GLANFORD TOWNSHIP

A STUDY OF A RURAL - URBAN FRINGE TOWNSHIP

Ву

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Introduction

The following is a study of Glanford Township, explaining the conditions of a rural municipality on the fringes of a larger urban municipality. The emphasis is placed on land utilization including agricultural and non-agricultural land use. Land utilization depends on certain physical and social factors such as geology, site, soils, climate, history, changing technology and the human element. No single factor can explain fully the pattern of land utilization as all combine to determine what the resources of the land will yield. A changing technology and increased urbanization will have their effect in rural land utilization. Thus the combination of the natural and social sciences will be responsible for various changes in land use.

The study is divided into six chapters. The first chapter is a general introduction dealing with location and size of Glanford. The second chapter is devoted to the Physical Geography of the area. A brief history of Glanford including settlement and agriculture from the beginning to the present is written in chapter three. The fourth chapter discussed the various agricultural land uses of Glanford, while the fifth chapter deals with non-agricultural land use, including towns, suburban residential, recreation, industrial and idle land. The last chapter contains the summary and conclusions. An appendix discusses the future possibilities of planning in Glanford Township.

Acknowledgments

I should like, at this time, to express my appreciation, for the many helpful suggestions and sound advice, given to me by Professor L.G. Reeds, in the preparation of material of this study, for publication. I am also indebted to Professor H.A. Wood who made many helpful suggestions in the preparation of this work. A word of personal appreciation is due to Mrs. Jessie Reed, Glanford Township Clerk, and W.G. Marritt, Agricultural Representative, who kindly gave me considerable amounts of material. Finally, I wish to express my thanks to all those farmers, who so patiently listened to, and answered my many questions.

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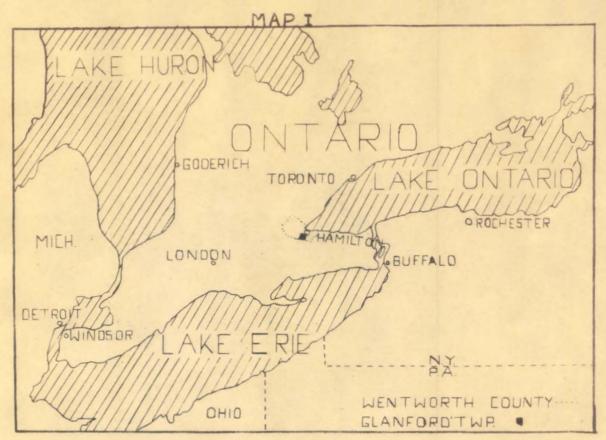
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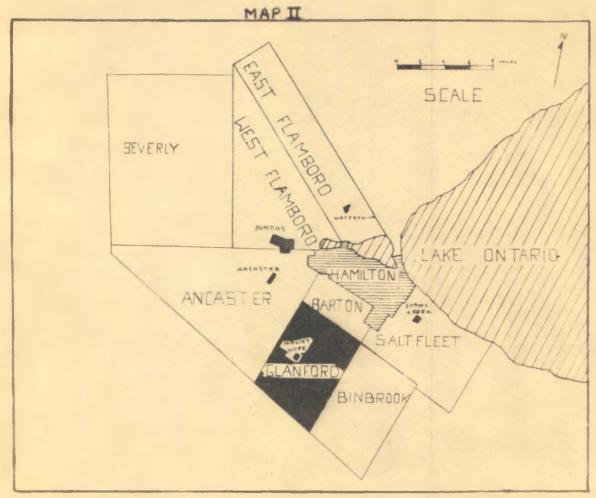
CHAPTER I

POLITICAL LOCATION

The township of Glanford is one of eight townships of Wentworth County, a county which encircles the south-west corner of Lake Ontario. The political location of both the township and the county, in relation to the other parts of Southern Ontario are shown in MAP I. MAP II shows the political divisions of Wentworth County, indicating the location of Glanford with relation to the other townships and urban settlements of the county.

In December 1793 the Township of Glanford was surveyed. southern boundary was taken to coincide with the northern limits of a previously surveyed Indian Reservation. This line, known as the Indian Line ran almost parallel to the Grand River bearing N62° 30'W. The western and eastern boundaries of Glanford bear N18° E, the western boundary being an extension southwards to the Indian Line, of the western edge of Barton Township and the eastern boundary coinciding with the western limits of Binbrook Township. The northern side of Glanford coincides with the southern boundary of Barton Township bearing N72°W. The concessions were laid out parallel to those in Barton, each being 66 chains deep, with a road allowance of one chain between concessions. There are nine concessions but due to the angle of the Indian Line, concessions eight and nine are smaller than the others and of a triangular shape. The concessions are numbered from north to south. Each concession was sub-divided into lots having a frontage of 282 chains and a road allowance of one chain was reserved between each group of five lots. Some of this work was done carelessly and a detailed map will show variations in sizes of lots and concessions. Lots in Glanford contain 188 acres instead of 100 or 200 acres.





the area found commonly in other townships.

Glanford was once larger than its present size, for after the survey was completed a tract of land between Binbrook Township and the Indian Line remained unsurveyed. It was surveyed in 1794 and laid out on the same plan as Glanford remaining part of this township until 1800 when it was annexed by Binbrook. To-day Glanford has a total area of 38 square miles or 23,512 acres. In shape, the township is almost rectangular, the township boundaries being of the following lengths: Southern, $5\frac{3}{4}$ miles, western, 6 miles; northern, $5\frac{1}{2}$ miles and eastern $6\frac{1}{2}$ miles.

Physiographic Setting

Glanford Township lies within the St. Lawrence Lowlands, one of the major physiographic regions of Canada. This region is divided by the Niagara Escarpment into a western section, which is generally more than 600 feet above sea level, and an eastern section, which is somewhat less elevated. Glanford lies within the former subdivision.

Landforms of the area are in a large part, a result of Pleistocene glaciation. Glanford lies on a great clay plain, which stretches from the Niagara River to the eastern limits of Norfolk County. This clay plain is made up of glacial till, with varying depths of lacustrine deposits on the top of the till. Partially buried moraines run parallel to the Escarpment from the Niagara Gorge to Ancaster. Two of these pass through Glanford from west to east. Erosion has worn away a great deal of the lacustrine deposits and in many cases, till outcrops on the steep slopes of the low moraines. To the south of the study area, is a narrow dissected clay plain, beyond which is an extensive drumlin field. On the north side of Glanford, the clay plain is very shallow, and the underlying limestone bedrock appears

in many places. This limestone plain continues to the brow of the Escarpment a few miles north of Glanford Township.

Economic Situation

Glanford Township also lies close to the centre of the region, termed by White and Foscue, the Buffalo-Niagara-Erie-Hamilton-Toronto
Subregion of the American Manufacturing Belt. This great industrialized area, encircles the western end of Lake Ontario, contains major industrial cities, such as Hamilton and Toronto, as well as smaller centres, including St. Catharines, Welland, Niagara Falls, Guelph, Brantford, and Kitchener. All these towns lie within a radius of fifty miles of Glanford. Here then is a large potential market for the agricultural products of rural townships such as Glanford.

Agriculturally, Glanford lies within the region called by O.E. Baker, The Hay and Dairy Belt of North America.² The cool moist climate, the productive soils, and the large urban markets of this region, provide ideal conditions for the development of a dairy industry. In its regional setting, therefore, Glanford is fortunate, possessing many of the prerequisites for rural prosperity.

White and Foscue, Regional Geography of Anglo-America (New York, 1949).

²O.E. Baker, Agricultural Regions of North America (January 1929).

CHAPTER II

THEY PHYSICAL GEOGRAPHY OF GLANFORD TOWNSHIP

Geology

Southern Ontario, including Glanford Township, is underlain by sedimentary rocks. These rocks were formed as a result of deposition in warm shallow seas, during the Paleozoic Era. As movements of the earth's crust caused the seas to fluctuate in depth, there was also a variation in the texture of the sediments deposited. Under heat and pressure, the beds were convected into solic strata of limestone, shale, and sandstones.

Movements of the earth's crust, resulted in the formations, which make up the Niagara Peninsula, being tilted to the south. Eventually the epicontinental seas drained off as these crustal movements continued to raise the entire area. The Niagara Cuesta was formed in this stage of uplift. Of the Paleozoic rocks, only those of Ordovician and Silurian age are present beneath the area under investigation. The former are deeply buried, and need not be considered in this study.

Immediately above the Ordovician formations, lie the Silurian systems. The Lower Silurians consist of sandstones and shales; the Middle Silurian is composed of dolomite; and the Upper Silurian consists of shales and dolomites. Only the Lower and Middle Silurian formations are found beneath Glanford's surface. The Upper Silurian, however, extends southwards from the southern boundary of Glanford.

The earliest formation of the Silurian, is the Medina, which has a total thickness of about 85 feet, and is made up of white, grey, and red sandstone, red, green and grey shale, and argillaceous limestone. The Clinton,



Photo I. Bedrock outcropping along the streams in the extreme north-east corner of Glanford.



Photo 2. Silurian rocks outcropping on the edge of a shallow east-west escarpment south of Hannon.

which overlies the Medina, is made up of light grey dolomitic limestone, with some grey shale. This formation is approximately 30 feet thick, but thins out to the west of Glanford. Immediately above is found the Rochester formation, consisting of dark grey shales. The thickness of this bed is shown by well samples, in Glanford Township, to be about 20 feet.

The succeeding member of the Silurian system is the Lockport formation, which is essentially, a thick series of magnesium limestone or dolomite, commonly light grey to bluish, fine to coarsely crystalline, and quite porous in places. This bed outcrops in Barton Township, just to the north of Glanford.

The Guelph formation of the Silurian system overlies the Lockport, and consists of grey, buff and brown dolomite. This constitutes the bedrock of the area considered in this study. The beds are relatively thin in the northern section of Glanford, but thicken to the south. There is an outcrop of Guelph-Lockport formations in the south-east corner of the township, along Highway No. 53. MAP III shows the geologic structure in Wentworth County.

Glacial and Post Glacial History

The pre-glacial surface of the area was fairly uniform, having a slight tilt to the south. The present irregularities of the topography are due to glacial deposition and subsequent erosion.

The last ice stage in Ontario saw the Wisconsin lobe occupying the regions around Lake Ontario. As the glacier retreated, recessional moraines were formed, running parallel to the Niagara Escarpment. As the glacier retreated still further, Glacial Lake Warren was formed. The glacial melt waters covered the till, and stretched from the Niagara Escarpment southwards,

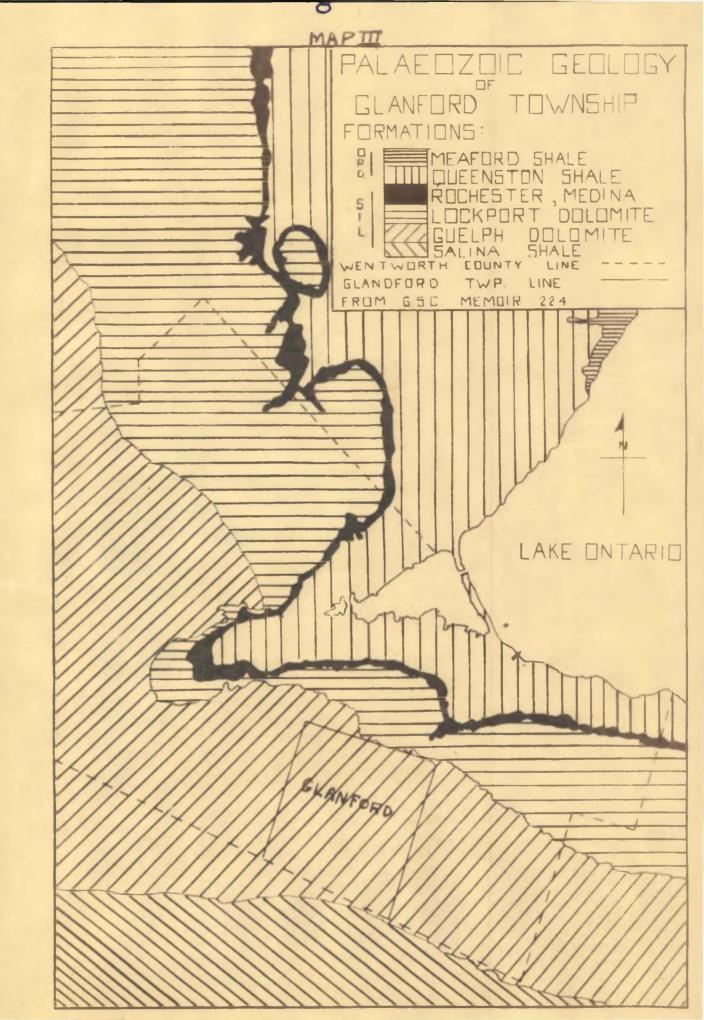




Photo 3. Glacial erratics left by retreating ice.



Photo 4. Bedrock in a ditch just west of Hannon in the Limestone Plain area. Note the shallow overburden.

joining the melt waters of the Erie Basin. The melt waters of Lake Warren laid down shallow beds of fine silt and clay over the drift. These landforms were subsequently dissected by running water.

Information collected from boring statistics of natural gas wells in Glanford, shows the depths of till over the area. Depth runs from a few inches in the extreme north-east corner, to 60 feet in Con. 9, Lot 16, in the south-east corner. In Con. 6, Lot 12, the till is 128 feet thick. Near Mount Hope the depth of till is over 100 feet.

Mineral Resources

The only mineral resource of Glanford Township which is of commercial importance at the present time, is natural gas. This is found in structural enclosures, in the south-east sections of Glanford. Sandstone is the most common reservoir rock in this area, while overlying shales and dolomite formations prevent escape of the gas. Natural gas in the Niagara Peninsula is found within the Medina and Clinton formations, of Silurian age. Greatest amounts are found associated with the Clinton dolomite, and this is the only producing zone in Glanford Township.

Physiographic Regions

Glanford Township lies in the southern section of Ontario, in the major physiographic region known as the St. Lawrence Lowlands. This region has been subdivided into subregions. According to Chapman and Putnam, Glanford lies within the Haldimand Clay Plain, an extensive area situated between the Niagara Escarpment, and Lake Erie.² Few topographic variations appear within

J.F. Caley, Palaeozoic Geology of the Toronto-Hamilton Area,
Ontario. Department of Mines and Resources, Canada
(Ottawa, 1940).

Putnam and Chapman, The Physiography of Southwestern Ontario. (Toronto, 1951).

this level plain. Nevertheless, within Glanford, three subregions may be recognized.

The Hannon Limestone Flain

This region occupies the extreme north-east corner of the township. It is fairly level, although the southern section rises slightly forming a small escarpment, which runs generally from south-east to north-west. Nowhere is relief more than 40 feet, the general elevation being between 650 feet, and 675 feet, above sea level. The entire section is underlain by sedimentary limestone bed rock, which has a very shallow layer of overburden upon it. Water lies in large pools on the surface after a heavy rainfall, as the bed rock impedes drainage. A small tributary stream of the Red Hill Creek drains a portion of this area, and has managed to cut its bed a few feet down into the limestone. The soil over all of this area is the heavy Napanee Clay Loam, with strips of bottomland along the stream courses.

The Mount Hope-Elfrida Moraines

This region constitutes the central and northern sections of the township. Two low, broad, recessional moraines, varying in height from 60 to 75 feet, cross the township in a north-west to south-east direction. According to Futnam and Chapman, these two moraines are part of the Niagara Falls and Fort Erie Moraines. 1 The Elfrida Moraine, enters Glanford at its north-east corner, and after passing through the northern section leaves the township in the north-west corner. The Mount Hope Moraine, runs from east to west through the central part of the township. The moraine slopes have been dissected by a number of small streams, this dissection being most

D.F. Putnam, and L.J. Chapman, The Physiography of Southwestern Ontario (Toronto: University of Toronto Press, 1951).



Photo 5. The slightly undulating topography characteristic of the Elfrida and Mount Hope moraines.



Photo 6. This photograph shows dissection on the Dissected Clay Plain.

severe in the eastern part of the township. Between the two moraines, the Twenty Mile Creek and its main tributary the Three Mile Creek, plus numerous other tributaries, flow from west to east across the township. These streams drain the entire moraine section of Glanford Township.

Internal drainage is imperfect throughout the area. External drainage is imperfect on the lower slopes and level upper sections of the moraines, but is rather good on the steeper slopes.

Lacustrine deposits which were laid down over the till, have been eroded from the steeper slopes of the moraines. There are several types of clays throughout the area. In the western sections there are deposits of Napanee Loam, which has a lighter texture than the other clays of the area. On either side of the Twenty Mile Creek, and its tributaries, are large areas of Napanee Silt Loam which have developed on the lacustrine deposits. This soil is fertile, being of a lighter texture than the other soil types of the township. In the north-east sections and the southern edges of Glanford, Napanee Clay Loam is predominant. This heavy textured clay loam, was developed on the lacustrine deposits. Internal drainage is poor, and external drainage is good only on the slopes.

The Tyneside Dissected Clay Plain.

This region covers the entire southern section of the township.

The clay plain was dissected by the Welland River, and its tributaries, which originate to the west of Glanford's western boundary. As the river is fairly small in the south-western parts of the township, there is no dissection of the clay plain. However, the central southern portion and the south-eastern parts of the township, have been greatly dissected. Relief in the area



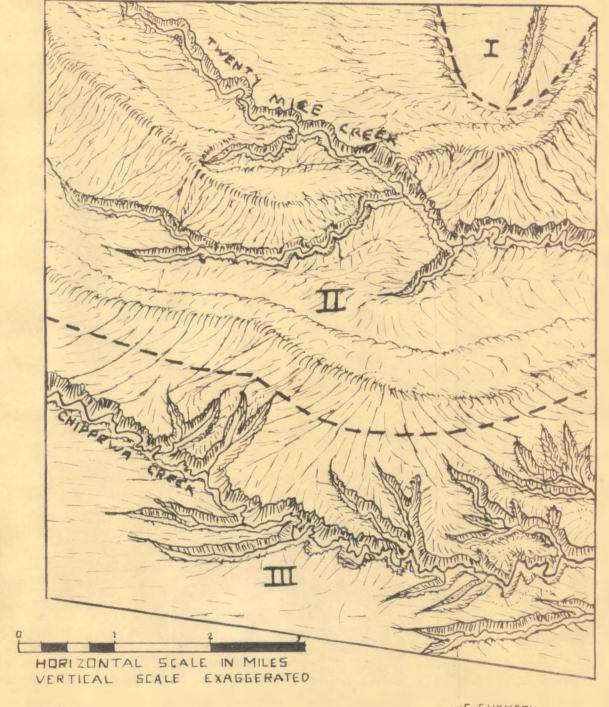
Photo 7. From the present bank of the Chippewa Creek, the once steep, high, bank of the creek, can be seen in the background. This is on the Dissected Clay Plain of Southern Glanford.



Photo 8. The south-west section of the Dissected Clay Plain of Southern Glanford where dissection has not started.

MAP IV

PHYSIOGRAPHIC REGIONS GLANFORD TOWNSHIP





LIMES FONE PLAIN -----I
MORAINES -----II
DISSECTED TILL PLAIN-III

averages from 20 to 30 feet, with the entire area being about 700 feet above sea level.

Napanee Clay Loam is the major soil type, and drainage varies from imperfect to fairly good throughout the area.

Soils

Glanford Township lies within the grey-brown podzolic soil zone of North America. The soils are relatively young as they are developed on glacial material. They have developed under a deciduous forest vegetation in a humid climatic region and thus belong to the grey-brown podzolic group. The texture of the soil in this region ranges from loams to clay loams.

The dominant soil type is the Napanee Clay Loam, found over the entire southern half of the township and in the north-east corner. It is a grey to light brown clay, strongly acid and low in organic content.

This heavy textured soil is imperfectly drained, internally and externally over the entire area. However, where the land is rolling, external drainage is fairly good. The impervious nature of the subsoil hampers internal drainage, but artificial drainage would improve the productivity of this soil.

The Napanee Loam, the second type, occupies the north-west section of the township, where the topography is only slightly rolling. This soil is a greyish brown in colour, stone free, strongly acid and low in organic content. As it also overlies an impervious clay, internal drainage is

¹Soils and Men, (1938 Yearbook of Agriculture), pp. 1019-1161.



Photo 9. A soil profile in the Napanee Clay Loam.

AI - A dark brown humus layer - 6" thick.

A2 - Lighter in colour, yellowish, slightly leached layer - 14" thick.

B - Well developed compacted, heavy textured layer, dark brown to reddish in colour.

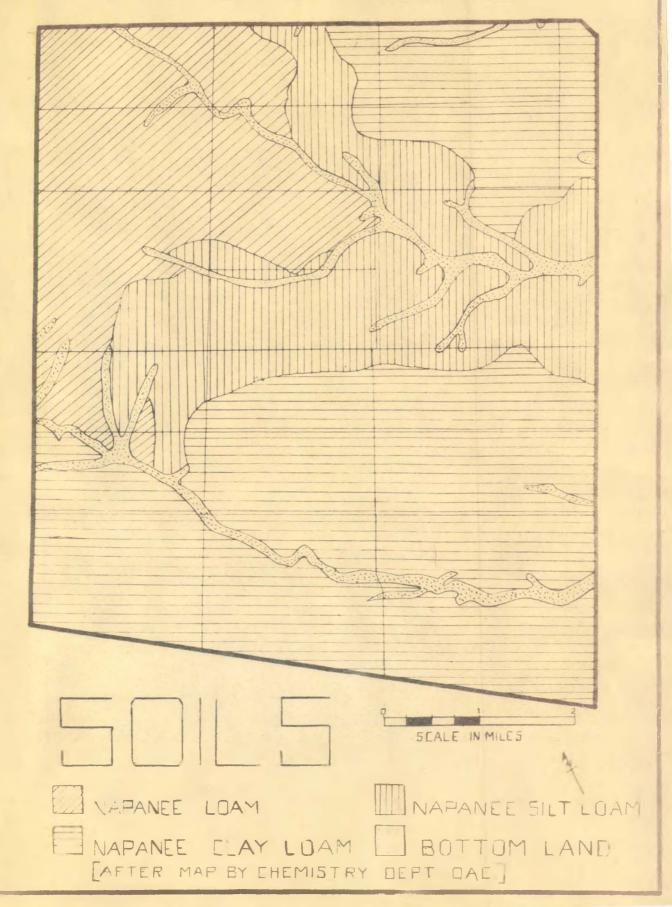
very poor, while artificial ditches are needed to carry away the excess surface water. Where land slopes quite steeply surface drainage is fairly good.

The third type is the Napanee Silt Loam, which is found in a band, from Ryckman's Corners, skirting both sides of the Twenty Mile Creek, right to the eastern boundary of the township. The soil is greyish brown silty loam, fairly acidic, and overlying a reddish impervious clay. Where the land is sloping drainage is fairly good, but internal drainage is imperfect.

The foregoing types are all in the heavy texture class, stone free and formed mainly on lacustrine materials which in turn overlie the glacial till. Some small stones are found in the B horizons of Clay Loams. Imperfect drainage is common to all three types and can be remedied by surface ditches or underground tilling. With improved drainage and the use of organic fertilizers, lime and phosphates, the fertility of the soil can be raised and better crops can be grown. Conservation techniques such as contour ploughing should be practiced on the rolling land. Artificial ditches should be kept in sod, to cut down erosion in the spring rainy season. Cover crops should be left on sloping land as run-off carries the soil with it. However erosion is not a serious problem in Glanford Township.

If cattle disturb excess water lying on the imperfectly drained soils, in any way, the land will form a cement-like crust, as it gradually dries out. When more moisture falls, internal drainage ceases entirely, for percolation cannot take place through this cement-like surface crust.

GLANFORD TOWNSHIP



Artificial surface drainage would do away with this problem, and free the soil for better cultivation.

The remaining type, is the Bottomland, found along stream courses. It is subject to occasional flooding in spring but is dry in summer. Drainage is restricted, but during the drier seasons, it is used as natural pasture. During the wet season percolation is impossible and soil profiles do not develop. These are a glei type of soil, in which decomposition of organic matter is very slow and aeration is impeded.

Climate

Glanford Township lies within the cyclonic belt of North

America and thus possesses a very changeable climate. The area is

traversed approximately once every three days by atmospheric depressions.

These low pressure areas stimulate the influx of such diverse air masses

as: Polar Pacific air; Polar Continental air and Tropical Maritime air.

The whole of Southern Ontario is classified by Koppen as an area with a humid continental climate with cool summers. Thornthwaite classifies this same area as one of humid microthermal climate, with rainfall abundant in all seasons. However, the study area does not conform in all respects with these descriptions. Temperatures in this particlar area are somewhat modified due to proximity of Lake Ontario and Lake Erie. The isotherm indicating a mean annual temperature of 47°F, runs through Glanford. Winter temperatures range from 26°F to 21°F and summer temperatures are between 66°F and 70°F.

Rainfall is uniform over the township conforming to the classifications listed above. The annual precipitation is approximately 32 inches. Average summer rainfall is 8 inches while the period from April to September has 17 inches.

There follows a summary of climatic conditions in Glanford taken from "The Climate of Southern Ontario" by Putnam and Chapman.

Mean annual temperature	400	460
Mean winter temperature	75 2.01	230
Mean summer temperature	-	68°
Mean autumn temperature	-	50°
Mean spring temperature	-	430
Extreme Low temperature		21° to 35°
Extreme High temperature	-	1060
Average Daily Range		190
Date of last spring frost	-	May 8
Date of first fall frost	-	Oct.8
Length of growing season	-	206 days
Length of frost free period	-	154 days
Average annual precipitation	-	32 inches
Average annual snowfall	-	58 inches
Average rainfall from April to September	-	17 inches
Average summer rain (June, July, August)		8.5 inches
Frequency of droughts over 50 year period	-	20 times
Possible sunshine in growing season	-	54%
TABLE I		

Natural Vegetation

Glanford Township lies within the zone designated by Halliday, "The Niagara Section of the Deciduous Forest Region". Climate and soil conditions are favourable for the growth of broad-leaved trees. These therefore are predominant.

The original forest cover consisted mainly of beech, basewood, sugar maple, red maple, and red, white and bur oak. Also contained in the forests were white pine, hemlock, yellow birch, larged tooth aspen, silver maple, rock elm, and blue beech. Besides these, many other species find their northern limit in this region. Among the latter are chestnut, tulip, hickory, scarlet and black oak, blue ash and mulberry trees.

Woodlots to-day consist mostly of maples, beeches, elms and a few pine trees. All are of second growth and of little commercial value. When livestock are allowed to graze in a woodlot, all the young trees are killed. There are no replacements for the old trees when they are cut down. In general, when a tree attains a diameter of approximately six to eight inches it is cut down and used for domestic fuel. Very few good woodlots are left and even these which still exist are rarely kept clean. Windfalls and rotten trees are not removed and hinder the growth of young trees. Very few farmers practice re-forestation in their woodlots. A major reason for this neglect of the woodlots is scarcity of labour.

¹W.E.D. Halliday, <u>A Forest Classification for Canada</u>, (Department of Mines and Resources, Canada. Forest Service Bulletin 89. Ottawa 1937).

The small lumbering industries and land-hungry farmers soon cleared away the original forests. The area is now closely settled and trees are found mainly in small woodlots or surrounding cultivated fields. Glanford has only 627 acres left in woodlot.

CHAPTER III

HISTORICAL GEOGRAPHY

Indian Settlement up to the 18th Century

Earliest known inhabitants of southern Ontario were a tribe of Indians known as the Attawanderons or Neutrals. Several early village sites were located along the Twenty Mile and Chippewa Creeks in Glanford. These villages for the most part, were located on the banks of streams, where the inhabitants could make use of the abundant fish and game. The Neutrals also made use of the fertile soils bordering the streams, planting such crops as corn, pumpkins, squash and tobacco. Charred remains of these crops, along with pot sherds, were found in 15th Century middens, excavated by students of the McMaster Geography Department in Binbrook and Glanford, in October 1951.

South of the Neutrals lived the warlike Iroquois, while to the north were the Hurons. There was much conflict between the two groups and eventually the Hurons were annihilated. The Iroquois then turned on the Neutrals, who suffered a similar fate in 1650. Many of the invaders remained in Neutral territory, leaving their artifacts in the upper layers of ancient middens, to reveal these events of prehistory to modern archaeologists.

The first white men to visit the area above the escarpment at the head of Lake Ontario, were French fur traders and priests. They visited the Indian Tribes living along the Grand River, the fur traders purchasing furs, and the priests converting the Indians to Christianity.



Photo 10. Pot sherds. Remains of Indian culture in Glanford.

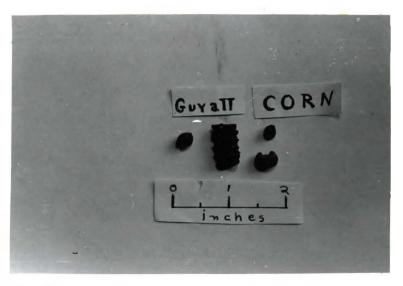


Photo II. Fragments of charred corn cob and kernels unearthed in 15th Century Indian middens in Glanford.

These early white visitors travelled through Glanford via Indian trails, from Burlington Bay to the Grand River area.

Political History of Glanford

Soon after 1780, the British purchased a tract of land along the southwestern edge of Lake Ontario, from the Mississauga Indians, to provide land for new settlers. Present day Glanford lies along the southern edge of this tract.

In 1786, Upper Canada was divided into four districts. The area now occupied by Glanford was included within the district of Nassau. In 1792, there was a change. Upper Canada was redivided into 19 districts and Glanford was in the new district of Gore. In 1850, the district of Gore was subdivided into counties, although Wentworth and Halton Counties were untied until 1855. In that year, the County of Wentworth was also subidivided as at present into eight townships: Ancaster, Barton, Beverly, Binbrook, Glanford, Saltfleet, East Flamboro', and West Flamboro'. Glanford was much larger then, than it is now, but as mentioned before, part of the township was annexed by Binbrook in 1800.

Pioneer Period 1790 - 1850

United Empire Loyalists, escaping from the revolution in the American colonies, were the first settlers to come to Glanford. From 1788 to 1850, almost 1800 settlers made their way into Glanford. The majority were United Empire Loyalists of English, Scottish, and Irish descent, who moved in from New York State via the Niagara Peninsula. Other settlers came directly from Britain. French fur traders and lumber men also came into the township at this date. The new settlers took up

crown grants, averaging 200 acres per settler.

The northwestern section of Glanford was occupied first, because of its nearness to previously settled areas. So many Loyalists of Scottish heritage settled in this part of the township and in the northeastern section of Ancaster, that the area was called the Scotch Block. The Caledonia Road was an early focus of settlement. This was particularly true after 1839 when the road was planked. Previous to this date the road was nearly a mud track. The settlers, at an early date, recognized the importance of communication, and transportation for farm produce, and settled close to this new artery. The planking of the Caledonia Road and the corduroying of Highway No. 53, opened the area to further settlement. As the roads improved, more travel took place, with stage coaches and teamster wagons travelling from Dundas to Lake Erie and Port Dover via Glanford. This trade prompted some settlers to build hotels and blacksmith shops along the new highways. By 1850 Pennsylvania Dutch settlers such as Young, Ryckman and Binkley established the present Ryckman's Corners. A famous hostelry, The Terryberry Inn, was built near North Glanford to accommodate weary travellers on the Caledonia Road. Another hostelry was built further south along the highway at the present site of Mount Hope.

Removal of the forest was a major task for the early pioneer, who was at this time, part time farmer and part time lumberman. The trees were cut and sold to the numerous saw mills situated along the Twenty Mile and Chippewa Creeks. The farmers grew small crops for home use and kept a few livestock. The first major crop was wheat and the fall variety was emphasized. The building of flour mills in nearby settlements

such as Dundas and Hamilton encouraged the growing of this crop. The first large crop was harvested in 1843. After this date, oats and hay also became important cultivated crops. Almost the entire production of oats and hay was used as feed for the increasing horse population of the area. Great quantities were exported to Hamilton and district, to be used as feed for the horses in hostelries and lumber camps.

A great detriment to the spread of settlement to the central and north central sections of Glanford, was the buying up of land by speculators. Records show that speculators held several thousand of acres within the township. The Canada Land Company had 800 acres and King's College, under the Church of England, was endowed with 1,892 acres. The land was to be sold to new settlers and the proceeds used for new buildings for Toronto University.

Period of Expanding Communications - Roads and Railroads - 1850 to 1890

The rapid development of roads and the building of a railroad opened the township to further settlement. Better roads meant quicker transportation of farm goods to growing markets around the Burlington Bay area. Highway No. 6 was improved and planked from Hamilton all the way to Port Dover. Highway No. 53 was a good corduroy road and other township roads were built, connecting the eastern extremities of Glanford with Highway No. 6. The railroad was laid through Glanford in 1860. Then owned by the Hamilton and Lake Erie Railroad Company, it connected Hamilton to Port Dover. It was also connected to east-west lines in the southern parts of the Niagara Peninsula. It was later taken over by the



Fhoto 12. The Glenfield Inn, at Hannon, built in 1874.

It is at present the Hannon General Store.



Photo 13. An old stump fence in Glanford. As the forests were cleared, the farmers used the stumps to divide their fields. Many still remain.

Grand Trunk System. Farmers used both transportation conveniences, the road, and the railroad, to ship produce to Hamilton.

The newer and better means of transportation not only made travelling better, but encouraged settlement along the arteries.

Ryckman's Corners now had, besides its hostelry, a blacksmith shop and other conveniences for travellers. North Glanford had a blacksmith shop and a saw mill. The Terryberry Inn was expanding because of increased business. The hotel at Mount Hope was enlarged, and a blacksmith shop was built. There was only one railroad station in the township and this was known as Glanford Station. It consisted of a station, a railway siding and a few farm houses nearby. Tyneside on the southern boundary of Glanford began at this time, as a small service center for surrounding farms. The Glenfield Inn built in 1874 at Hannon continued to expand as business increased along Highway No. 53.

With improvements in transportation and growing urban populations to the north, there was an increasing demand for farm produce. The year 1881, however, saw the peak of wheat production. Larger prairie farms of Western Canada could cultivate wheat on a larger scale, and sell to eastern markets, far more cheaply than could the smaller farms in Glanford. In 1851 there were 2,195 acres of wheat, yielding 35,178 bushels, and in the peak year of 1881, 3,531 acres were under wheat production. By 1890, acreage was falling, until only 2,749 acres were under cultivation. While farmers were reducing their wheat acreage they were raising their production of oats and hay. The increasing use of horses as delivery, and

transportation means in the city and the country provided the larger markets for oats and hay as food. In 1871 there were 4,122 acres of hav under cultivation, with much being sold to the hostelries of Hamilton. A few acres of barley, rye, and potatoes were also grown. Peas were an important crop, the maximum yield being in 1891, when 23,433 bushels were harvested. Some farmers along the Twenty Mile Creek, took advantage of the more loamy soil to grow apple orchards. As populations increased, some farmers began building up dairy herds. In 1851 there were only 769 milk cows in the township, but by 1890 this number had increased to approximately 1,000. The bulk of dairy produce was used for butter, cheese and cream. In 1851, 48,460 lbs of butter and 6,561 lbs of cheese were produced and sold on the markets. With the increasing number of cattle there was a greater demand for fodder corn, and much land was devoted to this crop. In 1890 there were 4,551 acres of corn in Glanford. Of the total harvested, less than half was used for forage, the remainder being husking corn, for human consumption.

Large flocks of sheep were kept in Glanford in this period. Both wool and meat were sold. In 1891, 6,000 lbs of wool from 1,322 sheep was procured. The wool was sold to textile mills in the immediate vicinity. Along with sheep, hog raising became important. In 1851 there were 1,079 hogs, and this number remained fairly constant right up to 1890. There was a good market for the farmers hogs in Hamilton and Dundas.

Total population in Glanford, registered a slight decrease, during this period. In 1861 there were 2,199 people living in Glanford. This number had decreased in 1871, to 2,039, and in 1881 to 1,977, and this

was further decreased by 1891 to 1,744. The major factor in this decrease, was the exodus of 1,500 Frenchmen. These people were mainly fur traders and lumbermen. With the rapid deforestation of Glanford, many saw mills had to close down. Thus lumbermen had to move on to other locations. As the forests were removed, there was a corresponding decline in the number of fur bearing animals, so the fur trappers also moved to less populated areas. Fortunately as the French element left, more British people were moving in. From 1860 to 1890, over 460 English, 200 Irish, 130 Scottish and 530 Germans settled in Glanford. Many of the British people came from the United States, with still more coming directly from Britain. The Germans came directly from Eruope.

Summarizing this period we see that lumbering was declining and farming was becoming the important economic factor up to 1890. The cultivation of oats and hay was the major farm activity, with wheat still important but declining. Dairying was increasing in importance as the period drew to a close.

The Dawn of a New Century 1890 - 1920

Perhaps the most important factor of this period was the increasing use of mechanization in the city and on the farm. Highway No. 6 was stoned in the early 1900's and not long after was paved from Hamilton to Lake Erie. Highway No. 53 was stoned and was one of the township roads running east and west. Increasing urban population in northern municipalities meant larger markets, and the farmers took advantage of this fact.

With the advent of the motor vehicle, the horse and buggy days were over. The resultant decline in the horse population was intensified

by extinction of lumber camps which were notoriously large usuers of horses. This decline in the numbers of horses had a marked effect on the markets for oats and hay. The result was a sharp decline in the acreage donated to these crops. Nevertheless, towards the close of the period, the demand for oats and hay increased once more and led to augmented production on the farms of Glanford. A possible explanation for this reversal of the earlier trend may be found in the increased use of delivery horses by city dairies and bakeries. With a constantly increasing population in Dundas and Hamilton, dairies and bakeries were increasing in numbers and were extending their delivery routes. With a larger population of horses in the city, more oats and hay was necessary.

Wheat had already began to decline by 1890 and declined still further throughout the remainder of the period. Other crops, such as barley, rye, and potatoes declined also, as the farmers turned more and more to dairying. Barley was being grown on a small scale as a cash crop and as feed for livestock. Some barley was sold to the distilleries in the vicinity. Orchards had increased until in 1911 there were 567 acres of fruit trees, with apples being predominant.

Although still not the most important aspect of farm economy, dairying was becoming more and more important, and by 1920 had reached a position of near dominance in Glanford. The large population centers to the north of Glanford, increased the demand for dairy produce and for fluid milk in particular. The improvement in communications, with the stoning of less important roads and the paving of the highways, meant quicker and easier transportation of the dairy products to market. In

1900, 75% of all milk produced was used for cream and butter, but by 1920, 50% was being consumed as fluid milk. Before 1900, herds were 75% grade cows, but by 1910, 80% of the herds were pure breds. The pure breds were made up of Holsteins, Ayrshires, Jerseys and Guernseys, with 60% of this number being Holsteins. As the farmers turned more to dairying they found that more acreage was needed for pasturage. Hay was still cultivated on a large scale, but most was used on the farm proper. A supply was still grown for sale to the dairies and bakeries of Hamilton. The overall acreage of corn, including both fodder and husking corn was decreased. The decrease was most marked in the case of husking corn, as a result of competition from more favoured areas to the south-west. Fodder corn, however, was increased in acreage, to satisfy the local demand for ensilage. In 1921, 831 acres were grown in Glanford.

Sheep flocks began a decline after 1900 and this continued on until after 1920. Better grades of wool were produced more cheaply in foreign countries with a more suitable environment. Competition with such areas as Australia and New Zealand forced local sheep herders to curtail production. The production of hogs has however remained relatively constant in Glanford throughout this period. Swine herds were fairly large on all the farms, the overall number of animals being approximately 1,300.

Many farmers kept chickens before 1900, but flocks only contained from 20 to 30 chickens. After 1900 the size of flocks increased as farmers found a ready market for the eggs and meat. In 1900 there were 6,000 chickens in Glanford and this number increased throughout the period.

With the improvement of roads, settlements increased. Up to 1920 the horse and buggy was still the major conveyance in rural areas, and inns and hostelries continued to prosper. With the better conveniences along the highways, more settlers were attracted, with business men opening up general stores near hostelries. Three centers shared in this greater prosperity, and became major service centers for their immediate areas. Mount Hope, with a large surrounding farm population, a hostelry, and a blacksmith shop, added a general store. This made it a service center for farmers living within a radius of three to four miles. Hannon, likewise, built a store which along with its inn and hostelry became the focus of farmers living in north-east Glanford, north-west Binbrook and southeastern Barton. Tyneside the last service center which had a blacksmith shop along with its general store, served the southern parts of Glanford Township. The remaining settlements of North Glanford and Ryckman's Corners were still minor service centers, having blacksmith shops and inns. In addition a small saw mill still remained at North Glanford. Glanford Station remained a point for the picking up of farm produce and the dropping off mail and general package freight.

With the removal of the forests, lumbering in Glanford had ceased by 1920. The last of the large saw mills in the township were abandoned, including the famous Maggies Mill celebrated in song and verse. Of this mill, located on the Twenty Mile Creek, only a low earthen dam remains to-day. All but two grist mills were abandoned, and these moved to Hannon and Mount Hope with the coming of electric power.

There was a slight decline in the British population in Glanford, from 1891 to 1920, due to the Boer War and World War I. Many of the English,

Irish and Scotch volunteered their services. The numbers of French and Germans and other Europeans in Glanford remained constant. Table No. II shows the rise and fall of populations in Glanford, and the racial origins of the major groups.

TABLE II

YEAR	ENGLISH	IRISH	SCOTCH	FRENCH	DUTCH	GERMAN	TOTAL
1851	-	-	-	-	-	_	2,002
1861	260	165	106	1518	2	25	2,199
1871	714	322	313	26	4	655	2,199
1881	737	364	241	51	7	569	1,977
1891	-	-	-	-	-		1,744
1901	583	264	211	41	2	462	1,588
1911	555	275	216	8	4	312	1,413
1921	606	293	200	27	190	36	1,409
1931	578	223	216	31	165	94	1,356
1941	779	287	227	19	149	56	1,641
1949	~	-	-	-	-	-	1,820
1950	-	-	-	-	-	-	2,053
1951	-		-	-	-	_	2,440

Summary

During the period there was a continuing shift of agricultural emphasis as the cultivation of grain and hay gave way to dairying. Soil fertility had fallen however, as farmers were only mining the ground, and this brought poorer yields of field crops, especially wheat. With the

development of better roads, settlements grew rather rapidly, at convenient sites around the previously established inns. These settlements were mainly service centers.

The Last Thirty Years 1920 - 1951

During this period there have been two major changes in Glanford Township. In the first place the farms have become for the most part strictly dairy farms, although a few raise beef cattle. Secondly the settlements have changed from service centers into suburban residential districts. At present the serving of rural populations is of minor importance.

The establishment of dairying as the major and almost the sole agricultural activity was due to the increased demand for fluid milk in the growing city of Hamilton, and in other nearby urban areas. In 1941, there were 1,928 milk cows in Glanford. By 1950 this number had increased to approximately 2,200.

As the diary industry and the cattle population increased, other livestock decreased in numbers. With the increasing use of motor transport, the horse population hit a new low. Their numbers decreased from 1,351 in 1890 to 915 in 1941. By 1950 only 300 horses were left in Glanford. More and more farmers adopted mechanized methods of cultivation, and farm horses were replaced by tractors. The number of hogs in the township in 1941 was 1,881. This number remained fairly steady until 1948, but since then the numbers have declined. The increased cost of raising hogs, along with fluctuating prices in the sale of hogs, has discouraged large swine herds. At present, some dairy farmers only raise a few hogs for market, to supplement their annual income.

Wool, as mentioned before had an increasingly difficult time in finding a market, since the importation of cheaper, but better qualities from abroad. In 1941 there were 535 sheep, and this number declined steadily throughout the period. The smaller flocks of sheep have been constantly menaced by sheep killing dogs and this factor may strike the final blow to sheep raising in Glanford.

Flocks of chickens were increasing after 1920 and by 1941 there were 61,986 chickens in Glanford with 1681 other fowl. This was a direct result of increasing demand in urban markets. However, dairy farmers found it difficult to keep large flocks of chicken all year and tend their herds as well. By 1948 large chicken flocks decreased and farmers turned to pullet raising. Fullets are bought in the spring as chicks and sold in the fall as meat. During the summer a quick profit is made in the sale of eggs.

With the increasing importance of dairying, cash grain farming had almost disappeared by 1950. In 1941 only 1,295 acres of wheat were grown and there was a further decrease up to 1950. Oats which had been increasing in acreage since 1918 saw its peak year in 1931, when 4,005 acres were grown. The subsequent decline is directly linked with the decreasing numbers of horses both in the town and on the farms. Hay production had been fairly constant throughout this period, for it is used mainly on the dairy farms. However, there had been a slight decline due to a drop in the requirements of the dairies and bakeries of Hamilton. By 1950 hardly any hay from Glanford was being sold in the city. In 1941 there was 6,000 acres in hay. This amount has remained fairly constant

during the remainder of the period. Barley has been declining steadily in production all through the period. In 1931 only 406 acres were grown. By 1951 farmers had stopped growing rye, except if it was to be used as green fertilizer to return nitrogen to the soil and increase soil fertility. Potatoes continued to decrease in importance, and in 1941 only 55 acres were grown. Orchards met disaster in the early 1920's, for severe frost killed almost every tree. Subsequent diseases which followed, attached the remaining trees and killed many more. In 1941 there were 130 acres in orchards, and most of these were commercially non-productive. Many of the farmers cut the orchards down and cultivated the land. Since 1948 new apple orchards have been planted on a commercial basis. These orchards are located on the more loamy soils of Glanford.

The increase of urban residential areas is the second largest factor of importance in Glanford in this period. During and after World War II crowded conditions and high land prices in the cities forced people into the country to take advantage of cheaper real estate prices. Land along the roads was chosen so city workers could have quick and easy access to Hamilton. The highway strip between Ryckman's Corners and Mount Hope became a major residential area. Mount Hope itself became a dormitory suburb of Hamilton, while its function as service center for rural populations became of minor importance. The hostelry and blacksmith shop gave way to a hotel and to garages. North Glanford became entirely residential when its inn and saw mill closed down. Ryckman's Corners also grew up as a residential area. A garage replaced the blacksmith shop.

Hannon's Glenfield Inn became a general store. The village itself became

one of suburban residences. Glanford Station decreased in importance as the period drew to a close, for dairy produce could be shipped more quickly by road than by train, and little freight by the Canadian National Railway was handled at the station. The railway line is now used mainly for through traffic.

The population figures in Table II show the extent to which urban people have moved into Glanford. In 1941, there were 1,641 people in the township and this figure increased slightly in 1949 to 1,820. By 1951 there were 2,440 people in Glanford. This increase is directly due to the influx of suburbanites.

In summarizing this final period we see that there has been increased mechanization both on the farms and in the city. The diary industry has become the predominant farm economy, while some hogs and chickens are raised as well. Fruits and grain are supplementary cash crops. A few farms still raise beef cattle for cash sale to Canadian and American buyers. Settlement has become mainly residential suburban in character while service to rural populations has become of less importance.

The size of farm holdings has not changed to any great degree in the last 30 years, in fact, there has been little change in this respect since 1851. Table III shows farm sizes for the last 90 years.

TABLE III

YEAR	UNDER 10 ACRES	11 - 50 ACRES	51 - 100 ACRES	101 - 200 ACRES	201 - 299 ACRES	300 - 479 ACRES
1851	39	44	73	414	7	
1861	4	41	76	68	7	
1891	53	45	119	62	9	
1921	30	44	141	61	2	1
1941	14	50	124	67	2	1

CHAPTER IV

NON-AGRICULTURAL LAND USE

A relatively small amount of land, in Glanford Township is devoted to land use, other than agriculture. Land being used for non-agricultural purposes is described briefly as follows.

Mount Hope and District Suburban Residential

The largest class of land not used for agriculture is that used for suburban and urban settlements. The largest settlement in Glanford is the town of Mount Hope, with a 1950 population of 252. Before 1948 Mount Hope had well defined limits. To-day, during the increasing development of suburban residential areas along No. 6 Highway, Mount Hope has been fused with this ribbon development, until a residential section stretches from Mount Hope to Ryckman's Corners.

Mount Hope is located on the highest elevation in Glanford Township. However, the elevation is only 775 feet above sea level. The village is situated at the cross roads of No. 6 Highway and Concession Four, 5½ miles from the city of Hamilton. Its favourable position on the main transportation route from the southern sections of the Niagara Peninsula has been a major factor in its growth.

Since the planking of No. 6 Highway from Hamilton to Port Dover through Mount Hope in 1839, to the eventual stoning in 1890, many travellers, freighters and stage coaches passed from south to north and vice versa. This factor prompted the building of a hostelry at the early site of Mount Hope. By 1850 a hostelry and blacksmith shop were



Photo 14. The main street in Mount Hope, facing north along Highway No. 6. The village is centered around Highway No. 6, and Concession No. 4.



Photo 15. A modern restaurant and store in Mount Hope.

operating. This attracted a few enterprising business men to build a store, and settle near the hotel. By 1869 there were 150 people living in the vicinity. With the coming of the hard surfaced roadway in the 1920's, and the decline of horse drawn vehicles, the hotel fell into disuse. However, people who had settled the area stayed on and established the town as a major service center for the surrounding farms. The business had favoured the building of a bank, a general store, a garage and a feed mill in the early 1900's.

The origin of the first settlers at Mount Hope were United

Empire Loyalists, of English, Scotch and Irish origin. From a population

of 150 in 1869 there was a small increase to 1948, but from 1948 to 1951

the figure almost doubled, and present statistics show it to be 252.

The main function of the hamlet to-day, is as a service center for the surrounding farms. This service is a limited one, for the retail section consists of a bank, a barber shop, a restaurant, an unlicensed hotel, snack bar, hardware store, grocery store, confectionary store, a post office and three garages. Besides these there are a few light industries in town including a feed mill, egg-grading station, two green-houses, and a combined electrical and plumbing business. Not only is Mount Hope a service center for farmers but is now an important suburban residential area.

Services within the town are limited. All water comes from individual wells which have never gone dry, but which contain varying amounts of sulphur. The water is pumped into the houses electrically so that running water is available. Although a water main runs through the

village from Hamilton to the R.C.A.F. Airport nearby, residents in the town are not allowed to tap it. There is no sewage disposal in the town and septic tanks are common. There is a fire fighting unit which works inconjunction with similar units at the R.C.A.F. Airport.

Housing in the village has been classified as second class on the whole, with a few third class frame buildings scattered throughout. However a trend has been noted in the classifications of houses. The newer homes along No. 6 Highway both north and south of Mount Hope are all second class well constructed brick homes. On Concession Four, to the east and west sides of the town, third class houses prevail. One small section almost $\frac{3}{4}$ of a mile from No. 6 Highway east along Concession Four, is made up of fourth class houses. Most of the fourth class houses are small one room frame cabins. This area might very well become the future slums of the district.

Between Mount Hope and Ryckman's Corners, there once was a small industrious hamlet called North Glanford. In this small town there was a hotel, a blacksmith shop and a saw mill. It was not long before all three of these concerns vanished and left a few houses and a church to mark the site of this once busy village. To-day North Glanford has been swallowed up by the steady and increasing advance of suburban housing from Ryckman's Corners to Mount Hope.

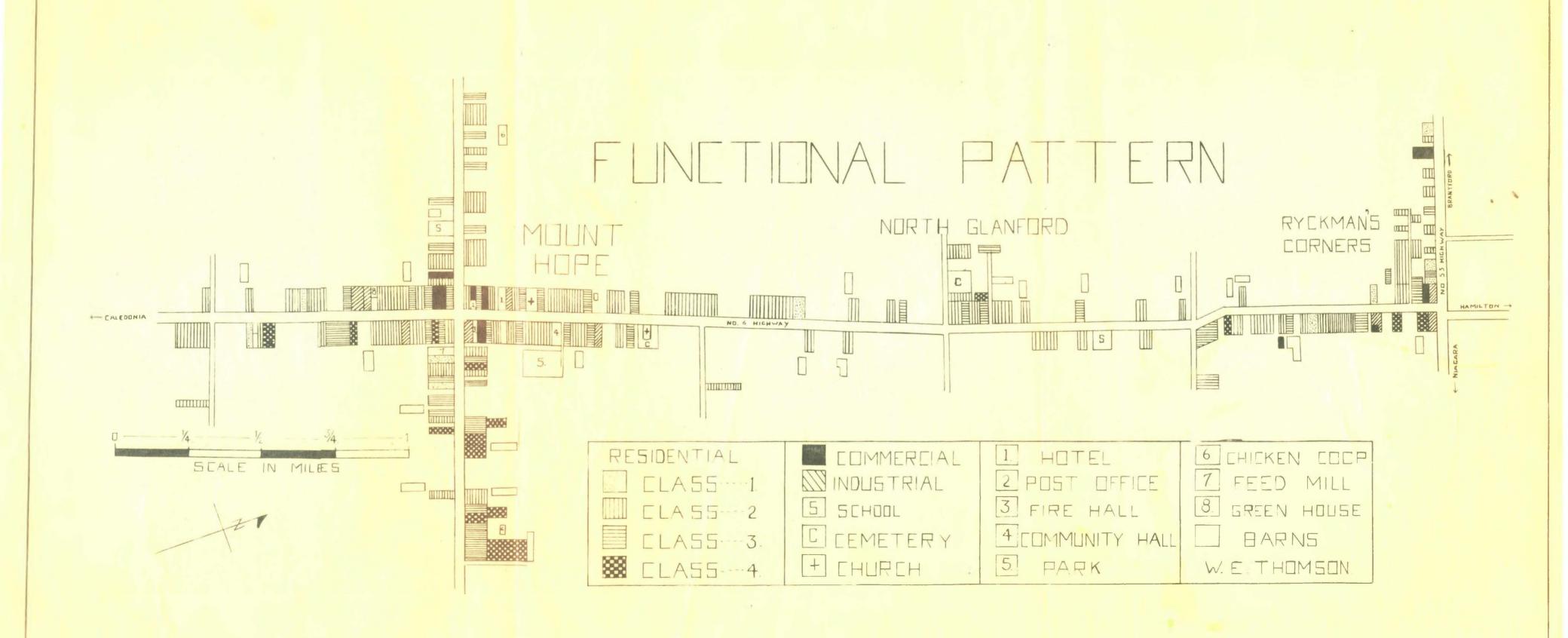
The third small hamlet on No. 6 Highway north of Mount Hope is Ryckman's Corners, which is located at the junctions of Highways 6 and 53. It originally consisted of a few garages and a hotel, but has swelled to three garages, a general store, a restaurant and a large residential



Photo 16. The busy feed mill in Mount Hope.



Photo 17. Rykcman's Corners situated at the junction of Highways No. 6 and 53. The Alderlea Survey is located on the south-west corner. The photographer is facing this corner.



survey. The Alderlea Survey originated from the selling of lots on the Alderson farm, bordering Ryckman's Corners. Land was sold to suburban buyers in 1950 in lots 60 x 200 feet. Road allowances were left between lots and streets paralleling Highways 53 and 6 are being built. This is the only planned survey in the entire township. The streets are laid out in a grid pattern and only well constructed houses are being allowed. These new brick houses are all second class dwellings with a few first class houses fronting on Highway 53, west of Ryckman's Corners.

Perhaps this is the time to present my classification of housing.

First Class: These are the larger types, well built brick, stone or a combination of brick and frame. All have a good sized and well kept lot. Houses have all the necessary conveniences. Ranch house styles are included in this category.

Second Class: Brick or frame buildings of good size, well kept, usually of one, or one and a half storeys. This type includes the majority of new homes and some of the older well constructed brick farm houses.

Third Class: These dwellings can be of any size, shape and material, as appearances of up keep and mode of construction are the basis of classification. Well constructed old frame buildings and older farm houses are included in this type.

Fourth Class: Houses in this classification are also of any size, shape and material, but are usually dilapidated dwellings, one room frame cabins, trailers, cellar dwellers and other types of owner built houses.

Many of these homes lack the necessary conveniences.



Photo 18. A first class ranch style house, located on Highway No. 53. Prerequisites of first class houses are: good size, well cared for lots, contain the necessary conveniences, and are constructed of brick or stone.



Photo 19. A first class brick house, well built, and located along Highway No. 6.



Photo 20. A first class house located in Mount Hope.



Photo 21. Second class houses north of Mount Hope along Highway No. 6. Well built brick, frame, or half brick, and half frame, of good size, well kept, and having the necessary conveniences, constitute this class.



Photo 22. Second class brick and frame houses in the Alderlea Survey at Ryckman's Corners.



Photo 23. An upper third class house in Mount Hope. It is an old, well constructed frame house, being well cared for.



Photo 24. A well constructed old frame third class house, which has been covered with imitation brick.



Photo 25. A small third class frame house. It is very neat and clean. Note the T. V. aerial.



Photo 26. Fourth class housing. A cellar dweller.
Three stages of development can be observed
from this photograph. From trailer to
cottage to cellar.



Photo 27. A fourth class, two room, cement block building, located along Highway No. 6. Note the T. V. aerial.



Photo 28. A fourth class, two story frame house.

Note the litter in the yard. It is
located south of Hannon.



Photo 29. Fourth class housing south of Hannon. Three stages of development in owner built houses can be noted. From the trailer in the background to a plain wooden building to a tar papered building.



Photo 30. Fourth class houses crowded together into a small group on Con. IV, east of Mount Hope. This section could very well become the future slums of Glanford.



Photo 31. Another section of fourth class houses east of Mount Hope. They consist of one and two room cottages crowded together. A fire would wipe them all out. Planning is urgently needed in these areas.

The greatest suburban residential increase in the last few years in Glanford has been the spread of housing from Ryckman's Corners, four miles south along No. 6 Highway, to one concession south of Mount Hope. Houses are all of the well constructed second class brick types, and are by no means detrimental to the area. However no planning in the area has gone on, for houses are spread in any manner along the highway, with large empty fields between some of the developments. The Alderlea Survey is the only planned area in the township.

Hannon Village and District Suburban Residential

Hannon is located on Highway 53 in the extreme northeastern corner of Glanford. The town is half in Barton Township and half in Glanford. It was founded as a service centre by U.E.L., English and Scotch settlers. The original home of the founder, the Hannon homestead still stands in Barton. The commercial section of the town lies in Barton Township and to-day this consists of a general store and a post office.

The Canadian National Railway line divides the town in half on the Glanford side. To the east of the railway lies a feed mill, saw mill, the Bell Exchange Office and a number of second and first class houses. To the west of the railway lies a garage, a general store which once was the Glenfield Inn of early origin, and a wrecking lot filled with ancient cars in various stages of disrepair.

The urban residential area of Hannon can be divided into three main parts. Central Hannon is the original site. East Hannon is situated in its mile east of the original site along Highway 53 and on the township road joining No. 53 at the eastern boundary of Glanford. South Hannon is

located \(\frac{3}{4} \) of a mile south of the original site, on No. 53 County Road. As mentioned before, Central Hannon contains the retail and light industrial sections. East Hannon consists of second class housing, of well constructed brick houses, along Highway 53. However, on the northsouth township road, between Glanford and Binbrook Township, housing consists of third and fourth class cabins, trailers and other owner built types of houses. A cellar dweller is present among these types. Trinity United Church and its cemetery, located on the junction of Highway 53 and this township road, divide the two differentiating classes of houses. South Hannon consists of third and fourth class housing, mainly square cabin type of houses, all owner built. One trailer dweller is present. This section has been developed on good agricultural land while to the north of the built up area is idle land. A school house nearby provides a short walk for the children of the immediate area. This area too, can become the slums of to-morrow, if care is not taken in insisting on decent types of housing.

The remaining hamlets consist of vanishing service centers. Better and quicker means of transportation have done away with these centers.

Such hamlets as Tyneside, on Concession Eight in lots 12 and 13, and North Seneca on Highway No. 6 at the boundary of Glanford Township and Haldimand County, have vanished, leaving only small general stores, and a few houses. Another once thriving center was Glanford Station, which depended on freighting services with the railway. To-day, only a post office, a few houses, and a miniature railroad station are left. Train service consists only of mail and express freight, with some shipments of grain and hay in

MAP VII.

FUNETIONAL

PATTERN

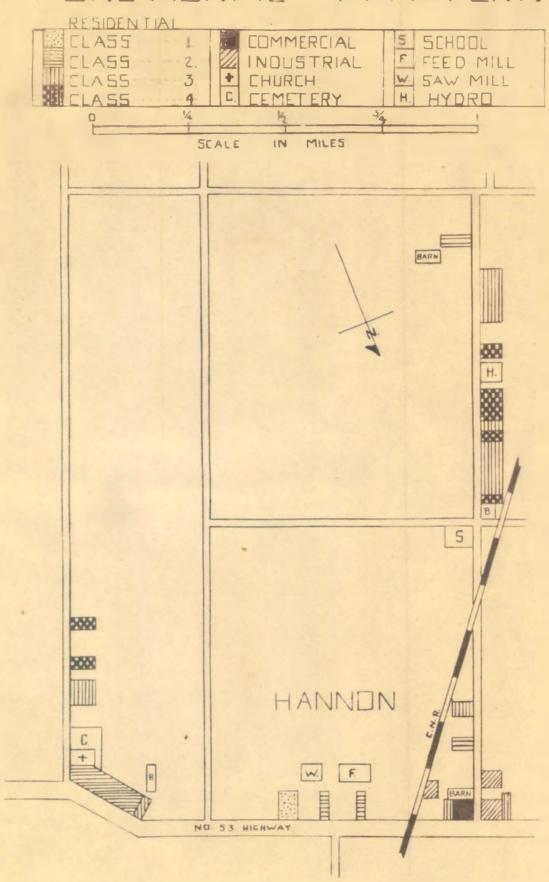




Photo 32. The feed mill at Hannon.



Photo 33. The saw mill at Hannon. Note the logs piled in the right foreground and the dressed lumber stacked in the left background.



Photo 34. Fourth class building located at Tyneside. Note the T.V. aerial.



Photo 35. The post office at Glanford Station.

the fall months.

There are a few scattered suburban residential districts in Glanford which are mainly along Highway 53. Glanford lies in the path of the ever expanding city of Hamilton, Already one half of Glanford's sister township to the north has been annexed by Hamilton. Suburban homes are swiftly being built, in unplanned areas outside the city limits. From Barton's southern sections to Glanford's northern edges scattered housing is being built. A ribbon pattern is already in advanced stages on Highway 6 from Hamilton to Mount Hope. This same pattern is underway now on Highway 53, from Ryckman's Corners, east and west. One development which threatens to start a further ribbon development on agriculture land has begun on Highway 53, just west of Highway 55. These houses are all first and second class brick dwellings, with some ranch style homes among them. A woodlot along the highway has been sacrificed for the building of these homes. This is not necessary, for across the road in Barton lies large sections of idle land awaiting development.

Recreational Land Use

There is only 15% acres of land allotted for a planned recreational area in Glanford. The Community Hall and Park take up this land. It is primarily for outdoor sports such as baseball and skating. There is a large, well kept baseball diamond, with bleachers and a night lighting system. A soft drink and hot dog stand are located nearby.

Idle land and woodlots along the Twenty Mile and Chippewa Creeks, lend natural recreational land use for hikers and picnickers. Frozen streams in winter make excellent outdoor ice skating rinks.



Photo 36. The baseball diamond in the Glanford Community Park, located at Mount Hope.



Photo 37. An ideal spot along the Twenty Mile Creek for hikers and picnickers.

Industrial Land Use

During the early years of Glanford's history, industry played a supporting role to agriculture in the luring of settlers to the area. Along the creek banks stood numerous saw mills and a grist mill. All the small hamlets contained blacksmith shops with North Glanford boasting a boot and shoe manufacturer. All this has long since vanished.

To-day, two grist mills and a saw mill make up the major portion of light industry in Glanford. The two grist mills, one in Hannon and one in Mount Hope, take care of all the business afforded the farmers. In all, over 14 men are employed annually and feed is shipped to larger centers. The saw mill employs approximately 5 men annually. Lumber is brought in from northern Ontario bush lots and occasionally from local woodlots. Finished products include, fence posts, fire wood and dressed lumber. The saw mill is situated in Hannon.

Other smaller industries include garages which repair cars and farm machinery, and a junk yard where spare parts can be secured. A combination plumbing and electrical business is situated at Mount Hope, along with an egg-grading plant. A building contractor has his yards on Highway 53 just west of Ryckman's Corners.

Mount Hope R.C.A.F. Airport

A government run R.C.A.F. Airport is situated $\frac{3}{4}$ of a mile west of Mount Hope, on Concession Four. It contains 479.7 acres and expansion next year will require the purchasing of more farm land. The airport is self contained, having a grocery store, theatre, chapel, recreational facilities, reading room, bar, and housing for single and married men. The location of such an airport is ideal for not only is the land flat

but it is the highest in the area, making visibility excellent.

All conveniences are enjoyed on the airport, even to the supply of water, coming by pipe line from Hamilton. Septic tanks take care of the sewage.

A section of the airport has been leased to the Hamilton Flying Club and the facilities are used for housing planes, building small planes and instruction for new pilots.

In the event of total peace the site would make an excellent air terminal for the growing demands of Hamilton.

Natural Gas Wells

Although the natural gas wells do not take up much land their importance should be discussed here.

Commercial production comes from the rocks of Silurian age with those of the Clinton horizon being the source rocks. Only six wells in Glanford are owned by the Gas Company which is situated in Binbrook. The gas is pumped into the main pipe lines to be further pumped to the residents in the nearby townships. There are many private wells which are used only for home utilization. All wells in Glanford are situated in the south-east section of the township.

The open flow in the Clinton Wells decreased 50% within the first two years, and from the fifth year onward about 10% of the previous years flow. The average life of a well in Glanford is 20 years. The gas is of the dry, sweet variety, and therefore needs no purification before utilization. The future gas possibilities in the area are rather poor in the Clinton horizons, although there may be some untapped reservoirs in



Photo 38. The R.C.A.F. Flying Station, west of Mount Hope. The hangers are in the right background, while the recreational buildings and living quarters are in the center and left foreground.



Photo 39. A large woodlot in Glanford, which consists of elm, maple and a few pine trees.

the southern sections of Glanford Township.

The following table shows the natural gas conditions in Glanford Township.

TABLE IV

No. of Producing Wells	Highest initial Vol. in Thousands of cu. feet	Vol. in Thousands of cu. feet	Average initial Vol. in Thousands of cu. feet
21	443	1	88

Roads and Railroads

Roads in Glanford come under three separate authorities. The Provincial Highway's system includes Highways 53 and 6, which are all hard surfaced roads. The County Road system includes Highways 33, and 22. No. 33 runs from Hannon, south to Tyneside, while No. 22 runs along Concession Five, from east to west. The Township Road system, embraces the remaining concessions, and side roads, which are either stoned or mud roads, totalling 60 miles in length. The total mileage of roads in the township is approximately 84. All roads have an allowance of 66 feet.

When the township was surveyed, provision was made for a grid pattern of roads to coincide with concession lines. All concessions were built up, except Concessions Three and Eight, which were only partially developed. The side roads were never fully developed.

The Canadian National Railway has a single track right-of-way, through the entire length of Glanford. The line runs diagonally across the township in a north-east to south-west direction. The railway was begun in 1840 but was not completed until 1860. Three companies have been

owners of the railroad from its beginning until to-day. The Hamilton
Lake Erie Line was taken over by the Grand Trunk System which in turn
sold out to the Canadian National Railways who are the present owners.
The line connects Hamilton with east-west lines in southwestern Ontario.
It therefore is a rail link of Hamilton to the southern parts of the
Niagara Peninsula, and the northern shores of Lake Erie. The railway
has little direct economic importance in Glanford except for the shipment
of some grain and hay in the fall harvest seasons.

To find the proper location of the roads, railroads and towns of Glanford discussed above see MAP VIII.

Idle Land

Very little land in Glanford is not used for some purpose or another. Idle land is found only along the banks of the Twenty and Chippewa Creeks and may be noted on the Land Use Map. In the spring, the land is usually flooded but dries out in summer, and can be used as temporary pasture, because of its nearness to water and shade trees. Both the latter items are necessary for dairy cattle. Some idle land is classed as slash land, where woodlots have been thinned out along the creeks. Approximately 354 acres are classed as waste land and 937 acres classed as slash land, both being idle land.

Woodlots

Woodlots are fairly stable in Glanford as many farmers are using coal and oil heating furnaces, and fire wood is then unnecessary. The total average in woodlots is only 627.

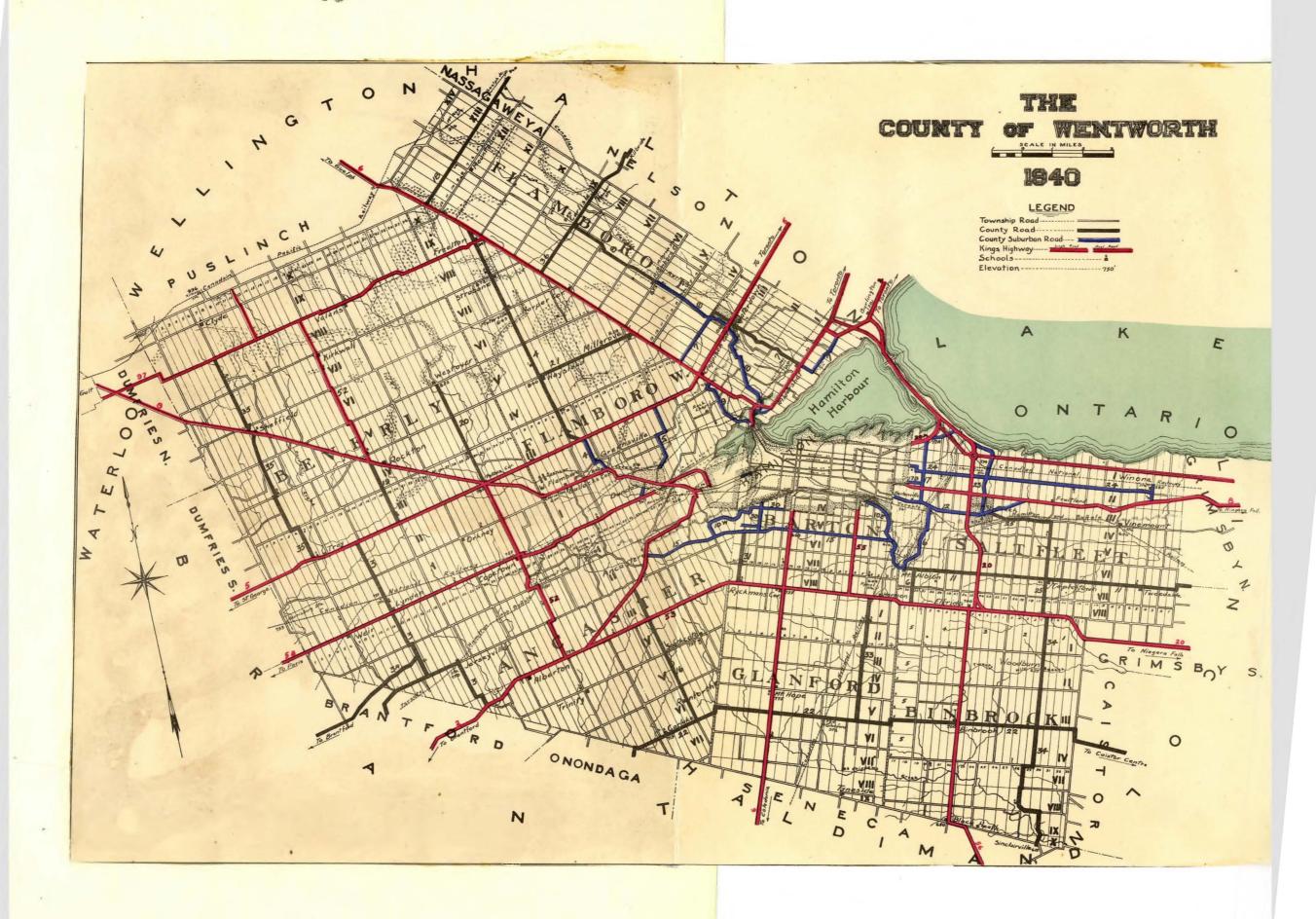




Photo 40. The Canadian National Railway, which runs through Glanford. The photograph shows a box car being shunted into the siding at Glanford Station.



Photo 41. A township road in Glanford. It is half Gravel and half mud..



Photo 42. Idle land along the Chippewa Creek.
In winter the frozen creek is for skating.



Photo 43. Idle land near the Twenty Mile Creek. This field is sometimes utilized as natural permanent pasture.

Miscellaneous Uses

Glanford has six public schools and one consolidated school.

The public schools take up one acre of land each. Three of these schools are being extended, so more farm land has been bought. The consolidated school is run jointly by Ancaster, Barton, and Glanford Townships. For secondary school education, pupils in Glanford must go to Hamilton or Caledonia high schools. Mount Hope is in the high school area with Barton.

Of the five cemeteries in Glanford, one is connected to Trinity
United Church at Hannon, and contains two acres. Two other cemeteries
were once connected with churches but these establishments have long since
gone, leaving the cemeteries behind. One of these latter cemeteries is the
White Church Cemetery, of one acre, situated at the junction of Concession
Six and Highway 6. The other is located in North Glanford and embraces
1 acres. The remaining two cemeteries are private, belonging to the old
families of Smith and Salem.

Land devoted to non-agricultural uses does not comprise a large percentage of the total area. All land used in this category however, is related to the rural population. Only the airport and ribbon developments of suburban residential areas have no relationship to agriculture. The villages are partially suburban residential and partially service centers for surrounding farms. Recreational and industrial sites are all used by rural populations as well as by suburban populations.

Future planning and development is needed in Glanford to ensure the proper use of non-agricultural and agricultural land. Land unsuited for agriculture should be sub-divided for suburban residential use.



Photo 44. The old and modern schools, lay side by side along Highway No. 6. Residential suburban families moving into Glanford increased the number of school age children. Hence the new schools.



Photo 45. Case United Church and its cemetery located on Con. V. Lot 13. in Glanford.

CHAPTER V

AGRICULTURAL LAND USE

The soil is one of man's important natural resources. From the soil come products, to which we owe our very existence. The proper use of the soil, has a great bearing on the life of man.

Southern Ontario, of which Glanford is a part, has all the favourable essentials for successful agricultural development. A favourable climate with warm summers, adequate uniform precipitation, and a long growing season are characteristics. The climate of Glanford is suitable for the production of a wide variety of field crops. The soil is also fairly productive. Thus the two basic factors of soil and climate are conducive to a satisfactory agricultural development. The dominant development agriculturally has been dairying. Along with the ideal physical factors, conducive to the growing of hay and fodder, crops important for dairy herds, has been the growing markets for farm produce. Slight variations of soil texture have caused some differences in yields of agricultural produce, but this is almost negligible. There are prosperous farms on the heavy textured soils as well as on the lighter textured soils. However, there are more prosperous farms on the lighter textured soils. The human factor, more than any other is responsible for poor farms in Glanford.

The climate and soil conditions in the township are favourable for the growing of wheat, and good yields are obtained when artificial drainage and proper fertilization practices are put into effect. As

emphasis is on dairying, wheat is grown only as a subsidiary cash crop, and as feed for poultry. Slightly more than 1,100 acres of wheat were grown in Glanford during 1951. Wheat grown on slopes yields more than wheat grown on more level land, because internal and external drainage is better on the slopes. Even at an early date, farmers found artificial drainage was imperative if better yields were to be obtained. Better drainage would mean higher yields in the future.

Only a few farms in 1951 grew hay as a cash crop. All hay grown on the dairy farms of the area is utilized as livestock feed. The dairy herds are the prime users of hay, although some farmers sell excess hay to dairies and bakeries in Hamilton. Approximately 6,000 acres of hay was grown in Glanford during 1951.

When the soils of the township are properly treated with nitrogen, phosphates, potassium or lime, crop yields increase. Yields do not vary appreciably over the township in spite of the slight texture differences in the soil.

Barley and oats constitute the majority of remaining acreage in cultivated land. Barley which once was a major cash crop has become less important. It is only used as a subsidiary cash crop, and as feed . mixture for livestock, to-day, approximately 400 acres of barley were grown in 1951, within Glanford. Oats grows slightly better on the loamy soils in the north-west parts of the township. On one farm near Ryckman's Corners, yields were 60 to 80 bushels of oats per acre in 1951. As with barley, most of the oat crop is sold as a cash crop, with the remainder used as feed mixture for livestock. A great deal more oats is grown than



Photo 46. A field of fall wheat.



Photo 47. A field of oats which has been recently harvested. Note the two silt knobs in this field.

barley, because of the greatest market demand. In 1951, approximately 2,500 acres of oats were planted. Surface drainage and tiling are oftentimes needed to ensure good yields.

Only 650 acres of corn were grown in Glanford during 1951. This crop is used almost entirely as ensilage with a few acres of husking corn sometimes being grown for home use.

Of the cultivated land shown on MAP IX, which is found in a folder on the back cover, there is approximately 500 acres in barley, 650 acres in corn, 1,200 acres in wheat, 2,500 acres in oats and 3,000 acres in mixed grains. As can be seen by the map, cultivated land is fairly evenly distributed over the township.

The size of the average dairy farm ranges from 90 to 150 acres.

The number of cattle on these farms depends on the size of the farm acreage, though 30 to 40 is average.

On the typical dairy farm of 150 acres, 25% of the land is left in hay, with another 30% in natural pasture and permanent seeded pasture. The remaining 45% is made up of 15% ensilage corn, 8% wheat and 13% oats and barley. The remainder consists of idle land, woodlot and farm buildings.

A four year crop rotation plan is used by most of the dairy farmers. If corn is taken as the crop grown the first year, then cats or barley, usually follows it in the following spring. After the corn is harvested in the fall, it is allowed to remain in stubble over the winter season. In the spring, cats or barley are planted without the usual procedure of plowing first. The grain is harvested in the fall



Photo 38. Threshing clover which is used as fodder for cattle.



Photo 49. Cutting corn for ensilage.

and the field is seeded down in hay. In the third year, a hay crop, which may be alfalfa, red clover, or timothy is cut. The field then can be left in hay without further seeding for another year, and in the fourth year another crop is cut off. The hay is left until seeding of corn is ready. Then the hay is plowed under. Hay is always worked into the crop rotation plan, sometimes only for one year, but generally for two years. When wheat is planted in the crop rotation plan, it is the fall wheat variety which is used.

On the dairy farms, all the hay cut is used for the cattle, during the winter and early spring months. On bigger farms, hay not used for livestock is sold as a cash crop. The wheat is used for cash crops and feed for poultry. All corn produced is used for ensilage.

Seed from all crops is kept for the following years planting.

Good permanent pasture must be produced by the farmers. Almost 30% of land on dairy farms is used as natural pasture, and permanent seeded pasture. Natural pasture consitutes a small percentage of the acreage in Glanford. It is only found along the banks of creeks and is located close to the idle land. After spring floods, when much of this land is dry, it is used as natural pasture, as it is near to water and trees. Permanent seeded pastures are kept at a high fertility by annual manuring, fertilizing, and re-seeding.

Different mixtures of grass seeds are used, according to the texture and chemical content of the soil. Usually one acre of pasture is needed per animal, and every dairy farmer takes this into consideration when planning his crop rotation. After 8 or 9 years, the farmer plows the

pasture under and uses it, either in a rotation scheme or re-seeds it for pasture.

A dairy farmer usually has pure bred cattle. Holsteins are the most common, but there are also Jersey, Guernsey and Ayrshires. Dairymen keep rebuilding their herds as they sell off their heifers and older cows. The dairy farmer makes up 20% of his income by selling calves, heifers and older cows. Many farmers when bringing along new and younger milkers, will sell their older cattle to American buyers. The American market especially in New York State has always been a profitable one for Canadian dairy farmers.

The sale of milk nets the dairy farmer almost 70% of his income. The remaining percentages are made up of 20% in sale of calves, heifers and cows, and 10% in sale of eggs, chickens, hogs, grain or fruit.

A few farmers in the south-east parts of Glanford raise beef cattle. The Aberdeen Angus is the popular breed. 'All practices concerning beef cattle farming are similar to those of dairy farming. A farmer, keeping beef cattle will have cash crops of grain, eggs, or livestock.

Prices for beef are good especially in north-east United States.

Smaller dairy farms, having 13 to 15 head of cattle supplement their income by raising hogs, chickens, or selling grain as a cash crop. Some have fruit orchards. These farms average from 50 to 100 acres in size. Part time poultry farmers buy 400 to 500 pullets from hatcheries in the early spring or late winter. When the pullets begin to lay, the eggs are sold to the markets, all summer and early fall. In late fall, the chickens are sold as meat. Feed for the birds is usually purchased.

One farmer near Glanford Station raises broilers and sells several thousand birds.

Hogs are kept mainly to supplement a small dairy farmer's annual income. In 1951 there were over 2,000 hogs in Glanford. It once was a profitable business but not to the same extent since 1948. There are only two or three flocks of sheep left in the township totaling approximately 50 sheep.

Two farms are growing hay and grain as cash crops. In this case the lack of labour is preventing the owners from raising cattle. One of these farms is operated by a city worker.

Large apple orchards are located in an area of silt loam, known locally as "Twenty Land", for it lies on either side of the Twenty Mile Creek and its tributaries. Harsh winters and disease killed the majority of the early orchards and few trees are productive to-day. In the last few years, larger apple orchards have been planted and these are located on "Twenty Land". The apples constitute a large commercial cash crop for the small dairy farmers. There are a few pear orchards and vineyards in the township, but the fruit is used locally.

Many farmers are concerned only with the mining of their land, year after year. Consequently crops suffer as the soil fertility declines. Soil which annually is constantly robbed of nutrients, without hope of restitution, will have increasingly lower crop yields. Land neglected in this manner takes many years to bring it back to its original fertility. These farms can be readily recognized by the poor crops and the appearances of farm buildings in various stages of disrepair. There are many examples



Photo 50. An old apple orchard which has been hard hit by frost and disease. Many of these trees are unproductive.



Photo 51. A young apple orchard along Highway No.6, on the silt loams bordering the Twenty Mile Creek. A cash crop is realized from this orchard.



Fhoto 52. The field in the foreground is a permanent seeded pasture, whereas the one in the background is natural permanent pasture.



Photo 53. Natural permanent pasture. Note the many weeds in this field.



Photo 54. Milk cans, a common sight near the dairy farms of Glanford.



Photo 55. A herd of pure bred Holsteins.



Photo 56. A good dairy barn in Glanford. Note the neat well constructed buildings.



Photo 57. A poor barn in Glanford. Note the poor construction of the buildings and the litter in the barnyard.

of this type of farming in Glanford. Poor farms are directly across the road from good farms. The human factor is the main cause for these differences.

The lack of labour is a contributing factor. A city factory lures farm labour by its high wages. Therefore, many farmers are forced to cultivate only a part of their land, leaving the remainder idle. Mechanization has helped these farmers, but all the work cannot be carried out by one man. Many farm children also are attracted to the higher wages and other social benefits of a city, leaving the older parents to struggle hopelessly in caring for their large holdings.

Generally, the township is a good farming area for hay and grain crops, and for dairying. Dairying is the dominant activity, despite growing importance of other agricultural produce. The growing population of nearby municipalities have provided larger markets for farm produce, especially in Barton Township and the City of Hamilton. Excellent transportation routes make possible the rapid transport of dairy products to the market.

Fruit growing is important on a small scale to a few dairy farmers, along the Twenty Mile Creek. Vineyards of the area are of no great economic importance except as small local cash crops. Grain is grown as a small supplementary cash crop by all the farmers.

Erosion in the township is almost negligible. Only on steep slopes and in isolated areas, is it noticeable. Sheet erosion is the main type. Contour plowing, and cover crops should halt all further erosion. Drainage ditches should be left in grass, if at all possible, to cut down incipient



Photo 58. Swiftly flowing water in a drainage ditch. Erosion has started along the banks of the ditch. Grass lined ditches are recommended to cut down erosion.



Photo 59. Incipient erosion on a slope. Cover crops are recommended for these slopes to cut down run off.

gully erosion, caused by spring run off. Temporary drainage ditches in every field affected by run off is recommended.

Drainage is the main physical problem in the township. More artificial drainage ditches and underground tiling are needed in the more level areas.

With the increased mechanization, and use of all available labour, a more intensive agriculture should be possible. Yields per acre and per man can be increased. Dairying is likely to become increasingly important in the future, as the nearby urban populations expand. The relationship between the rural and urban areas is likely to become closer as time passes.



Photo 60. Idle bottom land the day after a rainfall. Note the flooded creek.



Photo 61. The same field as shown in Photo 60, one week after the rainfall. Pools of water still remain.



Photo 62. A cultivated field after a rainfall. Note the grass lined ditch in the middle background.



Photo 63. The same field shown in Photo 62, one week after a rainfall. Note the pools of water which have not drained away because of imperfect drainage.



Photo 64. Imperfect drainage prevents the escape of water on the more level areas of the moraines.



Photo 65. Imperfect drainage in the south-west section of Glanford. This area is on the level portions of the Dissected Clay Plain. Underground tiling and artificial drainage ditches are recommended.



Photo 66. A good farm.

These two farms are located in the same general area and on similar soil conditions. The human elements have been the principle factors in the different appearances of these farms.



Photo 67. A poor farm.



Photo 68. A good farm.

Both farms pictured on this page are located on the heavy clay loams in southern Glanford. The human element is the dominant cause for differences in farm appearances.



Photo 69. A poor farm.



Photo 70. A good steel barn.

These two farm buildings on this page are in the northeast section of Glanford. Again the human element has caused the serious differences between these farms.



Photo 71. A poor farm. Note the ramshackle barn and weather beaten house.

CHAPTER VI

SUMMARY

Glanford Township, a rural municipality of the County of
Wentworth, lies above the Niagara Escarpment, in an area which encircles
the southwestern end of Lake Ontario. According to Putnam and Chapman,
the township lies in the Haldimand Clay Plain physiographic region.
This region is a subregion of a much larger physiographic region, the
St. Lawrence Lowlands. According to O.E. Baker it is part of the Diary
and Hay Belt of North America. White and Foscue place Glanford within
the Buffalo - Niagara - Erie - Hamilton - Toronto Subregion of the
American Manufacturing Belt. This means that Glanford, a dairying
township is close to large population centers, which supply a large
market for its dairy products.

Glanford was glaciated in the Pleistocene Epoch and retreating glaciers left varying amounts of till on the underlying, southerly tilting Palaeozoic rocks. Lacustrine deposits were laid down on top of the till, in Glacial Lake Warren. The rocks of the Medina and Clinton formations of the Silurian age, underlying Glanford are important economically. From the structural enclosures, natural gas is pumped to the surface to be used as fuel in the homes of Glanford.

The retreating glaciers left two, low, broad, recessional moraines, running from east to west in Glanford. The moraines constitute one of the physiographic features of the township. A limestone plain with shallow overburden is situated in the north-east corner of Glanford, while

the southern section is a dissected clay plain.

Loam being the largest group, is a brownish heavy textured clay found on the southern half of the township. Napanee Loam is located in the north-west section of the area and is a lighter textured soil. Napanee Silt Loam follows the basins of the Twenty Mile Creek and its tributaries. As the texture of the Napanee Loam is lighter, crops grow slightly better on it than on clay loam. The silt loam is perhaps the most fertile, being especially good for orchards. Drainage of the soils is imperfect.

The climate classified by Koppen for the general area of which Glanford is a part, is an area with a humid continental climate, with cool summers. However, Glanford deviates slightly from the above classification, as temperatures are slightly more moderate. Summers are warm and winters are cold. Rainfall is fairly uniform over the whole area, with the annual average being 52 inches. The climate along with soil conditions is conducive to the growing of field crops and to dairying.

The township once had large stands of deciduous trees, but subsequent deforestation by lumbering crews has left only a few woodlots. The main tree species to-day are maple and elm with a few pines.

The first white men to settle in Glanford, were United Empire Loyalists, who came via New York State and the Niagara Peninsula. The early settlers along with subsequent new settlers, were first lumbermen, and then agriculturists. The trees were sold to the saw mills which operated on the creeks running through Glanford. As the land was cleared, the farmers began growing grain and hay. Increasing populations to the

north in Dundas and Hamilton meant larger markets for farm produce.

Wheat was sold to flour mills and oats and hay to the hostelries and lumber camps for feed.

New roads encouraged settlements and soon many inns, blacksmith shops and general stores sprang up along Highways 6 and 53. Ryckman's Corners, North Glanford, Mount Hope, Tyneside and Hannon became service centers for the surrounding district.

When western wheat crops competed seriously with wheat grown locally, the farmers turned to dairying. The large hay crops were used for the dairy herds and also sold to the hay markets of Hamilton. The advent of the motor vehicle cut down the horse population, which curtailed the selling of hay as a cash crop. Fortunately larger dairy herds needed all the hay a farmer could grow. As the years passed dairying became increasingly more important, with grain crops used only to supplement the annual income.

With the newer roads, the settlements propsered and grew. When the motor car came and horses declined in importance, inns, hostelries and blacksmith shops became hotels and garages. As deforestation continued, saw mills moved in to new locations. Growing urban populations spread out into the surrounding rural municipalities, seeking cheaper land and quick access to Hamilton. The settlements changed in character. North Glanford became entirely a residential suburban area. Ryckman's Corners, Hannon and Mount Hope became major settlements of residential suburban people with the serving of rural folk, of secondary importance. Glanford Station dwindled in importance and now has only a post office and a few

buildings. Tyneside will completely disappear in a few years as only a church and a small store are located there.

Agricultural land use is mainly associated with dairying. Hay and pasture fields take up the majority of the acreage with grain being a subsidiary crop. Oats lead in acreage followed by wheat, corn and barley. All grain crops are supplementary cash crops, with some being used for livestock feed. All corn is used for ensilage. There are some new apple orchards on "Twenty Land" in Glanford, which also constitute supplementary cash crops for dairy farmers.

Most of the non-agricultural land use is made up of suburban residential houses, and the Mount Hope Air Port. The old settlements from Mount Hope to Ryckman's Corners are all dormitory towns of Hamilton. They still serve the rural population, but this is not too important anymore. A ribbon development has started along Highways 6 and 53 which threatens to engulf the existing settlements between Ryckman's Corners and Mount Hope and from Ryckman's Corners to Hannon. There is only light industry at present in Glanford. This consists of two feed mills, a saw mill, an egg grading station, numerous garages, a wreckers and many retail establishments.

Housing in Glanford has been classified, and a trend has been noted. Second class homes predominate along Highways 6 and 53, but fourth class housing and lower third class houses have been noted on the east-west township road running east from Mount Hope. Two poorer type housing districts are located just east of Mount Hope and one just south of Hannon. Most are owner built homes. Planning is needed here.



Photo 72. A typical ribbon development of residential suburban houses located along Highway No. 6. near North Glanford.



Photo 73. Ribbon development along Highway No. 53. east of Hannon. Houses are second class.



Photo 74. Ribbon development along County Road 33, south of Hannon. Houses are mainly fourth class. Without proper planning it could become a slum district.



Photo 75. A ribbon development north of Mount Hope along Highway No. 6. Houses are small neat frames with small gardens around them.

Unplanned suburban building is seriously encroaching on the agricultural land of Glanford. There are large tracts of poorer agricultural land both in Glanford and Barton which could be subdivided for residential areas. By this method the good agricultural land could be left until it is absolutely necessary to use it for suburban buildings.

Industry will never come to Glanford as long as there are sites along Burlington Bay and Lake Ontario. Transportation of raw materials by truck would be too costly. The R.C.A.F. Air Port, west of Mount Hope will in the event of total peace become an important air terminal for Hamilton. This fact should bring more business to Mount Hope.

The lack of labour has curtailed intensive farming of present farms in Glanford. Some farmers have had to cut down the size of their herds, so that they could manage alone. Further merchanization, increased use of fertilizers and all possible use of existing labour, will mean richer pastures, larger yields of hay and fodder crops, and higher production of fluid milk. With smaller, holdings, more intensive farming should be practiced to maintain and increase production.

Conclusions

Dairying should remain the important type of farming. The increasing populations of surrounding municipalities will raise the demands for fluid milk. Both physical and economic conditions have made dairying all important in the study area.

More efficient draining of the imperfectly drained soils, by the use of tilling and ditches, should raise yields of agricultural produce.

The use of present land is not a sound basis for predicting future uses of the land. No doubt Glanford will become more and more urban in character in the future. If present swiftly advancing residential suburban housing is any criteria for future trends, then Glanford is well on its way to becoming more urban than rural. In the meantime, the good land of the township should be preserved for agricultural uses, until subdivision is absolutely necessary. Large tracts of idle land between Hamilton and Glanford should be built up first. Froper planning is necessary in Glanford if a bright future is to be ensured. However restrictions on suburban development need not be so strict that suburban housing cannot continue to expand in Glanford. Effective planning will place suburban districts in the proper areas. Such areas as Mount Hope and Ryckman's Corners could be further subdivided. This would eliminate sporadic and ribbon developments throughout the township.

APPENDIX

In the following passages, the writer wishes to present his personal views regarding the need for future planning in Glanford Township.

Perhaps the greatest problem has to do with the spread of unplanned suburban buildings over the agricultural land of Glanford. Farmere, who are taking advantage of the high prices for building land, are selling off frontage lots from their land, which borders Highways 6 and 53, with no thought of future planning. At the present rate at which the ribbon development is spreading from Ryckman's Corners, south to one concession south of Mount Hope, the entire route will soon be the center of a densley populated suburban area. A ribbon not unlike that of Highway No. 6 has begun on Highway No. 53. It too will soon blossom into a suburban ribbon development stretching from Ryckman's Corners to Hannon. If these developments increase at the same rate in the next few years, then speed limits on these highways will have to be curtailed considerably. When the speed limit is lowered, transportation difficulties will become evident. Transportation along the highway will be slowed and the driving time from Mount Hope to Hamilton will be doubled. If such a development occurs along this main north-south route, a new highway will have to be built. It is not wise to have main routes of transportation passing through suburban areas, because of speed limits, and the danger to children. A new highway should be built for transport vehicles, either to the east or west of Highway No. 6. In order that the new road might not use valuable farm land, it should follow a present township roadway and connect

to a main artery out of Hamilton.

Planning must be carried on regionally, and political boundaries must be ignored. Cities should not have to stop at their borders when planning the area. If the city stops planning at its borders, a farmer can sell his lots in various sizes and not allow sufficient road and other necessary allowances. Consequently when the city annexes that area a problem confronts them. Annexations by the city of Hamilton will continue as the city's expansion progresses, and it may eventually reach Glanford.

A planning board can ensure that lots sold are of a standard size. that road, sewer and water allowances are made, and outlets for water, sewer and hydro are left in the houses. They, too, can specify the dimensions of the house to be built. Only by a thoroughly united and co-operating board of planners representing all the municipalities of the County can those factors be controlled, in the best interests of all. By proper planning, idle land closer to the city will be subdivided first, and agricultural land can be left until needed. The board could tabulate a uniform building code. New surveys could be studied before permission for building is granted. The proper use for the land in Glanford would then be insured. Individual farmers could be stopped from selling lots of varying sizes. Plans showing the future development of schools, retail districts, and parks should be made, and suburban residential districts laid out accordingly. There is no point in building up an area strung along a highway, when idle land, closer to a city, could be developed properly for suburban residential districts. Large tracts of idle land are awaiting development in Barton Township. Why then is this land not developed for

residential suburban areas first, before using agricultural land in Glanford? The reason seems clear. There is insufficient planning being undertaken by the two townships.

Planning and development in the County of Wentworth is in its infancy. The Alderlea Survey at Ryckman's Corners, is the only organized plan in the township. The same pattern should be laid out for Mount Hope. With a street pattern, and the town divided into blocks, a larger, uniform, suburban development could be built up making a ribbon pattern along Highway No. 6 unnecessary. With proper planning the village could expand and build up a neat retail district. Mount Hope is fast becoming a dormitory town for Hamilton industrial workers. Future tapping of a water main from Hamilton to the R.C.A.F. Airport at Mount Hope should be investigated, to see if such a plan would be feasible. Along with water a sewer system is required. In the event that total peace comes to the world, the airport at Mount Hope will become an important air terminal for Hamilton. This would play an important part in the future of Mount Hope, and proper plans should be drawn up.

There are two areas in Glanford, which, if left alone, will become the future slums of the township. Houses are lower third and fourth class, all owner built and consisting mainly of one and two room cottages. Many of these lacking the necessary conveniences. Among these homes are trailer and cellar dwellars. Conditions are poor and will remain so unless proper regulations are required before more homes are constructed. Poor housing lowers the real estate value of surrounding property and the improvement of housing is essential for the welfare of the community. These two sites



Photo 76. One of the narrow, steep and dangerous oneway wooden bridges crossing the Canadian National Railway through Glanford. A level crossing is recommended in place of the bridge.

are located, east of Mount Hope and south of Hannon.

The removal of two, high, one way, wooden bridges spanning the Canadian National Railway spur line through Glanford is recommended. No subway or steel bridge need be built again as level crossings, guarded by a safety device would be sufficient. There are only two trains a day, passing through this area, and thus level crossings are feasible.

If the city annexes another few concessions of Barton, then Glanford should annex the remaining concessions. Although both townships are slightly in debt, restitution could be made with wise developing and selling off suburban lots in the sections annexed. On this annexed section, Glanford could develop a suburban residential district, and thus, for a while keep the agricultural land free from housing. Of course Glanford would have to work in co-operation with the City Planners of Hamilton when developing this area.

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