

CHAPTER 10

EXTRACTION AREA PLAN

This chapter is intended to link the Township's overall goals with specific land use policy recommendations for the control of sand and gravel extraction-related land uses within the Township's scope of authority under applicable state laws.

GOAL

Control the extraction of sand and gravel resources within Freedom Township to ensure that they do not disrupt the environment, impair the water supplies, cause noise nuisances, dust nuisances, damage the roads and create conditions that are dangerous to Township residents.

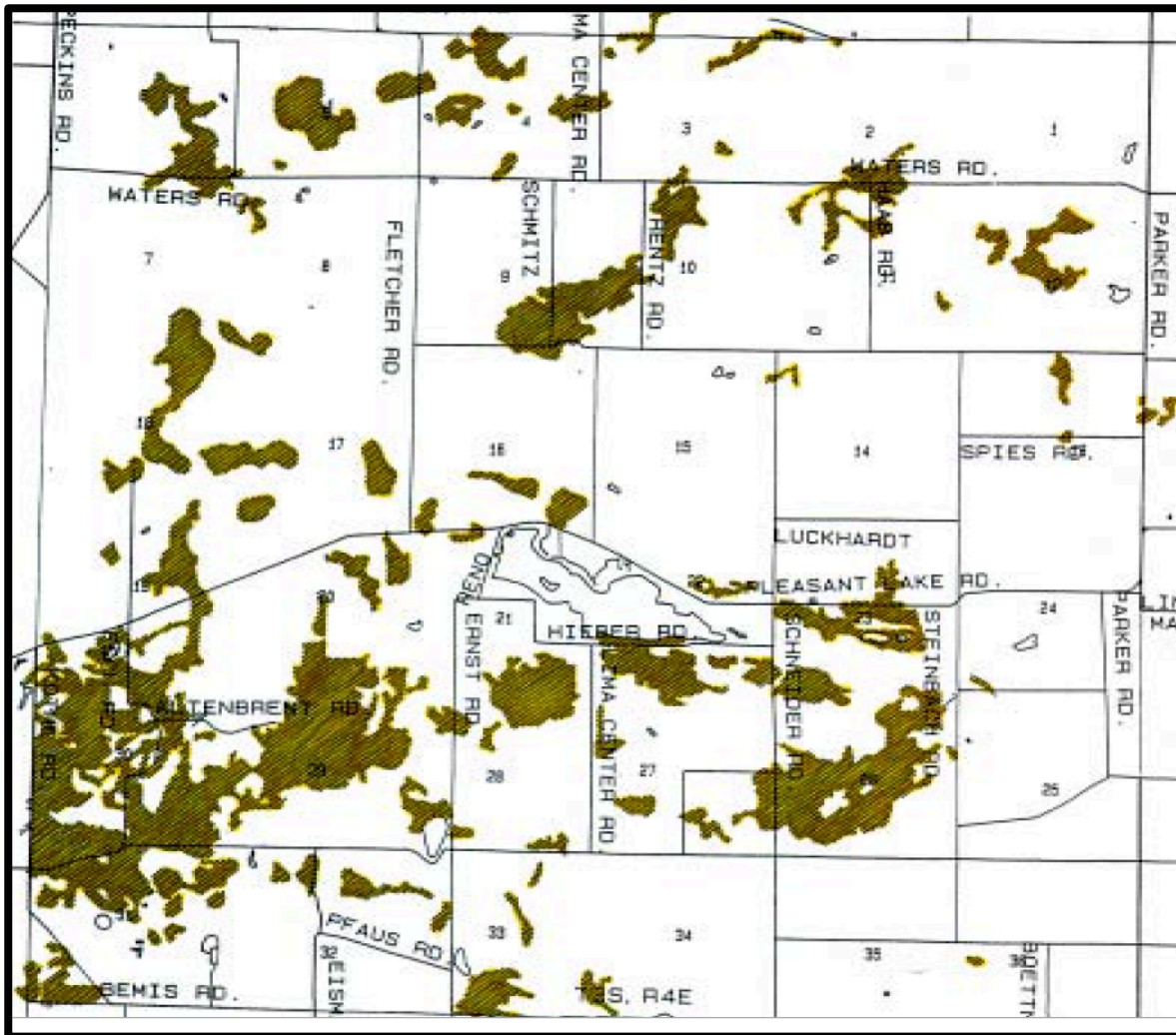


BACKGROUND

Freedom Township contains significant deposits of sand and gravel. Major extraction companies are currently mining sand and gravel from several sites within the Township. These companies currently own over 1,500 acres of land in the Township, which is more than 5% of the Township's total land area. Approximately 25% of this area has been or is currently being mined. The amount mined varies significantly from year to year, from under 1,000,000 tons to over 2,000,000 tons annually. During the peak construction season in more active years, the Township has experienced as many as 500 truck trips by sand and gravel haulers on a given day.

It is recognized that sand, gravel and other earthen deposits within the Township's land area are nonrenewable natural resources necessary and beneficial to the welfare of its inhabitants and the surrounding regional area. The Master Plan attempts to provide for the utilization of these resources in a manner compatible with nearby residential areas; to protect human health and the environment; and to ensure complete reclamation for another land use at the conclusion of the extraction process. The Master Plan addresses these resources because mining operations and the related activities can cause unique and substantial impacts upon the environment and the welfare of adjacent properties and the community.

Environmental goals and policies contained within the Master Plan are directed toward preserving the natural environment and ensuring proper use of surface and ground water supplies. Secondary impacts of extraction operations including noise nuisances, dust nuisances, damage to roads, increased truck traffic, and other conditions that are hazardous to Township residents are also of concern and are addressed by the Freedom Township Extraction Ordinance.

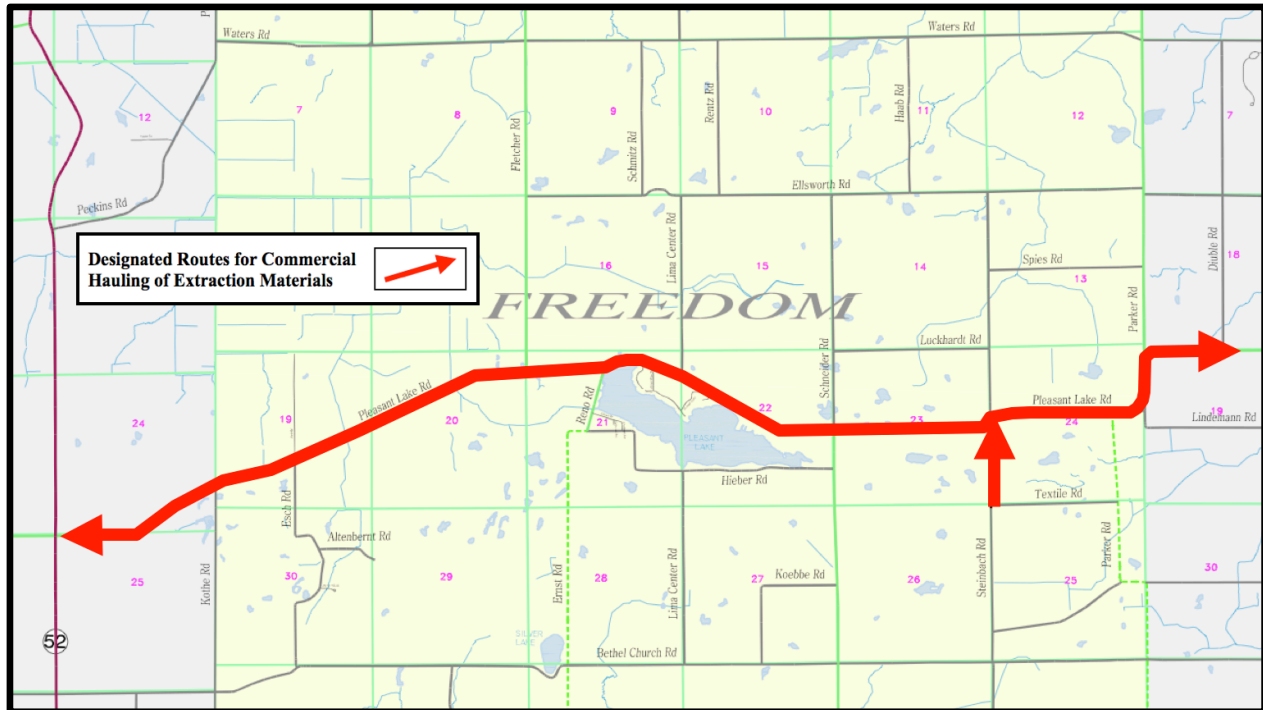
Map 9 – Potential Sand Deposits in Freedom Township

Source: Washtenaw County

EXTRACTION HAUL ROUTE POLICIES

To minimize the off-site impacts of truck traffic from mining activities on residents, roads, and other land uses in Freedom Township, only Class “A” paved county primary roads that are designated as haul routes for commercial hauling of extraction materials shall be utilized by sand and gravel trucks to haul mined materials out of Freedom Township. The designated routes for commercial hauling of extraction materials within Freedom Township shall be limited to only the paved portions of Pleasant Lake Road and Steinbach Road (see Map 10).

Fletcher Road shall not be used for commercial hauling of extraction materials because of inadequate road infrastructure and connectivity to the north in Lima Township.

Map 10 – Designated Routes for Commercial Hauling of Extraction Materials

Source: Washtenaw County Road Commission

OTHER EXTRACTION-RELATED POLICIES

To ensure that mining activities and associated off-site impacts are not out of proportion and within prospective as they relate to existing residents, natural resources, and other land uses taking place within Freedom Township, the following additional policies are set forth:

1. All land to be utilized for extraction purposes shall have a permit as required within the Township's Extraction Ordinance. Due to the various impacts of trucks that haul commercial extraction materials on the Township's roadways, removal of extraction materials from approved extraction operations may be allowed at the rate of one truck per two acres per day of land that has been approved for such extraction purposes. At no time shall any approved extraction operation exceed 350 trucks per day for hauling extraction materials on the Township's roadways.
2. The cumulative acreage of active extractions shall be allowed to operate only by compliance with Freedom Township Extraction Permit Process.
3. To protect the public health, safety, and welfare of Township residents, the following limits are hereby established on sand and gravel extraction operations in Freedom Township:
 - No more than 3,000,000 tons of cumulative extraction materials shall be mined within any given year within Freedom Township.
 - At no time shall more that 700 acres of total Township acreage be designated or used for extraction purposes.

4. All extraction operations permitted by the Township shall submit an annual reclamation plan. This plan will ensure that the future sustainable land uses can be developed without detrimental impact to the resources of Freedom Township.

CHAPTER 11

FUTURE LAND USE MAPS

This chapter illustrates the arrangement of planned future land uses in Freedom Township, based upon the Township’s overall goals and the specific land use policies defined in chapters 4 – 9.

BACKGROUND

The recommendations of this land use plan also have a long-range planning horizon and do not necessarily imply that a particular near-term rezoning is appropriate. Phasing in of any changes to the Township’s Official Zoning Map should be consistent with the land use and development related goals, objectives, and policy recommendations contained in this Master Plan, as well as the implementation and phasing guidelines contained in Chapter 14, Zoning Plan and the Freedom Township Zoning Ordinance. Land uses in the Pleasant Lake Area are further subject to the policies of Chapter 9, Pleasant Lake Area Plan.

The future land use maps in this chapter are intended to show generalized land use, and are not intended to indicate precise size, shape or dimension. The boundaries of various future land use designations on Maps 11-1 and 11-2 generally correspond to existing lot boundaries, section lines, the centerline of existing road rights-of-way, and other physical or geographic features of the Township.

Table 5 lists the land use classifications designated on Maps 11-1 and 11-2 of this chapter, and the references to the chapter(s) of this Master Plan where more specific land use policies are found.

Table 5 – Land Use Classifications

Classification	Description
Agricultural Preservation Area	See Chapter 4, Plan for Agriculture
Rural Residential	See Chapter 5, Plan for Residential
Lake Residential	See Chapter 5, Plan for Residential; and Chapter 9, Pleasant Lake Area Plan
Commercial	See Chapter 6, Plan for Commercial; and Chapter 9, Pleasant Lake Area Plan
Industrial	See Chapter 7, Plan for Industrial
Community Facilities	See Chapter 8, Plan for Community Facilities
Special Planning Area No. 1	See Chapter 9, Pleasant Lake Area Plan
Special Planning Area No. 2	See Chapter 9, Pleasant Lake Area Plan

Map 11-1

Future Land Use Map - Freedom Township



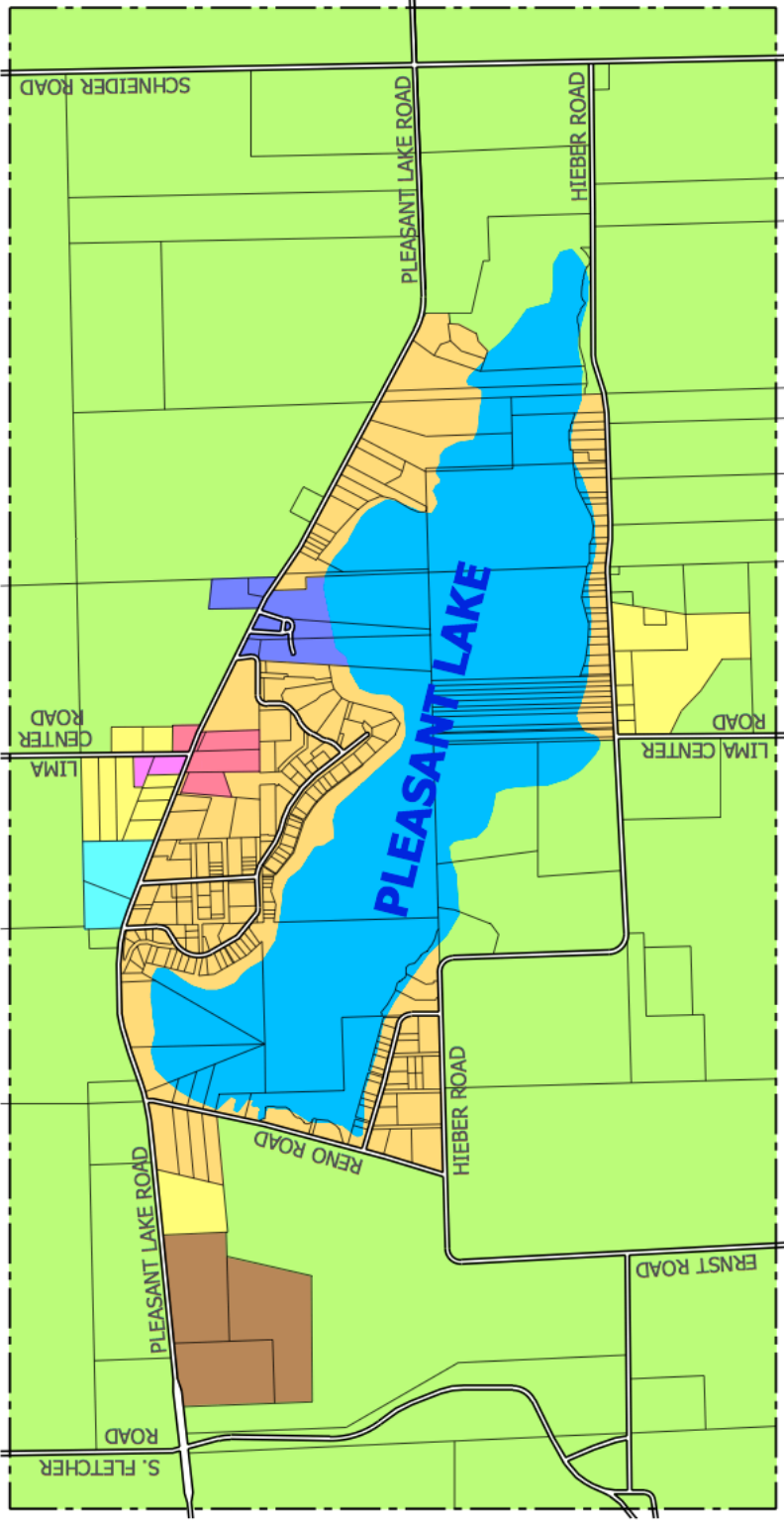
LEGEND:

- LAKE RESIDENTIAL
- RURAL RESIDENTIAL
- COMMERCIAL
- COMMUNITY FACILITIES
- INDUSTRIAL
- AGRICULTURAL PRESERVATION AREA
- SPECIAL PLANNING AREA #1
- SPECIAL PLANNING AREA #2

Map prepared by:



Map 11-2
Future Land Use Map - Pleasant Lake Area Detail



LEGEND:

- LAKE RESIDENTIAL
- RURAL RESIDENTIAL
- COMMERCIAL
- COMMUNITY FACILITIES
- INDUSTRIAL
- AGRICULTURAL PRESERVATION AREA
- SPECIAL PLANNING AREA #1
- SPECIAL PLANNING AREA #2

Map prepared by:

constructive thinking

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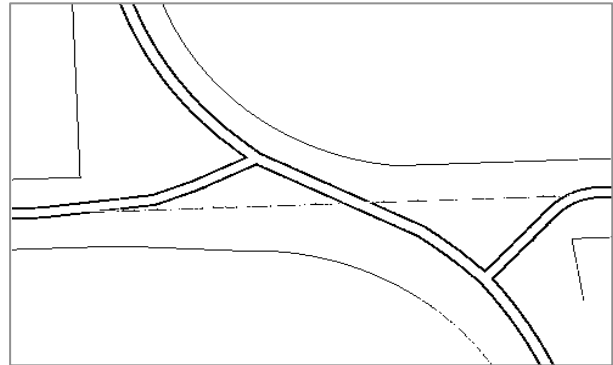
CHAPTER 12

TRANSPORTATION PLAN

This chapter is intended to link the Township’s overall goals with specific policy recommendations for the future improvements to the Township’s transportation networks.

GOAL

To establish and maintain a road network and transportation system that facilitates safe, convenient, and efficient movement of people from place-to-place within and through Freedom Township, while preserving the rural character of the Township.



BACKGROUND

A well-designed and maintained road network is needed to provide access to property, mobility for citizens, and conduits for local economic activity. However, the pattern of land uses and number and type of access points onto roads impact the function of the road system. The function of the road system and its ability to move traffic in an efficient and convenient manner has a significant impact on the viability of land uses and the overall quality of life in a community. An examination of the local transportation network is an important part of a Master Plan, as land uses and the means of transporting goods and people are interdependent elements of a successful community. The implementation of a functional transportation network depends upon adherence to sound planning principles and an effective collaboration between Township, county and state officials and private landowners.

COMPLETE STREETS IN THE TOWNSHIP

Public Acts 134 and 135 of 2010 established new project planning and coordination responsibilities for county and state transportation agencies in Michigan, as related to implementation of the “Complete Streets” policies defined by this package of laws.

These laws included amendments to the Act 51 program, which governs the funding and prioritization of road projects across the state. County and

Complete Streets. A comprehensive approach to transportation networks, which integrates all facilities in the road right-of-way (travel lanes, shoulders, sidewalks and non-motorized pathways, driveway access, etc.) to abutting buildings and land uses.

The intent of the “complete streets” approach to transportation planning is to ensure that all users (motorists, pedestrians, bicyclists, etc.) are safely accommodated as part of transportation improvements along a road corridor.

state road authorities are now under obligation to consider all users of the road right-of-way as part of the planning of future road projects.

Why should the Township be concerned with “complete streets” laws when the county and state are responsible for the road network?

These public acts provide the Township with a more powerful mechanism to influence decision-making within county and state road authority bureaucracies, which is this transportation plan.

In the absence of written and adopted road policies, the default county or state standard would apply to any future road improvements, with little regard as to whether a particular road width or design is best for Township residents or the character of the Township.

For example, the intent of the road-related policies and recommendations contained in the Pleasant Lake Area Plan (Chapter 9) are to encourage the county road commission to consider the unique character of this area, and to incorporate context-sensitive design elements into any future Pleasant Lake Road improvements.

For the Township, these public acts also included amendments to the Michigan Planning Enabling Act to ensure that county and state road agencies better coordinate road improvements with the Township, and that they will cooperate with the Township in an effort to implement transportation elements included in this Master Plan as part of future road improvement projects.

This transportation plan is intended to conform to the requirements of the Michigan Planning Enabling Act, and to establish Township priorities for improvements to the road network.

NATURAL BEAUTY ROAD POLICIES

Many of the Township’s roadways offer beautiful views of natural features and vegetation. Natural vegetation along these roads should be maintained, provided safety concerns are addressed. Under the state Natural Beauty Road Act (Public Act 451 of 1994), the Washtenaw County Road Commission (WCRC) can, upon request by Township residents and a public hearing, designate a county public road having “unusual or outstanding natural beauty” as a “natural beauty road.” All residents along the road must be notified of the hearing, and property owners representing more than fifty-one percent (51%) of the road frontage can prevent the road from being designated this way.

As of 2013, there are nine natural beauty roads designated in the county. Freedom Township’s rural roads should be evaluated by the Planning Commission and Township Board for potential nomination as natural beauty roads, based upon the criteria established by the Washtenaw County Road Commission.

Benefits of a Natural Beauty Road Designation

Once designated, normal maintenance activities are carried out with more sensitivity to the special character of the road, as summarized below from the WCRC website (2014):

- Mowing should be limited to one swath (maximum of five feet) on either side except at public road intersections.
- Grading should continue as normally provided and be kept to a minimum to avoid disturbance of vegetation. Grading should be pulled back to avoid trees or unusual sites

which have been designated.

- Under no circumstances will herbicides be used to control or eliminate roadside vegetation.
- Natural beauty roads will be identified with signage at key entrances.
- Tree and shrub trimming and removal, where necessary for safety or visibility reasons, should be done judiciously and with proper tools so as not to leave unsightly scars.

Designation as a natural beauty road does not preclude the WCRC from implementing necessary safety improvements, including those affecting horizontal and vertical alignment. If changes are required in road surface to improve safety, drainage, etc., consideration may be given to rescinding the natural beauty road designation where such changes would disturb or destroy the characteristics for which the road was originally designated.

ACCESS MANAGEMENT POLICIES

The access management techniques described below primarily apply to more intensive, non-residential land uses. However, the standards for shared access driveways are appropriate for individual residential home sites. Access management is usually implemented through the site plan review process, and these techniques are suggested as guidelines in that process. Each case will require an individual analysis to determine the appropriate action given the characteristics of the site and use.

Restricting the Number and Spacing of Access Points.

Limiting the number of driveways permitted for each land use can help preserve the traffic movement function of a roadway. Proposed and existing land uses should provide the minimum number of driveways needed to provide access to a development site.

- If additional driveways are proposed, additional road frontage for the subject site and appropriate spacing between existing driveways should be provided consistent with Washtenaw County Road Commission (WCRC) spacing standards.
- Even if only one access point is proposed, the most appropriate location should be selected to preserve the function of the roadway and maximize public safety. Driveways located too close together are safety hazards and they can negatively impact road capacity.
- Commercial and other non-residential driveway access to parcels on opposite sides of a public road should be arranged consistent with WCRC spacing standards.

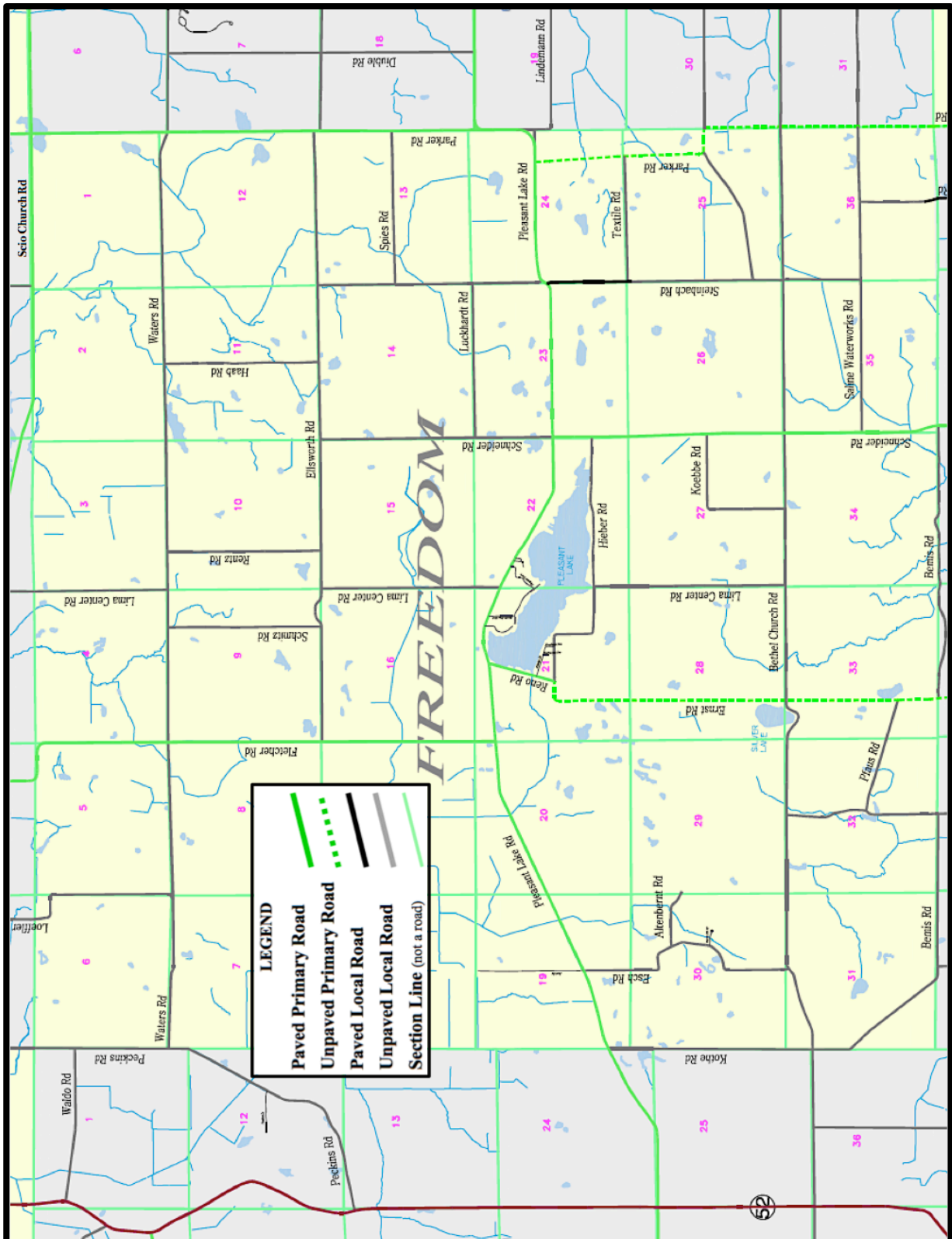
Encouraging Shared Access.

Providing shared access to a site reduces the number of access points, preserves the capacity of the road, and can even help to maintain the character of the community. Shared access can be achieved through a variety of techniques including frontage roads, service roads and internal connections between sites. Such shared access alternatives to multiple individual driveways and “curb cuts” into the public road right-of-way can preserve roadway capacity and views from the road, and provide a buffer area for residences along county primary roads.

COUNTY ROAD CLASSIFICATIONS

The following map identifies the county's classifications for public roads in Freedom Township:

Map 12 – Road Classifications, Washtenaw County Road Commission (2007)



ROAD AND INTERSECTION IMPROVEMENTS PRIORITIES

The following is a summary of key road and intersection improvement priorities, based upon the transportation-related goals as presented within this Master Plan:

1. The next time the Washtenaw County Road Commission is planning for major improvements to Pleasant Lake Road, the project should include leveling of the topographic highs along the portion of this road east of the Schneider Road intersection.
2. Intersection improvements are needed at Pleasant Lake Road and Steinbach Road to improve safety and visibility for motorists, and to discourage gravel truck drivers from running the stop sign northbound into Pleasant Lake Road.
3. Safety improvements may also be needed at Pleasant Lake Road and Schneider Road.
4. Visual obstructions need to be removed from within the road rights-of-way at various intersections along the paved primary roads of the Township. The designated corner clearance zones at these intersections, as defined in the Township Zoning Ordinance, should also be kept clear of visual obstructions. Some or all of the following steps may be taken, as appropriate to the conditions at each intersection:
 - The Ordinance Enforcement Officer should ensure that all unlawful signage at these intersections are consistently removed, and that the sign owners are promptly warned and cited as necessary to avoid repetition.
 - The Township should work with farmers of land adjacent to these intersections to ensure that corn and other tall crops are not planted within road rights-of-way or corner clearance zones.
 - The Township should work with the Washtenaw County Road Commission to ensure that trees, groundcover, and overgrowth is regularly trimmed back at these intersections.
 - The Township should work with the Washtenaw County Road Commission to seek the re-grading and leveling of any high areas within the road right-of-way that impact visibility at an intersection.
5. Consider upgrading Waters Road to a county primary road.
6. Consider upgrading Bethel-Church Road to a county primary road.

OTHER TRANSPORTATION-RELATED POLICIES

To accomplish the transportation-related goals as presented within this Master Plan, the following additional policies are set forth:

1. Because Freedom Township does not have direct control over the roads in the Township, it is important that the Washtenaw County Road Commission (WCRC) be kept aware of Township policy preferences. Information regarding the transportation plans of the Township, county, and state should be exchanged on a regular basis.

2. As new development and redevelopment is proposed, it should be examined with regard to impact on the road system. When a site plan for any type of use is submitted, access management techniques should be utilized, where appropriate. Provisions should be made to minimize hazardous curb cuts and other points of access to primary roads by establishing internal local street networks.
3. Where topography, vegetation, curvature of the road or other factors restrict road access or would potentially reduce the level of safety for motorists if new driveways and access points were to be constructed, new development in such areas should be encouraged to provide access via a local street, shared access drive or frontage road.
4. Plans for new development should provide for extension of roadways into new development areas where such extension is determined by the Township to be necessary for the continuity of the local road system.
5. Residential developments intended to be isolated from the rest of the community by a system of private streets and absence of street connections with adjacent parcels should be discouraged.
6. New residential developments shall be served by at least two means of regular public ingress and egress, except where natural conditions prevent such access. However, the number of new connections to the paved county primary roads should be minimized where possible.
7. Plans for new residential development should provide for new collector roads or extension of existing collector roads through the development and connecting into the Township's public road network.
8. Private roads should be limited to planned unit development (PUD) projects.
9. Private roads should not be approved unless a maintenance agreement conforming to Township ordinances has been approved, and a financing mechanism acceptable to the Township has been provided for long-term maintenance and improvement.
10. Public road rights-of-way should be of adequate width to serve all potential users, while maintaining the rural character of the Township.
11. Freedom Township considers its unpaved roads as the hallmark of the rural way of life. They contribute to a sense of place, a closer proximity to the natural environment, and a slower pace of life. Improvements to unpaved and gravel roads should generally be for safety and maintenance reasons, not to increase the speed limit or to accommodate or attract inappropriate development.
12. The Township should consider opportunities to collaborate with nearby communities other agencies with jurisdiction to help Township residents who no longer can drive themselves with access to other transportation options.
13. An increasing number of bicyclists and others are using Township roads for non-motorized transportation. The needs of all potential users of the transportation network should be adequately addressed as road improvement projects are planned and implemented. In addition, the long-term development of a safe system of multi-use

pathways (pedestrian, bicycles, snowmobiles, etc.) within existing road rights-of-way to connect areas of the Township and adjoining communities should be investigated.

14. To maintain the rural character, capacity improvements along the county's paved primary road corridors should be limited to acceleration/deceleration lanes and left hand turn lanes where determined necessary by the Washtenaw County Road Commission. Widening to a three, four or five lane configuration should be avoided.

See Chapter 9 (Pleasant Lake Area Plan) for additional transportation plan policies associated with the area around Pleasant Lake in sections 21 and 22 of the Township.

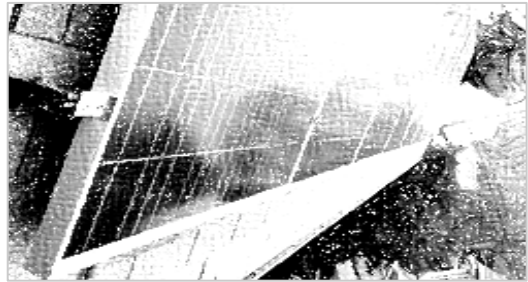
CHAPTER 13

PLAN FOR ENERGY

This chapter is intended to link the Township’s overall goals and natural resource protection policies of this Master Plan with additional policy recommendations related to energy resources.

GOAL

Efficient use of a safe, reliable, economical, diversified, and environmentally friendly mix of energy resources in a manner that maximizes the preservation of existing natural features and protects the quality of the natural environment.



BACKGROUND

Reliable energy is essential to the rural economy and quality of life in Freedom Township. Recent technological improvements in lighting, heating, and cooling systems offer the potential for more efficient use of existing energy sources. At the same time, technology associated with renewable energy options (such as solar cells, wind turbines, and geo-thermal energy production) has also improved substantially in recent years, opening up new opportunities to diversify local energy resources.

In addition to these considerations, the area’s location as a significant hub within the regional energy pipeline network creates land use and environmental protection challenges for local property owners, as well as the Township and other local governments along the pipeline routes.

While private businesses and individuals make most energy-related decisions, the Township has the authority under the Michigan Planning Enabling Act to incorporate an energy plan into the Township’s Master Plan to promote and encourage investments in energy efficiency and renewable energy resources, and protection of the Township’s natural resources and environment as part of any energy infrastructure project.

ENERGY CONSERVATION POLICIES

To accomplish the energy-related goals as presented within this Master Plan, the following conservation-related policies are set forth:

1. Encourage the incorporation of environmentally friendly and energy efficient features, construction methods, and materials into building renovation and new building projects in the Township.
2. Encourage developers to provide a statement of energy efficiency as part of a site plan or planned unit development (PUD) application that summarizes the proposed building

design elements, construction methods materials, systems, equipment, and other features incorporated into the building for purposes of energy efficiency and resource conservation.

3. The Township should consider LEED (Leadership in Energy and Environmental Design) certification from the U.S. Green Building Council (USGBC) ~~to identify and implement~~ for practical and measurable “green” building and neighborhood design elements in a development to satisfy the “public benefit” and “exemplary project design” provisions of the Township’s PUD regulations.
4. As upgrades and renovations become necessary, additional energy efficient infrastructure should be incorporated into the Township Hall.

RENEWABLE ENERGY POLICIES

To accomplish the energy-related goals as presented within this Master Plan, the following renewable energy resource policies are set forth:

1. The Township should continue to support the installation of roof-mounted or accessory structure-mounted solar energy systems associated with individual homes, farms, and businesses in conformance to established Zoning Ordinance requirements.
2. To minimize the potential for future conflicts over access to sunlight, the mature height of existing trees, minimum building setback distances, and maximum permitted structure height on neighboring land in the zoning district should be considered in the siting of new solar energy systems.
3. The potential for unintentional reflection and/or concentration of sunlight in a manner that damages or adversely impacts neighboring property or residents should be evaluated and fully mitigated as part of any solar panel installation.
4. Freestanding solar energy production facilities should be prohibited where lands designated for agricultural production would be impacted.
5. The Township should continue to allow installation of a limited number of private, agricultural wind turbines associated with active farm operations, consistent with Zoning Ordinance requirements.
6. Wind turbine installations should be prohibited where anticipated noise or “shadow flicker” (rapid, strobe-like flickering shadows from turbine blades backlit by the sun) would adversely impact the health, safety or welfare of Township residents.
7. The Planning Commission should consider ways to educate farmers and residents in the Township about Zoning Ordinance provisions and the approval process for solar energy systems and agricultural wind turbines.

OTHER ENERGY POLICIES

To accomplish the energy-related goals as presented within this Master Plan, the following additional policies are set forth:

1. To mitigate visual, light, noise, and other impacts, site plan approval and provision of substantial screening and buffering should be required for any future construction or alteration of permanent above-ground support or maintenance facilities associated with the regional energy pipeline networks. Such facilities and site improvements should be required to conform to the applicable site development requirements of the Zoning Ordinance.
2. The Township Board should consider collaborating with other communities along the energy pipeline routes to maintain pressure on the energy pipeline owners/operators to maximize safety through regular inspections and a robust maintenance program.
3. The Township Board should consider collaborating with other communities along the energy pipeline routes to advocate for changes in state and federal laws to allow for greater local input in the location of future energy pipeline projects.
4. Maintenance and upgrading of the existing pipeline networks in the Township should be encouraged, but no new pipeline pathways through the Township should be authorized by the state and federal governments.

CHAPTER 14

ZONING PLAN

The Michigan Zoning Enabling Act requires that a zoning plan be prepared as the basis for the Zoning Ordinance. This chapter is intended, along with the rest of the relevant parts of this Master Plan, to serve as the plan required by the Act. It functions as a link between the Master Plan and the Zoning Ordinance, and as a guide to the implementation of future ordinance changes.

BACKGROUND

Zoning is the division of a community into districts by ordinance for the purpose of regulating the use of land and buildings, their height and bulk, the proportion of the lot that may be covered by them, and the density of development. Zoning is enacted under the police power of the State for the purpose of promoting health, safety and general welfare and has long been supported constitutionally by the U.S. Supreme Court and the Michigan courts.

The Township Zoning Ordinance is one of the most important tools available to implement the policies of this Master Plan related to the use and development of land. The purpose of zoning is to assist in orderly development and growth. It is also used to protect property values and investments. Because of the impact it can have on the use of land and related services, local zoning regulations must be built upon the foundation of a Master Plan and “zoning plan.”

ZONING DISTRICTS

The following are descriptions and general purposes of the categories within which the proposed zoning districts in the Township Zoning Ordinance are organized. The proposed zoning districts are summarized in the table below. The specific purposes of each district are described in Article 2.0 (Zoning Districts) of the Zoning Ordinance:

Rural Districts

The principal purpose of the Rural District designation is to focus on conservation of lands with sensitive environmental characteristics like woodland, wetland, wildlife habitat, and farmland. A range of agricultural uses and agricultural support services are permitted, along with a limited range of very low-density single-family residential uses. The land zoned within this designation should conform to the areas planned for agricultural land uses and the Agricultural Preservation Area designated by this Master Plan.

Type of District	Zoning District Name	Symbol
Rural	Agricultural-Resource District	AR
Residential	Rural Residential District	R-2
	Manufactured Housing Park District	R-6
Business	Lake District	LK
	Convenience Commercial District	C-1
	Special Commercial District	C-2
	Industrial-Research District	I-1
Other	Public/Semi-Public Services District	PSP

Residential Districts

The principal purpose of the Residential Districts designation is to accommodate a variety of residential land uses. Three (3) separate residential districts are provided for in the Zoning Ordinance that accommodate residential land uses. The land zoned within the LK (Lake) and R-2 (Single-Family Residential) zoning district classifications should conform to the areas planned for residential land uses in the vicinity of Pleasant Lake. For the specific future land use policies associated with “Manufactured Housing Park Residential Development” and the R-6 zoning district classification, see chapter 5 (Plan for Residential) of this Master Plan.

Business Districts

The principal purpose of the Business Districts designation is to provide locations for compatible commercial, office or light industrial operations and activities in the Township. The land zoned within this designation should be strictly limited to the areas planned for commercial and industrial land uses in this Master Plan.

Other Districts

For the specific future land use policies associated with zoning and development of community facilities (including churches, schools, and other “institutional uses” as defined in the Zoning Ordinance) and the PSP (Public/Semi-Public Services) zoning district classification, see chapter 8 (Plan for Community Facilities) of this Master Plan.

DIMENSIONAL STANDARDS

The following table lists the dimensional standards table for each district of the Zoning Ordinance. The supplemental regulations and standards are listed in Article 3.0 (Dimensional Standards) of the Zoning Ordinance:

Section 3.101 Table of Dimensional Standards by District.

Standards			Districts								Additional Provisions
			AR	R-2	R-6	LK	C-1	C-2	I-1	PSP	
Maximum Building Height (feet)		Feet	35	35	25	35	35	35	45	35	Section 3.201
		Stories	2.5	2.5	2.0	2.5	2.0	2.0	2.0	2.0	
Lot Standards (per unit)	Minimum Width (feet)		300	150	500	100	100	150	150	100	Section 3.202
	Minimum Area (acres or square-feet)		10.0 acres	3.0 acres	22,000 sq.ft.	10,000 sq.ft.	10,000 sq.ft.	1.0 acre	1.0 acre	10,000 sq.ft.	
Yard / Setback Standards (feet)	Front Yard	Minimum	50	50	50	20	35	35	50	35	Section 3.203
		Maximum				35					
	Side Yard	Minimum, Each Side	30	10	30	10	10	10	20	10	Section 3.204
	Minimum Rear Yard		50	35	50	35	35	35	35	35	
Minimum Separation Between Principal Buildings (feet)				20	10		20	20	20		
Maximum Floor Area Ratio (FAR)			0.10	0.10		0.60	0.60	0.60	0.60	0.60	
Maximum Ground Floor Coverage (GFC)			10%	10%	30%	30%	30%	30%	30%	30%	
Minimum Gross Floor Area of a Principal Detached Dwelling (square-feet)			1,000	1,000	1,000	1,000					
Maximum Net Dwelling Unit Density (units per acre)			1.0	1.0	6.0						Section 3.202

RECENT ZONING ORDINANCE CHANGES (2014)

As a principal tool for implementing this Master Plan, the requirements and standards of the Township Zoning Ordinance should reflect the applicable policies of this Plan. The Planning Commission initiated a process to update the Zoning Ordinance in 2008, which culminated in adoption of a comprehensive new Zoning Ordinance that became effective in early 2014. The following is a summary of the changes that have been incorporated into the new Ordinance:

1. **Organization.** The organization of the Zoning Ordinance has been comprehensively updated to improve readability and make it easier to find information quickly. Wherever possible, regulations have been grouped into tables. The heart of the new ordinance is Article 4.0 (Land Use Table), where all of the zoning districts and permitted uses can be found in one table. The goal of the land use table format is to quickly answer the most common zoning-related questions: “Where is a particular land use permitted, and what can I do with my property?”
2. **Illustrations and flowcharts.** More than three dozen new illustrations and flowcharts are included throughout the updated Zoning Ordinance to clarify and illustrate certain development review procedures, regulations, defined terms, and other zoning concepts.
3. **State Zoning Act requirements.** The new ordinance is up-to-date with all of the requirements of the Michigan Zoning Enabling Act, including several recent amendments adopted into law during the development of this new Ordinance. The updated ordinance also conforms to other applicable state and federal statutes, including the state Condominium Act and Right to Farm Act, and the federal Religious Land Uses and Institutionalized Persons Act (RLUIPA).
4. **New in this ordinance.** The following is a summary of other key changes from the previous Zoning Ordinance:
 - The Township’s site plan review requirements and review processes have been comprehensively updated consistent with current zoning practices.
 - New landscaping and screening standards for projects subject to site plan approval are included (see Section 10.10).
 - Updated natural resources protection standards for property subject to site plan approval have also been added (see Section 10.04).
 - Standards have been added to the Dimensional Standards table to establish a maximum permitted number of dwelling units per acre of land for each of the residential zoning districts (see page 3-1).
 - Permitted land uses in the A-R (Agricultural-Resource) District have been updated to expand opportunities for “entrepreneurial” or “value-added” agricultural activities that allow farmers to diversify their income sources.
 - The Planned Unit Development (PUD) option has been comprehensively updated to make this development option easier for the Township and the developer to work with, while ensuring that the Township’s interests are protected (see Article 14)
 - Comprehensive “dark sky” compatible standards for exterior lighting have been added to the Ordinance (see section 10.08).

- “Wind energy conversion system” regulations have been added to the Zoning Ordinance to allow for limited use of agricultural or private wind turbines.

RECOMMENDED ZONING ORDINANCE CHANGES TO CONSIDER

Following is a list of additional recommended changes to the regulations and standards of the Zoning Ordinance consistent with the policies of this Master Plan. These changes should be considered with deliberation by the Planning Commission and Township Board as the need arises, or in conjunction with other planned Ordinance amendments:

1. Consider adoption of specific land use regulations for medical marijuana caregivers and a prohibition against medical marijuana dispensaries or provisioning centers in the Township, consistent with the Michigan Medical Marijuana Act and recent (2014) Michigan Supreme Court decisions.
2. Consider amending Section 3.202 (Lot and Dwelling Unit Density Standards) to insert provisions for a reduced lot width of 150 feet for rural residential dwellings on non-farm lots with less than ten (10) acres of lot area in the A-R (Agricultural-Resource) District, which would reduce unnecessary conversion of agricultural land for non-farm uses and would be consistent with previous development practices for these types of lots in the Township.
3. Revise the description of the LK (Lake) District in Section 2.105 and adjust the zoning district reference tables in articles 2.0, 3.0, and 4.0 to reflect the final adopted character of this zoning classification as one of the “Residential Districts.”

REZONING TO IMPLEMENT THE MASTER PLAN

The Master Plan is intended to guide future changes to the Township’s Official Zoning Map. The relevant elements of this plan should be a principal source of information in the investigation of all rezoning requests. The Planning Commission should conduct a periodic appraisal of the Zoning Ordinance and Official Zoning Map to ensure that the goals and policies of this plan are adequately reflected in the ordinance text and map.

Phasing of Zoning Map Changes

A key to successful Master Plan implementation is the timing of future changes to the Township’s Official Zoning Map, whether initiated by the Township or by petitioners. When considering whether a rezoning request is consistent with this plan, the Planning Commission and Township Board should keep in mind that the Master Plan’s policy recommendations are based upon a ten to twenty year planning period.

While the Master Plan may identify certain Township lands for more intensive development, the time for such development may not yet have arrived. More intensive land uses and development should be phased-in over a period of time, consistent with the policies of this plan and the infrastructure and land capacity available to support the development.

Specific criteria have been incorporated into the Township Zoning Ordinance to help the Planning Commission and Township Board evaluate future rezoning applications [see Section 18.05 (Findings of Fact Required)]. These criteria should be carefully considered before making recommendations and decisions on proposed amendments to the Official Zoning Map.

MORE ZONING TOOLS FOR PLAN IMPLEMENTATION

Following is a list of several additional zoning-related tools and techniques that can be used by the Township to implement the policies of this Master Plan:

Site Plan Review

Each time the Planning Commission reviews a site plan for compliance with the Township Zoning Ordinance, another step is taken in the process of implementing the policies of this Master Plan. Development review and approval is an important implementation tool to ensure that new construction is consistent with the goals and objectives of this Plan.

Planned Unit Development (PUD) Option.

The PUD zoning district is established under the special district authority authorized by Section 503 of the Michigan Zoning Enabling Act. The PUD option offers considerable flexibility to the land developer to provide opportunities for site designs that respect the natural environment, result in efficient layout of infrastructure and public facilities, and ensure mitigation of negative impacts on adjoining land uses and the Township as a whole.

Development Agreement

Although there is no explicit legislative authority for such agreements, many Michigan communities have used development agreements to achieve a mutual understanding between the developer and Township concerning the conditions under which development can occur. Development agreements are often negotiated as part of a planned development approval, allowing the community and developer to address complex issues that cannot be adequately addressed on a typical site plan. Development agreements might prove useful to achieve desired developments in the Township, especially if or when a mixed-use development is proposed.

Form-Based Zoning and Building Composition Standards

Although there is no explicit legislative authority for form-based zoning, some Michigan communities are adding building design and appearance standards to local zoning ordinances. The intent of form-based zoning and building composition standards is not to mandate certain architectural styles or materials, but rather to achieve a more uniform streetscape where adjacent buildings share common design elements, height, number of stories, and other characteristics.

CHAPTER 15

PLAN IMPLEMENTATION

The following is a summary of some of the plan implementation tools available to the Township:

BACKGROUND

The Master Plan serves as a framework for future decision-making and a regulatory process through which governmental agencies guide land use. The plan should be re-evaluated every five (5) years or as development pressures require. As time goes on, Township objectives may change, which could result in a need to amend the plan. However, any amendment should only be made after sound evaluation and consideration of the overall implications of the change. Further re-evaluation of the plan allows future participation of the general public in framing Township policy.

Implementation of the Plan requires continuous coordination between the Township Board, the Planning Commission, and the Zoning Board of Appeals whose principal tools are the Zoning Ordinance and Map, and the subdivision and site condominium development regulations. In addition, the Township must also remain abreast of on-going planning activities of adjoining units of government that may affect Plan recommendations for future implementation.

ZONING ORDINANCE

See Chapter 13, Zoning Plan.

SUBDIVISION AND SITE CONDOMINIUM REGULATIONS

The policies of this Master Plan can be implemented in part through careful review of proposed subdivision plat and site condominium development projects. The Michigan Planning Enabling Act (P.A. 33 of 2008, as amended) includes specific provisions associated with subdivision plat review that apply most effectively to townships that maintain a local Subdivision Ordinance. Through such an ordinance, the Township can better control the design and character of future development.

Subdividing, or platting, is a more complex method of land division and is regulated by the Land Division Act (P.A. 288 of 1967, as amended) and any Township subdivision regulations. This method of subdividing involves technical review by the Township Planner, Planning Commission recommendation, and Township Board action on the various stages of the plat. This process is aimed primarily at zoning compliance, compliance with the Master Plan, proper vehicular and pedestrian circulation, future street extensions, buildable lots, proper relationship with neighboring properties, and provision of all public facilities and utilities.

The site condominium process is an alternative to the subdivision plat available under the state Condominium Act (P.A. 59 of 1978, as amended) and the Township Zoning Ordinance, but the end result is intended to be equivalent to a platted development. Since the issues and interests are the same from the Township's point of view in either approach to land division, the

Township’s review process for site condominiums should be as similar as possible to that exercised in subdivision review.

DENSITY TRANSFER PROGRAM

This implementation tool involves moving (transferring) proposed development (density) from one part of a site to another part that is considered to be more suitable for development. The density transfer process results in a portion of the site remaining undeveloped and the developed part having a higher net density, although the overall density of the site will not be increased. Density transfer may and should be used to protect or preserve natural features such as woodland, wetlands, stream corridors, open spaces, sensitive soils, while permitting a reasonable use of the entire parcel. This method is applicable to larger parcels under the planned unit development (PUD) option in the Township Zoning Ordinance. Density Transfer should meet the following standards:

1. All lands involved in the transfer are located in Freedom Township and the owner has fee simple title to the lands.
2. All lands involved are contiguous.
3. The transfer number of dwelling units allocated to the total land area by this plan will not be exceeded.
4. The transfer is made as part of a single PUD project that includes all lands in the transfer at the same time.
5. The land that receives that transfer of density will, with the additional dwelling units; be compatible with the existing and planned use of the neighboring area.

CAPITAL IMPROVEMENTS PROGRAM (CIP)

One of the most important non-regulatory tools the Township has available to implement this Plan is a “Capital Improvements Program” (CIP). The Township can use a CIP to implement Master Plan recommendations for new or expanded public facilities, plan for major expenditures, ensure that public funds are used wisely and efficiently, and to be prepared with "shovel-ready" projects when unexpected sources of funding appear.

What are Capital Improvements?

Capital improvements are physical facilities that require substantial investments to construct/develop, and are intended to last/be used for a long period of time. Typical project examples include:

- fire engines, bulldozers, and similar large equipment purchases;
- treatment plants, water and sewer lines, landfills, street construction or reconstruction, and similar infrastructure improvements;
- libraries, schools, government buildings, and similar building projects; and

- replacement, expansion, or major repair of existing facilities and equipment.

“Gray area” projects that could also be considered “operating” expenses outside the scope of a CIP include vehicle and small equipment purchases, repairs, and remodeling projects.

What is a Capital Improvements Program?

A CIP identifies the community's capital needs; ranks them by priority; coordinates their scheduling over a specific number of years; and determines the best funding method(s) to pay for them. The first year of the CIP is the capital budget, and as each year is completed a new year is added at the end. Many CIPs are organized into three (3) sections:

1. Overview of the CIP process, along with a list of the benefits the community will derive from the capital improvements;
2. Financial data, including charts outlining historical revenue and expenditure data, projected revenue, expenditure, and debt service; and a
3. Description of projects recommended for funding in the CIP period, including a justification for a project's inclusion in the CIP, the project's relationship to the community's master plan and other long-range plans, and how the project will be financed within the community's fiscal capacity.

The CIP should cover a six (6) year period, updated annually, with the first year representing the community's capital budget. The document lists the proposed capital improvement projects and expenditures by:

- Location, date of construction, and relationship to other existing and proposed facilities;
- Cost, means of financing, and sponsor; and
- Priorities over the CIP time period and geography of the Township.

Per the Michigan Planning Enabling Act, any municipality with jurisdiction may prepare and adopt a CIP, but it is typically mandatory for most cities and villages and for those Michigan townships that “alone or jointly with one or more other local units of government owns or operates a water supply or sewage disposal system.” Freedom Township is not required to prepare a Capital Improvements Program, but the option is available as an implementation tool.

What are the Benefits of Using a CIP?

The CIP is a tool to enable and improve the local government’s ability to balance its capital needs and available financing over a multi-year period. The following are some of the additional benefits of adopting and maintaining an up-to-date capital improvements program:

- A CIP helps to ensure that new public facilities and infrastructure improvements meet Master Plan objectives, spreads large capital expenses over time, and breaks large projects into phases.
- An up-to-date CIP will alert residents and developers of the Township’s intention to make certain improvements in particular places at particular times. This helps coordinate private investment, minimize inappropriate development proposals, and restricts development from occurring at a too rapid rate.

- The process of adopting and updating a CIP increases opportunities for public input on and public support for proposed capital improvements.
- The CIP process helps to separate the good from the “it seemed like a good idea at the time.” Some “good ideas” cost more than their benefits. A public facility may turn out to be unnecessary, over-designed, or may not meet the community’s actual needs.
- Use of the CIP “tools” by the municipality enables private businesses and citizens to have some assurance as to when public improvements will be undertaken.

FINANCING

Successful implementation of these projects will depend on the ability of the Township to secure the necessary funding for community planning and project implementation. Besides the Township’s General Fund, there are an ever-changing range of potential federal and state government sources, community foundations, and other sources for grant funding and loans which the Township may be eligible for to complete a particular project.

The first step is to develop a capital improvements program (see above) to identify potential projects, anticipated costs, and potential sources of funding. Once a specific project has been identified, the most appropriate sources of grants and other revenues to supplement local funds can be considered. The following are examples of potential financing tools:

- **Millage.** A special millage can be used to generate revenues for a specific purpose.
- **Special Assessments.** Special assessments are compulsory contributions collected from the owners of property benefited by specific public improvements to defray the costs of such improvements, apportioned according to the assumed benefits to the property affected.
- **Bond Programs.** Bonds are one of the principal sources of financing used by communities to pay for capital improvements. General obligation bonds are issued for a specific community project and are paid off by the general public with property tax revenues. Revenue bonds are issued for construction of projects that generate revenues. The bonds are then retired using income generated by the project.
- **Grant Programs.** The State of Michigan periodically makes grant funding available for park development, land acquisition, and other public purposes. Local community foundations and private foundations may also have funding available for projects that fit their specific grant-making criteria.

PLAN MONITORING PROGRAM

The planning process, in order to be effective, must be continuous, and must be part of the day-to-day decisions that affect the physical character of the Township. Thus, the Master Plan must be in a form that encourages its regular use in the planning process. The plan is, in effect, the representation of the Township’s policies for the future. If the Master Plan is to perform its proper function, it must be reviewed regularly by the Planning Commission, and updated as conditions warrant.

As part of a consistent plan monitoring program, the Planning Commission should evaluate the Master Plan on an annual basis . Per the Michigan Planning Enabling Act, a major review of this plan should be made by the Commission at intervals no longer than five (5) years to enable the Planning Commission and Township Board to apply new perspectives to adopted policies.

Benefits of a Monitoring Program

There are several benefits to the Township from a regular monitoring program.

- The Master Plan will be kept up to date.
- The maintenance program broadens the area of community agreement on basic development policies over time. The process invites reconsideration of alternatives to major decisions and encourages exploration of new issues and secondary questions.
- Annual review of the Master Plan will keep current the Planning Commission and Township Boards' knowledge of the plan's elements. Along with the Master Plan's use in day-to-day decision-making, the annual review process will assure that the Master Plan will be a living document, that its policies will not be frozen in time.
- Annual review will avoid delays that might otherwise be caused by calls for more study on certain issues before the basic plan is adopted. An annual review program assures that issues that require further examination will be studied at proper levels of detail at later times, and the policy changes resulting from such studies will be made in the plan.

Description of the Program

The maintenance program will have two objectives:

- To determine the extent to which the Township is actually implementing the policies of the Master Plan; and
- To determine that the Master Plans policies are still desirable and appropriate in light of changing circumstances.

The basis of the maintenance program will consist of an annual review by the Planning Commission. Such review might result in identification of a need to make changes to a portion of the plan reflecting either a policy area or a geographic area. The results of the review will be forwarded to the Township Board in a report.

The Planning Commission, at the start of the review process, will determine the actual components of an annual review. The following should be among the elements studied by the Commission; others might be added as events suggest:

- Development proposals approved or denied - rezoning petitions, site plans, and subdivision plats.
- Land use regulations - Zoning Ordinance and subdivision ordinance amendments made in the past year or expected to be needed in the future.
- Building permits issued, by land use categories; estimate of the number of dwelling units, by type, added to the housing stock; estimates of the current population of the planning area.

- State equalized evaluation by assessor's categories; track changes in agricultural and development classifications.
- Traffic counts; relation to road capacities.
- Programmed road improvements.
- Changes in public transportation service during the past year and proposed in the future that affect the planning area.
- Land divisions, other than in approved subdivision plats and condominium site plans.
- Major zoning and land use changes on the perimeter of the planning area in the past year and those that are likely to occur in the coming year.
- Policy changes by adjacent municipalities that affect Freedom Township, in the past year and that are likely to occur in the coming year.

PUBLIC UNDERSTANDING AND SUPPORT

The necessity of citizen participation and understanding of the planning process and the Master Plan cannot be over-emphasized. A carefully organized public education program is needed to build support for and ease implementation of planning proposals. Residents' failure to support planning efforts, special assessments, zoning, or public improvements is more often than not the result of public misunderstanding of long-range plans. To organize public support most effectively, the Township must emphasize the reasons for the planning program and encourage citizen participation in the planning process.

Public education can be achieved through an informational program involving talks by the Township Planner and other experts, preparation of newspaper articles, posting of updates on the Township's website, and presentations at public meetings on current issues. Periodic community opinion surveys should be considered as another means by which Township officials can gauge changing attitudes and priorities.

A significant share of the responsibility of implementing this Master Plan rests on private efforts. Even one resident can have substantial influence in determining the appearance of the Township and influencing public opinion. The influence of an alert and informed citizenry may well compensate in a large part for limitations in the authority vested in the Township.