

Fresh Coast Planning

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MEMORANDUM

To: Robinson Township Planning Commission
From: Gregory L. Ransford, MPA 
Date: April 24, 2023
Re: Master Plan Final Draft Revisions

Pursuant to your direction at your April 11, 2023 meeting, attached are final draft revisions to Chapter Three, Chapter Four, the Appendix, the Master Plan Map, and the Street Map. As you know, you directed us to perform the following.

- Chapter Three and any other chapters
 - Relocate the hydrogeological study language from Strategies to Recommendations, and revise to require its use
 - In addition to Chapter Three, we only found the language in Chapter Four, which has been revised accordingly
- Appendix
 - Include the public workshop and survey summary rather than the entire results
 - Include the title and credentials of David Lusch in the main Appendix page and Appendix G
- Master Plan Map
 - Update property at 112th Avenue and North Cedar to Industrial
 - Update S&M Gravel property to LDR
 - Update the Southern Grand Marina in Commercial
- Street Map
 - Identify unlabeled roads in Sections 3, 13, and 19

We believe the attached achieves your direction. As usual, proposed additions are shown in bold text and proposed deletions are shown in strikethrough text. A clean copy of each chapter is also attached. Additionally, we have attached the R-2 map you previously requested showing only the R-2 Zoning District to consider High Density Residential Classification on the Master Plan Map.

Planning Commission Considerations

While we would ordinarily draft a synopsis of items for your consideration, we believe the above items would simply be repeated. Given this, please refer to the bullet points above. As we discussed at your previous meeting, we bundled the entire Master Plan and provided it to the Township office, which will only be provided to you at your request. Otherwise, only a copy of Chapter Three, Chapter Four, the Appendix, the Master Plan Map, and the Street Map are attached to this memorandum.

We will be prepared to discuss these items further at your May 9, 2023 meeting. If you have any questions, please let us know.

GLR
Principal Planner

Attachments

cc: Frank Johnson, Supervisor

Chapter Three

Residential Uses

Low Density, Medium Density, & High Density

Introduction

While Robinson Township is primarily an agricultural community, and because of the rural character that agriculture provides in the Township, the desire for residential uses within the Township continues to grow. Despite this, sixty-six (66%) of current residents within the Township who responded to the Master Plan Update Community Survey indicated that they agree or strongly agree that the Township should maintain the current density limits within residential developments. When asked about the methods to provide for residential development, eighty-seven percent (87%) of survey respondents indicated that clustered residential lots are an appealing residential design, which create open spaces and can preserve farmland. Further, ninety-two percent (92%) of survey respondents indicated that large lots are an appealing residential design. Significant opposition was provided for multi-family residential development by survey respondents. Finally, approximately fifty-one percent (51%) of survey respondents indicated that growth is “about right,” and thirty-eight percent (38%) of survey respondents indicated that growth is “too fast.” Overwhelmingly, survey respondents as well as workshop participants expressed the need to preserve rural character, protect agriculture, and provide buffers between residential land uses and farming.

Given this, and while Robinson Township is a rich agricultural community and residential uses comprise a relatively small percentage of the total land area, the Township recognizes the need to accommodate residential development concurrently with the preservation and protection of its agricultural heritage.

As a result of the Residential Lands public workshop, the Master Plan Update Community Survey, and various planning meetings we have concluded that the following goals are paramount for residential uses in Robinson Township. In addition, through the use of modern planning principles, where applicable, recommendations regarding these goals as well as strategies to achieve success are provided below.

Goals, Recommendations, and Strategies

Low Density Residential

Goals

- Preserve and protect the natural resources of the area that provide rural character
- Maintain the rural character of the community
- Protect and preserve the floodplain and wetlands in order to minimize property damage as well as to maintain environmental interests, including water retention and groundwater recharge areas, which have important aesthetic and scenic value

- Provide protection of groundwater sources, particularly within the Aquifer Recharge Area identified by Ottawa County's Groundwater Sustainability Initiative
- Residential uses should be restricted to areas of soil with good percolation and be on multi-acre lots, where public water is not present
- Discourage residential "strip" development and promote interconnectivity of residential neighborhoods

Recommendations

- Protect wetlands on-site to ensure that they are not encroached upon within the development
- Wooded areas of the Township are considered an asset and efforts should be made to protect them from unnecessary destruction
- Utilize the incorporation of existing vegetation, topography, and other natural features into the design of new residential developments
- Encourage groundwater preservation practices for new development that are in accordance with Ottawa County's Groundwater Sustainability Initiative
- Buffer residential uses from agricultural land
- Require the preservation or planting of trees between the public street and dwellings
- Require new residential developments to be sited in a manner that protects the rural character and scenic views by maintaining proper setbacks and providing landscape screening as appropriate
- **Require a hydrogeological study, if existing evidence reveals water quality and or quantity concerns**

Strategies

- Adopt or enhance appropriate ordinances to preserve natural features
- Require the layout of new residential developments to be extensions of existing neighborhoods, where possible. This should, at a minimum, apply to lot layout, road extensions, and open space plans.
- ~~Conduct a hydrogeological study, if existing evidence reveals water quality and or quantity concerns~~
- Limit development within the Aquifer Recharge Area identified by Ottawa County's Groundwater Sustainability Initiative, which would negatively impact the Recharge Area
- Review and strengthen density standards that are consistent with the natural capacity of soils to handle on-site septic systems and private water wells and which promote the preservation of the rural character of the Township

Medium Density Residential

Goals

- Preserve and protect the natural resources of the area that provide rural character
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- Rezoning to the R-1 Zoning District should not occur without public water and public sanitary sewer present at the property
- Require public water and public sanitary sewer connection for all Planned Unit Developments, Site Condominium developments, and Plat developments where the underlying zoning district is the R-1 Zoning District

High Density Residential

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- Provide a range of densities to accommodate a variety of dwelling types meeting the needs of diverse family sizes, age groups, and income levels
- Buffer residential uses from agricultural land

- Rezoning to the R-2 Zoning District shall not occur without public water and public sanitary sewer present at the property
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Chapter Three

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- Rezoning to the R-2 Zoning District shall not occur without public water and public sanitary sewer present at the property
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Chapter Four

Lowland Resource Conservation

Introduction

Waterways, wetlands, and forests are important natural resources within the Township. These ecosystems are vulnerable to impact from development and require significant protection. Many of these areas are protected by State and Federal statute and are not conducive to development. The most well-known waterway in Robinson Township is the Grand River, which flows from east to west across the entire width of the Township eventually discharging to Lake Michigan at Grand Haven. Respondents to the Master Plan Update Community Survey overwhelmingly felt that the Grand River and its bayous are important, with ninety-three percent (93%) indicating they are desirable, up from eighty-three percent (83%) in the 1998 community survey. In addition, almost ninety percent (90%) of respondents believe the Township should take an active role in preserving natural waterways.

The Grand River drainage basin includes tributaries, regulated wetlands, and flood plains, all of which are home to many varieties of flora and fauna. Stearns Creek flows into Stearns Bayou, which is located at the northwest part of the Township. Other tributaries include Little Robinson Creek, Bear Creek, Bass Creek, and Bass River. The drainage system includes many other drains under the control of the Ottawa County Water Resources Drain Commissioner. Surface water in the extreme southern extent of the Township includes drains that discharge to the Pigeon River Watershed including Walters Drain, South Beeline Drain, Tubbs Creek and Fellows Drain.

The majority of wetlands within the Township are contiguous to the Grand River, its' tributaries, and County drains. There are, however, several scattered areas of wooded wetlands, wet meadows, submergent and emergent wetlands throughout the Township. Along with wetlands, forests play a significant role in the environment by providing a habitat for wildlife, stabilizing soil, preventing erosion, absorbing storm water, reducing carbon footprint, and providing a visual screen. When asked about the protection of wetlands and woodlands within the Township, almost eighty-two percent (82%) of respondents to the Master Plan Update Community Survey believe the Township should take an active role in preserving wetlands, and eighty-five percent (85%) believe the Township should take an active role in preserving forests.

Proper regulation of these areas will serve to maintain and improve groundwater and surface water quality; preserve wildlife habitat; protect natural watersheds; protect water-based recreational resources of the Township; minimize flood damage to land, buildings and structures; and protect the health, safety and welfare of the residents of the Township.

As a result of public workshops, the Master Plan Update Community Survey, and various planning meetings we have concluded that the following goals are paramount for the protection of the environment within Robinson Township. In addition, through the use of modern planning principles, where applicable, recommendations regarding these goals as well as strategies to achieve success are provided below.

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Goals

- Protect wetlands from development
- Preserve and protect the natural resources of the area that enhance the rural character of the Township
- Protect and preserve floodplains and wetlands to minimize property damage as well as to maintain environmental interests, including water retention and groundwater recharge areas, which have important ecological and aesthetic scenic value
- Property use in areas of frequent flooding should be limited to agriculture, recreation, and other open spaces, or permitted uses that would not be subject to flood damage
- As the Grand River is an area wide resource that can seriously affect downstream and upstream conditions, protection of the use of this resource to prevent negative effects downstream should be encouraged
- Provide protection of groundwater sources, particularly within the Aquifer Recharge Area identified by Ottawa County's Groundwater Sustainability Initiative

Recommendations

- Protect wetlands from development including excavation and/or fill consistent with State and Federal regulations
- Wooded areas of the Township are considered an asset and efforts should be made to protect them from unnecessary destruction
- Building construction in the floodplain should be discouraged to avoid damage and health hazards created by flood conditions
- Flood Plains of the Grand River and Pigeon River watersheds and their tributaries should be protected to eliminate obstructions to flow and navigability, and should not be developed except for marine purposes consistent with State and Federal regulations
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Strategies

- Adopt or enhance policies and regulations in the floodplain area should be consistent with State of Michigan and Federal guidelines
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Appendix

Available within this appendix is the following data.

Appendix A – Community Mapping

Appendix B – M-231 Growth Areas

Appendix C – Population and Economic Data, Robinson Township

Appendix D – Robinson Township Master Plan Update Community Survey 2021 & Robinson
Township Master Plan Public Workshops: Results Summary

Appendix E – Water Supply System Master Plan for Robinson Township

Appendix F – Wastewater Master Plan

Appendix G – Aquifer Recharge in Robinson Township, Ottawa County – David P. Lusch, **Ph. D.,
Professor Emeritus, Department of Geography, Environment, and Spatial Sciences,
Michigan State University**

Appendix A Community Mapping

Following are the community maps as well as their established purpose, which are incorporated as part of the Master Plan. These maps are not intended to be limited to their purposes provided below but rather establish a minimum relationship to the Master Plan.

- **Master Plan Map** – creates future land use classifications and delineates boundaries for certain uses of land.
- **Soil Limitations for Residential Development without Public Sewer Map** - illustrates soil limitations for septic systems to illustrate feasibility of supporting proposed development.
- **Parks & Recreation Areas Map** – illustrates existing parks and recreation areas available to the public within the Township.
- **Natural Gas Suppliers Map** – illustrates the location of natural gas utilities and suppliers within the Township to illustrate feasibility of supporting proposed development.
- **Marathon Pipeline Map** – illustrates the general location of the Marathon Pipeline within the Township.
- **Electricity Suppliers Map** – illustrates the location of electric utilities and suppliers within the Township to illustrate feasibility of supporting proposed development.
- **Robinson Township Elevation Map** – illustrates the topography within the Township to illustrate feasibility of supporting proposed development.
- **Air Strips Map** – illustrates the location of existing air strips within the Township.
- **Designated Truck Route Map** – illustrates the location of existing truck routes within the Township.
- **Street Map** – illustrates the location and paving material of existing public roads within the Township.
- **School Districts Map** – illustrates boundaries of public school districts within the Township.
- **Hydrology Features Map** – illustrates the location of drains and water courses throughout the Township to illustrate feasibility of supporting proposed development.
- **Transportation Facilities 2022 Map** – illustrates the different types of transportation facilities available within the Township.
- **Merit Survey Respondents with a Minimum Speed of 100/20 Map & Merit Survey Respondents with a Minimum Speed of 25/3 Map** – illustrates the availability of highspeed internet within the Township.

Appendix B

M-231 Growth Areas

Following are factors, tables, and maps that provide information specific to the M-231 Growth Areas within the Township.

- Growth Boundary Factors
- Table 1: Growth Boundaries – Development Suitability Factors
- Table 2: Average Daily Traffic and Projections

GROWTH BOUNDARY FACTORS

Delineation of growth boundaries and future land uses are based on a variety of objective and subjective factors. Although factors are not weighted, prioritized, or exclusive, an assessment of information concerning all factors and a cumulative evaluation of the factors serve as the basis for the Robinson Township growth strategy.

1. Road infrastructure (Existing and Planned). Roads are an essential component of community infrastructure and are integral to land use decisions. Therefore, it is critical to ensure that the primary function of arterial roads (such as M-45 and Lincoln) which is to carry relatively high volumes of traffic long distances, is not compromised by inappropriate uses. All too often, the higher traffic volumes and greater visibility of arterial corridors entices businesses seeking that increased exposure to customer traffic. However, if not controlled, the proliferation of individual driveways and frequent in and out turning movements diminishes the capacity of the road and impedes its basic function to move traffic. Therefore, a delicate balance must be maintained between preserving the traffic-carrying function of the arterial road and permitting uses that depend on that traffic.
2. Soils and Natural Resources. Hydric soils are generally considered unsuitable for development due to their historically wet conditions. These soils are typically saturated through a significant part of the growing season or flooded long enough to eliminate oxygen in the root zone. According to the Robinson Township Hazard Mitigation plan, areas with hydric soils "are to be considered flood-prone, wetland, or otherwise suited to have development discouraged or specifically engineered to account for site hydrology." Therefore, the presence of such soils is considered a significant constraint to development due to their instability for buildings and limitations for on-site septic systems.
3. Existing Land Use. Established land use patterns must be considered in determining potential future land use options. Except in rare circumstances where redevelopment is advocated, the existing land use context must be a shaping influence as future land use options are explored. Intensive land uses may not be compatible and could potentially affect historically residential or agricultural areas negatively by reducing property values, increasing traffic, or creating nuisances (noise, hours of operation, glare, odor, etc.).
4. Future Land Use and Zoning. Development should emanate incrementally outward from areas targeted for growth through conscious land use planning. A logical, orderly, sequential growth pattern allows for the gradual expansion of needed infrastructure and other municipal services in a cost-effective and efficient manner. The Township Master Plan and this Growth Area Plan strive to manage growth and diminish incompatible land use relationships. Zoning regulations are the fundamental tools to support plan recommendations. They should ensure that appropriate uses are situated in conformance with the plan and an orderly transition is accomplished from intense uses to very low intensity uses.
5. Survey and Community Preference. Local desires are an important ingredient in any planning effort. All communities are different, local philosophies vary and conditions may

be unique. During past planning efforts, residents were surveyed to gauge their opinions regarding growth and development. The results of that survey provided valuable direction for the preparation of this plan.

6. Utilities. Water and sewer service infrastructure are critical determinants for land use intensity. Where public water and sewer are available, greater intensity of development is feasible. However, where such facilities are unavailable and private systems (septic and well) are employed, the range of potential uses and the intensity of development are severely limited.
7. Truck Routes. Except as expressly permitted under the Truck Route Ordinance, operation of heavy trucks and trailers is restricted to designated truck routes. As commercial and industrial developments are reliant upon trucks for deliveries and general operation, the most suitable lands are those that have direct access to truck routes in all directions.
8. Visibility and Demand. Commercial and industrial zoning map amendments, special land use review and site plan review requests are indicators of general demand for development. Additionally, visibility of property based on new traffic patterns and increase in the number of travelers in the township affects suitability.

The following table includes the application of the assessment factors as they related to the growth areas.

Table 1 Growth Boundaries- Development Suitability Factors

Planning Factor	Lincoln Street Focus Area	Lake Michigan Drive Focus Area	Outlying Areas
1. Road Infrastructure (Existing and Planned)	Medium • County Road- Lincoln Street • M-231	High • M-45 Lake Michigan Drive • M-231	Low • County secondary paved roads • County unpaved roads
2. Soils	Low • Hydric Soils	Low • Hydric Soils	Varies • Hydric and Non-Hydric Soils
3. Existing Land Use	Low • Low and medium density residential (north) • Agricultural land (south)	High • Generally agricultural and undeveloped • Existing commercial	Low • Agricultural uses • Low and medium density residential
4. Future Land Use and Zoning	Low • Existing low density residential zoning. • Low density residential future land use planned.	Medium/High • Existing commercial and industrial zoning • Commercial and industrial land use planned	Low • Existing residential zoning • Existing Residential future land use planned
5. Community Survey	Low • Development not desired.	Medium • Development more acceptable	Low • Development not desired
6. Utilities	Low • No existing or planned water and sewer.	Medium • No existing or planned water and sewer • Closer proximity to existing utilities	Low • No existing or planned water and sewer
7. Truck Routes	Medium • Truck routes travel in two directions.	High • Truck routes travel in all directions	Low • Trucks are generally prohibited
8. Visibility and Demand	Medium • New bypass traffic capture- significant increase on Lincoln west of M-231 (see traffic projections in Table 2 and Map 1).	Medium/High • Regionally significant intersection	Low • No bypass traffic capture or increases anticipated

	<ul style="list-style-type: none"> • New bypass traffic capture: travelers will stop for convenience-oriented needs but the location will not be a "destination." Some commercial developers may seek to take advantage of a key location and a potential new market resulting from the new hub at Lake Michigan Drive and M -231 (see traffic projections in Table 2). 		
Overall Score	Low/Medium Consolidated low-intensity commercial around new intersection to the southwest of the Lincoln/M-231 intersection.	Medium/High Designation of existing commercial and industrial future land use areas as priority area for future development.	Low No change in growth concept.
Recommendation			

Table 2 Average Daily Traffic and Projections

Road Section	2006	2013	2014	2015 (M-231 completed)	2016	2017	2018	2019	2020	2021	2030 Projected
Lincoln east of M-231	2,500										4,800
Lincoln east of 120th		2,078			1,623			1,535			
Lincoln west of M-231	4,300										11,100
Lincoln east of 128th		3,482			6,111			5,906			
Lincoln east of 144th		4,021			5,411			6,007			
120th south of Lincoln	3,000			3,040						2,294	2,400
120th north of Lincoln	1,200			1,156			1,471				2,300
M-45 west of M-231	5,400							6,700			8,400
M-45 east of M-231	7,000							13,750			14,100
M-231 south of Lincoln	N/A							no data available			10,000
M-231 north of Lincoln	N/A							11,000			22,000

Appendix C

Population and Economic Data

The following tables collected from the U.S. Census Bureau and the Ottawa County Department of Strategic Impact are included as a reference to the make up of Robinson Township's Population and Economic Characteristics. The narratives below were created using data from the tables.

- Table 1: Ottawa County, Michigan Decennial Population Data

From 1980 to 2010 Robinson Township was in the top half of municipalities in Ottawa County for population growth. This trend did not continue into 2020. From 2010 to 2020, Robinson Township was in the bottom third of Ottawa County municipalities for population growth.

- Table 2: Data Profile: Selected Social Characteristics

An overwhelming majority (90%) of Robinson Township residents live in the same place they did one year ago. Of the occupied housing units in Robinson Township, 70% are occupied by married couples. Lastly, of the 1,499 individuals enrolled in school, a majority (55%) are enrolled in grades one through eight.

- Table 3: Data Profile: Selected Economic Characteristics

Robinson Township has 4,666 residents that are 16 or older; of which 67% (3,166) are in the labor force. For residents in the labor force 95% are employed with a majority (88%) commuting to work alone. Most residents are employed in the manufacturing (25.4%), retail (7.7%), construction (7.5), and agricultural (7.2%) industries.

The median household income for Robinson Township is \$81,287 with 67% of households earning between \$50,000 and \$149,000 annually.

- Table 4: Data Profile: Selected Housing Characteristics

Approximately 97% of the housing units in Robinson Township are occupied, with a majority being owner-occupied. Of the 2,019 housing units in the Township, 46% have been built since 1990, with 54% being built in or before 1989. Two-thirds of housing units are heated using natural gas.

The median house value is \$235,300.

- Table 5: Data Profile: Demographic and Housing Estimates

Robinson Township has a total population of 6,466 individuals of which 53% are male and 47% are female. The median age is 37 with 96.7% of residents being white.

TABLE 1:
 Ottawa County, Michigan Decennial Population Data
 Data collected from Ottawa County Department of Strategic Impact

1980-1990			1990-2000			2000-2010			2010-2020		
Unit of Government	80-90 #	1990	Unit of Government	90-00 #	2000	Unit of Government	00-10 #	2010	Unit of Government	10-20 #	2020
Georgetown Township	6,568	32,672	Holland Township	11,388	28,911	Allendale Township	7,666	20,708	Georgetown Township	7,156	54,141
Holland Township	3,784	17,523	Georgetown Township	8,986	41,658	Holland Township	6,725	35,636	Allendale Township	5,614	26,322
Holland City (Ottawa pt)	3,319	25,086	Allendale Township	5,020	13,042	Georgetown Township	5,327	46,985	Grand Haven Township	2,859	18,037
Park Township	3,187	13,541	Park Township	4,038	17,579	Zeeland Township	2,358	9,971	Holland Township	2,730	38,366
Grand Haven Township	2,472	9,710	Grand Haven Township	3,568	13,278	Jamestown Township	1,972	7,034	Jamestown Township	2,615	9,649
Allendale Township	1,942	8,022	Zeeland Township	3,141	7,613	Grand Haven Township	1,900	15,178	Zeeland Township	2,062	12,033
Spring Lake Township	1,357	8,214	Holland City (Ottawa pt)	2,760	27,846	Spring Lake Township	1,351	11,977	Blendon Township	1,323	7,095
Hudsonville City	1,326	6,170	Spring Lake Township	2,412	10,626	Tallmadge Township	694	7,575	Tallmadge Township	1,240	8,815
Holland City (Allegan pt)	1,278	5,792	Olive Township	1,825	4,691	Robinson Township	496	6,084	Port Sheldon Township	969	5,209
Blendon Township	977	4,740	Robinson Township	1,663	5,588	Coopersville City	365	4,275	Park Township	871	18,673
Robinson Township	907	3,925	Port Sheldon Township	1,574	4,503	Park Township	223	17,802	Spring Lake Township	803	12,780
Zeeland Township	761	4,472	Holland City (Allegan pt)	1,410	7,202	Crockery Township	178	3,960	Holland City (Allegan pt)	712	7,728
Port Sheldon Township	723	2,929	Jamestown Township	1,003	5,062	Polkton Township	88	2,423	Crockery Township	621	4,581
Zeeland City	653	5,417	Hudsonville City	990	7,160	Blendon Township	51	5,772	Grand Haven City	605	11,017
Coopersville City	532	3,421	Blendon Township	981	5,721	Olive Township	44	4,735	Coopersville City	562	4,837
Jamestown Township	513	4,059	Tallmadge Township	581	6,881	Hudsonville City	(44)	7,116	Hudsonville City	523	7,639
Ferrysburg Village	479	2,919	Coopersville City	489	3,910	Wright Township	(139)	3,147	Holland City (Ottawa pt)	479	26,514
Olive Township	417	2,866	Zeeland City	388	5,805	Ferrysburg Village	(148)	2,892	Robinson Township	313	6,397
Tallmadge Township	373	6,300	Crockery Township	183	3,782	Holland City (Allegan pt)	(186)	7,016	Olive Township	278	5,013
Polkton Township	250	2,277	Chester Township	182	2,315	Spring Lake Village	(191)	2,323	Zeeland City	219	5,723
Grand Haven City	188	11,951	Ferrysburg Village	121	3,040	Port Sheldon Township	(263)	4,240	Spring Lake Village	217	2,540
Chester Township	99	2,133	Polkton Township	58	2,335	Chester Township	(298)	2,017	Polkton Township	148	2,571
Crockery Township	63	3,599	Wright Township	1	3,286	Zeeland City	(301)	5,504	Chester Township	85	2,102
Wright Township	(102)	3,285	Spring Lake Village	(23)	2,514	Grand Haven City	(756)	10,412	Ferrysburg Village	63	2,955
Spring Lake Village	(194)	2,537	Grand Haven City	(783)	11,168	Holland City (Ottawa pt)	(1,811)	26,035	Wright Township	44	3,191
Unit of Government	80-90 #	1990	Unit of Government	90-00 #	2000	Unit of Government	00-10 #	2010	Unit of Government	10-20 #	2020
Ottawa County	30,594	187,768	Ottawa County	50,546	238,314	Ottawa County	25,487	263,801	Ottawa County	32,399	296,200
Michigan	33,243	9,295,287	Michigan	643,157	9,938,444	Michigan	(54,804)	9,883,640	Michigan	193,691	10,077,331

TABLE 2:
 2020 American Community Survey 5-year Estimates: U.S. Census Bureau
 Data Profile: Selected Social Characteristics

	Estimate
HOUSEHOLDS BY TYPE	
Total households	1,971
Married-couple household	1,390
With children of the householder under 18 years	(X)
Cohabiting couple household	79
With children of the householder under 18 years	(X)
Male householder, no spouse/partner present	260
With children of the householder under 18 years	(X)
Householder living alone	162
65 years and over	61
Female householder, no spouse/partner present	242
With children of the householder under 18 years	(X)
Householder living alone	85
65 years and over	32
Households with one or more people under 18 years	746
Households with one or more people 65 years and over	550
Average household size	3
Average family size	4
RELATIONSHIP	
Population in households	6,372
Householder	1,971
Spouse	1,355
Unmarried partner	76
Child	2,126
Other relatives	641
Other nonrelatives	203

MARITAL STATUS	
Males 15 years and over	2,514
Never married	746
Now married, except separated	1,551
Separated	-
Widowed	58
Divorced	159
Females 15 years and over	2,218
Never married	409
Now married, except separated	1,457
Separated	45
Widowed	159
Divorced	148
FERTILITY	
Number of women 15 to 50 years old who had a birth in the past 12 months	70
Unmarried women (widowed, divorced, and never married)	11
Per 1,000 unmarried women	23
Per 1,000 women 15 to 50 years old	54
Per 1,000 women 15 to 19 years old	-
Per 1,000 women 20 to 34 years old	108
Per 1,000 women 35 to 50 years old	25
GRANDPARENTS	
Number of grandparents living with own grandchildren under 18 years	189
Grandparents responsible for grandchildren	81
Years responsible for grandchildren	
Less than 1 year	-
1 or 2 years	16
3 or 4 years	7
5 or more years	58
Number of grandparents responsible for own grandchildren under 18 years	81
Who are female	40
Who are married	74
SCHOOL ENROLLMENT	
Population 3 years and over enrolled in school	1,499
Nursery school, preschool	70
Kindergarten	136
Elementary school (grades 1-8)	825
High school (grades 9-12)	281
College or graduate school	187

EDUCATIONAL ATTAINMENT	
Population 25 years and over	4,144
Less than 9th grade	146
9th to 12th grade, no diploma	262
High school graduate (includes equivalency)	1,326
Some college, no degree	885
Associate's degree	491
Bachelor's degree	715
Graduate or professional degree	319
High school graduate or higher	3,736
Bachelor's degree or higher	1,034
VETERAN STATUS	
Civilian population 18 years and over	4,506
Civilian veterans	381
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION	
Total Civilian Noninstitutionalized Population	6,466
With a disability	751
Under 18 years	1,960
With a disability	112
18 to 64 years	3,674
With a disability	376
65 years and over	832
With a disability	263
RESIDENCE 1 YEAR AGO	
Population 1 year and over	6,396
Same house	5,805
Different house (in the U.S. or abroad)	591
Different house in the U.S.	575
Same county	542
Different county	33
Same state	20
Different state	13
Abroad	16
PLACE OF BIRTH	
Total population	6,466
Native	6,157
Born in United States	6,117
State of residence	5,201
Different state	916
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	40
Foreign born	309

U.S. CITIZENSHIP STATUS	
Foreign-born population	309
Naturalized U.S. citizen	146
Not a U.S. citizen	163
YEAR OF ENTRY	
Population born outside the United States	349
Native	40
Entered 2010 or later	-
Entered before 2010	40
Foreign born	309
Entered 2010 or later	73
Entered before 2010	236
WORLD REGION OF BIRTH OF FOREIGN BORN	
Foreign-born population, excluding population born at sea	309
Europe	10
Asia	75
Africa	-
Oceania	-
Latin America	217
Northern America	7
LANGUAGE SPOKEN AT HOME	
Population 5 years and over	6,111
English only	5,632
Language other than English	479
Speak English less than "very well"	280
Spanish	396
Speak English less than "very well"	246
Other Indo-European languages	10
Speak English less than "very well"	-
Asian and Pacific Islander languages	5
Speak English less than "very well"	5
Other languages	68
Speak English less than "very well"	29

ANCESTRY	
Total population	6,466
American	312
Arab	50
Czech	11
Danish	6
Dutch	1,587
English	400
French (except Basque)	125
French Canadian	5
German	1,287
Greek	43
Hungarian	23
Irish	961
Italian	66
Lithuanian	-
Norwegian	60
Polish	487
Portuguese	-
Russian	-
Scotch-Irish	63
Scottish	48
Slovak	17
Subsaharan African	-
Swedish	90
Swiss	6
Ukrainian	37
Welsh	5
West Indian (excluding Hispanic origin groups)	-
COMPUTERS AND INTERNET USE	
Total households	1,971
With a computer	1,899
With a broadband Internet subscription	1,757

TABLE 3:
2020 American Community Survey 5-year Estimates: U.S. Census Bureau
Data Profile: Selected Economic Characteristics

	Estimate
EMPLOYMENT STATUS	
Population 16 years and over	4,666
In labor force	3,116
Civilian labor force	3,116
Employed	2,983
Unemployed	133
Armed Forces	-
Not in labor force	1,550
Civilian labor force	3,116
Unemployment Rate	(X)
Females 16 years and over	2,195
In labor force	1,271
Civilian labor force	1,271
Employed	1,215
Own children of the householder under 6 years	466
All parents in family in labor force	339
Own children of the householder 6 to 17 years	1,489
All parents in family in labor force	785
COMMUTING TO WORK	
Workers 16 years and over	2,930
Car, truck, or van -- drove alone	2,530
Car, truck, or van -- carpooled	271
Public transportation (excluding taxicab)	-
Walked	6
Other means	2
Worked from home	121
Mean travel time to work (minutes)	23
OCCUPATION	
Civilian employed population 16 years and over	2,983
Management, business, science, and arts occupations	1,035
Service occupations	405
Sales and office occupations	561
Natural resources, construction, and maintenance occupations	485
Production, transportation, and material moving occupations	497

INDUSTRY	
Civilian employed population 16 years and over	2,983
Agriculture, forestry, fishing and hunting, and mining	217
Construction	224
Manufacturing	758
Wholesale trade	74
Retail trade	230
Transportation and warehousing, and utilities	155
Information	48
Finance and insurance, and real estate and rental and leasing	91
Professional, scientific, and management, and administrative and waste management services	206
Educational services, and health care and social assistance	506
Arts, entertainment, and recreation, and accommodation and food services	211
Other services, except public administration	159
Public administration	104
CLASS OF WORKER	
Civilian employed population 16 years and over	2,983
Private wage and salary workers	2,570
Government workers	268
Self-employed in own not incorporated business workers	145
Unpaid family workers	-

INCOME AND BENEFITS (IN 2020 INFLATION-ADJUSTED DOLLARS)	
Total households	1,971
Less than \$10,000	26
\$10,000 to \$14,999	18
\$15,000 to \$24,999	62
\$25,000 to \$34,999	87
\$35,000 to \$49,999	149
\$50,000 to \$74,999	494
\$75,000 to \$99,999	398
\$100,000 to \$149,999	429
\$150,000 to \$199,999	214
\$200,000 or more	94
Median household income (dollars)	81,287
Mean household income (dollars)	95,831
With earnings	1,680
Mean earnings (dollars)	90,876
With Social Security	668
Mean Social Security income (dollars)	27,053
With retirement income	447
Mean retirement income (dollars)	22,220
With Supplemental Security Income	115
Mean Supplemental Security Income (dollars)	11,865
With cash public assistance income	71
Mean cash public assistance income (dollars)	3,410
With Food Stamp/SNAP benefits in the past 12 months	80
Families	1,637
Less than \$10,000	8
\$10,000 to \$14,999	9
\$15,000 to \$24,999	24
\$25,000 to \$34,999	63
\$35,000 to \$49,999	110
\$50,000 to \$74,999	370
\$75,000 to \$99,999	405
\$100,000 to \$149,999	344
\$150,000 to \$199,999	214
\$200,000 or more	90
Median family income (dollars)	85,766
Mean family income (dollars)	102,011
Per capita income (dollars)	29,397
Nonfamily households	334
Median nonfamily income (dollars)	51,058
Mean nonfamily income (dollars)	57,690
Median earnings for workers (dollars)	36,603
Median earnings for male full-time, year-round workers (dollars)	60,168
Median earnings for female full-time, year-round workers (dollars)	39,659

HEALTH INSURANCE COVERAGE	
Civilian noninstitutionalized population	6,466
With health insurance coverage	6,358
With private health insurance	5,238
With public coverage	2,142
No health insurance coverage	108
Civilian noninstitutionalized population under 19 years	2,015
No health insurance coverage	10
Civilian noninstitutionalized population 19 to 64 years	3,619
In labor force:	2,902
Employed:	2,781
With health insurance coverage	2,712
With private health insurance	2,592
With public coverage	182
No health insurance coverage	69
Unemployed:	121
With health insurance coverage	121
With private health insurance	113
With public coverage	8
No health insurance coverage	-
Not in labor force:	717
With health insurance coverage	693
With private health insurance	482
With public coverage	365
No health insurance coverage	24
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL (X) = Data not Available	
All families	(X)
With related children of the householder under 18 years	(X)
With related children of the householder under 5 years only	(X)
Married couple families	(X)
With related children of the householder under 18 years	(X)
With related children of the householder under 5 years only	(X)
Families with female householder, no spouse present	(X)
With related children of the householder under 18 years	(X)
With related children of the householder under 5 years only	(X)
All people	(X)
Under 18 years	(X)
Related children of the householder under 18 years	(X)
Related children of the householder under 5 years	(X)
Related children of the householder 5 to 17 years	(X)
18 years and over	(X)
18 to 64 years	(X)
65 years and over	(X)
People in families	(X)
Unrelated individuals 15 years and over	(X)

TABLE 4:
 2020 American Community Survey 5-year Estimates: U.S. Census Bureau
 Data Profile: Selected Housing Characteristics

	Estimate
HOUSING OCCUPANCY	
Total housing units	2,019
Occupied housing units	1,971
Vacant housing units	48
Homeowner vacancy rate	-
Rental vacancy rate	-
UNITS IN STRUCTURE	
Total housing units	2,019
1-unit, detached	1,917
1-unit, attached	24
2 units	26
3 or 4 units	5
5 to 9 units	-
10 to 19 units	4
20 or more units	-
Mobile home	43
Boat, RV, van, etc.	-
YEAR STRUCTURE BUILT	
Total housing units	2,019
Built 2014 or later	110
Built 2010 to 2013	53
Built 2000 to 2009	264
Built 1990 to 1999	503
Built 1980 to 1989	241
Built 1970 to 1979	445
Built 1960 to 1969	146
Built 1950 to 1959	129
Built 1940 to 1949	39
Built 1939 or earlier	89

ROOMS	
Total housing units	2,019
1 room	-
2 rooms	-
3 rooms	14
4 rooms	272
5 rooms	363
6 rooms	343
7 rooms	270
8 rooms	300
9 rooms or more	457
Median rooms	7
BEDROOMS	
Total housing units	2,019
No bedroom	-
1 bedroom	28
2 bedrooms	327
3 bedrooms	959
4 bedrooms	515
5 or more bedrooms	190
HOUSING TENURE	
Occupied housing units	1,971
Owner-occupied	1,854
Renter-occupied	117
Average household size of owner-occupied unit	3
Average household size of renter-occupied unit	4
YEAR HOUSEHOLDER MOVED INTO UNIT	
Occupied housing units	1,971
Moved in 2019 or later	61
Moved in 2015 to 2018	283
Moved in 2010 to 2014	410
Moved in 2000 to 2009	451
Moved in 1990 to 1999	386
Moved in 1989 and earlier	380
VEHICLES AVAILABLE	
Occupied housing units	1,971
No vehicles available	45
1 vehicle available	321
2 vehicles available	794
3 or more vehicles available	811

HOUSE HEATING FUEL	
Occupied housing units	1,971
Utility gas	1,314
Bottled, tank, or LP gas	355
Electricity	98
Fuel oil, kerosene, etc.	15
Coal or coke	-
Wood	124
Solar energy	-
Other fuel	32
No fuel used	33
SELECTED CHARACTERISTICS	
Occupied housing units	1,971
Lacking complete plumbing facilities	-
Lacking complete kitchen facilities	-
No telephone service available	15
OCCUPANTS PER ROOM	
Occupied housing units	1,971
1.00 or less	1,912
1.01 to 1.50	53
1.51 or more	6
VALUE	
Owner-occupied units	1,854
Less than \$50,000	80
\$50,000 to \$99,999	38
\$100,000 to \$149,999	241
\$150,000 to \$199,999	352
\$200,000 to \$299,999	550
\$300,000 to \$499,999	516
\$500,000 to \$999,999	77
\$1,000,000 or more	-
Median (dollars)	235,300
MORTGAGE STATUS	
Owner-occupied units	1,854
Housing units with a mortgage	1,279
Housing units without a mortgage	575

SELECTED MONTHLY OWNER COSTS (SMOC)	
Housing units with a mortgage	1,279
Less than \$500	37
\$500 to \$999	208
\$1,000 to \$1,499	471
\$1,500 to \$1,999	345
\$2,000 to \$2,499	111
\$2,500 to \$2,999	44
\$3,000 or more	63
Median (dollars)	1,428
Housing units without a mortgage	575
Less than \$250	59
\$250 to \$399	130
\$400 to \$599	266
\$600 to \$799	89
\$800 to \$999	27
\$1,000 or more	4
Median (dollars)	477
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI)	
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	1,279
Less than 20.0 percent	726
20.0 to 24.9 percent	151
25.0 to 29.9 percent	198
30.0 to 34.9 percent	83
35.0 percent or more	121
Not computed	-
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	562
Less than 10.0 percent	335
10.0 to 14.9 percent	128
15.0 to 19.9 percent	25
20.0 to 24.9 percent	26
25.0 to 29.9 percent	34
30.0 to 34.9 percent	-
35.0 percent or more	14
Not computed	13

GROSS RENT	
Occupied units paying rent	63
Less than \$500	4
\$500 to \$999	30
\$1,000 to \$1,499	29
\$1,500 to \$1,999	-
\$2,000 to \$2,499	-
\$2,500 to \$2,999	-
\$3,000 or more	-
Median (dollars)	964
No rent paid	54
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)	
Occupied units paying rent (excluding units where GRAPI cannot be computed)	63
Less than 15.0 percent	27
15.0 to 19.9 percent	7
20.0 to 24.9 percent	24
25.0 to 29.9 percent	-
30.0 to 34.9 percent	-
35.0 percent or more	5
Not computed	54

TABLE 5:
 2020 American Community Survey 5-year Estimates: U.S. Census Bureau
 Data Profile: Demographic and Housing Estimates

	Estimate
SEX AND AGE	
Total population	6,466
Male	3,442
Female	3,024
Sex ratio (males per 100 females)	114
Under 5 years	355
5 to 9 years	589
10 to 14 years	790
15 to 19 years	358
20 to 24 years	230
25 to 34 years	708
35 to 44 years	847
45 to 54 years	913
55 to 59 years	440
60 to 64 years	404
65 to 74 years	458
75 to 84 years	323
85 years and over	51
Median age (years)	37
Under 18 years	1,960
16 years and over	4,666
18 years and over	4,506
21 years and over	4,332
62 years and over	1,136
65 years and over	832
18 years and over	4,506
Male	2,344
Female	2,162
Sex ratio (males per 100 females)	108
65 years and over	832
Male	420
Female	412
Sex ratio (males per 100 females)	102

RACE	
Total population	6,466
One race	6,191
Two or more races	275
One race	6,191
White	5,982
Black or African American	21
American Indian and Alaska Native	28
Cherokee tribal grouping	-
Chippewa tribal grouping	-
Navajo tribal grouping	-
Sioux tribal grouping	-
Asian	16
Asian Indian	-
Chinese	16
Filipino	-
Japanese	-
Korean	-
Vietnamese	-
Other Asian	-
Native Hawaiian and Other Pacific Islander	-
Native Hawaiian	-
Chamorro	-
Samoan	-
Other Pacific Islander	-
Some other race	144
Two or more races	275
White and Black or African American	-
White and American Indian and Alaska Native	36
White and Asian	-
Black or African American and American Indian and Alaska Native	-
Race alone or in combination with one or more other races	
Total population	6,466
White	6,257
Black or African American	21
American Indian and Alaska Native	64
Asian	16
Native Hawaiian and Other Pacific Islander	-
Some other race	383

HISPANIC OR LATINO AND RACE	
Total population	6,466
Hispanic or Latino (of any race)	529
Mexican	399
Puerto Rican	35
Cuban	58
Other Hispanic or Latino	37
Not Hispanic or Latino	5,937
White alone	5,670
Black or African American alone	21
American Indian and Alaska Native alone	28
Asian alone	16
Native Hawaiian and Other Pacific Islander alone	-
Some other race alone	-
Two or more races	202
Two races including Some other race	166
Two races excluding Some other race, and Three or more races	36
Total housing units	2,019
CITIZEN, VOTING AGE POPULATION	
Citizen, 18 and over population	4,343
Male	2,221
Female	2,122

Sources:

Table 1: https://www.miottawa.org/Departments/Planning/county_statistics.htm

Table 2: <https://data.census.gov/cedsci/table?g=0600000US2613969000&tid=ACSDP5Y2020.DP02>

Table 3: <https://data.census.gov/cedsci/table?g=0600000US2613969000&tid=ACSDP5Y2020.DP03>

Table 4: <https://data.census.gov/cedsci/table?g=0600000US2613969000&tid=ACSDP5Y2020.DP04>

Table 5: <https://data.census.gov/cedsci/table?g=0600000US2613969000&tid=ACSDP5Y2020.DP05>

Appendix D

Robinson Township Master Plan Update Community Survey 2021 & Robinson Township Master Plan Public Workshops: Results Summary

A summary of the Master Plan Update Community Survey 2021 and the Public Workshops is provided within this Appendix D. The entirety of the results is available at the Township Hall.

Appendix E

Water Supply System Master Plan for Robinson Township

Available within the December 2014 Water Supply System Master Plan is the following:

- Introduction
- Existing Water System
- Water Use Projections
- Proposed Water Supply System
- Procedures for System Extensions
- Figures
 - Figure 1 – Robinson Township Water Plan – Existing Systems
 - Figure 2 – Robinson Township Proposed Land Use Plan
 - Figure 3 – Wells in Robinson Township per Wellogic
 - Figure 4 – Robinson Township Water Master Plan
 - Figure 5 – Robinson Township Water Master Plan – Northeast
 - Figure 6 – Robinson Township Water Master Plan – Southeast
 - Figure 7 – Robinson Township Water Master Plan – Northwest

Appendix F

Wastewater Master Plan

Available within the March 2014 Wastewater Master Plan is the following:

- Introduction
- Master Plan
- Service to M-231 & M-45 Interchange
- Service to M-321 & Lincoln Street
- Tables
 - Table 1 – Capacity Analysis
 - Table 2 – Projected Flow Rates
 - Table 3 – Cost Estimate Connect to Ottawa County System at Fillmore Street and 120th Avenue
 - Table 4 – Cost Estimate Service from West Central Ottawa Treatment Plant
 - Table 5 – Cost Estimate Forcemain from M-45 and M-231 to Grand Haven Charter Township Pump Station
 - Table 6 – Cost Estimate Service from Allendale Township
 - Table 7 – Cost Estimate On-Site Septic Tank and Drainfield System
 - Table 8 – Cost Estimate Wastewater Collection and Treatment System/On-site Lagoon System
- Figures
 - Figure 1 – Zoning Map
 - Figure 2 – Wastewater Master Plan
 - Figure 3 – Ottawa County Complex, Flow Schematic

Appendix G

Aquifer Recharge in Robinson Township, Ottawa County – David P. Lusch, **Ph. D., Professor Emeritus, Department of Geography, Environment, and Spatial Sciences, Michigan State University**

Appendix

Available within this appendix is the following data.

Appendix A – Community Mapping

Appendix B – M-231 Growth Areas

Appendix C – Population and Economic Data, Robinson Township

Appendix D – Robinson Township Master Plan Update Community Survey 2021 & Robinson
Township Master Plan Public Workshops: Results Summary

Appendix E – Water Supply System Master Plan for Robinson Township

Appendix F – Wastewater Master Plan

Appendix G – Aquifer Recharge in Robinson Township, Ottawa County – David P. Lusch, Ph. D.,
Professor Emeritus, Department of Geography, Environment, and Spatial Sciences,
Michigan State University

Appendix A Community Mapping

Following are the community maps as well as their established purpose, which are incorporated as part of the Master Plan. These maps are not intended to be limited to their purposes provided below but rather establish a minimum relationship to the Master Plan.

- **Master Plan Map** – creates future land use classifications and delineates boundaries for certain uses of land.
- **Soil Limitations for Residential Development without Public Sewer Map** - illustrates soil limitations for septic systems to illustrate feasibility of supporting proposed development.
- **Parks & Recreation Areas Map** – illustrates existing parks and recreation areas available to the public within the Township.
- **Natural Gas Suppliers Map** – illustrates the location of natural gas utilities and suppliers within the Township to illustrate feasibility of supporting proposed development.
- **Marathon Pipeline Map** – illustrates the general location of the Marathon Pipeline within the Township.
- **Electricity Suppliers Map** – illustrates the location of electric utilities and suppliers within the Township to illustrate feasibility of supporting proposed development.
- **Robinson Township Elevation Map** – illustrates the topography within the Township to illustrate feasibility of supporting proposed development.
- **Air Strips Map** – illustrates the location of existing air strips within the Township.
- **Designated Truck Route Map** – illustrates the location of existing truck routes within the Township.
- **Street Map** – illustrates the location and paving material of existing public roads within the Township.
- **School Districts Map** – illustrates boundaries of public school districts within the Township.
- **Hydrology Features Map** – illustrates the location of drains and water courses throughout the Township to illustrate feasibility of supporting proposed development.
- **Transportation Facilities 2022 Map** – illustrates the different types of transportation facilities available within the Township.
- **Merit Survey Respondents with a Minimum Speed of 100/20 Map & Merit Survey Respondents with a Minimum Speed of 25/3 Map** – illustrates the availability of highspeed internet within the Township.

Appendix B

M-231 Growth Areas

Following are factors, tables, and maps that provide information specific to the M-231 Growth Areas within the Township.

- Growth Boundary Factors
- Table 1: Growth Boundaries – Development Suitability Factors
- Table 2: Average Daily Traffic and Projections

GROWTH BOUNDARY FACTORS

Delineation of growth boundaries and future land uses are based on a variety of objective and subjective factors. Although factors are not weighted, prioritized, or exclusive, an assessment of information concerning all factors and a cumulative evaluation of the factors serve as the basis for the Robinson Township growth strategy.

1. Road infrastructure (Existing and Planned). Roads are an essential component of community infrastructure and are integral to land use decisions. Therefore, it is critical to ensure that the primary function of arterial roads (such as M-45 and Lincoln) which is to carry relatively high volumes of traffic long distances, is not compromised by inappropriate uses. All too often, the higher traffic volumes and greater visibility of arterial corridors entices businesses seeking that increased exposure to customer traffic. However, if not controlled, the proliferation of individual driveways and frequent in and out turning movements diminishes the capacity of the road and impedes its basic function to move traffic. Therefore, a delicate balance must be maintained between preserving the traffic-carrying function of the arterial road and permitting uses that depend on that traffic.
2. Soils and Natural Resources. Hydric soils are generally considered unsuitable for development due to their historically wet conditions. These soils are typically saturated through a significant part of the growing season or flooded long enough to eliminate oxygen in the root zone. According to the Robinson Township Hazard Mitigation plan, areas with hydric soils "are to be considered flood-prone, wetland, or otherwise suited to have development discouraged or specifically engineered to account for site hydrology." Therefore, the presence of such soils is considered a significant constraint to development due to their instability for buildings and limitations for on-site septic systems.
3. Existing Land Use. Established land use patterns must be considered in determining potential future land use options. Except in rare circumstances where redevelopment is advocated, the existing land use context must be a shaping influence as future land use options are explored. Intensive land uses may not be compatible and could potentially affect historically residential or agricultural areas negatively by reducing property values, increasing traffic, or creating nuisances (noise, hours of operation, glare, odor, etc.).
4. Future Land Use and Zoning. Development should emanate incrementally outward from areas targeted for growth through conscious land use planning. A logical, orderly, sequential growth pattern allows for the gradual expansion of needed infrastructure and other municipal services in a cost-effective and efficient manner. The Township Master Plan and this Growth Area Plan strive to manage growth and diminish incompatible land use relationships. Zoning regulations are the fundamental tools to support plan recommendations. They should ensure that appropriate uses are situated in conformance with the plan and an orderly transition is accomplished from intense uses to very low intensity uses.
5. Survey and Community Preference. Local desires are an important ingredient in any planning effort. All communities are different, local philosophies vary and conditions may

be unique. During past planning efforts, residents were surveyed to gauge their opinions regarding growth and development. The results of that survey provided valuable direction for the preparation of this plan.

6. Utilities. Water and sewer service infrastructure are critical determinants for land use intensity. Where public water and sewer are available, greater intensity of development is feasible. However, where such facilities are unavailable and private systems (septic and well) are employed, the range of potential uses and the intensity of development are severely limited.
7. Truck Routes. Except as expressly permitted under the Truck Route Ordinance, operation of heavy trucks and trailers is restricted to designated truck routes. As commercial and industrial developments are reliant upon trucks for deliveries and general operation, the most suitable lands are those that have direct access to truck routes in all directions.
8. Visibility and Demand. Commercial and industrial zoning map amendments, special land use review and site plan review requests are indicators of general demand for development. Additionally, visibility of property based on new traffic patterns and increase in the number of travelers in the township affects suitability.

The following table includes the application of the assessment factors as they related to the growth areas.

Table 1 Growth Boundaries- Development Suitability Factors

Planning Factor	Lincoln Street Focus Area	Lake Michigan Drive Focus Area	Outlying Areas
1. Road Infrastructure (Existing and Planned)	<p>Medium</p> <ul style="list-style-type: none"> • County Road- Lincoln Street • M-231 	<p>High</p> <ul style="list-style-type: none"> • M-45 Lake Michigan Drive • M-231 	<p>Low</p> <ul style="list-style-type: none"> • County secondary paved roads • County unpaved roads
2. Soils	<p>Low</p> <ul style="list-style-type: none"> • Hydric Soils 	<p>Low</p> <ul style="list-style-type: none"> • Hydric Soils 	<p>Varies</p> <ul style="list-style-type: none"> • Hydric and Non-Hydric Soils
3. Existing Land Use	<p>Low</p> <ul style="list-style-type: none"> • Low and medium density residential (north) • Agricultural land (south) 	<p>High</p> <ul style="list-style-type: none"> • Generally agricultural and undeveloped • Existing commercial 	<p>Low</p> <ul style="list-style-type: none"> • Agricultural uses • Low and medium density residential
4. Future Land Use and Zoning	<p>Low</p> <ul style="list-style-type: none"> • Existing low density residential zoning. • Low density residential future land use planned. 	<p>Medium/High</p> <ul style="list-style-type: none"> • Existing commercial and industrial zoning • Commercial and industrial land use planned 	<p>Low</p> <ul style="list-style-type: none"> • Existing residential zoning • Existing Residential future land use planned
5. Community Survey	<p>Low</p> <ul style="list-style-type: none"> • Development not desired. 	<p>Medium</p> <ul style="list-style-type: none"> • Development more acceptable 	<p>Low</p> <ul style="list-style-type: none"> • Development not desired
6. Utilities	<p>Low</p> <ul style="list-style-type: none"> • No existing or planned water and sewer. 	<p>Medium</p> <ul style="list-style-type: none"> • No existing or planned water and sewer • Closer proximity to existing utilities 	<p>Low</p> <ul style="list-style-type: none"> • No existing or planned water and sewer
7. Truck Routes	<p>Medium</p> <ul style="list-style-type: none"> • Truck routes travel in two directions. 	<p>High</p> <ul style="list-style-type: none"> • Truck routes travel in all directions 	<p>Low</p> <ul style="list-style-type: none"> • Trucks are generally prohibited
8. Visibility and Demand	<p>Medium</p> <ul style="list-style-type: none"> • New bypass traffic capture- significant increase on Lincoln west of M-231 (see traffic projections in Table 2 and Map 1). 	<p>Medium/High</p> <ul style="list-style-type: none"> • Regionally significant intersection 	<p>Low</p> <ul style="list-style-type: none"> • No bypass traffic capture or increases anticipated

		<ul style="list-style-type: none"> • New bypass traffic capture: travelers will stop for convenience-oriented needs but the location will not be a "destination." Some commercial developers may seek to take advantage of a key location and a potential new market resulting from the new hub at Lake Michigan Drive and M -231 (see traffic projections in Table 2). 	
Overall Score	Low/Medium Consolidated low-intensity commercial around new intersection to the southwest of the Lincoln/M-231 intersection.	Medium/High Designation of existing commercial and industrial future land use areas as priority area for future development.	Low No change in growth concept.
Recommendation			

Table 2 Average Daily Traffic and Projections

Road Section	2006	2013	2014	2015 (M-231 completed)	2016	2017	2018	2019	2020	2021	2030 Projected
Lincoln east of M-231	2,500										4,800
Lincoln east of 120th		2,078			1,623			1,535			
Lincoln west of M-231	4,300										11,100
Lincoln east of 128th		3,482			6,111			5,906			
Lincoln east of 144th		4,021			5,411			6,007			
120th south of Lincoln	3,000			3,040						2,294	2,400
120th north of Lincoln	1,200			1,156			1,471				2,300
M-45 west of M-231	5,400							6,700			8,400
M-45 east of M-231	7,000							13,750			14,100
M-231 south of Lincoln	N/A							no data available			10,000
M-231 north of Lincoln	N/A							11,000			22,000

Appendix C

Population and Economic Data

The following tables collected from the U.S. Census Bureau and the Ottawa County Department of Strategic Impact are included as a reference to the make up of Robinson Township's Population and Economic Characteristics. The narratives below were created using data from the tables.

- Table 1: Ottawa County, Michigan Decennial Population Data

From 1980 to 2010 Robinson Township was in the top half of municipalities in Ottawa County for population growth. This trend did not continue into 2020. From 2010 to 2020, Robinson Township was in the bottom third of Ottawa County municipalities for population growth.

- Table 2: Data Profile: Selected Social Characteristics

An overwhelming majority (90%) of Robinson Township residents live in the same place they did one year ago. Of the occupied housing units in Robinson Township, 70% are occupied by married couples. Lastly, of the 1,499 individuals enrolled in school, a majority (55%) are enrolled in grades one through eight.

- Table 3: Data Profile: Selected Economic Characteristics

Robinson Township has 4,666 residents that are 16 or older; of which 67% (3,166) are in the labor force. For residents in the labor force 95% are employed with a majority (88%) commuting to work alone. Most residents are employed in the manufacturing (25.4%), retail (7.7%), construction (7.5), and agricultural (7.2%) industries.

The median household income for Robinson Township is \$81,287 with 67% of households earning between \$50,000 and \$149,000 annually.

- Table 4: Data Profile: Selected Housing Characteristics

Approximately 97% of the housing units in Robinson Township are occupied, with a majority being owner-occupied. Of the 2,019 housing units in the Township, 46% have been built since 1990, with 54% being built in or before 1989. Two-thirds of housing units are heated using natural gas.

The median house value is \$235,300.

- Table 5: Data Profile: Demographic and Housing Estimates

Robinson Township has a total population of 6,466 individuals of which 53% are male and 47% are female. The median age is 37 with 96.7% of residents being white.

TABLE 1:
 Ottawa County, Michigan Decennial Population Data
 Data collected from Ottawa County Department of Strategic Impact

1980-1990			1990-2000			2000-2010			2010-2020		
Unit of Government	80-90 #	1990	Unit of Government	90-00 #	2000	Unit of Government	00-10 #	2010	Unit of Government	10-20 #	2020
Georgetown Township	6,568	32,672	Holland Township	11,388	28,911	Allendale Township	7,666	20,708	Georgetown Township	7,156	54,141
Holland Township	3,784	17,523	Georgetown Township	8,986	41,658	Holland Township	6,725	35,636	Allendale Township	5,614	26,322
Holland City (Ottawa pt)	3,319	25,086	Allendale Township	5,020	13,042	Georgetown Township	5,327	46,985	Grand Haven Township	2,859	18,037
Park Township	3,187	13,541	Park Township	4,038	17,579	Zeeland Township	2,358	9,971	Holland Township	2,730	38,366
Grand Haven Township	2,472	9,710	Grand Haven Township	3,568	13,278	Jamestown Township	1,972	7,034	Jamestown Township	2,615	9,649
Allendale Township	1,942	8,022	Zeeland Township	3,141	7,613	Grand Haven Township	1,900	15,178	Zeeland Township	2,062	12,033
Spring Lake Township	1,357	8,214	Holland City (Ottawa pt)	2,760	27,846	Spring Lake Township	1,351	11,977	Blendon Township	1,323	7,095
Hudsonville City	1,326	6,170	Spring Lake Township	2,412	10,626	Tallmadge Township	694	7,575	Tallmadge Township	1,240	8,815
Holland City (Allegan pt)	1,278	5,792	Olive Township	1,825	4,691	Robinson Township	496	6,084	Port Sheldon Township	969	5,209
Blendon Township	977	4,740	Robinson Township	1,663	5,588	Coopersville City	365	4,275	Park Township	871	18,673
Robinson Township	907	3,925	Port Sheldon Township	1,574	4,503	Park Township	223	17,802	Spring Lake Township	803	12,780
Zeeland Township	761	4,472	Holland City (Allegan pt)	1,410	7,202	Crockery Township	178	3,960	Holland City (Allegan pt)	712	7,728
Port Sheldon Township	723	2,929	Jamestown Township	1,003	5,062	Polkton Township	88	2,423	Crockery Township	621	4,581
Zeeland City	653	5,417	Hudsonville City	990	7,160	Blendon Township	51	5,772	Grand Haven City	605	11,017
Coopersville City	532	3,421	Blendon Township	981	5,721	Olive Township	44	4,735	Coopersville City	562	4,837
Jamestown Township	513	4,059	Tallmadge Township	581	6,881	Hudsonville City	(44)	7,116	Hudsonville City	523	7,639
Ferrysburg Village	479	2,919	Coopersville City	489	3,910	Wright Township	(139)	3,147	Holland City (Ottawa pt)	479	26,514
Olive Township	417	2,866	Zeeland City	388	5,805	Ferrysburg Village	(148)	2,892	Robinson Township	313	6,397
Tallmadge Township	373	6,300	Crockery Township	183	3,782	Holland City (Allegan pt)	(186)	7,016	Olive Township	278	5,013
Polkton Township	250	2,277	Chester Township	182	2,315	Spring Lake Village	(191)	2,323	Zeeland City	219	5,723
Grand Haven City	188	11,951	Ferrysburg Village	121	3,040	Port Sheldon Township	(263)	4,240	Spring Lake Village	217	2,540
Chester Township	99	2,133	Polkton Township	58	2,335	Chester Township	(298)	2,017	Polkton Township	148	2,571
Crockery Township	63	3,599	Wright Township	1	3,286	Zeeland City	(301)	5,504	Chester Township	85	2,102
Wright Township	(102)	3,285	Spring Lake Village	(23)	2,514	Grand Haven City	(756)	10,412	Ferrysburg Village	63	2,955
Spring Lake Village	(194)	2,537	Grand Haven City	(783)	11,168	Holland City (Ottawa pt)	(1,811)	26,035	Wright Township	44	3,191
Unit of Government	80-90 #	1990	Unit of Government	90-00 #	2000	Unit of Government	00-10 #	2010	Unit of Government	10-20 #	2020
Ottawa County	30,594	187,768	Ottawa County	50,546	238,314	Ottawa County	25,487	263,801	Ottawa County	32,399	296,200
Michigan	33,243	9,295,287	Michigan	643,157	9,938,444	Michigan	(54,804)	9,883,640	Michigan	193,691	10,077,331

TABLE 2:
 2020 American Community Survey 5-year Estimates: U.S. Census Bureau
 Data Profile: Selected Social Characteristics

	Estimate
HOUSEHOLDS BY TYPE	
Total households	1,971
Married-couple household	1,390
With children of the householder under 18 years	(X)
Cohabiting couple household	79
With children of the householder under 18 years	(X)
Male householder, no spouse/partner present	260
With children of the householder under 18 years	(X)
Householder living alone	162
65 years and over	61
Female householder, no spouse/partner present	242
With children of the householder under 18 years	(X)
Householder living alone	85
65 years and over	32
Households with one or more people under 18 years	746
Households with one or more people 65 years and over	550
Average household size	3
Average family size	4
RELATIONSHIP	
Population in households	6,372
Householder	1,971
Spouse	1,355
Unmarried partner	76
Child	2,126
Other relatives	641
Other nonrelatives	203

MARITAL STATUS	
Males 15 years and over	2,514
Never married	746
Now married, except separated	1,551
Separated	-
Widowed	58
Divorced	159
Females 15 years and over	2,218
Never married	409
Now married, except separated	1,457
Separated	45
Widowed	159
Divorced	148
FERTILITY	
Number of women 15 to 50 years old who had a birth in the past 12 months	70
Unmarried women (widowed, divorced, and never married)	11
Per 1,000 unmarried women	23
Per 1,000 women 15 to 50 years old	54
Per 1,000 women 15 to 19 years old	-
Per 1,000 women 20 to 34 years old	108
Per 1,000 women 35 to 50 years old	25
GRANDPARENTS	
Number of grandparents living with own grandchildren under 18 years	189
Grandparents responsible for grandchildren	81
Years responsible for grandchildren	
Less than 1 year	-
1 or 2 years	16
3 or 4 years	7
5 or more years	58
Number of grandparents responsible for own grandchildren under 18 years	81
Who are female	40
Who are married	74
SCHOOL ENROLLMENT	
Population 3 years and over enrolled in school	1,499
Nursery school, preschool	70
Kindergarten	136
Elementary school (grades 1-8)	825
High school (grades 9-12)	281
College or graduate school	187

EDUCATIONAL ATTAINMENT	
Population 25 years and over	4,144
Less than 9th grade	146
9th to 12th grade, no diploma	262
High school graduate (includes equivalency)	1,326
Some college, no degree	885
Associate's degree	491
Bachelor's degree	715
Graduate or professional degree	319
High school graduate or higher	3,736
Bachelor's degree or higher	1,034
VETERAN STATUS	
Civilian population 18 years and over	4,506
Civilian veterans	381
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION	
Total Civilian Noninstitutionalized Population	6,466
With a disability	751
Under 18 years	1,960
With a disability	112
18 to 64 years	3,674
With a disability	376
65 years and over	832
With a disability	263
RESIDENCE 1 YEAR AGO	
Population 1 year and over	6,396
Same house	5,805
Different house (in the U.S. or abroad)	591
Different house in the U.S.	575
Same county	542
Different county	33
Same state	20
Different state	13
Abroad	16
PLACE OF BIRTH	
Total population	6,466
Native	6,157
Born in United States	6,117
State of residence	5,201
Different state	916
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	40
Foreign born	309

U.S. CITIZENSHIP STATUS	
Foreign-born population	309
Naturalized U.S. citizen	146
Not a U.S. citizen	163
YEAR OF ENTRY	
Population born outside the United States	349
Native	40
Entered 2010 or later	-
Entered before 2010	40
Foreign born	309
Entered 2010 or later	73
Entered before 2010	236
WORLD REGION OF BIRTH OF FOREIGN BORN	
Foreign-born population, excluding population born at sea	309
Europe	10
Asia	75
Africa	-
Oceania	-
Latin America	217
Northern America	7
LANGUAGE SPOKEN AT HOME	
Population 5 years and over	6,111
English only	5,632
Language other than English	479
Speak English less than "very well"	280
Spanish	396
Speak English less than "very well"	246
Other Indo-European languages	10
Speak English less than "very well"	-
Asian and Pacific Islander languages	5
Speak English less than "very well"	5
Other languages	68
Speak English less than "very well"	29

ANCESTRY	
Total population	6,466
American	312
Arab	50
Czech	11
Danish	6
Dutch	1,587
English	400
French (except Basque)	125
French Canadian	5
German	1,287
Greek	43
Hungarian	23
Irish	961
Italian	66
Lithuanian	-
Norwegian	60
Polish	487
Portuguese	-
Russian	-
Scotch-Irish	63
Scottish	48
Slovak	17
Subsaharan African	-
Swedish	90
Swiss	6
Ukrainian	37
Welsh	5
West Indian (excluding Hispanic origin groups)	-
COMPUTERS AND INTERNET USE	
Total households	1,971
With a computer	1,899
With a broadband Internet subscription	1,757

TABLE 3:
2020 American Community Survey 5-year Estimates: U.S. Census Bureau
Data Profile: Selected Economic Characteristics

	Estimate
EMPLOYMENT STATUS	
Population 16 years and over	4,666
In labor force	3,116
Civilian labor force	3,116
Employed	2,983
Unemployed	133
Armed Forces	-
Not in labor force	1,550
Civilian labor force	3,116
Unemployment Rate	(X)
Females 16 years and over	2,195
In labor force	1,271
Civilian labor force	1,271
Employed	1,215
Own children of the householder under 6 years	466
All parents in family in labor force	339
Own children of the householder 6 to 17 years	1,489
All parents in family in labor force	785
COMMUTING TO WORK	
Workers 16 years and over	2,930
Car, truck, or van -- drove alone	2,530
Car, truck, or van -- carpooled	271
Public transportation (excluding taxicab)	-
Walked	6
Other means	2
Worked from home	121
Mean travel time to work (minutes)	23
OCCUPATION	
Civilian employed population 16 years and over	2,983
Management, business, science, and arts occupations	1,035
Service occupations	405
Sales and office occupations	561
Natural resources, construction, and maintenance occupations	485
Production, transportation, and material moving occupations	497

INDUSTRY	
Civilian employed population 16 years and over	2,983
Agriculture, forestry, fishing and hunting, and mining	217
Construction	224
Manufacturing	758
Wholesale trade	74
Retail trade	230
Transportation and warehousing, and utilities	155
Information	48
Finance and insurance, and real estate and rental and leasing	91
Professional, scientific, and management, and administrative and waste management services	206
Educational services, and health care and social assistance	506
Arts, entertainment, and recreation, and accommodation and food services	211
Other services, except public administration	159
Public administration	104
CLASS OF WORKER	
Civilian employed population 16 years and over	2,983
Private wage and salary workers	2,570
Government workers	268
Self-employed in own not incorporated business workers	145
Unpaid family workers	-

INCOME AND BENEFITS (IN 2020 INFLATION-ADJUSTED DOLLARS)	
Total households	1,971
Less than \$10,000	26
\$10,000 to \$14,999	18
\$15,000 to \$24,999	62
\$25,000 to \$34,999	87
\$35,000 to \$49,999	149
\$50,000 to \$74,999	494
\$75,000 to \$99,999	398
\$100,000 to \$149,999	429
\$150,000 to \$199,999	214
\$200,000 or more	94
Median household income (dollars)	81,287
Mean household income (dollars)	95,831
With earnings	1,680
Mean earnings (dollars)	90,876
With Social Security	668
Mean Social Security income (dollars)	27,053
With retirement income	447
Mean retirement income (dollars)	22,220
With Supplemental Security Income	115
Mean Supplemental Security Income (dollars)	11,865
With cash public assistance income	71
Mean cash public assistance income (dollars)	3,410
With Food Stamp/SNAP benefits in the past 12 months	80
Families	1,637
Less than \$10,000	8
\$10,000 to \$14,999	9
\$15,000 to \$24,999	24
\$25,000 to \$34,999	63
\$35,000 to \$49,999	110
\$50,000 to \$74,999	370
\$75,000 to \$99,999	405
\$100,000 to \$149,999	344
\$150,000 to \$199,999	214
\$200,000 or more	90
Median family income (dollars)	85,766
Mean family income (dollars)	102,011
Per capita income (dollars)	29,397
Nonfamily households	334
Median nonfamily income (dollars)	51,058
Mean nonfamily income (dollars)	57,690
Median earnings for workers (dollars)	36,603
Median earnings for male full-time, year-round workers (dollars)	60,168
Median earnings for female full-time, year-round workers (dollars)	39,659

HEALTH INSURANCE COVERAGE	
Civilian noninstitutionalized population	6,466
With health insurance coverage	6,358
With private health insurance	5,238
With public coverage	2,142
No health insurance coverage	108
Civilian noninstitutionalized population under 19 years	2,015
No health insurance coverage	10
Civilian noninstitutionalized population 19 to 64 years	3,619
In labor force:	2,902
Employed:	2,781
With health insurance coverage	2,712
With private health insurance	2,592
With public coverage	182
No health insurance coverage	69
Unemployed:	121
With health insurance coverage	121
With private health insurance	113
With public coverage	8
No health insurance coverage	-
Not in labor force:	717
With health insurance coverage	693
With private health insurance	482
With public coverage	365
No health insurance coverage	24
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL (X) = Data not Available	
All families	(X)
With related children of the householder under 18 years	(X)
With related children of the householder under 5 years only	(X)
Married couple families	(X)
With related children of the householder under 18 years	(X)
With related children of the householder under 5 years only	(X)
Families with female householder, no spouse present	(X)
With related children of the householder under 18 years	(X)
With related children of the householder under 5 years only	(X)
All people	(X)
Under 18 years	(X)
Related children of the householder under 18 years	(X)
Related children of the householder under 5 years	(X)
Related children of the householder 5 to 17 years	(X)
18 years and over	(X)
18 to 64 years	(X)
65 years and over	(X)
People in families	(X)
Unrelated individuals 15 years and over	(X)

TABLE 4:
 2020 American Community Survey 5-year Estimates: U.S. Census Bureau
 Data Profile: Selected Housing Characteristics

	Estimate
HOUSING OCCUPANCY	
Total housing units	2,019
Occupied housing units	1,971
Vacant housing units	48
Homeowner vacancy rate	-
Rental vacancy rate	-
UNITS IN STRUCTURE	
Total housing units	2,019
1-unit, detached	1,917
1-unit, attached	24
2 units	26
3 or 4 units	5
5 to 9 units	-
10 to 19 units	4
20 or more units	-
Mobile home	43
Boat, RV, van, etc.	-
YEAR STRUCTURE BUILT	
Total housing units	2,019
Built 2014 or later	110
Built 2010 to 2013	53
Built 2000 to 2009	264
Built 1990 to 1999	503
Built 1980 to 1989	241
Built 1970 to 1979	445
Built 1960 to 1969	146
Built 1950 to 1959	129
Built 1940 to 1949	39
Built 1939 or earlier	89

ROOMS	
Total housing units	2,019
1 room	-
2 rooms	-
3 rooms	14
4 rooms	272
5 rooms	363
6 rooms	343
7 rooms	270
8 rooms	300
9 rooms or more	457
Median rooms	7
BEDROOMS	
Total housing units	2,019
No bedroom	-
1 bedroom	28
2 bedrooms	327
3 bedrooms	959
4 bedrooms	515
5 or more bedrooms	190
HOUSING TENURE	
Occupied housing units	1,971
Owner-occupied	1,854
Renter-occupied	117
Average household size of owner-occupied unit	3
Average household size of renter-occupied unit	4
YEAR HOUSEHOLDER MOVED INTO UNIT	
Occupied housing units	1,971
Moved in 2019 or later	61
Moved in 2015 to 2018	283
Moved in 2010 to 2014	410
Moved in 2000 to 2009	451
Moved in 1990 to 1999	386
Moved in 1989 and earlier	380
VEHICLES AVAILABLE	
Occupied housing units	1,971
No vehicles available	45
1 vehicle available	321
2 vehicles available	794
3 or more vehicles available	811

HOUSE HEATING FUEL	
Occupied housing units	1,971
Utility gas	1,314
Bottled, tank, or LP gas	355
Electricity	98
Fuel oil, kerosene, etc.	15
Coal or coke	-
Wood	124
Solar energy	-
Other fuel	32
No fuel used	33
SELECTED CHARACTERISTICS	
Occupied housing units	1,971
Lacking complete plumbing facilities	-
Lacking complete kitchen facilities	-
No telephone service available	15
OCCUPANTS PER ROOM	
Occupied housing units	1,971
1.00 or less	1,912
1.01 to 1.50	53
1.51 or more	6
VALUE	
Owner-occupied units	1,854
Less than \$50,000	80
\$50,000 to \$99,999	38
\$100,000 to \$149,999	241
\$150,000 to \$199,999	352
\$200,000 to \$299,999	550
\$300,000 to \$499,999	516
\$500,000 to \$999,999	77
\$1,000,000 or more	-
Median (dollars)	235,300
MORTGAGE STATUS	
Owner-occupied units	1,854
Housing units with a mortgage	1,279
Housing units without a mortgage	575

SELECTED MONTHLY OWNER COSTS (SMOC)	
Housing units with a mortgage	1,279
Less than \$500	37
\$500 to \$999	208
\$1,000 to \$1,499	471
\$1,500 to \$1,999	345
\$2,000 to \$2,499	111
\$2,500 to \$2,999	44
\$3,000 or more	63
Median (dollars)	1,428
Housing units without a mortgage	575
Less than \$250	59
\$250 to \$399	130
\$400 to \$599	266
\$600 to \$799	89
\$800 to \$999	27
\$1,000 or more	4
Median (dollars)	477
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI)	
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	1,279
Less than 20.0 percent	726
20.0 to 24.9 percent	151
25.0 to 29.9 percent	198
30.0 to 34.9 percent	83
35.0 percent or more	121
Not computed	-
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	562
Less than 10.0 percent	335
10.0 to 14.9 percent	128
15.0 to 19.9 percent	25
20.0 to 24.9 percent	26
25.0 to 29.9 percent	34
30.0 to 34.9 percent	-
35.0 percent or more	14
Not computed	13

GROSS RENT	
Occupied units paying rent	63
Less than \$500	4
\$500 to \$999	30
\$1,000 to \$1,499	29
\$1,500 to \$1,999	-
\$2,000 to \$2,499	-
\$2,500 to \$2,999	-
\$3,000 or more	-
Median (dollars)	964
No rent paid	54
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)	
Occupied units paying rent (excluding units where GRAPI cannot be computed)	63
Less than 15.0 percent	27
15.0 to 19.9 percent	7
20.0 to 24.9 percent	24
25.0 to 29.9 percent	-
30.0 to 34.9 percent	-
35.0 percent or more	5
Not computed	54

TABLE 5:
2020 American Community Survey 5-year Estimates: U.S. Census Bureau
Data Profile: Demographic and Housing Estimates

	Estimate
SEX AND AGE	
Total population	6,466
Male	3,442
Female	3,024
Sex ratio (males per 100 females)	114
Under 5 years	355
5 to 9 years	589
10 to 14 years	790
15 to 19 years	358
20 to 24 years	230
25 to 34 years	708
35 to 44 years	847
45 to 54 years	913
55 to 59 years	440
60 to 64 years	404
65 to 74 years	458
75 to 84 years	323
85 years and over	51
Median age (years)	37
Under 18 years	1,960
16 years and over	4,666
18 years and over	4,506
21 years and over	4,332
62 years and over	1,136
65 years and over	832
18 years and over	4,506
Male	2,344
Female	2,162
Sex ratio (males per 100 females)	108
65 years and over	832
Male	420
Female	412
Sex ratio (males per 100 females)	102

RACE	
Total population	6,466
One race	6,191
Two or more races	275
One race	6,191
White	5,982
Black or African American	21
American Indian and Alaska Native	28
Cherokee tribal grouping	-
Chippewa tribal grouping	-
Navajo tribal grouping	-
Sioux tribal grouping	-
Asian	16
Asian Indian	-
Chinese	16
Filipino	-
Japanese	-
Korean	-
Vietnamese	-
Other Asian	-
Native Hawaiian and Other Pacific Islander	-
Native Hawaiian	-
Chamorro	-
Samoan	-
Other Pacific Islander	-
Some other race	144
Two or more races	275
White and Black or African American	-
White and American Indian and Alaska Native	36
White and Asian	-
Black or African American and American Indian and Alaska Native	-
Race alone or in combination with one or more other races	
Total population	6,466
White	6,257
Black or African American	21
American Indian and Alaska Native	64
Asian	16
Native Hawaiian and Other Pacific Islander	-
Some other race	383

HISPANIC OR LATINO AND RACE	
Total population	6,466
Hispanic or Latino (of any race)	529
Mexican	399
Puerto Rican	35
Cuban	58
Other Hispanic or Latino	37
Not Hispanic or Latino	5,937
White alone	5,670
Black or African American alone	21
American Indian and Alaska Native alone	28
Asian alone	16
Native Hawaiian and Other Pacific Islander alone	-
Some other race alone	-
Two or more races	202
Two races including Some other race	166
Two races excluding Some other race, and Three or more races	36
Total housing units	2,019
CITIZEN, VOTING AGE POPULATION	
Citizen, 18 and over population	4,343
Male	2,221
Female	2,122

Sources:

Table 1: https://www.miottawa.org/Departments/Planning/county_statistics.htm

Table 2: <https://data.census.gov/cedsci/table?g=0600000US2613969000&tid=ACSDP5Y2020.DP02>

Table 3: <https://data.census.gov/cedsci/table?g=0600000US2613969000&tid=ACSDP5Y2020.DP03>

Table 4: <https://data.census.gov/cedsci/table?g=0600000US2613969000&tid=ACSDP5Y2020.DP04>

Table 5: <https://data.census.gov/cedsci/table?g=0600000US2613969000&tid=ACSDP5Y2020.DP05>

Appendix D

Robinson Township Master Plan Update Community Survey 2021 & Robinson Township Master Plan Public Workshops: Results Summary

A summary of the Master Plan Update Community Survey 2021 and the Public Workshops is provided within this Appendix D. The entirety of the results is available at the Township Hall.

Appendix E

Water Supply System Master Plan for Robinson Township

Available within the December 2014 Water Supply System Master Plan is the following:

- Introduction
- Existing Water System
- Water Use Projections
- Proposed Water Supply System
- Procedures for System Extensions
- Figures
 - Figure 1 – Robinson Township Water Plan – Existing Systems
 - Figure 2 – Robinson Township Proposed Land Use Plan
 - Figure 3 – Wells in Robinson Township per Wellogic
 - Figure 4 – Robinson Township Water Master Plan
 - Figure 5 – Robinson Township Water Master Plan – Northeast
 - Figure 6 – Robinson Township Water Master Plan – Southeast
 - Figure 7 – Robinson Township Water Master Plan – Northwest

Appendix F

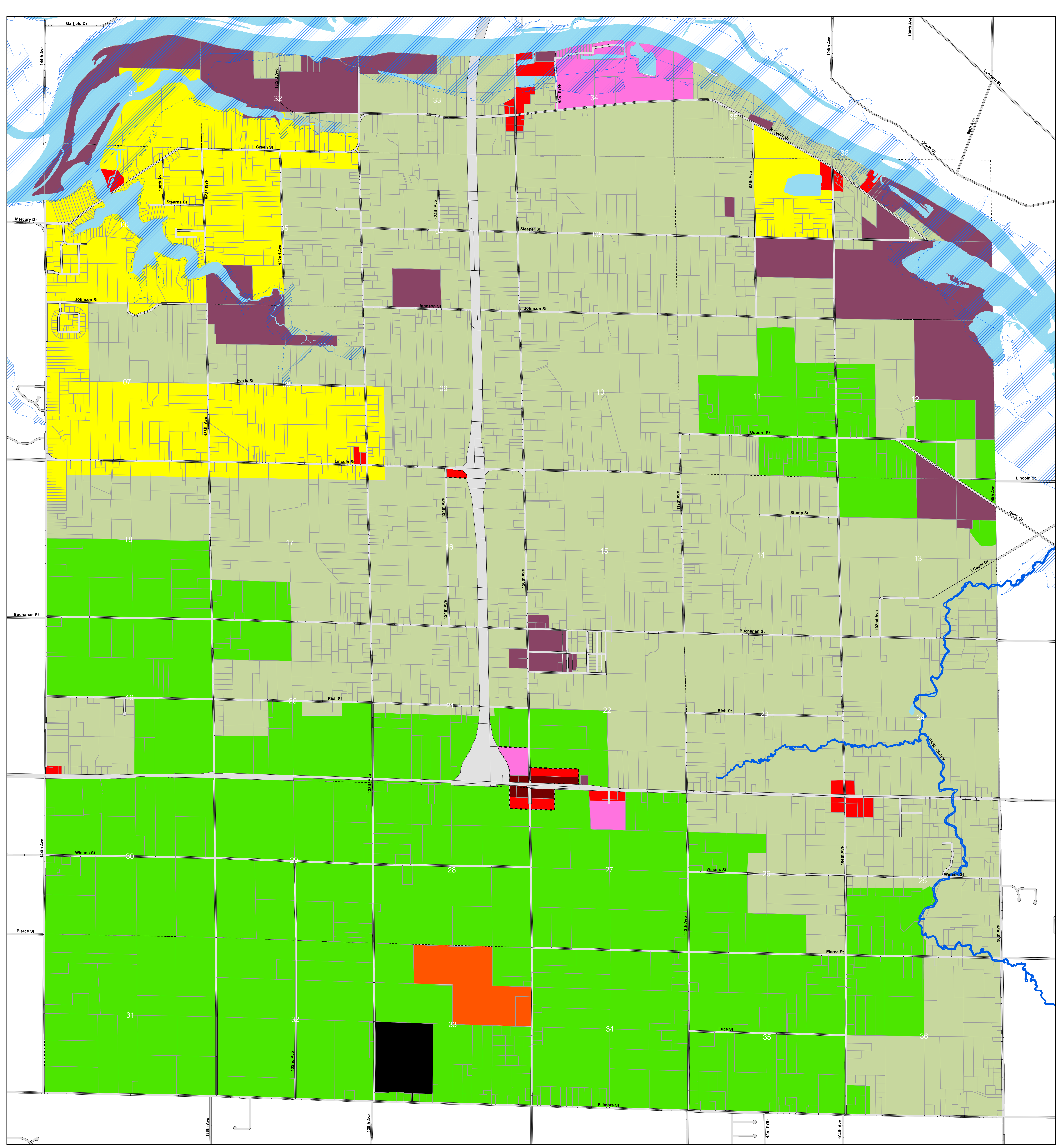
Wastewater Master Plan

Available within the March 2014 Wastewater Master Plan is the following:

- Introduction
- Master Plan
- Service to M-231 & M-45 Interchange
- Service to M-321 & Lincoln Street
- Tables
 - Table 1 – Capacity Analysis
 - Table 2 – Projected Flow Rates
 - Table 3 – Cost Estimate Connect to Ottawa County System at Fillmore Street and 120th Avenue
 - Table 4 – Cost Estimate Service from West Central Ottawa Treatment Plant
 - Table 5 – Cost Estimate Forcemain from M-45 and M-231 to Grand Haven Charter Township Pump Station
 - Table 6 – Cost Estimate Service from Allendale Township
 - Table 7 – Cost Estimate On-Site Septic Tank and Drainfield System
 - Table 8 – Cost Estimate Wastewater Collection and Treatment System/On-site Lagoon System
- Figures
 - Figure 1 – Zoning Map
 - Figure 2 – Wastewater Master Plan
 - Figure 3 – Ottawa County Complex, Flow Schematic

Appendix G

Aquifer Recharge in Robinson Township, Ottawa County – David P. Lusch, Ph. D., Professor Emeritus, Department of Geography, Environment, and Spatial Sciences, Michigan State University



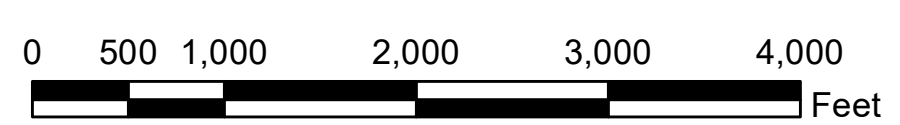
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Robinson Township

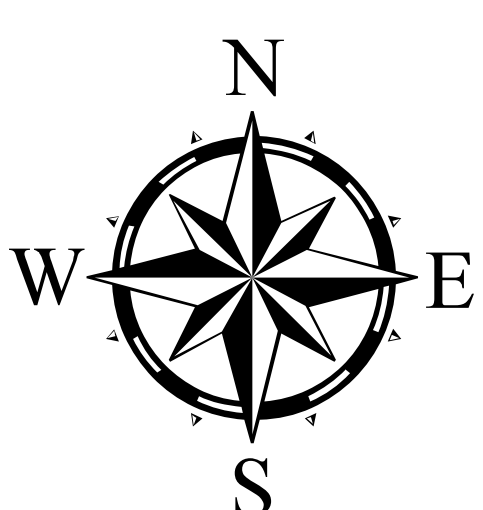
Master Plan
 T07-08N R16W

1 inch = 1,000 feet



Legend

- 100yr Floodplain (2011)
- Growth Area Boundary
- Agricultural (AG)
- Commercial (C)
- Highway Commercial (HC)
- Rural Residential (LDR)
- Residential (MDR)
- Residential (HDR)
- Industrial (I)
- Public (PQP)
- REC, Recreational (REC)
- Mobile Home, MHP



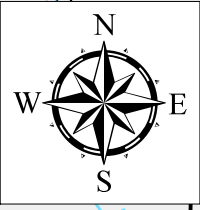
Draft Nov. 1 2022
 Rev. 01/31/2023
 Rev. 03/14/2023
 Rev. 04/11/2023



Robinson Township

Street Map 2023

T07N-08N, R15W



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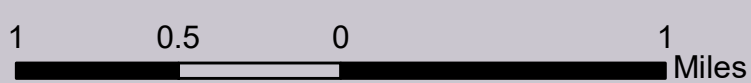
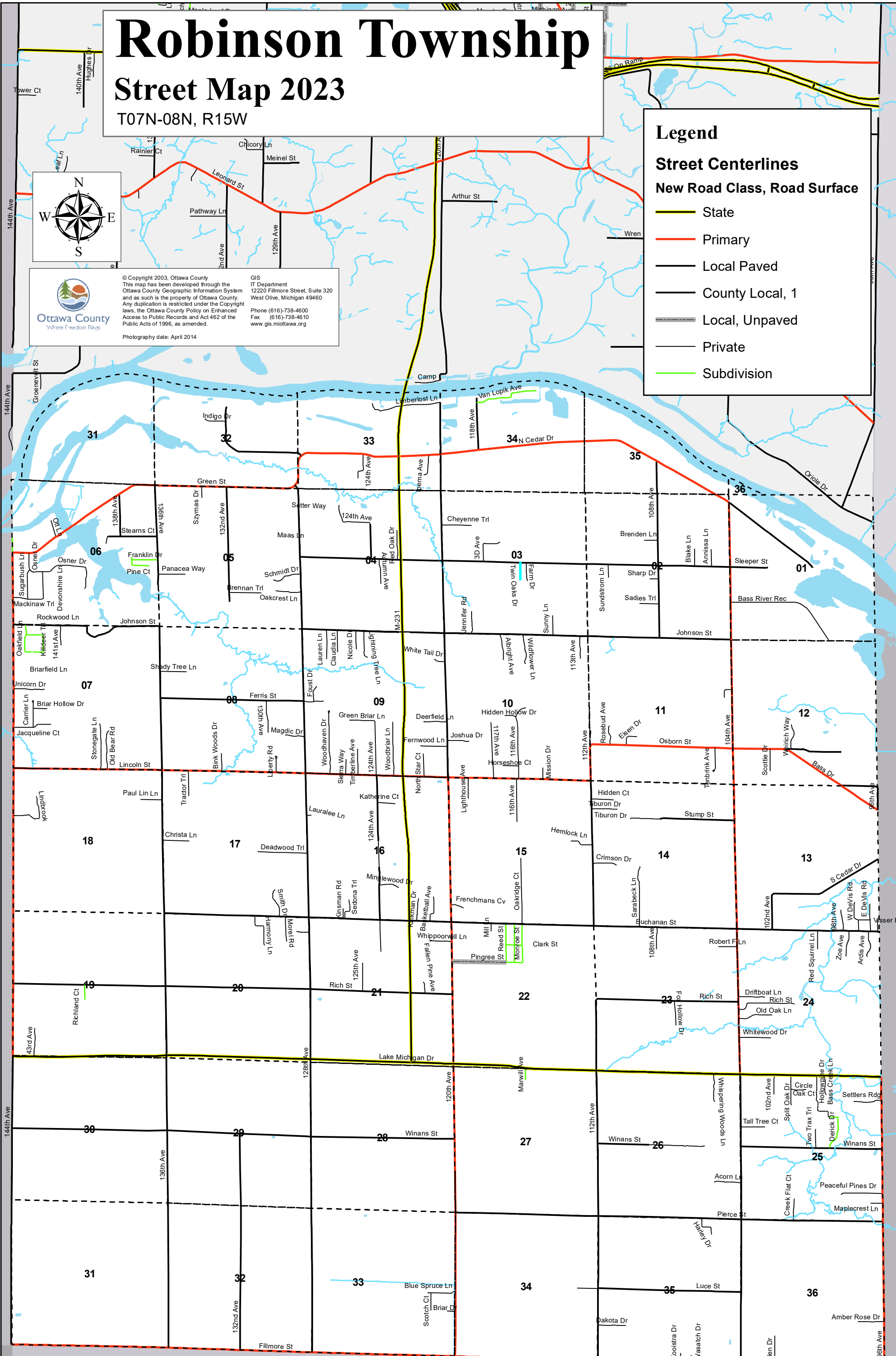
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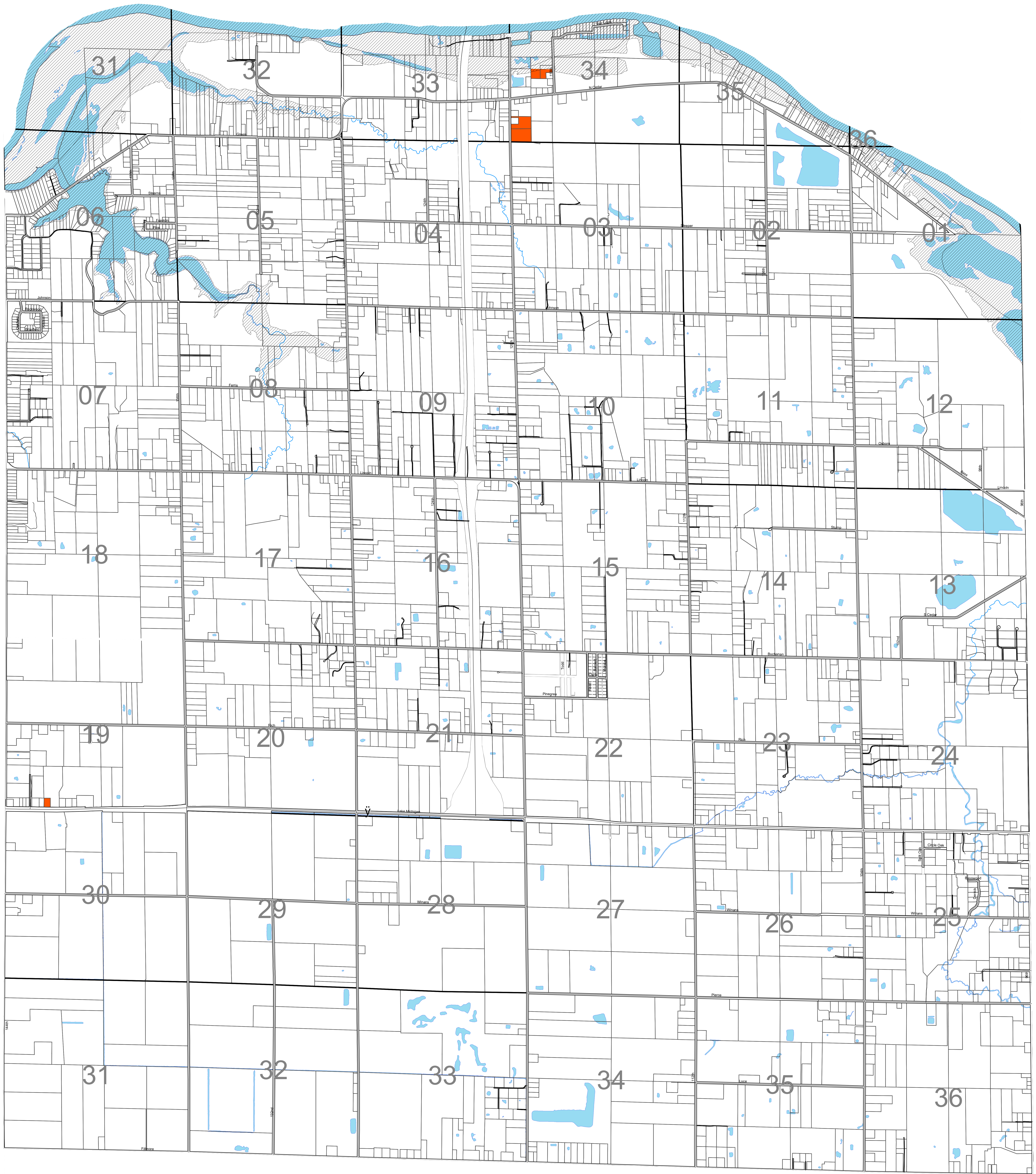
Legend

Street Centerlines

New Road Class, Road Surface

- State
- Primary
- Local Paved
- County Local, 1
- Local, Unpaved
- Private
- Subdivision





Robinson Township Zoning Map

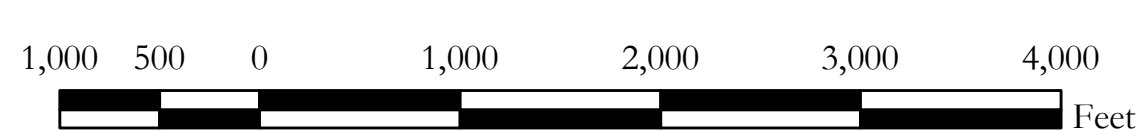


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Path: S:\Local_Unit_Projects\Robinson_Twp\Zoning\robinsone_zoning02012_R2.mxd
 Print Date: 12/18/2013

1 inch = 958 feet



Legend

Zoning Class and Code

Multiple-Family Residential (R-2)

