#### 7.1 ACCESSORY BUILDINGS AND STRUCTURES

- **7.1-1** Accessory buildings and structures include, but are not limited to the following: sheds; detached garages; gazebos; temporary accessory structures, special event tents, in ground and above ground pools; and hydro massage tubs. Only one of each type of accessory use or structure is permitted on a zoning lot so long as the maximum lot coverage is adhered to.
- **7.1-2** An accessory building or structure shall not be erected prior to the establishment or construction of the main building to which it is an accessory.
- **7.1-3** Where a substantial part of the wall of an accessory building or structure is part of the wall of the main building or where an accessory building or structure attached to the main building in a substantial manner as by a roof, such accessory building shall be counted as part of the main building.
- **7.1-4** Accessory buildings or structures may not be erected in front of the main building on a zoning lot.
- **7.1-5** An accessory building or structure may not be located nearer to any interior lot line than that permitted for the main building when it is a part of the main building. However, when an accessory building or structure is located in the rear yard separate from the building, it may then be located within four (4) feet of the side lot line, but not nearer than ten (10) feet to the rear lot line.
- **7.1-6** No accessory building shall be located on a reversed corner lot beyond the front yard required on the adjacent lot to the rear, nor be located nearer than six (6) feet to the side lot line of the adjacent building on the lot to the rear.
- **7.1-7** No accessory building shall have a floor space in excess of 400 square feet (except that garages may have a floor space not to exceed 624 square feet in the R-2 Zoning District and 864 square feet in the R-1 and E-1 through E-5 Zoning Districts) and a height restriction of 10 feet to the eaves. All accessory buildings shall be permanently anchored on all four corners. Garages and other accessory structures measuring greater than 168 square feet shall have a concrete floor with the thickness and aggregate as provided in the appropriate provisions of the ordinances and building codes adopted by the Village of Johnsburg.

### 7.1-8 TEMPORARY ACCESSORY STRUCTURES

A. Temporary Accessory Structures are prohibited effective May 1, 2018. Until such date, only one temporary accessory structure shall be permitted on a zoning lot. They shall be used for the storage of recreational vehicles only; manufactured by a trade mark company and maintained to manufacturer's original condition or be removed; shall not exceed 400 square feet; and shall not be located in the front yard nor shall they be attached to the principal structure.

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B. Failure to comply with the regulations set forth in Section 7.1-8 shall result in a fine of not less than \$50.00 per day for each day of noncompliance.

**7.1-9 CONTAINER STORAGE** – Container Storage shall be limited to no greater than 16x8x8 in size and for a period of no more than 30 consecutive days per year.

**7.1-10 SPECIAL EVENT TENTS** – Special event tents are permitted for no more than 14 consecutive days.

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#### 7.2 FENCES

- **7.2-1** <u>Fences Defined</u> A fence shall be any structure (including gates) which is a barrier and used as a boundary or means of protection or confinement.
- **7.2-2** Permit required No person shall erect any fence in the Village unless a permit is obtained in advance. The Village shall require such plans and drawings as deemed necessary prior to the issuance of a permit. All fences shall be constructed in conformance with the ordinances of the Village and inspected by the Village for conformity. The fee for said permit shall be set forth in Chapter 24 of the Johnsburg Municipal Code. Fences installed without a permit shall be removed at the owner's expense.
- **7.2-3** <u>General Standards</u> The below standards are applicable to all fences constructed in any residential, business, commercial or industrial zoning district. Fences constructed for agricultural/farming purposes shall be constructed in conformance with Section 10A.1-3 Agricultural District.
  - A. Fences shall be erected with the fence posts and supporting members located on the side of the fence facing the property for which the fence permit is issued. The finished side of the fence must face the adjacent property. Chain link fencing must be installed knuckle-side up.
  - B. No fence shall contain barbed wire (unless otherwise herein stated) or constructed in any way or with any material as to cause injury to any person.
  - C. Electric fences, permanent snow fences, chicken wire, hog and farm-type fences are prohibited.
  - D. Fences shall not be permitted in the front yard. In the case of waterfront properties abutting the river or bay, the front yard shall be considered the yard abutting the water and fences shall be allowed in the front yard provided that they are no greater than 4 feet in height, with slat spacing of no less than 3.5 inches. Said fence shall be constructed of wrought iron or decorative aluminum material with colors limited to white, bronze, black, tan or green.
  - E. No fence shall be installed which obstructs the line of site from any roadway or adjacent driveway.
  - F. Fences may be placed on the property line, however such fences shall not exceed building lines on any lot lines abutting a street. The fence owner must maintain the side of the fence facing adjacent properties. In the case of fences not installed on the property line, the fence owner must maintain any property extending behind the fence.
  - G. Fences built on rear property lines that abut major arterial streets must be in harmony with fences already erected along the same street.
  - H. Fences must be installed so as not to interfere or impede the flow of surface drainage and must comply with storm-water management conditions.

- I. Fences may not be installed in drainage easements, Municipal Utility Easements (MUEs) or Restricted Public Utility Easement (RPUEs). Other types of easement may also restrict the placement of fences. Refer to the plat of survey for the subject property for other easements that may be located on the property. (Note plats of subdivision and covenants may also restrict types and locations of fences).
- J. Fences may be erected in public utilities easements (PUEs) that are not restricted at the property owner's risk. Public utility companies are not required to replace or repair any fence removed from the easement in order to access their utilities.
- **7.2-4** Residential Fencing In addition to the above General Standards, Residential Fencing shall meet the following standards:
  - A. Fences shall be a minimum of 30% open, and not exceed five (5) feet in height as measured from the natural average grade.
  - B. If the fence is intended to serve as a swimming pool barrier, please reference Chapter 24., Swimming Pools, of the Johnsburg Municipal Code.
- **7.2-5** Commercial Fencing –In addition to the General Standards set forth in 7.2-3, fencing utilized in Business and Commercial Districts shall meet the following:
  - A. Fences shall be a minimum of 30% open and not exceed six (6) feet in height as measured from the natural average grade.
  - B. Fences utilized to enclose a structure, such as an air conditioning unit, which could pose a risk to public health and safety may be entirely closed so long as it is located within five feet of the structure.
  - C. Chain link and ornamental metals are standard acceptable fencing materials. Any other materials must be approved by the **Village's Architectural Review Committee**.
  - D. Fence in the B-5 Downtown District shall be 70% open and not exceed six (6) feet in height as measured from the natural average grade. Ornamental metals are standard acceptable fencing materials. Chain link fences are prohibited. Any materials other than ornamental metals must be approved by the **Village's Architectural Review Committee.**
- **7.2-6** Industrial Fencing In addition to the General Standards set forth in 7.2-3, fencing utilized in Industrial Districts shall meet the following:
  - A. Fences shall be a minimum of 30% open and not exceed eight (8) feet in height as measured from the natural average grade.
  - B. Barbed wire fencing is permitted on fencing eight (8) feet in height. Barbed wire material is limited to the upper one (1) foot section of the fence.

- C. Fences utilized to enclose a structure, such as an air conditioning unit, which could pose a risk to public health and safety may be entirely closed so long as it is located within five feet of the structure.
- D. Chain link and ornamental metals are standard acceptable fencing materials. Any other materials must be approved by the **Village's Architectural Review Committee**.
- **7.2-7** Dog Pounds, Runs, Enclosures shall only be permitted in rear yards and shall be located not closer than 10 feet to any lot line within the rear yard. Such enclosures constructed of fencing shall not exceed six (6) feet in height nor shall it exceed more than a total of 50 lineal feet measuring all four sides. Only one such pound, run or enclosure is permitted per zoning lot.
- **7.2-8** All excavations, not properly attended, large enough to be considered a hazard or an attractive nuisance to children shall either be filled to grade or completely enclosed within a four (4) foot fence.

## 7.2 POOLS

Swimming pools in all districts shall be located in the back yard, not less than 20 feet from any principal building on an adjacent lot, except in cases where the front yard abuts a lake or river (not including tributaries, detention ponds or other such bodies of water), said pool may be located in the front yard so long as compliance is made with the McHenry County Public Health Ordinance, the Johnsburg Zoning Ordinance and Johnsburg Municipal Code.

For further regulations regarding pools, see Chapter 24 of the Johnsburg Municipal Code.

### 7.3 SATELLITE DISH

- **7.4-1 PURPOSE**: The purpose of this Ordinance is to maintain an aesthetically pleasing environment throughout the Village, and thereby maintaining property values and allowing the use and enjoyment of property. In addition, it is the intent of this Ordinance to assure the safety of invitees and employees on business, resort and manufacturing property.
- **7.4-2 DEFINITION**: A parabolic or dish type antenna as used herein shall mean any circular or similar dish shaped transmitting or receiving antenna exceeding 40" in diameter for communications or for transmitting or receiving signals from a satellite.
- **7.4-3 REGULATIONS:** The installation and use of any parabolic or dish type antenna must meet all FCC regulations.
- **7.4-4 DIAMETER**: Satellite dish antennas shall not exceed twelve (12) feet in diameter.
- **7.4-5 HEIGHT**: The maximum height of the installation from ground level shall not exceed fifteen (15) feet.

#### 7.4-6 LOCATION:

- A. Any antenna may only be located in a rear yard, a minimum often (10) feet from any lot line and effectively screened by a dense screening hedge to a minimum height of six (6) feet.
- B. The antenna shall not be located in any street front or side yard.

## **7.4-7 MOUNTING**:

- A. The antenna shall be mounted directly upon the ground. The installation or mounting of an antenna on any roof or tower or similar form of structural support is hereby prohibited.
- B. All satellite dish antennas shall be mounted in accordance with manufacturer's specifications, and all electric or transmission cable connecting the satellite dish antenna to the principal structure shall be underground, or as per manufacturer's recommendations.
- **7.4-8 DENSITY**: Not more than one parabolic or dish type antenna shall be permitted per lot.
- **7.4-9 COLOR AND APPEARANCE**: Satellite earth stations and their supporting structures shall be neutral in color and to the extent possible, compatible with the appearance and character of the neighborhood.
- **7.4-10 PERMIT FEES**: The application fee for a permit for a residential antenna shall be Ten Dollars (\$10.00) and for a non-residential antenna, Twenty-Five Dollars (\$25.00).

**7.4-11 PENALTY**: Any person, firm or corporation violating any provision of this Section shall be fined not less than Fifty Dollars (\$50.00) nor more than One Hundred Dollars (\$100.00) for each offense committed on each day during or on which a violation occurs or continues.

- **7.4 HOME OCCUPATIONS**: Any occupation which is customarily, in whole or in part, conducted in a residential area is permitted provided that all of the following criteria are met:
  - A. It is conducted entirely within the dwelling by a member of the family residing in the dwelling and when such home occupation is clearly incidental and secondary to the use of the dwelling as a residence.
  - B. It is not conducted from an accessory building.
  - C. There is no display or activity that will indicate from the exterior of the dwelling that it is being used for any use other than a dwelling, except that one (1) name plate, no more than one and one-half (1 1/2) square feet in total area which contains only the name of the occupant of the dwelling and the home occupation conducted therein and is not illuminated, shall be permitted.
  - D. No more than one (1) person other than a member of the immediate family residing in the dwelling unit shall be employed or engaged in conducting the home occupation.
  - E. That the number of off-street parking spaces for that use is provided as required by the Off-Street Parking Regulations of this Ordinance, and in addition, if another person is employed as provided for in paragraph D above, one (1) off-street parking space shall be provided exclusively for that person's use during working hours.
  - F. No stock in trade shall be kept, displayed or sold on the premises unless such stock is clearly secondary and necessary to the performance of the services provided by the home occupation and at no time shall exterior storage of materials be permitted.
  - G. No offensive noise, vibration, smoke, dust, odors, heat, glare, or electrical disturbance shall be produced which is perceivable at or beyond the lot lines. In addition, no home occupation shall cause or create any nuisance, or cause or create any substantial or undue adverse impact on any adjacent property or the character of the area, or threaten the public health, safety or general welfare, or be noxious, offensive or hazardous.
  - H. No home occupation shall generate more vehicular or pedestrian traffic than is typical of residences in the areas.
  - I. Any resident who wishes to conduct a business in their home but does not meet the requirements of this section may apply for a special use permit pursuant to the Special Use Section of this Ordinance.

### 7.5 WIRELESS TELECOMMUNICATIONS TOWERS AND ANTENNAS

#### **7.6-1: PURPOSE**

- A. The purpose of this ordinance is to provide specific regulations for the placement, construction and modification of personal wireless service facilities. The provisions of this Ordinance are not intended to and shall not be interpreted to prohibit or to have the effect of prohibiting the provision of personal wireless services, nor shall the provisions of this ordinance be applied in such a manner as to unreasonably discriminate between providers of functionally equivalent personal wireless services. To the extent that any provision or provisions of this Ordinance are inconsistent with or in conflict with any other provision of the Village Municipal Code, Zoning Ordinance or any other ordinance of the Village, the provisions of this ordinance shall be deemed to control.
- B. In the course of reviewing any request for any approval required under this Ordinance made by an applicant to provide personal wireless services or to install personal wireless service facilities, the Zoning Board of Appeals or the Village Board, as the case may be, shall act within a reasonable period of time after the request is duly filed with the Village, taking into account the nature and scope of the request. Any decision to deny such a request shall be in writing and supported by substantial evidence contained in a written record.
- C. The purpose of this ordinance is to also establish general guidelines for the sighting of wireless communication towers and antennas. The goals of this Ordinance are to:
  - (1) protect residential areas and land uses from potential adverse impacts of towers and antennas;
  - (2) encourage the location of towers in non-residential areas;
  - (3) minimize the total number of towers throughout the community;
  - (4) strongly encourage the joint use of new and existing tower sites as a primary option rather than construction of additional single-use towers;
  - (5) encourage users of towers and antennas to locate them, to the extent possible, in areas where the adverse impact on the community is minimal;
  - (6) encourage users of towers and antennas to configure them in a way that minimizes the adverse visual impact of the towers and antennas through careful design, sighting, landscape screening, and innovative camouflaging techniques;
  - (7) enhance the ability of the providers of telecommunications services to provide such services to the community quickly, effectively, and efficiently;
  - (8) consider the public health and safety of communication towers; and

(9) avoid potential damage to adjacent properties from tower failure through engineering and careful sighting of tower structures. In furtherance of these goals, the Village shall give due consideration to the Village's Comprehensive Land Use Plan, Zoning Map, existing land uses, and environmentally sensitive areas in approving sites for the location of towers and antennas.

**7.6-2 DEFINITIONS**: As used in this Ordinance, the following terms shall have the meanings set forth below:

"Alternative tower structure" means man-made trees, clock towers, bell steeples, light poles and similar alternative-design mounting structures that camouflage or conceal the presence of antennas or towers and water towers.

"Antenna" means any exterior transmitting or receiving device mounted on a tower, building or structure and used in communications that radiate or capture electromagnetic waves, digital signals, analog signals, radio frequencies (excluding radar signals), wireless telecommunications signals or other communication signals.

"Backhaul network" means the lines that connect a provider's towers/cell sites to one or more cellular telephone switching offices, and/or long distance providers, or the public switched telephone network.

"FAA" means the Federal Aviation Administration.

"FCC" means the Federal Communications Commission.

"Height" means, when referring to a tower or other structure, the distance measured from the finished grade of the parcel to the highest point on the tower 0 other structure, including the base pad and any antenna.

"Preexisting towers and preexisting antennas" means any tower or antenna for which a building permit or special use permit has been properly issued prior to the effective date of this Ordinance, including permitted towers or antennas that have not yet been constructed so long as such approval is current and not expired.

"Tower" means any structure that is designed and constructed primarily for the purpose of supporting one or more antennas for telephone, radio and similar communication purposes, including self-supporting lattice towers, guyed towers, or monopole towers. The term includes radio and television transmission towers, microwave towers, common-carrier towers, cellular telephone towers, alternative tower structures, and the like. The term includes the structure and any support thereto.

## 7.6-3 APPLICABILITY

A. New Towers and Antennas. All new towers or antennas in the Village shall be subject to these regulations, except as provided in Sections 3(b) through (d), inclusive.

- B. <u>Amateur Radio Station Operators/Receive Only Antennas</u>. This Ordinance shall not govern any tower, or the installation of any antenna, that is under seventy (70) feet in height and is owned and operated by a federally-licensed amateur radio station operator or is used exclusively for receive only antennas.
- C. <u>Preexisting Towers or Antennas.</u> Preexisting towers and preexisting antennas shall not be required to meet the requirements of this Ordinance, other than the requirements of Sections 7.6-4F and 7.6-4G.
- D. <u>Commercial AM Broadcasting: Antenna Site (AM Array)</u>. For purposes of implementing this Ordinance, an AM array, consisting of one or more tower units and supporting ground system which functions as one AM broadcasting antenna, shall be considered one tower. Measurements for setbacks and separation distances shall be measured from the outer perimeter of the towers included in the AM array. Additional tower units may be added within the perimeter of the AM array by right.

# 7.6-4 GENERAL REQUIREMENTS

- A. <u>Principal or Accessory Use.</u> Antennas and towers may be considered either principal or accessory uses. A different existing use of an existing structure on the same lot shall not preclude the installation of an antenna or tower on such lot.
- B. <u>Lot Size</u>. Minimum lot size shall be 2 acres. For purposes of determining whether the installation of a tower or antenna complies with district development regulations, the dimensions of the entire lot shall be considered in determining lot size, even though the antennas or towers may be located on leased parcels within such lot.
- C. <u>Inventory of Existing Sites</u>. Each applicant for an antenna and/or tower shall provide to the Building and Code Officer an inventory of its existing towers, antennas, or sites approved for towers or antennas, that are either within the jurisdiction of the Village or within one mile of the border thereof, including specific information about the location, height, and design of each tower. The Building and Code Officer may share such information with other applicants applying for administrative approvals or special use permits under this Ordinance or other organizations seeking to locate antennas within the jurisdiction of the Village, provided, however that the Building and Code Officer is not, by sharing such information, in any way representing or warranting that such sites are available or suitable.
- D. Aesthetics. Towers and antennas shall meet the following requirements:
  - (1) Towers shall either maintain a galvanized steel finish or, subject to any applicable standards of the FAA, be painted a neutral color so as to reduce visual obtrusiveness.

- (2) At a tower site, the design of the buildings and related structures shall, to the extent possible, use materials, colors, textures, screening, and landscaping that will blend them into the natural setting and surrounding buildings.
- (3) If an antenna is installed on a structure other than a tower, the antenna and supporting electrical and mechanical equipment must be of a neutral color that is identical to, or closely compatible with, the color of the supporting structure so as to make the antenna and related equipment as visually unobtrusive as possible.
- E. <u>Lighting</u>. Towers shall not be artificially lighted, unless required by the FAA or other applicable authority. If lighting is required, the lighting alternatives and design chosen must cause the least disturbance to the surrounding views and minimize the spillover of light onto adjacent properties.
- F. State or Federal Requirements. All towers must meet or exceed current standards and regulations of the FAA, the FCC, and any other agency of the state or federal government with the authority to regulate towers and antennas. If such standards and regulations are changed, then the owners of the towers and antennas governed by this Ordinance shall bring such towers and antennas into compliance with such revised standards and regulations within six (6) months of the effective date of such standards and regulations, unless a different compliance schedule is mandated by the controlling state or federal agency. Failure to bring towers and antennas into compliance with such revised standards and regulations shall constitute grounds for the removal of the tower or antenna at the owner's expense. In addition, such failure shall constitute a violation of this Ordinance with each day such violation occurs constituting a violation.
- G. <u>Building Codes: Safety Standards.</u> To ensure the structural integrity of towers, the owner of a tower shall ensure that it is maintained in compliance with standards contained in applicable state or local building codes and the applicable standards for towers that are published by the Electronic Industries Association, as amended from time to time. If, upon inspection, the Village concludes that a tower fails to comply with such codes and standards and constitutes a danger to persons or property, then upon notice being provided to the owner of the tower, the owner shall have thirty (30) days to bring such tower into compliance with such standards. Failure to bring such tower into compliance within said thirty (30) days shall constitute grounds for the removal of the tower or antenna at the owner's expense.
- H. <u>Measurement.</u> For purposes of measurement, tower setbacks and separation distances shall be calculated and applied to facilities located in the Village irrespective of municipal and county jurisdictional boundaries.
- I. <u>Not Essential Services</u>. Towers and antennas shall be regulated and permitted pursuant to this Ordinance and shall not be regulated or permitted as essential services, public utilities or private utilities.

- J. <u>Franchises</u>. Owners and/or operators of towers or antennas shall certify that all franchises required by law for the construction and/or operation of a wireless communication system in the Village have been obtained and shall file a copy of all required franchises with the Building and Code Officer.
- K. <u>Public Notice</u>. For purposes of this Ordinance, any special use request, variance request or appeal shall require public notice to all abutting property owners and all property owners of properties that are located within the corresponding separation distance listed in Section 7.6-7B(5)(ii), Table 2, in addition to any notice otherwise required by the Johnsburg Zoning Ordinance.
- L. <u>Signs</u>. Other than signage relating to emergency contact information, no signs shall be allowed on an antenna or tower. Required emergency contact signage shall include name and telephone number of emergency contact person accessible at all times.
- M. <u>Buildings and Support Equipment</u>. Buildings and support equipment associated with antennas or towers shall comply with the requirements of Section 7.6-8.
- N. <u>Multiple Antenna/Tower Plan</u>. The Village encourages the users of towers and antennas to submit a single application for approval of multiple towers and/or antenna sites. Applications for approval of multiple sites shall be given priority in the review process.

### 7.6-5 PERMITTED USES

- A. <u>General</u>. The uses listed in this Section are deemed to be permitted uses and shall not require a special use permit.
- B. <u>Permitted Uses</u>. The following uses are specifically permitted:
  - (1) Antennas or towers located on property owned, leased, or otherwise controlled by the Village provided a license or lease authorizing such antenna or tower has been approved by the Village.

# 7.6-6 ADMINISTRATIVELY APPROVED USES

- A. <u>General.</u> The following provisions shall govern the issuance of administrative approval for towers and antennas.
  - (1) The Building and Code Officer may administratively approve the uses listed in this section.
  - (2) Each applicant for administrative approval shall apply to the Building and Code Officer providing the information set forth in Section 7.6-7B(1) of this Ordinance and a nonrefundable fee as established by resolution of the Village Board of Trustees to reimburse the Village for the costs of reviewing the application.

- (3) The Building and Code Officer shall review the application for administrative approval and determine if the proposed complies with Sections 7.6-4 and 7.6-6C of this Ordinance.
- (4) The Building and Code Officer shall respond to each such application within sixty (60) days after receiving it by either approving or denying the application. If the Building and Code Officer fails to respond to the applicant within said sixty (60) days, then the application shall be deemed to be approved.
- (5) If an administrative approval is denied, the applicant shall file an application for a special use permit pursuant to Section 4.6-7 prior to filing any appeal that may be available under the Zoning Ordinance.
- B. <u>List of Administratively Approved Uses</u>. The following uses may be approved by the Building and Code Officer after conducting an administrative review when locating in any I-2, Industrial Zoning District:
  - (1) Locating a tower or antenna, including the placement of additional buildings or other supporting equipment used in connection with said tower or antenna.
  - (2) Locating antennas on existing structures or towers consistent with the terms of subsections (a) and (b) below:
    - (a) Antennas on existing structures. Any antenna which is not attached to a tower may be approved by the Building and Code Officer as an accessory use to any structure in the Industrial Zoning District provided:
      - (i) The antenna does not extend more than thirty (30) feet above the highest point of the structure;
      - (ii) The antenna complies with all applicable FCC and FAA regulations; and
      - (iii) The antenna complies with all applicable building codes.
    - (b) Antennas on existing towers. An antenna which is attached to an existing tower may be approved by the Building and Code Officer and, to minimize adverse visual impacts associated with the proliferation and clustering of towers, collocation of antennas by more than one carrier on existing towers shall take precedence over the construction of new towers, provided such collocation is accomplished in a manner consistent with the following:
      - (i) A tower which is modified or reconstructed to accommodate the collocation of an additional antenna shall be of the same tower type as the existing tower, unless the Building Inspector allows reconstruction as a monopole.

## (ii) Height:

- (a) An existing tower may be modified or rebuilt to a taller height, not to exceed thirty (30) feet over the tower's existing height, to accommodate the collocation of an additional antenna.
- (b) The height change referred to in subsection (ii)(a) may only occur one time per communication tower.
- (c) The additional height referred to in subsection (ii)(a) shall require an additional distance separation as set forth in Section 7. The tower's premodification height shall be used to calculate such distance separations.

## (iii) Onsite location:

- (a) A tower which is being rebuilt to accommodate the collocation of an additional antenna may be moved onsite within fifty (50) feet of its existing location.
- (b) After the tower is rebuilt to accommodate collocation, only one tower may remain on site.
- (c) A relocated onsite tower shall continue to be measured from the original tower location for purpose of calculating separation distances between towers pursuant to Section 7.6-7B(5). The relocation of a tower hereunder shall in no way be deemed to cause a violation of Section 7.6-7B(5).
- (d) The onsite relocation of a tower which comes within the separation distances to residential units or residentially zoned lands as established in Section 7.6-7B(5) shall only be permitted when approved by the Building and Code Officer.
- (3) Installing a cable microcell network through the use of multiple low-powered transmitters/receivers attached to existing wireline systems, such as conventional cable or telephone wires, or similar technology that does not require the use of towers.
- C. <u>Factors Considered in Granting Administratively Approved Uses for Towers</u>. In addition, the Building Inspector shall consider the following factors in determining whether to issue administrative approval:
  - (1) Height of the proposed tower;
  - (2) Proximity of the tower to residential structures and residential district boundaries;

- (3) Nature of uses on adjacent and nearby properties;
- (4) Surrounding topography;
- (5) Surrounding tree coverage and foliage;
- (6) Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness;
- (7) Proposed ingress and egress;
- (8) Availability of suitable existing towers, other structures, or alternative technologies not requiring the use of towers or structures, as discussed in Section 7.6-7B(3) of this Ordinance;
- (9) Setbacks from existing and future right of way;
- (10) Availability of Suitable Existing Towers, Other Structures or Alternative Technology. No new tower shall be permitted unless the applicant demonstrates to the reasonable satisfaction of the Zoning Board of Appeals that no existing tower, structure or alternative technology that does not require the use of towers or structures can accommodate the applicant's proposed antenna. An applicant shall submit information requested by the Zoning Board of Appeals related to the availability of suitable existing towers, other structures or alternative technology. Evidence submitted to demonstrate that no existing tower, structure or alternative technology can accommodate the applicant's proposed antenna may consist of any of the following:
  - (i) No existing towers or structures are located within the geographic area which meet applicant's engineering requirements.
  - (ii) Existing towers or structures are not of sufficient height to meet applicant's engineering requirements.
  - (iii) Existing towers or structures do not have sufficient structural strength to support applicant's proposed antenna and related equipment.
  - (iv) The applicant's proposed antenna would cause electromagnetic interference with the antenna on the existing towers or structures, or the antenna on the existing towers or structures would cause interference with the applicant's proposed antenna.
  - (v) The applicant demonstrates that there are other limiting factors that render existing towers and structures unsuitable.
  - (vi) The applicant demonstrates that an alternative technology that does not require the use of towers or structures, such as a cable microcell network using

- multiple low-powered transmitters/receivers attached to a wireline system, is unsuitable. Costs of technology that exceed new tower or antenna development shall not be presumed to render the technology unsuitable.
- (11) Setbacks. The following setback requirements shall apply to all towers for which a special use permit is required:
  - (i) Towers must be set back a distance equal to at least one hundred and twentyfive percent (1.25%) of the height of the tower from any adjoining lot line or established right of way.
  - (ii) Guys and accessory buildings must satisfy the minimum zoning district setback requirements.
- (12) Separation. The following separation requirements shall apply to all towers and antennas for which a special use permit is required:
  - (i) Separation from off-site uses/designated areas.
    - (a) Tower separation shall be measured from the base of the tower to the lot line of the off-site uses. Minimum separation distances shall be 200 feet or 300% of tower whichever is greater.
  - (ii) Separation distances between towers.
    - (a) Separation distances between towers shall be applicable for and measured between the proposed tower and preexisting towers. The separation distances shall be measured by drawing or following a straight line between the base of the existing tower and the proposed base, pursuant to a site plan, of the proposed tower. The separation distances (listed in linear feet) shall be as shown in Table 2.

**TABLE 2: EXISTING TOWER - TYPES** 

	Lattice	Guyed	Monopole 75 Ft	Monopole Less
			in Height or	Than 75 Ft in
			Greater	Height
Lattice	5,000	5,000	1,500	750
Guyed	5,000	5,000	1,500	750
Monopole 75 Ft	1,500	1,500	1,500	750
in Height or				
Greater				
Monopole Less	750	750	750	750
Than 75 Ft in				
Height				

- (13) Security fencing. Towers shall be enclosed by security fencing not less than six feet in height and shall also be equipped with an appropriate anti-climbing device;
- (14) Landscaping. The following requirements shall govern the landscaping surrounding towers for which a special use permit is required.
  - (i) Tower facilities shall be landscaped with a buffer of plant materials that effectively screens the view of the tower compound from property used for residences. The standard buffer shall consist of a landscaped strip at least four (4) feet wide outside the perimeter of the compound.
  - (ii) In locations where the visual impact of the tower would be minimal. the landscaping requirement may be reduced or waived.
  - (iii) Existing mature tree growth and natural land forms on the site shall be preserved to the maximum extent possible. In some cases such as towers sited on large wooded lots natural growth around the property perimeter may be sufficient buffer.

### 7.6-7 SPECIAL USE PERMITS

- A. <u>General</u>. The following provisions shall govern the recommendation to the Village Board of special use permits for towers or antennas by the Zoning Board of Appeals.
  - (1) If the tower or antenna is not a permitted use under Section 7.5 of this Ordinance, then a special use permit shall be required for the construction of a tower or the placement of an antenna. A special use permit for towers or antennas shall be given consideration in the Business and Industrial zoning districts.
  - (2) Applications for special use permits under this Section shall be subject to the procedures and requirements of Section 16 of the Johnsburg Zoning Ordinance, except as modified in this Section.
  - (3) In granting a special use permit, the Zoning Board of Appeals may impose conditions to the extent the Zoning Board of Appeals conclude such conditions are necessary to minimize any adverse effect of the proposed tower on adjoining properties.
  - (4) Any information of an engineering nature that the applicant submits, whether civil, mechanical, or electrical, shall be certified by a licensed professional engineer.
  - (5) An applicant for a special use permit shall submit the information described in this Section and a non-refundable fee as established by resolution of the Village Board of Trustees to reimburse the Village for the costs of reviewing the application.

### B. Towers

- (1) Information required. In addition to any information required for applications for special use permits pursuant to Section 16 of the Johnsburg Zoning Ordinance, applicants for a special use permit for a tower shall submit the following information:
  - (i) A scaled site plan clearly indicating the location, type and height of the proposed tower, on-site land uses and zoning, adjacent land uses and zoning (including when adjacent to other municipalities), comprehensive land use plan classification of the site and all properties within the applicable separation distances set forth in Section 7.6-7B(5), adjacent roadways, proposed means of access, setbacks from property lines, elevation drawings of the proposed tower and any other structures, topography, parking, and other information deemed by the Building and Code Officer to be necessary to assess compliance with this ordinance.
  - (ii) Legal description of the parent tract and leased parcel (if applicable).
  - (iii) The setback distance between the proposed tower and the surrounding platted or unplatted properties.
  - (iv) The separation distance from other towers described in the inventory of existing sites submitted pursuant to Section 7.6-4C shall be shown on an updated site plan or map. The applicant shall also identify the type of construction of the existing tower(s) and the owner/operator of the existing tower(s), if known.
  - (v) A landscape plan showing specific landscape materials.
  - (vi) A lighting plan to insure minimal spillover of light onto adjacent parcels.
  - (vii) Method of fencing, and finished color and, if applicable, the method of camouflage and illumination.
  - (viii) A notarized statement signed by the applicant describing their compliance with Sections 7.6-4C, D, E, F, G, J, L and M; Sections 7.6-7B(4) and (5); and all applicable federal, state or local laws.
  - (ix) A notarized statement by the applicant as to whether construction of the tower will accommodate collocation of additional antennas for future users.
  - (x) Identification of the entities providing the backhaul network for the tower(s) described in the application and other cellular sites owned or operated by the applicant in the Village.

- (xi) A description of the suitability of the use of existing towers, other structures or alternative technology not requiring the use of towers or structures to provide the services to be provided through the use of the proposed new tower.
- (xii) A description of the feasible location(s) of future towers or antennas within the Village based upon existing physical, engineering, technological or geographical limitations in the event the proposed tower is erected.
- (2) Factors Considered in Granting Special Use Permits for Towers. In addition to any standards for consideration of special use permit applications pursuant to Section 14 of this Zoning Ordinance, the Zoning Board of Appeals shall consider the following factors in determining whether to issue a special use permit:
  - (i) Height of the proposed tower;
  - (ii) Proximity of the tower to residential structures and residential district boundaries;
  - (iii) Nature of uses on adjacent and nearby properties;
  - (iv) Surrounding topography;
  - (v) Surrounding tree coverage and foliage;
  - (vi) Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness;
  - (vii) Proposed ingress and egress; and
  - (viii) Availability of suitable existing towers, other structures or alternative technologies not requiring the use of towers or structures as discussed in Section 7.6-7 B(3) of this Ordinance.
  - (ix) Setbacks from existing and future right of way.
- (3) Availability of Suitable Existing Towers, Other Structures or Alternative Technology. No new tower shall be permitted unless the applicant demonstrates to the reasonable satisfaction of the Zoning Board of Appeals that no existing tower, structure or alternative technology that does not require the use of towers or structures can accommodate the applicant's proposed antenna. An applicant shall submit information requested by the Zoning Board of Appeals related to the availability of suitable existing towers, other structures or alternative technology. Evidence submitted to demonstrate that no existing tower, structure or alternative technology can accommodate the applicant's proposed antenna may consist of any of the following:

- (i) No existing towers or structures are located within the geographic area which meet applicant's engineering requirements.
- (ii) Existing towers or structures are not of sufficient height to meet applicant's engineering requirements.
- (iii) Existing towers or structures do not have sufficient structural strength to support applicant's proposed antenna and related equipment.
- (iv) The applicant's proposed antenna would cause electromagnetic interference with the antenna on the existing towers or structures, or the antenna on the existing towers or structures would cause interference with the applicant's proposed antenna.
- (v) The applicant demonstrates that there are other limiting factors that render existing towers and structures unsuitable.
- (vi) The applicant demonstrates that an alternative technology that does not require the use of towers or structures, such as a cable microcell network using multiple low-powered transmitters/receivers attached to a wireline system, is unsuitable. Costs of alternative technology that exceed new tower or antenna development shall not be presumed to render the technology unsuitable.
- (4) Setbacks. The following setback requirements shall apply to all towers for which a special use permit is required:
  - (i) Towers must be set back a distance equal to at least one hundred and twenty-five percent (125%) of the height of the tower from any adjoining lot line or established right of way.
  - (ii) Guys and accessory buildings must satisfy the minimum zoning district setback requirements.
- (5) Separation. The following separation requirements shall apply to all towers and antennas for which a special use permit is required:
  - (i) Separation from off-site uses/designated areas.
    - (a) Tower separation shall be measured from the base of the tower to the lot line of the off-site uses. Minimum separation distances shall be 200 feet or 300% of tower whichever is greater.
  - (ii) Separation distances between towers.
    - (a) Separation distances between towers shall be applicable for and measured between the proposed tower and preexisting towers. The

separation distances shall be measured by drawing or following a straight line between the base of the existing tower and the proposed base, pursuant to a site plan of the proposed tower. The separation distances (listed in linear feet) shall be as shown in Table 2.

**TABLE 2: EXISTING TOWERS - TYPE** 

	Lattice	Guyed	Monopole 75 Ft in Height or	Monopole Less Than 75 Ft in
			Greater	Height
Lattice	5,000	5,000	1,500	750
Guyed	5,000	5,000	1,500	750
Monopole 75 Ft in Height or Greater	1,500	1,500	1,500	750
Monopole Less Than 75 Ft in Height	750	750	750	750

- (6) Security fencing. Towers shall be enclosed by security fencing not less than six feet in height and shall also be equipped with an appropriate anti-climbing device;
- (7) Landscaping. The following requirements shall govern the landscaping surrounding towers for which a special use permit is required.
  - (i) Tower facilities shall be landscaped with a buffer of plant materials that effectively screens the view of the tower compound from property used for residences. The standard buffer shall consist of a landscaped strip at least four (4) feet wide outside the perimeter of the compound.
  - (ii) In locations where the visual impact of the tower would be minimal, the landscaping requirement may be reduced or waived.
  - (iii) Existing mature tree growth and natural land forms on the site shall be preserved to the maximum extent possible. In some cases, such as towers sited on large, wooded lots, natural growth around the property perimeter may be sufficient buffer.

## 7.6-8 BUILDINGS OR OTHER EQUIPMENT STORAGE

A. <u>Antennas Mounted on Structures or Rooftops</u>. The equipment cabinet or structure used in association with antennas shall comply with the following:

- (1) The cabinet or structure shall not contain more than 300 square feet of gross floor area or be more than 16 feet in height. In addition, for buildings and structures which are less than thirty-five (35) feet in height, the related unmanned equipment structure, if over 150 square feet of gross floor area or 10 feet in height, shall be located on the ground and shall not be located on the roof of the structure.
- (2) If the equipment structure is located on the roof of a building, the area of the equipment structure and other equipment and structures shall not occupy more than 20 percent of the roof area.
- (3) Equipment storage buildings or cabinets shall comply with all applicable building codes.
- B. Antennas Mounted on Utility Poles or Light Poles. The equipment cabinet or structure used in association with antennas shall be located in accordance with the following: The equipment cabinet or structure shall be no greater than 6 feet in height or 64 square feet in gross floor area. The structure or cabinet shall be screened by an evergreen hedge with an ultimate height of eight (8) feet and a planted height of at least 36 inches. In all other instances, structures or cabinets shall be screened from view of all residential properties which abut or are directly across the street from the structure or cabinet by a solid fence 6 feet in height or an evergreen hedge with an ultimate height of eight (8) feet and a planted height of at least 36 inches.
- C. <u>Antennas Located on Towers</u>. The related unmanned equipment structure shall not contain more than 300 square feet of gross floor area or be more than 15 feet in height, and shall be located in accordance with the minimum yard requirements of the zoning district in which located.
- D. <u>Modification of Building Size Requirements</u>. The requirements of Sections 7.6-8A through C may be modified by the Zoning Board of Appeals in the case of uses permitted by special use to encourage collocation.

**7.6-9 REMOVAL OF ABANDONED ANTENNAS AND TOWERS**. Any antenna or tower that is not operated for a continuous period of twelve (12) months shall be considered abandoned, and the owner of such antenna or tower shall remove the same within ninety (90) days of receipt of notice from the Village notifying the owner of such abandonment. Failure to remove an abandoned antenna or tower within said ninety (90) days shall be grounds to remove the tower or antenna at the owner's expense. If there are two or more users of a single tower, then this provision shall not become effective until all users cease using the tower.

#### 7.6-10 NONCONFORMING USES

A. <u>Not Expansion of Nonconforming Use</u>. Towers that are constructed, and antennas that are installed, in accordance with the provisions of this Ordinance shall not be deemed to constitute the expansion of a nonconforming use or structure.

- B. Preexisting towers. Preexisting towers shall be allowed to continue their usage as they presently exist. Routine maintenance (including replacement with a new tower of like construction and height) shall be permitted on such preexisting towers. New construction other than routine maintenance on a preexisting tower shall comply with the requirements of this Ordinance.
- C. Rebuilding Damaged or Destroyed Nonconforming Towers or Antennas. Notwithstanding Section 7.6-9, bona fide nonconforming towers or antennas that are damaged or destroyed may be rebuilt by obtaining administrative approval. The type, height and location of the tower onsite shall be of the same type and intensity as the original facility approval. Building permits to rebuild the facility shall comply with the then applicable building codes and shall be obtained within 180 days from the date the facility is damaged or destroyed. If no permit is obtained or if said permit expires, the tower or antenna shall be deemed abandoned as specified in Section 7.6-9.

**7.6-11 SEVERABILITY**. The various parts, sections and clauses of this Ordinance are hereby declared to be severable. If any part, sentence, paragraph, section or clause is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of the Ordinance shall not be affected thereby.

**7.6-12 REPEALER**. Any ordinances or parts thereof in conflict with the provisions of this Ordinance are hereby repealed to the extent of such conflict.

**7.6-13 EFFECTIVE DATE**. This Ordinance shall take effect June 2, 1998.

#### 7.6 SMALL WIND ENERGY CONVERSION SYSTEMS

**7.7-1: PURPOSE** – It is the purpose of this regulation to allow the safe, effective and efficient use of small wind energy systems installed to reduce the on-site consumption of utility supplied electricity. Therefore, we find that it is necessary to standardize and streamline the proper issuance of building permits for small wind energy systems so that this clean, renewable energy resource can be utilized in a cost-effective and timely manner.

**7.7-2 APPLICABILITY** – The requirements set forth in this Ordinance shall govern the siting of small wind energy systems used to generate electricity or perform work which may be connected to the utility grid pursuant to the public utility's net metering laws and the Illinois Commerce Commission's Interconnection Agreement guidelines, serve as an independent source of energy, or serve in a hybrid system.

The requirements of this Ordinance shall apply to all Small Wind Energy Systems proposed after the effective date of this Ordinance.

## 7.7-3: DEFINITIONS

<u>Committee</u> – The Village of Johnsburg Planning and Zoning Commission.

**FAA** – Federal Aviation Administration

<u>MET Tower</u> – "Meteorological Tower" or "met tower" means a structure designed to support the gathering of wind energy resource data, and included the tower, base plate, anchors, guy cables and hardware, anemometers (wind speed indicators), wind direction vanes, booms to hold equipment anemometers and vanes, data logger, instrument wiring and any telemetry devices that are used to monitor or transmit wind speed and wind flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at a given location.

<u>Small Wind Energy System</u> – A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than 100 kilowatts (kW) and which is intended to primarily reduce on-site consumption of utility power.

<u>Siting Permit</u> – A construction and operating permit granted in accordance with the provisions of this Ordinance

<u>Total Height</u> – When referring to a Wind Turbine, the distance measured from ground level to the blade extended at its highest point.

<u>Tower</u> – Monopole that supports a wind generator.

<u>Tower Height</u> – The height above natural grade of the fixed portion of the tower.

<u>Tower Extended Height</u> – The height above natural grade to a blade tip at its highest point of travel.

<u>Wind Turbine</u> – The parts of the wind system including the blades, generator and tail.

### 7.7-4 REGULATORY FRAMEWORK

- 7.7-4.1 Principal or Accessory Use Small wind energy systems shall be allowed by a Conditional Use Permit and shall be allowed as an accessory use and shall be tied to a principal use in all zoning districts where structures of any sort are allowed; subject to the requirements of Section 7.7-5 below. Requests not meeting all requirements of Section 7.7-5 below shall also require a variance.
- **7.7-4.2** Notification Requirements For purposes of this Ordinance, any conditional use request, variance request or appeal will require public notice to all abutting property owners and all property owners of properties that are located within 1,000 feet of the proposed tower site, in addition to any notice otherwise required by the Johnsburg Zoning Ordinance.

# 7.7-5 GENERAL REQUIREMENTS FOR SMALL WIND ENERGY SYSTEMS

7.7-5.1 Foundation of Tower – All foundations shall be installed to a Class 5 soil classification unless soil testing has been performed at the proposed tower site by a Village approved testing agency for a lower soil classification.

# 7.7-5.2 Visual Appearance; Lighting; Powerlines

- a. Wind Turbines shall be painted a non-reflective, non-obtrusive color such as the manufacturer's default color option or a color that conforms to the environment and architecture of the community. Small wind energy towers shall maintain galvanized steel, brushed aluminum or white finish, unless FAA standards require otherwise. The zoning authority shall require a photo of a small wind energy system of the same model that is the subject of the landowner's application adjacent to a building or some other object illustrating scale (e.g. manufacturer's photo).
- b. At Small Wind Energy System sites, the design of the buildings and related structures shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend the Small Wind Energy System into the natural setting and then existing environment.
- c. Small Wind Energy Systems shall not be artificially lighted, except to the extent required by the FAA or other applicable authority.
- d. Small Wind Energy Systems shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the wind turbine.

- e. Electrical controls and control wiring and powerlines shall be wireless or underground except where small wind energy system wiring is brought together for connection to the transmission or distribution network, adjacent to that network.
- f. The applicant shall provide evidence that the proposed height of the small wind energy system tower does not exceed the height recommended by the manufacturer or distributor of the system.
- g. The application shall certify that they will comply with the utility notification requirements set forth by the Illinois Commerce Commission and ComEd, and accompanying regulations in Section 7.7-5.7 of this Ordinance, unless the applicant intends, and so states on the application, that the system will not be connected to the electricity grid. Whether or not the applicant is participating in the net metering program, the applicant will be required to meet the most current IEEE (Institute of Electrical and Electronics Engineers) 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems.
- 7.7-5.3 Setbacks The following setbacks and separation requirements shall apply to all Small Wind Energy Systems and MET Towers; provided, however, that the Commission may reduce the standard setbacks and separation requirements if the intent of this Ordinance would be better served thereby.
- a. A Small Wind Energy System shall be located on a parcel that, at a minimum, is ½ acre in size.
- b. The total height of a Small Wind Energy System shall not exceed a maximum height of 60 feet.
- c. Property Lines: Each Small Wind Energy System shall be set back from the nearest property line a distance no less than 1.1 times its Total Height.
- d. At the time of application, each Small Wind Energy System shall be set back from the nearest non-participating primary building structure (i.e. primary buildings on neighboring land) a distance no less than one and a half (1.5) times its Total Height.
- e. Public and Private Roads: Each Small Wind Energy System shall be set back from the nearest public road or neighboring private right of ways (e.g. shared driveway, neighboring driveway) a distance no less than 1.1 times its Total Height, determined at the nearest boundary of the underlying right of way for such public road.
- f. Communication and Electrical Lines: Each Small Wind Energy System shall be set back from the nearest above ground public electric power line or telephone line a distance no less than 1.1 times its Total Height, determined from the existing power line or telephone line.
- g. No portion of Small Wind Energy Systems or MET Towers, may extend closer than 30 feet from any property line.

- 7.7-5.4 Sound Levels and Measurement Audible sound due to Small Wind Energy System operations shall not exceed fifty (50) dBA for any period of time, when measured at the property line of any property containing an occupied building on the date of approval of any Small Wind Energy System Siting Permit. The level, however, may be exceeded during short-term events such as utility outages and/or severe windstorms.
- 7.7-5.5 Minimum Ground Clearance The blade tip of any Wind Turbine shall, at its lowest point, have ground clearance of no less than fifteen (15) feet, as measured at the lowest point of the arc of the blades.

## 7.7-5.6 Safety

- a. Wind Turbine towers shall not be climbable up to 12 feet above ground level.
- b. All access doors to Wind Turbine towers and electrical equipment shall be lockable.
- c. Appropriate warning signage (e.g. electrical hazards) shall be placed on Wind Turbine towers, electrical equipment and Small Wind Energy Systems.

# 7.7-5.7 Federal and State Requirements

- a. Compliance with International Building Code: Building permit applications for wind energy systems shall be accompanied by standard drawings of the wind turbine structure, including the tower, base, footings and site plan (showing the location of the proposed small wind energy system and the locations of all existing buildings, structures and property lines to scale along with distances). An engineering analysis of the tower showing compliance with the International Building Code and by a licensed professional structural engineer certified in the State of Illinois shall also be submitted. This analysis may be supplied by the manufacturer. Wet stamps shall be required.
- b. Compliance with FAA Regulations: Wind energy systems shall comply with regulations of the Federal Aviation Administration (FAA), including any necessary approvals for installations close to airports.
- c. Compliance with National Electric Code: Building permit applications for Small Wind Energy Systems shall be accompanied by a line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electric Code. This information may be supplied by the manufacturer.
- d. Compliance with Regulations Governing Net Energy Metering: Small Wind Energy Systems connected to the utility grid shall comply with all Illinois Commerce Commission metering laws.
- 7.7-5.8 Removal of Defective or Abandoned Small Wind Energy Systems Any Small Wind Energy System found to be unsafe by the building official shall be repaired by the landowner to meet federal, state and local safety standards or removed within six months. If any Small Wind

Energy System is not operational for a period of 12 consecutive months or more, the Village will request by registered mail that corrective action be complete within 60 days. If there is a failure to comply, the tower will be removed at the owner's expense. The Village Administrator shall have the authority to pursue legal action if necessary.

#### 7.7 SOLAR ENERGY SYSTEMS

**7.8-1: PURPOSE** – The purpose of this Section is to provide standards for the use of solar energy equipment as accessory uses within the Village of Johnsburg Zoning Districts. This Section seeks to protect properties from incompatible uses and to conserve and enhance property values, while promoting the use of alternative energy sources, where appropriate. This Section provides a process to facilitate the use of solar power in a manner that minimizes visual impacts of solar energy equipment and the potential for nuisance.

**7.8-2: APPLICABILITY** – An applicant who seeks to install solar energy equipment must submit an application for a permit, as provided by the Village of Johnsburg. The application must include photographs of the existing conditions of the property as well as renderings of the proposed solar energy equipment and a description of the screening to be provided for ground or wall mount solar energy equipment.

## 7.8-3: DEFINITIONS

Solar Energy Equipment – Solar photovoltaic panel, solar hot air or hot water panel collector device, or other type of energy system which relies upon solar radiation as a source for the generation of electricity or transfer of stored heat.

### 7.8-4 REGULATORY FRAMEWORK

7.8-4.1 Solar energy equipment shall be allowed as an accessory use and must be tied to a principal use in all zoning districts where structures of any sort are allowed; subject to the requirements of Section 7.8-5 below. Requests not meeting all requirements of 7.8-5 below shall require a variance.

7.8-4.2 Notification Requirements – For purposes of this Ordinance, any conditional use request, variance request or appeal will require public notice to all property owners of properties that are located within 200 feet of the proposed site, in addition to any notice otherwise required by the Johnsburg Zoning Ordinance.

## 7.8-5 GENERAL REQUIREMENTS FOR SOLAR ENERGY EQUIPMENT

- <u>7.8-5.1 Visual Appearance</u> Solar energy equipment must be located in the least visibly obtrusive location where panels would be functional.
- <u>7.8-5.2 Setbacks</u> All solar energy equipment must comply with all setback and height requirements for the zoning district in which the property is located.

# 7.8-5.3 Ground-Mounted Solar Energy Equipment

- a. Must only be located in the side or rear yard of a property.
- b. Must not exceed a height of 10 feet above the ground.

- c. Must be substantially screened from public view (including adjacent properties and public rights of way) by fencing, plantings, or a combination thereof, as determined by the Building & Code Officer.
- d. All exterior electrical lines must be placed in conduit and buried below the surface of the ground.
  - e. Must not block any required parking areas, sidewalks or walkways.

## 7.8-5.4 Roof or Wall Mounted Solar Energy Equipment

- a. It is encouraged that solar energy equipment be installed on the roof (flush mounted) or made a part of the roof design (capping or framing being compatible with the color of the roof or structure). Mounting brackets will be permitted if the applicant can demonstrate that the existing pitch of the roof would render the solar energy equipment ineffective or would be otherwise impossible.
- b. Must be located on a rear or side facing roof, as seen from the fronting street, unless the applicant can demonstrate that such installation would be ineffective or otherwise impossible.
- c. Must not project above the peak of the roof to which it is attached, or project more than five (5) feet above a flat roof.
- d. All exterior electrical and/or plumbing lines must be painted in a color scheme that matches, as closely as reasonably possible, the color of the structure and the materials adjacent to the lines.
- <u>7.8-5.5 Building Integrated Photovoltaics</u> These installations are integrated into the structure of a building. Common BIPV applications include car ports, awnings and curtain walls. BIPV installations have the advantage of providing function in addition to power production.

In the event of a conflict between this Section and the then-current International Residential Code (IRC), the IRC shall supercede this Section.

## 7.8-5.6 Safety

- a. Solar energy equipment must meet all Federal, State and Local Codes.
- b. Solar energy equipment must have a commercially available mounting system.
- c. All access panels and electrical equipment must be lockable.
- d. Appropriate warning signage must be placed on solar energy equipment.
- e. A separate isolating lightening protection ground system is required for each solar energy system.

# 7.8-5.7 Federal and State Requirements

- a. Compliance with International Building Code: Building permit applications for solar energy systems must be accompanied by standard drawings of the solar energy equipment and site plan, showing the location of the proposed solar energy system and the locations of all existing buildings, structures, utilities and property lines, to scale, along with distances. Wet stamps are required.
- b. Compliance with National Electric Code: Building permit applications for solar energy systems must be accompanied by a line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electric Code. This information may be supplied by the manufacturer.
- c. Compliance with Regulations Governing Net Energy Metering: Solar energy systems connected to the utility grid must comply with all Illinois Commerce Commission metering laws.
- 7.8-5.8 Removal of Defective or Abandoned Solar Energy Systems Any solar energy system found to be unsafe by the building official must be repaired by the landowner to meet federal, state and local safety standards or removed within six months. If any solar energy system is not operational for a period of 12 consecutive months or more, the Village will request, by registered mail that corrective action be complete within 60 days. If there is a failure to comply, the solar energy equipment will be removed at the owner's expense. The Village Administrator shall have the authority to pursue legal action if necessary.
  - a. Must meet all state and federal EPA regulations for removal of any part of the system.