# Annex B – How To Create A .KML File

This guide will walk you through the steps to create a .KML file by using Indigenous and Northern Affairs Canada's (INAC) publicly available Aboriginal & Treaty Rights Information System (ATRIS) web-based application or Google Earth's free desktop application. Other geographic software packages like ArcGIS or QGIS may also be used to create the file, although this guide provides instructions for the use of ATRIS and Google Earth. Using a .KML allows a variety of point, polygon, and line data to be represented spatially with detail and consistency.

Using ATRIS

1. Navigate to CIRNAC's publicly available ATRIS web-based application using this link: http://sidait-atris.aadnc-aandc.gc.ca/atris_online/Content/Search.aspx

2. Navigate to the project location in the map viewer, either by clicking, dragging, and scrolling to zoom, or using the various search options available in the 'Search By:' drop down menu.
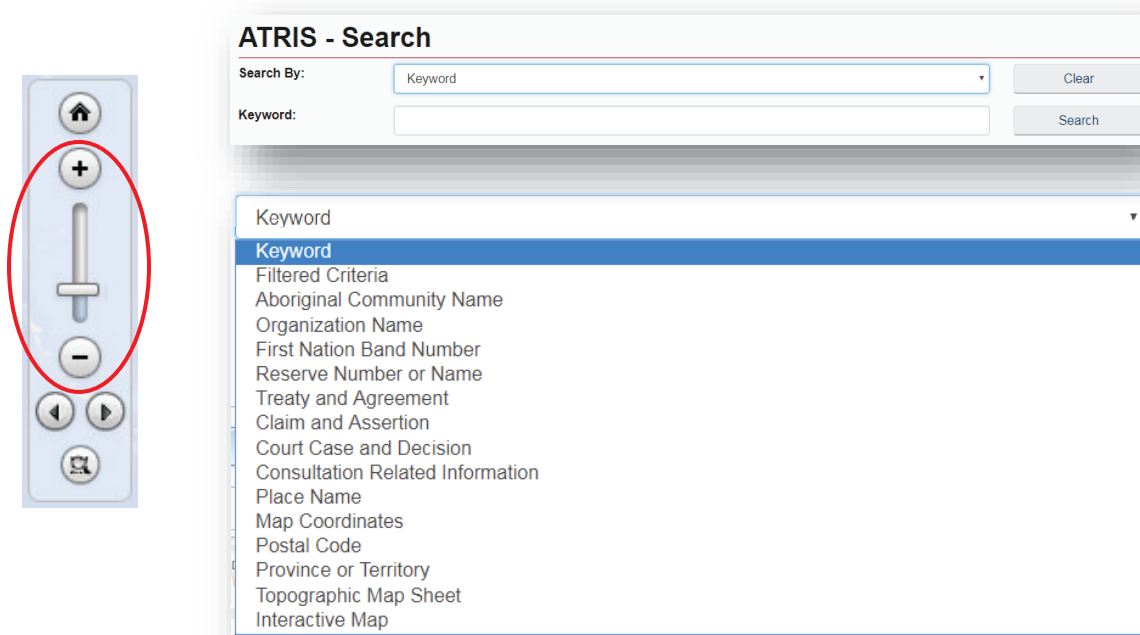
3. Draw your project on the map in the exact location using the "Draw on map" tools located in the top right of the ATRIS interface. You may draw as many components of varying types (point*, line, polygon) as necessary to be saved as one single .KML file.

    ATRIS users will not be able to create a geometry "point" in GIS terms, but the "Circular Search" option allows users to create circular polygons able to mimic points in terms of scale.
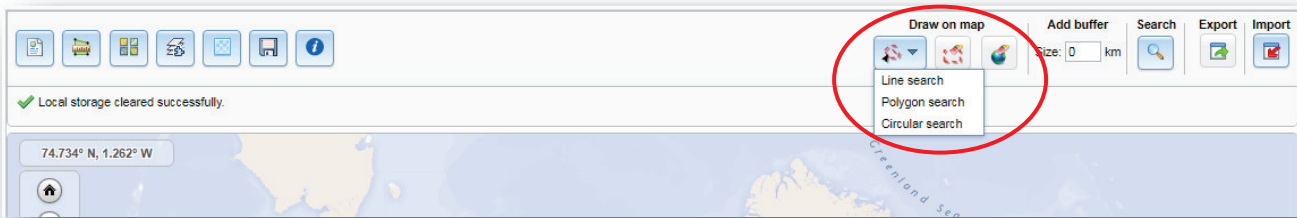
Choose the appropriate drawing tool for the type of component you are drawing:

a. Line search
   – Click as many times as necessary to create a line that represents your linear project feature. Double click to complete.
   – Examples include: roads, sewer lines, railways, pipelines, trails, transmission lines, etc.
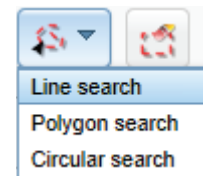
b. Polygon search
   – Click as many times as necessary to create a closed polygon that represents the project feature. Double click to complete.
   – Examples include: building footprints, vegetation cuts, sewer/wastewater lagoons, etc.
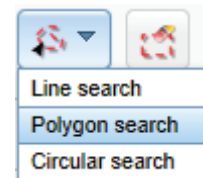
c. Circular search
   – Click on the map to automatically create a circle. To create a smaller circle similar to a point, zoom in as close as possible on the map before clicking. Alternatively, click and drag, then release to draw a circular project feature yourself.
   – Examples include: wells, outfalls, culverts, etc.
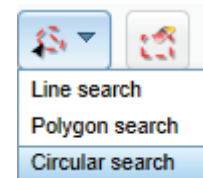
If at any time you wish to erase anything you've drawn, use the following two options:

 Erase by Exent: Click and drag to create a shape around what you want to delete. Anything intersecting the box will be deleted when you release.

 Global Erase: This will erase everything on the map. Click OK when prompted to clear the map viewer and start fresh.

4. Once you are satisfied with the drawn representation of your project, click the 'Export' button.

 The .KML will download as 'SearchAreas.kml' (unless you have specified otherwise) to the location where your browser saves downloads. The file name can be changed to something that reflects the project name before sending it to INFC.

Your file is now ready to be uploaded or sent via email.

Should you need any further assistance with ATRIS, please visit the following link to find more information about ATRIS training webinars:
https://www.aadnc-aandc.gc.ca/eng/1100100014686/1100100014687#sec1_1

Using Google Earth

*If you already have Google Earth installed on your system, skip to step 2.

1. If you don't already have Google Earth (free) installed on your system, follow the download instructions at this link: https://www.google.com/earth/desktop/

2. Navigate to your project location using one or more of the following options:

    a. Typing an address or coordinates in the search bar
    b. Using the navigation tools
   c. Clicking, dragging, and scrolling in the map viewer
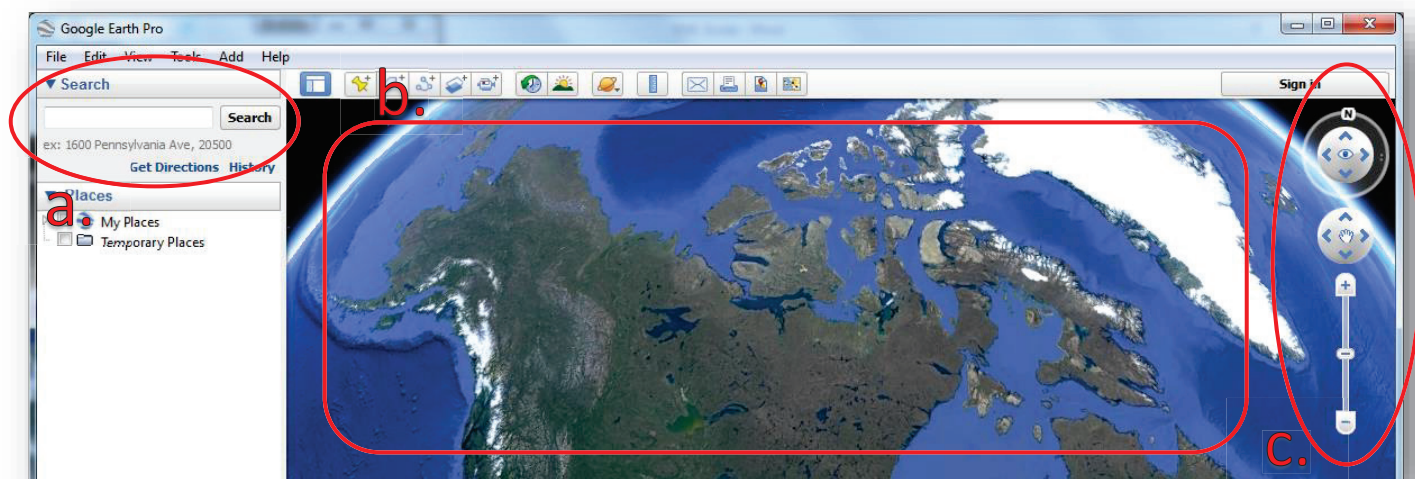
3. Draw your project on the map in the proper location using the placemark, polygon, and path tools (pictured below). You may draw as many components of varying types (point, line, polygon) as necessary.
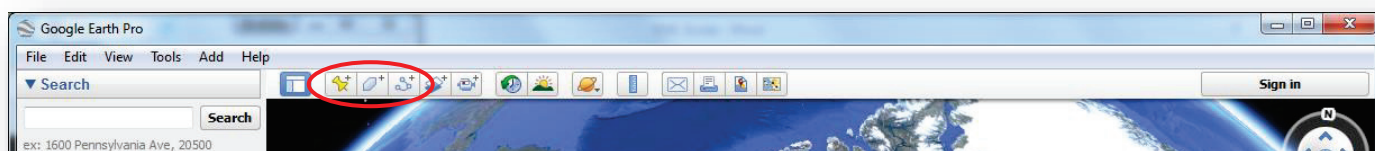
Choose the appropriate drawing tool for the type of component you are drawing:

a. Placemark: point project components
   – Examples include: wells, outfalls, culverts, etc.

Clicking this button will add a placemark to the map and bring up a corresponding dialogue box (see below).
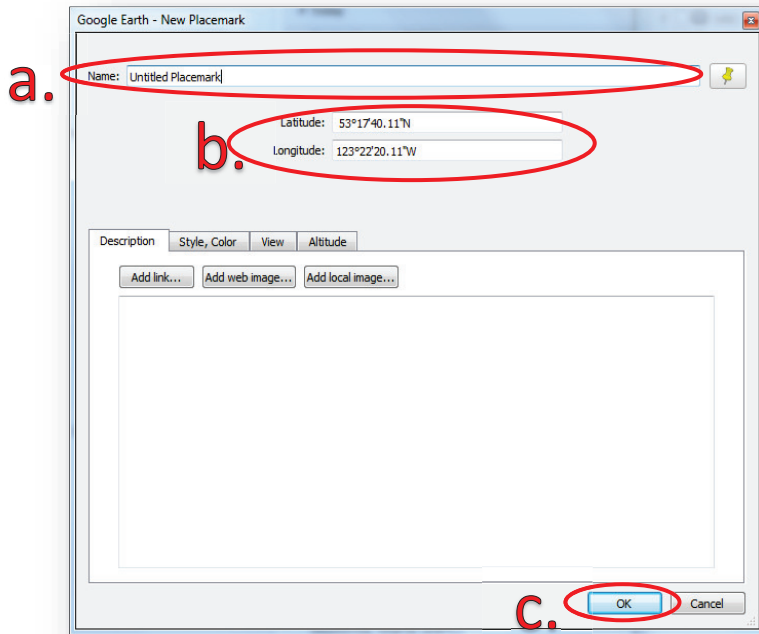
– You can move the placemark by clicking and dragging it to the desired location, or entering the desired latitude and longitude coordinates in the dialogue box (a).

– You can rename the placemark by changing the entry in the 'Name' field of the dialogue box (b).

– Click 'OK' when finished (c).

b. Polygon: project components that consist of an area of any shape
   – Examples include: building footprints, vegetation cuts, sewer/wastewater lagoons, etc.

Clicking this button will bring up a dialogue box and a crosshair cursor (see below). Click as many times as necessary to create a closed polygon that represents your project feature.
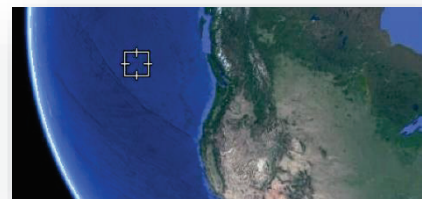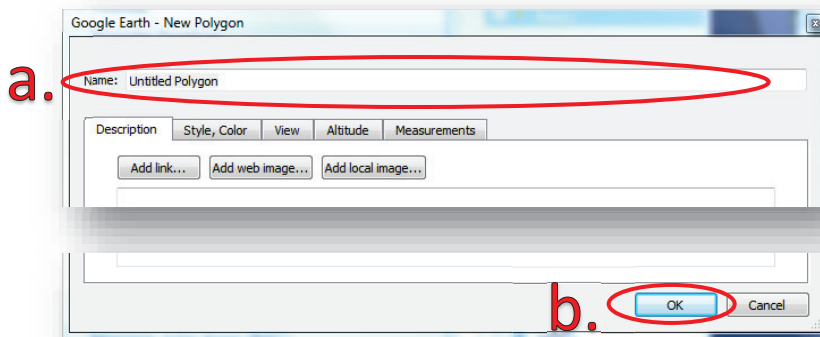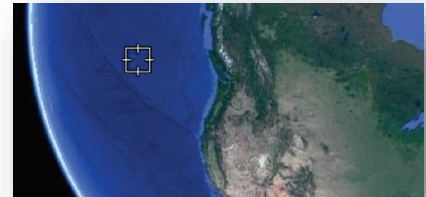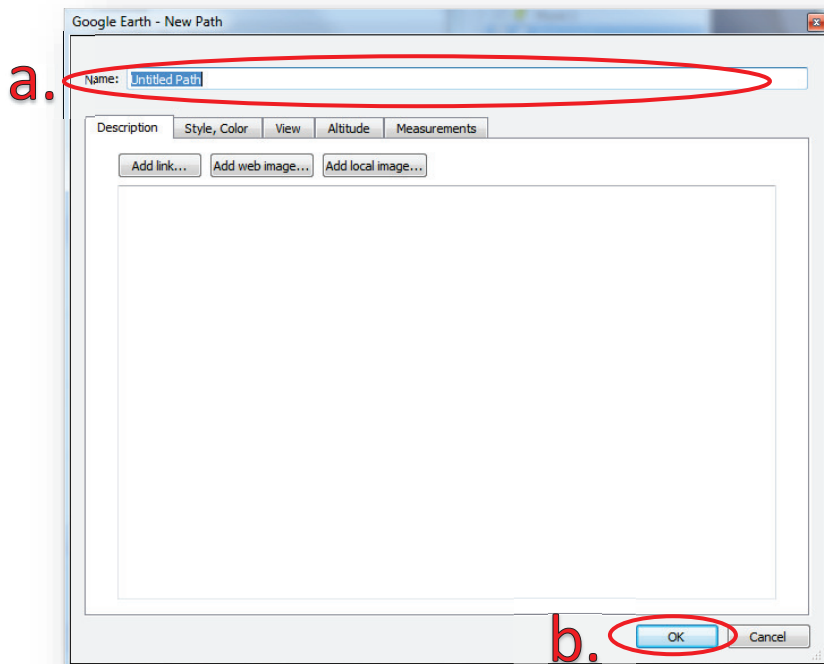

– You can rename the polygon by changing the entry in the 'Name' field of the dialogue box (a).
– Click 'OK' when finished (b).

c. Path: linear project components
   – Examples include: roads, sewer lines, railways, pipelines, trails, transmission lines, etc.

Clicking this button will bring up a dialogue box and a crosshair cursor (see below). Click as many times as necessary to create a line that represents your project feature.

– You can rename the polygon by changing the entry in the 'Name' field of the dialogue box (a).

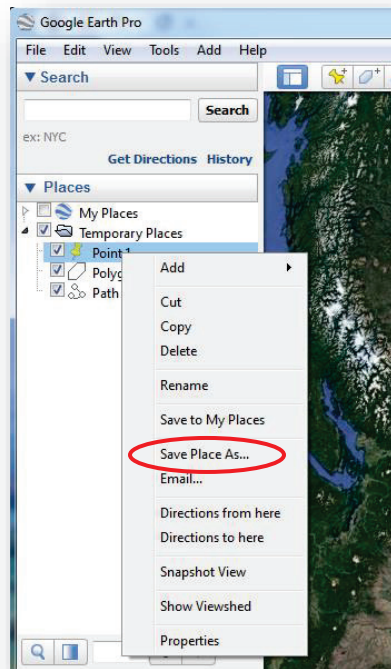– Click 'OK' when finished (b).

All drawn components will appear in the 'Places' sidebar under the 'Temporary Places' folder.
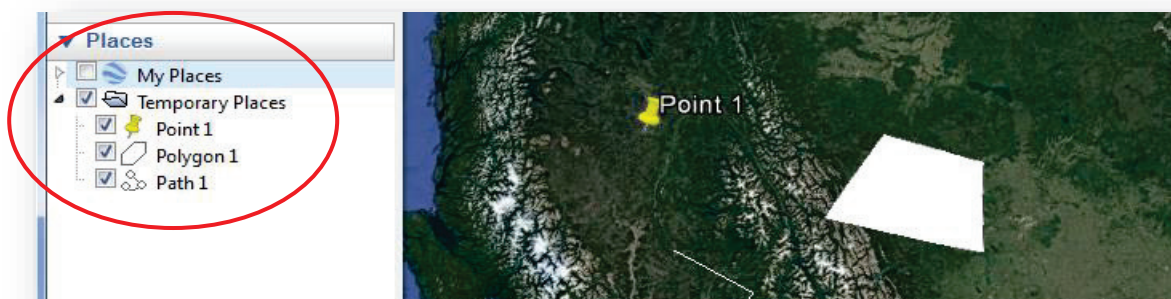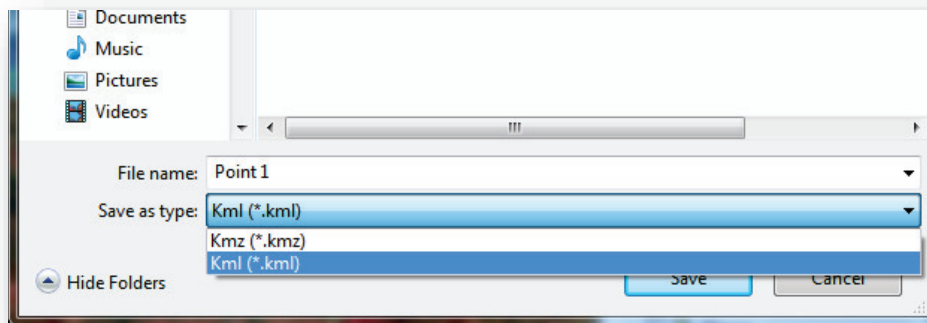

4. Export the shapes to .KML to be shared.

* Warning: If you have multiple shapes, they will need to be exported individually as separate .KML files.
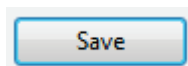
a. Right click on the component in the 'Places' sidebar and click 'Save Place As…'.

b. Change the file type from .KMZ to .KML using the 'Save as type:' drop down menu.

c. Choose the location where you would like to save the file in the file browser. You will need to locate it later on to send it to INFC.

  Click 'Save' when you are finished. You are now ready to upload or email the file to INFC.

*Repeat Step 4 for as many project components as you have created if you have more than one.