Birch Run Township

Master Plan

July 2022

Adopted: August 9th, 2022

Acknowledgements

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Chapter 1 Community Description

Community Profile

A community can take on many shapes and forms, but ultimately, it's comprised of history, county government, school district, and the residents who live there. The community description chapter will go over the brief history of Birch Run Township and Saginaw County.

A brief history of Birch Run Township

Birch Run Township, first organized in 1853, is a community located in the south-east corner of Saginaw County featuring a creek that runs through a large patch of Birch trees, it's no mystery how Birch Run Township got its name. Its rich history begins with the first Annual Meeting of the Electors held on April 4, 1853; Joseph Matheson was elected the first supervisor. In 1863, the Township was renamed Deer Lick and remained so until 1868 when it reverted to Birch Run and the name has remained since. The Township and Village have evolved over time. As the lumber industry cleared the land of trees, agriculture became the predominant land use, with the Village serving as the site for merchants and grain elevator serving the local farmers. As Saginaw and Flint grew and the auto industry provided jobs, the Township developed into a mix of agricultural and residential development. Today, Birch Run Township, is a family friendly community with a quaint, rural characteristic. The Village of Birch Run holds Birch Run Area School district, a downtown that has held its integrity over the years, a regional shopping mall, and other specialty retail establishments. What was once home to Native American tribes, Birch Run Township has evolved with the times, while aiming to limit urban expansion to certain areas in order to maintain a rural feel.

Saginaw County

Saginaw County holds a strong Native American History due to its extensive network of waterways leading to the Saginaw River, and ultimately giving access to Lake Huron. As Euro-American settlers entered the area, the Ojibwe (Chippewa) Tribe remained and for years lived alongside the settlers, it is said they even aided each other protecting against attacks. Today, Saginaw County has both rural and urban aspects, and continues to grow. Saginaw County is a part of the Flint/Tri-Cities region of Mid-Michigan and is home to twenty-seven Townships, five Villages, and three cities. It is also home to Saginaw Valley State University and Delta College. It's included in the Saginaw-Midland-Bay City Combined Statistical Area, the fifth largest metropolitan area in Michigan.

Chapter 2 Demographic Analysis

The purpose of this section is to analyze key indicators of change in Birch Run Township. Birch Run Township is in Saginaw County and located along I-75 (see Map 2-1). The degree of change within the township will enable community leaders to better understand current and projected trends taking place. It is with this understanding and knowledge that informed decisions can be made regarding "future growth" within the community.

Key indicators that are analyzed can be grouped in the following categories:

- Population Demographics;
- Housing Demographics;
- Economic Demographics; and
- Population Projections.

These indicators are analyzed, over time, in order to identify trends and make projections that may have a significant impact on future land use planning in the community. Of greater importance to the township may be the impact on future services and programs needed to accommodate and manage growth.

Population Demographics

The population demographics evaluates the past and present characteristics of residents in the township and compares them to surrounding municipalities, Saginaw County, and the State of Michigan. The below list are the different characteristics that will be evaluated.

- Size of Population/Population Growth;
- Household Size;
- Number of Households;
- Household Composition; and
- Age Distribution.

Population Growth

During the last three decades, population growth in the greater region has been slow and, in some areas, negative as shown in Table 2-1. Between 1980 and 1990, Birch Run Township gained 70 new residents, for a modest increase of just 2 percent. However, from 1990 to 2000, the township experienced a population increase of 42 percent, or 1,829 additional residents. From 2000 to 2010, the township experienced a decrease of 1.3 percent with another slight decrease of 1.1 percent in the next decade from 2010 to 2020. In comparison, Census data indicates that, between 1980 to 1990, the village lost 204 people, which represents a drop of 21 percent over the 10-year period. However, between 1990 and 2000, the Village of Birch Run also experienced a marked increase in population of 67 percent, or 661 additional residents. From 2000 to 2010, the village also experienced a decrease like the township, with population declining 5.9 percent. The village then experienced another decrease in population from 2010 to 2020 of 15.4 percent. In fact, the only other community in Saginaw County documented in Table 2-1 that experienced an increase in population was the City of Frankenmuth, which experienced an increase of 8.4 percent. Genesee County and Tuscola County both experienced municipalities with both increases and decreases in population. Noting in Genesee County that the City of Clio, Montrose Township, and Thetford Township all experienced decreases in population while the City of Montrose and Vienna Township experienced increases in population. Also, noting in Tuscola

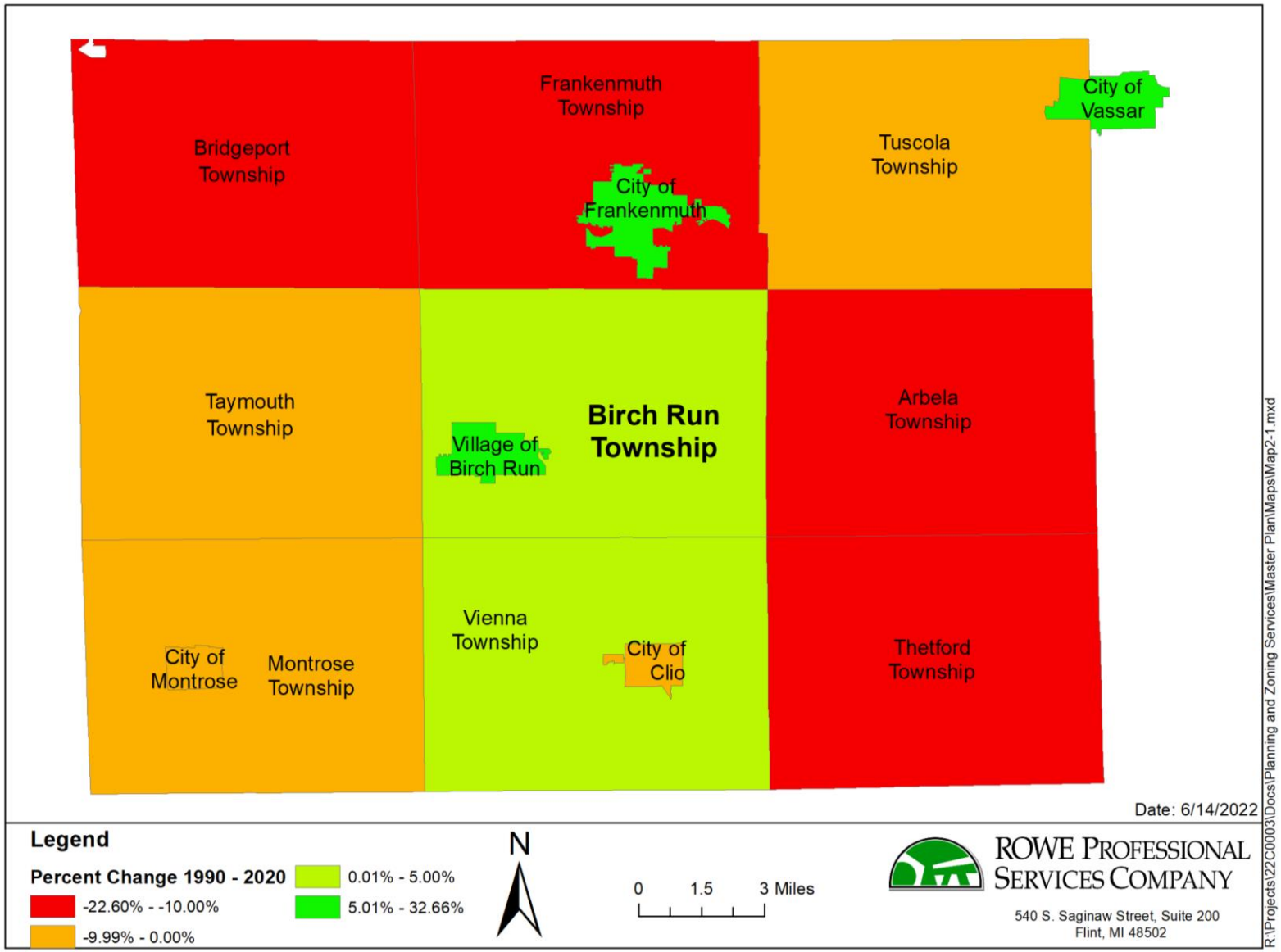
County, Arbela Township and Tuscola Township experienced decreases in population while the City of Vassar experienced an increase in population.

Table 2-1: Population of Birch Run Twp. and Surrounding Communities, 1980—2020

Community	1990	2000	2010	2020	Change 1990-2020	% Change 1990-2020
Saginaw County						
Birch Run Township*	4,362	4,538	4,478	4,408	46	1.05%
Village of Birch Run	992	1,653	1,555	1,316	324	32.66%
Bridgeport Township	12,747	11,709	10,514	9,866	-2,881	-22.60%I
Buena Vista Township	10,903	10,318	8,676	8,171	-2,732	-25.06%
Carrollton Township	6,521	6,602	6,103	5,685	-836	-12.82%
City of Frankenmuth	4,408	4,838	4,944	5,396	988	22.41%
Frankenmuth Township	2,122	2,049	1,959	1,898	-224	-10.56%
Taymouth Township	4,524	4,624	4,520	4,295	-229	-5.06%
Genesee County						
City of Clio	2,629	2,483	2,646	2,525	-104	-3.96%
City of Montrose	1,811	1,619	1,657	1,743	-68	-3.75%
Montrose Township	6,236	6,336	6,224	6,005	-231	-3.70%
Thetford Township	8,333	8,277	7,049	6,640	-1,693	-20.32%
Vienna Township	13,210	13,108	N/A	13,301	91	0.69%
Tuscola County						
Arbela Township	3,182	3,219	3,070	2,808	-374	-11.75%
City of Vassar	2,559	2,823	2,697	2,727	168	6.57%
Tuscola Township	2,144	2,152	2,082	1,978	-166	-7.74%

**Does not include the Village of Birch Run Population. All remaining tables include the Village of Birch Run Population within Birch Run Township.*

Map 2-1: Population Growth of Area



Household Size

Household size decreased in the township, as well as in all adjacent municipalities, since 1980. Between 1980 and 1990, the number of persons per household declined from 3.06 to 2.95 in Birch Run Township, as shown in Table 2-2. Household size continued to decrease between 1990 and 2000 with a drop to 2.65 persons per household. Between 2000 to 2010, this number continues to drop to 2.56. Between 2010 and 2020, this number continued to drop to 2.52. The surrounding municipalities show the same trend, other than the village which saw an increase in household size from 2000 to 2010, followed by a substantial decrease from 2010 to 2020 to 2.00. Bridgeport Township is also an outlier, with a slight increase in household size from 2.42 to 2.45 between 2010 and 2020. Birch Run Township and the other municipalities that experienced decreases follow a nationwide trend that has seen a consistent drop in average household size since the turn of the century with smaller families, childless couple families, and more single-parent households. The number of persons per household is an indicator of the size and composition of families. The figures indicate that there are likely more single-parent families and empty nester families in the village than in the township.

Table 2-2: Household Size, 1980-2020

Community	1980	1990	2000	2010	2020
Saginaw County		2.61	2.54	2.44	2.34
Birch Run Township	3.06	2.95	2.65	2.56	2.52
Village of Birch Run	2.98	2.38	2.35	2.37	2.00
Bridgeport Township	2.98	2.51	2.56	2.42	2.45
Buena Vista Township	2.53	2.37	2.62	2.44	2.26
Carrollton Township	2.78	2.42	2.58	2.47	2.26
City of Frankenmuth	2.32	2.01	2.16	2.14	2.08
Frankenmuth Township	3.29	2.7	2.79	2.71	2.60
Taymouth Township	3.39	2.98	2.89	2.74	2.49

Source: Census Bureau 1980, 1990, 2000, 2010, and 2020.

Number of Households

One result of a decreasing household size is that municipalities may decrease or remain relatively constant in total population and still experience an increase in the number of households in the community (Table 2-3). Between 2010 and 2020, the township had a significant increase of 569 households, a 33.5 percent increase. All of the surrounding communities with the exception of Bridgeport Township had an increase in the number of households as well. This dynamic of an increasing number of households along with stable population is a consequence of the decreasing number of people per household, and is a major factor driving demand for additional housing across the United States.

Table 2-3: Number of Households 1980 – 2020

Community	1990	2000	2010	2020	Total Chng. 1990-2020	% Channge 1990-20200
Saginaw County						
Birch Run Township	1,481	1,628	1,700	2,269	788	53.21%
Village of Birch Run	416	699	655	733	317	76.20%
Bridgeport Township	4,514	4,669	4,281	4,128	-386	-8.55%
Buena Vista Township	4,039	4,211	3,500	3,601	-438	-10.84%
Carrollton Township	2,404	2,559	2,457	2,500	96	3.99%
City of Frankenmuth	1,838	2,123	2,200	2,496	658	35.80%
Frankenmuth Township	711	728	721	798	87	12.24%
Taymouth Township	1,461	1,661	1,640	1,713	252	17.25%
Source: US Census 1980, 1990, 2000, 2010, and 2020.						

Household Composition

The term "household composition" is used to describe the general structure of households. The US Bureau of the Census divides households into several categories:

- Total Households.
- Family Households which includes married-couples and single household households.
- Married Couple Families composed of both spouses, with or without children.
- Female Householder, with no husband present.
- Male Householder, with no wife present.
- Nonfamily Households where the compositions are unmarried couples or people that are not related sharing housing.
- Householder is Living Alone
- One person Household and 65+ years of age.

Table 2-4 shows that a significantly large proportion (60 percent) of households in Birch Run Township consisted of married couple families. By contrast, the Village of Birch Run had a smaller share of its households (37 percent) made up of married couple families in 2020. Single householders with no partner present in the township are 10 percent of all households. The village has a larger proportion of 15 percent. The nonfamily households are 30 percent in the township, while the village is 48 percent. There is a smaller proportion of the population living alone (25 percent) and householders that are living alone and over 65 years (11 percent) than in the village.

One of the reasons for this difference was a relatively large number of low-cost dwellings such as apartments or mobile homes in the village, which were suitable for households with one income or a fixed income. These high-density residential developments are often inappropriate for rural areas without municipal services. Most of the housing in rural areas, such as Birch Run Township, is composed of single-family homes on large lots. They are often inappropriate or too expensive for single person or single parent households.

Table 2-4: Composition of Households for 2020

Household Types	Birch Run Township		Village of Birch Run	
	#	%	#	%
Total households	2,269	100	659	100
Family households (families)	1,593	70%	343	52%
Married-couple family	1,372	60%	247	37%
Female householder, with no husband present	157	7%	46	7%
Male householder, with no wife present	64	3%	50	8%
Nonfamily households	676	30%	316	48%
Householder is living alone	558	25%	229	35%
One person household and 65 years and over	252	11%	112	17%
Source: US Census 2020				

This trend is nationwide and will likely continue. One of the potential results of this trend could be a shift in the types of housing being constructed. Due to a shrinking household size, a significant proportion of housing characterized by a smaller floor area and two or fewer bedrooms could be constructed in the future.

Age Distribution

The age distribution of the community suggests maturing families with children and a relatively moderate number of persons 65 years and over as shown in Table 2-5. Almost a third of the population is between ages 35 and 59 years (29.2 percent). The following largest proportion of the population is between the ages of 5 and 19 years (19.6 percent). This is reflective of national trend in age distribution, which result from the "baby boom" of the late 1940s to late 1950s. The population segment born during this period has impacted American society dramatically as they have aged, affecting demands for products, housing, and jobs. This trend impacts could be seen in the village, township, county, and state.

Table 2-5: Age Distribution, 2020

Age Groupings	Birch Run Twp.		Village of Birch Run		Saginaw County		State of Michigan	
	#	%	#	%	#	%	#	%
Total population	5,724	100.0%	1,316	100.0%	191,166	100.0%	9,973,907	100.0%
Under 5 years	278	4.9%	66	5.0%	11,089	5.8%	568,326	5.7%
5-19 years	1,122	19.6%	185	14.0%	35,533	18.6%	1,859,662	18.7%
20-24 years	451	7.9%	95	7.2%	12,541	6.6%	692,245	6.9%
25-34 years	671	11.7%	205	15.5%	23,760	12.5%	1,288,625	12.9%
35-59 years	1,670	29.2%	316	24.0%	58,052	30.4%	3,165,198	31.8%
60-64 years	565	9.9%	243	18.5%	13,557	7.1%	687,010	6.9%
65-74 years	604	10.6%	125	9.5%	20,839	10.9%	1,007,792	10.1%
75 years and over	363	6.4%	81	6.2%	15,795	8.2%	705,049	7.0%
Median Age	43.3		46.0		41.0		39.8	
Source: US Census American Community Survey 2016- 2020								

The median age of the township closely parallels the county and state figures. The 2020 median age in the township was 43.3 years, the village was 46.0 years, the county was 41.0 years, and the state 39.8 years.

Housing Demographics

The housing demographics evaluates the past and present characteristics of housing stock in the township and compares them to surrounding municipalities, Saginaw County, and the State of Michigan. The below list are the different characteristics that will be evaluated.

- Housing Tenure;
- Housing Value;
- Dwelling Unit Type; and
- Building Activity.

Housing Tenure

The total amount of housing stock between 1990 and 2010 has decreased slightly, while the total amount of housing stock has increased between 2010 and 2020 as seen in Table 2-6. In 2020, the total housing available was 2,637; 2010, it was 1,804; in 2000, it was 1,688; and in 1990, it was 1,997. The number of vacancies in 2020 has increased by almost 10 percent since 1990. The majority of the housing within the township is occupied at 86 percent in 2020. There has been an increase of owner-occupied housing within the township from 1990 (66.4 percent) to 2020 (71.1 percent).

Table 2-6: Housing Tenure, 1990-2020

	1990		2000		2010		2020	
	#	%	#	%	#	%	#	%
Total Housing	**1,997**	**100.0%**	**1,688**	**100.0%**	**1,804**	**100.0%**	**2,637**	**100.0%**
Vacant	100	5.0%	60	3.6%	104	5.8%	368	14.0%
Total Occupied Housing	1,897	95.0%	1,628	96.4%	1,700	94.2%	2,269	86.0%
Owner Occupied	1,327	66.4%	1,494	88.5%	1,520	84.3%	1,876	71.1%
Renter Occupied	154	7.7%	134	7.9%	180	10.0%	393	14.9%
Source: US Census Decennial1990, Decennial 2000, American Community Survey 2006-2010, and American Community Survey 2016- 2020								

Home Value

This data was collected by using the American Community Survey (ACS), where a proportion of the population is sampled over five years to give estimates of different aspects of the community. The data collected is between 2016 and 2020. At the time the 2020 Census data was collected, Table 2-7 shows that over a third of the township's home value is between $100,000 to $149,999. Most of the village's home values are between less than $100,000 and $299,999. The median value for the township includes the village's home values but is $14,900 higher than the village's.

Table 2-7: Home Value, 2016-2020

Value Ranges	Birch Run Township		Birch Run Village	
	#	%	#	%
Specified owner-occupied units	1,876	100.0%	354	100.0%
Less than $50,000	83	4.4%	51	14.4%
$50,000 to $99,999	245	13.1%	72	20.3%
$100,000 to $149,999	680	36.2%	92	26.0%
$150,000 to $199,999	379	20.2%	46	13.0%
$200,000 to $299,999	287	15.3%	85	24.0%
$300,000 to $499,999	156	8.3%	8	2.3%
$500,000 to $999,999	16	0.9%	0	0.0%
$1,000,000 or more	30	1.6%	0	0.0%
Median (dollars)	$147,000*		$132,100	
Source: American Community Survey, 2016-2020.				

Dwelling Unit Type

Most of the dwelling unit types within the township are single unit detached homes (82.1 percent) as seen in Table 2-8. The next largest proportion of housing type is mobile homes with 4.9 percent. About 4.7 percent of the housing is three to nine units in one building. The village shows a larger variety of housing opportunities. This is more possible for the village to have higher density of housing units due to having and controlling the capacity of utilities such as water and sewer. Due to the rural nature of the township, it may not be appropriate for the high-density dwelling units.

Table 2-8: Dwelling Unit Type, 2016-2020

Dwelling Unit Type	Birch Run Township		Birch Run Village	
	#	%	#	%
Total housing units	2,637	100.0%	733	100.0%
1-unit, detached	2,166	82.1%	358	48.8%
1-unit, attached	35	1.3%	35	4.8%
2 units	70	2.7%	26	3.5%
3 or 4 units	48	1.8%	48	6.5%
5 to 9 units	77	2.9%	77	10.5%
10 to 19 units	128	4.9%	89	12.1%
20 or more units	11	0.4%	11	1.5%
Mobile home	102	3.9%	89	12.1%
Boat, RV, van, etc.	0	0.0%	0	0.0%
Source: American Community Survey, 2016-2020				

Building Activity

Table 2-9 presents recent building permit activity in the township. The majority of the development within the township is single-family housing. The largest increase is in 2017 and 2018 where a total of 11 homes were built each year. This would indicate that the township is now seeing a full recovery from the housing crisis experienced back in the early 2000s. There has been slight commercial growth in 2013 and 2018. National trends show the demand for retail spaces is decreasing, so the commercial building activity is not likely to increase dramatically.

Table 2-9: Building Activity 2010-2020

Year	Residential		Commercial	Industrial
	Single Family	Multi Family		
2010	-	-	-	-
2011	-	-	-	-
2012	-	-	-	-
2013	2	-	1	-
2014	1	-	-	-
2015	1	-	-	-
2016	-	-	-	-
2017	11	-	-	-
2018	11	-	1	-
2019	5	-	-	-
2020	7	-	-	-

Source: Birch Run Township Building Department, December 2021

Economic Demographics

The economic demographics evaluates the past and present characteristics of economic characteristics of residents in the township and compares them to surrounding municipalities, Saginaw County, and the State of Michigan. The below list are the different characteristics that will be evaluated.

- Median Household Income;
- Income of Households; and
- Occupations.

Median Household Income

Table 2-10 shows that the median household income for the township was $69,402 based on the ACS 2020 report. The township is higher than the village, county, and state. Birch Run Township as well as the village experienced a similar trend of decreased median household income from 2010 to 2015, then soon after saw an increase from 2015 to 2020 while the county and state had an increase in the median household income from 2010 to 2020.

Table 2-10: Median Household Income, 2016-2020

Year	Birch Run Twp.		Village of Birch Run		Saginaw County		State of Michigan	
	$	% Chng.	$	% Chng.	$	% Chng.	$	% Chng.
2010	$54,622*	-	45,990	-	42,235	-	48,432	-
2015	$53,780*	-1.5%	45,000	-2.2%	43,042	1.9%	49,576	2.4%
2020	$69,402*	29.0%	47,656	5.9%	49,565	15.2%	59,234	19.5%

Source: American Community Survey 2006-2010, 2011-2015, and 2016-2020

Income of Households

Table 2-11 shows levels of income for households in the Birch Run community. The most common income ranges for Birch Run Township are $50,000 to $74,999 (21.2 percent) and $100,000 to $149,999 (20.0%).

Table 2-11: Household Income, 2016-2020

	Birch Run Twp.		Village of Birch Run		Saginaw County		State of Michigan	
	#	%	#	%	#	%	#	%
Total Households	2,269	100.0%	659	100.0%	78,980	100.0%	3,980,408	100.0%
Less than $10,000	59	2.6%	43	6.5%	5,924	7.5%	254,746	6.4%
$10,000 to $14,999	75	3.3%	15	2.3%	3,949	5.0%	163,197	4.1%
$15,000 to $24,999	209	9.2%	105	15.9%	8,451	10.7%	366,198	9.2%
$25,000 to $34,999	168	7.4%	42	6.4%	9,241	11.7%	382,119	9.6%
$35,000 to $49,999	247	10.9%	147	22.3%	12,242	15.5%	529,394	13.3%
$50,000 to $74,999	481	21.2%	129	19.6%	15,243	19.3%	724,434	18.2%
$75,000 to $99,999	220	9.7%	106	16.1%	8,372	10.6%	513,473	12.9%
$100,000 to $149,999	454	20.0%	62	9.4%	9,557	12.1%	581,140	14.6%
$150,000 to $199,999	302	13.3%	8	1.2%	3,159	4.0%	234,844	5.9%
$200,000 or more	61	2.7%	2	0.3%	2,843	3.6%	226,883	5.7%
Source: American Community Survey 2016-2020.								

Occupations

The occupations within the township are primarily management professional, and related occupations (35.7%). Sales and office occupation being the next largest occupation at 26.9 percent(Table 2-12). These top occupations are also seen in the village and the county. It is important to keep in mind that these numbers are the types of jobs the residents have. Residents often commute into other communities for their place of work but have chosen to live in Birch Run Township.

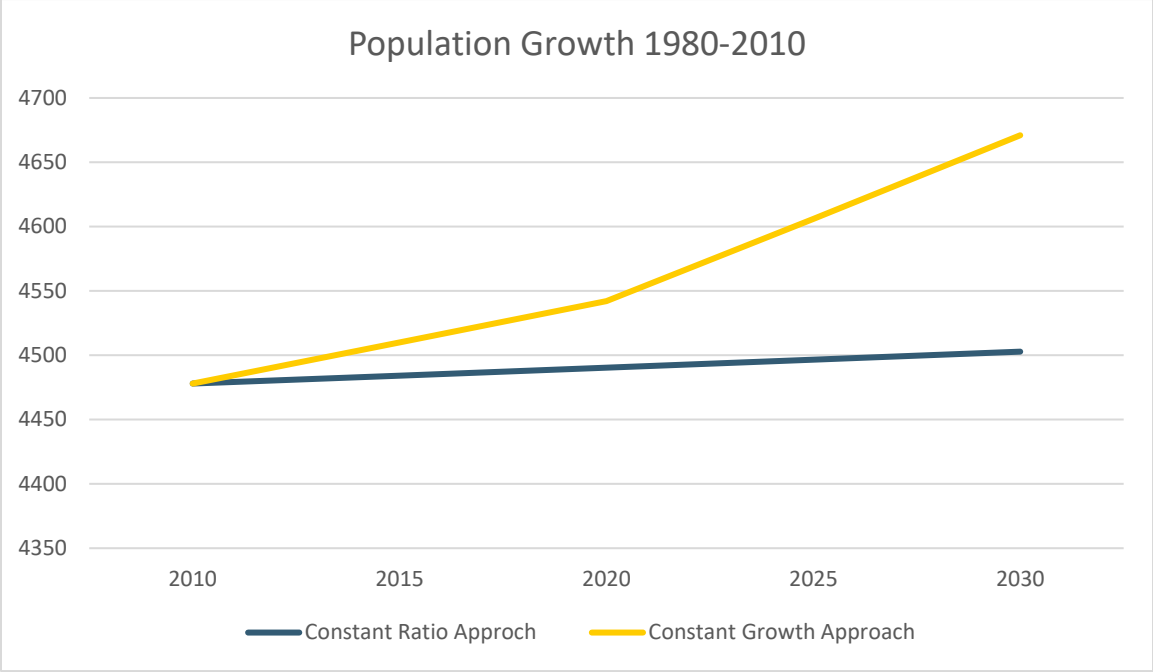
Table 2-12: Occupations, 2016-2020

	Birch Run Twp.		Village of Birch Run		Saginaw County	
	#	%	#	%	#	%
Employed civilian population 16 years and over	2,658	100.0%	597	100.0%	82,355	100.0%
Management, professional, and related occupations	948	35.7%	161	26.9%	26,484	32.2%
Service occupations	388	14.6%	131	21.9%	16,858	20.5%
Sales and office occupations	715	26.9%	222	37.2%	18,136	22.0%
Natural resources, construction, and maintenance occupations	336	12.6%	25	4.2%	6,440	7.8%
Production, transportation, and material moving occupations	271	10.2%	76	12.7%	14,437	17.5 %
Source: American Community Survey 2016-2020.						

Projections

Projections are based on population and household dynamics. These trends are important to monitor because they impact many policy decisions to either preserve agricultural land, expand residential areas, or increases in density of homes.

Figure 2-1: Populations Projections



The first projection method is called the constant ratio approach and used 2010 Census data (see Figure 2-1). This method assumes that the growth experienced by both the township and village would continue proportional to the changes between 1980 and 2010. Based on these projections, it appears between 2010 and 2030, the township will experience a 0.01 percent increase or an increase of 25 persons. The average is an estimated six new persons per year.

The second projection method used is the constant growth approach. This approach is used to calculate growth over 10-year periods of time. The 2010 population count of 4,478 is from the 2010 Census Data whereas the 2020, 2030, and 2040 are estimates based on the constant growth approach. Based on these projections, it appears that in 2020, it is estimated that the population will be 4,542; in 2030, that population will be 4,606; and then will increase to 4,671 in 2040.

Chapter 3 Existing Land Use

The existing land use in a community, and the distribution of that land use throughout the community, is the principal influence on future development. It is essential to understand the current pattern of land use in a community to identify how those land uses impact each other, the demand for municipal services created by those uses, and their impact on a community's natural resources.

To identify current land use, the township staff used tax records to identify the predominant land use for each parcel in the village and the township. In instances where a residence was located on a large agricultural parcel, it was classified as agricultural uses. Parcels that were primarily woodlots were included in the "vacant/fallow" category.

In the previous plan, ROWE staff acquired 1 inch equals 2,000 feet aerial photography of the area flown in 1978 and 1988 and, by interpreting those photos, they created land use maps for those two years. The data was then entered into a GIS system, and the area of each land use was calculated by year.

ROWE conducted an existing land use inventory off aerial imagery and did a windshield survey to determine the land use classifications.

Land Use Categories

The land use categories used in this inventory are:

Agricultural — Land used primarily for pasture or crop production.

Commercial — Retail commercial activities and professional offices.

Industrial — Light and heavy industrial activities including warehousing, assembly, and fabrication activities.

Public/Quasi Public — Public institutions such as public uses, cemetery, schools, and park space; non–public institutional uses such as fraternal organizations and meeting halls

Multi-Family — Structures or groups of structures each containing two or more residences.

Single Family Residential — Single family detached structures on individual lots.

Vacant/Fallow — Land not currently used for any of the above uses, including vacant wood lots.

Existing Land Use Comparison

Agriculture land use within the township is the largest land use category at comprised 60.8 percent of the land in the 2017 inventory, whereas in 1978, 62.5 percent of the land use was agricultural. While analyzing agricultural land use, it can be concluded that there has been a small amount of variation between 1978 and 2017 but, overall, the agricultural land use in Birch Run has remained constant.

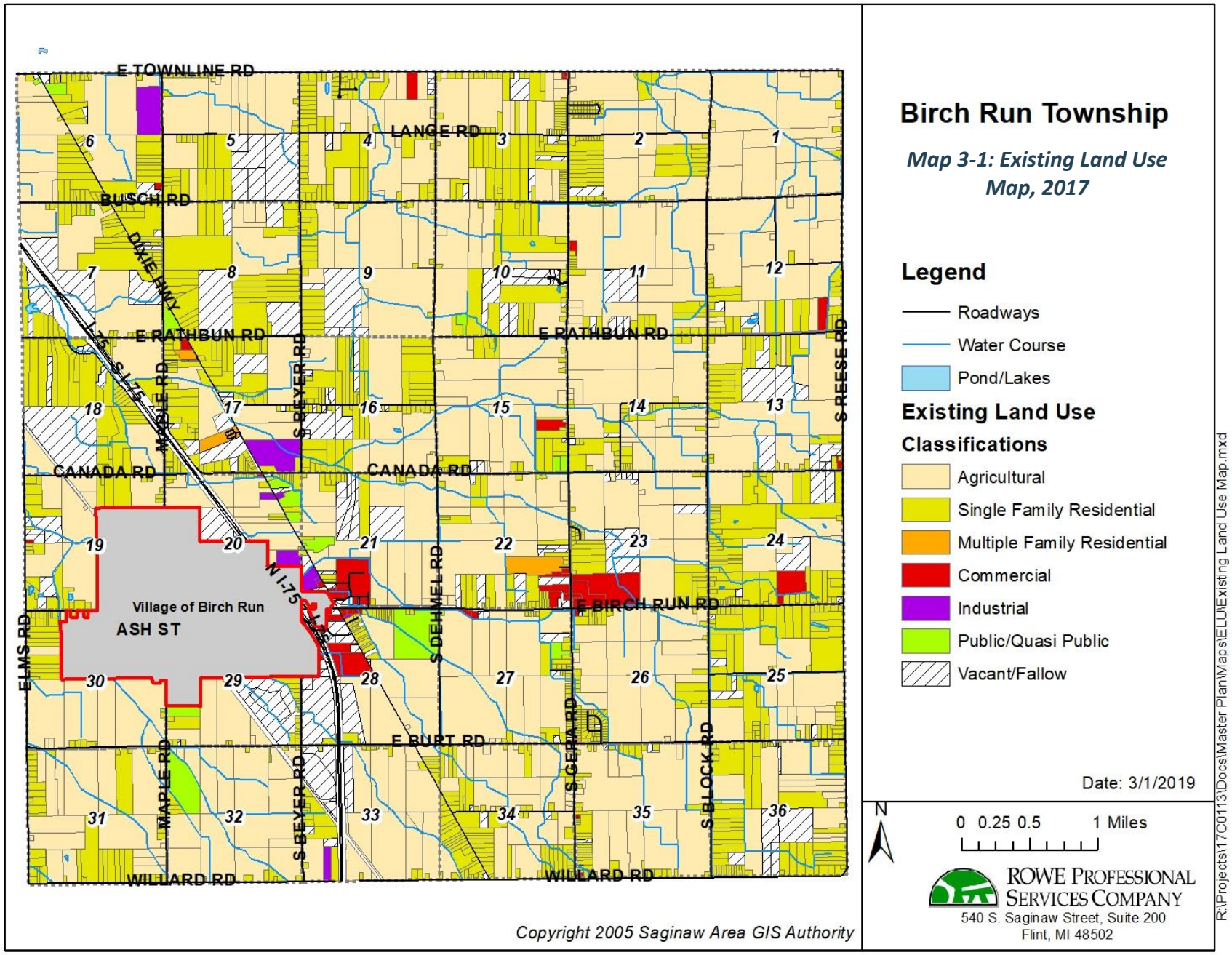
Single family residential uses are the second largest category at 5,542 acres and covering 26.2 percent of the township in 2017 and 19.7 percent of the township in 1978. In 1997, the single family residential land use covered 23.4 percent of land use. Table 3-1 indicates that between 1978 and 2017, the number of acres of the township that was single family residential has continuously increased. Vacant land is the third largest existing land use category, covering 9.7 percent of the total land area in 2017 and 15.4 percent of land area in 1978. Although vacant land is the third largest existing land use from 1978 to 2017, Table 3-1 indicates that there has been a decrease in the amount of vacant land from 1978 to 2017.

Commercial is another land use in the township, with 1.4 percent of the existing land use being commercial in 2017. Table 3-1 indicates that commercial land use decreased from 1997 to 2017. In 1997, 362 acres of land use was commercial and then decreased in 2017 to 288 acres. The Multi-Family residential uses located in the township totaled 60 acres of land area in 2017. The Industrial land uses have significantly increased between 1978 and 2017. In 1978, 3 acres in Birch Run Township were Industrial land uses. Whereas in 2017, 132 acres of land was used for Industrial land uses.

The Multi-Family land use has increased by 150 percent from 1978 to 2017, going from 24 acres in 1978 to 60 acres in 2017. Table 3-1 also shows that the largest percentage increase was in Industrial land use that went from 3 acres in 1978 to 132 acres in 2017. Whereas the largest percent decrease in land use was in Vacant/Fallow land at -35.21 percent.

Table 3-1: Existing Land Use (acres)

Land Use Classification	1978	1988	1997	2017	% Change from 1978 and 2017
Agricultural	12,844	12,683	12,617	12,889	0.35%
Single Family Residential	4,056	4,522	4,800	5,542	36.64%
Multi Family	24	36	36	60	150.00%
Commercial	235	261	362	288	22.55%
Industrial	3	10	10	132	4,300.00%
Public/Quasi Public	231	220	153	222	-3.90%
Vacant/Fallow	3,178	2,807	2,518	2,059	-35.21%
Total	20,571	20,539	20,496	21,192	3.02%


E TOWNLINE RD
LANGE RD
BUSCH RD
DIXIE HWY
E RATHBUN RD
S REESE RD
S BEYER RD
MAPLE RD
I-75 S
CANADA RD
Village of Birch Run
ASH ST
N I-75
S DEHMEL RD
E BIRCH RUN RD
ELMS RD
E BURT RD
S GERA RD
S BLOCK RD
WILLARD RD
1
2
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Copyright 2005 Saginaw Area GIS Authority
Birch Run Township
Map 3-1: Existing Land Use Map, 2017
Legend
Roadways
Water Course
Pond/Lakes
Existing Land Use
Classifications
Agricultural
Single Family Residential
Multiple Family Residential
Commercial
Industrial
Public/Quasi Public
Vacant/Fallow
Date: 3/1/2019
N
0 0.25 0.5 1 Miles
ROWE PROFESSIONAL SERVICES COMPANY
540 S. Saginaw Street, Suite 200
Flint, MI 48502
R:\Projects\17C0113\Docs\Master Plan\Maps\ELU\Existing Land Use Map.mxd

Changes in State Equalized Value (SEV)

All land in the State of Michigan is classified by use to estimate its value for taxing purposes. The change in value of each class of land in a community can provide some insight into changes in land use and development of land.

While analyzing the taxable value for Birch Run Township in 2001 and 2013, the 2013 residential uses comprise 61.7 percent of the real tax property tax base. Whereas in 2001, the residential uses comprised 59 percent of the real property tax base, indicating a 2.7 percent increase from 2001 to 2013.

Commercial uses had the largest percentage increase; 19.6 percent from 2001 and 2013. Industrial uses have increased by 1.38 percent, with a taxable value of $2,514,680 in 2013 and $32,400 in 2001. The agricultural use did not indicate a significant change, due to the equalization value being $13,668,150 in 2001 and $13,951,588 in 2013.

When analyzing the SEV, residential uses comprise 59 percent of the real property tax base in 2001, representing an SEV of $86,531,566. Commercial uses make up 33 percent of the tax base with an SEV of $47,724,815. Industrial SEV is $93,232 (less than 1%) and agricultural SEV is $12,169,937 (8%).

Table 3-2: Birch Run Township
State Equalized Values, 2001, 2013, and 2021

	Agricultural	Residential	Commercial	Industrial	Timber	Total Real Property
2021	16,247,219	138,703,990	63,819,810	3,652,883	-	222,423,902
2013	13,951,588	114,423,851	54,453,676	2,514,680	-	185,343,795
2001**	13,668,150	93,166,300	11,724,900	32,400	-	118,591,750

** according to Township Assessor, category has been eliminated.*
*** provided by Township Assessor in November 2001.*

Chapter 4 Natural Features

(Select maps were updated as part of the 2019 Master Plan update, otherwise this chapter was not revised)

Natural features are studied in the development of land use plans for two reasons: (1) they impose limitations on the development potential of some areas, because of the existence of such elements as flood plains, steep slopes, or wetlands; and (2) they enhance the community, development potential, and value of some areas due to the existence of such elements as river/lake access or views, mature woodlots, and easily "piercing" soils. A major concern, in preparing the plan, is to protect the community's environmental assets while allowing appropriate development.

In order to adequately address this concern, specific areas are analyzed:

- Floodplains
- Wetlands
- Woodlands
- Soils

Floodplains

Areas adjacent to creeks, streams, and rivers are susceptible to periodic flooding. Due to the property damage flooding causes and the effect that construction has in certain parts of floodplains, regulation of development in floodplains is important to sound planning.

There has not been a Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) prepared for the township, indicating that the area does not have a history of flood damage to property. Township soils were analyzed based on their flooding characteristics. Less than 60 acres in the township were soils characterized as prone to frequent or intermittent flooding.

Generally speaking, floodplains within the township appear to be limited and do not pose a significant barrier to development. Current state and federal regulations, in conjunction with local building code enforcement, represent adequate regulation of development within the township.

Wetlands

Wetlands include marshes, swamps, and the areas between dry land and open water. These are areas typified by poor drainage and standing water. They are important community resources for several reasons. Wetlands provide a filter to keep inorganic materials out of the water supply, act as a sponge to retain water during dry periods, and to hold water during floods. One (1) acre of marsh is capable of absorbing 300,000 gallons of water. Wetlands provide this holding capacity inexpensively. If destroyed, they can be replaced only with expensive structural public improvements. Wetlands also function as critical wildlife habitats.

Because wetlands are a valuable natural resource, they are protected by the Wetlands Protection Act, a part of the Michigan Natural Resources and Environmental Protection Act (PA 451 of 1994 as amended). The act requires that permits be acquired from the Michigan Department of Environmental Quality (DEQ) prior to altering or filling a regulated wetland. The Wetland Protection Act defines wetlands as:

> *"land characterized by the presence of water at a frequency and duration sufficient to support and that under normal circumstances does support wetland vegetation or aquatic life and is commonly*

referred to as a bog, swamp, or marsh and is contiguous to the Great Lakes, an inland lake or pond, or a river or stream."

Regulated wetlands include all wetland areas greater than 5 acres or those of any size contiguous to waterways. Wetlands which are hydrologically connected (i.e., via groundwater) to waterways are also regulated. Activities exempted from the provisions of the act include farming, grazing of animals, farm or stock ponds, lumbering, maintenance of existing non-conforming structures, maintenance or improvement of existing roads and streets within existing rights-of-way, maintenance or operation of pipelines less than 6 inches in diameter, and maintenance or operation of electric transmission and distribution power lines. Permits will not be issued if a feasible or prudent alternative to developing a wetland exists.

There are no official state wetland maps that will conclusively identify which areas are wetlands and those that are not. One of two types of maps that are commonly used as references in determining wetlands are the Michigan DEQ's Michigan Resource Inventory Systems' (MIRIS) Land Use/Land Cover Maps, which show wetlands mapped using 1978 infrared aerial photography. The program normally did not map land uses/cover under 5 acres in size, which means that small wetlands contiguous to a lake, stream, or pond, which are regulated, often don't show up. The other type of map is the US Fish and Wildlife Service wetlands maps. Although these maps are not based on Michigan's definition of a wetland, they do identify small wetlands that do not show up on the MIRIS maps. A map of wetlands based on the DEQ's land use/cover inventory is illustrated on Map 4-1.

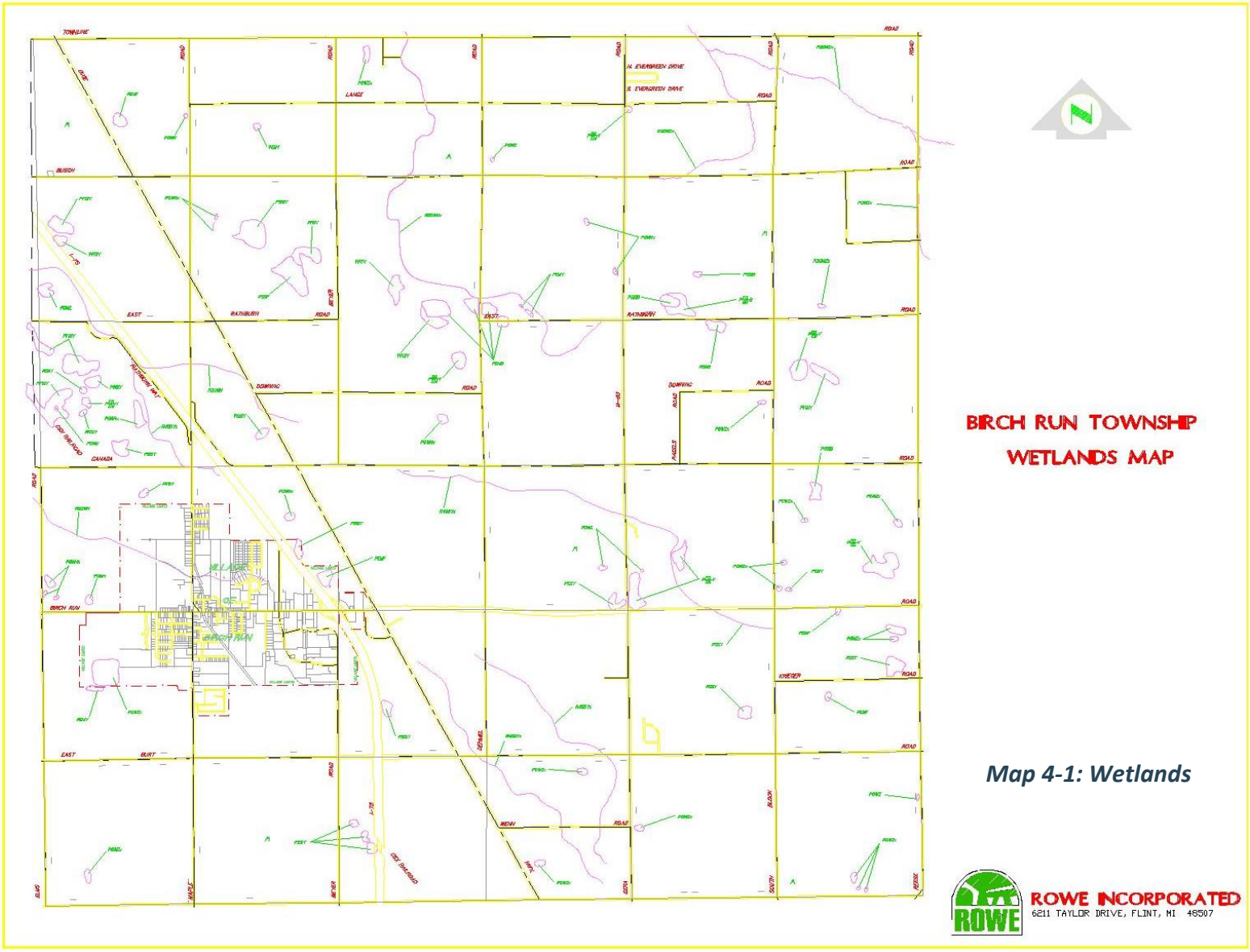
The Wetlands Map (Map 4-1) shows the wetlands identified by the US Fish and Wildlife Service. Small wetlands are scattered throughout the township with the majority of the wetland area in the northwest quadrant of the township, particularly Sections 8, 9, and 18.

With the exception of Sections 8, 9, and 18, none of the wetland areas appear concentrated or large enough to pose anything more than local limitations on development. The extent of wetlands in these three sections may justify the use of tools such as cluster development or a reduction of overall development to protect the wetland areas.

Woodlands

The importance attached to woodlands is a function of their demonstrated ability to stabilize slopes, retard erosion, conserve water quality and quantity, maintain local micro-climates, filter the atmosphere, decrease noise levels, and provide wildlife habitats. Mature trees represent a valuable resource in maintaining the aesthetic character of a community. Future development should not occur at the expense of existing tree cover. Wooded areas should be managed to ensure their long-term existence and to help preserve the rural character of the community.

The 1978 MIRIS land use/land cover map for the township shows large tracts of Aspen, White Birch, and associated species in the northern two thirds of the township. Comparison of this information with aerial photography and 1997 land use information indicates that significant residential development has occurred in these areas but has normally taken the form of development within the wood lot, rather than clear cutting the wood lot for development.



Map 4-1: Wetlands

Soils

One of the natural characteristics of a community affecting its development potential is the suitability of the soils. Soils in a given area can vary widely in their capacity to handle various types of development. Some soils may be excellent for raising crops but provide a poor foundation for roads. Other soils may provide good foundations for roads but are inadequate for buildings with basements. Knowing the limitations of the community's soils for development should serve as a basis for future land use planning.

The Soil Survey of Saginaw County, Michigan, prepared by the United States Department of Agriculture's Soil Conservation Service (SCS) and published in 1994, maps the various soil types in the county and evaluates them according to their physical properties and soil suitability. Physical properties identified include the soils permeability, soil reaction, shrink-swell potential, slope, erosion factor, fertility, frequency of flooding, and average/seasonal height of the water table. Based on these characteristics, the soils are classified as to their suitability for various crops, recreational uses, as natural habitat for various types of wildlife, for building sites, for sanitary facilities, and as a source for construction materials such as sand and gravel.

Land Use and Soils

Each soil type has unique characteristics, which pose opportunities for some uses and limitations for others. The most important characteristics making the soil suitable or unsuitable for development are limitations on dwellings with basements, limitations on septic tank absorption fields, and suitability for farming. The degree of soil limitations reflects the hardship and expense of developing the land. Soil limitations can be classified into four categories:

Slight: Relatively free of limitations or limitations are easily overcome.

Moderate: Limitations need to be considered but can be overcome with good management and careful design.

Severe: Limitations are severe enough to make use questionable.

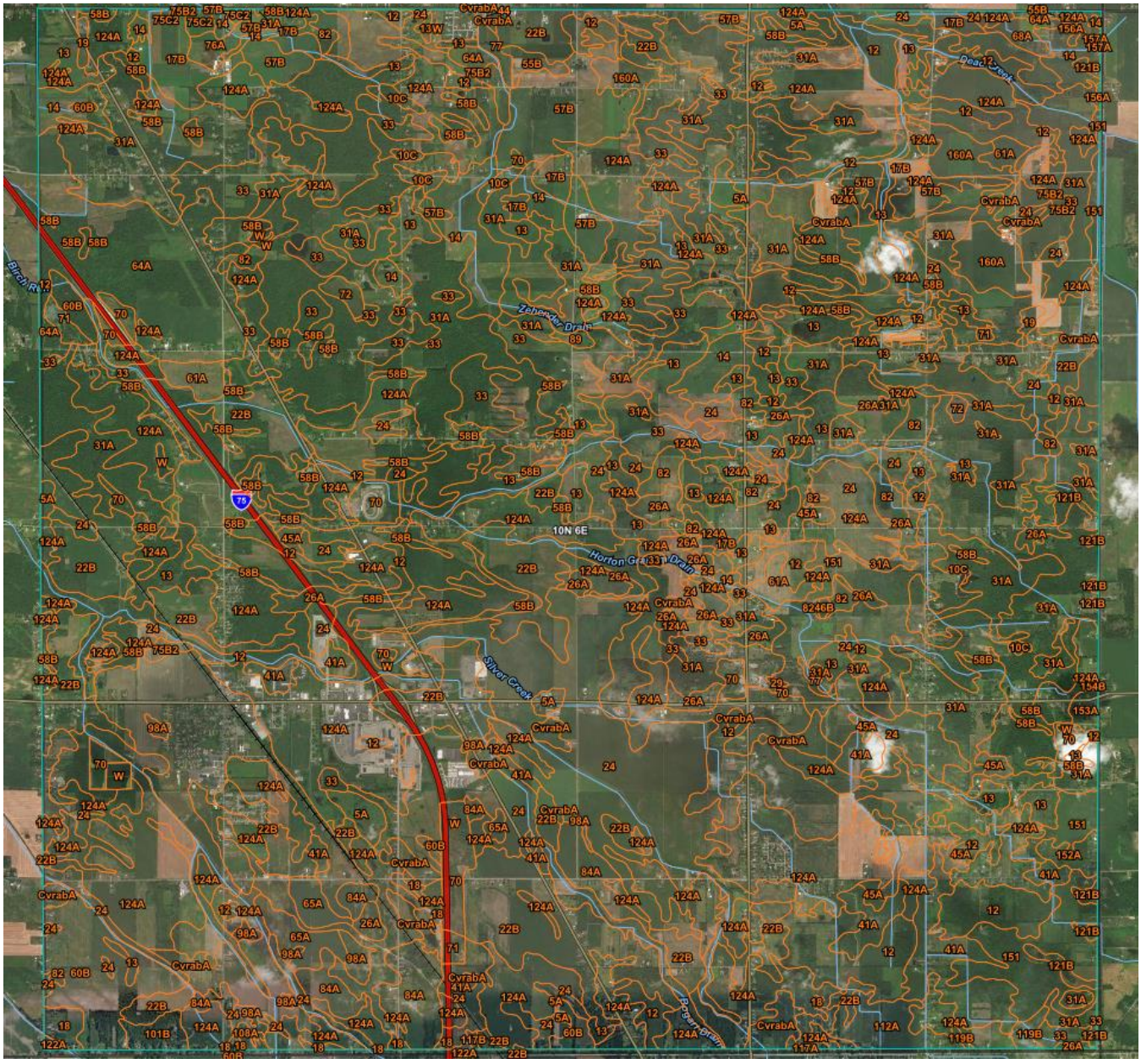
Mixed: Limitations vary within the soils group.

The soil types present in the township are shown on the Map 4-2: Soil Types. Soil types found are essentially glacial deposits, acted upon by soil formation processes such as wind and water. As a result of glaciation, soil types vary widely from site to site. This, coupled with the fact that soil depths on United States Department of Agriculture soil survey maps average 3 to 5 feet, make conclusive and accurate delineation of areas with severe limitations difficult. Site visits and inspections are necessary, in nearly all instances, to establish actual site conditions.

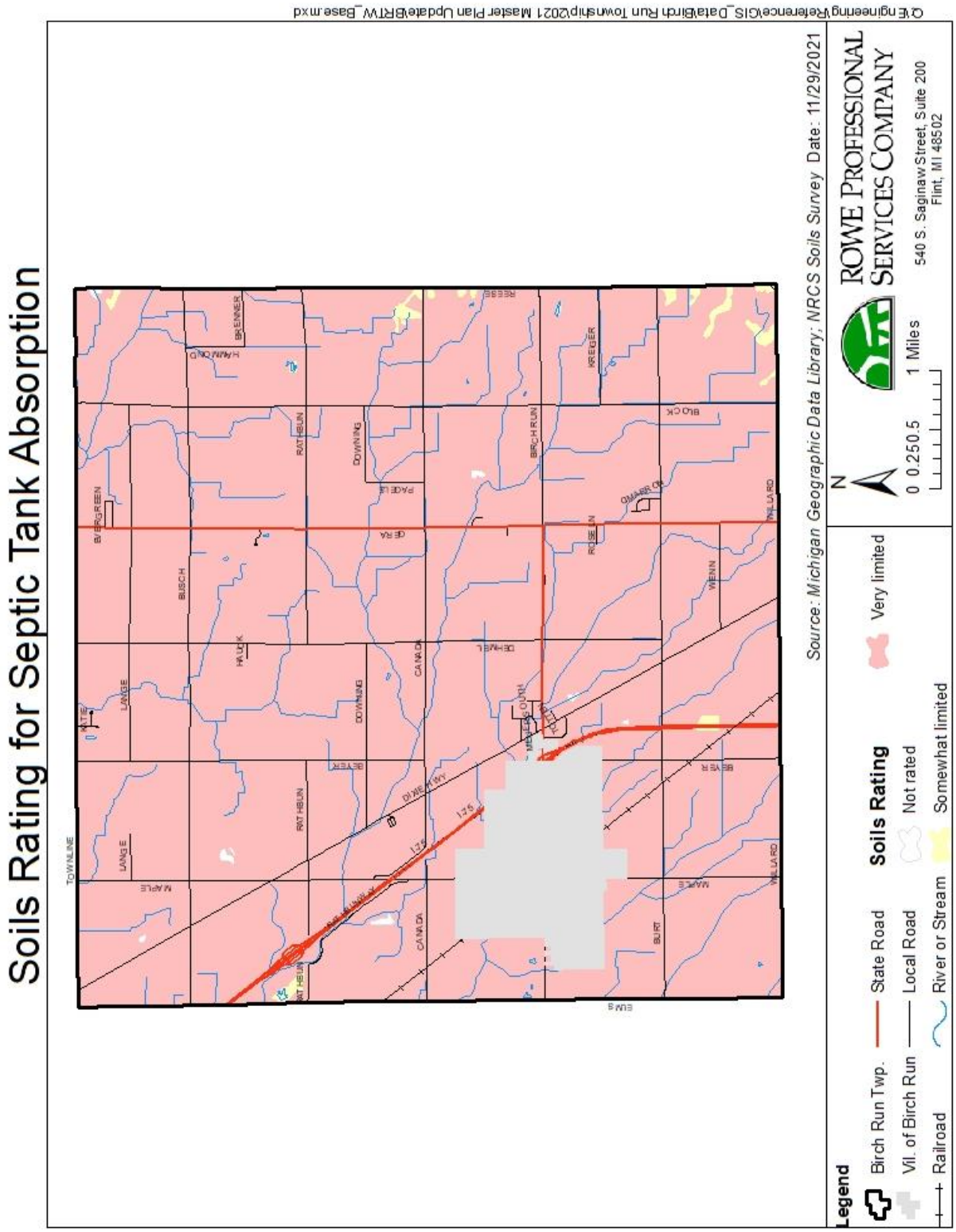
Limitations for Septic Systems

One of the soil characteristics important to consider in planning for future development is the suitability for use as septic tank absorption fields. In areas where public sewer systems are not available, septic systems with septic tanks and absorption fields are the most common method used to dispose of sewage from private residences. Absorption fields disperse the effluent from septic tanks through a series of subsurface tiles and perforated pipes. The liquid then percolates down into the ground, the soil and micro-organisms in the soil acting to filter and clean the effluent before it reaches the groundwater below it.

Map 4-2: Soil Types (Source: USDA Natural Resources Conservation Service Web Soils Survey)



Map 4-3: Soil Limitations for Septic Tank Absorption Fields



The soils in the village and township were categorized based on the SCS's system for evaluating soils according to the limitations the soils pose to construction and operation of septic tank absorption fields. Table 4-1 shows the various soil types and their classification, while the soil suitability map shows the distribution of the various soil types (see Map 4-3: Soil Limitations for Septic Tank Absorption Fields). The map symbol listed in Table 4-1 corresponds with Map 4-2.

Table 4-1: Soil Types/Suitability

Map Symbol	Soil Name	Rating for Dwellings with Basements	Rating for Septic Tank Absorption Field	% of Township
124A	Selfridge loamy sand, 0 to 3 percent slopes	Very limited	Very limited	21.80%
24	Parkhill loam, 0 to 1 percent slopes	Very limited	Very limited	12.10%
31A	Pipestone sand, Erie-Huron Lake Plain, 0 to 3 percent slopes	Very limited	Very limited	11.80%
22B	Parkhill-Selfridge complex, 0 to 2 percent slopes	Very limited	Very limited	8.20%
12	Corunna sandy loam	Very limited	Very limited	6.50%
33	Granby fine sand	Very limited	Very limited	5.80%
151	Granby loamy fine sand	Very limited	Very limited	5.80%
13	Belleville fine sand	Very limited	Very limited	3.90%
64A	Sanilac very fine sandy loam, 1 to 3 percent slopes	Very limited	Very limited	2.70%
58B	Covert sand, 1 to 6 percent slopes	Very limited	Very limited	2.10%
CvrabA	Conover-Williamstown loams, 0 to 6 percent slopes	Very limited	Very limited	2.00%
14	Pella silt loam	Very limited	Very limited	1.70%
57B	Pella-Frankenmuth complex, 0 to 4 percent slopes	Very limited	Very limited	1.70%
41A	Shiawassee gravelly sandy loam, 0 to 3 percent slopes	Very limited	Very limited	1.50%
26A	Pipestone sand, loamy substratum, 0 to 3 percent slopes	Very limited	Very limited	1.30%
60B	Arkona sand, 0 to 4 percent slopes	Very limited	Very limited	1.30%
17B	Frankenmuth very fine sandy loam, 0 to 4 percent slopes	Very limited	Very limited	1.10%
84A	Parkhill-Poseyville complex, 0 to 3 percent slopes	Very limited	Very limited	1.10%
70	Udipsamments, undulating	Not limited	Very limited	0.90%
82	Granby sand, loamy substratum	Very limited	Very limited	0.80%
160A	Tappan-Londo loams, 0 to 3 percent slopes	Very limited	Very limited	0.80%
5A	Sumava sandy loam, 0 to 3 percent slopes	Very limited	Very limited	0.60%

Map Symbol	Soil Name	Rating for Dwellings with Basements	Rating for Septic Tank Absorption Field	% of Township
61A	Tappan-Poseyville complex, 0 to 3 percent slopes	Very limited	Very limited	0.40%
65A	Shiawassee sandy loam, 0 to 3 percent slopes	Very limited	Very limited	0.40%
18	Lenawee silty clay loam, 0 to 1 percent slopes	Very limited	Very limited	0.30%
10C	Grattan sand, 4 to 12 percent slopes	Not limited	Very limited	0.30%
112A	Kibbie fine sandy loam, 0 to 2 percent slopes	Very limited	Very limited	0.30%
121B	Ottokee loamy fine sand, 0 to 6 percent slopes	Somewhat limited	Somewhat limited	0.30%
45A	Fabius sandy loam, 0 to 3 percent slopes	Very limited	Very limited	0.30%
75B2	Strawn silt loam, 2 to 6 percent slopes, eroded	Not limited	Very limited	0.30%
98A	Poseyville loamy fine sand, 0 to 3 percent slopes	Very limited	Very limited	0.30%
71	Udorthents, loamy, nearly level to steep	Somewhat limited	Somewhat limited	0.20%
19	Tappan loam, 0 to 1 percent slopes	Very limited	Very limited	0.10%
72	Aquents, ponded	Very limited	Very limited	0.10%
77	Chesaning-Cohoctah complex, frequently flooded	Very limited	Very limited	0.10%
101B	Pipestone loamy sand, loamy substratum, 0 to 6 percent slopes	Very limited	Very limited	0.10%
119B	Oakville fine sand, 0 to 6 percent slopes	Not limited	Somewhat limited	0.10%
152A	Wasepi sandy loam, 0 to 3 percent slopes	Very limited	Very limited	0.10%
153A	Wixom-Belleville loamy fine sands, 0 to 3 percent slopes	Very limited	Very limited	0.10%
156A	Sanilac silt loam, 0 to 3 percent slopes	Very limited	Very limited	0.10%
55B	Gagetown silt loam, 2 to 6 percent slopes	Very limited	Very limited	0.10%
68A	Tappan-Londo-Poseyville complex, 0 to 3 percent slopes	Very limited	Very limited	0.10%
75C2	Strawn silt loam, 6 to 12 percent slopes, eroded	Somewhat limited	Very limited	0.10%
76A	Londo loam, 0 to 3 percent slopes	Very limited	Very limited	0.10%
W	Water	Not rated	Not rated	0.10%

Source: USDA Natural Resources Conservation Service Web Soils Survey

The maps and table clearly identify that almost the entire township is comprised of soils that pose severe limitations to septic tank absorption fields. This does not mean that the soils cannot be used for absorption fields (since they currently are). It does mean that adequate land should be set aside with each new home in those areas to ensure an area of land for a functioning septic system. Medium- and high-density development should be limited to areas where future sewer service is planned, or through use of other sewage disposal methods such as sewage lagoons or package plants serving a cluster of homes or businesses. These systems, however, raise long-term maintenance and responsibility issues that need to be carefully considered before they are permitted.

Municipal sewer systems are necessary when residential densities exceed the inherent ability of soils to prevent wastes from reaching ground water supplies. For most soil types, that means densities of approximately four dwelling units per acre. With less dense development and soils without extreme limitations for septic systems, sewage can generally be disposed of safely by individual private systems on lots with a minimum lot size of around 22,000 square feet.

Basement Limitations

Limitations for dwellings with basements are shown on Map 4-4: Soils Limitations for Construction of Basements. Some soils are rated by the SCS as having severe limitations on basements because of excessive wetness, low strength, excessive slope, or shrink-swell potential. The map shows that a slightly smaller area poses severe limitations to basements than to septic fields. This means that if basements are to be constructed, special measures will be needed to keep them dry.

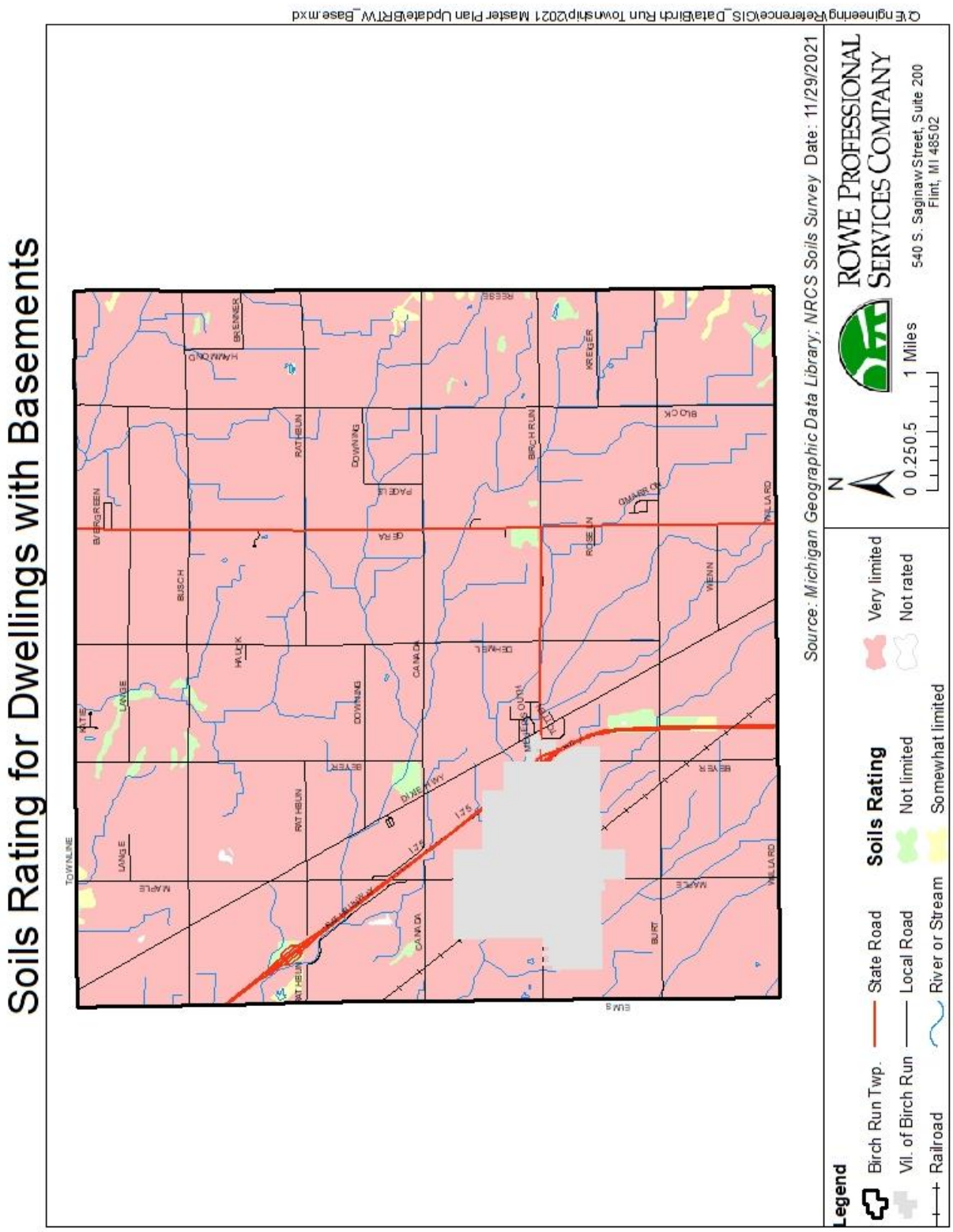
Hydric Soils

Hydric soils present another limitation to development. They are very poorly drained, saturate easily, and retain large quantities of water. They are generally unsuitable for structures. The SCS defines hydric soils as:

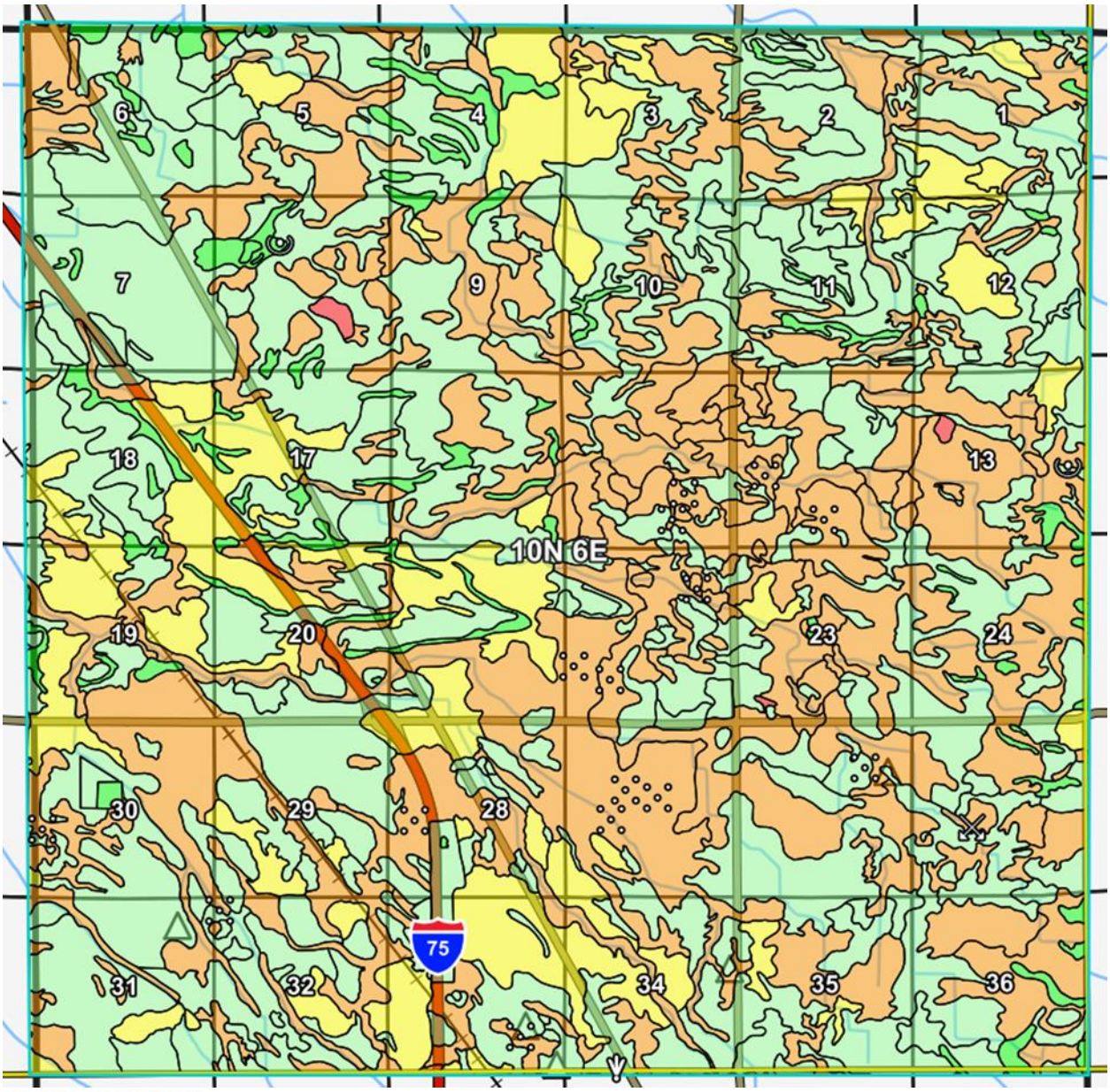
> *"A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part."*

Artificially drained, hydric soils can be suitable for farmland use. Map 4-5: shows where these hydric soils are located. Most of the hydric soils are found near water sources and correspond to present or former wetlands. Hydric soils represent 38.1 percent of the total land area. Residential, commercial, and industrial development in areas containing hydric soils should be discouraged.

Map 4-4: Soils Limitations for Construction of Basements



Map 4-5: Hydric Soils



Chapter 5 Transportation

(*This chapter was not updated as part of the 2019 Master Plan update, but minor revisions were made*.)

Road Network

The county road network is the principal transportation system in Birch Run Township (Map 5-1). The road system is divided into state trunk lines, local, and primary roads. The primary road system is designed to provide routes for movement within the county. Generally, road networks are designed so that people live within 1 to 1½ miles from a primary road. Local roads are any road other than a primary road and principally provide access from property to primary roads.

Highways

The Birch Run community is heavily impacted by I-75, a major north/south corridor between the Detroit Metropolitan area and northern Michigan. The State of Michigan produces an annual average 24-hour traffic count volumes for all state and federal expressways and roads. According to the 2000 publication, traffic volumes of 52,300 vehicles per day just south of the Birch Run Road exit were documented by the Michigan Department of Transportation (MDOT). Just north of this exit, a traffic volume of 58,600 has been documented. The interstate highway provides convenient access to the Flint and Saginaw Metropolitan areas. This, combined with the fact that the I-75/Birch Run Road interchange is on the way to the City of Frankenmuth, one of the state's leading tourist destinations, has made Birch Run the site of rapid commercial development over the past ten years. Paralleling I-75 is an older Saginaw/Flint connector, Dixie Highway, which is a county primary road. In addition, the construction of the Birch Run Outlet stores has added a significant amount of traffic to the Birch Run area. These shops draw visitors from Saginaw and surrounding areas north of the Birch Run area as well as those communities to the south. It is safe to assume that the addition of this commercial outlet is responsible for some of the high traffic volumes.

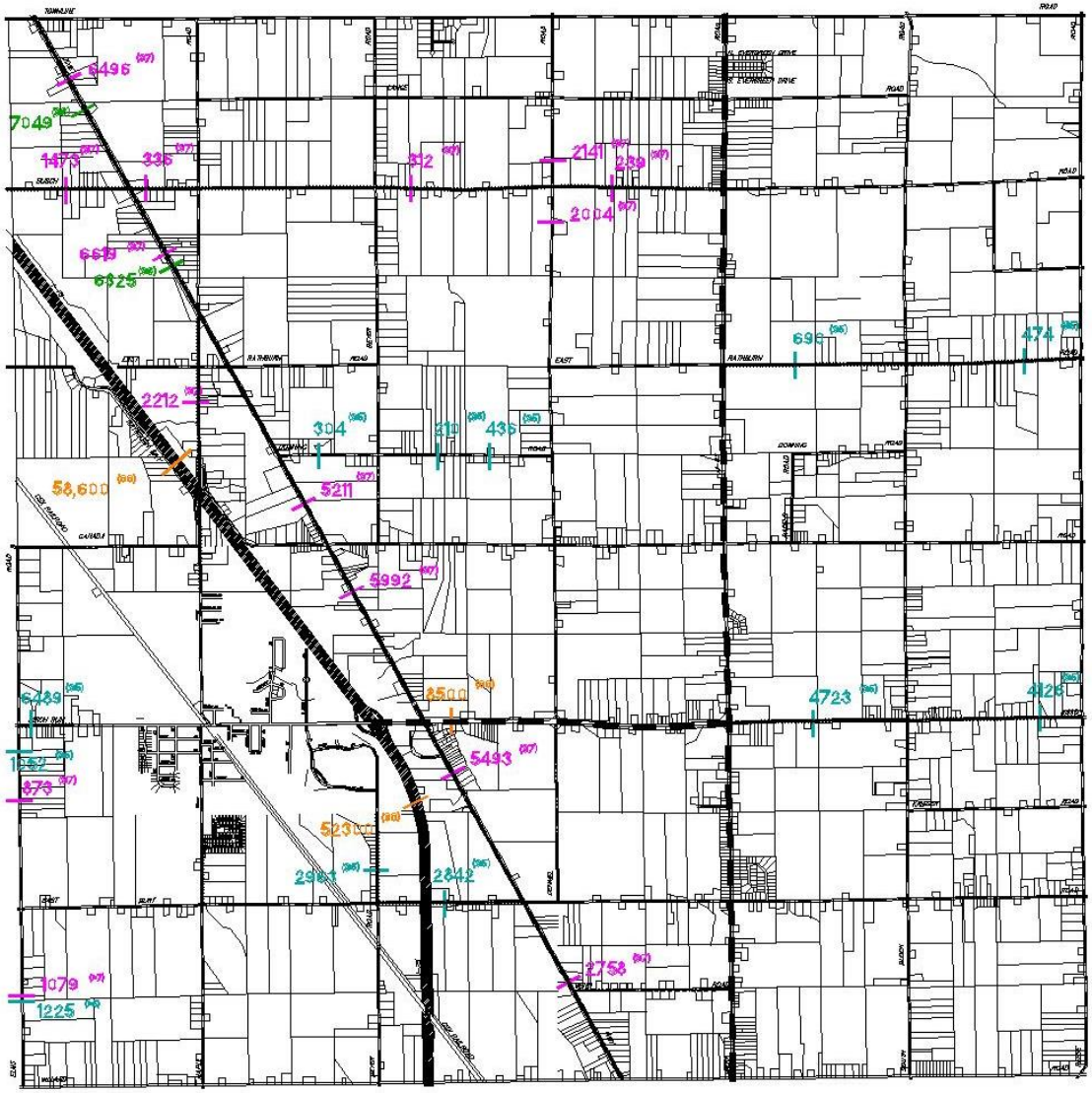
Coming north out of Genesee County is M-54. At the intersection with Birch Run Road, it becomes M-83 and continues north, bisecting the township and continuing into Frankenmuth Township and the City of Frankenmuth.

All Weather Roads

Most roads in Michigan are designed to accommodate heavy loads for most of the year except during spring when the frost in the ground begins to melt. During this period, which averages about six weeks, the base of most roads is susceptible to damage from heavy trucks. As a result, road commissions have adopted "frost laws" which restrict heavy vehicle movement on these roads during the spring thaw. Some roads have been built up to permit heavy truck traffic during this period. Generally, communities linked to all weather roads are the preferred location for industrial and commercial development since they can be used throughout the entire year.

The Saginaw County Road Commission maintains a complete list of All Season Special Roadways in Saginaw County. The all-weather roads in Birch Run Township are Dixie Highway, M-83, and Birch Run Road between M-83 and I-75.

Map 5-1: Road Classification & Traffic Count Map



Bridges

Bridges can restrict development by forming "choke points" where weight limitations restrict heavy vehicles and prevent trucks from being able to move conveniently from place to place. There are a number of bridges and box culverts in Birch Run Township. Only two bridges have weight restrictions. One is located on the town line, between Block Road and M-83, with a weight restriction of 42,700 pounds. The other bridge is on Birch Run Road, between Block Road and M-83, with a restriction of 23,600 pounds.

Road Capacity

A road's capacity and current volume of traffic can affect the suitability of land for various uses. The road capacity is measured by delay, such as how close actual speed is to posted speed, length of wait at traffic signals and intersections, and frequency of adequate gaps in traffic to allow turns. A road with a relatively low capacity should not be used to access uses with high traffic generation rates such as commercial or high-density residential uses. The same is true for a road with relatively high capacity and relatively high traffic volumes.

Map 5-1 shows 24-hour traffic counts for the primary roads in the township. They vary from 7,049 vpd (vehicles per day) to 210 vpd. A standard 26-foot-wide paved county road is estimated to have an average daily traffic capacity of 10,400 vpd. Generally speaking, the primary roads in the township appear capable of handling existing traffic without major widening or other improvements.

The Birch Run Road corridor, particularly between the I-75 interchange and Dixie Highway, has been identified as a problematic area by Township officials and residents. The corridor is a state trunkline, under the jurisdiction of the Michigan Department of Transportation (MDOT), with mixed jurisdiction between Birch Run Township and the Village of Birch Run. The Township will continue to encourage and collaborate with MDOT to make improvements to the corridor to enhance safety and reduce delays.

Traffic Accidents

Studying the location and type of traffic accidents over a period of time is a useful tool for determining transportation system problem areas. A significant pattern of accidents at one particular location could identify a design problem.

Traffic accident reports for Birch Run Township from 1996 to 1997 were studied. Of the accidents reported, there was no established pattern of type of accidents. It is assumed that driver error rather than roadway design was a contributing factor in most accidents.

Traffic Circulation and Vehicular Parking Study

The State, Saginaw County, Village of Birch Run, and the Horizon Group, have spent more than $3.5 million on improvements to Birch Run Road and the I-75 interchange. They have revamped Beyer Road (twice), widened lanes and bridges, improved entrance and exit ramps, and installed traffic signalization devices in an attempt to reduce traffic congestion.

Still, there is more traffic than the present roadway network can handle. MDOT has considered construction of a new freeway interchange at Burt Road. This would alleviate congestion at Birch Run Road, but the amount of dollars needed does not make this project feasible in the near future.

Chapter 6 Downtown Analysis

The "downtown" in the Birch Run Township community can be identified as the commercial uses centered near the I-75 interchange and development further to the east in the township and around the Dixie Highway/M-54 intersection.

The major changes in the commercial area of the township over the last 10 years are due to an incremental increase in commercial development east of the I-75 interchange that builds on the development of the outlet mall, gas stations, and restaurants on the eastern edge of the village. The nature of the original village downtown area has not changed because of the expansion of commercial development east, along and adjacent to Birch Run Road.

The original downtown has maintained its integrity and still provides a broad base that supports the vitality of businesses, with high vehicle accessibility provided by Birch Run Road (east to west); along with continued smaller business development that continues to attract residents and visitors for convenience products and related business type services.

The expansion of commercial development east of Church Street, along Main Street, over the past 25 years has created an evolution in the orientation of the downtown area from a small town, convenience shopping center to a major retail, entertainment, and specialty center. With a large population market size and physical regional economic characteristics, the Birch Run community exhibits a dominant location with continued potential for future growth.

By recognizing that the downtown area of Birch Run is no longer identified as a "traditional downtown area", the community can begin answering the questions, "Where are we headed?" and "What do we want to be?"

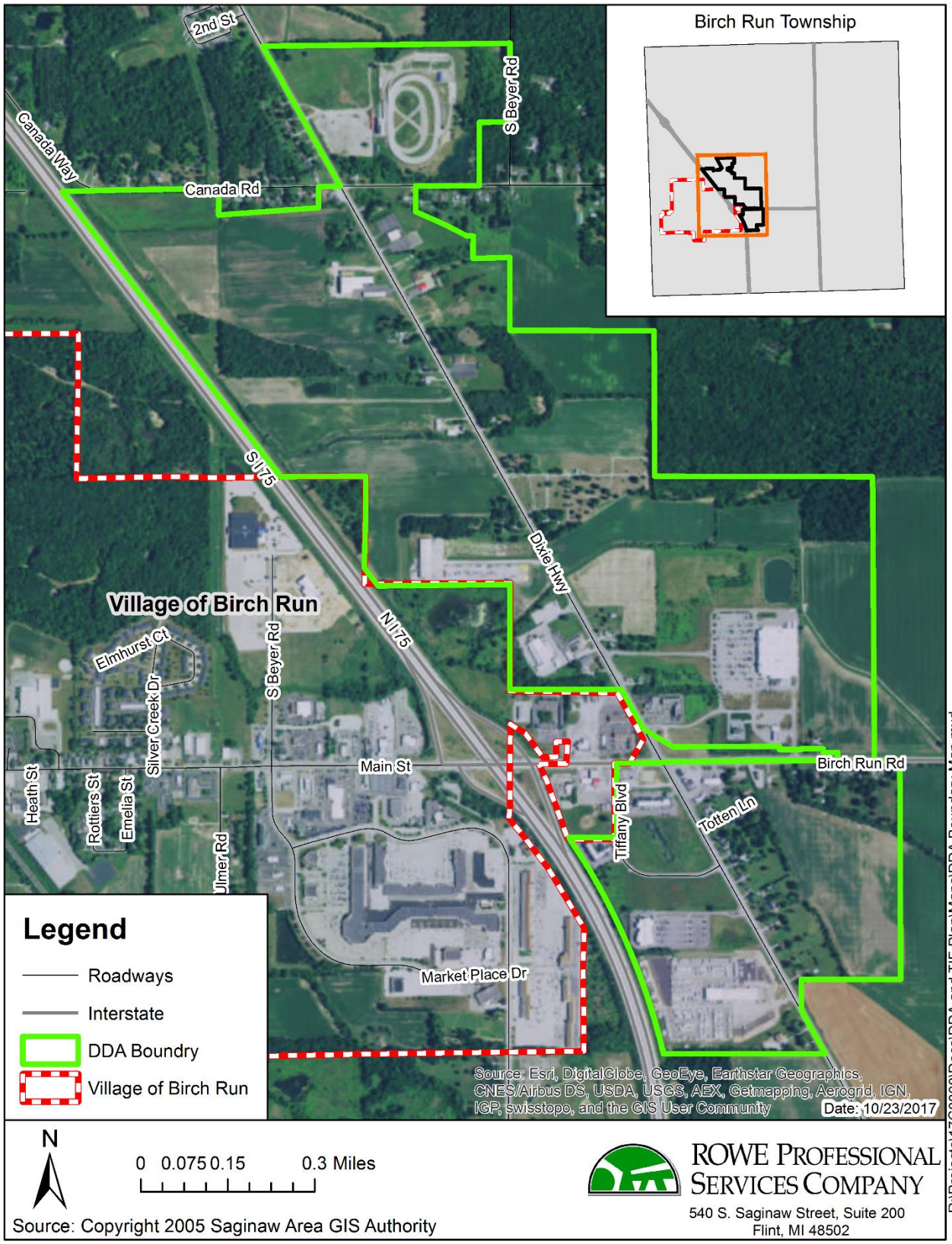
Township Downtown Development Authority Plan

Birch Run Township created a Downtown Development Authority (DDA) in April 1989. The authority's Development and Tax Increment Financing (TIF) Plan was amended in September of 1996, 2012, and again in 2017. The 2017 amendment extended the plan for an additional 30 years. The district is comprised of land lying east of I-75. Dixie Highway is the major road running south and north through the district. The southern boundary is just south of Birch Run Road, and the northern boundary is north of Canada Rd. including the Birch Run Speedway and Event Center. The plan calls for a range of improvements including extension of the sanitary sewer along Dixie Highway, possible construction of a municipal building continued reimbursement for police service in the DDA, efforts to market the DDA, development of an entrance feature to the DDA, and streetscaping within the district (Map 6-1).

This area is evolving into a major commercial center for the township. Being adjacent to the developments west of I-75 has allowed this area to capture many spin-off projects.

The construction timetable for the projects is dependent, to a large extent, on tax increment revenues which in turn are dependent primarily on new construction in the development area. It is not anticipated in the current plan, but a supplemental or amended Development Plan and Tax Increment Financing Plan will be submitted for approval, if necessary, prior to the commencement of any future projects.

Map 6-1: Downtown Development Authority



Today's Commercial and Downtown Trends

The commercial vitality of the Birch Run area as a whole is maintaining its strength. This strength can be attributed to a change in new commercial development, strategy, and location.

Throughout the 80s and 90s, a shift in commercial strategy and development surfaced across the United States. It involved the general consolidation of convenience, comparison, and specialty commercial markets into large scale, multi-use, developments. The trend also occurred locally, as new commercial developments, such as the Outlet Mall, were built on the perimeter of the village. The driving reasons for locations of these types of developments are the availability of freeway access and larger tracts of land to allow for the expansive building footprint and area required for off-street parking areas.

Comparison shopping for the local and regional market of the Birch Run area was enhanced with these big retail centers, offering more product variety, lower cost, and increased ease and efficiency to purchase goods. Other commercial comparison and service industry followed this trend such as fast food restaurants, convenience stores, and hotels/motels, all of which opted for village perimeter development, encouraged by local zoning requirements and the ease and efficient access of vehicle and consumer traffic.

In the early 2000s, due to the economic recession, much development halted in Michigan. In the late 2000s, that market has started to bounce back in some areas. In the early 2010s, this can be seen in the DDA by the increase in development and new businesses. A new trend from previous generations is that the need for retail space has decreased. This is due to a variety of factors including use of online retail, less of a need for traditional brick and motor establishments, etc.

The appearance of this commercial activity in the Birch Run area is positive, from the standpoint that the investment by these businesses, into the community and region, strongly confirms the existence of the large market that Birch Run area provides. However, with the intensive level of commercial development on the outer limits of the village, within the last 10 years, transitions have occurred in local shopping preference. Regionally, large convenience shopping districts and online retail have evolved in the Saginaw and Flint areas, which have added to the nearby shopping opportunities available to township residents.

Chapter 7 Agricultural Resources

(This chapter was not revised as part of the 2019 Master Plan update)

A major component of the 1984 and current Township Land Use Plan was the preservation of agricultural land. It is recognized that the trend to fragment prime agricultural land with residential development interspersed among it, poses a danger to the long term viability of the agricultural land uses.

Parcels of 10 to 20 acres are uneconomical to farm. Conflicts between agricultural practices and residential land use adds to the strain of farming. The demand for extension of municipal services imposes costs on the farmer that he can often pay for only by selling his property for non-agricultural land uses.

The Status of Agriculture in the State and Saginaw County

A 1995 report prepared by the Michigan Society of Planning Officials, entitled "Trend Future Project," outlined the importance of farming to the state's economy. It noted that agriculture is the second largest industry in Michigan. It contributes $37 billion to the state economy and employs one in every eight people.

All of this is despite the fact that, from 1982 to 1992, Michigan lost 854,000 acres of farmland. This represents an average loss of 133 square miles per year. Today, Michigan has one-half of the number of farms that existed in 1964, and less than 25 percent of the number in 1940.

Table 7-1 shows the major trends in farming over the period 1982 to 1997. Total number of farms decreased over this period, while average farm size rose, and total farm acreage decreased. The total value of products sold increased between 1982 and 1997.

Table 7-1:Agriculture in Michigan

	1982	1987	1992	1997
Number of Farms	58,661	51,172	46,562	46,027
Total Farm Acreage	10,942,172	10,316,861	10,088,170	9,872,812
Average Farm Size (acres)	187	202	217	215
Total Value of Products Sold in (1,000s)	$2,588,317	$2,545,078	$3,028,547	$3,567,825
Source: Michigan Agricultural Census				

Generally, Saginaw County is associated with the manufacturing industry. Saginaw County farms produced $84 million in products sold in 1997.

Table 7-2: Agriculture in Saginaw County

	1982	1987	1992	1997
Number of Farms	1,702	1,424	1,294	1,163
Total Farm Acreage	323,000	308,269	318,125	297,842
Average Farm Size	190	216	248	256
Total Value of Products Sold	$68 million	$63 million	$74 million	$84 million
Source: Michigan Agricultural Census				

Table 7-2 shows that the total farm acreage in Saginaw County decreased slightly from 1982 to 1987. In 1992, total farm acreage shows a gain of 10,000 acres over 1987. However, in 1997, the trend reversed, and total farm acreage decreased by over 20,000 acres. These gains and loses correlate to the steady

decrease in number of farms. At the same time, the county's average farm size has increased by 66 acres since 1982.

Birch Run Township Agricultural Base

Unfortunately, agricultural census information is not available on a township by township basis. The information for the county does not provide insight into the part agriculture plays in the Birch Run Township economy.

Prime Farmland

"Prime farmland" soil types have been identified by the SCS as those best suited for food production. They require minimal soil enhancement measures such as irrigation and fertilizer. Some soils are considered prime farmland only if they are drained. "Unique farmlands" are based on certain soil types as well as other factors, such as landscape position (proximity to water supply, orientation to sunlight, slope, etc.), moisture supply, and present management practices. "Prime farmland" soils are shown on Map 7-1: Prime Farmlands Map. Prime farmland soils comprise approximately 72 percent of the area.

Value of Agriculture in the County

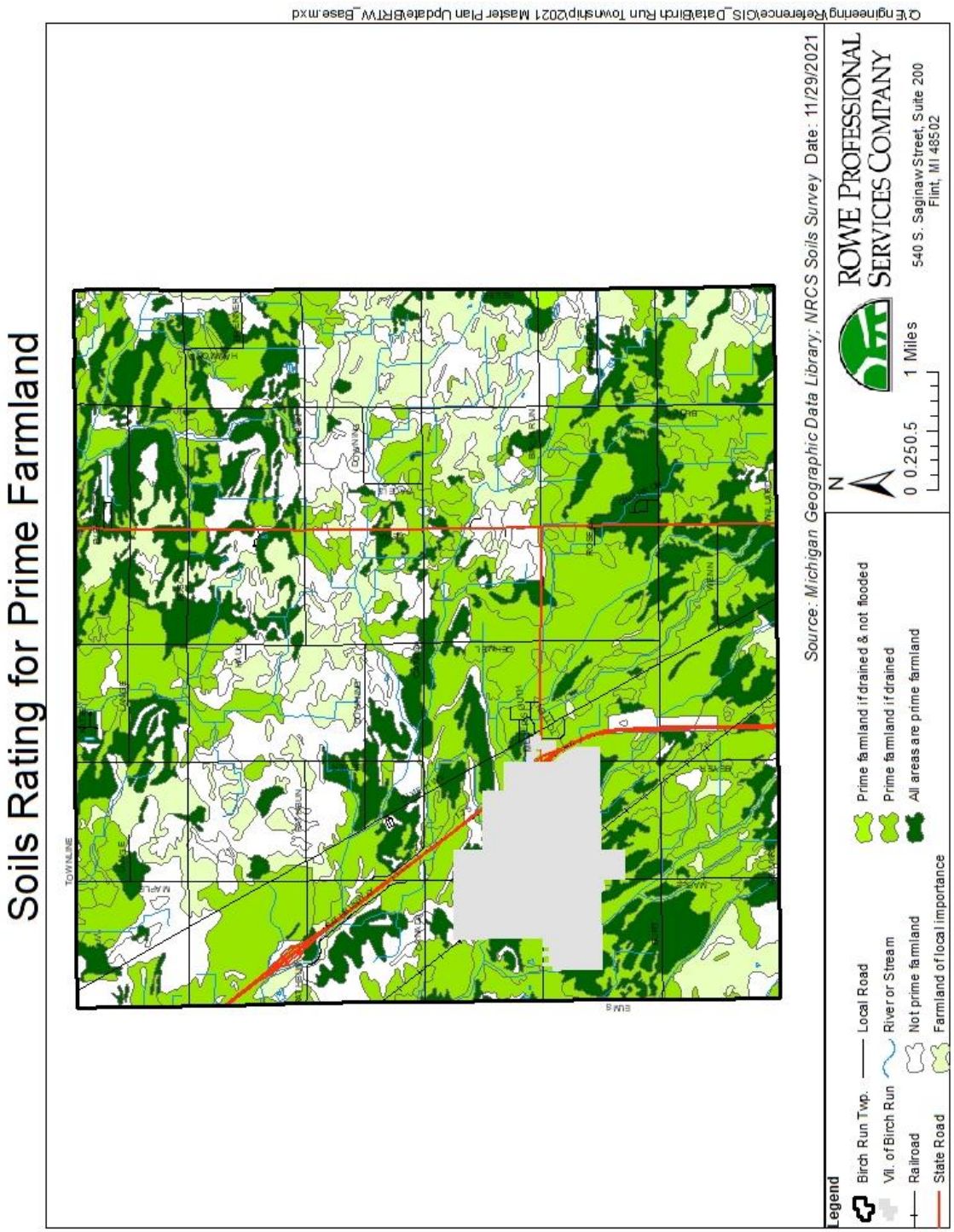
The assessed value of agricultural land has risen modestly in the last six years. In 2001, the assessed value of agricultural property was $12,169,937. In 2020, the value has risen to $30,159,500.

Farmland Fragmentation

The fragmentation of farmland into large rural residential lots is a major cause of the loss of prime agricultural land. In the past, this fragmentation could be blamed, in part, by requirements in the Subdivision Control Act of 1967. Under the act, subdivision of a parcel of land over a 10-year period, into five or more lots of 10 acres or less, required that the subdivision go through the plat approval process, which can be costly and time consuming. This provided landowners with an incentive to divide parcels into lots of 10.1 acres in size to prevent triggering the act's requirements. Recent amendments to the act, now called the Land Division Act, have eliminated some of the incentive to create large lots inherent in the previous act, but allows even more parcels to be created without plat review after 10 years has elapsed.

The second factor is the extension of water lines into rural areas. These extensions encourage development along the line because of the access it provides to relatively "good" water for household use, as well as, for firefighting purposes.

Map 7-1: Prime Farmlands Map

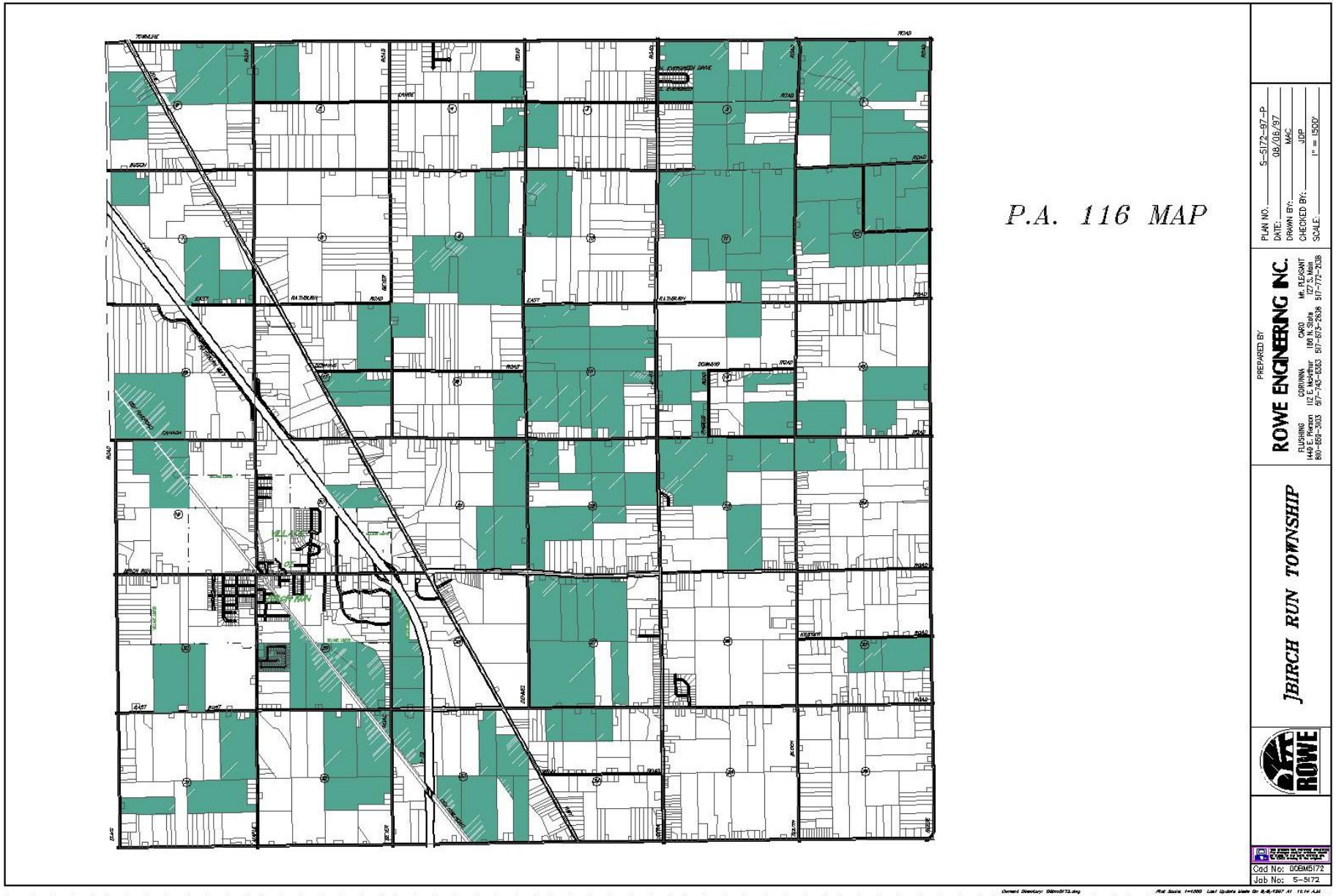


Tools in Place to Protect Farmland

The 1984 and current Township Land Use Plan identified the establishment of urban uses in areas of prime farmland as a significant problem and established two policies to prevent it. The first policy states that "public water and sanitary sewer lines should not be extended to areas designated as prime agricultural lands." Comparison of the 1984 Agricultural Plan, showing areas to be preserved for agricultural purposes, with the current water system map shows that this policy was not followed.

The second policy encourages farm owners' participation in the Farmland and Open Space Preservation Act, also known as PA 116 of 1978. This act provides the landowner with certain tax benefits and in return, the landowner gives up non-agricultural development rights in the property for a set period established under a contract entered into between the State of Michigan and the landowner. The minimum period is 7 years, the maximum is 99. This program has the potential of preserving prime farmland but, since it is voluntary, there is nothing to ensure that all of the property owners in a community's prime agricultural area will enroll. Recent changes in school financing in the State of Michigan have reduced the tax burden on agricultural property and reduced the incentive to participate in the program. Because of this change in conditions, the State of Michigan provided a 1-year "window of opportunity" for participants to withdraw from the program. Although it was anticipated that many of the current participants would withdraw, it is obvious from Map 7-2 that a significant number of farmers in Birch Run Township chose to stay in the program.

Map 7-2: PA 116


P.A. 116 MAP
BIRCH RUN TOWNSHIP
PREPARED BY
ROWE ENGINEERING INC.
PLAN NO. S-5172-97-P
DATE: 08/06/97
DRAWN BY: MAC
CHECKED BY: JDP
SCALE: 1" = 1500'
Cad No: 00BM5172
Job No: S-5172

Chapter 8 Public Facilities and Services

Water System

The Village of Birch Run constructed a public water system in 1964. Water was supplied to the system from two wells. Much of the water main in the village was constructed at that time. Most of the water mains in the village are 6-inch diameter. There are some 8-inch diameter lines, and some are only 4-inch. In recent years, the village has expanded the distribution system to serve the commercial development in the eastern part of the village and to the Silver Creek Apartments.

In 1976, the water transmission line to Birch Run Township, from the City of Saginaw, was completed. A booster pump station was built at the north township limits on Dixie Highway and a transmission line was constructed along Dixie Highway to the Village of Birch Run. Since that time, the City of Saginaw has supplied water to both the village and the township.

All water mains in the township have been constructed since 1976. Most of the water mains are extensions of dead end lines off the transmission main. Most of these water mains are 8-inch diameter lines.

Water Use

Water usage can be classified into the following three general categories:

- Residential
- Commercial/Institutional
- Unaccounted for

Residential customers are houses, apartments, and mobile home parks. Commercial/Institutional users include such uses as a car wash, laundromat, retail store, office, restaurant, school, church, and various businesses. Water usage by each customer is metered. Meters are read by village/township personnel quarterly and customers are billed for the quantity of water used.

Water that is pumped into the system but is not sold to customers is termed “unaccounted for”. It may be used to fight fires, lost through leakage, or consumed in other manners.

The rate at which water is used constantly changes. It varies hour to hour, day to day, and season to season. For example, water use will be greater on hot, dry summer days than during a cold, wet autumn. Also, water use during the day, will generally be greater than late at night. To properly meet the needs of its customers, the water system must be able to supply water at a sufficient rate to meet the customers’ peak demands.

Water System Considerations

The water system is generally able to meet the demands of existing and future customers. The system is somewhat limited in its ability to provide the higher flow rates needed to fight fires and in its ability to meet maximum day usage with one of the two booster pumps out of service. The water system currently purchases water from the City of Saginaw. The facilities related to water include one storage tank (water tower) located on Dehmel Rd. near Birch Run Road that helps supply water to the whole township and village and a pump station with two pumps.

The system, in recent history, has added several improvements which should help in the pressure of the water system, which has previously been an issue. Due to needing supply water from the City of

Saginaw to Taymouth Township, the pressure along the mainline must stay a consistent 900 gallons per minute (gpm) to provide sufficient flow. Based on the preliminary engineering report for an elevated water storage tank completed in 2010, the current booster station is adequate for the current usage and future growth.

One of the primary deficiencies of the water system is the layout of the distribution piping. The township and village are divided by the I-75 expressway, the CSX railroad tracks, and several large county drains. Construction of a water main across such obstacles can be quite expensive. The development of the existing water main network has minimized the number of crossings of these obstacles, at least somewhat for economic considerations. This has in part contributed to the construction of the large number of dead end lines. Much of the water main in the township is dead end extensions off the main transmission main. The water main system in the west part of the village is fed from the central part of the system by a single line crossing the railroad tracks. Pressure losses are greater in dead end lines than in interconnected systems. As a result, when large demands are imposed on dead end lines such as a fire flow, the friction losses significantly reduce the pressure and the quantity of water available.

As future development occurs in the area, it is recommended that more effort be put toward the interconnecting or "looping" of water mains. Interconnecting the existing piping system will improve the capacities and residual pressures in the outlying portions of the system. This can help improve capacity where existing problems exist and will help prevent future deficiencies from developing.

Sanitary Sewer System

The Birch Run area sewer system has two components. The village-maintained lagoon in the southwest quadrant of the village was built in 1972 and is connected to the Genesee County Sanitary Sewer System.

The village lagoon system is primarily for village's residents while the main Genesee County Sanitary Sewer System primarily takes the commercial and industrial waste from within the village.

The remainder of the system was rerouted in 1994 to connect to the Genesee County Sanitary Sewer System. The Village of Birch Run, in conjunction with Birch Run Township, purchased capacity from Genesee County. Of the possible 1,000,000 gpd allowable, approximately 200,000 gpd is currently utilized. The system, connecting to Genesee County, carries all flows east of Ulmer Street with approximately 3.2 miles gravity sewer and 4,350 linear feet of force main and four lift stations. The previous system was rerouted at Ulmer Street with the placement of a lift station and an 8-inch force main which carries flows south to the railroad tracks, then follows the tracks south to East Burt Road. The township completed a 10- and 12-inch force main, which combines with the village force main, at the railroad crossing on East Burt Road, and then continues as a 12-inch force main flowing west along East Burt Road and then south on Maple Road to Genesee County.

The current system handles all flows without major problems. There is capacity to handle additional flows in both systems. Currently, undeveloped areas could be serviced with systems that combine gravity sewer, lift stations, and possibly some force main.

Should problems arise in the future with the lagoon, a connection from the force main at the lagoon to the existing force main flowing to Genesee County could be made by placing under 1 mile of sanitary sewer force main along the Briggs Drain, which is the shortest route between the two systems.

Additionally, if the sanitary sewer system were to be increased in the township, an additional lift station may be required to provide adequate service due to the increased sanitary sewer waste.

Police Protection

The township uses the Saginaw County Sheriff's Department and the Michigan State Police Department for its protective services. This provides 24-hour, 7 days a week coverage for the township. The village's police force is contracted to provide some police patrols of the Birch Run Township DDA district. This contract is reviewed annually to determine the number of hours and cost. The Township also contracts to provide enforcement of other ordinances.

Fire Protection

Birch Run Township provides fire service to both the village and township. The department is staffed by an on-call fire and rescue team. The department operates out of the fire station located on Dixie Highway near Canada Rd. Currently, the fire department is supported by 23 to 30 on-call volunteers, utilizing three fire trucks, two rescue vans, a side-by-side utility vehicle, and necessary equipment. Overall, firefighting capability is good; however, it is necessary to closely monitor future needs and capabilities. The fire department moved into a new fire hall in 2019, after which the Department of Public Works has been using the old building for storage.

Public Land and Buildings

Governmental Facilities

The Township Hall/Complex is located on Birch Run Road adjacent to Silver Creek Drive. The complex consists of a 6,000-square-foot library and administrative office space for the township.

Cemeteries

The township maintains two cemeteries. The Hammond Cemetery is located on Busch Road, between Block and Gera Roads. A second township cemetery is located off Dixie Highway between Birch Run Road and Canada Road. The township cemetery is the primary cemetery for the township. These two cemeteries should accommodate future needs. When expansion is required, the township should acquire land adjacent to the cemeteries to reduce expansion costs.

Educational Facilities

The Birch Run School District facilities are located within the Village of Birch Run. School facilities consist of the Birch Run High School, Marshall Greene Middle School, North Elementary, head start/preschool facilities, an early college program, and a Progressive High School that offers alternative pathways for students to achieve a diploma. Other school districts that service parts of the township include Frankenmuth School District and Clio Area School District. The Frankenmuth School District services the northeast portion of the township, while the Clio Area School District services a small area in the extreme southern portion of the township.

Park and Recreational Facilities

Recreational facilities include a park in the township at Burt and Maple Roads, a village park at Church and Main, and facilities at the public schools in the village.

Birch Run Township Park

The Birch Run Township Park contains the following facilities:

Active:

4– Regulation Baseball Diamond

3– Soccer Fields

2– Hard Surfaced Tennis Courts

1– Concrete Basketball Court
2– Playground Equipment Areas

Passive:
1– Picnic
1– Pavilion
3– Outdoor Grills

Support Facilities:
1– Gravel Parking Lot
2– Restrooms (when rented with pavilion)

The facilities at the schools include:

Birch Run High School

Active:
1– Regulation Baseball Diamond
1– Regulation Softball Diamond
1– Regulation Outdoor Football Field*
1– Outdoor ¼ Mile Oval, All Weather Track*
2– Outdoor Basketball Court
* Not available for public use.

Passive:
- Grass Field
- Classrooms

Marshall Greene Middle School

Active:
2– Soccer Fields
1– Playground Area
2– Swing Sets w/10 seats
1– Large Activity Center
48– Basketball Nets
2– Non–regulation Softball Diamonds (grass infields)

Passive:
- Grass Field
- Classrooms

North Elementary School

Active:
Playground Equipment
6– Basketball Nets
2– Climbing Centers
1– 6' x 15' Concrete Wall for Dodgeball and Tennis
1– 3 Level Balance Beams
1– Activity Center
3– Softball Diamonds for Children Only
Walking in Halls– Allowed for Public Citizens Before Classes Being in the Morning.

Passive:
- Grass Field
- Classrooms

In addition to the public and semi-public facilities, there are a few private recreation facilities located within the township, they are as follows:

Evergreen Subdivision

There is a small playground located within the Evergreen Subdivision (section 2) which is utilized only by the residents of this subdivision.

The residents of the township also travel to the Clio/Montrose area and Bridgeport area to utilize indoor swimming facilities. Currently there are no swimming facilities located within Birch Run Township.

Chapter 9 Goals and Policies

Goals and Objectives

Introduction

Goals and objectives play a fundamental role in the Birch Run Township Master Plan. The goals and objectives chart the plan's direction and form. Policies, a later step in development of a plan, present key implementation strategies to assure the plan's direction is followed. The relationship between goals, objectives, and policies is as follows:

A **GOAL** is a destination, a final condition which a community seeks to attain. A goal is the most general level of policy and, by itself, is often not very helpful to decision makers. It needs further refinement to assist decision makers to reach their selected destination. At the individual level, a goal is like saying, "I want to take a vacation once each year."

An **OBJECTIVE** is a benchmark which specifies in general terms the way (route) by which the goal (destination) can be reached. An objective indicates the kinds of actions that should be used to achieve the goal. It is like deciding to set aside "$X" by "Y date" to travel to "Z location".

A **STRATEGY** is a course of action which, if followed, will achieve an objective. A policy is more detailed than an objective and can be readily translated into specific action recommendations or design proposals. It is like saving $100 extra dollars a month by reducing spending on non-essentials and entertainment in order to afford the vacation.

Land Use

Goal: Manage growth to prevent sprawl beyond the edge of developed areas, to promote new development at urban densities adjacent to the village, and to encourage reinvestment in older areas of the community.

Objectives:

Encourage compact development that uses land and infrastructure efficiently.

Strategies:

- Review standards to approve site plans in the zoning ordinance to be located nearby existing utilities or do not cause a financial hardship for the township.
- Establish boundaries to limit further costly extension of "dead end" sewer and water facilities into undeveloped areas as part of the future land use plan.

Protect environmentally sensitive areas and agricultural land.

- Amend the zoning ordinance to include a setback for features as well as buildings along natural features such as lakes, ponds, rivers, streams, and wetlands for all zoning districts (Sec. 10.05.F-Open Space Community Overlay).
- Adopt a provision to limit non-agricultural development in the AG Agricultural zoning district.
- Promote distinctly different development patterns/densities to maintain a clear boundary of urban and rural areas within the township.
- Review the zoning ordinance district locations and requirements to make sure it conforms to the boundary of the urban and rural areas.

Encourage highest densities around key activity centers and along major transportation routes.

- Review the zoning ordinance district requirements to have high densities that are located along major transportation routes and other key activity centers.
- Review the future land use criteria and map to locate appropriate locations for high densities along major transportation routes and other key activity centers.

Provide a linked system of planned open space that connects newly developing and existing neighborhoods.

- Explore the creation of walking/biking trails to connect new developments to existing neighborhoods.
- Provide incentives to developers to include walking paths to existing infrastructure.

Promote relationships between jobs, housing, and transportation that are convenient, efficient, healthy, and mutually supportive.

- Explore and amend the zoning ordinance to include more varieties of mixed-use developments in the township.

Separate new businesses from residential areas by landscaping, fencing, and other methods which minimize noise, lights, dust, ground vibration, and other nuisances.

- Continue to apply standards for buffer areas (Sec. 17.04) and lighting (Sec. 18.04).
- Review environment protection standards in the zoning ordinance to ensure they include these elements of potential nuisances. (Currently, does not have one for dust and noise.)

Industrial Development

Goal: Birch Run Township has an ample supply of competitively located and appropriately sized industrial sites.

Objectives:

Identify and reserve land for future industrial growth in planned business park settings with access to major roads and appropriate buffering from residential uses.

Strategies:

- Conduct an inventory of existing Industrial (I-1) district to determine the availability of vacant parcels for development of an industrial park.
- Review the zoning ordinance for appropriate locations and requirements for the Industrial (I-1) zoning district.

Ensure an adequate range of uses within the Industrial (I-1) district.

- Review the list of permitted and special land uses allowed in the Industrial (I-1) zoning district

Encourage the number of industrial uses, new businesses, and expansion of existing businesses.

- Develop a marketing plan for available industrial properties.
- Coordinate job creation and expansion with county, regional, and state agencies and programs.

Commercial Development

Goal: Birch Run Township has clearly defined nodes of commercial activity, appropriately distributed and scaled to serve state/regional, community, and neighborhood needs.

Objectives:

Encourage commercial development in compact clusters/planned centers and discourage strip commercial development

Strategies:

- Evaluate areas proposed for future commercial development to determine their adequacy for more commercial development.
- Review the number of zoning districts that allow compact cluster/planned centers.

Ensure new commercial development is designed to give the same consideration to the needs of pedestrians, bicyclists, and other users of transportation systems as to the needs of motorists and trucks.

- Encourage internal sidewalks and pedestrian traffic between commercial developments.

Focus economic development efforts on retaining existing businesses.

- Coordinate with Saginaw County Chamber of Commerce, Birch Run Chamber of Commerce, Birch Run Township DDA, and Village of Birch Run DDA to help advertise existing businesses in the area.
- The township and township DDA work to implement the township's DDA Development and TIF Plan.

Residential Development/Neighborhoods

Goal 1: Birch Run Township provides a range of housing choices in safe and attractive environments to accommodate a variety of lifestyles.

Objectives:

Encourage a variety of housing choices in neighborhoods through a balance of preservation, rehabilitation, and new construction of both affordable, middle income, and upper end housing.

Strategies

- Amend the zoning ordinance to include "missing middle" housing types such as four-plex, tri-plex, duplexes, etc.
- Review zoning ordinance procedures on historical home improvements or other additions.
- Zone land to offer a variety of density and housing types to optimize dwelling choices.
- Ensure the design of new neighborhoods has a street system that is fully integrated with the existing public street system.
- Modify zoning regulations to encourage use of conservation zoning and/or similar cluster zoning options.

Strengthen the livability of existing neighborhoods through improved safety, upkeep, reinvestment, and community involvement.

- Review Capital Improvement Plan (CIP) to review the development and replacement of sidewalks and roads.
- Ensure the design of new neighborhoods has a street system that is fully integrated with the existing public street system.

Preserve historic structures and neighborhoods where feasible.

- Explore the use of a historic overlay zoning district.

Goal 2: New housing in agricultural areas is designed to minimize impacts on farmland and on public service costs.

Objectives:

Modify zoning regulations to encourage use of conservation zoning and/or similar cluster zoning options.

Strategies:

- Review zoning district minimum lot sizes for Agricultural (A-1) district to determine its consistency with the OSD overlay district and the goal of limiting expansion of public infrastructure.
- Amend the zoning ordinance to include buffers of native vegetation between residential areas and agricultural areas to limit potential nuisance concerns and maintain rural character of the township.

Open Space, Parks, and Recreation

Goal 1: Birch Run Township offers a wide variety of indoor and outdoor recreation opportunities for families and persons of all ages.

Objectives:

Encourage neighborhood open space areas within new residential neighborhoods as they are developed.

Strategies:

- Review zoning ordinance to provide incentives for the OSC overlay district to encourage recreational use of open space.

Work in cooperation with the schools and the village to meet community recreation and cultural needs.

- Explore the development of a joint committee with members from the township, village, and school district.
- Coordinate with Birch Run Area Schools, and Frankenmuth School District, Frankenmuth Township, and City of Frankenmuth for improvements.

Promote a well-developed plan for the current and future parks and recreation programming.

- Base recreational planning/programming decisions on regularly updated parks and recreation plan. (Moved from Objectives.)
- Review the CIP to help implement physical improvements based on the Parks and Recreation Plan.

Encourage additional private sector involvement in providing open space and recreation opportunities to the residents of Birch Run Township.

- Evaluate zoning district requirement to ensure the maximum adequate opportunity for private recreational development.

Infrastructure

Goal 1: Birch Run Township has fiscally responsible maintenance and improvement of infrastructure.

Objectives:

Establish an annually updated CIP.

Strategies:

- The township will annually prepare, coordinate, and adopt as a part of the budget cycle a schedule of proposed capital improvements for the next 6 years and a capital budget for the next year.
- Prepare, adopt, and periodically update a map of future public facility improvements in the township.

Birch Run Township continually maintains and upgrades its roadway infrastructure serving the community to provide safe, convenient access and to complement balanced, orderly growth.

- Balance the preservation of neighborhood quality with community-wide access needs. (Moved from Objectives.)
- Promote the creation of at least one un-restricted, or grade separated (e.g., a bridge) crossing of the railroad that allows traffic to continue to move regardless of the presence of train traffic. (Moved from Objectives.)
- Coordinate with MDOT and the Saginaw County Road Commission in future improvements and rehabilitation of existing roadways.

Goal 2: Birch Run Township provides local travel alternatives to automobile use, including bikes, walking, and other users of transportation systems.

Objectives:

Encourage an efficient and pleasant bicycle and pedestrian system that safely connects residential areas with most desired destinations.

Strategies:

- Explore and develop a non-motorized transportation plan for the community.

Goal 3: Local storm sewer, sanitary sewer, and water systems are upgraded and extended to support balanced, orderly growth.

Objectives:

Closely monitor the condition of all infrastructure to ensure early detection and correction of problems.

- Coordinate improvements in the CIP.

Improve storm water systems to solve existing problems and meet growing needs. Correct spot drainage problems first.

- Coordinate improvements in the CIP for storm water systems.

Maintain the quality of water supply wells.

- Coordinate improvements in the CIP for water supply

Coordinate utility construction with road construction.

- Coordinate meetings with the Department of Public Works, county roads commission, and utility companies.

Public Services

Goal: Birch Run Township provides high quality, rapid response, and cost-effective public safety services.

Objectives:

Provide comprehensive and cost-effective police protection, fire protection, and emergency medical response service to all parts of the township.

Strategies:

- Explore the feasibility of a joint Village/Township Police Department.
- Explore the feasibility of a Fire Department with round-the-clock personnel and a full-time fire chief/fire marshal/inspector.

Cooperate regionally in the provision of public safety facilities and programs.

- Coordinate public safety facilities with the village and county.

Visual Character

Goal: Birch Run Township is a beautiful and well-maintained community.

Objectives:

Promote a high standard of building, landscape, and other property maintenance across the entire township.

Strategies:

- Maintain a consistent enforcement program for building and zoning.
- Evaluate the adoption of housing, rental, and/or property maintenance codes.
- Encourage property owners and businesses to make improvements consistent with adopted design guidelines. Key guidelines should be incorporated into regulations to ensure conformance.

Ensure that all publicly-financed infrastructure repairs are of high quality.

- Review the procedure for accepting bids for improvement projects.
- Encourage developers to bury all overhead utility wires.

Incorporate open spaces, landmark, and historic structures, natural landforms, and stream courses as part of the design of new development. This will help ensure a high-quality visual environment that is compatible with these important elements of the existing community.

- Encourage the use of development practices that enhance community character, particularly in the downtown area.
- Collaborate with the County Road Commission and MDOT to encourage roadway design that allows for pedestrian connections when appropriate and enhances the visual appeal of the township.

Integrate new development with design guidelines prepared for the area with the scale, architecture, and design of nearby quality buildings and landscaping to ensure compatibility and harmony in appearance.

- Review zoning ordinance to have design standards for the different zoning districts or types of development.
- Adopt uniform sign regulations that restrict the size, number and placement of new signs and billboards in the township.
- Revise zoning ordinance to adopt design standards for future development.

Citizen Attitudes/Opportunity

Goal: Birch Run Township benefits from the cooperation and contributions of all groups within the community.

Objectives:

Birch Run Township should assist in fostering civic activities and promoting public relations.

Incentives:

- Civic and special interest groups, the village, township, and school district all cooperate in community projects such as the 4th of July parade.
- A Civic Events Council is created to manage community-wide events, to encourage civic participation and to liaison between the needs of residents and local government.

Promote transparent government practices.

- Continue to post minutes, agenda, and important township documents on the website.
- Explore the use of social media platforms to communicate to residents.

Chapter 10 Future Land Use Plan

Land Use Classifications and Locational Criteria

The future land use map for Birch Run Township provides for open space / agriculture, dispersed residential, low density single family residential, medium density single family residential, high density residential, mobile home park, community commercial, highway services commercial, and industrial areas. These land use classifications; their purpose and locational criteria are outlined below.

Open Space / Agricultural

The purpose of this classification is to protect farmland and rural character by controlling residential and other non-farm development in primarily agricultural and open space areas. It is the intent that agricultural areas will be maintained. The maximum single-family density should be 1 home per acre.

Single family dwellings and accessory uses will be permitted by right in this district, while a limited number of non-farm uses will be permitted by special use permit. Cluster or open space development, in which residences are grouped together and a large portion of the original site is kept as open space, will be encouraged through zoning incentives. Other non–farm uses shall be excluded or restricted. Existing commercial uses approved through special use permits issued by the township are recognized, and it is not the intention of this district to encourage their elimination

The locational criteria for agricultural areas include:

- Areas where large parcels (40+ acres) are common.
- Areas not proposed for water or sewer services.
- Areas with predominantly prime agricultural lands, comprised of prime soils and reasonable slopes, as delineated in the Soil Survey for Saginaw County.
- Areas used primarily for agriculture.
- Areas adjacent to residential areas of similar density.
- Areas properly buffered from existing or proposed commercial or industrial areas.

Low Density Single Family Residential

The purpose of the low-density residential classification is to provide for residential development in areas where single family residential uses is the principal use. The maximum density for single-family detached homes in this classification is 1 dwelling unit per acre.

Complementary uses such as schools, churches and parks will be permitted, while incompatible uses will be excluded or regulated. Development in these areas should be consistent with the surrounding neighborhood in terms of use, scale, and design.

The locational criteria for low density residential areas include:

- Areas adjacent to residential areas of similar density.
- Areas properly buffered from existing or proposed commercial or industrial areas.
- Areas without and not proposed to have water and sewer services.
- Areas no longer economically viable for agriculture.

Medium Density Single Family Residential

The purpose of the medium density single family residential areas is to provide for a variety in housing style, design, and cost. The maximum dwelling units density should be 3-6 units per acre.

Single family and two-family development are the principal uses and other incompatible uses will be excluded or regulated. Single family and two-family residential areas should be developed at a density similar to the existing surrounding residential pattern.

The locational criteria for medium density residential areas include:

- Areas presently developed as medium density residential neighborhoods, or at an average density of approximately 2 or more units per acre.
- Areas adjacent to low density residential areas.
- Areas properly buffered from existing or proposed commercial or industrial areas.
- Areas with or proposed to have water and sewer services.

High Density Residential

The purpose of the high-density residential classification is to provide for alternative residential development at a higher density than single family and two-family residential neighborhoods. The maximum dwelling units density should be 5-8 units per acre.

Uses include apartment buildings and townhouses. Multi-family development in established single family residential neighborhoods is not appropriate. These developments will provide a wider range of housing opportunities to township residents, including single income households or households living on fixed incomes. Construction of new multifamily units should occur in the multifamily residential area delineated on the Future Land Use map.

The locational criteria for high density residential areas include:

- Areas adjacent to high density residential areas such as apartment complexes and mobile home parks.
- Areas adequately buffered from single family residential neighborhoods.
- Areas located with direct access to major streets.
- Areas adequately serviced with water and sewer services.
- Areas adequately buffered from low density and medium density single family residential neighborhoods.

Mobile Home Park

The purpose of the mobile home park classification is to provide for mobile home park developments. The Future Land Use Map identifies two sites, one an existing development on Dixie Highway northeast of the Village of Birch Run. The second site is adjacent to the existing development and is currently zoned for mobile home development. These two sites are expected to provide for the mobile home park needs of the township over the planning period. If both sites are fully developed, and a demonstrated need for additional sites in the township is documented, the locational criteria for additional mobile home park areas would be:

- Areas adjacent to high density residential areas such as apartment complexes or other mobile home parks.
- Areas adequately buffered from single family residential neighborhoods.

- Areas located with direct access to major streets.
- Areas adequately serviced with water and sewer services.
- Areas adequately buffered from low density and medium density single family residential neighborhoods.

Community Commercial

The purpose of the community commercial classification is to provide for general retail shopping and merchandising activities together with light wholesale uses, business, and personal services. The clustering of commercial and light industrial uses is encouraged to avoid traffic congestion, reduce traffic conflicts, and reduce sprawl. The infill of vacant lots will be encouraged to reduce commercial sprawl rather than increasing the total length of commercial linear development in the township. High density residential development may be permitted adjacent to community commercial areas providing there is adequate buffering between the two uses and further provided the impacts of the commercial uses are minimal.

The locational criteria for community commercial areas include:

- Areas within the established Birch Run Township DDA boundaries.
- Areas adjacent to established commercial or service uses.
- Areas adequately served by water and sewer services.
- Areas separated from incompatible land uses such as single family residential.

The area along Birch Run Road from the current DDA boundaries to M-83 would be suitable for rezoning for commercial development when adequate utilities can be provided to the area and the area at the corner of Dixie Highway and Townline Road could be suitable for light commercial development, consistent with existing land uses.

Highway Services Commercial

The purpose of the highway services commercial classification is to provide locations for uses which either generate significant automobile traffic or require parking, storage or building space not otherwise available in the community commercial area.

The intent of the district is to ensure adequate buffering of adjacent residential uses and to ensure adequate roadway access that promotes shared driveways and other techniques useful in reducing traffic access conflicts. It is also intended that highway services commercial development will occur as infill between established commercial uses rather than increasing the total length of commercial linear development in the township. The locational criteria for general commercial areas include:

- Areas fronting on or with direct access to Dixie Highway or Birch Run Road.
- Areas adjacent to established highway services commercial uses.
- Areas adequately buffered from incompatible uses such as single family residential.
- Areas with access to water and sewer services.

Light Industrial

The purpose of the light industrial classification is to provide locations for wholesale activities, warehouses and light industrial opportunities which have limited associated external effects, such as assembly and fabrication activities. The classification also permits commercial establishments including uses permitted in the community commercial and highway service classifications with adequate utilities.

It is the intent that these uses will expand the economic base of the Birch Run area and the employment opportunities available to Birch Run Township residents. They will not have adverse effects on surrounding uses or detract from the township's rural character

The locational criteria for light industrial areas include:

- Areas separated from incompatible land uses such as single family residential development.
- Areas with access to all–weather roads.
- Areas with access to suitable water and sewer services.
- Areas adjacent to industrial uses.

Open Space Communities Overlay District

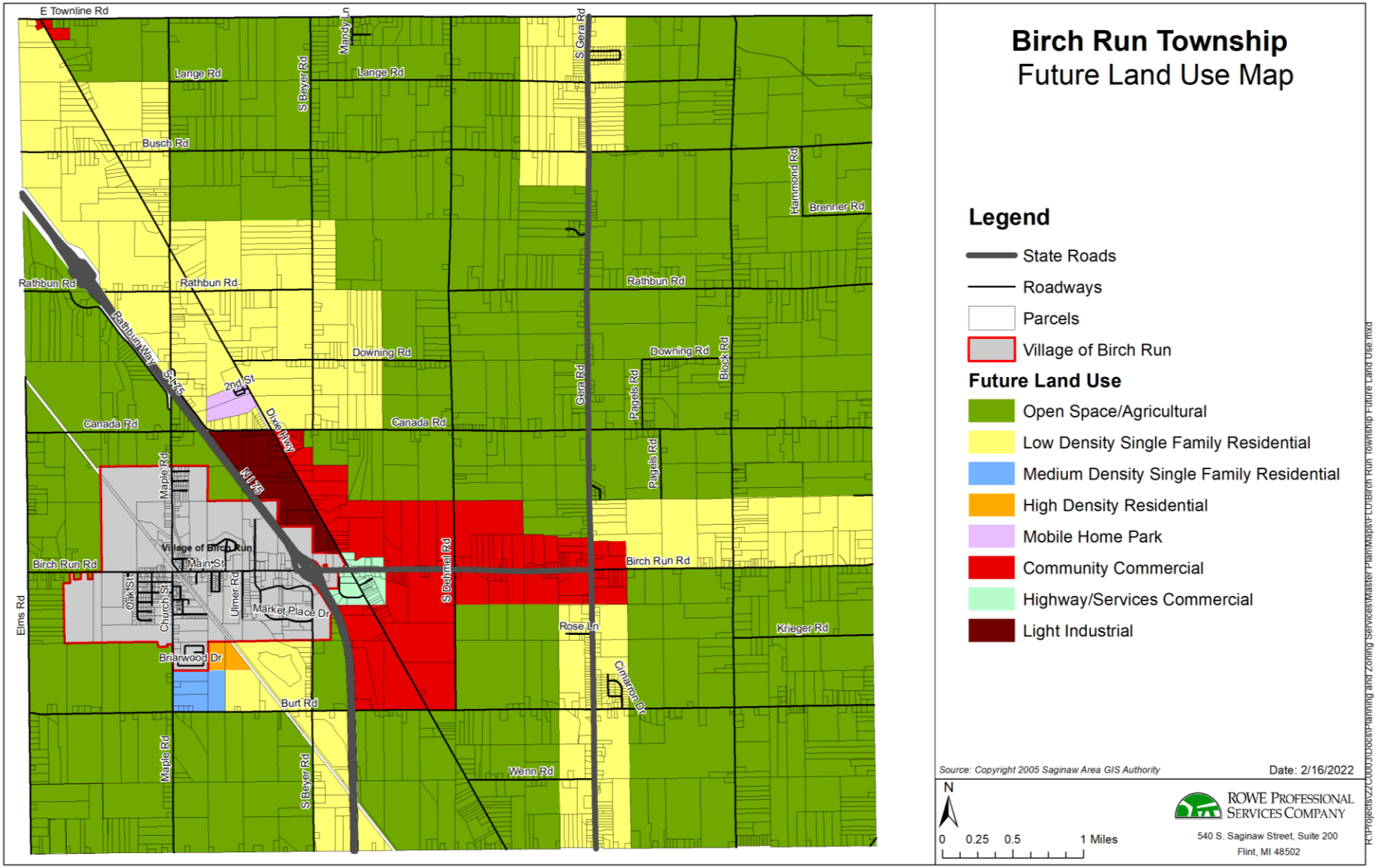
The purpose of this district is to provide more flexible standards to allow for more effective preservation of agricultural land, natural resources, sensitive environmental area, open space, and rural character.

The uses permitted in this overlay include dwelling units located in the underlying district, and dedicated open space for agricultural, resource conservation, recreation, and/or preservation. To encourage the use of this tool residential development are granted a 30 percent bonus density.

Locational criteria include:

- Areas with natural features, agricultural land, or open space.
- Areas with access to suitable water and sewer services.

Map 10-1: Future Land Use Map



Chapter 11 Implementation Plan

The purpose of an implementation plan is to ensure that the goals, objectives and plans of the Township Master Plan are implemented and that the plan is kept current and maintained. It does this by the use of tools provided the Township by State laws, through development of local support for the plan and by establishing procedures for use of the plan in reviewing zoning decisions and maintaining the plan.

Table 11-1: FLU and Zoning Ordinance Relationships

Recommended FLU and Zoning Ordinance Relationship	
FLU Plan	**Zoning Ordinance**
Open Space/Agricultural A-1	General Agricultural A-1
Delete - Dispersed Residential	-
Low Density Family Residential R-1	Low Density Residential District R-1
Medium Density Family Residential R-2	Medium Density Residential District R-2
High Density Residential R-3	High Density Residential District R-3
Multiple Family District R-MF	Multiple Family Residential District R-MF
Manufactured Housing Community District R-MHC	Manufactured Housing Community District R-MHC
General Commercial District C-1	General Commercial District C-1
Highway Commercial District C-2	Highway Commercial District C-2
Light Industrial I-1	Light Industrial I-1
Add - Open Space Communities Overlay	Open Space Communities Overlay District
Add - Planned Unit Development	Planned Unit Development District

Zoning Plan

One of the pre-eminent tools used by communities to reach the goals of their land use plan is zoning. Zoning is a regulatory power given by the State to Townships through the Michigan Zoning Enabling Act. The act authorizes the local units to establish zoning ordinances controlling the use of property and the height, bulk, and location of buildings on that property. In order for an ordinance to be effective in implementing a land use plan, it must be tailored to that plan. It follows, that when a plan is updated, the local zoning ordinance should also be updated to take into account those changes. Under the Michigan Planning Zoning Enabling Act any master plan developed for a community with a zoning ordinance must include a "Zoning Plan" that outlines the relationship between the zoning ordinance and the master plan. This section of the Implementation Plan addresses these requirements. Below is a table showing the relationship between the Master Plan Future Land Use Classifications and current zoning ordinance districts. The plan includes the changes as outlined in the table:

- The deletion of the Dispersed Residential land use classification because there is no such zoning district and seems an unnecessary intervening district.
- The addition of an Open Space Communities Overlay land use classification to correspond with the Open Space Communities Overlay District zoning district
- The addition of a Planned Unit Development future land use classification to correspond with the Planned Unit Development District zoning district.

The following strategies outlined in Chapter 9 relate to changes to the zoning ordinance

- Review standards to approve site plans in the zoning ordinance to be located nearby existing utilities or do not cause a financial hardship for the township
- Adopt a provision to limit non-agricultural development in the AG Agricultural zoning district.
- Review the zoning ordinance district requirements to have high densities that are located along major transportation routes and other key activity centers.
- Provide incentives to developers to include walking paths to existing infrastructure.
- Explore and amend the zoning ordinance to include more varieties of mixed-use developments in the township.
- Review the zoning ordinance for appropriate locations and requirements for the Industrial (I-1) zoning district.
- Review the number of zoning districts that allow compact cluster/planned centers.
- Encourage internal sidewalks and pedestrian traffic between commercial developments.
- Amend the zoning ordinance to include "missing middle" housing types such as four-plex, tri-plex, duplexes, etc.
- Review zoning ordinance procedures on historical home improvements or other additions.
- Zone land to offer a variety of density and housing types to optimize dwelling choices.
- Modify zoning regulations to encourage use of conservation zoning and/or similar cluster zoning options.
- Explore the use of a historic overlay zoning district.
- Review zoning district minimum lot sizes for Agricultural (A-1) district to determine its consistency with the OSD overlay district and the goal of limiting expansion of public infrastructure.
- Amend the zoning ordinance to include buffering requirements of native vegetation along agricultural land that matches the character of the area.
- Review zoning ordinance to provide incentives for the OSC overlay district to encourage recreational use of open space.
- Evaluate zoning district requirement to ensure the maximum adequate opportunity for private recreational development.
- Review zoning ordinance to have design standards for the different zoning districts or types of development.
- Adopt uniform sign regulations that restrict the size, number and placement of new signs and billboards in the township.
- Revise zoning ordinance to adopt design standards for future development.

Other Ordinances

Besides the zoning ordinance, State law has provided local communities with authority to adopt other special ordinances that can be used to enforce the goals and objectives of a land use plan.

Subdivision Control/Land Division Ordinances — Although the State's Land Division Act requires the developer of a subdivision to submit a proposed plat before a township for review and approval, it also authorizes a township if it wishes, to prepare a subdivision control ordinance. This ordinance may include stricter standards for subdivision design. In addition to review of subdivisions, since 1996 the township has been responsible for reviewing land divisions that do not require submission of a subdivision or condominium plat. In order to properly regulate these subdivisions and land divisions,

the township should adopt local land division and subdivision control ordinances identifying the procedures and standards for approval of a land division or subdivision plat. These ordinances should be regularly reviewed and updated.

Other Local Tools

Besides the tools granted by state law, local communities have other tools that can be used to implement the plan.

Engineering Construction Standards — Update standards to promote street layout that discourages cul-de-sacs and promotes continuation of existing street pattern

Procedural Manual — Public frustration over zoning rules is understandable. Most residents are not familiar with zoning provisions and requirements. They may need to deal with them a couple of times in their lifetime. But when they do, the ordinances legalese and the interconnect requirements and procedures can be extremely confusing. One way of reducing that confusion is to provide material that explains the most common zoning procedures and issues in plain English with the use of checklists and flow charts to graphically display the concepts. The plan recommends the development of a zoning procedural manual for use by the staff in educating the public and new Planning Commission, ZBA and Township Board members.

Public Education and Promotion of the Plan

An important part of the Planning Commission's responsibilities is the promotion of the plan to the general public. Strategies to educate the public on the intent and recommendations of the plan include:

- Develop a summary of the plan that is suitable for distribution to those with casual interest in the plan.
- Make copies of the plan available for public review at the Township Hall, public library, and other public locations.
- Encourage the use of the plan in civics classes at area schools.
- Provide opportunities for Planning Commission members to speak at local service clubs and other civic groups concerning the plan.

Capital Improvement Plan

As required under the Michigan Planning Enabling Act, every community that adopts a master plan that operates a municipal water or sewer system must prepare and maintain six-year Capital Improvement Plan (CIP), updating the plan annually.

Strategic Plan

The strategic implementation Plan identifies those strategies identified in the Goals & Policies chapter that are to be a priority over the next five years. Table 11-2 identifies priority strategies.

Table 11-2: FLU and Zoning Ordinance Relationships

Strategic Implementation Plan		
Strategy	Responsible Party	Year
Continue to post minutes, agendas, and important township documents on the website	Township Clerk (primary) Planning Commission Township Board	2022 - 2026
Prepare Capital Improvement Plan	Planning Commission (primary) Township Board	2022
Update Zoning Ordinance	Planning Commission (primary) Township Board	2022 - 2023
Explore the use of social media platforms to communicate with residents	Planning Commission (primary) Township Board	2025
Prepare Five Year Review	Planning Commission (primary)	2026

Plan Maintenance and Update

A plan is not a static document. It must be continuously maintained and updated if it is to remain a valid document. Under recent amendments to the Township Planning Act, Planning Commissions are required to review their plans for consideration of an update at least every five years. Below are key indicators the Township can monitor to determine the need for updating the plan.

Updating the Data Base — This plan is based on certain assumptions concerning the growth of the Township. These assumptions are contained primarily in the plan's data base. It is important for the Township to regularly monitor these assumptions to determine if they are still valid. If they become invalid, the Township must determine what the changes in circumstances mean for the plan goals and objectives.

1. **Population Growth** — The plan is based on the projection growth contained in the population section of the data base. As noted in the narrative following the projections, there is always a certain amount of guessing that goes into population projections, and they should be continuously monitored.
2. **Housing Growth and Mix** — The plan makes assumptions on the growth of housing in the Township over the planning period and the mix of single family and multifamily units. The Township should monitor housing growth and mix to determine if it is following the projections. Differences in the mix of housing types between what was projected and what is built may mean certain assumptions on market demand for various housing types was incorrect. This could impact the population projections and the land use need estimates contained in the plan.
3. **Adjacent Planning and Zoning** — Changes in the land use plans or zoning maps of adjacent townships and the Village of Birch Run should be reviewed to consider their impact on the Township's plan, preferably before that community makes a decision regarding the matter.

4. **Transportation** — The Township should monitor changes and proposed changes in their streets in the Township, possibly with an annual street survey.
5. **Utilities** — In order to permit development, the plan anticipates the expansion and extension of utilities into areas not currently served. As these improvements occur, the effect on the development potential of the property should be considered.

Reviewing the Plan Goals and Policies — After reviewing the updated information on the data base, the Township should review the goals and objectives. Specifically, the Township is looking for goals or objectives that are no longer relevant due to changes in conditions or objectives that have proven ineffective in addressing goals. Those items that are identified should be deleted or modified in light of the new information. The plan should be officially amended to incorporate the changes in the goals or objectives and the basis for the changes should be reflected in a public hearing record.

Incorporating Plan Review into Rezoning Request Review — Although an annual review is necessary for a comprehensive examination of the plan, many problems with a land use plan will become obvious during consideration of a rezoning or special land use permit request. It is important to incorporate review and amendment of the land use plan as part of the Township's consideration of such requests. This is covered in more detail in the subsection on using the land use plan for zoning reviews.

Using the Land Use Plan for Zoning Review

As noted earlier, the primary method of enforcing a land use plan is the zoning ordinance. In order for that to be done effectively, the community's rezoning and special land use permit request and site plan review procedure should be structured so land use goals and objectives are considered.

Rezoning Requests — In considering a rezoning request, the primary question to ask is: "Does this request conform to our land use plan?" Three subsidiary questions follow that; "Was there an error in the plan?", "Have there been relevant changes in conditions since the plan was approved?", and "Have there been changes in the goals and objectives of the Plan?". Answering these questions should answer the question whether a rezoning request is appropriate and that should frame the reason within the context of the plan.

This method of analyzing a request rests on the assumption that a request which complies with a valid plan should be approved and one that does not comply with a valid plan should not be approved. Further, it assumes that the three circumstances that would invalidate a plan are a mistake in the plan, a change in condition that invalidates the assumptions that the plan was built on or a change in the goals and priorities that the community set for itself.

In considering whether a rezoning complies with the plan requires more detailed study then simply looking at how a piece of land is designated on the Future Land Use Map. The plans goals and objectives and the intent and locational criteria of the various land use classifications should also be considered. The Future Land Use map is simply one arrangement of land use within the Township and is not intended to be an unalterable blueprint for the future zoning map. In some cases, a particular area may be appropriate for more than one land use type. For example, a use may be equally suitable for local commercial or multi-family development. The map may designate it for local commercial, but that does not mean it should be excluded from consideration for multi-family as well. By considering the goals, objectives, and land use classifications in the plan in addition to the map, the Planning Commission is more accurately weighing the conformance of a request to the intent of the plan.

Mistake — A mistake in a plan can be an assumption made based on incorrect data, an area on the land use map that is incorrectly labeled, or other factors that is known at the time of the plan adoption would have been corrected.

Changes in Conditions — A plan assumes that certain conditions will exist during the planning period. If those conditions change then goals, objectives and land use decisions that made sense when the plan was adopted may no longer be valid, and a rezoning that was not appropriate before is appropriate now.

Change in Policy — In the end, a plan is based on the future vision of the community held by the Planning Commission/Township Board. When that vision changes, the plan should change. When a zoning issue results in a change in vision, a decision can be made that is contrary to the current plan, as long as that changed vision is explicitly incorporated into the plan.

Two points should be made. First, the three factors for consideration (mistake, change in conditions, change in goals or objectives) can work in reverse, making a proposal that otherwise seems appropriate, inappropriate. Secondly, these factors should not be used to create excuses for justifying a decision to violate the land use plan, or to change it so often that it loses its meaning.

Chapter 12 APPENDIX

To include public hearing notices and adoption information.

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