MEMO

DATE: April 12, 2021

TO: Village of Poplar Grove Planning and Zoning Commission

FROM: Village of Poplar Grove Planning Staff

SUBJECT: Recommendation for case: 2021-01; Village of Poplar Grove, Multiple amendments (TA)

REQUEST:
The applicant, The Village of Poplar Grove, 200 North Hill Street, Poplar Grove, IL 61065, proposing an amendment to the Poplar Grove Zoning Ordinance pertaining to Sections 8-7-5-B Home Occupation applicability, 8-7-9-B Solar Energy minimum requirements, 8-8-4 Permitted Yard Exceptions, 8-10-8-B Lighting requirements in accordance with Section 8-5-4 Text Amendment. The request will remove references to the unfilled Village Administrator position, clarify inspection requirements for solar panels, add carports and correct a typo for exterior lighting levels. The proposed language is as follows:

Section 8-7-5-B: HOME OCCUPATION

B. Applicability: Unless otherwise provided in this Title, no building or land may be used, and no building may be erected, converted, enlarged or structurally altered, in an Agricultural or Residential District except in compliance with the requirements of this section.

1. Permit. A home occupation permit shall be obtained as prescribed by the requirements of this section. Acceptance of any of the benefits of a home occupation permit shall be deemed acceptance of all terms and conditions set forth herein.
2. Application. Application for a home occupation permit shall be made to the Village Clerk on a form prescribed by the Zoning Administrator.
3. Inspection. Prior to approval the ~~Village Administrator~~ Director of Public Works or designated representative shall review the application and inspect the premises for compliance with the regulation of this section. Additional inspections may be requested by the Zoning Administrator to confirm continued compliance with the provisions of this section.
4. Fee. The application fee for a home occupation permit shall be approved by resolution or ordinance.

Section 8-7-9-B: SOLAR ENERGY

B. Minimum Requirements:

1. Any solar collectors shall be installed either on the roof of the principal structure or accessory structure or shall be otherwise incorporated into and made an integral part of the main building. The maximum height and set-back regulations of the zoning district in which it is proposed shall be observed.
2. No solar collector, solar engine or accessories, pipes or ducts for any solar collector or shall be installed on any roof having a slope of less than one percent (one-eighth of an inch per foot or one centimeter per meter).
3. Installations on low sloped roofs shall comply with the following requirements:
   a. Clearances: All collectors, reflectors, engines, pipes, ducts and other components shall have sufficient clearance between the roof and the installation to permit roof repairs to be made and to permit circulation of air to avoid constant dampness. A space of two (2) feet or sixty-one (61) centimeters shall be adequate clearance in all instances, provided that a smaller space shall be permitted if it can be demonstrated that all normal repairs and resurfacings of the roof may be made under the proposed clearances. The clearances required herein shall not apply to vertical pipes installed through the roof surface or installed outside of the outside walls to provide access to solar components.
   b. Load capacity: No solar component shall be installed on any roof unless the roof has sufficient capacity to hold the weight of the roof, the weight of the solar components and the anticipated snow load. Load requirements must meet the Village of Poplar Grove's adopted building code. The weight of fluid to be used in any panels, pipes or other components will be included in the calculations of load. In determining the anticipated snow load, the effect of the solar components on causing drifting shall be considered. All solar collectors shall meeting building code requirements.
   c. Protection from drifting or sliding snow: On any installation where solar collectors, solar engines and reflectors may cause snow to drift on a roof, provisions shall be made by snow fences, chutes or other barriers to prevent snowdrifts from accumulating on the roof. Wherever a solar collector or other solar component may cause snow to slide, the part of the roof where the snow may accumulate as a result of sliding shall have sufficient capacity to hold the weight of the snow anticipated to accumulate because of sliding. Wherever the location and slope of a solar collector or other solar component may cause snow to slide onto any doorway, sidewalk or other place used by pedestrian traffic, protection in the form of chutes, awnings or other devices shall be provided to prevent any snow from sliding onto any such doorway, sidewalk or other place.

d. Roof penetration: Wherever any pipe, duct or other solar component penetrates the surface of a roof, the roof shall be protected from leaks in the manner provided for any stack, pipe, or conduit penetrating the roof surface.
e. Roof preparation: Before any solar component is installed, the roof shall be inspected and any repairs and maintenance work needed shall be done to put the roof in leak proof condition.

4. All of the requirements for installations on low sloped roofs shall apply to installations on roofs other than low sloped roofs, except that in lieu of clearance from the roof, a solar panel may be attached flush to the roof. Such solar panel may be an integral part of the roof, providing a waterproof cover, with a waterproof seal between the panel and the rest of the roof. If such panel is not made an integral part of the roof but is attached flush with the roof, the top and sides of the panel shall be sealed where they meet the roof surface or shingles, to prevent water from getting under the panel.
5. Any roof over three (3) stories above the ground shall be provided with a means of access other than an outside ladder against an outside wall. No solar components shall be installed in a location so as to interfere with walkways on any roof.
6. Each solar component which may contain any liquid or gas shall be designed and constructed to prevent the leakage of any liquid or gas under any combination of temperature and pressure possible either during use or when the system is not in use.
7. Each solar collector, solar panel and solar engine shall be securely anchored to withstand the maximum wind pressure anticipated, considering the effects, if any, of the solar components in channeling wind, and without considering the weight of any liquid in the components.
8. ~~Each solar collector, reflector, solar engine and all solar components shall be inspected at least once (1) every two (2) years. Such inspections shall be at the owner's expense and may be made by any qualified person selected by the owner. The inspection shall include looking for any evidence of dampness on the roof due to shading, lack of air circulation or leaks, and shall include examining the structural parts securing all components. The Zoning Officer may request a certified report of such inspection to be provided by the owner/applicant. If such request is required by the Zoning Officer it shall be in writing and provided by the owner/applicant within thirty (30) days.~~ A property owner may, at their expense, have each solar collector, reflector, solar engine and all solar components inspected by a qualified person selected by the owner. The inspection shall include looking for any evidence of dampness on the roof due to shading, lack of air circulation or leaks and shall include examining the structural parts securing all components. If a certified report is obtained after the inspection, the owner shall provide a copy of the report to the Village if requested at a later date.

9. Nothing in this Section shall be interpreted as prohibiting any innovative design. Any design not specifically permitted by this ordinance may be installed, upon a showing that the proposed system of solar components will achieve the safety objectives and structural objectives of the provisions of this ordinance.
10. Nothing herein contained nor any permit issued hereunder, shall be constructed to restrict or limit the use and development of any adjoining or other premises.

Section 8-8-4: PERMITTED YARD EXCEPTIONS:

The following projections by buildings and structures are permitted to extend into the required setbacks (as defined in Chapter 6). In no instance shall any portion of a structure extend beyond a property line.

Table 8-8-4: Permitted Yard Exceptions:

Structure or Use	Front Yard Setback	Rear Yard Setback	Side Yard Setback
Air conditioner condenser units, extending no more than forty-eight (48) inches into the setback		P	P
Antenna, freestanding, for non-commercial purposes		P	
Athletic Courts (tennis, basketball, etc. Not including a hoop off of a driveway)		P	
Architectural ornamentation, e.g. sills, belt courses, cornices, extending no more than thirty (30) inches into the setback	P	P	P
Awnings and canopies, projecting no more than forty-eight (48) inches from the structure, extending up to a distance that is no less than three (3) feet from the lot line.	P	P	P
Balconies, projecting no more than five (5) feet from the structure	P	P	
Bay windows, having no foundation and projecting no more than thirty (30) inches from the structure	P	P	P
Carports, having a roof but no side walls, must be over a paved surface and three-feet from the side yard property line.			P
Chimneys, having no foundation and projecting no more than thirty (30) inches from the structure	P	P	P
Decks, open to the sky and less than thirty-six (36) inches above the ground, extending up to a distance that is no less than three (3) feet from the lot line (subject to ground coverage ratio		P	P

defined in Chapter 6)			
Driveways and walkways	P	P	P
Eaves and gutters, projecting no more than thirty (30) inches form the structure	P	P	P
Fences and walls (corner, double frontage and gateway lots may be permitted a fence in the front yard in accordance with Chapter 10)		P	P
Fire escapes, open to the elements and projecting no more than five (5) feet from the structure		P	P
Fuel pumps and associated canopies, in accordance with Chapter 9	P	P	P
Gazebos, cabanas and similar structures		P	
Outdoor storage		P	P
Parking Areas	P	P	P
Patio, open to the sky, extending up to a distance that is no less than three (3) feet from the lot line		P	
Porches projecting no more than either (8) feet from the structure up to a distance no less than three (3) feet from the lot line	P	P	P
Portico chere, projecting no more than fourteen (14) feet from the structure up to a distance no less than three (3) feet from the lot line	P	P	P
Recreational equipment, e.g. children's swing set, lawn games and courts, trampolines and other structures with appropriate fencing or safety netting		P	P
Signs and nameplates in accordance with Chapter 10	P	P	P
Solar energy devices, attached	P	P	P
Solar energy devices, detached		P	
Steps, at or below the first floor level	P	P	P
Storage tanks and storage silos, extending up to a distance that is no less than ten (10) feet from a lot line.		P	P
Storm shelters and similar structures, attached or detached, above or below grade		P	
Trash receptacles and enclosures		P	P
Utility meters, distribution boxes, pedestals and other above ground appurtenances		P	P
Vestibules, enclosed, extending more than four (4) feet into the setback	P	P	P
Wheelchair ramps	P	P	P

** "P" indicates accessory structure or use is permitted in the indicated setback as defined in Chapter 6.*
*** Other similar structures or uses not listed may be classified in similar structure or use categories as determined by the Zoning Administrator and are permitted within the yard(s) identified in such category*
**** If the requirements of this section are in variance with the requirements of any other lawfully adopted rules, regulations, or ordinances, the most restrictive or those imposing the higher standards shall govern*

Section 8-10-8-B: LIGHTING

B. Requirements.

1. Maximum Luminaire Height: The maximum permitted luminaire height shall be thirty (30) feet in all nonresidential zoning districts and twenty-five (25) feet in all residential districts. The height of both the pole and base shall be considered in the measurement of luminaire height.

2. Orientation of Fixture: In no instance shall an exterior lighting fixture be oriented so that the lighting element (or a transparent shield) is visible from a property located within a residential zoning district. The use of shielded luminaries shall be utilized to facilitate compliance with this requirement.

3. Intensity of Illumination:
   a. In no instance shall the amount of illumination attributable to exterior lighting measured at the property line exceed ~~0.0~~ 0.50 foot-candles above ambient lighting conditions on a cloudless night. Exterior lighting must be IESNA (Illuminating Engineering Society of North America) rated cut-off or full cut-off.
   b. The maximum average lighting in non-residential zoning districts shall be 2.4 foot-candles.
   c. The maximum average lighting in residential zoning districts shall be 0.90 foot-candles.
   d. The following exceptions shall be permitted:
      i. Outdoor recreation facilities and assembly areas: Maximum average lighting is 3.60 foot-candles.
      ii. Auto display lots and gas station pump islands: Maximum average lighting is 3.0 foot-candles.

The methods used to show changes are:
xxxxxxxxxxx = (Standard text) existing text within the zoning code; no changes proposed.
~~xxxxxxxxxxx~~ = (Strike through text) text that is proposed to be deleted from the zoning code.
xxxxxxxxxxx = (Highlighted and underlined text) new text that is proposed to be inserted into the zoning code

BACKGROUND AND SUMMARY OF FINDINGS:
Home Occupations allow for a limited amount of business to be conducted out of one's house. Common home occupations include hairdressers, internet sales and landscape offices. Home Occupations are permitted and inspected to ensure compliance with the requirements of the Zoning Ordinance. Permitting was done by the Village Clerk but the Village Administrator was tasked with the inspections. Since the Village Administrator position is not consistently filled, inspections have been handled by different departments. In order to maintain consistency and compliance with the Village's ordinances, the task of inspections will be conducted by the Director of Public Works.

Currently the Zoning Ordinance requires that a homeowner that has solar panels on their roof get the roof inspected every two years. While this requirement was an effort to protect a homeowner from a damaged roof, it can be quite costly and burdensome on the homeowner. In addition, as the popularity of solar energy increases so does the amount of properties needing inspection. Tracking of these inspections and enforcement becomes a matter of code enforcement. While the intent behind the code was to protect residents, it has actually created a hardship and is not always enforced. Due to these concerns, it is recommended to remove the requirement to have roofs inspected and reports submitted. However, language regarding the reports is being kept in the Zoning Ordinance in an effort to allow residents to know that such a service exists should they want to pursue it and to notify them that if a report is done, the Village can request a copy of the findings.

After several severe storms to hit the area, residents are looking for affordable ways to protect their vehicles from hail and tee limb damage. Sometimes garages are not possible either due to lot coverage, setbacks or cost. Carports constructed over driveways are becoming more common. However, there is no reference to such structures in the Zoning Ordinance. The additional language will not only permit carports but require them to have the same setback as driveways and paved surfaces. Although these setbacks are less than a detached structure, due to the lack of walls, carports are not as impactful to neighboring properties.

In regards to lighting levels (foot-candles), there is a typo for maximum illumination level at the property line. Currently the code requires a maximum illumination level of 0.0 foot-candles which means no lighting at all. This is not practical nor was it intended. Although, the Village wants to limit the amount of light that spills over from one property to the next, since parking areas and walkways are allowed near property lines, lighting used for safety and visibility purposes will need to be near property lines as well. The intent of the code was to read 0.50 foot-candles which is a common requirement in the area.

RECOMMENDATION:
The planning staff recommends approval of case 2021-01 for the four Zoning Ordinance text amendments.

PLANNING AND ZONING COMMISSION/VILLAGE BOARD ACTION:

The Commission shall hold a public hearing on the proposed text amendment, after which a recommendation will be made to grant or deny the text amendment application to the Village Board. The Commission may make the recommendation at the same meeting, or choose to continue the proceedings at a later date. The Commission may request additional information as needed. Once a recommendation is made, the Commission shall record its conclusion as part of the meeting minutes and forward such documentation onto the Village Board for review. The Commission's failure to act or submit a report within sixty-five (65) days of the public hearing shall constitute a recommendation to approve the request.

Within sixty-five (65) days of receipt of the Commission's recommendation, the Village Board shall act by ordinance to approve or deny the text amendment as originally proposed or approve the text amendment with modifications. The Village Board may also remand the request back to the Commission for further hearings and/or discussion. The Village Board's approval or denial of the requested amendment shall be considered the approval or denial of a unique request, and shall not be construed as precedent for any other proposed amendment.

ATTACHMENTS

1. Letter from the Boone County Health Department, Amanda Mehl, dated April 5, 2021.