

### Drainage

The map showing drainage and flood plain indicates that nearly all of the Town of Herkimer is drained by West Canada Creek except for a small portion drained by Bellinger Creek at the southwest and another portion drained by Beaver Creek in the southeast, including some of East Herkimer. It should be noted that most of the minor drainage ways flow in an east-west direction with only the West Canada Creek flowing in the north-south direction. The map of the drainage system also indicates where particular attention must be given to the natural drainage ways in the design of new subdivisions. If these drainage ways are kept free and clear, storm sewers and other expensive drainage structures, except for occasional culverts and small bridges, could be eliminated.

Attention should also be given to the areas that are indicated as flood plain. It is not suggested that all of this land is flooded each year, or even once in ten years, but in the past this land has been subjected to flooding and, given the proper conditions, could be flooded again. It is, therefore, recommended that regulations be adopted to restrict the use of this land by permitting farming and other open land uses, but prohibiting dwellings or other substantial structures where loss of life and considerable damage may result from flooding. In any event, those people who intend to build houses in these flood plain areas should be alerted to the fact that an element of danger exists with respect to complete flooding, as well as high water table conditions at certain times of the year. It should also be noted that technically much of the Village of Herkimer is located on flood plain, and it is only by substantial flood protection and flood control works that a repetition of past flooding can be eliminated. In view of the considerable land area

available for residential development on the steeper slopes, which could provide some fine homesites, there appears to be little justification for residential development in flood plain areas.

### Geology

The entire Herkimer County region was once covered by a large plain based upon sedimentary rocks, strongly suggestive of ocean or lake bed. Erosion has seriously dissected this plain until there is little evidence remaining of this plain. The area is now characterized by many steep gullies and drainage ways with a good deal of steeply sloping land. All of the area was also subjected to glacial action and nearly all soils are based upon glacial till, together with fragments of the underlying shale. Other soils have been formed by deposition, the most sizable and notable being the alluvial deposit at the junction of the West Canada Creek and the Mohawk River.

From the regional aspect, it is interesting to note that most of the major surface drainage, except the Mohawk River, runs in a north-south direction while the principal topographic features run in the east-west direction. The smaller streams apparently have had little effect upon the over-all topographic pattern. The opposite is the case in the immediate area of the Town, however. Here the topographic features have been caused by the excavation of the original plain to its present form with slopes to the West Canada Creek the most apparent along with the general slope to the Mohawk River. There are also many sand and gravel deposits throughout the Town but especially in the eastern portion. There are no known mineral deposits of importance.



### Climate

The climate of the Herkimer area is temperate, without great extremes of heat and cold, but with considerable variation of temperature and precipitation throughout the year. The mean temperature ranges from 20 degrees in the winter months to about 66 degrees in the summer months. The growing season is approximately four months long. Precipitation ranges from about 2.5 inches per month in the winter to over 4 inches per month in the summer, with a mean total of about 38 inches per year. Winters are generally rather long and severe though snowfall is relatively light, averaging about 70 inches per year.