
GENERAL
PROVISIONS

ARTICLE

4

Chapter 4.1 • GENERALLY

Section 4.101 SCOPE OF REGULATIONS

No building or land shall be used and no building shall be hereafter erected, structurally altered, or relocated except for one or more of the uses herein permitted within the district in which such building, structure, or land is located or for a use similar to and harmonious with such permitted uses, except as provided in *Article 6: Administration & Enforcement*.

Section 4.102 OPEN STORAGE OR DUMPING IN LAND PROHIBITED

The use of land for the open storage or collection or accumulation of lumber (excluding non-commercial firewood less than two feet long) or human made materials, or for the dumping or disposal of scrap metal, junk, inoperable vehicles, part of automobiles, trucks, and boats, tires, garbage, rubbish, or other refuse or of ashes, slag or other wastes or byproducts, shall not be permitted in any zoning district, unless such place has been expressly designated as a public dumping ground to receive such materials by the Village Council.

Commercial composting bins for use by homeowners is not considered dumping or storage under the terms of this Section of the Ordinance and is expressly permitted.

Section 4.103 JUNK OR INOPERABLE VEHICLES

No properly owner in any district may maintain, or allow to be maintained, any junk or inoperable cars, trucks, trailers, motorcycles, machinery or other similar equipment or vehicles on the premises. Any vehicle not bearing a valid vehicle registration license plate shall be considered inoperable.

Section 4.104 OPEN BURNING PROHIBITED

Open burning, not otherwise regulated or allowed by Ordinance, is prohibited in any district.

Section 4.105 HUNTING, TRAPPING, AND USE OF SIMILAR TYPE EQUIPMENT PROHIBITED

Hunting, trapping and other forms of sport hunting activity are expressly prohibited from all zoning districts, including the discharge of firearms, discharge of arrows, setting of any animal traps and siting or weapon siting activity for hunting equipment or any other practices related to the sport.

Section 4.106 CLEAR VISION AREA

No structure, wall, fence, or vegetation shall be erected, planted or maintained on any lot which will obstruct the view of the driver of a vehicle approaching an intersection; excepting that shrubbery and low retaining walls not exceeding 30 inches in height above the curb level and trees where all branches are not less than 8 feet above the street level will be permitted. In the case of corner lots, there shall be provided an unobstructed triangular area formed by the street property lines and a line connecting them at points 25 feet from the intersection of the pavement edge lines, or in the case of a rounded corner, from the intersection of the street property lines extended.

Section 4.107 STANDARDS FOR DUMPSTER ENCLOSURES

Dumpster enclosures are required for all uses, excluding single family residential, unless sufficient evidence is provided to the satisfaction of the Planning Commission or Zoning Official that an alternative trash collection and disposal method is appropriate for the use.

When required, dumpster enclosures are subject to the following:

- A. LOCATION.** Dumpsters shall be permitted in the side or rear yard, provided that no dumpster shall extend closer to the front of the lot than any portion of the principal structure, and provided further that the dumpster shall not encroach on a required parking area, is clearly accessible to servicing vehicles, and is located at least 10 feet from any building. Dumpsters shall be located as far as practicable from any adjoining residential district.
- B. CONCRETE PAD.** Dumpsters shall be placed on a concrete pad. The concrete pad shall extend a minimum of three feet in front of the dumpster enclosure.
- C. SCREENING.** Dumpsters shall be screened from view from adjoining property and public streets and thoroughfares. Dumpsters shall be screened on three sides with a permanent building, decorative masonry wall, similar in material and/or color to the main structure, not less than six feet in height or at least six inches above the height of the enclosed dumpster, whichever is taller. The fourth side of the dumpster screening shall be equipped with an opaque, lockable metal gate that is the same height as the enclosure around the other three sides.
- D. BOLLARDS.** Bollards (concrete-filled metal posts) or similar protective devices shall be installed at the opening to prevent damage to the dumpster enclosure.
- E. SITE PLAN REQUIREMENTS.** The location and method of screening of dumpsters shall be shown on all applications and sketch plans submitted for administrative approval or site plans submitted for approval by the Planning Commission. The sharing of dumpsters by businesses is encouraged.
- F. EXCEPTION.** The requirements of this Section may be modified or waived upon a determination that the location, screening, or removal of refuse will be handled in a manner acceptable to the Planning Commission or Zoning Official. The Planning Commission or Zoning Official may require additional landscaping, screening or other site improvements as an alternative to adhering to the requirements of this section. If a requirement for a dumpster is waived, the site plan or sketch plan shall show a future dumpster location to be built when or if the use of the building changes prior to occupancy.

Chapter 4.2 • OFF-STREET PARKING & LOADING

Section 4.201 INTENT

In all zoning districts, off-street parking facilities for the storage and parking of self-propelled motor vehicles for the use of occupants, employees, and patrons of the buildings erected, altered or extended after the effective date of this Chapter shall be provided as prescribed below.

The purpose of this Chapter is also to limit the number of off-street parking spaces and amount of impervious surfaces that may be permitted on a parcel of land or accessory to a use or building; to establish standards for the number and location off-street parking and loading facilities; and to promote the use and development of shared parking facilities and cross-access between sites.

Section 4.202 SCOPE

Adequate off-street parking and loading spaces shall be provided in all districts in accordance with the provisions in this Chapter whenever a structure or use is established, constructed, altered, or expanded, an existing use is replaced by a new use (change of use), or the intensity of a use is increased through additional dwelling units, an increase in floor area or seating capacity or similar means. Such spaces shall be provided in accordance with the provisions of this Chapter.

Section 4.203 GENERAL STANDARDS

- A. EXISTING OFF-STREET PARKING.** Off-street parking existing at the effective date of this Ordinance in connection with the operation of an existing building or use shall not be reduced.
- B. LOCATION OF PARKING SPACES: RESIDENTIAL.** The parking of a vehicle in the front yard of a residential district is prohibited except for designated and paved driveways.

Off-street parking required for uses permitted in residential districts may be located on driveways or an approved area within the side/ rear yard, upon issuance of a permit by the Zoning Official. Driveways may be located no closer than 4 feet to the side yard line unless the driveway abuts the driveway located on the adjoining property.

- C. LOCATION OF PARKING SPACES: C-1, MU-1, MU-2, MU-3, AND I-2 DISTRICTS**
Off-street parking of permitted uses in the C-1, MU-2, MU-3, and I-2 districts may be located in a required side /rear yard, except the 10 feet adjacent to the side / rear lot line adjacent to a residential use. Off-street parking of permitted uses in the MU-1 district is limited to the required rear yard.
- D. PROXIMITY.** All off-street parking shall be either on the same premises as the building or within 300 feet of the building it is intended to serve, measured along lines of public access to the property between the nearest point of the parking facility and the building to be served.
- E. ONE AND TWO FAMILY RESIDENTIAL DWELLINGS.** An off-street parking facility for a one- or two-family dwelling shall be located on the same lot or plot of ground as the building it is intended to serve, and shall consist of an enclosed garage not less than of 20 by 20 feet for a one-family. The garage shall be served by a paved driveway from the garage to the street or alley. Any paved driveway may cover a maximum of 30% of the total surface area of the front yard.
- F. RESTRICTION OF PARKING ON PRIVATE PROPERTY.** It shall be unlawful for any person to park any motor vehicle on any private property or use the private property for vehicle storage, or use any portion of any private property as parking space, without the express or implied consent,

authorization or ratification of the owner, holder, occupant, lessee, agent or trustee of the property.

- G. PARKING OF COMMERCIAL VEHICLES IN RESIDENTIAL DISTRICTS.** A licensed commercial vehicle owned by, or assigned to, a licensed vehicle operator who is a permanent resident shall be permitted. For the terms of this section, a permitted vehicle shall be limited to passenger cars, vans, pickup trucks and other similar vehicles. Trucks having a gross cargo capacity of over four tons and tractors or tractor-trailer combinations shall not be considered vehicles under this section and are specifically excluded from parking in residential zoning districts. No more commercial vehicles than licensed vehicle drivers residing on the premises shall be allowed to park in residential districts.
- H. VILLAGE PARKING DISTRICT.** The parking area shown on the Village's Zoning Map may be referred to as the *Village Parking District*. The parking requirement for all uses within the parking district shall be reduced by one-half.

Section 4.204 PARKING REQUIREMENTS

- A. CALCULATION OF REQUIRED PARKING SPACES.** When units or measurements determining the number of required parking spaces result in a fractional space, fractions over one-half shall require one parking space.
- B. USABLE FLOOR AREA.** For the purpose of this Section, usable floor area shall mean 80 percent of the gross floor area used or intended to be used by customers, patrons, clients, patients, owners, tenants, and participants.
- C. SIMILAR USES AND REQUIREMENTS.** In the case of a use not specifically mentioned, the requirements for off-street parking facilities for a similar use, as determined by the reviewing authority, shall be applied.
- D. MINIMUM PARKING REQUIRED.** No non-residential parking area may contain less than three parking spaces.
- E. MINIMUM AND MAXIMUM NUMBER OF SPACES.** Off-street parking, stacking spaces, and loading spaces permitted for any use shall not exceed 120% or be less than 80% of the minimum parking requirements of this Section. This provision shall not apply to single family or two family dwelling units.
- F. LIGHTING / LANDSCAPING.** Off-street parking lots shall be subject to the requirements of *Chapter 4.3: Landscaping & Screening* and *Chapter 4.4: Exterior Lighting*.
- G. BICYCLE PARKING.** Bicycle parking areas, including racks, are required in conjunction with off-street parking lots that are larger than 25 spaces. One bicycle space shall be provided for every 20 required vehicle parking spaces or fraction thereof. Shelters, bicycle lockers, or other methods of protecting the parked bicycles are encouraged. Bicycle parking spaces may be located anywhere on the site, including inside the building, and need not be located within the boundaries of the vehicle parking lot, but shall be located proximate to building entrances.

Section 4.205 SCHEDULE OF PARKING REQUIREMENTS

The minimum number of off-street parking spaces shall be determined in accordance with the following *Schedule of Parking Requirements Table*. Parking requirements are correlated to functional intensity of use.

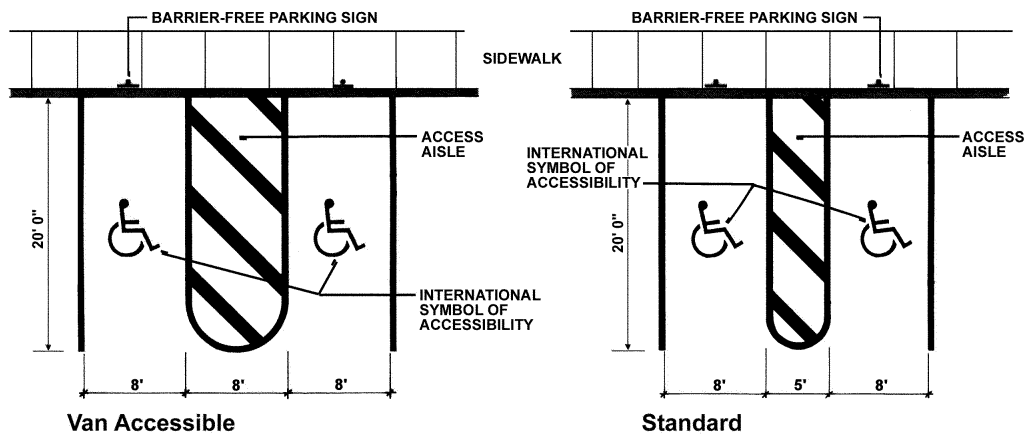
Schedule of Parking Requirements	
Use	Required Off-Street Parking Spaces
Residential	
Mixed Use Dwelling Unit	1.0 parking space per dwelling unit.
Multiple Dwelling Unit	1.5 parking spaces per dwelling unit. Additional 10% of total parking required for guests.
Single Family Dwelling Unit	2.0 parking spaces per dwelling unit.
State Residential Living Facility / Senior / Assisted Living	0.5 parking spaces per dwelling unit; plus 0.5 parking spaces per employee at the maximum shift.
Townhouse (3+ units)	1.0 parking space per dwelling unit.
Two Family Dwelling Unit	1.5 parking spaces per dwelling unit.
Vacation Rental	Two or less sleeping rooms = 1.0 parking space; Three – four sleeping rooms = 2.0 parking spaces; Five or more sleeping rooms = minimum of 3.0 parking spaces with additional parking to Zoning Official / Planning Commission satisfaction.
Lodging	
Bed and Breakfast	2.0 parking spaces; plus 1.0 parking space for each rental room; plus 0.5 parking spaces per employee at the maximum shift.
Inn / Motel	1.0 parking space per rentable room.
Hotel	1.3 parking spaces per rentable room.
Community, Education, and Institution	
Child Care Center (commercial)	0.25 parking spaces per student.
Education (primary, secondary)	0.40 parking spaces per student.
Education (higher, vocational, etc.)	0.25 parking spaces per student.
Medical Facility	4.0 parking spaces per 1,000 gross sq. ft.
Private Club, Fraternal Organization, or Lodge Hall	1.0 parking space per 400 gross sq. ft.
Recreation Center	3.0 parking spaces per 1,000 sq. ft. gross floor area.
Religious Institution	1.0 parking space per 3 seats.
Commercial and Retail Uses	
Automobile Service	1.0 parking spaces per 600 gross sq. ft.
Drive-in / through Establishment	10 stacking spaces per order window.
Bar, Tavern, or Alcohol Service Establishment	1.0 parking space per 400 gross sq. ft.
Financial Institution	3.5 parking spaces per 1,000 gross sq. ft. Drive-through windows shall provide an additional 3 stacking spaces per window.
Greenhouse / Nursery	1.0 parking space per 400 gross sq. ft. of indoor office or sales room.
Office	4.0 parking spaces per 1,000 gross sq. ft.
Personal Service Establishment	1.0 parking spaces per 400 gross sq. ft.
Place of Assembly	1.0 parking spaces per 3 seats.
Restaurant	0.5 parking spaces per 1 seat.
Retail Sales (10,000 sq. ft. or less)	1.0 parking spaces per 500 gross sq. ft.
Retail Sales (greater than 10,000 sq. ft.)	3.5 parking spaces per 1,000 gross sq. ft.
Industrial Uses	1.0 parking space per employee on the maximum shift, plus 1.0 parking space for each vehicle used in the conduct of the enterprise.

Section 4.206 BARRIER FREE PARKING

Off-street parking facilities, other than parking for one or two family dwellings, shall be designed, constructed, and maintained in accordance with the following:

- A. Barrier free parking spaces shall be provided per the State Construction Code and the following:

BARRIER FREE PARKING REQUIREMENTS			
Number of Parking Spaces Provided	Minimum Number of Barrier-Free Spaces Required	Van Accessible Parking Spaces Required	Accessible Parking Spaces Required
Up to 25	1	1	0
26 to 50	2	1	1
51 to 75	3	1	2
76 to 100	4	1	3
101 to 150	5	1	4
151 to 200	6	1	5
201 to 300	7	1	6
301 to 400	8	1	7
401 to 500	9	2	7
501 to 1,000	2% of total parking provided in each lot	1 out of every 8 accessible spaces	7 out of every 8 accessible spaces
1,001 and over	20 plus 1 per 100 spaces over 1,000	1 out of every 8 accessible spaces	7 out of every 8 accessible spaces



Barrier-Free Parking Space Layout

- B. Barrier free spaces shall be accessible from and conveniently located near the building’s primary entrance.
- C. Barrier free spaces shall be identified by above grade signs and pavement striping.

Section 4.207 SHARED PARKING

Common, shared parking facilities and interconnected private off-street parking / loading areas are encouraged in the Village. The development and use of a parking or loading area shared between two or more uses shall be permitted where peak activity for each use will occur at different periods of the day or week.

- A. **CROSS ACCESS.** Wherever feasible, cross-access connections between adjacent parking lots (or a reserved connection when no adjacent parking lot exists but can reasonably be expected to be constructed at a future date) are required. Blanket cross-access easements across the entire parking lot area shall be provided for connected lots under separate ownership or management.
- B. **SIGNED AGREEMENT.** Shared facilities shall submit a signed shared parking agreement, subject to acceptance by the Village Attorney.
- C. **LOCATION.** The collective off-street parking area shall not be located farther than 300 feet from any building or use being served. For the purposes of this regulation, a collective parking area shall be considered conforming if at least 20 percent of a contiguous parking area is located within 300 feet of the building(s) being served.
- D. **MINIMUM NUMBER OF SPACES.** After a parking study and documentation from the applicant (if necessary), the Planning Commission may reduce the required number of parking spaces based on the peak hour demand.

Section 4.208 LOADING FACILITIES

- A. **LOCATION OF LOADING SPACE.** All required loading berths shall be located on the same zoning lot as the use served. No loading berth for vehicles over two tons capacity shall be closer than 50 feet to any property in a residential district unless completely enclosed by building walls, or a uniformly painted solid fence or wall, or any combination thereof, no less than six feet in height. No permitted or required loading berth shall be located within 25 feet of the nearest point of intersection of any two streets.
- B. **SIZE OF LOADING SPACE.** Required loading spaces shall be at least 10 feet by 25 feet, exclusive of aisles and maneuvering space, and shall have a vertical clearance of the least 14 feet. The length of the berth shall be increased to a minimum of 50 feet, if intended to serve semi-tractors and trailers.
- C. **ACCESS TO PUBLIC STREET OR ROAD.** Each required loading space shall be designed with appropriate means of vehicular access to a street or alley in a manner which will least interfere with traffic movements.
- D. **PAVEMENT AND SURFACING.** All open off-street loading berths shall be concrete or asphalt according to standards established by the Village Engineer.
- E. **USE OF LOADING SPACE FOR VEHICLE REPAIR AND SERVICING.** No motor vehicle repair work or service of any kind shall be permitted in conjunction with loading facilities provided in any residence or business district.
- F. **LOADING SPACE CANNOT SERVE AS OFF-STREET PARKING.** Space allocated to any loading area shall not, while so allocated, be used to satisfy the space requirements for any off-street parking facilities or portions thereof.

- G. **LOADING SPACE REQUIREMENT FOR SPECIAL USES NOT HEREIN DEFINED.** For special uses other than prescribed hereinafter, loading berths adequate in number and size to serve such uses, as determined by the Zoning Official and approved by the Planning Commission shall be provided.

Section 4.209 PARKING LOT LAYOUT

- A. **PARKING SPACE AND MANEUVERING LANE DIMENSIONS.** The design and construction of off-street parking areas shall conform to the following requirements:

Parking Design Standards			
Parking Pattern (degrees)	Maneuvering Lane Width	Parking Space Width	Parking Space Length
0° (parallel)	11 feet (one way) 22 feet (two way)	8 feet	22 feet
1°– 70° (angled)	15 feet (one way)	9 feet	18 feet
71° - 90°	11 feet (one way) 22 feet (two way)	9 feet ²⁰	18 feet

- B. **PARKING SETBACK.** Except for access drives and shared parking facilities, no off-street parking area shall be located closer than five feet to any lot line, provided that the minimum landscaping and screening requirements of *Chapter 4.3: Landscaping & Screening* are met on the site.
- C. **MANEUVERING AISLES.** Off-street parking lots shall be so arranged and marked with adequate drives and aisles for safe and convenient maneuvering giving access to parking spaces, and in no case shall a parking space be permitted which would necessitate the backing of a motor vehicle into a street or over a public walk.
- D. **PERIMETER BARRIER REQUIRED.** There shall be a curb or wheel stop provided along the perimeter of a parking lot. The curb or wheel stop shall be designed to prevent any portion of a vehicle from encroaching upon a sidewalk, right-of-way, landscaped area, or adjoining property. Curbs shall be continuous except as part of an overall stormwater management design incorporating bioswales and/or raingardens.
- E. **MAXIMUM CONTIGUOUS SPACES.** Not more than 20 contiguous spaces may be provided in an uninterrupted row. Longer rows shall provide landscaped breaks (e.g., islands or bioswales) with shade trees. Such breaks shall have a minimum area of 144 square feet and shall contain at least one shade tree.
- F. **CONSOLIDATED LANDSCAPE AREAS.** Parking spaces and rows shall be organized to provide consolidated landscape areas and opportunities for on-site stormwater management. The use of bioswales and/or rain gardens is encouraged.
- G. **PEDESTRIAN CIRCULATION.** The parking lot layout shall accommodate direct and continuous pedestrian circulation, clearly divided from vehicular areas. Pedestrian crosswalks shall be provided.

Section 4.210 PARKING LOT CONSTRUCTION

- A. **SURFACING.** The entire parking area, including parking spaces and maneuvering lanes, shall have asphaltic or concrete surfacing; or porous pavers in accordance with specification approved by the Village Engineer. Such facilities shall provide on-site drainage to dispose of all surface water accumulated in the parking area, unless otherwise approved by the Village Engineer.

²⁰ Any parking space abutting a landscaped area on the driver's or passenger's side of the vehicle shall provide an additional 18 inches of width to allow for access without damage to the landscaped area.

Permeable or porous paving methods are encouraged, including open joined pavers, porous concrete/asphalt, and other methods of increasing stormwater infiltration. These methods may only be used when the permeable paving will have sufficient strength to bear expected vehicle loads for the parking area.

All off-street parking areas are encouraged to use light-colored materials such as concrete, white asphalt, or light-colored pavers to reduce surface temperatures and to reduce the heat island effect.

The parking area shall be surfaced within two months of occupancy of the use it is to serve if it is for a new use, and within two months of the effective date of rezoning if parking area is to serve an existing use or uses, except when weather conditions prohibiting the pouring of concrete extend such time period.

- B. **STRIPING.** Off-street parking shall be striped with either white or yellow paint and the striping of handicapped parking stalls shall be identified with blue paint. All parking spaces shall be clearly striped with four inch wide lines spaced two feet apart to facilitate movement and to help maintain an orderly parking arrangement.

Chapter 4.3 • LANDSCAPING & SCREENING

Section 4.301 INTENT

Landscaping enhances the visual image of the Village, improves property values, and alleviates the impact of noise, traffic, and visual distraction associated with certain uses. Screening protects less intensive uses from the noise, light, traffic, litter and other impacts of more intensive, non-residential uses. These provisions are intended to set minimum standards for the design and use of landscaping and screening, and for the protection and enhancement of the Village's environmental and aesthetic quality.

More specifically, the intent of this Chapter is to:

- A. Establish aesthetically pleasing, functionally appropriate, and sustainable landscape design for the long-term enhancement of the appearance of development in the community.
- B. Safeguard the public health, safety and welfare, and preserve and enhance aesthetic qualities that contribute to community character.
- C. Protect and preserve the appearance, character, and value of the Village's residential neighborhoods that abut nonresidential areas, parking areas, and other more intensive use areas.
- D. Improve the appearance of off-street parking areas, vehicular use areas, and property abutting public rights-of-way.
- E. Increase soil water retention and natural storm water filtering, thereby helping to prevent flooding and improve water quality.

Section 4.302 SCOPE

The standards of this Chapter shall apply to all uses, lots, and sites altered, developed or expanded after the effective date of this Ordinance that are subject site plan or sketch plan approval, excluding single family detached homes, unless otherwise specifically noted.

The requirements in this Chapter are minimum standards, and under no circumstances shall they preclude the Planning Commission or Zoning Official from requiring additional landscaping. Any landscape plan submitted for review and approval shall be in accordance with the requirements of *Chapter 6.2: Site Plan Review*.

Section 4.303 GENERAL LANDSCAPING STANDARDS

- A. **CORRIDOR OVERLAY.** All sites must also meet the landscaping standards outlined in the Corridor Overlay District, Section 3.3.
- B. **OPEN SPACE.** Any unpaved portion of a site shall be planted with grass, ground cover, shrubbery, or other suitable live plant material and maintained in a neat condition. Pedestrian walks, amenities, planters, and other decorative elements are encouraged in such landscaped areas.
- C. **REQUIRED TREES.** On non-residential sites, a minimum of 1 tree per 3,000 square feet (or fraction thereof) of unpaved open area shall be provided, in addition to any other landscaping requirements of this Article. Required trees may be planted at uniform intervals, at random, or in groupings.

- D. **DESIGN CREATIVITY.** Creativity in landscape design is encouraged. Required trees and shrubs may be planted at uniform intervals, at random, or in groupings, depending on the designer's desired visual effect and, equally important, the intent of the Village to create a compatible landscape appearance on adjoining properties.
- E. **VISIBILITY.** Landscaping and screening materials shall be laid out in conformance with the requirements for clear vision areas, and shall not obstruct the visibility of motorists or pedestrians.
- F. **PROTECTION.** Wherever landscaping is proposed adjacent to a paved area, a six-inch concrete curb shall be provided. Except for storm water management features such as bioswales, landscape areas shall be elevated above the pavement to a height that is adequate to protect the plants from snow removal, salt, and other hazards.

Section 4.304 STREET FRONTAGE LANDSCAPING STANDARDS

- A. **STREET TREES.** One deciduous tree shall be planted for each 35 feet (or fraction thereof) of total road frontage and may be planted in a tree lawn (the area in between the sidewalk and the curb or edge of pavement).
- B. **TREE LAWN LANDSCAPING.** The tree lawns shall be planted with grass or other suitable live ground cover, and shall be maintained by the owner or occupant of the adjacent property as if the right-of-way were part of the required site landscaping.

Section 4.305 RESIDENTIAL LANDSCAPING STANDARDS

- A. **MULTIPLE FAMILY.** For multiple family residential uses, a minimum of two deciduous or evergreen trees plus four shrubs shall be planted per dwelling unit, in addition to any other landscaping requirements of this Article. Required trees may be planted at uniform intervals, at random, or in groupings.
- B. **RESIDENTIAL ENTRANCEWAY.** In any residential district, entranceway structures, including but not limited to walls, columns and gates marking entrances to single-family subdivisions or multiple housing projects may be permitted and may be located in a required yard and meeting clear vision areas.

Section 4.306 LANDSCAPING OF DIVIDER MEDIANS

Where traffic on driveways, maneuvering lanes, entrance roads, or similar vehicle access ways is separated by a divider median, the median shall be curbed and have a minimum width of 10 feet. A minimum of one deciduous or evergreen tree shall be planted for each 25 linear feet (or fraction thereof) of median. Trees may be planted at uniform intervals, at random, or in groupings, but in no instance shall the center-to-center distance between trees exceed 50 feet. Trees shall be set back a minimum of four feet from the curbed edge of any landscaped median.

Section 4.307 PARKING LOT LANDSCAPING

Landscaping shall be located within parking lots to improve the appearance and screen lot edges, reinforce circulation routes, define pleasing pedestrian routes through the parking lot, and maximize shade and stormwater benefits. All off-street parking areas shall include internal landscaping as follows:

- A. Landscaping Ratio.** Off-street parking areas containing greater than 10 spaces shall incorporate at least 30 square feet of interior landscaping per parking space. Interior parking lot landscaping shall include the following:
 - 1. Internal islands and medians.
 - 2. Landscaped areas surrounded on three sides by a parking area (i.e., peninsulas or fingers).
 - 3. Landscaped areas at the corners of a parking area and bordered by parking on at least two sides.
- B. Internal Landscape Area Requirements.**
 - 1. Landscaped areas in parking lots shall be no less than nine feet in any single dimension and no less than 144 square feet in area.
 - 2. Landscaped areas in or adjacent to parking lots shall be protected with curbing to prevent encroachment of vehicles. Curbs shall be a minimum of six inches in height and shall be continuous around the parking area, except for curb cuts required for integrated on-site stormwater management or pedestrian accessibility.
- C. Required Plantings.**
 - 1. At least fifty percent of each interior landscaped area shall be covered by living plant material, such as sod, shrubs, ground cover, or trees. Plant materials other than turf grass or ground cover shall not be placed closer than two feet to the curbed edge of any interior parking lot landscape area. Trees shall be set back a minimum of four feet from the curbed edge of any interior parking lot landscape area.
 - 2. A minimum of one deciduous shade tree shall be planted within the parking lot for every 10 vehicle parking spaces in the lot.

Section 4.308 PLANT MATERIALS STANDARDS

- A. GENERALLY.**
 - 1. All plant material shall conform to size and description set forth in the current edition of "American Standard for Nursery Stock" sponsored by the American Association of Nurserymen, Inc.
 - 2. All plant material shall be nursery grown; hardy to the climate of Michigan; appropriate for the soil, climatic and environmental conditions; and resistant to disease and insect attack.
 - 3. Artificial plant material shall be prohibited within required screening areas.
- B. GROUNDCOVERS.**
 - 1. Lawn areas shall be planted in species of grass normally grown as permanent lawns in Michigan. Grass may be sodded or hydro-seeded, provided that adequate measures are taken to minimize soil erosion. Sod or seed shall be clean and free of weeds and noxious pests or disease.

2. The creative use of groundcover alternatives is encouraged. Groundcover used in lieu of grass shall be planted to present a finished appearance after one complete growing season.
 3. Synthetic materials shall not be used as a permitted groundcover. Use of stone and gravel as a groundcover shall be limited to decorative accents within a planting bed, subject to Planning Commission approval.
- C. MULCH.** Planting beds shall present a finished appearance; with shredded hardwood bark mulch or similar natural material at a minimum depth of three inches. Mulch used around trees and shrubs shall be a minimum of four inches deep, and shall be pulled one inch away from tree trunks. An effective edge treatment shall be provided to contain and prevent migration of the mulch.
- D. TOPSOIL.** A minimum four inches of topsoil shall be provided for all lawn areas, ground covers, and planting beds.
- E. STANDARDS FOR SIZE AND VARIETY OF PLANT MATERIALS.** To ensure adequate variety, and to avoid monotony and uniformity within a site, required plant materials shall not include more than 30 percent of any single plant species, and shall comply with the following schedule for minimum sizes at planting:

Table 4.1: Plant Material Standards

Screening Materials	Minimum Size at Installation
Street Trees	2.5 caliper-inches diameter
Deciduous Shade Trees	2.5 caliper-inches diameter
Evergreen Trees	6.0 feet overall height
Deciduous Ornamental Trees	2.0 caliper-inches diameter or 6 feet overall height
Shrubs	36 inches in height or 30 inches in spread

- F. RECOMMENDED TREES.** Table 4.2, 4.3, and 4.4 recommended trees based on the size and character of the planting area. Trees not listed in Table 4.2, 4.3, and 4.4 are not recommended for use.

Table 4.2: Limited Width Tree Lawn 4' – 6' Wide (based on urban tolerance/canopy size)

Common Name	Botanical Name
Red Maple	<i>Acer rubrum</i>
Serviceberry	<i>Amelanchier</i> species
River Birch	<i>Betula nigra</i> (tree form)
Columnar European Hornbeam	<i>Carpinus betulus</i> 'Fastigiata'
American Hornbeam	<i>Carpinus caroliniana</i>
Hackberry	<i>Celtis occidentalis</i>
Maidenhair Tree	<i>Ginkgo biloba</i> (Fastigate)
Thornless Honeylocust	<i>Gleditsia triacanthos inermis</i>
Callery Pear	<i>Pyrus calleryana</i>
American Linden	<i>Tilia americana</i>
Littleleaf Linden	<i>Tilia cordata</i>
Silver Linden	<i>Tilia tomentosa</i>

Table 4.3: Standard Width Tree Lawn 6' or Greater (based on canopy size)

Common Name	Botanical Name
Red Maple	<i>Acer rubrum</i>
Sugar Maple	<i>Acer saccharum</i>
Red Horsechestnut	<i>Aesculus x carnea</i>
Bottlebrush Buckeye	<i>Aesculus parviflora</i>
Serviceberry	<i>Amelanchier species</i>
Columnar European Hornbeam	<i>Carpinus betulus 'Fastigiata'</i>
Hackberry	<i>Celtis occidentalis</i>
Katsuratree	<i>Cercidiphyllum japonicum</i>
Hardy Rubber Tree	<i>Eucommia ulmoides</i>
European Beech	<i>Fagus sylvatica</i>
Yellowwood	<i>Cladrastis lutea</i>
Maidenhair Tree	<i>Ginkgo biloba</i>
Thornless Honeylocust	<i>Gleditsia triacanthos inermis</i>
Goldenraintree	<i>Koelrueteria paniculata</i>
Goldenchain Tree	<i>Laburnum x watereri 'Vossi'</i>
American Sweetgum	<i>Liquidambar styraciflua</i>
Tuliptree	<i>Liriodendron tulipifera</i>
Saucer Magnolia	<i>Magnolia soulangiana</i>
Dawn Redwood	<i>Metasequoia glyptostroboides</i>
Black Gum	<i>Nyssa sylvatica</i>
London Planetree	<i>Platanus x acerifolia 'Bloodgood'</i>
Sycamore, American Planetree	<i>Platanus occidentalis</i>
White Oak	<i>Quercus alba</i>
Swamp White Oak	<i>Quercus bicolor</i>
Northern Red Oak	<i>Quercus borealis (Q. rubra)</i>
Scarlet Oak	<i>Quercus coccinea</i>
Shingle Oak	<i>Quercus imbricaria</i>
Bur Oak	<i>Quercus macrocarpa</i>
Pin Oak	<i>Quercus palustris</i>
English Oak	<i>Quercus robur</i>
Baldcypress	<i>Taxodium distichum</i>
American Linden	<i>Tilia americana</i>
Littleleaf Linden	<i>Tilia cordata</i>
Silver Linden	<i>Tilia tomentosa</i>
Hybrid Elm	<i>Ulmus species</i>
Japanese Zelkova	<i>Zelkova serrata</i>

Table 4.4: Sidewalk Tree Grates (based on urban tolerance/canopy size)

Common Name	Botanical Name
Red Maple	<i>Acer rubrum</i>
Columnar European Hornbeam	<i>Carpinus betulus 'Fastigiata'</i>
Hackberry	<i>Celtis occidentalis</i>
Katsuratree	<i>Cercidiphyllum japonicum</i>
Hackberry	<i>Celtis occidentalis</i>
Maidenhair Tree	<i>Ginkgo biloba (Fastigiata)</i>
Thornless Honeylocust	<i>Gleditsia triacanthos inermis</i>
Callery Pear	<i>Pyrus calleryana</i>
American Linden	<i>Tilia americana</i>
Littleleaf Linden	<i>Tilia cordata</i>
Silver Linden	<i>Tilia tomentosa</i>

- G. EXISTING PLANT MATERIALS.** Healthy existing trees and other plant materials on a site may be used to satisfy specific screening standards of this Chapter, subject to Planning Commission approval and the location, size, and species of individual trees and other plant materials to be preserved shall be identified on the site plan.

The Planning Commission may require Village inspection of existing plant materials prior to or as a condition of site plan approval to determine the health and desirability of such materials. Such inspections shall be performed by qualified Village staff or by a certified arborist or similar qualified consultant.

Where plant materials are to be saved, prior approval shall be obtained by the property owner from the Village prior to any delimiting, root pruning, or similar work. Protective fencing shall be placed at the drip-line of existing trees, and around the perimeter of other preserved plant materials, with details of protective measures noted on the site plan. No vehicle or other construction equipment shall be parked or stored within protected areas.

In the event that trees or other plant materials identified to be preserved on an approved site plan are destroyed or damaged, as determined by the Village, the owner, developer or contractor shall replace the plant material with a comparable size, amount, and species.

Section 4.309 INSTALLATION AND MAINTENANCE

- A. INSTALLATION.** All screening shall be installed in a manner consistent with the approved site plan. Landscaping along the perimeter of a site shall be installed prior to construction, except where such landscaping would be destroyed during construction. Installation of all required landscaping shall be completed prior to or at the time of completion of building construction, except when building construction is completed during the off-season when plants cannot be installed, in which case the owner shall provide a performance guaranty to ensure installation of required landscaping in the next planting season.
- B. MAINTENANCE.** All screening elements and plant materials shall be maintained in accordance with the approved site plan, and the following:
1. Maintenance procedures and frequencies to be followed shall be specified on the site plan, along with the manner in which the effectiveness, health, and intended functions of the screening elements and plant materials on the site will be ensured.
 2. Plant materials shall be kept in a neat, orderly and healthy growing condition, free from weeds, debris, and refuse. Tree stakes, guy wires, and tree wrap shall be removed after 1 year. Pruning of plant materials shall be limited to the minimum necessary to ensure proper maturation of plants to achieve their intended purpose.
 3. All required screening elements and plant materials shall be planted and maintained in accordance with an approved site plan. Failure to maintain required screening, including the removal and replacement of dead or diseased plant materials, shall be a violation of this Ordinance.
 4. The replacement or removal of plant materials in a manner not consistent with an approved site plan shall be a violation of this Ordinance.
- C. IRRIGATION.** To assist in maintaining plant materials in a healthy condition, all landscaped areas shall be provided with an automatic, underground, or drip irrigation system. All automatic irrigation systems shall be designed to minimize water usage, and shall be manually shut off during water emergencies or water rationing periods.

The Planning Commission may approve an alternative form of irrigation for a particular site, or may waive this requirement upon determining that underground irrigation is not necessary for the type of proposed plant materials.

Section 4.310 WALLS AND FENCES

Walls and fences are subject to the following:

A. RESIDENTIAL DISTRICTS.

1. **Front Yard.** Fences / walls shall not exceed three feet in height (measured from established sidewalk grade, or where no sidewalks exist, from the curb grade) and may be located one foot from the front property line. Decorative, non-opaque fences such as wood picket fences or wrought iron-appearing fences are required.
2. **Rear / Side Yards.** Walls or fences in residential districts shall not exceed six feet in height and may be constructed within a required rear or side yard, (i.e. the property line). Fencing material may be concealing or opaque type, provided it is decorative and creates a harmonious appearance with the front yard screening materials.

B. INDUSTRIAL DISTRICT.

1. **Front Yard.** Fences / walls shall not exceed three feet in height.
2. **Rear / Side Yards.** Walls or fences not exceeding eight feet in height are permitted in side and rear yards.

C. COMMERCIAL AND MIXED-USE DISTRICTS.

1. **Front Yard.** Fences / walls shall not exceed three feet in height.
2. **Rear / Side Yards.** Walls or fences up to six feet in height are permitted in side and rear yards. All fences in commercial and mixed-use districts shall be decorative in nature.

C. GENERAL REQUIREMENTS. All fences shall comply with the following general requirements:

1. Materials and Construction.

- i. **Fences.** Fences in or within 100 feet of a residential district shall consist of wood, metal, or other durable materials that are found by the Zoning Official to be decorative and weather-resistant.

Masonry piers may be used as part of a fence installation with the approval of the Zoning Official. Barbed wire and other similar hazardous materials shall be prohibited in all districts.

- ii. **Walls.** Walls shall be constructed of masonry material (i.e., brick, decorative stone) that is architecturally compatible with the materials used on the facade of the principal structure on the site. A finished cap shall be installed on the top of all walls.

Concrete block may only be used for screening walls in the rear yard of the I-1 district.

2. **Maintenance.** Walls and fences shall be maintained in good condition. Rotten, crumbled, or broken components shall be replaced, repaired, or removed. As required by the Zoning Official, surfaces shall be painted, stained, or similarly treated so as to prolong the life of the structure.

3. **Orientation of Finished Side.** Where a fence has a single finished or decorative side, it shall be oriented to face outward towards adjacent parcels or street rights-of-way (away from the interior of the lot to which the fence is associated).
4. **Site Drainage and Utilities.** Fences / walls shall not be erected in a manner that obstructs the free flow of surface water or causes damage to underground utilities.
5. **Location.** Fences / walls shall be located completely within the boundaries of the lot to which they are associated.
6. **Removal of Illegal or Damaged Fences.** Damaged or illegal fences / walls shall be immediately repaired or removed by the property owner. Upon identification of a damaged or illegal fence, the Zoning Official shall order the property owner to remove such fence / wall or make necessary repairs within 20 days. If the property owner fails to take such actions within 20 days, the Village may act to remove such fence / wall at the expense of the property owner. The Village may then place a lien on the property, adding necessary removal expenses to the tax bill for the property.

Section 4.311 MODIFICATION OF LANDSCAPING REQUIREMENTS

Recognizing that a wide variety of land uses and the relationships between them can exist, and that varying circumstances can mitigate the need for landscaping, the reviewing authority may reduce or waive the minimum landscape requirements or the screening and buffer requirements of this Chapter and approve an alternate landscaping plan, provided the following standards have been met:

- A. The landscaping plan will protect the character of new and existing residential neighborhoods against negative impacts such as noise, glare, air pollution, trash and debris, or nuisances.
- B. The alternate width and landscaping of the buffer or screen will ensure compatibility with surrounding and nearby land uses because:
 - i. The development is compatible with and sensitive to the immediate environment of the site and neighborhood with respect to architectural design, scale, bulk, building height, identified historical character, disposition and orientation of buildings on the lot, or visual integrity.
 - ii. The site has existing natural vegetation and/or topography, bodies of water, wetland areas, or other existing conditions which offer screening consistent with the standards set forth in this Chapter. The preservation of these natural features in perpetuity must be ensured or else the modification may not be granted.
 - iii. The arrangement, design and orientation of buildings on the site maximize privacy and isolate nearby land uses from any negative impacts of the development.

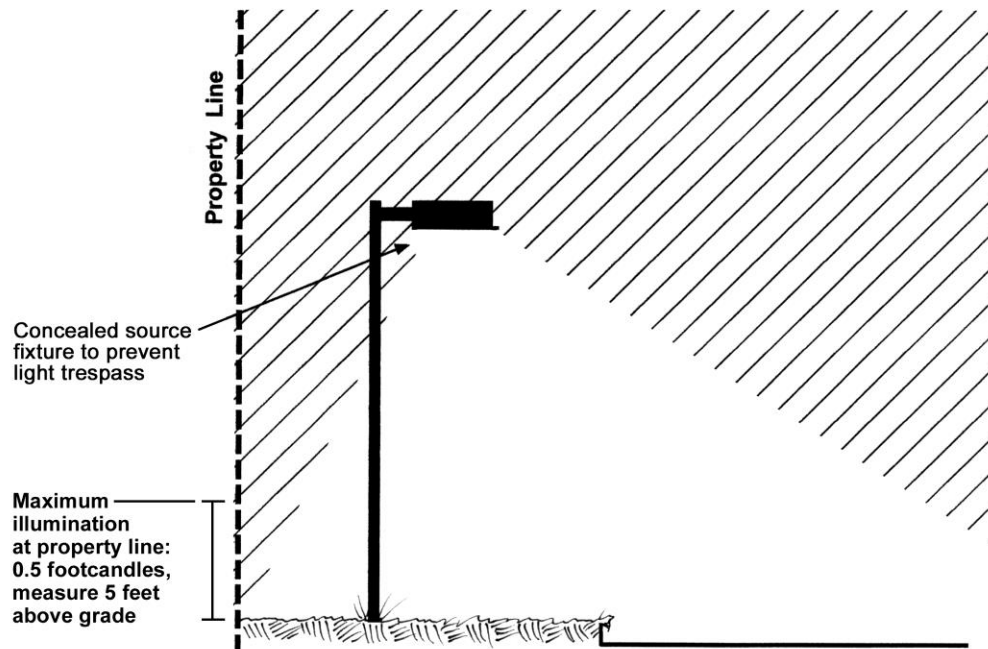
Chapter 4.4 • EXTERIOR LIGHTING

Section 4.401 PURPOSE

The purpose of this chapter is to preserve, protect, and enhance the lawful nighttime use and enjoyment of all properties in the Village and reduce light pollution through the use of appropriate lighting practices and systems. Exterior lighting shall be designed, installed and maintained to control glare and light trespass, minimize obtrusive light, conserve energy and resources, maintain safety, and prevent the degradation of the nighttime visual environment. It is the further intent of this Chapter to encourage the use of innovative lighting designs and decorative light fixtures that enhance the character of the community.

Section 4.402 GENERAL PROVISIONS

The following design and illumination standards shall apply to all exterior lighting sources and other light sources visible from the public right-of-way, road easement, or adjacent parcels, except where specifically exempted.



Lighting Fixture Orientation and Shielding

- A. **SHIELDING.** Exterior lighting shall be fully shielded and directed downward at a 90 degree angle and so noted on all site plans. All fixtures shall incorporate full cutoff housings, louvers, glare shields, optics, reflectors or other measures to prevent off-site glare and minimize light pollution. Only flat lenses are permitted on light fixtures; sag or protruding lenses are prohibited. Oblique lenses (commonly featured on wall-packs) are prohibited.
- B. **INTENSITY.** Light intensity shall be measured in foot-candles on the horizontal plane at grade level within the site, and on the vertical plane at the property or street-right-of-way boundaries of the site at a height of five feet above grade level.

The following light intensity requirements shall apply to all sites:

1. **Minimum Intensity.** The light intensity shall average a minimum of 0.5 foot-candles for parking lots and between 1.0-2.0 foot-candles for pedestrian sidewalks.
 2. **Maximum Intensity – Within the Site.** The intensity of light within a site shall not exceed 10 foot-candles. In areas of intensive vehicular use (i.e. the area underneath gas station pump canopies or outdoor sales areas), the maximum intensity permitted shall be increased to 20 foot-candles.
 3. **Maximum Intensity at Property Lines.** The maximum light intensity permitted at any property line shall be 0.5 foot-candles.
- C. **LAMPS.** Lamps with a maximum wattage of 250 watts per fixture are permitted for use in the Village to maintain a unified lighting standard and to minimize light pollution. The Planning Commission may permit the use of lamps with wattages up to 400 watts if the applicant can demonstrate that the higher wattage fixture is necessary to provide adequate site lighting and that the light fixture is in compliance with all other Chapter requirements. This exemption shall not be granted if the same lighting effect can be reasonably accomplished on the site by incorporating additional 250 watt fixtures into the site design.
- D. **ANIMATED LIGHTING.** Permanent exterior lighting shall not be of a flashing, moving, animated, or intermittent type.
- E. **HOURS OF OPERATION.** All exterior lighting in non-residential districts shall incorporate automatic timers and shall be turned off between the hours of midnight and sunrise, except for lighting necessary for security purposes or accessory to a use that continues after midnight.

Section 4.403 STANDARDS BY FIXTURE TYPE

FREESTANDING POLE AND BUILDING MOUNTED LIGHTING. The maximum height of pole or building mounted fixture is 20 feet. Where a pole or building mounted fixture is located within 50 feet of a residentially zoned or used property, the maximum pole height shall be 15 feet.

DECORATIVE LIGHT FIXTURES. The Planning Commission may approve decorative light fixtures as an alternative to shielded fixtures, provided that such fixtures will enhance the aesthetics of the site and will not cause undue offsite glare or light pollution (i.e. shall be in compliance with the maximum illumination standards set forth in Section 4.402). Such fixtures may utilize LED, incandescent, tungsten-halogen, metal halide or other lamps with full-spectrum color rendering properties with a maximum equivalent wattage of 100w per fixture.

Section 4.404 LIGHTING REQUIREMENTS FOR THE MU-1, MU-2, MU-3, AND CO DISTRICTS

Site lighting for parking lots and streetscapes within the MU-1, MU-2, MU-3, and CO Overlay districts shall utilize a similar traditional style fixture as those used in the Downtown streetscape. The model number for the light pole and luminaire, as well as a detail product specifications will be provided by the Village or the Downtown Development Authority. Fixtures shall be compatible with the traditional style of building architecture.

Section 4.405 EXEMPT LIGHTING

The following exterior lighting types are exempt from the requirements of this Chapter, except that the Zoning Official may take steps to minimize glare, light trespass or light pollution impacts when determined necessary:

- A.** Holiday decorations.
- B.** Building Up-Lighting, provided that the light emitting element of the fixture is shielded from direct view from any vehicle or pedestrian travel or use area, and that the fixture is directed at a vertical building surface.
- C.** Single family residential lighting with fixtures of 100 watts or less.
- D.** Instances where federal or state laws, rules or regulations take precedence over the provisions of this Chapter.
- E.** Temporary emergency lighting.
- F.** Special event lighting in conjunction with a permitted special event, provided that the lighting will not significantly impact residential areas. Special event lighting shall only be allowed for the duration of the special event.

Section 4.406 EXCEPTIONS

The Village recognizes that there are certain uses or circumstances not otherwise addressed in this Chapter that may have special exterior lighting requirements. The reviewing authority may waive or modify standards for a particular use or circumstance upon determining that all of the following conditions have been satisfied:

- A.** The waiver or modification is necessary because of safety or design factors unique to the use, circumstance, or site.
- B.** The proposed light intensity would be adequate for the intended purpose. Consideration shall be given to maximizing safety and energy conservation, and to minimizing light pollution, off-site glare and light trespass on to neighboring properties or street rights-of-way.
- C.** For lighting related to streets or other vehicle access areas, a determination is made that the purpose of the lighting cannot be achieved by installation of reflective markers, lines, informational signs or other passive means.
- D.** Additional conditions or limitations may be imposed by the reviewing authority to protect the public health, safety or welfare, or to fulfill the purpose of this Chapter.

Chapter 4.5 • PERFORMANCE STANDARDS

Section 4.501 PURPOSE

The following performance standards are established in order to preserve the environmental health, safety, and welfare of the Village. No activity, operation, or use of land, building or equipment shall be used or occupied in any manner so as to create any dangerous, injurious, noxious or otherwise objectionable element or condition that adversely impacts the surrounding area.

Any violation of these standards in subsequent operations will be corrected. The costs of inspection by experts to determine compliance shall be borne by the applicant. The following standards are deemed the minimum requirements to be maintained.

Section 4.502 NOISE

- A. **NOISE LEVEL LIMITS.** No operation or activity shall be carried on which causes or creates measurable noise levels which have an annoying or disruptive effect on surrounding properties, or which exceed the maximum noise level limits prescribed in Table 4.5, as measured at the boundary line of the lot on which the operation or activity is located. The measuring equipment and measurement procedures shall conform to the latest American National Standards Institute (ANSI) specifications. The sound measuring equipment shall be properly calibrated before and after the measurement.

TABLE 4.5: MAXIMUM PERMITTED NOISE LEVELS

Zoning District	Time	Sound Level (A Weighted) Decibels dB(A)
Residential	7:00 AM to 7:00 PM	55
	7:00 PM to 7:00 AM	50
Commercial / Mixed-Use	Any Time	55
Industrial	Any Time	70

- B. **INTERMITTENT SOUNDS.** Intermittent sounds or sounds characterized by pure tones may be considered a violation of this Section, even though the measured sound level may not exceed the permitted level in Table 4.5.
- C. **PERMITTED EXEMPTIONS.** Noise resulting from the following activities shall be exempt from the maximum permitted sound levels provided such activity occurs in a legally accepted manner:
1. Temporary construction activity that occurs between 7:00 AM and 7:00 PM.
 2. Performance of emergency work.
 3. Warning devices necessary for public safety, such as police, fire, and ambulance sirens and train horns.
 4. Lawn care and house maintenance that occurs between 8:00 AM and 9:00 PM.

Section 4.503 VIBRATION

Vibration is the oscillatory motion of a solid body. Machines or operations which cause vibration may be permitted in the industrial district, provided that: no operation shall generate any ground or structure borne vibrational motion that is perceptible to the human sense of touch beyond the property line of the site on which the operation is located.

Section 4.504 AIRBORNE EMISSIONS / GAS

It shall be unlawful for any person, firm, or corporation to emit or create any smoke or air contaminant in violation of applicable air quality standards adopted by the Federal Clean Air Act and MDNR. The escape or emission of any gas which is injurious or destructive, harmful to person or property, or explosive is prohibited.

Section 4.505 ODORS

Any condition or operation which results in the creation of odors of such intensity and character as to be detrimental or which interferes unreasonably with the comfort of the public shall be removed, stopped, or so modified as to remove the odor. Such odors shall be prohibited when perceptible at any point along the property line.

Section 4.506 ELECTROMAGNETIC RADIATION AND RADIOTRANSMISSION

Electronic equipment required in an operation shall be designed and used in accordance with applicable rules and regulations established by the Federal Communications Commission (FCC). The operation of such equipment shall not interfere with the use of radio, television, or other electronic equipment on surrounding or nearby property.

Section 4.507 PROPERTY MAINTENANCE

All properties within the Village shall be maintained in accordance with the requirements of the most recent edition of the International Property Maintenance Code.

Section 4.508 LIQUID OR SOLID WASTE

No operations shall directly discharge waste of any kind into any river, stream, reservoir, pond, or lake. All methods of sewage and industrial waste treatment and disposal shall be approved by the Village and state health departments, MDEQ, or MDNR.

Section 4.509 HAZARDOUS SUBSTANCE CONTAINMENT AND STORAGE

The storage and handling of hazardous substances shall comply with all applicable state, county and local regulations. There shall be no general purpose floor drains in structures in which hazardous substances are kept. Above ground storage containers for hazardous materials shall require secondary containment facility capable of containing the total volume of all hazardous substances.

Chapter 4.6 • Sustainable Energy Generation

Section 4.601 INTENT

It is the purpose of this Chapter to promote the safe, effective, and efficient use of sustainable wind and solar energy systems to reduce or replace on-site consumption of utility supplied electricity. Wind and solar energy are abundant, renewable, and nonpolluting energy resources and their conversion to electricity will reduce dependence on non-renewable energy resources and decrease air and water pollution that results from the use of fossil fuel inputs. The use of distributed sustainable energy systems will also enhance the reliability and power quality of the power grid, reduce peak power demands, and help diversify the Village's energy supply portfolio.

Section 4.602 DEFINITIONS

The terms used in this Section will have the following meanings:

HEIGHT. The vertical distance from grade level adjacent to the base of the structure to the edge of the blade at highest rotation for a horizontal axis wind turbine or the highest point of a vertical-axis wind turbine.

ROOF-MOUNTED ENERGY SYSTEM. A type of small wind energy conversion system that is mounted on a roof with a height not greater than 15 feet above the ridgeline of a pitched roof or parapet of a flat roof.

SMALL WIND ENERGY SYSTEM. A wind energy conversion system consisting of a wind turbine, tower or axis, blades or blade system, and associated control or conversion electronics primarily intended to reduce on-site consumption of utility power.

SOLAR ENERGY SYSTEM. A solar photovoltaic cell, panel, or array that converts solar energy to usable thermal, mechanical, chemical, or electrical energy.

SOLAR STORAGE BATTERY. A device that stores energy from the sun and makes it available in an electrical form.

TOWER MOUNTED WIND ENERGY SYSTEM. A wind energy conversion system that is mounted on a freestanding or guyed tower attached to the ground, and not attached to any other permanent or temporary structure.

UTILITY WIND ENERGY SYSTEM. A wind energy conversion system consisting of a wind turbine, tower or axis, blades or blade system, and associated control or conversion electronics primarily intended to provide wholesale or retail energy to the electric utility grid.

WIND ENERGY SYSTEM. Any wind energy conversion device including all associated control or conversion electronics.

Section 4.603 WIND ENERGY SYSTEMS

A. WHERE PERMITTED.

- 1. Small Wind Energy Systems.** Subject to the requirements of this Section, roof mounted systems are permitted by right in any zoning district, and tower mounted systems are permitted by right in any district except the MU-1 and MU-2 districts.
- 2. Utility Wind Energy Systems.** Utility systems may be permitted in the I-1 district, subject to special land use permit approval and the requirements of this Section. If the applicant

requests a height modification, the application shall be reviewed by the Planning Commission following a public hearing held in accordance with *Chapter 6.7: Public Hearing Process*.

- B. SMALL WIND ENERGY REVIEW PROCEDURES AND STANDARDS.** Applications for small wind energy systems shall be reviewed administratively.
- C. UTILITY WIND ENERGY REVIEW PROCEDURES AND STANDARDS.** Utility wind energy systems are subject to the special land use permit review process.
- D. GENERAL STANDARDS.** The following standards are applicable to all wind energy systems:
 - 1. Noise.** A wind energy system shall not generate a noise level of 55 dB(A), measured at the property line, for more than 3 minutes in any hour of the day. EXCEPTION: if the constant ambient sound pressure level exceeds 55 dB(A), measured at the base of the wind energy system, a decibel level of the ambient dB(A) plus 5 dB(A) shall not be exceeded for more than three minutes in any hour of the day.
 - 2. Shadow Flicker.** Shadow flicker is a term used to describe what happens when rotating wind turbine blades pass between the viewer and the sun, causing an intermittent shadow. The application for a wind energy system shall include a shadow flicker analysis demonstrating locations where shadow flicker will occur at sunrise and sunset, along with measures the applicant will take to eliminate or mitigate the effects of shadow flicker on adjacent or nearby affected properties.
 - 3. Lighting.** No wind energy system shall be artificially lighted except as required by the Federal Aviation Administration.
 - 4. Appearance, Color, and Finish.** The wind energy system shall be light gray, white, or sky blue in color. All wind energy systems shall be finished in a non-reflective matte finish.
 - 5. Signs.** All signs other than the manufacturer or installer's identification, appropriate warning signs, or owner identification signs are prohibited.
 - 6. Electrical Wires.** All electrical wires associated with a wind energy system other than wire necessary to connect the wind generator to the tower wiring, the tower wiring to the disconnect junction box, and grounding wires shall be located underground.
 - 7. Compliance with Electrical Code.** Building permit applications for wind energy systems shall be accompanied by line drawings of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code.
 - 8. System Access.** The tower shall be designed and installed such that step bolts, ladders, or other means of access readily accessible to the public are located at least eight feet above grade level and secured to prevent access by unauthorized persons.
 - 9. Wind Access.** The Village makes no assurance of wind access other than the provisions of this Section. The applicant may provide evidence of covenants, easement or similar documentation for abutting property owners providing access to wind for the operation of a wind energy system.

Section 4.604 Solar Energy Systems

- A. ROOFTOP AND BUILDING MOUNTED SOLAR ENERGY SYSTEMS.** Rooftop and building mounted solar energy systems are permitted in all zoning districts, subject to the following regulations:
1. A roof mounted system may not extend more than three feet above its affixed surface.
 2. No solar energy system may protrude beyond the edge of the roof.
 3. A building permit shall be required for installation of rooftop and building mounted systems.
- B. GROUND MOUNTED SOLAR ENERGY SYSTEMS.** Ground mounted and freestanding solar energy systems are permitted in all zoning districts, subject to the following regulations:
1. **Location.** The solar energy system shall meet the required front yard setback requirement for the district in which it is located, and be set back a minimum of five feet from any side or rear property line.
 2. **Height.** The height of the solar energy system and any mounts shall not exceed 10 feet when oriented at maximum tilt. If the solar energy system is located in a front yard between the required front setback line and front building wall of the principal building, the maximum height for the system shall be 42 inches (3.5 feet). Evergreen landscaping that is sufficient to buffer the equipment from view from nearby dwelling units or streets but that will not obstruct the energy collecting surface from solar energy shall be provided.
 3. **Building Permit.** A building permit shall be required for any ground mounted solar energy system.
 4. **Area.** No more than 20 percent of the total lot area may be covered by a ground mounted solar energy system.
 5. **Batteries.** When batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure when in use, and when no longer used shall be disposed of in accordance with applicable laws and regulations.
- C. REMOVAL.** If a solar energy system ceases to perform its intended function for more than 12 consecutive months, the property owner shall remove the collector, mount, and associated equipment and facilities no later than 90 days after the end of the 12 month period.

Chapter 4.7 • CONSERVATION DEVELOPMENT

Section 4.701 INTENT

It is the purpose of a Conservation Development to promote the provision of passive and active open space in the form of neighborhood and community parks and to encourage a less sprawling form of development. The following ratios of required open space are based on the National Recreation and Park Association guidelines for community open space.

Section 4.702 CONSERVATION DEVELOPMENT

- A. RELATIONSHIP TO UNDERLYING ZONING REGULATIONS.** A Conservation Development is permitted for use on any vacant and underdeveloped parcel of land located within an R-1 and R-2 Residential zoning district having a minimum of two acres of land area.
- 1. Uses Permitted.** Any use permitted by right or special land use in the underlying zoning district in which the property is located shall be permitted within a Conservation Development, provided all necessary approvals are met.
 - 2. Applicable Gross Density.** The gross density of development of the subject property shall be determined by dividing the minimum lot size required by the underlying zoning district into the gross square feet of the property to be development (excluding any protected areas such as wetlands), mathematically rounded up to the higher whole number.
- B. SITE PLAN AND REZONING APPROVAL REQUIREMENTS.** An application for Conservation Development approval shall be accompanied with a site plan which shall be processed in accordance with *Article 6: Administration & Enforcement*. Approval of a Conservation Development is a rezoning of the subject property, designating the property as a Conservation Development Overlay district.
- C. ZONING MAP DESIGNATION.** Upon approval of a Conservation Development, the Village Clerk shall indicate the subject property on the Zoning Map as a Conservation Development (overlay) district by designating the property "CD" and including the date of the rezoning approval in the record of map amendments.

Section 4.703 REQUIRED OPEN SPACE

- A. PERMANENT OPEN SPACE.** Permanent open space shall mean permanently undeveloped by means of a conservation easement, plat dedication, restrictive covenant, or other legal means that runs with land, in a form acceptable to the Planning Commission and Village Council. The form of management and maintenance of the open space shall be submitted for any approval to ensure such open space shall be properly managed and maintained in perpetuity and that the conversation easement, deed restrictions, or dedication shall be adequately monitored and enforced by the organization or entity holding title to the easement or property rights of the designated open space.
- B. MINIMUM OPEN SPACE REQUIRED.** Every residential development with 20 or more units shall provide a minimum of 6,000 square feet of common park area for every 20 units or fraction thereof.
- C. INCENTIVE BONUS DENSITY FOR INCREASED OPEN SPACE.** The Planning Commission may grant a variable density bonus, up to 15 percent for exemplary projects, based on a demonstration by the

applicant of design excellence in the open space community. Projects qualifying for a density bonus shall include at least one of the following elements:

1. A high level of clustered development where a minimum of 60 percent is common open space.
2. Inclusion of an integrated mixture of housing types.
3. Cleanup of site contamination.
4. Other similar elements as determined by the Planning Commission.

Section 4.704 OPEN SPACE DESIGN

Required open space in a residential development shall be provided in the form of a Significant Natural Asset, Park, Square, or Playground as described below. Connections to adjacent open space, public land, or existing or planned pedestrian / bike paths may be required by the Planning Commission.

Any structure(s) or building(s) accessory to a recreation, conservation, or public use may be erected within the dedicated open spaces, subject to the approved open space plan. However, the proposed location of accessory structures or uses that are of a significantly different scale or character than any abutting residential uses, shall not be located near the boundary of the development or so as to negatively impact the residential use of adjacent lands.

- A. PARK.** A natural preserve available for unstructured recreation. A park may be independent of surrounding building frontages. Its landscape shall consist of paths and trails, meadows, waterbodies, woodlands, and open shelters, all naturalistically dispersed. Parks may be linear, following the trajectories of natural corridors. The minimum size shall be eight acres.
- B. SQUARE.** An open space available for unstructured recreation and community gathering. A square is often spatially defined by building frontages. Its landscape shall consist of path, lawns and trees, and other pedestrian amenities such as seating, fountains, and public art.
- C. PLAYGROUND.** An open space designed and equipped for the recreation of youth. Such a recreation area may include, passive recreational facilities, soccer fields, ball fields, bike paths or similar facilities which provide a feature of community-wide significance and enhance the development.
- D. SIGNIFICANT NATURAL ASSET.** An open space which contains significant natural assets such as woodlands, individual trees over 12 inch diameter, rolling topography, significant views, regulated or non-regulated wetlands or natural corridors that connect quality wildlife habitats that are in the best interest of the Village to preserve.