

# BROCK UNIVERSITY MAP LIBRARY

## ERSC/GEOG 2P11

### Map Reading HELP notes

#### Air photos

Consulting older air photos to determine changes in land use over time is critical to this assignment.

- use the flight line indexes to find the air photos that cover your area over a reasonable time period (1970's; 1954/55; 1934 are recommended).

**NOTE: the 1934 air photos are available online from the Map Library website.**

- look for changes over the years by comparing the photos.
- viewing through a stereoscope in 3-D may assist in your interpretation.
- if you are unsure of what a feature represents, compare it to a topographic map.
- notice the referencing format on the outside of each folder.

#### Soil Maps (series of 7 maps)

- these maps will provide information about the soil's parent materials, drainage patterns, the slope characteristics of the terrain.
  - don't be intimidated by the codes! All symbols are described in detail in the legend.
  - Example of code interpretation:
    - **HIM1**  
**c = B**
      - the numerator HIM1 represents the name and composition of the soil, and how well it drains. According to the legend, HIM is Haldimand soil; the "1" means mainly lacustrine heavy clay with imperfect drainage. (If the number is other than 1, it is comprised of a combination of 2 soil units.)
      - the denominator c=B indicates the proportion of the slope types where:  
c indicates an irregular very gently sloping at 2-5%;  
B indicates a smooth basin to level terrain;  
= means that the percentage of the c and B slope is equal 50:50 (> means 70:30; < means 30:70)
- THEREFORE, this soil code indicates a soil type of Haldimand mainly lacustrine heavy clay with imperfect drainage; half of this is irregular very gently sloping and the other half is smooth basin to level terrain. In summary, the area is clay, and flat.
- more information on the soil characteristics can be found in the accompanying (red) soil books in the 2P11 Reserve box.
  - For example, Volume1 indicates that the Haldimand soil type is unsuitable for growing most horticultural crops.

#### Agricultural Land Use (series of 7 maps)

- provides crop activity for your piece of land
- compare it to a soil or geology map – some soil materials are better suited for certain activities
- note: if there is more than one category combined (i.e. orchard and vineyard) the first one listed is dominant.

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Watershed

- the watershed map shows the names and boundaries of the subwatersheds within Niagara
- notice there is no grid on this map to determine your location
- watersheds indicate the direction of waterflow which is especially important for underground flow
- determine the watershed and the direction of waterflow for your property

Geology (quaternary)

- provides surface geology features, such as moraines, eskers, lake bottom sediments, etc.
- read the explanatory text in the margins for more detail
- examine the map carefully – codes and symbols are explained in the legend
- compare this to other maps/air photos to determine if any patterns emerge

Subject guides

- use the 2P11 resources guide and the municipalities guide for direction to other sources
- all maps are searchable from the Library catalogue and filed in call number sequence.

**REFERENCING**

**You must** reference all sources properly. Refer to the 2P11 display or the Map Library website for both paper and digital citation formats.

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