

CONVIS TOWNSHIP MASTER PLAN

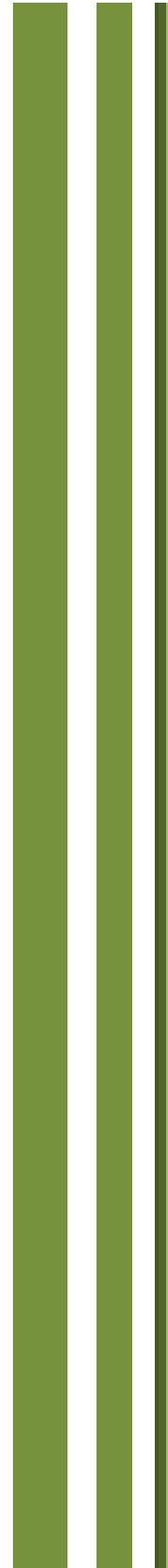
Draft
December 18, 2018

Prepared By The
**Convis Township
Planning Commission**

Under The Direction Of The
**Convis Township
Board Of Trustees**

With The Assistance Of
Mark A. Eidelson, AICP
Landplan Inc.

CONVIS TOWNSHIP
CALHOUN COUNTY, MICHIGAN



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Statement of Approval Page

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Chapter One OVERVIEW

Introduction

This Chapter provides an overview of the Convis Township Master Plan and the Master Plan’s role, importance, preparation process, and principal policies. Understanding the fundamentals of the Master Plan will enable township residents and officials to appreciate the role it plays in ensuring the future welfare of the community, its residents and its resources. Embracing this Plan as a vital tool in preserving and enhancing the public health, safety and welfare of the township is essential if this Plan is to be effective.

This Master Plan was prepared by the Convis Township Planning Commission under the authority of the Michigan Planning Enabling Act (P.A 33 of 2008, as amended).

What is the Master Plan?

Purpose / Enabling Authority

Just as individuals and families plan for their future well-being, so must municipalities. This Master Plan is a “plan” – it is a specific tangible document consisting of text, maps, and figures that establishes a plan for how growth and associated land development should be guided to enhance the long-term welfare of Convis Township.

The following key words and phrases can generally describe the Master Plan:

FUTURE ORIENTED: The plan concerns itself with long-range planning to guide and manage future growth and development, and the manner in which the township should evolve over the next ten to twenty years in response to growth, development and preservation interests.

GENERAL: The plan establishes broad principles and policies to address future land use and public services.

COMPREHENSIVE: The Plan is comprehensive in that it addresses all principal types of land use and the practical geographic boundaries of each.

DYNAMIC: The Plan is intended to be continually evolving in light of the aspirations of local residents, changing conditions in the township, and new strategies to manage growth.

Purpose of the Master Plan

Section 7(2) of the Michigan Planning Enabling Act (MCL 125.3807) provides:

The general purpose of a master plan is to guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all of the following criteria:

- (a) Is coordinated, adjusted, harmonious, efficient, and economical.*
- (b) Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development.*
- (c) Will, in accordance with present and future needs, best promote public health, safety, morals, order, convenience, prosperity, and general welfare.*
- (d) Includes, among other things, promotion of or adequate provision for 1 or more of the following:*
 - (i) A system of transportation to lessen congestion on streets.*
 - (ii) Safety from fire and other dangers.*
 - (iii) Light and air.*
 - (iv) Healthful and convenient distribution of population.*
 - (v) Good civic design and arrangement and wise and efficient expenditure of public funds.*
 - (vi) Public utilities such as sewage disposal and water supply and other public improvements.*
 - (vii) Recreation.*
 - (viii) The use of resources in accordance with their character and adaptability.*

This Master Plan is not a law or regulatory document, but a "policy plan" to be implemented through, in part, zoning and other regulatory and non-regulatory tools. For example, though the Master Plan is not a zoning ordinance, the Master Plan's recommendations and policies serve as a basis for updating the current Convis Township Zoning Ordinance.

services (Appendix A); natural features such as soils, topography, and water resources (Appendix B); demographic features such as population growth, employment, and education (Appendix C); and maps illustrating township features (Appendix D).

**Zoning Ordinance
Must be Based on a Master Plan**

The Michigan Zoning Enabling Act, which provides Michigan municipalities with the statutory authority to adopt zoning regulations, requires that a municipality's land development regulations *"...shall be based upon a plan designed to promote the public health, safety, and general welfare, to encourage the use of lands in accordance with their character and adaptability, to limit the improper use of land, to conserve natural resources and energy..."*

The Convis Township Master Plan addresses this statutory requirement and ensures a strong legal foundation for the township's zoning regulations.

**Importance and Application
of the Master Plan**

The importance and application of the Convis Township Master Plan are demonstrated in:

- the long-term interests of the township
- the day-to-day administration of the township's planning and zoning program

Long Term Interests

There are a number of interests shared by residents and officials today that can be expected to continue for years to come and be similarly shared by future residents and new officials. Some of these important interests include:

- protecting the township's rural character
- protecting the quality of life of residents
- protecting the township's natural resources including its surface and ground water, productive farmland, forest lands, wetlands, and wildlife
- minimizing tax burdens
- ensuring appropriate land use and adequate services to protect the public health, safety, and welfare of residents and visitors
- ensuring compatibility with the use and development of neighboring properties

Elements of the Master Plan

This Master Plan consists of the following key components:

Chapter One (Introduction) presents an overview of the purpose and role of the Plan, the process followed in its preparation, key planning policies, and a summary of township conditions.

Chapter Two (Planning Issues, Goals and Objectives) presents important planning issues facing the township today, and associated goals and objectives that address these issues.

Chapter Three (Future Land Use Strategy) presents future land use policies including the planned geographic boundaries for principal land use types.

Chapter Four (Coordinated Public Services) presents policies addressing the coordination of public services with the planned future land use pattern and the township's overall welfare.

Chapter Five (Implementation) presents key measures to effectuate the policies of the Plan.

The Appendices present an overview of existing conditions and trends in the township, addressing cultural features such as roads, land use, and public

This Plan supports these long-term interests through a future-oriented strategy that seeks to further these interests. Chapter Two establishes goals and objectives, and Chapters Three and Four establishes future land use and public services strategies, to secure these and other long-term interests.

**Balancing Development
with Services and Natural Resources**

Development without adequate public services to meet the demands of the development, as well as development which places excessive demands on the township's natural resources, can lead the township into a future of social and environmental risks that may threaten the public's health, safety, and welfare.

Day-To-Day Administration

In addition to furthering the long-term interests of the township, the Master Plan also plays an important role in the day-to-day planning and zoning efforts of the township:

- Advisory Policies: The Plan is an official advisory policy statement that should be readily shared with existing and prospective landowners and developers. The Plan informs all of the long term intentions of the township regarding land use and encourages development proposals more closely integrated with the official policies of the Plan.
- Regulatory Programs: The Plan establishes a practical basis for the township to revise, update, or otherwise prepare regulatory programs intended to ensure that the policies of the Plan are implemented including zoning and land division regulations.
- Review of Land Development Proposals: Chapter Two includes a list of township goals and objectives that should be reviewed when considering proposed rezoning requests, site plans, and related land use proposals, serving as criteria upon which the proposal can be evaluated. Chapter Three provides policies regarding the planned future land use pattern in the township – valuable reference points upon which land use proposals should be evaluated.
- Public Services Improvements: The identification of a planned future land use pattern enables the township to prioritize areas in need of current or future public services improvements and plan accordingly. Chapters Four and Five provide important guidance in this area.
- Intergovernmental Coordination: This Plan provides the basis for township officials to communicate effectively with neighboring communities regarding both the impact of their planning and zoning actions and opportunities for mutual gain through coordinated land use and public services efforts.
- Factual Reference: This Plan includes a factual overview of trends and conditions in the township. This factual profile can educate local officials and residents and aid in the review of development proposals, encourage constructive discussion of planning issues and policies, and serve as a base line for future studies.

How The Plan Was Prepared

The township adopted a master plan in 2003 under the Township Planning Act. The Convis Township Planning Commission undertook a review of the Plan in the summer of 2017 and identified revision issues ranging from old and outdated facts and figures to more substantive concerns regarding the Plan's policies and other content. With the increasing age of the 2003 Plan and concerns about certain aspects of the 2003 Plan, and the repeal of the Township Planning Act in 2008, replaced by the Planning Enabling Act (Public Act 33 of 2008), Convis Township embarked on the development of a wholly new plan in the spring of 2017.

One of the first tasks undertaken by the township was the administration of a community-wide mail survey in May of 2017 to gain insight into local perceptions about the township and aspirations for the future including land use and public services.

The Planning Commission's initial efforts were also directed at establishing a database about the Township for use during the planning process. This involved a review of physical and cultural conditions in the township including soils, topography, road network, existing land use patterns, public services, and demographic characteristics.

The Planning Commission then directed its efforts to identifying important planning issues facing the community and established a set of goal and objective statements to address each, and guide the development of the Plan.

Several alternative future land use patterns and strategies were then developed based on the data collected and the goals and objectives statements. The Planning Commission studied these alternatives and developed a concept upon which to base the policies of the Plan.

The Planning Commission assembled a complete initial draft of the new Plan and refined the draft to arrive at a document suitable for presentation to the community. The Planning Commission held a public hearing on the draft Plan and subsequently finalized the Plan for adoption.

Throughout the development of the Plan, the township followed the procedural requirements of the Planning Enabling Act including notification of neighboring communities of its intent to prepare a plan, and the township's subsequent solicitation for comment on the draft plan.

**Some Themes
from the Responses to the
Community-Wide Master Plan Survey**

- Preserve natural features
- Preserve rural character
- Preserve farmland
- Limit commercial and industrial expansion
- Manage growth and development
- 80% or more of respondents found these to be important in making Convis Township a desirable place to live:
 - Farmland
 - Quality of schools
 - Reasonable taxes
 - Natural resources
 - Police and fire protection
 - Rural character/country living
 - Cellular phone and internet service
- 60% or more of respondents found these services to be “okay” or “good”:
 - Ambulance service
 - Recreation opportunities
 - Police and fire protection
- 25% or more of respondents found these services to be “poor”:
 - Road conditions
 - Recreation opportunities
 - Cellular phone coverage
 - Broadband/internet service

provide opportunities for more suburban and urban living arrangements provided adequate measures are available for potable water and sewage disposal.

Planned commercial areas are limited to locations along N Dr. North including at the 16 Mile Rd. intersection, the 16 1/2 Mile Rd. intersection, and between 15 Mile and 15 1/2 Mile Roads. Industry is planned between 15 Mile and 15 1/2 Mile Roads just south of the township hall and east of the C&C Landfill, and along N Dr. North near Old U.S. Highway 27.

Public services improvements are to be focused in those areas of the community where heightened growth and development are anticipated, as described above.

Convis Township Overview

The following is a brief overview of Convis Township. A more detailed review of township trends and conditions can be found in Appendix A, B, C, and D.

Convis Township is a rural community located along the central northern periphery of Calhoun County in the south-central region of Michigan’s Lower Peninsula. The township occupies a total area of approximately 23,360 acres. There are no cities or village’s immediately adjacent to Convis Township but there are multiple urban centers within ten miles including Battle Creek, Marshall, Olivet and Bellevue. The regional landscape within fifty miles of Convis Township is dominated by agriculture, woodlands, wetlands and other open spaces, and scattered residential development, along with periodic small villages and larger cities.

Regional access to Convis Township is excellent. Interstate 69 travels north-south through the east half of the township, with an N Dr. North interchange in the southern third of the township. Interstate 94 (I-94) travels east-west across the state and is within three miles of the township’s south border. Old U.S. Highway 27 cuts across the southeast tip of the township and is accessible from the I-94 interchange. The I-69/I-94 interchange is also within three miles of the township. The nearest regional airport to Convis Township, the W.K. Kellogg Airport, is approximately 17 road miles to the west on the west side of Battle Creek. Marshall operates a small single runway airport, Brooks Field, approximately 10 road miles south on the south side of the city.

The township’s local road network does not exhibit the one-mile square grid system that is so dominant in most southern Michigan townships. All roads in the

Overview of Planning Policies

This Plan presents a coordinated strategy that addresses growth, development and preservation. The Plan supports the continuation of Convis Township as a predominantly rural community characterized by farm operations; woodlands, wetlands and other open spaces; and low density residential development with densities generally not exceeding one dwelling per two acres. Lower densities are planned for wetland areas.

The most significant exceptions to the planned rural residential landscape are the higher density residential areas along the north central and southwest peripheries of the township, and in the proximity of the I-69/N Dr. North interchange (approximately ¾-mile radius). These are intended to

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township are under the jurisdiction of the Calhoun County Road Department (CCRD) except for I-69 and several private roads owned and maintained by the property owners they serve. The CCRD maintains jurisdiction over approximately 76 miles of road in the township, nearly all of which are paved.

The dominant land cover in Convis Township is of an "open space" character including farmland, woodlands, wetlands, meadows and similar environments. The most dominant active land use is farming. Together, agricultural operations and other open spaces account for approximately 84% of the land area of Convis Township. The more urbanized areas of the Township, including those developed for commercial, industrial, and suburban residential uses, are somewhat scattered but are most dominant along the N Dr. North corridor in the general vicinity of the I-69 interchange.

The 2010 Census recorded 685 dwelling units in the township, a 5.2% increase over the 651 dwellings in 2000. Based on an average of two acres of maintained lawn area per dwelling unit, residential development comprises approximately 5.9% (1,370 acres) of the township's total acreage. Approximately 99% of the township's dwellings are single-family dwellings, with about one-fifth being mobile homes and of which approximately one-half are part of the Bellevue Mobile Home Park Residential development is comprised nearly entirely of incremental land splits. There are no subdivision plats in the township. A condominium subdivision has been recorded in the township, adjacent to the Medalist Golf Club, but has yet to be developed.

Commercial and industrial development in Convis Township is limited. The principal commercial site is Cornwell's Turkeyville, a restaurant located at the southwest corner of the N Dr. North/15 ½ Mile Rd intersection. Camp Turkeyville is an outdoor recreational facility catering to recreational vehicle campers and is to the south of the restaurant. The other principal commercial facility is the Medalist Golf Club just northeast of Cornwell's Turkeyville. Active industrial operations are limited to the C&C Landfill located immediately west of the township hall on the west side of 15 Mile Rd. Aggregate Industries operates a gravel pit in the southwest corner of the township in Section 31. A third industrial facility now sits vacant at the southwest corner of the Old U.S. Highway 27/N Dr. North intersection.

There are a number of properties in Convis Township devoted to outdoor recreation and/or conservation, the principal being the Michigan Audubon Society's Bernard W. Baker Sanctuary, a bird sanctuary covering approximately 980 acres surrounding Big Marsh Lake.

The topography of Convis Township can be described as generally level to gently rolling. Drainage is facilitated by three principal water courses – the Battle Creek River, Indian Creek and Ackley Creek. Together, these watercourses and their associated wetlands and smaller tributaries drain nearly the entire Convis Township area. The township includes eight lakes in excess of ten acres in area, the largest being Big Marsh Lake (168 acres) in its northeast quarter.

Approximately one-quarter of the township is comprised of wetlands and are most prominent along or in the immediate proximity of its lakes and water courses. The township's wetlands range in size from less than ten acres to more than 400 acres, the largest expanses being along the Battle Creek River, surrounding Mud Lake, and to the south of Big Marsh Lake. The vast majority of the township is characterized by loam, sandy loam and loamy sand soils.

A five member Township Board governs Convis Township. Township offices are located in the Township Hall on the east side of 15 Mile Rd. immediately south of the 15 ½ Mile Rd. intersection and directly east of the C&C Landfill. There is no public sewer or water service in the township. Convis Township receives fire protection services from the Bellevue Community Fire Department and the Marshall Township Fire Department. Police protection services are provided by the Calhoun County Sheriff's Department. Ambulance service is provided to township residents by the Marshall Area Fire Fighter Ambulance Authority, with medical first response assistance from the Bellevue Community Fire Department and Marshall Township Fire Department. Convis Township does not levy any tax millage to fund township operations. The majority of services are funded through revenue generated by the C&C Landfill. This practice has been in place since the early 1990s.

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Chapter Two PLANNING ISSUES, GOALS & OBJECTIVES

Introduction

The primary goal of this Plan is to establish a basis for and present future land use and public services policies, and means to implement the policies. To effectively plan for the township's well-being with regard to future land use and public services, it is beneficial to:

- identify important planning issues facing the community
- clarify the township's long term planning goals and objectives.
- establish a basis for more specific land use and public services policies

This chapter discusses important planning issues facing the Convis Township community and presents associated goals and objectives.

Planning Issues, Goals & Objectives

A number of key planning issues are apparent today in Convis Township. These issues vary in scope and are clearly inter-related. The future quality of life and character of the township will be largely shaped by the township's strategy to address these issues.

Each issue presented in this Chapter is followed by a set of goal and objective statements. Planning goals are statements that express the township's long range desires. Each goal has accompanying objectives that are general strategies that the township will pursue to attain the specified goal.

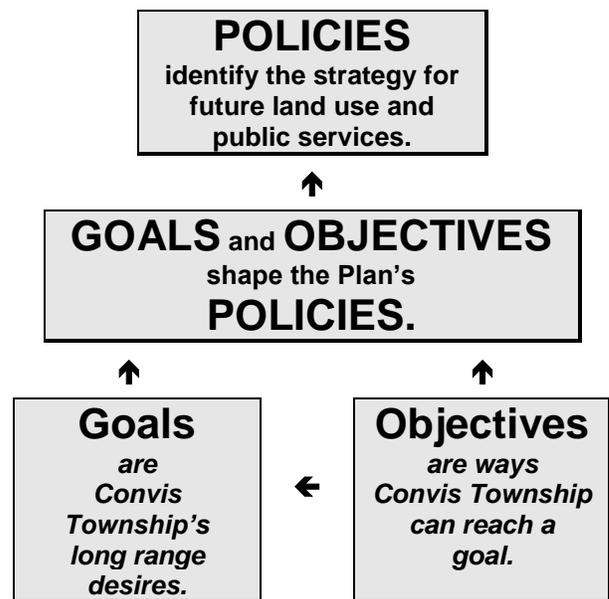
The planning issues and goals/objectives are divided into the following major categories:

- Growth Management and Public Services
- Community Character
- Natural Resources and the Environment
- Farmland Protection
- Housing
- Commerce, Industry and Economic Development
- Circulation
- Regional Coordination

The Importance of Goals and Objectives

- **Convis Township Vision:** The goals and objectives provide current and future residents with an overview of the intended future character of the community.
- **Shape Policies:** The goals and objectives identify and outline the basic parameters that should be used in guiding land use and public services policies and decisions.
- **Evaluate Development Proposals:** The goals and objectives serve as references upon which future rezoning and land development decisions can be evaluated.

The planning issues presented in the following pages are not intended to be all inclusive. Rather, they are presented as the primary issues that Convis Township must address as it shapes a future for itself. These issues will evolve over time and should be reexamined periodically and the appropriate modifications made.



Goals, Objectives, and Policies of the Plan

The objectives listed on the following pages should not be interpreted as limitations on the township's efforts to reach its goals. The township's commitment to the following objectives does not preclude it pursuing other objectives that it determines are beneficial. In addition, the objectives listed are not time specific. The township may choose to act on some objectives in a shorter time frame than others.

GROWTH MANAGEMENT and PUBLIC SERVICES

Convis Township is a very desirable place to live for many, with abundant natural resources and open spaces, excellent access to highways and nearby employment centers, an overall rural character, and proximity to retail and other urban services. It is reasonable to expect that as the regional and state's economic rebound continues, township growth will follow though perhaps at a comparably slow rate.

Individual properties and land uses exist within a network of adjoining and nearby properties and land uses. This weave of uses helps to establish the character of the township. The accommodation of growth and development should assure compatibility between land uses and the continued enjoyment of the use of properties as development occurs nearby. Effective growth management extends well beyond parcel-to-parcel relationships to township-wide issues. Growth and development has the potential to impact all residents' quality of life.

Successful growth management includes:

- minimizing unnecessary loss or degradation of natural resources including farmland, woodlands and water resources
- the provision of public services consistent with the character of the township and coordinating the amount and rate of new development with adequate public services including emergency services
- accommodating growth and development in a manner that preserves the desired character of the community and its environmental integrity
- encouraging economic development compatible with the character of the township
- encouraging orderly development including compatibility between adjacent land uses
- encouraging the wise expenditures of Township funds
- land use management along transportation corridors to minimize traffic hazards and nuisances

The township's character and quality of life will be impacted by the way the township chooses to manage growth and development.

Tax revenues dictate, in part, the extent and quality of public services. Public services in the community are comparatively limited at this time, including the lack of public sewer or water. The comparatively limited public services has not been identified as a problem, but a way of life. Although development will increase the township's tax base, the same development will place additional demands upon public services.

Contrary to traditional planning wisdom and thought, research has shown that development does not necessarily "pay its way," particularly as it applies to traditional single family residential development. Maintaining the current quality of public services, let alone the pursuit of improvements, can be very difficult in the face of unmanaged growth and development.

Development patterns that minimize new public costs should be sought where practical. In this regard, it is advantageous to locate higher density and intensity development near or adjacent to areas currently being served with higher levels of public services or anticipated to be served by such services in the future.

GROWTH MANAGEMENT GOAL: *Guide future development in a manner that encourages compatibility between land uses, land use patterns compatible with public facilities and services and the cost-effective use of tax dollars, and the preservation of natural resources, property values, and rural character.*

Objectives

- 1) Document and monitor the township's natural and cultural features that impact growth management efforts, such as public services, existing land use patterns, road infrastructure, and sensitive environmental resources.
- 2) Develop a rational land use strategy that provides an appropriately balanced scope of uses, including agricultural, residential, and non-residential uses, and which considers the constraints and opportunities presented by the township's natural features and public services and facilities.
- 3) Guide development into areas where public facilities and services have adequate capacity to accommodate the growth and increased

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development intensities, and where the provision or expansion of public facilities is cost-effective.

- 4) Separate incompatible land uses by distance, natural features, or man-made landscape buffers that adequately screen or mitigate adverse impacts.
- 5) Where legally permissible, local regulations should require new developments pay for the additional direct and indirect public services costs associated with that development. These costs should not be imposed on existing residents except where public interests or benefits may be at stake.
- 6) Discourage public services improvements that will have the effect of encouraging development at a rate beyond the township's ability to ensure adequate public health, safety, and welfare.
- 7) Discourage public services improvements that will have the effect of encouraging development in areas not designated for such growth.
- 8) Encourage the preservation of the township's natural resources including farmland resources, wetlands and woodlands.
- 9) Provide regular opportunities for substantive public input on growth and development issues facing the township, continually monitor local attitudes about public facilities and services, and pursue options to address identified public service and/or facility needs.
- 10) Update zoning and other tools to implement the Plan's policies, goals and objectives, and evaluate rezoning petitions, site plans, and other development decisions according to the Plan's policies, goals and objectives.

COMMUNITY CHARACTER

Evidence suggests that most residents view Convis Township as a "rural" community – an important factor in their enjoyment of the community. "Rural" is a subjective quality but is often associated with an overall perception of limited development, open spaces comprised of farmland, woodlands, wetlands, meadows and/or similar landscapes, and a way of life often linked to the outdoors and past pioneer settlers.

Effective protection of rural character does not require the prohibition of growth and development. Managed growth and development encourages the continuation of the township's overall rural character, including reliance on appropriate site design standards regarding lot area, lot width, building and parking setbacks, screening, exterior lighting, signage and other site development features. Limitations on the extent to which suburban and urban development patterns are permitted to

encroach into more rural areas is also an important part of the equation.

Recognition of the more urban areas of the township is equally important, such as the I-69/N Dr. North interchange area. These and other settlement areas contribute to the overall fabric of the township and its character, diversity and historical evolution. The manner in which these areas are maintained and/or expanded will impact the perception of these areas, their contributions to the community, and the extent to which they are a valued component of the community.

Community character preservation can protect property values, minimize negative impacts between adjacent land uses, and enhance the overall quality of life.

COMMUNITY CHARACTER GOAL: *Protect and enhance the dominant rural character of the township and the township's more urbanized pockets, in a manner that encourages a sense of identity and an atmosphere that defines the community as a desirable place to live.*

Objectives

- 1) Encourage development designed in scale with the immediate surroundings and the dominant rural character of the community, through reasonable standards addressing density, building size and height, setbacks, and other development features.
- 2) Introduce appropriately designed and landscaped signage along key entrances into the township, which highlight the township's identity and place within the region.
- 3) Encourage the placement of signs or markers at designated historic sites, buildings and areas, to highlight the historic resources of the township.
- 4) Work with other local communities to emphasize the unique character of the region and the assets that each community offers in shaping the desirability of the area as a place to live and do business.
- 5) Consider rural character preservation interests as one of the relevant factors in determining appropriate development densities throughout the township.
- 6) Encourage the maintenance of historically significant structures.
- 7) Encourage a structurally sound housing stock and the rehabilitation or removal of dilapidated and/or blighted structures and yard areas.
- 8) Encourage development that actively strives to preserve natural open spaces (woodlands,

wetlands, and fields) as part of a development project.

- 9) Encourage the preservation of the township's natural resources including their visual character, environmental integrity, and recreational value.

See also "Natural Resources and the Environment" below for additional objectives addressing community character.

NATURAL RESOURCES and the ENVIRONMENT

One cannot speak of community character preservation in Convis Township without acknowledging the tremendous impact its natural resources play in defining the community's character. These resources include its farmland; underground and surface water features including the Battle Creek River and Big Marsh Lake; forested lands of both an upland and lowland character; and wetlands. These resources are important in shaping the character of Convis Township and also provide vital environmental roles including wildlife habitats, flood control, water purification, groundwater recharge, and air quality enhancement. These same resources play a fundamental role in recreation in the community including hunting, fishing, hiking, and boating. Input received during this Plan's preparation suggests that residents strongly support the preservation of the township's natural resources.

Preservation of natural resources can be very difficult because the process of encroachment and degradation can occur incrementally and very slowly. Increased environmental knowledge, awareness, and education, when incorporated into a comprehensive planning strategy, can minimize the potential for environmental degradation.

The township's woodland, wetlands, and other natural resources are important in shaping the community's rural character and also provide vital environmental roles including wildlife habitats, flood control, water purification, groundwater recharge, and air quality.

Of particular concern is the preservation of the environmental integrity of the township's water resources due to their impact on animal and public health, safety and welfare. Proactive site development practices are critical in this regard. Related to the preservation of water resources is the importance of the preservation of floodplain environments due to their unique contribution to

public health, safety and welfare including wildlife habitats, flood control and property protection, opportunities.

Increased environmental knowledge, awareness, and education, when incorporated into a comprehensive planning strategy, can minimize the potential for environmental degradation.

NATURAL RESOURCES and ENVIRONMENT

GOAL: *Preserve the integrity of the township's natural resources including its land resources, underground and surface water resources, wetlands, woodlands, and farmland, and the varied and interconnected environmental systems that foster native flora and fauna.*

Objectives

- 1) Document and periodically update natural resources inventory for use in land planning studies and land use and development decisions.
- 2) Encourage land development that actively strives to preserve natural resources as part of the development plan and recognizes the importance of preserving environmental corridors across multiple parcels and the community as a whole.
- 3) Ensure that the quantity and quality of new development does not unreasonably create increases in air, noise, land, and water pollution.
- 4) Discourage the expansion of public utilities into areas dedicated to resource protection.
- 5) Guide more intensive land uses away from environmentally sensitive areas and important natural features.
- 6) Ensure that all development is in compliance with applicable local, county, state, and federal environmental regulations.
- 7) Review proposed development in light of its potential impact upon on-site and regional natural resource areas including woodland and wetland corridors crossing parcels.
- 8) Explore the preparation of an MDNR-approved five-year recreation plan that qualifies the township to apply for recreation grants and the acquisition of important open space resources for recreation and preservation purposes.
- 9) Encourage the use of conservation easements to preserve woodlands, wetlands and other important open spaces including in association with land development projects.
- 10) Encourage the use of native vegetation in association with new development projects,

redevelopment efforts, stream corridor preservation, and reforestation.

- 11) Educate the public about measures that help to protect the environmental integrity and recreation value of water resources including management of yard waste and fertilizer use, minimizing impervious surfaces, maintenance of shoreline vegetation, avoidance of erosion, and properly operating septic systems.
- 12) Educate the public about waste management and the township's fundamental reliance upon groundwater resources for potable water supplies and the potential detrimental effects of irresponsible land use and development practices including improperly functioning septic systems.
- 13) Explore the development of a greenway plan that encourages the preservation of natural drainage systems and patterns ("green infrastructure") and establishes a township-wide strategy to preserve natural resource corridors across multiple parcels and in coordination with regional greenway efforts.

To substantially limit the farmer's ability to provide home sites can undermine the farm operation during difficult economic times, or otherwise burden the farmer when the continuation of the farm operation is no longer practical, economical, or otherwise desirable.

Effective farmland preservation is dependent upon the management of both the number and size of new non-farm lots. Ten-acre divisions, by example, accelerate the loss of farmland and are an inefficient use of the township's land resources. On the other hand, one-acre zoning across the township, by example, encourages residential encroachment and sets the stage for a township build-out population approaching 25,000 persons or more.

State law illustrates the importance and need for farmland preservation. Most notably is Public Act 116 of 1974, the Farmland and Open Space Preservation Act (now part of the Michigan Natural Resources and Environmental Protection Act). The Act enables a landowner to enroll property in a tax relief program provided the property is maintained in an agricultural/open space status.

FARMLAND

Approximately one-quarter of the township is devoted to agricultural use. Farming continues to play a dominant role in the community. Farmland resources provide important food and fiber to both local and regional populations, are an important source of income, and contribute to the economic stability of the local economy. Farmland has been found to typically generate more municipal revenues than the costs associated with the municipal services it requires. Based on the community survey administered during the planning process, there appears to be strong support for the preservation of the township's farmland resources.

Persons yearning for a rural lifestyle flock to farm communities and incrementally consume farmland for home sites – the very farmland that contributes to the rural lifestyle they seek. The number of farms in Convis Township has declined over the years and dwellings have appeared in their place. Of course, these home sites would not be available if it were not for the farmer opting to make available the residential lots. Other factors that can encourage the decline and/or abandonment of farmland include changing economic conditions, encroachment by other uses that interfere with day-to-day farm operations, the personal circumstances of the land owner, and the fewer young persons interested in continuing in their parents' footsteps.

The township recognizes the economic and other challenges facing the local farming community. The township also recognizes the economic benefits of local farming not only for its productive capacity and contribution to the local economy, but for its limited demand on public services, infrastructure, and township revenues. The challenge before the township is to encourage farmland preservation while, at the same time, accommodate the conversion of farmland to alternative uses in a manner supportive of growth management interests.

FARMLAND GOAL: Encourage the continuation of local farming operations and the long-term protection of farmland resources.

Objectives

- 1) Document those areas of the township that present favorable conditions for farming, including existing farm areas and compatible soils and parcel sizes.
- 2) Advise prospective builders and home owners in planned agricultural areas that they should expect the normal smells, odors, noises, dust, and use of chemicals as a part of daily farm life in the area.
- 3) Establish limits on the amount of non-farm residential development permitted in designated agricultural areas, in a manner that strives to

balance farmland preservation interests with private property interests.

- 4) To the extent that residential development occurs in farm areas, encourage such development to be placed on less productive farmland.
- 5) To the extent that residential development occurs in agricultural areas, encourage developments that incorporate the continuance of the farming operation through the clustering of the residential lots on only a portion of the farm parcel.
- 6) Encourage buffer areas between new settlement areas and abutting agricultural areas.
- 7) Support and maintain P.A. 116 farmland preservation agreements and other preservation programs.
- 8) Discourage the extension of enhanced public services such as sewer, water and paved roads, into designated agricultural areas.
- 9) Encourage the continuation of farm operations through complementary zoning provisions.
- 10) Provide opportunities for “value-added” income sources as part of local farm operations such as agri-tourism, farm markets, and corn mazes, where such activities and specific proposals will not cause unreasonable impacts on surrounding properties and the community as a whole.

HOUSING

As previously noted, Convis Township is an attractive place to live for many prospective residents. Residential development will likely be the major land use change in the coming ten to twenty years and it will have the greatest long-term impact on the township’s natural resources, farming, demand for public services, and overall community character.

Important questions facing the township with respect to residential growth are

- what type?
- how much?
- where?

Opportunities for rural residential lifestyles are abundant in Convis Township and are the primary housing option today.

Convis Township is interested in providing reasonable options for additional and varied housing opportunities. Opportunities for rural and suburban residential lifestyles are plentiful as soil conditions generally support home sites of one to two acres in size. The lack of public sewer and water service significantly restricts opportunities for more varied and affordable housing. However, private community

sewer systems may be a reasonable alternative in some instances.

Providing suburban and urban residential development opportunities can be important as part of the township’s efforts to address the varied housing needs of all people, including all age groups, and limit the extent of residential encroachment into natural resource areas including farmland.

Public studies during the past 30 years have consistently documented that as residential development increases in density to a more urban character, including multiple family development, it is more likely to generate more municipal revenue than the cost to provide it with services. Forms of higher density development can also address the varied housing needs of existing and future residents.

Public sentiment, and the township’s negative growth during the past 20 years and minimal projected growth in the near future, suggest that only limited portions of the township be set aside for more suburban and urban development patterns at this time. However, the more growth that is accommodated in higher density development patterns – the greater natural resource preservation interests may be advanced. For example, the accommodation of 200 new dwellings could occupy as little as 50 acres in a strategic location where sewer or water service may be provided (including private water/sewer systems). The same 200 dwellings could occupy 2,000 acres of farmland and other natural resources (approximately 8% of the township) based on an average lot size of 10 acres. This less efficient development pattern can dramatically accelerate the rate at which farmland and other natural resource areas are converted to residential use or otherwise disturbed.

However, it must also be recognized that small acreage zoning across the township without any density limitations, such as one acre zoning, provides for a build-out population (the population resulting from all land being developed at a density of 1 dwelling per acre, exclusive of wetlands and future road rights-of way) approaching 25,000 persons or more. Such a growth pattern will have dramatic effects on farming, community character, taxes, and public services demands. Based on the community survey administered as part of the planning process for this Plan, this does not appear to be the future vision residents have for their community.

Much of the residential development in the township today is of a strip pattern – residences are “stripped” along the existing county road frontages. This pattern of lot splits has become an increasing source of concern in the planning/transportation fields. This condition leads to an excessive number of driveways directly accessing the county roads and thereby increasing the level of congestion, traffic hazards, and travel times, and incrementally replacing rural road corridor viewsheds with images of driveways, cars, and garages.

HOUSING GOAL: *Provide a healthy residential environment in which persons and families can grow and flourish, accommodating residential growth in a manner that recognizes the opportunities and constraints of the township’s public services, infrastructure, and natural features; preserves the overall rural character of the township and its natural resources; and accommodates an appropriate balance and range of densities and lifestyles.*

Objectives:

- 1) Encourage the continued dominance of low density housing as the principal housing option.
- 2) While maintaining low density housing as the primary housing option, provide opportunities for alternative housing options to meet the varying housing preferences of current and future residents, such as small lot single and two-family dwellings, apartments, and assisted living facilities.
- 3) Consider the natural carrying capacity of the land when determining the appropriate density of development, including the extent and character of environmental features.
- 4) Identify limited areas in the township where higher density residential development can be adequately accommodated, with priority directed to locations that have greater access to improved thoroughfares and necessary public services, and within walking distance of existing and/or planned commercial services areas.
- 5) Encourage alternatives to strip residential development along the frontage of existing county roads.
- 6) Encourage innovative residential development that incorporates in the site planning process the preservation of natural resource systems and open spaces and the preservation of the township’s rural character, including the conversion of only a portion of the original development parcel with clustered small lots and placing the balance of the parcel in a permanent open space status.
- 7) Encourage a housing stock that ensures affordable housing to all, including starter homes

and special housing opportunities for senior citizens, while also ensuring all dwellings are of appropriate design to complement nearby conditions and the community as a whole.

- 8) Assure adequate barriers and/or buffering where residential neighborhoods interface with commercial/industrial development.
- 9) Discourage uses and structures in residential areas that undermine the residential character and peacefulness of such areas, such as commercial encroachment, or increases conflicts between landowners such as accessory buildings of excessive size or inappropriate location.
- 10) Encourage the rehabilitation of blighted and/or dilapidated homes and properties.

COMMERCIAL SERVICES, INDUSTRY and ECONOMIC DEVELOPMENT

Commercial and industrial development in Convis Township is comparatively limited. The principal commercial site is the Cornwell’s Turkeyville restaurant, with recreational vehicle camping nearby. The other principal commercial facility is the Medalist Golf Club (also includes a restaurant). Active industrial operations in the township are limited to the C&C Landfill and an Aggregate Industries gravel pit. The former Johnson Systems manufacturing facility is currently vacant.

Addressing commercial and industrial expansion includes considerations of:

- Need
- Location
- Character

The limited extent of commercial and industrial uses is not surprising. The township exhibits conditions that do not support such activity including the lack of public sewer and water, a limited local population base, and the presence of regional urban centers where many such uses commonly prefer. Still, the presence of I-69 and the N Drive North interchange offer improved opportunities for access and visibility – important factors for most traditional commercial activity such as retail sales, offices and consumer services. Interstate access can be a strong asset for industry as well.

There are no universal land use ratio standards that identify the appropriate amount of commercial development for a particular community. Each community is unique, with its own set of circumstances including infrastructure, existing land use pattern, conditions in surrounding communities, growth, and public perceptions. Input received during this Plan’s preparation suggests that residents do not

support significant expansion of commercial or industrial activity. The proximity of varied consumer opportunities within six miles of the township and along daily commuter patterns, including Marshall, Battle Creek, Olivet and Bellevue, must also be acknowledged.

However, the township's current one to two acres of conventional commercial uses (office, retail and service) serving the township's 1,700 residents (approximately) is proportionally low compared to the commonly recommended five to ten acres for a community of 3,000 to 4,000 persons. Further, it must be recognized that commercial and industrial development can improve the community's overall economic stability and provide additional local employment opportunities.

Economic development efforts can strive to capitalize on special or unique assets of the township including the presence of the I-69 corridor, and the community's rich rural character that may support and complement more specialized commercial endeavors that cater to the local population and highway traveler.

Commercial and industrial development that complements the township's rural character should be encouraged, including development characterized by appropriate landscaping and screening; limitations on signage, building heights and sizes, and lighting; and the avoidance of excessive curb cuts and conflicting turning patterns that undermine public safety. To this end, traditional strip development is not considered beneficial for Convis Township.

Commercial uses can vary significantly in character as can industrial uses. The existing and desired long-term character of Convis Township does not readily support expansion facilities such as "big box" stores and heavy manufacturing facilities that require services not currently available in the Township. Development of a more local character, which does not contribute to excessive traffic levels and public services demands, can be more easily accommodated into the fabric of the community.

The viability of and/or suitability of commercial and industrial growth areas are commonly linked to:

- Proximity to emergency services
- Proximity to existing/planned growth areas
- Visibility to the general public
- Improved road infrastructure
- Avoidance of environmental sensitive areas

- Compatible adjacent land use conditions

COMMERCIAL SERVICES, INDUSTRY AND ECONOMIC DEVELOPMENT GOAL:

Enhance the economic stability of the township through commercial and industrial development that is of a scale, intensity, and character supportive of the predominant character of the community.

Objectives

- 1) Identify limited locations where commerce and industry are most appropriate, based on sound planning principles including adequate facilities and services to support the resulting demands and, to this end, give special consideration to the I-69 corridor.
- 2) Encourage commercial and industrial development that is in character and scale with the township's rural character and surrounding land uses, considering such features as building size and height, architectural design, setbacks, signage, lighting, noise, landscaping and screening, and open spaces.
- 3) Encourage business centers that exhibit an attractive appearance and foster an inviting character.
- 4) Encourage commercial uses that cater to local consumer needs and the highway traveler, or are otherwise of a character that do not generate excessive traffic levels through the township or create excessive demands for public services.
- 5) Limit industrial uses to those predominantly characterized by assembly activities, information and communication technologies, research facilities and similar "light" operations that do not require added levels of public services, do not entail the processing of raw materials, and do not negatively impact surrounding land uses or the community as a whole.
- 6) Encourage industrial uses to locate within industrial park settings, characterized by interior road systems, ample open spaces, landscaping, and buffering.
- 7) Encourage economic development through the marketing of the special assets of the Convis Township area including the township's rural character and opportunities for recreation tourism, agri-tourism, and other tourism opportunities.
- 8) Encourage economic stability in a manner that balances development with the preservation of the township's natural resources and rural character.
- 9) Discourage commercial and industrial encroachment into residential areas.

- 10) Maintain reasonable controls on commercial and industrial uses such as noise, odors, glare, vibration, and similar operational features.
- 11) Provide managed opportunities for home-based occupations under conditions that will support the desired character, appearance, and quality of life for surrounding residential properties and neighborhoods.

CIRCULATION and MOBILITY

As new residential and non-residential land uses are introduced into the township, demands on the roadway network will increase. Even low density residential development can significantly increase local traffic levels, and unpaved roads can accommodate only limited levels before they necessitate constant maintenance. Conversely, it must be recognized that road improvements may attract new development which, in turn, will place additional demands on the roadway network. Increased traffic demands can be minimized through the coordination of road improvements with the planned future land use pattern and designated growth and development areas. The extent to which higher intensity land uses, including commercial and industrial uses, are in comparatively close proximity to improved thoroughfares will minimize future maintenance costs and traffic levels along other roads of lesser infrastructure.

Maintaining adequate vehicular circulation is not solely dependent on the road system itself. The future pattern of residential lot splits and subdivisions will have a significant impact upon the functioning of the township's roads. Residences "stripped" along the existing county road frontages can be debilitating:

- the increased number of driveways directly accessing the county roads increases the level of congestion and safety hazards
- travel times are increased
- the township's rich rural panoramic views of woodlands, fields, and other open spaces, as experienced from the road viewsheds, may be reduced to images of driveways, cars, and garages

Community circulation extends far beyond just accommodating vehicular traffic. More and more attention is being focused on ensuring road systems take into consideration all potential user needs including pedestrians, bicyclists, persons restricted to wheel chairs, and persons of all ages and physical conditions.

The value of circulation systems between communities that facilitate non-motorized travel have also been recognized as an important part of long range planning. Well planned and designed community and inter-community circulation systems can limit the reliance on the automobile and resulting environmental impacts, improve the health of local residents, and improve the quality of leisure time. The importance of safe and comprehensive pedestrian and non-motorized travel led the Michigan Legislature to amend the Planning Enabling Act in 2010 to require a "complete streets" element in a master plan.

CIRCULATION AND MOBILITY GOAL: *Maintain a circulation network throughout the township that encourages efficient and safe travel, by vehicular, pedestrian, and other non-motorized modes, consistent with the rural character of the community and coordinated with the planned future land use pattern.*

Objectives

- 1) Identify priority road segments for systematic maintenance and improvement, based upon the planned future land use pattern and existing and projected traffic patterns.
- 2) Discourage high-traffic generating land uses and development patterns along the township's secondary roads.
- 3) Pursue access management measures to minimize the potential for traffic congestion and safety hazards, including limitations on the number, size, and shape of new land divisions and limitations on curb cuts.
- 4) Work with the Calhoun County Road Department to discourage road improvements that will increase growth and development pressures in areas of the township not specified for such growth.
- 5) Encourage the inclusion of pedestrian/bicycle paths in association with new residential subdivisions and non-residential development to facilitate safe and convenient non-motorized movement for all potential users.
- 6) Encourage the linking of residential and commercial centers through non-motorized trails or similar linkages.
- 7) Work with the Calhoun County Road Department to improve opportunities for safe non-motorized travel.

REGIONAL COORDINATION

Convis Township exists within a regional network of communities, none of which are islands unto themselves. Convis Township principally abuts the townships of Bellevue, Lee, Marshall and Pennfield, and is within several miles of the Village of Bellevue. Convis Township and nearby municipalities can greatly benefit by cooperatively pursuing common goals in the areas of land use and public services where mutually beneficial. Planned land uses, public services and preservation efforts should take into consideration conditions in these abutting communities. Land use planning efforts should seek to establish a land use pattern compatible with surrounding conditions provided the goals of Convis Township are not undermined.

REGIONAL COORDINATION GOAL: *Guide future development and public services in a manner that recognizes the position of Convis Township within the larger region and the mutual impacts of local planning efforts.*

Objectives

- 1) Where practical, identify a planned future land use pattern that seeks to ensure compatibility among land uses along municipal borders.
- 2) Maintain a meaningful communication program with area municipalities and county agencies to discuss local and area-wide public facilities and services needs, land use conditions and trends, preservation goals and objectives, planning issues including vehicular and non-motorized modes of travel and recreation, and mutually beneficial strategies to address short and long-term needs.

Chapter Three FUTURE LAND USE STRATEGY

Introduction

Convis Township's principal planning components are contained in the Future Land Use Strategy, as discussed in this Chapter Three, and the Coordinated Public Services presented in Chapter Four. The Future Land Use Strategy identifies the desired pattern of land use, development and preservation throughout the township. Chapter Four presents guidelines regarding public services to help ensure that public services are coordinated with the planned land use pattern and the achievement of the Plan's goals and objectives.

Implementation of the policies of this Chapter and Plan rests with regulatory and non-regulatory tools – most importantly the Convis Township Zoning Ordinance. The Zoning Ordinance generally regulates the type, location, bulk, and intensity of land development. ***The Future Land Use Strategy establishes policy for future land use – it does not change the manner in which property is zoned under the Zoning Ordinance.*** However, the Future Land Use Strategy does serve as a basis for evaluating future rezoning requests.

The township may also utilize supporting regulatory and non-regulatory tools, in addition to zoning regulations, to further the implementation of the policies of this Plan. Chapter Five discusses implementation strategies in more detail.

The foundation on which the Future Land Use Strategy is rooted is the goals and objectives in Chapter Two including:

- ***encourage the preservation of farmland, natural resources and rural character***
- ***guide future development in a manner that ensures land use patterns compatible with public facilities and services***
- ***encourage compact growth and development areas***
- ***encourage the cost-effective use of tax dollars***

The Future Land Use Strategy is based on an analysis of the township's natural and cultural features such as community attitudes, existing land use, road network, existing and nearby public infrastructure, and environmental features including wetlands. Also considered were conditions in neighboring municipalities. The opportunities and constraints presented by these conditions were evaluated in the context of the goals and objectives in Chapter Two to arrive at a planned land use pattern.

Planning Areas

The Future Land Use Strategy divides the township into planning areas and identifies the predominant land use pattern planned for each. These areas collectively formulate the planned land use pattern. These planning areas are as follows:

- Resource Conservation Area
- Agricultural / Rural Residential Area
- Suburban Residential Area
- Commercial Areas
 - N Dr. Commercial Area – West
 - N Dr. Commercial Area – Central
 - N Dr. Commercial Area – East
- Industrial Areas
 - Old U.S. 27 Industrial Area
 - 15 Mile Road Industrial Area
- Landfill Area

It is not the intent of this Plan to identify the specific land uses that should be permitted in each of these planning areas. This Plan presents broad-based policies regarding the dominant land use(s) to be in each. Specific permitted land uses will be determined by the zoning provisions of the township based on considerations of compatibility.

There may be certain existing properties that do not "fit" with the planned future land use pattern. This should not be necessarily interpreted as a lack of township support for the continuation of the existing use of such properties. Zoning regulations will clarify this matter.

Boundaries: The approximate boundaries of the planning areas are illustrated on the Future Land Use Map at the end of this chapter. The boundaries are described as approximate. There is frequently room for discretion at the exact interface between the boundaries of two planning areas and appropriate uses at these points of interface. However, the approximate boundaries presented in this Plan have been considered carefully. The described and illustrated boundaries of the planning areas are purposeful. These areas are not intended to incrementally evolve into extended strip corridors or other expanded development zones contrary to this theme. Significant departures are strongly discouraged except in unique circumstances and only when the public health, safety and welfare will not be undermined.

It is important to recognize that neither the Future Land Use Map nor the explanatory policies of this chapter are intended to stand on its own. Both the policy discussions and map are inseparable and must be viewed together.

Context-Sensitive Site Development: Irrespective of the particular planning area, all nonresidential development should be of such character and design so as to encourage compatibility with adjacent and nearby land uses and the desired rural character of the township including site layout, principal buildings and accessory facilities. Such compatibility should be based on, in part, appropriate signage; building height, size, and bulk; setbacks; and landscaping and screening. Special care must be exercised during all phases of the review and approval of specific development proposals to ensure that proposed uses, buildings and other site modifications, and their interface with surrounding properties, enhances their compatibility.

The establishment of private “community sewer systems” serving new neighborhoods is not a valid basis for development densities contrary to the policies presented in this chapter.

Site development should incorporate the inclusion of nonmotorized travel and measures to enhance the safety and comfort of nonmotorized travel along road corridors and elsewhere.

Resource Conservation Area

The Resource Conservation Area includes those portions of the township comprised of wetlands, river and stream corridors, and the expansive Bernard W. Baker Sanctuary. These resources provide important environmental benefits including habitats for wildlife, flood control, groundwater recharge and discharge, and surface water purification. In addition, they provide special opportunities for recreation and contribute to the township’s overall rural character and desirability as a place of residence. The Resource Conservation Area is intended to encourage the preservation of important natural resource areas.

In light of the critical role these natural resources play, uses within the Resource Conservation Area should be predominantly limited to open-space and natural resource based conservation endeavors. Residential development is discouraged to minimize encroachment into and the disturbance of these important resource areas and the environmental systems contained within.

Key policies of the Resource Conservation Area are:

1. The primary use of land should be resource conservation and other open space areas including dedicated game refuges and hunting facilities.
2. Secondary uses of land should be low-density home sites.
3. Maximum development densities should be limited, ranging from one dwelling per five to 10 acres.
4. Where only a portion of a parcel is located in the Resource Conservation Area, development on the site should be guided to those portions outside of the Resource Conservation Area, most typically the Agricultural/Rural Residential Area (as described on the following page).
5. The alteration of wetlands to accommodate home sites and other construction in the Resource Conservation area should occur only where no other practical alternatives are available and only after the issuance of all necessary local, county and state approvals including as may be required by the Michigan Department of Environmental Quality.

Agricultural / Rural Residential Area

Farming plays an important role in the history and character of Convis Township, contributes important food and fiber to local and regional populations, encourages economic stability, and is an important source of income.

The Agricultural/Rural Residential Area covers the largest portion of the township. The Area is principally comprised of farmland and farming operations, scattered residential properties typically ranging from two to 80 acres in area, and open space areas including meadows and woodlands. The intent of the Agricultural/Rural Residential Area is to provide opportunities for farming and encourage the preservation of farmland resources, while also providing opportunities for rural residential home sites. Agriculture and single-family residences are intended to be the primary use of the land in this Area.

Lands in the Agricultural/Rural Residential Area are generally characterized by conditions that enhance their suitability for commercial agricultural endeavors including:

- the presence of active farm operations including farm parcels adjacent to other farm parcels
- acreage contained within parcels commonly approaching 20 acres or more
- limited encroachment by residential subdivisions and similar neighborhood developments
- enrollment of some parcels in the P.A. 116 Farmland and Open Space Protection Program

It is intended that development densities in the Agricultural/Rural Residential Area be low. Limited densities are supported by a number of factors including, in part:

- the township's commitment to protecting its farming industry and minimizing land use conflicts between farm operations and neighboring land uses
- the township's commitment to managing growth, providing cost effective public services, and limiting suburban and urban development densities to specific and compact portions of the community
- the township's commitment to protecting its natural resources and rural character
- the presence of a market for low-density rural lifestyles

Key policies of the Agricultural/Rural Residential Area are:

1. The primary use of land should be agriculture, resource conservation and other open space areas, and home sites.
2. Secondary uses should typically be limited to those that are uniquely compatible with the environmental and/or rural character of the Area such as kennels, stables, golf courses, bed and breakfasts, and other small-scale commercial endeavors as described further in (3) below.
3. Limited commercial endeavors may be appropriate, in addition to home occupations, in an effort to balance reasonable entrepreneurial interests and a sense of calm and peacefulness in the Area. Small-scale and appropriately managed commercial endeavors may be determined acceptable, after adequate review, provided appropriate measures are in place to prohibit nuisance conditions. Minimum conditions for such businesses should include uses that generate comparatively limited traffic, have a comparatively small floor area and building size, are substantially set back from property lines and appropriately screened and landscaped, and are appropriately spaced apart from one another. The Convis Township Zoning Ordinance will further clarify the site development and approval standards for such uses.
4. Minimum lot sizes should generally be restricted to two acres provided adequate measures are available for potable water and sewage disposal, and subject to the density limitations of (5) below.

The Agricultural/Rural Residential Area supports the management of both minimum lot sizes and maximum development densities – two very different aspects of growth management. “Lot size” refers to the size of a home site. “Density” refers to the total number of home sites across a tract of land. For example, a 20-acre parcel divided into four 2-acre home sites and one 12-acre home site yields five home sites across the entire 20 acres – a density of one dwelling per four acres. The Area supports minimum two-acre lot sizes with appropriate density limitations. See (5) that follows for further clarification.

5. Maximum development densities should generally be coordinated with the density concept embodied in the Michigan Land Division Act, for the creation of incremental land splits or as referred to as “divisions” under the Act. In recognition of the increased agricultural and environmental value of larger parcels, the Act permits a disproportionately higher density of divisions from smaller “parent parcels” as compared to larger parcels. For example, the Act permits approximately four divisions from a 10-acre parent parcel but only approximately 13 divisions from a parcel ten times greater in area (100 acres), subject to local zoning provisions. This overall density concept will be further defined in the Convis Township Zoning Ordinance.
6. Exceptions to the lot size and density limitations in (4) and (5) above may be appropriate in the case of “open space preservation communities,” where smaller than normal home sites are permitted provided substantial portions of the development tract is set aside in a permanent open space status. This development option is further described in Chapter Five.

Prospective new residents in the Agricultural/Rural Residential Area should recognize that the noises, smells and agricultural operations associated with responsible farm operations are a significant component of the Area and will continue on a long term basis. Convis Township does not consider such activities and operations as nuisances. The township supports the long term continuation and protection of responsible farm operations and the local farming industry. Developers and real estate agents should disclose this information to their clients.

The Agricultural/Rural Residential Area encourages the continuation of all current farming activities as well as the introduction of new agricultural operations. All farming activities are encouraged including the raising of crops and livestock and the erection of associated structures, provided that they meet Department of Agriculture and Rural Development requirements for “generally accepted agricultural management practices” and any requirements of applicable township ordinances.

In light of the township’s interest in maintaining the quality of life for existing households, reasonable care should be exercised in accommodating specialized agricultural operations that may have heightened impacts on surrounding land uses such as large concentrated livestock operations.

Suburban Residential Area

The Suburban Residential Area provides for residential development of a more suburban and urban character than planned elsewhere in the township. The planned Suburban Residential Areas are as follows:

The I-69 Interchange Suburban Residential Area extends from the I-69 interchange right-of-way at N. Drive North, in a radial manner, for a distance of about ¾ miles, excluding wetlands.

The Northcentral Suburban Residential Area occupies the north halves of Sections 3 and 4 along the north periphery of the township, including along segments of Baseline and Junction Roads, W Drive, and 14½, 15 and 16 Mile Roads, excluding wetlands.

The Southwest Suburban Residential Area occupies the southern halves of Sections 31, 32, 33 and 34 along the south periphery of the township, including along segments of L Drive North, and 12, 14, 15½ and 16 Mile Roads, excluding wetlands.

These Area are characterized by one or more conditions that support their appropriateness for future higher-density residential growth including

- improved access via primary roads and/or I-69
- existing suburban/urban development in the area
- increased proximity to existing settlement areas and/or population centers, either within or outside of the township including the Bellevue community
- soils more supportive of suburban densities
- enhanced proximity of commercial and public services including fire protection services

Key policies of the Suburban Residential Area are:

- 1) The primary use of land should be single and two-family residences, including opportunities for comparatively higher density small-lot subdivisions where adequate provisions are made for potable water and sewage disposal.
- 2) Secondary uses should be principally limited to alternative living arrangements such as townhouses, apartments, retirement centers, and similar housing options, along with uses that directly support and enhance desirable residential areas such as schools, religious institutions, and recreation facilities.
- 3) All living arrangements should ensure healthy environments including sufficient open space and safe motorized and non-motorized circulation.

- 4) Maximum development densities should typically not exceed one dwelling per approximately one-half acre, provided adequate measures are in place for sewage disposal and potable water.
- 5) Development densities approaching three or more dwellings per acre may be reasonable but only after special review proceedings to determine if the proposed development densities are appropriate on the proposed property. Minimum guidelines that should be considered are:
 - adequate infrastructure and public services including sewage disposal and potable water
 - on-site environmental limitations
 - anticipated impacts on existing neighborhoods and opportunities for minimizing negative impacts through appropriate design measures
 - developments involving densities of four or more dwellings per acre should be of limited size, or be subject to phasing, to ensure that the desired character of the community is preserved and public welfare maintained.

Commercial Areas

The Future Land Use Strategy establishes three planned “Commercial Areas,” all along segments of N Dr. North near the I-69 interchange.

The N Dr. Commercial Area – West extends from the 15 ½ Mile Road intersection westerly to 15 Mile Road, including Cornwell’s Turkeyville. Development should generally extend no more than approximately 750’ to the north and south of N Dr. North.

The N Dr. Commercial Area – Central extends from the 16 Mile Rd. intersection a distance of approximately 500’ along the two road segments, except to extend approximately ¼ to ½ mile north to include acreage between 16 Mile Rd. and I-69.

The N Dr. Commercial Area – East is situated along the south side of N Dr. North at the 17 Mile Rd. intersection, extending approximately 750’ west of the intersection.

These areas are considered preferred locations for commercial growth centers and are characterized by one or more conditions that support commercial activity including:

- excellent access afforded by N Dr. North and I-69
- excellent visibility afforded by N Dr. North and I-69
- past commercial development in the area and the presence of commercial buildings (though vacant)
- increased proximity to fire protection services

Key policies of the Commercial Areas are:

1. The primary use of land should be locally-oriented commercial services including convenience and other retail sales, restaurants, offices and service providers, and should be of a comparatively small scale and sensitive to the desired rural character of the township.
2. Secondary uses should be principally limited to those that provide additional benefits but which may not cater to the local population or highway traveler, or otherwise rely on a more regional market and may generate heightened traffic levels.
3. Dwellings above commercial storefronts are recommended as a means to provide varied housing opportunities, evening security, and nearby consumers.

There are existing residences in these Commercial Areas. The Plan supports the continued presence of these residences while, at the same time, supports the incremental conversion of such residential properties to commercial use should there be interest by the respective land owner. See (4) below.

4. To the extent that residential properties in the Commercial Areas remain in residential use, special provisions are to be employed where nonresidential uses are introduced, to ensure that adequate site layout, including buffer yards and screening, minimize negative impacts on existing home sites. Prospective residents to the area should recognize that nearby properties may transition into commercial uses, subject to township review and approval.
5. Site layout, principal buildings and accessory facilities should be of a character and design that encourages compatibility with adjacent and nearby land uses and the desired rural character of the area. Such compatibility should be based on, in part, appropriate signage; building height, size, and bulk; signage and lighting; and landscaping and screening.

Industrial Areas

The Future Land Use Strategy identifies two designated industrial areas. The Old U.S. 27 Industrial Area extends along N Dr. North west from Old U.S. 27, for approximately ¼ to ½ mile. The 15 Mile Road Industrial Area includes the tract between 15 and 15 ½ Mile Roads, south of the Township Hall. Both of these Areas reflect features that make them more supportive for industry. The locations are served by improved road infrastructure capable of accommodating industry including I-69, Old U.S. 27 and N Dr. North, and both locations are absent any residential settlement areas. The Old U.S. 27 Industrial Area includes the former Johnson Systems facility. The 15 Mile Road Industrial Area, just south of the Township Hall, is immediately east of the C&C Landfill and north of the previously described N. Dr. Western Commercial Area.

Key policies of the Industrial Areas are:

1. Primary uses of land should be comparatively light industrial activities that generate minimal impacts on neighboring uses and limited demands on the township's limited public services. Uses may include, by example, small-scale product testing, technology research, calibration services, and the assembly of electrical components and other pre-manufactured items.
2. Secondary uses should be principally limited to those that may result in more visible external impacts but which incorporate adequate measures to substantially limit nuisance conditions and have comparatively limited public services demands.
3. All industry should be of a character and design and is sensitive to the desired rural character of the township.
4. To the extent that residential properties in the Industrial Areas remain in residential use, special provisions are to be employed where nonresidential uses are introduced, to ensure that adequate site layout, including buffer yards and screening, minimize negative impacts on existing home sites. Prospective residents to the area should recognize that nearby properties may transition into industrial use, subject to township review and approval.
5. Site layout, principal buildings and accessory facilities should be of a character and design that encourages compatibility with adjacent and nearby land uses and the desired rural character of the area. Such compatibility should be based on, in part, appropriate signage; building height, size, and bulk; signage and lighting; and landscaping and screening.

Landfill Area

The Future Land Use Strategy establishes a Landfill Area in recognition of the presence of the C&C Landfill. The landfill occupies the majority of the east half of Section 28. It is reasonable to expect that the landfill will remain operational for well beyond the 10 to 20 year planning period of this Plan, and solid waste demands may suggest expansions in the future. The presence of a landfill commonly impacts the desirability of surrounding areas for residential use including the residential development supported by the adjacent Agricultural/Rural Residential Area.

Key policies of the Landfill Areas are:

1. The Future Land Use Strategy supports the presence of the landfill in the township, recognizing the vital role it serves the region and the economic stability it affords the township, provided appropriate measures are in place to minimize nuisances to surrounding properties, uses and persons, and to protect environmental resources including ground water.
2. Specific boundaries of the Landfill Area are not presented, given the reasonable potential for current operations to expand as current operational capacity is reached. However, this Plan envisions that the Landfill Area is to be principally contained within Section 28.
3. The expansion of landfill operations should be based upon, in part, a demonstrated need for additional acreage and state-mandated procedures for design review, public input, and approval.
4. Land surrounding active landfill operations should be of an agricultural or other open space-based character.
5. Residential development in the proximity of the landfill is considered reasonable provided prospective residents recognize that the noises, smells and operations associated with responsible landfill management are anticipated to continue on a long term basis. Developers and real estate agents should disclose this information to their clients.
6. The policies of the Agricultural/Rural Residential Area apply to the use of land adjacent to active landfill operations except for any existing and future approved expansions of landfill operations.

Preservation of Natural Resources

Convis Township includes abundant areas of woodlands, wetlands and water courses. In light of the importance of these resources, the Plan supports their protection including the establishment of the Resource Conservation Area as previously described. Preservation should take precedence over the unnecessary disturbance and/or destruction of these resources. These resources are vital parts of the township's environment, provide important environmental benefits including habitats for wildlife, flood control, groundwater recharge and discharge, and surface water purification. In addition, they provide special opportunities for recreation and contribute to the township's overall rural character and desirability as a place of residence and business.

Not all important natural resource areas may fall within the Resource Conservation Area described earlier in this Chapter or as otherwise delineated on the Future Land Use Map. The presence of such resources in areas designated for development should be recognized in the deliberation of rezoning, site plan, and similar proposals. Land uses requiring state and/or federal permits (especially for wetland or floodplain alterations) should not receive final township approval until satisfactory evidence has been submitted verifying the acquisition of all necessary permits. Where a portion of a parcel contains environmentally sensitive areas, development should be directed elsewhere on the site where practical alternatives exist.

Keyholing

Keyholing, or funnel development, is the use of a waterfront lot as common open space for waterfront access for dwelling units located away from the waterfront. This results in potentially greater lake use than would normally occur if the lot were used for its intended use, such as a single family residence. As surface water use increases, so does the potential for shore erosion from speedboats, loss in property values, oil and gas spillage from powerboats, increased noise, conflicts between lake users (sailboats, fisherman, swimmers, etc.), and increased lake maintenance costs. Such threats become that much greater when keyholing occurs with the digging of canals to increase lake frontage access to back lot residences. This form of development should be effectively regulated in the interest of preserving the environmental quality of the township's lakes, protecting the public health, safety, and welfare, and preserving local property values and the character of local lakes and associated shoreline areas.

Keyholing regulations should address, at a minimum, minimum lot area and width of common use lots, minimum water frontage per dwelling having access to a common use lot, water quality protection, common use lot parking facilities and setbacks, litter control, and related use and development features.

Phased Zoning

This Plan recommends that the rezoning of land to a more intensive zoning district be done in a phased or incremental manner. For example, while the Plan may identify locations that are appropriate to accommodate suburban residential development, the Plan does not recommend "across the board" or immediate rezonings of such land. The Plan recommends that rezonings to more intensive districts occur incrementally over time to ensure:

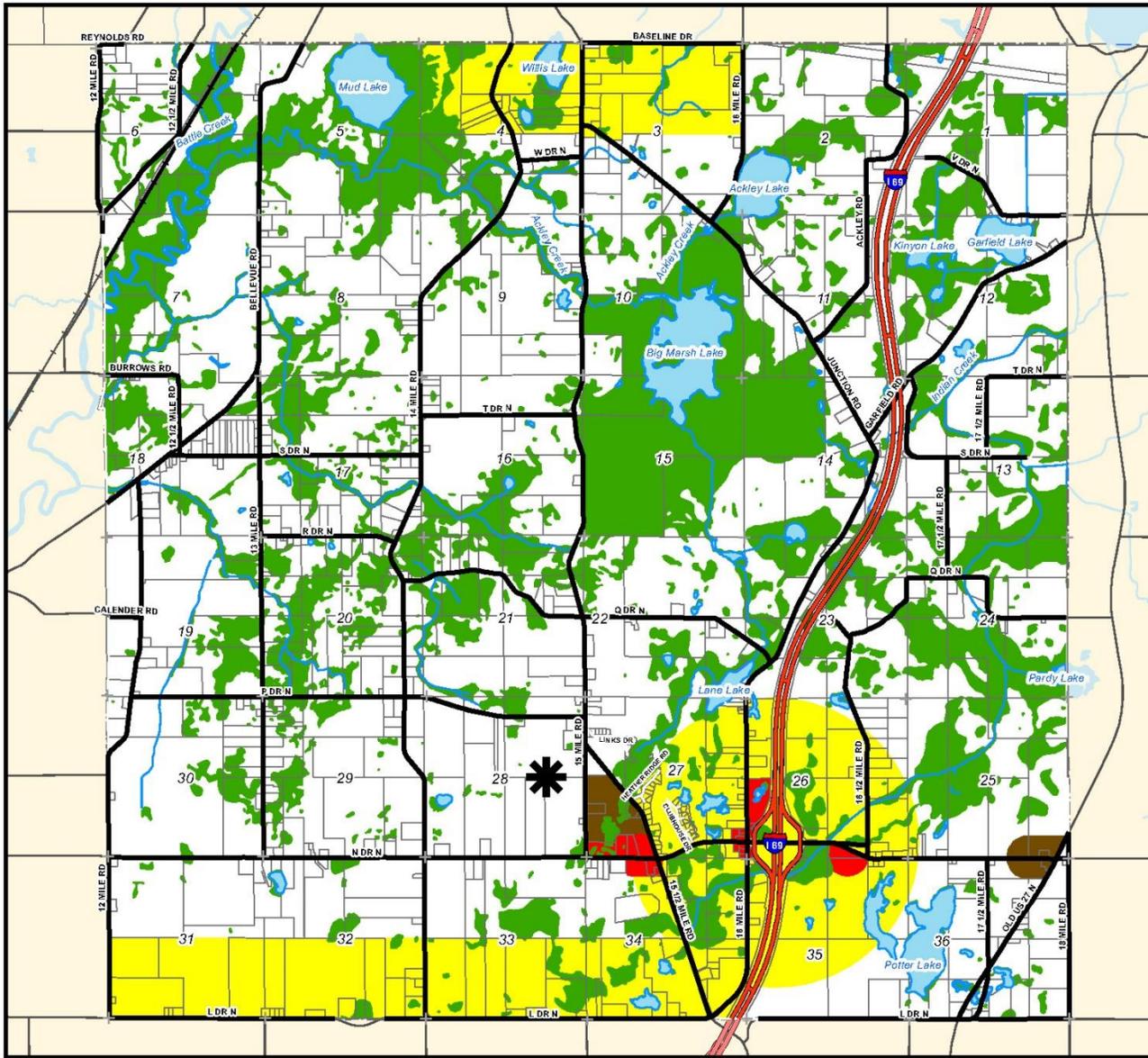
- adequate public services
- managed growth and development
- proper review of rezoning requests as they pertain to specific sites
- rezonings are in response to a demonstrated need
- no unnecessary hardships upon a landowner as a result of property assessments and/or the unintended creation of nonconforming uses and structures

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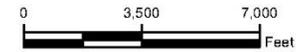


CONVIS TOWNSHIP MASTER PLAN

CALHOUN COUNTY, MICHIGAN
FUTURE LAND USE

DRAFT: December 18, 2018

- AGRICULTURAL/RURAL RESIDENTIAL AREA
- RESOURCE CONSERVATION AREA
- SUBURBAN RESIDENTIAL AREA
- COMMERCIAL AREA
- INDUSTRIAL AREA
- ✳ LANDFILL AREA
- STATE ROAD OR HIGHWAY
- RAILROAD
- LOCAL ROAD
- RIVER OR STREAM
- LAKE OR POND



(THIS IS NOT A ZONING MAP)

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landplan-eidelson.com | 517.347.2120



Prepared By:
Mid-Michigan Mapping Solutions, LLC
4905 Seneca Dr
Okemos, MI 48864

Source: Data provided by Calhoun County and the State of Michigan. Mid-Michigan Mapping Solutions, LLC, does not warrant the accuracy of the data and/or the map. This document is intended to depict the approximate spatial location of the mapped features within the Community and all use is strictly at the user's own risk.

Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl

CONVIS TOWNSHIP MASTER PLAN

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Chapter Four COORDINATED PUBLIC SERVICES

Introduction

Chapter Three describes the planned pattern of land use throughout the township. Chapter Four discusses the public services strategy to be coordinated with the planned pattern of land use. The character and feasibility of land use and development is influenced by the extent to which public services are available. In addition, the character of public services can directly impact the perceived quality of life among residents in the community.

An important principle of the Future Land Use Strategy is that no new development should occur in the township unless public services are adequate to meet the needs of that new development.

On the other hand, public service improvements and the increased development that may result from such improvements should not jeopardize the township's preservation interests and commitment to managed growth and development. Thus, it is important that future public service improvements be coordinated with the planned pattern of future land use as described in Chapter Three.

Circulation and "Complete Streets"

As growth and development occurs, demands on the road network will increase. The additional development anticipated in this Plan will result in higher traffic levels. This increased traffic may lessen the level of service along some of the township's road segments. Conversely, it must be recognized that road improvements may well attract new development which, in turn, will place additional demands on the road network.

The township's road infrastructure currently fulfills its function reasonably well for vehicular traffic. This is due, in large part, to the existing low development density throughout most of the township and important paved thoroughfares such as N Dr. North, Junction Rd., Bellevue Rd., 15 Mile Rd., and the presence of the I-69/N Dr. North interchange.

However, opportunities for safe pedestrian and non-motorized travel are comparatively limited. Safe pedestrian and non-motorized travel has received greater and greater focus within the planning arena, on local, regional, state and federal levels. The provision of opportunities for safe and comprehensive pedestrian and non-motorized travel has been found to encourage a more healthy population, provide alternative means of recreation, and lessen congestion, air pollution, and the consumption of fossil fuels. The importance of safe and comprehensive pedestrian and non-motorized travel led to the Michigan Legislature to amend the Planning Enabling Act in 2010 to require a "complete streets" element in a master plan. The automobile as the sole design factor for roads is no longer the "norm."

"Complete streets" generally refers to the design of roads that takes into account the circulation needs of all potential users including pedestrians, bicyclists, motorists, and public transportation users. The "complete streets" program emphasizes safety along roads for all users and users of all age groups. While recognizing that there is no single "complete streets" design solution that applies to all roads in all communities, the program emphasizes the need for new roads to be designed, and existing roads be improved, to facilitate their safe and efficient use by all prospective users within the context of the particular community's needs and character.

As a rural community, implementation of a "complete streets" program is different than that of an urban center such as in the case of Bellevue or Marshall. While an urban community may pursue sidewalks, bike lanes or paved shoulders, bus lanes, convenient public transportation stops, median islands, frequent and well-marked cross-walks, and other measures, rural communities such as Convis Township typically have fewer options and frequently focus on paved shoulders. However, even in rural communities, the feasibility of implementing a wider scope of "complete streets" measures increases in the community's planned residential and non-residential development areas.

The Calhoun County Road Department has jurisdiction over local public roads. Still, the township has the opportunity to provide input regarding road maintenance, design and improvements.

Circulation/Complete Streets Policies:

1. Greatest priority for road improvements will be assigned to those road segments whose current conditions present imminent danger to the public health, safety and welfare, such as in the case of road impasses and flooding.
2. Functional classification of roads will dictate the priority of improvements when all other conditions are generally equal. The functional importance of the roads in the township, from highest to lowest, is: a) county primary roads, particularly those segments servicing the Future Land Use Strategy's Suburban Residential, Commercial and Industrial Areas; b) county local roads, particularly those segments servicing the Future Land Use Strategy's Suburban Residential, Commercial and Industrial Areas, but excluding roads in a platted subdivisions and similar neighborhood developments; and 3) minor roads, such as local subdivision roads and similar neighborhood development roads.
3. No new roads or road extensions should be undertaken except upon a clear finding of need to ensure public safety and welfare or to provide access to new development projects, such as the provision of access to lots in new subdivisions.
4. All roads will be designed and constructed to County Road Department standards except upon a finding that, in specific instances, such standards do not justify the impact on the natural environment and rural character of the community or are otherwise unnecessary, and lesser standards will not undermine public safety and welfare including the long term stability of the road infrastructure.
5. All proposed future road construction will be evaluated for local and regional impacts on traffic flow, congestion, public safety and land use. New road construction will be coordinated with other local and regional road improvements to address traffic movement in a unified, regional and comprehensive manner.
6. The township will explore the development of a non-motorized circulation plan to encourage the provision of trails and linkages between neighborhoods, commercial centers, and other activity centers in the community including in association with new residential developments. (See also "Recreation" section in this Chapter.)
7. The township will work with the County Road Department to incorporate "complete streets"

measures in road construction, maintenance and improvements.

8. The township will evaluate proposed developments within the context of "complete streets" to ensure all users of a development are afforded opportunities for safe and efficient travel within and between development sites including neighborhoods and commercial/industrial areas.

Sewage Disposal and Potable Water

There is no public water or sewer service in Convis Township. Township residents rely on private wells and septic systems for potable water and sewage disposal.

As development densities increase, so does the need for public sewer and water. Industrial, commercial, and higher density residential land uses generally have greater sewage disposal and potable water needs than can often be met by traditional on-site facilities. Failure to provide adequate sewer and water facilities to these land uses can lead to health and environmental problems, while the premature provision of these services can lead to accelerated and unmanaged growth and development.

Many of the township soils present severe limitations to on-site sewage disposal. Improperly operating septic systems can contaminate potable groundwater resources, lakes and streams and this poses a public health threat. This condition highlights the critical relationship between land use, development intensities, and adequate measures for sewage disposal and potable water.

Sewage Disposal and Potable Water Policies:

1. All on-site sewage disposal and potable water facilities will be constructed and maintained in accordance with the requirements and standards of the Calhoun County Public Health Department, Michigan Department of Health and Human Services, and other applicable public agencies.
2. The township will support the introduction and extension of public sewer and water in the planned Suburban Residential Areas, where initiated and funded by private sector interests and in coordination with the policies of the Suburban Residential Area.
3. Public sewer and water services will not be introduced into planned conservation and agricultural areas except in response to a

significant public health threat and where no other practical means of addressing the threat is available.

4. Any introduction or expansion of public sewer and/or water service, and associated infrastructure, will occur in a phased and incremental manner to ensure effective growth management.
5. The introduction or expansion of public sewer and/or water should be based upon sound engineering principles and infrastructure design that will facilitate incremental increases in demand on the system while, at the same time, will not create excessive capacity that will encourage expansion into planned conservation, agricultural and rural residential areas.

Storm Water Management

As buildings, parking lots and other impermeable surfaces associated with new development cover more of the township’s land surface, the quantity of storm water runoff increases. The vegetated landscape that previously absorbed and slowed much of the water associated with storms is replaced by impervious surfaces. Unless specific preventive measures are taken, this condition encourages flooding and property damage, as well as the pollution of local water resources due to soil erosion, sedimentation and other runoff impurities. The township’s water resources including its numerous lakes and Ackley Creek, Indian Creek, and the Battle Creek River, and their associated wetlands, are vulnerable to degradation.

Storm water management is not a development issue only. While development can pose increased flood potential, improper maintenance of county drains and roadside ditches, and filling of wetlands, can increase flood conditions in agricultural and rural areas as well.

Though flooding, soil erosion, sedimentation and pollution may originate from site-specific circumstances, their impact can extend to adjacent properties and more regional areas including other downstream communities. Storm water management aims to minimize flood conditions and control the quality and quantity of runoff that is discharged into the watershed system (streams, rivers, wetlands, lakes, etc.) from a development site.

Storm Water Management Policies:

- 1) Increased runoff that may occur as a result of property development will be appropriately managed to ensure that the quality of the water runoff discharged does not undermine the integrity of the township’s surface and ground water resources.
- 2) Proposed land uses will not be permitted if the level of service currently provided by existing storm water management infrastructure and/or existing drainage patterns will be decreased, unless necessary improvements to such infrastructure or natural drainage courses are first made.
- 3) New and existing land uses shall comply with all local, county, state, and federal regulations regarding storm water management and soil erosion, including the regulations of the Calhoun County Water Resources Commissioner, except where local officials determine less stringent standards in site-specific instances are appropriate, the standards will not undermine the public health, safety and welfare, and the application of the standards are within the jurisdiction of the township.
- 4) Storm water management measures will emphasize “green infrastructure” – planned networks of natural lands, functioning landscapes and other open spaces that minimize alterations to the natural landscape and lessen the reliance on storm sewer and similar “grey” infrastructure.
- 5) All development will be reviewed within the context of its impact on drainage corridors and surface and groundwater resources, including wetlands, to ensure discharge practices do not undermine the environmental integrity of these resources.
- 6) The Township will maintain regular communication with the Calhoun County Water Resources Commissioner and Road Department regarding drains and roadside ditches in disrepair.

Emergency Services

Convis Township receives fire protection services from the Bellevue Fire Department and the Marshall Township Fire Department, with the nearest fire station being in Bellevue – approximately 2.5 road miles north of the north edge of the township (15 Mile Rd./Baseline Rd. intersection). The Marshall Township Fire Department is located approximately three road miles south of the south edge of the township (L Dr. North/15 Mile Road intersection). Police protection services are provided by the Calhoun County Sheriff’s Department.

Ambulance service is provided to Convis Township residents by the Marshall Area Fire Fighter Ambulance Authority. The nearest ambulance station of the Marshall Area Fire Fighter Ambulance Authority is located three miles south of the southeast corner of the township (L Dr. North/Old U.S.27 Highway intersection).

As community growth and land development increases, so does the demand for emergency services. It is important that the township ensure that adequate fire and police protection services are available to existing and future residents and property.

The community survey undertaken during the development of this Plan suggests that emergency services are currently viewed as reasonable. Common industry standards regarding fire protection suggest a maximum service radius from a fire station in low density residential areas of approximately 3 miles, and an approximately 3/4 to 2 mile service radius in commercial, industrial, and high density residential areas. The vast majority of the township is not within these recommended ranges, with the northern periphery receiving the best level of service.

There are no widely accepted standards for police protection levels and is frequently measured as a function of public satisfaction.

Police and Fire Protection Policies:

1. The township will require the provision of fire protection infrastructure (wells, water lines, etc.) for all new developments which are of such size and density that on-site infrastructure is considered critical. On-site fire protection infrastructure will generally be considered necessary for residential developments that concentrate building sites on lots of approximately one-half acre or smaller.
2. The township will continually monitor police and fire protection needs and services to minimize and/or prevent emergency services deficiencies, and explore improving service levels. Considerations for expansion of services will include both the expansion of joint services with neighboring municipalities and the establishment of independent operations.

Recreation

Convis Township operates a single recreation site, comprised of a portion of the township hall property devoted to picnic and playground facilities. Township residents also have available to them recreational facilities and services of other public entities including the school facilities and programs of the various school districts that serve the township, the parks and recreation programs of nearby municipalities, and a

number of more distant regional public state game and recreation areas. Residents also have access to a number of semi-public and private facilities in the township itself such as, by example, the Bernard W. Baker bird sanctuary, the Medalist Golf Club, and gun and hunt clubs.

The well-being of the township's residents is affected by the availability of recreation opportunities, and the type and ease of accessibility to nearby opportunities are important.

Demands for recreation opportunities increase with population growth. Available land for recreational purposes decreases as housing and other land uses consume more of what was open space and potential outdoor recreation land. Recreation lands must be appropriately located within the community if ease of access is to be enhanced. The township's interest in ensuring adequate recreation opportunities for its residents is reflected in the recent recreation improvements at the Township Hall.

Recreation Policies:

1. The township will periodically monitor the extent to which area residents are satisfied with the scope and accessibility of recreation opportunities in the local area.
2. Should sufficient public sentiment warrant, the township will pursue the development of an MDNR-approved five year recreation action plan that provides a specific action plan aimed at providing needed township facilities and enable the township to compete for state and federal recreation grants to provide such opportunities.
3. Where there is a demonstrated demand for recreation improvements, as financial resources may become available, the township will strive to provide recreation facilities in a manner that recognizes the particular needs of its residents.
4. The township will encourage the provision of open space and recreation areas within future residential development projects such as platted and condominium subdivisions, to facilitate close-to-home recreation opportunities.
5. The township will make the short and long-term maintenance of recreation facilities a priority including adequate funding to support such efforts.
6. The township will ensure that all recreation facilities are accessible by all persons, including encouraging recreation sites in planned residential growth areas and facilitating access within each park site for all persons, irrespective of physical limitations of prospective users.

Information and Technology Access

Our society has been dramatically molded by advanced technology including wireless communications, the internet and computer programs and applications. Availability of reliable cellular phone service and high-speed internet access (broadband) is now commonly linked to quality of life measures. Local, regional and global economies rely heavily on these tools including persons and entrepreneurs who work from their home. Emergency services are greatly enhanced when access to such technology is readily available including the generation of and analysis of data to improve efficiency and levels of service. Personal communications and leisure time are significantly linked to cellular phones and internet surfing. Personal and business research and consumer purchasing through the internet is a regular practice in many households. Today, access to information and technology services is a priority among entrepreneurs, businesses and job-seekers.

Rural areas frequently experience a reduced level of access to reliable cellular service and high-speed internet access. Convis Township is no different in this regard, as more than half of the respondents to a survey conducted as part of the development of this Master Plan identified broadband/internet service as being “poor.”

Technology and Information Access Policies:

1. The township will communicate with local broadband providers to explore impediments to enhanced services and options to improve services.
2. The township will communicate with local municipalities to explore joint efforts to attract broadband providers and improve services on a regional level and in a coordinated manner.
3. The township will periodically evaluate zoning provisions to minimize impediments to cellular service while, as the same time, ensuring potential negative impacts of cellular towers for area residents are minimized.

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Chapter Five IMPLEMENTATION

Introduction

This Master Plan establishes a strategy for growth, development and preservation in Convis Township. The Plan is comprised of graphic and narrative policies intended to provide basic guidelines for making reasonable, realistic community decisions. It establishes policies and recommendations for the proper use of land and the provision of public services and facilities. The Plan is intended to be used by local officials, by those considering private sector developments, and by all residents interested in the future of the township.

This Plan is a policy document. As a policy document, the Plan's effectiveness is directly tied to the implementation of its policies through specific tools and actions.

The completion of the Plan is one part of the planning process. Realization or implementation of the goals, objectives and policies of the Plan can only be achieved by specific actions, over an extended period of time, and through the cooperative efforts of both the public and private sectors.

Implementation of the Plan may be realized by:

- encouraging knowledge, understanding, and support of the Plan by residents and the business community, and the continued communication with and involvement of the citizenry
- providing a program of capital improvements and adequate, economical public services to accommodate desirable development.
- pursuing an action plan to address the objectives presented in Chapter Two
- regulating the use and manner of development through up-to-date reasonable zoning controls and other regulatory and non-regulatory tools
- maintaining a current master plan

The purpose of this Chapter is to identify important implementation tools available to the township.

Public Support, Communication and Community Involvement

Citizen participation and understanding of the general planning process and the specific goals, objectives and policies of the Plan are critical to the success of the township's planning program. Understanding and support of the Plan by local citizens can greatly enhance its implementation. This enhancement may be found in citizen support for bond proposals, special assessments, zoning decisions, and development proposals.

In order to organize public support most effectively, the township must emphasize the necessity of, and reasons for long-range planning and the development of the Master Plan.

Specific actions to be undertaken to encourage public understanding and support of the township's planning program, and the continued communication with and involvement of the citizenry, are as follows.

1. Ensure that copies of the Master Plan are available at the township hall and on the township web site.
2. Post the Future Land Use Map in the township hall where it is clearly visible.
3. Post a regularly updated listing of current events pertaining to planning and zoning matters at the township hall and on the township web site.
4. Through public notices, newsletters, township hall postings, web site postings, and other means, apprise residents of:
 - the planning efforts of the township
 - meetings that will address development and public service improvement proposals as the projects move through review
 - proposed developments and land use decisions under consideration, and where individuals may acquire additional information on such matters
5. Periodically hold special meetings for the specific purpose of discussing the township's planning efforts and providing residents with the opportunity to share concerns and suggestions.

- 6. Encourage “neighborhood watch” programs in each neighborhood to promote safety, cooperation and communication.
- 7. Maintain regular and continued communication with neighboring communities and encourage coordination of planning efforts.

As the township grows and increased demands for public services and infrastructure improvements surface, the benefit of a comprehensive capital improvement program will grow.

Capital Improvements Programming

The use of capital improvements programming can be an effective tool for implementing the Master Plan and ensuring the orderly programming of public improvements. In its basic form, a Capital Improvements Program (CIP) is a complete list of all proposed public improvements planned for a six year period (time span may vary) including costs, anticipated funding sources, location, and relative priority. It is a schedule for implementing improvements that acknowledges current and anticipated demands, and recognizes present and potential financial resources available. The CIP is not intended to encourage the spending of additional public monies, but is simply a means by which an impartial evaluation of needs may be made.

The importance of CIPs is highlighted by the fact that Sec. 65 of the Planning Enabling Act strongly endorses capital improving planning for all communities, and mandates that a township prepare an annual six-year CIP if the township owns or operates a water supply or sewage disposal system.

The CIP outlines the projects that will replace or improve existing facilities, or that will be necessary to serve current and projected land use development within a community. Advanced planning for public works through the use of a CIP ensures more effective and economical capital expenditures, as well as the provision of public works in a timely manner. Few communities are fortunate enough to have available at any given time sufficient revenues to satisfy all demands for new or improved public facilities and services. Most communities are faced with the necessity of determining the relative priority of specific projects and establishing a program schedule for their initiation and completion.

This Master Plan does not recommend specific increases in public services or infrastructure, and includes no recommendations for the introduction of public sewer or water, the acquisition of additional park sites, or the construction of a fire station. Still, regularly prioritizing even “minor” community improvements is an important element of planning.

Objectives Action Plan

The objectives presented in Chapter Two serve as strategies to reach the goals of this Master Plan, also presented in Chapter Two, and to put in place the policies of Chapter Three (Future Land Use Strategy) and Chapter Four (Public Services Strategy). Some of the objectives require comparatively short periods of focus for successful implementation (one or several years) while others may require a longer implementation period and continued maintenance as a regular annual effort each and every year.

The Chapter Two objectives are of limited value unless they are routinely and regularly reviewed and an annual action plan is developed to identify those objectives to pursue in the coming year and each subsequent year, and the recommended township entity that is best suited to take the lead in furthering the selected objective(s).

Undertaking the implementation of an excessive number of objectives during a single year is likely not realistic and may lead to little being accomplished. Identifying a realistic set of annual objectives to direct efforts toward may ultimately lead to a more successful long-term implementation program.

The Planning Commission and Township Board should meet annually:

- to prioritize objectives to be pursued in the coming several years and those that should take priority in the immediate year ahead
- to identify the entity to take charge in the respective objective’s implementation
- to identify the steps to be taken for the objective’s implementation
- to identify from where funding is to be provided (if funding is necessary)
- to report on the status of implementation efforts during the previous year

Prioritization of the objectives should be based on such factors as public safety, economic stability and growth, comparative need, comparative impact community wide, and the number of residents and/or businesses that benefit.

Development Codes and Programs

Zoning Ordinance

A zoning ordinance is the primary tool for implementing a Master Plan. A zoning ordinance regulates the use of land. The ordinance generally divides a community into districts and identifies the land uses permitted in each district. Each district prescribes minimum standards that must be met such as minimum lot area, lot width, and building setbacks. Since 2006, zoning regulations for Michigan communities are adopted under the authority of the Michigan Zoning Enabling Act, P.A. 110 of 2006.

The purpose of zoning, according to the Michigan Zoning Enabling Act, is to (in part): “regulate the use of land and structures; to meet the needs of the state’s citizens for food, fiber, energy, and other natural resources, places of residence, recreation, industry, trade, service, and other uses of land; to insure that use of the land shall be situated in appropriate locations and relationships; to limit the overcrowding of land and congestion of population, transportation systems, and other public facilities.”

Convis Township has had local zoning in place for more than 40 years. Its current ordinance was adopted in 1971 and it has been periodically amended. With the adoption of this Master Plan, the township’s zoning ordinance should again be carefully reviewed to identify amendments that may be beneficial to implement the policies of the Plan and facilitate efficient day-to-day zoning administration. The extent of desirable amendments may suggest the need for the development of a wholly new zoning ordinance.

Adoption of zoning regulations by the Township Board provides the legal basis for enforcement of zoning provisions. The ultimate effectiveness of the ordinance is dependent on the overall quality of ordinance administration and enforcement. If administrative procedures are lax, or if enforcement is handled in an inconsistent, sporadic manner, the result will be unsatisfactory. The Planning Commission, Township Board, and staff are responsible for carrying out zoning/development related functions including the review of development plans and site inspections. These functions can require special expertise and a substantial investment of time to ensure that these essential day-to-day functions are met and appropriate development is facilitated.

Convis Township Zone Plan

The following pages present a Zone Plan. The Zone Plan establishes a foundation for the township’s zoning regulations. The Zone Plan is comprised of three elements. The Michigan Planning Enabling Act requires that a Master Plan include a Zone Plan.

Zone Plan – Part One

Part One of the Zone Plan presents **guidelines for the presentation of zoning districts** in the Convis Township Zoning Ordinance, to implement the Future Land Use Strategy presented in Chapter Three of the Master Plan including the Future Land Use Map.

Zone Plan – Part Two

Part Two of the Zone Plan presents **guidelines for basic site development standards** for the zoning districts to implement the Future Land Use Strategy presented in Chapter Three of the Master Plan including the Future Land Use Map.

Zone Plan – Part Three

Part Three of the Zone Plan identifies **important ordinance elements** that the Convis Township Zoning Ordinance should include to ensure its ease of use and effectiveness in advancing the goals, objectives and policies of the Master Plan. The ordinance should be reviewed within the context of these elements.

CONVIS TOWNSHIP MASTER PLAN

Draft: December 18, 2018

Zone Plan – Part One

Table of Recommended Zoning Districts and Relation to Future Land Use Map

The following table presents conceptual guidelines for the presentation of zoning districts in the Convis Township Zoning Ordinance, to implement the Master Plan’s Future Land Use Strategy (including Future Land Use map). “Secondary District Uses” identified in the table, or others specified in the Zoning Ordinance, should typically be subject to comprehensive review to determine if the proposed use is appropriate on the subject site based on, in part, compatibility with surrounding land uses, environmental conditions, road infrastructure, and public services. The Zoning Ordinance may incorporate other districts to address specialized matters such as uses and development in floodplains and along surface waters, “planned unit development” provisions as authorized by the Zoning Enabling Act, and corridor access management provisions.

Zoning District (example names)	Primary Relationship to Chapter Three Including Future Land Use Map	Primary Intended District Uses	Examples of Potential Secondary District Uses
<u>NRP</u> Natural Resource Protection	Resource Conservation Area	Wildlife management areas, conservation areas and agriculture	Single-family dwellings.
<u>A-R</u> Agricultural-Residential	Agricultural/Rural Residential Area	Agriculture and single-family residences	Golf courses, veterinarian clinics, kennels, bed and breakfasts, shooting ranges, and campgrounds
<u>R-1:</u> Low Density Residential <u>R-2</u> Medium Density Residential <u>R-3</u> High Density Residential	Suburban Residential Area	Single-family and two-family dwellings of incrementally greater density: <ul style="list-style-type: none"> • 1 dwelling per 30,000 sq. ft. (R-1 Low Density Residential) • 1 dwelling per 15,000 sq. ft. (R-2 Medium Density Residential) • 1 dwelling per 8,000 sq. ft. (R-3 High Density Residential) 	Religious institutions, schools, libraries, child care facilities, parks and other recreation facilities, and utility substations
<u>R-MHC</u> Manufactured Housing Community	Suburban Residential Area	Manufactured housing communities	Child care facilities, parks and other recreation facilities, utility substations and mobile home sales
<u>R-MF</u> Multiple Family Residential	Suburban Residential Area	Multiple family developments	Religious institutions, nursing homes, assisted living facilities, and utility substations
<u>C-1</u> Local Commercial	Commercial Areas	Comparatively small retail, office and personal service uses, catering to local needs	Service stations, day care centers, and drive-through facilities
<u>C-2</u> General Commercial	Commercial Areas	Retail, office and personal service uses, catering to local and more regional markets	Automobile dealerships, motels and hotels, service stations, drive-through facilities, and very large commercial operations.
<u>C-3</u> Rural Commercial	Commercial Aspect of the Agricultural/Rural Residential Area	Very small retail and personal service uses, catering to local needs	Not applicable
<u>I-1</u> Light Industrial	Industrial Area	“Light” industrial uses such as assembly of pre-made parts, tool and die, and laboratories	Junk yards, truck terminals, fuel storage, vehicle repair and limited manufacturing

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**Zone Plan – Part Two
Table of Zoning District Site Development Standards**

The following table establishes conceptual guidelines for basic site development standards of the zoning districts intended to implement the Future Land Use Strategy in Chapter Three (including the Future Land Use Map). The table’s standards establish a realistic concept for each district. All guidelines below are approximate and serve as a framework for more detailed Zoning Ordinance standards. Conditions may suggest divergences from the guidelines to address special issues such as height exceptions for communication towers, increased setbacks where commercial/industrial uses are adjacent to residential uses, and increased lot width standards as part of an access management program.

Zoning District (example name)	Minimum Lot Area	Minimum Lot Width and Frontage	Maximum Building Heights	Maximum Lot Coverage	Minimum Yard Setback		
					Front	Side	Rear
<u>NRP</u> Natural Resource Protection	5 to 10 acres	330 ft.	35 ft.	5% – 10%	60 ft.	50 ft.	50 ft.
<u>A-R</u> Agricultural-Residential	2 acres ¹	330 ft.	35 ft.	10% – 15%	60 ft.	50 ft.	50 ft.
<u>R-1</u> Low Density Residential	30,000 sq. ft.	125 ft.	35 ft.	15% – 20%	50 ft.	30 ft.	50 ft.
<u>R-2</u> Medium Density Residential	15,000 sq. ft.	75 ft.	35 ft.	25% – 30%	25 ft.	10 ft.	30 ft.
<u>R-3</u> High Density Residential	8,000 sq. ft.	60 ft.	35 ft.	30% – 35%	25 ft.	10 ft.	20 ft.
<u>R-MHC</u> Manufactured Housing Community	Conformance with Rules and Regulations of the Michigan Manufactured Housing Commission						
<u>R-MF</u> Multiple Family	1 acre	300 ft.	35 ft.	35% – 40%	35 ft.	50 ft.	50 ft.
<u>C-1</u> Local Commercial	20,000 sq. ft.	150 ft.	30 ft.	50%	30 ft.	15 ft.	30 ft.
<u>C-2</u> General Commercial	30,000 sq. ft.	150 ft.	30 ft.	50%	40 ft.	25 ft.	30 ft.
<u>C-3</u> Rural Commercial	2 acres	200 ft.	30 ft.	35%	60 ft.	60 ft.	60 ft.
<u>I-1</u> Light Industrial	1 acre	150 ft.	30 ft.	50%	85 ft.	25 ft.	40 ft.

Footnotes

1. Limitations to be applied to the number of splits from a parent parcel, generally based on Land Division Act. Smaller lots available in association with “Clustering/Open Space Developments” (see page 5-8).

Zone Plan, Part Three – Important Components of the Convis Township Zoning Ordinance. The following identifies important general elements that the Convis Township Zoning Ordinance should include to ensure its ease of use and effectiveness in advancing the goals, objectives and policies of the Master Plan. The ordinance should be reviewed within the context of these elements:

1) Procedural Matters/Plan Review

The Zoning Ordinance should be reviewed to ensure it includes clear and comprehensive step-by-step provisions addressing procedural matters such as the application process and approval standards for zoning permits, amendments, matters that come before the Zoning Board of Appeals, and enforcement efforts.

The zoning permit application procedures should include clear requirements for the submittal of necessary plans illustrating proposed modifications to a site, to enable officials to determine compliance with all standards of the Ordinance.

The provisions should ensure development plans include comprehensive information such as the delineation of existing natural features, the extent of alterations to such features, and the salient features of the development including buildings, parking, screening, lighting, grading and storm water management.

The Zoning Ordinance should include a comprehensive set of approval standards addressing such matters as access management and vehicular/pedestrian circulation, emergency vehicle access, natural resource protection, utilities, storm water management and compatibility with surrounding conditions.

2) District Provisions/Special Land Uses

The ordinance should include a clear and comprehensive presentation of zoning districts including the purpose, authorized uses, and development standards for each. To this end, the districts should differentiate between uses authorized “by right” versus as “special land uses.”

Uses permitted by right are the primary uses and structures specified for which a particular district has been established. An example may be a dwelling in a residential district.

Special land uses are uses that are generally accepted as reasonably compatible with the primary uses and structures within a district but, because of their particular character, may have

an increased potential for injurious effects upon the primary uses in the district, or are otherwise unique in character and it may not be appropriate in certain situations or on certain parcels. An example may be a kennel in a residential district.

Special land uses require special consideration in relation to the welfare of adjacent properties and to the township as a whole, and may not be appropriate in all locations.

3) Site Development Standards

In addition to the standards presented in the Zoning Ordinance for each district, such as minimum lot area, width, and setbacks, the Ordinance should be reviewed to ensure it presents clear and comprehensive standards addressing more general fundamental site development issues such as:

- a. Proper access to ensure public safety and welfare including access management along thoroughfares, emergency vehicle access, and non-motorized circulation.
- b. Off-street parking and loading to ensure adequate facilities are provided on a development site and design features encourage safe and efficient circulation for all.
- c. Landscaping and screening provisions that ensure new development (commercial, industrial, institutional, etc.) is compatible with surrounding conditions and supportive of the desired character of the community.
- d. Sign regulations to ensure local signage does not contribute to traffic safety hazards, visual clutter, confusion for vehicle drivers, visual blight, and decreased property values.
- e. Environmental safeguard provisions to ensure new development minimizes disturbances to the township’s natural resources including keyholing and storm water management.

4) Nonconformities

The Zoning Ordinance should address lots, uses and structures that are nonconforming due to changes to the zoning ordinance, and the extent to which such lots, uses and structures can be replaced, expanded, enlarged, or otherwise altered.

5) Site Condominium Regulations

The Zoning Ordinance should address site condominiums. Site condominiums come in many forms, but they typically involve developments that look identical or nearly identical to platted subdivisions. The principal differences between the two is that while privately owned lots comprise the entirety (or near entirety) of a platted subdivision, site condominiums are comprised of privately owned (or rented) building envelopes where there are no "lot lines" and greater portions of the development are commonly owned. Site condominiums are not comprised of "lots" in the traditional sense. Zoning regulations must clearly address this form of development and correlate site condominium development with "lot" regulations to ensure such development is subject to the same review procedures and standards as otherwise applicable to other residential development of similar physical character (platted subdivisions).

6) Clustering / Open Space Developments

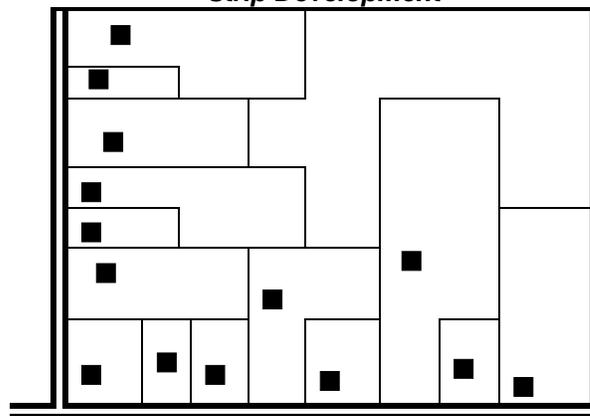
As a tool to facilitate the conservation of important natural resources and ecosystems, this Plan supports what are commonly referred to as "cluster developments" and "open space developments" in association with platted subdivisions, condominium subdivisions, and similar neighborhood developments. This development option is a beneficial alternative to large lot "rural sprawl," which consumes open space and creates lots that are too small for farming or meaningful habitat protection.

"Clustering" provides for the grouping of smaller lots than what is normally permitted, on only a portion of the development tract, so that the balance of the tract can be retained as open space and for the preservation of important environmental resources. Clustering provisions must recognize the specific requirements of Sec. 506 of the Michigan Zoning Enabling Act.

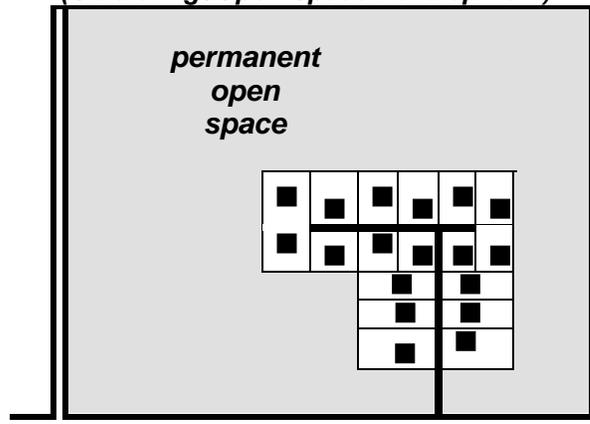
As much as 50% or more of a site, and preferably the most environmentally significant, may be preserved in its existing natural state, with individual house lots occupying the remaining acreage. These "open space" areas can be reserved by the use of conservation easements, deed restrictions, or similar tools. A critical component of clustering should be the inclusion of new interior roads to serve the new lots, rather than stripping new dwellings along existing road frontages.

More traditional strip residential development along the township's major roads is illustrated in Example A below. This is the easiest form of development but it impacts public safety due to the many driveways directly accessing the road and it can significantly undermine the rural character of the township. Example B, illustrating a clustering/open space development, improves public safety along the road and more effectively preserves the existing character of the community including its open spaces and environmental resources and habitats. Clustering can also save infrastructure costs by reducing the length of roads and utility lines.

**Example A
Strip Development**



**Example B
(Clustering / Open Space Development)**



One of the most effective means to encourage the open space development option is through more flexible development standards than otherwise available, such as standards pertaining to permissible densities, lot sizes, and setbacks. This Plan supports appropriate incentives to facilitate this preferred form of development provided such incentives are not contrary to the principal policies of the Plan. Accordingly, moderate increases in

recommended maximum development densities presented in Chapter Three may be reasonable.

7) Planned Unit Developments (PUDs)

“Planned unit development” provisions in a Zoning Ordinance typically permit a more flexible form of development that normally permitted by the district in which a development site is located or the other districts established in the Ordinance. PUDs are expressly authorized by the Zoning Enabling Act with the intent to facilitate development that, in part, encourages innovation in land use and variety in design, layout, and type of structures constructed; achieves economy and efficiency in the use of land, natural resources, energy, and the provision of public services and utilities; encourages useful open space; and provides better housing, employment, and consumer opportunities. PUDs are sometimes used as a means to facilitate residential cluster development discussed in (6) above, but are frequently used to facilitate development that provides a mix of housing units and nonresidential uses in one unified site design. The specific PUD provisions of an ordinance dictate the character and scope of development that may occur under such a development option.

8) Special Issues

A very beneficial part of a zoning ordinance, commonly referred to as “supplemental provisions”, can be used to address a host of special issues that have relevance to the particular community. The particular scope of issues addressed should be tailored to the particular community. However, common issues addressed under include, but are not limited to, some of the following:

- conditional approvals
- moving buildings
- essential services
- one dwelling per lot
- single family dwelling standards
- temporary dwellings
- accessory uses, buildings, and structures
- outdoor furnaces
- home occupations
- keeping of livestock (dwelling related)
- roadside stands
- swimming pools
- outdoor display, sales, and storage
- outdoor recreational vehicle storage
- temporary non-residential buildings/uses
- building height exceptions
- setback exceptions

9) Clarity

The clarity of a zoning ordinance’s wording and organization will greatly impact the ability of officials to administer the ordinance in a consistent manner, validly enforce the ordinance’s provisions, and facilitate a user-friendly document for officials, applicants and the general public. This clarity must be reflected in the wording of individual provisions as well as linkages between chapters including the avoidance of conflicting provisions.

10) Compliance with Current Law

The Zoning Ordinance’s provisions must comply with current law to ensure its validity and the ability of officials to enforce the Ordinance. The Township Zoning Act, under which Convis Township first adopted its first zoning regulations, was repealed in 2006 and replaced by the Zoning Enabling Act (Public Act 110). The township’s zoning regulations should be coordinated with the Zoning Enabling Act and periodically updated to address any subsequent changes to the law.

Subdivision and Land Divisions Ordinances

When a landowner/developer proposes to subdivide land, the person is, in effect, planning a portion of the township. To ensure that such a development is in harmony with the Master Plan, the subdivision or resubdivision of residential and nonresidential land must be adequately reviewed. A subdivision ordinance establishes requirements and design standards for the development of plats including streets, blocks, lots, curbs, sidewalks, open spaces, easements, public utilities, and other associated subdivision improvements. The Land Division Act, P.A. 288 of 1967, as amended, provides the authority for municipalities to adopt local ordinances to administer the provisions of the Land Division Act including the platting of subdivisions.

With the implementation of a subdivision ordinance, there is added insurance that development will occur in an orderly manner and the public health, safety and welfare will be maintained. For example, subdivision regulations can help ensure developments are provided with adequate utilities and streets, and appropriately sized and shaped lots. Adopting a local ordinance addressing the creation of subdivisions can encourage a more orderly and comprehensive manner for the review and approval of subdivision plats.

Of equal importance is a “land division ordinance.” While a subdivision ordinance addresses unified residential developments of multiple units (plats), much of the development in Convis Township is in association with incremental land divisions for the purpose of establishing individual home sites. A land division ordinance assures that these incremental divisions meet certain minimum zoning ordinance standards such as lot area and width. The Land Division Act referenced above also provides municipalities with the authority to adopt a land division ordinance. Land division ordinances can ensure consistency in review and approval practices.

Other Special Purpose Ordinances

While zoning and land split regulations are the most frequently used tools for the regulation of land use and development, the control of land use activities can extend beyond their respective scopes. Special purpose rules and regulations can complement zoning and land split regulations and further the implementation of the Master Plan. Such ordinances may address matters pertaining to noise, public nuisances, outdoor assemblies, blight, junk, weeds, and other activities. Township officials should evaluate the scope of the township’s current special purpose ordinances and determine what new ordinances, and/or amendments to current ordinances, may be beneficial to further implement the Master Plan.

Maintaining a Current Master Plan

Successful planning requires maintaining a current Master Plan. The Master Plan should be updated periodically. The Plan must be responsive to community changes if it is to be an effective community tool and relied upon for guidance. Periodic review of the Plan should be undertaken by the Planning Commission, Township Board, and other officials to determine whether the Plan continues to be sensitive to the needs of the community and continues to chart a realistic and desirable future.

Community changes that may suggest updates to the Plan include, but need not be limited to, changing conditions involving available infrastructure and public services, growth trends, unanticipated and large-scale development, and changing community aspirations. The following page outlines important considerations for the periodic evaluation of the Master Plan.

The importance of maintaining a current Plan is reflected in the Planning Enabling Act’s requirement that a Planning Commission review its Master Plan at intervals not greater than five years and document the Commission’s findings.

Amendments to the Plan, or the preparation of a wholly new Plan, should follow the minimum procedures delineated in the Planning Enabling Act in addition to measures the township believes will enhance the planning process.

**Important questions to be asked during a review
of this Master Plan should include, at a minimum:**

- Does the Plan present valid and current inventory data (Appendices and elsewhere)?
- Does the discussion of planning issues and specific goals/objectives continue to be appropriate today?
- Do the future land use and public services policies of the Plan continue to reflect preferred strategies to address development, preservation and public services?
- Have there been any new and/or significant development projects that have raised concerns about the township's future, or the future of a particular area of the township, that may suggest changes to the Master Plan's goals, objectives and/or policies regarding development, preservation and public services?
- Have there been any other major changes in the township that were not anticipated under the current Master Plan?
- Have any specific development decisions been made (such as rezonings and site plan approvals) that may have appeared contrary to the Master Plan and, if so, do such decisions suggest the need to revise the Plan to be more responsive to local conditions?
- Have any text amendments been made to the Zoning Ordinance that suggest Master Plan revisions to maintain coordination between the two documents?
- Is the character of local growth and development (residential, commercial and other) since the Plan was adopted (or last updated) in keeping with Plan's vision (goals, objectives, and policies)?
- Are there significant discrepancies between the Future Land Use Map and Zoning Map, recognizing that the Zoning Map is current law and the Future Land Use Map portrays the future vision?
- Are there conditions and/or trends in nearby communities, particularly along the township's borders, which suggest modifications to the Plan's policies addressing future land use and public services?
- Does the Master Plan comply with current law?

Appendix A

CULTURAL FEATURES

Geography and Regional Context

Convis Township is a rural community located along the central northern periphery of Calhoun County in the south-central region of Michigan's Lower Peninsula. The township occupies a total area of approximately 23,360 acres, being approximately six miles by six miles and having the square congressional township boundary characteristic of the majority of townships in southern Michigan (based on the U.S. Public Land Survey System). Convis Township is 1.5 miles south of the Village of Bellevue (1,282 population), six miles east of Battle Creek (52,347 population), and five miles north of Marshall (7,088 population). There are no cities or village immediately adjacent to Convis Township. The four principal surrounding townships are Bellevue to the north (Eaton County), Lee to the east, Marshall to the south, and Pennfield to the west. Interstate 69 travels north-south through the east half of the community.

Approximate driving distances to more regional urban centers of a population of 40,000 persons or more, within approximately 100 miles, are:

Battle Creek:	52,347 persons	6 road miles west
Kalamazoo:	74,260 persons	40 road miles west
Lansing:	114,297 persons	45 road miles northeast
Ann Arbor:	113,934 persons	75 road miles east
Grand Rapids:	188,040 persons	75 road miles northwest
Flint:	102,434 persons	95 road miles northeast
Fort Wayne, IN:	253,691 persons	95 road miles south

The regional landscape within fifty miles of Convis Township is dominated by agriculture, woodlands, wetlands and other open spaces, and scattered residential development, along with periodic small villages and cities and other similar more urbanized pockets (in addition to some of the larger urban centers listed above).

Access and Circulation

Regional Access

Regional access to Convis Township is excellent. Interstate 69 (I-69) travels north-south through the east half of the township, with an N Dr. North interchange in the southern third of the township. Interstate 94 (I-94) travels east-west across the state and within three miles of the Convis Township's south border. Old U.S. 27 cuts across the southeast tip of the township and is accessible from the I-94 interchange (Exit 108). The I-69/I-94 interchange is also within three miles of the township. The nearest regional airport to Convis Township, the W.K. Kellogg Airport, is approximately 17 road miles to the west on the west side of Battle Creek. The Kalamazoo/Battle Creek International Airport is 35 miles to the west in Kalamazoo. Marshall operates a small single runway airport, Brooks Field, approximately 10 road miles south on the south side of the city.

Local Road Network

Convis Township's local road network does not exhibit the one-mile square grid system that is so dominant in most southern Michigan townships. This is a result of a number of factors that interfere with the application of a grid system including extensive wetland areas, meandering watercourses and the I-69 corridor. The grid pattern is most evident in the township southwest quarter. All roads in the township are under the jurisdiction of the Calhoun County Road Department (CCRD) except for I-69 and several private roads owned and maintained by the property owners they serve. The CCRD maintains jurisdiction over approximately 76 miles of road.

Public Act 51 Road Classifications: In compliance with the requirements of Public Act 51 of 1951, the CCRD classifies all roads under its jurisdiction as either “*primary*” or “*local*” (See Public Road Network – Public Act 51 Map, Appendix D). Primary roads are considered the most critical in providing regional circulation throughout the county. The classification of roads by the CCRD has important financial implications with regard to maintenance and improvements. Under Michigan law, townships have no responsibility for funding road improvements and maintenance. The CCRD is responsible for local road maintenance. On the other hand, while the CCRD must maintain and improve primary roads at its own expense, state law limits the participation of road commissions and departments to no more than 50% of the cost for improvements to local roads. Requests by local townships for local road maintenance levels beyond those considered adequate or feasible by the CCRD frequently require local funding. In reality, there are very few counties in Michigan where local townships are not actively involved in funding road improvements.

Roads in Convis Township that the CCRD classifies as “*primary*” under Act 51 include:

- Bellevue Rd.
- Garfield Rd.
- Junction Rd.
- Old U.S. 27
- L. Dr. North, between 14 Mile and 15 1/2 Mile Rds.
- N. Dr. North
- S. Dr. North, between 13 and 14 Mile Rds.
- 14 Mile Rd.
- 15 Mile Rd., north of 15 1/2 Mile Rd.
- 15 1/2 Mile Rd.
- 16 Mile Rd.

All other roads in the Township under the jurisdiction of the CCRD are classified as “*local*.”

National Functional Classifications (NFC): Also of importance is the national functional classification of roads as established by the Federal Highway Administration (FHA). The FHA classifies road segments according to their function – the extent to which the road is intended to facilitate traffic movement over long distances versus over shorter distances and for access to abutting property (see Public Road Network – National Functional Classification Map, Appendix D). The relative hierarchy of the classification and its applicability to Convis Township follows:

Interstates, Freeways and Principal Arterials are thoroughfares intended to move large volumes of traffic over long distances. Facilitating circulation on a regional level, including between cities and states, is the primary role of these thoroughfares. I-69 is the only thoroughfare in the township that falls under this classification.

Minor Arterials/Major Collectors serve to accommodate through traffic while also providing access to abutting properties and minor intersecting streets.

Minor arterials in Convis Township are limited to:

- Old U.S. 27

Major collectors in Convis Township are limited to:

- Bellevue Rd.
- N. Dr. North
- 15 Mile Rd., north of 15 ½ Mile Rd.
- 15 ½ Mile Rd.

Minor Collectors serve to collect traffic from local streets and to provide a means of access to local destinations and minor arterial/major collector roads. Minor collectors in Convis Township are:

- Garfield Rd.
- Junction Rd.
- L. Dr. North, between 14 Mile and 15 Mile Rds.
- S. Dr. North, between Bellevue and 15 Mile Rds.
- 14 Mile Rd.
- 16 Mile Rd.

Local Streets serve primarily to provide access to adjacent properties and minor collectors. The public roads in the Township not otherwise identified above are classified as local streets.

Federal aid for road projects is limited to roads classified as major collectors or higher. Roads classified as minor collectors have only limited eligibility. Roads classified as local are not eligible for federal funding.

Land Cover, Land Use and Development

The dominant land cover in Convis Township is of an “open space” character including farmland, woodlands, wetlands, meadows and similar environments. The most dominant active land use is farming. Together, agricultural operations and other open spaces account for approximately 84% of the land area of Convis Township. The more urbanized areas of the Township, including those developed for commercial, industrial, and suburban residential uses, are somewhat scattered but are most dominant along the N Dr. North corridor in the general vicinity of the I-69 interchange.

Table A-1 provides a breakdown of general land use/land cover in Convis Township. Table A-2 provides a breakdown of land use based solely on tax classification for county assessing purposes. An examination of the two tables quickly reveals how actual land use/land cover can differ considerably from the classification of land resources for taxation purposes. For example, the acreage devoted to home sites and immediate yard areas, based on an average of two acres per dwelling, accounts for approximately 1,370 acres. On the other hand, the county’s residential tax classification accounts for 12,163 acres of the township – slightly more than one-half of the entire community. This condition is a result of a single tax classification being applied to an entire parcel even though the actual active use of a parcel may be limited to only a small portion of the parcel.

Tables A-1 and A-2 are followed by a review of some of the more significant characteristics of land use and development in the township. See Land Use/Land Cover map and Land Use by Tax Classification map, Appendix D.

CONVIS TOWNSHIP MASTER PLAN

Draft: December 18, 2018

**Table A-1
Approximate General Land Use/Land Cover Allocation, 2017**

Land Use-Land Cover	Approximate Acreage (ac.)	Approximate Portion (%) of Township
Open Space, comprised of woodlands, wetlands, and meadows, excluding Outdoor Recreation and Conservation.	12,300 ac.	52.7%
Agriculture	5,800 ac.	25.0%
Outdoor Recreation and Conservation, comprised of shooting ranges, hunt clubs, golf courses, camping facilities, and wildlife sanctuaries, excluding water bodies.	1,400 ac.	6.0%
Residential	1,370 ac.	5.9%
Transportation, comprised of road/highway right-of-ways.	1,050 ac.	4.5%
Industrial, comprised of mineral extraction, landfill, and manufacturing.	720 ac.	3.1%
Water Bodies, comprised of lakes, rivers and streams.	700 ac.	3.0%
Commercial, comprised of retail, office and service-oriented uses.	2 ac.	---
Other, comprised of cemeteries, township hall and related uses.	20 ac.	---

Table is based on aerial imagery, township records and “windshield” survey.
“—” denotes less than 0.1%

**Table A-2
Land Use Allocation According to Tax Classification, 2017**

Tax Classification	Acreage (ac.)	Portion (%) of Township
Residential	12,163 ac.	54.9%
Agriculture	7,738 ac.	35.0%
Exempt	1,309 ac.	5.9%
Commercial	713 ac.	3.2%
Industrial	215 ac.	1.0%

Source: Calhoun County

Agriculture

Farming operations occupy approximately 25.0% (approximately 5,800 acres) of the township. While farming is present in nearly all of the township's 36 square-mile sections, farming typically represents less than a quarter of the area of each section including sections in which no farming is present. However, there are some notable exceptions where farm operations account for nearly half or more of the section including in the case of Sections 3, 7, 13, 16, 19, 30, 32, 33, and 34. The most visible presence of farming in the township is in the southwestern region of the community. Some of the more commonly harvested crops are corn and soybeans. Nearly all farmland is dedicated to crop production, the primary exception being a large dairy farm on the north side of N. Dr. North at the 17 ½ Mile Rd. intersection in Section 25.

In an effort to better protect Michigan's farming interests, that state passed Public Act 116 of 1974 – the Farmland and Open Space Preservation Act. The Act has since been amended and ultimately repealed, and made part of Public Act 451 of 1994 – the Natural Resources and Environmental Protection Act. The program continues to be commonly referred to as the "PA 116 Program." The Act establishes a program whereby farmers can enroll their properties to gain property tax relief provided the farmland is maintained in an agricultural and/or other open space status. Minimum and maximum program enrollment periods are 10 and 90 years respectively, with renewal enrollment periods of a minimum of seven years. Except in certain instances, termination from the program requires the landowner to repay the tax credits received for the enrolled property during the previous seven years.

There were approximately 1,550 acres enrolled in the Farmland and Open Space Preservation Program in 2016, comprising approximately 6.7% of the township's area. The enrolled parcels are scattered throughout the township but approximately half of the acreage is located in the township's northwest quarter. The minimum required initial enrollment period in the program is 10 years. All of current enrollment periods for the Convis Township parcels extend to between 2017 and 2021 except for three, which extend to between 2072 and 2080 and cover a total of approximately 300 acres.

Residential Development and Land Division

The 2010 Census recorded 685 dwelling units in Convis Township, a 5.2% increase over the 651 dwellings in 2000. Based on an average of two acres of maintained lawn area per dwelling unit, residential development comprises approximately 5.9% (1,370 acres) of the township's total acreage. 8.2% of the dwelling units were not occupied in 2010, of which only 26.3% were for sale or rent. The balance of the unoccupied dwellings were recently sold but unoccupied, used for seasonal, recreational or occasional use only, or were unoccupied for some other reason. 91.6% of all occupied dwellings were owner-occupied and the balance were renter-occupied.

According to the 2015 Census Bureau's American Community Survey, approximately 98.7% of the township's dwellings were single- family dwellings. Of these single- family dwellings, approximately one-fifth were mobile homes. Approximately one-half of the mobile homes are in the Belleview Mobile Home Park, located on 15 ½ Mile Rd. immediately south of Baseline Rd. and east of Willis Lake.

According to the 2015 Census Bureau's American Community Survey, 20.1% of the dwelling units were constructed prior to 1940, 43.1% were constructed between 1940 and 1979, and 38.2% were constructed since 1980. The township's housing stock is comparatively young when compared to the county and state. The 38.2% of the township's housing stock constructed since 1980 is far greater than that of the county (23.8%) and nearly three times that of the state (13.6%). The township's 2015 median value of the owner-occupied housing stock was \$109,600, noticeably greater than the county (\$96,000) and approaching twice that of the state (\$60,000). See Table A-3.

TABLE A-3
Selected Housing Characteristics Comparison, 2015
 Source: U.S. Census Bureau, 2015 American Community Survey

DWELLINGS	CONVIS TOWNSHIP	CALHOUN COUNTY	STATE OF MICHIGAN
Year Built (%)			
Since 1980	38.2%	23.8%	13.6%
1940 to 1979	41.7%	50.5%	65.6%
Before 1940	20.1%	25.7%	20.8%
Median Value	\$109,600	\$96,000	\$60,600
Monthly Owner Cost, With Mortgage	\$1,201	\$1,090	\$1,492
Monthly Owner Cost, Without Mortgage	\$414	\$427	\$458
Median Rent	\$683	\$682	\$928

Residential development in Convis Township exhibits two principal development patterns. The first and original form is the farm homestead and other large land tracts. With the establishment of Convis Township in 1837 and into the early 1900s, nearly all of the township’s acreage was contained within parcels of 80 to 160 acres or more. The parcels were commonly occupied by farming families and those in the timber industry. Parcels as small as 40 acres or less were limited, with most square mile sections having no more than two such parcels if any at all.

By the 1960s, new dimensions in the township’s land division pattern had begun to emerge. Many of the larger parcels had begun to be split into smaller parcels, typically between two to 40 acres in size, with the new splits stripped along the existing road frontage. While the township’s acreage continued to be contained within parcels of 40 acres or more, small parcel settlement areas began to surface such as the triangular area formed by Bellevue Rd., S. Dr. North, and 13 Mile Rd., and in the general vicinity of what is now the I-69/N. Dr. North interchange. The 1970s and 1980s saw this trend intensify and by the end of the 1990s, five and ten-acre splits along the township’s “section-line” roads were evident in nearly all of the 36 sections of the township. This pattern of land splitting has continued since 2000 but at a somewhat slower pace.

This pattern of land splitting along the township’s section-line roads is the primary manner in which residential development has evolved in Convis Township to date. By example:

- In 1930, Section 20 was comprised of approximately 13 parcels and none were less than 20 acres in size. In 2017, Section 20 was comprised of approximately 40 parcels with sizes typically ranging between approximately 5 and 20 acres.
- In 1930, parcels of 80 acres and more accounted for approximately 85% of the township’s total acreage, and an additional 13% of the acreage was contained in parcels of between approximately 40 and 79 acres. In 2017, the acreage contained in parcels of 80 acres and more had decreased to approximately 58% and the amount of acreage contained in the smaller parcels of approximately 40 to 79 acres had increased to approximately 29%.
- In 1930, parcels of less than approximately 40 acres accounted for 2% of the township’s total acreage, and this proportion increased to approximately 14% in 2017.

Commonly referred to as *strip development*, this form of development has been the source of increasing concern in the transportation and land use planning arena due to its negative impacts upon traffic safety, congestion, farmland preservation, and rural character preservation.

A third principal form of residential development common in more suburban and urban communities are platted and condominium subdivision. Unlike the incremental partitioning of land along section-line roads that dominates the Convis Township landscape, platted and condominium subdivisions represent multiple land divisions established as a unified development project pursuant to the requirements of the Land Division Act (formerly Subdivision Control Act) or the alternative provisions of the Condominium Act. Convis Township is void of any platted subdivisions and has one undeveloped condominium subdivision in association with the Medalist Golf Club, comprised of approximately 35 lots. As of 2017, no infrastructure has been developed nor has any other construction been initiated in association with the subdivision. See Land Division map, Appendix D.

Commercial Development

The principal commercial site is Cornwell's Turkeyville, a restaurant located at the southwest corner of the N Dr. North/15 ½ Mile Rd intersection. Camp Turkeyville, to the south of the restaurant, is an outdoor recreational facility catering to recreational vehicle campers. Together, these facilities cover approximately 70 acres. The other principal commercial facility in the township is the Medalist Golf Club covering approximately 270 acres along N Dr. North and 15 ½ Mile Rd. in Section 27, just northeast of Cornwell's Turkeyville.

While Cornwell's Turkeyville, Camp Turkeyville, and the Medalist Golf Club cover approximately 340 acres, it is only the restaurant facility that covers about two acres (including parking) that is of a more traditional commercial use in the township.

There are also a number of other commercial enterprises scattered throughout the township in association with agricultural operations and occupations conducted from residences.

Industry

Active industrial operations in Convis Township are limited to two facilities but together, they occupy approximately 700 acres. The C&C Landfill, located immediately west of the township hall on the west side of 15 Mile Rd., covers about 300 acres. Aggregate Industries operates a gravel pit in the southwest corner of the township in Section 31, which occupies approximately 400 acres. A third industrial facility now sits vacant, previously occupied by Johnson Systems, Inc. and specializing in the manufacture of farm equipment. The approximately 10-acre facility is located at the southwest corner of the Old U.S. Highway 27/N Dr. North intersection in Section 36.

Outdoor Recreation and Conservation

There are a number of properties in Convis Township devoted to outdoor recreation and/or conservation. The principal facilities are summarized below:

- The Michigan Audubon Society operates the Bernard W. Baker Sanctuary, a bird sanctuary covering approximately 980 acres surrounding Big Marsh Lake and located principally in Sections 10 and 15. While more than 200 species of birds have been recorded at the facility, it is most known for the abundant nesting and migrating Sandhill Cranes that visit annually, including the annual "CraneFest" during the fall when hundreds of Sandhill Cranes arrive daily and make the marsh a temporary rest stop during their migration to warmer climates. Viewing for the CraneFest is principally from the adjacent Kiwanis Club property that covers approximately 130 acres, includes an educational building and hiking trails, and functions as an outdoor education center.
- Centerline of Calhoun County is a gun club located in the south half of Section 5 along the south side of Ackley Creek. The facility covers approximately 155 acres and is open to the public.
- The Wolverine State Coon Hunters Club operates an approximately 160-acre facility in the northwest corner of Section 7 along the Battle Creek River. The club is dedicated to, in part, hunting and the breeding and showing of hunting dogs.

- The Medalist Golf Club covers approximately 270 acres along N Dr. North and 15 ½ Mile Rd. in Section 27. The 18-hole course is open to the public.
- The Michigan Department of Natural Resources operates two public boat launches in the township. One is on the west shore of Ackley Lake off of 16 Mile Rd. in Section 2 and the other is on the southeast shore of Lanes Lake off of 16 Mile Rd. in Section 22. Ackley Lake is approximately 66 acres in area and Lanes Lake is approximately 23 acres in area.
- In addition to the above, some private landowners have placed conservation easements across portions of their properties, restricting development of the properties and dedicating the land for conservation purposes. Examples of conservation easements in excess of 200 acres include acreage surrounding and including Mud Lake east of Bellevue Road (Holden property) and acreage near the south end of the Bernard W. Baker Sanctuary, north of Q Dr. North (Big Marsh Farms property).

Community Facilities & Services

Government Administration

A five member Township Board governs Convis Township. Township offices are located in the Township Hall on the east side of 15 Mile Rd. immediately south of the 15 ½ Mile Rd. intersection and directly east of the C&C Landfill. The Hall includes office space, restrooms, and a large meeting room. The hall, constructed in 2000, covers approximately 9,300 sq. ft. on an 8.5-acre parcel.

The Convis Township Board currently funds nearly all services and the maintenance of all township facilities through the revenues generated by the C&C Landfill and paid directly to the township. Convis Township does not levy any tax millage to fund township operations. This practice has been in place since the early 1990s.

Cemeteries

Convis Township operates and maintains two cemeteries:

- Austin Cemetery is located on 15 Mile Road approximately one-half mile north of the 15 ½ Mile intersection.
- Porter Cemetery is located on the north side of N Dr. North approximately one-quarter mile west of 17 ½ Mile Road.

Education

Convis Township is served by four public school districts:

- Bellevue Community Schools serves nearly the entire northwest quarter of the township and extends into limited areas of the northeast and southwest quarters.
- Marshall Public Schools service the majority of the southern half of the township.
- Olivet Community Schools serves the majority of the northeast quarter of the township and extends into limited areas of its southeast quarter.
- Pennfield Schools services very limited portions of the township, in the northwest and southwest corners of the community.

There are no public school facilities located in Convis Township. The nearest public school facilities are in the Village of Bellevue, several miles to the northwest.

Public Sewer and Water

There is no public sewer or water service in Convis Township except for the community sewer system that serves the Camp Turkeyville RV Resort. All other occupied lots rely on on-site or other measures for sewage disposal and potable water.

Emergency Services

Convis Township receives fire protection services from two different fire departments. The Bellevue Community Fire Department provides services to the northern two-thirds of the township (P Dr. and north). The Marshall Township Fire Department provides service to the balance of the township. The nearest fire station is in Bellevue, approximately 2.5 road miles north of the north edge of the township (15 Mile Rd./Baseline Rd. intersection). The Marshall Township Fire Department is located approximately three road miles south of the south edge of the township (L Dr. North/15 Mile Road intersection). Fire emergency services are paid by way of a user fee.

Police protection services are provided by the Calhoun County Sheriff's Department. Services are funded through C&C Landfill revenues. The State Police provide services on an as-needed basis.

Ambulance service is provided to township residents by the Marshall Area Fire Fighter Ambulance Authority, with medical first response assistance from the Bellevue Community Fire Department and Marshall Township Fire Department. Services are funded through C&C Landfill revenue. The nearest ambulance station of the Marshall Area Fire Fighter Ambulance Authority is located approximately three road miles south of the southeast corner of the township (L Dr. North/Old U.S.27 Highway intersection).

Recreation

Convis Township operates a single recreation site, comprised of a portion of the township hall property that is currently under phased construction to install picnic and related park facilities. Township residents also have available to them recreational facilities and services of other public entities including the school facilities and programs of the various school districts that serve the township, the parks and recreation programs of nearby municipalities including Bellevue and Marshall, and a number of more distant regional facilities including the Barry State Game Area in Barry County, the Waterloo State Recreation Area in Jackson County, and the Fort Custer Recreation Area in Kalamazoo County.

In addition to the above publicly owned recreation facilities, area residents have access to a number of semi-public and private facilities as previously discussed under "Outdoor Recreation and Conservation."

Historical Perspective

Congress authorized the construction of the Territorial Road from Detroit westward in 1830, which subsequently became Interstate 94 many years later. With its construction, settlers to the more central and western parts of the southern Michigan began to increase. Farming, including the timber industry, drew many as did industry in the more urban centers. Calhoun County was officially organized in 1833 and Convis Township was organized in 1837. Following is an excerpt from the "1869 Directory of Calhoun County" by E.G. Rust, as posted on the Convis Township website:

"Sanford Chaffee, who came in the forepart of 1835, and settled on section 3, was the first settler. He was followed by Ebenezer Naramore, James Lane, who came direct from England, and Paul Moss, in the fall of the same Year. Lane and Moss located on section 26, and Naramore on 25 and 36. Daniel Bearrs was the next settler, locating on section 24, in the spring of 1836. Wm Newman came soon

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after, and settled on section 23. The families of Asahel Howkins, from Saratoga Co., N.Y., on section 34, and that of Gilbert King, from Marshall township, where the King family had settled about one year previous to this time, came to their places in Convis, in May, 1836.

The year 1836 witnessed quite large accessions to their numbers; and as the year 1837 approached, they began to talk of organizing into a township by themselves. Those who came in 1837 were Wm. Kenyon, Levi Rowley, Ira H. Ellsworth, Leonard Cleveland, Simeon Bardon, Nathan Chidester, Leach S. Loomis, Oel B. Austin, now of Pennfield, Levi Eaton, and Allen Matteson. Their first election took place in the spring of 1837, at the home of James Lane, known at that time as the "Half-way House." The officers elected were as follows: Supervisor—Elisha Brace; Town Clerk—T.J. Van Gieson; Treasurer—Levi Rowley; Justices—Elisha, Brace, Sanford Chaffee, Asahel Hawkins, and Daniels Berrars; Highway Commissioners—Hiram Brace, Ira H. Elsworth, and Daniel Berrars; Assessors—Asahel Hawkins, Ira H. Ellsworth, and Daniel Berrars.

Gen. Ezra Convis, being a member of the Legislature at this time, introduced the bill organizing this township; but while the matter was pending, he met with an accident which caused his death, and the matter was taken up by another member, who suggested that the town take the name of Convis, in honor of the member who introduced the bill.

Those who came between 1836 and 1840 were, Ezra Brackett, who came in 1838, settling on Section 34, where he still resides; Nye and Clark Chandler, Miner Porter, Sidney Safford, Morgan L. Rood, and Anson Ackley. Of the old settlers still left in town, there are James Lane, Geo Moss, Asahel Hawkins, Naham Chidester, Jesse Smith, Ezra Brackett, Miner Porter, and Wm Kenyon. Wm Goss came as early as 1839, or 1840, as is still living in the north-west corner of the town, on section 7. R.B. White, on section 27, also came at an early day. Ira Andrus and James Walkinshaw came as early as 1849, or 1850."

Appendix B

ENVIRONMENTAL FEATURES

Geology & Topography

During the Paleozoic era of geological history, Calhoun County and the state as a whole was inundated by successive warm, shallow seas during which large amounts of sediment were deposited. These deposits subsequently lithified to form bedrock. The majority of Convis Township sits upon Marshal Sandstone bedrock, consisting of sandstone. However, significant portions of the township's northeast half are characterized by Bayport Limestone bedrock and Michigan Formation bedrock. Bayport Limestone bedrock is comprised of limestone along with interbedded sandstone and dolomite. The Michigan Formation bedrock is comprised principally of shale, along with interbedded sandstone, limestone, dolomite and anhydrite. The Ice Age brought four successive continental glaciers across the Great Lakes area. As these ice sheets moved southward from Canada, they scoured and abraded the surface of the land leaving behind deeper valleys and more rounded hilltops. The advancing glaciers carried large quantities of rock materials scraped and gouged from the land's surface. These materials were then deposited during the melting of the ice to form drift materials covering the bedrock below. While the depth to bedrock exceeds 800 feet in some parts of Michigan, the depth of the drift layer in Convis Township does not generally exceed 50' in depth and there are reported instances of bedrock outcroppings along or near the northern periphery of the township in its northwest quarter.

The topography of Convis Township can be described as generally level to gently rolling, with isolated areas where the topographic relief is greater. Approximately two-thirds of the township reflects grades of 6% or less. The more expansive level or nearly levels areas are most prominent in the south half of the township. There are areas that are somewhat more rolling, typically reflecting grades of between 6% and 12%, and which are most prominent in the township's north half. There are only limited areas where grades are between 12% and 18% or more, being most prominent in the northwest quarter of the township. The township ranges from approximately 840' to 1,020' above sea level, with the majority of the township being 890' to 950' above sea level. The lower elevations are generally limited to the northwest quarter of the township including along the Battle Creek River corridor. The highest elevations tend to be in the township's southern third including one of its highest elevations to the east of 16 ½ Mile Road approximately three-quarters of a mile north of N Dr. North (Section 26), where a hilltop reaches 1,030' above sea level. Generally, the township's surface elevation falls as one moves south to north and northwest.

The character of an area's geology and topography has bearing on development and land use planning. As surface grades increase in severity, significant challenges arise for septic systems and there is an increased potential for soil erosion and sedimentation of water courses and wetlands. Construction costs frequently increase as well. Slopes exceeding 7% present special challenges in this regard. It is generally recommended that development be restricted in intensity where grades exceed approximately 12%, and be strongly discouraged where grades exceed 18%.

Drainage and Water Courses

Drainage in Convis Township is facilitated by three principal water courses, the most significant being the Battle Creek River. The Battle Creek River flows diagonally southwest through the northwest corner of Convis Township and ultimately drains into the Kalamazoo River in Battle Creek, which in turn flows into Lake Michigan in the Saugatuck/Douglas area. Nearly all of the runoff in Convis Township ultimately finds its way to the Battle Creek River either directly or through a network of smaller tributaries and expansive wetlands. The most significant of the smaller tributaries are Indian Creek and Ackley Creek. Indian Creek flows generally north through the township's eastern third before emptying into the Battle Creek River in Walton Township to the northeast. Ackley Creek flows northwest through the township's northwest quarter and empties into the Battle Creek River in the northwest corner of the township. Together, these watercourses and their associated wetlands and smaller tributaries drain nearly the entire Convis Township area.

There are a number of lakes in the township that facilitate the collection and storage of runoff, some of which are of substantial size. The larger named lakes are noted below in order of size:

**TABLE B-1
Named Lakes in Convis Township**

LAKE	SURFACE ACREAGE	SURFACE ELEVATION	PRINCIPAL LOCATION
Big Marsh Lake	168 acres	889'	Sec. 10,15
Potter Lake	112 acres	925'	Sec. 35,36
Mud Lake	102 acres	839'	Sec. 5
Ackley Lake	66 acres	891'	Sec. 2,3,10
Garfield Lake	43 acres	893'	Sec. 12
Willis Lake	24 acres	839'	Sec. 4
Lanes Lake	23 acres	911'	Sec. 22
Kinyon Lake	12 acres	899'	Sec. 12

Big Marsh Lake, also referred to as Ackley Creek Lake, is part of the Michigan Audubon's Bernard Baker Sanctuary.

Lands abutting or in close proximity to drainage courses are subject to flood conditions where the drainage courses do not have the capacity to accommodate the rate of runoff from a single heavy rainfall or numerous lighter rainfalls over a relatively short period of time. Serious flooding has not been a common occurrence in Convis Township. This is due in large part to the comparatively limited development (impervious surfaces) in the township, and the network of drainage courses and wetlands that carry and store runoff. The Federal Emergency Management Agency (FEMA) completed a floodplain study for the Bellevue and surrounding areas in 2011. The study identifies those areas of the township that are subject to a flood event that has a 1% chance of happening in any single year, commonly referred to as the 100-year flood. The areas of the township that would be subject to such flood conditions are comparatively limited and located principally along the township's northern periphery, as summarized below:

- The wetlands within the triangular area formed by I-69, Garfield Road, and V Dr. North including the areas surrounding Kinyon and Garfield Lake, in Sections 1 and 2.
- The immediate Ackley Lake area, primarily in Section 2, and extending northwest to include the wetlands in the central region of the Section.
- Willis Lake and adjacent wetland areas in Section 3.
- The wetland areas of the Battle Creek River corridor and Mud Lake, in Sections 4, 5, 6, and 7.

Although Convis Township may be relatively free of any regular threat of flooding, improperly managed land development practices can impact flood conditions both in the township and in communities downstream.

Groundwater

As runoff flows across land surfaces and travels through drainage courses, a portion of the runoff seeps into the ground through gravitational forces and collects in great quantities in the underlying soils (drift) and deeper bedrock. *Groundwater* is a term that is generally used to describe this subsurface water below the water table in soils and bedrock.

The reservoirs of groundwater are referred to as *aquifers* and serve as the sources of drinking water for nearly all residents of Convis Township.

Aquifers are geological formations that are capable of yielding a significant amount of water to a well or spring. The water drawn from the Marshall Sandstone bedrock aquifer, the bedrock underlying most of the southwest half of the township, is considered to be of very good quality and serves as the source of water for the City of Battle Creek. The Bayport Limestone bedrock and the Michigan Formation bedrock, underlying the majority of the northeast half of the township, are considered to be of lesser sources of potable water. Shale typically provides a higher quality of water but significantly restricts the rate at which the water can be drawn due to its comparatively limited permeability. Limestone frequently permits a higher rate of draw yet the water quality may not be as preferred as that from shale. Aside from the potential for high-iron content, common throughout Michigan, the quality of Convis Township's groundwater is generally considered to be satisfactory.

Aquifers can also be present in the glacial drift that extends from the surface of the ground to the bedrock.

Aquifers can be "*confined*" or "*unconfined*" systems. Confined systems have an impermeable soil layer (typically clay) above them which acts to confine the aquifer and protect the aquifer from contaminants seeping into the subsurface above the confining soil layer, such as petroleum products, fertilizers, and improperly disposed household liquids. Unconfined systems do not have this protective layer of clay soil and are much more prone to contamination. Even confined systems can be contaminated due to hazardous material entering the groundwater as a result of groundwater flows from nearby and/or more distant non-confined aquifers and improperly constructed and/or abandoned wells.

A random survey of well records for Convis Township suggests that the vast majority of wells in the township extend to the bedrock below, typically between 100' to 200' in depth. Local well logs suggest there is no continuous confining layer of clay across the township, thereby increasing the potential for groundwater contamination, and the common sandy and graveling soil conditions encourage comparatively fast seepage of contaminants to the aquifers below. Some of the wells do not extend to the bedrock and draw from the glacial drift, further increasing the potential for potable water contaminants.

Contamination of ground water resources can originate from a number of sources including, but not necessarily limited to poorly operating septic drain fields, floor drains that discharge to the outdoors, the storage of hazardous and toxic substances without the necessary safeguards, the improper disposal of fuels and oils, excessive use of fertilizers, and improper disposal of wastes by industrial, commercial and residential activities.

Vegetation

Approximately 60% of the vegetative cover in Convis Township is comprised of woodlands, wetlands, meadows and similar natural open space areas. An additional approximately 25% of the township is characterized by agricultural crop and pasture lands. The balance of the vegetative cover is characterized principally by lawn areas associated with the township's residential lots and road right-of-ways.

There are approximately 5,531 acres of wetlands in Convis Township, comprising 24% of its area (see Environmental Resources map, Appendix D). Wetland areas are generally characterized by the interface between water and land, where water depths are comparatively shallow and the soils are moist (perhaps seasonally only), dark, and high in organic content. Wetlands are located throughout Convis Township but are most prominent along or in the immediate proximity of its lakes and water courses. The township's wetlands range in size from less than ten acres to more than 400 acres. The largest expanses of wetlands are along the Battle Creek River, surrounding Mud Lake, and to the south of Big Marsh Lake. Approximately two-thirds of the township's wetlands are comprised of lowland forested and shrub environments such as red and silver maples, cottonwood, cedar, willow, and dogwoods, and which are commonly referred to as swamps. The balance is comprised nearly entirely of shrub and emergent wetlands consisting of herbaceous non-woody plant material. Emergent wetlands tend to be more open in character and are commonly referred to as marshes, where shallow waters are present throughout the year or for extended periods of the year, and are commonly characterized by cattails, cranberry, fens and sedges.

There are approximately 2,800 acres of upland woodlands in the Township. These woodlands are predominantly characterized by such species as maple (sugar and red), birch, beech, cherry, basswood and oak (red, black and white). The upland woodlands are scattered throughout the township and commonly occur in close proximity to wetland environments and along hills where grades are more excessive and unsuitable for crop farming.

Of particular significance is the network of interconnected wetlands and upland woodlands. These network are important because of the vital role these resources play in flood control, runoff purification, groundwater recharge, wildlife habitats, recreational opportunities, and supporting the rural character of the township. Many of these networks extend for miles in length and exceed 400 acres in size, including those in association with the Battle Creek River, Mud Lake and Big Marsh Lake.

Wetlands are environmentally sensitive resources and can experience degradation and destruction due to changes in water levels, erosion and sedimentation, filling, dredging, and draining. The degradation or pollution of a wetland area can have a destructive impact upon wetlands and related woodland resources distances away due to the frequent physical linkages between these resource areas. In addition to the environmental constraints wetlands pose for development, they present severe physical constraints for land development due to flooding and instability of soils.

Because of the important environmental role of wetlands, they are protected by the Michigan Environmental and Natural Resources Protection Act, Part 303. Wetlands are regulated by the state if they meet any of the established criteria including, but not limited to, wetlands connected to one of the Great Lakes or located within 1,000 feet of one of the Great Lakes, wetlands located within 500 feet of an inland lake, pond, river or stream, and other wetlands of five acres or more in area. The law requires a permit be obtained from the state for depositing fill in a wetland, dredging or removing soil from a wetland, constructing or operating a use in a wetland, or draining surface water from a wetland. The Michigan Department of Environmental Quality will not issue a permit unless it finds, in part, that

there would be no unacceptable disruption to aquatic resources and that the proposed activity is wetland dependent or no feasible and prudent alternatives exist.

Soils

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), has prepared a soil survey for Calhoun County. According to the survey, the vast majority of Convis Township is characterized by loam, sandy loam and loamy sand soils. Soils classified as “loam” typically have near equal proportions of sand, silt and clay. Sandy loam soils have an increased sand content, typically between 50% and 75%. Soils classified as sand have a sand composition of 85% or greater and loamy sand soils typically have nearly equal portions of sand and silt (40%) and a lesser presence of clay (20%). The primary exception to these three soil types are the “muck” soils that account for about one-fifth of the township’s land area including Houghton, Adrian and Palm muck soils. Muck soils are commonly described as being a soil consisting of fairly well decomposed organic material that is relatively high in mineral content, fine in texture and dark in color, and are often hydric in nature. Hydric soils exhibit an especially high moisture content, are generally very low in oxygen (O₂) content, and are frequently associated with wetland and floodplain environments.

See Hydric Soils map in Appendix D.

The character of soils can have a profound impact upon the suitability of future land uses with regard to groundwater contamination, buckling and shifting of foundations and roads, erosion, on-site sewage disposal, and agricultural productivity. The NRCS has identified specific individual soil units throughout the county based upon the characteristics of the upper soil layers (approximately five feet in depth) that provides a reliable basis for township planning purposes.

Septic Systems: According to the NRCS, approximately one-half of the township’s land area is covered by soils that present severe limitations to septic systems and the vast majority of the balance of the township area is covered by soils that present moderate limitations. Only about 10% of the township area is comprised by soils that present only slight limitations to septic systems and these areas are most prevalent in the southern third of the township. A primary concern is the soil’s ability to absorb and break down the leachate from the septic drain fields before it reaches underground water supplies. Soil limitations to septic systems are typically a result of year-round or seasonally high water tables, ponding, and poor soil filtration characteristics including rapid permeability.

See Soil Limitations for Septic Systems map, Appendix D.

The Calhoun County Public Health Department is responsible for issuing permits for on-site sewage disposal. A permit will not be issued unless all county requirements have been met. Under typical conditions, sites approaching one to two acres are generally adequate to meet the Health Department’s requirements for effective septic systems, including a back-up area should the initial drain field fail. Sites of one acre or less must meet more stringent standards and may not be able to do so due to soil conditions. Development at this density may require a sewer system.

It should be noted that while a site may be classified by the NRCS as presenting limitations to septic systems and building construction, on-site investigation may show the classification to be less than fully accurate and/or show that the deeper soils (more than five feet deep) present different characteristics from the upper layer soils and thus, varying limitations. Detailed on-site investigation is critical to determine opportunities and constraints the soils may present.

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Prime Farmland: The NRCS classifies the soils for the majority of the township's area as "*farmland of local importance*." Only about 10% of the township is classified by the NRCS as *prime farmland*, with an additional approximately 5% classified as prime farmland only if appropriately drained. The NRCS generally defines *prime farmland* as land that is, under proper management, particularly well-suited for food, feed, forage, fiber, and oilseed crops and is capable of producing sustained high yields. Prime farmland soils are not substantially concentrated in any particular area of Convis Township. See Prime Farmland map, Appendix D.

Appendix C DEMOGRAPHIC FEATURES

Population Growth Trends

The 2010 Census recorded a Convis Township population of 1,636 persons, a decrease of 1.8% from its 2000 population (1,666) and a 5.9% decrease from its 1990 population (1,739 persons). The 1990s witnessed a considerably greater drop in population, decreasing by 4.2%. Prior to the population declines in the township between 1990 and 2010, the township witnessed a limited 0.2% population increase in the 1980s but experienced strong growth during the preceding 30 years, with an average 10-year growth rate of 28.5% during this period.

The Township's 1.8% population decrease between 2000 and 2010 corresponds with Michigan's overall 0.5% decline in population – the only state to record a population loss and a reflection of the economic and housing market decline across the nation and particularly evident in Michigan. Convis Township was one of the approximately half of the Calhoun County municipalities that dropped in population during this period. Convis Township was one of the approximately one-third of the Calhoun County municipalities that dropped in population during the 1990s. Calhoun County as a whole had a population decrease of 1.5% from 2000 to 2010 after posting an overall growth rate of 1.5% during the 1990s.

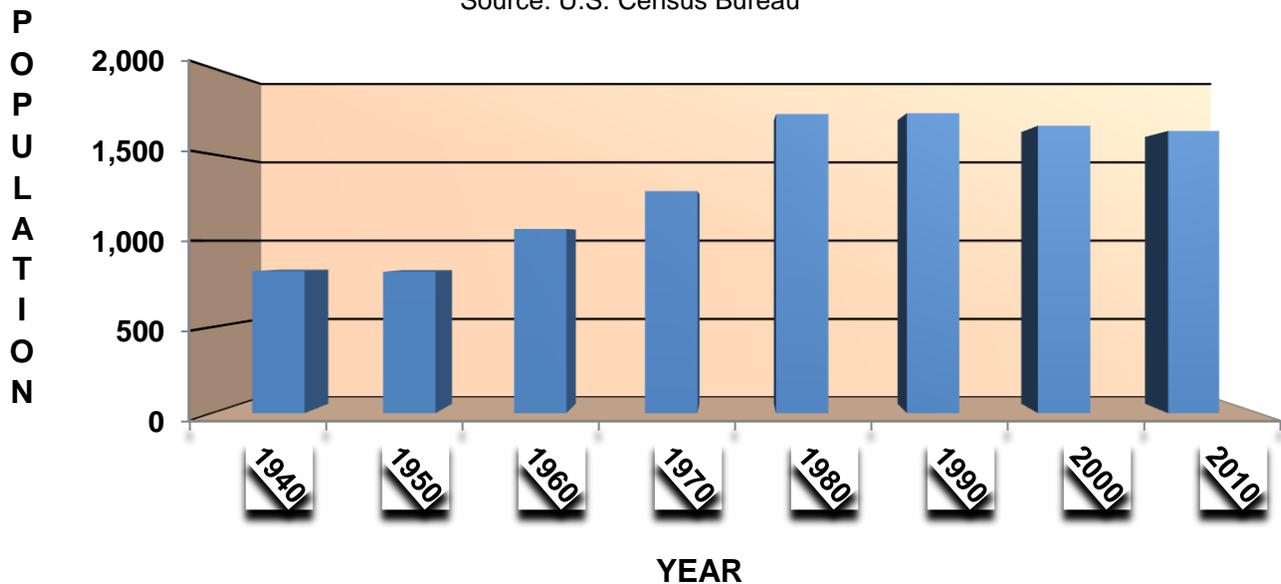
Convis Township's 2010 population of 1,636 persons reflected a 99.0% increase over its 1940 population of 822 persons. The county and state have grown 44.5% and 88.0% respectively during the same period. Convis Township has exhibited considerable and erratic swings in population growth. The township's loss of population in the 1940's (-0.3%) occurred during the same period when Calhoun County witnessed a growth rate of 28.2% and the state grew by 17.6%. Convis Township's 111.72% growth rate between 1950 and 1980 contrasted with the Calhoun County's growth rate of 17.2% and the state's growth rate of 45.4%. While the township witnessed a negative growth rate of -1.8% from 1990 to 2010, the county witnessed a rate of 0.1% and the state witnessed a rate of 3.2%.

**TABLE C-1
 Population Trends & Growth Rates Comparison**

Source: U.S. Census Bureau
 (previous ten-year growth rate indicated by "%")

YEAR	CONVIS TOWNSHIP		CALHOUN COUNTY		STATE of MICHIGAN	
1940	822		94,206		5,256,106	
1950	819	-0.3%	120,813	28.2%	6,371,766	17.6%
1960	1,068	30.4%	138,858	14.9%	7,823,194	18.6%
1970	1,287	20.5%	141,963	2.2%	8,881,826	11.9%
1980	1,734	34.7%	141,579	-0.2%	9,262,078	4.1%
1990	1,739	0.2%	135,982	-4.0%	9,295,297	0.4%
2000	1,666	-4.2%	137,985	1.5%	9,938,444	6.9%
2010	1,636	-1.8%	136,146	-1.3%	9,883,640	-0.5%

FIGURE C-1
Convis Township Growth
Source: U.S. Census Bureau



Convis Township's growth has increased its population density, rising from 23 persons per square mile in 1940 to 46 persons per square mile in 2010. By comparison, Battle Creek, the county's most populated community, had a 2010 population of 52,347 persons and a population density of 1,223 persons per square mile. Calhoun County as a whole had a 2010 population density of 192 persons per square mile.

The varying growth rates of the township and county since 1940 have resulted in a slight increase in the proportion of Convis Township residents comprising the total Calhoun County population, increasing from 0.9% in 1940 and to 1.2% in 2010. The communities of the City of Battle Creek (52,347 persons) and Emmett Charter Township (11,770 persons) accounted for 47.1% of the total county population in 2010.

POPULATION PROJECTIONS

Estimating future population growth can provide important insights into identifying future land use and public services needs. Projecting the growth of a community's population over an extended period of time is not an exact science. The many unpredictable factors that affect growth make population projections somewhat speculative. Because of the severity of the housing and financial market that surfaced in 2007, both in Michigan and nationally, projecting population growth at this particular time is uniquely challenging.

Several factors further complicate projections. Convis Township has exhibited considerable and erratic swings in population growth over the years as noted previously. In addition, the U.S. Census Bureau estimates that while Michigan's population increased by 0.3% from 2010 to 2015, Calhoun County's population is estimated to have decreased by -1.3% and Convis Township's population is estimated to have decreased by 5.5% during the same period (though the margin of error in the case of the township is considerable). While long-term positive growth is a common occurrence among

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municipalities, long term negative growth is not and it is difficult to accurately determine when the negative trend may change and at what rate the change will occur.

By using several projection techniques, a range of growth estimates can be generated. These shed light on potential growth scenarios provided planning policies and land development regulations do not limit or encourage growth any more than in the past.

Table C-2 presents a number of population projections:

- The Consistent Negative Trend projection assumes the township will continue to lose population at a rate of -1.8% every ten years – the same recorded rate between 2000 and 2010.
- The Negative/Positive Trend #1 projection assumes the township will continue to lose population at a rate of -1.8% every ten years between 2010 and 2030, before posting a 1.5% growth rate between 2030 and 2040 – the same rate the county witnessed in the 1990s and the last period during which the county posted positive growth.
- The Negative/Positive Trend #2 projection assumes the township will continue to lose population at a rate of -1.8% between 2010 and 2020, and grow by 1.5% every ten years from 2020 to 2040.
- The Negative/Positive Trend #3 projection assumes the township will continue to lose population at a rate of -1.8% between 2010 and 2020, grow by 1.5% between 2020 and 2030, and grow by 7.2% between 2030 and 2040 – the average ten-year growth rate between 1970 and 2010.
- The Historical Trend projection assumes the township will grow at a rate of 11.4% every ten years, the average rate of growth between 1940 and 2010.

It is reasonable to expect to witness the lower end growth projections over the next 20 years given current (though improving) economic conditions in Michigan. This is further supported by the U.S. Census Bureau’s estimated drop in population in the township between 2010 and 2015.

**TABLE C-2
Convis Township Population Projections**

Projection Trend	Population In 2010	2020 Projection	2030 Projection	2040 Projection
Consistent Negative Trend (-1.8%)	1,636	1,606	1,578	1,549
Negative/Positive Trend #1	1,636	1,606	1,578	1,602
Negative/Positive Trend #2	1,636	1,606	1,630	1,655
Negative/Positive Trend #3	1,636	1,606	1,630	1,747
Historical Trend (11.4%)	1,636	1,823	2,030	2,262

SOCIAL and ECONOMIC CHARACTERISTICS

RACE: The 2010 Census showed Convis Township to have a racial composition significantly more homogeneous than that of the county and state as a whole. 96.9% of the township population was white, compared to 82.2% and 78.9% for the county and state respectively. The township’s homogeneity is typical of rural Michigan communities as compared to more urban areas such as Battle Creek where the “white only” population represented 71.7% of the city’s residents. (See Table C-3).

TABLE C-3
Race Profile Comparison, 2010 (By Percent)

Source: 2010 U.S. Census

RACE	CONVIS TOWNSHIP	CALHOUN COUNTY	STATE of MICHIGAN
White Only	96.9	82.2	78.9
Black/African American Only	0.2	10.9	14.2
American Indian, Alaska Native Only	0.5	0.6	0.6
Asian Only	0.2	1.6	2.4
Native Hawaiian/Other Pacific Islander Only	0.0	0.0	0.0
Some Other Single Race Only	1.0	1.5	1.5
Two or More Races	1.2	3.1	2.3

AGE: Convis Township’s overall age composition in 2010 was generally similar to that of the county and state as a whole except for a noticeably higher proportion of persons between the ages of 35 and 54 and a noticeably lower proportion of persons of age 75 or greater. The proportion of the township’s population between 35 and 54 years of age (34.0%) was approximately 23% more than the county and state, and the proportion of the township’s population of age 75 or greater (3.5%) was approximately half that of the county and state. See Figure C-2 and Table C-4.

TABLE C-4
Age Profile Comparison (By Percent, except where noted)

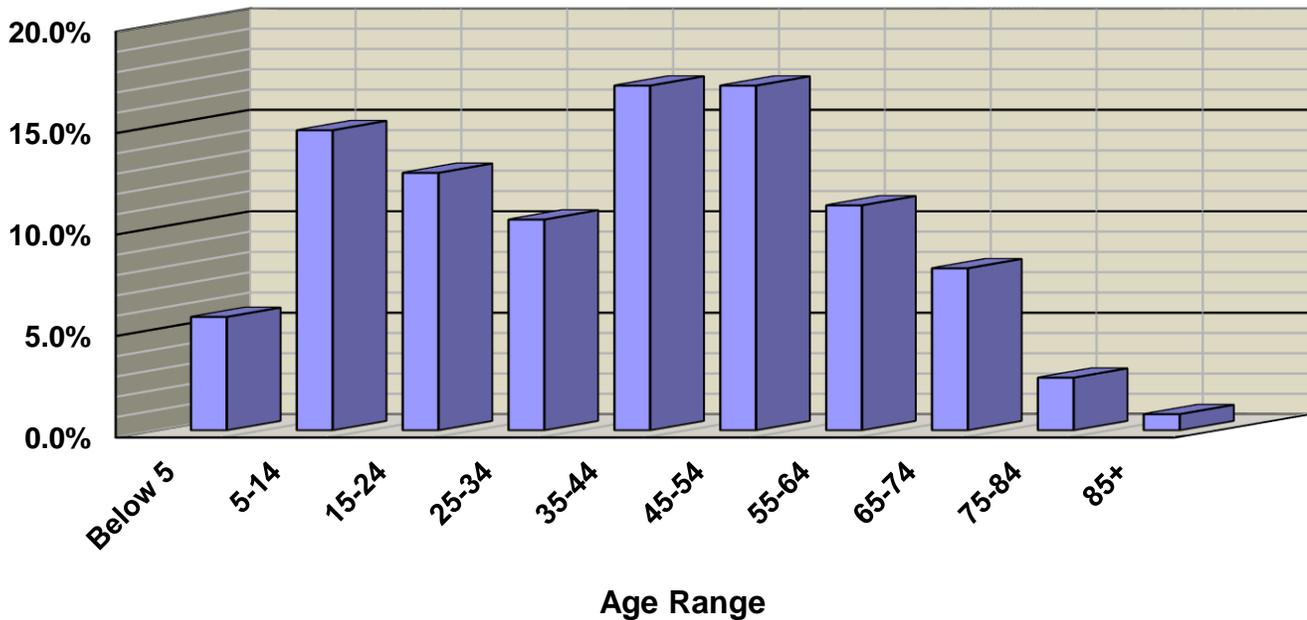
Source: 2010 U.S. Census

AGE	CONVIS TOWNSHIP	CALHOUN COUNTY	STATE of MICHIGAN
Under 5 yrs.	5.6	6.4	6.0
5 – 14 yrs.	14.8	13.4	13.3
15 - 24 yrs.	12.7	13.7	14.3
25 - 34 yrs.	10.4	11.6	11.8
35 – 44 yrs.	17.0	12.4	12.9
45 - 54 yrs.	17.0	14.8	15.2
55 - 64 yrs.	11.1	12.9	12.7
65 - 74	8.0	7.6	7.3
75 - 84	2.6	5.0	4.5
85 yrs. or more	0.9	2.2	1.9
Under 18 yrs.	25.3	24.2	20.8
65 yrs. and over	11.5	14.3	13.8
Median Age	44.3	39.2 yrs.	38.9 yrs.

The township’s population in 2010 can be divided into near equal thirds according to the following age groups:

- Less than 25 years of age
- 25 – 48 years of age
- 49 years of age and greater

FIGURE C-2
Convis Township Age Profile
 Source: 2010 U.S. Census



The township’s median age of 44.3 years in 2010 was approximately 10% higher than that of the county (39.2) and state (38.9). Like the balance of the state and nation, Convis Township’s residents are continuing to mature. The township’s 2010 median age of 44.3 years reflects a 13.3% increase over its 2000 median age of 39.1 years and a 31.8% increase over its 1990 median age of 33.6 years.

HOUSEHOLDS: The 2010 Census recorded 628 households, 69.8% of which were family households and 56.7% were comprised of a married-couple family. Of the 13.1% of the family households not comprised of a married couple, about two of every three such households were headed by a female. The township’s proportion of married-couple households was 25.2% and 18.1% greater than that of the county and state respectively. The 628 households reflected an increase of 1.0% since the 2000 Census (622 households). Thus, while the township’s population decreased between 2000 and 2010, its number of households witnessed a slight increase – likely a reflection of the overall shrinking average household size and resulting increased number of dwellings housing the nearly same number of persons. The township’s average household size of 2.6 persons in 2010 was slightly lower than its average household size of 2.7 in 2000, and was somewhat greater than the 2010 average household sizes for the county (2.4) and state (2.5). See Figure C-3 and Table C-5.

FIGURE C-3
Convis Township Household Type

Source: 2010 U.S. Census

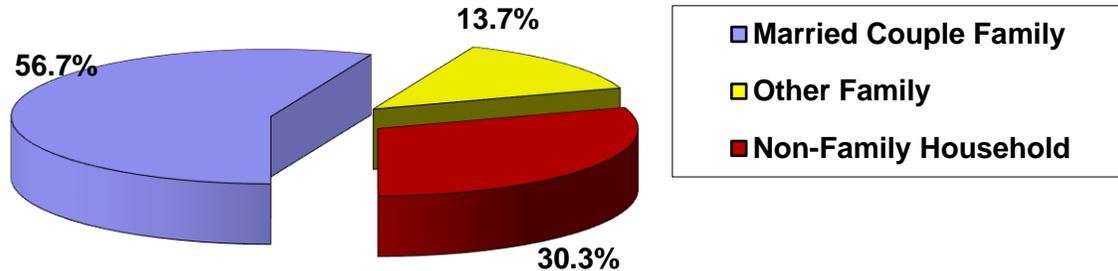


TABLE C-5
Household Type and Size Comparison
 (by percent, except where otherwise noted)

Source: 2010 U.S. Census

	CONVIS TOWNSHIP	CALHOUN COUNTY	STATE OF MICHIGAN
HOUSEHOLD TYPE			
Married-couple family	56.7	45.3	48.0
Other family:	13.1	19.9	18.0
Male householder	4.5	5.3	4.8
Female householder	8.6	14.6	13.2
Non-family household	30.3	34.8	34.0
PERSONS Per HOUSEHOLD	2.6 persons	2.4 persons	2.5 persons
PERSONS Per FAMILY	3.0 persons	3.0 persons	3.1 persons

29.3% of all households included one or more persons under the age of 18 and about the same portion included one or more persons 65 years old or greater. Of the 30.3% of the township's households comprising a non-family household, about two-thirds were comprised of the householder living alone.

EMPLOYMENT and INCOME: Of the estimated 1,263 township residents of age 16 years and over in 2015, 51.5% were in the labor force and all were in the civilian labor force. The three principal employment industries for employed township workers were: 1) Professional, scientific, management, administrative, waste management, and certain other services excluding public administration; 2) manufacturing; and 3) education, health, and social services. These three industries alone accounted for 73.5% of township workers' employment. The 26.0% of township workers employed in the "professional, scientific, management, administrative, waste management, and certain other services" industry is approximately twice that of the county (11.6%) and state (13.5%). In contrast, the 8.4% of township workers in the retail trade industry was noticeably low compared to the county (12.7%) and state (11.6%). 1.0% of the township workers were employed in the agriculture, forestry, fishing, hunting and mining industry. See Table C-6.

CONVIS TOWNSHIP MASTER PLAN

Draft: December 18, 2018

3.1% of township’s work force worked within their place of residence, a percentage slightly less than that of the county (3.3%) and noticeably less than that of the state (3.6%). For those township residents who commuted to work, the mean travel time was 29.4 minutes – significantly higher than that of the county (20.5 minutes) and state (24.0 minutes). This is a reflection of the limited employment opportunities in the immediate Convis Township area and workers commuting to more regional urban areas such as Battle Creek and Kalamazoo including Western Michigan University.

TABLE C-6
Employment by Industry Comparison
(employed persons 16 years and older, by percent)
 Source: 2015 American Community Survey, U.S. Census Bureau

INDUSTRY	CONVIS TOWNSHIP	CALHOUN COUNTY	STATE of MICHIGAN
Professional, scientific, management, administrative, waste management, other services not listed (excluding public administration)	26.0	11.6	13.5
Manufacturing	24.6	22.9	18.3
Education, health, and social services	22.9	21.8	22.4
Art, entertainment, recreation, accommodations, and food services	12.2	10.2	9.0
Retail trade	8.4	12.7	11.6
Construction	7.2	3.4	5.6
Public administration	5.5	5.0	3.7
Transportation, warehousing, and utilities	2.8	4.9	4.2
Finance, insurance, and real estate	5.3	3.8	5.7
Wholesale trade	0.9	1.3	2.9
Agriculture, forestry, fishing, hunting, mining	1.0	1.2	1.2
Information	0.3	1.0	1.9

The prosperity of Convis Township’s residents is generally between that of the county and state as a whole.

- The township’s median household income of \$46,422 was slightly greater than the county’s (\$45,520) and less than the state (\$48,700).
- The township’s median family income of \$55,000 was slightly greater than the county’s (\$53,315) and noticeably less than the state (\$60,635).
- The township’s per capita income of \$26,191 was noticeably greater than the county’s \$23,150) and slightly greater than the state’s (\$25,172).

However, Convis Township exhibited noticeably higher poverty levels than the state as a whole and somewhat greater levels than the county. The portion of township families and persons below poverty level in 2015 were 14.1% and 18.9% respectively.

See Figure C-4 and Table C-7.

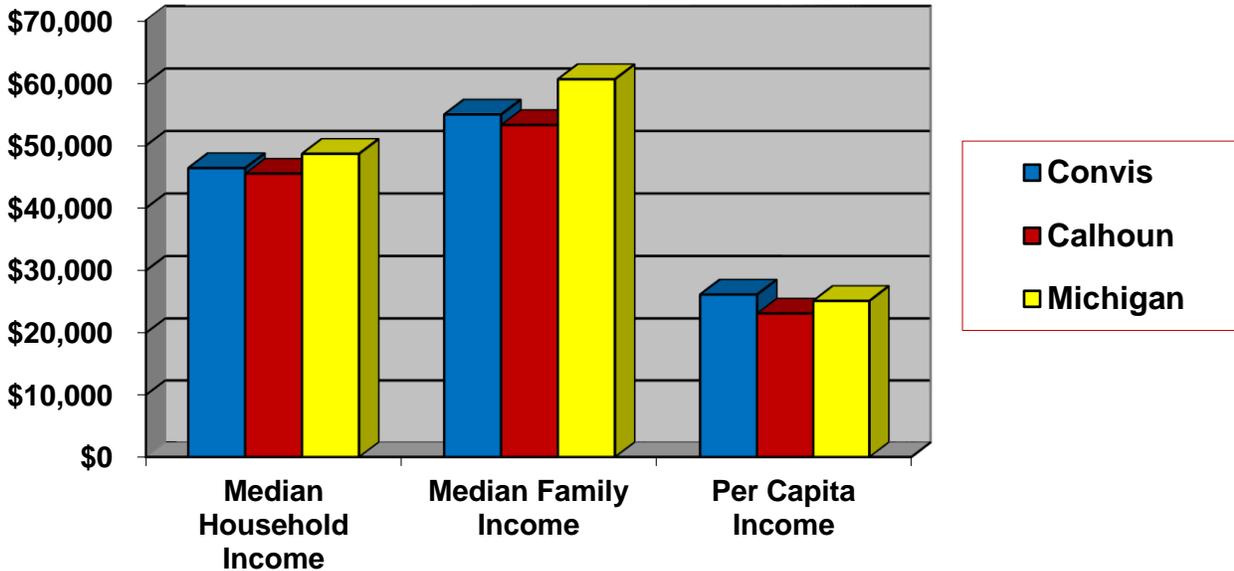
TABLE C-7
Income Characteristics Comparison

Source: 2015 American Community Survey, U.S. Census Bureau

INCOME CHARACTERISTIC	CONVIS TOWNSHIP	CALHOUN COUNTY	STATE OF MICHIGAN
Median household income	\$46,422	\$45,520	\$48,700
Median family income	\$55,000	\$53,315	\$60,635
Per capita income	\$26,191	\$23,150	\$25,172
Families below poverty level	14.1%	13.4%	10.3%
Persons below poverty level	18.9%	17.5%	14.5%

FIGURE C-4
Income Characteristics Comparison, 2015

Source: 2015 American Community Survey, U.S. Census Bureau



EDUCATION: Formal education levels for Convis Township residents in 2015 were generally less than those of the county and state as a whole.

- The township’s 39.9% of residents 25 years of age or older that had not pursued formal education beyond the attainment of a high school diploma (or equivalent) was noticeably higher than that of the county (35.7%) and the state (31.8%).
- The township’s 17.4% of residents 25 years of age or older that had attained a bachelor’s degree or higher level of education was noticeably lower than that of the county (20.1%) and state (24.5%).
- The 6.0% of township residents that pursued formal education after attaining a bachelor’s degree was slightly lower than the county (6.5%) and noticeably lower than the state (9.3%).

See Table C-8 and Figures C-5 and C-6.

TABLE C-8
Highest Level of Education Attainment Comparison
 (for persons 25 years of age and higher, by percent)
 Source: 2015 American Community Survey, U.S. Census Bureau

HIGHEST EDUCATION ATTAINMENT	CONVIS TOWNSHIP	CALHOUN COUNTY	STATE of MICHIGAN
Less Than 9th Grade	3.8	2.9	3.7
9th to 12th, no diploma	9.3	7.0	8.9
High School Diploma	39.9	35.7	31.8
Some college, no degree	22.4	25.0	23.1
Associates Degree	7.2	9.3	8.0
Bachelor's Degree	11.4	13.6	15.2
Graduate/Professional Degree	6.0	6.5	9.3
High school graduate or higher	86.9	90.0	87.4
Bachelor's degree or higher	17.4	20.1	24.5

FIGURE C-5
Highest Level of Education Attainment, Convis Township
 (for persons 25 years of age and higher, by percent)
 Source: 2010 - 2015 American Community Survey, U.S. Census Bureau

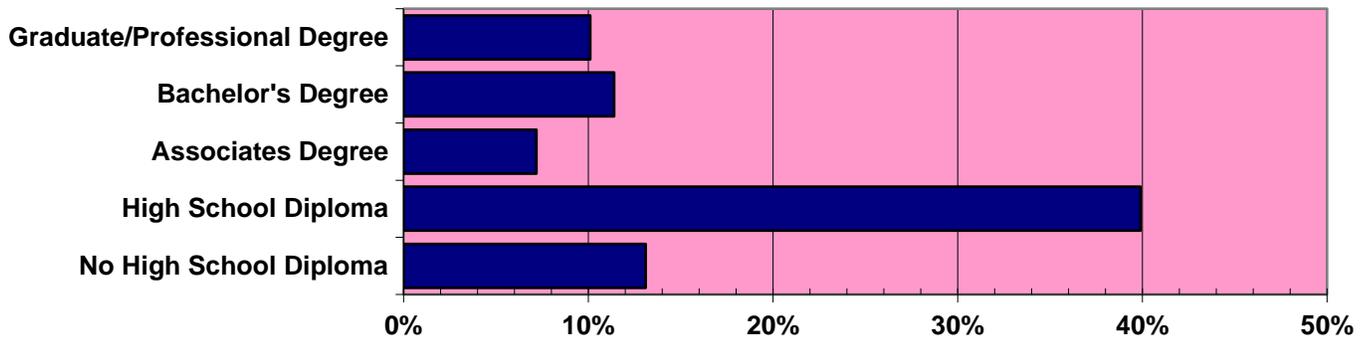
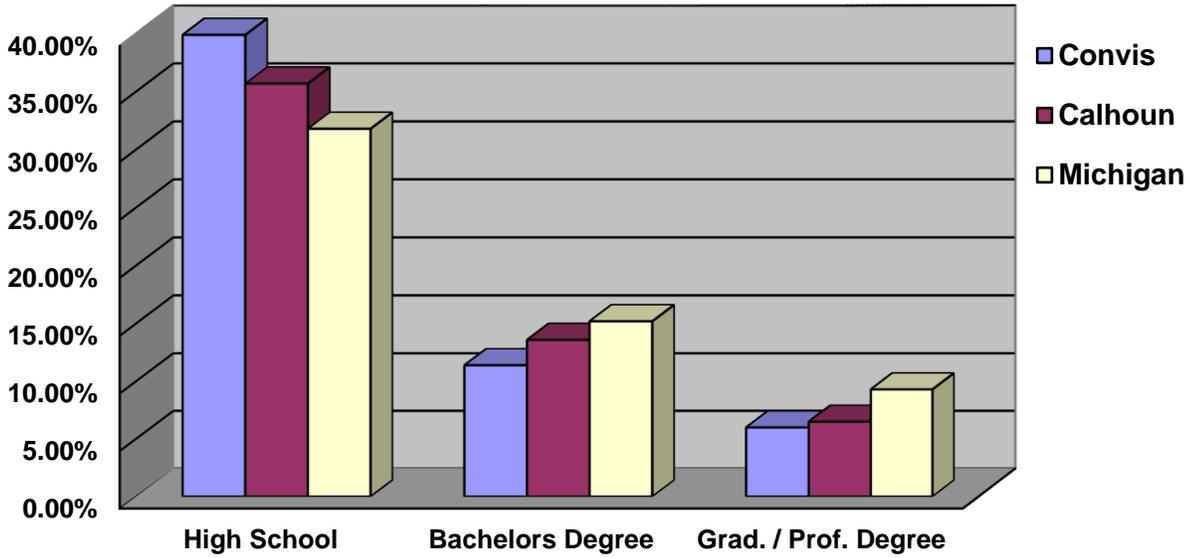


FIGURE C-6
Highest Level of Education Attainment Comparison
(for persons 25 years of age and higher)
Source: 2015 American Community Survey, U.S. Census Bureau



Appendix D INVENTORY MAPS

Roads – Public Act 51 Classification

Public roads under the jurisdiction of the Calhoun County Road Department and classified by the Department as “primary” or “local” pursuant to Public Act 51 of 1951.

Roads – National Functional Classification

Public roads as classified by the Michigan Department of Transportation according to the Federal Highway Administration’s National Functional Classification System.

Land Use by Tax Classification

Land use as classified for taxation purposes by Calhoun County.

Land Division Pattern

Land division according to Calhoun County.

Wetlands

Wetlands as identified in the National Wetland Inventory prepared by the U.S. Fish and Wildlife Service.

Hydric Soils

Soils that are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part, and are frequently in association with wetlands, according to Natural Resources Conservation Service.

Soil Limitations for Septic Tank Absorption Fields

The comparative extent of limitations for septic tank absorption fields according to soil conditions including topographic and drainage features, according to Natural Resources Conservation Service.

Prime Farmland

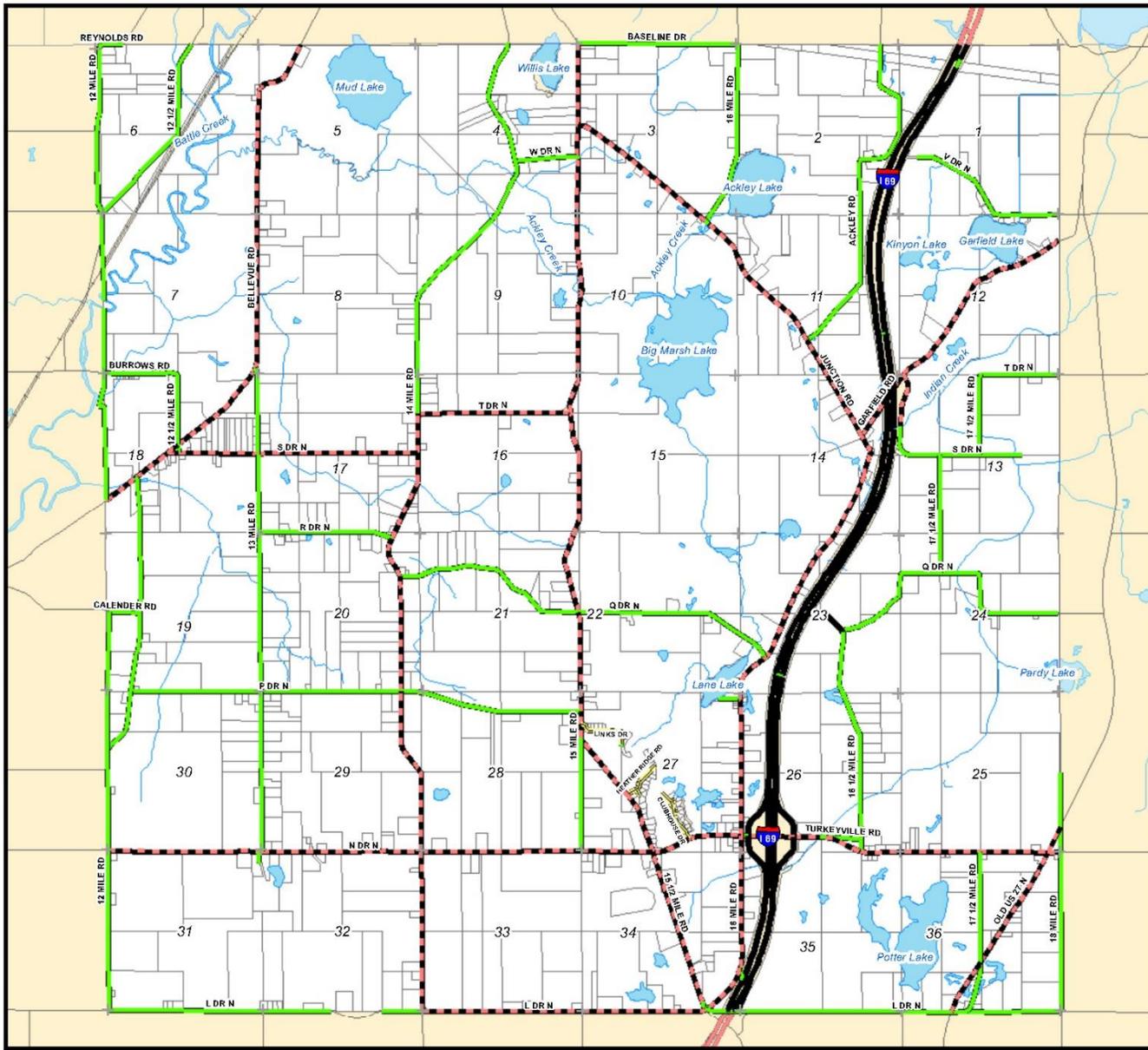
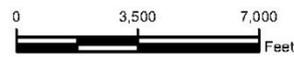
Land that is, under proper management, particularly well-suited for food, feed, forage, fiber, and oilseed crops and is capable of producing sustained high yields, according to Natural Resources Conservation Service.

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CALHOUN COUNTY, MICHIGAN
ROADS - PUBLIC ACT 51 CLASSIFICATION

DRAFT: December 18, 2018

-  STATE TRUNKLINE
-  COUNTY PRIMARY
-  COUNTY LOCAL
-  UNCLASSIFIED/Private ROAD
-  RIVER OR STREAM
-  LAKE OR POND



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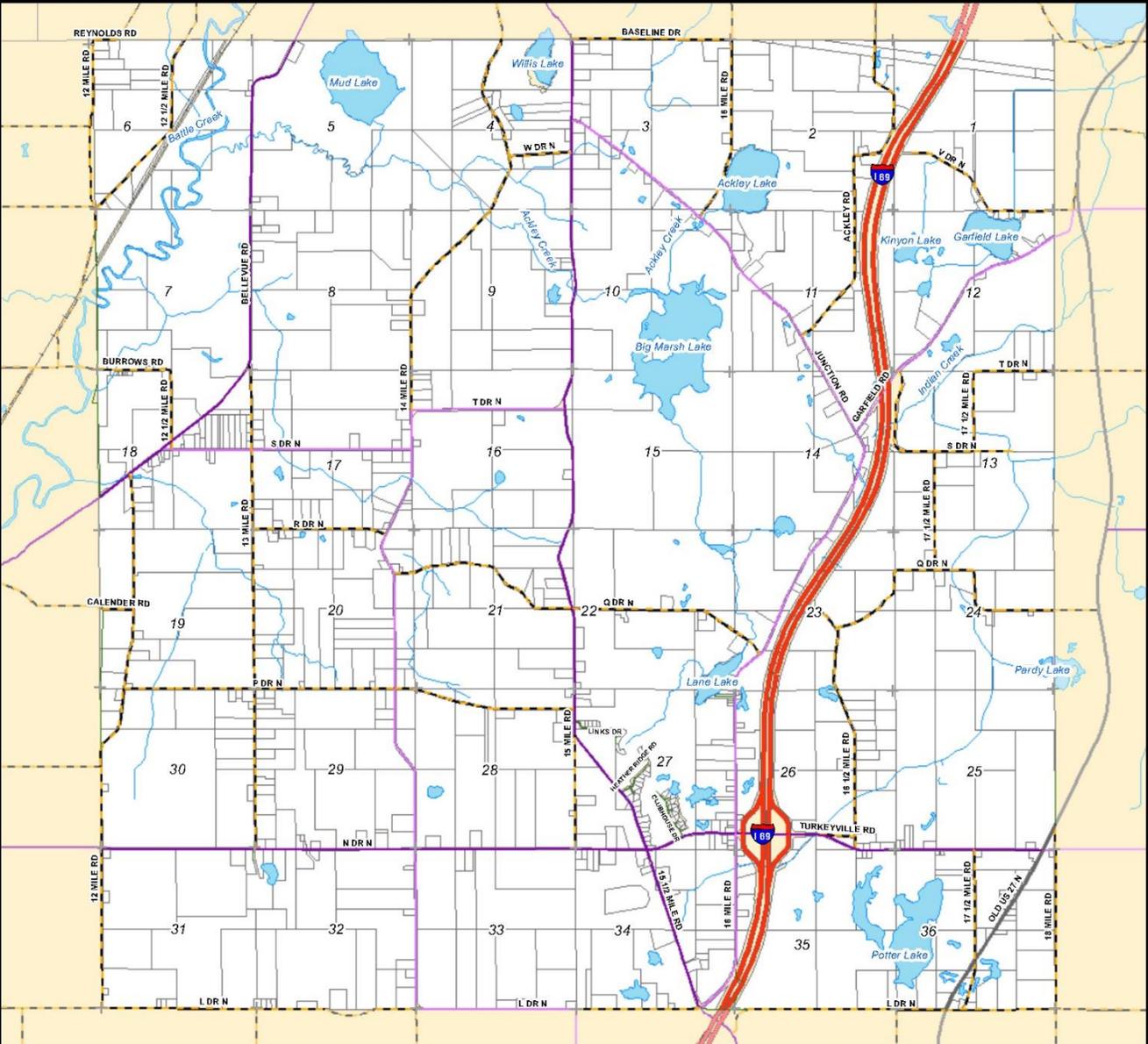
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CALHOUN COUNTY, MICHIGAN
ROADS - NATIONAL
FUNCTIONAL CLASSIFICATION

DRAFT: December 18, 2018

-  INTERSTATE
-  MINOR ARTERIALS
-  MAJOR COLLECTORS
-  MINOR COLLECTORS
-  LOCAL
-  UNCODED
-  RIVER OR STREAM
-  LAKE OR POND



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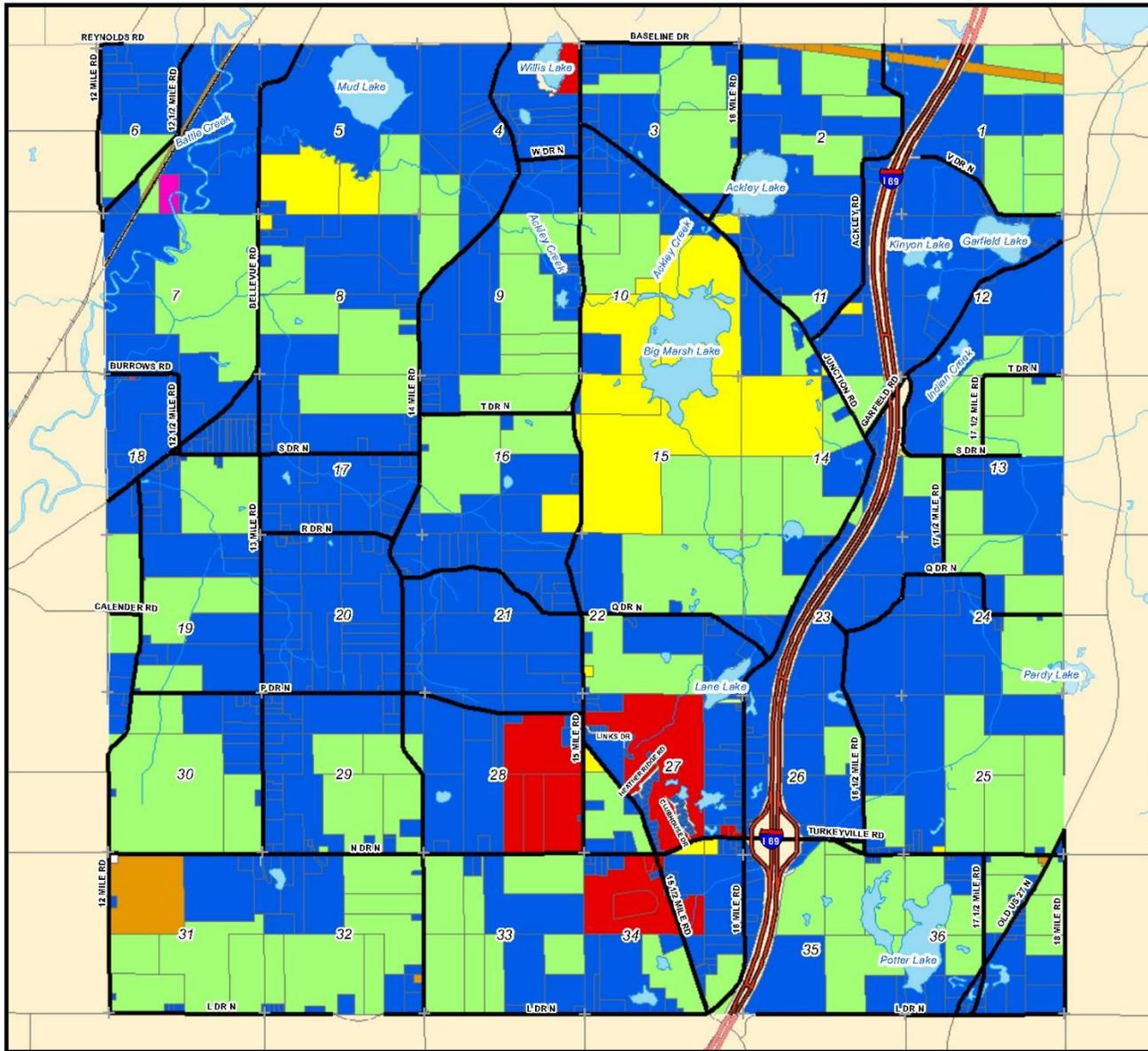
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CALHOUN COUNTY, MICHIGAN
LAND USE BY TAX CLASSIFICATION

DRAFT: December 18, 2018

- AGRICULTURAL
- COMMERCIAL
- INDUSTRIAL
- RESIDENTIAL
- EXEMPT
- LAND BANK
- STATE ROAD OR HIGHWAY
- RAILROAD
- LOCAL ROAD
- ~ RIVER OR STREAM
- ~ LAKE OR POND



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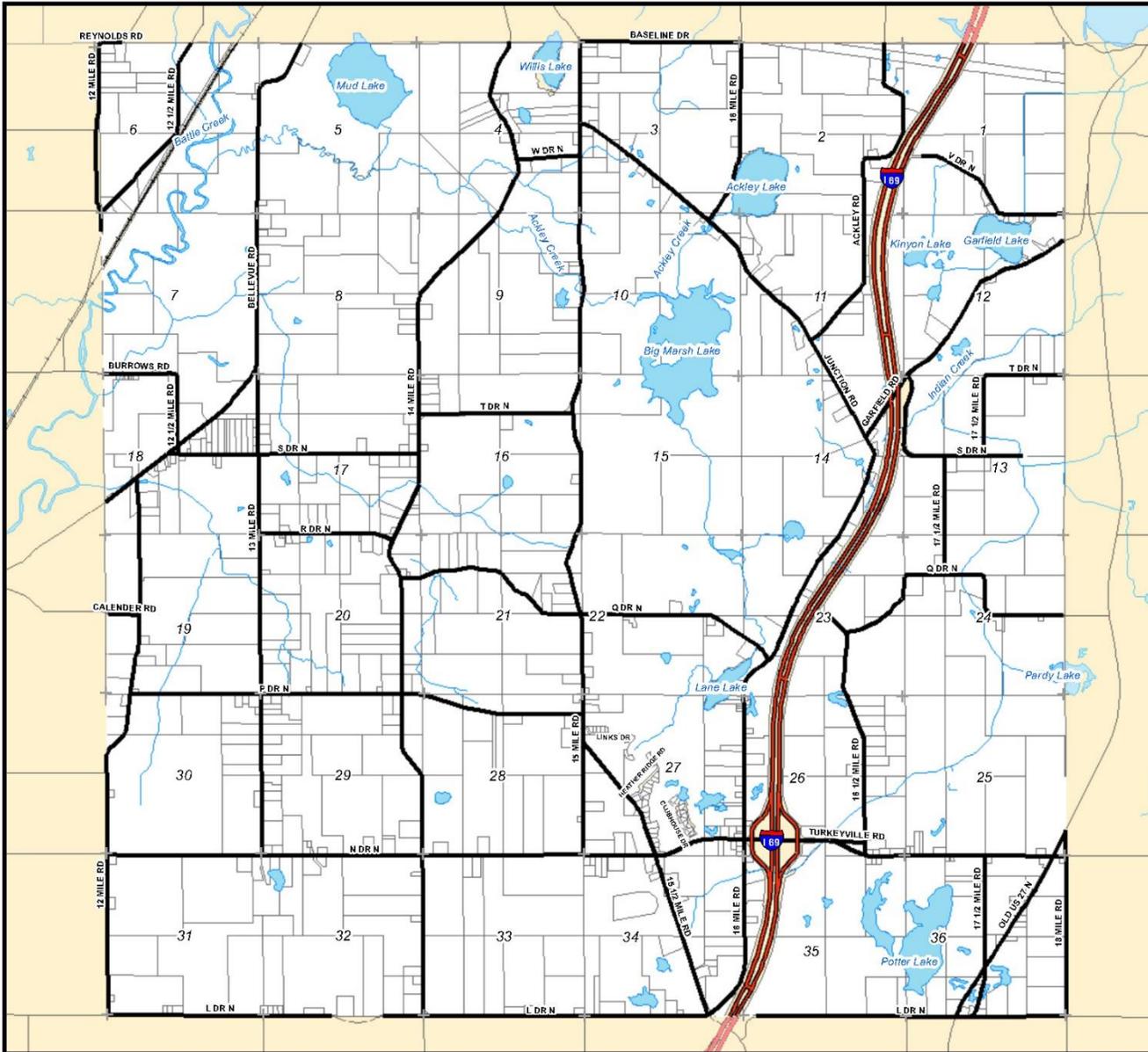
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Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Int.



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CALHOUN COUNTY, MICHIGAN LAND DIVISION PATTERN

DRAFT: December 18, 2018

-  STATE ROAD OR HIGHWAY
-  RAILROAD
-  LOCAL ROAD
-  RIVER OR STREAM
-  LAKE OR POND



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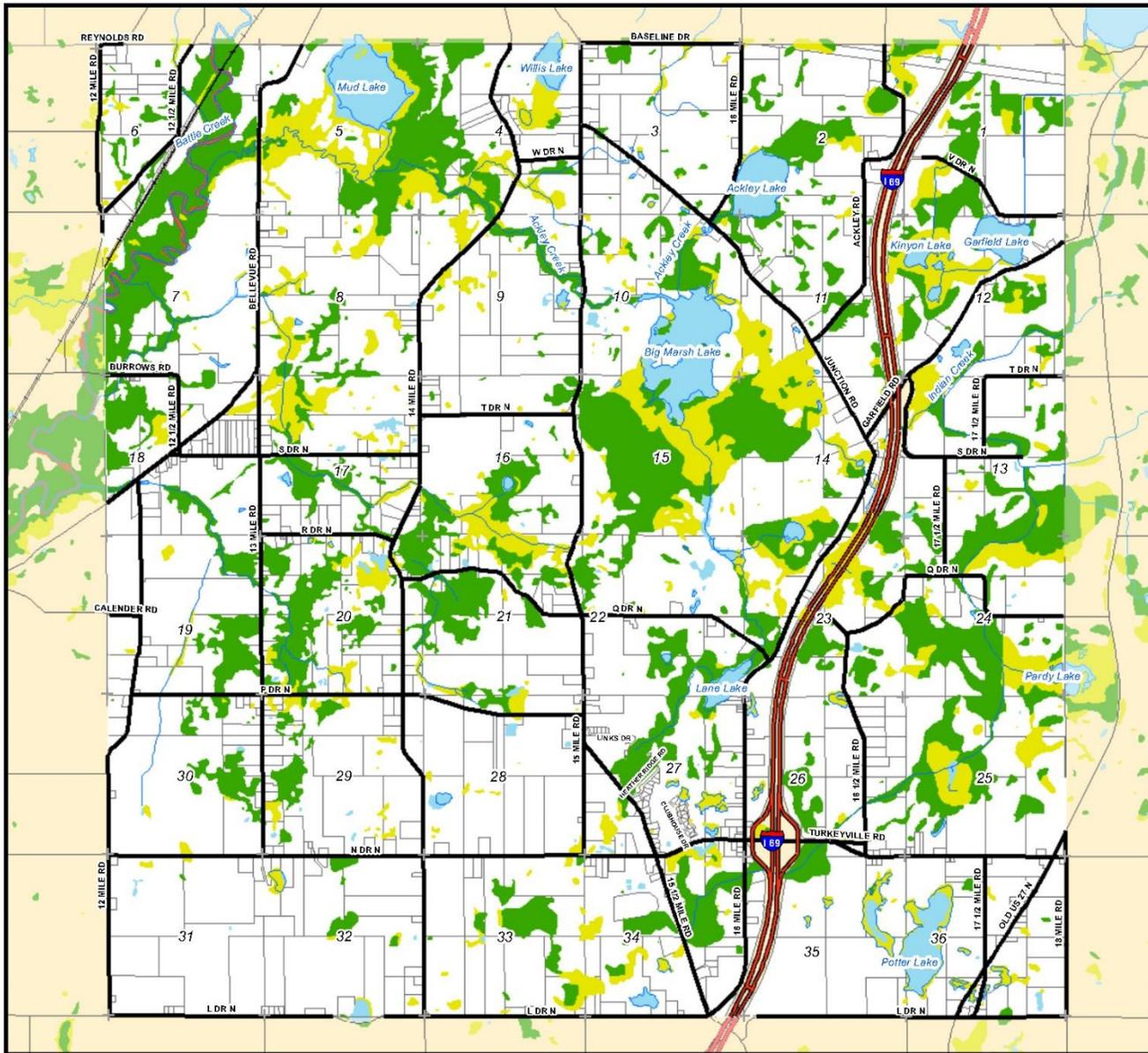
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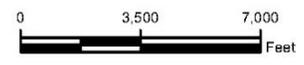
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CALHOUN COUNTY, MICHIGAN

WATER RESOURCES AND WETLANDS

DRAFT: December 18, 2018

- FRESHWATER EMERGENT WETLAND
- FRESHWATER FORESTED/SHRUB WETLAND
- RIVERINE WETLAND
- FRESHWATER POND OR LAKE
- RIVER OR STREAM



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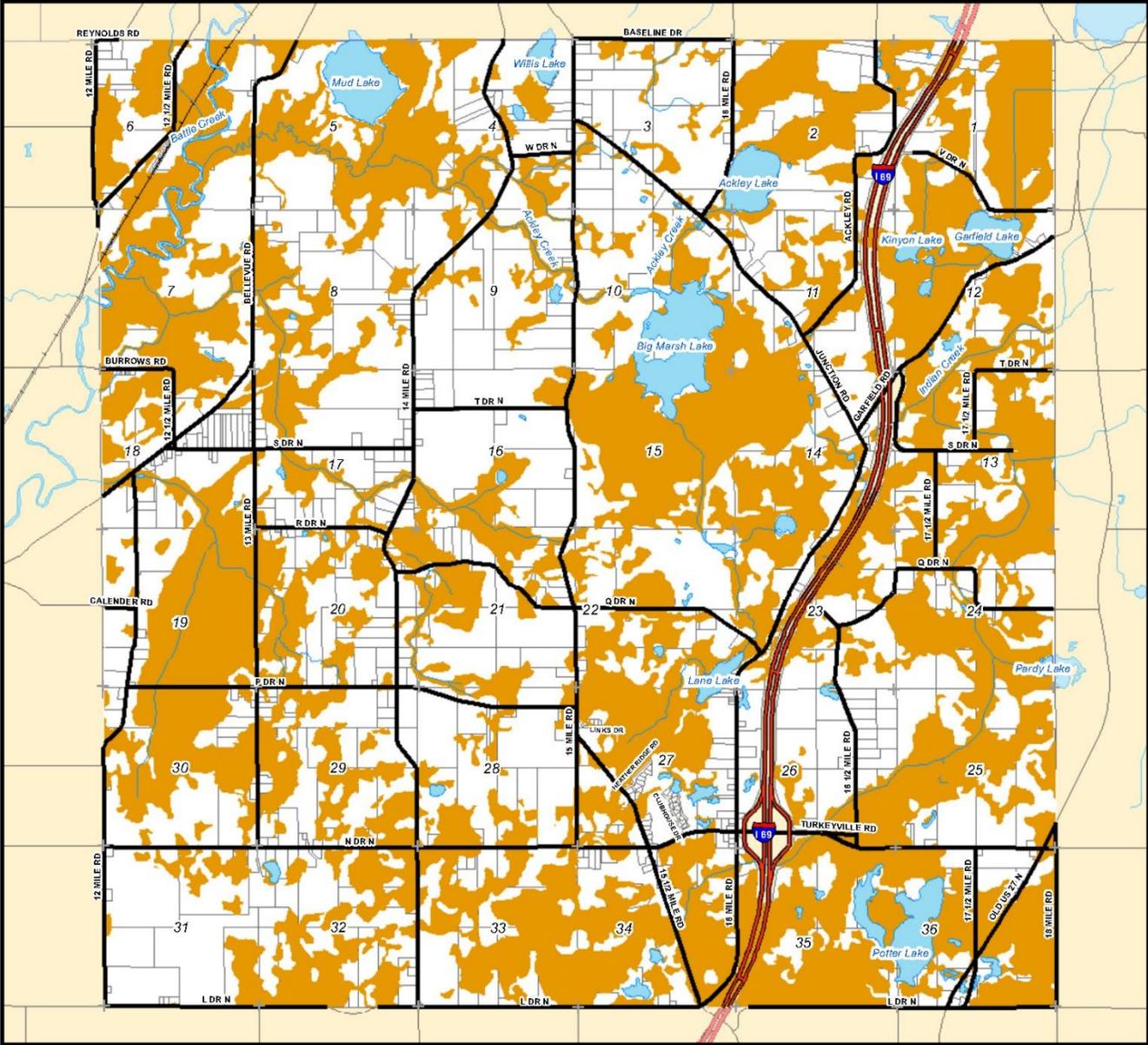
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CONVIS TOWNSHIP MASTER PLAN

CALHOUN COUNTY, MICHIGAN

HYDRIC SOILS

DRAFT: December 18, 2018



- HYDRIC SOILS
- STATE ROAD OR HIGHWAY
- RAILROAD
- LOCAL ROAD
- RIVER OR STREAM
- LAKE OR POND



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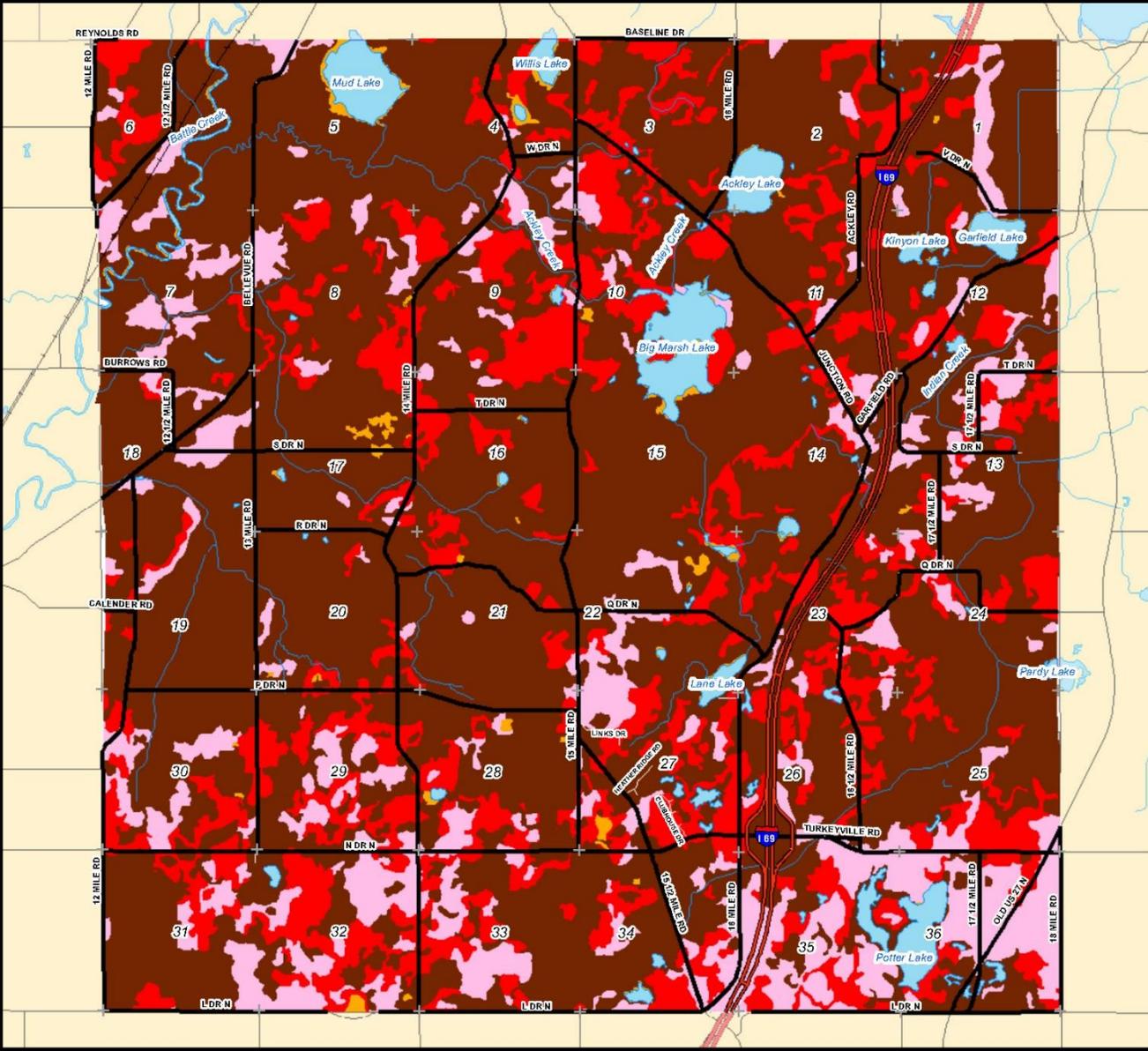
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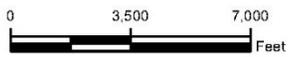
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CALHOUN COUNTY, MICHIGAN
SOIL LIMITATIONS FOR SEPTIC SYSTEMS

DRAFT: December 18, 2018



- SLIGHT SEPTIC LIMITATIONS
- MODERATE SEPTIC LIMITATIONS
- SEVERE SEPTIC LIMITATIONS
- NOT RATED
- STATE ROAD OR HIGHWAY
- RAILROAD
- LOCAL ROAD
- RIVER OR STREAM
- LAKE OR POND



LANDPLAN

rural community planning & zoning services
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Source: Data provided by Calhoun County and the State of Michigan. Mid-Michigan Mapping Solutions, LLC, does not warrant the accuracy of the data and/or the map. This document is intended to depict the approximate spatial location of the mapped features within the Community and all use is strictly at the user's own risk.

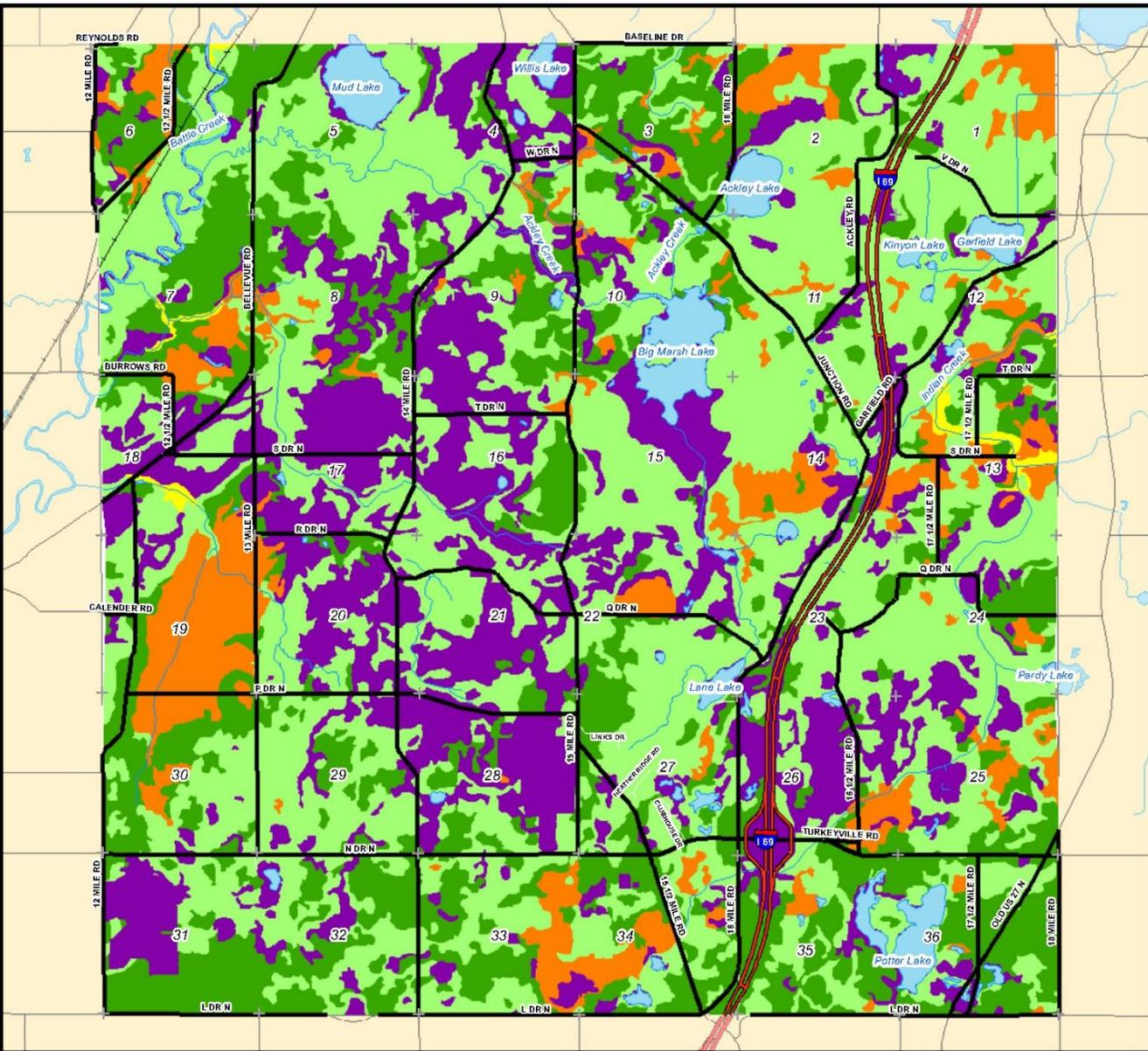
Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Int

CONVIS TOWNSHIP MASTER PLAN

CALHOUN COUNTY, MICHIGAN PRIME FARMLAND SOILS

DRAFT: December 18, 2018

- ALL AREAS ARE PRIME FARMLAND
- FARMLAND OF LOCAL IMPORTANCE
- PRIME FARMLAND IF DRAINED
- PRIME FARMLAND IF DRAINED AND PROTECTED FROM FLOODING OR NOT FREQUENTLY FLOODED DURING THE GROWING SEASON
- NOT PRIME FARMLAND
- STATE ROAD OR HIGHWAY
- RAILROAD
- LOCAL ROAD
- RIVER OR STREAM
- LAKE OR POND



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