

**ETNA
TWP** 
S T R A T E G I C P L A N

MEETING AGENDA

Community Advisory Committee

July 12, 2023 @ 6:00pm

Etna Township Building

1. Industrial Solar
2. Gross and Net Density
3. Implementation of Comprehensive Plan
4. Buffering
5. Adjourn



June 4, 2023

Mr. Mark Evans
Etna Township Trustee
P.O. Box 188
81 Liberty Street
Etna, OH 43018-0188

SUBJECT: FUTURE SOLAR FIELDS IN ETNA TOWNSHIP

Dear Mr. Evans,

This letter addresses issues related to potential solar farms located in Etna Township. As Etna Township, City of Columbus, and central Ohio continue to grow in population, land will become even more sought after for residential and commercial develop. At the same time, the solar industry is seeking to develop their infrastructure to provide clean energy to the same growing population I mentioned previously.

As the Board of Trustees discusses the future of solar farms located in the Township, please consider these planning and land use issues.

1. Land Use Conversion: Solar farms require a significant amount of land to install the solar panels and supporting infrastructure. In high growth areas where land is in demand for other purposes such as Etna Township, such as residential or commercial development, the conversion of land for solar farms may reduce the available land for these desired uses.
2. Visual Impact: Solar farms consist of large arrays of solar panels, which can alter the visual landscape of an area. Some people may find the sight of solar panels visually unappealing or consider them as an eyesore, particularly in scenic or natural areas.

3. **Habitat Disruption:** Construction and operation of solar farms can disrupt local habitats and ecosystems. Clearing of vegetation and altering the terrain during installation can impact the local flora and fauna. However, solar farms can also be designed with consideration for preserving and enhancing habitats through the integration of native plant species and wildlife-friendly measures.
4. **Agricultural Land Use:** In areas where agricultural land isn't abundant, the conversion of agricultural land for solar farms may reduce the available land for farming activities. This could impact local food production and agricultural economies.
5. **Soil Compaction and Erosion:** During the construction phase, heavy equipment and machinery may compact the soil, making it less suitable for future agricultural use. Improper management of construction activities can also lead to soil erosion, which may affect the surrounding areas.
6. **Land Value and Tax Base:** The presence of solar farms may influence property values in the surrounding area. While some studies suggest that solar farms may have a neutral or positive effect on property values, others indicate a potential negative impact. Additionally, the shift of land use from commercial or residential development to solar farms may affect the local tax base and revenue generation for local governments.
7. **Potential Land Contamination:** Solar farms typically require the installation of infrastructure, such as underground cables and transformers. Poor construction practices or accidental spills may lead to soil or water contamination if proper precautions are not taken.

It's important to note that the specific land effects can vary depending on factors such as the design and management of the solar farm, the characteristics of the local environment, and the regulations and guidelines in place. Proper planning, environmental assessments, and mitigation measures can help minimize, but not eliminate, the potential negative land effects of solar farms in high growth areas.

Renewable energy infrastructure and facilities are needed as reduction of fossil fuels and non-renewable resources become more prevalent. However, having such an installation located in growing Etna Township isn't appropriate given the imminent growth on the doorstep of the Township. In my opinion from a land use planning

perspective, solar farms are best suited for areas that are not experiencing high growth.

This topic will be discussed at the next comprehensive plan Community Advisory Committee meeting as well.

Please let me know if you have any questions.

Jim Lenner

A handwritten signature in blue ink, appearing to read "Jim Lenner", with a stylized flourish at the end.

President + CEO
Neighborhood Strategies

Buffering and Landscaping

A. Applicability

The buffer yard standards only apply along the property lines (front, side, and rear) where conflicting/dissimilar uses or zoning districts meet. The width of the buffer yard is in addition to required setbacks. Existing mature vegetation shall be credited toward the requirements.

B. Responsibility for Installation

The property which is zoned for higher intensity uses is responsible for installing the buffer yard.

C. Buffer Yard Types

There are three types of buffer yards as described below. Minimum requirements for each type are set forth in the following table.

1. **Small.** A small buffer yard is required where single-family uses abut a multi-family, institutional, or office uses.
2. **Medium.** A medium-sized buffer yard is required where single-family, multi-family, or employment mixed use abuts commercial uses.
3. **Large.** A large-sized buffer yard is required where single-family, multi-family, mixed use, or commercial uses abut industrial and/or logistics uses.

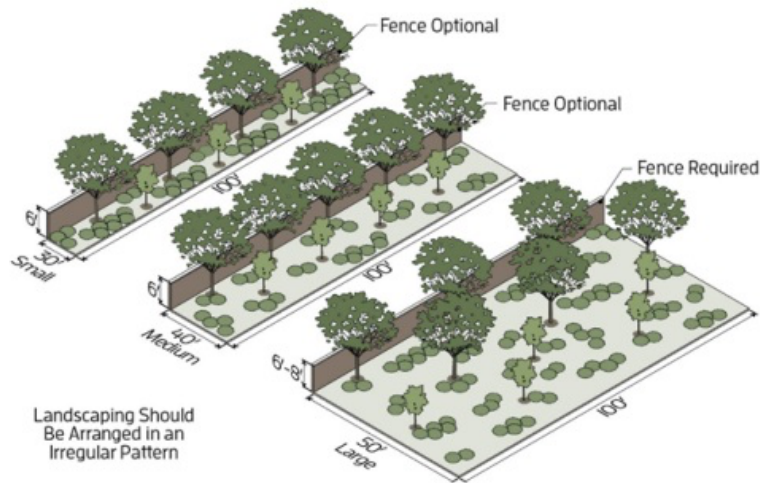


Image Credit: City of Fishers, IN

City of New Albany Standards

<https://municode.com/webcontent/15494/StandardsPlan.pdf>

Buffer Yards	Small	Medium	Large
Buffer Width (min)	30'	40'	50'
<u>Canopy Trees</u> ² (min per 100') ¹	5	4	6
Evergreen Trees (min per 100')	3	5	5
Tree Location	5-15' from property line	Up to 25' from property line	Within 25' from property line
Shrubs (min per 100')	5	10	15
Undulating Mounds Height (min/max)	3' / 8'	4' / 8'	4' / 8'
Undulating Mounds Length (min)	Total 60% of the distance contiguous to the conflicting zoning district or use.		
Fencing	Permitted up to 6'	Permitted up to 6'	Required. 6' min / 8' max
<p>1. Trees shall be prorated and rounded up to the nearest whole number for every foot over the initial 100 feet of contiguous boundary with the conflicting zoning district or use.</p> <p>2. Deciduous trees that grow to at least 40 feet in height and that has a canopy that is round or oval. Conical or tubular shaped trees are not canopy trees.</p>			

Implementation

Implementation Plan Objective: To execute the Etna Township Comprehensive Plan by establishing an effective implementation committee and facilitating regular meetings for efficient progress monitoring and coordination.

1. Formation of Etna Township Comprehensive Plan Implementation Committee:

- Identify key stakeholders: Identify individuals and groups within Etna Township who have a vested interest in the successful implementation of the Comprehensive Plan.

- Establish committee roles: Define the roles and responsibilities of committee members based on their expertise, knowledge of the community, and their ability to contribute effectively to the implementation process.

- Recruit committee members: Invite and appoint individuals who possess the necessary skills, such as community planners, government representatives, business leaders, and community advocates, to contribute to the implementation efforts.

- Appoint a committee chairperson: Select a capable leader from within the committee who will facilitate meetings, ensure coordination, and drive the implementation efforts.

2. Regular Meeting Schedule:

- Determine meeting frequency: Establish a regular meeting schedule that allows for effective communication and progress updates without overwhelming committee members' other commitments.

- Set meeting duration: Allocate an appropriate amount of time for each meeting, considering the complexity of the Comprehensive Plan and the depth of discussion required.

- Schedule recurring meetings: Fix a recurring day and time for committee meetings to allow participants to plan their schedules in advance.

- Define meeting format: Determine whether meetings will be held in-person, virtually, or a combination thereof, based on the availability and location of committee members.

3. Purpose of Committee Meetings:

- Plan review and refinement: Review the Etna Township Comprehensive Plan document, identify any gaps or areas needing further development, and refine the strategies and action steps as necessary to align with the community's goals and objectives.

- Progress tracking and reporting: Share updates on the progress made since the last meeting, evaluate accomplishments, discuss challenges faced, and propose solutions to address obstacles.

- Resource allocation and coordination: Assess resource needs, including financial, human, and technological resources, and ensure appropriate allocation to support the implementation activities outlined in the Comprehensive Plan.

- Decision-making: Discuss and make decisions on critical issues, such as prioritization of tasks, adjustments to timelines, and modifications to the plan based on changing circumstances or new information.

- Stakeholder engagement: Share updates with relevant stakeholders, such as residents, businesses, and community organizations, seek their input, and engage in dialogue to ensure their alignment with the goals and objectives outlined in the Comprehensive Plan.

- Evaluation and measurement: Define key performance indicators (KPIs) and establish a system to monitor and evaluate the effectiveness of the Comprehensive Plan's implementation. Regularly assess progress against the defined KPIs and make necessary adjustments.

4. Communication and Documentation:

- Ensure transparency: Share meeting agendas, minutes, and action items with committee members and the Etna Township Trustees to foster transparency and accountability.

- Provide updates: Regularly communicate the progress and outcomes of the committee meetings to the Etna Township Trustees and the community, as applicable, to maintain transparency and gain support.

- Document decisions: Keep a record of decisions made during meetings, including rationale, to maintain an accurate account of the committee's activities and to facilitate future reference.

When forming the Etna Township Comprehensive Plan Implementation Committee, it is essential to include individuals with diverse backgrounds, expertise, and perspectives relevant to the goals and objectives of the plan. Some professions and areas of expertise that should be considered for representation on the committee include:

1. Community Planners: Professionals with experience in urban planning, land use, and zoning regulations can provide valuable insights into the development and implementation of the Comprehensive Plan.

2. Government Representatives: Including representatives from the Etna Township Trustees or local government entities can ensure alignment with existing policies and regulations, facilitate coordination, and aid in securing necessary approvals.

3. Business Leaders: Representatives from local businesses or business associations can provide insights into economic development, job creation, and infrastructure needs, contributing to the plan's viability and success.

4. Environmental Experts: Professionals with expertise in environmental conservation, sustainability, and natural resource management can help integrate environmentally friendly practices into the plan, fostering responsible development and preserving the community's natural assets.

5. Transportation Specialists: Including individuals with knowledge of transportation planning, traffic engineering, and infrastructure development can contribute to creating a comprehensive transportation system that addresses mobility needs and enhances connectivity within the community.

6. Social and Community Advocates: Representatives from community organizations, nonprofits, and social service agencies can provide a voice for marginalized groups, advocate for social equity, and help ensure that the Comprehensive Plan addresses the needs and aspirations of all residents.

7. Architects and Design Professionals: Having design professionals on the committee can contribute to creating visually appealing and functional spaces within the community, considering architectural aesthetics, building codes, and accessibility requirements.

8. Education Representatives: Including individuals from local schools or educational institutions can ensure that the Comprehensive Plan addresses the needs of students, supports educational infrastructure, and promotes lifelong learning opportunities.

9. Real Estate and Development Experts: Professionals with knowledge of real estate development, construction, and property management can provide valuable insights into market trends, feasibility, and implementation strategies.

10. Community Residents: It is crucial to include representatives from different neighborhoods and demographics within Etna Township to ensure the committee reflects the community's diversity and includes the perspectives of those directly impacted by the plan.

By incorporating these diverse professions and areas of expertise, the Etna Township Comprehensive Plan Implementation Committee can benefit from a broad range of insights, knowledge, and experiences, leading to a more well-rounded and effective plan implementation process.

By following this implementation plan, the Etna Township Trustees will have a structured framework for implementing the Etna Township Comprehensive Plan, allowing for effective coordination, regular monitoring, and increased chances of achieving the community's goals and objectives.

Density Calculation (Gross & Net)

When referring to a new development, the gross acreage and net acreage are terms used to describe different aspects of the land area involved. Here's an explanation of each term:

- 1. **Gross Acreage:** Gross acreage refers to the total land area encompassed by the development, including all the areas within the boundaries of the project. It represents the overall size of the development, including any non-buildable or non-usable areas such as roads, utilities, green spaces, and other infrastructure. Gross acreage includes all land regardless of its suitability for construction or development.
- 2. **Net Acreage:** Net acreage, on the other hand, refers to the portion of the gross acreage that is actually available for construction and development. It excludes areas within the project boundaries that are dedicated to infrastructure, common areas, and any other non-buildable portions. Net acreage represents the usable land area where buildings, residences, or other structures can be constructed.

Both gross acreage and net acreage calculations are important components of a development plan for several reasons:

- 1. **Planning and Design:** Gross acreage provides an understanding of the total land area available for development. It helps in the initial planning and design stages of the project, allowing developers to assess the feasibility and scale of the proposed development. It provides a starting point for determining the overall layout, infrastructure requirements, and potential uses for the land.
- 2. **Zoning and Regulatory Compliance:** Gross acreage is often a factor in zoning regulations and local planning ordinances. Certain regulations may specify minimum lot sizes or density requirements based on gross acreage. By considering the gross acreage, developers can ensure compliance with applicable zoning regulations and other legal requirements.
- 3. **Infrastructure and Utilities Planning:** Gross acreage is used to estimate the infrastructure needs of a development, including road networks, utility systems, and drainage facilities. By understanding the total land area, developers can allocate appropriate resources for infrastructure planning and ensure the efficient provision of services to the development.
- 4. **Environmental Considerations:** Gross acreage provides a broader perspective for assessing potential environmental impacts. It allows for comprehensive environmental studies, including considerations for wildlife habitats, wetlands, or other sensitive areas. These assessments help in determining appropriate mitigation measures and preserving environmental features within the development.
- 5. **Market Analysis and Financial Planning:** Net acreage is crucial for market analysis and financial planning. It represents the actual land area available for development, which directly affects the project's revenue potential. By considering net acreage, developers can estimate the number and size of lots or units that can be built, helping in determining the project's market value and financial feasibility.
- 6. **Open Space and Amenities:** Gross acreage is essential for allocating open spaces and amenities within the development. By understanding the total land area, developers can plan for parks, green spaces, recreational facilities, and other amenities that enhance the livability and desirability of the project.

Overall, both gross acreage and net acreage calculations are vital in a development plan as they provide a comprehensive understanding of the land area, allowing developers to make informed decisions, comply with regulations, plan infrastructure, analyze market potential, and create a well-designed and sustainable development.

Now, let's consider a new 100-acre development as an example:

- Gross Acreage: The gross acreage of the development would be 100 acres, which represents the total land area within the project boundaries, including all areas regardless of their suitability for development.
- Net Acreage: The net acreage would be less than the gross acreage, as it excludes non-buildable or non-usable areas. The specific net acreage would depend on the design and layout of the development, including factors such as infrastructure requirements, open space provisions, and any other designated areas that are not available for construction. Without further information on the development's layout and design, it is difficult to provide an exact figure for the net acreage. However, it is typically lower than the gross acreage, with the extent of the reduction varying depending on the project.

Let's consider a hypothetical example of a typical suburban development on 100 acres and calculate both the gross acreage and net acreage based on common scenarios:

1. Gross Acreage:

For the purpose of this example, let's assume that the 130-acre development includes the following elements within its boundaries:

- Roads and infrastructure: 10 acres
- Common areas and parks: 15 acres
- Green space and landscaping: 5 acres

To calculate the gross acreage, we add up these components:

$$\begin{aligned} \text{Gross acreage} &= 100 \text{ buildable acres} + 10 \text{ acres (roads)} + 15 \text{ acres (common areas)} + 5 \text{ acres (green space)} \\ &= 130 \text{ acres} \end{aligned}$$

Therefore, the gross acreage of the suburban development in this example would be 130 acres, taking into account the total land area and all the non-buildable or non-usable areas within the project boundaries.

2. Net Acreage:

To calculate the net acreage, we subtract the non-buildable areas from the gross acreage:

$$\text{Net acreage} = \text{Gross acreage} - \text{Non-buildable areas}$$

Considering the non-buildable areas in this example (roads, common areas, and green space), the calculation would be as follows:

Net acreage = 130 acres - 10 acres (roads) - 15 acres (common areas) - 5 acres (green space) = 100 acres

Therefore, the net acreage of the suburban development in this example would be 100 acres, representing the portion of the land available for construction and development.

It's important to note that these calculations are simplified examples and actual gross acreage and net acreage can vary depending on the specific design, layout, and requirements of the development.

Let's calculate the net density based on a gross acreage of 130 acres, while keeping the other information the same:

Given information:

- Gross Acreage: 130 acres

- Net Acreage: 100 acres

- Gross Density: 50 units

To calculate the net density:

Net Density = (Gross Density * Gross Acreage) / Net Acreage

Plugging in the values:

Net Density = (50 units * 130 acres) / 100 acres

Simplifying the calculation:

Net Density = 65 units

Therefore, with a gross acreage of 130 acres, a net acreage of 100 acres, and a gross density of 50 units, the net density of the development would be 65 units.

Using only gross density in zoning regulations can have certain consequences and limitations. Here are some potential consequences:

1. Inefficient Use of Land: Gross density calculations do not account for non-buildable areas within a development, such as roads, infrastructure, common areas, or green spaces. As a result, relying solely on gross density may lead to an inefficient use of land. Developments could have a lower actual density than desired or intended, as a significant portion of the gross acreage may be occupied by non-buildable elements.

2. Inaccurate Assessment of Impact: Gross density calculations do not consider the actual density of developed areas. By ignoring non-buildable areas, the impact of development on the surrounding

environment, infrastructure, and services may not be accurately assessed. This can lead to unintended consequences, such as strained infrastructure or inadequate provision of amenities and services.

3. Lack of Flexibility: Gross density alone does not account for variations in site conditions, topography, or other physical constraints. It may result in uniform density requirements across the entire development, regardless of the specific characteristics of different areas within the project. This lack of flexibility can limit design options and hinder creativity in developing diverse and well-planned communities.

4. Overestimation of Capacity: Gross density may overestimate the actual capacity of a development to accommodate units or dwellings. Since it does not account for non-buildable areas, relying solely on gross density figures may give a misleading impression of the number of units that can be feasibly constructed within the available land area.

5. Insufficient Consideration of Open Space and Amenities: Gross density calculations do not explicitly consider the provision of open spaces, parks, recreational areas, or other amenities. Without separate provisions for these elements, the zoning regulations may not adequately address the need for community spaces, green areas, or recreational facilities within the development.

To address these limitations and consequences, it is beneficial to consider both gross density and net density calculations in zoning regulations. Incorporating net density allows for a more accurate assessment of the actual density achievable within the usable land area and promotes more efficient land use planning, appropriate infrastructure provisions, and the creation of livable communities.

USE	SYMBOL	GROSS RESIDENTIAL DENSITY	NET RESIDENTIAL DENSITY	COMMERCIAL FAR*	INDUSTRIAL FAR*	OPEN SPACE
Agricultural	AG	TBD	.20 Unit Per Acre	0	0	0%
Institutional	IND	TBD	0	0	0	NA
Mixed Use	MU	TBD	5 - 8 Units Per Acre	2	0	30%
Neighborhood Commercial	NC	0	0	0.9	0	10%
Open Space & Recreation	OS	0	0	0	0	100%
Planned Employment	PE	0	0	0	1.0	10%
Planned Residential	PR	TBD	5 Units Per Acre	0.7	0	40%
Rural Residential	RR	TBD	.4 Unit Per Acre	0	0	0%
Single Family Residential	SF	TBD	1 Unit Per Acre	0	0	40%
Village Center	VC	TBD	12 Units Per Acre	2	0	30%

* FAR = Floor area ratio (FAR) is the measurement of a building’s floor area in relation to the size of the

lot/parcel that the building is located on. FAR is expressed as a decimal number, and is derived by dividing the total area of the building by the total area of the parcel (building area ÷ lot area).