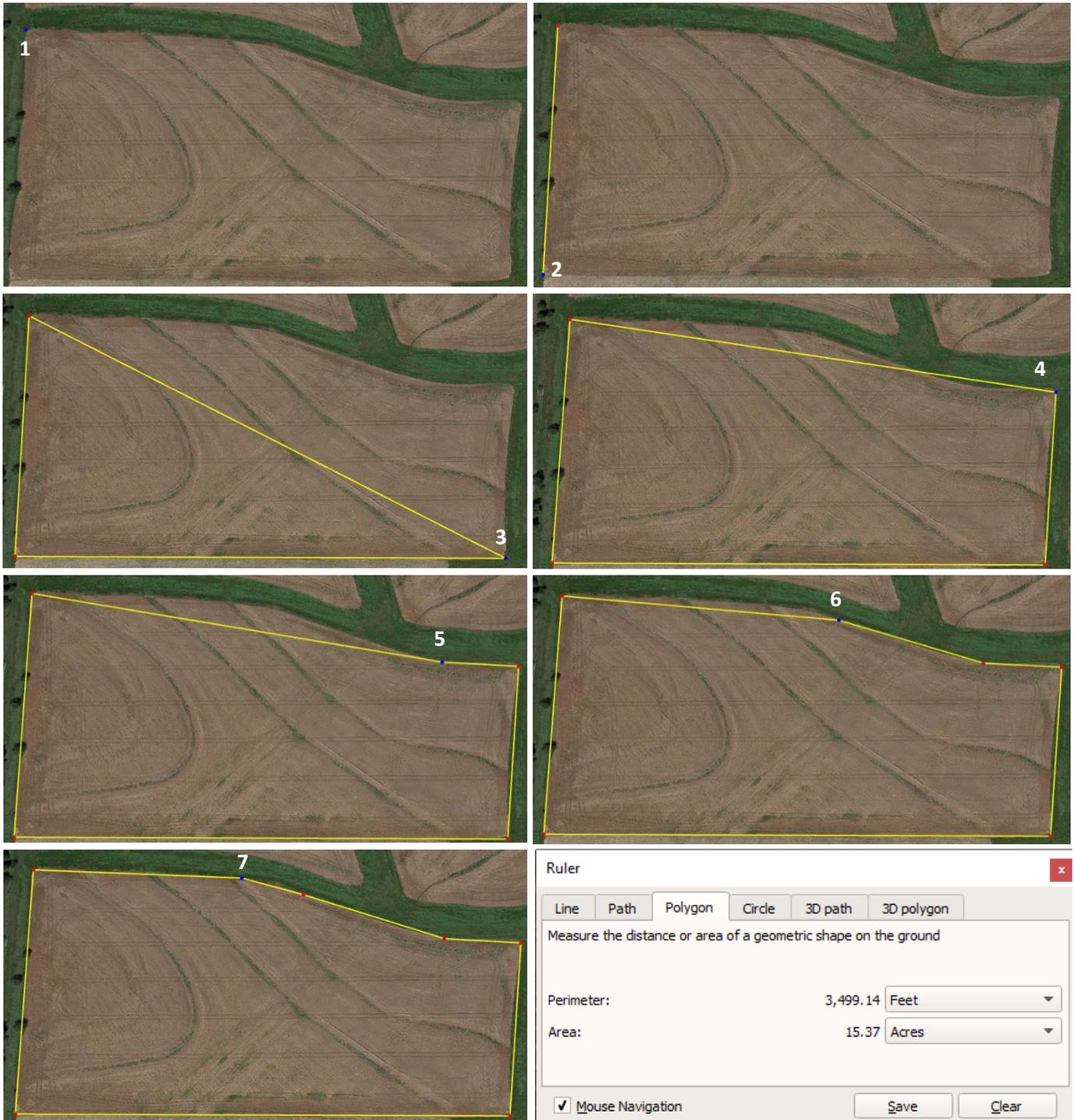
Google Earth Users: Click the ruler icon, and a dialogue box will pop up.



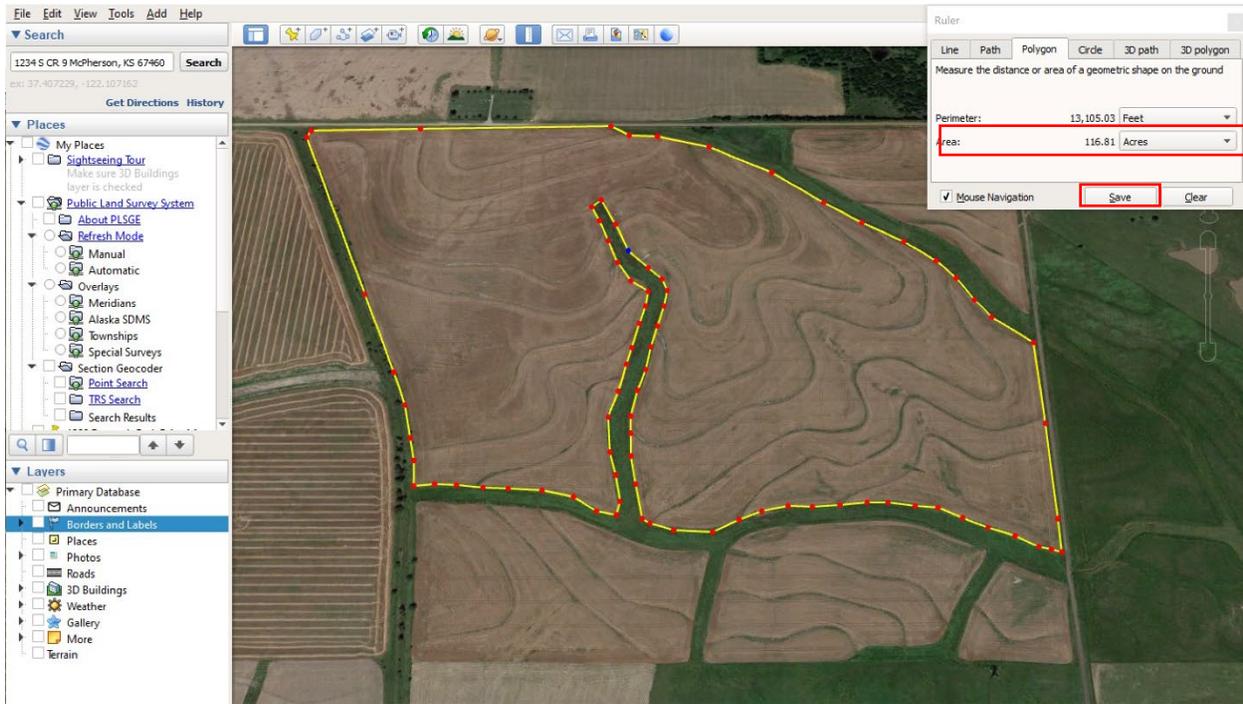
Select the "polygon" tab, and then the measurement option for "acres".



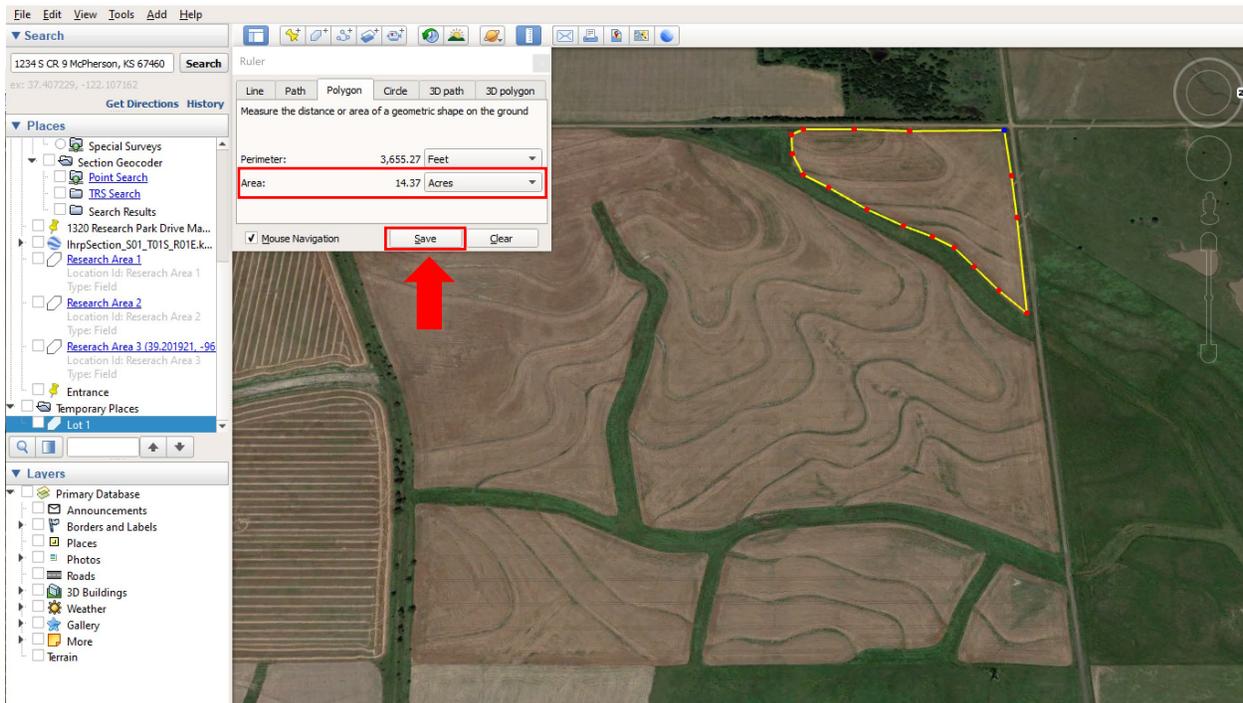
The following directions will show you how to create a boundary line using Google Earth. Using the polygon function within the ruler tool, click on a corner of the lot being measured (1), and then click the next corner, this will create a line (2). Now click on another corner and it will place another line (3). Click on the next corner (4) and so on, until you have clicked around the entire boundary line (5 and 6). Once finished, the ruler will display the area within the boundary line.



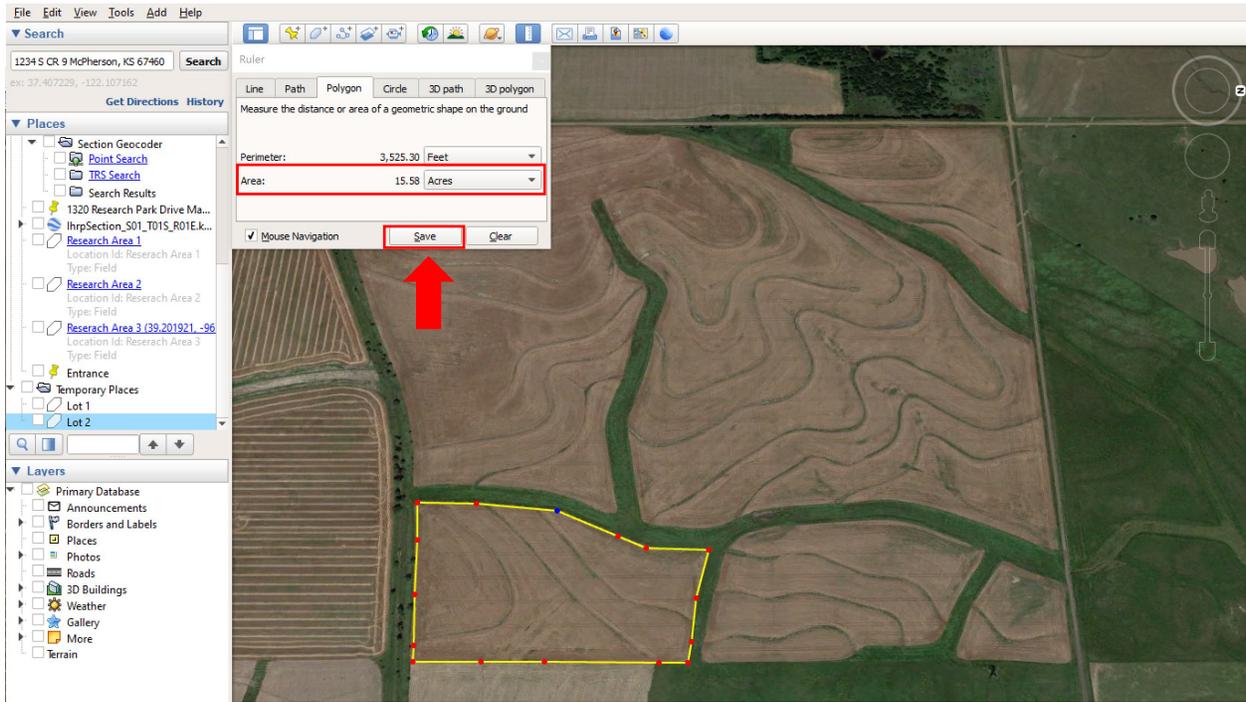
# Lot 1



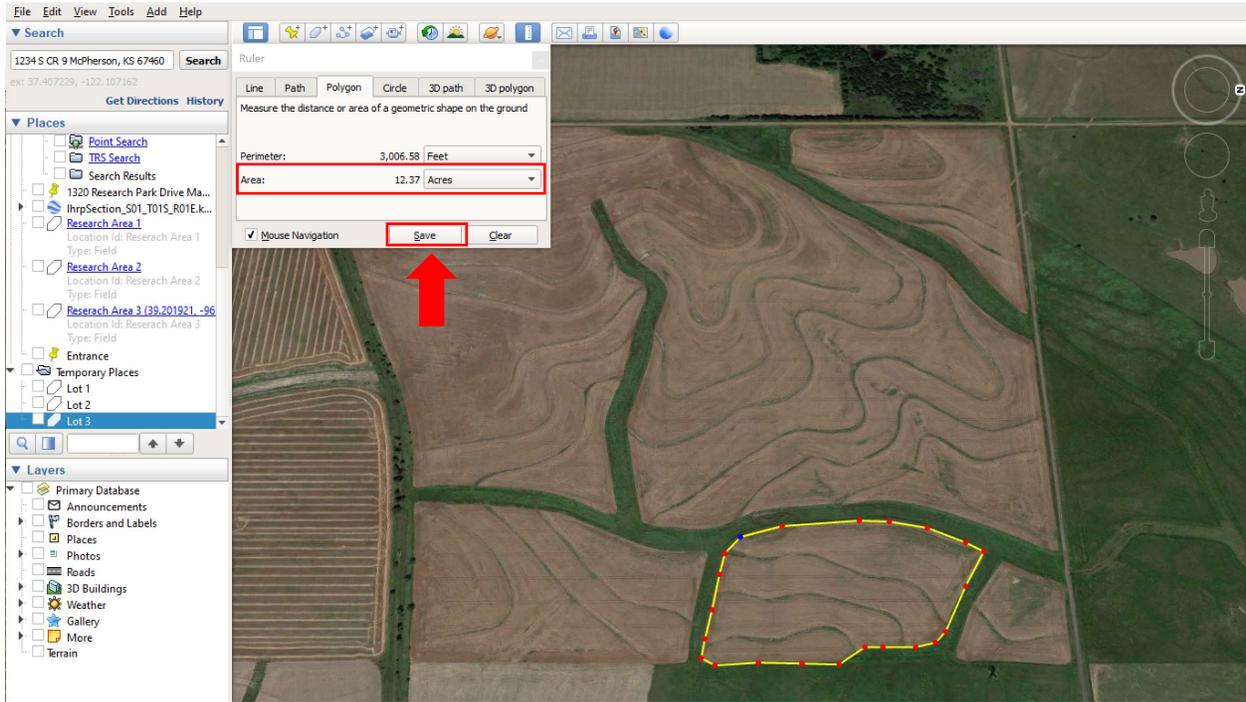
# Lot 2



# Lot 3



# Lot 4



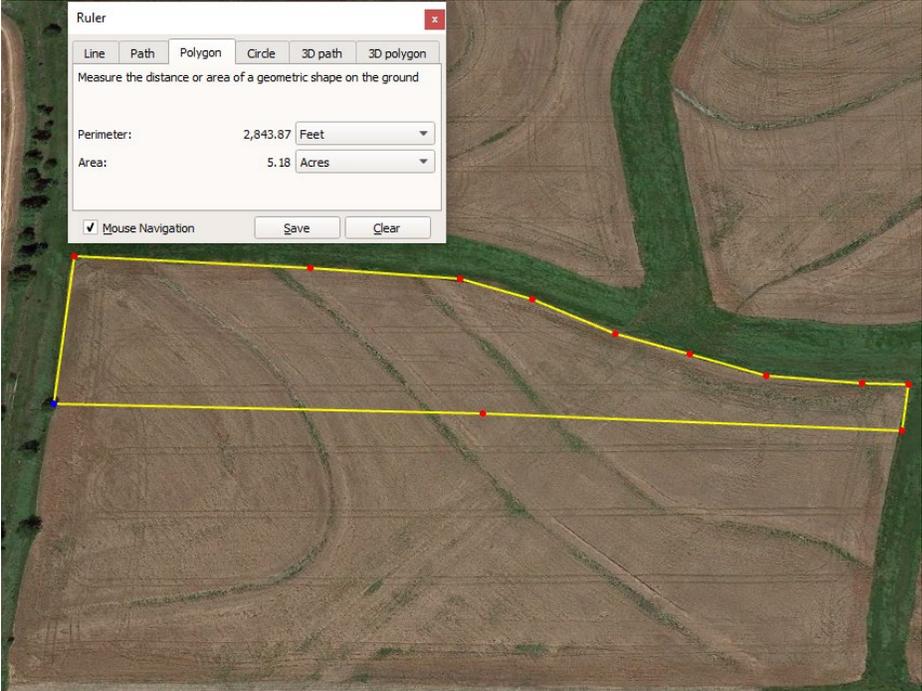
# Lot 5

The screenshot displays a GIS application window with the following components:

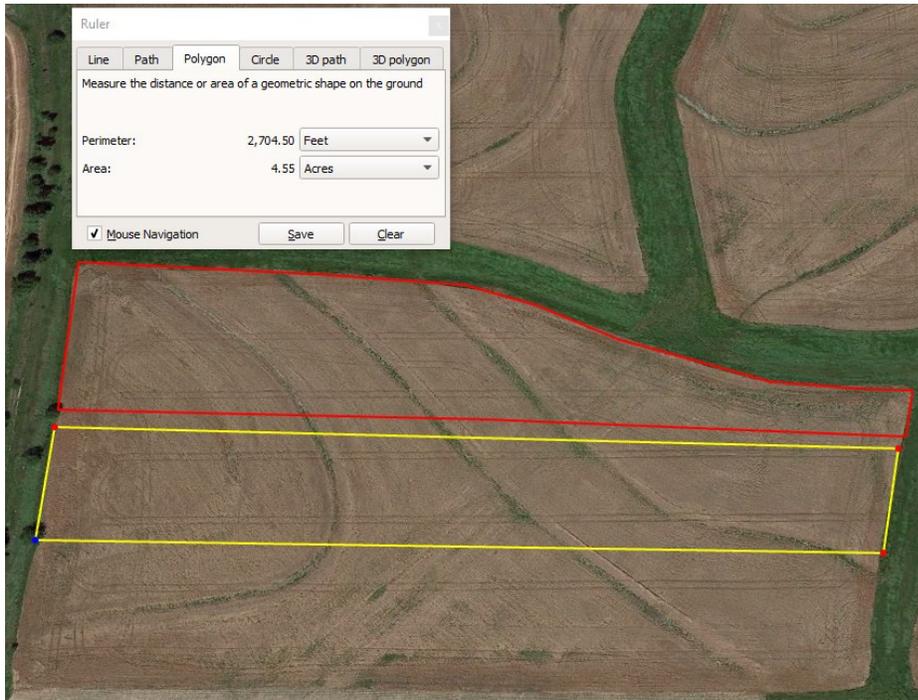
- Search Bar:** Contains the address "1234 S CR 9 McPherson, KS 67460" and a search button.
- Places Panel:** Lists various locations including "Research Area 1", "Research Area 2", "Research Area 3 (39.201921, -96)", "Entrance", and "Temporary Places" (Lot 1, Lot 2, Lot 3, Lot 4).
- Layers Panel:** Lists map layers such as "Primary Database", "Announcements", "Borders and Labels", "Places", "Photos", "Roads", "3D Buildings", "Weather", "Gallery", "More", and "Terrain".
- Measurement Tool:** A "Ruler" tool is active, showing a "Perimeter" of 1,473.18 Feet and an "Area" of 3.25 Acres. The "Save" button is highlighted with a red box, and a red arrow points to it from the map.
- Map:** An aerial view of agricultural fields with a yellow and red polygon overlaid on a specific area.

As KDA only allows one variety of industrial hemp per lot, you must distinctly identify the lots within a field, greenhouse, high tunnel or warehouse where each variety will be produced. If proposing multiple varieties per field, distinctly identify each lot. Notice a buffer is included between each lot as KDA does not permit the co-mingling of varieties.

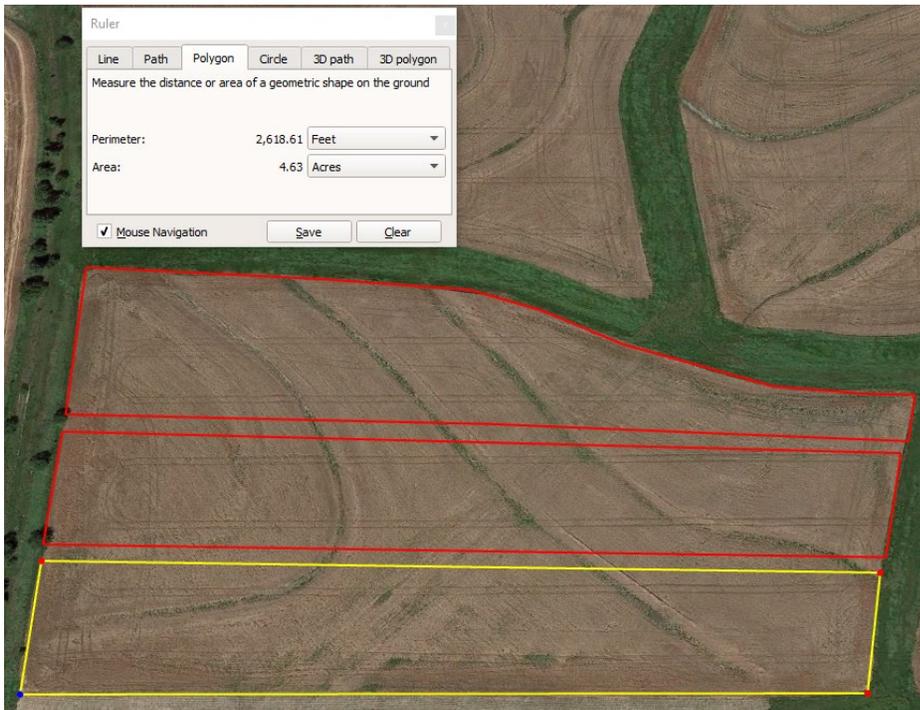
Lot 3.1



# Lot 3.2



### Lot 3.3



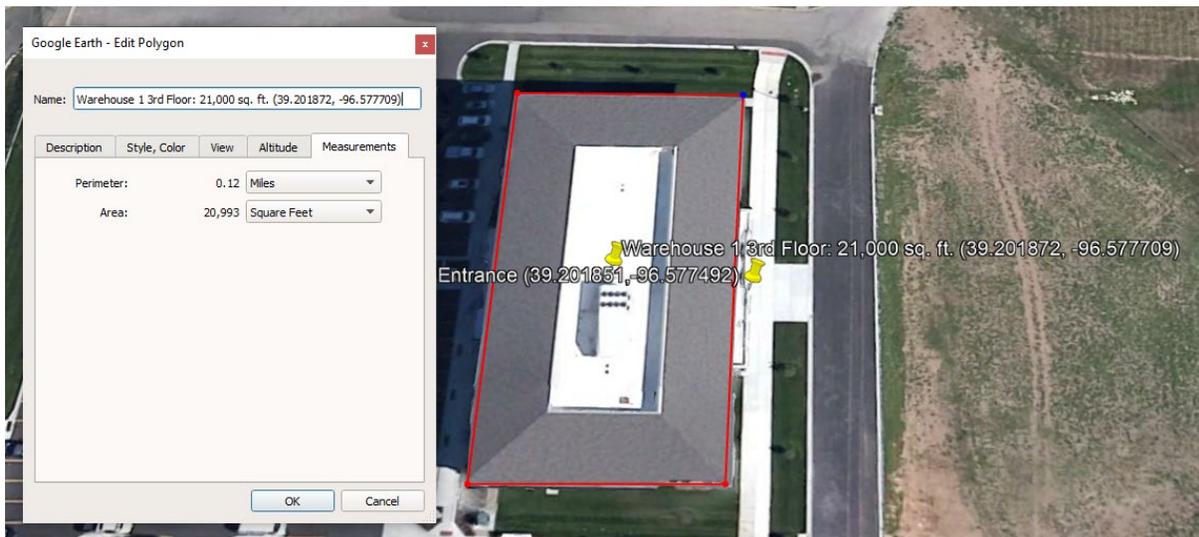
### Lots 3.1, Lot 3.2 and 3.3 combined.



If proposing structures and fields, each must be identified separately. The example below provides the identification of four separate temporary growing structures and a field.



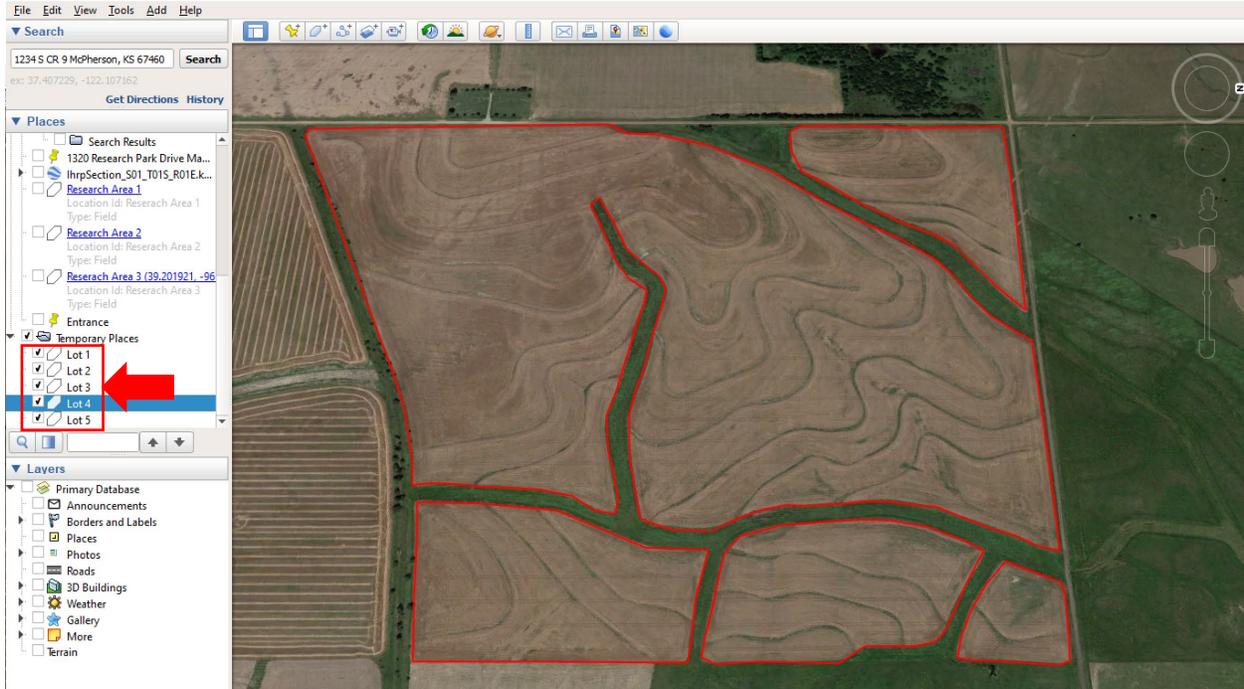
If proposing an indoor space, outline the building only and notate the square feet. If you are only registering a portion of the building, explain that when you state the land measurement. State this on the map “Proposing \_\_\_\_ sq. ft. (where it is located in building) of \_\_\_\_ sq. ft. type of building”. Examples: If you are proposing a 600 sq. ft. room, of a 1600 sq. ft. warehouse, then you would outline the warehouse and write “registering a 1<sup>st</sup>- floor room of 600 sq. ft. within a 1600 sq. ft. warehouse”. Or, if proposing 21,000 sq. ft. 3<sup>rd</sup>- floor of a 3 story, 63,000 sq. ft. warehouse.



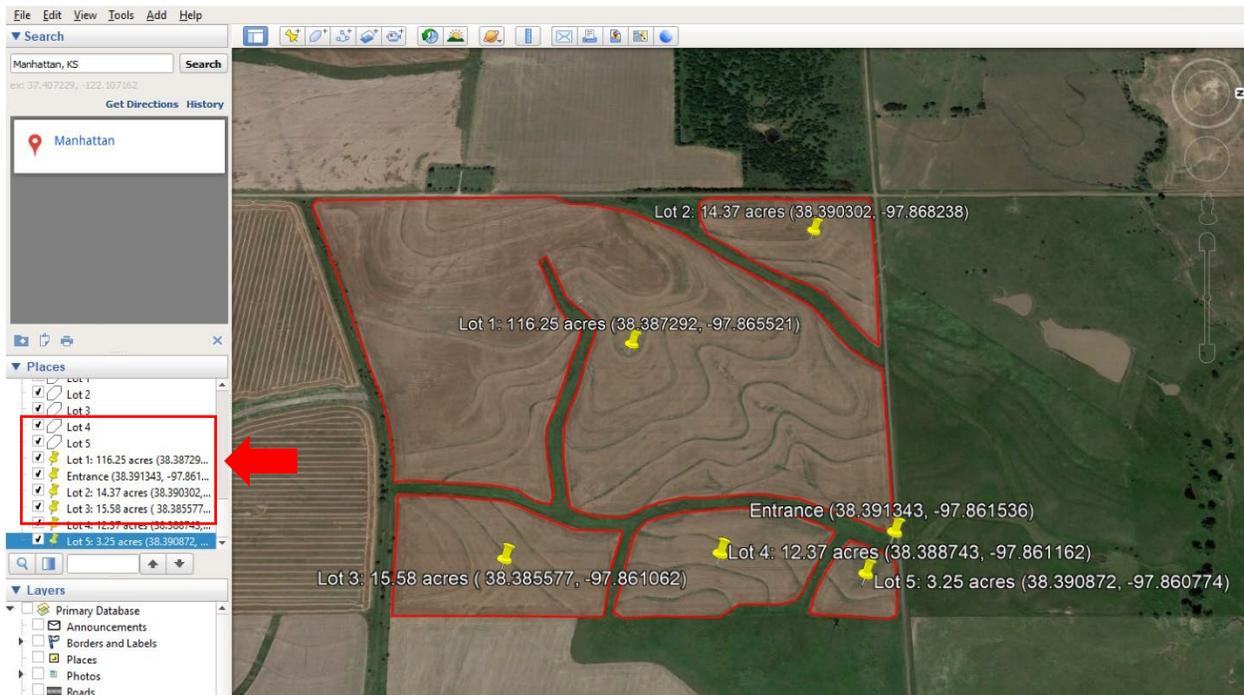
**Step 4:** Write on the map the exact number of acres and/or square feet. Remember this is an exact area, not a general area. You will register, and state on your application: 3 acres. Do not estimate by using terms like “about 16 acres” or “approx. 16 acres” The dialogue box will show the exact measurements of the boundary line you created. Or you can add it yourself (text can be handwritten or computer generated).

Google Earth Users: Finalize map by applying polygon outlines and thumbmarks for each lot.

Toggle thumbtack to show/hide all borders of identified lots.



Toggle thumbtack to show/hide all thumbtacks and borders of identified lots.



Screenshot map using print screen option, snipping tool or similar feature.



**Step 4:** Finalize map by including other pertinent information. An example is below.

**Example of Required Maps for Licensed Growing Area**



Licensed Growing Area Section Description				
Section	Township and Direction	Range and Direction	Description	Acres
12	19S	03E	NW4	161.82

Crop Address and Licensed Growing Area Entrance		
<b>Crop Address:</b>	1234 S CR 9 McPherson, KS 67460	
<b>Entrance Information:</b>	GPS Latitude: 38.391331	GPS Longitude: -97.861566

Lot Information					
Lot Designation	Lot Name	GPS Latitude	GPS Longitude	Acres	Variety
1	Terrace 1	38.390302	-97.868238	116.25	Variety 1
2	Terrace 2	38.12351	-97.12353	14.37	Variety 2
3	Terrace 3	38.385577	-97.861062	15.58	Variety 3
4	Terrace 4	38.388743	-97.861162	12.37	Variety 4
5	Terrace 5	38.390872	-97.860774	3.25	Variety 1

## Examples of Unacceptable Maps

### Unacceptable Map: Example 1



Unacceptable Map: Example 2



Unacceptable Map: Example 3

