

# GUIDANCE ON MAPPING AND OBTAINING GPS COORDINATES FOR CANNABIS CULTIVATION APPLICATIONS JUNE 2023

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# **Table of Contents**

Introduction	2
Tools for Getting GPS Coordinates and Mapping	2
Cultivator Applicant Maps	2
Low Tech Mapping for Cultivation, Drying and Storage Areas	3
Using Google Maps	3
Using Google Earth Pro	4
Using the ANR Natural Resource Atlas	9
Common issues with print layout	12

## Introduction

The Vermont Cannabis Control Board (CCB) provides the following instructions on how to create the required photographic aerial view/maps and obtain global positioning system (GPS) coordinates necessary to be a cultivator in its adult-use cannabis program.

There is no requirement that cultivator applicants develop maps using any particular method, but it is necessary that maps are legible, accurate, and contain the required information. Failure to provide legible information may require the CCB to clarify the map with an applicant. This may result in delays receiving a license.

## **Tools for Getting GPS Coordinates and Mapping**

You may use a web based mapping program such as <u>ANR Atlas</u>, <u>Google Maps</u>, or download Google Earth Pro to develop maps, outline boundaries of fields and acres to be registered, and to obtain GPS Coordinates.

- GPS coordinates for both indoor and outdoor cultivation applications must be provided in Decimal Degrees to the **fifth decimal place**, (DD.DDDDD, or 44.26079, -72.57997).
  - Please note, the minus sign, "-", before your longitudinal number is extremely important. The minus sign before the second number indicates areas west of the prime meridian, or in the western hemisphere. Without it, your submitted GPS information may be found on the wrong continent.

## **Cultivator Applicant Maps**

Applicants for a cultivation license are required to provide to the CCB aerial views/maps of each cultivation area along with additional information listed in the bullet points below. The creation of multiple maps may be necessary if these areas are noncontiguous areas. This requirement applies to all cultivation applicants that want to participate in the CCB program. Each map accompanying the application must be in color using satellite imagery and all information on the map must be legible. Your application will not be considered complete until these maps are uploaded to your applicant portal.

In addition to GPS coordinates, all maps must contain the following information:

A diagram or a site plan of the physical site of operation that is clearly legible and includes:

- North arrow
- Standard scale
- Size of property in acres (for outdoor cultivator) or total square feet (for indoor cultivator)
- Total plant canopy dimensions
- For outdoor cultivators, use of land and structures that share the property.
- For indoor cultivators, a diagram of how non-cultivation parts of the facility will be utilized.

## Low Tech Mapping for Cultivation, Drying and Storage Areas

- Print a color map of your location from any mapping program (EX: Google Maps, ANR Atlas, MapQuest, etc.).
- Print with visible marker/pen your name, business name, the complete address of the parcel pictured in the image.
- Mark the name of most nearly adjacent public right of way, if not present on the image.
- Draw a point, along with GPS coordinates, marking the vehicular access from public right of way to the cultivation area and drying and storage areas.
- If the map illustrates a cultivation area, outline the boundaries of the cultivation area.
- Scan and upload the image with the completed application.

#### **Using Google Maps**

Go to Google Maps, <u>https://www.google.com/maps</u>.

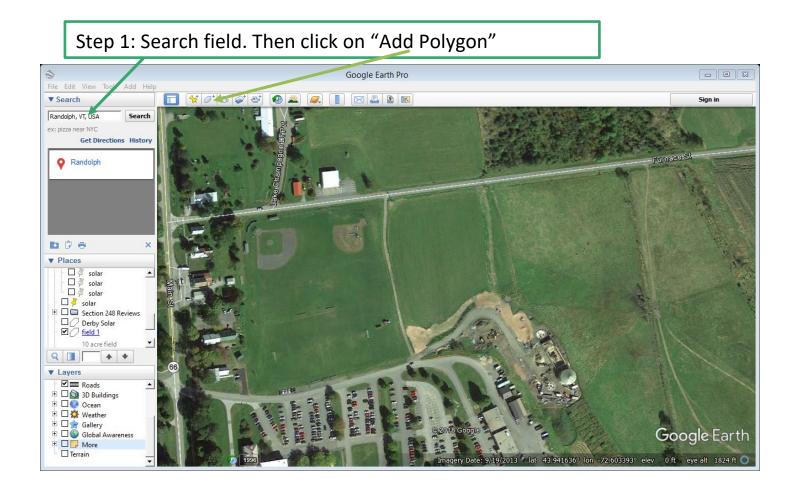
- 1. Choose the satellite image in the bottom left-hand corner of the screen.
- 2. Type in your address to find your cultivation area and driveway.
- 3. Right click on the location of the driveway with your mouse and choose "What's here?"a. The latitude and longitude will appear at the bottom of the page, click on it.
- 4. Right click again within the image and choose "Print", this gives you a print view of the aerial view map. Make sure you have the name of the road that provides access to your property, and the field, storage or drying locations in the image. Adjust as necessary.
- 5. Type in your name, your business's name, the address of the parcel picture in the image at the top of the page.
- 6. Print the image in color and then outline the boundaries of the fields with a pen or marker, or
- 7. Print to .pdf and save to your computer,
  - a. open the file in adobe acrobat
  - b. Under "File" tab choose "Export to" and choose Microsoft Word
  - c. Open file in Microsoft Word
  - d. Under the "Insert" tab click on "Shapes" and draw the boundaries of the field
  - e. Additional labels can be added as necessary with Text Boxes
  - f. Save the file
  - g. Print the file in color

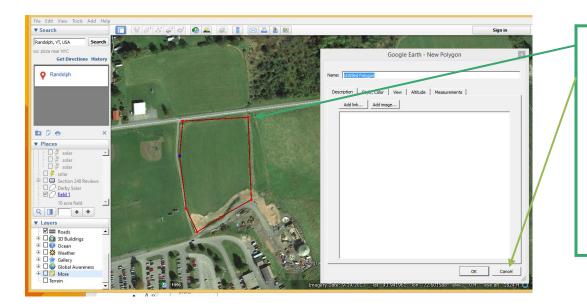
# **Using Google Earth Pro**

Google Earth Pro can be downloaded for free at <u>https://www.google.com/earth/download/gep/agree.html</u>. Be sure to set the appropriate GPS coordinate format, under **Tools**, **Options**, **3D View**, **Show Lat/Long**, **Decimal Degrees** 

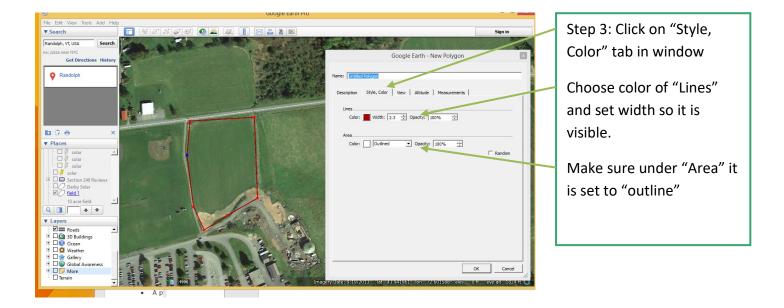
#### It is also possible to find under Preferences,3D View, Show Lat/Long, Decimal Degrees

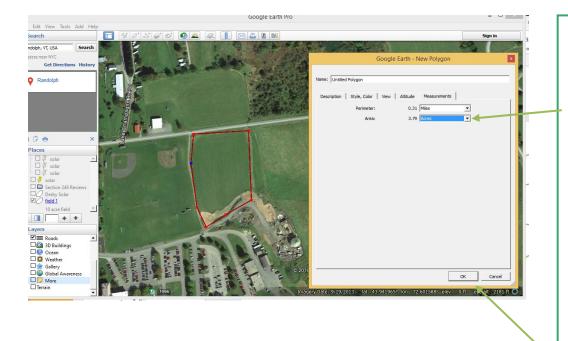
Search the locations of cultivation areas, or drying/storage areas by entering the address of the property in the Search Field in the left hand navigation column and click "search".





Step 2: Using mouse, set the boundaries of your field. If you make a mistake, click "cancel" at the bottom of the open window and begin again.

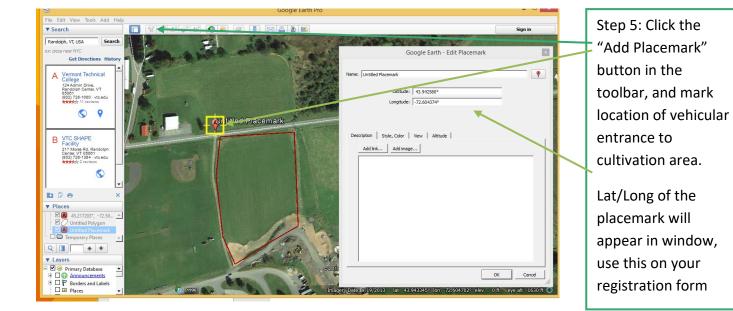




Step 4: Click on "Measurements" tab in window.

Use drop-down to get acres in boundaries of mapped field location. You may use this information on your application form. With multiple noncontiguous cultivation areas, you will need tally all acreages from each map.

Click "OK"

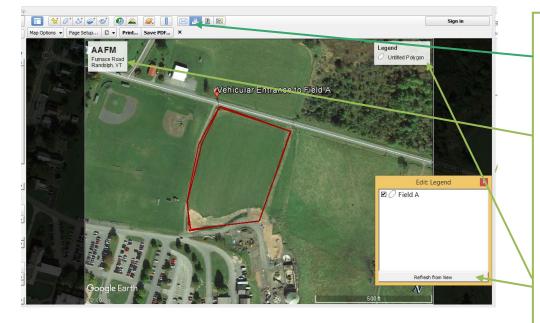


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Step 6: Name the feature

Click "OK" when done editing.

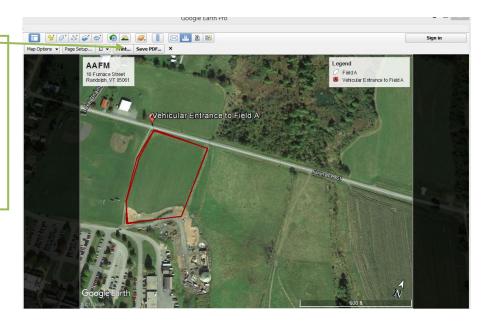
If you need to further edit, hover mouse over placemark and right click. Go to "properties" in drop down provided to get the window back.



Step 7: To begin set up for printing, click the print button in the tool bar.

Edit the title block, by clicking on it adding primary contact name, business name and physical address required information

Edit legend same manner (use refresh if labels do not appear at first) Step 8: Click "Save PDF" to make a PDF copy suitable for loading with your application



#### **Using the ANR Natural Resource Atlas**

http://anrmaps.vermont.gov/websites/anra5/

All applicants are required to list GPS coordinates for vehicular access point to a property where cannabis will be grown or processed, or an area where cannabis will be dried, cured, or stored on the appropriate application form.

- 1. Open "Tools" to get various tools needed to create and print a map.
- 2. Navigate to site location under Quick Tools (Zoom to Town or Find an Address)





- Show all
- 3. Right click on the location of vehicular access to site and "Plot a Coordinate" to get GPS coordinates, transcribe information as necessary to appropriate forms.
- 4. Right click on site and "Draw a point" to mark buildings and indoor cultivation areas where cannabis will be grown, cured, processed, or, stored. Follow instructions below to map the boundaries of fields for outdoor cultivation areas.

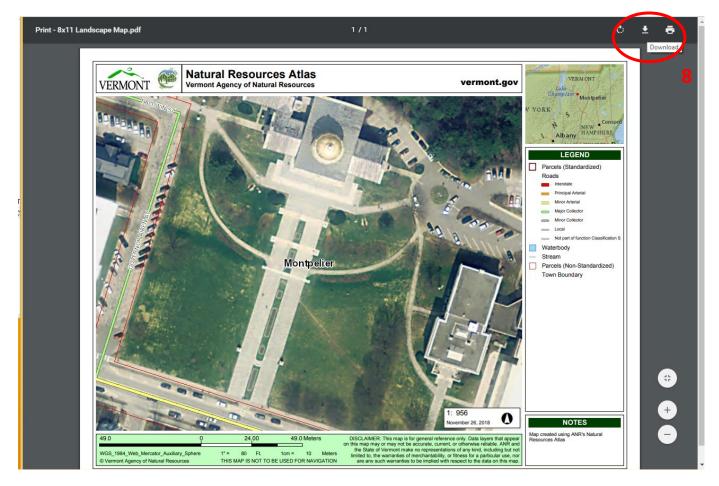
To change style of points left click on the colored point and choose "style", then change color and shape of point in menu of options in left have navigation bar.

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- 5. Click on "Polygon" in the "Draw" tab to draw boundaries of the cultivation areas. If indoors, please use a "point" to mark the building being used. It is not necessary to gather GPS coordinates for each building being used in the operation, however they must be marked with a point.
- 6. Click on "Text" in the "Draw" tab to label fields, buildings, and create a title block with necessary information. (See image below for examples).
- 7. Click on "Print" in the Map Tools tab to open the file and follow instructions until print view appears, below.



#### Example of print view



8. Rename image and download / save to your computer. Upload image to your applicant portal online.

#### **Common issues with print layout**

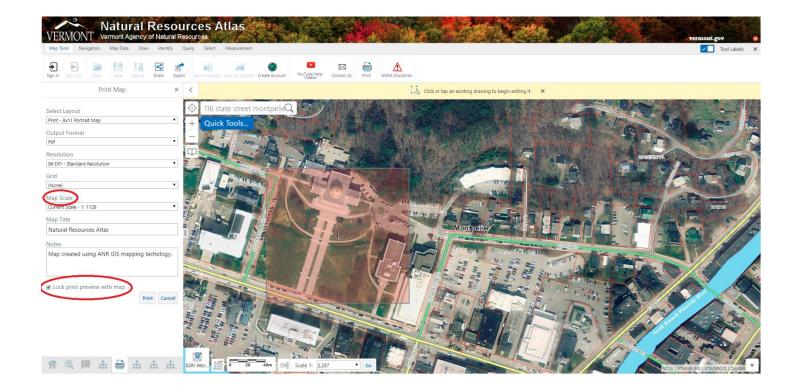
1. Labels or map title appear in black font over a dark background and are hard to read.

To adjust font colors, click "Edit" from the Draw menu. Select the text on the map. Within the Draw menu, click "Style" to adjust font color and size.

2. Labels or Map Title appear cut off or stacked on top of one another in printed map.

After selecting "Print from the Map Tools" menu, you can adjust the print settings in the left pane to see a print preview and adjust the mapped area. Select "Current Scale" from the Map Scale dropdown menu. This causes the printable area to be highlighted in red. You may need to zoom out to see the entire highlighted area. If you notice your title or other important labels falling outside of the printable area, select the text items and move them into the printable area.

To change the size of the printable area (the red highlighted rectangle), try other scale options from the Map Scale dropdown menu (i.e., 1:2,500 or 1:5,000). To move the printable area, unselect the "Lock print preview with map" checkbox and click the map to drag the proper fields/facilities into the printable area.



3. Vehicle entries marked with GPS coordinates overlap/cover building points, causing the points to not appear on the printed map. This is most likely to happen when farm buildings are located slightly north of vehicle access points.

If GPS coordinate boxes at vehicle entry points cover building points, please minimize the GPS coordinate box, and replace it with a point and a label. To minimize a GPS coordinate box:

First, be sure to write down the GPS coordinates for the vehicle entry. You can minimize the GPS callouts and replace it with a label including the same information, which can more easily fit without blocking other features. Find the icon in the bottom left-hand corner to activate the Plot Coordinates pane. From there, you can click on a set of coordinates to see them highlighted on the map, then still within the Plot Coordinates pane, click the elipses to the right of the coordinates to see the "Hide this coordinate" option.

To replace the coordinate with a point and a label, revisit steps 4 and 7. In the new label, note that this point is a vehicle access and include the GPS coordinates for that location.