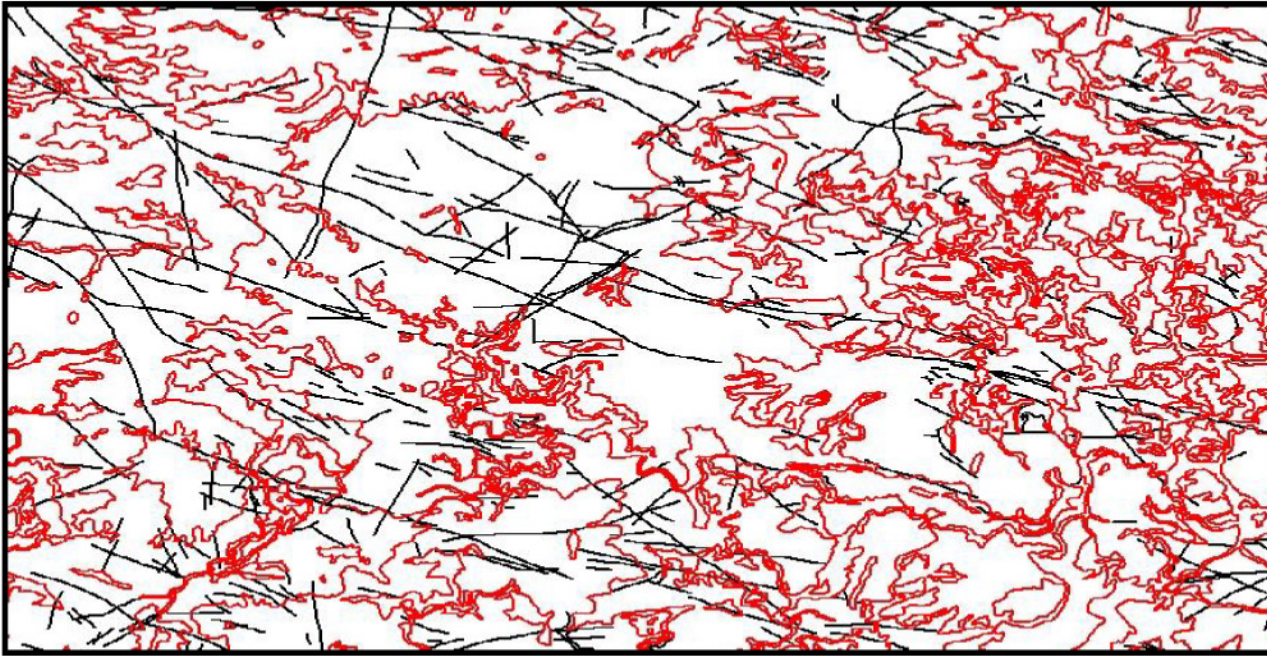


## Creation of Geological / Geomorphological Geo-database



### Client:

Earth Engineering Consultants, CANADA

### Inputs Used:

#### Raster Data:

Scanned Maps – 25 Maps of  
Scale Ranging from 1:25,000 and 1:50,000

#### Vector Data:

Topographic features in vector as reference for  
Image geo-rectification

### Software Used:

The following software were used-

- i) AutoCAD Map
- ii) Arc GIS 8.2

### Business Need:

The client wanted to have the Geological and geo-morphological information in a sophisticated Geo-database format to enable easy and accurate overlay analysis with the relevant information from other sources.

To meet this requirement LETS undertake creation of Geological and Geomorphologic Geo-database for the area of Interest. The input source was Geology, Geomorphology and structural maps of 1:50,000 and 1:25000 scale.

### Business Solution:

Scanned Geology and Geomorphology maps were geo-referenced with reference to the Topographic features in vector format predominantly Roads and Water bodies. The geological / Geomorphologic units were captured from the geo-rectified raster maps.

Structural units including linear elements like Fault planes, unconformities, Bedding planes etc, and point features like scattered mineral/ore deposits, dip and strike details etc.

LETS created a unique library for the symbols for points lines and polygons in order to maintain the similar appearance of the features in output dataset as it was shown in input Raster maps. This adds more value to the final data set as most of the Geo-Engineering analysts are accustomed with this symbology.

The result is the accurate geo-database representing all geological, geomorphological and structural information which resembles the hard copy maps.

### Project Shipment:

- ✓ Geo-referenced Raster image in tiff format
- ✓ Geo-database of Geological, Geomorphological and structural features of AOI.