

# County Commission Public Hearing

ZTA19-03 – Solar Energy Facilities

Friday, September 11, 2020



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- ZTA19-03 specifically addresses Solar Energy Facilities as a principal land use.
  - Solar Energy Facilities = large arrays of solar panels erected for the purpose of generating electricity for the wholesale market.



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- ZTA19-03 does not impact roof top solar panels, or ground mounted solar panels, which are accessory to a residence or business.
  - Solar Panels serving a residence or business are permitted under the current rules as an Accessory Use (i.e. incidental to principal use)



# ZTA19-03 – Summary of Standards

## as recommended in the draft amendment by the Planning Commission

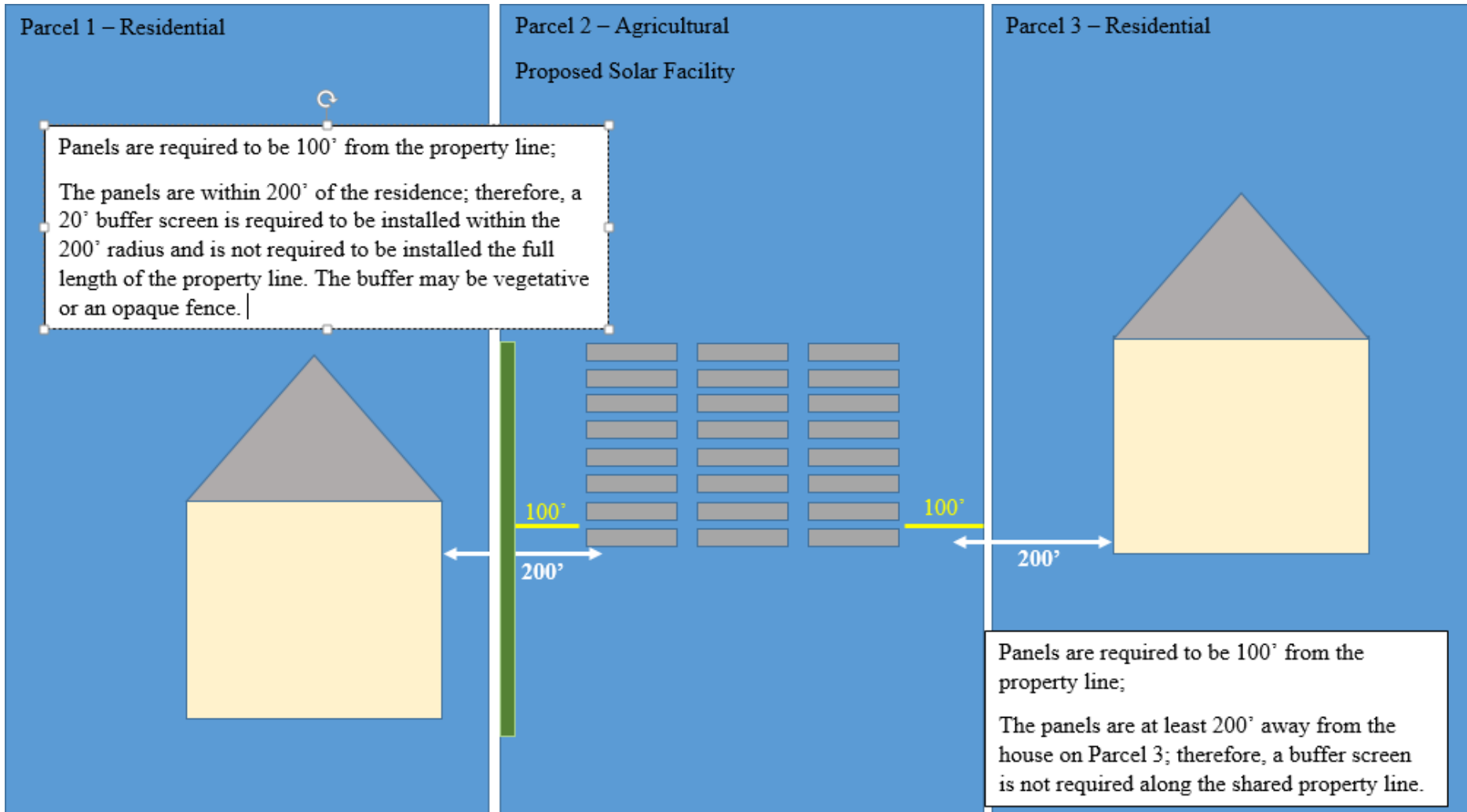
- Pre-Proposal Conference (informational) meeting recommended (not required).
- Concept Plan required for Solar Energy Facilities = Public Workshop before Planning Commission.
  - Includes submission of a preliminary outline of decommissioning plan.
    - Outline = timeline of lease; plan for removal of solar facility
- Upon approval of Concept Plan, a Zoning Certificate Application shall be submitted, which is administratively processed.
  - Full Decommissioning Plan required with submission of ZC application. Decommissioning Plan shall be deemed acceptable by the County Engineering Staff.
- Stormwater Management is required in accordance with the Stormwater Management Ordinance
  - Exemption for solar facilities which comply with conditions (Best Management Practices) outlined in SWM Ordinance.
  - Exemption criteria developed based on research from other jurisdictions and a study by the American Society of Civil Engineers
- Building Permit is required for any structures and/or electrical work.

# ZTA19-03 – Summary of Standards

- The Concept Plan requires a Public Workshop before the Planning Commission.
- A project may occur on multiple adjoining properties under the same ownership or lease by the same company. Internal boundary lines would not be subject to setbacks or buffer requirements.
- Setbacks for **Solar Panels**: 100 feet from all external/perimeter property lines and from the edge of the State ROW or Easement of any State Road.
- Setbacks for **accessory components**, excluding solar panels: 25 feet from all external/perimeter property lines and from the edge of the State ROW or Easement of any State Road.
- 20' Buffer Screen required when **solar panels** are located within 200 feet of any residence, Category 1 Historic Resource, Institution for Human Care, or similar use.
  - Buffer screen may be vegetative or an opaque fence
- **Accessory components** located within 200 feet of any residence, Category 1 Historic Resource, Institution for Human Care, etc. shall comply with the provisions of Sec. 4.11.

# ZTA19-03 – Summary of Standards

- Exhibit A: When is a buffer screen required?



# Amendment to Stormwater Management Ordinance Friday, September 11, 2020

- As summarized in a memorandum dated April 22, 2020 from the Jefferson County Chief Engineer and Director of the Department of Engineering, Planning, and Zoning,
- *“...the ASCE hydrologic study indicates that stormwater runoff from solar farms can be significant. However, the hydrologic study, and stormwater management practices adopted by the by [sic] other jurisdictions, indicate that solar farms can be exempt from providing traditional stormwater management facilities if the conditions proposed in the Jefferson County Stormwater Ordinance are satisfied. These proposed conditions require low-impact methods for reducing post-construction runoff volumes and velocities.”*

# SWM Ordinance Standards

- Earth disturbance and grading activities shall be minimized and natural vegetal cover shall be preserved and/or restored.
- Vegetal cover shall have 90% or better uniform coverage and shall not be subject to chemical fertilization and herbicides/pesticides. A meadow condition is preferable, particularly for slopes between 5 and 10%. Mowed areas should be kept to a minimum of 4”.
- Individual PV modules with an array shall be arranged to allow the passage of runoff underneath each module. The PV modules shall be arranged to allow the growth of vegetation beneath the PV modules and between the rows of PV arrays.
- If the width of the vegetative strip between rows of PV arrays is not a minimum of 12’, then stormwater BMPs such as infiltration trenches or berms shall be installed down gradient between each row.



# SWM Ordinance Standards

- Ground mounted solar PV modules shall be supported with structures/foundations occupying a maximum of 5% of the total project area (the area within the boundary of the 100' setback/buffer surrounding the solar energy facility equipment). This area shall be delineated and dimensioned on the Concept Plan, along with a note of the total area and a calculation of the percent of impervious area occupied by the support structures/foundation.
- Solar PV modules shall be situated on mild slopes (10% max). If greater than 10% slopes are proposed, then stormwater BMPs such as infiltration trenches or berms shall be installed down gradient between each row of PV arrays, in addition to providing the minimum 12' spacing between the rows of PV arrays.
- The lowest vertical clearance of the solar PV array shall be at an elevation of 10' or less from the ground, but is also at an adequate height to promote vegetative growth below the PV array.
- No erosion or transport of sediments shall be allowed. An Erosion and Sediment Control Plan shall be submitted as part of the Stormwater Report. Permanent Erosion and Sediment Control shall be provided to address the potential for erosion at the drip edge of solar panels. In addition, the WVDEP temporary construction stormwater NPDES permit shall be submitted along with the Stormwater Report.

# SWM Ordinance Standards

- The developer shall submit documentation in the form of a Stormwater Report, which demonstrates all of the above conditions are satisfied, to the Jefferson County Engineer for review and approval.
- The Stormwater Report shall be prepared, signed, and sealed by a professional engineer, registered in West Virginia.
- The Stormwater Report shall be approved prior to the issuance of the building permit.
- If the requirements established in the SWM Ordinance cannot be met, then stormwater quantity and quality control shall be provided.
- Engineering Staff shall have authority to visit the site within 72-hours notice, to determine if conditions are being maintained.
- Failure to perpetually maintain and meet the conditions outlined in the SWM Ordinance shall be a violation.

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## Next Steps

- The County Commission is required by W. Va. Code Chapter 8A to hold a Public Hearing on the Planning Commission's recommended draft.
- There is no timeframe to take action on the draft.
- Changes to the draft cannot be made until after the public hearing is held.
- There are no rules in effect until the County Commission takes action.