

**TYRONE TOWNSHIP PLANNING COMMISSION
WORKSHOP AGENDA
March 22, 2023- 6:00 PM**

CALL TO ORDER:

PLEDGE OF ALLEGIANCE:

APPROVAL OF THE AGENDA:

CALL TO THE PUBLIC:

OLD BUSINESS:

- 1) Master Plan**
- 2) Utility Scale Solar Facilities**

NEW BUSINESS:

CALL TO THE PUBLIC:

MISCELLANEOUS BUSINESS:

ADJOURNMENT:

OLD BUSINESS #1

Master Plan

EXISTING LAND USE ANALYSIS

9.1 Overview

Several important land use conditions in the Township are:

- MOST COMMON;
- LARGEST INCREASE;
- LARGEST DECREASE;
- DETAILS BY REGION;
- Land uses in surrounding communities along the shared boundaries are generally consistent and compatible.

9.2 Land Use Categories

Existing land use categories described below are generally recognized and used by SEMCOG.

Agricultural/Rural Residential. These lands include cultivated, crop-producing fields, animal husbandry, dairying, farmer's market, and horse stables. It may include large properties used for the above agricultural uses that also include a single-family house. It does not include uncultivated, open space or woodlands.

Single-family Residential. These lands have a single-family dwelling. Lot sizes and dwelling sizes vary.

Multiple-family Residential. These lands have attached dwellings, such as duplexes, apartment complexes, and manufactured home communities.

Commercial. These lands are used for sale of convenience and consumer goods, provision of services, or offices.

Industrial. These lands are used for the intensive production or assembly of goods used for export and lighter uses such as warehousing or distribution centers. Extractive operations that produce raw materials, such as mines, quarries, and oil and gas wells are also considered industrial uses.

Institutional. These lands are associated with a public body, such as the Township, County, or State, and public institutions, such as schools or libraries. Quasi-public institutions, such as private schools and places of worship, are also considered institutional uses.

Recreation/Open Space. These are publicly or privately-owned lands used for personal enjoyment and recreational purpose, such as parks, preserved woodlands, and golf courses.

Transportation, Communications, and Utilities. These lands are used for roads, public infrastructure, communication facilities, and other transportation routes, such as a rail line.

Vacant. These lands are open, uncultivated, undeveloped, uninhabited, and unused areas, such as wetlands, woodlands, scrublands, and open meadows.

Mixed Use. These lands have multiple land uses on a single property.

Water. These areas are surface waters, such as lakes or rivers.

9.3 Land Use Survey

Land use in Tyrone Township has been documented by various entities for several decades.

Previous master plans have included information based on a land use survey from the Township's planning consultant and the Southeastern Michigan Council of Governments (SEMCOG).

Land use information from SEMCOG is used for the current land uses. In some cases, corrections have been made based on local information or recent changes.

Although it can be difficult to compare information generated by different entities at different times, looking at general changes over time helps provide a picture of land use trends in the Township.

Table 9.3: Land Use in Tyrone Township 2001-2020

	2001		2008		2020
	McKenna		SEMCOG		SEMCOG
Agricultural/Rural Residential	4,854 acres	20.7%	5,588	15.2%	13,581 acres
Single-family Residential	9,768 acres	41.5%	16,983 acres	72.1%	2,961 acres
Multiple-family Residential	0 acres	0.0%	0 acres	0.0%	262 acres
Commercial	45 acres	0.6%	137 acres	0.6%	71 acres
Industrial	81 acres	0.4%	113 acres	0.5%	204 acres
Institutional	533 acres	2.3%	187 acres	0.8%	81 acres
Recreational/Open Space	191 acres	0.8%	643 acres	2.7%	740 acres
Transportation, Communication, and Utilities	318 acres	1.4%	1,024 acres	4.3%	949 acres

Existing Land Use Analysis Article

Draft 02.08.2023

Vacant	X	X	X	X	3,621 acres
Mixed-use	0 acres	0%	0 acres	0%	108 acres
Water	653 acres	2.8%	880 acres	3.7%	870 acres

(Source: SEMCOG and Tyrone Township)

[NEED TO VERIFY TOTALS AND ACCOUNT FOR DIFFERENCES IN AGRICULTURAL/RURAL RESIDENTIAL, SINGLE-FAMILY RESIDENTIAL, TRANSPORTATION, AND VACANT]

Graph 9.3: Land Use in Tyrone Township 2001-2020

GRAPH HERE

SUMMARY OF LAND USE AND CHANGES

9.4 Land Use Analysis

INTRODUCTION TEXT

[IS THERE A DESIRE TO ANALYZE LAND USES FOR DIFFERENT TOWNSHIP AREAS??]

Table and Graph 9.4 below show the land use in Tyrone Township for each area.

Table 9.4: Land Use by Subarea 2020

	NW	NE	SE	SW	US-23
USE TYPE					

(Source: SEMCOG)

Table 9.4.: Land Use by Subarea 2020

GRAPH HERE

Northwest Subarea

Text

Runyan Subarea (Northeast)

Text

Lake Shannon Subarea (Southwest)

Text

Mabley Hill Subarea (Southeast)

Text

US-23 Subarea

Text

SUMMARY HERE

9.5 Adjacent Communities Land Use Analysis

Land uses can create benefits and impacts that extend beyond a community's boundaries. It is important to consider and examine land uses in adjacent communities in order to plan appropriately.

Land uses in the communities that share a border with Tyrone Township, including Fenton Township, City of Fenton, Rose Township, Hartland Township, and Deerfield Township are examined. The communities that the Township shares a limited boundary (corner) with are not included in this examination because of the limited impacts those land uses are likely to create (*Argentine Township, Holly Township, Highland Township, and Oceola Township*).

Fenton Township

Fenton Township shares a boundary with the western portion of Tyrone Township's northern border. Bennet Lake Road forms a portion of this boundary.

Land uses in Fenton Township along and near this border are primarily single-family dwellings, as individual lots or in subdivisions, small agricultural fields, and undeveloped woodlands.

PUBLIC WATER AND SANITARY SEWER??

Marl Lake extends into both Townships.

Land uses on both sides of this border appear to be generally compatible.

City of Fenton

The City of Fenton shares a boundary with the eastern portion of Tyrone Township's northern border. Shiawassee Avenue and Jayne Road form a portion of this boundary.

Land uses in the City of Fenton along and near this border are primarily single-family dwellings. There are several institutional uses, including schools. There are also several undeveloped woodlands and agricultural fields. There are significant commercial and industrial areas roughly a mile north of this border, along Owen Road.

Public water and sanitary sewer are available in the City of Fenton, which allows for noticeable smaller lot sizes for residential uses.

Land uses on both sides of this border appear to be generally compatible. There are some locations where there is a significant difference in the size of lots for single-family residential lots.

Rose Township

Rose Township shares a boundary with the eastern side of Tyrone Township. Tipsico Lake Road forms most of this boundary, but the road alignment wanders in several locations because of natural features.

Land uses in Rose Township along and near this border are primarily single-family dwellings, on larger lots and smaller lake lots, agricultural fields, and undeveloped woodlands.

Tipsico Lake, with a DNR access site, is just east of the border.

Land uses on both sides of this border appear to be generally compatible. The lake residential area and DNR access site in Rose Township are small in area but are more intensive than the uses immediately to the west in Tyrone Township.

Hartland Township

Hartland Township shares a boundary with the southern side of Tyrone Township. This border is defined by Allen Road, Parshallville Road, Parshall Road, and Holtforth Road.

Land uses in Hartland Township along and near this border are primarily single-family dwellings, on larger lots and smaller lake lots, agricultural fields, and undeveloped woodlands. There are some limited commercial uses and a fire station/emergency medical services base along this border. The hamlet of Parshallville is along this border.

Tyrone Lake extends into both Townships.

Land uses on both sides of this border appear to be generally compatible. The Cider Mill Mobile Home Park, at the northwest corner of Old US-23 and Parshallville Road, is a significantly more intense use than the adjacent residential uses immediately to the south in Hartland Township.

Deerfield Township

Deerfield Township shares a boundary with the western side of Tyrone. This border is defined by McGuire Road and O'Connell Road.

Land uses in Deerfield Township along and near this border are primarily single-family dwellings, on larger lots and smaller lake lots, undeveloped woodlands, and agricultural fields. There is an extraction operation just west of this border on the north side of Hogan Road.

Lake Shannon and Hosington Lake extend into both Townships.

Existing Land Use Analysis Article

Draft 02.08.2023

Land uses on both sides of this border appear to be generally compatible. The extraction operation generates truck traffic that travels through Tyrone Township to access US-23.

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draft (02.08.2023) for PC review

Existing Land Use Map

EXISTING LAND USE MAP GOES HERE

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Existing Land Use Analysis Article

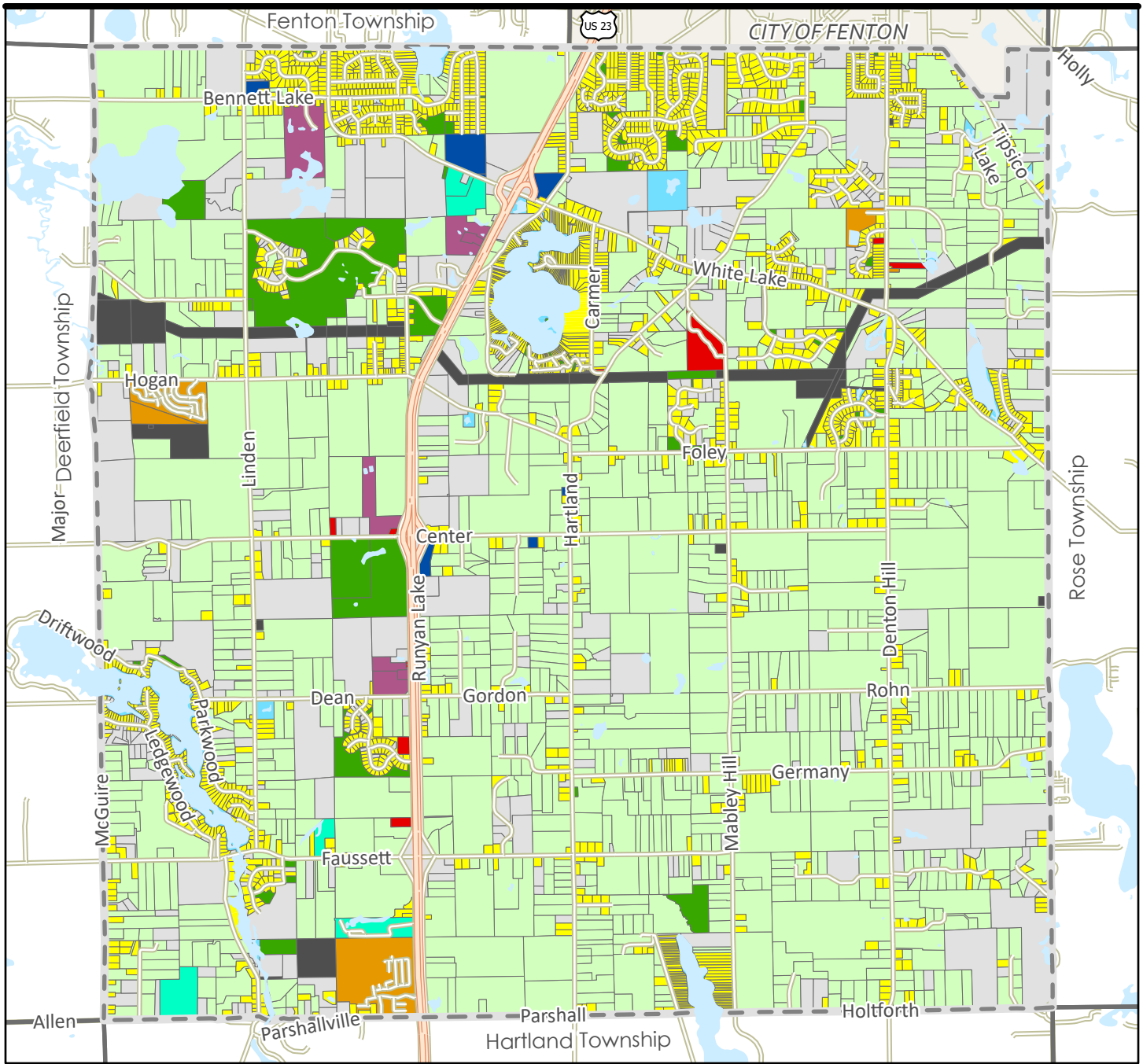
Draft 02.08.2023

[End of Existing Land Use Analysis Article.]

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draft (02.08.2023) for PC review



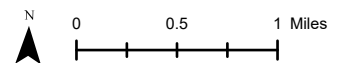
Existing Land Use Categories

- Agricultural/Rural Residential
- Recreation/Open Space
- Commercial
- Industrial
- Institutional
- Mixed Use
- Multi-Family Housing
- Single-Family Housing
- Transportation/Communication/Utilities
- Vacant

Other Features

- Tyrone Township
- Highways
- Roads
- Waterways

Existing Land Use Tyrone Township



FUTURE LAND USE

11.1 Overview

The Future Land Use plan for Tyrone Township outlines desired future development patterns over the next 10 to 20 years. Specific land use categories are described in this section and incorporated into the Future Land Use Map.

The Future Land Use plan is based on consideration of a number of factors that have been documented and examined through the master planning process and in this Master Plan. Those factors include:

- Population, including characteristics and trends
- Infrastructure and utilities
- Natural features and land capacity
- Existing land uses, including within the Township and in surrounding communities
- Existing zoning, including within the Township and in surrounding communities
- Compatibility of uses
- Community goals, objectives, and policies
- Citizen opinions

The Future Land Use plan identifies 12 different land use categories. The descriptions of these land use categories include general site conditions, design characteristics, and site amenities that are anticipated or are desirable. These descriptions are intended to provide guidance for future decisions and to guide adoption of Zoning Ordinance standards to support this Master Plan.

11.2 Agricultural

Agricultural areas are intended for commercial agricultural uses and extremely-low density rural residential uses.

These areas are proposed for areas with prime farmland soils and where the infrastructure is not able to support more-intensive uses.

It is anticipated that these areas will remain dependent on individual on-site well and sanitary septic systems.

Lots in Agricultural areas should be at least 5 acres in size. Ideally, lots will be larger in order to support continued agricultural uses.

11.3 Natural Preservation

Natural Preservation areas are intended for preservation of important natural features, limited agricultural uses, and extremely-low density rural residential uses.

These areas are proposed for areas with significant natural features, such as woodlands, wetlands, waterbodies, steep slopes, and scenic vistas; areas with less than prime farmland soils; and areas where the infrastructure is not able to support more-intensive uses.

It is anticipated that these areas will remain dependent on individual on-site well and sanitary septic systems.

Lots in Natural Preservation Areas should be at least 3 acres in size. Ideally, lots will be larger to reduce habitat fragmentation and reduce impacts on natural features.

11.4 Lower-Density Residential

Lower-Density Residential areas are intended for lower-density residential uses, such as large-lot single-family dwellings, and limited agricultural uses.

They are proposed for areas with lower development pressures due to their location and lack of infrastructure, such as roads, water, and sanitary sewer.

It is anticipated that these areas will remain dependent on individual on-site well and sanitary septic systems.

Lots in Lower-Density Residential areas should be between 1.5 acres to 3 acres in size.

11.5 Medium-Density Residential

Medium-Density Residential areas are intended to provide for more-intense residential uses, such as single-family dwellings on moderate-sized lots and two-family dwellings.

They are proposed for areas with greater development pressures; areas with better access to infrastructure, such as roads, water, and sanitary sewer; and areas where it would be beneficial to provide a transition between higher-intensity uses and lower-intensity residential uses.

It is anticipated that most of these areas will remain dependent on individual on-site wells and sanitary septic systems, but some areas may connect with public sanitary sewer systems.

Lots in Medium-Density Residential areas should be between 0.5 acres to 1.5 acres in size. Lots with on-site sanitary septic systems should be at least 1 acre in size.

11.6 Higher-Density Residential

Higher-Density Residential areas are intended for more-intense residential uses, such as single-family dwellings on smaller lots, two-family dwellings, apartments, and building condominiums.

They are proposed for areas with the greatest development pressures; areas with appropriate access to infrastructure, such as roads, water, and sanitary sewer; and areas with appropriate transitions to less-intense uses.

It is anticipated that these areas are or will be connected to public sanitary sewer systems. These areas may be dependent on individual on-site wells or may be connected to public water systems.

Higher-Density Residential areas should have between 4 dwelling units per acre to 8 dwelling units per acre.

11.7 Lake Residential

Lake Residential areas are intended for medium to higher-density residential uses, with the goal of recognizing and supporting the unique character of these residential areas.

They are proposed for established residential areas surrounding lakes and other waterbodies.

Most of these areas are connected to public sanitary sewer systems. Because of the environmentally-sensitive nature of these areas, it is preferred that public sanitary sewer would be extended throughout these areas. It is anticipated that these areas will remain dependent on individual on-site wells.

Newly-created lot areas in Lake Residential areas should be at least 0.5 acres in size where public sanitary sewer systems are available and at least 1 acre in size where public sanitary sewer systems are not available. Many existing lots in Lake Residential areas are smaller than these desired sizes.

11.8 Mobile Home Residential

Mobile Home Residential areas are intended for mobile home park communities, with relatively high densities of residential units.

They are proposed for the area of the 2 existing mobile home communities on Hogan Road and Old US-23.

Additional Mobile Home Residential areas are not proposed at this time, as concerns exist about road capacity, public sanitary sewer capacity, and school financing.

The Township believes it provides its fair share of mobile home residential opportunities and does not anticipate planning for additional areas in the near future without a demonstrated need, proof that suitable sites are not available in adjacent communities, and confirmation that adequate infrastructure exists.

These areas are connected to public sanitary sewer systems.

Any new Mobile Home Residential in the future should be limited to areas with appropriate access to infrastructure, such as roads, water, and sanitary sewer; and areas with appropriate transitions to less-intense uses.

Mobile Home Residential areas should have between 4 dwelling units and 10 dwelling units per acre.

11.9 Local Commercial

Local Commercial areas are intended for smaller commercial uses that primarily serve the day-to-day needs of the Township's residents, such as convenience stores, small medical offices, and small professional offices. Large commercial uses and drive-through uses are not compatible with these areas. These areas should be integrated with the surrounding neighborhoods and enhance the appearance and enjoyment of the area.

They are proposed for areas with existing small commercial uses that are served by adequate road infrastructure. It is anticipated that many of these areas will remain dependent on individual on-site wells and septic systems, but some may be served by public systems.

Lots in Local Commercial areas should be at least 1.5 acres in size. Specific uses may require larger lot sizes. Improvements necessary for commercial uses, such as parking, landscaping, and stormwater management are also likely to require larger lot sizes for these uses. Existing lots in these areas may be smaller than these desired sizes.

11.10 General Commercial

General Commercial areas are intended for larger commercial uses that serve the day-to-day need of the Township's residents but may also serve the larger region, visitors to the community, or may draw customers from outside of the Township.

They are proposed for areas with larger lots; areas with access from County primary roads; and areas with access to public sanitary sewer service.

Lots in General Commercial areas should be at least 2 acres in size. Specific uses may require larger sizes. Improvements necessary for commercial uses, such as parking, landscaping, and stormwater management, are also likely to require larger lot sizes for these uses.

11.11 Research, Office, and Industrial

Research, Office, and Industrial areas are intended to allow for a mix of commercial uses, such as research laboratories, design studios, high-tech manufacturing, larger office buildings or parks, regional medical facilities, and light industrial. Some other uses, such as packaging, limited warehousing, and assembly may be appropriate in

certain locations. Outdoor uses, such as outdoor storage, sales, or contractors yards, may be appropriate where adequate transitions are provided to less-intense uses.

They are proposed for areas with larger lots, primarily along Old US-23, with access to appropriate infrastructure, including public sanitary sewer.

These uses should have adequate buffering and landscaping to mitigate any impacts on surrounding uses and to support the Township's desired character along US-23.

11.12 Public/Quasi-Public

Public/Quasi-public areas are intended for public, quasi-public, and institutional uses, such as public facilities, public parks, schools, utilities, and places of worship, that primarily serve the Township's residents but may draw users from outside of the Township.

They are proposed for areas with existing or anticipated public, quasi-public, and institutional uses.

There are no minimum lot dimensions, as needs may vary greatly depending on the type of public, quasi-public, and institutional use. Specific uses may have minimum lot sizes.

11.13 Recreational

Recreational areas are intended for public and private recreational uses, such as golf courses, preserved open space, conservation easements, and parks. These uses may be limited to residents of a single development, such as a neighborhood park, or may be open to the general public, such as a golf course or public park.

They are proposed for areas with existing private recreational uses and existing or potential public recreational uses.

There are no minimum lot dimensions, as needs may vary greatly depending on the type of recreational use. Specific uses may have minimum lot dimensions. Commercial indoor recreational uses should be at least 1 acre in size. Outdoor recreational uses should have larger lots to accommodate and manager any impacts of outdoor uses.

This Master Plan recognizes that private recreation uses may be sold or closed due to economic conditions and may not be maintained or used as private recreational land in perpetuity. Therefore, alternate Future Land Uses are also provided for these areas, based on the surrounding area and compatibility of uses, in the event that land is sold or the use is ended.

11.14 Zoning Plan

Table 11.14 below describes the future land use areas and the corresponding current zoning districts and anticipated future zoning districts. It also shows the future land use designation from the Township's previous master plan.

Table 11.14: Zoning Plan

Master Plan Future Land Use Designation	Previous Master Plan Future Land Use Designation	Current Zoning District	Anticipated Zoning District
Agricultural	Agricultural/ Residential	FR Farming Residential	AG Agricultural
Natural Preservation	Residential/ Natural Resource Preservation	RE Rural Estate Residential	NP Natural Preservation
Lower-density Residential	Low Density Single Family Detached Residential	R-1 Single-family Residential	R-1 Residential
Medium-density Residential	Medium Density Single Family Detached Residential	R-2 Single-family Residential	R-2 Residential
Higher-density Residential	High Density Single Family Attached Residential	RM-1 Multiple- family Residential	R-3 Residential
Lake Residential	Medium Density Single Family Detached Residential- Lakeside	LK-1 Lake Front Residential	LR Residential
Mobile Home Residential	Manufactured Single Family Detached Residential	MHP Mobile Home Park	MHP Mobile Home Park
Local Commercial	Planned Commercial Services	PCS Planned Commercial Services	LC Local Commercial
General Commercial	Planned Commercial Services	PCS Planned Commercial Services	GC General Commercial

Future Land Use Article

Draft 02.08.2023

Research, Office, and Industrial	Planned Office Planned Industrial Research Office Planned Commercial Industrial	OS Office Service?? PIRO Planned Industrial Research Office	ROI Research, Office, and Industrial
Public/Quasi-public	Public/ Quasi Public	All, except EI Extractive Industrial	P Public
Recreational	Commercial Recreation	-	R Recreation P Public

11.15 Special Planning Areas

GOLF COURSE

FORMER PIRO SECTION

TRIANGLE BETWEEN OLD US-23 AND FENTON

11.16 Area of Future Land Use Assignments

Table and Graph 11.16 below describes the total acreage and percent of the Township designated for each of the future land use areas. Area within rights-of-way and water is also included.

[TABLE AND CHART POPULATED FOLLOWING ADOPTION OF FUTURE LAND USE
MAP]

Table 11.16: Area of Future Land Use Assignments

Master Plan Future Land Use Designation	Acreage	Percent
Agricultural		
Natural Preservation		
Lower-density Residential		
Medium-density Residential		
Higher-density Residential		
Lake Residential		
Mobile Home Residential		
Local Commercial		

Future Land Use Article

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General Commercial
Research, Office, and Industrial
Public/Quasi-public
Recreational
Rights-of-way
Water

Graph 11.16: Area of Future Land Use Assignments

TABLE GOES HERE

TABLES FOR DIFFERENT AREAS???

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Future Land Use Map

FUTURE LAND USE MAP GOES HERE

draft (02.08.2023) for PC review

Future Land Use Article

Draft 02.08.2023

[End of Future Land Use Article.]

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draft (02.08.2023) for PC review

OLD BUSINESS #2

Utility Scale Solar Facilities



Livingston County Department of Planning

MEMORANDUM

TO: Tyrone Township Supervisor
FROM: Robert Stanford, Principal Planner
DATE: February 23, 2023
SUBJECT: Staff Courtesy Review

Robert A. Stanford
AICP, PEM
Principal Planner

Scott Barb
AICP, PEM
Principal Planner

**Township Utility Scale Solar Ordinance
Article 22 Special Uses, Section 22.05 Site Design
Conditions, Item T. Utility-scale Solar Energy Facilities**

Tyrone Township has requested a courtesy review regarding *Tyrone Township Zoning Ordinance #36, Article 22 Special Uses, Section 22.05 Site Design Conditions, Item T. Utility-scale Solar Energy Facilities*. As requested, I have performed a preliminary, cursory review of the above-referenced Ordinance. Current language is shown in Times Roman font. Staff's comments are listed below in ***bold italics***. Suggested additions are shown in **highlighted text**.

ARTICLE 22 SPECIAL LAND USES

SECTION 22.05 SITE DESIGN CONDITIONS

All special land uses shall comply with the site plan design requirements of Article 23. In addition, certain special land uses shall also comply with design conditions unique to that use. Those special land uses and conditions are listed herein.

T. Utility-scale Solar Energy Facilities.

Tyrone Township recognizes the positive environmental impact solar energy systems promise as an energy alternative to traditional sources. Concurrently, the Township has an obligation to ensure use of lands within its jurisdiction provide a net positive effect in terms of impact, support of the Township Master Plan, and availability of land resources.

1. Regulations. The following regulations are intended to ensure the interests of the landowner and the Township are achieved harmoniously with no negative effect to the long-term viability of the subject property or those surrounding it. In zoning districts where they are permitted or special land uses, facilities for the capture, storage, and distribution of solar energy for commercial purposes are subject to the following standards:

Department Information

Administration Building
304 E. Grand River Avenue
Suite 206
Howell, MI 48843-2323

●
(517) 546-7555
Fax (517) 552-2347

●
Web Site
co.livingston.mi.us



a. Lease Unit Boundary. The boundary around a parcel, multiple parcels, or portions thereof, leased or purchased for the purposes of operating a solar energy facility. The Lease Unit Boundary may cross road rights-of way, but required setbacks shall be provided and calculated on each side of any such road.

b. Location and Setbacks. The solar energy system shall not be located closer to the road than any portion of a principal building located on the same parcel. The solar energy facility setback requirements are found in the table below. For parcels abutting Old US-23, the minimum setback from Old US-23 shall be 50 feet. All accessory equipment shall be subject to the same requirements. Setback requirements for all yards may be increased or decreased by the Planning Commission based upon impacts to existing or likely adjacent development.

District	FR	PCI	PIRO-A	PIRO-B	PIRO-C
Front Yard Setback	*50	100	100	100	100
Side Yard Setback	30	30	30	30	30
Rear Yard Setback	75	30	30	30	30

*In the FR district if the prevailing setbacks of structures on adjacent properties within 500 feet are greater than 50 feet the front yard setback must be increased to those average setbacks, but is not required to be greater than 150 feet.

STAFF COMMENTS: *The above setback provisions should clarify how they are measured. There are several different alternatives. For example, setbacks can be measured from the property line or road ROW to the closest point at minimum tilt or from any solar energy system component. If the solar energy system facility is located next to a residential zoning district, the township may want to consider expanding these setback requirements to decrease the undesirable aspects of the facility on these neighboring properties (glare, noise, visual impacts, etc.).*

The Township proposes to allow Utility Scale Solar Energy Facilities as a Special Use in the FR, PCI, and PIRO A, B, and C zoning districts. The intent statement for each of these districts are listed below:

SECTION 4.00 INTENT

The intent of the FR Farming Residential District is to protect lands best suited to agricultural uses from the encroachment of incompatible uses, while designating an area appropriate to the type of single family residential development that does not alter the general agricultural character of the district. Moreover, the intent also is to protect vital natural resources, including wetlands, inland lake water quality, groundwater supplies, fertile and stable soils, and significant stands of wood lots and vegetative cover. Lands in the FR and RE District are not likely to be served with centralized public water and sewer facilities.

SECTION 13A.00 INTENT

The PCI Planned Commercial Industrial District is designed to accommodate land extensive commercial uses serving both residents and businesses in the Township. These uses typically



include outdoor storage or display, may require large sites, access to a major thoroughfare, and may have offsite impacts. Standards are provided to create an environment of consistent attractive character and design with generous landscaping, screening, and attractive buildings, where permitted uses will not negatively impact adjacent uses in other zoning districts. The PCI District is intended to be located near the freeway, with interchange access but not immediately adjacent to the interchange. Therefore, the appearance of uses in this district is important to the image of the community and maintaining the quality of life.

SECTION 16A.00 INTENT

The intent of the PIRO District is to encourage the development of a high quality office, research and industrial environment, in campus-type settings with generous landscaping, low intensity lot coverage, and preserving significant natural features. Such areas are often visible from freeways, in high image locations and can impact the impression the Township makes on visitors and travelers, which influences the marketability of the land and the community.

The PIRO District is intended to provide a desirable location for larger office, light industrial, and limited heavier industrial uses as provided in the table of permitted and special uses provided below. The District provides opportunities for enterprises to locate office facilities with laboratories or small assembly or distribution sites nearby. By integrating these uses into a planned development, potential impacts of the heavier uses may be mitigated.

The distribution of land uses in the PIRO District is regulated in three sub-districts: PIRO-A (Research and Office), PIRO-B (Light Industry), and PIRO-C (General Industry). The subdistricts are designated to ensure that appropriate land transitions occur and that potential use incompatibilities are avoided. The planned location of these sub-districts is illustrated and described in the Future Land Use Plan chapter of the Tyrone Township Master Plan. Development of PIRO-zoned land shall be consistent with this Plan, as determined by the Township. The boundaries of the sub-districts as illustrated on the Future Land Use Map are general, allowing for flexibility when rezoning to one or more of the PIRO sub-districts. When reviewing a potential rezoning, the Township shall consider the proposed location and range of uses that would be permitted in the context of the overall PIRO planned district, to ensure that the purpose and intent of these regulations will be maintained, including proper land transitions and protections from negative impacts and incompatible uses. The Township's Zoning Map shall identify the boundaries of each sub-district as it is adopted, and the land within each sub-district shall be regulated as provided herein.

Use of the Planned Unit Development (PUD) process is encouraged for sites larger than 20 acres. This will provide additional flexibility to the property owner and designer, and further enable coordination among various on-site uses.

Staff would recommend that the Township reevaluate including the FR Farming Residential zoning district into the group of targeted districts for utility-scale solar energy facilities. While the district is the largest zoning district in the Township by acreage, which means that there are still large unoccupied parcels available, the intent of the district does not support the development of utility-scale solar energy facilities in these areas. As the intent statement states: the desired characteristics of the FR district are: "the protection of lands



best suited to agricultural uses from the encroachment of incompatible uses, while designating an area appropriate to the type of single family residential development that does not alter the general agricultural character of the district. The intent of the district is also the protection of vital natural resources, including wetlands, inland lake water quality, groundwater supplies, fertile and stable soils, and significant stands of wood lots and vegetative cover. Therefore, staff does not believe that the development of utility-scale solar energy facilities is conducive to the continued long-term viability of the intended nature of this zoning district.

In addition, staff believes that the PCI and specifically the PIRO-B and PIRO-C zoning Districts would be the more suitable for supporting utility-scale solar energy facilities. While the intended development pattern within these districts calls for a campus-like atmosphere with “generous landscaping, low intensity lot coverage, and preserving significant natural features”, the inherent characteristics of these areas, are that they are intended to support “a desirable location for larger office, light industrial, and limited heavier industrial uses as provided in the table of permitted and special uses [for each district]”. Thus, these areas would be more conducive to supporting utility-scale solar energy facilities than the FR Farming Residential zoning district.

Also, the text states that these areas fall under the category of “PUDs”, or Planned Unit Developments. Therefore, the use of the PUD process is encouraged for sites larger than 20 acres (typically utility-scale solar facilities are much larger than 20 acres in area) and provides additional flexibility to the development and design process and further enable coordination among various on-site uses.

As staff was unable to identify any PIRO-designated zoning districts on the current zoning map available online, it is highly recommended that the township consider adding these areas in the desired locations so that the official zoning map of the township identifies all districts identified in the map legend (currently it is somewhat confusing).

c. Height. The height of the solar energy system and any mounts shall not exceed 15 feet when oriented at maximum tilt.

***STAFF COMMENT:** Staff would recommend revising this provision to be a bit more inclusive of all components associated with the utility-scale solar energy facility in the following manner:*

The height of the Commercial Solar Energy System and any mounts, buildings, accessory structures, and related equipment must not exceed fifteen (15) feet when orientated at maximum tilt. Lightning rods may exceed fifteen (15) feet in height, but they must be limited to the height necessary to protect the Commercial Solar Energy System from lightning.

d. Screening. Landscaping shall be provided to screen the racking and any accessory equipment from view at a six (6) foot ground level from adjacent properties or public rights-of-way, unless otherwise determined and/or modified by the Planning Commission and/or Township Board.

***STAFF COMMENT:** Staff would recommend revising this provision to be a bit more comprehensive and descriptive. An example would be the following:*



Screening and Vegetation.

Greenbelt screening is required around any Commercial Solar Energy System and around any equipment associated with the system to obscure, to the greatest extent possible, the Solar Energy System from any adjacent residences. The greenbelt must consist of shrubbery, trees, or other non-invasive plant species that provide a visual screen. At least 50% of the plants must be evergreen trees that are at least six feet tall at the time of planting. In lieu of a planting greenbelt, a decorative fence that is at least 50% opaque and that meets the requirements of this Ordinance applicable to fences may be used if approved by the Planning Commission. Each owner, operator, or maintainer of any Commercial Solar Energy System to which this ordinance applies shall utilize good husbandry techniques with respect to said vegetation, including but not limited to, proper pruning, proper fertilizer, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted at the next appropriate planting time. Plants or grasses not part of the buffer area shall be maintained by the facility operator not to exceed a height of twelve (12) inches.

Staff would also encourage staggering of any shrubbery, trees, or non-invasive plant species within the established greenbelt.

Staff would also recommend that the applicant/solar developer provide a long-term landscaping maintenance plan at the time of application or prior to final approval by the Township.

e. Glare. Solar energy systems must be placed and oriented such that concentrated solar radiation or glare does not project onto roadways and nearby properties. Applicants have the burden of proving any glare produced does not cause annoyance, discomfort, or loss in visual performance and visibility.

STAFF COMMENT: To ensure compliance with this provision, the township should require that the applicant/solar developer provide a Glare Study. The provision of such a study could be described in the following manner:

Glare Study: An analysis by a third-party qualified professional to determine if glare from the SES will be visible from nearby residents and roadways. If required, the analysis shall consider the changing position of the sun throughout the day and year, and its influence on the SES.

f. Batteries and Accessory Equipment. When solar storage batteries are included as part of the solar energy system, they must be placed in a secure container or enclosure when in use, and when no longer used shall be disposed of in accordance with applicable laws and regulations.

STAFF COMMENT: If possible, Staff would recommend against permitting on-site battery storage for safety and welfare of local residents and emergency response personnel that may not be properly trained in dealing with these specialized emergency situations.

g. Natural Feature Preservation. The plan for installation of a solar farm shall include a tree survey and plan for cutting of trees greater than 6" DBA. No such trees shall be cut in any required



setback other than those reasonably required for the installation of a drive to access the facility. Retention of natural grades, soils, and groundcover material is encouraged where feasible.

STAFF COMMENT: In this same regard, staff would recommend adding the following provision:

Environmental Impact Analysis: An applicant shall have a third-party qualified professional conduct an analysis to identify and assess any potential impacts on the natural environment including, but not limited to, wetlands and other fragile ecosystems, historical and cultural sites, and antiquities. The applicant shall take appropriate measures to minimize, eliminate, or mitigate adverse impacts identified in the analysis.

An applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts. The applicant shall comply with applicable parts of the following:

- Michigan Natural Resources and Environmental Protection Act (Act 451 of 1994, MCL 324.101 et seq.) including but not limited to Part 31 Water Resources Protection (MCL 324.3101 et seq.).
- Part 91 Soil Erosion and Sedimentation Control (MCL 324.9101 et seq.), Part 301 Inland Lakes and Streams (MCL 324.30101 et seq.).
- Part 303 Wetlands (MCL 324.30301 et seq.).
- Part 323 Shoreland Protection and Management (MCL 324.32301 et seq.).
- Part 325 Great Lakes Submerged Lands (MCL 324.32501 et seq.).
- Part 353 Sand Dunes Protection and Management (MCL 324.35301 et seq.).

Other types of analysis that may be of benefit to the township, which have been utilized in other utility scale solar energy system ordinances, to include as part of the required application/permit package, consist of the following:

• Wildlife Impact Analysis:

An applicant shall have a third-party qualified professional conduct an analysis to identify and assess any potential impacts on wildlife and endangered species. The applicant shall take appropriate measures to minimize, eliminate, or mitigate adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts. Sites requiring special scrutiny include wildlife refuges, other areas where birds are highly concentrated, bat hibernacula, wooded ridge tops that attract wildlife, sites that are frequented by federally or state listed endangered species of birds and bats, significant bird migration pathways, and areas that have landscape features known to attract large numbers of raptors. At a minimum, the analysis shall include a thorough review of existing information regarding species and potential habitats in the vicinity of the project area. Where appropriate, surveys for bats, raptors, or general avian use should be conducted. The analysis shall include the potential effects on species listed under the federal Endangered Species Act and Michigan's Endangered Species Protection Law. The applicant shall follow all pre-construction and post-construction recommendations of the United States Fish and Wildlife Service. The analysis shall indicate whether a



post-construction wildlife mortality study will be conducted and, if not, the reasons why such a study does not need to be conducted. Power lines should be placed underground, when feasible, to prevent avian collisions and electrocutions. All aboveground lines, transformers, or conductors should follow any Avian Power Line Interaction Committee (APLIC, <http://www.aplic.org/>) guidelines to prevent avian mortality.

- **Provision of Manufacturers' Safety Data Sheet(s) on-site:**

Documentation shall include the type and quantity of all materials used in the operation of all equipment.

- **Fire Suppression Plan:**

A plan describing the fire suppression process and procedure, as well as training for emergency personnel.

- **Anticipated Construction Schedule**

- **Permits from the Livingston County Road Commission and/or Michigan Department of Transportation (MDOT) for permission to connect access roads to existing County roads and from the Livingston County Drain Commission for any culverts or other drainage facilities.**

- **A complete set of photos and video of the entire development area prior to construction. This would be helpful historical documentation for the township to secure and to refer to once the time comes for decommissioning and redevelopment as agricultural or other prior land use activities takes place.**

h. Drainage and Stormwater. Solar energy facilities shall not increase stormwater runoff onto adjacent properties. The application shall include a drainage plan prepared by a registered civil engineer showing how stormwater runoff shall be managed and demonstrating that runoff from the site shall not exceed the agricultural runoff rate or otherwise cause undue flood. Any necessary permits from outside agencies for off-site discharge shall be provided. It should also be demonstrated that maintenance procedures and products will not introduce chemicals or create detrimental impacts to the natural environment, groundwater, and wildlife. Detergents should be of a biodegradable variety, and frequency of anticipated cleaning should be described.

STAFF COMMENT: To ensure compliance with this provision, the township should require that the applicant/solar developer provide a Stormwater Study. The provision of such a study could be described in the following manner:

Stormwater Study: An analysis by a third-party qualified professional that takes into account the proposed layout of the SES and how the spacing, row separation, and slope affects stormwater infiltration, including calculations for a 100-year rain-event (storm). Percolation tests or site-specific soil information shall be provided to demonstrate infiltration on-site without the use of engineered solutions.

i. Lot Coverage. Impervious surfaces required for the installation of ground-mounted solar energy systems shall be subject to the maximum lot coverage standards of the zoning district. Impervious surfaces for the purpose of calculating lot coverage for solar energy systems include, but are not limited to, mounting pads, footings, concrete or asphalt driveways and walkways, and



accessory structures. In the case of a solar energy system on a lease unit, maximum lot coverage standards shall apply for each parcel included within a lease unit.

STAFF COMMENT: Staff prefers this arrangement in determining maximum lot coverage as opposed to a set percentage that some communities chose to use.

j. Abandonment and Removal. If a solar energy system ceases to perform its intended function (generating electricity) for more than 12 consecutive months, the operator shall remove the collectors, mounts, and associated equipment and facilities no later than 90 days after the end of the 12-month period. Where the removal has not been lawfully completed as required above, and after at least 30 days' written notice, the Township may remove or secure the removal of the solar energy system or portion thereof, with the Township's actual cost and reasonable administrative charges to be covered by the operator's security bond. Any costs incurred by the Township above and beyond the value of the security bond will be the responsibility of the operator.

STAFF COMMENT: Within this same context, the township should consider adding provisions for repowering the facility, in cases where repairs or replacements to solar energy system components are necessary, in order to properly maintain the system. These regulatory provisions should only pertain to repowering the solar energy system in order to maintain or increase the power rating within the EXISTING project footprint. Any proposal to change the project footprint of an existing solar energy system should be processed as a NEW application and permit.

k. Decommissioning. The ground shall be restored to its original condition within 60 days of removal of structures. Acceptable ground covers include grasses, trees, crops, or other material demonstrated to be characteristic of the surrounding land. All above and below ground materials shall be removed when the solar energy system is decommissioned.

STAFF COMMENT: As part of this process, the township must consider what, if any, infrastructure would be allowed to remain on site (service road, fencing, etc.).

The decommissioning process should take on the form of an overall comprehensive plan.

l. Security. A letter of credit, cash deposit, or other security instrument found acceptable to the Tyrone Township Board. The owner(s) and/or operator of the solar energy facility shall post a security instrument in a form acceptable to the Township equal to one-hundred fifty (150) percent of the total estimated decommissioning and reclamation costs. The cost of decommissioning shall be re-reviewed and submitted to the Township annually to ensure adequate funds are allocated for decommissioning. The security instrument, defined herein, shall be appropriately adjusted to reflect the current decommissioning estimate.

- i. The applicant shall engage a certified professional engineer acceptable to the Township to estimate the total cost of decommissioning all structures in the facility in accordance with the requirements of this Ordinance, including reclamation to the original site conditions.



- ii. A security bond, if utilized, shall be posted and maintained with a bonding company licensed in the State of Michigan or a Federal or State-chartered lending institution acceptable to the Township.
- iii. Any bonding company or lending institution shall provide the Township with 90 days' notice of the expiration of the security bond. Lapse of a valid security bond is grounds for the actions defined in Subsection v., below.
- iv. In the event of sale or transfer of ownership and/or operation of the solar energy facility, the security instrument shall be maintained throughout the entirety of the process.
- iv. If at any time during the operation of the solar energy facility or prior to, during, or after the sale or transfer of ownership and/or operation of the facility the security instrument is not maintained, the Township may take any action permitted by law, revoke the special land use, order a cessation of operations, and order removal of the structure and reclamation of the site.
- v. The security instrument shall be maintained until decommissioning and removal has been completed to the satisfaction of the Township.

2. Site Plan Approval and Supporting Materials. All applications for Utility-scale Solar Energy Facilities must be accompanied by detailed site plans, drawn to scale and dimensioned and certified by a registered engineer licensed in the State of Michigan. All site plans shall conform to the requirements of Article 23.

In addition they shall display the following information:

- a. All lot lines and dimensions, including a legal description of each lot or parcel comprising the Utility-scale Solar Energy Facility.
- b. Vicinity map showing the location of all surrounding land uses.
- c. Location and height of all proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing, and all aboveground structures and utilities associated with a Utility-scale Solar Energy Facility.
- d. Horizontal and vertical to scale drawings (elevations) with dimensions that show the location of the proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing and all above ground structures and utilities on the property.
- e. Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Utility-scale Solar Energy Facility and within one hundred (100) feet of all exterior property lines of the Utility-scale Solar Energy Facility. (exterior means the physical property lines versus the lease unit boundary lines)



- f. Proposed setbacks from the Solar Array(s) to all existing and proposed structures within the Utility-scale Solar Energy Facility.
- g. Topography for the Solar Array(s) location and the relationship to the land elevations of all existing and proposed structures within the Utility-scale Solar Energy Facility at a minimum of two (2) foot contour intervals.
- h. Access driveways within and to the Utility-scale Solar Energy Facility, together with a detailed narrative regarding dimensions, composition, and maintenance of each proposed driveway. All access driveways shall be subject to Livingston County Road Commission (LCRC) approval and shall be planned so as to minimize the use of lands for that purpose.
- i. Planned security measures to prevent unauthorized trespass and access during the construction, operation, removal, maintenance or repair of the Utility-scale Solar Energy Facility.
- j. A written description of the maintenance program to be used for the Solar Array(s) and other components of the Utility-scale Solar Energy Facility, including decommissioning and removal. The description shall include maintenance schedules, types of maintenance to be performed, and decommissioning and removal procedures and schedules if the Utility-scale Solar Energy Facility is decommissioned.
- k. Planned lightning protection measures.
- l. Additional detail(s) and information as required by the Tyrone Township Zoning Ordinance, or as required by the Planning Commission and/or Township Board.

STAFF COMMENT: In addition to the application items listed above, the township should consider including any number of the following additional application items:

- A plan for resolving complaints from the public or other property owners concerning the construction and operation of the Commercial Solar Energy System, which is subject to the Township's review and approval.
- A plan for managing any hazardous waste, which is subject to the Township's review and approval.
- A transportation plan for construction and operation phases, including any applicable agreements with the County Road Commission and Michigan Department of Transportation, which is subject to the Township's review and approval.
- An attestation that the applicant will indemnify and hold the Township harmless from any costs or liability arising from the approval, installation, construction, maintenance, use, repair, or removal of the Solar Energy System, which is subject to the Township's review and approval.

ADDITIONAL STAFF COMMENTS: At a minimum, staff would recommend that the township add the following definitions related to utility-scale solar energy facilities:



Solar Energy: The following definitions shall apply in the application of this Ordinance.

- 1. Abandonment:** Any solar energy system or facility that is no longer producing power.
- 2. Building Integrated Photovoltaics (BIPVs):** A private or utility solar energy system that is integrated into the structure of a building, such as solar roof tiles or solar shingles.
- 3. Decommission:** To remove or retire a solar energy system or facility from active service.
- 4. Ground-Mounted Solar Energy System:** A private or utility solar energy system that is not attached to or mounted on any roof or exterior wall of any principal or accessory building.
- 5. Height:** The height of a solar energy system, measured vertically from the adjacent grade to its highest point at maximum tilt.
- 6. Inhabited Structure:** Any existing structure usable for living or non-agricultural commercial purposes, including, but not limited to: working, sleeping, eating, cooking, recreation, office, office storage, or any combination thereof. An area used only for storage incidental to a residential use, including agricultural barns, is not included in this definition. If it is not clear by this definition, the Zoning Administrator shall make a determination of any structure regarding whether or not it is inhabited.
- 7. Non-Participating Property:** A property that is not subject to a Utility Solar Energy Facility lease or easement agreement at the time an application is submitted for a Special Land Use for the purposes of constructing a Utility Solar Energy Facility.
- 8. Participating Property:** A property that participates in a lease or easement agreement, or other contractual agreement, with or that is owned by an entity submitting a Special Land Use Permit application for the purpose of developing a Utility Solar Energy Facility.
- 9. Private Solar Energy System:** A Solar Energy System used exclusively for private purposes and not used for commercial resale of energy, except for the sale of surplus electrical energy back to the electrical grid.
- 10. Roof or Building-Mounted Solar Energy System:** A private or utility solar energy system that is attached to or mounted on any roof or exterior wall of any principal or accessory building but excluding BIPVs.
- 11. Solar Energy System:** A device designed to collect and transform solar energy into electricity.
- 12. Solar Farm:** See Utility Solar Energy Facility.
- 13. Utility Scale Solar Energy System or Facility:** A Solar Energy System where the principal design, purpose, or use of such system is to provide energy to off-site uses or the wholesale or retail sale of generated electricity to any person or entity.

As an example of one of the more preferred development methods regarding regulating utility-scale solar energy facilities that County Planning Staff and the County Planning Commission has recently received for review and recommendation was submitted by Marion Township. Marion Township has established an overlay zone for siting this land use within its township (since the map's initial conception, the Township has been diligently revising the overall area boundaries and has reduced the size considerably). The following are the intent statements and associated permitted and special use provisions along with the initial proposed Overlay District Map for this district:



SFO: Solar Farm Overlay District

Intent: It is the intent of the Solar Farm Overlay District (SFO) to provide for the location and siting of Utility Solar Energy Facilities to promote economic development while protecting the public health, safety, and welfare; mitigating adverse impacts to agricultural lands, natural and environmentally-sensitive areas, and developed residential areas; and preserving scenic views and cultural resources. The Solar Farm Overlay District is intended to include areas with large tracts of land in proximity to electrical transmission lines to limit potential impact on other areas and uses within the Township.

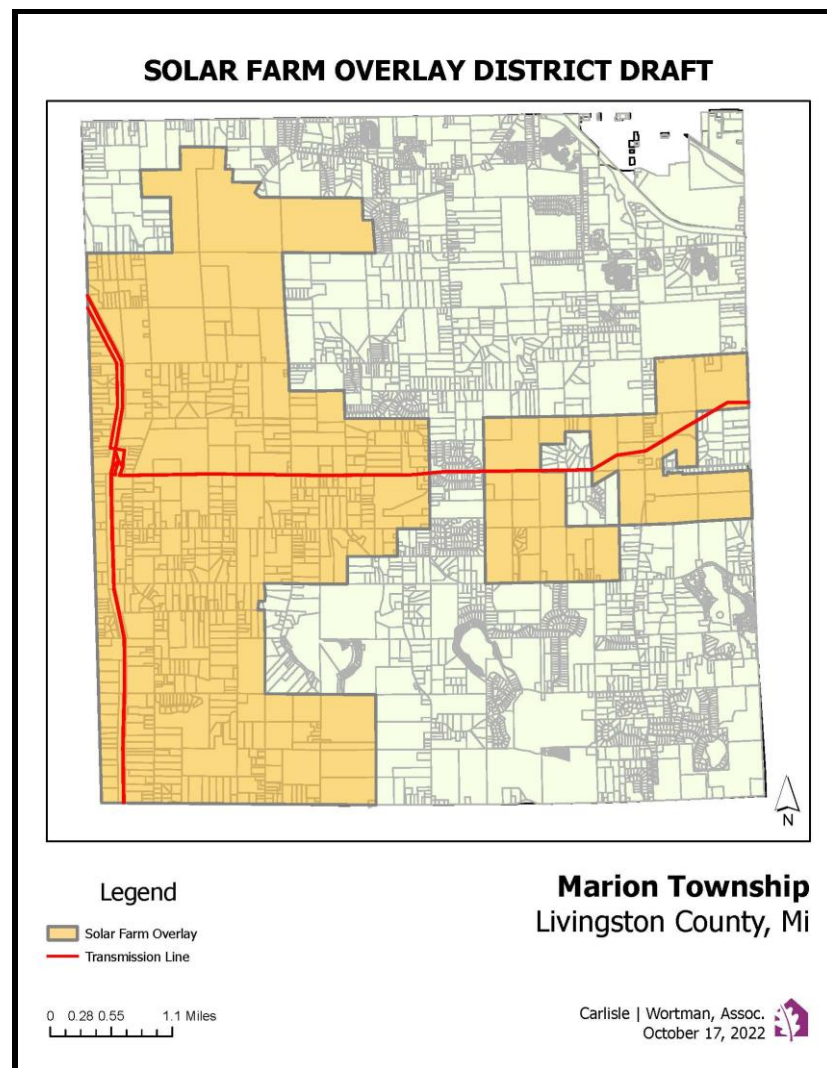
Permitted Accessory Uses:

Accessory uses or structures clearly incidental to the operation of an approved Utility Solar Energy Facility.

Uses Permitted By Special Use Permit: (See specific Provisions in Article XVII)

Utility Solar Energy Facilities.

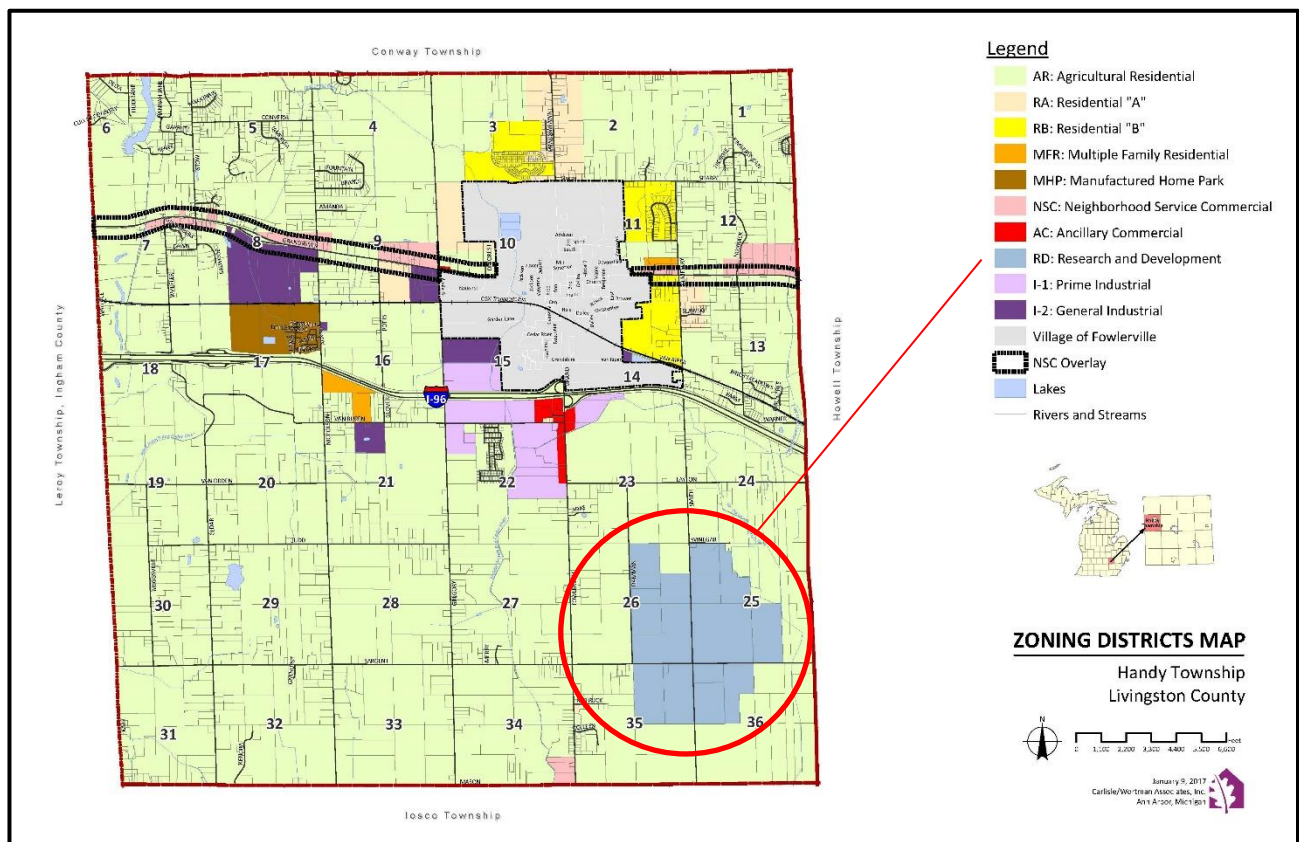
Marion Township Initial Solar Farm Overlay District (as of December 2022)





Another one of the preferred alternatives recently reviewed by County Planning and the County Planning Commission is that of Handy Township. Handy Township's utility solar ordinance utilizes a previously designated and well-established Research and Development zoning district (located southeast of the Village of Fowlerville) by which to plan and allow for future utility-scale solar energy facility development. The benefit of this alternative is that the site is of relative size to support this type of land use activity (200 acres+) and is in close proximity to an existing overhead high power electricity line corridor. Handy Township has chosen to prohibit utility-scale solar energy facilities on PA 116 lands (which are allowed in other, more appropriate lands within the township, thus, the township is proactively protecting the community's agricultural and rural, open space nature while also allowing this new renewable energy source at a well defined area of the township.

Handy Township R & D Zoning District (highlighted below)





The Township should also decide whether it wishes to permit utility-scale solar energy facilities on properties enrolled in the PA 116 Farmland and Open Space Preservation Program.

If not already done so, it would be beneficial for the township consider all permutations of solar energy systems: accessory roof-mounted, accessory ground mounted, principal use (small-scale), and principal use (large-scale, utility-scale).

It's also important to include the following provisions in any utility-scale solar energy facilities ordinance:

Validity and Severability

If any portion of this Ordinance is found invalid for any reason, such holding will not affect the validity of the remaining portions of this Ordinance.

Repealed

All other ordinances inconsistent with the provisions of this Ordinance are hereby repealed to the extent necessary to give this Ordinance full force and effect.

Effective Date

This Ordinance takes effect seven (7) days after publication as provided by law.

Lastly, it's very important to consult with and utilize township legal counsel with developing the township's solar energy facility ordinance language.

There are now available Community Energy Management Incentive Programs available to upgrade plans and ordinances for renewable energy:

*Grants for updating plans and ordinance for renewables:
up to \$25,000*

sending postcards to residents for planning process, support for public meetings, etc.

2023 cycle open – January 1 -May 31 or until funds are 100% committed:

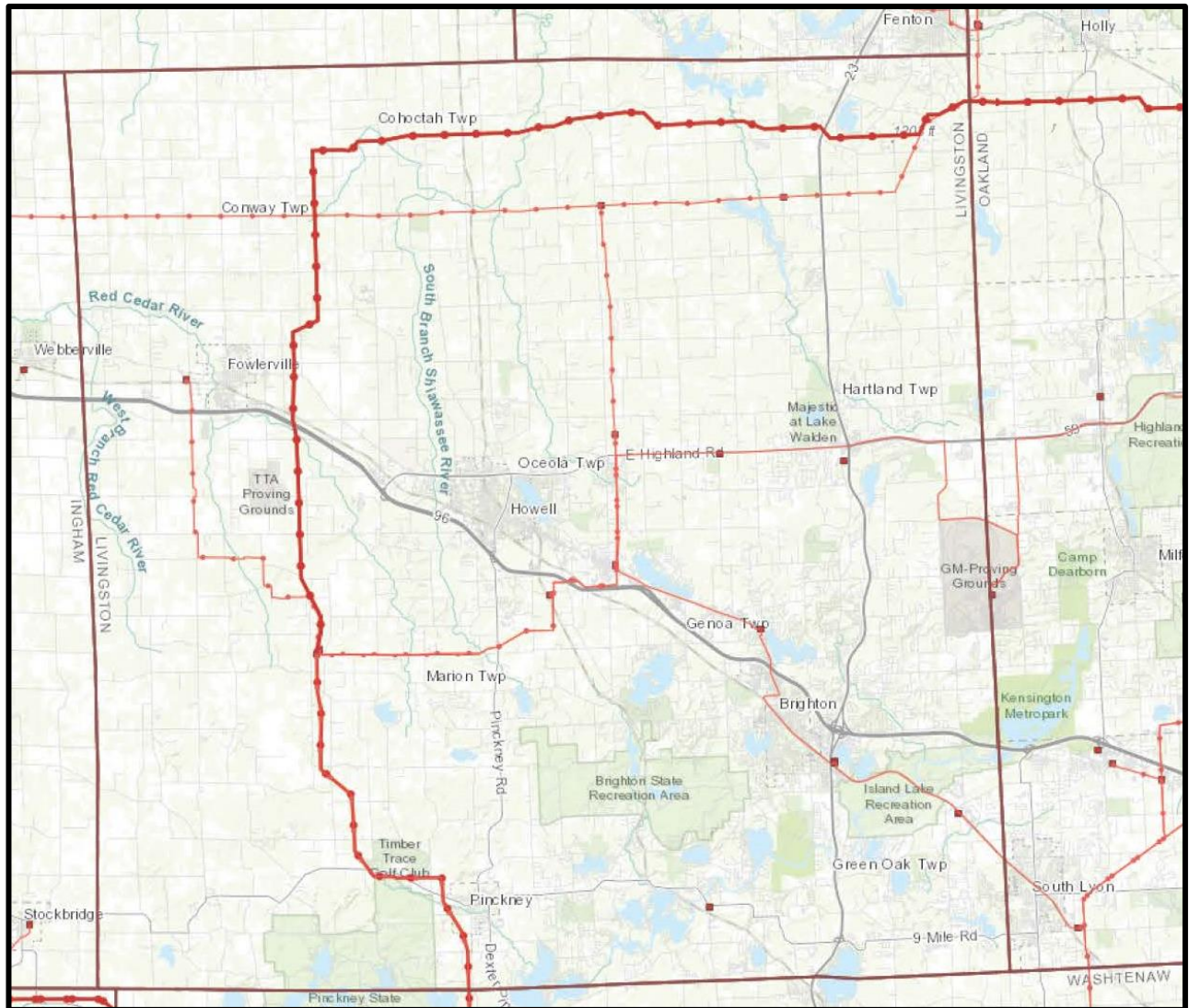
Email: Jessica Crawford: crawfordj15@michigan.gov

Apply at: www.michigan.gov/energy

County Planning Staff hopes that Tyrone Township finds this courtesy review helpful and derives some practical benefit from it when determining whether to revise its current standards. County Planning Staff is always willing to share best practices it becomes aware of with all 20 of our local community planning partner communities, either knowledge gained in the course undertaking the monthly review of township zoning and master plan amendments submitted by one or many of our fourteen local township planning partners, or via the numerous planning conferences, webinars and training sessions attended by staff on a regular basis.



The map below provides the location of all main electrical transmission lines in the County.



Livingston County Electric Transmission Lines

Source: <https://ezmt.anl.gov>

ARTICLE 22 SPECIAL LAND USES

SECTION 22.00 INTENT

The formulation and enactment of this ordinance is based upon the division of the unincorporated portions of the township into districts, in each of which are specified permitted uses that are mutually compatible. In addition to such permitted compatible uses, it is recognized, however, that there are certain other land uses, which may be necessary or desirable in certain districts, but on account of their actual or potential impact on neighboring uses or public facilities, need to be carefully regulated with respect to their location for the protection of township residents. This ordinance, therefore, requires approval and issuance of a special land use permit for each use listed in the several zoning districts as special land uses, and specifies in this Article the procedures and standards to be followed in granting such permits. A special land use shall not commence until a special land use permit is issued in accordance with this ordinance.

SECTION 22.01 AUTHORITY TO GRANT OR DENY PERMITS

The Township Planning Commission, after review and consideration of the special land use application and site plan according to the standards contained in this ordinance, shall recommend to the Township Board approval, disapproval or approval with conditions of the proposed special land use. The Township Board grants either approval, denial, or approval with conditions to the special land use application. Only the Township Board may direct the Zoning Administrator to issue a special land use permit. The Township Board shall establish financial guarantee and other performance requirements based on the type of special use, the district, and the specific conditions included in the permit. The financial guarantee shall be required to ensure completion of specific land or structure improvement(s), and to ensure ongoing compliance with the stated permit conditions.

SECTION 22.02 PERMIT PROCEDURES

An application made without full compliance with this ordinance shall be returned to the applicant. Every submission shall include the following information and data:

- A. Application:** Application for any special land use permit permissible under the provisions of this ordinance shall be made to the Tyrone Township Clerk by filling in the official special land use permit application form, submitting required data, exhibits and information, and depositing the required fee. The applicant shall pay a fee set by the Tyrone Board, except that a fee may be waived by the Township Board for any

governmental body or agency. No part of such fee shall be returnable to the applicant. The Township Clerk shall forward the official special land use permit application form and all related materials to the township Planning Commission at least fifteen (15) days prior to the next regular scheduled meeting.

B. Data Requirement: Every application shall be accompanied by the following information and data:

- 1. Special Land Use Permit Application.** A Special Land Use Permit Application supplied by the Township Clerk and filled out by the applicant.
- 2. Statement of Use.** The special land use permit application shall contain a full statement of the requested use, the number of the ordinance article allowing provisions for the special land use requested, the reasons why the applicant feels the land use requested should be granted, substantiated by data, exhibits, information, and evidence regarding the requested findings as set forth in Section 22.05 of this Article, the applicant's signature(s), and the owner's notarized signature(s), if different from the applicant's. It shall be the obligation of the applicant to furnish sufficient evidence, or proof, of present and future compliance with the provisions of this ordinance.
- 3. Representative.** Where an agent represents an applicant, a letter designating agent authority and signed by the applicant shall accompany the special land use permit application.
- 4. Site Plan.** A detailed site plan that satisfies all requirements set forth in Article 23.
- 5. Additional Information.** Upon review of the accepted special land use permit application, the Planning Commission shall have the authority to request additional information as it may deem necessary to make a determination of the request
- 6. Land Use Permit.** The special land use permit shall be attached to an application for a land use permit that has been obtained from, and reviewed by the Zoning Administrator in accordance the provisions of this ordinance.

C. Excavation and Construction. Until a special land use permit has been issued with a proper land use permit there shall be neither construction nor excavation on any land, nor shall there be made any use of land related to the request for the special land use permit.

- D. Review Standards.** The Tyrone Township Planning Commission shall review the proposed development as presented on the submitted plans and specifications in accordance with the established standards set forth in this ordinance.

SECTION 22.03 PUBLIC HEARINGS AND NOTICES

- A. Publishing.** The Planning Commission shall hold a public hearing on an application for a special land use permit within a reasonable time period following receipt of the application. The public hearing may be scheduled for the same date as the Commission's regular meeting, provided that the meeting date does not conflict with the notice requirements in the following paragraph.

A notice that a request for a special land use approval will be reviewed and considered by the Planning Commission shall be published in a newspaper of general circulation in the township, and sent by mail or personal delivery to the owners and occupants of property for which approval is being considered. A notice shall also be sent to the property owners and occupants of all property within three hundred (300) feet of the subject property regardless of whether the property or occupant is located in Tyrone Township. The notice shall be given not less than fifteen (15) days nor more than sixty (60) before the date of the public hearing. If the name of the occupant is not known, the term "occupant" may be used in making notification. Notification need not be given to more than one (1) occupant of a structure, except that if a structure contains more than one (1) dwelling unit or spatial area owned or leased by different individuals, partnerships, businesses, or organizations, one (1) occupant of each unit or spatial area shall receive notice.

- B. Public Notice Content.** The notice shall:

- 1. Nature of the Request.** Describe the nature of the special land use request.
- 2. Property Location.** Indicate the location of the property by street address, if known, which is the subject of the special land use request.
- 3. Date and Time.** State when and where the public hearing for the special land use request will be considered.
- 4. Location.** Indicate when and where written comments will be received concerning the request.

SECTION 22.04 GENERAL REVIEW STANDARDS FOR ALL SPECIAL LAND USES

In addition to specific standards for individual special land uses listed in Section 22.05, the following general standards shall be satisfied for the use at the proposed location prior to approving a special land use permit:

- A. Master Plan.** The special land use will be consistent with the goals, objectives and future land use plan described in the Township's Master Plan.
- B. Zoning District.** The special land use will be consistent with the stated Intent of the zoning district.
- C. Neighborhood Compatibility.** The special land use will be designed, constructed, operated and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity in consideration of environmental impacts, views, aesthetics, noise, vibration, glare, air quality, drainage, traffic, property values or similar impacts.
- D. Environment.** The special land use will not significantly impact the natural environment.
- E. Public Services.** The special land use can be served adequately by public facilities and services such as police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools.
- F. Traffic.** The proposed use shall be of a nature that will make vehicular and pedestrian traffic no more hazardous than is normal for the district involved, taking into consideration the following:
 - 1. Turning.** Vehicular turning movements;
 - 2. Intersections.** Proximity and relationship to intersections;
 - 3. Sight Distance.** Adequacy of sight distances;
 - 4. Parking.** Location and access of off-street parking; and,
 - 5. Pedestrian Access.** Provisions for pedestrian traffic.
- G. Additional Development.** The proposed use shall be such that the location and height of buildings or structures, and the location, nature and height of walls, fences, and landscaping will not interfere with or discourage the appropriate development and use of adjacent land and buildings or unreasonably affect their value.

- H. Health, Safety and Welfare.** The proposed use shall be designed, located, planned, and operated to protect the public health, safety, and welfare.

SECTION 22.05 SITE DESIGN CONDITIONS

All special land uses shall comply with the site plan design requirements of Article 23. In addition, certain special land uses shall also comply with design conditions unique to that use. Those special land uses and conditions are listed herein.

T. Utility-scale Solar Energy Facilities.

Tyrone Township recognizes the positive environmental impact solar energy systems promise as an energy alternative to traditional sources. Concurrently, the Township has an obligation to ensure use of lands within its jurisdiction provide a net positive effect in terms of impact, support of the Township Master Plan, and availability of land resources.

- 1. Regulations.** The following regulations are intended to ensure the interests of the landowner and the Township are achieved harmoniously with no negative effect to the long-term viability of the subject property or those surrounding it. In zoning districts where they are permitted or special land uses, facilities for the capture, storage, and distribution of solar energy for commercial purposes are subject to the following standards:
 - a. Lease Unit Boundary.** The boundary around a parcel, multiple parcels, or portions thereof, leased or purchased for the purposes of operating a solar energy facility. The Lease Unit Boundary may cross road rights-of-way, but required setbacks shall be provided and calculated on each side of any such road.
 - b. Location and Setbacks.** The solar energy system shall not be located closer to the road than any portion of a principal building located on the same parcel. The solar energy facility setback requirements are found in the table below. For parcels abutting Old US-23, the minimum setback from Old US-23 shall be 50 feet. All accessory equipment shall be subject to the same requirements. Setback requirements for all yards may be increased or decreased by the Planning Commission based upon impacts to existing or likely adjacent development.

District	FR	PCI	PIRO-A	PIRO-B	PIRO-C
Front Yard Setback	*50	100	100	100	100
Side Yard Setback	30	30	30	30	50
Rear Yard Setback	75	30	30	30	50

*In the FR district if the prevailing setbacks of structures on adjacent properties within 500 feet are greater than 50 feet the front yard setback must be increased to those average setbacks, but is not required to be greater than 150 feet.

- c. **Height.** The height of the solar energy system and any mounts shall not exceed 15 feet when oriented at maximum tilt.
- d. **Screening.** Landscaping shall be provided to screen the racking and any accessory equipment from view at a six (6) foot ground level from adjacent properties or public rights-of-way, unless otherwise determined and/or modified by the Planning Commission and/or Township Board.
- e. **Glare.** Solar energy systems must be placed and oriented such that concentrated solar radiation or glare does not project onto roadways and nearby properties. Applicants have the burden of proving any glare produced does not cause annoyance, discomfort, or loss in visual performance and visibility.
- f. **Batteries and Accessory Equipment.** When solar storage batteries are included as part of the solar energy system, they must be placed in a secure container or enclosure when in use, and when no longer used shall be disposed of in accordance with applicable laws and regulations.
- g. **Natural Feature Preservation.** The plan for installation of a solar farm shall include a tree survey and plan for cutting of trees greater than 6" DBA. No such trees shall be cut in any required setback other than those reasonably required for the installation of a drive to access the facility. Retention of natural grades, soils, and groundcover material is encouraged where feasible.
- h. **Drainage and Stormwater.** Solar energy facilities shall not increase stormwater runoff onto adjacent properties. The application shall include a drainage plan prepared by a registered civil engineer showing how stormwater runoff shall be managed and demonstrating that runoff from the site shall not exceed the agricultural runoff rate or otherwise cause undue flood. Any necessary permits from outside agencies for off-site discharge shall be provided. It should also be demonstrated that

maintenance procedures and products will not introduce chemicals or create detrimental impacts to the natural environment, groundwater, and wildlife. Detergents should be of a biodegradable variety, and frequency of anticipated cleaning should be described.

- i. **Lot Coverage.** Impervious surfaces required for the installation of ground-mounted solar energy systems shall be subject to the maximum lot coverage standards of the zoning district. Impervious surfaces for the purpose of calculating lot coverage for solar energy systems include, but are not limited to, mounting pads, footings, concrete or asphalt driveways and walkways, and accessory structures. In the case of a solar energy system on a lease unit, maximum lot coverage standards shall apply for each parcel included within a lease unit.
- j. **Abandonment and Removal.** If a solar energy system ceases to perform its intended function (generating electricity) for more than 12 consecutive months, the operator shall remove the collectors, mounts, and associated equipment and facilities no later than 90 days after the end of the 12-month period. Where the removal has not been lawfully completed as required above, and after at least 30 days' written notice, the Township may remove or secure the removal of the solar energy system or portion thereof, with the Township's actual cost and reasonable administrative charges to be covered by the operator's security bond. Any costs incurred by the Township above and beyond the value of the security bond will be the responsibility of the operator.
- k. **Decommissioning.** The ground shall be restored to its original condition within 60 days of removal of structures. Acceptable ground covers include grasses, trees, crops, or other material demonstrated to be characteristic of the surrounding land. All above and below ground materials shall be removed when the solar energy system is decommissioned.
- l. **Security. A letter of credit, cash deposit, or other security instrument found acceptable to the Tyrone Township Board.** The owner(s) and/or operator of the solar energy facility shall post a security instrument in a form acceptable to the Township equal to one-hundred fifty (150) percent of the total estimated decommissioning and reclamation costs. The cost of decommissioning shall be re-reviewed and submitted to the Township annually to ensure adequate funds are allocated for decommissioning. The security instrument, defined herein, shall be appropriately adjusted to reflect the current decommissioning estimate.

- i. The applicant shall engage a certified professional engineer acceptable to the Township to estimate the total cost of decommissioning all structures in the facility in accordance with the requirements of this Ordinance, including reclamation to the original site conditions.
- ii. A security bond, if utilized, shall be posted and maintained with a bonding company licensed in the State of Michigan or a Federal or State-chartered lending institution acceptable to the Township.
- iii. Any bonding company or lending institution shall provide the Township with 90 days' notice of the expiration of the security bond. Lapse of a valid security bond is grounds for the actions defined in Subsection v., below.
- iv. In the event of sale or transfer of ownership and/or operation of the solar energy facility, the security instrument shall be maintained throughout the entirety of the process.
- v. If at any time during the operation of the solar energy facility or prior to, during, or after the sale or transfer of ownership and/or operation of the facility the security instrument is not maintained, the Township may take any action permitted by law, revoke the special land use, order a cessation of operations, and order removal of the structure and reclamation of the site.
- vi. The security instrument shall be maintained until decommissioning and removal has been completed to the satisfaction of the Township.

2. Site Plan Approval and Supporting Materials. All applications for Utility-scale Solar Energy Facilities must be accompanied by detailed site plans, drawn to scale and dimensioned and certified by a registered engineer licensed in the State of Michigan. All site plans shall conform to the requirements of Article 23. In addition they shall display the following information:

- a. All lot lines and dimensions, including a legal description of each lot or parcel comprising the Utility-scale Solar Energy Facility.
- b. Vicinity map showing the location of all surrounding land uses.
- c. Location and height of all proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing, and all above-

ground structures and utilities associated with a Utility-scale Solar Energy Facility.

- d. Horizontal and vertical to scale drawings (elevations) with dimensions that show the location of the proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing and all above ground structures and utilities on the property.
- e. Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Utility-scale Solar Energy Facility and within one hundred (100) feet of all exterior property lines of the Utility-scale Solar Energy Facility. (exterior means the physical property lines versus the lease unit boundary lines)
- f. Proposed setbacks from the Solar Array(s) to all existing and proposed structures within the Utility-scale Solar Energy Facility.
- g. Topography for the Solar Array(s) location and the relationship to the land elevations of all existing and proposed structures within the Utility-scale Solar Energy Facility at a minimum of two (2) foot contour intervals.
- h. Access driveways within and to the Utility-scale Solar Energy Facility, together with a detailed narrative regarding dimensions, composition, and maintenance of each proposed driveway. All access driveways shall be subject to Livingston County Road Commission (LCRC) approval and shall be planned so as to minimize the use of lands for that purpose.
- i. Planned security measures to prevent unauthorized trespass and access during the construction, operation, removal, maintenance or repair of the Utility-scale Solar Energy Facility.
- j. A written description of the maintenance program to be used for the Solar Array(s) and other components of the Utility-scale Solar Energy Facility, including decommissioning and removal. The description shall include maintenance schedules, types of maintenance to be performed, and decommissioning and removal procedures and schedules if the Utility-scale Solar Energy Facility is decommissioned.
- k. Planned lightning protection measures.
- l. Additional detail(s) and information as required by the Tyrone Township Zoning Ordinance, or as required by the Planning Commission and/or Township Board.

SECTION 22.06 REQUIRED STANDARDS AND FINDINGS

- A.** The Planning Commission shall review the particular circumstances and relevant facts concerning each special land use in terms of the standards and required findings listed below. The Planning Commission shall find and record adequate data, information, and evidence showing that the proposed use on the lot in question meets all required standards. The Planning Commission will review each proposal in order to determine that the use(s) envisioned:
- 1. Township Objectives.** Will be harmonious with, and in accordance with, the general objectives of the Tyrone Township Master Plan, and will be consistent with the intent and purpose of this ordinance;
 - 2. Character of the Area.** Will be designed, constructed, operated and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity, and that such use will not change the essential character of the area;
 - 3. Disturbance.** Will not be hazardous or disturbing to existing or future neighboring uses or detrimental to the economic welfare of the community;
 - 4. Environment.** Will be compatible with the natural environment and existing and future land uses in the vicinity;
 - 5. Essential Services.** Will be served adequately by essential public facilities and services, such as highways, streets, police and fire protection, drainage structures, refuse disposal, or that persons or agencies responsible for the establishment of the proposed use(s) shall be able to provide them and that such proposed use(s) will not create excessive additional requirements at public cost for public facilities and services;
 - 6. Detrimental Uses.** Will not involve uses, activities, processes, materials and equipment, and conditions of operation which will be detrimental to any persons, property or the general welfare by reason of excessive smoke, fumes, glare, noise, vibration, odor, or handling of storage of hazardous materials and supplies.
- B. Public Record.** The Planning Commission shall record all data, information, and evidence of the findings of Section 22.05 as a matter of public record.

SECTION 22.07 DETERMINATION

- A. Recommendation to the Board.** The Planning Commission may recommend approval, denial, or approval with conditions of a request for special land use based on the findings of Section 22.05. Any conditions proposed shall meet all of the following requirements:
- 1. Community Protection.** Be designed to protect natural resources, the health, safety, and welfare and social and economic well being of those who will use the land use or activity under consideration, residents and landowners immediately adjacent to the proposed land use or activity, and the community as a whole.
 - 2. Exercise of Police Powers.** Be related to the valid exercise of the police power, and purposes which are affected by the proposed use or activity.
 - 3. Intent and Purpose of the Zoning Ordinance.** Be necessary to meet the intent and purpose of the zoning ordinance, be related to the standards established in the ordinance for the land use or activity under consideration, and be necessary to insure compliance with those standards.
- B. Statements and Conditions.** The recommendation of a special land use shall be incorporated in a statement containing the conclusions relative to the special land use under consideration which specifies the basis for the decision, and any conditions imposed.
- C. Changes in Conditions.** Any conditions imposed with respect to the approval of a land use or activity shall remain unchanged except upon the mutual consent of the approving authority and the landowner. The Planning Commission shall maintain a record of conditions which are changed.
- D. Final Decision.** The Planning Commission action on the special land use is forwarded to the Township Board, which then shall take action on the application. The decision of the Township Board shall be final.

SECTION 22.08 EXPIRATION OF SPECIAL LAND USE PERMIT

A special land use permit shall be valid for as long as the permitted use continues in accordance with the conditions stated therein, unless otherwise stated in the special land use permit. If there is not compliance with the term of the special land use permit within ninety

(90) days from the date of its issuance, then it shall automatically expire and be of no further effect or validity. The conditions of approval may limit the duration that the special use is granted and/or may require an annual review of the special use. The breach of any condition, safeguard, or requirement shall automatically invalidate the permit granted.

SECTION 22.09 REAPPLICATION

An application for a special land use permit, which has been denied wholly or in part by the Township Board, shall not be resubmitted until the expiration of at least one (1) year from the date of such denial, except on grounds of valid new evidence or proof of changed conditions found by the Township Planning Commission or Township Board.

REVISIONS:

- 2000 DECEMBER - Section 22.03.J; 22.05.0 1-11, 22.05.P 1-9; 22.05.Q.
- 2007 APRIL - Sections 22.03, 22.05.J, 22.05.N.
- 2007 JULY - Section 22.05.K (new) and Section 22.05.R (New).
- 2012 JUNE - Added 22.05.S to include Contractor's Limited Storage.
- 2012 OCTOBER - Amended 22.05.G – Kennels.
- 2013 OCTOBER – Amended 22.05.C – Cemeteries to include RE.
- 2018 FEBRUARY – Amended 22.05.C – Cemeteries - to update special land use requirements.
- 2018 SEPTEMBER – Amended 22.05.F – to include provisions for commercial recreational uses in the FR District.
- 2019 JULY – Added Section 22.05.T Utility-scale Solar Energy Facilities.