



Adopted November 20, 2023

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Introduction



Change is inevitable. Planning allows a community to make choices and set goals to help manage change.

Purpose and Use of the Master Plan

The Township's Master Plan lays out the vision for the community's desired future and serves as a decision-making framework by providing valuable information and sound rationale for recommended land uses, public utility extensions and transportation system changes. The goals and objectives of the Master Plan guide the Planning Commission and Township Board in making both day-to-day and long-range decisions to achieve the community's vision.

Master Plan Review

In 2021, the Planning Commission began to review the 2015 Master Plan. They determined that the overall Master Plan was generally still valid but that certain elements needed to be updated or added. This document carries through elements of both the 2007 and 2015 Master Plans, while also adding new or revised aspects, and is the official future vision of Alpine Township.

The review and update process included intensive public engagement in Fall 2021, policy discussion (particularly regarding the Future Land Use Map, farmland preservation, and housing development) throughout 2022, and the adoption process in 2023.

Vision Statement

Alpine Township is a dynamically diverse family-oriented community that strives for managed growth with proper supporting infrastructure within a framework of a vibrant agricultural base and a small-town feel.

Current Conditions and Trends



Community Resources

CULTURAL RESOURCES

There are several congregations and churches located throughout the Township.

A group of businesses, governments, schools, churches and service organizations comprise the Comstock Park Community Outreach group whose mission is to match community needs to available resources. Activities for seniors are provided by the Comstock Park Garden Panthers organization.

The Kent District Library continues to host many programs and activities. Other groups such as Neighborhood Watches, Ridge Agricultural Economic Partner's promotion of farm activities, numerous farm markets, and the Comstock Park Rotary continue to sustain and improve the quality of life for Alpine Township residents and visitors.

EDUCATIONAL INSTITUTIONS

Comstock Park's Greenridge Elementary on Oakridge Avenue is an early childhood center serving children ages 2½ to 5 years of age in various capacities. Stony Creek Elementary in the Westgate Subdivision on Lantern Street expanded to include 8 new classrooms, a new gym, cafeteria, and playground equipment and serves kindergarten through 2nd grades.

Kenowa Hills’ Alpine Elementary School was completely renovated and expanded in 2017 and provides education to students in Kindergarten through 5th Grade. Located adjacent to each other, Kenowa Hills Middle and High Schools provide a campus with expanding facilities to educate students in 6th to 12th Grades.

Holy Trinity Catholic School provides educational opportunities to students in Kindergarten through 8th Grade.

RECREATION FACILITIES

At the Alpine Township Sports Park, the parking lot was recently resurfaced and soon four pickleball courts and a new picnic shelter will be installed. In 2013, Westgate Neighborhood Park received needed updates including new tennis courts, a basketball hoop, additional playground equipment, a gaga ball pit and a paved walking/biking pathway. Both the York Creek and Alpine Slopes Apartment complexes provide playgrounds to better serve their communities.

Dwight Lydell County Park was recently renovated completely. Wahlfield County Park will soon receive an additional entrance, parking lot, and restrooms.

ECONOMIC DEVELOPMENT

The Township joined The Right Place, an economic development agency for West Michigan, to assist with local economic development efforts.

Social and Economic Characteristics

The U.S. Census Bureau, within the U.S. Department of Commerce, is the source of the demographic data cited in this section. Every ten years, the U.S. Census Bureau conducts a census of population for the United States, and the thousands of political subdivisions within it. The demographic data in this section is gathered from the 2020 Census and the 2019 American Community Survey, a statistically accurate survey of the U.S. Census Bureau.

POPULATION

Between 2010 and 2020, the population of Alpine Township grew by an estimated 743 people to a total of 14,079. Population growth allows the Township to encourage new entrepreneurship, reinvestment into housing stock, expansion of retail-oriented businesses and other services needed to support the community. A community comparison was also undertaken to provide the reader with an overview of the population totals of adjacent townships and municipalities. Of the four surrounding communities that were reviewed, Alpine Township had the third largest population total, as evidenced in the below table.

Table 1: Population, Surrounding Communities

Alpine Twp	Wright Twp	Sparta Twp	Plainfield Twp	City of Walker
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Population	14,079	3,190	9,395	33,535	25,132
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Source: US Census

Since 1980, Alpine Township has exhibited an increase in population, as evidenced in the table below. Of the communities that were reviewed for comparison to Alpine Township, populations have steadily increased since the 1980s. However, Wright Township continues a decreasing-to-maintaining level of population, which might also be referred to as stagnant. Alpine itself lost population from 2000 to 2010. It gained population between 2010 and 2020, but not as quickly as other nearby communities.

Table 2: Population, 1980–2020

	1980	1990	2000	2010	2020
Alpine Twp.	8,934	9,863	13,976	13,336	14,079
Wright Twp.	3,387	3,285	3,286	3,147	3,190
Sparta Twp.	6,934	8,447	8,938	9,110	9,395
Plainfield Twp.	20,611	24,946	30,195	30,952	33,535
City of Walker	15,088	17,279	21,842	23,537	25,132
Kent County	444,506	500,631	574,335	602,622	657,974

Source: US Census

Kent County added an average of 53,367 people per decade since 1980. The past ten years alone added an additional 55,352 people. This is a significant population growth per decade, which has raised the demand for essential services, real estate for housing expansion and additional infrastructure investment.

RACE & ETHNICITY

The population of Alpine Township is moderately homogenous in terms of race and ethnicity. In 2020, 74.7% of residents reported being white/Caucasian for a total of 10,517 persons. The second largest ethnic group was reported as being two or more races, which accounted for 8.4% (1,187) of the township. Residents who reported being African American accounted for 7.4% (1,048) of the Township. 1,023 residents reported being some other race, which accounted for 7.3% of the Township.

14.6% of Township residents identify as Hispanic, regardless of race.

The table below compares Alpine Township to Kent County. Kent County reports being 73% white.

Table 3: Race, 2020

	Kent County	Alpine Township
Total Population	657,974	14,079
Population of one race	607,977	12,892

White alone	480,003	10,517
Black or African American alone	64,499	1,048
American Indian and Alaska Native alone	4,013	121
Asian alone	21,980	180
Native Hawaiian and Other Pacific Islander alone	214	3
Some Other Race alone	37,268	1,023
Population of two or more races	49,997	1,187
Population of two races	47,052	1,138

Source: US Census

Table 4: Ethnicity, 2020

	Kent County	Alpine Township
Hispanic	70,152 (10.6%)	2,055 (14.6%)
Non-Hispanic	587,822 (89.4%)	12,024 (85.4%)

Source: US Census

AGE STRUCTURE

As of the 2020 Census, the median age of Alpine Township residents was 35.1 years, while comparatively, the median age for Kent County was 35.5 years. The State of Michigan had a median age of 39.8 years, while the United States as a whole had a median age of 38.5 years.

In 2019, 25% (3,495) of the Township population was under the age of 19 years. 58% (8,099) of the Township population was under the age of 39. 62% (8,668) of the population was between the ages of 20 and 64. 12.9% of the population is 65 or older.

Table 5: Age Structure

	Number	Percentage
Total Population	14,079	100%
Under 5 years	1,053	7.6%
5 to 9 years	1,094	7.8%
10 to 14 years	765	5.5%
15 to 19 years	583	4.2%
20 to 24 years	1,270	9.1%
25 to 29 years	1,231	8.8%
30 to 34 years	955	6.8%
35 to 39 years	1,148	8.2%

40 to 44 years	880	6.3%
45 to 49 years	787	5.6%
50 to 54 years	907	6.5%
55 to 59 years	851	6.1%
60 to 64 years	639	4.6%
65 to 69 years	583	4.2%
70 to 74 years	360	2.6%
75 to 79 years	332	2.4%
80 to 84 years	293	2.1%
85+ years	348	1.6%

Source: US Census

Alpine Township has one of the lowest median ages within the sample communities. Wright Township, in Ottawa County had the highest median age of 40.9, followed closely by Plainfield Township with a median age of 40.7 years.

Table 6: Median Age

	Alpine Twp	Wright Twp	Sparta Twp	Plainfield Twp	City of Walker
Median Age	35.1	40.9	36.8	40.7	35.4

Source: US Census

Based on the age demographics, it is conceivable that a future spike in the school age population could occur. This trend is also supportive of the continued growth in Kent County over the past four decades. With demographics that skew towards younger age groups, the Township may want to consider planning for services that cater to younger demographics. Such services could include safe routes to school, public parks, youth recreation and employment, and daycare.

INCOME & ECONOMICS

A community's base median income is a signifier of the economic health of the community. A higher median income could indicate higher disposable income, which in turn leads to an increase in demand for additional non-essential services. Non-essential services could be classified as a service that is not critical to the life-safety (utilities, food stores, public safety) of residents.

Alpine Township has a median income of \$53,834 per household, which is moderately-to-significantly lower than Kent County, which has a median income of \$66,532. Plainfield Township, for comparison, has a median income of \$71,853, which happens to be 8% higher than the County median income level.

Table 7: Median Income

	Alpine Twp	Wright Twp	Sparta Twp	Plainfield Twp	City of Walker
Median Income	\$53,834	\$70,956	\$56,942	\$71,853	\$65,170

Source: US Census

Median income of a community is one vitality marker of the overall economic health. A second marker relates to industry professions within the community. Based on data obtained from the 2019 American Community Survey, 22.7% of the Township residents are employed within a manufacturing-based business. The second highest employment sector for Township residents was educational services, health care and social assistance, which accounts for 19.1% of employment.

Grand Rapids Michigan is known for being a major hub for manufacturing of office furniture. In addition, the area also supports regional hospitals, colleges and universities, and a myriad of other businesses and supporting services. As such, having a large portion of the employment base being focused on manufacturing, educational services and health care is anticipated. A further breakdown of employment sectors is provided in the table below.

Table 8: Employment by Industry

Industry	Number	Percentage
Civilian employed population 16 years and over	7,523	
Agriculture, forestry, fishing and hunting, and mining	257	3.4%
Construction	460	6.1%
Manufacturing	1,707	22.7%
Wholesale trade	327	4.3%
Retail trade	851	11.3%
Transportation and warehousing, and utilities	191	2.5%
Information	119	1.6%
Finance and insurance, and real estate and rental and leasing	376	5.0%
Professional, scientific, and management, and administrative and waste management services	733	9.7%
Educational services, and health care and social assistance	1,437	19.1%
Arts, entertainment, and recreation, and accommodation and food services	701	9.3%
Other services, except public administration	180	2.4%
Public administration	184	2.4%

Source: US Census

EDUCATION

The educational attainment for people 25 years and older in Alpine Township is shown in the graphic below. Within the Township, 89.9% of residents have attained a high school diploma or higher. The Township also has 36.1% of its population with some college experience or an associate degree. Alpine Township has had 24.3% of all residents earn a bachelor’s degree, professional degree, or a graduate degree.

Kent County has an educational attainment rate for bachelor’s degree or higher at 36.1%.

Post-secondary education institutions, either with a primary campus or satellite campus, located in the region of Alpine Township include Calvin University; Aquinas College; Grand Valley State University; Cornerstone University; Davenport University; Kuyper College; Grand Rapids Community College, Grace Christian University, and Hope College.

Table 9: Educational Attainment

Education Attainment	Percent of Population over 25
No High School Diploma or GED	10.1%
High School or GED	29.5%
Some College	26.2%
Associate’s degree	9.9%
Bachelor’s degree	18.8%
Graduate or Professional	5.5%

Source: US Census

As noted in the table below, Plainfield Township is the only community that surpasses the County educational attainment rate. Previously indicated in the age demographic section, Alpine Township has 25% of its population at or below the age of 19 years. It is reasoned that with an older population, educational attainment could be higher. Additionally, with a large employment sector of the Township being in manufacturing, the requirement for advanced degrees is not as high.

Alpine also has a large agricultural economy, which attracts migrant farm workers from other countries. While important to the local economy and valued as residents, those migrant workers typically do not have formal educational credentials.

Table 10: Educational Attainment

	Alpine Twp	Wright Twp	Sparta Twp	Plainfield Twp	City of Walker
Bachelor’s Degree or Higher	24.3%	19.1%	17.9%	37.8%	31.0%

Source: US Census

Housing Analysis

PURPOSE

The purpose of this study is to examine the demand for housing units in the Greater Grand Rapids Area, with particular focus on Alpine Township, to inform the Township’s housing policies in this Master Plan. This study includes a detailed analysis of housing market data from the US Census, ESRI, and other sources. The conclusions of this study are designed to initiate policy discussions with Township officials and stakeholders, especially related to zoning decisions and other Master Plan implementation action items.

SUMMARY OF ANALYSES

This study features several areas of analysis:

- Analysis of the underlying demographic trends that impact the housing market, including population projections
- Analysis of the overall supply and demand for housing, including a breakdown of “For Sale” vs “For Rent” units
- Projection of the population to 2030 and 2040, with accompanying projections of long-term housing trends
- A build-out analysis of the Future Land Use Map, to understand how fast the housing build-out envisioned in the plan should occur in order to keep pace with market demand.

SCOPE AND LIMITATIONS

This report is based on estimates, assumptions, and other information developed from market research and knowledge of the industry. Sources of information and the basis of estimates are stated in the report.

The conclusions of this report rely on standards set by national organizations and data derived from outside market research organizations. Additionally, they are based on the assumptions stated in this report. The conclusions and supporting data in this report are subject to change based on evolving market conditions. This report is intended to quantify the market for new housing development and is not intended to be used as a financial projection.

DATA SOURCES

Data for this report comes from the following sources, which are cited where appropriate:

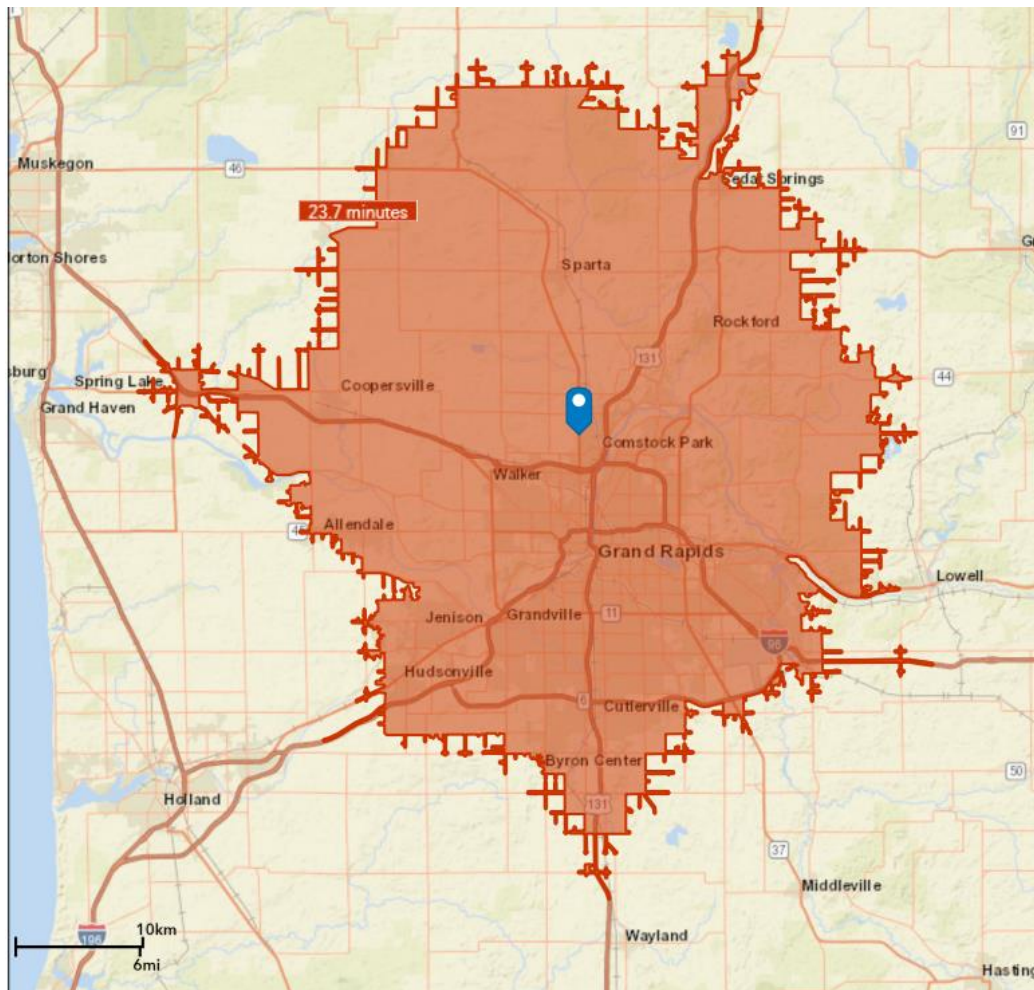
- US Census
 - 2010 Decennial Headcount
 - 2019 American Community Survey
 - 2020 Decennial Headcount
- ESRI Business Analyst
- Michigan High School Athletic Association (School Enrollment)
- National Association of Realtors

TRADE AREA

Markets do not stop at municipal borders. When households seek housing in the Alpine Township area, they do not look solely within Alpine Township, or any other specific community. Thus, the geographic extent of the housing market is more realistically the area where someone can live and comfortably commute into Alpine Township. To estimate this area, McKenna used the average commute time in the Township (23.7 minutes) and mapped the area where a commuter could reach the intersection of Alpine Avenue and Lamoreaux Drive in that amount of time.

The resulting Trade Area is shown on the map below. The Trade Area incorporates a large swath of Kent, Ottawa, and Muskegon Counties, reaching as far west as Spring Lake, as far north as Kent City, as far east as Ada, and as far south as Byron Center. **The Trade Area has a total population of 685,196 people, according to 2021 ESRI estimates.**

Map 1: Housing Trade Area



POPULATION PROJECTION

To project the population in the future, McKenna used a Cohort-Component Population Projection. Cohort-Component Population Projections are developed using the following methodology:

Cohort-Component: The population is divided into ten-year age cohorts, using US Census data. At each ten-year interval, individual age cohorts are moved up the ladder. For instance, the group that was 30-40 years old in 2010 became the 40-50-year-olds in 2020, minus those who die during that time frame based on the mortality rate for their age group. For the 81+ age cohort, the number not projected to die during the ten-year period in question was carried over to the next decade. To calculate the number of people aged 0-10, the population of women of childbearing age was calculated and a 10-year birthrate per thousand (from the Michigan Department of Community Health) applied to give the number of births.

Net Migration Calculation: To account for migration, the population projection also includes a net migration factor. The net migration factor was calculated by running a Cohort-Component Analysis from 2010 to 2020 and comparing the results to the actual 2020 population data. The Cohort-Component Analysis predicted a Township population of 15,118 people, compared to an actual population of 14,079. Therefore, the analysis estimates a net loss of 1,039 people from the Township who would otherwise be living there if they had not moved away. 1,039 people represents a **-6.9% net migration rate**.

The reason for that loss is likely the large number of rental apartments in the Township – in fact, the York Creek Apartment community is referred to locally as “everyone’s first apartment.” Anecdotally, it appears that when residents reach homebuying age, they move to other communities in the Trade Area (possibly due to lack of supply in Alpine Township). That anecdotal evidence is backed up by the positive net migration rate of the Trade Area at large. For the Trade Area, the Cohort-Component Analysis projected a population of 669,920, compared to an actual population of 685,196, a **+2.2% net migration rate**.

For the purposes of this analysis, the net migration rates are assumed to hold constant through the 20-year projection period. The results of the population projection are shown below:

Table 11: Trade Area Population Projection

	2020	2030 (Projected)	2040 (Projected)
Alpine Township	14,079	14,348	14,562
Rest of Trade Area	671,117	750,935	813,388
Total Trade Area	685,196	765,283	827,950

Source: US Census, ESRI, McKenna Calculation

ALTERNATE MIGRATION RATES

Because of the out-migration trend from the Township, Township growth is projected to be much slower than the rest of the Trade Area during the 20-year projection period. One reason for that is an intentional policy of this plan—the preservation of the irreplaceable fruit ridge and other rural and agricultural land in the face of growth pressure.

However, the Township could reduce its out-migration by constructing more housing intended for homeownership. Because the Township offers good schools, affordable homes, and a rural character combined with the convenience of a metropolitan region, it could be popular for first-time homebuyers. That would lead to more robust population growth, as shown in the table below.

The table includes five scenarios.

- Continued Out-Migration (-6.5% Net Migration Rate)
- Reduced Out-Migration (-3% Net Migration Rate)
- Zero Net Migration (0% Net Migration Rate)
- Regional Net Migration (+2.2% Net Migration Rate)
- Extreme Growth (+10% Net Migration Rate)
-

The “Extreme Growth” scenarios is designed to “stress test” the Future Land Use Plan – to ensure that the Township has planned for enough housing to weather very high growth rates while still protecting the fruit ridge.

Table 12: Alternate Migration Scenarios

Net Migration Rate	2020 Population	2030 (Projected)	2040 (Projected)
-6.5% (Actual 2010-2020)	14,079	14,402	14,672
-3%	14,079	14,872	15,655
0%	14,079	15,275	16,522
2.2% (Trade Area 2010-2020)	14,079	15,571	17,173
10%	14,079	16,619	19,579

Source: US Census, ESRI, McKenna Calculation

HOUSING SUPPLY

Alpine Township contains approximately 2% of the Trade Area’s housing stock. The Township added 149 new units between 2010 and 2020, though many of those were mobile home units replacing older mobile homes. The pace of housing growth in the Trade Area has been much faster; a 7.6% increase since 2010.

The Township has a higher proportion of rental units than the Trade Area at large, but at the same time has a higher median rent. This indicates that the Township’s apartment complexes are sought after by renters in the region.

The median home value in the Township is lower than that of the region, but that indicates potential affordability for first-time homebuyers, which has become a concern in many regions, including the Grand Rapids area.

Table 13. Characteristics of Housing Supply

	Number of Housing Units, 2020	Change in Units 2010-2019	Owner-Occupied*	Renter-Occupied*	Median Rent	Median Home Value
Alpine Township	5,720	+149 (+2.5%)	56.4%	43.6%	\$857	\$160,700
Trade Area	276,497	+20,189 (+7.6%)	67.2%	32.8%	\$787	\$200,471

Source: US Census, ESRI

*Also includes for-sale and for-rent units.

Table 14. Housing Tenure by Age of Householder, Alpine Township

Age of Householder	Owner-Occupied*	Renter-Occupied*
15 to 34 Years	24.5%	75.5%
35 to 64 Years	69.1%	30.9%
65+ Years	61.8%	38.2%

Source: US Census

*Also includes for-sale and for-rent units.

Table 15: Housing Unit Comparison with Neighboring Communities (2020)

	Alpine Twp	Wright Twp	Sparta Twp	Plainfield Twp	City of Walker
Housing Units	5,720	1,215	3,761	13,649	10,797

Source: US Census

The charts above reflect American Community Survey data from the US Census for 2020. However, at the time of the drafting of this plan in 2022, two large housing developments were in process – Wilder Crossings (538 units) and The Range at Alpine (246 units). With those two developments included, Alpine Township will have an estimated **6,504 housing units**.

Housing Type

The table below consolidates Census categories into more descriptive categories, to allow for at-a-glance understanding of the housing supply. The following describes which Census categories are included in each category in the table:

- Single Family = 1 Unit, Detached
- Townhouse/Duplex = 1 Unit, Attached and 2 Units
- Small Multi-Family = 3 or 4 Units and 5 to 9 Units
- Large Multi-Family = 10+ Units
- Manufactured Housing = Mobile Home

Until Wilder Crossings and The Range at Alpine are built out, a majority of the housing in Alpine Township will not be single family homes. That is highly unusual for a community in Michigan, and importantly different than the Trade Area, where nearly two-thirds of housing units are single family homes. Over 30% of the Township’s housing stock is in “Large Multi-Family” buildings. The lack of both single family homes and townhouses/duplexes contributes to the out-migration. There is a lack of options for homebuyers, particularly first-time homebuyers who may be interested in a duplex, townhouse, or other condominium unit.

The table below includes the unit type information based on the 2020 American Community Survey (ACS), as well as updated 2023 information that incorporates Wilder Crossings and The Range at Alpine. Wilder Crossings and The Range at Alpine will move the Township in a positive direction with regard to the diversity of its housing stock, increasing single family to a small majority of housing units, and increasing duplexes while reducing the proportion of large multi-family.

Table 16. Units in Structure, 2020 ACS and 2023 with New Developments

	Single Family	Townhouse/ Duplex	Small Multi-Family	Large Multi-Family	Manufactured Housing
Alpine Township (2020 Census)	47.8%	5.4%	5.9%	30.4%	10.5%
Alpine Township (2023)	50.3%	8.5%	5.1%	26.7%	9.4%
Trade Area	65.2%	10.7%	7.7%	12.8%	3.6%

Source: US Census, ESRI

Age of Housing Stock

The age of the housing stock can provide important insights for a community, as the conditions of the housing stock may be related directly to its age. Older housing stock can also provide a sense of character to the community. Traditionally, major repairs or rehabilitation (new roof system, upgraded heating and cooling units, exterior siding) are needed when the housing structure reaches an age of 30 years. Communities where a substantial proportion of the housing stock is more than 30 years old typically initiate programs to encourage reinvestment.

An example of such housing program is the HOME Investment Partnerships Program, which is funded by the U.S. Department of Housing and Urban Development (HUD). “This program provides formula grants to states and localities that communities use (also in partnership with local nonprofit groups) to fund a range of activities including building, buying and/or rehabilitating affordable housing for rent or homeownership or providing direct rental assistance to low-income people” (Hud.gov).

Further, since the 1960s, the demand for increased energy efficiency homes and additional amenities has increased. Older homes tend to lack features that support barrier free access and may be unsuitable for aging in place without significant remodeling or other reinvestment into the home and property.

Around two-thirds of the Township’s housing stock was built between 1960 and 2000, during a booming period for housing growth regionally and nationally. Other than the oldest housing stock in the region (which is generally located in the core of Grand Rapids), the Trade Area has followed a similar trend, including a slowdown in housing construction during and after the Great Recession of 2008-2011.

The table below includes Wilder Crossings and The Range at Alpine in the “After 2020” column. Data is not available for the Trade Area after 2020.

Table 17. Year of Construction for Units

	Before 1939	1940-59	1960-79	1980-99	2000-19	After 2020
Alpine Township	3.8%	7.6%	24.3%	40.0%	12.5%	11.7%
Trade Area	16.9%	17.0%	24.5%	26.5%	15.1%	Not Available

Source: US Census, ESRI, Alpine Township

HOUSING DEMAND

Headship and Homeownership Rates

The headship rate is the number of households in each age group divided by the population in that age group. By definition, a household resides in a dwelling unit under its control. Using the data in Table 13 we can calculate the propensity of the population in each age cohort to 1) form a household based on the headship rate, and 2) own or rent a dwelling unit. Notably, roommates or a romantic couple living together are considered “co-heads” of a household, and only one person is counted as the “head” for the purposes of the headship rate.

Headship rate data is provided by the National Association of Home Builders. National data is used for headship because it is not available for smaller geographies. The assumption, for the purposes of this analysis, is that Kent County’s headship rates are roughly similar to the nation at large.

For the homeownership rate, the State of Michigan’s rate is used to create a “baseline” of homeownership demand for the Township and Trade Area. Using the national rate would incorporate regions where homeownership rates are lower, and over-state demand for rental housing. Using a more local or countywide rate would be circular logic, merely repeating what is already going on in the housing market, and not allowing for the analysis to show inefficiencies. Therefore, the statewide rate is used.

Table 18: Homeownership and Headship Rates, 2020

	Population (Township)	Population (Trade Area)	Headship Rate (United States)	Homeownership Rate (Michigan)
20-29	2,501 (18%)	103,353 (15%)	39.2%	44.1%
30-39	2,103 (15%)	94,939 (14%)	54.3%	68.6%
40-49	1,667 (12%)	82,232 (12%)	56.7%	75.4%
50-59	1,758 (13%)	80,765 (12%)	58.5%	79.9%
60-69	1,222 (9%)	72,473 (11%)	63.6%	83.3%
70-79	692 (5%)	45,033 (7%)	64.4%	83.7%
80+	641 (5%)	23,423 (3%)	54.1%	72.2%

Source: U.S. Census, National Association of Home Builders.

Table 19: Demand Calculation Explanation

Population	Households	Homeowners	Renters
US Census American Community Survey 2019	Population x Headship Rate in Table 18	Households x Homeownership Rate in Table 18	Households - Homeowners

Table 20: Estimated Homeowner/Renter Demand by Age Group, Alpine Township, 2020

Age Group	Population	Total Households	Homeowner Households	Renter Households
20-29	2,501	980	433	548
30-39	2,103	1,142	784	358
40-49	1,667	945	713	232
50-59	1,758	1,028	822	206
60-69	1,222	777	648	129
70-79	692	446	373	72
80+	641	347	250	96
Total:		5,666	4,023	1,643
			71.0%	28.9%

Source: US Census Bureau, National Association of Home Builders, McKenna Calculations

Table 21: Estimated Homeowner/Renter Demand by Age Group, Trade Area, 2020

Age Group	Population	Total Households	Homeowner Households	Renter Households
20-29	103,353	40,514	17,882	22,633
30-39	94,939	51,552	35,375	16,177
40-49	82,232	46,626	35,157	11,469

50-59	80,765	47248	37,785	9,463
60-69	72,473	46093	38,413	7,680
70-79	45,033	28556	23,913	4,643
80+	23,423	12325	8,900	3,424
Total:		272,913	197,424	75,489
			72.3%	27.2%

Source: US Census Bureau, National Association of Home Builders, McKenna Calculations

The ratio of demand for homeownership and rental properties (with approximately 71% of demand for homeownership properties) in the Township does not match ratio of owner-occupied units versus renter-occupied units (approximately 56% of the housing units are owner-occupied). That mismatch is likely due to socioeconomic and market factors. The projection estimates the number of households who would *prefer* to own, as opposed to rent, but limited income, high sales prices for homes, and lack of inventory could be keeping these households in rental housing.

PROJECTED TOWNSHIP HOUSING DEMAND – 2030 AND 2040

The purpose of projecting housing demand in 10 and 20-year increments is to understand the impact of the housing market on Township policy over the long term. The Master Plan is a forward-looking document with a 20-year time horizon, and therefore, this analysis uses the same time horizon. This report includes a build-out analysis of the Future Land Use Map, which is compared to this Demand Projection to ensure that the housing capacity described in the plan is reflective of the projected market.

Please note that this projection is limited to the parameters in the model and does not take into account unforeseen events or trends that could alter housing demand in the future.

Using the population projection described above and the headship and homeownership rates, the number of housing units demanded in the Township has been projected out to 2030 and 2040. The projection was modelled using the four net migration rates discussed earlier, to project different scenarios.

Table 22: Estimated Housing Demand by Migration Scenario, 2030 (Alpine Township)

Net Migration Rate	2030			
	Projected Population	Households	Homeowners	Renters
-6.5%	14,402	5,658	4,187	1,471
-3%	14,872	5,880	4,352	1,528
0%	15,275	6,070	4,493	1,577
2.2%	15,571	6,209	4,597	1,613
10%	16,619	6,703	4,964	1,740

Source: US Census, ESRI, McKenna Calculation

Table 23: Estimated Housing Demand by Migration Scenario, 2040 (Alpine Township)

Age Group	2040			
	Projected Population	Households	Homeowners	Renters
-6.5%	14,672	5,686	4,181	1,504
-3%	15,655	6,138	4,532	1,623
0%	16,522	6,540	4,812	1,728
2.2%	17,173	6,843	5,035	1,808
10%	19,579	7,971	5,868	2,103

Source: US Census Bureau, McKenna Calculations

The difference between scenarios is substantial. And because building more housing in the Township will create demand – by attracting residents who would otherwise live elsewhere in the Trade Area—there are conflating variables at play. That said, under each scenario, the housing market in Alpine Township will evolve in the following ways between 2020 and 2040:

-6.5% Scenario by 2040:

- 763 new homeownership units needed
- 1,137 **fewer** rental units needed

Under this scenario, young people continue to move out of the Township when they reach homeownership age. However, because the “Zoomer” generation (born mid-1990s to approximately 2010) and the generation after it (born after approximately 2010) are smaller than the “Millennial” generation (born early-1980s to mid-1990s), there will be fewer 20-somethings to move into the apartments and more people in their 30s, 40s, and 50s looking for home ownership. Thus, the Township may experience landlords looking to convert existing rental units into condominiums.

The -6.5% scenario also envisions so much out-migration that the Township population barely grows, stunting the overall growth of the housing market. That seems like an unlikely scenario, because additional owner-occupied housing is already proposed in the Township, meaning the out-migration rate will almost certainly decline or even reverse, as projected in the other scenarios.

-3% Scenario by 2040:

- 1,114 new homeownership units needed
- 1,018 **fewer** rental units needed

Under this scenario, a similar trend plays out to the -6.5% scenario. Smaller cohorts of young adults result in reduced demand for rental units. But in the -3% scenario, the Township population grows more substantially, resulting in an overall increase in demand for housing.

0% Scenario by 2040:

- 1,394 new homeownership units needed

- 913 *fewer* rental units needed

Under this scenario, in-migration and out-migration balance each other out. Young adults who lived in apartments move to homes in the Township and have children, resulting in population growth and demand for additional housing. But rental housing is still oversupplied as the population of young adults decline.

2.2% Scenario by 2040:

- 1,617 new homeownership units needed
- 833 *fewer* rental units needed

This scenario takes into account the rapid growth of the West Michigan region, which had a +2.2% in-migration rate between 2010 and 2020 and appears to be attracting residents even more rapidly in recent years (though data is incomplete for 2020-22). Under this scenario, Alpine would attract more residents from out of the region or from other parts of the Trade Area, rather than simply keeping young people in the Township when they move into homeownership.

Even under this scenario, the oversupply of rental housing is significant. But there is a need for net of nearly 800 new housing units (1,600 new homeownership units, but a decline of 800 rental units) overall, with a necessary shift towards homeownership.

10% Scenario by 2040:

- 2,222 new homeownership units needed
- 761 *fewer* rental units needed

This is the “stress test” scenario, under which the Township must manage rapid growth while still protecting its agricultural community. Under this scenario, an influx of homebuyers would create very high demand for new homeownership units – but the inevitable decline in young adults (which is caused by broader demographic factors) will continue to erode rental demand.

REGIONAL GROWTH

The overall trade area does not share the housing tenure imbalance, or the concern about out-migration of young people once they are seeking to own a home. In fact, projecting the 2.2% in-migration rate forward is a conservative estimate, since anecdotal evidence suggests that the region’s growth will accelerate through the 2020s (though there is not reliable data to support that, yet).

Below is the projected housing demand in the Trade Area through 2040:

Table 24: Change in Housing Demand, 2020-2040, Trade Area

Year	Homeowners	Change from Previous 10 Years	Renters	Change from Previous 10 Years	Total Housing Units Demanded	Change from Previous 10 Years
2020	197,424	–	75,489	–	272,913	–
2030	227,214	+29,791	82,991	+7,502	310,206	+37,293
2040	48,225	+16,995	87,373	+4,382	331,538	+21,377

Source: US Census Bureau, McKenna Calculations

Housing demand in the Trade Area at large is projected to grow rapidly, with over 37,000 new housing units needed before 2030 and over 21,000 more needed before 2040. The slowdown in growth (though growth will continue) is again due to the smaller generations that follow the Millennials, as well as the aging, and eventual dying off, of the Baby Boomers.

Currently, Alpine Township contains approximately 2% of the Trade Area's housing stock. But it will almost certainly be called upon to absorb more than 2% of the coming influx of demand, making the 0% and +2.2% migration scenarios much more likely than continuing out-migration. There is simply too much demand and too much available land in the Township for the out-migration trend to continue.

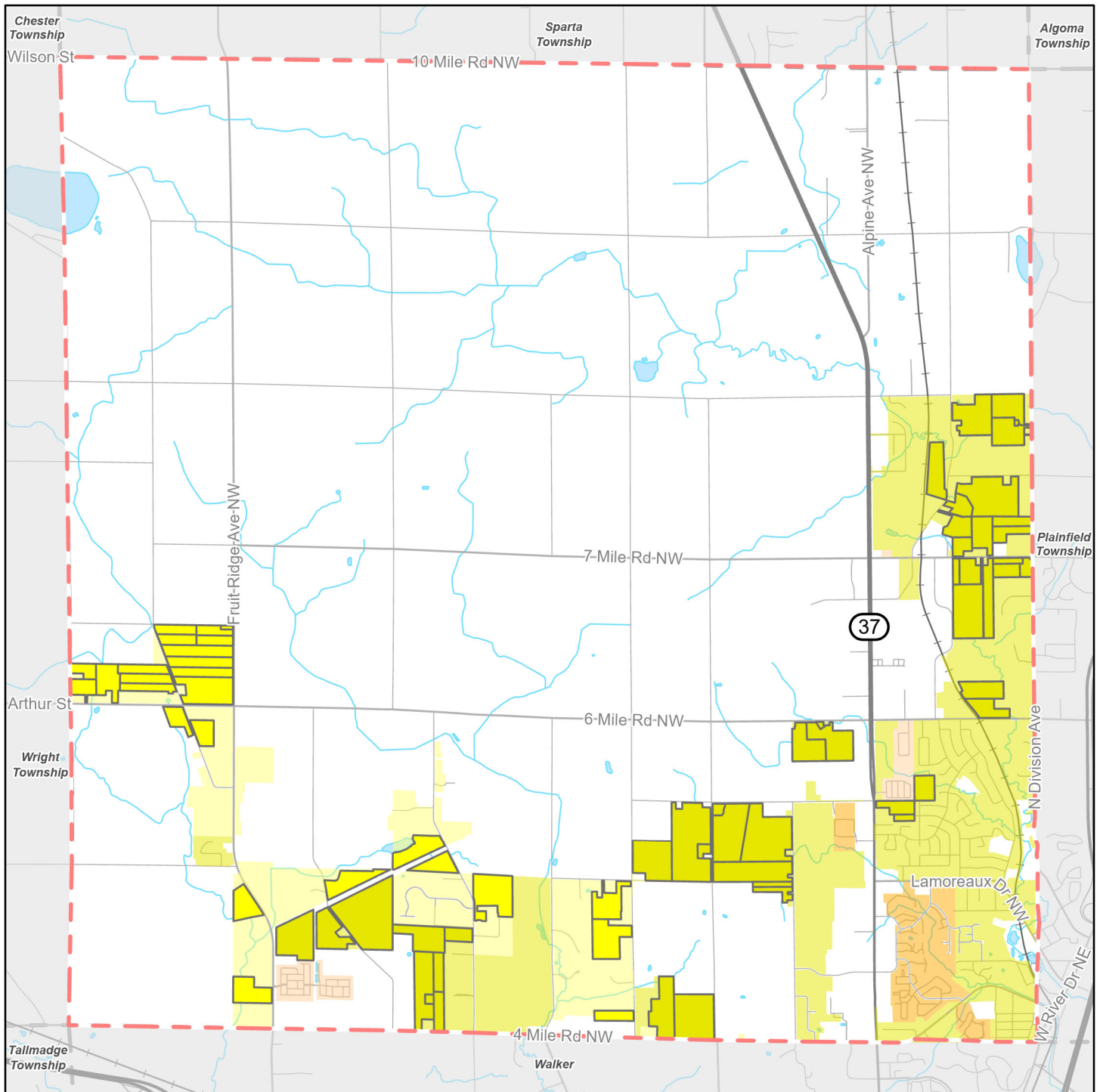
But then the question becomes: Does the Future Land Use Map adequately ensure that the Township can absorb new housing demand while continuing to protect the fruit ridge?

FUTURE LAND USE BUILD-OUT ANALYSIS

To determine whether the Township has planned for an appropriate amount of housing, and inform policy decisions related to planning and zoning, this report includes a build-out analysis of the Future Land Use Map. The total additional housing that could be built under the plan will be compared to the projected demand from all four housing demand scenarios, as well as the regional demand growth that could put development pressure on the Township above and beyond the analyzed scenarios.

The build-out analysis was conducted using the following steps:

1. Identifying undeveloped and underdeveloped parcels that are planned for housing on the Future Land Use Map. "Underdeveloped" parcels were defined on those that have a current active non-agricultural use but are well below the maximum permitted housing density permitted, and thus may be attractive for redevelopment. The parcels identified for the analysis are shown on the map on the following page.
2. Determining the number of acres available on undeveloped or underdeveloped parcels within each Future Land Use category.
3. Calculating the maximum number of housing units that could be built within each Future Land Use category, based on the maximum density. 20% of the total acreage was removed from each category to account for infrastructure, open space, drainage, and other non-housing site features.



Vacant/Underdeveloped Residential Parcels

Alpine Township, Kent County, Michigan

April 10, 2023

LEGEND

- Vacant/Underdeveloped Low-Density Residential (982 acres)
- Vacant/Underdeveloped Residential Parcels (408 acres)
- Total Residential Parcels (4,400 acres)
- Residential Estate (1,210 acres)
- Low Density Residential (2,842 acres)
- Medium Density Residential (108 acres)
- High Density Residential (240 acres)
- Alpine Township Boundary
- Other Municipal Boundaries



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Feet

Basemap Source: Michigan Center for Geographic Information, v. 17a.
Data Source: Kent County, 2022.
GVMC REGIS, 2022. McKenna 2022.



FUTURE LAND USE CATEGORIES

The Future Land Use Categories used in this analysis were as follows. The density numbers indicate the *maximum* density permitted by the Zoning Districts associated with the Future Land Use categories. In order for the maximum density to be permitted, the parcel in question must have access to sewer.

- **Estate Residential** (RA Zoning District – 0.66 Units Per Acre)
- **Low-Density Residential** (R-1 Zoning District - 3.20 Units Per Acre)

Note: All other residential Future Land Use categories are fully “built-out;” i.e. none of their parcels were determined to be vacant or underdeveloped.

This analysis assumes that all new housing in these categories will have access to sewer, so vacant or underdeveloped Estate Residential parcels north of 8 Mile Road (i.e. beyond the planned extent of public sewer) are NOT included.

Further, the Agricultural Preservation category allows for single family homes, the purpose of that category is to promote agriculture and rural character and to preserve the fruit ridge. While new homes will likely be built in that area, they will be built one at a time by individual property owners, and their share of new housing growth in the Township will be small.

Table 25: Master Plan Build-Out Analysis

FLU Category	Available Acreage		Units Per Acre	Total Units
	Total	80%		
Estate Residential	155	124	0.66	82
Low-Density Residential	982	786	3.20	2,515
Total:	1,137	910	–	2,597

Source: McKenna Calculation

The buildout analysis concludes that the Future Land Use Plan would allow for 2,597 new housing units. Given that there are **6,504 housing units in the Township (including Wilder Crossings and The Range at Alpine)** the Future Land Use Plan provides an opportunity for housing to increase by approximately 28% to a **full-build out capacity of 9,101 housing units** served by sanitary sewer.

Comparison to Demand Projection

Table 26: Projected Housing Capacity Used (-6.5% Scenario)

Year	Total Housing Units Demanded	Housing Capacity (Per Future Land Use Plan)	Percentage of Capacity Used
2030	5,658	9,101	62.2%
2040	5,686	9,100	62.4%

Source: McKenna Calculation

Table 27: Projected Housing Capacity Used (-3% Scenario)

Year	Total Housing Units Demanded	Housing Capacity (Per Future Land Use Plan)	Percentage of Capacity Used
2030	5,880	9,101	64.6%
2040	6,138	9,101	67.4%

Source: McKenna Calculation

Table 28: Projected Housing Capacity Used (0% Scenario)

Year	Total Housing Units Demanded	Housing Capacity (Per Future Land Use Plan)	Percentage of Capacity Used
2030	6,070	9,101	66.9%
2040	6,540	9,101	71.8%

Source: McKenna Calculation

Table 29: Projected Housing Capacity Used (+2.2% Scenario)

Year	Total Housing Units Demanded	Housing Capacity (Per Future Land Use Plan)	Percentage of Capacity Used
2030	6,209	9,101	68.2%
2040	6,843	9,101	75.0%

Source: McKenna Calculation

Table 30: Projected Housing Capacity Used (+10% Scenario)

Year	Total Housing Units Demanded	Housing Capacity (Per Future Land Use Plan)	Percentage of Capacity Used
2030	6,703	9,101	73.5%
2040	7,971	9,101	87.3%

Source: McKenna Calculation

Under all the scenarios, even the “extreme growth” stress test, **the Township has planned for plenty of housing**, even while keeping the fruit ridge planned for Agricultural Preservation.

Township leaders should hold firm to the Future Land Use Map. **Land planned for housing is likely to become housing.** There will be pressure to both reject housing developments on appropriately planned land, and to allow housing developments on land planned for agricultural preservation. Neither should sway Township decision makers from following the plan.

Additionally, while there is little need for new rental housing, new housing should not be exclusively single family homes. There is a clear need for homeownership products that are attainably priced for first-time homebuyers, which will likely include townhouses, duplexes, and condominiums. Importantly, these types of housing units are also attractive to older residents, especially when they feature age-friendly features like zero-step entry.

By developing these housing types via Planned Unit Developments that do not exceed 3.2 units per acre (i.e. the same density as the R-1 Zoning District), the Township can provide attainable housing, reduce out-migration, increase its homeowner base, and preserve natural and agricultural land, all at the same time.

Transportation

Located at the northwest corner of the Grand Rapids metropolitan region, Alpine Township’s transportation system plays an important regional role. As the connection between places, transportation infrastructure impacts the Township’s quality of life, economic viability, and the provision of community services. While commonly represented as simply roads and highways, a successful twenty-first century transportation system must be diversified among multiple modes to provide alternatives for residents, alleviate congestion, and improve environmental conditions within the region.

Transportation infrastructure influences land use patterns and land use patterns influence transportation infrastructure demand. Because of this, land use and transportation policy should be linked together, as decisions in one category invariably impacts the other. As transportation systems tether regions together and enable local, regional, and interstate commerce; infrastructure funding remains a central focus of government at the local, state, and federal levels.

ROADS

Road Classification

Roadways in Alpine Township are currently classified by federal and state agencies that determine their eligibility in certain funding programs, and these are discussed below.

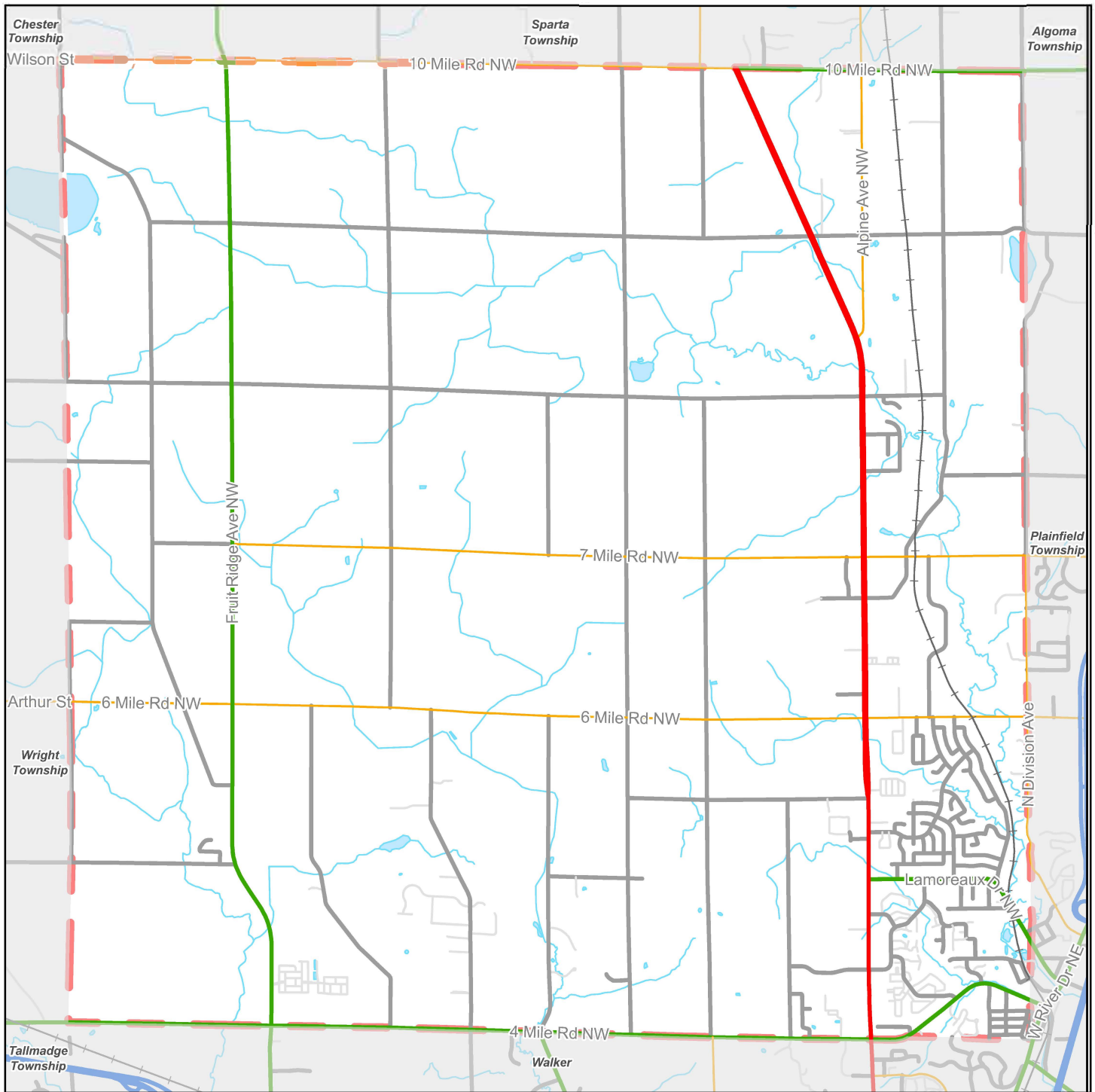
National Functional Classification (NFC) System

Federal funding for roadway infrastructure is largely determined through the Federal Highway Administration’s National Functional Classification (NFC). This system assigns classifications to every roadway based on traffic characteristics and their proximity to Adjusted Census Urban Boundaries (ACUBs). Since the ACUB is adjusted in accordance with each decennial census count, the ACUB has shifted in Alpine Township over the past 10 years. This determines which roadways are classified as urban or rural, influencing their eligibility under certain funding programs. The NFC roadway classifications are listed below as well as illustrated in the map on the following page.

Table 31: Roadway Classifications in Alpine Township

National Functional Classification Name	Total Miles
Urban Principal Arterials	11.0
Urban Minor Arterials	11.3
Rural Minor Arterials	4.0
Urban Major Collectors	10.7
Rural Major Collectors	8.1
Total miles Analyzed	45.1

Source: Michigan Dept. of Transportation NFC Classification Traffic Count Data, March 2022.



National Functional Class

Alpine Township, Kent County, Michigan

Adopted November 20, 2023

LEGEND

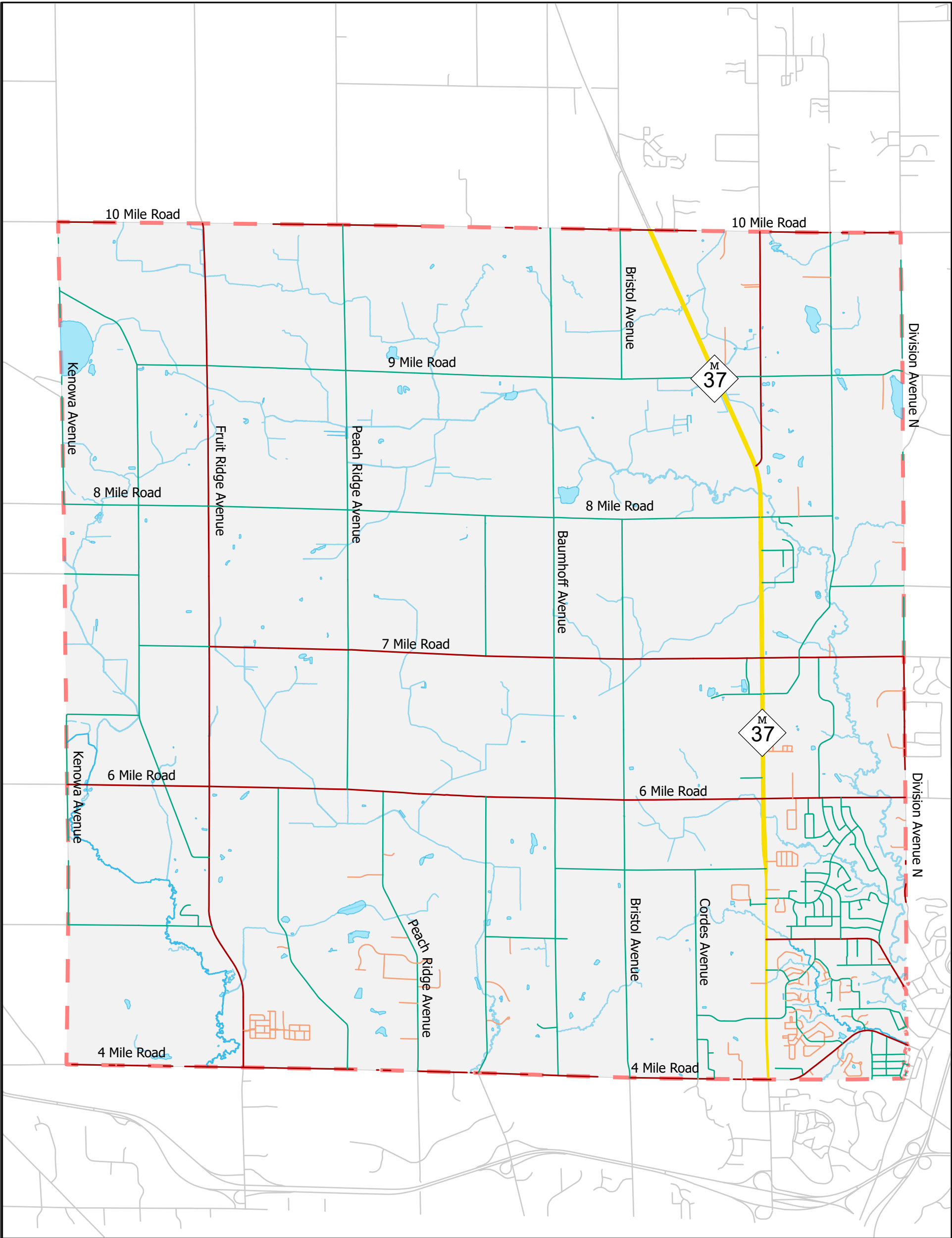
- Interstate
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Local
- Non-Certified
- ▬ Alpine Township Boundary
- ▬ Other Municipal Boundaries



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Feet

Basemap Source: Michigan Center for Geographic Information, v. 17a.
Data Source: Kent County, 2022.
GVMC REGIS, 2022. McKenna 2022.


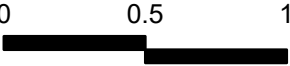




Act 51 Road Classifications


Alpine Township, Kent County, Michigan

- LEGEND**
- Freeways and Highways
 - County Primary
 - County Local
 - Private



Miles

Base Map Source: Kent County GIS Data, 2022.
GVMC REGIS Data, 2022. McKenna 2022.

Adopted November 20, 2023

 **MCKENNA**

Michigan Act 51 Roadway Classification System

State funding for roadways is authorized under Public Act 51 of 1951 which developed criteria for classifying roadways. This act provides funding for state trunklines and empowers counties, cities, and villages as “Act 51 Agencies,” allowing them to receive funding sourced from fuel taxes, vehicle registration fees, and other automobile-related taxes. Due to its status as a township, Alpine Township does not maintain control over its roadways and relies on the Kent County Road Commission for maintenance and repair of its roadway network. A map of Act 51 classified roadways in Alpine Township is included above.

Motor Vehicle Traffic Congestion

The two primary components of measuring congestion are the traffic volume of a roadway and the capacity of a roadway. Volume is the actual number of vehicles traveling on a given roadway. Capacity relates to the number of vehicles per hour that a roadway can accommodate. The number of lanes, traffic mix, and characteristics of the road will determine its capacity. Congestion is measured by the volume to capacity ratio (V/C ratio). For road segments that receive a V/C ratio less than 1, the roadway is operating within its capacity. For any segments that receive a V/C ratio greater than 1, the roadway is exceeding its designated capacity. The following maps and tables display the current and forecasted (the year 2040) V/C ratios.

As of 2021, there are no roads operating above their given capacity in Alpine Township. However, Alpine Avenue (M-37) between 4 Mile Road and Alpine Church Street is operating at 80% capacity.

***NOTE:** Current Volume figures range from 2010-2022. GVMC is on a three-year rotation for collecting traffic counts, so it has identified the latest count for each segment as the Current Volume for the purpose of this analysis. Growth rates have been applied based on the actual year the count was taken to get 2040 volume estimates.

The forecasted traffic analysis resulted in more roads operating near their current capacity. As indicated on the map, roads located in the southern and eastern portions of the township are affected the greatest.

Road Network Changes

Since 2015, a traffic light has been added at 4 Mile Road and Hendershot Avenue, and a blinking red light has been added at 6 Mile Road and Fruit Ridge Avenue. The 4 Mile/Cordes intersection will soon have a connection to Northridge Drive, which is being extended in the City of Walker as part of a redevelopment of the former English Hills Golf Course.

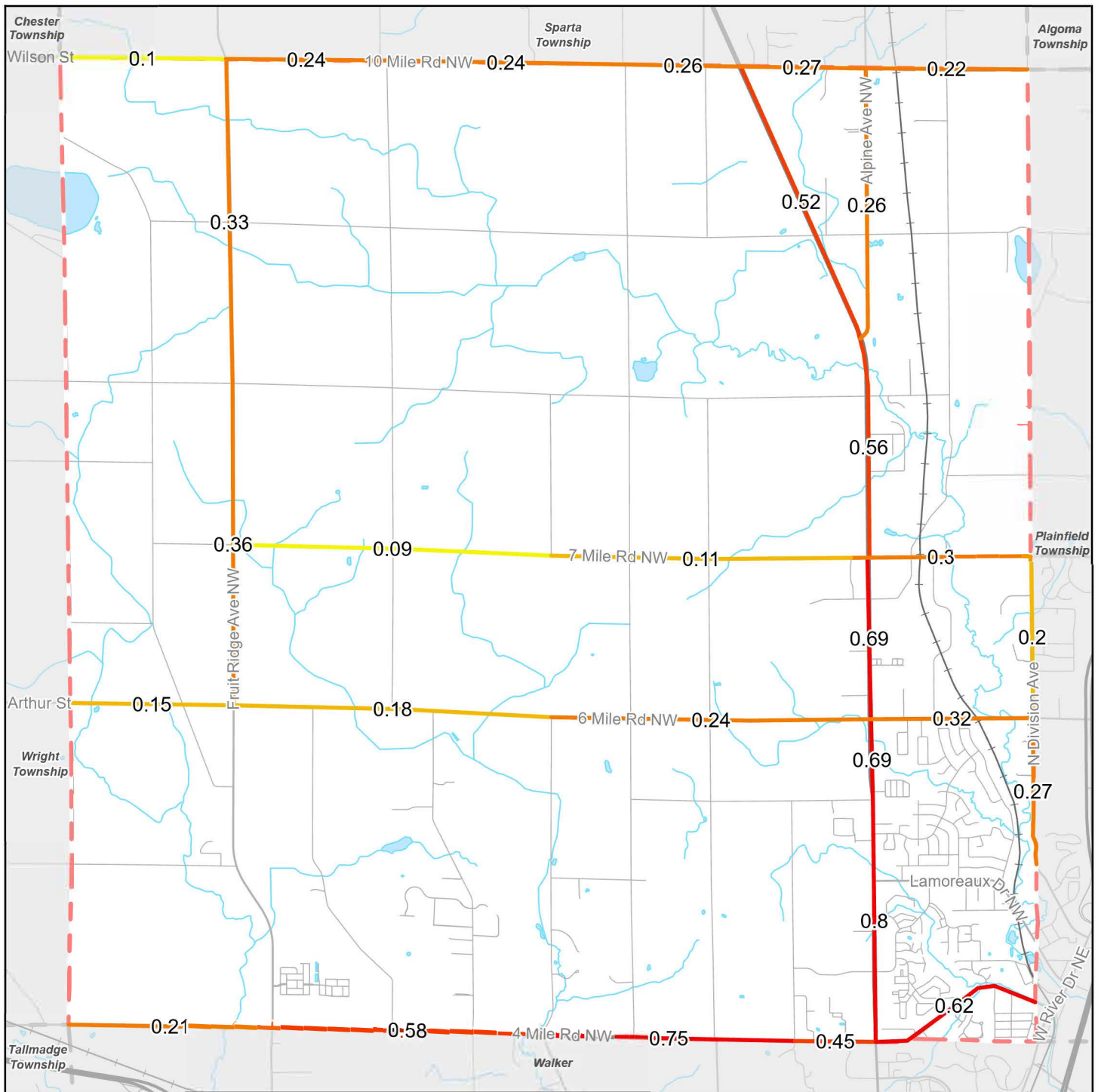
New traffic signals will soon be added at Alpine Avenue (M-37) and Alpine Church Street, and 4 Mile Road and Walker Avenue.

None of these changes have impacted the estimated capacity of any roadways.

Table 32: Traffic Volumes and Volume/Capacity Ratios of Classified Roads

Street	From Street	To Street	Miles	Latest Volume Count	2040 Est. Volume	Capacity	Current V/C Ratio	2040 V/C Ratio
Urban Principal Arterial								
Alpine Ave NB (M-37)	Alpine	7 Mile	1.4	10,316	11,864	17,500	0.56	0.68
Alpine Ave SB (M-37)	Alpine	7 Mile	1.4	10,316	11,864	17,500	0.56	0.68
Alpine Ave NB (M-37)	7 Mile	6 Mile	1.0	13,377	14,583	17,500	0.69	0.83
Alpine Ave SB (M-37)	7 Mile	6 Mile	1.0	13,377	14,583	17,500	0.69	0.83
Alpine Ave NB (M-37)	6 Mile	Alpine Church	0.5	13,377	14,583	17,500	0.69	0.83
Alpine Ave SB (M-37)	6 Mile	Alpine Church	0.5	13,377	14,583	17,500	0.69	0.83
Alpine Ave (M-37)	Alpine Church	4 Mile	1.5	30,455	31,819	34,800	0.80	0.91
M-37 NB	10 Mile	Alpine	1.8	8,148	10,371	17,500	0.52	0.59
M-37 SB	10 Mile	Alpine	1.9	8,148	10,371	17,500	0.52	0.59
Urban Minor Arterial								
10 Mile Rd	M-37	Alpine	0.8	3,748	4,914	13,600	0.27	0.36
	Alpine	Division	1.0	7,684	11,206	36,000	0.22	0.31
4 Mile Rd	Kenowa	Fruit Ridge	1.3	2,939	3,160	12,000	0.21	0.26
	Fruit Ridge	Walker	1.7	6,304	8,899	12,000	0.58	0.74
	Walker	Cordes	1.6	7,137	11,373	12,000	0.75	0.95
	Cordes	Alpine	0.5	9,272	15,156	26,400	0.45	0.57
	Alpine	Twp Line	1.1	9,324	12,170	16,000	0.62	0.76
Fruit Ridge Ave	6 Mile	4 Mile	2.1	6,888	6,705	13,600	0.42	0.49
Lamoreaux	Alpine	Twp Line	1.2	6,246	10,430	26,400	0.23	0.39
Rural Minor Arterial								
Fruit Ridge Ave	10 Mile	8 Mile	2.0	5,423	5,793	13,600	0.33	0.43
	8 Mile	6 Mile	2.0	5,279	6,266	13,600	0.36	0.46
Urban Major Collector								
6 Mile Rd	Kenowa	Fruit Ridge	1.0	1,596	2,838	13,600	0.15	0.21
	Fruit Ridge	Walker	2.0	2,402	4,011	13,600	0.18	0.29
	Walker	Alpine	2.0	3,284	4,226	13,600	0.24	0.31
	Alpine	Division	1.0	5,852	4,791	13,600	0.32	0.35

7 Mile Rd	Rhino	Division	1.1	4,186	5,106	13,600	0.30	0.38
Alpine Ave	10 Mile	M-37	1.7	3,677	4,831	13,600	0.26	0.36
Division Ave	7 Mile	6 Mile	1.0	1,549	3,070	13,600	0.20	0.23
	6 Mile	Twp Line	0.9	3,300	4,210	13,600	0.27	0.31
Rural Major Collector								
10 Mile Rd	Kenowa	Fruit Ridge	1.0	2,563	1,869	13,600	0.10	0.14
	Fruit Ridge	Peach Ridge	1.0	3,205	5,352	13,600	0.24	0.39
	Peach Ridge	Baumhoff	1.5	3,219	5,375	13,600	0.24	0.39
	Baumhoff	M-37	0.7	3,467	5,789	13,600	0.26	0.42
7 Mile Rd	Fruit Ridge	Walker	2.0	1,382	1,831	13,600	0.09	0.13
	Walker	Rhino	1.9	1,645	2,256	13,600	0.11	0.17



Traffic Congestion

Alpine Township, Kent County, Michigan

Adopted November 20, 2023

LEGEND

Current Volume/Capacity Ratio

0.09 - 0.10

0.10 - 0.20

0.20 - 0.40

0.40 - 0.60

0.60 - 0.80

Alpine Township Boundary

Other Municipal Boundaries



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Feet

Basemap Source: Michigan Center for Geographic Information, v. 17a
Data Source: Kent County, 2022.
GVMC REGIS, 2022. McKenna 2022.





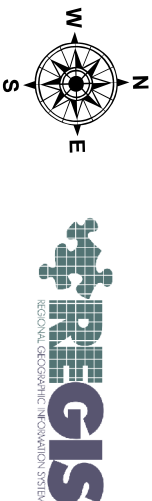
Alpine Township All Season Roads

ALPINE TOWNSHIP KENT COUNTY, MICHIGAN

KENT COUNTY ROAD COMMISSION

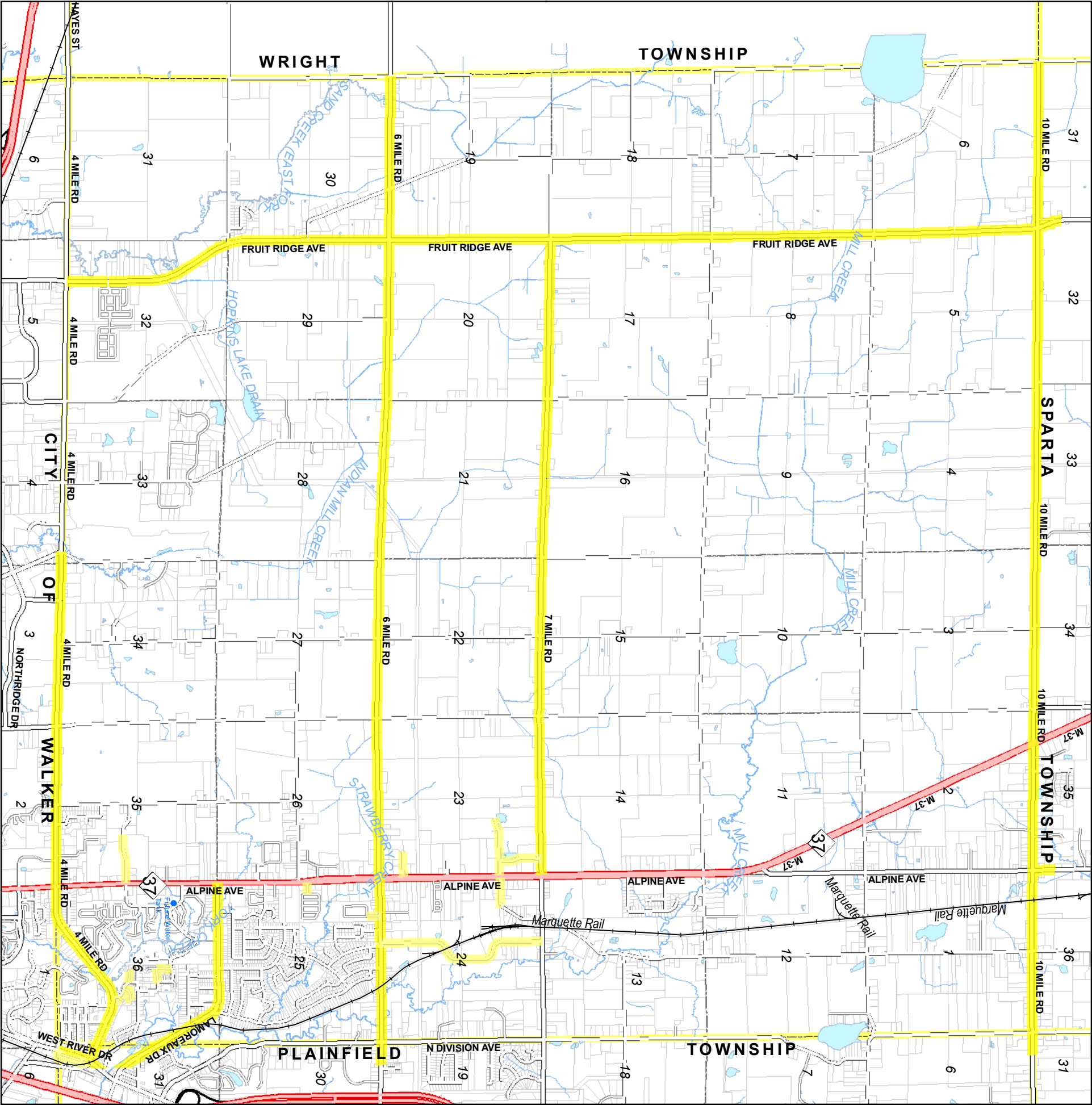
Map Legend

All Season Roads	Street Centerlines
Primary	Freeway
Secondary	Freeway Ramp
Private	Highway
Rivers & Streams	Primary
Lakes & Ponds	Secondary
Railroads	Private
	Parcels
	Section Lines
	Municipal Boundaries



This map does not represent a legal document. It is intended to serve as an aid in graphic representation only. Information shown on this map is not warranted for accuracy and should be verified through other means.

This map was last updated 4/28/2023 by the REGIS Agency in conjunction with Alpine Township Planning staff. Data sources include REGIS, Alpine Township.



RAIL

The railroad track traversing Alpine Township runs between Manistee/Ludington and Grand Rapids. Chemicals, paperboard, grain, salt, petroleum products and other commodities are transported daily. On average one train a day (southbound and return trip northbound) occurs seven days a week. Between 6 and 7 Mile Roads there are three dead-end sidings in the Township: Weekes Forest Products, River City Mechanical, and Michigan Rail & Storage.

TRANSIT

Fixed-Route Bus

The Rapid operates fixed-route bus service across the Grand Rapids region. Alpine Township is serviced by Rapid Route #9, which provides service every 30-minutes to the Alpine Avenue corridor. Route #9 originates near downtown Grand Rapids at central station, crosses the river on the Pearl Street bridge and heads north on Alpine Avenue to Lamoreaux Drive and then loops back south.

Prior to the COVID-19 pandemic, ridership on Route #9 was one of the highest in the system. Although ridership has declined system-wide since 2020, Route #9 ridership has declined at a slower rate than other routes, indicating a higher percentage of individuals relying on the route to access jobs and other amenities.

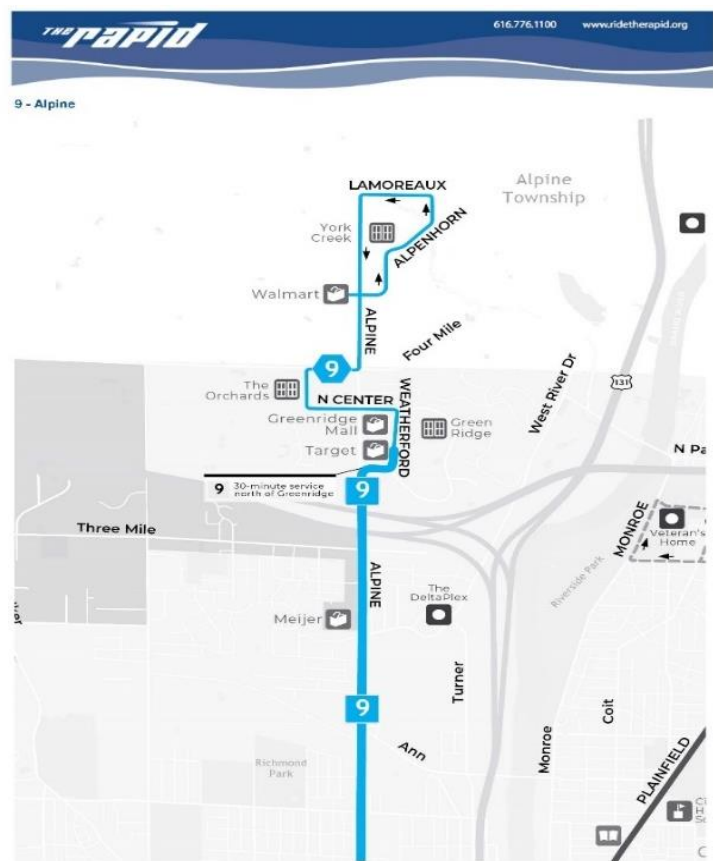
Paratransit

There are two door-to-door paratransit services available in Alpine Township for non-disabled residents at least 65 years of age and for persons with a disability requiring specialized transportation. Both require reservations.

Hope Network operates the North Kent Transit Service which provides service to the entire metropolitan area. The hours of operation are 8:00 a.m. – 4:30 p.m. Monday through Friday.

The Rapid also operates the GO!Bus which services the areas within $\frac{3}{4}$ of a mile from the fixed-route bus in Alpine Township to the rest of the areas within The Rapid bus system.

Map 7: Rapid Bus Route #9





PEDESTRIAN AND BICYCLE FACILITIES

Historically, as commercial, and industrial properties develop or redevelop, the Township has required sidewalks to be installed. In some instances, a written agreement to be a part of a future special assessment district for sidewalk construction was required instead. Some of these agreements were recorded with the Kent County Register of Deeds and some were not. Properties with sidewalk agreements for future sidewalk are illustrated on Map 6: Sidewalk Agreements.

Because historically only development or redevelopment triggers the requirement of sidewalk installation, some key segments in the pedestrian network were disjointed until recent years. Beginning in 2010, the Township installed a couple miles of sidewalk in various locations. The most significant was the 2013-mile-long replacement of the aged Lamoreaux Drive pathway. The Township has used Community Block Grant funds and Transportation Alternatives Program funds to fill in gaps in the current network.

However, there is much work to be done, including:

- connecting existing sidewalk segments together
- providing sidewalk and bicycle facilities in areas of need
- providing sidewalk and bicycle facility connections to destination points and neighborhoods

How the connections listed above are accomplished is a discussion in the Future Plans section of this document.

There are a several 4-foot paved shoulders for bicycles to use, but the network is very limited. Pedestrian and bicycle facilities to connect to the trailheads of the White Pine Trail and the Fred Meijer Pioneer Trail are currently in the works.

Additional Resources:

Walk scores for any location and travel time maps using various modes of transportation, www.walkscore.com
Greater Grand Rapids Bicycle Coalition (maps available), <http://www.BikeGrandRapids.org>
Regional Bicycle Maps for the entire state, our area is covered in the Grand Region
<https://www.michigan.gov/mdot/travel/safety/road-users/bicycling/bicycle-maps>

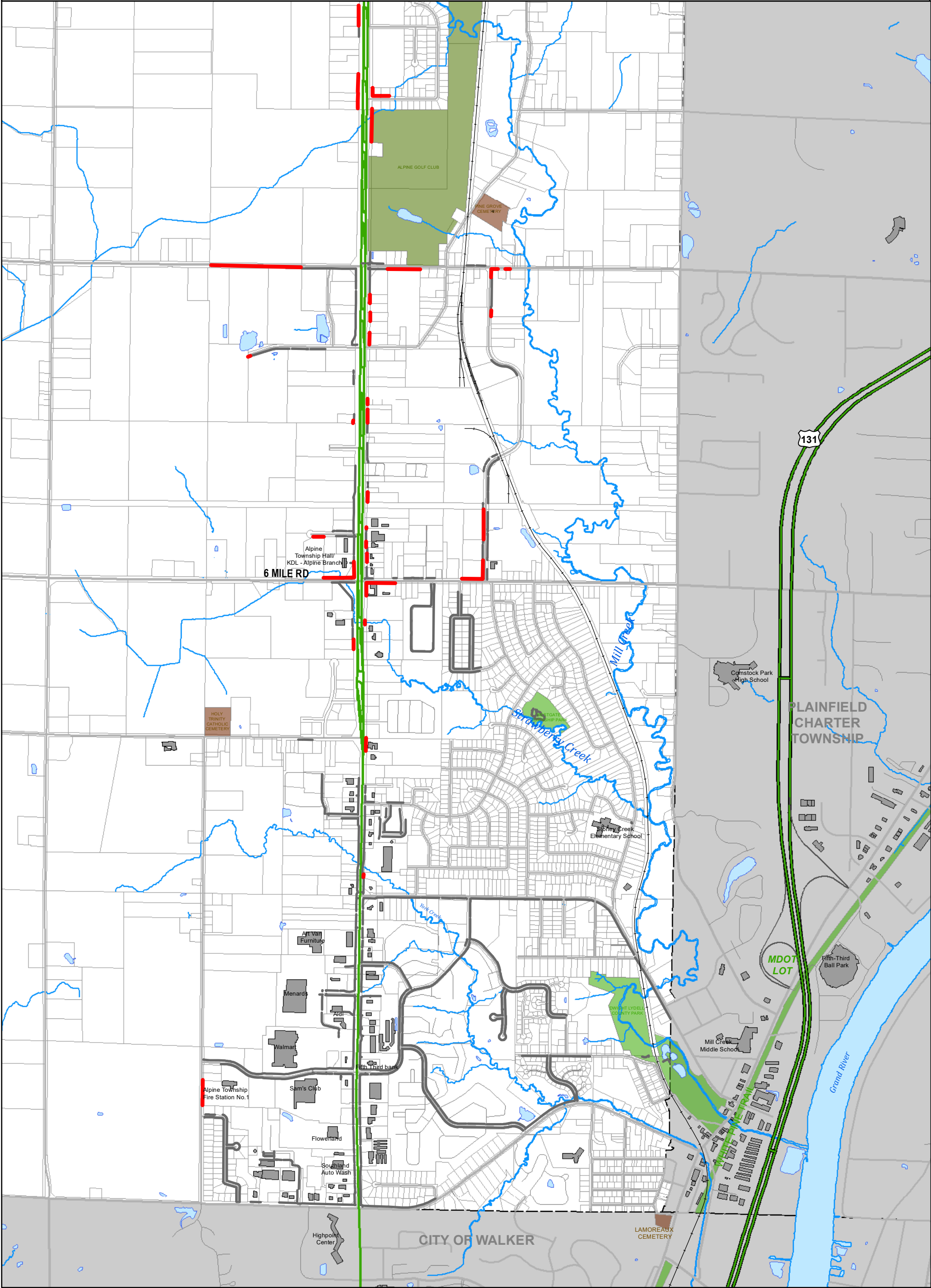


SIDEWALKS AGREEMENTS AS OF APRIL 2023

NOTE: THERE ARE OTHER
AGREEMENTS THAT ARE
LOCATED BEYOND
THE BOUNDARIES OF THIS MAP

Legend

- Proposed Sidewalk w/Agreements
- Sidewalks
- Railroads
- Freeway
- Freeway Ramp
- Highway
- Primary
- Secondary
- Private
- River or Stream
- Lake or Pond
- Building Footprints
- Cemetery
- Golf Course
- Park



Utilities

PUBLIC WATER

In 2009, Alpine and Plainfield townships formally dissolved their 425 Agreement because the investment in the water system was deemed secure and the other provisions for mutual services were deemed no longer practical. After the 425 Agreement was dissolved, Alpine Township retained its established water service boundary. The water service boundary and Plainfield Township's master planned water mains are illustrated on Map 8: Water Distribution System

The 2023 Master Plan Update did not include any changes to the water service boundary.

PUBLIC SANITARY SEWER

In late 2008, the Township's contract with the City of Grand Rapids for sewer treatment expired and the new PARCC (Plainfield, Alpine, Rockford, Cannon, Courtland) Side Waste Water Treatment Plant began operations. The Township immediately adopted the proposed sanitary sewer service map in the 2007 Master Plan as the official boundaries (see Map 9: Sanitary Sewer Collection System). In 2012, Kent County decided it no longer wanted to be in the sewer service business. Alpine Township signed a contract with the North Kent Sewer Authority to immediately begin maintaining and servicing our sanitary sewer system in addition to sewage treatment.

The 2023 Master Plan Update did not include any changes to the sewer service boundary.

ALPINE

TOWNSHIP EST. 1847

2023

WATER DISTRIBUTION SYSTEM

IN ALPINE TOWNSHIP

PLAINFIELD CHARTER TOWNSHIP

WATER DISTRIBUTION SYSTEM

IN ALPINE TOWNSHIP

WATER SYSTEM LEGEND

- Elevated Water Storage Tanks
- Water Fire Hydrants
- Pressure District, Subtype
 - High, Distribution Main
 - Medium, Distribution Main
 - High, Private Line
 - Medium, Private Line
 - Dual Pressure Water Mains - High and Medium

MAP LEGEND

- Roads & Streets
 - Section Lines
 - Freeway
 - Freeway Ramp
 - Highway
 - Primary
 - Secondary
 - Proposed/Under Construction
 - Private
 - Railroads
- Parcels
- Major Buildings
- Municipal Boundaries
- Parks, Cemeteries, Etc.
- Lakes & Ponds
- Rivers & Streams

MAP SCALE 1:40,000

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Path: I:\Alpine Twp\Master Plan Maps 2023\WaterSystemMap 11x17.mxd

2023 SANITARY SEWER COLLECTION SYSTEM IN ALPINE TOWNSHIP



SANITARY SYSTEM LEGEND

Sewer Lift Stations

Sewer Manholes

Forcemain

Gravity

MAP LEGEND

Roads & Streets

Freeway

Freeway Ramp

Highway

Primary

Secondary

Proposed/Under Construction

Private

Railroads

Section Lines

Rivers & Streams

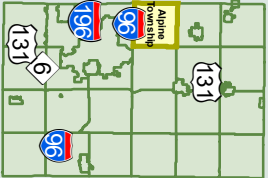
Lakes & Ponds

Parcels

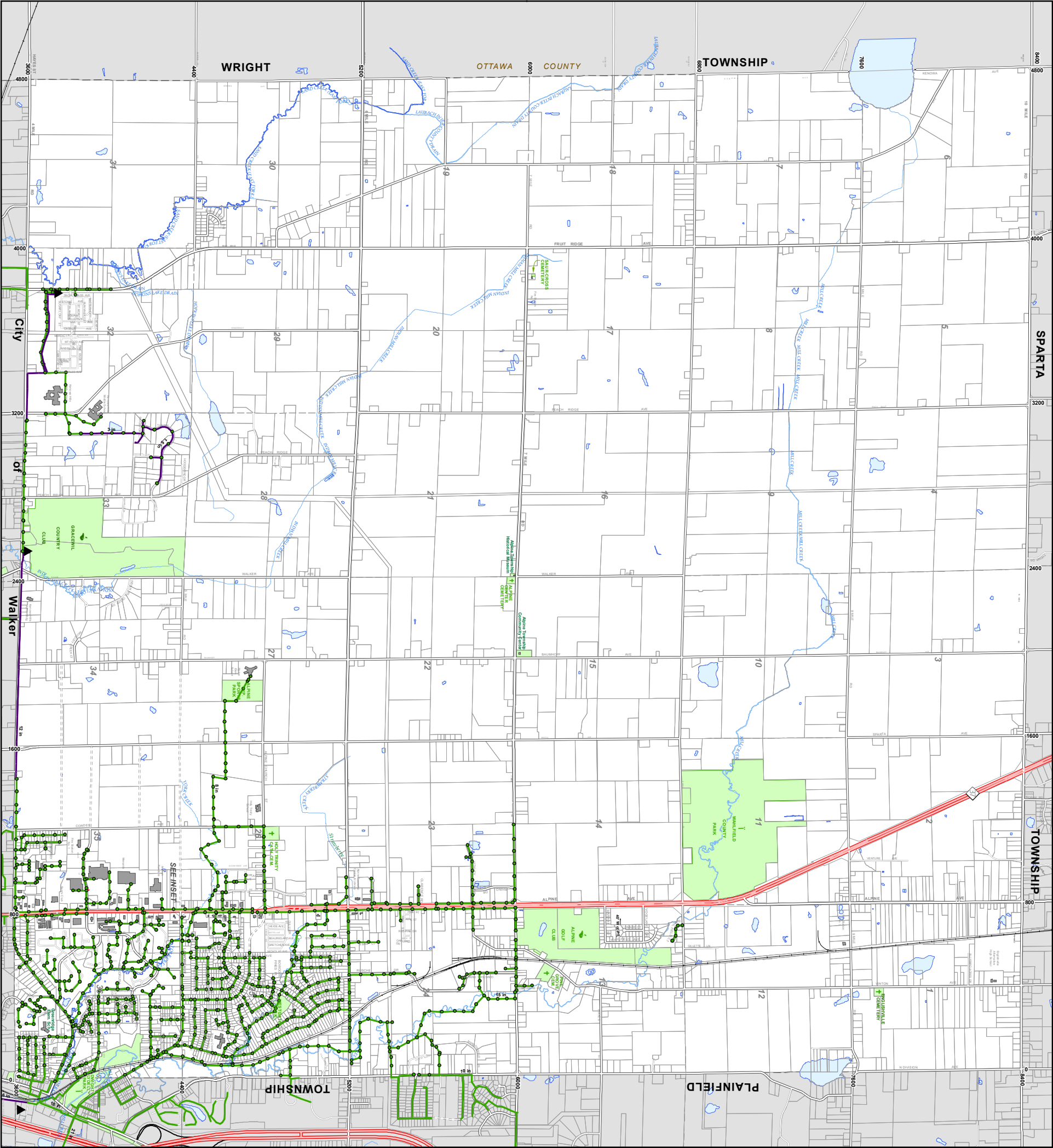
Major Buildings

Municipal Boundaries

Parks, Cemeteries, Etc.



KENT COUNTY, MI.

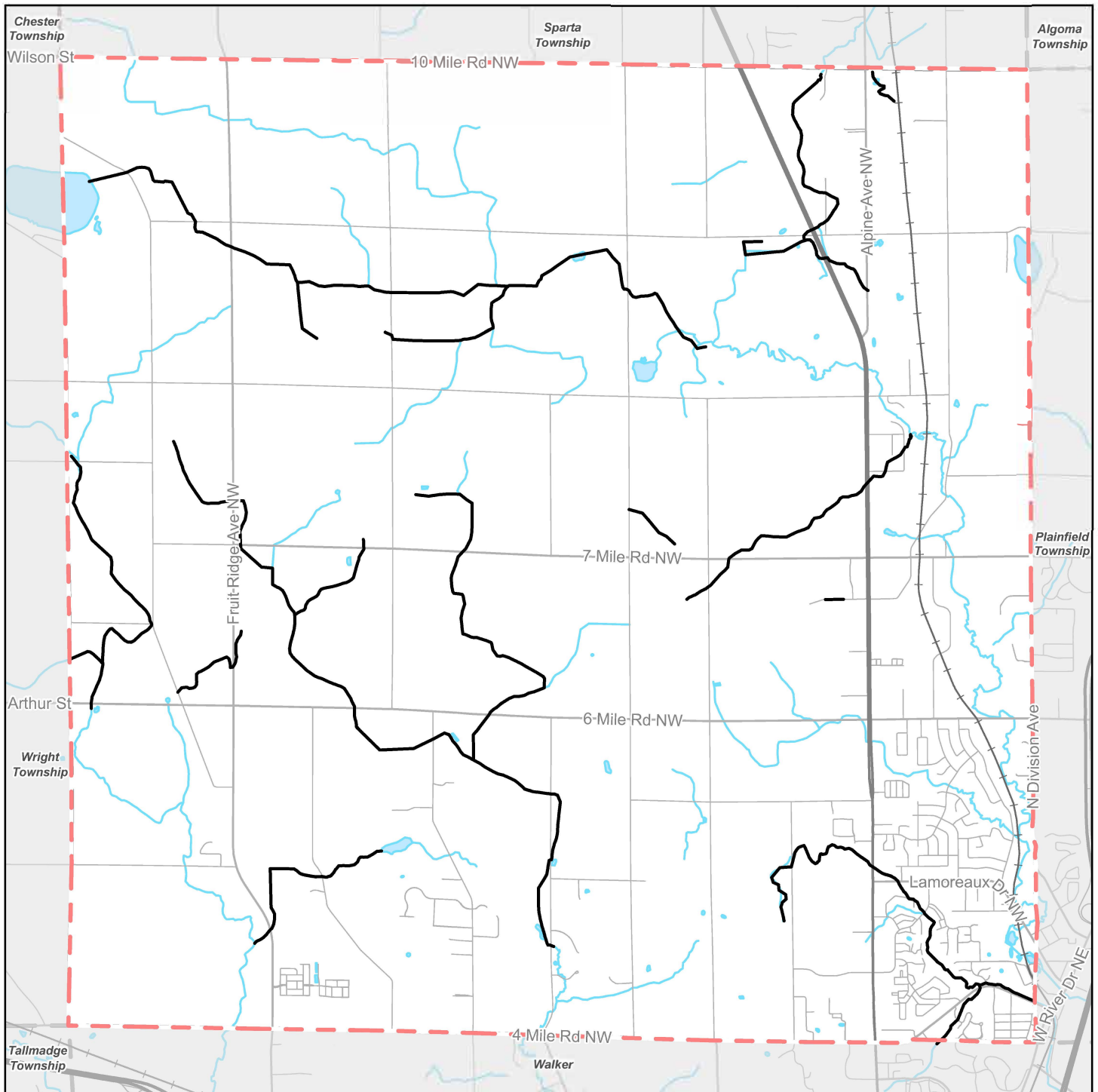


MAP SCALE 1:40,000



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County Drains

Alpine Township, Kent County, Michigan

Adopted November 20, 2023

LEGEND

- County Drains
- Alpine Township Boundary
- Other Municipal Boundaries



0 2,000 4,000
Feet

Basemap Source: Michigan Center for Geographic Information, v. 17a.
Data Source: Kent County, 2022.
GVMC REGIS, 2022. McKenna 2022.



Communications Infrastructure

BROADBAND CONNECTIVITY

Broadband internet, with its fast download speeds and consistent connectivity, helps connect residents and businesses to the online world. As more and more economic and social activity moves online (especially during and after the COVID-19 pandemic), communities without connectivity are placed at a disadvantage.

As shown on the maps on the following pages, **Alpine Township is well-served by broadband infrastructure, but there is room for improvement in available speeds, and residents frequently have limited choices of provider.**

Based on data from Connected Nation, nearly all of the Township has infrastructure for households and businesses to connect broadband internet, with only some portions of the western part of the Township, as well as a doughnut hole near Alpine Avenue and 8 Mile Road, missing the necessary infrastructure.

Internet speeds are measured by how much data can be transferred in one second. The Federal Communications Commission's goal is for all households to be able to connect to upload and download at least 10 Megabytes per second. Based on data from Connected Nation, the entire Township has access to upload speeds of at least 10 Megabytes per second (from broadband or another internet source), but some areas – generally those that lack broadband infrastructure – are limited to just 1 Megabyte per second for downloads.

Further, the 10 Megabytes per second standard is a minimum level of speed, not an optimal one. Technology exists for 1,000 Megabytes per second, and the infrastructure for that level of speed exists in the West Michigan region. Currently, however, it is limited to specific areas – though some of them are near Alpine Township. There is 1,000 Megabytes service running along US-131, as well as just northeast of the Township in Ottawa County. These lines could extend into Alpine Township in the future.

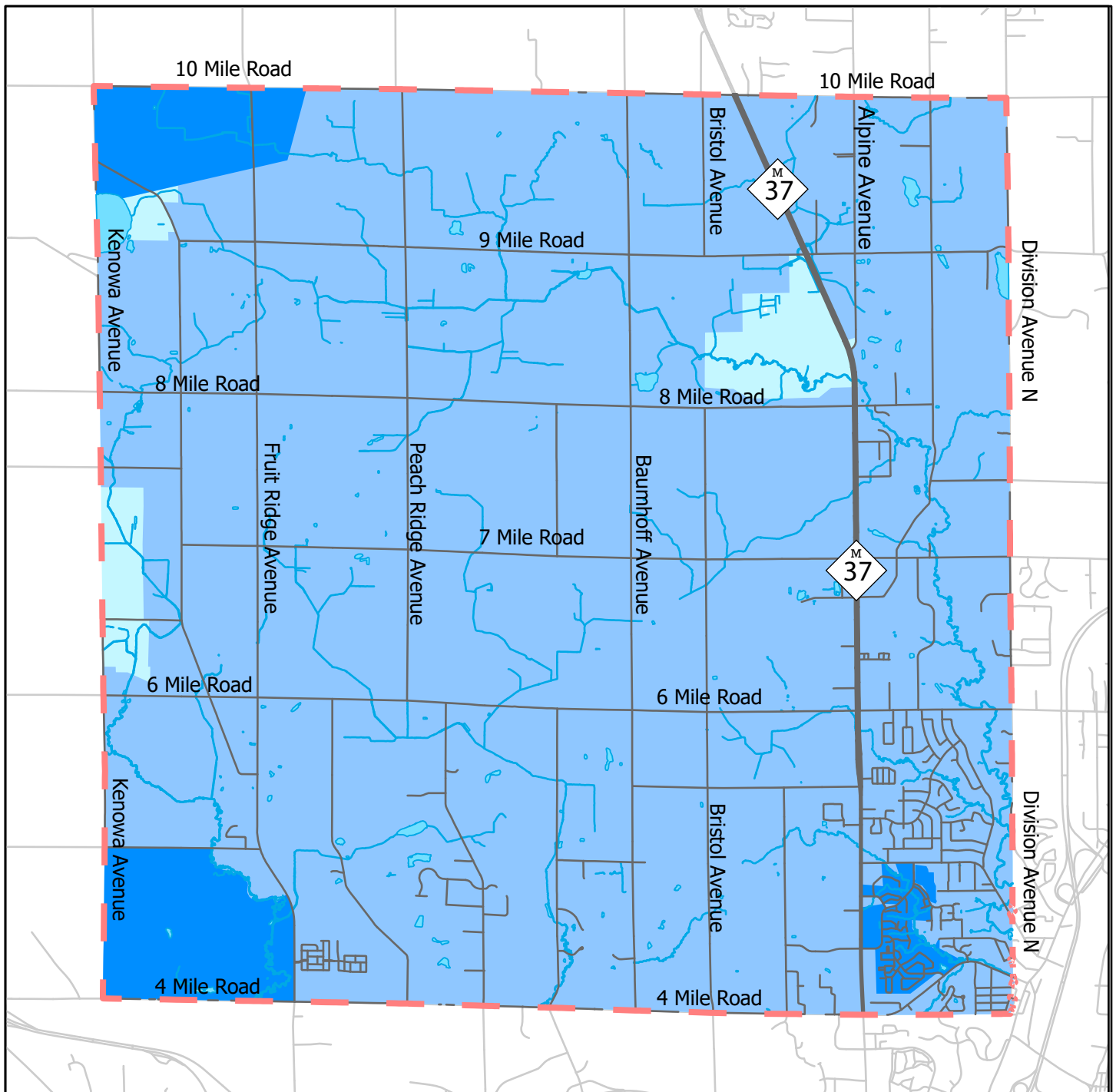
Further, most of the Township has only two internet service providers (generally Comcast or AT&T) to choose from. Some parts of the Township also have Spectrum. The lack of competition can lead to less reliability, higher prices, and slower technology improvements – though the Township does benefit from at least having a choice. Many communities are stuck with only one internet service provider.

Opportunities for Improvement

Both the public and private sectors are making investments in improvements to broadband connectivity, though suburban communities that already have basic infrastructure – like Alpine - may not be a priority.

The **Federal Communications Commission’s Rural Digital Opportunity Fund grant** program has been active in rural Michigan, but is largely focused in rural areas and underserved urban neighborhoods. The 2021 Federal Infrastructure and Jobs Act allocated \$65 billion for improved broadband access, though again the focus is on bringing as many households up to the Federal minimum standard as possible, rather than increasing speed. Plus Alpine Township may not meet the definition of rural.

The non-profit **Michigan Moonshot** program is also working to improve broadband access in Michigan. The program is part of the Merit Network, which is a collaboration between Michigan’s public universities. Program leaders act as a catalyst by fostering public-private partnerships to expand broadband infrastructure to underserved areas. Because this is a more local program, it may be more open to improving service quality, rather than simply connectivity.



Estimated Internet Speed

Alpine Township, Kent County, Michigan

LEGEND

- 1GB Download Speed
- 100MB Download Speed
- 25MB Download Speed
- Alpine Township Boundary
- Primary Streets



Adopted November 20, 2023

WIRELESS TELECOMMUNICATIONS

Wireless voice and data service is also an important part of the modern economy and lifestyle. While wireless providers consider detailed coverage data proprietary, anecdotally, most of the Township reports generally reliable 4G service. As shown on the map on the following page, there are existing wireless telecommunication towers scattered through the Township, though they are generally concentrated along the Alpine Avenue corridor.

As the industry transitions to 5G service, improved wireless service may come to the township in the form of “small cell” technology. Small cells, which are generally located on poles of 40 feet or lower, are less expensive to install and less of an aesthetic blight on the landscape than traditional cell towers (which are usually 150-200 feet tall). The State of Michigan has already enacted legislation (including an amendment to the Zoning Enabling Act) to speed the roll out of small cells, which may hasten their installation in Alpine Township and similar communities.

This plan recommends the following actions with regard to wireless telecommunications.

1. **The township must be proactive to attract “small cells” and other infrastructure improvements** to expand high-quality wireless coverage. The Township should also ensure that its Zoning Ordinance is in compliance with State laws governing local control of wireless infrastructure, especially the Zoning Enabling Act and the 2018 Small Wireless Communications Facilities Deployment Act.
2. **Focus intensive land uses on areas with the best wireless service.** As with other forms of infrastructure, development should occur only where it can be supported effectively.
3. **Support the construction of wireless telecommunications infrastructure in parts of the township that are underserved.** The township should examine land use controls and ensure that zoning regulations are not slowing the buildout of wireless communications infrastructure in underserved areas.
4. **Partner with private landowners, especially those with tall structures like silos, to locate telecommunications infrastructure in strategic locations.** Local and private partners can be effective in helping the township achieve its goals.

ALPINE

TOWNSHIP EST 1861

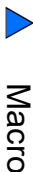
Wireless Communication Towers

ALPINE TOWNSHIP
KENT COUNTY, MICHIGAN

Map Legend

Wireless Communications Street Centerlines

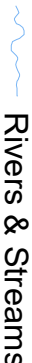
Type of Tower



Macro



Micro



Rivers & Streams



Lakes & Ponds



Railroads



Freeway



Freeway Ramp



Highway



Primary



Secondary



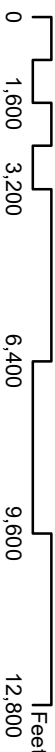
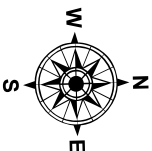
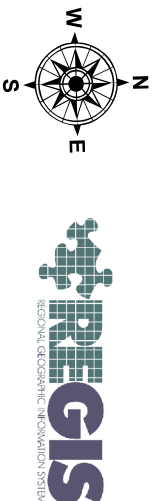
Parcels



Section Lines

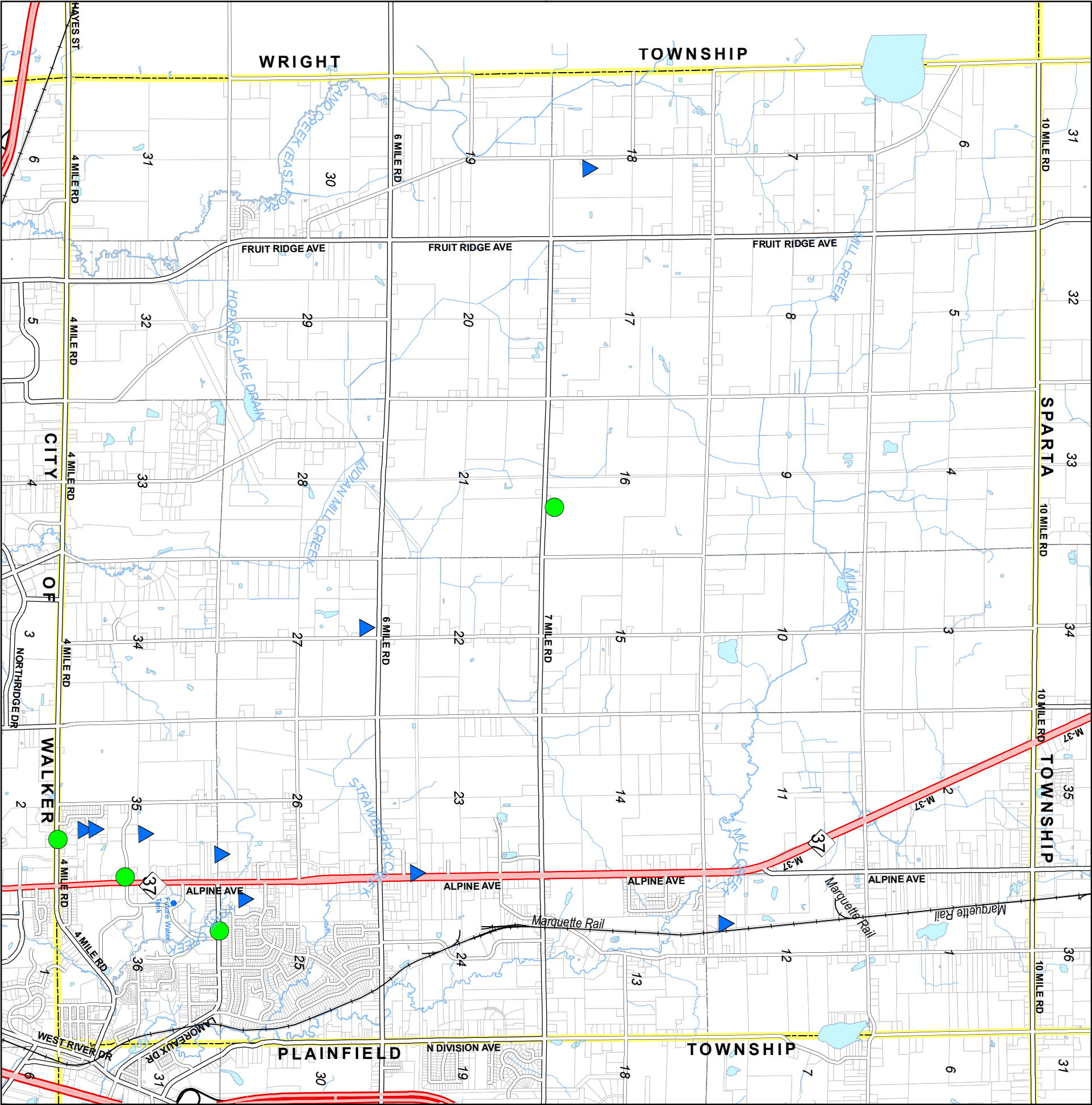


Municipal Boundary



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This map was last updated 9/20/2023 by the REGIS Agency in conjunction with Alpine Township Planning staff. Data sources include REGIS, Alpine Township.



Existing Land Use

The general development character of the Township was largely unchanged between 2007 and 2020. However, as of the early 2020s, large scale residential developments have been proposed or are underway in the Township, including Wilder Crossings and The Range at Alpine, as noted earlier in this plan. These developments have occurred within areas long planned for development, but they still represent a faster shift in land use than has been experienced in more than three decades.

Significant land use changes are also occurring in the City of Walker just south of the mutual border. A new residential development is replacing the English Hills Golf Course south of the 4 Mile/Cordes intersection, and new industrial development is being constructed rapidly along Northridge Drive west of Bristol Avenue.

AGRICULTURAL LAND USES

Alpine Township is the southern-most community within the Fruit Ridge, and thus has an important responsibility to define the line between the growth of the Grand Rapids region and the preservation of the irreplaceable agricultural land that makes up the Ridge. Except for the sporadic construction of individual new homes on small splits off larger agricultural parcels, there has been little change in the boundary of the preserved area. Map 14 shows the location of prime farmland soils.

Large scale developments have occurred along 4 Mile Road (Wilder Crossings) or Alpine Avenue (The Range at Alpine) and have not infringed on the Ridge itself. This plan envisions that continued protection of the area beyond the water and sewer service boundaries, and indeed plans for the preservation of some land where public water and sewer could otherwise be made available.

RESIDENTIAL LAND USES

The 500+ new housing units in the Wilder Crossings development under consideration and the time of this plan represented the largest increase in housing capacity in the Township in at least 35 years, (other than the Range at Alpine project) though the Township's Master Plan has, for several decades, consistently called for the course to be converted residential development at the time of its closure.

Aside from that development, most the Township's housing capacity exists within the Alpine Avenue corridor, much as it always has. Legacy neighborhoods such as Westgate and large apartment complexes like York Creek make up much of Alpine's housing market.

COMMERCIAL AND INDUSTRIAL LAND USES

As of 2023, development of commercial land along Alpine Avenue is accelerating, especially north of Lamoreaux Drive, though the pace of development is still slower than the Township experienced in the 1980s and 90s. New developments include a Circle K gas station at 6 Mile and Alpine, and the office and retail component of the mixed-use Range at Alpine development at Alpine Avenue and Alpine Church Street.

Vacancies in existing commercial sites still exist, most notably the former Art Van/Love's Furniture store and much of the former 4 Mile Showplace building on 4 Mile near Cordes Avenue, though redevelopment proposals have been floated for both.

Regional industrial vacancy rates have been very low since the recovery from the Great Recession (even during the Covid-19 pandemic), and Alpine has experienced investment in its industrial sector due to that trend. However, there are still industrial sites available along Alpine Avenue and Comstock Park Drive, and the growth of industrial development in Alpine has been slower than in neighboring City of Walker.



ALPINE TOWNSHIP
KENT COUNTY, MICHIGAN

MAP 4

PRIME FARMLAND SOILS

MAP LEGEND

- Prime Farmland Soils

Prime Farmland Soils

Prime, If Drained
- Section Lines

Municipal Boundaries

Lakes & Ponds

Rivers & Streams
- Railroads

Street Centerlines

Freeway

Freeway Ramp

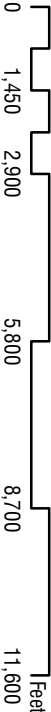
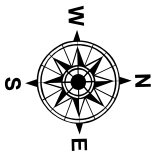
Highway

Primary

Secondary

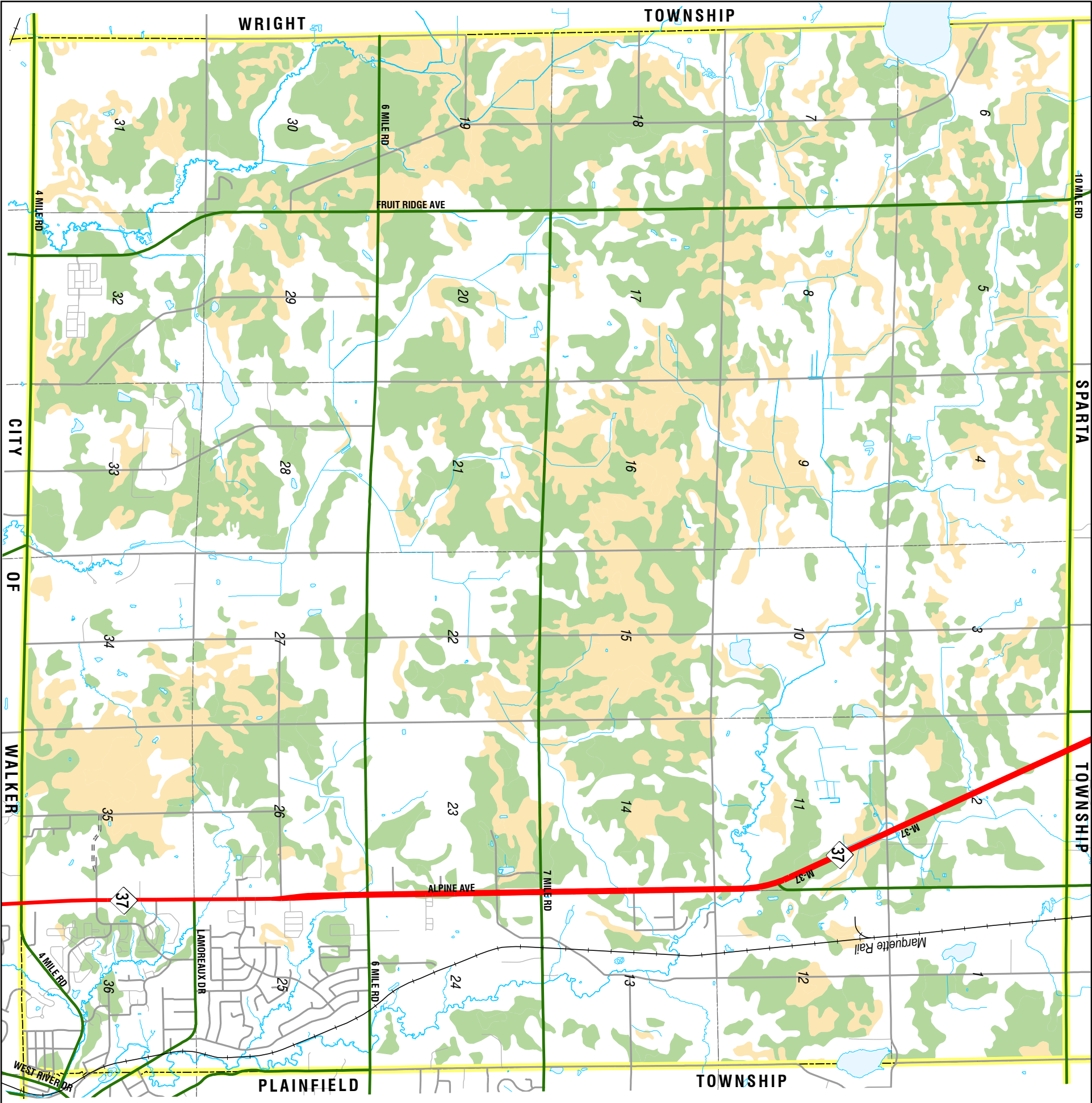
Proposed/Under Const.

Private



This map does not represent a legal document. It is intended to serve as an aid in graphic representation only. Information shown on this map is not warranted for accuracy and should be verified through other means.

Map created July 2007 by the REGIS Agency in conjunction with Alpine Township Planning staff. Data sources include REGIS and Alpine Township.
Last Revision: July 31, 2007 CJB



Implications

This chapter contains a broad range of summary information regarding current conditions and trends in Alpine Township. What does it all mean? The following sets forth implications:

POPULATION

- Alpine Township's population grew between 2010 and 2020, though not as fast as neighboring communities or the Grand Rapids region at large. Part of the reason for the slow growth is the imbalance of the Township's housing market, with households moving out of the Township when they transition from into adulthood and from rental to homeownership because of the lack of entry-level homeownership options.
- As the two largest generations – the Baby Boomers and their children, the Millennials – age, the housing market will continue to see change. The Boomers, who are aging into retirement, seek alternative housing options, have changing recreation needs/desires, and are experiencing changes in transportation needs and increased health care needs. The Millennials are seeking homeownership and opportunities for high quality of life for families with young children.
- The post-Millennial generation (called Generation Z or Zoomers) is smaller than older cohorts but is aging into adulthood and will soon be entering the housing market in large numbers.
- A smaller cohort of people in their 40s and 50s (Generation X) means less demand for larger homes frequently purchased by those who are selling another property. However, the Millennial generation may quickly fill this market gap.
- The overall culture of Alpine Township is changing into a more diverse community. For example, in 2010 13% of the residents were of Hispanic ethnicity compared to 6% in 2000, and that number continued to increase, albeit slowly, hitting 14.6% in the 2020 Census.

HOUSING

- As of 2020, single family housing made up only a plurality of the Township housing stock, and 44% percent of the Township's housing units were rental units. However, recent developments that are proposed or under construction would increase the proportion of owner-occupied and single family housing.
- Rental populations are generally mobile. The mobility results in the Township's population growing much more slowly than demographic analysis would suggest due to first-time homebuyers having limited options within the community.
- Because such a large percentage of the housing units in the Township are renter-occupied, the population in the Township is very dynamic, meaning the population number and makeup (education, race, income, etc.) changes with some frequency. This becomes a challenge for community outreach efforts, educators, and community involvement efforts.

- New housing is demanded within the Township, but not at levels that would require additional land to be planned for housing beyond what the Township has designated in previous Master Plans. Additionally, new housing should fill the market niche of entry-level homeownership in mid to low density neighborhoods. High density housing and large lot homesteads are already well-supplied in the Township and are not the desired development patterns for new construction.

TRANSPORTATION

- Fruit Ridge Avenue has become the alternative route to M-37.
- Conversion of 10 Mile Road to an all-season road east to Pine Island Drive (to connect to US-131 at Post Dr.) is important to the economic health of Alpine Township.
- RAPID bus Route #9 consistently has one of the top ridership numbers in the system. Transit will continue to be an important mode of transportation and its usage is expected to increase.
- Providing a full range of transportation options, especially public transit, and pedestrian/non-motorized facilities, will help allow older residents to remain in their homes.
- The compact development patterns of Sections 25 and 36 make providing multiple transportation modes easier.
- The importance of commercial freight rail service is expected to increase.

INFRASTRUCTURE

- Strategically directing where future utilities may be located will allow the Township to better direct where development may occur.
- Although not previously mentioned, the Township is currently reaping the financial benefits from having a geographically compact area of development on public sewer service in the form of lower operating costs. To maintain low cost of services (construction and more importantly ongoing maintenance costs) the Township should encourage geographically compact development patterns.

LAND USES

- The City of Walker is experiencing a change its land use plans between Walker and Cordes Avenues along our mutual border (high density residential and non-residential uses). This area in Alpine Township is currently planned for low density residential uses (mostly 3.22 d.u./acre or lower). The inconsistency between non-residential and residential uses may impact the Township's plans for the area, though the 2021 Future Land Use update identified appropriate transition uses for the 4 Mile Road corridor.
- Currently, the tax base is reasonably balanced between agribusinesses, industrial, commercial uses, and residential uses. Extensive additional residential development without agricultural, commercial, or industrial tax base expansion will likely necessitate higher local tax rates to support services. This is particularly true of low density housing (which does not provide sufficient tax revenue per acre to cover the cost of public services) and high density housing (which requires high levels of public services, generally exceeding tax revenue received).
- Different development patterns of future residential areas will have different fiscal impacts on the Township. Less compact development patterns are less efficient and more costly to service and maintain (i.e. water, sewer, roads, sidewalks, emergency services, etc.). Recent large-scale developments that are proposed or under construction (Wilder Crossings, The Range at Alpine) have fallen within areas planned for growth in this and previous Master Plans. It is crucial that future development also follows the Master Plan.

Community Input



Community Input Survey

In late 2021, a Community Input Survey was distributed through the Harvester newsletter and on the website alpinetwpplan.com in a fillable digital format for residents and business owners to provide their input and help guide the future of Alpine Township.

A total of 447 people responded to the survey, which opened to the public in September 2021. Hard copies were due back to the Township by November 15, while the online option remained open until January 2022.

Survey Results Summary

RESPONDENT CHARACTERISTICS

The first question on the survey asked respondents to select their relationship to Alpine Township. The results include:

- 87.5% are Township residents
- 7.3% are renters
- 4% are business owners
- 1.5% selected "other" in which 2 responded noted that they frequently visit Alpine Township

When asked about how long respondents have lived in the Township, the responses include:

- Less than a year: 1.5%
- 1-5 years: 20%
- 6-15 years: 24%
- 16-25 years: 10%
- 25+ years: 40%

Age range of respondents include:

- Under 18 years: 0%
- 18-24 years: 0.7%
- 25-30 years: 8%
- 31-39 years: 14%
- 40-49 years: 20%
- 50-59 years: 24%
- 60-69 years: 21%
- 70-79 years: 11%
- 80+ years: 2%

Zip code of residence or business breakdown includes:

- 49321: 76%
- 49345: 5%
- 49544: 19%
- 49403: 0.7%

TOWNSHIP PRIORITIES

The next question asked respondents to rank the importance of several characteristics when deciding on a place to live. The results include the following (listed in descending order from the highest number of people who selected “Very Important.”):

- Low crime rates
- Quality of neighborhood
- Internet/broadband services
- Housing I can afford
- Trees, waterways, and other natural features
- Family nearby
- Quality of schools
- Small town character
- Parks and recreation facilities
- A home on acreage
- Cable availability
- Church nearby
- Living in a place that’s away from it all
- Close to Grand Rapids metro area
- Sidewalks
- Easy access to the expressway

- Living in a community with people of all ages
- An established neighborhood with older homes and mature trees
- Being within walking or biking distance of places I want to go
- Job nearby
- Living in a community with a mix of different housing types
- Availability of public transportation
- Living in a community with a mix of people with different income levels
- Living in a place that's the center of it all
- A new neighborhood with recently built homes

TOWNSHIP PERCEPTIONS

When asked to rate their satisfaction with several Township public services, the results include (listed in descending order from the highest number of respondents who selected "Very Satisfied"):

- Library
- Fire protection
- Emergency medical services
- Police protection
- Park facilities
- Sanitary sewer facilities
- Water utility services
- Access to Township leaders
- Harvester newsletter
- Road maintenance and repair
- Township Board
- Township website
- Community events

Respondents were then asked if they thought the Township has changed over the past 5 years. Of this, an equal number of respondents selected "yes" and "no."

When asked about how the Township has changed over the past 5 years, responses include:

- Increased development has comprised the Township's rural character
- Lack of farmland preservation efforts
- More traffic issues and congestion, especially along the Alpine Road corridor
- Increased crime rates

First Community Open House

During the Master Planning process, the Township of Alpine sought public input on various important overarching aspects of the Plan such as preservation, enhancements, development, and redevelopment. In general, the purpose of the public engagement component of this Plan is to help determine:

- The value residents receive from the services provided in the Township.
- If current planning and development priorities are aligned with current goals and objectives.
- What should be the Township's future priorities.

The first public engagement open house was held on October 7th, 2021, at Alpine Township Hall.

In achieving the most public input as possible from all resident demographics, Township staff hosted an in-person public engagement event with the assistance of the consultants (project staff). At the open house, project staff were available to obtain public feedback in a casual and exciting setting. The engagement event focused on the Township as a whole, with the focus of the event having been around a large aerial photograph of the Township.

SUMMARY

Results from the in-person public engagement open house set up at Alpine Township Hall concluded the following general themes:

- Many residents who attended the open house commented that additional traffic studies/corridor enhancements are warranted along M-37/Alpine Avenue.
- Residents made comments regarding the need to preserve the existing agricultural settings and fruit farms within the Township.
- Residents indicated that additional review of sidewalk and multi-purpose trail installation is needed, especially in the south-east portion of the Township.

"TOWN CENTER LOCATIONS" & TOWN CENTER DISCUSSION

Residents and interested person were asked to comment on potential Township Center locations, which may contain new retail, office, housing, and civic buildings. Based on two proposed locations, engagement boards and discussions with residents and other interested persons at the October 7th, 2021 open house, the following broad topics were highlighted:

- The Alpine Town Center should be focused around the M-37/Alpine Avenue and Lamoreaux Drive intersection.
- The proposed location should be kept off of M-37 due to the significant traffic count.
- Residents indicated that the Town Center should be close for convenience, however not abutting residential uses.
- The Town Center should be inviting and offer a variety of attractions and comforts.

KEEP

The first engagement board asked respondents to indicate areas of the Township that should be kept or left in an “as is” state. Of those who were present at the open house, the following themes were predominant:

- Keep farm preservation as a top priority.
- Keep the agricultural and orchard as a focus of the Township.
- Keep a clear development boundary within the Township that would allow for business growth (brick & mortar) while also keeping the existing farm and orchard fields.
- Separate PUDs (Planned Unit Developments) from adjacent farms.
- Keep existing housing style and limit the expansion of multi-unit housing (apartment complex).

FIX

The second engagement board asked respondents to indicate areas of the Township that should be enhanced, or “fixed”. Enhancement meant areas of the Township that could use some attention but should not be considered for development or redevelopment. The following key themes were most frequently identified:

- Develop a greenspace or landscape buffer from the City of Walker’s industries along 4 Mile Road.
- Promote single-family home development (example: large lot residential property) north of 4 Mile Road: no large housing complexes.
- M-37 is not conducive to a Town Center: a Town Center should be relaxed and a place to meet. M-37 is too active and does not promote a sense of relaxation.
- Enhance the lighting ordinance to help preserve the dark night sky.
- Enhance and/or update sign regulations with the Township to limit excessive sign size.
- Increase non-motorized transportation in the dense residential areas of the Township, such as bike paths and sidewalks.
- Due to the traffic congestion within the dense residential districts of the Township, residents wished to see future traffic calming measures be created: residents expressed positivity on roundabouts and other non-signalized style measures.
- Work with the City of Walker and the County Road Commission to make enhancements to 4 Mile Road to handle the increasing traffic that is generated from new commercial and industrial developments.

ASPIRE

The third engagement board asked respondents to identify areas within the Township that would benefit from additional opportunities, such as new developments (residential, commercial, recreational). The following key themes were identified by participants:

- Develop non-motorized trails across the Township: create a connection to the White Pine Trail system.
- Increase the existing size of the library to further serve Township residents and offer additional services.
- Construct a dog park for area residents and interested persons.

- Increase the number of parks within the Township: create an outdoor amphitheater.
- Install bike paths and sidewalks within the Westgate Neighborhood.
- Continue to promote and protect fruit farming within the Township.

DESIGN GUIDELINES

Engagement boards were also displayed that showed a plethora of potential site designs for residential development, street designs and Town Centers. Based on the interaction with the public in attendance, the following observations were made:

- Residents indicated that the Township should promote single family homes, on moderate to larger lots. Some residents also indicated that a smaller footprint home should be allowed on a large parcel of land. Of those residents who provided comment, some felt that a smaller home footprint would be more easily maintained than a larger home, especially if the home owner(s) happens to be retired. Additionally, residents were in favor of having a communal style green space with housing surrounding the common area. Residents did not wish to see additional apartment or multi-family complexes within the Township.
- Residents indicated to program staff that there is a desire for landscaping enhancements along major corridors, which would include the installation of street trees. Residents felt that a landscape buffer between the roadway and businesses located along a major corridor (such as M-37) would help beautify the Township and encourage future development. Additionally, residents were in favor of locating parking in the rear of commercial developments and keeping the front of the business facing the street: residents felt that by hiding the parking lot would be more visually attractive and create a destination for visitors as compared to a “sea of asphalt”. While residents seemed in favor of installing bike lanes on commercial corridors, they had concerns with the potential conflict between motorized and non-motorized users of the roadway system.

Second Community Engagement Open House

The second community engagement open house was held on November 4, 2021, at Alpine Township Hall.

In achieving the most public input as possible from all resident demographics, Township staff hosted an in-person public engagement event with the assistance of the consultants (project staff). At the open house, project staff were available to obtain public feedback in a casual and exciting setting. The engagement event focused on the Township as a whole, with the focus of the event having been around a large aerial photograph of the Township.

SUMMARY

Results from the in-person public engagement open house set up at Alpine Township Hall concluded the following general themes:

- **Agricultural Preservation** – Many residents who attended the open house emphasized the importance of preserving agricultural landscapes and fruit farms that give the township it’s rural identity.

- **Traffic Concerns** – Residents voiced concerns over traffic – Alpine Avenue remains a high-traffic thoroughfare that elicits comments regarding perceived danger and congestion. Other residents mentioned increasing truck traffic along 4 Mile Road and North Division Avenue.
- **Pedestrian and Cycling Facilities** – Residents indicated that additional review of sidewalk and multi-purpose trail installation is needed, especially in the south-east portion of the Township. Many residents of the Westgate neighborhood mentioned desired connections to schools, local business establishments, and the White Pine Trail to the east.

TOWN CENTER DISCUSSION

Attendees were asked to comment on potential Township Center locations, which may contain new retail, office, housing, and civic buildings. Based on two proposed locations, engagement boards and discussions with residents and other interested persons at the November 4, 2021, open house, the following themes were discussed:

- **Questions of Town Center Necessity** – Many attendees questioned whether the Township needed a town center, stating that it would be of limited value and could be viewed as a waste of money. Some attendees stated that resources would be better used on improving parks or community services instead.
- **Interest in Farmer's Market** – Some attendees voiced interest in a community farmer's market. Attendees stated this would best celebrate the Township's identity as a fruit-producing agricultural area. Others stated that a farmer's market is unnecessary, as there are numerous "U-pick" fruit orchards and other farm stands throughout the Township.

KEEP

The "Keep" engagement board prompted attendees to indicate aspects of the Township they admire and want to preserve. Of the attendees present at the open house, the following "Keep" items were the predominant points of agreement:

- **Maintain Agricultural Character** – Preserving the Township's agricultural and rural environment was the overwhelming consensus among attendees present at the meeting. Attendees mentioned enjoying rural environments and wanted to protect farmland from increasing commercial and residential development.
- **Limit Apartments** – Attendees also desired to limit new apartment construction, citing an impact on traffic, and reduced rural character as main points of opposition.

FIX

The "Fix" engagement board asked attendees to indicate aspects of the Township that should be enhanced, or "fixed". Enhancement meant areas of the Township that could use some attention but should not be considered for development or redevelopment. The following key themes were most frequently identified:

- **Limit Apartments** – Attendees emphasized their desire to limit apartments, mobile homes, and small lot developments. Some attendees opposed construction of new rental units.
- **Limit Commercial Development** – Attendees expressed a desire to limit commercial development within the Township. One attendee mentioned the number of gas stations along Alpine Avenue and others expressed concerns about large billboards and new developments resulting in greater congestion.

- **Improved Pedestrian Facilities** – Many attendees spoke about wanting greater non-motorized facilities in the Township. Numerous residents of the Westgate neighborhood stated that they wanted bicycle lanes to provide greater safety and access to schools, parks, and trails within the region. Others desired more sidewalks and safer crosswalks along Lamoreaux Drive.
- **Traffic** – Numerous residents mentioned increasing semi-truck traffic along and near the 4 Mile corridor. Attendees mentioned the industrial facilities in Walker as generating more traffic in the area and expressed a desire to enforce truck routes within the Township.

ASPIRE

The “Aspire” engagement board asked respondents to identify areas within the Township that would benefit from additional opportunities, such as new developments (residential, commercial, recreational). The following key themes were identified by participants:

- **Increased Non-Motorized Opportunities** – Attendees mentioned the importance of pedestrian facilities and expressed a desire to improve non-motorized access within the Township. Some noted locations include the Westgate neighborhood, the 6 Mile corridor, and connections to regional trails.
- **Parks and Community Center** – Numerous attendees desired additional parks and playgrounds, including a dog park in the Township. Others stated that a community center featuring events for seniors would be desirable.

DESIGN GUIDELINES

Engagement boards were also displayed that showed a plethora of potential site designs for residential development, street designs and Town Centers. Based on the interaction with the public in attendance, the following observations were made:

- Residents indicated that the Township should promote single family homes, on moderate to larger lots. Some residents also indicated that a smaller footprint home should be allowed on a large parcel of land. Of those residents who provided comment, some felt that a smaller home footprint would be more easily maintained than a larger home, especially if the homeowner(s) happens to be retired. Additionally, residents were in favor of having a communal style green space with housing surrounding the common area. Residents did not wish to see additional apartment or multi-family complexes within the Township.
- Residents indicated to program staff that there is a desire for landscaping enhancements along major corridors, which would include the installation of street trees. Residents felt that a landscape buffer between the roadway and businesses located along a major corridor (such as M-37) would help beautify the Township and encourage future development. Additionally, residents were in favor of locating parking in the rear of commercial developments and keeping the front of the business facing the street: residents felt that by hiding the parking lot would be more visually attractive and create a destination for visitors as compared to a “sea of asphalt”. While residents seemed in favor of installing bike lanes on commercial corridors, they had concerns with the potential conflict between motorized and non-motorized users of the roadway system.

Focus Groups

Focus Groups on specific topics were held on November 16, 2021.

Two focus groups were held – one with agricultural producers and the other with business owners within the Township. The agriculture group had roughly 15-20 attendees from nearby farms and agricultural operations. Three business owners attended the business focus group. SWOT (Strengths, Weaknesses, Opportunities, Strengths) Analyses were conducted during these sessions to spur conversation among the groups. These discussions provided useful insights on each group’s future visions for Alpine Township and are discussed in detail below:

AGRICULTURAL FOCUS GROUP

Strengths

- **Limiting Rural Development** – The group voiced approval of Alpine Township’s “sliding scale” lot split requirements. Many people also cited the Township not allowing private roads as a means of curbing development in rural and agricultural areas.
- **Township’s Agricultural Heritage** – The group noted that Alpine Township has a rich farming history and features a diverse array of crops being grown in the area. People mentioned that many families have continued farming over the generations and intend to continue doing so.

Weaknesses

- **Encroaching Suburban Development** – Attendees mentioned that development posed a threat to the Township’s agricultural community. The group cited large-lot single-family houses being constructed near agricultural operations as especially problematic, as this development leads to fragmentation and increased traffic along rural roadways.
- **No Need for Town Center/Farm Market** – The group was largely opposed to the creation of a town center or farm market within the Township. Many people cited existing farm stands as sufficient while viewing the potential town center/farm market as commercialized and not representative of existing farm operations within the Township. Some attendees worried that a farm market could negatively impact producers instead of helping them.

Opportunities

- **Purchase of Development Rights Program** – Some attendees mentioned using a purchase of development rights (PDR) program as a tool to protect farmland in the Township. Some mentioned Kent County’s PDR efforts in the past and stated that a joint program with surrounding townships may be feasible.
- **Buffers near Agricultural Areas** – The group mentioned increased buffers between agricultural areas and other land uses may be desirable and may reduce conflict between farmers and nearby residents. Some people mentioned increased setbacks and landscaping as potential solutions.
- **Agricultural Area Setback Requirements** – Some attendees mentioned instances of development occurring “too close” to roadways while others mentioned that some new houses have been constructed in the middle of former farming parcels, reducing the viability to use the rest of the parcel for agricultural uses. This led to a discussion about maximum setbacks in agricultural districts to limit this type of development.

Threats

- **Rural Residential Development** – The group cited rural residential development as a primary threat to agriculture in Alpine Township. They mentioned lot splits (especially in the 5–10-acre size) that fragment farmland and make agricultural operations more difficult or infeasible.
- **Housing and Land Prices** – The group mentioned higher land values as detrimental to farming as farmers must pay more for agricultural land.
- **Walker Industrial Park** – Some attendees mentioned increasing truck traffic near the industrial park along 4 Mile Road.

BUSINESS FOCUS GROUP

Strengths

- **Diverse Tax Base** – The group mentioned Alpine Township’s status as a prominent agricultural producer while maintaining a solid commercial and residential tax base.

Weaknesses

- **Burdensome Development Requirements** – The group mentioned instances where Township requirements made development more difficult. One instance was constructing “sidewalks to nowhere” and installing large water retention basins. Another instance was complying with the Township sign ordinance in installing new menu boards for drive-through restaurants.
- **Confined Lot Sizes for Expansion** – One attendee mentioned restricted parking lot size for drive-through establishments, as large trucks and vehicles with trailers can hit signs and disrupt flow of traffic. This reduces the drive-through restaurants capacity.

Opportunities

- **Expanding Employee Opportunity** – The group was vocal about the difficulty in finding and retaining employees, especially in light of the COVID-19 pandemic. The group stated that most of their employees had access to cars and that mobility challenges were not an issue for getting to work. One attendee mentioned that some employees live in nearby apartments and walk to work.
- **Alpine Avenue as Commercial Corridor** – Attendees noted that Alpine Avenue is a major north-south thoroughfare and attracts many shoppers from across the region. There are also many people staying in nearby hotels within the area. Attendees mentioned they would like a regional traffic count if one is not readily available.
- **Stormwater Infrastructure Improvements** – Some attendees stated a desire for public stormwater improvements. These included discussions of creating public storm sewer lines and combining retention ponds.

Threats

- **Labor Market** – Attendees stated that fewer people are looking for jobs, citing instances of college students or working parents deciding to avoid the labor force during the COVID-19 pandemic. The group stated this worker shortage is especially pronounced among unskilled positions.

Community Vision and Goals



During the 2015 Master Plan update process, the Planning Commission decided it was important to develop a new Vision Statement. The community's values, as expressed through various community input processes, were the basis for the new vision statement and were used to update the goals and objectives adopted in the 2007 Master Plan. A vision statement is an aspirational description of what the community would like itself to be in the future. It is a foundation for goal setting and action planning.

Vision Statement

Alpine Township is a dynamically diverse family-oriented community that strives for managed growth with proper supporting infrastructure within a framework of a vibrant agricultural base and a small-town feel.

Planning goals are statements that express a community's long-range desires and serve to provide direction for related action planning activities such as zoning, development of infrastructure, and economic development. Goals are intended to provide a basic framework upon which long term development decisions may be made as well as day-to-day decisions made by public and private entities. Objectives describe the specific means to work towards achieving the goals.

Agriculture

01 Maintain and implement the Alpine Township Farmland Preservation policy, which is to preserve the prime, unique and valuable “Fruit Ridge” agricultural land in Alpine Township for present and future generations.

Objective 1: Study and implement PDR (purchase of development rights) and TDR (transfer of development rights) ordinances or participate in regional or county-wide efforts to implement those programs.

Objective 2: Analyze original and current Sliding Scale splits.

Objective 3: Advocate links between local farm products and local consumers

- Continue to support R.E.A.P. (Ridge Economic Agricultural Partners) www.fruitridgemarket.com
- Publicize farm markets on Township web page and in Harvester newsletter.

Objective 4: Apply REGIS to increase understanding of the Alpine Township LESA study, PA 116 map, local soils and topography, past and present land use & cover, and watershed management.

Objective 5: Continue to monitor local farmer priorities and concerns.

- Survey the farming community
- Hold discussion meetings with farmers by type of operations and products.
- Review Alpine Township farmland preservation policy and zoning ordinances.

Objective 6: Monitor State of Michigan farmland legislation and support and implement when appropriate.

- Remain active with MTA (Mich. Twp. Assoc.) on farm legislation.
- Support the Michigan Right to Farm Act (PA 93 of 1981)

Objective 7: Buffer working farms from residential development.

- Update ordinance standards when appropriate for open space and buffers to protect farmland.

- Preserve open space in clustered housing developments adjacent to active farmland.
- Study the permitted density of development parcels adjacent to master planned agricultural areas.

Objective 8: Analyze and update permitted and special uses in the “A, Agricultural” zoning district to allow increased economic use of farmland and farm buildings.

Objective 9: Research potential for an Alpine Township private land trust and rural land foundation.

Objective 10: Consider the impact on agricultural systems when reviewing applications for utility scale wind or solar energy facilities. Adopt zoning regulations that further this goal.

Housing

02

Plan for safe, creative, and desirable residential neighborhoods that are suitable for people of varying ages, lifestyles and incomes.

Objective 1: Plan for traditional subdivision densities and attached housing units only where public utilities are available or can be reasonably extended.

Objective 2: Analyze present and future housing needs based on Census data and best-available demographic analyses and projections.

- Continually update the build-out study in this Master Plan to avoid “over-planning” for growth.

Objective 3: Encourage the creative development of new residential areas when and where appropriate through the use of planned unit developments (PUD’s)

- Adopt ordinance standards for sidewalks, trails, linked and useable open spaces and natural feature preservation.
- Adopt ordinances which allow flexibility regarding lot size and area, building setbacks, and design and dwelling unit types within a single unified development.
- Ensure that PUD ordinances apply to a range of housing densities, not just traditional subdivisions.

Objective 4: Protect existing and future residential areas from any unwarranted negative effects of nearby non-residential uses through berming, landscaping, greater setbacks and natural features preservation while still allowing pedestrian and vehicle connections to nearby schools, parks, shopping and employment opportunities via road, trail and sidewalks.

- Objective 5:** Allow for senior housing developments and related medical care facilities close to shopping, churches, parks, medical offices, sidewalks and public transit in a variety of zoning districts.
- Adopt zoning ordinance regulations to allow senior housing and related medical care facilities in residential, office and commercial zoning districts by special land use.
 - Develop a “Senior Housing PUD” district or specifically allow such use in a Town Center or Mixed Use PUD chapter
 - Survey seniors for input and ideas
 - Implement policies or programs that allow residents to age in place. An example would be to increase non-motorized transportation connections.
- Objective 6:** Maintain values of existing single-family and multiple-family homes and neighborhoods.
- Continue to enforce the Property Maintenance Code and other applicable Township ordinances.
 - Demolish abandoned and unsafe homes.
- Objective 7:** Help prevent crime by seeking community engagement so that citizens are informed, consulted, and involved in public safety issues. This requires open communication and trust between citizens and law enforcement personnel.
- Promote the establishment of trained neighborhood watch groups.

Transportation

03

Maintain and plan for a safe, efficient, and functional transportation system for all users, both motorized and non-motorized.

- Objective 1:** Periodically update the M-37 Access Management Plan.
- Use previous plans as reference materials.
 - Require businesses to connect to service drives or each other. More parallel service drives.
 - Partner with MDOT and KCRC to enforce the plan.
 - Require traffic impact studies for development projects.
 - Periodically update access management link in zoning ordinance, including maps
- Objective 2:** Plan for future public streets that disperse traffic density and provide alternate travel routes thus improving traffic flow on M-37.
- Review and revise the transportation master plan map.
 - Develop zoning ordinance regulations to implement master plan future roadways.

- Provide more opportunities for non-motorized transportation options.
- Support improvements to 7 Mile Road between M-37 and Pine Island Drive to make it an all-season road.
- If MDOT, Kent County, or other regional partners endeavor to create a new interchange on US-131 between West River Drive and Post Drive, advocate for the new interchange to be located at 7 Mile Road/Pine Island Drive, and not at 6 Mile Road.
- In general, ensure that Alpine Township is consulted regarding upgrades and alterations to US-131 in Plainfield Township.

Objective 4: Require developers (residential, office, commercial and industrial) to include public street improvements, sidewalks, trails, and public transit system components on approved site plans and then build the improvements.

Objective 5: Continue to link Capital Improvement Program (CIP) expenditures and grant opportunities to the transportation master plan.

- Annually set aside a sufficient consistent amount of funds for public road maintenance.

Objective 6: Continue and support public bus service partnership with ITP/ The Rapid.

Objective 7: Develop a non-motorized transportation plan.

- Develop a non-motorized transportation component to the future land use map.
- Develop zoning ordinance regulations to implement master plan future non-motorized transportation facilities.
- Amend the Land Subdivision and Utility Extension Ordinance to include installation of sidewalks on both sides of all streets.

Objective 8: Design new streets in a manner to allow for the most efficient and least expensive extension of infrastructure.

- Require new public or private local streets to stub in developable directions where appropriate. The terminus of the stub shall be legally reserved for the future street extension.

Objective 9: Where planned for and contextually appropriate, provide for complete streets that emphasize safe, attractive, and comfortable access and travel to all users of roadways.

- Include sidewalks, bicycle lanes/paths, wider shoulders, and other appropriate elements to complement the roadway.
- When road reconstruction occurs, coordinate with all involved road agencies to install sidewalks, bicycle paths/lanes, streetscapes elements and other related improvements to maximize both efficiency and cost effectiveness.

Objective 10: Periodically review and update 4 Mile Road Plan with City of Walker, Grand Valley Metro Council, MDOT and the Kent County Road Commission.

- Ensure pedestrian access along 4 Mile Road.
- Ensure public transit access along 4 Mile Road.
- Develop capital improvements program.
- Develop access management standards for 4 Mile Road.
- Communicate with the City of Walker on an ongoing basis regarding development along (and near) 4 Mile Road.

Utilities

04 Maintain and plan for efficient, functional, and fiscally sound utility systems.

Objective 1: Maintain and plan for a functional and financially efficient, geographically compact design for public water and sanitary sewer utilities.

- Maintain public water and sewer district maps.

Objective 2: Continue to link Capital Improvement Program (CIP) expenditures and grant opportunities to the public utility master plans.

Objective 3: Periodically review and refine the Alpine Township Stormwater Management Master Plan and Ordinance.

Objective 4: Continue to partner with Plainfield Township regarding public water system.

Objective 5: Continue membership in the North Kent Sewer Authority to maintain a long term, cost efficient sanitary sewer system for Township residents.

Objective 6: Continue to partner with the Kent County Drain Commission office regarding drainage issues.

Objective 7: Monitor high-speed internet access availability.

Economic Development

05

Encourage dynamic commercial and industrial districts.

- Objective 1:** Monitor and periodically update building design standards in the zoning ordinance using community visual preference survey results as one method.
- Objective 2:** Develop and maintain Township/businesses relationships. Survey Alpine Township businesses to understand priorities and concerns.
- Objective 3:** Partner with local businesses and governmental agencies to seek grants for specific infrastructure and aesthetic improvements.
- Objective 4:** Connect business and industrial areas with sidewalks and bicycle paths/lanes to allow alternative ways for employees to travel to work.
- Objective 5:** Find appropriate places in the Township to direct growth.
- Study development potential of Lamoreaux Drive extended area for new residential development.
 - Study development potential of Henze Street extended area
- Objective 6:** Periodically review and update commercial and industrial zoning ordinances.
- Objective 7:** Encourage commercial and industrial development where public water and sanitary sewer are available or can be reasonably extended.
- Objective 8:** Promote the redevelopment, rehabilitation, and adaptive re-use of existing commercial or industrial sites and buildings within existing commercial or industrial areas.
- Study underutilized commercially or industrially zoned sites outside the main commercial or industrial areas to determine appropriate future land use designation.
- Objective 9:** Small-scale commercial land uses serving nearby residents should be encouraged within or near new development.
- Objective 10:** Research a Downtown Development Authority or other mechanism to provide funding for needed vehicular and pedestrian linkages.

Relationships

06 Maintain and develop Township-school relationships.

Objective 1: Cooperate with school officials to align master plans, discuss future school sites, discuss future of decommissioned schools, and compare demographic data.

07 Maintain and expand inter-governmental cooperation and relationships.

Objective 1: Continue to serve on committees and focus groups to help the State and Federal governments better understand local issues.

Objective 2: Continue to partner with the Grand Valley Metro Council (GVMC) and REGIS (Regional Geographic Information System).

Objective 3: Continue to partner with MDOT and the Kent County Road Commission on access management, drainage, and other roadway issues.

Objective 4: Continue to partner with the City of Walker regarding traffic, drainage, and land use issues.

Objective 5: Continue to partner with Plainfield Township regarding traffic, public water system, drainage, and land use issues.

Objective 6: Continue membership in the North Kent Sewer Authority to maintain a long term, cost efficient sanitary sewer system for Township residents.

Objective 7: Expand communication with Wright, Sparta and Algoma Townships regarding traffic, drainage and land use issues.

Objective 8: Continue to partner with the Kent County Drain Commission office regarding drainage issues.

Objective 9: Continue and enhance alliances with local universities and non-profit organizations.

Community Resources

08

Maintain and expand natural, recreational and cultural resource assets.

- Objective 1:** Map natural features and historical sites using REGIS.
- Objective 2:** Periodically review and update the Alpine Township Community Recreation Plan.
- Objective 3:** Seek parkland acquisition within master planned growth areas.
- Objective 4:** Encourage developers to provide parks/open space in standard, non-PUD subdivisions in addition to PUD subdivisions.
- Objective 6:** Continue to maintain and update Township parks with new recreation equipment and facilities.
- Objective 7:** Create gateway treatments identifying the Township at key entrance locations.
- Objective 8:** Require new developments to include provisions for open space.
- Objective 9:** Require a natural features inventory as part of the site plan approval process.

Future Plans



Transportation

RELATIONSHIP WITH LAND USE PATTERNS

Land use and transportation are a chicken and an egg relationship. Land use shapes the demand for transportation and conversely, transportation options alter the intensity with which land is used and thus land use patterns.¹

The density and proximity of residential and commercial/industrial development to each other greatly influences pedestrian and bicycle travel. Generally, the greater the density of development and mixing of uses (i.e., mixed use developments) the shorter the distance individuals must travel which in turn increases the attractiveness of making trips by walking or bicycling. The compact development patterns of Sections 25 and 36 make providing multiple transportation modes easier.

COMPLETE STREETS

In 2010, the Governor signed complete streets legislation that advances cooperation and coordination among local governments and transportation agencies with regards to street planning and design so that consideration is given to all legal users of a street (pedestrians, bicyclists, and transit users). It is important to note that local road agencies are not required to adopt a complete streets policy or spend additional dollars on non-motorized facilities. However, the KCRC adopted a complete streets policy in the early 2010s and 1% of Act 51 transportation monies must be spent on non-motorized transportation.

One of the Township’s transportation objectives is: Where planned for and contextually appropriate, provide for complete streets that emphasize safe, attractive, and comfortable access and travel to all users of roadways. What constitutes a complete street will depend upon the context within which the street is located. For instance, in a rural area a complete street may have a wide paved shoulder for pedestrians and bicyclists to use. In an urban setting a complete street may include sidewalks, crosswalks, benches at transit stops and a bike lane.

Additional Resources:

National Complete Streets Coalition www.completestreets.org

Michigan Complete Streets Coalition www.michigancompletestreets.org

1 Contemporary Urban Planning, 9th Ed. John M. Levy, page 239

CONNECTIVITY

A well-connected transportation system reduces motor vehicle congestion on collector and arterial streets, reduces trip time and miles, and provides for an efficient utilization of land.

To ensure proper connectivity and efficient utilization of land (since it’s a finite resource); all future public and private streets shall stub in all developable directions and depending on the size of a development, may be required to provide more than one stub in a given direction. The terminus of stubs shall be legally reserved for future street extensions.

Extensive use of cul-de-sacs is discouraged as are street patterns that loop and only provide limited connections between streets. See the Zoning Plan for further details.

FUTURE STREETS

New public streets will be required in the areas planned for growth. Capacity improvements should be limited to the growth areas, with road investment in the Agricultural Preservation areas dedicated to maintenance and safety. All new public streets should be contextually appropriate complete street.

1. **Lamoreaux Drive Extension.** Consistent with Master Plans dating back to the 1990s, this plan includes an extension of Lamoreaux Drive from Alpine Avenue to Baumhoff Avenue, where it will connect to 5 Mile Road. That roadway faces significant topographic and land use impediments to completion, especially between Alpine Avenue and Cordes Avenue, but it would provide a key east-west connection through the portion of the Township that is planned for growth, and thus remains in the plan as a long-term vision. Short term implementation efforts will likely focus only on connecting to the north-south service road system (see below) to the traffic light at Alpine and Lamoreaux, with any extensions beyond that subject to evaluation based on the needs of the land uses in the area.

“I maintain that the extension to Cordes is sound planning for the long term. We can’t fully see how successful this overall area may be in the future (including development along Cordes/other), so it would seem short-sighted to remove this potential connection from the master plan altogether. I understand how the few residents living along Cordes now don’t want to lose the current rural feel to this section of Cordes, but development changes over time as it always does, and the connection in the future may become deemed a real positive addition to the network.”

-Pete LaMourie, PE, PTOE, Senior Transportation Engineer, ProgressiveAE (December 8, 2022)

2. **Alpine Church Street Connection to Westgate Neighborhood.** Consistent with planning efforts since 2007, this plan envisions Alpine Church Street being extended east from Alpine Avenue to provide an additional connection to the Westgate neighborhood. Land acquisition for the extension (as well as potential park space along the extended road) may be possible in the near future, given real estate trends in the immediate area. A traffic light is already planned for the intersection of Alpine Avenue and Alpine Church Street.
3. **East-West Collector Street System.** As shown on the New Road Connections and Future Land Use Maps, this consists of public streets through the planned residential areas in Sections 26, 27, 34 and 35.

The rest of the east-west collector street system will serve to collect residential traffic from abutting neighborhoods. Uses along these streets will be residential and the design and layout must ensure that residential uses are not compromised by too much traffic utilizing these streets. These streets are planned to be complete streets and must include contextually appropriate facilities for pedestrians, bicyclists and transit users.
4. **Vitality Drive.** This is a local loop road providing interior access to future industrial land in Section 23. The northern portion aligns with Vinton Avenue. A portion of the road has been completed, and additional sections will be added as development warrants.
5. **Service Road System.** The Plan strongly recommends that the service road system serving private properties along Alpine Avenue be continued on both sides of Alpine Avenue as illustrated on the New Road Connections Map and consistent with Master Plan updates since 2007.
6. **4 Mile Road Additional Right-of-Way.** Consideration needs to be given to requiring greater setbacks for buildings along 4 Mile Road as future widening may require additional right-of-way.
7. **Aldun Ridge Extended.** Obtain the necessary right-of-way and either extend Aldun Ridge Avenue north to Alpine Church Street in order to provide a second means of ingress and egress to this 228 dwelling unit development and to serve the back sides of C-2 zoned properties

Implementation and Financing

The New Road Connections and Future Land Use Maps show the general location of these future roadways. The exact location and alignment will likely not be determined until the property is proposed for development, at which time the Planning Commission and Township Board will make a final determination on the need for the street and agree to its final location. All public streets shall conform to the Kent County Road Commission's standards of construction and design.

Payment for the street will also need to be determined by Township officials but to date payment for streets has been by developers. By illustrating these future streets on the New Road Connections and Future Land Use Maps, the Township is indicating that such streets will improve access in and around the Township and that these streets must be part of any development for that property. These streets are planned to be complete streets and must include contextually appropriate facilities for pedestrians, bicyclists and transit users.

TRANSIT

Alpine Township is a proud partner of The Rapid. Although property owners in the Township do not pay the Rapid's operating millage, the Township invests general fund resources on an annual basis to fund the portion of Route 9 that extends into the Township. The Township is also generally supportive of expanded transit opportunities to connect residents to the broader region, provided that those options are fiscally responsible for Township taxpayers and provide a service that benefits Alpine residents and businesses.

Service Frequencies

Route 9 currently has among the highest ridership in the Rapid system. Most of the route operates with 15-minute headways on weekdays, but the bus only crosses 4 Mile Road into Alpine Township on every other run, which means that Alpine residents have 30 minutes headway. All weekend runs (every half hour on Saturdays and every hour on Sundays) run into Alpine. This plan supports ridership and fiscal studies to determine whether extending 15-minute service into Alpine Township would be financially viable and beneficial to riders.

Service Expansion

As development continues to move north along Alpine Avenue, Route 9 could be extended north to serve the Churchill Place apartments, the new Range at Alpine development, and other businesses along the corridor up to Alpine Church Street. As with frequency improvements, the extensions should be studied both in terms of ridership and financial impact on the Township before being implemented. As of the 2023 Master Plan update, there is little need for an extension of Route 9 beyond Alpine Church Street, though that could change in the future.

Future Crosstown Transit Corridor

In previous long-term planning efforts, the Rapid has identified a north side crosstown route as a potential addition to the system. No crosstown route currently exists north of Downtown Grand Rapids, but the south side of the region has several. Therefore, this plan supports such as crosstown route, provided that ridership from Alpine residents would be commensurate with the financial contribution of the Township.

The previously proposed route would operate between Standale Meijer and Knapp's Corner via Wilson Avenue, 3 Mile Road, Alpine Avenue, 4 Mile Road, W. River Drive, N. Park Street, Coit Avenue, 3 Mile Road, Leffingwell Avenue and Knapp Street. The 4 Mile Road portion would run through Alpine Township, with a transfer to Route 9 at 4 Mile Road.

Rapid Connect

Rapid Connect is on-demand service that currently operates in the City of Walker to provide access to corridors, such as Northridge Drive and 3 Mile Road, that do not have fixed-route service. Alpine Township would consider participating in an expansion of Rapid Connect to serve parts of Alpine, but the proposal would have to be evaluated, both in terms of ridership and financial impact on the Township, before being implemented.

PEDESTRIAN AND BICYCLE FACILITIES

Goal and Benefits

Alpine Township desires to create a pedestrian and bicycle-friendly community by creating an attractive, safe, and connected network of sidewalks and bicycle facilities. Such a network encourages walking and bicycling as viable modes of transportation, improves public health, helps control traffic congestion, and improves quality of life.

Sidewalk Network Connection Priorities

- Fill gaps in the current sidewalk network, especially within the Sidewalk Network Zone on the Non-Motorized Plan Map.
- Within the Sidewalk Network Zone, connect neighborhoods to important destination points such as parks, transit stops, recreation areas, libraries, civic buildings, schools, and daily living needs (grocery stores, banks, barbers, etc.)
- Connect places of employment to transit stops and neighborhoods.

Bike Trail Network Connection Priorities

- Create a system of bike paths that can connect residents through and between the growth areas of the Township, as well as to employment, recreation, and amenities in neighboring communities.
- Key nodes on the system should include:
 - The Westgate Neighborhood
 - The York Creek Neighborhood
 - Kenowa Hills High School
 - Alpine Sports Park
 - The Wilder Crossings Neighborhood (if approved and completed)

- Even if the Lamoreux Extension is not completed as a roadway for automobiles, the corridor can and should be used for a bike trail connection between the Westgate and York Creek Neighborhoods (and Comstock Park) on the east and Kenowa Hills High School (and surrounding neighborhoods) on the west, with a connection to Alpine Sports Park via Baumhoff Avenue.
- Look for connections to the Fred Meijer Pioneer Trail, which connects the Musketawa and White Pine Trails together. The Fred Meijer Pioneer Trail is located just to the south in the City of Walker.

Design Criteria

Most new facilities will be located in KCRC or MDOT right-of-way; therefore, care has been given to coordinate with KCRC's policy for non-motorized facilities (see Appendix) and MDOT's policies.

- Sidewalks shall be constructed of concrete and be a minimum of 5 feet wide. They will typically be located 1-foot off the property line inside the road right-of-way.
- Shared-Use Paths are a pedestrian and bicycle facility that are separated from the road and must be a minimum of 10 feet wide.
- Where feasible, all non-motorized facilities should meet Barrier Free and AASHTO design standards so as to be accessible to all regardless of physical ability or age.
- All public streets shall have sidewalks located on both sides of the street unless specifically identified otherwise on the Transportation Master Plan map.
- Sidewalks along Alpine Ave. shall be located parallel and adjacent to Alpine Ave.
- Support facilities such as bicycle racks, signage, appropriate lighting levels at street crossings, and mid-block crossing locations should be provided when needed.

Additional Resources

www.pedbikeinfo.org www.walkscore.com www.pbs.org/americaswalking/

Grand Valley Metropolitan Council Non-Motorized Transportation Plan

<http://www.gvmc.org/transportation/nonmotorized.shtml>

Implementation

- When property develops or redevelops, sidewalks are always required to be installed to tie into the existing or planned sidewalk network. Construct all other sidewalks as needs and opportunities present themselves.
- All master planned future streets are to be complete streets that include contextually appropriate pedestrian and bicycle facilities.
- When road reconstruction occurs, coordinate with all involved road agencies to install sidewalks, bicycle lanes, streetscapes elements and other related improvements.
- The Township does not prevent bicyclists from using sidewalks, but such use should not be encouraged. Instead, proper bicycle facilities should be created (paved shoulders, shared-use paths or signed/striped bike routes), especially on busy corridors. On Alpine Avenue where sidewalks do not currently exist, shared-use paths (at least 8 feet wide) should be constructed instead of 5-foot-wide sidewalks.
- In new residential developments: developer to submit a renewable 3 to 5-year bond for sidewalk construction on 100% of the lots. Sidewalk to be constructed on a lot-by-lot basis prior to a Certificate of Occupancy being issued on a house. At the end of the bond timeframe, the bond shall be renewed for the amount equal to sidewalk construction costs for the

remaining unbuilt lots. The bond shall be continually renewed until the sidewalk network is complete. The goal is to ensure the entire residential neighborhood eventually has a complete sidewalk network.

- In existing residential developments: sidewalk to be installed as opportunities present themselves such as a road reconstruction, grant opportunities and the like.

Financing

- Private developers: When property develops or redevelops sidewalks are always required to be installed. If there is extenuating physical reasons to postpone construction of a sidewalk; a Sidewalk Agreement with the Township to construct the sidewalk at a future date shall be made with the property owner and recorded at the Register of Deeds.
- Special Assessment Districts: There are numerous existing sidewalk agreements with language that a property owner will be included in a future special assessment district for sidewalk installation. The Township could establish such districts and construct the sidewalk segments.
- Build sidewalks at reduced cost during other construction activities (underground utility work, road resurfacing, etc.)
- State grants, private donations, and private foundations
- Community Development Block Grants: Funds are very limited and may only be used in low/moderate income areas as defined by the U.S. Bureau of the Census.
- Township General Fund monies through the Capital Improvement Program.
- The Township could consider creating and funding a Pathways Committee to build out a bike trail network, as has been done in similar communities elsewhere in Kent County. Some communities have even implemented dedicated millages for bike paths.

Township Gateways

One other key aspect of the transportation plan is the creation of Township gateways through signage, landscaping, streetscaping, and other placemaking techniques. These upgrades should be considered in the locations designated on the Key Township Entrances Map.

Scope of Transportation Master Plan Maps

The Transportation Master Plan maps are not static. They do not represent the geographic limits of all future transportation facilities as unforeseen needs or opportunities may arise in the future that would provide needed or desired network connections or additions. Implementation is considered a long-term process, with an expected timeframe of 25 years or more for portions of the plan.



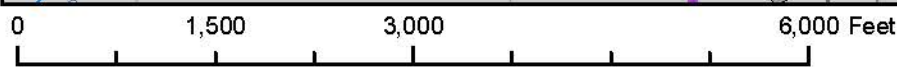
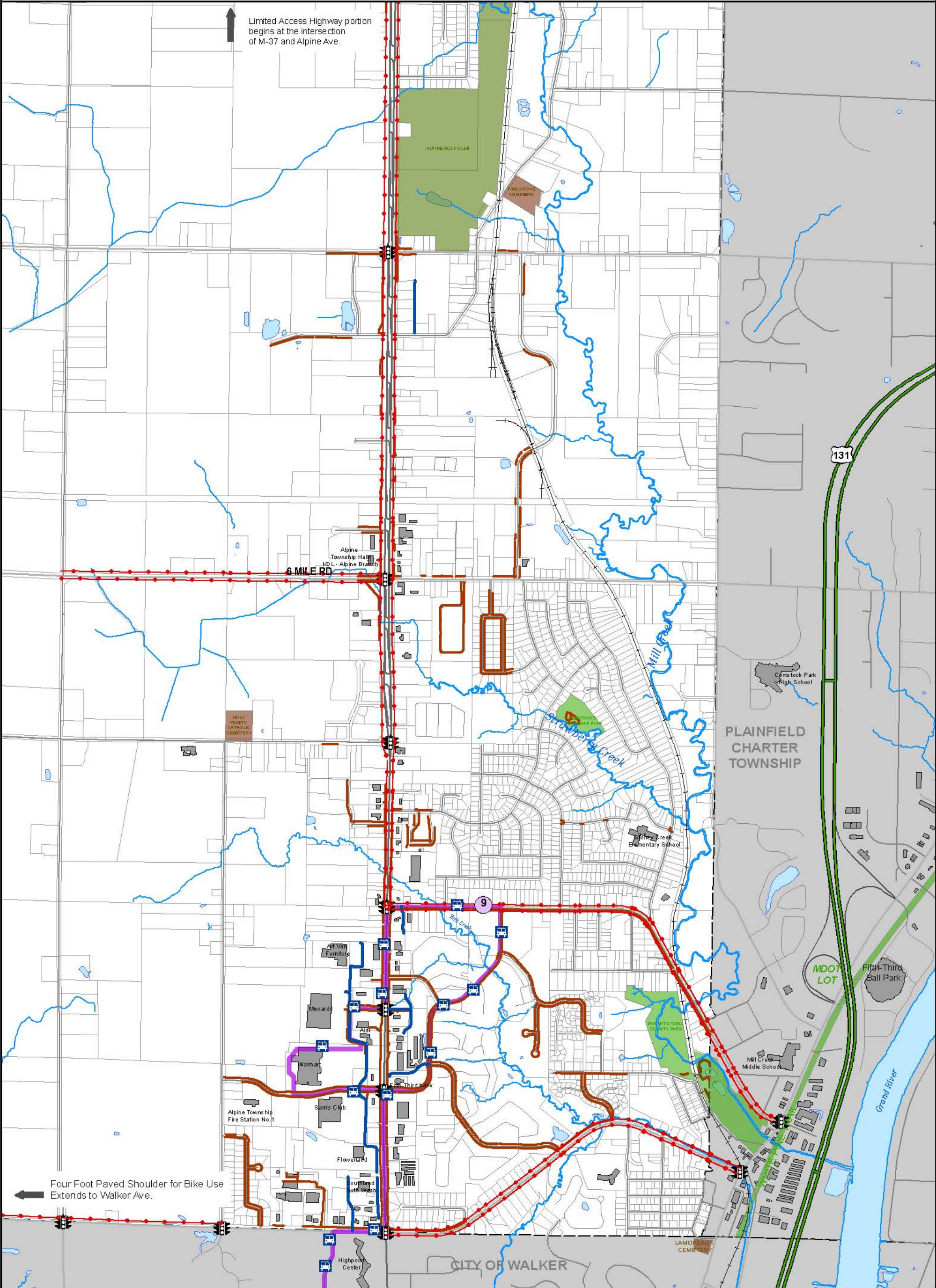
2023 EXISTING TRANSPORTATION NETWORK

Legend

- 4 Foot Paved Shoulder (Bike Use)
- Existing Service Drives
- Traffic Signal
- Existing Bus Stop (16)
- Trail
- Pedestrian Bridge
- Sidewalk
- Existing Bus Route (9, Alpine)

- Freeway
- Freeway Ramp
- Highway
- Primary
- Secondary
- Private
- Railroads
- River or Stream
- Lake or Pond

- Building Footprints
- Cemetery
- Golf Course
- Park





2023 FUTURE TRANSPORTATION CONNECTIONS

Legend

Proposed Road

Shared Use Path

Sidewalks

Proposed Sidewalk

Existing Service Drives

Proposed Service Drive

Existing Bus Route (S. Alpine)

Existing Bus Stop

Proposed Extended Bus Route (Route #9)

Proposed New Bus Route (3 Mile Rd. Cross-town)

Freeway

Freeway Ramp

Highway

Primary

Secondary

Private

River or Stream

Lake or Pond

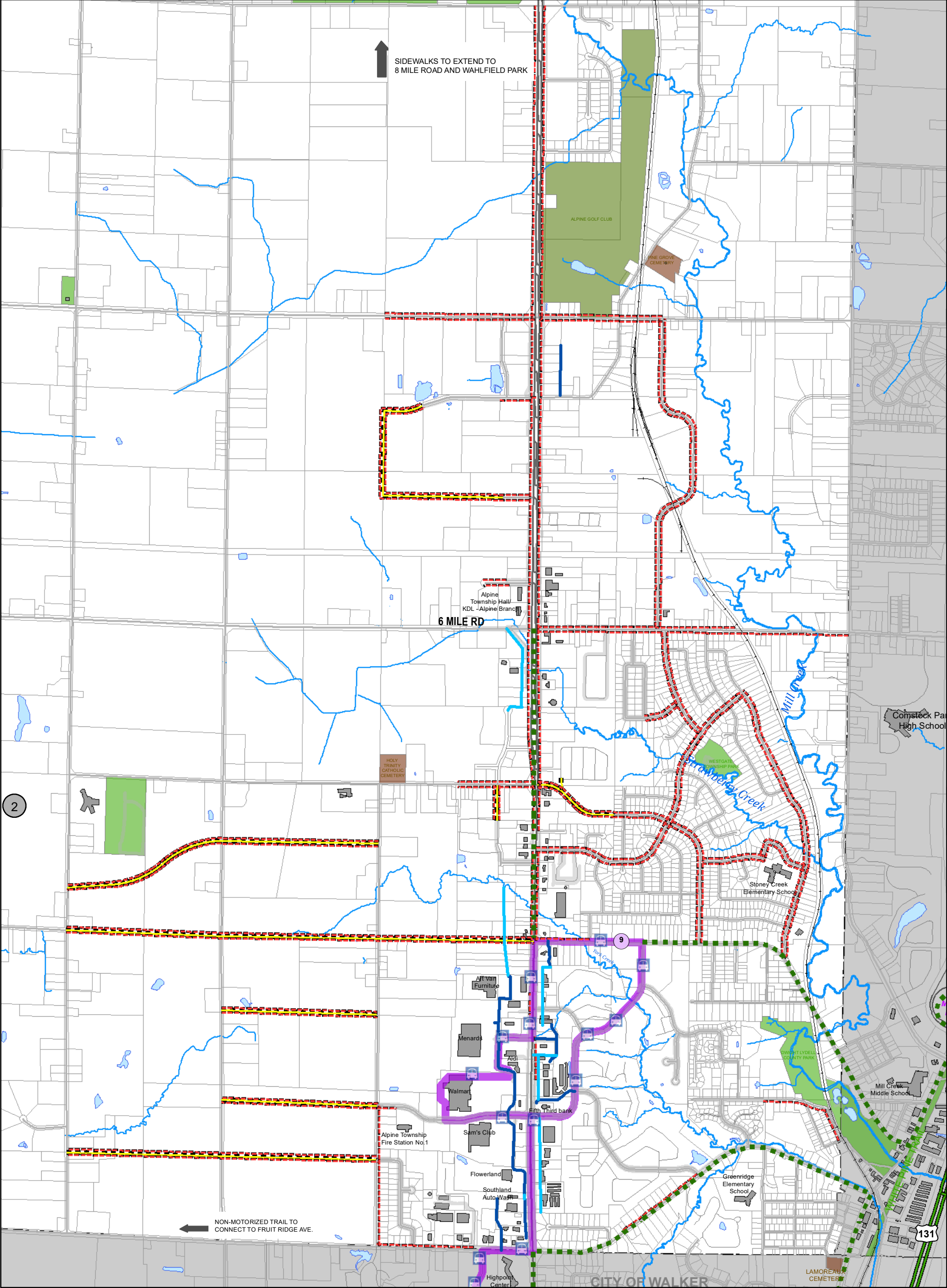
Building Footprints

Cemetery

Golf Course

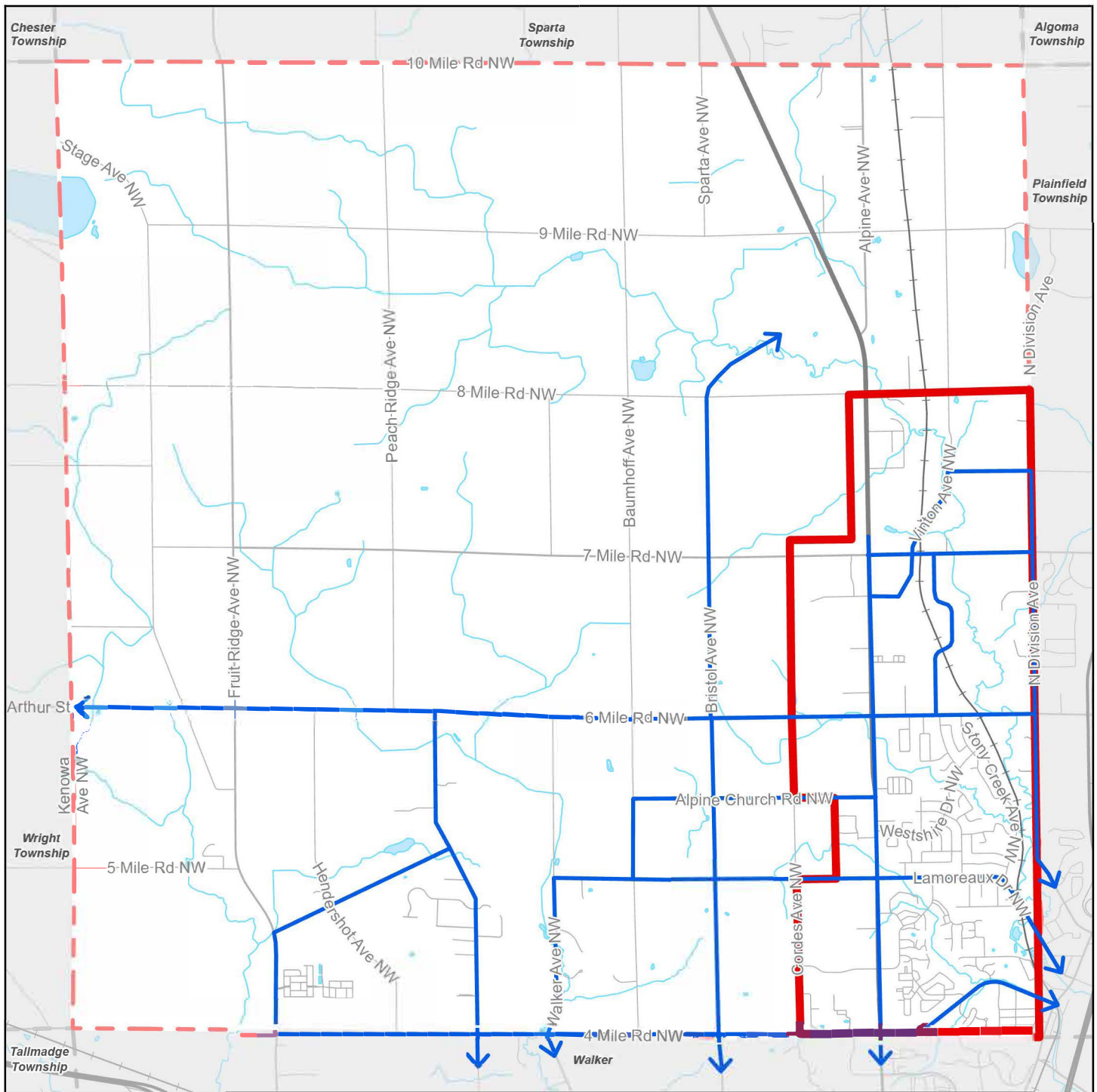
Park

Railroads



0 1,500 3,000 6,000 Feet





Non-Motorized Transportation Plan

Alpine Township, Kent County, Michigan

Adopted November 20, 2023

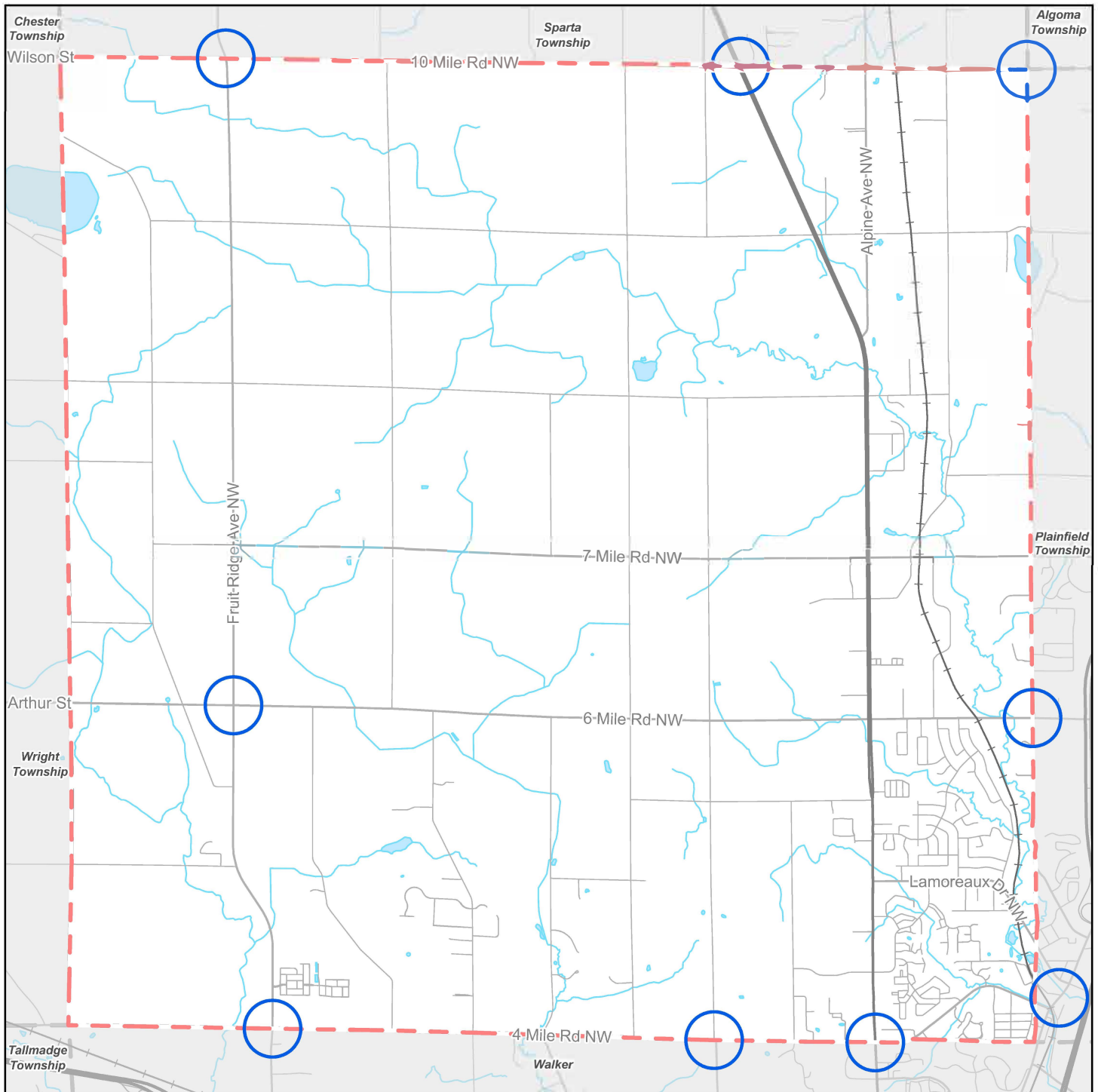
LEGEND

- Non-Motorized Pathway Corridor
- ▭ Sidewalk Network Zone
- - - Alpine Township Boundary
- ▭ Other Municipal Boundaries



0 2,000 4,000
Feet

Basemap Source: Michigan Center for Geographic Information, v. 17a.
Data Source: Kent County, 2023.
GVMC REGIS, 2023. McKenna 2023.






Township Entrances

Alpine Township, Kent County, Michigan

Adopted November 20, 2023

LEGEND

-  Township Entrances
-  Alpine Township Boundary
-  Other Municipal Boundaries



0 2,000 4,000
Feet

Basemap Source: Michigan Center for Geographic Information, v. 17a.
Data Source: Kent County, 2022.
GVMC REGIS, 2022. McKenna 2022.



Utilities

WATER DISTRIBUTION SYSTEM.

Plainfield Township owns and maintains the water system in Alpine Township. Future plans include increasing the service area to incorporate the small residential area at the northwest corner of Fruit Ridge Avenue and 5 Mile Road. The water service area and master planned water mains are illustrated on the Water Service Boundary Map.

SANITARY SEWER COLLECTION SYSTEM.

The Township has completed a Storm Water, Asset Management and Wastewater (SAW) grant and developed a complete asset management plan and financial plan for the Township's sewer system. The asset management plan along with the financial tools created to develop an annual sewer O&M budget has helped set user rate changes which in turn has been used for capital improvement planning purposes.

The sanitary sewer service area and master planned sewer mains are illustrated on the Sanitary Sewer Service Boundary Map. The planned mains have been changed to reflect current conditions and proposed future land uses.



WATER SERVICE AREA AND MASTER PLAN

ALPINE TOWNSHIP KENT COUNTY, MICHIGAN

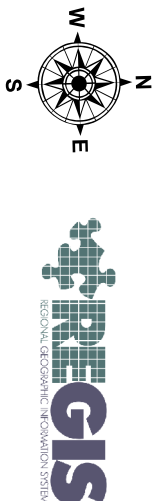
PLAINFIELD CHARTER TOWNSHIP WATER DISTRIBUTION SYSTEM

Map Legend

- Water Storage Tanks
- Proposed Water Mains
- Rivers & Streams
- Lakes & Ponds
- Water Service Area
- Proposed Service Area Addition
- Railroads
- Pressure District
- High
- Medium
- Low

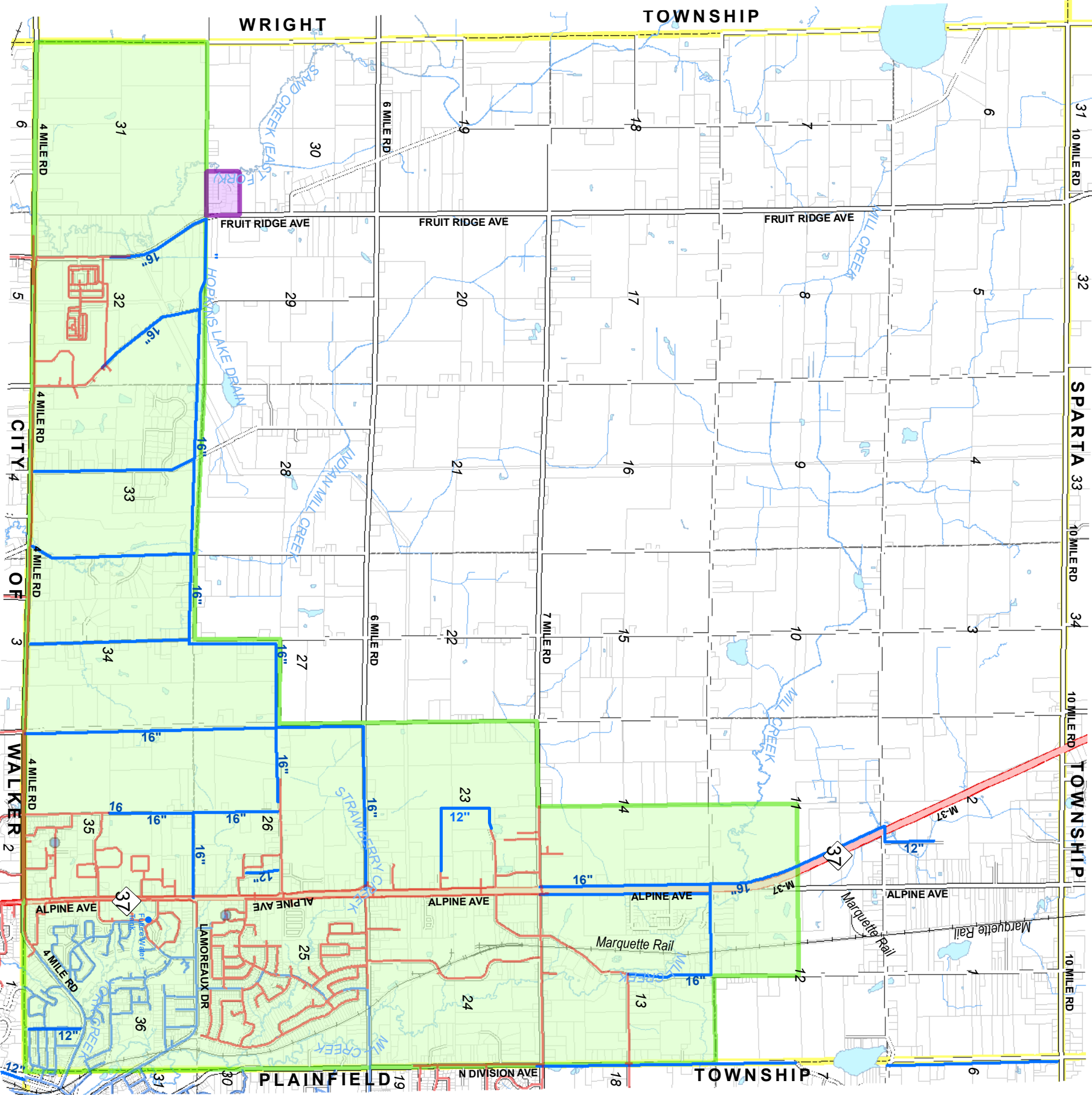
Street Centerlines

- Freeway
- Freeway Ramp
- Highway
- Primary
- Secondary
- Private
- Parcels
- Section Lines
- Municipal Boundaries



This map does not represent a legal document. It is intended to serve as an aid in graphic representation only. Information shown on this map is not warranted for accuracy and should be verified through other means.

This map was last updated 5/11/2023 by the REGIS Agency in conjunction with Alpine Township Planning staff. Data sources include REGIS, Alpine Township, and Plainfield Charter Township.



SANITARY SEWER SERVICE AREA & MASTER PLAN



MAP LEGEND

- ▲ Lift Stations

Street Centerlines

Freeway

Freeway Ramp

Highway

Primary

Secondary

Proposed/Under Construction

Private
- Mains

Gravity

Forcemain

Siphon

Proposed Gravity Main

Proposed Forcemain
- Railroads

Municipal Boundaries

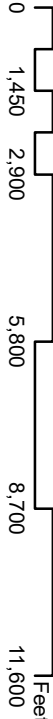
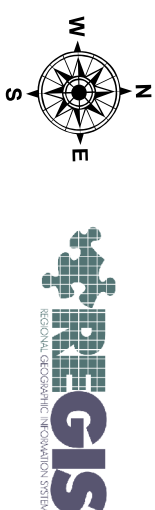
Section Lines

Parcels

Sanitary Sewer Service Area
- Rivers & Streams

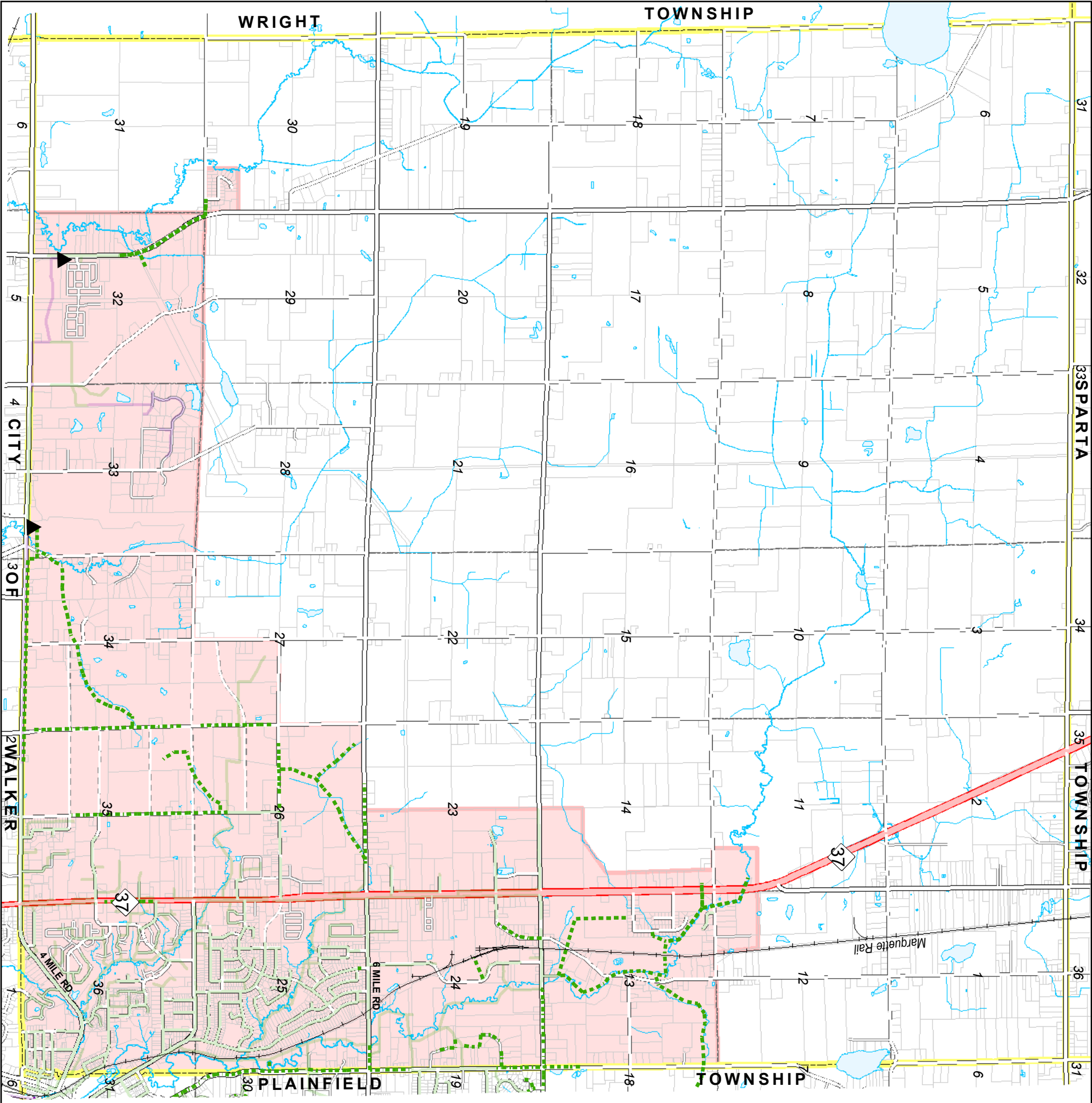
Lakes & Ponds

Adopted by the Alpine Township Board
2023, Resolution No. 23-__



This map does not represent a legal document. It is intended to serve as an aid in graphic representation only. Information shown on this map is not warranted for accuracy and should be verified through other means.

Map created April 2023 by the REGIS Agency in conjunction with Alpine Township Planning staff. Data sources include REGIS and Alpine Township.
Last Revision: Monday, October 9, 2023



Land Use

FISCAL IMPACTS OF DEVELOPMENT PATTERNS AND LAND USES

Different development patterns have different fiscal impacts. Less compact development patterns are less efficient and more costly to service and maintain (i.e., water, sewer, roads, sidewalks, public transit, emergency services and etcetera).

The Township is currently reaping the financial benefits from having a geographically compact area of development on public sewer service in the form of lower operating costs. To maintain a low cost of providing public services (utilities, transportation, and emergency services) the Township encourages geographically compact development patterns.

Different land uses also have different fiscal impacts. Currently, the Township's tax base is reasonably balanced between agribusinesses, industrial, commercial uses and residential uses. However, extensive additional residential development without agricultural, commercial, or industrial tax base expansion will likely necessitate higher local tax rates to support public services.

As a community with a large percentage of rental dwelling units, a large percentage of Alpine Township's population base is easily mobile. A mobile population results in slower population growth than demographics and regional trends would otherwise suggest. At the same time, the Township has seen a greater demand for public services in areas with multi-family development complexes. The Township strives for development patterns and land uses that collectively are balanced and fiscally sustainable to help ensure Alpine Township is an attractive place to live, work and play for current and subsequent generations.

FUTURE HOUSING NEEDS

The overall population of the Township is aging, and the leading edge of the Baby Boomers has reached retirement age. An increasing larger percentage of the Township's population being aging Baby Boomers will result in increased demands for senior housing options that provide supportive living environments for a variety of age-related needs.

In 2020, approximately 44% of housing units in Alpine Township were renter-occupied. Within the county, only the City of Grand Rapids has a higher percentage of renter-occupied housing units (45%). Most renter-occupied housing units in Alpine Township are located within multi-family development complexes. Because such a large percentage of housing units in the Township are renter-occupied, the Township's population is very dynamic, meaning the population number and makeup changes with some frequency. In addition to the fiscal impacts mentioned above, the dynamic nature is a challenge for community outreach efforts, educators, and community involvement efforts.

There are several multi-family development complexes within Alpine Township in addition to single-family homes, condominiums, and mobile homes available for rent. As such, there is a variety of housing choices available to residents. While each proposed development will be judged on its particular merits; in general there is not a need for additional multi-family dwelling units in Alpine Township. Senior housing options and as part of a mixed-use PUD development would be exceptions as those choices are not currently available to residents and have been identified as desirable.

Additional Resources:

Michigan Initiatives for Placemaking

Michigan Economic Development Corporation: www.michiganbusiness.org / www.miplace.org

Michigan Municipal League: www.mml.org/placemaking

Smart Growth Network www.smartgrowth.org

The Congress for New Urbanism www.cnu.org

American Association of Retired Persons: www.aarp.org/livable-communities

Future Land Use Designations and Descriptions

The Future Land Use designations and descriptions were influenced by:

- The concerns, desires and suggestions of Alpine Township residents and property owners voiced during the Plan preparation process;
- Location and availability of public utilities;
- Analysis of existing circumstances and future needs;
- The land use plans of nearby municipalities.

The categories are described below and are illustrated on the Future Land Use Map. Key changes in the 2023 update are noted.

AP

Agricultural Preservation

The intent of this category is the long-term preservation of farmland in Alpine Township, especially the precious “Fruit Ridge.” The Future Land Use Map identifies the majority of Township land as being within this category. The principal land use is agriculture or agricultural support services which help to enhance and stabilize the farming industry.

Single family dwellings for farmers and migrant workers are also allowed. Non-farm dwellings would be limited by the Sliding Scale zoning regulations established in 1989 which allow landowners to create up to four buildable lots from a parcel which is over 80 acres.

Participants in the agricultural community focus group cited the rural character, agricultural history, large lot size, open space, neighbors, fire protection and investment potential as positive qualities in their neighborhoods although some noted dissatisfaction with the number of permitted lot splits.

Overall, the lands recommended for the AP, Agricultural Preservation category have not changed significantly from the AP areas recommended as far back as the 1998 Master Plan, except for an expansion into the Bristol-Cordes Preserve Zone in the 2023 update (see below). Lands in Section 12 between Division Avenue and the railroad tracks are recommended for Residential Estate instead of AP as was the recommendation in the 1998 Plan. Preserving this land for long term agricultural use did not seem practical in light of planned residential land use in Plainfield Township to the east and land in Alpine Township to the south. The land also did not achieve a high ranking according to the Prime, Unique and Valuable Farmland Map (Map 3).

Land is recommended for AP use in Sections 27, 28, 29, 30 and 31 due to the LESA scoring system and the adjacent existing and planned RE, Residential Estate buffer zone which will protect these lands from conflicts caused by intensive non-farm uses. Additional AP designated lands are north of 6 Mile Road and reflect the LESA scoring system, large tracts of productive farmland, history of agricultural use and zoning, and compatibility with land uses in Wright Township to the west and Sparta Township to the north.

It is the intent of this Master Plan that the area along the south side of 6 Mile Road west of Cordes Avenue to a depth of about one-half mile be considered as a buffer zone to protect the long-term farming activities north of 6 Mile Road from encroachment by non-farm residential uses. Six Mile Road frequently carries slow moving farm equipment. Development of the lands abutting 6 Mile Road will produce more traffic and create hazardous driving conditions for both farmers and non-farmers. Minimizing development possibilities within this protective buffer along the south side of 6 Mile Road will lessen traffic conflicts and reduce problems between farm operators and non-farm residents.

2023 Update – Bristol-Cordes Preserve Zone. The 2023 Master Plan update redesignated a swath of land along from Cordes Avenue to Baumhoff Avenue, between 4 Mile Road and the planned Lamoreaux/5 Mile extension, from LDR Low Density Residential and RE Rural Estate to Agricultural Preservation. The reasons for this change were:

- The overarching desire to preserve as much Fruit Ridge land as possible, resulting in an active search by the Planning Commission for land that was previously planned for development, but could be reserved for preservation instead.
- The large number of active orchards and other agricultural uses in the area, and the limited interest in property owners in developing those lands for housing.
- The possibility of the RE category generating large lot housing sprawl, rather than the entry-level homeownership needed in the market based on the analysis in this plan and public engagement.
- The desire to respond to increased development pressure by more specifically designating the areas where growth is considered acceptable by the Township. In this analysis, the land near Alpine Elementary and Holy Trinity Elementary Schools was considered more appropriate for development, for the following reasons:
 - They have access to existing water and sewer infrastructure.
 - They have existing parks and schools to serve a neighborhood population.
 - They have an existing east-west corridor to access Alpine Avenue (Alpine Church Road)

RE

Rural Estate

The RE category of land use was called RA, Rural Agricultural in the 1998 Plan and switched to RE in 2007, but the intent remained the same, and continues to be consistent through the 2023 update. The RE classification is intended to provide for residential development in a rural setting adjacent to Agricultural Preservation land use areas.

With a density of one dwelling unit per one- and one-half acres, this land use category will also permit general and specialized farming activities but on a much smaller scale than the AP land use category.

The 1.5-acre minimum lot size requirement and agricultural activities recommended for the RE land use classification are intended to satisfy a demand for a rural life style without using up prime agricultural land.

Areas planned for RE in Sections 1, 2, 33, 34 already exhibit an established pattern of large lot residential estate use. A number of these large lot developments are served by private roads.

The RE classification is intended to serve as a transition or buffer zone between the AP classification and more intense land uses. This district promotes and supports one of the principal goals of the Alpine Township Master Plan which is to preserve productive farmlands from urban encroachment and maintain the agricultural economy of the Township. The RE areas in the northeast corner of the Township reflect existing larger lots with scattered farms.

Subdivisions in the RE zone, whether they take the form of traditional plats or condominiums, will need to be served by public sanitary sewer due to soil conditions which can make it difficult to concentrate residential development. Public sanitary sewer for subdivisions will help ensure the long-term health and safety of residents in such developments.

LDR

Low Density Residential

This land use category recognizes existing subdivisions and makes provision for new residential areas. LDR is analogous to the R-1 zoning district. For properties with public sewer utilities, a maximum density of 3.2 dwelling units per acre is recommended for this land use category.

The single family detached house will be the predominant style in this area although two family (duplex) units will be permitted along arterial streets. Low Density Residential areas are required to be served by public water and sewer and should be located close to schools, parks and shopping opportunities. LDR areas could also be developed as Open Space Neighborhoods.

Existing Low Density Residential areas are located in the southeast corner of the Township south of 6 Mile Road and east of Alpine Avenue. This area is served by public water and sewer. The largest subdivision in this area is Westgate. Another Low-Density Residential area, Marway Subdivision, exists along the east side of Alpine just south of 8 Mile. This subdivision is not served by public water and sewer.

Future LDR areas are expected to develop east of Cordes Avenue and south of Alpine Church Street (**excluding the Bristol-Cordes Preserve Zone as of the 2023 Update**) as utilities become available. Certain non-residential uses compatible with single family residences, i.e., parks, churches and schools are also permitted within the Low-Density Residential classification. Assisted living and elderly housing is recommended as a Special Land Use to accommodate the growing population of older people and to allow for a mix of housing types and age groups within a residential setting.

The south portion of Section 26 is recommended to remain in the LDR designation as it is within the utility service area. A sanitary sewer main is located in this area and because of this existing utility line the adjacent lands were also designated LDR in the 1988 and 2007 Plans.

LDR areas are designated north and east of Kenowa Hills High School which was completed in 1998 as single family dwellings are appropriate next to schools. This LDR area can be served by public water which was extended to serve the school in 1997. There are additional factors which will make this land attractive to developers such as the proximity of the I-96 interchange which makes access very easy to all parts of the metro area and the ongoing industrial development in nearby Walker.

MDR

Medium Density Residential

This land use category is designed to accommodate up to 8 dwelling units per acre with a variety of housing types such as two, three and four family dwelling units, including attached condominiums. Mobile home parks fit into this category due to their density. **The Master Plan does not recommend any new areas for mobile home parks as three parks already exist in the Township.**

The MDR areas illustrated on the Future Land Use Map represent existing uses such as the Strawberry Pines Creek condominiums on 6 Mile Road east of Alpine Avenue. Medium density residential areas can be located along or near urban arterial streets and can also serve as a buffer or transition zone between non-residential uses and low density or Residential Estate areas. Public water and sanitary sewer are necessary to serve this type of land use and these areas should not be zoned or developed until proper utility service can be extended to accommodate this type of intensive land use. The MDR designation is the same as the R-2 zoning district. **The Plan does not recommend any new MDR areas due to the large number of existing multi-family dwellings in the Township and because future multi-family dwellings can be accommodated within the Mixed Use PUD areas shown on the Plan.**

HDR

High Density Residential

High density residential areas are intended for multifamily dwelling units, such as apartments (renter occupied) or condominiums (owner occupied). A maximum density of 12.5 units per acre is recommended for this land use category which shall be served by public utilities. The Plan recognizes the existing York Creek Apartment development south of Lamoreaux Drive and east of Alpine Avenue which is close to commercial land uses and I-96.

Multi-family dwelling units also exist near the Westgate subdivision. Another high-density residential area, Churchill Apartments, is located along the west side of Alpine Avenue south of Alpine Church Street. HDR is the same as the R-3 zoning district. Between 1990 and the end of 1997, 1128 multi-family rental dwellings were constructed in Alpine Township which more than doubled the number of rental units which existed in 1990.

Rental housing accounts for about 44 percent of the total housing stock in the Township, though that percentage is decreasing with new owner-occupied units under construction and proposed. This high number of rental units has increased the need for Township services, especially fire, police and emergency medical services. Traffic volumes have also increased significantly in these areas due to the higher number of dwellings permitted. The current ratio of rental occupied to owner occupied housing (about 44 to 56 percent respectively) achieves a Master Plan goal of providing for diversified housing opportunities. **The Master Plan therefore recommends that no more land be planned for High Density Residential development.**

MPUD

Mixed Use Planned Unit Development

The Mixed Use PUD land use category is proposed as a means to encourage the creative development of residential areas and to implement an important objective of this Master Plan. Within a Mixed Use PUD a variety of dwelling unit types and lot sizes would be required. Single family detached dwellings may very well be the predominant type but two family and multi-family buildings up to eight units per building including townhouses are also permitted within this category in order to achieve the objective of this category.

The intent of the MPUD district is to encourage land developers to provide a variety of housing options within a unified development project with open space and other amenities for residents in exchange for higher density than allowed by the Low-Density Residential category. Residential uses would be allowed at a maximum overall density of 6 dwelling units per acre depending on compatibility with the uses and character of adjacent lands. Senior housing and related medical care facilities would be allowed at a density of 8 units per acre, although the Zoning Ordinance would allow the Planning Commission to approve a higher density for senior housing.

As a further means to encourage creativity in neighborhood design and function some limited office/service uses, and neighborhood convenience retail uses would also be permitted within a Mixed Use PUD. This will promote another Plan objective of locating employment opportunities within walking distance of residential areas and provide places and opportunities for interaction among neighbors. Commercial use within a Mixed Use PUD would be limited to a certain percentage of the site area perhaps in the range of 25 to 33 percent.

Specific design standards are required in MPUD developments with emphasis placed on preserving the natural terrain, providing usable open space, community, or village type greens to promote opportunities for social interaction, providing sidewalks and foot trails in open space areas along with a variety of lot sizes and building setbacks to create a sense of neighborhood which is often missing from traditional subdivision design. Any use within a MPUD shall be served by public utilities. MPUD areas, because of the flexibility proposed in design standards, can be appropriate in a variety of locations.

The Plan recommends several specific locations for MPUD development, **though these have been revised for the 2023 Update.**

- **The Northwest Corner of Alpine Avenue and Alpine Church Street (The Range at Alpine Development).** An MPUD is also designated northwest of the intersection of M-37 and Alpine Church Street. This is a highly visible area served by public utilities. The approved development plan, which was under construction at the time of the 2023 update, calls for commercial or office uses along the M-37 frontage and a compatible blending of residential with the Low Density Residential use planned to the west. While the western portion of the site was planned for Low Density Residential in previous plans, it was rezoned to MPUD during the approval of The Range at Alpine development. The Planning Commission determined that the portion of the site that fell into the LDR planning category met the vision for LDR, but that splitting the development into two zoning categories was unwieldy and unnecessary. For the 2023 Master Plan Update, the boundaries of the Mixed Use PUD in this area have been updated to reflect the new zoning.
- The area along the proposed Lamoreaux extension near where it would intersect with Cordes Avenue is no longer planned for Mixed Use PUD, and is instead planned for Low Density Residential, for the following reasons:
 - The hilly and wooded terrain is not suitable for the housing densities envisioned in Mixed Use PUDs.
 - The Lamoreaux Extension is a long-term infrastructure vision with significant barriers to short-term implementation.
 - The housing market analysis and public engagement determined that the niches in the housing market that need to be filled by new development are entry level owner-occupancy and senior housing. While Mixed Use PUD does not prohibit or discourage those types of development, it opens the door for high density rentals, which are not a preferred housing type, and are not in demand in Alpine Township as of 2023 according to the market study.
- **Alpine Golf Course on M-37 north of 7 Mile Road is no longer recommended for a Mixed Use PUD.** While the existing golf course can continue indefinitely it makes good planning sense to be prepared for other future uses and manage them to meet the goals and objectives of Alpine Township. This 120-acre site can

be served by public water and sanitary sewer and would have its primary access from M-37. **However, the site is now planned for LDR Low Density Residential, with a small commercial area along the Alpine Avenue frontage, for the following reasons.**

- The natural site features, rolling terrain, trees, a pond and possible wetlands can be better preserved in a lower density residential development. Cluster development may be an option for the site under a Residential Planned Unit Development, provided that the overall density does not exceed 3.2 units per acre as designated by the LDR category.
- Planning for Low Density Residential ensures compatible uses and design with the Marway Subdivision which borders the land on the north.
- The housing market analysis and public engagement determined that the niche in the housing market that needs to be filled by new development is entry level owner-occupancy. While Mixed Use PUD does not prohibit or discourage that type of development, it opens the door for high density rentals, which are not a preferred housing type, and are not in demand in Alpine Township as of 2023 according to the market study.

O

Office

Office development is similar in many ways to high density residential in terms of characteristics (traffic, appearance, height, etc.) and compatibility with other uses. This makes offices a suitable transition or buffer use in many locations. Office uses should be served by public utilities and generally located along or near the Alpine Avenue corridor, or along 4 Mile Road west of Alpine Avenue. Office uses at major intersections are desirable as such uses generate less traffic than commercial uses and serve as a buffer for less intensive uses located away from the intersection.

Office uses are specifically envisioned along 4 Mile Road between Bristol Avenue and Cordes Avenue. This designation was added during the 2021 Update to serve as a buffer from intensifying land uses in Walker.

C

Commercial

The majority of the commercial land uses recommended in the Plan are already generally located between 4 and 8 Mile Roads along the Alpine Avenue Corridor. This area serves both the day-to-day shopping needs of the community as well as the highway traveler. The commercial areas between 7 Mile and 10 Mile Roads consist of existing uses established long before current zoning regulations were adopted, and do not necessarily reflect current Township attitudes toward commercial development.

Commercial areas should be served by public utilities and developed with safe and convenient access through proper site plan review regulations. Transportation infrastructure, such as bike paths, sidewalks, and service roads, should be constructed at the time of development, consistent with this plan.

Commercial uses are also envisioned along 4 Mile Road between Bristol Avenue and Walker. This designation was added during the 2021 Update to serve as a buffer from intensifying land uses in Walker.

CPUD

Commercial Planned Unit Development

This land use category is provided as it is recognized that for certain areas in the Township, commercial uses may be appropriate if developed under the unifying, flexible and protective regulations of a Planned Unit Development.

A Commercial Planned Unit Development (CPUD) would permit a broad range of commercial uses which would be designed to provide shopping opportunities for nearby Township residents and workers and to lesser extent passing traffic. Other uses within a CPUD which would serve to support and complement the commercial uses would be offices and senior housing.

Commercial PUD's are expected to be developed under a single unifying site plan to ensure that all uses relate well to each other in both function and design. Any Commercial PUD, however, must be served by public sewer and water. A Commercial PUD would be developed according to specific site development standards to achieve the intended results of the district.

The 2023 Master Plan retains the CPUD designation for lands along both sides of the proposed Lamoreaux Drive extension in Section 26. Development requests for this land should be reviewed as a CPUD in order to provide flexibility in land use design so as to accommodate the future extension of Lamoreaux Drive and the north-south service drive to ensure internally consistent and efficient traffic and pedestrian access and to coordinate utility service.

The uses allowed by the CPUD area are appropriate for this location because of the existing commercial nature of Alpine Avenue and the high traffic volumes. The terrain in this area is hilly and wooded in parts. The flexible regulations of a PUD will allow a commercial development to better preserve these natural features. A CPUD will also allow for better coordination of public streets planned for this area and for a centralized storm water detention system.

I

Industrial

The Plan recommends that industrial development occur in those areas where utilities exist or are planned for, with access to an urban arterial (M-37) and railways and which can be protected from conflicting uses. Industrial land use areas are planned between 6 and 7 Mile Roads in Sections 23 and 24 as utilities are available in this area with some extension, railroad service is available in Section 24 and industrial uses and zoning already exist.

The 2007 Plan recommended one new area for Industrial land use on the north side of 7 Mile west of Alpine in Section 14. This approximate 60-acre site matches the industrial land use to the south with good access provided by 7 Mile Road which is a County Primary road. Public utilities have been extended to this site as they are available to the south of 7 Mile. All new industrial uses must be connected to public utilities.

No substantial revisions to the area planned for industrial have been made in subsequent Master Plan Updates, though small alterations have occurred.

S

Social and Cultural

The Future Land Use Map illustrates existing churches, schools, cemeteries, and the Alpine Historical Museum as Social, Cultural, and Institutional uses.

P

Public Parks and Recreation

This category recognizes government lands, buildings, and public recreation areas such as the Township offices, fire stations, the Alpine Township Sports Park, Westgate Park, Wahlfeld County Park, and Dwight Lydell County Park.

Future Park Areas

As the Township grows, space should be reserved for new parks, in order to preserve open space and provide recreational amenities to complement new development. The Township should consider acquisition of land within or near areas planned for growth for the eventual construction of a “Community Park”, as that term is defined by the Michigan Department of Natural Resources, although recreational and open space needs could be met by a greater number of smaller facilities, or by one larger facility.

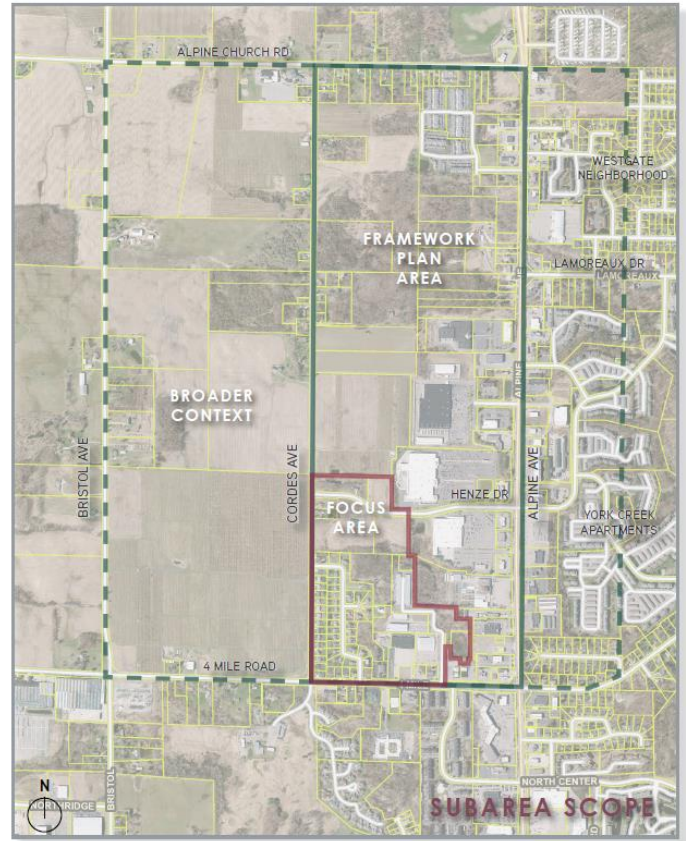
While planning for future parks is important, there should only be urgency to acquire park space in places where growth is imminent, and there is no need to acquire additional park land in the Agricultural Preservation area. Further, this planning goal could be achieved through a requirement for developers to preserve open space and recreation areas within developments, instead of the Township acquiring land. Regardless, outdoor recreation and open space should be preserved in places where housing will replace open areas.

Henze-Cordes Visioning Process

As part of the 2023 Master Plan Update, the Township considered the possibility of planning for a “town center” – a dense, walkable, mixed use area to be constructed within the Township. The leading candidate for the location of such a development was the corner of Henze and Cordes, near the new Township fire station and west of Wal-Mart and other major Alpine Avenue businesses.

Through the public engagement process, Township leaders found that there was a little appetite in the community to plan for that type of development, and the planning process shifted into a broader focus on the Cordes Avenue corridor, with a particular focus on creating a "Civic Ridge" around the new fire station.

The graphics on the following pages illustrate the process and conclusions of the visioning process.



CIVIC RIDGE

- MAXIMIZE VISIBILITY & CIVIC PROMINENCE THROUGH THE TOPOGRAPHICAL FEATURE OF THE RIDGE
- BLEND THE CIVIC PROGRAMMING WITH A SERENE, FORESTED, PARK-LIKE SETTING
- PRESERVE THE INTEGRITY & BIODIVERSITY OF THE ECOLOGICAL PATCH BETWEEN THE FIRE STATION & THE COMMERCIAL CORRIDOR
- CREATE A TRAIL & SIDEWALK SYSTEM TO CONNECT THE NEW RESIDENCES, CIVIC RIDGE, AND BRAMBLEBERRY NEIGHBORHOOD WITH THE MIXED USE NODE AT 4 MILE RD
- ENCOURAGE SHARED PARKING TO MINIMIZE THE STORMWATER IMPACTS

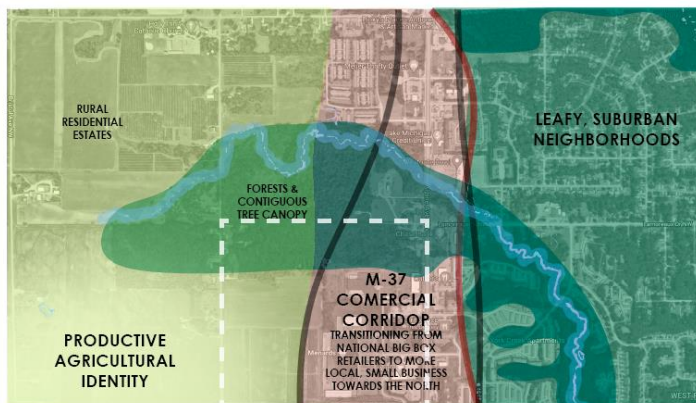
VISION STATEMENT & GUIDING PRINCIPLES

The ALPINE-CORDES SUBAREA ...

A PLACE where future growth and development is balanced with the preservation of productive farm lands and nature.

A BRIDGE blending community-focused and agricultural activities with a strong, visible commercial corridor.

ABUFFER with calm, safe, and friendly neighborhoods and pockets for recreation and respite.



IDENTITY

- CREATE A SENSE OF CIVIC IDENTITY UNIQUE TO ALPINE TOWNSHIP
- CELEBRATE THE RICH, AGRICULTURAL HERITAGE AND NATURAL FEATURES
- COUNTER THE HUSTLE & BUSTLE OF M-37
- PROVIDE OPPORTUNITY FOR COMMUNITY GATHERING AND CONNECTION

CONNECTIVITY

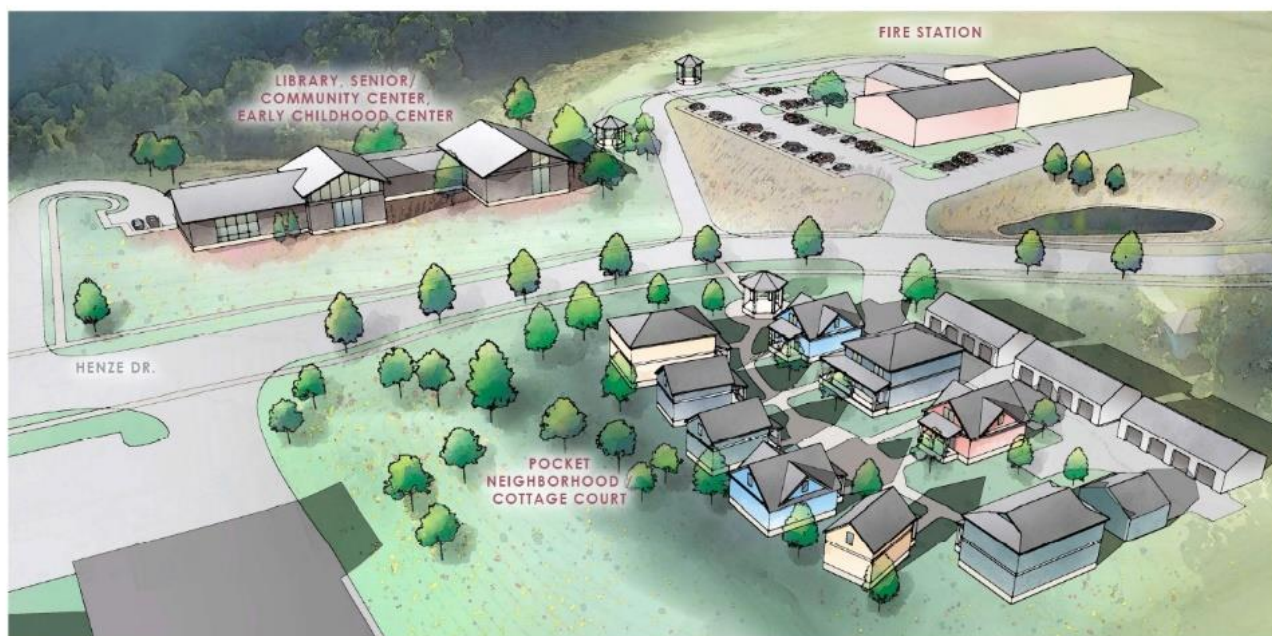
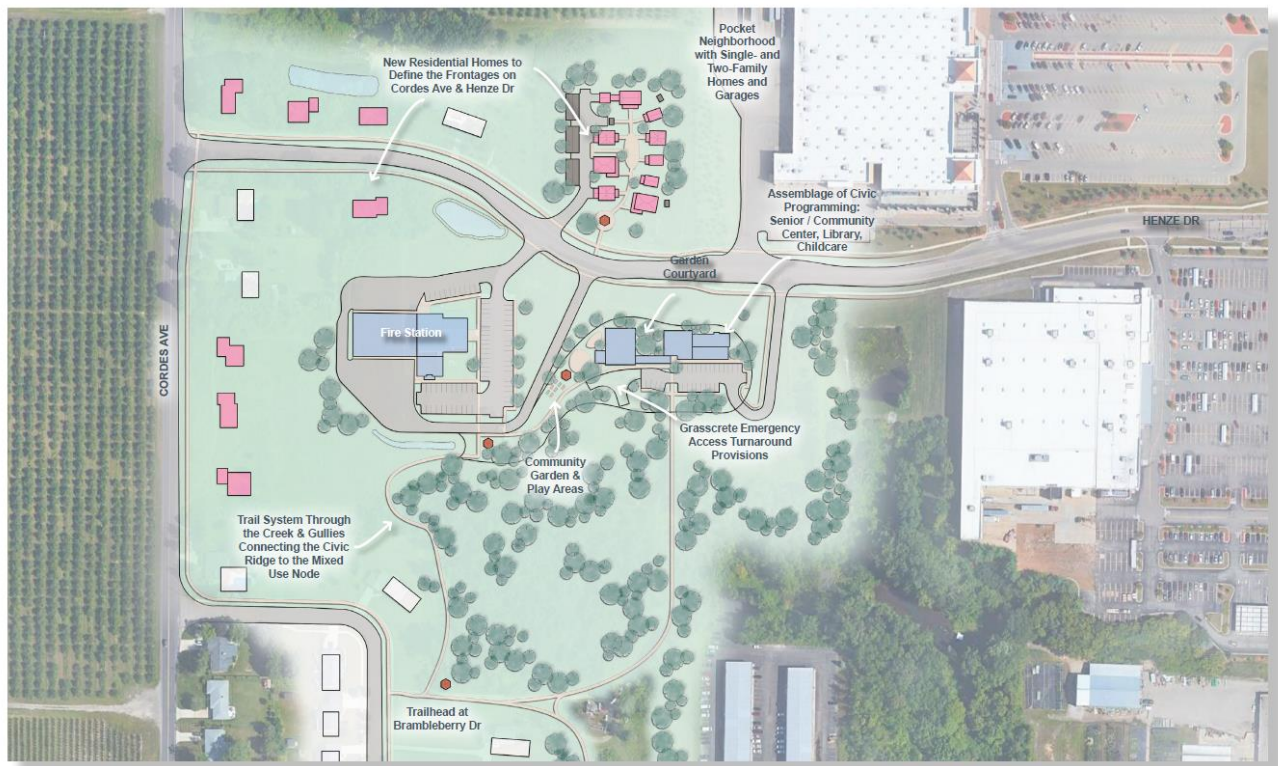
- CREATE A NETWORK OF POTENTIAL ROADS AND PRIVATE DRIVEWAYS TO SUPPORT VEHICULAR ACCESS
- IDENTIFY OPPORTUNITIES TO ENHANCE PEDESTRIAN SAFETY AND CONNECTIVITY THROUGH SIDEWALK EXTENSIONS AND TRAIL SYSTEMS
- SUPPORT AND PROTECT EXISTING ECOLOGICAL & LANDSCAPE CONNECTIVITY WITHIN THE NATURAL SYSTEMS

DIVERSITY

- FOSTER OPPORTUNITIES FOR MIXED USE DEVELOPMENTS AND REDEVELOPMENTS
- INTRODUCE A VARIETY OF HOUSING TYPES TO PROVIDE ATTAINABLE, QUALITY LIVING
- SUPPORT A RANGE OF CIVIC AND RECREATIONAL PROGRAMMING

EXISTING CONDITIONS: TOPOGRAPHY AS A FORM DRIVER





Sub-Area Plans

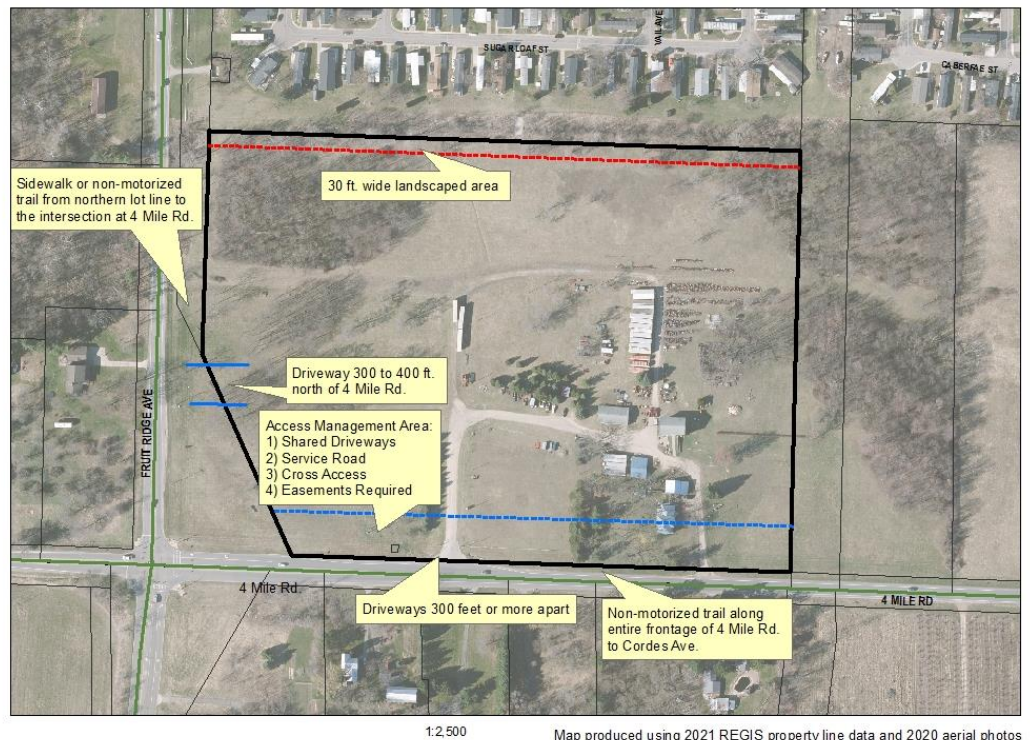
Section 35 of the Michigan Planning Enabling Act (PS 33 of 2008) as amended, allows the Planning Commission to adopt plans for geographic areas of the Township where a more detailed plan is needed due to unique physical characteristics. These detailed plans, known as sub-area plans, serve as the basis for review of site plans for the development of the geographic areas under consideration. In Alpine Township there are three such areas:

SUB-AREA 1: THE NORTHEAST CORNER OF 4 MILE ROAD AND FRUIT RIDGE AVENUE

This parcel consists of about 30 acres and has been zoned for commercial use since the 1960's. The site is utilized by Hofacker Equipment, a sales and service business for lawn and garden equipment. The majority of the property is vacant and has potential for development. Traffic on Fruit Ridge Avenue and 4 Mile is expected to increase due to development to the south in the City of Walker, development to the east on 4 Mile including associated uses with the Kenowa Hills High and Middle Schools.

Access Management (number and placement of driveways) is important at this busy intersection. In order to provide for safer driving conditions in this area, the number and placement of driveways along 4 Mile Road and Fruit Ridge is proposed to be limited according to Sub-Area Plan 1. These

driveways would be connected by private service roads or parking lots depending on how the property develops. Site development standards shall be the same as those established for Sub-Area 2. The future land use designation of 'Commercial' is planned for Sub-Area 1.



Map produced using 2021 REGIS property line data and 2020 aerial photos

SUB-AREA 2: THE NORTH SIDE OF 4 MILE ROAD BETWEEN WALKER AND CORDES AVENUES

Alpine Township decided to expand the planning area to help ensure there wouldn't be development pressure for intensive large-scale land uses that would negatively impact the Township's residential development goals on land near and adjacent to 4 Mile Road or negatively impact its farmland preservation goals on land further to the north (north of 5 Mile Road). Currently, the land to the south in the City of Walker is developing and is planned to continue to develop for mostly industrial uses.

The Township is looking ahead to provide opportunities for small-scale less intense uses that support neighborhood-scale needs and provide support services to the industrial uses to the south. The planned uses along 4 Mile Road are intended to serve as a buffer to the planned residential and agricultural uses further north of 4 Mile Road.

4 Mile Road is a three-lane county primary road and sees an Average Daily Traffic (ADT) volume of 12,000 vehicles per day near M-37 and a low of 7,000 vehicles per day near Fruit Ridge Avenue. Traffic will continue to increase because of continued development at the I-96 / Walker interchange in the City of Walker, continued industrial development along Northridge Avenue in the City of Walker, the location of Kenowa Hills Middle and High Schools and the general development of land along the corridor in both Alpine Township and the City of Walker.

This area is envisioned to provide support retail, commercial and office services for the industrial development to the south. Envisioned uses are to be much less intense in use and scale as compared to those uses on M-37. To minimize the potential negative impacts of strip commercial development, access management provisions limiting the number and locations of driveways will be required. In addition, drive-through establishments such as restaurants and oil change businesses will not be permitted since the operations of such (number of customers, nighttime headlights, large delivery vehicles during the night, etc.) are disruptive to adjoining planned residential areas.

At the time of this writing, there is no public gravity sanitary sewer serving this area between Walker Avenue on the west and halfway between Bristol and Cordes Avenues on the east. When gravity sanitary sewer becomes available to this area, all existing businesses must connect to the public sanitary sewer system. Any new development requires gravity sanitary sewer extension and all new businesses shall connect to gravity sanitary sewer.

Future Land Use Designation Commercial Border, Walker Avenue to Baumhoff Avenue:

The approximate 30 acres of land encompassing properties from Walker Ave. east to Baumhoff Ave. for a depth of about 500 feet from the right-of-way line has been commercially zoned since the 1960's. The depth of *Sub-Area 2* has been adjusted in spots to recognize existing property lines. However, most of the area is planned for commercial to a depth of 500 feet from the right-of-way line.

The area contains one parcel of 15 acres. The remainder of the sub-area consists of parcels ranging from one-half to five acres. Four single family dwellings occupy the smaller lots while the Kenowa Hills School Administration building occupies a five acre parcel. A couple of small businesses are located along this road stretch.

Single family dwellings are located to the north and are planned to the north, west and east within Alpine Township. To the south, the City of Walker Comprehensive Plan proposes 'Enterprise' (i.e. industrial uses) from Walker to Cordes Avenues.

Future Land Use Designation Commercial Border: Baumhoff Avenue to Bristol Avenue

The future land use designation of 'Commercial Border' is planned for that portion of Sub-Area 2 from Walker Avenue to Cordes Avenue. The uses along this stretch include two home and farmland. The west half is zoned RA, Rural Agricultural and the east half is zoned Agricultural.

Future Land Use Designation Office: Bristol Avenue to Cordes Avenue:

This area is located between the Bristol and Cordes Avenue intersections and is planned for office uses to a depth of 500 feet from the right-of-way line. Office uses were chosen because office uses are a good transitional use between the more intensive uses planned to the south in the City of Walker and the residential uses planned to the north in Alpine Township and because there is very little opportunity for office development elsewhere in Alpine Township. Financial institutions with drive-up windows are acceptable in this designation. There is one house and farmland all zoned Agricultural along this stretch.

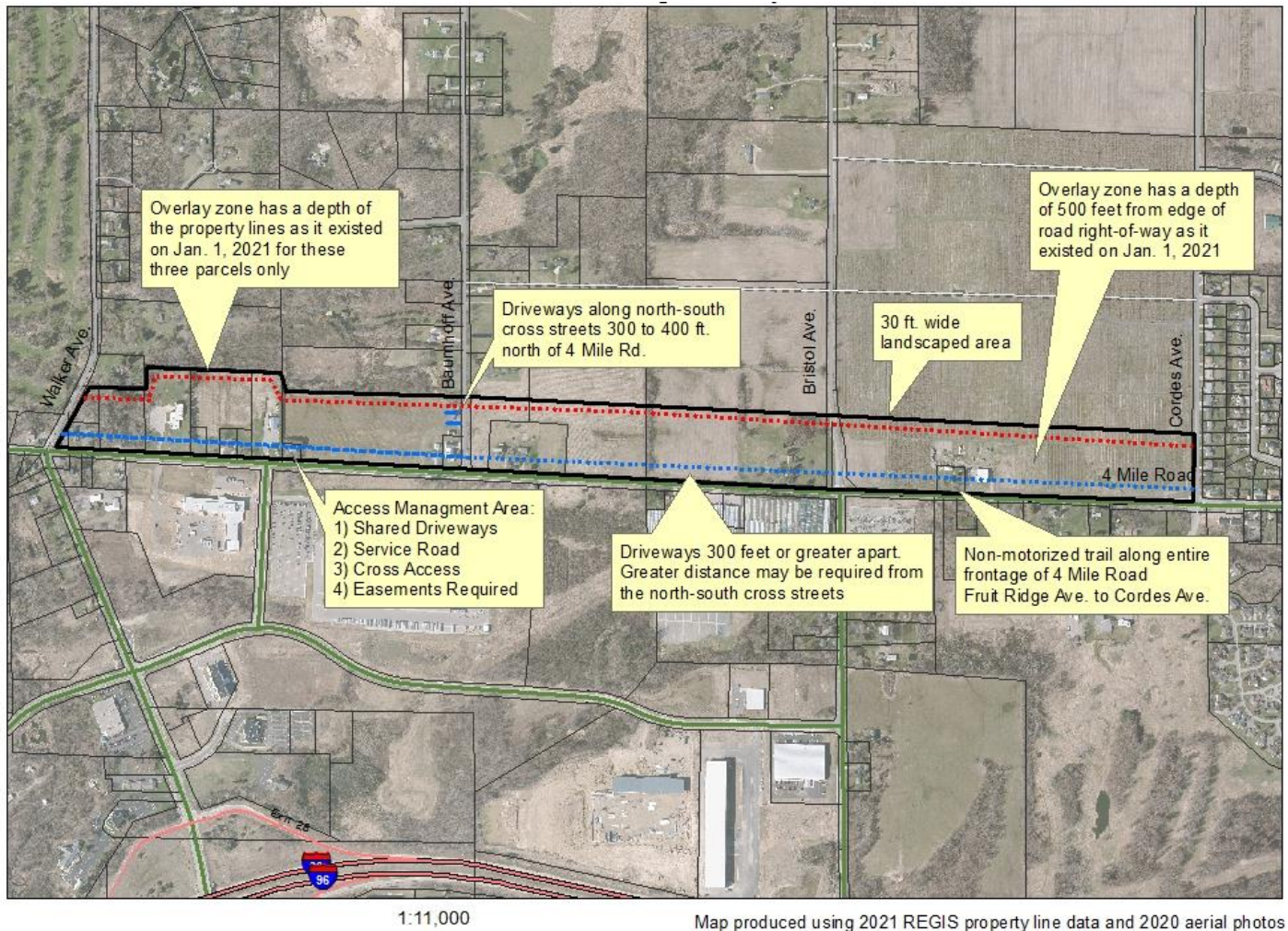
The site development standards for Sub-Area 2 are as follows:

1. All parcels shall be connected by a front or rear service road or by parking lots according to the Alpine Township access management standards contained in the Zoning Ordinance. The location shall be as illustrated in Sub-Area Plan 2. Cross access easements shall be provided to and from all property owners as parcels develop.
2. The number and placement of driveways shall be provided as illustrated on Sub-Area Plan 2. Temporary driveways shall be permitted in accordance with the procedures of Chapter 18 of the Alpine Township Zoning Ordinance.
3. Permitted uses shall be as set forth in the Alpine Township Zoning Ordinance for the C-4 zoning district or O-S zoning district as designated on the Future Land Use Map.
4. Building setbacks shall be as required by the applicable zoning district except:
 - Front: 70 feet from the edge of the 4 Mile Road right-of-way as it existed on Jan. 1, 2021 (20 feet future ROW + 50 feet = 70 feet). For a corner lot: 35 feet along the secondary street.
 - Rear: 50 feet.

5. Parking lot setbacks shall be as required by the applicable zoning district except:
 - Front: 40 feet from the edge of the 4 Mile Road right-of-way as it existed on Jan. 1, 2021 (20 feet future ROW + 20 feet = 40 feet).
 - Rear: 30 feet.

On Jan. 1, 2021 the 4 Mile Road right-of-way was 33 feet wide from the road centerline to the edge of the right-of-way. The setbacks listed above include a 20-foot requirement that could be future 4 Mile Road right-of-way. If 20 feet is eventually acquired, the resulting building and parking setbacks will be considered conforming.

6. Parking shall be located to the side or rear of buildings.
7. Buildings shall have a pitched roof or articulated roof line to reduce the scale of larger buildings and create a residential or village appearance. The Planning Commission may modify this standard in order to allow buildings which do not have pitched roofs but whose architectural features and design meets the intent of this standard.
8. Landscaping shall be provided around buildings.
9. Lighting on the north and east sides of the sub-area shall not exceed 23 feet above ground whether on poles or buildings. All lighting fixtures shall have cut off fixtures.
10. A 30 feet wide landscaped area shall be provided along the north portion of the sub-area. This area shall be planted according to the standards of the Alpine Township Landscape Guidelines. Berming or a screen fence shall be provided within this landscaped area in order to help screen the commercial uses from residential properties to the north and east. The landscaped area may be located north of the commercial zoning line but all landscaping must be located on the property.
11. A non-motorized pathway shall be provided along 4 Mile Road as properties develop. Walkways from 4 Mile Road to on site uses shall also be provided as required by the Planning Commission.





SUB-AREA 3: THE SOUTHWEST CORNER OF 6 MILE ROAD AND ALPINE AVENUE

The area includes the Rasch homesite at 930 6 Mile Road, extending easterly to contain the Circle K gas station site, then southerly to include the Perrin Motors dealership lots, the Oasis Hot Tubs property and the former Van Luster homesite at 5011 Alpine Avenue.

Their combined area is approximately twenty acres, which is divided into seven lots. Public water and sewer is either currently available or master planned for extension to the lots. This section of Alpine Avenue is an increasingly busy divided highway. The boulevard design restricts left turning movements from these sites but seems to facilitate high speeds and mass movement of vehicular traffic.

Only three lots are currently vacant. There is a remaining agriculture building on a lot west of Circle K gas station, a vacant lot between Circle K and Perrin Motors and the former Van Luster homesite at 5011 Alpine Avenue. The grouping of commercial businesses when combined with semi-truck deliveries, raises commercial-residential compatibility issues similar to those stated in Sub-Area 2. This sub-area plan seeks to balance the sustainability of local businesses with quality of life issues for present and future residential dwellers on adjacent lots.

There are two significant purposes for a sub-area plan in this location:

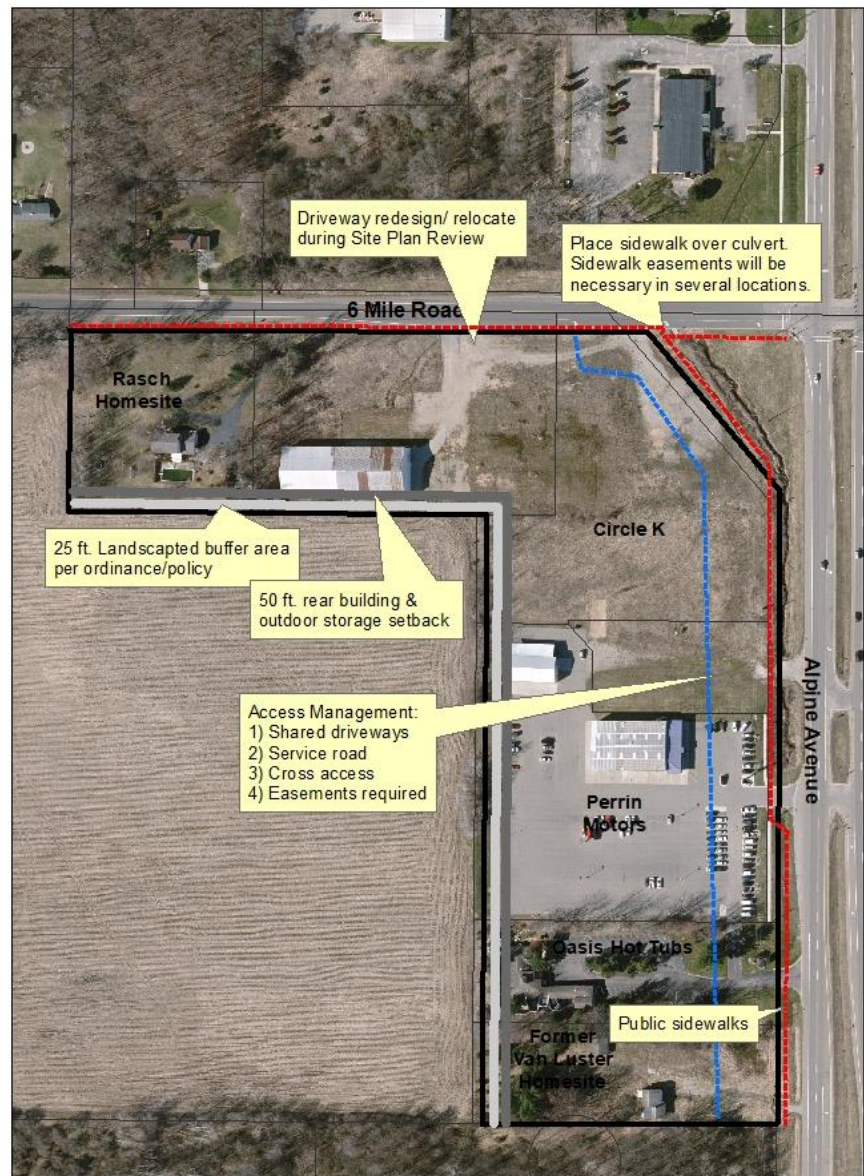
- Improved public safety via a comprehensive access management plan, and
- Improved quality of life via outdoor lighting controls, building and outdoor storage setbacks plus landscaped buffering of adjacent master planned residential properties.

Purpose 1 involves the installation of cross access parking lot connections, a private service road and shared driveways, as detailed on the following map. Both the Kent County Road Commission and the Michigan Department of Transportation endorse this type of access management strategy. Service roads and shared driveways can potentially improve public safety by decreasing trips onto Alpine Avenue as customers move from business to business. As sites develop or redevelop, these connections must be constructed to facilitate the creation of an inter-connected network. Cross access and shared driveway easements must also be provided by the site's developer at the time of site plan review.

Purpose 2 above indicates the need for site development standards similar to those noted in Sub-Areas 1 and 2. These design details are displayed on the following map and include:

- Permitted uses are those allowed in the Alpine Township Zoning Ordinance for the Commercial C-2 or C-PUD districts or the O-S, Office-Service district provided that the parcel in question is zoned C-2, C-PUD or O-S.
- Setbacks as required by the applicable zoning district, except for the following:

- Along 6 Mile Road, the rear building and outdoor storage setback shall be 50 feet from adjacent lots master planned for residential uses.
- Along Alpine Avenue, the rear building and outdoor storage setback shall be 50 feet from adjacent lots master planned for residential uses.
- All outdoor lighting fixtures as required by Chapter 18 of the Alpine Township Zoning Ordinance, except that parking lot light poles shall not exceed 23 feet above the surrounding average parking lot grade anywhere on the site.
- Public sidewalks shall be installed along Alpine Avenue and 6 Mile Road as properties develop.
- A landscaped buffer area must be installed and maintained adjacent to properties master planned for residential uses. This landscaped area must be at least 25 feet wide and include plantings consistent with the standards of the Alpine Township Zoning Ordinance. Berming or decorative fencing shall be installed as part of the landscaping buffer plan and shall be reviewed by the Alpine Township Planning Commission for adequacy and design. No parking, vehicle maneuvering or loading shall be allowed within the 25 foot landscaped buffer area.



1:2,500

Map produced using 2023 REGIS property line data and 2020 aerial photos

ALPINE

TOWNSHIP EST 1847

Future Land Use Map

Alpine Township

Adopted _____ 2023 by the Alpine
Township Board

LEGEND	
<div></div>	AP - Agricultural Preservation
<div></div>	C - Commercial
<div></div>	CB - Commercial Border
<div></div>	CPUD - Commercial Planned Unit Development
<div></div>	HDR - High Density Residential
<div></div>	I - Industrial
<div></div>	LDR - Low Density Residential
<div></div>	MDR - Medium Density Residential
<div></div>	MPUD - Mixed Use Planned Unit Development
<div></div>	O - Office
<div></div>	P - Public Parks/Recreation
<div></div>	RE - Residential Estate
<div></div>	S - Social, Cultural, & Institutional
<div></div>	Alpine Township Sub Area Plans

MAP LEGEND	
<div></div>	Section Lines
<div></div>	Parcels
<div></div>	Major Buildings
<div></div>	Municipal Boundaries
<div></div>	Proposed/Under Construction
<div></div>	Private
<div></div>	Railroads
<div></div>	Lakes & Ponds
<div></div>	Rivers & Streams

Created March 2022 within REGIS (Regional Geographic Information System) from data supplied by Alpine Township, the Kent County Road Commission and other official sources.
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0 1,125,250 4,500 6,750 9,000 Feet

MAP SCALE 1:37,500

Zoning Plan



Zoning System

PLANNING COMMISSION

A stable and knowledgeable Planning Commission is essential to the success of the zoning process. The responsibilities of the Commission include long-range plan formulation and the designing of appropriate and reasonable zoning ordinance regulations to implement the goals and objectives of the Master Plan. Adoption of the zoning ordinance by the Township Board then provides the legal basis for enforcement of the zoning ordinance's provisions. The ultimate effectiveness of the various ordinance requirements, however, depends upon the quality of ordinance administration and enforcement. If procedures are lax or handled in a sporadic and inconsistent manner, the results will be unsatisfactory at best.

The Planning Commission has the role of providing planning recommendations for the Township Board. This planning function is a continuous process and does not terminate with the completion of this Plan. Areas on the suburban fringe, like Alpine Township, are in constant change and planning is an ongoing process of identification, adjustment, and resolution of problems. To sustain the planning process and generate positive results, maintain momentum, and respond to change, the Plan should be reviewed and updated every three to five years to maintain the validity of its data and relevance as a policy document.

ZONING ORDINANCE

The zoning ordinance is made up of two major parts, the ordinance itself and the zoning map. The zoning ordinance is the text of the regulation, describing what is permitted in each zoning district. The zoning map identifies the location of the zoning districts. The zoning ordinance should follow the recommendations set out by the Master Plan, but it is the ultimate decider of what is and is not permitted in certain districts. In other words, the Master Plan is a recommendation and guide for good development, but the zoning ordinance is the letter of the law. Whenever the Master Plan is updated, the law is not changed until the Township Board approves a change to the zoning ordinance itself.

Matrix

The following table defines the zoning plan for Alpine Township, with each future land use category corresponding to one or more zoning classifications. When considering rezonings, Planned Unit Developments, and other decisions, the Planning Commission and Township Board should not stray from this chart, in order to ensure that development occurs only in locations where it is specifically planned, and the rural character of the fruit ridge is preserved. Using this chart will also ensure that housing densities are appropriate, and that new businesses are located and designed to maximize the use of existing infrastructure and transportation systems.

Future Land Use Designation	Corresponding Zoning Districts
AP, Agricultural Preservation	A, Agricultural
RE, Rural Estate	RA, Rural Agricultural OSN-PUD, Open Space Neighborhood Planned Unit Development ROSP-PUD, Residential Open Space Preservation Planned Unit Development (in areas zoned RA)
LDR, Low Density Residential	R-1, Low Density Residential OSN-PUD, Open Space Neighborhood Planned Unit Development ROSP-PUD, Residential Open Space Preservation Planned Unit Development (in areas zoned R-1)
MDR, Medium Density Residential	R-2, Medium Density Residential R-4, Mobile Home Park (only where such zoning currently exists)
HDR, High Density Residential	R-3, High Density Residential
MPUD, Mixed Use Planned Unit Development	MPUD, Mixed Use Planned Unit Development
O, Office	O-S, Office and Service
C, Commercial	C-1, Commercial C-2, Commercial C-3, Commercial C-4, Commercial CPUD, Commercial Planned Unit Development B-PUD, Business Planned Unit Development (if also partially master planned for industrial uses)
CPUD, Commercial Planned Unit Development	CPUD, Commercial Planned Unit Development
Industrial	I-1, Light Industrial I-2, General Industrial B-PUD, Business Planned Unit Development
Public Parks / Recreation	Alpine Township does not have a zoning district specifically for public parks, recreation, social, cultural and institutional uses. Existing such uses are zoned various zoning districts. Thought should be given to rezoning requests on or adjacent to such lands with these future land use designations as to not create use conflicts.
Social, Cultural & Institutional	

Residential Densities and Typologies

“Residential Typology” means the design of a housing unit. Single family homes are a “typology”, as are multi-family apartment complexes. There are numerous other typologies, which are sometimes called “missing middle” housing because they are neither single family, nor large complexes of multi-family, but somewhere in between. These typologies include townhouse, duplexes, and multi-family buildings with a small number of units.

“Residential Density” is the number of housing units per acre of land.

Typology and density are sometimes related, but not in all cases. For instance, the following are all housing developments with 1.0 units per acre:

- 12 single family homes, each on a 1-acre lot.
- 6 duplexes, each on a 2-acre lot.
- 12 townhouse-style condominiums surrounded preserved open space, on a 12-acre parcel.
- 1 apartment building, containing 12 apartments, surrounded by preserved open space, on a 12-acre parcel.

The following chart should be used to determine the appropriate Zoning Districts for different typologies and densities of housing. In all cases, residential densities should fall below the maximum appropriate density, though as noted in the chart, in some cases the housing typology may be flexible, provided that the density is within the appropriate range.

Future Land Use Category	Appropriate Density (Units Per Acre)	Typologies					
		Single Family Detached	Duplex/ Two-Family	Multi-Family (4 units or fewer per building)	Multi-Family (8 units or fewer per building)	Multi-Family (12 units or fewer per building)	Multi-Family (No limit per building)
Agricultural Preservation	Less than 0.05	AG	-	-	-	-	-
Rural Estate	Less than 0.66	RA ROSP-PUD OSN-PUD	OSN-PUD	ROSP-PUD OSN-PUD	-	-	-
Low Density Residential	Less than 3.22	R-1 ROSP-PUD OSN-PUD	R-1 ROSP-PUD OSN-PUD	ROSP-PUD OSN-PUD	-	ROSP-PUD OSN-PUD	-
Medium Density Residential	Less than 8.0	R-4	R-2	R-2	-	R-2	-
High Density Residential	Less than 12.44	-	R-3	R-3	-	R-3	R-3
Mixed Use PUD	Senior Housing: Less than 8.0 All Others: Less than 6.0	MPUD	MPUD	MPUD	MPUD	-	-

This plan also envisions possible amendments to the residential zoning districts, in order to more clearly implement the vision of the residential Future Land Use categories.

- Constantly monitor market trends to determine if the densities in the Ordinance are appropriate and responsive to the housing market and Alpine’s vision for its future.
- Consider permitting duplexes and/or attached single family units in the R-1 district, but only at a maximum density of 3.2 dwelling units per acre.
- Consider reducing the maximum allowable number of units in a multi-family building in the R-2 district to as low as four to reduce opportunities for large apartment buildings and incentivize the development of “missing middle” housing types instead.
- Review Section 2.37 to ensure that its provisions allowing “Underground Single Family Dwellings” are still consistent with Township goals, and with the Michigan Building Code, Kent County Health Department, and other regulations.

SENIOR HOUSING

This is not a future land use category in the sense that the Plan designates specific locations as would be done for a multi-family (apartment) land use. From a physical planning view, senior housing has certain location requirements such as good access, public utilities, proximity to convenience shopping and medical care facilities, and quiet surroundings. Senior housing typically generates very little traffic or outside noise and therefore, such a use could be a good fit in many locations.

In fact, senior housing would have less impact on a neighborhood than an elementary school. Given the present and future need for such facilities many communities allow them in all zoning districts except Industrial and Agricultural.

Alpine Township's Zoning Ordinance allows senior housing in the R-2, R-3, C-1, C-2, and C-4 zones as Special Land Uses. The permitted density is 8 dwellings per acre although the Ordinance language would allow the Commission to approve a higher density.

However, no vacant land is proposed for R-2 or R-3 land use. The Plan recommends that the Zoning Ordinance be amended to allow senior housing in the R-1 Zone as a Special Land Use based on future housing needs, the low impact of senior housing and the abundance of planned Low Density Residential (R-1 Zone) land which will provide a variety of locations for such use.

USES COMPLEMENTARY TO RESIDENTIAL AREAS

The Plan recognizes that it is necessary to provide for the establishment of certain non-residential land uses within residential areas subject to the implementation of measures which are designed to ensure compatibility. Such non-residential uses commonly include:

- Township government facilities
- Religious and educational institutions
- Recreational uses such as parks, golf courses and play fields
- Public utility facilities
- Home occupations.
- Senior housing and care facilities

Traffic generation, noise, lighting, appearance, drainage and trespass are factors which must be reviewed to mitigate possible negative impacts on residential uses.

Promoting Connectivity

In order to create a connected and safe community, the following changes to the Zoning Ordinance are recommended:

- Enhance standards for new roads in the Township, and make sure the standards apply to both public and private roads. Examples of enhanced standards could include the following but should be somewhat flexible based on the context of the road.
 - Required sidewalks.
 - Required curb and gutter.
 - Required street trees.
 - Required lighting.
- Require stub streets at the edges of development, to connect to new development. Do not make this requirement dependent on the approval of the neighboring property. Reserve strips are required at the end ends of these stubbed streets under the control of either the Kent County Road Commission or Alpine Township.
- Restrict cul-de-sacs to only situations where stub street requirements are met elsewhere in the development.
- Review Section 2.45 regarding Public Sidewalks and Walkways to ensure that it meets the connectivity goals of this plan and add standards for bike paths.
- Set an intersection density standard for new neighborhoods and developments. Intersection density is a measure of the number of routes that a pedestrian, cyclist, or motorist can take through an area. A greater number of intersections (and therefore options for routing) makes walking and biking safer and easier, and makes driving more efficient, thus reducing traffic.
- Amend Section 2.34 to place additional restrictions on private roads. While private roads may be appropriate in some instances, in general they promote disconnected transportation networks, and cause long-term maintenance problems due to inadequate funding for homeowners or condominium associations. Ultimately, in the interest of a well-maintained and highly functional road system in the Township, it is the intent of this plan for nearly all roads in the Township to be dedicated to the Kent County Road Commission, which has dedicated funding for their long-term maintenance.

Agricultural Preservation

The Township has a strong commitment to agricultural preservation and has put a robust system in place to preserve the Fruit Ridge, including the utility service boundaries, which have been unchanged for several Master Plan updates, and the “sliding scale” lot split system in AG Zoning District.

To complement those existing efforts, in order to ensure the preservation of agriculture and open space within the Agricultural Preservation Future Land Use Category, the following changes to the Zoning Ordinance are recommended.

- Prohibit Planned Unit Developments within the Agricultural Preservation Future Land Use area, in order to ensure that lot splits, housing development, and other growth takes place strictly within the parameters outlined by the Master Plan and Zoning Ordinance. Planned Unit Developments should only occur where growth and development are specifically called for in this plan, and even then, should only be approved if they meet the goals and vision of this Plan.
- Residential splits within the Agricultural Preservation Future Land Use category should be along the frontage of farms and orchards, allowing for undisturbed agricultural activity to continue on the remaining “back” of the parcel.



Rural lot splits for homes should be located along existing roads, leaving undisturbed farm or orchard land behind them.

Other Recommended Zoning Amendments

This plan also recommends the following Zoning Amendments:

- Update the limits on Family and Group Daycare Homes to reflect updated State regulations that allow more children in each category.
- Clarify the language in Section 2.33.a, which appears to allow high intensity uses to infringe upon lower intensity uses in “transitional” zones.
- Review the Commercial Building Design Standards in Section 2.44 to ensure they still reflect the goals and vision of the Township.
- Prevent disinvestment in older platted neighborhoods like Westgate by expanding the protections for existing non-conforming lots in Section 2.11.
- Revised the Mixed Use PUD Requirements to allow more flexibility in the mix of uses.
- Adopt regulations for utility-scale wind and solar energy facilities that protect the agricultural systems of the Township.

Action Plan



In order for the Master Plan to serve as an effective decision-making framework regarding the development of the Alpine Township, it must be implemented. This is done through a number of methods, including ordinances, programs, and administrative procedures. In addition to Zoning and policy recommendations of the previous section, the following actions should be taken to implement this Master Plan Update:

Table 33: Action Plan

Actions regarding Ordinances, Guidelines, Plans and Policies	Responsibility	Priority for this update
Amend the sanitary sewer and water service boundaries in Sec. 23 and 30.	TB	1
Amend Land Subdivision & Utility Extension Ordinance (Ord. #89-10) with the sewer extension policy if necessary	TB	2
Update the Sidewalk Ordinance (Ord. #94-5) add construction standards, including standards for bike paths, and streamline ordinance.	TB	3
Amend Unplatted Property Ordinance (Ord. #91-4) and Land Subdivision & Utility Extension Ordinance (Ord. #89-10) with complete streets components and reserve strips at road stubs	TB	4
Amend the private road and service drive provisions of the Zoning Ordinance (Sections 2.34 and 18.06) regarding approval process, construction standards, require road stubs with reserve strips	PC, TB	5
Research the possibility of requiring Environmental Impact Assessments for other types of developments besides PUDs (Sec. 22.03), esp. fiscal & community impact analysis	PC, TB	6
Consider creating a Pathways Committee, and determine the feasibility of a dedicated pathways millage.	PC, TB	7
Determine a framework for acquiring new parkland in areas targeted for growth.	PC, TB	8

Appendix



Kent County Road Commission Complete Streets Policy

Kent County Road Commission Non-Motorized Facilities Policy


Alpine Township Finance Primer and Capital Improvements Plan 2023-2029

2016-2020 Alpine Township Community Recreation Plan


2003 Alpine Township Stormwater Master Plan

Water System History

Sanitary Sewer System History

	KENT COUNTY ROAD COMMISSION BOARD POLICY	No. 508
		Effective Date 05/26/15

Complete Streets Policy
Policy authored by Engineering Division
<p>The Michigan Legislature adopted Public Acts 134 and 135 of 2010 to enact the Complete Streets Legislation. This legislation requires the Michigan Department of Transportation and local governments to consider all users in transportation related projects.</p> <p>The Kent County Road Commission recognizes the importance of Complete Streets and Context Sensitive Solutions and will work with Townships and local Municipalities to allow the installation of street lighting, sidewalks, bike paths, non-motorized trails, trees and other street scape amenities, within the public road right-of-way.</p> <p>DIVISIONAL RESPONSIBILITY</p> <p>The Managing Director is responsible for overseeing compliance with this policy as implementation will be carried out by different Departments working together.</p> <p>PROCEDURES</p> <ol style="list-style-type: none">1. Departments will continue to collaborate with Townships and local Municipalities to place transportation facilities where the need justifies the investment.2. It is recognized that context sensitive solutions are important to preserve the character, environment, historical aspect of the area's in which work takes place. Departments will work within the right-of-ways and easements to achieve these goals.3. Departments will consider all appropriate modes of transportation. Location; safety, classification of roadway, cost, location of other or alternative routes, and surrounding environment are all part of the analysis that will go into the final decisions for each project. <p>All proposed complete street work will be reviewed to ensure compliance with AASHTO, MDOT, Americans with Disabilities Act, and Kent County Road Commissions Street Standards, Non-Motorized Trail Standards, and Tree Planting Policy.</p>

 <p style="text-align: center;">KENT COUNTY ROAD COMMISSION BOARD POLICY</p>	No. 505
	Effective Date 01/01/00
	Revised Date 02/09/10
Non-Motorized Facilities	
Policy authored by	
<p>The Kent County Road Commission supports the development of non-motorized trails and the establishment of a system of integrated bike routes throughout Kent County and between adjacent Counties. In order to provide safe and convenient non-motorized transportation facilities, the Kent County Road Commission has adopted the following guidelines to be used by the Kent County Road Commission or by requesting agencies in conjunction with the existing permit procedures when the facilities are to be located within the road right-of-way.</p> <ul style="list-style-type: none"> A. Non-Motorized Paths (separated from the roadway) B. Paved Shoulders (along existing roads) C. Signed Routes (on existing roads) D. Sidewalks <p>Providing these facilities is generally considered a responsibility of the local unit of government in which it will be located. This policy does not preclude the Kent County Road Commission from constructing bike lanes within curbed roadways in addition to or as an alternative to an independent non-motorized facility. The Road Commission may be involved in certain instances in providing in whole or in part similar facilities as they may determine.</p>	

A. NON-MOTORIZED PATHS

Non-Motorized paths are considered to be a facility that is separated from the motorist-traveled portion of the roadway. It is also considered to be different than a sidewalk, in that sidewalks have specific statutory status especially as it pertains to construction and liability matters.

Such non-motorized paths will not be signed, or designated, as “exclusive” bike paths because they are intended for multiple non -motorized uses and all users should be encouraged to use the facility rather than the roadway. Existing sidewalks shall be enlarged to provide for the non-motorized path.

The following gives guidance for designing a facility to be constructed on County road right-of-way.

Width and Clearance:

The paved width and operating width are primary considerations. A facility intended for two-way traffic should have a minimum width of eight feet, or for one-way traffic a minimum width of five feet, in order to accommodate bicycle traffic as well as other non - motorized uses such as walking, running, wheelchairs, wagons and roller skates.

A two feet wide (minimum) clear graded area is recommended along both sides of the paved path and vertical clearance to overhead obstructions should be a minimum of eight and one-half feet. All bridges, culverts etc. needed to accommodate these facilities should provide for these same minimum standards.

A wide separation between the facility and the roadway is desirable for safety reasons. The facility should typically be located one foot off the property line and provide minimum clearances of six feet from back of curb on roads with curb and gutter; ten feet from edge of roadway pavement (where there is no ditch), or twenty feet from centerline of right-of-way (where there is no ditch), or one foot behind the top of drainage backslope (where ditch exists), whichever is greater. These clearances shall also be used as a guide for allowing deviations from the location of one foot off the property line.

Where these minimum requirements cannot be obtained in the right-of-way or where there is evidence that a roadway will require widening beyond two lanes, consideration must be given to acquiring additional right-of-way to accommodate the proposed roadway, the facility, and the minimum clearances and widths stated.

Pavement & Structures:

The type of material, thickness of surface and base are of primary importance as well as the proper design of all structures needed to accommodate the facility. These designs should be determined by engineers after an analysis of soils, wheel loads, and other site-specific requirements are considered.

Normally, however, the pavement should be a minimum of four inches concrete or three inches bituminous surface over six inches of processed road gravel. A cross slope of two percent should be provided to allow for proper drainage.

Signing & Marking:

Adequate signing and marking may be important safety considerations. General guidance is provided in the Michigan Manual of Uniform Traffic Control Devices. Only signing necessary for safety should be erected so as not to create confusion or restrict vision.

Signing and marking shall be reviewed and approved by the Road Commission's Traffic and Safety Department.

Design Speed, Grades and Alignment:

Many other factors must be considered in the design of the facility. Design speed of twenty mph is normally considered adequate except for steep grades where a higher design speed should be used.

Grades and pavement elevations should be given special consideration in relation to the roadway facility and adjoining properties so as to cause minimal concern for safety, drainage, driveways, yards, etc. Profiles of the curbs and/or roadway should be utilized as a guide for such determination.

Changes in alignment and curves to accommodate such changes should be adequate to provide for the design speed selected and the safety to users of the facility.

Intersections:

Where the facility crosses a roadway, special consideration for selecting the proper location and placing adequate controls must be given.

Operation & Maintenance:

The agency responsible for the control, maintenance and policing of non-motorized paths will be established prior to construction approval. A written agreement specifying local responsibility for maintenance, repair and restoration of the path and stating the local community will save harmless, indemnify, represent and defend the Road Commission for all claims for as long as such path exists must be executed prior to issuance of a construction permit by the Road Commission.

The Road Commission will be responsible only for reviewing plans to assure conformance to the guidelines set forth above relative to geometrics within the right-of-way and for issuance of a construction permit.

Attached as Exhibit "A" is a typical agreement that could be used and modified if necessary to clearly establish responsibilities for such facilities on the road right-of-way.

B. PAVED SHOULDERS

There is considerable emphasis today on the need for paved shoulders to accommodate non-motorized transportation, particularly in urban areas or near schools.

The Road Commission will continue to recommend the construction of sidewalks or non-motorized paths where it is deemed advisable for safety reasons. Generally, such recommendations will be made when traffic volumes or non-motorized uses are exceptionally high or where adequate right-of-way is available.

When the Road Commission allows for construction of a paved shoulder it shall be their policy that:

1. The cost for constructing the paved shoulder is the responsibility of the requesting parties, unless otherwise agreed. The requesting party may also be required to resurface the existing roadway, dependent on it's condition.
2. The paved shoulder will not be designated as any special facility, such as a bicycle path, but be treated as a normal road shoulder.
3. Both shoulders shall generally be paved along a section of roadway as opposed to only paving one side.
4. All construction shall be done by or under the direct supervision of the Road Commission in accordance with current standards of construction and design. The width to be a minimum of four feet on uncurbed roadways and six feet on curbed roadways unless a special exception is granted. Bituminous surface shall be a minimum thickness of three inches.
5. The Road Commission will only perform routine maintenance of the shoulders following completion and acceptance of construction. Pathway maintenance is the responsibility of the requesting agency.

C. SIGNED ROUTES

In addition to providing for non-motorized paths as a separated facility from the motorist traveled portion of the roadway and the use of paved shoulders to accommodate non-motorized uses, there may be times when it would be desirable to sign an existing roadway (without paved shoulders or separated path) as a “Bike Route”. This may also be needed for the purpose of providing continuity of routes within the County or with other counties.

An agreement with the local unit of government shall be executed assigning certain responsibilities for signing, maintenance and liability. (See Exhibit A)

D. SIDEWALKS

Sidewalks constructed by local units of government on county roads shall conform to the following general guidelines and receive the approval of the Kent County Road Commission before construction begins.

1. The sidewalk shall be five feet in width and be generally located one foot off the property line.
2. Current construction standards of the Michigan Department of Transportation shall be used for the design and construction of all sidewalks.
3. Sidewalk elevations shall be determined by the Kent County Road Commission for uniformity in relation to the profile or proposed profile to curbs and/or roadway.

Since the statutes are quite specific regarding sidewalk construction and liability, an agreement will not be necessary. Approval of the design and construction plans, however, by the Kent County Road Commission is a prerequisite before locating on a county road and issuance of a construction permit.

**EXHIBIT “A”
AGREEMENT**

WHEREAS, the _____ (hereinafter referred to as _____) is a municipal corporation organized under the laws of the State of Michigan, and is located in the County of Kent, State of Michigan, and:

WHEREAS, the Board of County Road Commissioners of the County of Kent (hereinafter referred to as “BOARD”) is a public body corporate, with jurisdiction and control over all county roads located within the County of Kent, State of Michigan, and;

WHEREAS, the _____ desires to build non-motorized transportation facilities or bicycle paths (hereinafter referred to as “pathway”) in accordance with plans and designs prepared by its engineer within right-of-way under the jurisdiction and control of the BOARD; more specifically:

WHEREAS, because the intended location of the pathway is within right-of-way under the jurisdiction and control of the BOARD, it is necessary for _____ to obtain the consent of the BOARD prior to commencing construction of the pathway, and;

WHEREAS, it is the desire and objective of the parties hereto, to set forth their mutual understanding with respect to the conditions under which the BOARD will grant its consent to the _____ to construct pathway within county road right-of-way;

NOW, THEREFORE, in consideration of the aforementioned premises and in furtherance thereof, it is hereby mutually agreed as follows:

1. _____ will apply for a permit from the BOARD and agrees to abide by all terms and conditions imposed upon permit applications.
2. _____ will construct the pathway in accordance with the plans and design prepared by its engineer and approved by the BOARD. Any deviation from the plans and design must receive the prior written approval of the BOARD.
3. _____ agrees to assume total and exclusive responsibility for maintenance, repair and restoration of the pathway for so long as the pathway may exist. If, for any reason, the pathway is removed by _____, _____ agrees to restore the county road right-of-way where the pathway is located, to a condition reasonably similar to that in effect prior to the construction of the pathway. _____ further agrees to remove or relocate the pathway at its expense when necessary to accommodate a roadway improvement of the Board.

4. Upon completion of the installation of the pathway, and final approval having been granted by the BOARD to the _____, _____ agrees to save harmless, indemnify, represent and defend the BOARD from any and all claims for bodily injury or property damage or any other claim relating to or arising out of the operation, use or continuing existence of the pathway within county road right-of-way.
5. This agreement shall be in effect as between the parties hereto upon the affixation of the signatures of the duly authorized officers of the BOARD and _____.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized officers and their seals affixed hereto the day and year written below.

WITNESS: _____ BOARD OF COUNTY ROAD COMMISSIONERS,
_____ COUNTY OF KENT

By: _____
Chairman

By: _____
Vice-Chairman

By: _____
Commissioner

By: _____
Commissioner

By: _____
Commissioner

_____ TOWNSHIP OF

_____ By: _____

_____ By: _____

Date: _____



2023-2029

Alpine Township Capital Improvements Plan



Adopted by
Alpine Township Board
June 19, 2023

Prepared by Susan Becker,
Planning Director

5255 Alpine Avenue
Comstock Park, MI 49321
(616) 784-1262
www.alpinetwp.org



2016-2020 Alpine Township Community Recreation Plan



Alpine Township Stormwater Master Plan

Alpine Township

April 2003

2020217



Alpine Township
Kent County, Michigan



Roger G. Laninga
Kent County Drain Commissioner

Prein & Newhof

WATER SYSTEM HISTORY

In the late 1950's, Everett Ladd began building a small subdivision of 76 lots which is now a part of the larger Westgate subdivision. Since the Township was not ready to get into the business of public water treatment, Mr. Ladd provided a private water system for those first homes. But that new development brought an awareness of the need for future utilities, which the Township Board began to explore. By 1961, Alpine and Plainfield Townships contracted with the engineering firm of Williams and Works to develop a plan for linking the private Westgate water system and two other existing systems within Plainfield Township. The plan also called for drilling new wells near the Grand River in Plainfield Township and adding a pumping, purifying and softening plant. The initial system needed at least 1,000 customers, so the two Townships worked together to form this new public water system. On December 8, 1961, Alpine and Plainfield Townships signed a contract to put them in the water business. Alpine Township became a retail customer of Plainfield Township; as such, Plainfield supplied public water to residents within Alpine Township and billed them for the same.

Through the 1960's and 1970's, most of the water system and customers were within the Westgate subdivision, with some smaller projects being developed off Lamoreaux Drive. The first water tower in the Township was constructed behind Westgate Bowling Alley north of Lamoreaux Drive sometime prior to 1963. In 1986-87, the Township, with the cooperation of its residents and businesses along Alpine Avenue, constructed a huge water project which extended down 7 Mile Road to Alpine Avenue, down Alpine Avenue to 4 Mile Road and 4 Mile Road west to Cordes Avenue. A second water tower was built just north of 4 Mile Road and east of Cordes Avenue. This new water system brought high pressure water with better fire flows to Alpine Township.

In 1996, Alpine and Plainfield Charter Townships forged a 425 Agreement in an effort to bolster and protect the water system investment made by the two communities [P.A. 425 of 1984, Intergovernmental Conditional Transfer of Property by Contract Act]. The 425 Agreement, which extended for a period of 50 years, covered the southern tier of sections within Alpine Township (Section 31-36) as well as Sections 13, 23, 24, 25, 26, the east half of Section 14, and the southeast quarter section of Section 27. In addition, Alpine Township approached Plainfield Township to immediately add Wahlfield Park in Section 11 and the southern half of the southwest quarter section of Section 12. This was due to Kent County's interest in developing Wahlfield Park and the discovery of higher nitrate levels in the existing homes tested in Section 13 during analysis conducted in 1999 as part of the overall Marway Plat area.

In 1997, Alpine Township built a water line down 4 Mile Road from Cordes Avenue west to Fruit Ridge Avenue, north on Fruit Ridge Avenue and then cross country to Hendershot Avenue and looping back to 4 Mile Road. This system was developed to service Kenowa Hills Public School District's newly proposed high school, their existing high school (that was converted to a middle school) and their nearby Administration building. An additional benefit to this water main extension was getting public water to Alpine Meadows mobile

home park where 381 units had been experiencing water and sewer problems over the years. This major investment to benefit the school district and mobile home park required the Township to finance a project for the first time in years through the public bonding process. Since this new water line was being built in front of many homes, some businesses, and several large tracts and vacant properties, the Township made a one-time offer to allow these property owners to participate in a voluntary assessment roll for the cost of water main in front of their property (or a minimum frontage amount with the balance deferred on larger tracts). Those properties that chose a voluntary assessment roll to be paid over a period of ten years, the mobile home park and school shares of the assessment were part of a Special Assessment bond. The annual principal and interest costs for those amounts are anticipated to be paid by the special assessments. The remaining costs (deferred amounts) were funded through a General Obligation bond. The Water Fund pays those costs through a Water Capital Improvement Charge and trunkage/connection fees. Both bonds are scheduled to be paid in full by 2012.

In 1999, Alpine Township entered into a 40-year contract with Plainfield Charter Township for Plainfield to supply, sell and deliver water to Alpine Township. (Agreement #98-28)

In 2009, Alpine and Plainfield townships formally dissolved their 425 Agreement because the investment in the water system was deemed secure and the other provisions for mutual services were deemed no longer practical. After the 425 Agreement was dissolved, Alpine Township retained its established water service boundary which includes Sections 13, 23-26 and 31-36 in their entirety along with the SE $\frac{1}{4}$ of Section 11 and 27; the SW $\frac{1}{4}$ of Section 12 and the West $\frac{1}{2}$ of Section 14. With the dissolution of the 425 Agreement, Plainfield Township assumed ownership of the water distribution system.

As part of the planned Westgate area water improvements, in 2011 the original cast iron mains were replaced with new ductile iron mains on Westgate, Lantern and Brandywyne Drives along with Westshire Dr. from Alpine Ave. to Westgate Dr. and Stony Creek Ave. from Lantern Dr. to Lamoreaux Dr.. The project increased water pressure in the area and provided additional fire flows to Stony Creek Elementary School.

Planning has begun to replace the water tower located behind Westgate Bowling Alley north of Lamoreaux Drive. The current tank, the oldest in the system, has a capacity of 200,000 gallons. Property has been purchased to locate a 500,000 to 750,000 gallon replacement tank on York Creek Drive.

Responsibilities for the Water System:

Plainfield Charter Township maintains the water lines within Alpine Township. Alpine Township's responsibility is to assist in planning for system capacity and system improvements.

SANITARY SEWER SYSTEM HISTORY

In 1966, the Township Board first began to work toward getting public sanitary sewer to the Township. Septic systems within the Stowell Terrace Plat in Section 36 were found to be polluting York Creek. In November 1967, the Board approved the location, acquisition and construction by the County of the North Kent Sewer System; which Alpine and Plainfield Townships and the City of Rockford had initiated in 1966. Over the next two years, the first sewer trunklines were built within the two Townships and north to the City of Rockford. Kent County agreed to finance, operate and maintain the sewer system. The County then entered into an agreement with the City of Grand Rapids for the treatment of sewage delivered from the North Kent Sewer System.

In 1972, the North Kent Sewer System was extended to portions of Cannon Township, and Courtland Township was added to the system in 1979. Throughout those years, various trunklines and subtrunks were added to the system and problems with odor and scale in the pipes were documented. From June 1988 to January 1990, the engineering firm of Fishbeck, Thompson, Carr and Huber conducted various studies and made recommendations for the system regarding scale build-up and pH conditions.

Concurrently (in 1973), Alpine Township was expanding its new sewer system. A public hearing was held in 1973 to notify residents of the public health concerns in the Westgate subdivision area, where pollution of Strawberry Creek and the failure of septic systems were being evidenced. In 1976-77, a \$3,000,000 sanitary sewer project was undertaken in the Westgate subdivision with the assistance of federal funding. Sewer on the west side of Alpine Avenue from Alpine Church Street to Lamoreaux Drive was added to this project, as was an extension down Alpine Church Street to Holy Trinity Church and School and cross country to Alpine Elementary School.

In 1991, a trunkline was extended from 6 to 7 Mile Road to service areas in western Plainfield Township and areas east of Alpine Avenue. Special assessment areas for sewer extensions were made in:

- 1) 1979 - the east Alpine Avenue commercial areas, north of 6 Mile Road,
- 2) 1986-87 - 7 Mile Road businesses west of Alpine Ave. and Mill Creek Lane off Division Ave.,
- 3) 1991 - 7 Mile Road, from Mill Creek Lane west to Alpine Baptist Church,
- 4) 1993 - Division Avenue, from the power line to just south of Meadowfield Lane,
- 5) 1995 - Vinton Avenue sewer from Alpine Ave. to Grand Rapids Sash & Door at the bend in the road and
- 6) 2000 - 4 Mile Road / Fruit Ridge Ave. area to serve the Kenowa Hills Middle and High Schools along with the Alpine Meadows mobile home park. Sewage lines flow south into the City of Walker.
- 7) 2001 - 4 Mile Road from Hachmuth Dr. to Alpine Avenue.

There have been other smaller projects that have utilized special assessment districts that involved only one or two properties as a means of financing sewer projects (i.e. Metzgar Court, Rusche Drive, Fruit Basket Flowerland, and Pleasant Street). The Township does have a Poverty Exemption Policy in place for residents who own and

occupy their home that lies within in special assessment district and who may qualify for such an exemption (Ord. No. 04-02).

In September 1995, the North Kent Sewer System (Alpine, Cannon, Courtland and Plainfield Townships along with the City of Rockford) experienced collapse of a concrete pipe on Coit Avenue, just west of Plainfield Avenue. In December 1996, a portion of the Belmont Bypass concrete sewer collapsed due to corrosion of the pipe. In January, a study contracted with Kent County and the engineering firm of Prein and Newhof, at the request of the North Kent Communities, documented the severe corrosion of the Northerly Trunk, Belmont Bypass and West River Trunk through video and visual inspections and chemical testing. And on January 22nd of that same month and year, a portion of West River Drive concrete sewer collapsed due to corrosion of the pipe near the Grand River crossing. In May 1997, a segment of concrete forcemain from the 4 Mile Road Lift Station collapsed.

In 1997, the five communities of the North Kent Sewer System decided to unite as the North Kent Sewer Authority (NKSA) for the purpose of bonding for the improvements recommended in the original and subsequent Prein and Newhof studies, and to work toward the future ownership, operation and maintenance of the North Kent Sewer System. The original bonds to Kent County have been paid in full, but per the contract terms that existed, the County would continue to own, operate and maintain the system until the year 2017 or the expiration of the contract with the City of Grand Rapids for sewage treatment in November of 2008.

Issues with Kent County and the City of Grand Rapids

In November 1998, the City of Grand Rapids proposed new contracts to all of their wholesale and retail community customers. The first contract related to water and sewer services, while the second, which was tie-barred to the first contract, dealt more with the development of a regional funding source for programs, facilities, and/or other regional amenities that would be approved by a board of representatives from Grand Rapids and the customer communities. The NKSA contracted with their engineers and an independent financial consultant to review the impacts of these new contracts on the NKSA municipalities. Both consultants reached the conclusion that the costs from the new Grand Rapids' contracts shifted a higher burden of costs to the customer communities, and were in fact very similar to the costs of building its own new treatment facility.

The NKSA and elected officials from all five member communities met for a series of meetings to review information and discuss options. Although there was a great deal of discussion about staying with the Grand Rapids' system, the community leaders did not feel that the shifts in costs were reasonable or that all aspects of the contracts were legal. NKSA expressed their concerns to Grand Rapids about the lack of representation of NKSA in the initial discussions, the absence of a voice from the wholesale communities in the negotiations, and the legal and cost shift concerns. NKSA continued to attempt to negotiate with Grand Rapids and the UAB (Utility Advisory Board). Meanwhile, the NKSA communities continued on a parallel path to apply for a discharge permit from the DEQ for a new wastewater treatment facility.

The NKSA communities' attorney contracted with the engineering firm of Prein and Newhof to undertake a study to determine the extent of damages and history of the same in order to determine if the County was in any way liable for some of these damages. That report was released in November 1999. The communities attempted to discuss and work through these issues with the County. The NKSA suggested that the County and member communities could amend their contract to reflect a new relationship between them in terms of ownership, responsibilities, future liability and perhaps future bonding.

After the notice of intent to bond was approved by four of the communities, Plainfield Township's Board, the community within which the proposed wastewater treatment facility would be located, put the question of bonding for a plant to their citizens. The vote was approved, and appeared to be our best chance of negotiating with the City of Grand Rapids. The City of Grand Rapids/Utility Advisory Board made a final offer on changes to the new contracts for services to the NKSA. The contract still contained charges based on land area (20%), included charges based on plant flow rather than billed flow (which tilts costs toward systems like the NKSA that have improved the inflow and infiltration into their system), and charges wholesale customers a connection fee (which would cause our fees to be significantly higher than retail communities that do not build their own sewer lines and maintain their systems). In addition, the sewer contract continued to be tie-barred to a per capita charge for distribution to projects deemed appropriate by the Urban Cooperation Board. This additional agreement, which had nothing to do with sanitary sewer use, was also unacceptable to the NKSA communities as it permitted tax payer dollars to be used as donations to charities, worthwhile causes and even individuals that would be illegal for a local government to do individually and thus questionable to do as a body of communities. After a great deal of analysis and negotiations, the NKSA communities voted to move forward with the permitting process with the DEQ for sewage discharge permits.

In the early 2000s, the NKSA bonded for and rebuilt the Belmont Bypass and the West River Trunk. Then the NKSA bonded and constructed a new 4 Mile Road Lift Station (the main lift station on the east side of the Grand River near the intersection of Willow Dr. and 4 Mile Rd.), a new river crossing, and Willow Drive Trunk; giving us a second line for reliability, maintenance and backup in case of problems. During the mid 2000s, Alpine Township undertook two system improvements in conjunction with the road widening on 4 Mile Road and the York Creek Drain improvements. These projects replaced lines that were some of the oldest in the system (late 1960s) and were in areas where inflow and infiltration (I & I) had been indicated as a concern.

In October of 2005, the Township Board approved the NKSA Cost-Sharing Agreement (Resolution #05-28). In October 2006, the NKSA voted to build a plant and borrowed \$50 million to do so. To facilitate the change in sewer flows to the south into the City of Walker (served by the City of Grand Rapids) to instead flow east to the new PAARC Side treatment plant under construction, Alpine Township installed sewer down 4 Mile Road from Fruit Ridge Ave. to Alpine Avenue in 2008.

Construction of the new PARCC Side Clean Water Plant in Plainfield Township was completed in the fall of 2008 prior to the contract expiration with the City of Grand Rapids. Flow to the plant constructed at 4775 Coit Avenue NE began in October 2008. The Transfer Service Agreement from the City of Grand Rapids to the North Kent Sewer Authority became effective on December 1, 2008

In 2012, the Township replaced the clay 40+ year old York Creek trunk main and most of the Strawberry Creek trunk main, other than sections that have been recently relined. Also in 2012, work commenced on the Mill Creek trunk sewer between 6 Mile Road and Lamoreaux Drive. From 6 Mile Road south to the confluence with Strawberry Creek the trunk manholes were rehabilitated and south of the Strawberry Creek confluence sections of the trunk were either lined or replaced. The work is financed with low interest loans through the State Revolving Fund.

The NKSA communities continue to work on inflow and infiltration issues to improve our system. Meters have been installed in key locations to pinpoint areas of concern.

Responsibilities for the Sanitary Sewer System:

The North Kent Sewer Authority owns the common large sewer mains, however, none lie within Alpine Township. Alpine Township owns all of the sanitary sewer lines within Alpine Township. It is the Township's responsibility to plan for system capacity and improvements.

The Kent County DPW maintained the North Kent Sewer System until October 1, 2012. Since then, Alpine Township has contracted with the North Kent Sewer Authority to provide sewer system maintenance services.