



**Hamburg Township
Planning Commission
Hamburg Township Board Room
Wednesday, November 18, 2020 7:00 P.M.**

AGENDA

- 1. Call to order**
- 2. Pledge to the Flag**
- 3. Approval of the Agenda**
- 4. Approval of Minutes**

October 21, 2020 Planning Commission Meeting Minutes
- 5. Call to the Public**
- 6. Old Business**
 - a) Public hearing for Zoning Ordinance Text Amendment (ZTA 20-006) proposes revisions to Section 9.6., Regulation of Floodplain Areas. The proposed amendment would clarify the NFIP requirements; identify the special flood hazard area the township administers; and require a one-foot freeboard, including for equipment or mechanical items, for all residential buildings constructed, substantially improved, and/or reconstructed due to substantial damage throughout the floodplain area.
- 7. New Business**
 - a) Public hearing for Zoning Ordinance Text Amendment (ZTA 20-007) proposes revisions to Article 14 Planned Units Development (PUD). The proposed amendment includes revising wording for clarification purposes, amending the area, height, bulk and layout regulations for ECHO and CHPUD projects, adding regulations to allow more than one type of PUD to be in a single project, and consolidating the review standards for all PUD projects.
 - b) Draft zoning text amendment ZTA 20-008 for alternative energy regulations
 - c) Adoption of 2021 Planning Commission meeting calendar
- 8. Zoning Administrator's Report**
- 9. Adjournment**

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**Hamburg Township
Planning Commission
Wednesday, October 21, 2020
7:00 P.M.**

1. CALL TO ORDER:

The meeting was called to order by Chairman Muck

Chairman Muck stated that he would like to recognize that we lost a member of this Commission, Trustee Annette Koeble who recently passed away suddenly. She was very passionate about the Township and will be greatly missed. The Commission recognized a moment of silence in honor of Trustee Koeble.

Present: Bohn, Hamlin, Leabu, Muck, Muir & Priebe

Absent: (1 Vacancy)

Also Present: Scott Pacheco, Township Planner & Amy Steffens, Planning & Zoning Administrator

2. PLEDGE TO THE FLAG:

3. APPROVAL OF THE AGENDA:

Chairman Muck stated that he would like to add New Business b) ZTA 20-006 to revise the regulations regarding Floodplain Development.

Motion by Priebe, supported by Leabu

To approve the agenda as revised by adding New Business b)

Voice Vote: Ayes: 6 Nays: 0 Absent: 0 1 Vacancy MOTION CARRIED

4. APPROVAL OF MINUTES:

a) September 16, 2020 Planning Commission Meeting Minutes

Motion by Hamlin, supported by Priebe

To approve the minutes of the September 16, 2020 as presented

Voice Vote: Ayes: 5 Nays: 0 Abstain: 1 Absent: 0 1 Vacancy MOTION CARRIED

5. CALL TO THE PUBLIC:

Chairman Muck opened the call to the public. Hearing no comment, the call was closed.

6. NEW BUSINESS:

- a) ZTA 20-004 Riparian Frontage Regulations (Public Hearing): Proposed Zoning Text Amendment to require minimum riparian width regulations for newly created waterfront lots and existing lots with newly created riparian frontage and to clarify the setback for docks, patios and terraces that abut a waterbody. The draft regulations would amend Article 2; Article 7, Section 7.5.1(G); Article 8, Section 8.18.9; Article 9, Section 9.5 and 9.7.

Chairman Muck opened the public hearing. Hearing no comment, the public hearing was closed.

Scott Pacheco, Township Planner, stated that we discussed this at our last meeting. This will put some regulations in place when you have new lots created that have water frontage. There is also language included to clarify the dock regulations that are currently in our ordinance. At the last meeting, there were some suggestions by the Planning Commission. He reviewed all of the proposed options. He stated that the zoning amendment would limit the number of properties that can be created abutting a waterbody. The proposed zoning amendment would be consistent with the 2020 Master Plan Goals to preserve the natural and historic character of Hamburg Township by accommodating a reasonable amount of development, but ensuring the development is in harmony with the natural features and the unique environmental requirements of the Township and to protect, preserve, and enhance whenever possible the unique and desirable natural amenities of Hamburg Township. One of the reasons we are doing these amendments is to try to enact the goals of the Master Plan. He believes that this amendment would do that.

Commissioner Priebe asked Amy Steffens, Planning & Zoning Administrator, if this is user friendly enough for her to administer or if there is anything she would like changed. Steffens stated that as with any ordinance change, the first few times you apply it, it can be more difficult, but she is sure that it will be fine. It was stated that the graphics will help people and explain how to take those measurements.

Commissioner Leabu discussed the property that would be available that some of this applies to. He stated that he does not know if there are any developments left where this would apply. Pacheco stated that this would be mostly on the Huron River and there are some properties on Hamburg Lake as well that could be split. He further discussed some of the larger parcels on the major lakes that are marshy that someone could try to develop on the high land and access through the marsh.

Discussion was held on the keyholing ordinance.

Pacheco stated that the Commission can direct him to make any revisions or make a recommendation to the Township Board for approval of a zoning text amendment. He stated that staff's recommendation is option B because it allows for a more orderly design to the lots. It requires the property to be no less wide than the riparian width at any point.

Further discussion was held on the two options.

Motion by Hamlin, supported by Bohn

To recommend approval to the Township Board of the Zoning Text Amendment ZTA 20-004 Riparian Frontage Regulations amendment Article 2; Article 7, Section 7.5.1(G); Article 8, Section 8.18.9; Article 9, Section 9.5 and 9.7 as outlined as Option B in the Staff's Recommendation dated October 20, 2020

Voice Vote: Ayes: 6 Nays: 0 Absent: 0 1 Vacancy MOTION CARRIED

- b) ZTA 20-006 - Floodplain Development.Regulations revision

Amy Steffens, Planning & Zoning Administrator stated that Hamburg Township participates in the National Flood Insurance Program which allows homeowners who purchase homes using a federally backed mortgage to purchase flood insurance in the floodplain. We also voluntarily participate in the Community Rating

System Program (CSR program). It does not change the material we collect, the zoning requirements or development requirements. It is all administrative work. Because of this program, we can undertake some activities, some of which are required to be in the program, such as collecting elevation certificates at the end of a project constructed within a flood plain, and a number of things we do throughout the year. The more points you get, the higher you move up in the classification. We are at a Class Eight, which is where we have been since we started the program. Class Eight communities receive a 10% discount on their flood insurance. It is nice because flood insurance can be costly. Even though we have a number of structures within the floodplain, there are very few that carry flood insurance. FEMA audits the Township through its CRS program every five years. Our last audit was in April 2019. We were told in early summer that in order to remain a Class Eight community in the CRS program, we have to adopt changes to our Zoning Ordinance. We need to adopt a 1-foot freeboard requirement. Freeboard is how we describe the elevation above the base-flood elevation. FEMA sets the base flood elevation. The freeboard is adopted within the residential building code, but it is a State requirement, not a FEMA requirement. The states can adopt higher regulatory standards than what FEMA prescribes. The State requires that you go one foot above the base flood elevation rather than at that elevation. The CRS program says that you have to adopt a one-foot freeboard requirement including for equipment for mechanical items for all residential buildings constructed, substantially improved and/or reconstructed due to substantial damage throughout the floodplain area. FEMA already tells FIP communities that when a structure goes through a substantial improvement, not related to a flood, when that substantial improvement is more than 50% of the market value, you have to bring the entire structure up to floodplain standards. Steffens further discussed how those structures could be brought into compliance. We did not have some of those requirements in our ordinance. What is before the Commission now are the needed changes that are required for the CSR program as well as some administrative changes. She explained the proposed changes. She discussed the maps of the floodplain panels that we have available. She discussed the removal of structures from the floodplain by FEMA. She further discussed the proposed changes. She stated that she has sent these changes to both the Livingston County Building Official and the State NFIP Coordinator for comments. Livingston County has indicated that this language will be more restrictive in terms of mechanical equipment from what the Residential Building Code currently requires. We do not have to adopt this, but if we wish to remain a Class Eight community with the 10% premium discount, we need to make these changes. We would remain in the CRS program, but could not progress past a Class 9, which gives a 5% discount on the flood insurance premium. She is looking for comments, questions, concerns or suggested changes by the Commission. It will be brought back at the next meeting for a public hearing.

Discussion was held on the base flood elevation. Steffens stated that there is not just one base flood elevation for the Township. It varies depending on where you are in the Township. Discussion was held on the elevations along the Huron River.

Steffens stated that Hamburg Township, Green Oak Township along with the Army Corp of Engineers conducted a flood inundation study. They were looking mostly at Ore Lake and Little Ore Lake because when there is a flood in the Township, it hits there. It did look upstream and downstream as well. They surveyed the elevations of all of the homes in the area, and most of them are below the base flood elevation for that section of the river. There is a map online, and it is quite a tool. We cannot use it to change our map, but we know that FEMA does not have it correct in that area.

Discussion was held on basements and crawl spaces. Steffens stated that a crawl space can be below the base flood elevation if it is properly vented.

Discussion was held on mechanical equipment. Right now, it has to be at or above and protected from infiltration of flood waters. She stated that this is not the last amendment to the floodplain ordinance. The ordinance does need an overhaul. One of the things discussed at the February joint meeting was either requiring a higher standard of freeboard or do we look at the 500-year flood area or maybe both, which would be a big change. This will be coming back to the Planning Commission within the next few months. It was stated that the changes before the Commission now is so that we can remain a Class Eight community.

Steffens stated that the flood insurance premium is based on a number of things, and one of them is where is the grade in relation to the house and the base flood elevation.

Discussion was held on the addition of a generator. It was stated that a new generator would have to be one foot above base flood elevation.

7. OLD BUSINESS: None

8. ZONING ADMINISTRATOR'S REPORT: None

The question was asked what they are doing near the round-about on Winan's Lake Road. Steffens stated that the County created a new drain district to handle the flooding in that area. They are doing some major work.

9. ADJOURNMENT

Motion by Muir, supported by Leabu

To adjourn the meeting

Voice Vote: Ayes: 6 Nays: 0 Absent: 0 1 Vacancy MOTION CARRIED

The Regular Meeting of the Planning Commission was adjourned at 7:57 p.m.

Respectfully submitted,

Julie C. Durkin
Recording Secretary

The minutes were approved as presented/Corrected: _____

Jeff Muck, Chairperson



MEMORANDUM

To: Planning Commission
From: Amy Steffens, AICP
Date: November 18, 2020
Item: 6a
Subject: Zoning Text Amendment (ZTA20-006) to revise the regulations regarding floodplain development

PROJECT HISTORY:

Hamburg Township voluntarily participates in the National Flood Insurance Program and the Community Rating System (CRS) program. The township's participation in the CRS program allows homeowners purchase flood insurance at a ten percent discount on the premiums. A fuller discussion of the NFIP and CRS is included in Exhibit A, staff report for the October 21, 2020 Planning Commission meeting.

In June, 2020, CRS issued a notice that a pre-requisite for remaining a Class 8 community, which Hamburg Township is, would be to adopt a *one-foot freeboard requirement, including for equipment or mechanical items, for all residential buildings constructed, substantially improved, and/or reconstructed due to substantial damage throughout the floodplain area* (Exhibit A).

On October 21, 2020, the Planning Commission reviewed an initial draft of the zoning text amendment to Section 9.6., Regulation of Floodplain Areas. The PC discussed the ZTA and recommended that staff schedule the ZTA for a public hearing (Exhibit B) and include pending comments from the Michigan NFIP coordinator, Matt Occhipinti, and the Livingston County Building Department deputy building official, Rick Swanson (Exhibit C).

The NFIP coordinator's comments are incorporated into the redlined ordinance (Exhibit D). Matt Occhipinti made the following suggestions:

Section 9.6.2.A.: include the map panel index.

Section 9.6.2.B: deleting paragraph for clarity in regards to letters of map amendments and floodplain determination by FIRM not elevations.

Section 9.6.3.A.: remove language that implies ordinance does not apply to Zone A floodplains.

Section 9.6.4.A.(1): The township zoning ordinance defines construction activity as additions, not just new structures.

Section 9.6.4.C.(2): Delete language “as a result of flood” because it is redundant.

Rick Swanson from the LCBD corrected Section 9.6.3.C.(1)(a) to read “State of Michigan” rather than Department of Natural Resources. Rick also asked about the enforcement of the ordinance that is stricter than state building code. The township requires elevation certificates at permit issuance, at foundation, and at final. The township will not sign off on permit or final zoning compliance unless the township floodplain regulations are met.

RECOMMENDATION:

Staff suggests that the Planning Commission discuss and review the proposed zoning text amendment (ZTA 20-006) regarding Section 9.6., Regulation of Floodplain Areas. The Planning Commission should direct staff to either make necessary changes to the zoning ordinance wording and return to the Planning Commission or recommend the ZTA for approval to the township board.

Example Recommendation Motion:

The Planning Commission recommends that the Township Board approved ZTA20-006 as discussed at tonight meeting and as presented in the staff report because the proposed amendment will comply with the requirement of CRS so that Hamburg Township may remain a class 8 community. This zoning text amendment is consistent with the goals and objectives of the township’s Master Plan for environmental protection.

EXHIBITS

Exhibit A: October 21, 2020 Planning Commission staff report

Exhibit B: October 21, 2020 Planning Commission meeting minutes

Exhibit C: NFIP and LCBD emailed comments

Exhibit D: redlined ordinance incorporating NFIP and LCBD comments

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Supervisor: Pat Hohl
Clerk: Jim Neilson
Treasurer: Al Carlson
Trustees: Mike Dolan
 Bill Hahn
 Chuck Menzies
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MEMORANDUM

To: Planning Commission
From: Amy Steffens, AICP
Date: October 21, 2020
Item: 7b
Subject: Zoning Text Amendment (ZTA20-006) to revise the regulations regarding floodplain development

PROJECT HISTORY:

Hamburg Township property owners are able to purchase flood insurance policies because we participate in the National Flood Insurance Program (NFIP). The NFIP underwrites flood insurance coverage only in communities that adopt and enforce floodplain management regulations through an ordinance that meets or exceeds NFIP criteria. Because we participate in the NFIP, it is essential that the township enforce our floodplain ordinance for every property in the SFHA.

Additionally, the township voluntarily participates in NFIP's Community Rating System. CRS is an incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. Because of our participation in the CRS and because we undertake additional regulatory activities, such as the one-foot freeboard requirement, Hamburg Township property owners are able to purchase flood insurance at a discounted premium rate. Every part of our participation in the CRS program is administrative—residents do not know that we undertake these activities on their behalf to reduce their flood insurance premiums.

The township earns points for various administrative activities, such as sending floodplain informational letters to lenders, realtors, and insurers; maintaining elevation certificates for every project in the SFHA; updating our flood maps; and ensuring that projects in the SFHA are properly permitted.

FEMA audits CRS communities on a five-year cycle. Hamburg Township was audited on April 9, 2019. After the auditor reviewed township's documents and activities, we were advised that we remain a Class 8 CRS community, which offers home owners a ten percent discount on flood insurance premiums.

We were advised in June, 2020, by CRS that a pre-requisite for remaining a Class 8 community is to adopt a *one-foot freeboard requirement, including for equipment or mechanical items, for all residential buildings constructed, substantially improved, and/or reconstructed due to substantial damage throughout the floodplain area.* Staff has revised the relevant portions of Section 9.6., Regulation of Floodplain Areas, to include the language as required by CRS, as well as changes to the ordinance to better reflect standard floodplain ordinance language.

Staff has forwarded the proposed changes to both the Livingston County Building Department and the state NFIP coordinator for comment.

Attached as Exhibit A is Section 9.6. with the proposed revisions in red. Staff explanation of each revision is below.

STAFF EXPLANATION:

Throughout Section 9.6., the term *base flood level* has been corrected to use the standard *base flood elevation* terminology.

Section 9.6.1.(B).: This paragraph has been changed to correctly identify the Code of Federal Regulations that govern the NFIP program.

Section 9.6.2. Delineation of Floodplain Areas: Township's current zoning ordinance does not specify what flood zone the ordinance applies. The *one percent annual chance flood* is what is commonly known as the 100-year floodplain or the A or AE flood zones.

Section 9.6.2.(A): The current zoning ordinance includes an incomplete reference to the Flood Insurance Study for Livingston County, Michigan and the Flood Insurance Rate Map panels. Additionally, the FIRM panel numbers are not currently included in the zoning ordinance. The FIRM panels are incorporated by reference in the zoning ordinance but the enumeration of the panel numbers in the ordinance is helpful in identifying over which panels the township has jurisdiction.

Section 9.6.2.(B) and (C): The current zoning ordinance does not specifically address how the boundaries of the floodplain are determined, nor does it address what is the governing document in the event of a conflict between the FIRM and the on-site conditions.

Section 9.6.2.(D): Edited to correct grammar mistake.

Section 9.6.3.(A): This is standard language that identifies which portion of the floodplain the township ordinance applies. In other words, Section 9.6. applies to the area of land where base flood elevations have been determined by either the FIRM or FIS, per Section 9.6.2.(A).

Section 9.6.3.(B)(3): Floodplain permits and letters of no authority are issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), not the Department of Natural Resources. The reference to DNR has been removed and replaced with *State of Michigan*; referencing the State of Michigan, rather than a specific agency, means that the zoning ordinance would not need to be amended if the state changes the floodplain permitting agency.

Section 9.6.4.(A)(1): Addition of language required by CRS to remain a Class 8 community; current ordinance does not include *and/or reconstruction due to substantial damage* language.

Section 9.6.4.(A)(1)(d): Addition of language required by CRS to remain a Class 8 community; current ordinance does not require the mechanical equipment freeboard.

Section 9.6.4.(B)(1): Addition of language required by CRS to remain a Class 8 community; current ordinance does not include *and/or reconstruction due to substantial damage* language.

Section 9.6.4.(C): Addition of language required by CRS to remain a Class 8 community; current ordinance does not include *and/or reconstruction due to substantial damage* language in regards to mobile homes.

Section 9.6.4.(C)(2): Addition of language required by CRS to remain a Class 8 community; current ordinance does not include *and/or reconstruction due to substantial damage* language or mechanical equipment freeboard for mobile home placement. This section applies to all mobile homes in the floodplain regardless if they are located in a mobile home park.

Section 9.6.4.(C): Removed existing paragraph 3, mobile homes within zones A-3, because those flood zones are no longer used by FEMA.

Section 9.6.4.(D)(1): The reference to DNR has been removed and replaced with *State of Michigan*; referencing the State of Michigan, rather than a specific agency, means that the zoning ordinance would not need to be amended if the state changes the floodplain permitting agency.

RECOMMENDATION:

Staff suggests that the Planning Commission discuss and review the proposed zoning text amendment (ZTA 20-006) regarding Section 9.6., Regulation of Floodplain Areas. The Planning Commission should direct staff to make any necessary changes to the draft wording and to notice a public hearing for this amendment

EXHIBITS

Exhibit A: CRS notice of ordinance adoption requirements

Exhibit B: Draft redlined version of proposed zoning text amendment to Section 9.6.

NFIP's Community Rating System (CRS)

Class 8 Freeboard Prerequisite

Frequently Asked Questions

October 2020

The Community Rating System (CRS) is a voluntary program that provides flood insurance premium discounts to communities that implement programs and measures that exceed the minimum floodplain management requirements of the National Flood Insurance Program (NFIP). The CRS determines discounts based on credit points provided for floodplain management activities. To achieve certain CRS Class ratings, communities must meet certain program prerequisites in addition to obtaining the credit points. In January 2021, the CRS will implement a new Class 8 prerequisite for freeboard for all participating and new CRS communities. Below are some frequently asked questions about the CRS Class 8 freeboard prerequisite. Answers to questions 1–12 were released in July 2020. Questions 13–17 were added in October 2020.

A community with additional questions about the prerequisite or the CRS should contact its ISO/CRS Specialist. For a list of ISO/CRS Specialists, see the [CRS Resources website](#). State NFIP Coordinators or FEMA Regional CRS Coordinators can assist with model ordinance or sample regulatory language for freeboard, and other higher regulatory standards. A list of [State NFIP Coordinators](#) can be found here. Contact information for FEMA is available at the [FEMA website](#).

1. What is the new CRS Class 8 freeboard prerequisite?

Section 211 of the 2017 *CRS Coordinator's Manual* will be changed to read:

“In order to be a Class 8 or better . . .

- (1) The community must meet all the Class 9 prerequisites.
- (2) The community must adopt and enforce at least a 1-foot freeboard requirement (including machinery and equipment) for all residential buildings constructed, substantially improved, and/or reconstructed due to substantial damage, throughout its Special Flood Hazard Area (SFHA) where base flood elevations have been determined on the Flood Insurance Rate Map (FIRM) or in the Flood Insurance Study (FIS), except those areas that receive open space credit under Activity 420 (Open Space Preservation).”

2. Why is FEMA making freeboard a Class 8 prerequisite in the CRS?

The goal is to further the flood resiliency of our Nation. FEMA is working to ensure that homes are built to better withstand natural disasters, including floods. The CRS credits community efforts that exceed the minimum floodplain management requirements of the NFIP.

Freeboard—a margin of safety added to the level of the base flood—definitively exceeds those minimum standards. Research shows that higher regulatory standards reduce future flood

damage, and the importance is recognized by over 80% of CRS communities who already require freeboard. With freeboard in place, homes are not only better protected from flood damage, but also flood insurance costs less. The expense of elevating a new home an additional foot often can be recaptured in lower flood insurance premiums over 5 years or less.

3. How will the change in the 2017 CRS Coordinator's Manual be made?

FEMA will issue an addendum to the 2017 *CRS Coordinator's Manual* that will be effective on January 1, 2021. CRS communities and the Insurance Services Office, Inc. (ISO) will continue to use the 2017 *Coordinator's Manual* along with the 2021 Addendum, until such time that FEMA issues a new *Coordinator's Manual*, likely not before 2023.

4. Which CRS communities does the Class 8 freeboard prerequisite affect?

The Class 8 freeboard prerequisite affects Class 5 through Class 8 communities. The prerequisite will not affect Class 9 communities. Communities in Classes 1 through 4 already meet the new freeboard prerequisite.

5. When will the Class 8 freeboard prerequisite be applied to participating CRS communities?

The Class 8 freeboard prerequisite will be required of CRS communities at their first CRS cycle verification visit after January 1, 2021. Ordinance, regulatory, or building code language that meets the Class 8 prerequisite must be adopted, and provisions must be enforced, no later than the first cycle visit after January 1, 2021. However, an earlier date for community enforcement of the Class 8 freeboard prerequisite may be required in a new (2023 or later) *CRS Coordinator's Manual*. This means that communities that are not due for a cycle visit until 2023 or later should not wait to adopt the freeboard requirement.

6. Can a community still join or participate in the CRS without a freeboard requirement?

Yes. Any community that meets the CRS Class 9 prerequisites can apply to join the CRS and become a Class 9 community. Any already-participating CRS community that cannot meet the Class 8 freeboard prerequisite at its first cycle visit after 2021 will change to a Class 9 community (see previous question).

7. Where must a community require at least 1 foot of freeboard?

Communities must enforce the freeboard requirement for all residential buildings that are new, substantially improved, and/or reconstructed due to substantial damage throughout the SFHA where base flood elevations have been determined on the FIRM or in the FIS. This means all "numbered zones" in the SFHA. The CRS will not require freeboard in unnumbered zones within the SFHA.

8. The prerequisite includes all residential buildings. Does this include manufactured homes?

Yes. At least 1 foot of freeboard is required for manufactured homes, including machinery and equipment.

9. If a community adopts the International Code Council codes, will they meet the requirements for the Class 8 freeboard prerequisite?

Yes, provided that the adopted building code includes freeboard for residential buildings and the community is enforcing the freeboard provisions. This includes adopted state building codes that are enforced in the community. The CRS credits other higher standards included in building codes. For example, coastal CRS communities that have adopted and enforce recent building codes and have newer FIRMs often can qualify for Coastal A Zones credit under Activity 430 (Higher Regulatory Standards).

10. Should a community require more than 1 foot of freeboard?

All communities are encouraged to consider adopting additional freeboard. This may mean freeboard in all flood zones. It may mean more than 1 foot of freeboard. It may mean applying the freeboard standard to all building types. Remember, CRS credit is available for the enforcement of freeboard under CRS Activity 430 (Higher Regulatory Standards).

11. Will communities receive CRS credit for the enforcement of freeboard for residential buildings?

Yes. Communities will continue to receive freeboard credit (FRB) under Activity 430 (Higher Regulatory Standards) for enforcing freeboard for residential buildings. Communities that already receive FRB credit will continue to receive FRB credit. The basic FRB credit in the CRS is 100 points. FRB credit is higher when more freeboard is required or when elevation on fill is not allowed. An impact adjustment is applied to FRB credit.

12. What should CRS communities do in light of the Class 8 prerequisite?

Communities that currently enforce freeboard should check their floodplain ordinances and/or building codes to be sure that machinery and equipment are included, that substantially improved buildings are included, and that the provisions are being enforced.

Communities that do not now enforce at least 1 foot of freeboard for all new or substantially improved residential buildings, including machinery and equipment, within numbered zones of the SFHA will need to make changes to their floodplain ordinance and/or building code. Adoption and enforcement of the freeboard must occur before the community's first CRS cycle visit after January 1, 2021.

~ Answers to questions 13 through 17, below, were provided in October 2020. ~

13. What residential buildings are included in the Class 8 freeboard requirement?

The Class 8 freeboard prerequisite applies to all residential buildings, whether single-family, multi-family, or manufactured.

14. Does the Class 8 prerequisite include the replacement of manufactured homes in pre-FIRM manufactured home parks? And can the replaced manufactured home be 48 inches above grade to meet the Class 8 prerequisite?

The Class 8 freeboard prerequisite applies to all manufactured homes. All manufactured homes in numbered zones of the SFHA must have at least 1 foot of freeboard above the base flood elevation. This is consistent with the 2015 and 2018 International Residential Codes. A requirement that the manufactured home be 48 inches above grade is not by itself sufficient to meet the 1-foot freeboard requirement.

15. Are historic buildings subject to the Class 8 freeboard prerequisite?

No, historic structures (as defined in 44 *C.F.R* §59.1) that are allowed an exemption (or variance) as anticipated by 44 *C.F.R* §60.3 for substantial improvements may be exempt (or varied) from the Class 8 prerequisite. For CRS purposes, documentation of the exemption may be requested. A community interested in providing for the treatment of historic structures within its floodplain ordinance should contact its state historic preservation office or the FEMA Regional Office about recommended language.

16. May machinery and equipment be floodproofed instead of elevated to at least 1 foot above base flood elevation to meet the Class 8 freeboard prerequisite?

No. To meet the Class 8 prerequisite the building code or ordinance must require machinery or equipment to be elevated to at least 1 foot above the base flood elevation for buildings newly constructed, substantially improved, and/or reconstructed due to substantial damage. This is consistent with the 2015 and 2018 International Residential Codes. This includes machinery and equipment placed within attached garages. For more information, see [Reducing Flood Losses through the International Codes](#) and [Comparison of Select NFIP and I-Code Requirements](#).

17. Does the freeboard requirement for Class 8 apply to attached garages?

To meet the Class 8 freeboard prerequisite, attached garages must meet the credit criteria for element FRB under Activity 430 (Higher Regulatory Standards) in the *Coordinator's Manual*. Specifically, "If the garage floor is below the freeboard level, the garage must meet the opening and wet floodproofing requirements for enclosures." For communities that require at least 1 foot of freeboard for the residential portion of the building but require less than 1 foot of freeboard for an attached garage, the Class 8 prerequisite will be met, but the credit for FRB may be reduced.

ARTICLE 9.00**ENVIRONMENTAL PROVISIONS****Section 9.6 Regulation of Floodplain Areas****9.6.1 Purpose**

- A. The floodplains of Hamburg Township are subject to periodic inundation of flood waters which result in loss of property, health and safety hazards, disruption or commerce and governmental services and impairment or tax base.
- B. ~~It is the purpose of this Section to comply with the provisions and requirements of the National Flood Insurance Program, as constituted in accordance with the National Flood Insurance Act of 1968, and subsequent enactments and rules and regulations promulgated in furtherance of this program by the Federal Emergency Management Agency (FEMA), as published in the Federal Register, Vol. 41, No. 207, Tuesday, October 26, 1976, and redesignated at 44FR 31177, May 31, 1979. These regulations are adopted to comply with the rules and regulations of the National Flood Insurance Program, codified as 44 Code of Federal Regulations Parts 59—78, so as to maintain the community's eligibility in the National Flood Insurance Program.~~
- C. The provisions of this Section are intended to:
1. Help protect human life, prevent or minimize material losses, and reduce the cost to the public of rescue and relief efforts;
 2. Restrict or prohibit uses which are dangerous to health, safety, or property in times of flooding or cause excessive increases in flood heights or velocities;
 3. Require that uses vulnerable to floods, including public facilities which serve such uses, shall be protected against flood damage at the time of initial construction;
 4. Protect individuals from buying lands which are designated to be unsuited for intended purposes because of flooding;
 5. Permit reasonable economic use of property located within a designated floodplain area.

9.6.2 ~~9.6.2~~ Delineation of Floodplain Areas (One percent annual chance flood):

- ~~A.~~ A.—Designated floodplain areas shall overlay existing zoning districts delineated on the Zoning District Map of Hamburg Township. The following maps together with all attached material are hereby adopted by reference and declared to be a part of the Hamburg Township zoning map and this ordinance. The attached material includes the Flood Insurance Study for Livingston County, Michigan (all jurisdictions) and the Flood Insurance Rate Map panels enumerated below, dated September 17, 2008, all prepared by the Federal Emergency Management Agency. These materials are on file with the Hamburg Township zoning

department. The most updated Flood Insurance Rate Maps adopted by Hamburg Township will be incorporated for the administration of this ordinance.

Flood Insurance Rate Map panel numbers of 26093C0320D, 26093C0340D, 26093C00345D, 26093C00431D, 26093C0432D, 26093C00433D, 26093C0434D, 26093C0445D, 26093C0451D, 26093C0452D, 26093C0453D, 26093C0454D, 26093C0456D, 26093C0458D, 26093C0465D, 26093C0470D.

A. The boundaries of the Floodway Zone are determined by the scaling distances on the Flood Insurance Rate Map. The boundaries of the Flood Fringe Zone are determined by the flood elevations shown on the Flood Insurance Study.

B. Where a conflict exists between the floodplain limits illustrated on the Flood Insurance Rate Map and actual field conditions the flood elevations shown on the Flood Insurance Study shall be the governing factor. The floodplain administrator shall interpret the boundary location based on the ground elevations that existed before construction and the flood elevations shown on the Flood Insurance Study for Livingston County, Michigan.

~~The boundaries of the floodplain areas are identified in the report entitled The Flood Insurance Study, Hamburg Township, with accompanying Flood Insurance Rate Maps dated September 17, 2008 prepared by FEMA. The study and accompanying maps are adopted by reference, appended, and declared to be part of this Ordinance.~~

D. B.—The standard applied to establishing the floodplain area is the base floodplain delineated by the base flood. In areas associated with riverine flooding, a floodway is designated within the floodplain area.

E. C.—Where there are disputes as to the location of a floodplain area boundary, the Zoning Board of Appeals shall resolve the dispute in accordance with Section 6.5.B.

9.6.3 Application of Regulations.

A. In addition to other requirements of this Ordinance applicable to development in the underlying zoning district, compliance with the requirements of this Section shall be necessary for all development occurring within designated floodplain areas where base flood elevations have been determined on the Flood Insurance Rate Map or in the Flood Insurance Study. Conflicts between the requirements of this Section and other requirements of this Ordinance or any other ordinance shall be resolved in favor of this Section, except where the conflicting requirement is more stringent and would further the objectives of this Section. In such cases the more stringent requirement shall be applied.

B. Upon application for Land Use Permits in accordance with Section 3.3., the Zoning Administrator shall determine whether said use is located within a designated floodplain area utilizing the documents cited in Section 9.6.2. The issuance of a Land Use Permit within the floodplain area shall comply with the following standards:

1. The requirements of this section shall be met.

2. The requirements of the underlying districts and all other applicable provisions of this Ordinance shall be met.
3. All necessary development permits shall have been issued by appropriate local, State and Federal authorities, including a floodplain permit, approval, or letter of no authority from the ~~Michigan Department of Natural Resources under authority of Act 245, Public Acts of 1929, as amended by Act 167, Public Acts of 1968, State of Michigan.~~ Where a development permit cannot be issued prior to the issuance of a zoning compliance permit, a letter from the issuing agency indicating intent to issue contingent only upon proof of zoning compliance shall be acceptable.

C. Floodplain Management Administrative Duties

1. With regard to the National Flood Insurance Program, and the regulation or development within the flood hazard area zone as prescribed in Article 9.6., the duties of the zoning administrator shall include, but are not limited to:
 - a. Notification to adjacent communities and the Department of Natural Resources of the proposed alteration or relocation of any watercourse, and the submission of such notifications to the Federal Insurance Administration;
 - b. Verification and recording of the actual elevation in relation to mean sea level of the lowest floor, including basement, of all new or substantially improved structures constructed within the flood hazard area, and in the case of floodproofed structures, the elevation to which the structure was floodproofed;
 - c. Recording of all certificates of floodproofing, and written notification to all applicants to whom variances are granted in a flood hazard area zone indicating the terms of the variance, the increased danger to life and property, and that the cost of flood insurance will increase commensurate with the increased flood risk, and may reach amounts in excess of \$25.00 for \$100.00 of insurance coverage per year. A record of all variance notifications and variance actions shall be maintained together with the justification for each variance.
2. All records and maps pertaining to the National Flood Insurance Program shall be maintained in the office of the zoning administrator and shall be open for public inspection.
3. It shall be the responsibility of the zoning administrator to obtain and utilize the best available flood hazard data for purposes of administering this Ordinance in the absence of data from FEMA.

9.6.4. Floodplain Standards and Requirements

- A. The following general standards and requirements shall be applied to all uses proposed to be located within the floodplain area:

1. All new construction, ~~and~~ substantial improvements, and/or reconstruction due to substantial damage within a floodplain, including the placement of prefabricated buildings and mobile homes, shall:
 - a. Be designed and anchored to prevent flotation, collapse, or lateral movement of the structure;
 - b. Be constructed with materials and utility equipment resistant to flood damage
 - c. Be constructed by methods and practices that minimize flood damage.
 - d. Be constructed with electrical, heating, ventilation, plumbing, air conditioning equipment, generators, and other service facilities elevated a minimum of one (1) foot above the base flood elevation and designed to prevent water from entering or accumulating within the components during conditions of flooding.
 2. All new and replacement water supply systems shall minimize or eliminate infiltration of flood waters into the systems.
 3. All new and replacement sanitary sewage systems shall minimize or eliminate infiltration of flood waters into the systems and discharges from systems into flood waters. On-site waste disposal systems shall be located to avoid impairment to the system or contamination from the system during flooding.
 4. All public utilities and facilities shall be designed, constructed, and located to minimize or eliminate flood damage.
 5. Adequate drainage shall be provided to reduce exposure to flood hazards.
 6. The Township Engineer or his representative shall review development proposals to determine compliance with the standards in this section, and shall transmit his determination to the Zoning Administrator.
 7. Land shall not be divided in a manner creating parcels or lots which cannot be used in conformance with the requirements of this Article.
 8. The flood carrying capacity of any altered or relocated watercourse not subject to State or Federal regulations designed to ensure flood carrying capacity shall be maintained.
 9. Available flood hazard data from Federal, State, or other sources shall be reasonably utilized in meeting the standards of this section. Data furnished by FEMA shall take precedence over data from other sources.
- B. The following specific standards shall be applied to all uses proposed to be located within the floodplain area ~~but not within the floodway portion of the floodplain area.~~
1. ~~Residential structures: new construction, substantial improvements, and/or reconstruction due to substantial damage~~ Residential structures: new construction, substantial improvements, and/or reconstruction due to substantial damage ~~All new construction and substantial~~

~~improvements of residential structures~~ shall have the lowest floor, including basement, elevated at least one (1) foot above the base flood ~~elevation level~~.

2. All new construction and substantial improvements of nonresidential structures shall have either:

- a. The lowest floor, including basement, elevated at least one (1) foot above the base flood ~~elevation level~~.
- b. Be constructed such that below base flood ~~level, elevation~~, together with attendant utility and sanitary facilities, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subparagraph are satisfied, and that the floodproofing methods employed are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with a base flood in the location of the structure.

- C. Mobile Home Standards. The following general standards and requirements shall be applied to all mobile homes placed, substantially improved, and/or reconstructed due to substantial damage located within flood plain areas:

1. All mobile homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties in accord with the following specifications:
 - a. Over-the-top ties shall be provided at each of the four corners of the mobile home, with two (2) additional ties per side at intermediate locations, except that on mobile homes less than fifty (50) feet in length one (1) tie per side shall be required.
 - b. Frame ties shall be provided at each corner of the home with five (5) additional ties per side at intermediate points, except that on mobile homes less than fifty (50) feet in length four (4) ties per side shall be required.
 - c. All components of the anchoring system shall be capable of carrying a force of 4800 pounds.
 - d. All additions to a mobile home shall be similarly anchored.

2. All mobile homes located either outside of a mobile home park, in a new mobile home park, in an expansion to an existing mobile home park, or in an existing mobile home park where the mobile home has suffered substantial damage as a result of a flood, shall be elevated on a permanent foundation such that the lowest floor and electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities including ductwork, are elevated to one foot above the base flood elevation and securely anchored to adequately anchored foundation system to resist flotation, collapse and lateral movement.

~~3.2.~~ An evacuation plan indicating alternate vehicular access and escape routes shall be filed with the Livingston County Sheriff Department for mobile home parks and mobile home subdivisions.

~~3. Mobile homes within Zones A-3 on the Flood Insurance Rate Map shall be located in accord with the following standards:~~

~~a. All mobile homes shall be placed on stands or lots which are elevated on compacted fill or on pilings so that the lowest floor of the mobile home will be at or above the base flood level.~~

~~b. Adequate surface drainage away from all structures and access for a mobile home hauler shall be provided.~~

~~c. In the instance of elevation on pilings, lots shall be large enough to permit steps, piling foundations shall be placed in stable soil no more than ten (10) feet apart; and reinforcement shall be provided for piers more than six (6) feet above ground level.~~

~~d. In mobile home parks and mobile home subdivisions which exist at the time this subsection is adopted, where repair, reconstruction or improvement of streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities, and pads before the repair, the standards in subparagraphs (a), (b), and (c) of this subsection shall be complied with.~~

D. The following standards shall be applied to all uses proposed to be located within the floodway portion of the floodplain area.

1. Encroachments, including fill, new construction, substantial improvements, and other development shall be prohibited. Exception to this prohibition shall only be made upon certification by a registered professional engineer or the ~~Department of Natural Resources~~State of Michigan that the development proposed will not result in any increases in flood levels during a base flood discharge, and compliance with Act 245, Public Acts of 1929, as amended by Act 167, Public Acts of 1968.

2. The placement of mobile homes shall be prohibited.

3. The uses of land permitted in an underlying zoning district shall not be construed as being permitted within the regulatory floodway, except upon compliance with the provisions of this section.

9.6.5. Warning and Disclaimer of Liability.

A. The degree of flood protection required by provisions of this section is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Larger floods may occur on rare occasions.

- B. These provisions do not imply that areas outside the floodplain or land uses permitted within such districts will be free from flooding or flood damages nor shall the Township or any officer or employee thereof be liable for any flood damages that result from reliance on the provisions of this section or any administrative decision lawfully made thereunder.



FAX 810-231-4295
PHONE 810-231-1000

P.O. Box 157
10405 Merrill Road
Hamburg, Michigan 48139

**Hamburg Township
Planning Commission
Wednesday, October 21, 2020
7:00 P.M.**

1. CALL TO ORDER:

The meeting was called to order by Chairman Muck

Chairman Muck stated that he would like to recognize that we lost a member of this Commission, Trustee Annette Koeble who recently passed away suddenly. She was very passionate about the Township and will be greatly missed. The Commission recognized a moment of silence in honor of Trustee Koeble.

Present: Bohn, Hamlin, Leabu, Muck, Muir & Priebe

Absent: (1 Vacancy)

Also Present: Scott Pacheco, Township Planner & Amy Steffens, Planning & Zoning Administrator

2. PLEDGE TO THE FLAG:

3. APPROVAL OF THE AGENDA:

Chairman Muck stated that he would like to add New Business b) ZTA 20-006 to revise the regulations regarding Floodplain Development.

Motion by Priebe, supported by Leabu

To approve the agenda as revised by adding New Business b)

Voice Vote: Ayes: 6 Nays: 0 Absent: 0 1 Vacancy MOTION CARRIED

4. APPROVAL OF MINUTES:

a) September 16, 2020 Planning Commission Meeting Minutes

Motion by Hamlin, supported by Priebe

To approve the minutes of the September 16, 2020 as presented

Voice Vote: Ayes: 5 Nays: 0 Abstain: 1 Absent: 0 1 Vacancy MOTION CARRIED

5. CALL TO THE PUBLIC:

Chairman Muck opened the call to the public. Hearing no comment, the call was closed.

6. NEW BUSINESS:

- a) ZTA 20-004 Riparian Frontage Regulations (Public Hearing): Proposed Zoning Text Amendment to require minimum riparian width regulations for newly created waterfront lots and existing lots with newly created riparian frontage and to clarify the setback for docks, patios and terraces that abut a waterbody. The draft regulations would amend Article 2; Article 7, Section 7.5.1(G); Article 8, Section 8.18.9; Article 9, Section 9.5 and 9.7.

Chairman Muck opened the public hearing. Hearing no comment, the public hearing was closed.

Scott Pacheco, Township Planner, stated that we discussed this at our last meeting. This will put some regulations in place when you have new lots created that have water frontage. There is also language included to clarify the dock regulations that are currently in our ordinance. At the last meeting, there were some suggestions by the Planning Commission. He reviewed all of the proposed options. He stated that the zoning amendment would limit the number of properties that can be created abutting a waterbody. The proposed zoning amendment would be consistent with the 2020 Master Plan Goals to preserve the natural and historic character of Hamburg Township by accommodating a reasonable amount of development, but ensuring the development is in harmony with the natural features and the unique environmental requirements of the Township and to protect, preserve, and enhance whenever possible the unique and desirable natural amenities of Hamburg Township. One of the reasons we are doing these amendments is to try to enact the goals of the Master Plan. He believes that this amendment would do that.

Commissioner Priebe asked Amy Steffens, Planning & Zoning Administrator, if this is user friendly enough for her to administer or if there is anything she would like changed. Steffens stated that as with any ordinance change, the first few times you apply it, it can be more difficult, but she is sure that it will be fine. It was stated that the graphics will help people and explain how to take those measurements.

Commissioner Leabu discussed the property that would be available that some of this applies to. He stated that he does not know if there are any developments left where this would apply. Pacheco stated that this would be mostly on the Huron River and there are some properties on Hamburg Lake as well that could be split. He further discussed some of the larger parcels on the major lakes that are marshy that someone could try to develop on the high land and access through the marsh.

Discussion was held on the keyholing ordinance.

Pacheco stated that the Commission can direct him to make any revisions or make a recommendation to the Township Board for approval of a zoning text amendment. He stated that staff's recommendation is option B because it allows for a more orderly design to the lots. It requires the property to be no less wide than the riparian width at any point.

Further discussion was held on the two options.

Motion by Hamlin, supported by Bohn

To recommend approval to the Township Board of the Zoning Text Amendment ZTA 20-004 Riparian Frontage Regulations amendment Article 2; Article 7, Section 7.5.1(G); Article 8, Section 8.18.9; Article 9, Section 9.5 and 9.7 as outlined as Option B in the Staff's Recommendation dated October 20, 2020

Voice Vote: Ayes: 6 Nays: 0 Absent: 0 1 Vacancy MOTION CARRIED

- b) ZTA 20-006 - Floodplain Development.Regulations revision

Amy Steffens, Planning & Zoning Administrator stated that Hamburg Township participates in the National Flood Insurance Program which allows homeowners who purchase homes using a federally backed mortgage to purchase flood insurance in the floodplain. We also voluntarily participate in the Community Rating

System Program (CSR program). It does not change the material we collect, the zoning requirements or development requirements. It is all administrative work. Because of this program, we can undertake some activities, some of which are required to be in the program, such as collecting elevation certificates at the end of a project constructed within a flood plain, and a number of things we do throughout the year. The more points you get, the higher you move up in the classification. We are at a Class Eight, which is where we have been since we started the program. Class Eight communities receive a 10% discount on their flood insurance. It is nice because flood insurance can be costly. Even though we have a number of structures within the floodplain, there are very few that carry flood insurance. FEMA audits the Township through its CRS program every five years. Our last audit was in April 2019. We were told in early summer that in order to remain a Class Eight community in the CRS program, we have to adopt changes to our Zoning Ordinance. We need to adopt a 1-foot freeboard requirement. Freeboard is how we describe the elevation above the base-flood elevation. FEMA sets the base flood elevation. The freeboard is adopted within the residential building code, but it is a State requirement, not a FEMA requirement. The states can adopt higher regulatory standards than what FEMA prescribes. The State requires that you go one foot above the base flood elevation rather than at that elevation. The CRS program says that you have to adopt a one-foot freeboard requirement including for equipment for mechanical items for all residential buildings constructed, substantially improved and/or reconstructed due to substantial damage throughout the floodplain area. FEMA already tells FIP communities that when a structure goes through a substantial improvement, not related to a flood, when that substantial improvement is more than 50% of the market value, you have to bring the entire structure up to floodplain standards. Steffens further discussed how those structures could be brought into compliance. We did not have some of those requirements in our ordinance. What is before the Commission now are the needed changes that are required for the CSR program as well as some administrative changes. She explained the proposed changes. She discussed the maps of the floodplain panels that we have available. She discussed the removal of structures from the floodplain by FEMA. She further discussed the proposed changes. She stated that she has sent these changes to both the Livingston County Building Official and the State NFIP Coordinator for comments. Livingston County has indicated that this language will be more restrictive in terms of mechanical equipment from what the Residential Building Code currently requires. We do not have to adopt this, but if we wish to remain a Class Eight community with the 10% premium discount, we need to make these changes. We would remain in the CRS program, but could not progress past a Class 9, which gives a 5% discount on the flood insurance premium. She is looking for comments, questions, concerns or suggested changes by the Commission. It will be brought back at the next meeting for a public hearing.

Discussion was held on the base flood elevation. Steffens stated that there is not just one base flood elevation for the Township. It varies depending on where you are in the Township. Discussion was held on the elevations along the Huron River.

Steffens stated that Hamburg Township, Green Oak Township along with the Army Corp of Engineers conducted a flood inundation study. They were looking mostly at Ore Lake and Little Ore Lake because when there is a flood in the Township, it hits there. It did look upstream and downstream as well. They surveyed the elevations of all of the homes in the area, and most of them are below the base flood elevation for that section of the river. There is a map online, and it is quite a tool. We cannot use it to change our map, but we know that FEMA does not have it correct in that area.

Discussion was held on basements and crawl spaces. Steffens stated that a crawl space can be below the base flood elevation if it is properly vented.

Discussion was held on mechanical equipment. Right now, it has to be at or above and protected from infiltration of flood waters. She stated that this is not the last amendment to the floodplain ordinance. The ordinance does need an overhaul. One of the things discussed at the February joint meeting was either requiring a higher standard of freeboard or do we look at the 500-year flood area or maybe both, which would be a big change. This will be coming back to the Planning Commission within the next few months. It was stated that the changes before the Commission now is so that we can remain a Class Eight community.

Steffens stated that the flood insurance premium is based on a number of things, and one of them is where is the grade in relation to the house and the base flood elevation.

Discussion was held on the addition of a generator. It was stated that a new generator would have to be one foot above base flood elevation.

7. OLD BUSINESS: None

8. ZONING ADMINISTRATOR'S REPORT: None

The question was asked what they are doing near the round-about on Winan's Lake Road. Steffens stated that the County created a new drain district to handle the flooding in that area. They are doing some major work.

9. ADJOURNMENT

Motion by Muir, supported by Leabu

To adjourn the meeting

Voice Vote: Ayes: 6 Nays: 0 Absent: 0 1 Vacancy MOTION CARRIED

The Regular Meeting of the Planning Commission was adjourned at 7:57 p.m.

Respectfully submitted,

Julie C. Durkin
Recording Secretary

The minutes were approved as presented/Corrected: _____

Jeff Muck, Chairperson

Amy Steffens

From: Amy Steffens
Sent: Wednesday, November 4, 2020 10:51 AM
To: 'Rick Swanson'
Subject: RE: Amendment to township floodplain development ordinance

Thanks for reviewing the ordinance for me. I did hear back from Matthew Occhipinti with EGLE who commented "This entire ordinance is very atypical. But recently, I've seen other communities around southeast Michigan with versions of this. I have no idea where it came from but it is not a complete floodplain ordinance. There are MANY other standards spelled out in 44CFR that need to be part of the ordinance." I know we have a lot of work to do on our ordinance; we'll tackle that beast this winter.

The township currently require an elevation certificate prior to permit issuance, at foundation (although we do not always receive these), and at final. We will not sign off unless the final EC shows the one foot freeboard. Are you comfortable with our review path once we adopt the higher freeboard standard?

No, we do not have any mobile home parks in the floodplain.

Amy

From: Rick Swanson <RSwanson@livgov.com>
Sent: Monday, November 2, 2020 1:11 PM
To: Amy Steffens <asteffens@HAMBURG.MI.US>
Subject: RE: Amendment to township floodplain development ordinance

Hi Amy,

Sorry it took me a while to get back on this...This COVID thing is really ramping up again. I hope you and your family are doing well.

I have just a few comments for you on floodplain Ord. updates:

9.6.3 C 1a. - You might want to change wording from Dept. of Natural Resources to State of MI

9.6.4 A 1 d. – New language proposes elect., heating, and mech. equipment to be 1 foot above BFE. 2015 MI Res building code- R322.1.6 requires such equipment to be at or above the BFE. With the Ordinance being more restrictive who will be responsible to enforce a more restrictive requirement? We typically enforce the building code so we'll need to discuss enforcement for more restrictive rule.

9.6.4 C 1. (a-c) – Your current ordinance has detailed anchoring/attachment standards for mobile homes located in flood plains. The Res. building code simply states they must comply with state or federal requirements. I'm curious, do you have any mobile home parks within flood zones? I can't recall any flood reviews for mobile home sites in your township?

When you have time we can chat on this more and I can answer any questions.
 Thank you,

Rick

From: Amy Steffens <asteffens@HAMBURG.MI.US>

Sent: Tuesday, October 20, 2020 12:46 PM

To: Rick Swanson <RSwanson@livgov.com>

Subject: [EXT] Amendment to township floodplain development ordinance

"The e-mail below is from an external source. Please do not open attachments or click links from an unknown or suspicious origin."

Rick,

Could I trouble you to please read through the redlined version of the township floodplain development ordinance? We have to make a few changes to remain a Class 8 community through the CRS program. I'd like to make sure that what I have changed aligns with the residential building code, particularly the mobile home standards.

I'm taking this amendment to the planning commission's public hearing on November 18.

Thanks,

Amy Steffens, AICP

Hamburg Township Planning and Zoning Administrator

(810) 222-1167

(Personal office hours 8 am to 3 pm, Monday, Wednesday, Friday)

Amy Steffens

From: Occhipinti, Matthew (EGLE) <OCCHIPINTIM@michigan.gov>
Sent: Thursday, October 22, 2020 1:51 PM
To: Amy Steffens
Cc: Rosario, Mollie (Mollie.Rosario@fema.dhs.gov)
Subject: RE: Hamburg Township amended floodplain development ordinance
Attachments: ZTA 20006 with exhibits001.pdf

Section 9.62A – you need to include the index panel – 26093CIND0A - it doesn't show floodplains, only the orientation of the FIRMs.

9.62 A -second paragraph and section B – the boundary of the floodplain is determined by the FIRM, not by elevation. It is possible to get removed from the floodplain if the existing ground is above the BFE, but they would have to go through the LOMA process. If they don't go through the LOMA process, then floodplain regulations still apply if it's in the mapped floodplain. I'd recommend deleting the entire paragraph.

9.63 A – the purpose of the added language isn't clear. There are regulations for A zones as well.

9.64A1 – the Michigan Residential code also regulates additions (even if not a substantial improvement)

9.6.4.1.d is the CRS freeboard requirement for mechanical and electrical.

9.6.4.C.2 – mobile home language specifies substantial damage as a result of flood. Delete “as a result of flood”. Substantial damage criteria applies regardless of how the structure was damaged. The standards in this section also must be applied to new or replacement mobile homes on existing pads (IE maybe the pad was vacant and there wasn't substantial damage).

9.6.4. D.2. – mobile homes prohibited in the floodway- this is good. You likely get CRS points for this.

This entire ordinance is very atypical. But recently, I've seen other communities around southeast Michigan with versions of this. I have no idea where it came from but it is not a complete floodplain ordinance. There are MANY other standards spelled out in 44CFR that need to be part of the ordinance.

In Michigan, all the minimum NFIP requirements are located in the building codes (along with Appendix G). We have a sample ordinance at: http://www.michigan.gov/deq/0,1607,7-135-3313_3684_3725-122959--,00.html You may want to consider using the sample ordinance and just adding the language for the freeboard for mechanical/ electrical and any other more restrictive language you want.

Matt

Matthew Occhipinti, PE, CFM | NFIP Coordinator/ Floodplain Engineer | Water Resources Division
350 Ottawa Ave, NW, Grand Rapids, MI 49503 | ☎ 616-204-1708 | Fax: 616-356-0202
www.michigan.gov/floodplainmanagement



From: Amy Steffens <asteffens@HAMBURG.MI.US>
Sent: Tuesday, October 20, 2020 12:56 PM
To: Occhipinti, Matthew (EGLE) <OCCHIPINTIM@michigan.gov>
Subject: Hamburg Township amended floodplain development ordinance

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Matt,

Could I trouble you to please read the attached redlined amendments to Hamburg Township's floodplain development ordinance regarding the CRS-required amendment? I would like to make sure the changes I made align with the state requirements, particularly the mobile home standards. I am taking this amendment to the Planning Commission's November 18 public hearing.

At some point I will be in touch with you about potentially requiring a greater freeboard or elevating above the 0.2% annual chance flood.

Thank you,

Amy Steffens, AICP
Hamburg Township Planning and Zoning Administrator
(810) 222-1167
(Personal office hours 8 am to 3 pm, Monday, Wednesday, Friday)

ARTICLE 9.00**ENVIRONMENTAL PROVISIONS****Section 9.6 Regulation of Floodplain Areas****9.6.1 Purpose**

- A. The floodplains of Hamburg Township are subject to periodic inundation of flood waters which result in loss of property, health and safety hazards, disruption of commerce and governmental services and impairment of tax base.
- B. ~~It is the purpose of this Section to comply with the provisions and requirements of the National Flood Insurance Program, as constituted in accordance with the National Flood Insurance Act of 1968, and subsequent enactments and rules and regulations promulgated in furtherance of this program by the Federal Emergency Management Agency (FEMA), as published in the Federal Register, Vol. 41, No. 207, Tuesday, October 26, 1976, and redesignated at 44FR 31177, May 31, 1979. These regulations are adopted to comply with the rules and regulations of the National Flood Insurance Program, codified as 44 Code of Federal Regulations Parts 59—78, so as to maintain the community's eligibility in the National Flood Insurance Program.~~
- C. The provisions of this Section are intended to:
1. Help protect human life, prevent or minimize material losses, and reduce the cost to the public of rescue and relief efforts;
 2. Restrict or prohibit uses which are dangerous to health, safety, or property in times of flooding or cause excessive increases in flood heights or velocities;
 3. Require that uses vulnerable to floods, including public facilities which serve such uses, shall be protected against flood damage at the time of initial construction;
 4. Protect individuals from buying lands which are designated to be unsuited for intended purposes because of flooding;
 5. Permit reasonable economic use of property located within a designated floodplain area.

9.6.2 ~~9.6.2~~ Delineation of Floodplain Areas (One percent annual chance flood)-

- A. Designated floodplain areas shall overlay existing zoning districts delineated on the Zoning District Map of Hamburg Township. The following maps together with all attached material are hereby adopted by reference and declared to be a part of the Hamburg Township zoning map and this ordinance. The attached material includes the Flood Insurance Study for Livingston County, Michigan (all jurisdictions) and the Flood Insurance Rate Map panels enumerated below, dated September 17, 2008, all prepared by the Federal Emergency Management Agency. These materials are on file with the Hamburg Township zoning department. The most updated Flood

Insurance Rate Maps adopted by Hamburg Township will be incorporated for the administration of this ordinance.

Flood Insurance Rate Map panel numbers of 26093CINDOA, 26093C0320D, 26093C0340D, 26093C00345D, 26093C00431D, 26093C0432D, 26093C00433D, 26093C0434D, 26093C0445D, 26093C0451D, 26093C0452D, 26093C0453D, 26093C0454D, 26093C0456D, 26093C0458D, 26093C0465D, 26093C0470D.

Commented [AS1]: Addition by NFIP to include index panel

~~B. The boundaries of the Floodway Zone are determined by the scaling distances on the Flood Insurance Rate Map. The boundaries of the Flood Fringe Zone are determined by the flood elevations shown on the Flood Insurance Study.~~

Commented [AS2]: Deletion of paragraph recommended by NFIP

~~C. Where a conflict exists between the floodplain limits illustrated on the Flood Insurance Rate Map and actual field conditions the flood elevations shown on the Flood Insurance Study shall be the governing factor. The floodplain administrator shall interpret the boundary location based on the ground elevations that existed before construction and the flood elevations shown on the Flood Insurance Study for Livingston County, Michigan.~~

Commented [AS3]: Deletion of paragraph recommended by NFIP

~~The boundaries of the floodplain areas are identified in the report entitled The Flood Insurance Study, Hamburg Township, with accompanying Flood Insurance Rate Maps dated September 17, 2008 prepared by FEMA. The study and accompanying maps are adopted by reference, appended, and declared to be part of this Ordinance.~~

~~D. B. —~~ The standard applied~~s~~ to establishing the floodplain area is the base floodplain delineated by the base flood. In areas associated with riverine flooding, a floodway is designated within the floodplain area.

E. ~~C. —~~ Where there are disputes as to the location of a floodplain area boundary, the Zoning Board of Appeals shall resolve the dispute in accordance with Section 6.5.B.

9.6.3 Application of Regulations.

A. In addition to other requirements of this Ordinance applicable to development in the underlying zoning district, compliance with the requirements of this Section shall be necessary for all development occurring within designated floodplain areas ~~where base flood elevations have been determined on the Flood Insurance Rate Map or in the Flood Insurance Study.~~ Conflicts between the requirements of this Section and other requirements or this Ordinance or any other ordinance shall be resolved in favor of this Section, except where the conflicting requirement is more stringent and would further the objectives of this Section. In such cases the more stringent requirement shall be applied.

Commented [AS4]: Deleted by recommendation of NFIP for unclear language

B. Upon application for Land Use Permits in accordance with Section 3.3., the Zoning Administrator shall determine whether said use is located within a designated floodplain area utilizing the documents cited in Section 9.6.2. The issuance of a Land Use Permit within the floodplain area shall comply with the following standards:

1. The requirements of this section shall be met.

2. The requirements of the underlying districts and all other applicable provisions of this Ordinance shall be met.
3. All necessary development permits shall have been issued by appropriate local, State and Federal authorities, including a floodplain permit, approval, or letter of no authority from the ~~Michigan Department of Natural Resources under authority of Act 245, Public Acts of 1929, as amended by Act 167, Public Acts of 1968, State of Michigan.~~ Where a development permit cannot be issued prior to the issuance of a zoning compliance permit, a letter from the issuing agency indicating intent to issue contingent only upon proof of zoning compliance shall be acceptable.

C. Floodplain Management Administrative Duties

1. With regard to the National Flood Insurance Program, and the regulation or development within the flood hazard area zone as prescribed in Article 9.6., the duties of the zoning administrator shall include, but are not limited to:
 - a. Notification to adjacent communities and the ~~State of Michigan Department of Natural Resources~~ of the proposed alteration or relocation of any watercourse, and the submission of such notifications to the Federal Insurance Administration;
 - b. Verification and recording of the actual elevation in relation to mean sea level of the lowest floor, including basement, of all new or substantially improved structures constructed within the flood hazard area, and in the case of floodproofed structures, the elevation to which the structure was floodproofed;
 - c. Recording of all certificates of floodproofing, and written notification to all applicants to whom variances are granted in a flood hazard area zone indicating the terms of the variance, the increased danger to life and property, and that the cost of flood insurance will increase commensurate with the increased flood risk, and may reach amounts in excess of \$25.00 for \$100.00 of insurance coverage per year. A record of all variance notifications and variance actions shall be maintained together with the justification for each variance.
2. All records and maps pertaining to the National Flood Insurance Program shall be maintained in the office of the zoning administrator and shall be open for public inspection.
3. It shall be the responsibility of the zoning administrator to obtain and utilize the best available flood hazard data for purposes of administering this Ordinance in the absence of data from FEMA.

Commented [A55]: Corrected to State of Michigan per LCBD email

9.6.4. Floodplain Standards and Requirements

- A. The following general standards and requirements shall be applied to all uses proposed to be located within the floodplain area:

1. All ~~new construction, -and-~~ substantial improvements, and/or reconstruction due to substantial damage within a floodplain, including the placement of prefabricated buildings and mobile homes, shall:
 - a. Be designed and anchored to prevent flotation, collapse, or lateral movement of the structure;
 - b. Be constructed with materials and utility equipment resistant to flood damage
 - c. Be constructed by methods and practices that minimize flood damage.
 - d. Be constructed with electrical, heating, ventilation, plumbing, air conditioning equipment, generators, and other service facilities elevated a minimum of one (1) foot above the base flood elevation and designed to prevent water from entering or accumulating within the components during conditions of flooding.
2. All new and replacement water supply systems shall minimize or eliminate infiltration of flood waters into the systems.
3. All new and replacement sanitary sewage systems shall minimize or eliminate infiltration of flood waters into the systems and discharges from systems into flood waters. On-site waste disposal systems shall be located to avoid impairment to the system or contamination from the system during flooding.
4. All public utilities and facilities shall be designed, constructed, and located to minimize or eliminate flood damage.
5. Adequate drainage shall be provided to reduce exposure to flood hazards.
6. The Township Engineer or his representative shall review development proposals to determine compliance with the standards in this section, and shall transmit his determination to the Zoning Administrator.
7. Land shall not be divided in a manner creating parcels or lots which cannot be used in conformance with the requirements of this Article.
8. The flood carrying capacity of any altered or relocated watercourse not subject to State or Federal regulations designed to ensure flood carrying capacity shall be maintained.
9. Available flood hazard data from Federal, State, or other sources shall be reasonably utilized in meeting the standards of this section. Data furnished by FEMA shall take precedence over data from other sources.

B. The following specific standards shall be applied to all uses proposed to be located within the floodplain area, ~~but not within the floodway portion of the floodplain area.~~

1. ~~Residential structures: new construction, substantial improvements, and/or reconstruction due to substantial damage~~ All new construction and substantial

Commented [A56]: NFIP comment indicates MRC regulates additions but our ZO defines defines an addition as construction.

~~improvements of residential structures~~ shall have the lowest floor, including basement, elevated at least one (1) foot above the base flood ~~elevation level~~.

2. All new construction and substantial improvements of nonresidential structures shall have either:

- a. The lowest floor, including basement, elevated at least one (1) foot above the base flood ~~elevation level~~.
- b. Be constructed such that below base flood ~~level, elevation~~, together with attendant utility and sanitary facilities, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subparagraph are satisfied, and that the floodproofing methods employed are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with a base flood in the location of the structure.

- C. Mobile Home Standards. The following general standards and requirements shall be applied to ~~all mobile homes placed, substantially improved, and/or reconstructed due to substantial damage~~ located within flood plain areas:

1. All mobile homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties in accord with the following specifications:
 - a. Over-the-top ties shall be provided at each of the four corners of the mobile home, with two (2) additional ties per side at intermediate locations, except that on mobile homes less than fifty (50) feet in length one (1) tie per side shall be required.
 - b. Frame ties shall be provided at each corner of the home with five (5) additional ties per side at intermediate points, except that on mobile homes less than fifty (50) feet in length four (4) ties per side shall be required.
 - c. All components of the anchoring system shall be capable of carrying a force of 4800 pounds.
 - d. All additions to a mobile home shall be similarly anchored.

2. ~~All mobile homes located either outside of a mobile home park, in a new mobile home park, in an expansion to an existing mobile home park, or in an existing mobile home park where the mobile home has suffered substantial damage as a result of a flood, shall be elevated on a permanent foundation such that the lowest floor and electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities including ductwork, are elevated to one foot above the base flood elevation and securely anchored to adequately anchored foundation system to resist flotation, collapse and lateral movement.~~

Commented [AS7]: Deleted at recommendation of NFIP

~~3.2.~~ An evacuation plan indicating alternate vehicular access and escape routes shall be filed with the Livingston County Sheriff Department for mobile home parks and mobile home subdivisions.

~~3. Mobile homes within Zones A-3 on the Flood Insurance Rate Map shall be located in accord with the following standards:~~

~~a. All mobile homes shall be placed on stands or lots which are elevated on compacted fill or on pilings so that the lowest floor of the mobile home will be at or above the base flood level.~~

~~b. Adequate surface drainage away from all structures and access for a mobile home hauler shall be provided.~~

~~c. In the instance of elevation on pilings, lots shall be large enough to permit steps; piling foundations shall be placed in stable soil no more than ten (10) feet apart; and reinforcement shall be provided for piers more than six (6) feet above ground level.~~

~~d. In mobile home parks and mobile home subdivisions which exist at the time this subsection is adopted, where repair, reconstruction or improvement of streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities, and pads before the repair, the standards in subparagraphs (a), (b), and (c) of this subsection shall be complied with.~~

D. The following standards shall be applied to all uses proposed to be located within the floodway portion of the floodplain area.

1. Encroachments, including fill, new construction, substantial improvements, and other development shall be prohibited. Exception to this prohibition shall only be made upon certification by a registered professional engineer or the ~~Department of Natural Resources~~State of Michigan that the development proposed will not result in any increases in flood levels during a base flood discharge, and compliance with Act 245, Public Acts of 1929, as amended by Act 167, Public Acts of 1968.

2. The placement of mobile homes shall be prohibited.

3. The uses of land permitted in an underlying zoning district shall not be construed as being permitted within the regulatory floodway, except upon compliance with the provisions of this section.

9.6.5. Warning and Disclaimer of Liability.

A. The degree of flood protection required by provisions of this section is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Larger floods may occur on rare occasions.

- B. These provisions do not imply that areas outside the floodplain or land uses permitted within such districts will be free from flooding or flood damages nor shall the Township or any officer or employee thereof be liable for any flood damages that result from reliance on the provisions of this section or any administrative decision lawfully made thereunder.

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P.O. Box 157
10405 Merrill Road
Hamburg, Michigan 48139-0157

To: Planning Commissioners
From: Scott Pacheco, AICP
Date: November 18, 2020
Agenda Item: 7 a
Re: ZTA20-007 PUD Mixed Development Communities (Exhibit A)

PROJECT HISTORY:

The applicant was originally considering a site within Hamburg Township to develop as two separate developments; a 27-31 unit Open Space PUD (OSPUD) and a 20 unit Elder Cottage Housing Opportunity PUD (ECHOPUD). The OSPUD would be on approximately 41 acres on the south side of the subject property and the ECHOPUD would be developed on an approximately 7 acre piece of the property on the north side of the subject property. OSPUD and ECHOPUD projects are both allowed in the zoning district (RAA) where the site was located.

During the initial stage of design the applicant determined that the development would be more desirable if the ECHOPUD housing (980 sq. ft. homes restricted to owners over 55 y/o) was intermingled with the OSPUD housing (market rate single family homes). This would allow; future owners of the ECHOPUD housing to be more integrated throughout the neighborhood and the housing types to be alternated throughout the site to provide a mixture of architectural elements.

When the applicant discussed this idea with staff; it was determined that although the mixtures of projects would provide some benefits to the community, that the current PUD regulations did not allow multiple PUD developments to be mixed into a single project. The PUD regulations would need to be amended if the developer wanted to move forward with a development that utilized multiple PUD regulations (OSPUD and ECHOPUD) in a single project.

On October 12, 2020, Jeff Wilkerson (the applicant) submitted the Zoning Text Amendment, ZTA 20-007. ZTA20-007 was submitted to revise the Planned Unit Development regulations to allow multiple Planned Unit Development (PUD) regulations to be used in a single development project. The existing PUD regulation do not allow a developer to mix the types of housing and uses allowed by the PUD ordinance to be mixed into a single project.

ANALYSIS:

The applicant has worked diligently with Township Staff since the draft zoning text amendment was submitted on October 12, 2020 to create a more cohesive draft amendment

that would work for all future projects within the entire Township. The changes to the final draft zoning text amendment (ZTA20-007) are broken into two categories below; The first category is amendments requested by the applicant, and the second category is amendments requested by staff. The amendments requested by the applicant are needed in order to allow multiple PUD regulations to be utilized in a single project and the amendments proposed by staff will make clarification and streamline the existing PUD regulations in Article 14.

- 1) Draft Amendment Proposed by the Applicant:
 - a. Revisions to ECHO Regulations under Section 14.2.4
 - b. Addition of Section 14.4 Mixed Community Planned Unit Developments
- 2) Draft Amendments Proposed by Staff:
 - a. Changing the word Article to Section throughout Article 14 when applicable;
 - b. Consolidating the Project Standards in the OSPUD, ECHOPUD, CHOPUD, and General PUD sections into a section 14.6 Project Standards.
 - c. Revisions to the CHOPUD regulations to match the proposed revisions to the ECHO regulations;

Applicant Proposed Amendments

Revisions to Section 14.2.4 (F):

F. Area, Height, Bulk and Layout Regulations.

Minimum ECHO unit Floor area:	400 square feet
Maximum ECHO unit floor area:	980 square feet
Maximum building height:	1 story
Required roof pitch:	4:12 ratio or greater
Minimum building width, any dimension:	14 feet
Distance between roof overhangs of Buildings:	10 feet
Handicap ramps:	May encroach into any setback space.
Basement:	Optional
Shed:	Optional
Garage:	Optional
Covered parking:	Optional
Minimum setbacks:	15 ft. from Street or private road right-of-way 10 ft. side and rear lot lines 5 ft. from common access drives
Common access drives:	4 ft. from all lot lines
Overall Site :(Perimeter Setbacks)	20 ft. setbacks for buildings. 4 ft. setback for street, road and common access drive improvements.
Project Setbacks	15 ft. from street or road right-of-way, front porches may encroach 7 feet into this setback. 10 ft. separation between roof overhangs on a habitable building not allowed elsewhere in the regulations. 6 ft. separation between roof overhangs on accessory structure and accessory dwellings. 0 ft. separation for attached units or attached garages

5 ft. setback from common access drives
(excluding driveways and shared driveways)

Removing the regulation to require a 4:12 or greater pitch roof will allow more architectural flexibility and will open up the home design for modern and mid-century modern architectural designs.

The proposed amendments to the Minimum Setbacks will clarify the setback regulations. By adding setbacks from the overall site or perimeter of the subject property and by making sure all of the rest of the setback are from an improvement on the site there will be no confusion on where the setback is measure to and from; specifically on condominium type project where the units are on common owned lots and there are no individual lot line to measure to and from.

Addition of Section 14.5 Mixed Planned Unit Development Projects (MPUD)

14.5.1 Intent

It is the intent of this section to allow more than one type of Planned Unit Development to be combined into a single project. For example a development may have an Open Space Planned Unit Development project that also includes Elderly Cottage Housing Opportunity (Echo) Planned Unit Development. This will allow the different development types to be mixed throughout a single project site.

14.5.2 Definitions.

MIXED DEVELOPMENT COMMUNITY: This is a Development where there are multi planned unit development communities are mixed into a single development site.

14.5.3 Project Characteristics.

A mixed development community shall comply with the Project Characteristics of the Planned Unit Development type utilized on the project and as following:

A. Location. A mixed development community may only be approved within a zoning district in which all of the proposed Planned Unit Development utilized are allowed.

B. Permitted Uses. Only the permitted uses in the Planned Unit Development utilized are allowed in the mixed development community

C. Dwelling Density. The number of dwelling units allowable within a mixed development community project shall be determined as if.

1. The applicant shall prepare and present to the Planning Commission for review, a parallel design for the project that is consistent with State, County and Township requirements and design criteria for a tentative preliminary plat. The parallel plan shall meet all standards for lot size, lot width and setbacks as normally required under the Planned Unit Developments regulations for the development type that is utilized in the proposed mixed development community, public roadway improvements and private parks, and contain an area which conceptually would provide sufficient area for storm water detention. Lots in the parallel plan shall provide sufficient building envelope size without impacting wetlands regulated by the State of Michigan. This design shall include all information as required by the guidelines adopted by the Planning Commission pursuant to Section 14.7.5 (A).

2. The parallel plan is only used to determine allowable density for the mixed development community project.

3. The Planning Commission shall review the design and determine the number of lots that could be feasibly constructed and be economically viable following the parallel design. This number, as determined by the Planning Commission, shall be the maximum number of dwelling units allowable for the mixed development community project.

14.5.4 Development Standards.

A mixed development community shall comply with the Development Standards of all of the Planned Unit Development types utilized in the project in addition to the following:

- A. **Mixed Development Community Size.** A mixed development community if the Open Space Planned Unit Development is utilized shall not be located on a property less than 30 acres in size.
- B. **Mixed Development Community Setbacks:** Where and ECHO or CHPUD structure are adjacent to a Structure other than another ECHO or CHPUD structure the separation between roof overhangs shall be a minimum of 15 feet.

This section will allow future development within the Township to use two different Planned Unit Developments (PUDs) within a single development site as long as all the requirements of the original PUDs are met.

For example if a developer is utilizing a CHPUD the regulations in the CHPUD section (14.3) need to be met and if the CHPUD project is mixed with an ECHOPUD project the Mixed Development Planned Unit Development project could only be located in the VC, VR or RB zoning districts because those are the only zoning districts where both the CHPUD and the ECHOPUD projects are allowed. So even though an ECHOPUD project is allowed in the RAA, RA, RB, RC, CS, VC, VR, OH or MD, or WFR zoning district because the development will be a mixed development it is restricted to where both of the PUDs are allowed.

Staff Proposed Amendment:

On October 15, 2019 the Township made significant changes to the PUD regulations, when these regulations were amended in 2019 the regulations were consolidated from 5 Article (Articles 13-17) to a single Article (Article 14 Planned Unit Developments). Article 14 was then broken into sections in order to provide regulations for the different types of PUDs, and to provide common sections that would pertain to all of the PUDs discussed under Article 14.

Change references in Article 14:

Through this process the reference to the original PUD regulations in the articles was not changed to reference sections instead of articles. Staff has gone through the PUD regulations and revised the references to provide better clarity.

Consolidate the Project Standards:

To make the PUD regulations more streamlined the Project Standards for each type of PUD (OSPUD, ECHOPUD, CHPUD, GPUD and MDPUD) have been removed from each individual PUD section and have been consolidated into a new section 14.6 Project Standards which will be applicable to all PUDs.

Amend the CHPUD regulations Area, Height, Bulk and Layout Regulations:

This revision would provide clarity for the required setback to the CHPUD project and would be similar to the proposed changes to the ECHOPUD regulations regarding setbacks. The

regulations regarding roof pitch were never included in the CHPUD requirement to allow more flexibility in design when the original regulations were approved on October 15, 2019.

Because the project requirements are the same as the existing PUD regulations, the proposed zoning amendments would not increase the density or traffic created by a project. This proposed amendment would not increase the impact a project would have on the surrounding community. The approval process for a Mixed Community Planned Unit Development (MCPUD) is the same as all other Planned Unit Development and would require a public hearing and preliminary and final site plan review. The ZTA would also be consistent with the 2020 Master Plan Goals to preserve the natural and historic character of Hamburg Township by accommodating a reasonable amount of development, but ensuring the development is in harmony with the natural features and the unique environmental requirements of the Township and to protect, preserve, and enhance whenever possible the unique and desirable natural amenities of Hamburg Township.

RECOMMENDATION:

Staff suggests that the Planning Commission consider the proposed zoning text amendment (ZTA 20-004) in terms of its own judgment on particular factors related to the individual proposal, the most likely effect on the community's physical development, and conformance with the Township Master Plan. The Planning Commission should then make a recommendation on the proposed zoning text amendment to the Township Board.

Example Recommendation Motion:

The Planning Commission recommends that the Township Board approve ZTA20-007 as discussed at tonight's meeting and as presented in the Staff Report because the proposed amendment will allow additional flexibility in new developments without increasing any impacts on the community and still requiring the same review and approval requirements as currently exist. This zoning text amendment is consistent with the goals and objectives of the Township's Master Plan as discussed and as stated in the staff report.

EXHIBITS

Exhibit A: Draft Zoning Text Amendment 20-007

Exhibit B: October 12, 2020 application

Section 14.1 OPEN SPACE COMMUNITY PLANNED UNIT DEVELOPMENT (OSPUD)

14.1.1 Intent

The intent of this ~~Article~~ **Section** is to offer an alternative to traditional subdivisions through the use of Planned Unit Development legislation, as authorized by Michigan Zoning Enabling Act, Public Act 110 of 2006, as amended for the purpose of:

- A. Encouraging the use of Township land in accordance with its character and adaptability;
- B. Assuring the permanent preservation of open space, agricultural lands, and other natural resources;
- C. Providing recreational facilities within a reasonable distance of all residents of an open space community development;
- D. Allowing innovation and greater flexibility in the design of residential developments;
- E. Facilitating the construction and maintenance of streets, utilities, and public services in a more economical and efficient manner;
- F. Ensuring compatibility of design and use between neighboring properties; and,
- G. Encouraging a less sprawling form of development, thus preserving open space as undeveloped land.

These regulations are intended to preserve a traditional rural character to the land use pattern in the Township through the creation of small residential nodes contrasting with open space and less intensive land uses. This ~~Article~~ **Section** is not intended as a device for ignoring the Zoning Regulations of the Township, the standards set forth therein, nor the planning concepts upon which the Zoning Ordinance has been based.

These regulations are intended to result in a specific development substantially consistent with Zoning Ordinance standards, yet allow for modifications from the general standards to insure appropriate, fair, and consistent decision making.

The open space community district is established as an overlay district applicable to the following single family residential districts RAA, RA, WRF, and NR.

14.1.2 Scope

For the purposes of this ~~Article~~ **Section**, an “open space community” is defined as a predominately single family residential development in which dwelling units are placed together into one or more groupings within a defined project area. The dwelling units are separated from adjacent properties or other groupings of dwellings by substantial open space that is perpetually protected from development. Multi-family and commercial uses may be allowed as stated in Section 14.1.5.

14.1.3 Eligibility Criteria

To be eligible for open space community consideration, the applicant must present a proposal for residential development that meets each of the following:

- A. Recognizable Benefits.** An open space community shall result in a recognizable and substantial benefit, both to the residents of the property and to the overall quality of life in the Township. The benefits can be provided through site design elements in excess of the requirements of this Ordinance, such as high quality architectural design, variety of housing types and sizes, providing additional amenities for public use, extensive landscaping, provide transition areas from adjacent residential land uses, unique site design features, unified access, preservation of woodlands and open space, particularly along major thoroughfares, and buffering development from lakes, rivers, streams and wetlands. This benefit should accrue, in spite of any foreseeable detriments of the proposed development.

B. Open Space. The proposed development shall provide at least one of the following open space benefits:

1. Significant Natural Assets. The site contains significant natural assets such as woodlands, individual trees over twelve (12) inch diameter, measured at breast height, rolling topography with grades exceeding 15%, significant views, natural drainage ways, water bodies, floodplains, regulated or nonregulated wetlands, or natural corridors that connect quality wildlife habitats which would be in the best interest of the Township to preserve and which might be negatively impacted by conventional residential development. This determination shall be made by the Planning Commission after review of a site analysis plan, prepared by the applicant that inventories these features. If animal or plant habitats of significant value exist on the site, the Planning Commission, as a condition of approval, may require that the open space community plan preserve these areas in a natural state and adequately protect them as nature preserves or limited access areas.

2. Recreation Facilities. If the site lacks natural features, it can qualify if the development will preserve an existing recreation facility or provide usable recreation facilities to which all residents of the development shall have reasonable access. Such recreation facilities include areas such as a neighborhood park, golf course, passive recreational facilities, soccer fields, ball fields, bike paths or similar facilities which provide a feature of community-wide significance and enhance residential development.

3. Creation of Natural Features. If the site lacks existing natural features, it can also qualify if the development will create significant woodland features. The creation of significant woodland features shall be considered providing perimeter buffer plantings and interior street tree plantings at a rate of twice (2 x) what is required by this Ordinance.

C. Guarantee of Open Space. The applicant shall guarantee to the satisfaction of the Township Planning Commission that all open space portions of the development will be maintained in the manner approved. Documents shall be presented that bind all successors and future owners in fee title to commitments made as a part of the proposal. This provision shall not prohibit a transfer of ownership or control, provided notice of such transfer is provided to the Township and the land uses continue as approved in the open space community plan.

D. Cohesive Neighborhood. The proposed development shall be designed to create a cohesive community neighborhood through common open space areas for passive or active recreation and resident interaction. All open space areas shall be equally available to all residents of the open space community.

E. Unified Control. The proposed development shall be under single ownership or control, such that there is a single person or entity having proprietary responsibility for the full completion of the project unless it is stated in the development agreement. The applicant shall provide sufficient documentation of ownership or control in the form of agreements, contracts, covenants, and/or deed restrictions that indicate that the development will be completed in its entirety as proposed. In the event, all or any portion of the development changes ownership or control prior to completion of the project, the terms and conditions of the planned unit development shall be binding on any successor owner of all or any portion of the property.

F. Density Impact. The proposed type and density of use shall not result in an unreasonable increase in the need for or impact to public services, facilities, roads, and utilities in relation to the use or uses otherwise permitted by this Ordinance, and shall not place an unreasonable impact to the subject and/or surrounding land and/or property owners and occupants and/or the natural environment. The Planning Commission may require that the applicant prepare an impact statement documenting the significance of any environmental, traffic or socio-economic impact resulting from the proposed open space community. An unreasonable impact shall be considered an unacceptable significant adverse effect on

the quality of the surrounding community and the natural environment in comparison to the impacts associated with conventional development. The Planning Commission may require that the applicant prepare a quantitative comparison of the impacts of conventional development and the open space community plan to assist in making this determination (such as an overlay of conceptual development plans on a natural features map illustrating other site development options to demonstrate the impacts that have been minimized to the extent practical). If the cumulative impact creates or contributes to a significant problem relative to infrastructure demand or environmental degradation, mitigation shall be provided to alleviate the impacts associated with the open space community.

G. Township Master Plan. The proposed development shall be consistent with and further the implementation of the Township Master Plan.

14.1.4 Project Characteristics.

A proposed open space community shall comply with the following:

A. Location. An open space community may be approved within any of the following zoning districts: RAA, RA, NR, or WFR.

B. Permitted Uses. An open space community is generally restricted to single family detached or attached residential dwellings.

1. Unless modified by the Planning Commission following the standards herein, all residential dwellings shall meet the yard, lot width, and bulk standards required by Article 7.00, except that single family attached dwellings may have zero (0) side lot lines.

2. In projects that qualify under the standards of Section 14.1.5, a commercial or a multiple family component may be allowed by the Planning Commission.

C. Dwelling Density. The number of dwelling units allowable within an open space community project shall be determined through preparation of a parallel plan.

1. The applicant shall prepare and present to the Planning Commission for review, a parallel design for the project that is consistent with State, County and Township requirements and design criteria for a tentative preliminary plat. The parallel plan shall meet all standards for lot size (as shown in paragraph B below), lot width and setbacks as normally required under Section 7.6, public roadway improvements and private parks, and contain an area which conceptually would provide sufficient area for storm water detention. Lots in the parallel plan shall provide sufficient building envelope size without impacting wetlands regulated by the State of Michigan. This design shall include all information as required by the guidelines adopted by the Planning Commission pursuant to Section 14.57.5 (A).

2. The parallel plan shall be prepared with the following minimum lot areas. The parallel plan is only used to determine allowable density for an open space community project. The following parallel plan minimum lot areas incorporate a density bonus for qualifying open space community projects that meet all requirements of this ordinance:

Underlying Zoning District Parallel Plan Minimum Lot Size (square feet)			
Zoning District	Original	Meeting Open Space Regulations	Meeting Open Space Regulations with Pubic Sewer and a minimum of

			60% open space
RAA	87,160	60,000	51,000
RA	43,580	30,000	25,500
NR	43,580	30,000	25,500
WFR	43,580	30,000	25,500

3. The Planning Commission shall review the design and determine the number of lots that could be feasibly constructed and be economically viable following the parallel design. This number, as determined by the Planning Commission, shall be the maximum number of dwelling units allowable for the open space community project. The Planning Commission may grant an additional density bonus of up to 15% for exemplary projects that meet the conditions outlined in Section 14.1.5

D. Open Space Community Plans Not requiring Public Hearing (Open Space Preservation). An open space community that results in the same number of lots as would be permitted under the existing zoning district and where 50% of the land area will remain open space, may be permitted by the Planning Commission following normal site plan review procedures outlined in Article 4.00.

E. Water and Sewer Service. If there is public water or sewer service available to the site on which an open space community development is proposed, the Planning Commission may require connection into the system.

F. Base Zoning Regulations. Unless specifically waived or modified by the Planning Commission, all Zoning Ordinance requirements for the underlying zoning district, except for minimum lot area, and other Township regulations, shall remain in full force.

G. Regulatory Flexibility.

1. To encourage flexibility and creativity consistent with the open space community concept, departures from compliance with the standards provided for in the Zoning Ordinance, except for additional density bonuses, may be granted at the discretion of the Planning Commission as part of the open space community approval process. Such departures may be authorized on the condition that there are features, amenities or planning mechanisms deemed adequate by the Planning Commission designed into the project for the purpose of achieving the objectives intended to be accomplished with respect to each of the regulations from which a departure is sought. Any allowed deviations from Zoning Ordinance standards will require the applicant to provide substitute safeguards for each regulation for which there is noncompliance, in whole or in part, in the development plan.

2. Any regulatory modification shall be approved through a finding by the Planning Commission that the deviation shall result in a higher quality of development than would be possible using conventional zoning standards. Regulatory modifications are not subject to variance approval of the Zoning Board of Appeals. No part of an open space community plan may be appealed to the Zoning Board of Appeals. This provision shall not preclude an individual lot owner from seeking a variance following final approval of the open space community, provided such variance does not involve alterations to open space areas as shown on the approved open space community site plan.

3. A table shall be provided on the site plan which specifically details all deviations from the established zoning area, height and setback regulations, off-street parking regulations, general provisions, or subdivision regulations which would otherwise be applicable to the uses and development proposed in the absence of this open space community [Article Section](#). This specification should include Ordinance provisions from which deviation are sought, and the reasons and mechanisms to be utilized for the protection of the public health, safety, and welfare in lieu of

the regulations from which deviations are sought. Only those deviations consistent with the intent of this Ordinance shall be considered.

H. Open Space Requirements.

1. All land within a development that is not devoted to a residential unit, an accessory use, vehicle access, vehicle parking, a roadway, an approved land improvement, or, if applicable, a commercial use, shall be set aside as common land for recreation, conservation, agricultural uses, or preserved in an undeveloped state. Grading in the open space shall be minimal, with the intent to preserve existing topography.

2. An open space community shall maintain a minimum of forty percent (40%) of the gross area of the site as dedicated upland open space held in common ownership. Such open space may be reduced to thirty percent (30%) for lower density projects as described in Section 14.1.4.H.9 Large Lot Open Space, except as noted in Section 14.1.4.H.3 Areas Not Considered Open Space, any undeveloped land area within the boundaries of the site meeting the open space standards herein may be included as required open space. A minimum of twenty-five percent (25%) of the required open space shall be upland area exclusive of wetlands that is accessible to all residents of the open space community.

3. Areas Not Considered Open Space. The following land areas are not included as dedicated open space for the purposes of this [Article section](#):

- i. The area of any street right-of-way
- ii. Any submerged land area.
- iii. Any portion of the project used for commercial purposes.
- iv. golf course fairways and greens.
- iv. The required setbacks surrounding a residential structure that is not located on an individual lot or condominium site.

4. The common open space may either be centrally located along the road frontage of the development, located to preserve significant natural features, or located to connect open spaces throughout the development. The open space along the exterior public roads shall generally have a depth of at least one hundred (100) feet, either landscaped or preserved in a natural wooded condition. The open space along the exterior public roads shall be landscaped with a minimum of one (1) evergreen tree or canopy tree for each twenty (20) feet of road frontage. Such plantings shall be planted in staggered rows or clustered into groupings to provide a natural appearance. Preservation of existing trees may be credited towards meeting the frontage landscaping requirement. The Planning Commission may require the provision of a planting berm at least three (3) feet in height in addition to the plant materials required to further help to separate open space areas along the public right-of-way parallel to a major arterial.

5. Connections with adjacent open space, public land or existing or planned pedestrian/bike paths may be required by the Planning Commission.

6. The dedicated open space shall be set aside by the developer through an irrevocable conveyance that is found acceptable to the Planning Commission, such as:

- i. Recorded deed restrictions,
- ii. Covenants that run perpetually with the land, or
- iii. A conservation easement established pursuant to subpart 11 of part 21 of the Natural Resources and Environmental Protection Act being MCL 324.2140, et seq.. Such conveyance shall assure that the open space will be protected from all forms of development, except as

shown on an approved site plan, and shall never be changed to another use. Such conveyance shall:

- a. Indicate the proposed allowable use(s) of the dedicated open space. The Planning Commission may require the inclusion of open space restrictions that prohibit the following:
 - Dumping or storing of any material or refuse;
 - Activity that may cause risk of soil erosion or threaten any living plan material;
 - Cutting or removal of live plant material except for removal of dying or diseased vegetation;
 - Use of motorized off road vehicles;
 - Cutting, filling or removal of vegetation from wetland areas;
 - Use of pesticides, herbicides or fertilizers within or adjacent to wetlands.
- b. Require that the dedicated open space be maintained by parties who have an ownership interest in the open space.
- c. Provide standards for scheduled maintenance of the open space.
- d. Provide for maintenance to be undertaken by the Township of Hamburg in the event that the dedicated open space is inadequately maintained, or is determined by the Township to be a public nuisance, with the assessment of costs upon the property owners.

7. Continuing Obligation. The dedicated open space shall forever remain open space, subject only to uses approved by the Township on the approved site plan. Further subdivision of open space land or its use for other than recreation, conservation or agricultural purposes, except for easements for utilities and septic systems, shall be strictly prohibited. Open space may include golf course area, provided that it forever remains outdoor recreation or natural undeveloped land. This dedication shall be written and recorded with the Development Agreement, and shall be in a format reviewed and approved by the Township Attorney.

8. Allowable Structures. Any structure(s) or building(s) accessory to a recreation, conservation or agriculture use may be erected within the dedicated open space, subject to the approved open space plan. These accessory structure(s) or building(s) shall not exceed, in the aggregate, one percent (1%) of the required open space area.

9. Large Lot Open Space. The Planning Commission has the discretion to allow lower density Open Space Communities with larger lots and less open space. For these Large Lot Open Space Communities, the required minimum open space area may be reduced from forty percent (40%) to thirty percent (30%) where the total number of dwelling units, determined under Section 14.1.4, is reduced by at least ten percent (10%).

I. Compatibility with Adjacent Uses. The proposed location of accessory uses or structures that are of a significantly different scale or character than the abutting residential districts, such as access drives, parking areas, solid waste pick-up points, swimming pools, tennis courts and facilities of a similar nature, shall not be located near the boundary of the development or so as to negatively impact the residential use of adjacent lands.

J. Transition Areas. Where the Open Space Community abuts a single family residential district, the Planning Commission may require a transition area. Grading within the transition area shall be minimal unless needed to provide effective buffering or accommodate drainage. If the grade change adjacent to single family residential is to be varied by more than three (3) feet, the site plan shall include cross sections illustrating existing and proposed grades in relation to existing and proposed building heights. Perspective renderings from adjacent residential units are encouraged. The Planning Commissions may

review the proposed transition area to ensure compatibility. The Planning Commission may require that the transition area consist of one or more of the following:

1. A row of single-family lots or condominium sites similar to adjacent single family development in terms of density, lot area, lot width, setbacks and building spacing.
2. Woodlands, natural features or a landscaped greenbelt sufficient to provide an obscuring effect.
3. Open or recreation space.
4. Significant changes in topography which provide an effective buffer.

K. Architectural and Site Element Design. Residential facades shall not be dominated by garages; at least forty percent (40%) of residential units shall have side entry garages, garages to the rear of the main structure, alley loaded garages, or recessed garages where the front of the garage is at least five (5) feet behind the front line of the living portion of the principal dwelling. The intent of encouraging rear yard, recessed or side entry garages is to enhance the aesthetic appearance of the development and minimize the aesthetic impact resulting from the close clustering of units allowed under these regulations.

Signage, lighting, entryway features, landscaping, building materials for the exterior of all structures, and other features of the project, shall be designed and completed with the objective of achieving an integrated and cohesive development, consistent with the character of the community, surrounding development, and natural features of the area. The Planning Commission may require street or site lighting where appropriate.

L. Access. Direct access onto a County road or State highway shall be required to an open space community. The nearest edge of any entrance or exit drive shall be located no closer than two hundred (200) feet from any existing street or road intersection (as measured from the nearest intersection right-of-way line). Open Space Communities shall also meet or exceed the access standards contained in Section 10.8 of this Ordinance. The requirements of this section may be waived or modified by the Planning Commission in accordance with Section 14.1.4.G Regulatory Flexibility, ~~A~~ upon a finding by the Planning Commission that safe and reasonable access cannot otherwise be provided in a manner that complies with the standards of the zoning ordinance, including the provisions specified above, and that proposed deviations from these ordinance standards will result in safe and reasonable access to the site. The Planning commission may require the submission of a traffic impact study to document the conditions and circumstances that prevent compliance with these standards, and if so it shall be the burden of the Applicant to demonstrate that safe and reasonable access is provided by the Open Space plan.

M. Internal Roads. Internal roads within an open space community may be public or private.

1. Construction of private roads as a means of providing access and circulation is encouraged. Private roadways within an open space community must meet the design requirements of the Township Private Road Ordinance. The Planning Commission may modify these requirements, if all of the following findings are made:
 - i. There is no potential for the road to connect with abutting land or be extended to serve additional land in the future.
 - ii. Significant natural features such as mature trees, natural slopes, wetlands or other water bodies would be preserved through allowing a modification to the Private Road standards.
2. Where private roads are developed, a maintenance plan, including a means of guaranteeing maintenance assessments from the affected property owners, shall be reviewed and approved by the Township Planning Commission.

3. Both sides of all internal roads shall be landscaped with street trees. For road frontages of individual lots or condominium sites, a minimum of two (2) canopy trees shall be provided per dwelling. For sections of road that do not abut lots or condominium sites, one canopy trees shall be provided on each side for every fifty (50) feet of road. Existing trees to be preserved within five (5) feet of the road right-of-way or easement may be credited towards meeting this requirement.

N. Pedestrian Circulation. The Open Space Community plan shall provide pedestrian access to all open space areas from all residential areas, connections between open space areas, public thoroughfares, and connections between appropriate on- and off-site uses. Trails within the open space community may be constructed of gravel, woodchip or other similar material, but the Planning Commission may require construction of eight (8) foot wide asphalt bike paths through portions of the development or along the any public right-of-way abutting the open space community. The Planning Commission may require the construction of sidewalks for Open Space Communities within the area included in the Hamburg Village Sub-area Master Plan. Locations for school bus stops shall be provided on the site plan.

O. Natural Features. The development shall be designed to promote the preservation of natural features. If animal or plant habitats of significant value exist on the site, the Planning Commission, as a condition of approval, may require that the open space community plan preserve these areas in a natural state and adequately protect them as nature preserves or limited access areas. The Planning Commission may also require that the project meets the natural features setback requirements of Article 9 Section 9.9 of the zoning ordinance.

P. Existing Structures. When a tract contains structures or buildings deemed to be of historic, cultural or architectural significance, as determined by the Planning Commission, and if suitable for rehabilitation, the structures shall be retained. Adaptive reuse of existing structures for residential use or permitted accessory residential uses shall be permitted.

14.1.5 Optional Provisions for Exemplary Projects.

The Planning Commission may allow an exemplary open space community to include one or more of the following optional provisions. In order to qualify for an optional provision, the applicant must demonstrate, to the satisfaction of the Planning Commission, that the proposed project exceeds the minimum standards for open space community eligibility under Section 14.1.3 Eligibility Criteria.

In order to qualify for development under the optional provisions of this section, all structures within the project, including single family dwellings, shall be subject to architectural review by the Planning Commission. Buildings shall provide harmony with adjacent uses in terms of texture, materials, peaked roof lines and massing, but there shall be a variation of front facade depth and roof lines to avoid monotony. Building elevations shall be required for all structures.

A. Density Bonus. An additional density bonus between one percent (1%) and ~~of~~ up to fifteen percent (15%) may be allowed at the discretion of the Planning Commission, based upon a demonstration by the applicant of design excellence in the open space community. In order to qualify for a density bonus, the Open Space Community must be served by public sanitary sewer and have a minimum of 60% open space. An additional density bonus no greater than fifteen percent (15%) may be granted for an exemplary project.

1. Calculation of additional density bonus based on the additional percentage allow by the Planning Commission up to fifteen percent (15%) please see the following examples:

- i. If the parallel plan under Section 14.1.4 Project Characteristics allows for 100 homes and the Planning Commission make a determination based on the criteria in this section that the project should receive an additional density bonus for an Exemplary Project of five percent (5%), ten percent (10%) , or fifteen percent (15%) as examples than for a project that is allowed 100 homes

under section 14.1.4 Project Characteristics would be allowed and addition $(100 \times .05=5)$ 5, $(100 \times .10=10)$ 10 or $(100 \times .15=15)$ 15 homes, respectively.

2. To receive an additional density bonus under this section a qualifying project shall include at least one of the following elements. The Planning Commission may base the percentage of the bonus, between one percent (1%) and fifteen percent (15%), on the number of elements that are integrated into the project design and the benefit or impact the element/elements will provide to the Township.

i. Inclusion of an integrated mixture of housing types. These housing types may include duplexes, single family attached dwellings, accessory dwelling units, homes designed to front on common open space areas, homes with access from alleys, homes with a wide range of sizes include smaller more affordable homes and other innovative designs and housing types.

ii. Providing perimeter transition areas around all sides of the development that are at least one hundred fifty (150) feet in depth.

iii. Utilization of sustainable design elements. These elements may include green infrastructure, energy (solar, energy efficient structure orientation, etc.) and water (low flow water fixtures, grey water tanks, rain barrels, etc.) efficient design practices, limiting impervious surfaces, access to alternative transportation options, and other sustainable design elements.

iv. Include amenities within the project. These amenities should be easily accessed by the residents of the development, connect the project to surrounding developments and open to everyone within the Township. Amenities may include parks, recreational facilities (playground structure, tot lots, pools, sports courts, picnic areas or similar type improvements.), common buildings (such as pool houses, club houses, gazebos, covered pavilions) trails and other amenities that may be a benefit to the community.

v. A minimum of ten percent of the units shall meet the International Code Council Accessibility Standards for Type B units.

vi. A minimum of ten percent of the housing meets the Housing and Urban Development definition of affordable housing.

vii. The sewer systems are gravity feed.

viii. Public water is provided

ix. Cleanup of site contamination.

x. Other similar elements as determined by the Planning Commission.

B. Multiple Family Component. In an open space community with a gross area of fifteen (15) acres or more, up to fifty percent (50%) of the dwelling units may be other than single-family dwellings. Such units shall meet the following design standards:

1. **Front Yard.** The minimum building setback from an internal road shall be twenty five (25) feet from the public street right-of-way or private road easement. The Planning Commission may reduce the setback based upon a determination that off-street parking will be adequate, and that the modification will preserve natural features or that the rear yard buffer will be increased by one (1) foot for each one (1) foot of reduction in the front yard setback. In no instance shall the front yard setback be reduce below a minimum of fifteen (15) feet. Buildings that front on two streets must provide the required front yard setback from both streets.

2. **Rear Yard:** A thirty five (35) foot rear yard shall be maintained for all buildings. Where the rear of a building abuts the side or rear of another residential structure, the minimum spacing between the structures shall be the combined total of the two setback requirements.

3. Side Yards. A ten (10) foot setback shall be maintained to the side of all residential buildings. Where two buildings are located side-by-side, a thirty five (35) foot spacing shall be maintained between apartment buildings.

4. Off-street Parking Lots. Off-street parking lots serving three (3) or more dwelling units shall provide a ten (10) foot wide open green space area around the perimeter of the parking lot.

5. The building setback requirements may be varied provided they are specifically indicated on the Open Space Community plan and the Planning Commission determines the variation does not negatively impact adjacent properties and provides a recognizable benefit. Building setback requirements on the perimeter of the development shall not be reduced below thirty five (35) feet.

C. Commercial Component. An open space community with a gross area of fifty (50) acres or more may incorporate a commercial land use component, provided that all of the following are met:

1. The commercial component shall be located on a lot of sufficient size to contain all commercial structures, parking, and landscape buffering. The total area occupied by the commercial land uses may not exceed five percent (5%) of the gross area of the open space community or five (5) acres, whichever is less.

2. All commercial uses shall be compatible with the residential area.

3. The Planning Commission finds that the architectural design of the structures is compatible with the balance of the development.

4. All commercial structures are connected to a pedestrian access system servicing the project.

5. Vehicular access is available only from an access drive to the open space community that connects directly with M-36.

6. If a proposed project cannot provide direct access to M-36, the Planning Commission may approve a commercial land use component for an Open Space Community project located on any paved County thoroughfare, subject to:

i. A special land use hearing on the location of the use being held prior to consideration by the Planning Commission. The hearing shall be conducted according to the procedures stated in Section 3.5. of this Ordinance, and

ii. The Planning Commission making the finding that the overall site layout, including the architectural design and the vehicular circulation pattern, is:

a. Compatible with the surrounding land uses, and

b. Will not have a significant detrimental effect on the character of surrounding residential uses.

7. All parking and loading areas serving the commercial uses shall be to the rear or side of the structure and fully screened from view of any public roadway, except that the Planning Commission may allow up to twenty five percent (25%) of the minimum number of required parking spaces in the front yard. Where the parking lot is visible from residential units or open space, it shall be planted with a landscape buffer consisting of evergreen trees spaced no more than fifteen (15) feet on center.

8. The allowable commercial uses within such an area shall be recorded as a deed restriction on the property and shall be restricted to the following:

i. Food and beverage stores for the sale of: groceries, fruit, meat, baked goods, dairy products, beverages and liquor.

ii. Personal service establishments such as barber shops, beauty salons, laundry pick-up, and similar uses.

iii. Child care or day care centers.

iv. Offices for the professions or occupations of doctor, dentist, attorney, engineer, accountant, architect, financial consultant or broker, publisher, real estate broker, secretarial services, and similar uses as determined by the Planning Commission, may be permitted, subject to findings by the Planning Commission that (a) a use is consistent with the intent of this [Article Section](#) and (b) provides no significant negative impact on the open space community project or other surrounding land uses.

9. No structure within the commercial land use component of an open space community shall be occupied without a valid certificate of occupancy from the Township.

i. A request for a certificate of occupancy for a commercial structure within an open space community shall be reviewed by the Zoning Administrator to insure compliance with this [Article Section](#).

ii. A certificate of occupancy may be approved only for uses identified in sub-section 14.1.5 (C)(8). Approval shall not be granted to a use that is inconsistent with the intent and/or requirements of this [Article Section](#).

iii. The initial certificate of occupancy for a commercial structure or portion of a commercial structure within the open space community shall not be approved until fifty percent (50%) of the physical improvements related to the residential components of the total open space community plan are complete, notwithstanding an approved schedule for project phasing.

iv. A certificate of occupancy may be revoked by action of the Zoning Administrator, if a use is conducted in a manner that does not comply with the intent of this [Article Section](#) and/or any other requirements of this Ordinance.

14.1.6. Project Standards

~~In considering any application for approval of an open space community site plan, the Planning Commission shall make their determinations on the basis of the standards for site plan approval set forth in Article 4.00, as well as the following standards and requirements:~~

~~A. Compliance with the Open Space Community Concept. The overall design and land uses proposed in connection with an open space community shall be consistent the intent of the open space community concept, as well as with specific design standards set forth herein.~~

~~B. Compatibility with Adjacent Uses. The proposed open space community plan shall set forth in detail, all specifications with respect to height, setbacks, density, parking, circulation, landscaping, views, and other design features that exhibit due regard for the relationship of the development to surrounding properties, the character of the site, and the land uses. In determining whether this requirement has been met, consideration shall be given to:~~

~~1. The bulk, placement, and materials of construction of proposed structures.~~

~~2. Pedestrian and vehicular circulation.~~

~~3. The location and screening of vehicular use or parking areas.~~

~~4. The provision of landscaping and other site amenities.~~

~~C. Impact of Traffic. The open space community shall be designed to minimize the impact of traffic generated by the proposed development on surrounding uses.~~

~~D. Protection of Natural Environment. The proposed open space community shall be protective of the natural environment. It shall comply with all applicable environmental protection laws and regulations.~~

~~E. Compliance with Applicable Regulations. The proposed open space community shall comply with all applicable Federal, state, and local regulations.~~

~~F. Township Master Plan. The proposed open space community shall be consistent with and further the implementation of the Township Master Plan.~~

~~G. Conditions. Reasonable conditions may be required with the special approval of an Open Space Community, to the extent authorized by law, for the purpose of ensuring that public services and facilities affected by a proposed land use or activity will be capable of accommodating increased service and facility loads caused by the land use or activity, protecting the natural environment and conserving natural resources and energy, ensuring compatibility with adjacent uses of land, promoting the use of land in a socially and economically desirable manner, and further the implementation of the Township Master Plan. Conditions imposed shall be designed to protect natural resources, and the public health, safety and welfare of individuals in the project, those immediately adjacent and the community as a whole; shall be reasonable related to the purposes affected by the Open Space Community; shall be necessary to meet the intent and purpose of this Ordinance and implement the Township Master Plan; and be related to the objective of ensuring compliance with the standards of this Ordinance. All conditions imposed shall be made a part of the record of the special approval.~~

SECTION 14.2 ELDERLY COTTAGE HOUSING OPPORTUNITY(ECHO) PLANNED UNIT DEVELOPMENT

14.2.1 Intent

It is the intent of this ~~Article~~ **Section** is to offer an alternative to traditional single family detached or attached housing developments for elderly persons through the use of planned unit development legislation as authorized by the Michigan Zoning Enabling Act, Public Act 110 of 2006, as amended for the purpose of:

- A. Encouraging the construction of more affordable single family residential detached or attached dwelling for elderly persons units utilizing cluster septic tank drainfields and common water supply systems;
- B. Facilitating the construction of affordable single family residential detached housing units for elderly persons on a smaller scale than conventional multi-family developments that require public infrastructure improvements such as roads, and public water and sewer to accommodate higher density and lower cost dwelling units;
- C. Offering an alternative to multi-family residential developments in order to provide affordable housing for elderly persons in a small scale, less dense neighborhood setting;
- D. Preserving the rural character and appearance of the township through the construction of small scale environmentally sensitive elderly person developments on scattered sites.
- E. Encouraging the clustering of detached or attached single family elderly person dwelling units to promote the safety and security of the senior citizen residents.

These regulations are intended to preserve a traditional rural character to the land use pattern in the Township through the creation of small elderly person residential nodes contrasting with open space and less intensive land uses. This ~~Article~~ **Section** is not intended as a device for circumventing the zoning regulations of the township, the standards set forth therein, nor the planning concepts upon which the zoning ordinance has been based.

These regulations are intended to result in a specific development substantially consistent with zoning ordinance standards, yet allow for modifications from the general standards.

14.2.2 Definitions

- A. **ECHO Lot:** Land occupied or to be occupied by ECHO units and accessory buildings permitted herein, together with such open spaces as are required under this Ordinance and having its principal frontage upon a street.
- B. **ECHO Unit:** A single family residential dwelling unit with full facilities for residential self-sufficiency in each individual dwelling unit which has a resident who is an elderly person.
- C. **ECHO Village:** An ECHO Village is a housing development which meets the unique needs of the elderly through the provision of significant facilities and services specifically designed to meet the physical or social needs of such residents.

14.2.3 Zoning

An ECHO village may be located in the following zoning districts: RAA, RA, RB, RC, CS, VC, VR, OH or MD, or WFR provided the development does not have riparian rights (i.e. does not have shoreline along a lake or river).

14.2.4 ~~Development Design Standards~~ Project Characteristics

ECHO village housing shall meet the following criteria:

- A. On-site sewage disposal and water supply must be approved by the Livingston County Health Department.
- B. **ECHO Village Size.** No fewer than four (4) ECHO units nor more than twenty (20) ECHO units shall be permitted per lot.
- C. **Acreage and Density Requirements.** An ECHO village development may be approved upon any residentially zoned land with density as permitted below:

<u>District</u>	<u>Minimum Acreage</u>	<u>Minimum Density Per ECHO Unit</u>
RAA	3 acres	15,000 square feet
RA	2 acres	10,000 square feet
RB	2 acres	5,000 square feet
WFR	2 acres	10,000 square feet
CS	1 acre	5,000 square feet
RC	1 acre	5,000 square feet
VR	1 acre	5,000 square feet
VC	1 acre	5,000 square feet
MD	1 acre	5,000 square feet

- D. **Unified Control.** The ECHO village shall be initially under single ownership or control, so there is a single person, entity or condominium having proprietary responsibility for the development of the ECHO village as evidenced by a title company licensed to do business in Michigan. In the event, all or any portion of the development changes ownership or control prior to completion of the Project, the terms and conditions of this Planned Unit Development shall be binding on any successor owner of all or any portion of the Property.

E. Guarantee of Open/Common Space. At least fifteen (15) percent of the total site area shall be reserved as open space. This open space shall be held in common ownership by all residents of the ECHO village. This open space shall be utilized for recreation facilities such as picnic areas, walking trails or other open space uses which provide elderly residences the opportunity to enjoy the natural features of the site. The open space shall be configured to be integrated with the individual units and maximize the proximity of each housing unit to natural open space. If the open space is close and accessible for residents of all individual units, it need not be owned in common. A guarantee to the satisfaction of the Township Planning Commission that all open/common space portions of the development will be maintained in the manner approved shall be provided. Documents shall be presented that bind all successors and future owners in fee title to commitments made as a part of the proposal. This provision shall not prohibit a transfer of ownership or control, provided notice of such transfer is provided to the township and the land uses continue as approved in the ECHO village plan.

F. Area, Height, Bulk and Layout Regulations.

Minimum ECHO unit Floor area:	400 square feet
Maximum ECHO unit floor area:	980 square feet
Maximum building height:	1 story
Required roof pitch:	4:12 ratio or greater
Minimum building width, any dimension:	14 feet
Distance between roof overhangs of Buildings:	10 feet
Handicap ramps:	May encroach into any setback space.
Basement:	Optional
Shed:	Optional
Garage:	Optional
Covered parking:	Optional
Minimum setbacks:	15 ft. from Street or private road right-of-way 10 ft. side and rear lot lines 5 ft. from common access drives
Common access drives:	4 ft. from all lot lines
Overall Site :(Perimeter Setbacks)	20 ft. setbacks for buildings. 4 ft. setback for street, road and common access drive improvements.
Project Setbacks	15 ft. from street or road right-of-way, front porches may encroach 7 feet into this setback. 10 ft. separation between roof overhangs on a habitable building not allowed elsewhere in the regulations.

6 ft. separation between roof overhangs on accessory structure and accessory dwellings.

0 ft. separation for attached units or attached garages

5 ft. setback from common access drives (excluding driveways and shared driveways)

G. **Attached Units:** No more than 4 units shall be attached in a single structure.

H. **Garages.** Detached garages can be located no more than one hundred (100) feet of walking distance from the ECHO unit which it serves.

I. **Porches.** Each ECHO unit shall have at least one (1) covered porch of at least twenty four (24) square feet in area.

J. **Common Area.** Each ECHO village which contains 5 or more ECHO units shall have a common area containing at least one (1) gazebo, deck, patio or terrace that shall be covered with a roof, be a minimum of 60 square feet, and be of the same architectural style and design as the ECHO units located on the lot.

K. **Storage Sheds.** Any storage sheds shall be so designed as to have the same roof pitch and architectural style as the ECHO units in the development. Storage sheds may be linked so as to have common walls; however, each shed must have its own private, lockable access door. The dimensions of any shed servicing an ECHO unit shall conform to other size provisions of the zoning ordinance.

L. **Water and Septic System Service.** If there is public water and/or sewer service available to the lot or in the area on which an ECHO development is located, connection into the system may be required.

M. **Roads.** The ECHO village shall have paved access designed and constructed to AASHTO standards and shall provide adequate access for emergency vehicles.

N. **Parking Requirements.** The parking standards for an ECHO village shall be two (2) spaces per unit. Each parking space shall have a minimum size of 180 square feet (10 feet by 18 feet), and may be located either on-site or within one hundred (100) feet of the site.

O. **Construction Drawings Required.** Scaled floor plan and building elevation drawings shall be presented for each ECHO unit within the ECHO village that has a different interior layout and square footage of living space.

P. **Sidewalks and Access Ramps.** All pedestrian circulation walkways and sidewalks shall be hard-surfaced with either asphalt, concrete or brick paving and be accessible to the handicapped according to the standards set forth in the Americans with Disabilities Act. Handicapped access ramp structures may encroach into any required setback space.

Q. **Interior Design.** The interior of each ECHO unit shall be designed to provide ease of mobility by seniors who may have mobility limitations. The units shall meet the International Code Council (American National Standards Institute) Accessibility Standards for Type B units.

R. **Design Compatibility.** The exterior of each ECHO unit shall be compatible in terms of architectural design, materials and color with the residential structures in the immediate neighborhood within 300 feet of the development parcel or lot. However, all housing units shall be a minimum of fourteen (14) feet wide at their least horizontal dimension and attached to a permanent foundation. The roof pitch of an ECHO unit shall be at least a 4:12 pitch. Accessory buildings for an ECHO unit, such as a detached garage and shed, shall also conform to the minimum roof pitch and be architecturally

compatible with the design and style of the ECHO unit. Compatibility of design shall be decided by the planning commission.

S. Waiver of Standards. The planning commission is hereby empowered to waive site design standards and development area requirements if public health and safety are not compromised. The planning commission is further empowered to specify conditions in issuing any special use permits as may be required.

14.2.5 Project Standards

In considering any application for approval of an ECHO Village site plan, the Planning Commission shall make their determinations on the basis of the standards for site plan approval set forth in Article 4.00, as well as the following standards and requirements:

A. Compliance with the ECHO Concept. The overall design and land uses proposed in connection with an ECHO village shall be consistent with the intent of the ECHO concept, as well as with the specific design standards set forth herein.

B. Compatibility with Adjacent Uses. The proposed ECHO village site plan shall set forth in detail, all specifications with respect to height, setbacks, density, parking, circulation, landscaping, views and other design features that exhibit due regard for the relationship of the development to surrounding properties, the character of the site, and the land uses. In determining whether this requirement has been met, consideration shall be given to:

1. The bulk, placement, and materials of construction of proposed structures.
2. Pedestrian and vehicular circulation.
3. The location and screening of vehicular use or parking areas.
4. The provision of landscaping and other site amenities.

C. Protection of Natural Environment. The proposed ECHO village shall be protective of the natural environment. It shall comply with all applicable environmental protection laws and regulations.

D. Common Area and Unit Maintenance. The ECHO village shall include in the Master Deed, Community Bylaws or covenant provisions, as applicable for the maintenance of the common open space, including landscaping maintenance, snow removal and repairs to building exteriors, in a form approved by the Township Attorney.

E. Compliance with Applicable Regulations. The proposed ECHO village shall comply with all applicable federal, state and local regulations.

F. Because of the specialized character of such uses, the limited class of occupants and the potentially limited market for such units, the planning commission may require a market study and or surveys of elderly residents in the vicinity of Hamburg Township as to documenting the long term marketability of the development and which supports both the need and market for the development. The planning commission may require written supporting evidence from national elderly assistance groups such as American Association of Retired Persons (AARP) that units of such floor area and density, and developments of such an arrangement are attractive and feasible for the elderly.

G. The planning commission may require the submission of letters of endorsement or support for the development from public and private elderly service provider agencies as to the suitability of such dwellings for elderly persons.

H. The planning commission may base its action on experience with and competition from similar developments in the area.

- I. The planning commission may base its approval on the long-term availability of senior services to be provided by the developer, operator, government or private elderly support agencies, such as medical assistance, meals assistance, proximity to shopping, personal services and medical care, transportation (including access to major roads), recreation and other elderly needs.

SECTION 14.3 COTTAGE HOUSING PLANNED UNIT DEVELOPMENT (CHPUD)

14.3.1 Intent

It is the intent of this ~~Article~~ **Section** is to offer an alternative to traditional single family detached and attached housing developments through the use of planned unit development legislation as authorized by the Michigan Zoning Enabling Act, Public Act 110 of 2006, as amended for the purpose of:

- A. Encouraging the construction of more affordable single family residential detached or attached dwelling units which utilizing public sewer and public water systems;
- B. Facilitating the construction of affordable single family residential detached or attached housing units on a smaller scale than conventional multi-family developments to accommodate higher density and lower cost dwelling units;
- C. Offering an alternative to multi-family residential developments in order to provide affordable housing for persons in a small scale, less dense neighborhood setting;
- D. Preserving the rural character and appearance of the township through the construction of small scale environmentally sensitive developments on sites within the Village Center Master Plan Area.
- E. Encouraging the clustering of detached or attached single family dwelling units to promote the safety and security of the residents.

These regulations are intended to preserve a traditional rural character to the land use pattern in the Township through the creation of small residential nodes contrasting with open space and less intensive land uses. This ~~Article~~ **Section** is not intended as a device for circumventing the zoning regulations of the township, the standards set forth therein, nor the planning concepts upon which the zoning ordinance has been based.

These regulations are intended to result in a specific development substantially consistent with zoning ordinance standards, yet allow for modifications from the general standards.

14.3.2 Definitions

- A. **CHPUD Lot:** Land occupied or to be occupied by CHPUD units and accessory buildings permitted herein, together with such open spaces as are required under this Ordinance and having its principal frontage upon a street.
- B. **CHPUD Unit:** A single family residential dwelling unit with full facilities for residential self-sufficiency.
- C. **CHPUD:** An CHPUD is a housing development which meets the unique needs of the residents through the provision of significant facilities and services specifically designed to meet the physical or social needs of such residents.

14.3.3 Zoning

A CHPUD may be located in the following zoning districts: RB, VC and VR.

14.3.4 ~~Development Design Standards~~Project Characteristics

CHPUD housing shall meet the following criteria:

- A. Public Sewer and public water shall be provided.

B. CHPUD Size. No fewer than four (4) CHPUD units nor more than twenty (20) CHPUD units shall be permitted per lot.

C. Acreage and Density Requirements. A CHPUD development may be approved upon any residentially zoned land with density as permitted below:

<u>District</u>	<u>Minimum Acreage</u>	<u>Minimum Density Per CHPUD Unit</u>
RB	1 acre	7,500 square feet
VC	1 acre	4,100 square feet
VR	1 acre	5,450 square feet

D. Unified Control. The CHPUD shall be initially under single ownership or control, so there is a single person, entity or condominium having proprietary responsibility for the development of the CHPUD as evidenced by a title company licensed to do business in Michigan. In the event, all or any portion of the development changes ownership or control prior to completion of the Project, the terms and conditions of this Planned Unit Development shall be binding on any successor owner of all or any portion of the Property.

E. Guarantee of Open/Common Space. At least fifty (50%) percent of the total site area shall be preserved as open space. This open space shall be held in common ownership by all residents of the CHPUD. This open space shall be utilized for recreation facilities such as lawns, gardens, plazas, common use buildings, pool areas, picnic areas, walking trails or other open space uses which provide residents the opportunity to enjoy the features of the site. The open space shall be configured to be integrated with the individual units and maximize the proximity of each housing unit to natural open space. The principle common open space area shall be centralized to the project and at least fifty percent (50%) of the CHPUD units shall have their main entries on the centralized common space area. A guarantee to the satisfaction of the Township Planning Commission that all open/common space portions of the development will be maintained in the manner approved shall be provided. Documents shall be presented that bind all successors and future owners in fee title to commitments made as a part of the proposal. This provision shall not prohibit a transfer of ownership or control, provided notice of such transfer is provided to the township and the land uses continue as approved in the CHPUD plan.

F. Area, Height, Bulk and Layout Regulations.

Maximum CHPUD unit floor area: 1200 square feet

Maximum building height: 2 story

~~Distance between walls of
the Buildings:~~ 10 feet

Basement: Optional

Shed: Optional

Garage: Optional

Covered parking: Optional

Minimum setbacks:

~~15 ft. from Street or private road right of way~~

~~10 ft. side and rear lot lines~~

~~5 ft. from common access drives~~

~~Common access drives:~~ 4 ft. from all lot lines

~~* the setbacks are from the overall CHPUD lot.~~

Overall Site:(Perimeter Setbacks) 20 ft. setbacks for buildings.

	4 ft. setback for street, road or common access drive improvements.
Project Setbacks	15 ft. from street or road right-of-way, front porches may encroach 7 feet into this setback.
	10 ft. separation between roof overhangs on a habitable building not allowed elsewhere in the regulations.
	6 ft. separation between roof overhangs on accessory structure and accessory dwellings.
	0 ft. separation for attached units or attached garages
	5 ft. setback from common access drives (excluding driveways and shared driveways)

G. **Attached Units:** No more than 4 units shall be attached in a single structure.

H. **Garages/ Carports.** If provided garages can be attached or detached from the main structure. Garages may be linked so as to have common walls. Garages/Carports may be on common owned property.

I. **Porches.** Each CHPUD unit shall have a front porch that is a minimum of six feet deep and 50% of the front elevation.

J. **Private Out Door Space.** Each unit shall have no more than 2,000 square foot of private outdoor space. This space shall include any private outdoor parking areas, open porches, and yard space that is not open for common use.

K. **Common Area.** Each CHPUD shall have a common area containing at least one (1) common use structure such as a pool house, clubhouse, gazebo, deck, patio or terrace that shall be covered with a roof, of similar architectural style and design as the CHPUD units located on the lot, and a minimum of 100 square feet. Common use structures can be counted towards the common open space area.

L. **Storage Sheds.** Any storage sheds shall be so designed as to have the same roof pitch and architectural style as the CHPUD units in the development. Storage sheds may be linked so as to have common walls; however, each shed must have its own private, lockable access door. The dimensions of any shed servicing a CHPUD unit shall conform to other size provisions of the zoning ordinance. Storage sheds may be located on common owned property.

M. **Water and Sewer System Service.** CHPUD developments are required to be serviced by public sewer and public water services.

N. **Roads.** The CHPUD shall have paved access designed and constructed to AASHTO standards and shall provide adequate access for emergency vehicles.

O. **Parking Requirements.** The parking standards for a CHPUD shall be two (2) spaces per unit. Each parking space shall have a minimum size of 180 square feet (10 feet by 18 feet), may be located either on-site or within one hundred (100) feet of the site, may be on street or off street and may be within a garage or carport structure or unenclosed. If the applicant requests a reduction in the parking requirements the Planning Commission must make the findings that alternative transportation options have been provided to the future residence of the project.

P. Construction Drawings Required. Scaled floor plan and building elevation drawings shall be presented for each CHPUD unit within the CHPUD that has a different interior layout and square footage of living space.

Q. Sidewalks and Access Ramps. All pedestrian circulation walkways and sidewalks shall be hard-surfaced with either asphalt, concrete or brick paving and be accessible to the handicapped according to the standards set forth in the Americans with Disabilities Act. Sidewalks and pathways shall be designed to connect the CHPUD units to the common areas on the lot and to connect with adjacent properties. Handicapped access ramps are exempt from the required setbacks.

R. Interior Design. A minimum of ten (10) percent or at least one (1), whichever is greater, of the CHPUD units shall meet the International Code Council (American National Standards Institute) Accessibility Standards for Type B units.

S. Design Compatibility. The exterior of each CHPUD unit shall be compatible in terms of architectural design, materials and color with the residential structures in the immediate neighborhood within 300 feet of the development parcel or lot. However, all housing units shall be a minimum of fourteen (14) feet wide at their least horizontal dimension and attached to a permanent foundation. Accessory buildings for a CHPUD unit, such as detached garage, common room and shed structures, shall be architecturally compatible with the design and style of the CHPUD units. Compatibility of design shall be decided by the Planning Commission.

T. Waiver of Standards. The Planning Commission is hereby empowered to waive site design standards and development area requirements if public health and safety are not compromised. The Planning Commission is further empowered to specify conditions in issuing any special use permits as may be required.

14.3.5 Project Standards

~~In considering any application for approval of an CHPUD site plan, the Planning Commission shall make their determinations on the basis of the standards for site plan approval set forth in Article 4.00, as well as the following standards and requirements::~~

~~**A. Compliance with the CHPUD Concept.** The overall design and land uses proposed in connection with a CHPUD shall be consistent with the intent of the CHPUD concept, as well as with the specific design standards set forth herein.~~

~~**B. Compatibility with Adjacent Uses.** The proposed CHPUD site plan shall set forth in detail, all specifications with respect to height, setbacks, density, parking, circulation, landscaping, views and other design features that exhibit due regard for the relationship of the development to surrounding properties, the character of the site, and the land uses. In determining whether this requirement has been met, consideration shall be given to:~~

- ~~1. The bulk, placement, and materials of construction of proposed structures.~~
- ~~2. Pedestrian and vehicular circulation.~~
- ~~3. The location and screening of vehicular use or parking areas.~~
- ~~4. The provision of landscaping and other site amenities.~~

~~**C. Protection of Natural Environment.** The proposed CHPUD shall be protective of the natural environment. It shall comply with all applicable environmental protection laws and regulations.~~

~~**D. Common Area and Unit Maintenance.** The CHPUD shall include in the Master Deed, Community Bylaws or covenant provisions, as applicable for the maintenance of the common open space, including landscaping maintenance, snow removal and repairs to building exteriors, in a form approved by the Township Attorney.~~

~~E. Compliance with Applicable Regulations. The proposed CHPUD shall comply with all applicable federal, state and local regulations.~~

SECTION 14.4 GENERAL PLANNED UNIT DEVELOPMENT (GPUD)

14.4.1 Intent

A. The intent of the General Planned Unit Development is to permit, with Township approval, private or public development which is substantially in accord with the goals and objectives of the Hamburg Township Master Plan which was adopted by the Planning Commission in June 4, 1997 and may be amended from time-to-time, the M-36 Corridor Plan, which was adopted by the Planning Commission on November 26, 1993 and may be amended from time-to-time, and the Hamburg Township Village Plan, which was adopted by the Planning Commission on December 6, 1995 and which may be amended from time-to-time.

B. The development permitted under this Chapter 14.4 shall be considered as an optional means of development. The availability of the option imposes no obligation on the Township to encourage or foster its use. The decision to approve its use shall be at the sole discretion of the Township. Consequently, in this [Article Section](#), the development opportunities made available under this [Article Section](#) may be referred to as the GPUD.

C. A GPUD is intended to permit regulatory flexibility to achieve development that is in accord with the Township's Master Plans; to achieve economy and efficiency in the use of land, natural resources, energy and in the provision of public services and utilities; to encourage the creation of useful open space particularly suited to the proposed development and parcel on which it is located; and to provide appropriate housing, employment, services and shopping opportunities to satisfy the needs of residents of the Township of Hamburg.

D. It is further intended that the development of a GPUD be laid out so that proposed uses, buildings, and site improvements relate to each other and to adjoining existing and planned uses in such a way that they will be compatible, with no material adverse impact of one use on another.

F. The GPUD Option is further intended to permit reasonable development or use of parcels of land that were subdivided and/or developed prior to adoption of the current ordinance, or amendment thereto, and which would otherwise be restricted from development or use because of existing or resulting nonconformities.

14.4.2 Definitions

For the purposes of this [Article Section](#), the following definitions shall apply:

A. **GENERAL PLANNED UNIT DEVELOPMENT:** The term "General Planned Unit Development" means a specific parcel of land or several contiguous parcels of land, which has been, is being, or will be developed in accordance with a site plan approved by the Township Board, following a recommendation from the Planning Commission, where the site plan meets the requirements of this [Article Section](#), proposing permitted land uses, density patterns, a fixed system of streets (where necessary), provisions for public utilities, drainage and other essential services and similar features necessary or incidental to development.

B. **UNDERLYING ZONING:** The term "Underlying Zoning" means the zoning classification assigned in the Hamburg Township Zoning Ordinance to a parcel of land that is proposed to be developed in accordance with the General Planned Development regulations.

C. **UNDERLYING FUTURE LAND USE:** The term "Underlying Future Land Use" means the future land use designation identified in the Township Master Plan, M-36 Corridor Plan or Hamburg Township Village Plan which the Township Planning Commission has determined is applicable to a

parcel of land that is proposed to be developed in accordance with the General Planned Unit Development regulations.

14.4.3 Project Characteristics

A. Location. A GPUD shall only be created on development sites within the Township which have a portion of the property located within the Neighborhood Service (NS), Community Service (CS), Mixed Use Development (MD), Village Residential (VR), or Village Center (VC) zoning districts.

B. Size. A GPUD shall only be created on development sites one (1) acre in area or greater.

C. Permitted Uses.

1. Uses that are listed as Permitted Uses or Special Uses in the underlying zoning district or uses identified in the underlying future land use category of the Township Master Plans may be permitted in a GPUD development. Expansion of or renovation to a building containing a use that is not listed as a Permitted Use or Special Use may be permitted by the Planning Commission upon making the determination that:

- i. The use has operated and will continue to operate in a manner that is compatible with surrounding and nearby land uses;
- ii. The proposed expansion or renovation will not impair the efforts of the Township and property and business owners and residents to further the goals and objectives of the Township Master Plans; and
- iii. The proposed expansion or renovation will have a recognized and substantial beneficial impact as a result of improved building design, site improvements that are consistent with project standards set forth in Section 14.4.4 and the Township Master Plans, improved traffic and transportation patterns or other benefits

2. Uses that are listed as Permitted Uses or Special Uses in the Village Center (VC) zoning district may be permitted in the GPUD, with the exception that residential uses as described in the Village Center (VC) shall not be permitted in a GPUD located outside the Village Center (VC) or Village Residential (VR) zoning districts. Upon the determination that the inclusion of residential uses shall aid the GPUD in meeting the project standards stated in Section 14.4.4, residential uses shall comply with the density requirements of the underlying zoning district or master plan designation.

3. The Township Board shall make the final determination, based on the recommendation of the Planning Commission, as to whether a specific use may be permitted in the GPUD subject to compliance of the proposed uses with the Project Standards of Section 14.4.4 and approval of a site plan, pursuant to the review procedures in ~~Chapter~~Section 14.57.

D. Regulatory Flexibility.

1. A GPUD proposal shall comply with the height, bulk, density, and setback standards of the underlying zoning district except as specifically modified and noted on the GPUD site plan. Uses listed as Special Uses shall be subject to applicable height, bulk, density, area and use standards in Section 3.5 of the Zoning Ordinance, unless such standards are modified and noted on the GPUD site plan.

2. The Township Board may approve modification or waiver of one or more standards of the underlying district or standards for Special Uses, after reviewing the recommendation of the Planning Commission, upon making the determination that any such modification or waiver would be consistent with the land use goals and objectives of the Township and the intent of this ~~Article~~Section, and upon making the determination that the modification or waiver would be appropriate because of the particular design and orientation of buildings and uses. Any regulatory modification shall be approved by the Township Board based upon a finding by the Planning Commission that

the deviation shall result in a higher quality of development than would be possible using conventional zoning standards. Regulatory modifications are not subject to variance approval of the Zoning Board of Appeals. No part of a GPUD plan may be appealed to the Zoning Board of Appeals.

3. A table shall be provided on the site plan which specifically details all deviations from the established zoning area, height and setback regulations, off-street parking regulations, general provisions, or subdivision regulations which would otherwise be applicable to the uses and development proposed in the absence of this GPUD ~~Article~~ ~~Section~~. This specification should include Ordinance provisions from which deviation are sought, and the reasons and mechanisms to be utilized for the protection of the public health, safety, and welfare in lieu of the regulations from which deviations are sought. Only those deviations consistent with the intent of this Ordinance shall be considered.

~~14.4.4 Project Standards~~

~~In considering any application for approval of an GPUD site plan, the Planning Commission shall make their determinations on the basis of the standards for site plan approval set forth in Article 4.00, as well as the following standards and requirements:~~

~~A. A GPUD shall promote the goals and objectives of the Township Master Plan, M-36 Corridor Plan and Hamburg Township Village Plan. Including the intent and guidelines related to site design as stated in the Site Design Chapter of the M-36 Corridor Plan, and the Village Design Chapter of the Hamburg Township Village Plan, where applicable.~~

~~Along with other appropriate site design standards, guidelines, and principles, the following site development elements shall also be reviewed for consistency with the applicable guidelines of the Village Center and M-36 Corridor Plans:~~

- ~~1. Sidewalks/Pedestrian Circulation~~
- ~~2. Parking/Loading Areas~~
- ~~3. Architecture~~
- ~~4. Signs~~
- ~~5. Street and Access Design~~
- ~~6. Lighting~~
- ~~7. Landscaping~~

~~B. A GPUD shall result in a higher quality of development than could be achieved under conventional zoning.~~

~~C. A GPUD shall not be created in situations where the same land use objectives can be accomplished by the application of conventional zoning provisions or standards without the need for variances.~~

~~D. A GPUD may be created only when the proposed land use will not add public service and facility loads beyond those contemplated in the Master Plan or other applicable plans or policies of the Township unless the applicant can demonstrate to the sole satisfaction of the Township Board that such added loads will be accommodated or mitigated by the proponent as part of the CGPUD or by some other means deemed acceptable to the Township Board.~~

~~E. Creation of a GPUD shall establish land use patterns which are compatible with and protect existing or planned use.~~

~~F. The use of the GPUD option shall not be for the purpose of avoiding applicable zoning requirements of the underlying zoning district.~~

~~G. A GPUD shall not be allowed solely as a means of increasing the density or intensity of development.~~

~~H. A GPUD shall improve the appearance of the Township through quality building design and site development, the provision of trees and landscaping consistent with or beyond minimum requirements; the preservation of unique and/or historic sites or structures; and the provision of open space or other desirable features of a site beyond minimum requirements.~~

SECTION 14.5 – MIXED PLANNED UNIT DEVELOPMENT PROJECTS (MPUD)

14.5.1 Intent

It is the intent of this section to allow more than one type of Planned Unit Development to be combined into a single project. For example a development may have an Open Space Planned Unit Development project that also includes Elderly Cottage Housing Opportunity (Echo) Planned Unit Development. This will allow the different development types to be mixed throughout a single project site.

14.5.2 Definitions.

MIXED DEVELOPMENT COMMUNITY: This is a Development where there are multi planned unit development communities are mixed into a single development site.

14.5.3 Project Characteristics.

A mixed development community shall comply with the Project Characteristics of the Planned Unit Development type utilized on the project and as following:

A. Location. A mixed development community may only be approved within a zoning district in which all of the proposed Planned Unit Development utilized are allowed.

B. Permitted Uses. Only the permitted uses in the Planned Unit Development utilized are allowed in the mixed development community

C. Dwelling Density. The number of dwelling units allowable within a mixed development community project shall be determined as if.

1. The applicant shall prepare and present to the Planning Commission for review, a parallel design for the project that is consistent with State, County and Township requirements and design criteria for a tentative preliminary plat. The parallel plan shall meet all standards for lot size, lot width and setbacks as normally required under the Planned Unit Developments regulations for the development type that is utilized in the proposed mixed development community, public roadway improvements and private parks, and contain an area which conceptually would provide sufficient area for storm water detention. Lots in the parallel plan shall provide sufficient building envelope size without impacting wetlands regulated by the State of Michigan. This design shall include all information as required by the guidelines adopted by the Planning Commission pursuant to Section 14.7.5 (A).

2. The parallel plan is only used to determine allowable density for the mixed development community project.

3. The Planning Commission shall review the design and determine the number of lots that could be feasibly constructed and be economically viable following the parallel design. This number, as determined by the Planning Commission, shall be the maximum number of dwelling units allowable for the mixed development community project.

14.5.4 Development Standards.

A mixed development community shall comply with the Development Standards of all of the Planned Unit Development types utilized in the project in addition to the following:

- A. **Mixed Development Community Size.** A mixed development community if the Open Space Planned Unit Development is utilized shall not be located on a property less than 30 acres in size.
- B. **Mixed Development Community Setbacks:** Where and ECHO or CHPUD structure are adjacent to a Structure other than another ECHO or CHPUD structure the separation between roof overhangs shall be a minimum of 15 feet.

SECTION 14.6. PROJECT STANDARDS

In considering any application for approval of any Planned Unit Development community site plan, the Planning Commission shall make their determinations on the basis of the standards for site plan approval set forth in Article 4.00, as well as the following standards and requirements:

- A. **Compliance with the Specific Planned Unit Development Concept.** The overall design and land uses proposed in connection with a planned unit development community shall be consistent with the intent of the planned unit development community concept, as well as with specific design standards set forth in this Article.
- B. **Compatibility with Adjacent Uses.** The proposed planned unit development community plan shall set forth in detail, all specifications with respect to height, setbacks, density, parking, circulation, landscaping, views, and other design features that exhibit due regard for the relationship of the development to surrounding properties, the character of the site, and the land uses. In determining whether this requirement has been met, consideration shall be given to:
 - 1. The bulk, placement, and materials of construction of proposed structures.
 - 2. Pedestrian and vehicular circulation.
 - 3. The location and screening of vehicular use or parking areas.
 - 4. The provision of landscaping and other site amenities.
- C. **Impact of Traffic.** The planned unit development community shall be designed to minimize the impact of traffic generated by the proposed development on surrounding uses.
- D. **Protection of the Natural Environment.** The proposed planned unit development community shall be protective of the natural environment. It shall comply with all applicable environmental protection laws and regulations.
- E. **Compliance with Applicable Regulations.** The proposed planned unit development community shall comply with all applicable Federal, state, and local regulations.
- F. **Design.** The planned unit development community shall:
 - 1. result in a higher quality of development than could be achieved under the conventional zoning regulations.
 - 2. not be created in a situation where the same objectives can be accomplished by the application of conventional zoning provisions or standards without the need of a variance.
 - 3. not be established solely for the purpose of avoiding applicable zoning requirements of the underlying zoning district or as a means to increase the density and intensity of the development.
 - 4. improve the appearance of the Township through quality building design and site development, the provision of trees and landscaping consistent with or beyond the minimum requirements; the preservation of unique and/or historic sites or structures; and/or the provisions of open spaces and other desirable features of the site beyond the minimum requirements of the zoning regulations.

G. Township Master Plan. The planned unit development community shall be consistent with, promote the goals and objectives of and further the implementation of the Township Master Plan and Village Center Master Plan.

Along with other appropriate site design standards, guidelines, and principles, the following site development elements shall also be reviewed for consistency with the applicable guidelines of the Township and Village Center Master Plans:

1. Sidewalks/Pedestrian Circulation
2. Parking/Loading Areas
3. Architecture
4. Signs
5. Street and Access Design
6. Lighting
7. Landscaping

H. Conditions. Reasonable conditions may be required with the special approval of an Open Space Community, to the extent authorized by law, for the purpose of ensuring that public services and facilities affected by a proposed land use or activity will be capable of accommodating increased service and facility loads caused by the land use or activity, protecting the natural environment and conserving natural resources and energy, ensuring compatibility with adjacent uses of land, promoting the use of land in a socially and economically desirable manner, and further the implementation of the Township Master Plan. Conditions imposed shall be designed to protect natural resources, and the public health, safety and welfare of individuals in the project, those immediately adjacent and the community as a whole; shall be reasonable related to the purposes affected by the Open Space Community; shall be necessary to meet the intent and purpose of this Ordinance and implement the Township Master Plan; and be related to the objective of ensuring compliance with the standards of this Ordinance. All conditions imposed shall be made a part of the record of the special approval.

SECTION 14.57 -- REVIEW PROCEDURES

The following outlines the procedures and requirements which must be followed for all PUD developments to receive approval under this Article. Prior to all scheduled Planning Commission or Township Board meetings, the applicant shall submit ten (10) copies of the completed site plan [as required under Article 4 Site Plans](#) with the Zoning Administrator at least twenty-one (21) days prior to the Planning Commission or Township Board meeting at which the site plan is to be considered. The Zoning Administrator shall determine the number of plans the applicant shall provide prior to any scheduled pre-application meeting.

14.57.1 Pre-Application Meeting. An optional pre-application conference can be held with township staff including Township Planner and Township Engineer as determined by the Zoning Administrator to review applicability of the PUD ordinance to the proposed site and uses.

14.57.2 Conceptual Review. The applicant may submit a draft site plan for the optional conceptual review by the Planning Commission. The draft site plan shall include as much detailed information as needed for the applicant to convey to the Planning Commission how the applicant would like to utilize the site. Information should include potential building locations, vehicular parking areas, types of uses, road layouts, if applicable, and setbacks from property lines. The conceptual review allows the applicant to present the proposed project to the Planning Commission, at an early stage in the development process, prior to formal submittal of the project. This process allows the developer to receive comments and feedback from the Planning Commission based on the information submitted. No formal action is taken by the Planning Commission at this time

14.57.3 Preliminary PUD Site Plan Review and Public Hearing. The applicant prepares and submits a Preliminary Site Plan. The Preliminary PUD site plan shall contain enough detail to explain the proposed uses, relationship to adjoining parcels, vehicular and pedestrian circulation patterns, open spaces and landscape areas, and building density or intensity. The Planning Commission shall conduct a public hearing in accordance with Section 3.5.2.B. Following the public hearing, the Planning Commission gives direction to the applicant. The plan is revised, if necessary. The Planning Commission then takes action to recommend approval or denial of the Preliminary PUD site plan to the Township Board based upon the Preliminary PUD site plan meeting the eligibility requirements as outlined in this Article. A recommendation of approval for the Preliminary PUD site plan shall be accompanied by a description of the minimum conditions under which the proposal will be considered for final approval. In describing such conditions, the Planning Commission may identify specific requirements or standards in the Zoning Ordinance which could be waived or modified upon approval of the final PUD site plan.

The Township Board shall consider the Planning Commission recommendation and public hearing comments and shall take action to approve, deny or remand the preliminary PUD site plan back to the Planning Commission for further review.

14.57.4 Final PUD Site Plan Review.

A. The applicant shall submit a Final PUD site plan which contains all information required for site plan review under Section 4.5.6 of the Township Zoning Ordinance and approvals from all appropriate county, state and federal agencies, including, but not limited to, the Livingston County Road Commission, Livingston County Drain Commissioner, Livingston County Health Department and the Michigan Department of Transportation.

B. The Planning Commission shall review the submitted Final PUD site plan to insure compliance with all standards and criteria of the Hamburg Township Zoning Ordinance, the Hamburg Township Master Plan, M-36 Corridor Plan, Hamburg Township Village Plan, and the Southeast Livingston County Greenways Plan where applicable. The Planning Commission then shall take action to recommend approval or denial of the Final PUD site plan to the Township Board based upon compliance with the above referenced standards.

C. Upon receipt of the report and recommendation of the Planning Commission, the Township Board shall review all findings. If the Township Board determines that approval would be appropriate, it shall work with the application and the Township Attorney to prepare a Development Agreement setting forth the conditions upon which such approval is based. Such conditions shall include, where appropriate, identification of the phases and time table for development, and an estimate of the costs of implementing each phase.

D. After approval by resolution of the Township Board, the Development Agreement shall be executed by the Township and the applicant and recorded in the County records. Approval shall be granted only upon the Township Board determining that all qualification requirements, conditions of approval, and provisions of this and other Township Ordinances have been met, and that the proposed development will not adversely affect the public health, welfare and safety. Approval shall further be subjected to the condition that the contract will be properly recorded.

E. Approval of a PUD site plan shall be effective upon recording the contract and filing proof of recording with the Township Clerk.

F. Once an area has been included, within the boundaries of an approved PUD, no development may take place in the PUD except in accordance with the Township Board-approved PUD site plan.

G. Prior to any development within the area involved, an approved PUD site plan may be terminated by the applicant or the applicant's successors or assigns, by filing with the Township and recording in the County records an affidavit so stating. The approval of the plan shall terminate upon such recording.

H. No approved plan shall be terminated after development commences except with the approval of the Township Board and of all parties having an equity interest in the land.

14.57.5 General Requirements

A. General Application Requirements. The application for approval of a PUD shall be made according to procedures and guidelines adopted by resolution of the Planning Commission. The required materials shall be submitted to the Township Zoning Administrator with all required fees.

B. Effect of Approval. Approval of a PUD proposal shall not require, nor shall it be construed as an amendment to the Zoning Ordinance. All improvements and uses of the site shall be in conformity with the approved site plan and comply fully with any conditions.

C. Recording of Action. The applicant shall record a Development Agreement with the register of deeds containing the full legal description of the project site, specifying the date of final Township approval, and declaring that all improvements will be carried out in accordance with the approved PUD plan unless an amendment is adopted by the Township. In addition, all deed restrictions and easements shall be duly filed with the register of deeds of the County and copies of recorded documents presented to the Township.

D. Land Use Permit. Following final approval of the PUD site plan and final approval of the engineering plans by the Township Engineer, a land use permit may be obtained. It shall be the responsibility of the applicant to obtain all other applicable Township, County, State or Federal permits.

E. Initiation of Construction. If construction has not commenced within twenty-four (24) months of final approval, all Township approvals become null and void. The applicant may apply in writing to the Planning Commission for an extension, not to exceed twelve (12) months. A maximum of two (2) extensions may be allowed.

F. Continuing Adherence to Plan. Any property owner who fails maintain an approved site design shall be deemed in violation of the use provisions of the Zoning Ordinance and shall be subject to the penalties for same.

G. Performance Guarantee. The Planning Commission may require a performance guarantee, in accordance with the zoning ordinance.

H. Scheduled Phasing. When proposed construction is to be phased, the project shall be designed in a manner that allows each phase to fully function on its own regarding services, utilities, circulation, facilities, and open space. Each phase shall contain the necessary components to insure protection of natural resources and the health, safety, and welfare of the users of the project and the residents of the surrounding area.

I. Timing of Phases. Each phase of the project shall be commenced within twenty-four (24) months of the schedule set forth on the approved site plan. If construction of any phase is not commenced within the approved time period, approval of the plan shall become null and void, subject to the requirements of Section 14.57.5 (E).

14.57.6 Revision of Approved Plans

A. General Revisions. Approved plans for a PUD may be revised in accordance with the procedures set forth in ~~Chapter~~Section 14.57 Review Procedures.

B. Minor Modifications. Minor modifications to an approved PUD plan may be permitted following normal site plan review procedures outlined in Article 4.00, "Site Plan Review," Sections 4.9 and 4.10 subject to the finding of all of the following:

1. Such modification will not adversely affect the initial basis for granting approval;

2. Such minor modification will not adversely affect the overall PUD in light of the intent and purpose of such development as set forth in this Article; and
3. Such modification shall not result in the reduction in the benefits and amenities the PUD provides to the community.



Hamburg Township

a great place to grow

FAX 810-231-4295
PHONE 810-231-1000

P.O. Box 157
10405 Merrill Road
Hamburg, Michigan 48139

ZONING AMENDMENT APPLICATION

Please note: All required information, copies, fees, and other materials as appropriate must be submitted and complete before the Township Planning Commission will set a public hearing date on the Zoning Amendment Application.

Application fees and review fees are required at the time of application.

Zoning Amendments have application fees and review fees. Review fees shall be placed into a non-interest bearing escrow account. Upon final review, review fee balances shall be returned upon receipt of final billing. The applicant shall be responsible for all costs incurred.

The undersigned hereby makes application for a Zoning Amendment for: (Check all that apply)

1. **TYPE OF PROJECT:** ☒ Zoning Text Amendment ☐ Zoning Map Amendment
2. **PROJECT NAME:** _____ Submittal Date: _____

3. **PROJECT ADDRESS:** _____

Tax Code Numbers: 15 - _____ 15 - _____ 15 - _____
15 - _____ 15 - _____ 15 - _____

☐ Metes & Bounds Parcel ☐ Subdivision _____ Lot Numbers: _____

4. **ZONING MAP AMENDMENT:** (please attached the existing zoning map and a proposed zoning map as a separate document)

Existing Zoning District Classification: _____ Proposed Zoning District Classification: _____

Number of Lots Proposed: _____ Acreage of Project: _____

5. **ZONING TEXT AMENDMENT:** (please attached the existing zoning ordinance and the proposed revisions as a separate document)

Zoning Ordinance Section proposed to be amended Article 14.0

6. **PROJECT DESCRIPTION (reason for amendment):** _____

allow ECHO units throughout PUD development.

7. **OWNER/PROPRIETOR INFORMATION:**

Name: _____ Phone Number(s): _____

Email: _____ Address: _____

City: _____ State: _____ Zip: _____

8. **APPLICANT:**

Name: Jeff Wilkerson Phone Number(s): 989.529.5858
Email: jwilkerson@voltagehomes.com Address: 711 Fountain Street
City: Ann Arbor State: MI Zip: 48103

ZONING AMENDMENT PROCESS: (Zoning Ordinance, Article 12)

1. Application. Petitions for amendments by individual property owners shall be submitted to the Zoning Administrator on a standard application form provided and shall be accompanied by a fee in accordance with the duly adopted schedule of fees, to cover administrative and publication costs. No part of such fee shall be returnable to the petitioner if the public hearing is held.
2. Referral to Planning Commission. All proposals for amendment shall be referred to the Planning Commission for their review and recommendation. The Planning Commission shall consider each proposal for amendment in terms of its own judgment on particular factors related to the individual proposal, the most likely effect on the community's physical development, and conformance with the Township Master Plan. The Planning Commission may recommend any additions or modifications to the original amendment proposal.
3. Public Hearing. Upon receipt of an application for an amendment, the Planning Commission shall hold a public hearing in accordance with the notification procedures described in Section 3.8.
4. Upon receipt of recommendation from the Planning Commission and the County Planning Commission, the Township Board shall consider the proposed amendment. The Township Board may hold additional hearings it deems necessary. Notice of a public hearing held by the Township Board shall be published in a newspaper of general circulation in the Township not more than fifteen (15) days nor less than five (5) days before the hearing.
5. If the Township Board shall deem any changes to the proposed amendment advisable, it shall refer the same to the Planning Commission for a report within a time specified by the Township Board. After receiving the report, the Township Board shall grant a hearing on the proposed amendment to a property owner who by certified mail addressed to the Township Clerk requests a hearing. The Township Board shall request the Planning Commission to attend the hearing.
6. Thereafter, the Township Board may adopt the amendment with or without changes by majority vote in accordance with procedures of Act 184 of 1943, as amended.
7. No application for a rezoning which has been denied by the Township Board shall be resubmitted for a period of one (1) year from the date of the last denial, except on grounds of newly discovered evidence or proof of changed conditions found upon inspection by the Township Board to be valid.
8. Amendments adopted by the Township Board shall be filed with the Township Clerk and one notice of amendment adoption shall be published in a newspaper of general circulation in the Township within fifteen (15) days after adoption. The notice of amendment adoption shall contain the following information: either a summary of the regulatory effect of the amendment, including the geographic area affected, or the text of the amendment; the effective date of the amendment; and, the time and place where a copy of the amendment may be purchased or inspected.

APPLICANT CERTIFICATION:

I hereby certify that all uses for which this application is made shall conform to the Ordinances of Hamburg Township, Livingston County and the State of Michigan. All information submitted as a part of the zoning amendment application is to my knowledge accurate. If the information is determined either now or in the future to be inaccurate any permits granted for the incorrect information shall be void and any structures built or uses approved may be in violation of the required ordinances and must otherwise be brought into compliance with all regulations.

I further agree that any deviation from the application submitted or the breach of any additional safeguards, conditions or requirements the Hamburg Township may impose in granting this application shall constitute a violation of the Ordinance and invalidate the permit granted.

PROPERTY OWNERS SIGNATURE: DATE: 10-10-2020

*If an agent submits the project to the Township for the property owner a letter authorizing must be submitted.

PHONE: 810-231-1000
FAX: 810-231-4295



P.O. Box 157
10405 Merrill Road
Hamburg, Michigan 48139-0157

To: Planning Commissioners
From: Scott Pacheco, AICP
Date: November 18, 2020
Agenda Item: 7 b
Re: ZTA20-008 Alternative Energy Regulations

PROJECT HISTORY:

The Township Board directed staff at the 2020 joint meeting in February to propose an ordinance amendment that would add requirements for alternative energy systems.

Michigan has seen a recent growth of renewable energy partially due to Public Act 295 of 2008 and Public Act 342 of 2016. The 2008 Act required Michigan's energy providers to maintain at least 10% of their energy from renewable energy sources. The 2016 Act increases this requirement, mandating that an energy provider's portfolio be 12.5% renewable energy by 2019, with a later increase to 15% in 2021 and the goal is to have 35% of electric needs met through energy waste reduction and renewable energy by 2025. To meet these requirements, utility companies have undertaken a rapid expansion in developing Michigan's renewable energy sources, including wind and solar power. This expansion has increased the development pressures for these types of uses within local municipalities.

Currently the Township zoning regulations do not address solar or wind energy facilities. Zoning Department Staff has been addressing these type of uses as follows; if the wind turbine or solar panels are used to support the energy needs of the structures on a residential property and does not create more energy than needed for the structure on the subject site than solar or wind energy systems are considered either an accessory structure if they are not attached to another structure or as part of the structure if they are attached to a structure. These items can be approved with a Land Use Permit as long as all the regulations for accessory structure or the main structure are met depending on the location of the item. If the wind turbines or solar arrays are created to provide more energy than needed on the subject property, they are considered a commercial use and are only allowed in industrial districts.

ANALYSIS:

The following are some of the Benefits and Concerns of Alternative Energy Systems:

Both Wind and Solar:

Benefits

- Cleaner Energy Source than Fossil Fuels
- Tax Payments to the Community
- Creation of Jobs Both to Install and Maintain

Concerns

- Visual Impacts

Solar:**Benefits**

- Can be used on unwanted land and landowners can still make money.
 - Brownfield sites
 - Large parking areas
 - Large industrial or commercial roof tops
- No drainage concerns
- Allows for pollinator potential of site
- Cost of solar is currently most viable clean energy source

Concerns:

- Amount of property necessary for large scale projects
- Glare
- Use of land
 - Not much opportunity for dual use of land

Wind:**Benefits**

- Can be used to support farm operations in a community allows farmers to make extra income.
- Has a small footprint compared to the amount of energy created.

Concerns

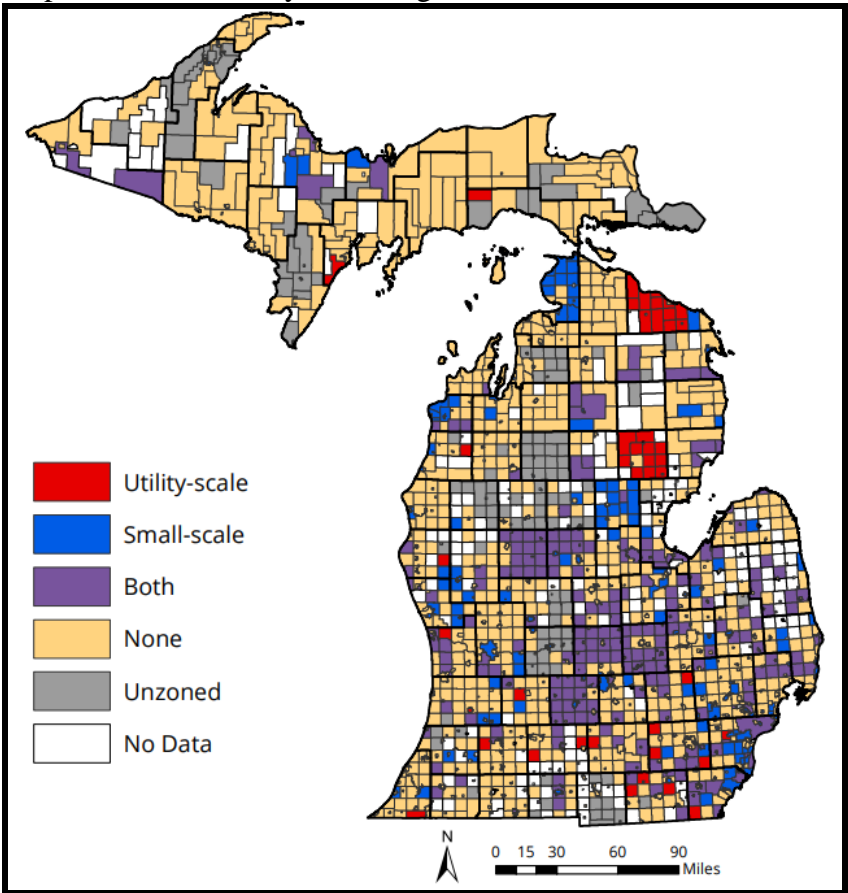
- Very tall structures
- Noise
- Wildlife impacts
- Light flicker
- Impacts on property values

To learn more about planning for wind and solar energy systems, on the Living County Planning Commission website the Planners Brown Bag Lunch and Learn Series from October of 2019 was “Planning for Renewable Energy” presented by Sarah Mills with the University of Michigan Sustainability Institute. This presentation was very helpful when considering Planning for Renewable Energy. I have included the presentation materials for this Series as Exhibit E. Also if you would like to watch a presentation from Sarah Mills on this issues prior to the meeting contact me at spacheco@hamburg.mi.us and I will direct you to an online presentation by Dr. Mills.

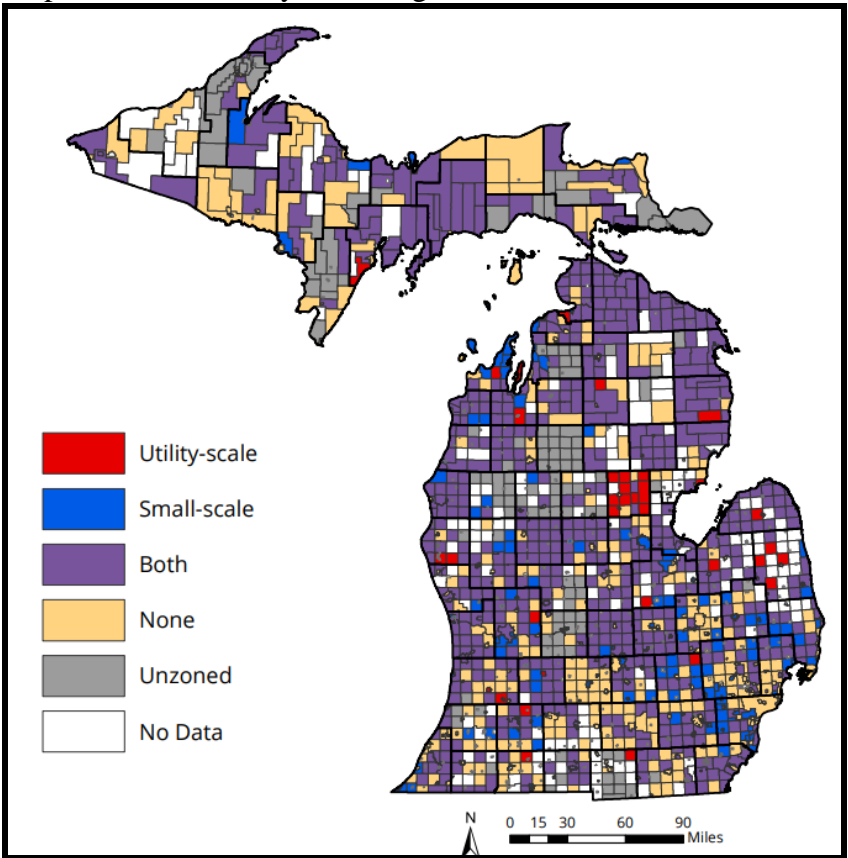
Michigan Municipalities with Alternative Energy Regulations:

As you can see in Map 1 and 2 many municipalities within Michigan already have regulations for solar and wind power systems:

Map 1: Solar Power Systems Regulations



Map 2: Wind Power Systems Regulations



I have review and collected some of the surround municipality regulations regarding solar and wind power system and have included them as Exhibits to this report for Planning Commission review. Below is a summary of the surrounding municipality regulations:

- 1) Putnam Township: Alternative Energy Systems (340-39 approved in 2018) Exhibit A
 - a. Includes regulations for both wind and solar power systems.
 - b. Wind Energy Systems (WES):
 - i. Only allow WES that supply power to the site where they are located, WES with a primary purpose of providing power to the utility grid are not permitted.
 - ii. Includes regulations for ground mounted and building mounted WES.
 - c. Solar Energy Systems (SES):
 - i. Breaks the regulations into two categories; Private and Commercial SES.
 - ii. Private SES are allowed in all zoning districts and are approved with approval of a Zoning Permit by the Zoning Administrator.
 - iii. Commercial SES are allow in the Agricultural/Open Space zoning District and require approval of a Special Use Permit by the Planning Commission and Township Board.
- 2) Deerfield Township: Solar Energy Systems (17.30 approved 2020) Exhibit B
 - a. Includes regulations for solar power systems only.
 - b. Breaks SES down to Small, Medium and Large
 - i. Small SES allowed in all districts, allowed with ZA approval
 - ii. Medium SES allowed in all district on properties where the principle use is not residential allowed with site plan approval
 - iii. Large SES allowed in A-1 district and allowed with a Special Use Permit approval.
 - iv. Excepts self-contained solar systems and roof mounted solar that function as roof shingles
- 3) Green Oak Township: Wind Energy Conservation Systems (WECS) (Secs. 38-200 approved _____) Exhibit C
 - a. Include regulations for Wind Energy Systems
 - b. Breaks WECS down to Private, Commercial and Temporary Systems
 - i. Private WECS serve the needs of the principal use on the property and has a rated power output of 100kw or less. Permitted with a building permit and 1 per lot is allowed unless the lot is greater than 40 acres than an additional WECS is allowed.
 - ii. Commercial WECS are built to provide electricity for commercial use. Permitted with approval of a Special Use Permit.
 - iii. Temporary WECS are not permanently affixed to a structure or the ground and will serve a need for no more than three hundred and sixty-five (365) days. Permitted with approval of a building permit.
- 4) Lyndon Township: Large Solar Energy Systems (LSES) (Section 3. Approved 2018) Exhibit D
 - a. Only regulates LSES which are defined as *“A utility-scale solar energy system where the primary use of the land is to generate electric energy or other energy by converting sunlight, whether by Photovoltaic Devices or other conversion technology, for the sale, delivery or consumption of the generated energy with a capacity greater than one megawatt (MW).”*

- b. Requires a Special Use Permit and Site Plan approval for approvals of a LSES.

All of the attached ordinances have many regulations in place to mitigate the potential impacts of the different Alternative Energy Systems allowed by the municipality. The Planning Commission should review these requirements and we can discuss these items at the meeting.

However, prior to creating regulations to address possible concerns the first items to consider are the Type and Location of Alternative Energy Systems that are appropriate in Hamburg Township. Once we have a better understanding of the first items we can create regulations that specifically address the allowed Alternative Energy Systems for Hamburg Township.

RECOMMENDATION:

Staff suggests that the Planning Commission review and discuss the surrounding communities Wind and Solar Energy System regulations and the Benefits and Concerns of Wind and Solar Energy Systems. The Planning Commission should then make suggestions on what type of regulations would be appropriate for Hamburg Township and direct staff to prepare draft regulations in ZTA20-008 and bring them back to a future Planning Commission meeting for further review.

EXHIBITS

Exhibit A: Putnam Township Alternative Energy Ordinance

Exhibit B: Deerfield Township Solar Energy Ordinance

Exhibit C: Green Oak Wind Energy Ordinance

Exhibit D: Lyndon Township Solar Energy Ordinance

Exhibit E: Planning for Renewable Energy Presentation

EXHIBIT A: Putnam Township Solar & Wind Ordinance

Township of Putnam, MI
Monday, November 2, 2020

Chapter 340. Zoning

Article III. General Provisions

§ 340-39. Alternative energy systems.

[Added 8-19-2009; amended 6-16-2010 by Ord. No. 46; 5-16-2018 by Ord. No. Z-92]

A. Wind energy conversion systems.

- (1) Purpose. This section establishes requirements and procedures by which the installation and operation of an on-site service WECS shall be governed within Putnam Township.
- (2) Definitions. As used in this section, the following terms shall have the meanings indicated:

ON-SITE SERVICE WECS

A single WECS placed upon a lot or parcel with the primary intent to service the energy needs of only the structures and uses on the same lot or parcel.

WECS HEIGHT

The distance measured between the ground (at normal grade) and the highest point of a WECS (for a horizontal axis WECS, the measurement shall be to the tip of the rotor blade when the blade is in the full vertical position).

WIND ENERGY CONVERSION SYSTEM (WECS)

A combination of:

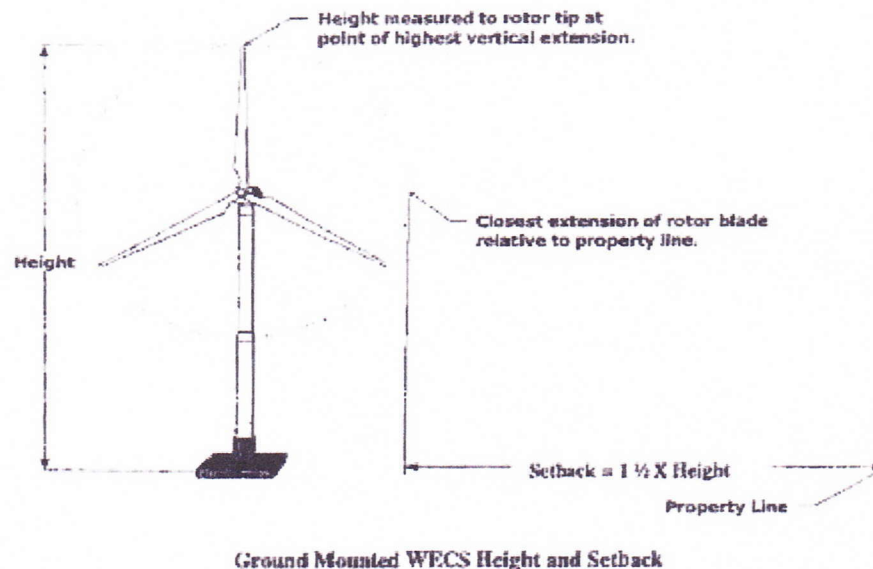
- (a) A surface area (typically a blade, rotor, or similar device), either variable or fixed, for utilizing the wind for electrical power;
 - (b) A shaft, gearing, belt, or coupling utilized to convert the rotation of the surface area into a form suitable for driving a generator, alternator, or other electricity-producing device;
 - (c) The generator, alternator, or other device to convert the mechanical energy of the surface area into electrical energy, generally housed in a nacelle;
 - (d) The tower, pylon, building mount or other structure upon which any, all, or some combination of the above are mounted; and
 - (e) Other components not listed above but associated with the normal construction, operation, and maintenance of a WECS.
- (3) Only on-site service WECS shall be allowed. A WECS with the primary purpose of providing power to the utility grid is not permitted.
 - (4) Review requirements. All WECS shall be subject to the plot plan requirements of Article XIV of this chapter.

- (5) Test equipment. The Zoning Administrator may issue a permit to erect a test tower containing anemometer equipment for testing if adequate wind potential exists on the site proposed for a WECS, provided that the tower does not exceed the height maximum allowed for a WECS on the same site. The test tower permit shall be valid for a period of up to one year.
- (6) On-site service WECS general requirements:
- (a) Except as may otherwise be required by this chapter, an on-site service WECS shall be allowed as an accessory use in any zoning district, subject to the requirements of this section.
 - (b) Power rating of the WECS turbine shall not be greater than 50 kW.
 - (c) The WECS shall provide energy only to the structures and uses on the same property upon which the tower is located and must be owned or leased by the owner of the same property; however, this does not prevent the distribution to the local utility company of any power that is generated beyond the needs of the structures or uses on the property. Except for the local utility company, power generated by the WECS may not be provided to any other property or entity.
 - (d) No sound attributed to the WECS in excess of 55 dBA shall be discernible at the property line.
 - (e) There shall be no signs on the WECS other than the name of the manufacturer, which may only be affixed to the base of the tower or to the nacelle. No sign shall exceed three square feet in area.
 - (f) There shall be no lighting on or directed to the WECS, unless a beacon is required by the Federal Aviation Administration.
 - (g) The WECS shall be painted in a neutral matte color, such as gray or light blue, to blend into the background. A building-mounted WECS may be painted in similar colors to those on the building.
 - (h) A WECS shall have an automatic braking, governing, or feathering system to prevent uncontrolled rotation or over-speeding.
 - (i) A WECS shall not be installed in any location where its proximity to existing fixed broadcast, retransmission or reception antenna for radio, television or wireless phone or personal communication systems would produce electromagnetic interference with signal transmission or reception.
 - (j) The applicant shall provide written evidence that the WECS complies with all applicable federal, state and county requirements, in addition to Township ordinances.
 - (k) All WECS installations shall comply with applicable ANSI (American National Standards Institute) standards.
 - (l) A WECS shall be removed when the device or equipment is no longer operating or when it has been abandoned. A WECS shall be deemed abandoned when it has not produced electrical energy for 12 consecutive months.
 - (m) An existing and approved WECS may be repaired and maintained. Any new or replacement WECS must be approved via the plot plan review process. For the purposes of this subsection, a "new or replacement WECS" shall mean all of the WECS, excluding the tower or support structure.

- (n) A performance bond or letter of credit, in favor of the Township, in an amount equal to the estimated costs of the WECS removal, as determined by an engineer, shall be required prior to the erection of a WECS. Such performance bond or letter of credit shall remain in effect during and after the operation of a WECS until its operations have ceased and it has been removed.

(7) Ground-mounted on-site service WECS.

- (a) There shall be no more than one ground-mounted WECS per parcel or lot.

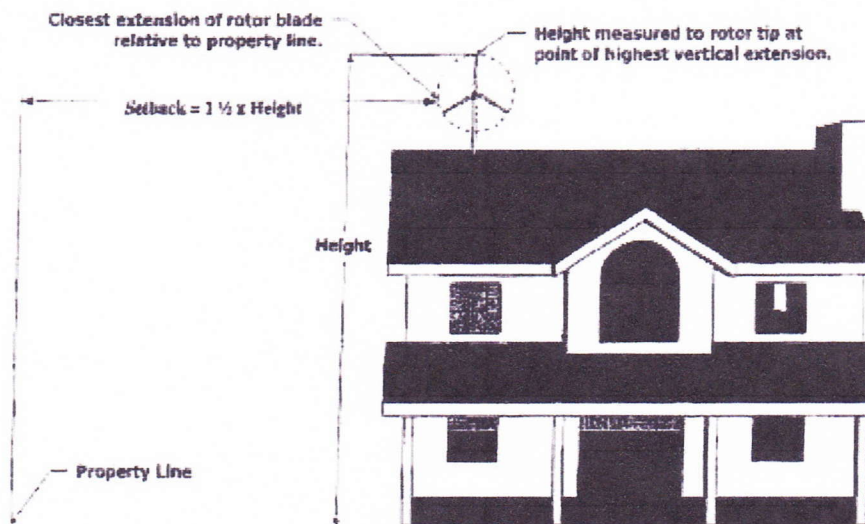


- (b) The WECS shall be located on the property so that it is set back from the nearest property line(s) a distance equal to 1 1/2 times the WECS height. The setback shall be measured from the property line (considered as a plane extending from the ground to the highest point of the WECS) to the closest extension of the rotor relative to the property line (see graphic). No part of a single WECS shall be located within or above any required setback.
- (c) Lot area. The WECS height shall be limited by available setbacks as required in Subsection **A(7)(a)** above; however, no WECS height shall exceed 50 feet on a property less than one acre in area; 75 feet on a property at least one acre but less than three acres in area; or 100 feet on a property three acres in area or greater.
- (d) The minimum rotor blade tip clearance from grade shall be 20 feet.
- (e) The minimum rotor blade tip clearance from any structure shall be 20 feet.
- (f) The diameter of the rotor shall be dependent upon maximum WECS height and rotor blade tip clearance, but in no case shall it exceed 50 feet.
- (g) The tower used to support a WECS shall be adequately anchored meeting ANSI standards, as certified by an engineer.
- (h) The first six feet of the WECS shall employ an anticlimbing device or be designed to prevent climbing and unauthorized access. A fence may be required around the base of the WECS to further restrict access.
- (i) Guy wires, including guy anchors, must be located at least five feet from any property line. Guy wires are not permitted in front yard or required side or rear yard setbacks. Guy

wires must be provided with a conspicuous protective sleeve, at least three inches in diameter, to a height of eight feet above ground.

(8) Building-mounted on-site service WECS.

- (a) There may be more than one WECS mounted on a single building; however, each individual WECS shall meet all of the requirements in this subsection, and each WECS shall be separated from any other WECS no less than 10 feet, measured between the maximum extension of the rotors.



Building Mounted WECS Height and Setback

- (b) The diameter of the rotor shall not exceed 20 feet.
- (c) The WECS height shall not exceed the maximum height for principal buildings in the district, plus 25 feet, including a minimum of five feet between the roof surface and any part of the WECS, except for the support structure.
- (d) The WECS shall be mounted so that it is set back from the nearest property line(s) a distance equal to 1 1/2 times the combined height of the WECS and the height of the portion of the structure on which it is mounted. The setback shall be measured from the property line (considered as a plane extending from the ground to the highest point of the WECS) to the closest extension of the rotor relative to the property line (see graphic).

B. Solar energy systems.

- (1) Purpose. This Subsection **B** establishes requirements and procedures by which the installation and operation of an on-site solar energy system shall be governed within Putnam Township.
- (2) Definitions. As used in this Subsection **B**, the following terms shall have the meanings indicated:

BUILDING-INTEGRATED PHOTOVOLTAICS (BIPVs)

A private or commercial solar energy system that is integrated into the structure of a building, such as solar roof tiles and solar shingles.

COMMERCIAL SOLAR ENERGY SYSTEM

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.

GROUND-MOUNTED SOLAR ENERGY SYSTEM

A private or commercial solar energy system that is not attached to or mounted to any roof or exterior wall of any principal or accessory building.

PRIVATE SOLAR ENERGY SYSTEM

A solar energy system used exclusively for private purposes and not utilized for any commercial resale of any energy, except for the sale of surplus electrical energy back to the electrical grid.

ROOF- OR BUILDING-MOUNTED SOLAR ENERGY SYSTEM

A private or commercial solar energy system attached to or mounted on any roof or exterior wall of any principal or accessory building, but excluding BIPVs.

SOLAR ENERGY SYSTEM

Any part of a system that collects or stores solar radiation or energy for the purpose of transforming it into any other form of usable energy, including but not limited to the collection and transfer of heat created by solar energy to any other medium by any means.

- (3) General requirements. All solar energy systems are subject to the following general requirements:
 - (a) All solar energy systems must conform to the provisions of this chapter and all county, state, and federal regulations and safety requirements as well as applicable industry standards.
 - (b) Solar energy systems shall be located or placed so that concentrated solar glare shall not be directed toward or onto nearby properties or roadways at any time of the day.
- (4) Private solar energy systems.
 - (a) Private solar energy system BIPVs. Private solar energy system BIPVs shall be permitted in all zoning districts, provided such BIPVs conform to applicable county, state and federal regulations and safety requirements, including the Michigan Building Code. A Putnam Township zoning compliance permit and Livingston County building permit shall be required for the installation of any BIPVs.
 - (b) Roof- or building-mounted private solar energy systems. Roof- or building-mounted private solar energy systems shall be considered an accessory use in all zoning districts, subject to the following requirements:
 - [1] No part of the solar energy system erected on a roof shall extend beyond the peak of the roof. If the solar energy system is mounted on a building in an area other than the roof, no part of the solar energy system shall extend beyond the wall on which it is mounted.
 - [2] No part of a solar energy system mounted on a roof shall be installed closer than three feet from the edges of the roof, the peak, or eave or valley in order to maintain pathways of accessibility.
 - [3] No part of a solar energy system mounted on a roof shall extend more than two feet above the surface of the roof.
 - [4] In the event that a roof- or building-mounted solar energy system has been abandoned (meaning not having been in operation for a period of one year), it shall be removed by the property owner within six months from the date of abandonment.

- [5] A Putnam Township zoning compliance permit and Livingston County building permit shall be required for installation of roof- or building-mounted private solar energy systems.
- (c) Ground-mounted private solar energy systems. Ground-mounted private solar energy systems shall be considered an accessory use in all zoning districts, subject to the following requirements:
 - [1] Prior to the installation of a ground-mounted solar energy system, the property owner shall submit a site plan to the Zoning Administrator. The site plan shall include setbacks, panel size, and the location of property lines, buildings, fences, greenbelts, and road rights-of way. The site plan must be drawn to scale.
 - [2] A ground-mounted solar energy system shall not exceed the maximum building height for adjacent accessory buildings, but in no case shall the maximum height of any ground-mounted solar energy system exceed 15 feet above the ground when oriented at maximum tilt.
 - [3] A ground-mounted solar energy system shall be located in the rear yard and shall meet the side and rear yard setback requirements applicable in the zoning district in which the solar energy system will be located.
 - [4] All power transmission or other lines, wires or conduits from a ground-mounted solar energy system to any building or other structure shall be located underground. If batteries are used as part of the ground-mounted solar energy system, they must be placed in a secured container or enclosure.
 - [5] There shall be greenbelt screening around any ground-mounted solar energy systems and equipment associated with the system to obscure the solar energy system from any adjacent residences. The greenbelt shall consist of shrubbery, trees, or other noninvasive plant species that provide a visual screen. In lieu of a planting greenbelt, a decorative fence (meeting the requirements of this chapter applicable to fences) may be used.
 - [6] No more than 20% of the total lot area may be covered by a ground-mounted solar energy system.
 - [7] In the event that a ground-mounted solar energy system has been abandoned (meaning not having been in operation for a period of one year), it shall be removed by the property owner within six months from the date of abandonment.
 - [8] A Putnam Township zoning compliance permit and Livingston County building permit shall be required for installation of a ground-mounted solar energy system.
- (5) Commercial solar energy systems. Commercial solar energy systems shall only be allowed in the A-O Agricultural/Open Space Zoning District as a special land use approved by the Planning Commission and the Township Board. In addition to any other requirements for special land use approval, commercial solar energy systems shall be ground-mounted and are subject to the following requirements:
 - (a) The property owner or applicant for a commercial solar energy system shall provide the Planning Commission with proof of ownership of the subject property, a copy of any lease agreement for a commercial solar energy system, together with an operations agreement which shall set forth the operations parameters, the name and contact information of the certified operator, inspection protocol, emergency procedures and general safety documentation.

- (b) Commercial solar energy systems shall be located on parcels of land no less than 20 acres in size.
- (c) The commercial solar energy system shall meet the minimum front, side and rear yard setbacks of the zoning district.
- (d) The height of the commercial solar energy system and any mounts shall not exceed 15 feet when oriented at maximum tilt.
- (e) Landscaping and/or decorative fencing (meeting the requirements of this chapter applicable to fences) shall be provided to screen the system from view on all sides.
- (f) Prior to installation, the applicant shall submit a site plan in accordance with Article **XIV**, Site Plan and Plot Plan Review, of this chapter, to the Planning Commission which includes where and how the commercial solar energy system will connect to the power grid.
- (g) No commercial solar energy system shall be installed until evidence has been given to the Planning Commission that the electric utility company has agreed to an interconnection with the electrical grid or a power purchase agreement. Any such agreement shall be furnished to the Planning Commission.
- (h) To ensure proper removal of a commercial solar energy system upon discontinued use or abandonment, applications shall include a description of the financial security guaranteeing removal of the system, which must be posted with the Township within 15 days after approval or before a Putnam Township zoning compliance permit is issued for the facility. The financial security shall be: a cash bond; or an irrevocable bank letter of credit or a performance bond, in a form approved by the Township. The amount of such guarantee shall be no less than the estimated cost of removal and may include a provision for inflationary cost adjustments. The estimate shall be prepared by the engineer for the applicant and shall be subject to approval by the Township.
- (i) A Putnam Township zoning compliance permit and Livingston County building permit shall be required for installation of a commercial solar energy system.
- (j) If the owner of the facility or the property owner fails to remove or repair the defective or abandoned commercial solar energy system, the Township, in addition to any other remedy under this chapter, may pursue legal action to abate the violation by seeking to remove the solar energy system and recover any and all costs, including attorneys' fees.



EXHIBIT B: Deerfield Township Solar Ordinance

Livingston County Department of Planning

MEMORANDUM

Kathleen J. Kline-Hudson
AICP, PEM
Director

Robert A. Stanford
AICP, PEM
Principal Planner

Scott Barb
AICP, PEM
Principal Planner

TO: Livingston County Planning Commission and the Deerfield Township Board of Trustees

FROM: Scott Barb, Principal Planner

DATE: September 9, 2020

SUBJECT: Z-16-20. Amendments to Zoning Ordinance: Article 2 Definitions, Section 2.02 Definitions; Article 12 Agricultural Districts, Section 12.01 General Agriculture District; Article 17 Standards for Specific Land Uses, Section 17.29 Accessory Dwelling Units and Section 17.30 Solar Energy Systems (SES).

The Deerfield Township Planning Commission is proposing to amend the Township Zoning Ordinance by creating new definitions and corresponding sections for Accessory Dwelling Units (ADU's) and Solar Energy Systems (SES). Staff has reviewed the proposed additions to the Deerfield Township Ordinance for accuracy and compatibility with the existing ordinance language and offers the following summary for your review. Staff comments are written in *italic and underlined* with additions and changes to the Ordinance written in red.

Article 2, Section 2.02 Definitions

New definitions will be created in this section that read as follows:

Accessory Dwelling Unit: See Section 17.29 for the definition of accessory dwelling unit and regulations regarding the same.

Solar Energy Systems (SES): See Section 17.30 regarding definitions pertaining to solar energy systems.

Staff comment: Definitions for the proposed uses will be deferred to Section 17.29 and 17.30 accordingly.

Article 12, Section, Section 12.01 General Agriculture District

A new use will be added to Section 12.01(D) (23) that reads as follows:

Large solar energy systems (Large SES).

Department Information

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

(517) 546-7555
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Article 17, Section 17.29 Accessory Dwelling Units (ADU)

A new section will be created that will read as follows:

Section 17.29 Accessory Dwelling Units (ADU)

A. Definitions: For the purpose of this Section, the following terms and phrases shall have the corresponding definitions.

1. Accessory Dwelling Unit (ADU): A second dwelling unit on the same lot as an existing single-family dwelling, where the physical character of such second dwelling unit is clearly subordinate to the existing single-family dwelling and the second dwelling unit functions in an accessory manner to the existing single-family dwelling. The existing dwelling on the lot is commonly referred to as the principal dwelling.
2. Attached: The sharing of a common wall between an ADU and the principal dwelling for a minimum length of ten (10) feet, or a fully enclosed corridor between an ADU and principal dwelling that does not exceed ten (10) feet in length.

B. Authorization: No ADU shall be established prior to the issuance of a land use permit for the ADU. The Zoning Administrator shall be the approving body for all ADUs. A land use permit for an ADU shall terminate at such time that the ADU does not conform to one (1) or more of the standards and requirements of this Section and the ADU has not been brought into compliance within the time period specified by the Zoning Administrator, but no greater than ninety (90) days. In the case of an ADU in a separate building from the principal dwelling, and which has not been brought into compliance with the period specified by the Zoning Administrator, the ADU shall be removed from the lot within sixty (60) days thereafter and the ground shall be returned to its pre-construction condition. No ADU shall be occupied upon termination of the land use permit for the ADU.

Staff comment: The Zoning Administrator will be the approving authority for all ADU's within the Township and reserves the authority to enforce non-compliance if needed.

C. General Regulations and Standards: The following requirements shall apply to all accessory dwelling units (ADUs) except where provided otherwise:

1. Principal Dwelling Required: An ADU shall be established only on a lot on which a principal dwelling exists. The splitting of a lot that results in an ADU on a different lot than the principal dwelling to which it is accessory is prohibited.
2. Ownership, Occupancy and Bedrooms:
 - a. An ADU shall be established only on a lot owned by the occupant of the principal dwelling though upon construction of the ADU, the lot owner shall reside in the principal dwelling or the ADU.
 - b. A maximum of two (2) persons shall reside within an ADU.
 - c. An ADU shall have no more than one (1) bedroom except in an Agricultural District in which case the number of bedrooms shall not exceed two (2).
 - d. An ADU shall not be rented by or otherwise be made available to any one (1) or more persons for periods less than thirty (30) days.

3. Relationship to Principal Dwelling: An ADU shall be located in or be otherwise attached to the building containing the principal dwelling except that an ADU may be a separate accessory building or portion thereof when located in an Agricultural District provided the lot on which it is located is not a lakefront lot.

Staff comment: ADU's may be a separate structure in agricultural zoning districts and if not located on a lakefront lot.

4. Prohibited Forms of ADUs: An ADU shall not be comprised of a mobile home or any device designed for regular or periodic movement including vehicles and cargo containers.
5. Number and Mailing Address: No lot shall have more than one (1) ADU on such lot and the lot shall maintain one (1) mailing address that shall service the ADU and principal dwelling.
6. Design Character: An ADU, and modifications to the principal dwelling to accommodate an ADU, shall be of similar or better workmanship as the principal dwelling, shall not detract from the appearance of the lot as a place of one (1) residence, and shall be aesthetically compatible in appearance with other single-family dwellings in the immediate area based on architectural design and exterior materials.

D. Site Development Standards: The following standards and requirements shall apply to all accessory dwelling units (ADUs) except where provided otherwise:

1. Lot Size: The minimum size of a lot containing an ADU shall be five thousand (5,000) sq. ft., except that the minimum size of a lot containing an ADU in a separate accessory building shall be two (2) acres.
2. Floor Area: An ADU shall not exceed six hundred (600) sq. ft. in gross floor area except that an ADU in an Agricultural District shall not exceed eight hundred (800) sq. ft. in gross floor area, but in no case shall the ADU's gross floor area exceed fifty (50%) of the gross floor area of the principal dwelling excluding the principal dwelling's basement.
3. Height: In the case of an ADU that is not part of or attached to the principal dwelling, the maximum height of the ADU shall be eighteen (18) feet or the principal dwelling's height, whichever is less.
4. Lot Coverage: An ADU shall be subject to the maximum lot coverage standards of the district in which the ADU is located.
5. Yard and Setback Restrictions:
 - a. In the case of an ADU that is not attached to the principal dwelling, the ADU shall be located in the rear yard only.
 - b. An ADU shall comply with the setback standards as required for the principal dwelling.
 - c. An ADU that is not part of or attached to the principal dwelling shall be located closer to the principal dwelling than to any non-ADU dwelling on another lot.
6. Doors: In the case of an ADU that is part of or otherwise attached to the principal dwelling, access to the ADU shall rely on doors in the side or rear yard only or otherwise rely on the shared use of a door of the principal dwelling facing the front door.

7. Driveway and Parking:

- a. An ADU and principal dwelling shall be served by the same driveway.
- b. An ADU shall be provided one (1) parking space in addition to the minimum two (2) spaces required for the principal dwelling.
- c. In the case of the conversion of a garage to an ADU, a decrease in parking spaces for the principal dwelling below the minimum required two (2) spaces shall be replaced elsewhere on the lot.

8. Utilities: An ADU shall be connected to potable water and sanitary facilities approved by the County Health Department. Utility service to an ADU shall rely on the same metering and service panel as those that serve the principal dwelling except as may be otherwise required by the building inspector according to the State Construction Code. Separate utility billings for an ADU by the utility provider are prohibited.

Article 17, Section 17.30 Solar Energy Systems (SES)

A new section 17.30 will be added to the Ordinance that reads as follows:

Section 17.30 Solar Energy Systems (SES)

A. Definitions: For the purpose of this Section, the following phrases shall have the following corresponding definitions.

1. Solar Energy System (SES): A system consisting of a device or combination of devices, structures or parts thereof, that collect, transfer or transform solar radiant energy into thermal, chemical or electrical energy, excluding systems that substantially rely on mirrors or similar technologies to focus solar radiant energy onto a considerably smaller area and are sometimes referred to as "concentrated solar power" systems or "CSP" systems.
2. Small Solar Energy System (Small SES): A SES located on the same lot as the use served by the SES and which relies on roof mounted and/or ground mounted collection systems that occupy no more than two thousand (2,000) sq. ft. of roof and/or land area, including access aisles between solar panels. A Small SES is typically intended to serve a single residential unit, agricultural operation or other business.
3. Medium Solar Energy System (Medium SES): A SES located on the same lot as the use served by the SES and which relies on roof mounted and/or ground mounted collection systems that occupy more than two thousand (2,000) sq. ft. but not more than ten thousand (10,000) sq. ft. of roof and/or land area, including access aisles between solar panels. A Medium SES is typically intended to produce energy for use in association with multiple dwellings and/or businesses on a single lot.
4. Large Solar Energy System (Large SES): A solar energy system that relies on roof mounted and/or ground mounted collection systems that occupy more than ten thousand (10,000) sq. ft. of roof and/or land area, including access aisles between solar panels. A Large SES is typically intended to produce energy for use principally in association with multiple dwellings and/or businesses on a single lot on which the system is located and/or for use by off-lot properties and persons including in association with energy utility providers. A Large SES may be commonly referred to as a "solar farm."

5. Solar Collection Panels: Panels and tiles comprised of semiconductor devices and typically referred to as photovoltaic cells, which collect and convert solar energy directly into electricity. Ground mounted solar collection panels are panels attached to the ground by a pole, metal frame or other similar support structure.

Staff comment: The definitions appear to be compatible with the Ordinance and differentiate between small, medium, and large solar energy systems.

B. Authorization, Review and Approval Procedures

1. Small SES: Small SES are permitted as accessory uses and structures only, and are authorized in all districts. Small SES shall be subject to Zoning Administrator approval. An application for a Small SES shall be accompanied by a plot plan prepared according to Section 3.04(B), including the delineation of all SES structures and equipment.
2. Medium SES: Medium SES are permitted as accessory uses and structures only, and are authorized in all districts provided the principal use of the lot is not residential. Medium SES shall be subject to site plan approval according to Article 4 except that if the principal use constitutes a special land use, the approval process for the Medium SES shall be subject to the special land use review and approval provisions of Article 5.
3. Large SES: Large SES are permitted as accessory and principal uses and structures, constitute a special land use, and are authorized in the A-1 District only. Large SES are subject to the special land use review and approval provisions of Article 5.

Staff comments: Small SES's will be approved by the Zoning Administrator while medium and large SES's will require site plan approval. Large SES's will also require special land use review and approval.

C. General Standards

1. Buildings: Unless provided elsewhere in this Section, all buildings shall comply with Section 10.09 unless the approving body determines a building functions in an accessory manner, in which case the standards of Section 19.11 shall apply.
2. Structures: Unless provided elsewhere in this Section, all structures that do not constitute buildings shall comply with the accessory structure standards of Section 19.11.
3. Glare/Radiation: SES collection panels shall be placed such that concentrated solar radiation or solar glare shall not be directed onto nearby properties and public roads. The applicant shall submit documentation to verify compliance with this section. When deemed necessary, the reviewing body may require a report from a registered civil engineer or other professional deemed qualified by the Zoning Administrator, attesting to the glare and radiation impact on nearby properties and public roads.
4. Panel Setbacks and Heights: Ground mounted SES panels shall be set back a minimum of twenty-five (25) feet from lot lines and shall not exceed fifteen (15) feet in height as measured from the ground below. In the case of a Medium or Large SES, the minimum setback shall be increased to fifty (50) feet.
5. Maximum Lot Coverage: Maximum lot coverage restrictions shall not apply to solar collection panels. Any other regulated structures on the lot are subject to maximum lot coverage restrictions.

6. Yard Restrictions: No ground mounted SES panels, and support equipment that exceeds twenty (20) sq. ft. in area or six (6) feet in height, shall be located in a front yard unless such panels and equipment are set back a minimum distance of seventy-five (75) feet from the front lot line and screening is provided according to the landscape screening height and spacing provisions of subsection (8) (a) – (c). In the case of a lot that does not include a building not otherwise part of the SES, the front yard shall be construed to extend from the front lot line to a distance of seventy-five (75) feet.
7. Lighting: No SES exterior lighting shall be erected except upon satisfactory evidence that such lighting is necessary for the proper operation or security of the facility. No light may adversely affect adjacent lots. All lighting shall be shielded from adjoining lots, and light poles are restricted to eight (8) feet in height from the ground except upon satisfactory evidence that a greater height is necessary, no reasonable alternatives are available, and the greater height shall not create nuisance conditions.
8. Screening: In the case of Medium and Large SES ground mounted solar collection panel(s) located on a lot that is adjacent to a lot in an Agricultural or Residential District, where the panels are to be located within one hundred (100) feet of a shared lot line with such lot, the panels shall be screened from view from such lot.
 - a. Screening shall be comprised of trees and shrubs, with a minimum of fifty percent (50%) of the trees to be of evergreen species, and all trees shall be a minimum of six (6) feet in height at the time of planting, have a projected growth rate of a minimum of six (6) inches per year, and have a minimum projected growth height of at least fifteen (15) feet. The screening shall consist of a minimum of one (1) evergreen tree and one (1) low-branching deciduous tree per forty (40) linear feet of perimeter panel length, and one (1) shrub per twenty (20) linear feet of perimeter panel length. Shrubs shall be of a dense growth habit and shall be a minimum of two and one-half (2.5) feet in height at the time of planting.
 - b. The approving body may permit a maximum fifty percent (50%) reduction in the number and size of tree plantings where the adjacent property is vacant and not likely to be developed within the next three (3) years based on nearby development trends during the preceding three (3) years, where natural features are present that serve to assist in the screening of the panel(s) such as existing topographic or vegetative conditions, where existing structures will assist in the screening of the panel(s), and/or where other conditions may be present that make the normally required screening requirements ineffective or otherwise unnecessary.
 - c. Required screening shall be located and configured to encourage a natural appearance such as clustering and non-linear plantings, and need not be in the immediate area of the panels that the plantings are intended to screen if the planting locations provide for the intended screening effect. No tree shall be located within five (5) feet of a lot line.
 - d. All plant material shall be maintained in a healthy condition to provide the intended screening, shall be permitted to grow according to its natural habit, and shall be replaced upon death or disease.

- e. The screening requirements of this Section shall replace the screening provisions of Article 23 except as the Township Board may determine otherwise appropriate.
- f. The site plan shall specify the proposed plant material according to common name, botanical name, and minimum planting size, and the selected plant material shall be predominantly species native to Michigan.

Staff comments: The screening regulations for solar energy systems are extensive and appropriate for the use.

9. **Roof-Mounted Systems:** Roof-mounted SES may exceed the maximum height standard for the structure to which it is attached according to the District in which it is to be located, but no portion of the system shall extend more than five (5) feet above the roof surface to which it is attached directly below.

10. **Abandonment:** If a ground mounted SES ceases to operate or is abandoned for six (6) months, or is deemed by the Building Inspector to be unsafe or not consistent with the building code, the applicant shall repair and restore the system to good working order within a reasonable time set by the Zoning Administrator or otherwise remove the system in its entirety including posts, equipment, panels, foundations and other features and restore the ground to its preconstruction state.

D. Self-Contained Solar Energy Systems: Solar energy systems that do not exceed four (4) square feet in total solar collector panel area, intended to provide energy to operate a device to which such panel is attached such as in the case of a panel powering an exterior light or an attic fan, are permitted in all districts and may be erected without the issuance of a zoning permit.

- 1. **Setbacks:** Self-contained solar energy systems shall comply with the setback restrictions applicable to accessory structures in the respective District.
- 2. **Heights:** Self-contained solar energy systems shall comply with the height restrictions applicable to accessory structures in the respective District except that in the case of a roof-mounted system, no portion of the system attached to the roof shall exceed three (3) feet above the roof surface below.

E. Exempt Solar Energy Systems: The following are exempt from the regulations of this Section and are not subject to the issuance of a zoning permit.

- 1. Roof-mounted solar energy systems that function as shingles or are otherwise shingle-like in general character.

F. Additional Submittal Requirements for Medium and Large SES: In the case of an application for a Medium or Large SES, the following information shall be provided in addition to the information required by Article 4 for site plan review and Article 5 for special land use applications.

- 1. **Project Description and Rationale:** The type, size, rated power output, performance, safety and noise characteristics of the system, including the name and address of the manufacturer, and model. Identify time frame, project life, development phases, likely markets for the

generated energy, and possible future expansions.

2. Operator's Agreement: The operator's agreement, which shall set forth the operations parameters, the name and contact information of the certified operator, inspection protocol, emergency proceedings and general safety documentation.
3. Analysis of Traffic: An assessment of anticipated traffic to the SES during construction phases and once the CSES is operational, including the anticipated daily vehicles by frequency and type such as construction workers' and employees' personal vehicles, earth moving and clearing vehicles, and other construction vehicles.
4. Visual Impacts: A presentation of the visual impact using photos or renditions of the project with consideration given to the tree plantings and setback requirements and shall include setbacks, panel size, location of the property lines, buildings, fences, greenbelts and road right of ways.
5. Wildlife: A review of the real and potential impacts on wildlife on the site and in the surrounding area.
6. Lighting: Indicate the extent of exterior lighting to be installed including locations, heights, fixture specifications, light levels along property lines, and the frequency of lights to be illuminated.
7. Transportation Plan: An access plan during construction and operation phases including the proposed SES service road system and ingress and egress onto public roads.
8. Public Safety: A description of the public health and safety risks the SES may present and measures to address such risks including emergency and standard shutdown procedures, and any security measures that may be employed to manage access to the facility by the general public.
9. Telecommunications Interference: Provide a description of the extent to which the SES may interfere with wireless communications within one (1) mile of the SES, or otherwise alter electromagnetic field conditions.
10. Power: Identify how the SES will connect to the power grid.
11. Glare: Provide a report prepared by a qualified person with documented training, certification and/or licensing in glare associated with SES including training in the use of computer software designed to assess glare potential, attesting to the glare and radiation impact on nearby properties and public roads and verifying compliance with this Section.
12. Project Duration, Decommissioning, and Reclamation: Provide a detailed decommissioning plan addressing the project's estimated duration period, the manner in which all SES features shall be removed, and the manner in which the site shall be reclaimed to its former condition. The decommissioning plan shall include a detailed description of the financial security guaranteeing removal of the system and which shall be posted at the time of receiving a construction permit for the facility. The security shall be in a form as required by Section 3.06. The amount of such guarantee shall be no less than the estimated cost of removal and may include a provision for inflationary cost adjustments. The estimate shall be prepared by the engineer for the developer, shall present a detailed basis for the estimate

including estimated hours and costs for labor and equipment, and shall be subject to approval by the Township.

Staff Comment: Large solar energy systems will be required to undergo a more extensive review process and adhere to more stringent regulations due to their size and operation. We believe the ordinance amendments for solar energy systems are adequate and are well written to accommodate the use and to also protect the Township with the appropriate amount of regulation.

TOWNSHIP PLANNING COMMISSION RECOMMENDATION: APPROVAL. Comments at the August 20, 2020 public hearing were limited to Township Planning Commission discussion of the proposed amendments.

RECOMMENDATION: APPROVAL. We believe the proposed ordinance amendments for Accessory Dwelling Units (ADU)'s and Solar Energy Systems (SES) are well constructed and are an appropriate addition to the Deerfield Township Zoning Ordinance.

EXHIBIT C: Green Oak Township Wind Energy Ordinance

Green Oak: Wind Energy Regulations

Definitions:

Utility Scale wind farm means all wind farms that produce greater than fifty (50) kilowatts of energy

Wind Energy Conversion System (WECS) means any device such as a wind charger, windmill, or wind turbine that converts wind energy to a form of electrical energy greater than one (1) kilowatt.

a. Private WECS means any WECS that is accessory to a principal non-residential or residential use located on the same lot, and is designed and built to serve the needs of the principal use and has a rated power output of 100kw or less.

b. Commercial WECS means any WECS that is designed and built to provide electricity for commercial use.

c. Temporary WECS means any WECS not permanently affixed to a structure or the ground and will serve a need for no more than three hundred and sixty-five (365) days.

Secs. 38-200. Wind Energy Conversion Systems.

(a) Intent. It is the intent of Green Oak Charter Township to promote the effective and efficient use of Wind Energy Conversion Systems (WECS) by regulating the siting, design, and installation of such systems to protect the public health, safety, and welfare. In no case shall this ordinance guarantee the wind rights or establish access to the wind.

(b) Approval Required. Except where noted in this Section, it shall be unlawful to construct, erect, install, alter, or locate any WECS project within Green Oak Charter Township unless approval for a:

(1) Private WECS. A permit has been obtained from the Building Department as an accessory use and subject to Section 38-171 and the height restrictions of Section 38-185 and this Section. Only one (1) Private WECS shall be permitted per lot, and the private WECS shall not be allowed within either a required or non-required front yard area. Two (2) Private WECS shall be permitted on a lot if the lot is greater than forty (40) acres in size and meets all requirements of this Ordinance.

(2) Commercial WECS. A special land use has been obtained pursuant to Section 38-44 and this Section.

(3) Temporary WECS. A permit has been obtained from the Building Department.

(c) General Standards. The following standards shall apply to wind energy conversion systems in Green Oak Charter Township:

(1) Design Safety Certification. The safety of the design of all WECS structures shall comply with all current applicable State of Michigan guidelines and standards.

(2) Setbacks. All private and commercial WECS structures (Horizontal axis or vertical axis wind turbines) must be setback from property lines at a distance equal to or greater than the height of the structure, measured from the base of the structure to the highest reach of its blade. (See Figure 38-200-1)

(3) Utility Notification. No grid-tied WECS shall be installed until evidence has been submitted that the applicant's utility company has been informed of the customer's intent to install an interconnected customer-owned generator.

(4) Construction Code. All WECS shall meet or exceed all requirements of the State of Michigan Construction Codes.

(5) Applications for roof-mounted (or other non-traditionally mounted) WECS must include a wet stamped structural engineering analysis for the roof WECS mounting system and for the suitability of the building to which the WECS is to be mounted.

Figure 38-200A

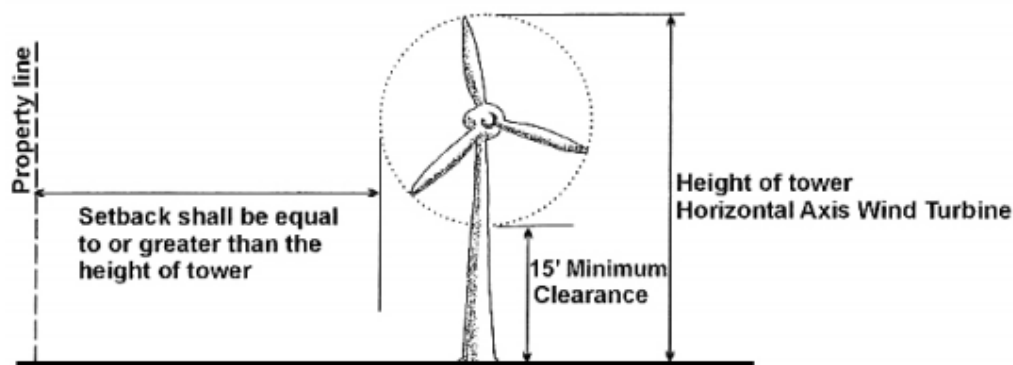
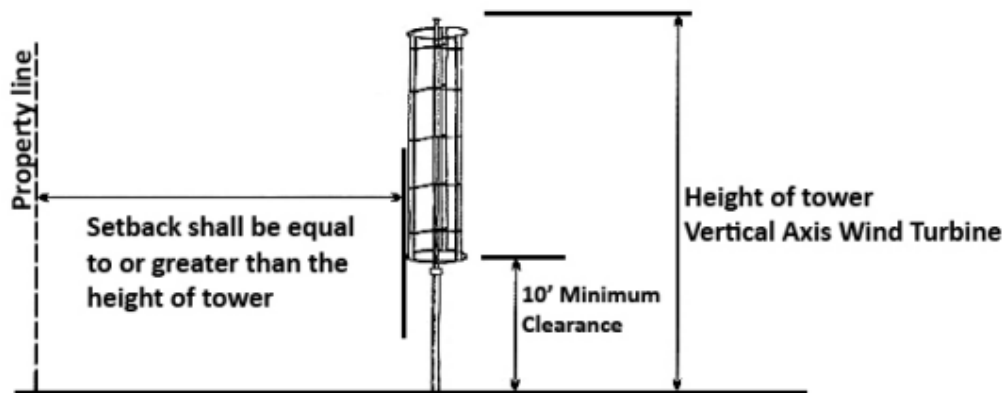


Figure 38-200B



(6) Interference. All WECS structures shall be certified by the manufacturer to minimize or mitigate interference with existing electromagnetic communications, such as radio, telephone, microwave or television signals.

(7) Noise. The sound pressure level shall not exceed 60 dB(A) (A-weighted Decibels) at the property line closest to the wind energy system. This sound pressure level may be exceeded during short-term events such as utility outages and/or severe wind storms. If the ambient sound pressure level exceeds 60 dBA, the standard shall be ambient dBA plus 5 dBA.

(8) Safety. All moving parts including blades or rotating cylinders shall be located at least fifteen (15) feet above ground for horizontal axis wind turbines (Figure 38-200A) and ten (10) feet above ground for vertical axis wind turbines (Figure 38-200B) in order to provide a safe distance from human interference. The support system, footings and tower shall be constructed in accordance with all applicable building codes governing structural integrity and wind loads.

(9) Height. All private and commercial WECS structures shall be subject to the height restrictions of this Section and Section 38-185.

(d) Additional Standards for Commercial WECS Structures. The following additional standards shall apply to all commercial wind energy conversion systems in Green Oak Charter Township:

(1) Color. Towers and blades shall be a non-reflective, non-obtrusive neutral color such as white, off-white, or gray.

(2) Controls and Brakes. All commercial WECS structures shall be equipped with manual and automatic controls to limit rotation of blades to a speed below the designed limits of the WECS. Wind cut out speed rotation governors are required. The Professional Engineer must certify that the rotor and over speed control design and fabrication conform to applicable design standards. No changes or alterations from certified design shall be permitted unless accompanied by a Professional Engineer's statement of certification.

(3) Compliance with FAA. It shall be the responsibility of the applicant to obtain the appropriate FAA permits for the WECS structure, or to obtain a determination of no significant impact to air navigation from the FAA.

(4) Climb Prevention. All commercial WECS structures must be protected by anti-climbing devices.

(5) Shadow Flicker. The facility owner or operator shall minimize shadow flicker by orienting and placing a commercial WECS away from occupied buildings. The Planning Commission may require a shadow flicker analysis and methods of mitigation such as revised location, landscape buffer, or other methods to minimize adverse impacts.

(6) Warnings. A visible warning sign of High Voltage as required by the State Construction Code shall be placed at the base of all commercial WECS structures. The sign must have at a minimum six-inch letters with 1/8-inch stroke. Such signs shall be located a maximum of three hundred (300) feet apart and at all points of site ingress and egress.

(7) Performance Guarantee. All commercial WECS shall include a description of security to be posted at the time of receiving a building permit to ensure removal of the facility when it has been abandoned or is no longer needed. The security shall be posted and maintained in the form of: (1) cash; (2) irrevocable letter of credit; or (3) other security arrangement accepted by the Township Board.

(8) Removal. A condition of every approval of a commercial WECS shall be adequate provision for removal of all or part of the facility by users and owners upon the occurrence of one or more of the following events:

a. When the facility has not been used for one hundred and eighty (180) days or more. For purposes of this section, the removal of equipment from the facility, or the cessation of operations (transmission of

electrical power or prolonged periods of no movement of the WECS) shall be considered as the beginning of a period of nonuse.

b. The situations in which removal of a facility is required, as set forth in paragraphs 1 and 2 above, may be applied and limited to portions of a facility.

c. Upon the occurrence of one (1) or more of the events requiring removal, the property owner or persons who had used the facility shall immediately apply for any required demolition or removal permits, proceed with, and complete the demolition/removal.

d. If the required removal of a facility or a portion thereof has not been lawfully completed within sixty (60) days of the applicable deadline, and after at least thirty (30) days written notice, the Township may remove or secure the removal of the facility or required portions thereof, with its actual cost and reasonable administrative charge to be drawn, collected and/or enforced from or under the security posted (Section 38-200(d)7) at the time of application.

Exhibit D: Lyndon Township LSES Regulations

II. Large Solar Energy Systems.

1. In addition to the site plan requirements outlined in Chapter 15 of the Lyndon Township zoning ordinance, all site plans for Large Solar Energy Systems shall include the following:

a. Names of owners of each lot or parcel within Lyndon Township that is proposed to be within the Large Solar Energy System.

b. 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 Large Solar Energy System.

c. Horizontal and vertical (elevation) to scale drawings 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.

d. Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Large Solar Energy System and within 100 feet of all exterior property lines of the Large Solar Energy System.

e. Proposed setbacks from the Solar Array(s) to all existing and proposed structures within the Large Solar Energy System. f. Land elevations for the Solar Array(s) location and the relationship to the land elevations of all existing and proposed structures within the Large Solar Energy System at a minimum of 5' contours.

g. Access driveways within and to the Large Solar Energy System, together with a detailed narrative regarding dimensions, composition, and maintenance of each proposed driveway. All access drives shall be subject to Washtenaw County Road Commission approval and shall be planned so as to minimize the use of lands for that purpose.

h. Planned security measures to prevent unauthorized trespass and access during the construction, operation, removal, maintenance or repair of the Large Solar Energy System.

i. A written description of the maintenance program to be used for the Solar Array and other components of the Large Solar Energy System, 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 Large Solar Energy System is decommissioned.

j. Planned lightening protection measures.

k. Additional information as required by the Special Land Use requirements of the Lyndon Township Zoning Ordinance, or as required by the Planning Commission.

1. Abandonment and decommissioning plan

2. Application Escrow Account: In addition to the requirements set forth in Section 15.06, an escrow account shall be deposited with the Township by the Applicant when the Applicant applies for a Special Land Use Permit for a Large Solar Energy System.

3. Height: Maximum height of a Solar Array, other collection device, components or buildings of the Large Solar Energy System, excluding substation and electrical transmission

Exhibit D: Lyndon Township LSES Regulations

equipment, shall not exceed fifteen (15) feet (as measured from the natural grade at the base of improvements) at any time or location on the property. Substation and electrical transmission equipment shall not exceed one hundred (100) feet.

4. Lot Size: A Large Solar Energy System shall be located on one or more adjacent parcels with an aggregate area of one hundred (100) acres or greater.

5. Setbacks: A minimum setback distance of seventy-five (75) feet from all property boundaries on the outside perimeter of the Large Solar Energy System shall be required for all buildings and Solar Arrays. Where the use is adjacent to or abuts a residential use or residential zone, a setback distance of seventy-five (75) feet.

6. Lot Coverage: A Large Solar Energy System is exempt from maximum lot coverage limitations.

7. Security: A Large Solar Energy System shall be completely enclosed by a six (6) foot tall perimeter security fence to restrict unauthorized access. As permitted in Section 3.11 (E.), barbed wire cradles, not to exceed one (1) foot in height, may be placed on top of fence in the interests of public safety. Such fencing shall not be permitted less than twenty-five (25) feet from the property boundary of a residential zoning districts or residential use. Electric fencing is not permitted.

8. Screening: The perimeter of Large Solar Energy Systems shall be screened and buffered by installed evergreen trees or native vegetative plantings whenever existing natural vegetation does not otherwise reasonably obscure the Large Solar Energy System from adjacent residential zoning districts or residential uses, subject to the following requirements:

a. The Large Solar Energy Systems shall be in conformance with the landscape requirements of Chapter 3.

b. All unhealthy (sixty (60) percent dead or greater) and dead material shall be replaced by the Applicant within one (1) year, or the next appropriate planting period, whichever occurs first.

c. All plant materials shall be installed between March 15 and November 15. If the Applicant requests a Final Certificate of Occupancy from the Township and the Applicant is unable to plant during the installation period, the Applicant will provide the Township with a letter of credit, surety or corporate guarantee for an amount equal to one and one half (1.5) times the cost of any planting deficiencies that the Township shall hold until the next planting season. After all plantings have occurred, the Township shall return the financial guarantee. d. Failure to install or continuously maintain the required vegetative buffer shall constitute a violation of this Ordinance and any Special Use Permit may be subject to revocation.

9. Signage: In addition to the requirements set forth in Chapter 17, no advertising or non-project related graphics shall be on any part of the Solar Arrays or other components of the Large Solar Energy System. This exclusion does not apply to entrance gate signage or notifications containing points of contact or any and all other information that may be required

Exhibit D: Lyndon Township LSES Regulations

by authorities having jurisdiction for electrical operations and the safety and welfare of the public.

10. Lighting: All lighting shall be directed away from and be shielded from adjacent properties and shall be so arranged as to not adversely affect driver visibility on adjacent public roads in accordance with Section 3.21.

11 . Abandonment and Decommissioning: Following the operational life of the project, the Applicant shall perform decommissioning and removal of the Large Solar Energy System and all its components. The Applicant shall prepare a Decommissioning Plan and submit it to the Planning Commission for review and approval prior to issuance of the Special Land Use Permit. Under this plan, all structures, concrete, piping, facilities, and other project related materials above grade and any structures up to three (3) feet below-grade shall be removed offsite for disposal. Any Solar Array or combination of Photovoltaic Devices that is not operated for a continuous period of twelve (12) months shall be considered abandoned and shall be removed under the Decommissioning Plan. The ground must be restored to its original or similar adjacent topography within three hundred sixty-five (365) days of abandonment or decommissioning.

12. Approval Time Limit and Extension: Subject to the regulations and standards of Section 14.02 G.

13. Inspection: The Township shall have the right at any reasonable time and shall provide day of inspection notice to the Applicant to inspect the premises on which any Large Solar Energy System is located. The Township may hire one or more consultants, with approval from the Applicant (which shall not be unreasonably withheld), to assist with inspections at the Applicant's or project owner's expense.

14. Maintenance and Repair: Each Large Solar Energy System must be kept and maintained in good repair and condition at all times.

15. Roads: Any material damages to a public road located within the Township resulting from the construction, maintenance or operation of a Large Solar Energy System shall be repaired at the Applicant's expense. In addition, the Applicant shall submit to the appropriate County agency a description of the routes to be used by construction and delivery vehicles; any road improvements that will be necessary to accommodate construction vehicles, equipment or other deliveries. The Applicant shall abide by all County requirements regarding the use and/or repair of County roads.

16. Continuing Security: If any Large Solar Energy System is approved for construction under this section, Applicant shall post decommissioning security prior to the start of construction (in a mutually agreed upon form) for an amount necessary to accomplish the work specified in the decommissioning plan as agreed upon by the Township and Applicant. The amount shall be reasonably sufficient to restore the property to its previous condition prior to construction and operation of the Large Solar Energy System. Such financial security shall be kept in full force and effect during the entire time that the Large Solar Energy System exists or is in place, and such financial security shall be irrevocable and non-cancelable.

Exhibit D: Lyndon Township LSES Regulations

a. Continuing Obligations: Failure to keep any required financial security in full force and effect at all times while a Large Solar Energy System exists or is in place shall constitute a material and significant violation of the Special Land Use Permit and this Ordinance, and will subject the Large Solar Energy System Applicant, owner and operator to all remedies available to the Township, including any enforcement action, civil action, request for injunctive relief, and revocation of the Special Land Use Permit.

17. Other Requirements: Each Large Solar Energy System shall also comply with all applicable federal, state and county requirements, in addition to other applicable Township Ordinances.



GRAHAM
SUSTAINABILITY INSTITUTE
UNIVERSITY OF MICHIGAN

EXHIBIT E: Planning for Renewable Energy Presentation

Planning for Renewable Energy

Sarah Mills, PhD

Livingston County
October 30, 2019

My Background, Perspective

- PhD in rural land use planning
 - Investigate claims of wind as farmland preservation tool
 - Surveys of 4,000+ Michiganders near windfarms
- Research on renewable energy policy, public opinion
- Funding from Office of Climate & Energy
 - Facilitate planning & zoning
 - Provide state-based data
 - Present pros and cons

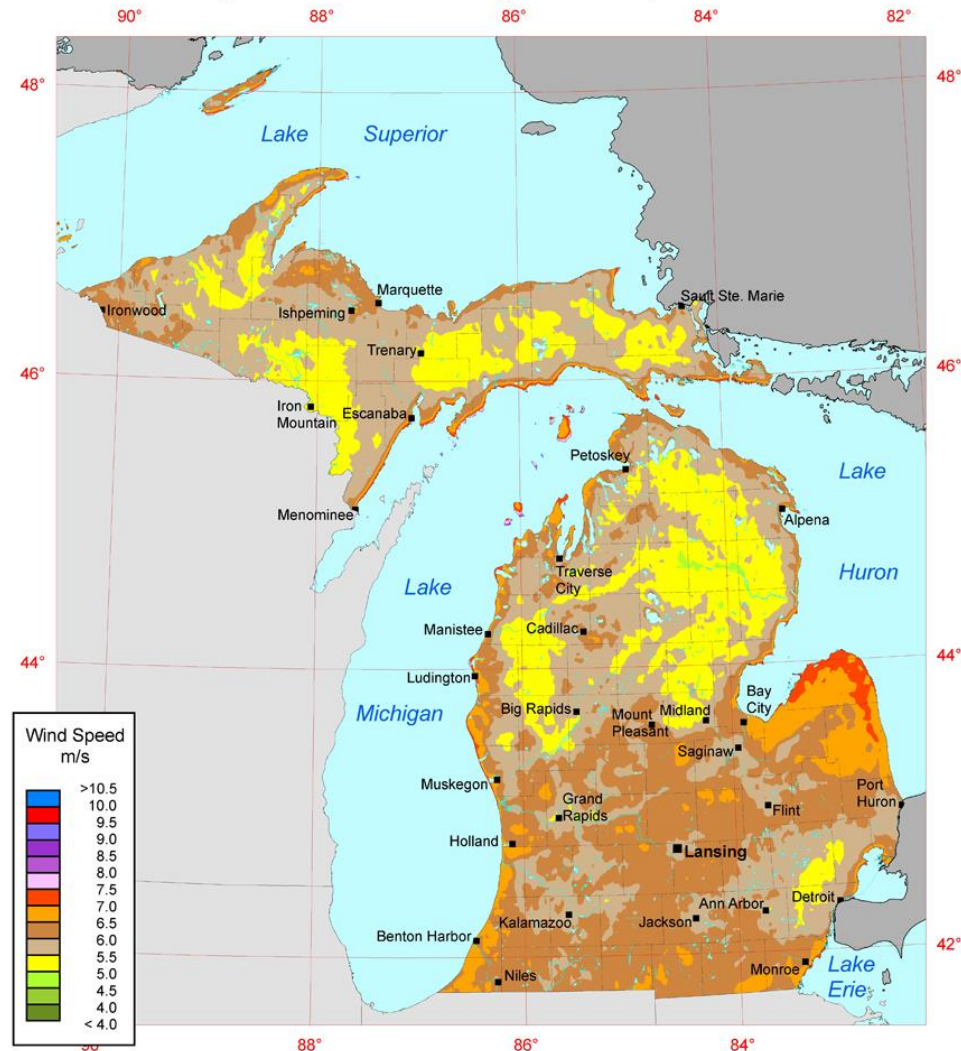


Overview

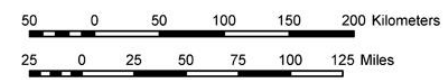
- Why plan for renewable energy?
- Pros & Cons of Wind
- Pros & Cons of Solar
- Planning and zoning resources

WHY PLAN FOR RENEWABLE ENERGY?

Michigan - Annual Average Wind Speed at 80 m

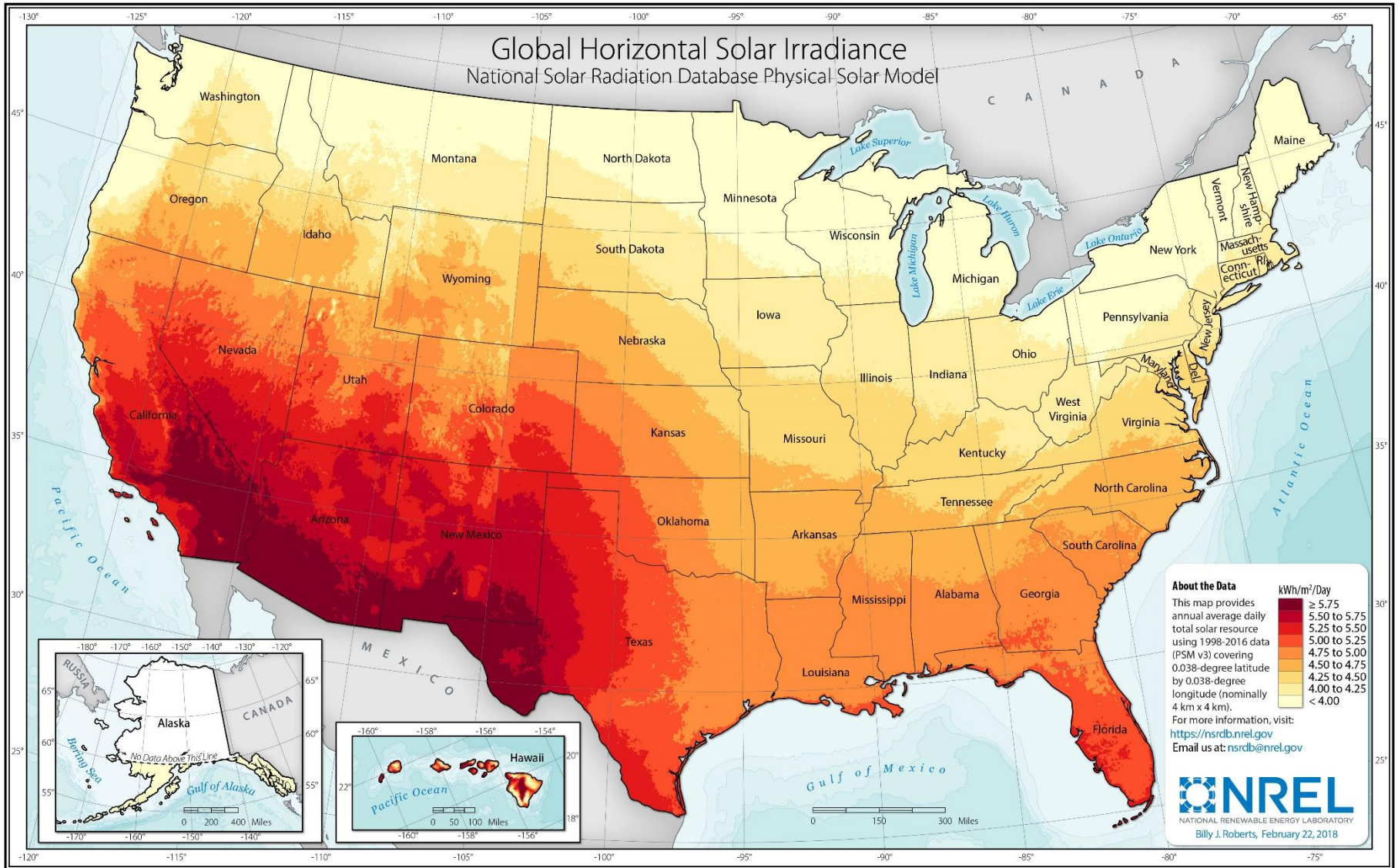


Source: Wind resource estimates developed by AWS Truepower, LLC for windNavigator®. Web: <http://www.windnavigator.com> | <http://www.awstruepower.com>. Spatial resolution of wind resource data: 2.5 km. Projection: UTM Zone 16 WGS84.



Global Horizontal Solar Irradiance

National Solar Radiation Database Physical Solar Model

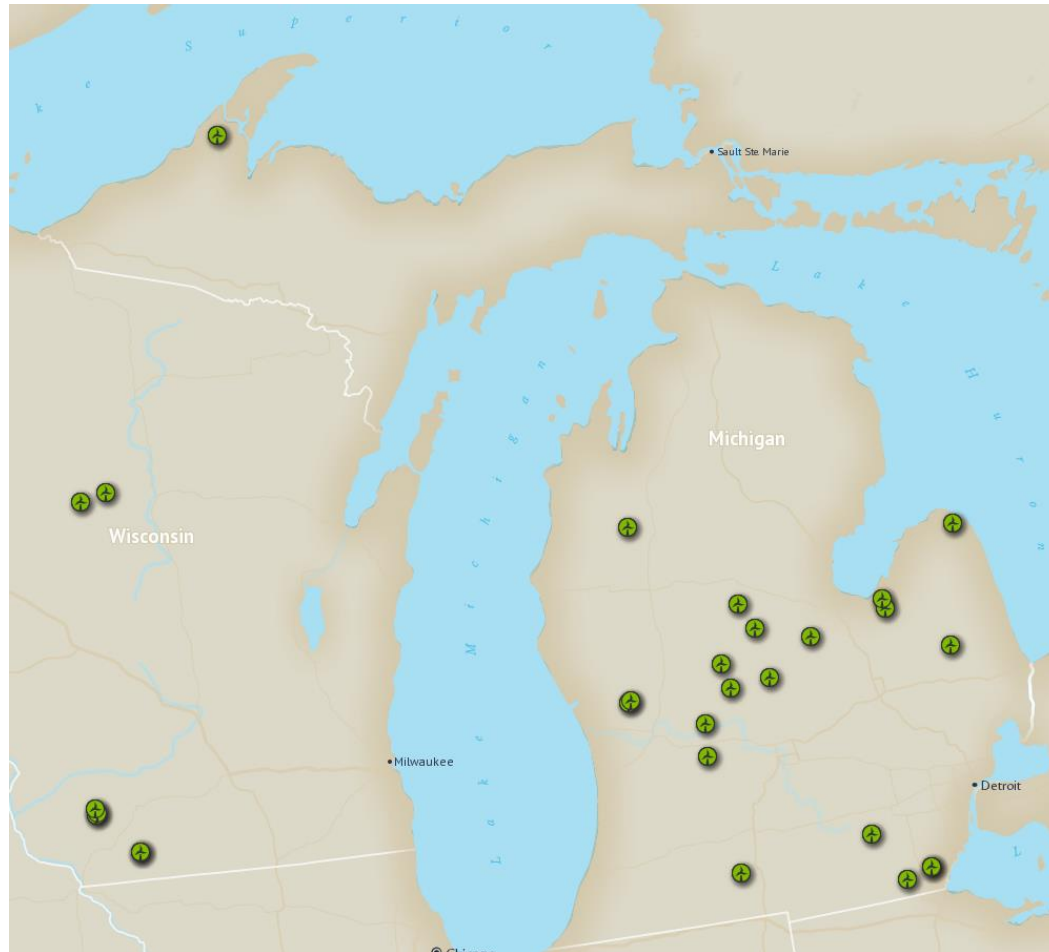


Existing Utility-scale Solar & Wind 2,185 MW



- Source: U.S. Energy Mapping System,
<https://www.eia.gov/state/maps.php>

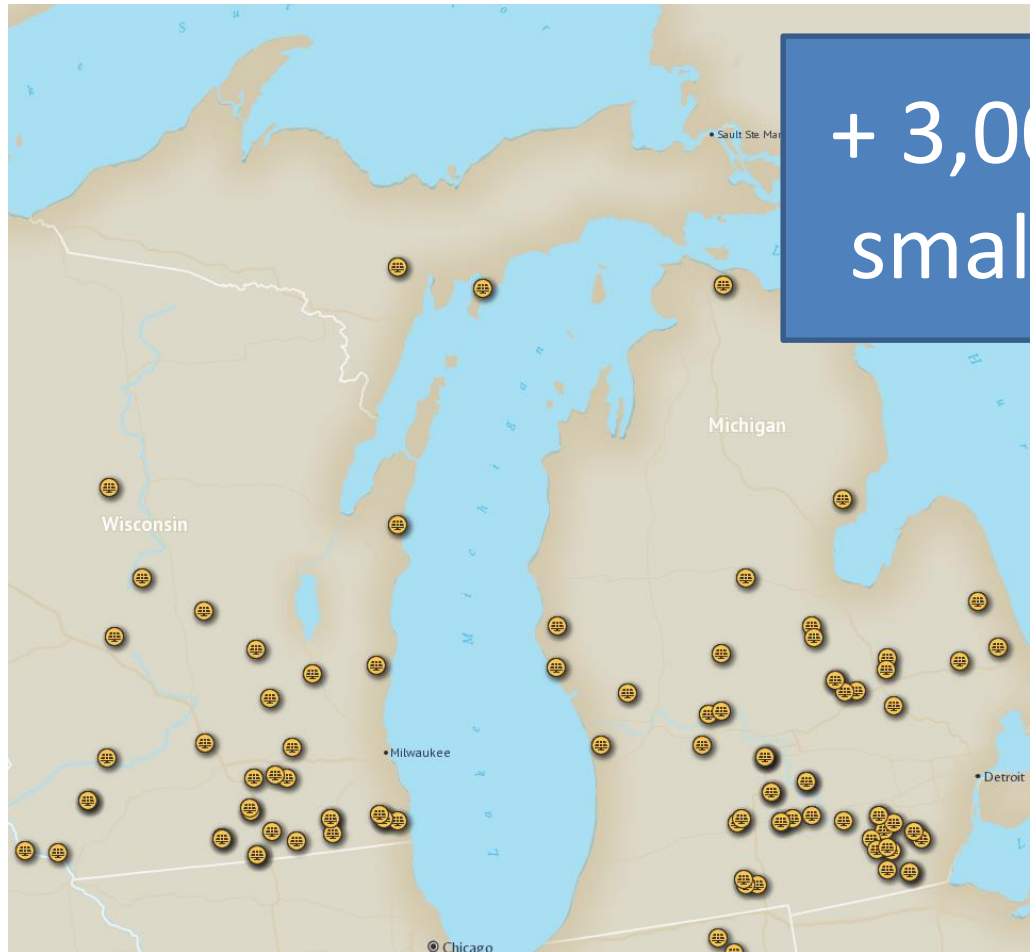
Wind being considered 20 projects, 3,000 MW



- Source: MISO Queue, Sept 2, 2019
- <https://api.misoenergy.org/PublicGiQueueMap/index.html>



(Large) Solar being considered 56 projects, 7,000 MW



+ 3,000 MW of
small projects

- Source: MISO Queue, Sept 2, 2019
- <https://api.misoenergy.org/PublicGiQueueMap/index.html>

Not all—but lots—will be built

The Detroit News

HOME

NEWS

SPORTS

BUSINESS

AUTOS

LIFE + HOME

ENTERTAINMENT

OPINION

MORE



DTE to request bids for solar and wind projects

775MW by 2023

ter, The Detroit News

Published 9:59 p.m. ET Sept. 16, 2019

Michigan PURPA Settlement Set to More Than Triple State's Solar Capacity

Michigan has its first massive solar contract

Consumers Energy has agreed to a deal with Ranger Power to purchase the output of 100 MW of Ranger's planned 149 MW River Fork Solar project, the first deal of its kind known to pv magazine in the state.

Consumers:
+584 MW by
Sept 2023

Why so much activity?

Demand from
consumers, cities,
corporations

Technology (wind),
cost reductions
(solar) making
renewables
possible statewide



Why Plan Now?



All communities
will be approached
within 10 years

- Best before proposal is on the table
 - Time
 - Fewer conflicts of interest
 - Strategize
- Send message
 - “Open for business”
 - “Don’t bother here”

PROS & CONS OF WIND ENERGY



Wind Energy

Local Benefits

- Landowner payments
 - Farm succession
 - Farm reinvestment
 - Not JUST farmers
- Tax payments, developer donations
 - ~\$3M value / turbine
- Jobs (maybe)

Local Concerns

- Noise / health
- Wildlife
- Visual Impacts
 - Outright
 - On property values
- “Not why I moved here”

Bottom Line on Wind

- Wind = economic development
- If goal is to sustain agriculture, wind can fit
- If goal is for substantial residential development or growth of tourism, wind may not be right



PROS & CONS OF SOLAR ENERGY

What's 800 MW of solar?

1 MW = 5-7 acres



6 - 8.5
square miles

Photo: <https://inovateus.com/portfolio-items/lapeer-michigan-solar/>

Solar Energy

Local Benefits

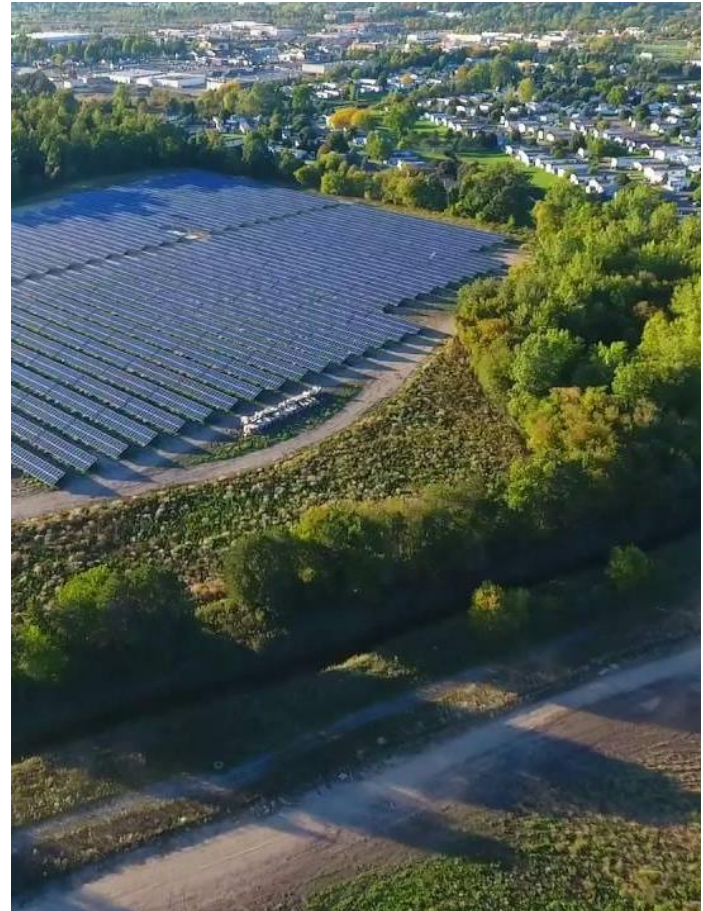
- Landowner payments
 - Opportunity for brownfields!
- Tax payments (?)
- Water quality, pollinator potential
- Jobs (maybe)

Local Concerns

- Wildlife (?)
- Impact on farm economy for very large projects(?)
 - Rental land
 - Supply chain
- Visual Impacts
 - “Not why I moved here”

Lapeer Solar Facility

- 48 MW on 250 acres
- Land owned by City of Lapeer
 - Formerly farmed
- Benefit:
 - Lease: \$500k/year (\$887/acre)
 - Taxes: \$4.5M school; \$.75M county
 - \$10M spending during construction



Coldwater Solar Field

- 1.3MW on 7 acres
- Owned by former foundry
- Ballasted
- Gravel cover
- Benefit:
Aesthetic
improvement



Images from [Coldwater Board of Public Utilities Website](#)

East Lansing Solar Park



Photo: Nick King/Lansing State Journal

- 0.3MW on 1 acre
- Retired city-owned landfill
- Ballasted
- Pollinators, native grasses planned
- Benefit:
 - “Community Solar”
 - \$0 lease
 - 10-year tax exemption

Bottom Line on Solar

- Solar = economic development OR further other environmental goals
- Where land is ample or of marginal quality, **no-brainer**
 - May work on smaller parcels
- Where ag-based economy, think more carefully through pros/cons, particularly for very large projects



PLANNING AND ZONING FOR ENERGY

Step 1: Plan first!

- How does energy fit with your long-term plan?
 - For local economic development
 - For land use
- What sort of energy, at what scale, and in which part of community?

Step 2: Make zoning match your plan

- Specifics matter about ability to realize plan
- Unlikely to satisfy everyone
- Doesn't have to be all or nothing
- Beware of zoning out
 - But making really hard is ok

Zoning Considerations

- Setbacks
- Which districts
- Noise, flicker, visual impacts analysis & mitigation (wind)
- Decommissioning plan / financial assurance
- Think permanent or temporary use?
 - Screening, stormwater retention

Resources under Development (Thanks to EGLE)

- Curated repository of templates, guidance
- Answers to FAQs
 - Do you have any now?
- March-April 2020 issue of Planning & Zoning News



Example zoning ordinances

Wind

- [Sample Zoning for Wind Energy Systems](#) (2017)
- [Michigan Land Use Guidelines for Siting Wind Energy Systems](#) (2007)
- [Shiawassee County review of ordinances](#) (2017)

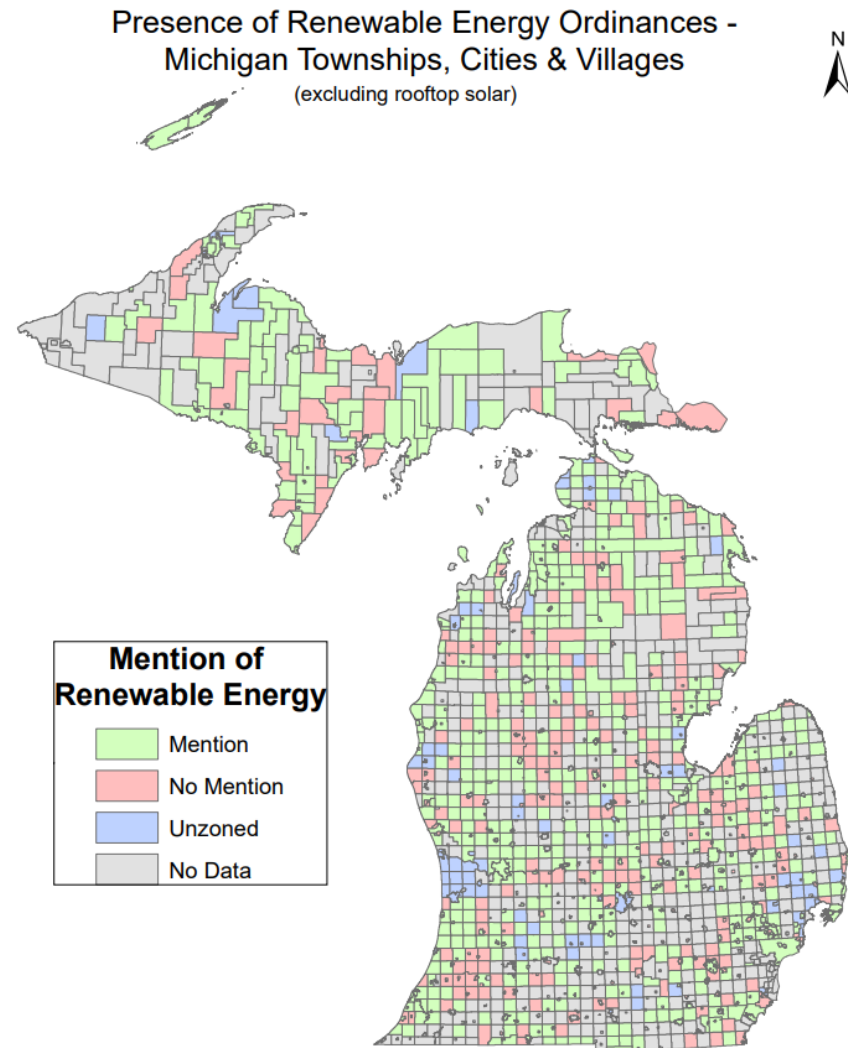
Solar

- [National Renewable Energy Lab](#) (2017)
- [APA Report](#) (2014)
includes planning
- [Mass. Ordinance](#) (2014)

Consider whether
peer communities
do or do not
have energy projects

Resources under Development (Thanks to EGLE)

- Database of all zoning ordinances in the state; which have wind/solar content
- Expected: January 2020



Real-time Resources

- Reach out to me
 - Answer questions
 - Give presentation
 - Connect you to MSU-Extension, other communities



Sarah Mills, PhD

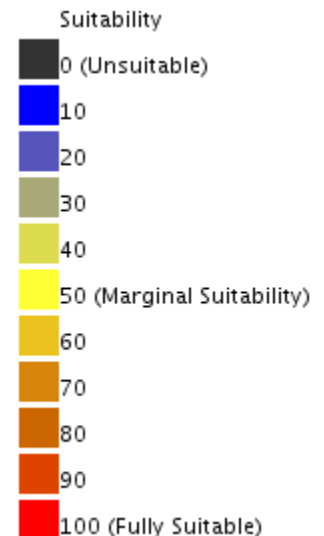
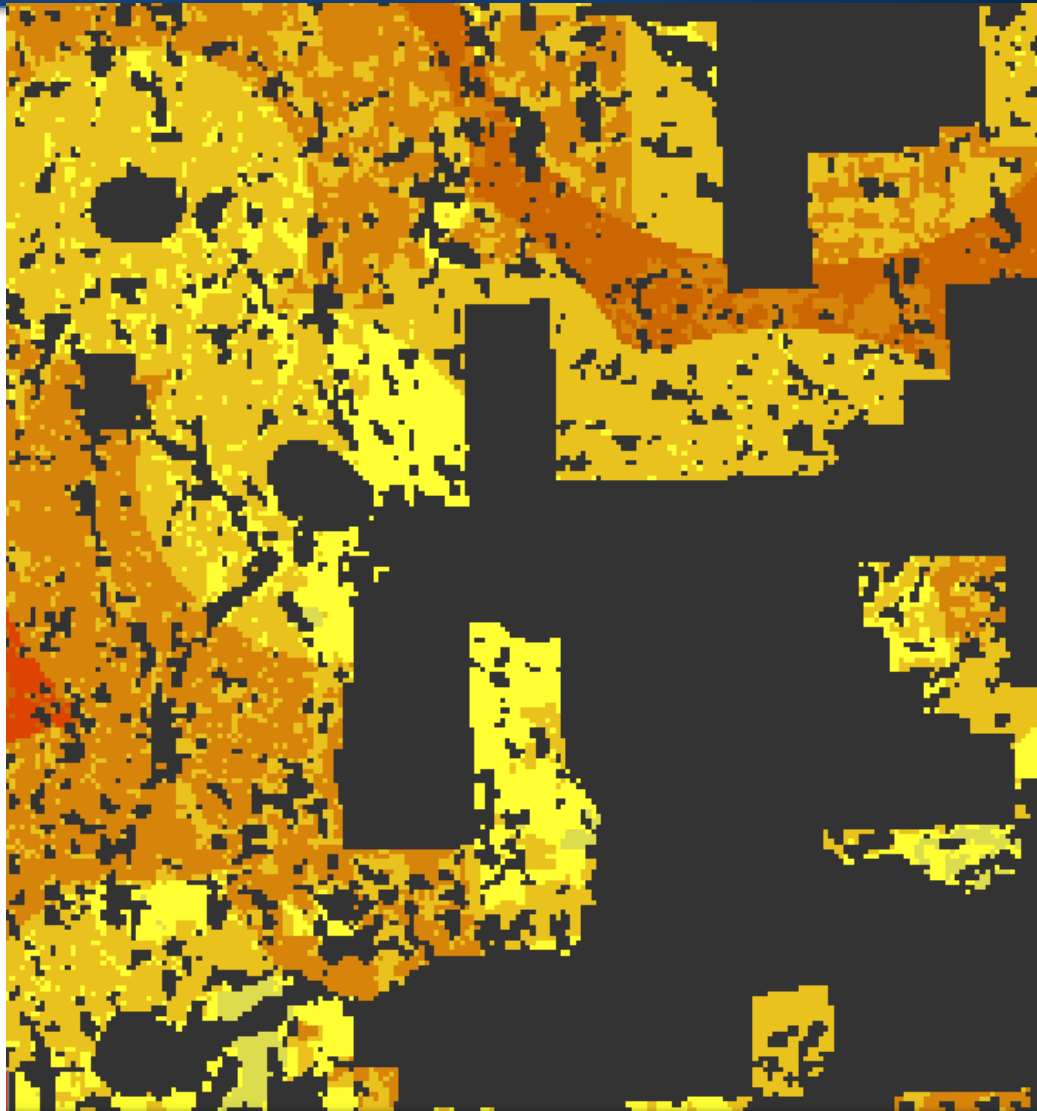
Senior Project Manager, University of Michigan

sbmills@umich.edu

(734) 615-5315

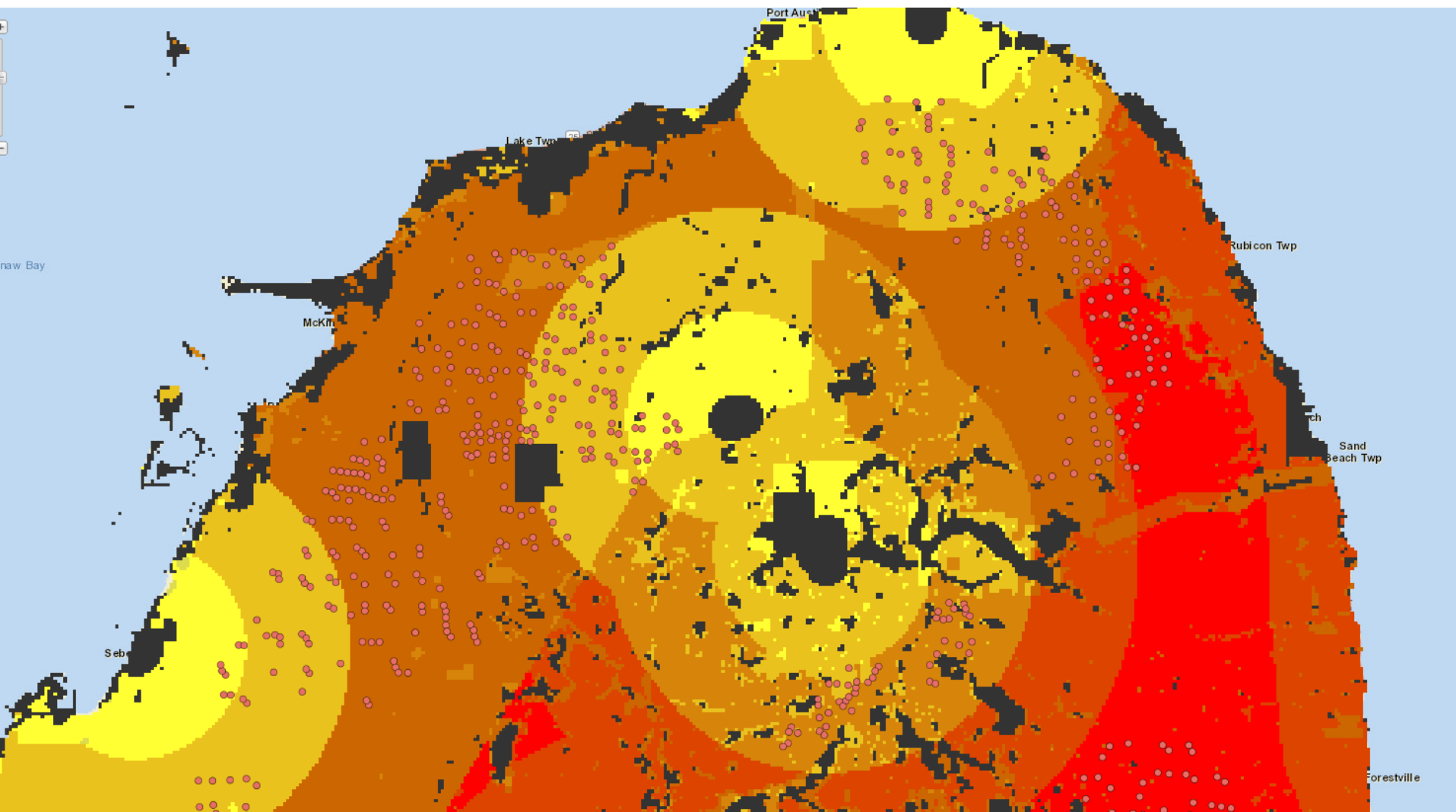
www.closup.umich.edu

Wind Suitability in Livingston County

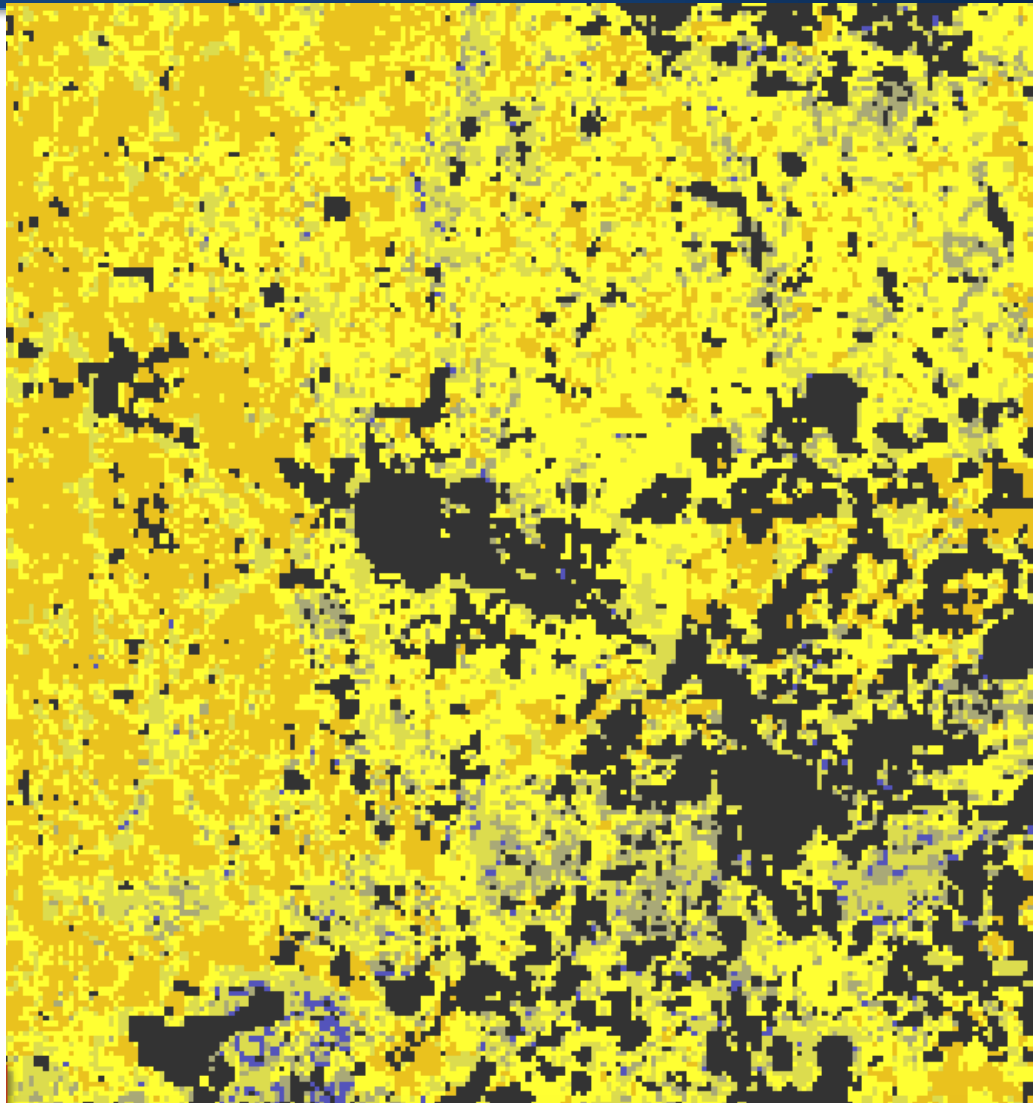


[https://ezmt.
anl.gov/mapping/viewer](https://ezmt.anl.gov/mapping/viewer)

Wind suitability in Huron County

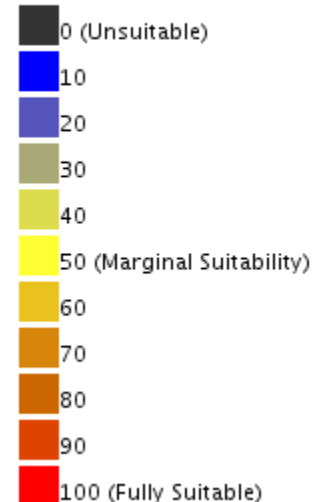


Solar Suitability in Livingston County






☒ Utility-scale Photovoltaic (PV) (default)

Suitability
























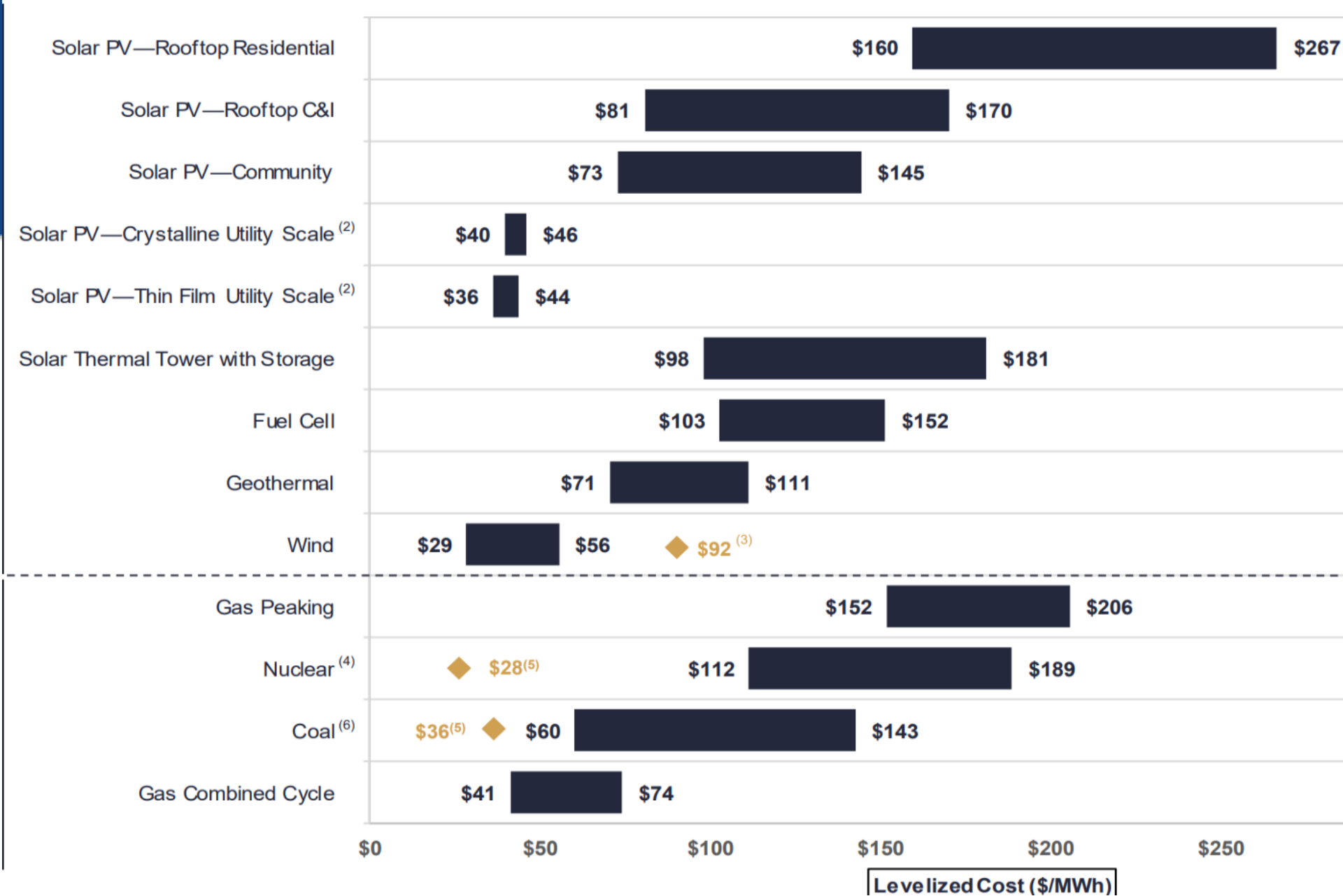
Criteria for Suitability Analysis

Land-Based Wind Turbine (100m - Lower 48) (modified)

		<input type="text" value="5"/>		Wind Turbine Gross Capacity Factor (100m)
		<input type="text" value="2"/>		Habitat
		<input type="text" value="3"/>		Protected Lands
		<input type="text" value="3"/>		Distance to Transmission (>345 kV)
		<input type="text" value="2"/>		Distance to Airport Runway
		<input type="text" value="1"/>		Distance to Major Road
		<input type="text" value="1"/>		Population Density
		<input type="text" value="2"/>		Land Cover Area

Utility-scale Photovoltaic (PV) (default)

Actions	Weight	Name
	 <input type="text" value="4"/> 	Tilted Photovoltaic Potential
	 <input type="text" value="2"/> 	Slope
	 <input type="text" value="1"/> 	Land Cover Area
	 <input type="text" value="2"/> 	Landscan Population Density
	 <input type="text" value="1"/> 	Distance to Transmission (>345 kV)
	 <input type="text" value="2"/> 	Protected Lands
	 <input type="text" value="2"/> 	Habitat



Source: <https://www.lazard.com/media/450784/lazards-levelized-cost-of-energy-version-120-vfinal.pdf>



FAX 810-231-4295
PHONE 810-231-1000

P.O. Box 157
10405 Merrill Road
Hamburg, Michigan 48139

November 18, 2020

RE: 2021 Planning Commission meeting dates.

The Planning Commission regular meetings are held on the third Wednesday of each month at 7 pm. Below are the scheduled meeting dates for 2021.

January 20

February 17

March 17

April 21

May 19

June 16

July 21

August 18

September 15

October 20

November 17

December 15