

ARTICLE XXI

GENERAL PROVISIONS

This Article contains general and special standards for numerous unique situations and circumstances. The provisions of this Article shall apply uniformly regardless of the zoning district, unless otherwise stated, and are in addition to other applicable provisions of this Ordinance.

Section 21.1 Access to and Frontage on a Public or Private Road

- (a) Every lot or parcel of land hereafter created shall abut a public street or a conforming private road except as provided for in 21.1(b). Each such lot or parcel shall have abutting frontage on a public or private road of no less than the minimum lot width required by the zoning district in which it is located, at the required front setback line except as provided for in 21.1(b).
- (b) Parcels with a principal dwelling in existence as of the effective date of this section of the ordinance, may be divided one time creating only one (1) new parcel not meeting the minimum frontage requirements in 21.1(a) provided both parcels meet all of the following requirements:
 - 1. There is no change in use for either parcels.
 - 2. Both parent and new parcel must meet requirements in Section 21.22 concerning Width to Depth Ratio for all Newly Created Lots or Parcels
 - 3. A permanent 66' easement is established from the public road providing ingress and egress to both parcels.
 - 4. Overhead trees and limbs must be maintained to no less than 14' above ground over a cleared travel width of twenty (20) feet.
 - 5. Easements longer than 400 feet must include emergency passing areas every 400 feet. Emergency passing areas must have a travel width of at least 20 feet wide and 80 feet long and must be maintained and passable all year.
 - 6. The turn-around at the end of the easement must have a minimum right-of-way radius of 50 feet and a minimum running surface radius of 42 feet. The cul-de-sac may have a center landscape island, however, the minimum paved or gravel lane width shall be 20 feet.
 - 7. No building permits shall be issued on the vacant parcel until the easement is improved to meet all applicable private road standards.

Section 21.2 Accessory Building Size Regulations in the “A” Agricultural and “AR” Agricultural-Residential Zoning Districts

For all accessory buildings as defined in this Ordinance, the following regulations shall apply in the “A” and “AR” Zoning Districts:

(a) Location:

1. Accessory buildings less than 200 square feet on the main floor and not permanently attached to the ground shall not be located in the front setback area required for a principal building. Accessory buildings less than 200 square feet are not subject to side and rear setback requirements.

2. Accessory buildings 200 square feet and larger shall not be located in the front setback area required for a principal building. Each accessory building 200 square feet and larger shall be located no closer than 10 feet to a side lot line nor closer than 10 feet from a rear lot line.

(b) Accessory Buildings Permitted:

(1) One customary private garage- Subject to the following limitations one customary private garage consisting of a garage attached to a principal residential dwelling or a detached garage is permitted on any single family residential lot. The maximum size of such attached or detached private garage under this subsection shall be limited to 1080 square feet; any square feet in excess of 1080 shall count against the 3% limit on additional accessory buildings provided for in subsequent subsection (2).

(2) In addition to the above attached or detached private garage, one or more detached accessory buildings having a total exterior ground floor area of up to 3% of the total lot area are permitted.

(3) If parcel is less than 5 acres in size, attached garage area must not exceed 75% of the footprint of the useable main floor area of the dwelling unit to which it is attached. A garage shall be considered attached when it is connected to the principal building with a roof structure.

(c) In any “A” or “AR” Zoning District, if a lot or parcel is vacant, an accessory building may be constructed prior to a principal building but shall be located in conformance with all setbacks required for a principal building.

(d) An accessory building shall be used only for accessory uses allowed in the zoning district in which it is located and shall not exceed 35 feet in height from grade.

(e) Residential accessory buildings covered in vinyl, canvas, nylon or other similar membrane materials shall not exceed 200 square feet in ground coverage and such structures shall be securely attached to the ground with approved anchors. Bright contrasting stripes, orange tarp covers, or other carnival-like

colors, materials and patterns shall not be permitted. The buildings shall be maintained in a safe and attractive manner; rips, hanging fabric, leaning frame components, and other potential visual detriments that present an unkempt image shall not be permitted. The buildings shall not detract from or undermine the character or quality of a neighborhood by appearing incongruous or transient. Accessory structures of these types shall not exceed more than one structure per parcel.

Section 21.3 Accessory Building Size Regulations in the “RR” Rural Residential and “RE” Residential Estates Zoning Districts

For all accessory buildings, as defined in this Ordinance, the following regulations shall apply in the “RR” and “RE” Zoning Districts:

(a) Location:

1. Accessory buildings less than 200 square feet on the main floor and not permanently attached to the ground, may be located closer to the front lot line than the front wall of the principal building provided they are not located in the front setback area required for a principal building. Accessory buildings less than 200 square feet are not subject to side and rear setback requirements.
2. Accessory buildings 200 square feet or larger on the main floor, shall be located at least ten (10) feet from a side lot line and at least five (5) feet from a rear lot line. Accessory buildings 200 square feet or larger on the main floor shall not be located closer to the front lot line than the front wall of the principal building provided that the following provisions shall apply:
 - (i) The above stated provision prohibiting an accessory building from being located closer to the front lot line than the front wall of the principal building shall not apply if both the principal building and the accessory building are located at least 200 feet back from the street right-of-way line.
 - (ii) As a special land use, the Planning Commission may approve an accessory building that is located closer to the front lot line than the front wall of the principal building and within the first 200 feet back from the street right-of-way line; provided, however, that no such special land use shall be granted for an accessory building located in the required front yard setback area for the respective zoning district. The approval of any such special land use shall take place at a public meeting of the Planning Commission, and public hearing and special public notice shall be required. In its review of the application, the Planning Commission shall consider the standards applying to all special land uses as listed in Section 19.3. In addition, the accessory building shall be compatible in appearance to the dwelling on the property and dwellings in the area. In determining whether the proposed accessory building is compatible in appearance, the following shall be considered: exterior colors, materials, roof pitch, window coverage, landscaping and other features of the structure and site.

(b) Accessory Buildings Permitted:

(1) One customary private garage-Subject to the following limitations one customary private garage consisting of a garage attached to a principal residential dwelling or a detached garage is permitted on any single family residential lot. The maximum size of such attached or detached private garage under this subsection shall be limited to 1080 square feet; any square feet in excess of 1080 shall count against the 3% limit on additional accessory buildings provided for in subsequent subsection (2).

(2) In addition to the above attached or detached private garage, one or more detached accessory buildings having a total exterior ground floor area of up to 3% of the total lot area are permitted.

(3) If parcel is less than 5 acres in size, attached garage area must not exceed 75% of the footprint of the useable main floor area of the dwelling unit to which it is attached. A garage shall be considered attached when it is connected to the principal building with a roof structure.

(c) Except for waterfront lots in subsection (e) below, an accessory building shall not be constructed on any lot or parcel unless and until a principal building is located on the lot or parcel.

(d) An accessory building shall be used only for accessory uses allowed in the zoning district in which it is located and shall not exceed 35 feet in height from grade.

(e) Waterfront lots. When there is identical ownership of an improved waterfront lot and a vacant lot or parcel across the same public or private road or street and within 200 feet of any portion of the waterfront lot, one accessory building is permitted on the vacant lot or parcel prior to a principal building being located on the vacant lot or parcel. Such accessory building shall be located in conformance with all setbacks required for a principal building. The exterior ground floor area of such accessory building shall not exceed 3% of the total area of the vacant lot or parcel, and it is recommended that such accessory building be located as far to the rear of the vacant lot or parcel as setbacks and topography permit.

(f) Each residential accessory building shall incorporate exterior material finishes compatible with the principal building and others within the neighborhood.

(g) A residential accessory building and driveway approach to the building shall be located or set at a finished grade so that they do not cause rain water to flow into an adjoining property.

(h) Residential accessory buildings covered in vinyl, canvas, nylon or other similar membrane materials shall not exceed 200 square feet in ground coverage

and such structures shall be securely attached to the ground with approved anchors. Bright contrasting stripes, orange tarp covers, or other carnival-like colors, materials and patterns shall not be permitted. The buildings shall be maintained in a safe and attractive manner; rips, hanging fabric, leaning frame components, and other potential visual detriments that present an unkempt image shall not be permitted. The buildings shall not detract from or undermine the character or quality of a neighborhood by appearing incongruous or transient. Accessory structures of these types shall not exceed more than one structure per parcel.

Section 21.4 Accessory Uses – Buildings and Structures

- (a) In all zoning districts, accessory uses of land or building clearly incidental to a permitted principal use are permitted when located on the same lot or parcel.
- (b) *Reserved*
- (c) The minimum distance between a principal building and a detached accessory building shall be 10 feet. The minimum distance between detached accessory buildings shall be ten 10 feet.

Section 21.5 Keeping of Animals

Keeping of animals, other than household pets as defined in Article XXXII, in the “AR” Agricultural-Residential and Rural Residential Zoning District shall be subject to the following standards and provisions of Section 21.6 herein:

- (a) Any building housing animals shall be located no closer than one hundred (100) feet from any existing dwelling on an adjacent property. Animal enclosures or building housing animals in existence prior to construction of a new dwelling within 100 feet thereof shall be considered a permitted use and not a non-conforming use or structure.
- (b) A minimum parcel size of 2 acres shall be required for keeping any animal having an equivalent animal unit of .5 or less. The minimum parcel size for keeping of all other animals and fowl shall be 1.5 acres. (For keeping chickens on parcels less than 1.5 acres, see Section 21.6 Keeping of Chickens)
- (c) The number of animal units kept on any separate parcel of land shall be limited to the following unless kept on land for which a special land use permit has been issued for an intensive livestock operation:

Horses/mules/donkeys/llamas	00.5 unit/acre
Feed cattle	01.0 unit/acre
Dairy cow	01.4 unit/acre
Sheep	10.0 unit/acre
Laying hen	30.0 unit/acre
Turkey	50.0 unit/acre
Ducks/geese	50.0 unit/acre
Pigs	0.25 unit/acre

Rabbits

50.0 unit/acre

- (d) For animals or fowl not listed, the number kept on any separate parcel shall be based on animal units per 1000 pounds live adult animal weight. The Zoning Administrator shall determine in writing the animal(s) per acre allowed by animals not specified herein.
- (e) All animals shall be kept in clean, sanitary facilities as determined by generally accepted agricultural management practices as approved by the Michigan Department of Agriculture.

Sections 21.6 Keeping of Chickens

Within the “RE” Residential Estates, “R-1” Low Density Residential and the “R-2” Medium Density Residential zoning districts, and for parcels less than 1.5 acres in the AR and RR Zoning Districts, any owner or occupant of a one or two-family residential building may keep chickens on the same lot or parcel, subject to requirements set forth in this section.

Chickens shall not be kept on any lot or parcel having an area of less than twenty thousand (20,000) square feet or less than 80 feet of lot width.

The following definitions shall apply for purposes of this section only:

BACKYARD: The area of the lot or parcel bounded by the rear lot line, side lot lines and the line drawn perpendicular to the side lot line at the rear of the residential building.

COOP: A structure intended to house chickens and protect them from severe weather conditions.

ENCLOSURE: A fence placed to keep chickens outdoors within a defined area to prevent free roaming.

The following requirements shall apply to any premises in which chickens are proposed to be kept:

- (a) No more than 8 chickens may be kept on each lot or parcel of 20,000 square feet or more plus 4 more chickens for each additional 10,000 square feet of lot area.
- (b) No rooster shall be kept on premises at any time.
- (c) Outdoor slaughter of chickens on premise is prohibited.
- (d) The chickens shall be provided with a coop and must be kept within an enclosure at all times.
- (e) A coop or enclosure shall not be located closer than 60 feet from any dwelling unit on an adjoining parcel.
- (f) A person shall not keep chickens in any location other than a backyard.

- (g) The coop and enclosure area shall be maintained as to prevent rats, mice or other rodents from being harbored within or under the coop or enclosure area.
- (h) All feed and chicken care items shall be stored or protected so as to prevent rats, mice, or other rodents from gaining access to or coming into contact with them.
- (i) Chickens shall not be housed on a waterfront lot or parcel unless the coop and enclosure area can be located not less than 30 feet from the 100 year flood plain.
- (i) In addition to the requirements set forth in Section 21.5 hereof, provisions must be made for the storage and removal of manure. Manure shall be covered, stored, and confined in such a manner as to not allow the manure or its odors to spread onto abutting properties. No more than three [3] cubic feet of manure shall be stored on the property. All other manure not used for fertilizing shall be removed promptly.

Private restrictions on the use of property shall remain enforceable and take precedence over this section. Private restrictions include but are not limited to deed restrictions, condominium master deed restrictions, neighborhood association by-laws, and covenant deeds. The interpretation and enforcement of the private restrictions is the sole responsibility of the private parties involved.

Any person who violates terms of this section shall be deemed in violation of the zoning ordinance and will be subject to prosecution as a civil infraction.

Section 21.7 Basement Dwellings

The use and occupancy of a basement as defined in Article XXXII and in the residential building code in effect as a dwelling unit is prohibited in all zoning districts.

Section 21.8 Lots and Parcels With More Than One Street Frontage

The required front yard setback shall apply on each public street or private road frontage in all zoning districts.

Section 21.9 Single-Family Dwellings Requirements for all Zoning Districts

All single-family dwelling units built or located in the Township shall conform to the following requirements:

- (a) Each single-family residential building shall have a minimum exterior dimension of 20 feet on any side.
- (b) Each single-family residential building, when located on an approved foundation, shall have all wheels, towing mechanisms and tongues removed and no portion of the undercarriage shall be visible from outdoors.

- (c) All single-family structures shall be secured to the foundation and be watertight, as required by the applicable residential building code.
- (d) Additions to any building containing a dwelling unit shall meet requirements of the Michigan Residential Building Code.

Section 21.10 Floor Area Minimums for Dwellings in all Zoning Districts

(a) Single-Family Detached Dwellings

- (1) One-story dwellings shall have no less than 816 square feet of floor area.
- (2) One and one-half and 2 story dwellings shall have no less than 672 square feet of floor area on the first floor level.

(b) Two-Family Dwellings

- (1) A one-story, 2 family building shall include no less than 600 square feet in each dwelling unit.
- (2) One and one-half and two-story, two-family buildings shall include no less than 500 square feet in each dwelling unit on the first floor level.

(c) Multiple-Family Dwellings

- (1) Each dwelling unit within a residential building containing 3 or more dwelling units shall have a minimum floor area of 500 square feet.

(d) Dwellings within a Planned Unit Development

- (1) Minimum floor area for all types of dwellings shall conform to this section, unless a different minimum floor area is approved by the Planning Commission for each type of dwelling unit. Approval of smaller floor area for any dwelling unit shall be based on review of proposed exterior building finishes and proposed site landscaping. The objective of this incentive is to obtain higher quality exterior finishes and site landscaping in exchange for a smaller floor area.

Section 21.11 Essential Services

The erection, construction, alteration, or maintenance by public utilities or governmental units, boards, or commissions of overhead or underground gas, electrical, steam or water distribution, transmission, collection, communication or supply systems including mains, drains, sewers, pipes, conduits, wires, cables, fire alarm boxes, police call boxes, traffic signals, hydrants, towers, poles, electrical substations, gas regulator stations, utility pump and metering stations and other similar equipment and accessories in connection therewith which are reasonably necessary for the furnishing of adequate service by such public utility or municipal department or commission for public health, safety or general welfare is permitted by right in all zoning districts.

Section 21.12 Fences

The following standards shall apply to all fences installed after the effective date of this Ordinance or fences installed to replace fencing present on the effective date of this Ordinance:

- (a) A fence shall not be placed in any portion of a public road right-of-way or private road easement.
- (b) A fence located in a front yard setback shall not exceed 4 feet in height.
- (c) Fencing located in a side or rear yard shall not exceed 6 feet in height.
- (d) No fence shall be located within a clear vision area as regulated in Section 21.20.
- (e) Fencing is not permitted in any waterfront lot or parcel between the waterfront and the principal building, excluding required swimming pool enclosures to assure safety.
- (f) All fences shall be maintained in good condition.

Fencing in Platted Subdivisions or Site Condominium Subdivisions, in Addition to (a) – (f) Above, Shall also Conform to the Following Standards:

- (a) The maximum fence height in any actual front setback area shall not exceed 30 inches and said fence shall not be completely opaque.
- (b) Side and rear yard fencing, if opaque, shall be installed with a finished side [no support posts showing] facing adjoining property or the adjoining street.
- (c) An access gate facing the adjoining street, no less than four (4) feet in width shall be installed whenever a fence forms a complete enclosure in any side or rear yard or both.

Section 21.13 Health Department – Required Approvals

A zoning permit for new construction or any addition to an existing building shall not be issued unless and until the Barry-Eaton District Health Department has issued written approval under the following circumstances.

- (a) **New dwelling** – Approved water well and septic construction permits for the lot or parcel on which a new water well and on-site wastewater disposal system are to be located to serve the dwelling.
- (b) **New Residential Accessory Building or Addition Thereto** – An approved “Evaluation of Existing Well or Septic System” to verify the building will not be located on an existing wellhead area, septic tank, drainfield, or reserve drainfield area.
- (c) **Addition to an Existing Dwelling** – An approved “Evaluation of Existing Well and Septic System” to verify the building will not be located on an existing wellhead area, septic tank, drainfield or reserve drainfield area.
- (d) **All Other Buildings** – An approved site evaluation from the Barry-Eaton District Health Department for the lot or parcel on which the new water well and on-site wastewater disposal system is to be located to serve the building.

Section 21.14 Swimming Pool Regulations

An in-ground swimming pool on privately owned property shall be considered an accessory structure for purposes of this Ordinance and shall require issuance of a zoning permit. Fencing, gates, pool decks, safety covers and door alarm systems shall comply with the State Building Code. *[As Amended Ordinance 2019-01 effective 9-21-2019]*

Above-ground swimming pools with side wall height of 36 inches or more need not be fenced, provided that entry steps providing access to the pool are secured by an enclosure and a self-closing and latching gate with latch on the pool side of the gate.

Section 21.15 Vehicle Repair in Residential Zoning District R-E, R-1, R-2, R-3 and R-4.

Outdoor and non-commercial and not for fee repair of motor vehicles is permitted in these residential districts. Vehicle(s) undergoing repairs may be stored outdoors for a period no longer than 21 consecutive days. A longer period may be allowed by the Zoning Administrator on request of owner of the premises.

Outdoor and indoor, non-commercial and not for fee repair of motor vehicles is permitted by right in District A, A-R, and R-R.

Section 21.16 Dismantled, Non-operating and Unlicensed Motor Vehicles

No person shall cause to be stored outdoors on any lot or parcel dismantled, non-operating or unlicensed motor vehicles or parts thereof.

Section 21.17 Trash, Litter and Junk on any Premises

No person shall cause to be accumulated on any lot or parcel, trash, litter or junk. This shall include all forms of waste material, metal, machinery, garbage or any other used matter. This requirement shall not apply to facilities approved for materials recycling by the Planning Commission.

Section 21.18 Recreational Vehicle Parking in All Residential Zoning Districts

Recreational vehicles, as defined in this Ordinance, shall not be stored in a required front yard setback in all Residential Zoning Districts. This requirement does not include short-term parking in the driveway for purposes of loading/unloading or cleaning of the recreational vehicle. *[As Amended Ordinance 2019-01 effective 9-21-2019]*

Section 21.19 Refuse Management in all Zoning Districts

Containers placed outdoors, used for waste disposal, grease disposal, and/or recycling, shall be located and screened in accordance with regulations in this section. For existing parcels or buildings served by outdoor containers, a change in location shall require compliance with requirements of this section. Containers under 96 gallons and serving single family homes are exempt from this section.

- (a) **Location.** Containers shall be placed in the rear yard or side yard, unless otherwise approved by the Planning Commission. For commercial and industrial sites adjoining residential use or zoning, the container shall be placed not closer than 20 feet to a residential property line.
- (b) **Access.** The container shall be positioned to allow convenient access by waste management vehicles used to empty the container. There shall be no interference or conflict between necessary vehicle circulation to empty or place the container and required on-site parking.
- (c) **Base.** A concrete slab shall be installed that is no less than 2 feet wider on each side than the width of the container. The base shall extend no less than 6 feet in front of the container enclosure access gate to support the nearest axle of the waste management vehicle.
- (d) **Required Screening.** All outdoor containers shall have an enclosing lid or cover and be enclosed on three sides with an access gate on the fourth side. A separate pedestrian access shall be provided to each container. The enclosure shall consist of an earth berm, brick, wood or decorative concrete finish with a height of 6 feet or at least 1 foot above the height of the container, whichever is greater. The access gate shall be made of treated wood or decorative aluminum with center latch to keep the gate in place or a rolling gate with latch. Enclosure design and layout shall conform with **Figure 21.19** below.

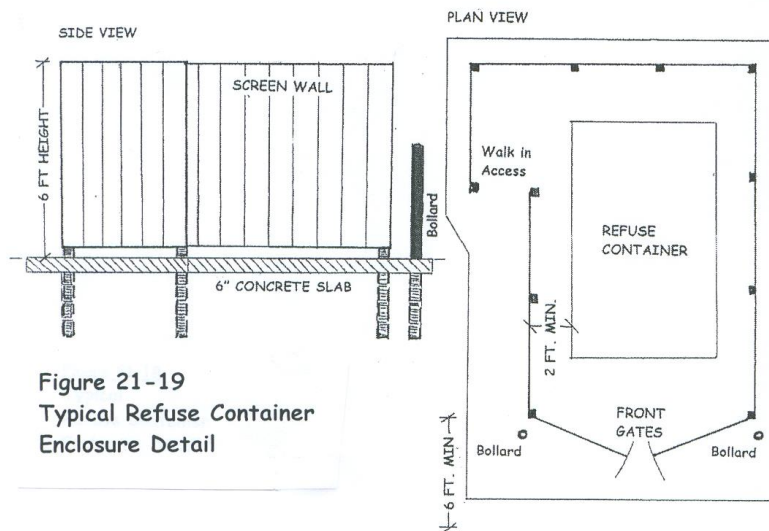


Figure 21-19
Typical Refuse Container
Enclosure Detail

**Section
21.20
Height**

Exceptions

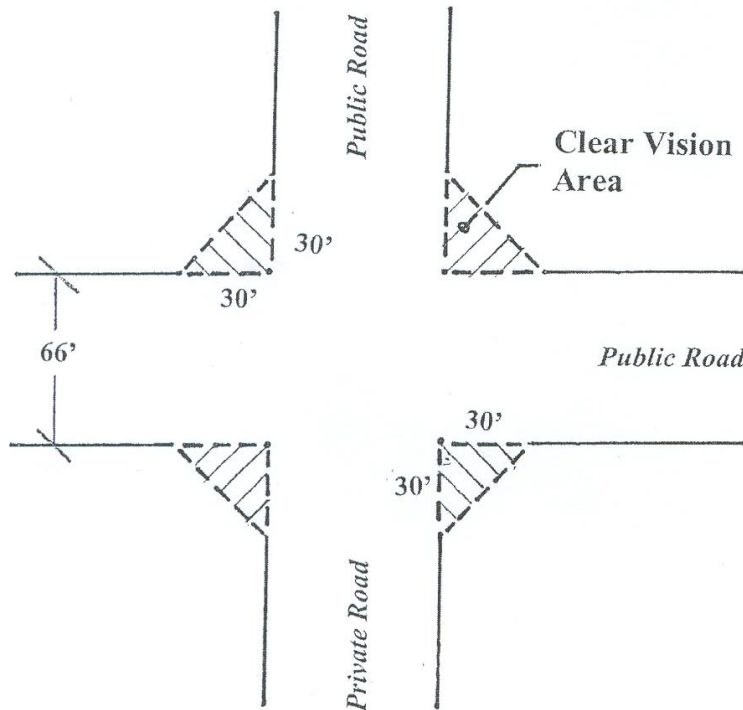
The following building elements and structures shall be exempt from the maximum height regulations in all zoning districts:

- (a) Parapet walls, chimneys and mechanized penthouses integral to a building, not to exceed 4 feet in height above the average roof line.
- (b) Cooling towers, elevator bulkheads or enclosures, fire towers, silos, grain elevators and elevated water storage facilities.
- (c) Towers that are regulated and controlled by the Federal Communication Commission and/or Federal Aviation Administration.
- (d) Residential or Commercial wind generation and wireless communication towers, subject however, to other requirements within this Ordinance.

Section 21.21 Clear Vision Areas

No building structures shall be located or built within a triangle area 30 feet from intersecting public road right-of-way lines or public road right-of-way line and private road easement line. The required clear vision area is as depicted in *Figure 21.21*.

Figure 21.21
Clear Vision Area
Illustration



Section 21.22 Width to Depth Ratio for all Newly Created Lots or Parcels

Every lot or parcel of land created hereafter in a plat, site condominium or by land division shall have a depth from front lot line to back lot line not greater than four (4) times the lot, unit or parcel width at the required front setback line.

Section 21.23 Dangerous Buildings

The Zoning Administrator, in collaboration with the building code official, may order the owner of premises to raze and remove or make safe by repair a dilapidated or dangerous building. A partially built structure where cessation of construction extends to more than 730 days shall be considered a dangerous building.

Section 21.24 Moving of Buildings

Moving of an existing building to a new location shall be considered new construction and all applicable zoning and building code requirements shall apply. A building shall not be relocated until a zoning permit has been issued by the Zoning Administrator.

Section 21.25 Demolition of Buildings

A building owner shall not demolish, in whole or in part, any building or structure unless a demolition permit has been obtained from the building code official with jurisdiction.

Section 21.26 Standards for All Private Roads

Whenever a lot or parcel exists or is proposed without required minimum frontage on a public road, said lot or parcel shall be served by a public road extension or a private road meeting requirements of this section. For all private roads, the following requirements and standards shall apply:

- (a) Private roads are permitted only when located in the “AR” Agricultural-Residential and “RR” Rural Residential Zoning Districts.
- (b) Private roads serving 5 or more lots or parcels shall require approval by the Planning Commission for a preliminary private road permit.
- (c) Whenever land divisions are intended companion with a proposed private road, the private road application shall also include a survey layout and description of all lots or parcels to be served by the private road.
- (d) The preliminary private road permit process for all private roads is as follows:
 - (1) Owner submits application for preliminary private road together with construction plans and specifications. If private road serves more than one (1) parcel, road plans and specifications must be prepared by a registered professional engineer along with

- proposed deed restrictions addressing future maintenance of the private road.
- (2) The Zoning Administrator reviews the application material. For private road serving 5 or more lots or parcels, the application is referred to the Planning Commission.
 - (3) The Planning Commission shall hold a duly noticed public hearing in accordance with Section 103 of 110 PA 2006 as amended, (MCL 125.3103).
 - (4) The Planning Commission or Zoning Administrator shall approve a preliminary private road application if it meets standards contained in this section.
- (e) The road agency with jurisdiction over the public roadway to which the private road is connected shall be provided the proposed private road construction plans, by the owner. The Planning Commission or Zoning Administrator shall take no action on the preliminary private road application until written approval or approval with conditions is received from the road agency.
- (f) For Private Roads serving only one (1) parcel
- (1) Each private road shall be located entirely within an easement not less than 66 feet in width.
 - (2) The minimum width of the traveled surface shall be 12 feet.
 - (3) The traveled surface shall be graded and well drained to allow passage anytime of the year.
 - (4) The traveled surface shall be maintained with a minimum clear height of 14 feet.
 - (5) The traveled surface shall be built and maintained to within 50 feet of the structure in which the dwelling is located.
 - (6) A turn out or turn around shall be provided with a radius of 42 feet or leg length of 35 feet.
 - (7) The proposed traveled surface centerline, width and location, shall be shown on a site sketch filed with the Zoning Administrator. The owner or applicant shall place centerline stakes for the proposed traveled surface at intervals of 50 feet in straight sections, 20 feet through curves.
 - (8) Maximum private road grade shall be 10 percent.
 - (9) Once the design and location is approved by the Zoning Administrator, a private road serving one parcel within the easement may be constructed.
- (g) For Private Roads serving 2-4 parcels
- (1) Each private road shall be centered within an easement not less than 66 feet in width.
 - (2) The road base shall consist of not less than 12-inches of compacted sand and 6 inches of 22A gravel compacted in place. 22A gravel shall be used where pavement will be applied as the surface course. 23A gravel shall be used where the gravel will

- remain exposed. Substitutions may be allowed if approved by the engineer.
- (3) Where existing soils do not allow for natural drainage, sand subbase must be extended to adjacent ditch or 4 inch underdrain must be installed and outlet to a suitable location.
 - (4) For gravel or paved roads, the cross-section shall be Twelve (12) foot traveled width with at least four (4) feet cleared on each side. Wider travel width around curves may be required to accommodate emergency vehicles. The side ditch slope shall not exceed 1 foot vertical to each 4 feet horizontal.
 - (5) For paved roads, no less than 3 inches of asphalt, placed in two lifts, shall be applied. Asphalt must consist of at least 1.5 inches of MDOT base mix and at least 1.5 inches of MDOT surface mix.
 - (6) For concrete roads, no less than 6 inches shall be applied.
 - (7) Overhead trees and limbs must be maintained to no less than 14' above ground over a cleared travel width of twenty (20) feet.
 - (8) Private Roads longer than 400 feet must include emergency passing areas every 400 feet. Emergency passing areas must have a travel width of at least 20 feet wide and 80 feet long and must be maintained and passable all year.
 - (9) Storm water management shall consist of ditches, and storm sewer designed to the 10 year storm and basins designed to a 25 year storm event and shall not result in an increase in storm water run-off flow rate from the subject property onto any adjoining land. All improvements must be able to convey the 100-year storm without resulting in property damage on or off the improved site. Storm water run-off calculations prepared by a professional engineer shall be included with the construction plans.
 - (10) Maximum private road grade shall be 10 percent. The maximum road grade may be reduced if determined to be a public safety risk by the Township or its engineer.
 - (11) Any proposed cul-de-sac shall have a minimum right-of-way radius of 50 feet and a minimum running surface radius of 42 feet. The cul-de-sac may have a center landscape island, however, the minimum paved or gravel lane width shall be 20 feet.
 - (12) "T" type private road endings are not permitted.
 - (13) Construction plans shall include an erosion control plan.
 - (14) Construction plans shall include private road sign detail and location[s].
 - (15) Private roads shall have an asphalt approach extending 30 feet from the existing road edge whenever a private road intersects a paved road.
- (h) For Private roads serving 5 or more parcels construction plans shall conform to road design and construction standards as follows:
- (1) Each private road shall be centered within an easement not less than 66 feet in width.

- (2) The road base shall consist of not less than 12 inches of compacted sand and 6 inches of gravel compacted in place. 22A gravel shall be used where pavement will be applied as the surface course. 23A gravel shall be used where the gravel will remain exposed. Substitutions may be allowed if approved by the engineer.
 - (3) For gravel roads, the cross-section shall be 22 feet with side ditch slope not exceeding 1 foot vertical to each 4 feet horizontal.
 - (4) For paved roads, the cross-section shall be 18 feet with 2 foot shoulders on each side with side ditch slope not exceeding 1 foot vertical to each 4 feet horizontal.
 - (5) For paved roads, no less than 3 inches of asphalt placed in two lifts shall be applied. Asphalt must consist of at least 1.5 inches of MDOT base mix and at least 1.5 inches of MDOT surface mix.
 - (6) If concrete, no less than 6 inches shall be applied.
 - (7) Overhead trees and limbs must be maintained to no less than 14' above ground over a cleared travel width of twenty (20) feet.
 - (8) Storm water management shall consist of ditches and storm sewer designed to the 10-year storm and basins designed to a 25 year storm event and shall not result in an increase in storm water run-off from the subject property onto any adjoining land. All improvements must be able to convey the 100 year storm without resulting in property damage from surface storm water on or off the improved site. Storm water run-off calculations prepared by a professional engineer shall be included with the construction plans.
 - (9) Maximum private road grade shall be 6 percent.
 - (10) Any proposed cul-de-sac shall have a minimum right-of-way radius of 50 feet and a minimum running surface radius of 42 feet. The cul-de-sac may have a center landscape island, however, the minimum paved or gravel lane width shall be 20 feet.
 - (11) "T" type private road endings are not permitted.
 - (12) Construction plans shall include an erosion control plan.
 - (13) Construction plans shall include private road sign detail and location[s].
 - (14) A separate sidewalk or pathway shall be required within the easement if determined to be necessary by the Planning Commission unless waived by the Planning Commission for good reason shown.
 - (15) Private roads serving five (5) or more parcels shall have an asphalt approach extending 30 feet from the existing road edge whenever a private road intersects a paved road.
- (i) The applicant for approval of a private street, together with any other owners or parties in interest, shall submit to the Township a recordable private street maintenance agreement, signed by all owners of the easement or right-of-way for the private street and by all other parties having any interest therein. Such agreement shall provide for and assure

that the private street shall be regularly maintained, repaired and snowplowed so as to assure that the street shall be safe for travel at all times. The agreement shall also provide for the payment of all costs and expenses of such maintenance, repair and snowplowing by all or any of the parties in interest.

- (j) The deed restrictions governing maintenance of the private road shall be recorded with the Barry County Register of Deeds and a copy of the recorded document filed with the Zoning Administrator prior to issuance of a Certificate of Completion.
- (k) Land divisions companion to a private road improvement will not be approved until the Certificate of Private Road Completion is signed and filed with the Zoning Administrator.
- (l) A private road may connect to or extend an existing private road, so long as the existing private road conforms to design standards of this section.

Section 21.27 Temporary Uses of Land or Building

Temporary use[s] of land may be established for a period not to exceed 180 days in any “A”, “AR”, “RR” or “RE” Zoning District. Such use[s] shall conform to the zoning district in which they are located. A permit application to establish temporary use[s] shall be filed with the Zoning Administrator prior to establishment of such use[s]. The Zoning Administrator shall approve the temporary use[s] application if all applicable regulations of this Ordinance are met. The application shall include a site plan or building occupancy plan or both.

Section 21.28 Temporary Structures

Temporary structures incidental to site or building construction may be authorized by the Zoning Administrator by issuance of a temporary structure permit. The permit shall specify the size and location for the temporary structure and method of addressing waste water disposal. A temporary structure permit shall be limited to a 12-month period. A temporary structure permit may be renewed for up to an additional 12-month period if construction is continuing. The maximum period for any temporary structure shall be 24 months.

Section 21.29 Maximum Site Grades

For any land development involving earth changes, any new, finished grades established shall not exceed one foot vertical rise to two feet horizontal. All areas of a site on which grading and grade changes occur shall be stabilized with at least 2 inches of top soil, seed and mulch.

Section 21.30 Plat and Site Condominium Subdivision Regulations

For any parcel of land on which a plat under 288 PA 1967, as amended and 591 PA 1996, [MCL 560.101 et seq] as amended, or a site condominium subdivision

under 59 PA 1978, [MCL 559.101 et seq] as amended, the following requirements shall apply:

(a) Procedure – Preliminary

A preliminary Plat or Site Condominium plan shall be filed with the Zoning Administrator for review by the Planning Commission. The preliminary application for Plat or Site Condominium plan approval shall include:

1. Completed application form.
2. A project location map, plan scale, north arrow and seal of the professional engineer.
3. Proposed internal street layout, cross-section and vertical alignment.
4. Lot or unit layout and dimensions in the form of a preliminary plat or site condominium plan.
5. Existing and proposed site grades.
6. Proposed drainage facilities.
7. Street and project signage.
8. Surface water features, wetland areas and woodland shall be depicted.
9. Draft deed restrictions or master deed.

The Planning Commission shall hold a duly noticed public hearing on the preliminary plat or site condominium. The Planning Commission will not take action on the plan until the public hearing minutes are reviewed and approved.

The Planning Commission may deny the plan with reasons stated, approve the plan or approve the plan with conditions.

(b) Plat or Site Condominium Subdivisions Design Standards

The following design standards shall apply to all Plat or Site Condominium developments:

- (1) Private streets or roads are not permitted. All interior streets or roads shall be designed and constructed to meet standards of the Barry County Road Commission or other public agency with jurisdiction. Construction inspection of all internal streets or roads shall conform to requirements of the public agency with jurisdiction and shall be dedicated as public streets or roads.
- (2) Storm drainage shall outlet to an established Barry County drain or on-site storm water retention shall be required. The storm water management design shall conform to best management practices and standards contained in Article XXII, Section 22.2.
- (3) For sites not served by public sanitary sewer, all proposed lots or units shall be evaluated by the Barry-Eaton District Health Department [BEDHD] as approved for on-site wastewater disposal. The Planning Commission shall not give approval to the preliminary plan until all lots or parcels have been approved by the B.E.D.H.D.

- (4) Street lighting shall be required at each internal intersection.
- (5) All utilities, including electric, gas, telephone, catv, etc. shall be placed underground in dedicated easements.
- (6) Natural areas including surface water and wetlands on the site shall be included in common open space areas and shall not be included within any lot or unit, to the extent possible.
- (7) Pedestrian facilities in the form of sidewalks shall be directly accessible from each lot or unit. Alternative common area pedestrian facilities may be allowed if approved by the Planning Commission.
- (8) Other design standards as applicable within this Ordinance.

(c) Procedure – Final

Final plat or site condominium approval shall be filed with the Zoning Administrator for review by the Planning Commission

All required site improvements shall be completed at the time of Planning Commission review of the final Plat or Condominium Master Deed and plan.

The final plan shall be filed in recordable form.

The Planning Commission shall review the final plat or site condominium plan to verify all required improvements have been completed in accordance with the approved preliminary plan. If completed, the Planning Commission shall recommend to the Township Board final plat or site condominium plan approval.

The Township Board may deny with reasons stated, approve, or approve with conditions, the final plat or site condominium plan and Master Deed.

(d) Performance Guarantee

In lieu of completing all required site improvements, the proprietor may file a performance guaranty based on provisions of Section 20.9 of this Ordinance.

Section 21.31 Outdoor Lighting Standards for all Zoning Districts

- (a) **Light Levels:** All outdoor lighting in all zoning districts used to light the general area of a specific site shall be shielded to reduce glare and shall be arranged to reflect lights away from property lines. Light shall not exceed more than 0.5 footcandle at a residential lot line. Light shall not exceed more than 1.0 footcandle at a non-residential lot line, including road frontage. The maximum light level on the site shall be 10 footcandles. All illuminaries shall be metal halide.
- (b) **Light Fixtures:** Outdoor lighting in all zoning districts shall be directed toward and confined to the ground areas of lawns or parking lots except as noted elsewhere in this section. Lighting shall utilize cut-off fixtures that are recessed sufficiently such that the light source is not visible from

off site. Bollard lights are permitted to light driveways, parking areas and pedestrian areas. Floodlight type fixtures shall not be permitted except for building accent and sign lighting.

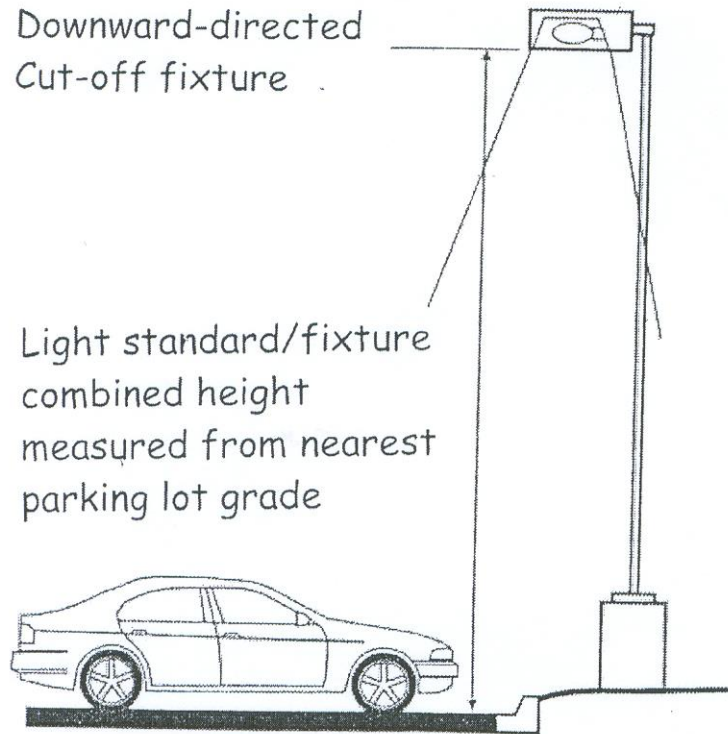


Figure 21.31

- (c) **Fixture Height:** Light standards shall have a maximum height of 15 feet where adjacent to a residential district. Light standards shall have a maximum height of 25 feet where adjacent to non-residential districts.
- (d) **Ornamental Lighting:** The requirement of cut-off type downward directed luminaries may be waived for period style lighting which is part of an overall architectural theme, as approved by the Planning Commission. The Planning Commission may require period style lighting for commercial sites within any Office or General Commercial Zoning district.
- (e) **Sign and Building Lighting:** All lighting in non-residential districts used for external illumination of buildings to feature said buildings or to illuminate a permitted wall sign, shall be placed and shielded so not to interfere with the vision of motorists on adjacent highways or pedestrians on adjacent property.
- (f) **Sign Lighting:** Illumination of signs shall comply with requirements of Article XXIV.

- (g) **Photometric Plan:** The Planning Commission may require the submission of a photometric plan prepared by an electrical engineer graphically illustrating the planned layout and footcandles of the site lighting. The evaluation of the photometric is intended to permit the Planning Commission to determine potential adverse effects the site lighting may have on adjoining properties and motorists. Compliance with the lighting design criteria shall be demonstrated by submitting the following for review:
- (1) Lighting plan showing light fixture locations, type designations and heights;
 - (2) Photometric plan showing horizontal luminance levels in a point by point format with contour lines. The photometric plan shall be provided for a full parking lot within an automobile dealership. Canopy lighting will also be included in luminance levels;
 - (3) Lighting standards and illuminaries specifications and data sheets;
 - (4) Any other presentations required to convey the intent of the design.

Section 21.32 Governmental Buildings

Governmental buildings may be located in any zoning district, subject to minimum lot area and frontage requirements of the zoning district in which they are located, site plan review and other applicable regulations in this ordinance.

Section 21.33 Keyhole Development

It is hereby found that keyhole development [also known as funneling] is harmful to the public health, safety and welfare and constitutes an improper use of land and natural resources in that it causes overcrowding of lakes, streams, and lands adjacent to them, contributes to pollution and degradation of public waters, creates hazards to life and property by increasing the risk of boating accidents, adversely affects the recreational experiences of both riparian owners and the general public, and adversely impacts property values of shoreline properties located near funnel developments.

It is the declared purpose of this section to regulate keyhole development so as to protect the health, safety and general welfare of the citizens of the Township and to carry out the intent of the Michigan Zoning Enabling Act, as amended.

Waterfront, riparian lots or parcels may not be used for common access to a waterfront from non-riparian lots or parcels, except in conformance with the following regulations:

- (a) Any development in any zoning district which has shoreland area may not permit more than 1 dwelling unit to the use of each 40 feet of lake frontage in such common lakefront area as measured along at the water's edge of the normal high water mark of the lake or stream. There shall not be more than

one dock for each 40 feet of lake frontage and no more than two boats may be moored at each dock.

- (b) The foregoing standards shall apply to any parcel regardless of whether access to the water shall be gained by easement, common fee ownership, single fee ownership, or lease.
- (c) Additional waterfront use and development regulations in this Ordinance may apply.

Section 21.34 Wind Energy Systems

The purpose of this section is to establish standards for locating and construction of electrical generating devices from wind energy. This section addresses two types of wind energy systems; these are (1) “On-site Use Wind Energy system” which primarily serve the needs of the homeowner and (2) “Utility Grid Wind Energy Systems” intended to serve needs of the community by providing electricity to the utility electrical grid.

(a) Property Setbacks. No part of the wind energy structure, including guy wire anchors, shall extend closer than 10 feet to any side or rear lot line. The minimum setback in any front yard shall be the required front setback for the district in which the wind energy structure is located.

(b) Tower Height. Tower height shall be defined as the height above grade at the base of fixed portion of the tower, excluding the wind turbine and rotor blades.

**Table 21.34
Wind Energy Systems Permit Review, Placement and Tower Height**

System Type	Required Review	Zoning Districts Allowed	Setback Required	Tower Height
On-Site Use Wind Energy System less than 60 feet	Zoning Administrator	A, AR, RR, RE and R-1	Tower Height plus 20% of actual height	Parcels 1.5 acres or less, Maximum building height allowed in zoning district Parcel larger than 1.5 acres, no limit but subject to setback requirement and FAA Regulations
Anemometer Tower less than 60 feet in height	Zoning Administrator	A, AR, RR, RE and R-1	Tower Height plus 20% of actual height	Same as Above
On-Site Use Wind Energy System over 60 feet in height	Planning Commission (1)	A AR	Tower Height plus 20% of actual height	Same as Above

Anemometer Tower over 60 feet in height	Planning Commission (1)	A AR	Tower Height plus 20% of actual height	Same as Above
Utility Grid Wind Energy System	Planning Commission (1)	A AR	Tower Height plus 20% of actual height	Same as Above

(1) *Public Hearing Required.*

(c) Construction Codes. Wind Energy System towers, base and supports shall comply with all applicable state construction and electrical codes, building permit requirements, Federal Aviation Administration [FAA] requirements, the Michigan Airport Zoning Act [23 PA 1950] [MCL 259.431 et seq] the Michigan Tall Structures Act [259 PA 1959] [MCL 259.481] as well as applicable utility, Michigan Public Service Commission and Federal Energy Regulatory Commission interconnection standards. The minimum FAA lighting standards shall not be exceeded. Strobe or spot light illuminaries are prohibited. Tower lighting required by the FAA shall be shielded to the extent necessary to reduce glare and visibility from the ground.

(d) Safety.

(1) Each On-Site Use Wind Energy System shall be automatic braking, governing, or feathering system to prevent uncontrolled rotation or over speeding. All wind towers shall have lightning protection. If the tower is supported by guy wires, the wires shall be clearly visible to a height of at least 8 feet above the guy wire ground anchors. The minimum vertical blade tip clearance from grade shall be 20 feet for a wind energy system employing a horizontal axis rotor.

(2) All Utility Grid Wind Energy Systems shall be designed to prevent unauthorized access to electrical and mechanical components and shall have access gates and/or doors that are kept securely locked at all times when service personnel are not present. A sign no more than 8 square feet shall be placed adjacent to the tower or service building giving emergency contact information. A sign placed at the entry drive shall conform to requirements of Article XXIV of this Ordinance. The minimum vertical blade tip clearance from the service building or ground, whichever is higher, shall be 20 feet.

(e) Visual Impact. A Utility Grid Wind Energy System shall use a tubular tower without guy wires and for each tower shall be finished in a single, non-reflective matte finish or similar design, size, operation and appearance throughout the site. No lettering, company insignia, advertising or graphics shall be on any part of the tower, hub or blades. Nacelles may have lettering that exhibits the manufacturer’s or owner identification. Real property identified in a local, state or federal register of historic places shall be avoided when locating a Utility Grid Wind Energy System.

(f) Environmental Impact. The applicant for a Utility Grid Wind Energy System shall have a third party, qualified professional conduct an analysis to identify and assess any potential impacts on the natural environment including, but not limited to, wetlands and other fragile ecosystems, historical sites, birds and wildlife. The applicant shall take appropriate measures to minimize, eliminate or mitigate

adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any net effects or concerns that shall remain after mitigation efforts. The applicant shall comply with applicable parts of the Michigan Natural Resources and Environmental Protection Act (Act 451 of 1994, MCL 324.101 et seq.)

(g) Noise. Each type of wind energy system shall not exceed 55 decibels (dBA), measured at the nearest property line.

(h) Electromagnetic Interference.

(1) Utility Grid Wind Energy System shall not be installed in any location where its proximity to existing fixed broadcast, retransmission, or reception antennas for radio, television, or wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception unless the applicant provides a replacement signal to the affected party that shall restore reception to at least the level present before operation of the wind energy system.

(2) Each Utility Grid Wind Energy System shall not be installed in any location within the line of sight of an existing microwave communications link where operation of the wind energy system is likely to produce electromagnetic interference in the link's operation, unless the interference is insignificant.

(i) Shadow Flicker. The applicant shall conduct an analysis on potential shadow flicker at occupied structures. The analysis shall identify the locations of shadow flicker that may be caused by the project and the expected durations of the flicker at these locations from sunrise to sunset over the course of a year. The analysis shall identify problem areas where shadow flicker may affect the occupants of the structures and describe measures that shall be taken to eliminate or mitigate the effects.

Section 21.35 Sidewalks and Pathways

The purpose of this section is to set forth standards for pedestrian facilities in all new development thereby creating walkable neighborhoods throughout the Township.

(a) Applicability. Sidewalks or alternative pedestrian facilities shall be required for any development subject to site plan review in Article XX, under the following circumstances:

- (1) Any residential subdivision, site condominium subdivision, or land division of 5 or more parcels with an average lot or unit area of less than 65,340 square feet.
- (2) Any two-family or multiple family residential development.
- (3) All other forms of land use.
- (4) The Planning Commission approves a specific design for alternative pedestrian facilities in lieu of sidewalks so long as all new lots or parcels are directly served.

(b) Construction Standards. The following construction standards shall apply to all pedestrian facilities.

- (1) All sidewalks shall be a minimum 5 feet wide concrete or asphalt and shall be constructed to the specifications of the American Society of Highway and Transportation Officials (AASHTO).
- (2) All bike paths shall be at least 8 feet wide concrete or asphalt and constructed in accordance with the specifications of the AASHTO.
- (3) The Planning Commission may require walking trails within open space areas of residential developments. Trails shall be 6 foot wide crushed aggregate stone or asphalt, or wooden boardwalks in areas with sensitive environmental features. The path shall provide direct access to all lots where the Planning Commission waives the requirement for sidewalks.
- (4) Sidewalks and bike paths shall be installed by the developer within the dedicated street right-of-way, private road access easements or special easement where grades or other factors prevent placement within the right-of-way or access easement.
- (5) Crosswalk pavement markings and signs are required.
- (6) An inclined approach meeting AASHTO standards shall be required where sidewalks and bike paths intersect curbs for barrier-free access to the sidewalk.
- (7) A performance guarantee, in lieu of sidewalk/pathway construction, may be required by the Planning Commission in instances where significant site constraints such as where there are significant grade changes to adjacent undeveloped property or when utility and other infrastructure improvements are planned for the site in the near future. Under these circumstances, the sidewalk/pathway shall be constructed once the site constraints can be eliminated.

Section 21.36 Land Division Regulations

Regulations set forth in this section govern divisions of land under terms of Michigan Public Act 591 of 1996, said land division proposed outside of a platted subdivision or site condominium as regulated by Section 21.30 of this Ordinance.

(a) Land Division Application – Prior to any owner recording or conveying any portion of a parcel in existence and under common ownership on March 31, 1997 an application for land division shall be filed with the Zoning Administrator. Said application for land division shall include:

- (1) Completed land division application form provided by the Township.
- (2) Payment of land division application fee as determined by the Township Board.
- (3) A drawing of each proposed or collective land division[s] prepared by a registered land surveyor, including the remainder of the parent parcel. The survey shall also depict all easements of record, location of existing buildings and distance to proposed property lines.

- (4) A legal description of each parcel to be created and legal description of the remainder of the parent parcel.
- (5) A copy of proposed deed restrictions, if any, that are to run with each newly created parcel.

(b) Land Division Standards – Each new parcel to be created by land division shall meet the minimum lot width and lot area required by the zoning district in which the land division is located and the following requirements:

- (1) A public road or private road shall not bi-sect any newly created parcel.
- (2) A parent parcel in existence as of March 31, 1997 shall not be divided in excess of the number of divisions allowed by law.
- (3) Each new parcel shall not exceed the lot width to depth ratio required in Section 21.22.
- (4) *Reserved (Amended effective 1-21-2017- Ordinance 2017-01).*
- (5) Each new parcel shall have direct frontage on a public road or approved private road not less than the minimum lot width required by the zoning district in which the parcel is located.

(c) Land Division Approval – If the land division application meets requirements of this Ordinance, the Zoning Administrator shall approve the application, subject to the following requirements:

- (1) Verification by the Township Treasurer that all property taxes have been paid and no delinquent taxes exist on the parent parcel.
- (2) A final land survey and legal descriptions for each new parcel sealed by the registered land surveyor.
- (3) Assignment of parcel identification number[s] to each newly created parcel by the Township Assessor.

Section 21.37 Solar Energy Collectors

[As Amended Ordinance 2019-01 effective 9-21-2019]

(a) Purpose. Thornapple Township promotes the effective and efficient use of solar energy collection systems. It is the intent of the Township to permit these systems by regulating the site, design, and installation of such systems to protect the public health, safety and welfare, and to ensure compatibility of land uses in the vicinity of solar energy collectors, as defined in this ordinance, shall comply with the provisions of this Section.

(b) Criteria for the Use of All Solar Energy Equipment.

- (1) Solar energy equipment shall be located in the least visibly obtrusive location where panels would be functional
- (2) Solar energy equipment shall be repaired, replaced or removed within three (3) months of becoming non-functioning.
- (3) Each system shall conform to applicable industry standards including those of the NEC 2014, as amended.

(c) Application for Administrative Review. An applicant who seeks to install building-mounted solar energy equipment or ground-mounted solar energy

collectors totaling less than 600 square feet shall submit an application for administrative review, as provided by the Township. The application shall include the following:

- (1) Photographs of the property's existing conditions.
- (2) Renderings or catalogue cuts of the proposed solar energy equipment
- (3) Certificate of compliance demonstrating that the system has been tested and approved by Underwriter Laboratories (UL) or other approved independent testing agency.
- (4) Plot plan to indicate where the solar energy equipment is to be installed on the property
- (5) Description of the screening to be provided for ground or wall mounted solar energy equipment
- (6) Any fee(s) as determined by the Township Board from time to time.

(d) Exclusions from Administrative Review

- (1) The installation of one (1) solar panel with a total area of less than eight (8) square feet.
- (2) Repair and replacement of existing solar energy equipment, provided that there is no expansion of the size or coverage area of the solar energy equipment.

(e) Building-Mounted Solar Energy Collector Requirements. A building-mounted solar energy collector shall be a permitted accessory use in all zoning districts subject to the following requirements.

- (1) An Administrative Review is required of all building-mounted solar energy collectors permitted as an accessory use.
- (2) Solar energy collectors that are mounted on the roof of a building shall not project more than five (5) feet above the highest point of the roof but, in any event, shall not exceed the maximum building height limitation for the zoning district in which it is located, and shall not project beyond the eaves of the roof.
- (3) Solar energy collectors mounted on the roof of a building shall be only of such weight as can safely be supported by the roof. Proof, thereof, in the form of certification by a professional engineer or other qualified person, shall be submitted to the Township Building official prior to installation; such certification shall be subject to the Building Official's approval.
- (4) Solar energy collectors that are roof-mounted, wall-mounted or are otherwise attached to a building or structure shall be permanently and safely attached to the building or structure. Proof of the safety and reliability of the means of such attachment shall be submitted to the Building Official prior to installation; such proof shall be subject to the Building Official's approval.

- (5) Solar energy collectors that are wall-mounted shall not exceed the height of the building wall to which they are attached.
 - (6) Solar energy collectors shall not be mounted on a building wall that is parallel to an adjacent public right-of-way.
 - (7) The exterior surfaces of solar energy collectors that are mounted on the roof or on a wall of a building, or are otherwise attached to a building or structure, shall be generally neutral in color and substantially non-reflective of light.
 - (8) Solar energy collectors shall be installed, maintained, and used only in accordance with the manufacturer's directions. Upon request, a copy of such directions shall be submitted to the Township Building Official prior to installation. The Building Official may inspect the completed installation to verify compliance with the manufacturer's directions.
 - (9) Solar energy collectors, and the installation and use thereof, shall comply with the State construction code, the electrical code, and other applicable codes and ordinances.
- (f) Ground-Mounted Solar Energy Collector Requirements.** A ground-mounted solar energy collector system shall be subject to the following requirements.
- (1) Commercial ground-mounted solar energy collector systems and fields are subject to a Special Land Use requiring approval by the Planning Commission in the following zoning districts: Agriculture, Agriculture Residential, Rural Residential, Office, and Commercial Zoning Districts.
 - (2) Ground-mounted solar collectors less than 600 square feet are permitted as an accessory use in all zoning districts and are subject to Administrative Review.
 - (3) Ground-mounted solar collectors 600 square feet and greater shall be considered a Solar Farm and shall be subject to a Special Land Use requiring approval by the Planning Commission.
 - (4) Ground mounted solar energy collectors shall be located only as follows:
 - a. They may be located in the rear yard and side yard, but not in the required rear yard setback unless permitted by the Planning Commission in its approval of a special land use.
 - b. They may be located in the front yard only if permitted by the Planning Commission as a special land use but, in any event, they shall not be located in the front yard setback.
 - (5) Ground mounted solar energy collectors shall not exceed sixteen (16) feet in height, measured from the ground at the base of such equipment.
 - (6) Total area of all ground mounted solar energy collectors on a lot shall be limited as follows:

- a. Residential ground mounted solar arrays shall not exceed 3% of lot area.
 - b. Commercial ground mounted solar energy collector systems lot coverage is subject to Planning Commission review.
- (7) Solar energy collectors shall be permanently and safely attached to the ground. Proof of the safety and reliability of the means of such attachment shall be submitted with the special use application and shall be subject to the Planning Commission’s approval.
- (8) Solar energy collectors shall be installed, maintained and used only in accordance with the manufacturer’s directions. A copy of such directions shall be submitted with the Special Use application. The Special Use, if granted, may be subject to the Building Official’s inspection to determine compliance with the manufacturer’s directions.
- (9) The exterior surfaces of solar energy collectors shall be generally neutral in color and substantially non-reflective of light.
- (10) Ground-mounted solar energy collectors, and the installation and use thereof, shall comply with the State construction code, the electrical code and other applicable Township codes and ordinances.
- (11) The Special Use may include terms and conditions in addition to those stated in this subsection.

Section 21.38 Common Open Space Residential Development

Common Open Space Residential Developments are subject to the following requirements:

(a) Site Development Standards:

- (1) A minimum gross site area of not less than 20 acres.
- (2) A minimum gross site area of 65,340 square feet for each proposed lot or condominium unit.
- (3) A minimum net site area for each proposed lot or condominium unit as follows:

For OSRD without public sanitary sewer	38,000 square feet
For OSRD with public sanitary sewer	15,000 square feet
For OSRD with public sewer and water	12,000 square feet

- (4) The minimum lot width for each principle building at the required building setback line shall be as follows:

Single Family Dwellings:

- a. Not served by public sanitary sewer 110 feet
- b. Served by public sanitary sewer 85 feet
- c. Served by public sewer and water 75 feet

Buildings with 2-4 Dwelling Units:

- a. Not served by public sanitary sewer 180 feet
- b. Served by public sanitary sewer 120 feet
- c. Served by public sewer and water 110 feet

- (5) Yard requirements for all lots, site condo units or parcel on which condominium units as located shall be as follows:

	<u>Front Yard</u>	<u>Side Yard</u>	<u>Rear Yard</u>
Without Public Sewer	40 ft.	20 ft.	34 ft.
With Public Sewer	30 ft.	10 ft.	30 ft.

- (6) Common open area shall comprise not less than 35 percent of the gross site area.
- (7) The development may be served by public roads built to the standards of the Barry County Road Commission or paved private roads meeting standards of the Township, however, cul-de-sacs shall have a landscaped median centered in the cul-de-sac and having a 20 foot diameter.
- (8) The Barry-Eaton Health Department, for on-site wastewater disposal and well water supply shall approve each proposed lot or unit. An engineered public sanitary sewer system may be provided in lieu of Barry-Eaton Health Department approval of individual septic systems and drain fields. Common systems for either utility may be permitted if approved by the Health Department, Michigan Department of Public Health and/or Michigan Department of Environmental Quality, based on permits required by law.
- (9) Wetlands, 100-year floodplains and surface waters shall be incorporated into common open space to the extent possible.
- (10) A common open space residential development may include buildings containing from 1-4 dwelling units so long as the required minimum net site area per dwelling is provided.
- (11) All required site improvements shall be completed and inspected by the Zoning Administrator or a professional engineer acting as an agent for Thornapple Township. Variations from an approved final plan shall require an amendment.
- (12) If the common open space development:
 - (a) Is a subdivision under the Subdivision Control Act of 1967, [MCL 560.101 et seq] as amended, then all requirements of the Township Subdivision Control Ordinance shall be met in addition to requirements herein.
 - (b) Is a site condominium under terms of the Condominium act of 1978, as amended, then the development shall comply with requirements of Section 21.30 in addition to requirements herein.
 - (c) Is a land division including more than 5 lots under terms of the

Land Division Act of 1996, [MCL 560.101 et seq] as amended, then the development shall meet all requirements of Section 21.35 of this Ordinance in addition to requirements herein.

- (13) Each common open space residential development may have, at a minimum, improved 5 feet wide pedestrian walkways physically separate from roadways with the OSRD, conveniently located to each lot unit. The walkway shall be covered by a surface other than grass, dirt or wood chips and shall be well drained. Said walkway shall provide access to the common open space areas. Walkways on a parcel abutting an established public trail or trail right-of-way shall connect to such trail or right-of-way. If pedestrian walkways are provided as prescribed above, a walkway credit of one additional lot or unit will be granted to the developer for each 20 lots or units having direct access to the pathway. If pathways are provided, all lots or units shall have direct access to such pathways.
- (14) Every building containing a dwelling unit shall have the architectural appearance of a single family dwelling including but limited to:
 - (a) A single entry door on the street side of the dwelling.
 - (b) Requirements of Sections 21.9 and 21.10.
- (15) Each detached accessory building shall be of similar architectural style and exterior materials finish as the principal building.

(b) Site Plan Requirements:

- (1) a pre-application conference in accordance with Section 20.5(c) with the developer providing an OSRD sketch plan together with a sketch plan depicting a non-OSRD layout meeting requirements of the zoning district in which the parcel is located. The non-OSRD plan will be used to determine the maximum number of allowable lots or condominium units in the OSRD, notwithstanding pathway credits as provided herein.
- (2) Following the pre-application conference, a preliminary OSRD site plan with content as required in Section 20.4(b) may be filed with the Planning Commission. If private roads are proposed for the OSRD, an application for special use approval for private roads shall be filed concurrently with the application for site plan approval. The planning Commission may elect, whether or not private roads are proposed, to hold a public meeting on the OSRD site plan and give prior notice to all property owners within five hundred feet (500) of the subject parcel. If the preliminary site plan is approved by the Planning Commission, the developer may then submit a final development plan for one or more phases of the OSRD, consistent with requirements of Section 20.4(b) and including construction documents and specifications. No condominium documents, land restrictions or new lots or units may be recorded with the Barry County Register of Deeds for the subject parcel unless and until a final site plan has been approved by the Planning Commission.

Sections 21.39 Driveways to Single Family and Two Family Dwellings

Each new or relocated driveway providing access from a public or private road to a single family or two family dwelling that is 150 feet or more in length shall conform to the following design standards:

- (a) The minimum width of the traveled surface shall be 12 feet.
- (b) The traveled surface shall be graded and well drained to allow passage anytime of the year.
- (c) Each driveway shall be maintained with a minimum clear height of 14 feet.
- (d) The driveway traveled surface shall be built and maintained to within 50 feet of the structure in which the dwelling is located.
- (e) A turn out or turn around shall be provided with a radius of 42 feet or leg length of 35 feet.
- (f) No driveway shall cross a surface water utilizing a privately built and maintained bridge, except a private bridge may be built and used for emergency vehicle access if:
 - (1) The bridge deck is no less than 12 feet wide, and,
 - (2) The bridge is designed by a registered structural engineer, and
 - (3) Load capacity is certified by a structural engineer upon completion demonstrating the bridge will support the heaviest fire apparatus in Thornapple Township Emergency Services inventory, and,
 - (4) Annual inspection reports are filed with Thornapple Township Emergency Services by a registered structural engineer certifying load capacity.
- (g) No driveway providing access to a dwelling shall be secured by locked gates unless a key or access card is provided to the Thornapple Township Emergency Services.
- (h) If connecting to a public road, the driveway location intersecting the public road shall be approved by the Barry County Road Commission.
- (i) The proposed driveway centerline, width and location, shall be shown on a site sketch filed with the Zoning Administrator. The owner or applicant shall place centerline stakes for the proposed driveway at intervals of 20 feet.
- (j) Once design and location is approved by the Zoning Administrator, a driveway construction permit shall be issued

Section 21.40 Household and Recreational Storage Facility

The Purpose of this section is the Township's intent, in accordance with its master plan and citizen surveys, to preserve, maintain and support the rural and recreational character of the Township. The Township and surrounding areas afford numerous opportunities for recreational activities and many of the Township's residents own and use recreational vehicles, trailers, boats and associated equipment. Moreover, due to the Township's agricultural history, there are located within the Township's boundaries numerous barns and similar structures that affirmatively add to the Township's rural character. Many of these structures sit vacant due to changes in agricultural operations. The Township

desires to provide the owners of such structures with an incentive to maintain and preserve them so that they may be productively utilized as storage facilities for household and recreational goods and so that the history and character that these structures provide is not lost.

Administrative Special Land Use. Household and recreational equipment storage may be permitted as a special land use in the A (Agricultural), AR (Agricultural-Residential), and RR (Rural Residential) zoning districts within the Township. For purposes of this Section, “household and recreational storage” shall mean the storage of goods, vehicles, and equipment related to residential and recreational activities.

Standards. The following minimum conditions, in addition to the requirements of Article XIX (Special Land Uses) of this code, shall apply to all household and recreational storage uses:

- (a) The use shall be conducted entirely within an enclosed agricultural building. The agricultural building must be located on a lawful lot in accordance with Sections 3.5, 4.5, or 5.5 of this Code and Michigan Law.
- (b) The building within which the use is conducted shall be maintained in good structural repair at all times. Structural alterations to the building shall conform to the requirements of the Barry County Building Code in effect.
- (c) Doorway entry to existing buildings shall not be modified in any way to increase the number of openings. Each building approved for use as a household and recreation storage facility shall contain common interior storage only. Interior wall dividers may be utilized, though direct entry to individual storage area from the exterior is prohibited.
- (d) No sale, maintenance, repair or servicing of goods, vehicles, or equipment shall be permitted in association with the use and the use shall be limited to inside storage within an enclosed building.
- (e) Junk, debris, or salvage materials, highly combustible, toxic or hazardous materials may NOT be stored on the premises. Fuel within fuel tanks which are an integral and attached part of a vehicle, boat or other power equipment may be stored. Portable, hand-held fuel tanks and propane tanks shall not be stored within any storage unit. Nothing herein shall be interpreted to prohibit the safe storage of agricultural vehicles, and equipment and pesticides and herbicides associated with a principal agricultural use occurring on the premises.
- (f) Only a single, non-illuminated identification wall sign or freestanding monument type sign not greater than 16 square feet in area shall be permitted in association with the use. It is the intent of this subsection that the sign provided for herein be in lieu of the signs provided for in Section XXIV of this Code.
- (g) Off-street parking spaces shall not be required in association with the use.
- (h) The use shall not be permitted in any portion of the building that has not been in active agricultural use for at least 5 years. The ZBA shall have authority to

grant a variance in the required time in the event of a substantial change of circumstances not within the control of the applicant.

- (i) At all times when goods, vehicles or equipment are being put into or removed from storage, the legal operator of the use or his designee shall be physically present at the building so that “self storage” does not occur on the premises.
- (j) To facilitate compliance with the terms of this Section, the Township may conduct an annual physical inspection of the premises for which the use was approved. An inspection fee shall be charged to owner/operator of the facility.
- (k) Failure to comply with any of the conditions set forth or referenced in this Section shall constitute grounds for the revocation of the special land use permit by the Zoning Administrator. Revocation of the permit shall become effective 30 days following written notice of violation, unless the violation(s) is (are) corrected.
- (l) Outdoor storage of RV’s, boats, and trailers may be allowed if approved by the Planning Commission after a public hearing has been held per Section 28.12

All outdoor storage requires the establishment of an adequate buffer/screen between storage area and neighboring properties. A buffer and/or screen must be approved by the Planning Commission. The buffer/screen may consist of a 6-8 foot high privacy fence and/or vegetative buffer. All RV’s, boats and trailers stored outside must be licensed and operable. The total area used for outdoor storage may not exceed 1.5 times the floor area of indoor storage areas.

[Section 21.40(l) effective 12-3-2016 by Ordinance 2016-02]

Procedure.

Each application for a Household and Recreational Storage facility shall be filed with the Zoning Administrator. The application shall include a site plan meeting requirements of Article XX of this ordinance, and a floor plan for each building intended for use as a household and recreational storage facility.

The Zoning Administrator shall approve each application meeting requirements of this section. If an application is denied, the Zoning Administrator shall specify in writing the reasons for denial.

Section 21.41 Outdoor Furnaces

[As Amended Ordinance 2019-01 effective 9-21-2019]

For the purposes of this section, “outdoor furnace”, means any outdoor piece of equipment used to burn material for the purpose of providing heat to a structure.

- (a) Permit required: No person shall cause, allow or maintain the use of an outdoor furnace without first having obtained a zoning permit from the zoning administrator and all appropriate construction permits.
- (b) Permitted fuel: Only firewood, wood pellets, untreated lumber, and untreated agricultural products such as corn pellets or seeds are permitted to be burned in any outdoor furnace. Burning of any other materials,

- including, but not limited to, garbage, painted or treated wood, rubber, or newspaper, in an outdoor furnace is prohibited.
- (c) Permitted districts: Outdoor furnaces shall be permitted only in the following Zoning Districts: Agriculture (A), Agriculture Residential (AR), and Rural Residential (RR).
 - (d) Minimum lot size: Outdoor furnaces shall be permitted only on lots of 3 acres or more.
 - (e) Minimum setbacks: Outdoor furnaces shall be set back not less than seventy-five (75) feet from the front, rear and side lot lines, and not less than two hundred (200) feet from the nearest existing dwelling on abutting property.
 - (f) Chimney height: The height of the chimney shall satisfy the manufacturer's recommendations.
 - (g) Spark arrestors: All outdoor furnaces shall be equipped with properly functioning spark arrestors.
 - (h) Seasons of operation: Outdoor furnaces shall not operate during the months of June, July or August.
 - (i) Effect of other regulations: Nothing contained herein shall authorize or allow burning which is prohibited by codes, laws, rules or regulations promulgated by any federal, state, regional or local agency.
 - (j) Installation: Outdoor furnaces and any electrical, plumbing or other apparatus or device used in connection with an outdoor furnace shall be installed, operated and maintained in conformity with the manufacturer's specifications and recommendations and all local, state and federal codes, laws, rules and regulations.

Sections 21.42 – 21.99 [Reserved]