

EXHIBIT F
ZONING AND OTHER STANDARDS

- A. Provisions not Applicable. Article 16 of the Village Zoning Ordinance and, except to the extent necessary to implement these standards, Article 20 of the Village Zoning Ordinance do not apply to the Property.
- B. Definitions. The following definitions shall be used in interpreting the Zoning Standards set forth below. In the event of any conflict between these definitions and the provisions of the Village Zoning Ordinance, the Village Subdivision Ordinance or any other Village Ordinance, these definitions will control.
1. Accessory Building or Structure.
- a. An "accessory building or structure" is one which:
- (1). Is subordinate to and serves a principal building or principal use; and,
 - (2). Is subordinate in area, extent or purpose to the principal building or principal use served; and
 - (3). Contributes to the comfort, convenience, or necessity of occupants of the principal building or principal use served; and
 - (4). Is located on the same zoning lot as the principal building or principal use served with the single exception of such accessory off-street parking facilities as are permitted to locate elsewhere than on the same zoning lot with the building or use served.
- b. An "accessory structure" includes, but is not limited to, the following:
- (1). A garage, shed, or building for domestic storage;
 - (2). Storage of goods used in or produced by manufacturing activities, on the same lot or parcel of ground with such activities, unless storage is excluded by the district regulations;

- (3). Off-street motor vehicle parking area, and loading and unloading facilities;
- (4). Public utility communication, electric, gas, water, and sewer lines, their supports, and incidental equipment; and
- (5). Central heating or air-conditioning facilities, solar energy collectors for the purpose of providing energy for heating and/or cooling whether as part of a structure or incidental to a group of structures in the nearby vicinity;

c. No accessory buildings shall be used for residential living quarters.

2. Accessory Use. A use which is customarily and exclusively incidental to the principal building or use which it serves and which (with the single exception of such off-street parking spaces as are permitted to locate elsewhere) is located on the same zoning lot as the principal building or use.
3. Acreage. Any tract or parcel of land having an area of one acre or more which has not been subdivided by metes and bounds or platted.
4. Agriculture. "Agriculture" is the use of land for agricultural purposes, including, farming, dairying, pasturage, apiculture, horticulture, floriculture, viticulture, and animal and poultry husbandry, and the necessary accessory uses for packing, treating, or storing the produce; provided, however, that the operation of any such accessory uses shall be secondary to that of the normal agricultural activities.

Agriculture shall not include the commercial feeding of garbage or offal to swine or other animals, the commercial feeding of animals on open lots where no feed is raised on the premises, or the commercial feeding of poultry broilers or laboratory animals such as mice, rabbits, rats, etc.
5. Awning. A rooflike cover, temporary in nature, which projects from the wall of a building.
6. Basement. A story having part but not more than one-half (1/2) its height below grade. A basement shall be counted as a story for purpose of height regulation.

7. **Building.** Any structure with substantial walls and roof securely affixed to the land and entirely separated on all sides from any other structure by space or by walls in which there are no communicating doors, windows, or openings; and which is designed or intended for the shelter, enclosure, or protection of persons, animals, or chattels. Any structure with interior areas not normally accessible for human use, such as gas holders, oil tanks, water tanks, grain elevators, coal bunkers, oil cracking towers, and other similar structures, are not considered as buildings.
8. **Buildable Area.** The space remaining on a zoning lot after the minimum open space requirements of these Zoning Standards have been complied with.
9. **Building Height.** The vertical distance measured from the surface of the first finished floor of a building to the highest point of a building, excluding chimneys, antennas, and other appurtenances.
10. **Building, Principal.** A non-accessory building in which is conducted the main use of the zoning lot on which it is situated.
11. **Building, Setback Line.** A line parallel to the street line at a distance from it, regulated by the front yard requirements set forth in these Zoning Standards.
12. **Bulk.** The term used to describe the size and mutual relationships of buildings and other structures as to size, height, coverage, shape, location of exterior walls in relation to lot lines, to the center lines of streets, to other walls of the same building, and to other buildings or structures, and to all open spaces relating to the building or structure.
13. **Child Care Centers.** Day care centers which receive pre-school or school-age children, or both, for short term or extended hours of care, or out of school hours, and which provide essential personal care, protection, supervision, training and programs to meet the needs of the children served.
14. **Clinic, Medical and Dental.** An establishment where patients are admitted for study or treatment by two or more licensed physicians and their professional associates, practicing medicine together.
15. **Club or Lodge, Private.** An association of persons who are bona fide members paying annual dues, which owns, hires, or leases a building or portion thereof. Food

and alcoholic beverages may be served on its premises, provided they are secondary and incidental to the principal use and appropriate licenses are obtained from the Village.

16. Commercial Vehicle. Any vehicle other than a passenger vehicle operated for the transportation of persons or property in the furtherance of any commercial or industrial enterprise, For-Hire or Not-For-Hire, not including, however, a recreational vehicle not being used commercially.
17. Corner Lot. See Lot, Corner.
18. Corporate Authorities. The President and Board of Trustees of the Village of Vernon Hills then holding office.
19. Court. An open unoccupied space other than a required yard on the same lot with a building, which is totally or partially enclosed by a building or buildings and completely open to the sky.
20. Court, Inner. A court enclosed on all sides by exterior walls of a building or by exterior walls and lot lines on which walls are allowable.
21. Court, Outer. A court enclosed on not more than three sides by exterior walls of a building or by exterior walls and lot lines on which walls are allowable, with one side or end open to a street, driveway, alley or yard.
22. Coverage, Lot. See Lot Coverage.
23. Curb Level. See Grade.
24. Driveway. The paved area located between the curb of the roadway in the public street and the open or enclosed parking area located behind the front line of the dwelling unit.
25. Floor Area Ratio. The floor area of the building or buildings on that zoning lot divided by the area of such zoning lot. The "floor area ratio" requirements shall determine the maximum floor area allowable for the building or buildings in direct ratio to the gross area of the zoning lot. The "floor area" of a building is defined as total gross floor space. Any space devoted to off-street parking or loading shall not be included in the floor area.

26. Frontage. All the property on one side of a street between two intersecting streets (crossing or terminating) measured along the line of the street, or if the street is dead-ended, then all of the property abutting on one side between an intersecting street and the dead-end of the street.
27. Grade. The average level of the finished surface of the ground adjacent to the exterior walls of the building or structure.
28. Gross Floor Space. The sum of the gross horizontal areas of all the floors, including basement, in a building, which areas shall be measured from the exterior faces of the exterior walls or from the centerline of walls separating buildings, as the case may be.
29. Hotel or Motel. A building in which rooms or suites are reserved to provide living and sleeping accommodations for temporary guests.
30. Laboratory, Commercial. A place devoted to experimental study such as testing and analyzing. Manufacturing, assembly, or packaging of products is not included within this definition.
31. Loading and Unloading Space, Off-Street. An open hard-surfaced area of land other than a street or public way, the principal use of which is for the standing, loading and unloading of motor trucks, tractors, and trailers to avoid undue interference with the public use of streets and alleys.
32. Lot. The word "lot" when used alone shall mean a zoning lot unless the context of these Zoning Standards clearly indicates otherwise.
33. Lot, Corner. A parcel of land situated at the intersection of two or more streets or adjoining a curved street at the end of a block.
34. Lot Coverage. The area of a zoning lot occupied by the principal building or buildings and accessory buildings.
35. Lot Depth. The average horizontal distance between the front and rear lot lines.
36. Lot, Interior. A lot other than a corner lot.

37. Lot Line, Front. That boundary of a lot which is along a street right-of-way. For land-locked or partially land-locked land, the front lot line is that lot line that faces the access to the lot.
38. Lot Line, Interior. A side lot line common with another lot.
39. Lot Line, Rear. The rear lot line is the lot line or lot lines most nearly parallel to and most remote from the front lot line. Lot lines other than front or rear lot lines are side lot lines. If the rear lot line is less than ten (10) feet in length, or if the lot forms a point at the rear, the rear lot line shall be deemed to be a line ten (10) feet in length within the lot, parallel to and at the maximum distance from the front lot line. If the rear lot line is more than 10 feet in length and the lot also forms a point in the rear, then the rear yard is measured from said line.
40. Lot of Record. A lot which is a part of a subdivision, the map of which has been recorded in the office of the County Recorder of Deeds.
41. Lot, Through. A lot having frontage on two parallel or approximately parallel streets, and which is not a corner lot.
42. Lot Width. The horizontal distance between the side lot lines measured at right angles to the lot depth at the established front building line.
43. Lot, Zoning. See Zoning Lot.
44. Manufacture. The making of anything by an agency or process.
45. Marquee or Canopy. A rooflike structure of a permanent nature which projects from the wall of a building.
46. Octave Band. An "octave band" is a means of dividing the range of sound frequencies into octaves in order to classify sound according to pitch.
47. Parking Area, Private. A hard-surfaced area other than a street, driveway or public way, designed, arranged, and made available for the storage of private passenger automobiles, recreational vehicles and commercial vehicles of occupants of the building or buildings for which the parking area is developed and is accessory.

48. Parking Area, Public. A hard-surfaced area other than a street or public way intended to be used for the storage of passenger automobiles and commercial vehicles under one and one-half tons capacity, and available to the public, whether for compensation, free, or as an accommodation to clients or customers.
49. Parking Area, Underground. A building or portion of a building designed, arranged, and made available for storage of private passenger automobiles and commercial vehicles under one and one-half tons capacity, of occupants of the building under which the parking is developed.
50. Parking Space, Automobile. Space within a public or private parking area for the storage of one passenger automobile or commercial vehicle under one and one-half tons capacity.
51. Passive Solar Energy. A solar energy system that uses natural and architectural components to collect and store solar energy without using any external mechanical power.
52. Public Utility. Any person, firm, corporation, or municipal department duly authorized to furnish to the public electricity, gas, steam, telephone, telegraph, cable television, transportation, or water.
53. Public Utility Facilities. Poles, towers, wires, cables, conduits, vaults, laterals, transformers, pedestals, switchgear and other similar transmission or distribution equipment of a Public Utility.
54. Public Way. A thoroughfare for travel or transportation from place to place which is accessible to the public.
55. Ringelmann Number. The number of the area on the Ringelmann Chart published and used by the U. S. Bureau of Mines that coincides most nearly with the visual density of emission or the light-obscuring capacity of smoke.
56. Setback Line, Building. See Building Setback Line.
57. Sign(s). Any identification, description, illustration or illuminated device which is visible from any public place or is located on private property and exposed to the public and which directs attention to a product, service, place, activity, person, institution, business, or solicitation, including any permanently

installed or situated merchandise or any emblem, painting, banner, pennant, placard, or temporary sign designed to advertise, identify or convey information, with the exception of national flags. For the purpose of removal, signs shall also include all sign structures.

58. Smoke Units. The number obtained by multiplying the smoke density in Ringelmann numbers by the time of emission in minutes. For the purpose of this chart, Ringelmann density reading is made at least once every minute during the period of observation; each reading is then multiplied by the time in minutes during which it is observed, and the various products are added together to give the total number of "smoke units" observed during the total period under observation.
59. Story. That portion of a building included between the surface of any floor and the surface of the floor next above it, or if there be no floor above it, then the space between the floor and the ceiling next above it.
60. Street. The width of the right-of-way or easement, whether public or private, and shall not be considered as the width of pavement or other improvement on the right-of-way.
61. Street Line. A dividing line between a lot, tract, or parcel of land and a contiguous street.
62. Structure. Anything built, constructed or placed, which requires location in or on the ground or is attached to something having a location on the ground.
63. Structural Alterations. Any change other than incidental repairs which would prolong the life of the supporting members of a building or structure, such as bearing walls, columns, beams, or girders.
64. Terrace, Open. A level plane or platform which is located abutting one or more faces of the principal structure and which is constructed not more than four feet in height above the average level of the adjoining ground.
65. Use. The purpose for which land or a building thereon is designed, arranged, or intended, or for which it is occupied or maintained, let, or leased.
66. Village. The Village of Vernon Hills.

67. Wind Energy Conversion System. Any device, such as wind charger, wind turbine, or windmill, that converts wind power to another form of energy such as electricity or heat.
68. Yard. An open space on the same zoning lot with a principal building or group of buildings, which is unoccupied and unobstructed from its lowest level upward, except as otherwise permitted in these Zoning Standards and which extends along a lot line and at right angles thereto to a depth or width specified in the applicable yard regulations
69. Yard, Front. A yard extending across the full width of the zoning lot and lying between the front line of the lot and the closest point of a building.
70. Yard, Rear. A yard extending across the full width of the zoning lot and lying between the rear line of the lot and the nearest line of the principal building, which is unobstructed and unoccupied from its lowest level upward except as otherwise permitted in these Zoning Standards.
71. Yard, Side. That part of the yard lying between the nearest line of the principal building and a side lot line, and extending from the required front yard (or from the front lot line, if there is no required front yard) to the required rear yard which is unoccupied and unobstructed from its lowest level upward except as otherwise permitted in these Zoning Standards.
72. Zoning Lot. The basic development unit - an area with fixed boundaries, used or intended to be used by one building and its accessory building or buildings unless otherwise specified in these Zoning Standards.
- C. Permitted Uses. No building or land shall be used and no building shall be erected, structurally altered or enlarged unless otherwise provided herein, except for the following uses (which shall be subject to the Performance Standards set forth below):
1. Laboratories, offices and other facilities for research and development, including basic, applied development and technical services conducted by or for any individual organization or concern, whether public or private.
 2. Engineering and testing laboratories and offices.
 3. Offices, business or professional.

4. Clinics, medical and dental.
 5. Banks and financial institutions.
 6. Civic buildings.
 7. Accessory and factory outlet retail services.
 8. Child care center.
 9. Building material sales.
 10. Contractors' shops.
 11. Hotels and motels.
 12. Eating and drinking establishments for which appropriate Village licenses have been issued.
 13. Garages for storage, repair and servicing of motor vehicles, including body repair, painting and engine rebuilding.
 14. Warehouse storage of nonhazardous materials, products and equipment, wholly enclosed within the building.
 15. Wholesale sales and warehouses.
 16. Public utility facilities (including wells, water, reservoir and pumping stations).
 17. Any manufacturing, fabricating, processing, assembly, repairing, storing, cleaning, servicing, or testing of materials, goods or products, and related office uses.
 18. Agriculture
 19. Private or Public Recreation and Social Facilities.
 20. Accessory uses to the above permitted uses including outside storage as permitted by Section E below.
 21. Off-street parking and loading facilities as required or permitted by Section I of these Zoning Standards.
- D. Special Uses. Upon the recommendation by the planning and zoning commission, after public hearing on petition pertaining thereto, in accordance with the requirements set forth for such hearing in Section 21.6 of the Village Zoning Ordinance, the Corporate Authorities may, by special use permit, allow the following uses:

1. Heliports.
2. Radio and television transmitting or antenna towers (commercial), telephone exchanges, and other electronic equipment requiring outdoor structures, and including antenna towers used for the sending of private messages, but not including private receiving aerials or antennas.
3. Wind Energy Conversion System.

E. Required Conditions. The following conditions shall be required:

1. Accessory uses shall be customarily incidental to principal uses and shall be for the convenience of the tenants and employees of the building or structure in which or next to which they are located. These uses, unless otherwise permitted herein, shall be conducted wholly within a building or structure.
2. Any production, processing, cleaning, servicing, testing, repair, or storage of goods, materials, or products shall take place without creating disturbing influences to the use and occupancy of adjoining properties.
3. All business, production servicing, and processing shall take place within completely enclosed buildings unless otherwise provided herein or specified by the Corporate Authorities.
4. Temporary or permanent outside storage of any and all raw materials, consumables, work-in-process, packing materials, inventory and equipment of any kind shall be acceptable only if located directly behind principal buildings and effectively screened with landscaping and/or other suitable designs and materials.
5. All refuse collection or pick-up areas shall be completely screened on all sides (excluding the top).
6. All principal buildings shall be provided with automatic fire sprinkler systems.

F. Lot area. Each principal building and its accessory buildings and uses shall have a minimum frontage of 150 feet and be situated on at least 60,000 square feet of land. Lots shall have a minimum lot size of 20,000 square feet and a minimum frontage of 50 feet.

G. Bulk Requirements.

1. Front yards. There shall be provided a front yard of not less than fifty (50) feet in depth. That fifty (50) feet shall be seeded or sodded as the owner may elect, except for driveways, aisles, and pathways. These yards shall be increased by one (1) foot for each one (1) foot in height by which any building on the lot exceeds thirty (30) feet.
2. Side yards. There shall be provided a side yard of not less than twenty-five (25) feet in depth except that such side yard shall be increased in depth by one (1) foot for each one (1) foot in height by which any building on the lot exceeds thirty (30) feet.
3. Rear yards. There shall be required a rear yard of not less than twenty-five (25) feet in depth except that such rear yard shall be increased by one (1) foot for each one (1) foot in height by which any building on the lot exceeds thirty (30) feet. Notwithstanding any other provision hereof, the required rear yard along Bartlett's Woodbine Estates Subdivision shall be forty (40) feet within which there shall be a twenty-five (25) foot minimum green belt contiguous to the Subdivision in which there shall be no paving.
4. Yard requirements, general.
 - a. Where a lot fronts on either Route 21 or Route 45, the required setback from said Route shall be one hundred (100) feet. No parking shall be allowed within said required setback and said setback shall be seeded or sodded as the owner may elect prior to occupancy.
 - b. Parking facilities shall be permitted in any required side or rear yard provided they are not located within eight (8) feet of a zoning lot line.
 - c. Notwithstanding the provisions of Section 5.4.3.1 of the Village Zoning Ordinance and Section 501.2.3. of the Village Code, there shall be a minimum of a twenty-five (25) foot fire separation between the building or structure and all lot lines, or such lesser distance required by the 1981 BOCA Code or any subsequent BOCA Code adopted by the Village.
5. The maximum height for industrial buildings shall be forty-five (45) feet. The maximum height for office

buildings shall be ninety-five (95) feet (except that the maximum height for any building located on lots adjacent to the Woodbine Estates Subdivision shall be forty-five feet). Height shall be computed from the surface of the first finished floor to the highest point of a building, excluding chimneys, antennas, and other appurtenances.

6. The combined floor area ratio for any principal building, excluding all accessory buildings, shall not exceed five tenths (0.5) on any lot.
7. No buffer strip, fencing or special landscape treatments will be required along lot lines abutting residential districts.
8. No fire/emergency lane shall be required unless required by the Vernon Fire Protection District.

H. Accessory Buildings and Structures.

1. Application of Section. Where an accessory building is structurally attached to a principal building, it shall be subject to and must conform to all regulations of this Section applicable to the principal building.
2. Location of Accessory Buildings and Structures.
 - a. An accessory building or structure shall not be located in any required front yard, side yard, or rear yard and shall not be closer to the front lot line than any principal building.
 - b. No accessory building or structure shall be located on a corner lot beyond the required front yard of the adjacent lot to the rear.
3. Height Restrictions.
 - a. All accessory buildings and structures shall comply with the height limitations contained herein provided that the accessory building or structure does not exceed the height of the principal building or structure.
 - b. Radio and television towers and antennas (non-commercial) shall not exceed sixty (60) feet in total height from grade.
4. Timing of Construction. An accessory building or structure shall not be erected prior to the establishment or construction of the principal building to which it is accessory.

- I. Performance Standards. All industrial activities shall be established and maintained in accordance with the following performance standards.

It is the intent of these standards to provide that industrial activities shall be established and maintained in order that each permitted use shall be a good neighbor to adjoining properties by the control of emission of noise, odor, glare, vibration, smoke, dust, liquid wastes, and other nuisances.

The architectural and engineering plans shall bear the signature and seal of the appropriate qualified professional and the certification that all performance standards will be complied with based upon the submitted plans and documents. The Village shall have the right to conduct its own investigation to determine compliance with the performance standards.

1. Compliance. The performance standards set forth herein shall be complied with and any use which fails to comply with these standards shall be in violation of the Village Zoning Ordinance and be subject to penalties provided for such violation. It shall be deemed a violation of these standards for any qualified professional to falsely certify as to the compliance of submitted plans and documents with the performance standards specified herein.

2. Landscaping. Those portions of property not devoted to buildings, pavement or other permanent improvements shall be landscaped and well maintained. Landscaping shall mean at a minimum, the use of trees and a ground cover defined as grass, shrubs or other plant material allowing water to seep through the ground. Grass may be seeded rather than sodded to achieve the necessary ground cover. Berming can also be used effectively. Berm profile shall not exceed a slope of one (1) foot of elevation in four (4) horizontal feet unless other approved methods of slope stabilization are utilized.
 - a. Landscaping may include:
 - (1) Trees planted in conformance with the Annexation Agreement and with applicable Village Ordinances.
 - (2) Combination of berming and tree planting.
 - (3) Combination of berming and shrub planting.

(4) Berming with low ground cover.

- b. No plants shall be placed in such a way as to obstruct pedestrian or vehicular sight of a public right-of-way and no plant shall be placed so as to interfere or cause damage to roadways, utilities or other public works. Species of trees known to cause damage to roadways, underground utilities or other public works shall not be used in an area where such damage could occur.
- c. Parking areas, building exteriors and all other parts of the tract visible from the public way shall be maintained in a sightly, well-kept condition.
- d. All landscape plans must show the proposed land slope with a one (1) foot contour interval, all proposed plantings, drainage facilities, pavements, and other proposed facilities

3. Noise. At no point on the property line on which the operation is located shall the sound intensity level of any individual operation or plant (other than the operation of motor vehicles or other transportation vehicles) exceed the levels shown in the following table:

Table of Maximum Permitted Sound Level (Decibels)

Octave Band (Frequency) Cycles per Sound	Industrial or Commercial Adjoining Same District	Industrial or Commercial Adjoining Residential Properties
0 to 75	79	72
75 to 150	74	67
150 to 300	66	59
300 to 600	59	52
600 to 1200	53	46
1200 to 2400	47	42
2400 to 4800	41	38
above 4800	39	38

Noise testing is to be accomplished at the property line of the noise emitting source, with an octave band analyzer operated by an independent testing authority trained and skilled in the operation of this equipment.

4. Odors. The emission of odorous matter in such quantities as to be readily detectable at any point

along a property line or which is unwholesome, offensive, harmful or injurious to the public health, comfort or welfare, is prohibited. The measurement of the threshold of odor shall be in accordance with the American Society for Testing and Materials Method D1391-57 "Standard Method for Measurement of Odor in Atmosphere (Dilution Method)" Philadelphia: American Society of Testing and Materials, 1957, (which is hereby adopted by reference). Detailed plans for the prevention of odors crossing property lines may be required before the issuance of a building permit.

5. Glare or Heat. Any operation producing intense glare or heat shall be performed within a completely enclosed building in such manner as not to create a public nuisance or hazard. Exposed sources of light shall be controlled so that direct or indirect illumination from any source within the property line shall not cause illumination in excess of one half of one (0.5) foot candle when measured at any zoning lot line. The measurement of glare or light shall be made at the property line using a light meter operated by a trained operator through an independent testing agency. Any lights used for exterior illumination shall be planned, erected and maintained to direct light away from adjoining properties or public right-of-ways.
6. Vibration. Any operation or activity shall not cause earthborn vibrations in excess of the following values. Column I shall apply at or beyond the property line, Column II shall apply at or beyond a residence district boundary line. Vibration shall be expressed as displacement in inches and shall be measured with a three-component measuring system:

Frequency (Cycles per second)	I Displacement Inches	II Displacement Inches
0 to 10	.0008	.0004
10 to 20	.0005	.0002
20 to 30	.0002	.0001
30 to 40	.0002	.0001
40 and over	.0001	.0001

Impact vibrations (discrete pulses that do not exceed one hundred (100) impulses per minute), shall not cause in excess of twice the displacement values above.

Any use or portion thereof creating intense earth-shaking vibrations such as are caused by heavy drop forges or heavy hydraulic surges, shall be set back at least five hundred (500) feet from all property lines.

7. Smoke and Particulate Matter. In addition to the performance standards specified herein, the emission of smoke or particulate matter in such manner or quantity as to endanger or be detrimental to the public health, safety, comfort or welfare is hereby declared to be a public nuisance.

For the purpose of grading the density of smoke, the Ringelmann Chart, published and used by the United States Bureau of Mines (hereby adopted by reference), shall be employed. The evaluation of smoke by the Ringelmann Chart must be accomplished by a State of Illinois Certified Smoke Reader. Particulate matter size shall be determined by measurement through a 325 mesh sieve which will, in fact, accumulate all +44 micron particles and prove helpful in the measurement process. The emission of smoke or particulate matter of a density greater than No. 2 on the Ringelmann Chart is prohibited.

The emission from all sources within any property of particulate matter containing more than 10% by weight of particles having a particulate diameter larger than +44 microns is prohibited. Dust and other types of air pollution, borne by the wind from such sources as storage areas, yards, roads and the like within property boundaries, shall be kept to a minimum by appropriate landscaping, paving, oiling, fencing, or other acceptable means. Emission of particulate matter from such sources in excess of the weight limitation herein specified is hereby prohibited.

The emission of more than ten (10) smoke units per hour per stack is prohibited, including smoke of a density in excess of Ringelmann No. 2. However, during one (1) one-hour period each day, stack may emit up to twenty (20) smoke units when blowing soot or cleaning fires. Only during firecleaning periods, however, shall smoke of Ringelmann No. 3 be permitted, and then for not more than four (4) minutes.

The rate of emission of particulate matter from all sources within the boundaries of any property shall not exceed a net figure of one (1) pound per acre during any one (1) hour, after deducting from the gross hourly emission per acre the corrective factors set forth in the following tables for height, velocity, and temperature of emission, respectively. Determination of the total net rate of emission of particulate matter within the boundaries of any property shall be made as follows:

- a. Determine the maximum emission in pounds per hour from each source of emission and divide this figure by the number of acres of property area, thereby obtaining the gross hourly rate of emission in pounds per acre.
- b. From each gross hourly rate of emission derived in (a) above deduct the appropriate correction factor (interpolating as required) for height, velocity and temperature of emission set forth in the following corresponding tables, thereby obtaining the net rate of emission from all sources of emission within the boundaries of the property. Such total shall not exceed one (1) pound per acre of property area during any one (1) hour.

Allowance for Height of Emission*

Height of Emission Above Grade (feet)	Correction Pounds/Hours/Acre
50	0.01
100	0.06
150	0.10
200	0.16
300	0.30
400	0.50

Allowance for Temperatures of Emission*

Temperature of Emission (Degrees Fahrenheit)	Correction Pounds/Hours/Acre
200	0.000
300	0.001
400	0.002
500	0.003
1000	0.010
1500	0.040
2000	0.100

* Interpolate for intermediate value not shown in table.

8. Gases, Toxic or Noxious Matter. No toxic materials shall be detectable at any point beyond the lot line, either at ground level or habitable elevation, whichever is more restrictive. Within the lot line, toxic materials which are released shall not exceed the maximum permissible airborne concentration allowed as safe for an industrial worker contained in the most recent list of "Threshold Limit Values" published by

the American Conference of Governmental Industrial Hygienists (hereby adopted by reference). The applicant shall satisfy the Zoning Administrator that proposed levels will be safe to the general population.

9. Radiation Hazards. The release of radioactive gases and particulate matter shall not exceed the maximum allowable concentration permitted the general population under applicable federal, state, and local laws and regulations when measured at or beyond the lot line at ground level or habitable elevation.

No activity involving radiation hazards shall be permitted which causes exposure to persons at or beyond the lot lines in excess of the maximum allowable concentration permitted the general population under applicable federal, state, and local laws and regulations.

10. Fire and Explosion Hazard. The storage, utilization or manufacture of materials or products ranging from incombustible to moderate-burning, as determined by the Village, in accordance with generally accepted standards, is permitted, subject to compliance with all other performance standards and provided the following conditions are met:

Said materials or products shall be stored, utilized or produced within completely enclosed structures having fire-resistive construction in accordance with the 1981 BOCA Code or any subsequent BOCA Code adopted by the Village.

Manufacturing or processing of materials or products which produce flammable or explosive vapors or gases at ordinary weather temperatures shall not be permitted, except when such materials are used in secondary processes or are required in emergency or standby equipment. Their storage for use as power or heating fuels shall be permitted if in conformity with standards prescribed by the National Fire Protection Association and with applicable requirements embodied in the regulations promulgated by the State of Illinois Department of Public Safety.

11. Register of Pollutants. It shall be unlawful for any person to install, erect, construct, reconstruct, alter or add to, or cause to be installed, erected, constructed, reconstructed, altered or added to, any fuel burning, combustion or process equipment or device or any equipment pertaining thereto, or any stack or

chimney connected therewith, within the Village excepting domestic heating plants, domestic refuse-burning equipment, locomotives and internal combustion engines, in the Village, until there has been filed in duplicate by the owner, contractor, installer or other person, or his agent with the Village, an application for a permit accompanied by a complete listing of emissions into the atmosphere that results from the operation of the aforesaid equipment or processes, both as to kind and quantity and, in addition thereto, a listing of the type and capacity of the equipment used for the collection, absorption, or suppression of each and an estimate of its efficiency, and until a permit therefor has been granted. Said submitted register of pollutants shall be accompanied by an affidavit of a qualified person stating that it is complete and correct and that the proper operation of the plant or process, as designed, will not result in any violation of these provisions.

12. Waste. All sewage and industrial wastes shall be treated and disposed of in such manner as to comply with the standards of the Lake County Public Works Department. Approval by the Illinois Environmental Protection Agency of all plans for waste disposal facilities shall be required before issuance of any building permit.

J. Off-Street Parking and Loading.

1. Scope of regulations.
 - a. Off-street parking and off-street loading facilities shall be provided as required by the regulations of this Section, for all buildings and structures erected, altered, or enlarged and all uses of land established in the Property.
 - b. When the intensity of use of any building, structure, or premises is increased through the addition of dwelling units, gross floor area, seating capacity, or other units of measurement, such increase shall be permitted only if the required parking and loading facilities for the addition are also provided.
 - c. Whenever the existing use of a building or structure shall hereafter be changed to a new use, parking or loading facilities shall be provided as required for such new use.

- d. Nothing in this Section shall be deemed to prevent the voluntary establishment of off-street parking and loading facilities in excess of the minimum requirements to serve any existing use of land or buildings, provided that all regulations herein governing the location, design, and operation of such facilities are adhered to.
2. Use of parking and loading facilities.
 - a. Off-street parking facilities shall be solely for the parking of motor vehicles of the employees, patrons or occupants of the permitted use and their guests.
 - b. Off-street loading facilities shall be used only for loading or unloading of goods, for the use of which such loading facilities are accessory, for the storage of vehicles and shall not be used for repair of vehicles.
3. Location of parking.
 - a. Off-street parking spaces shall be located on the same lot as the use served, except when the planning and zoning commission recommends and the board of trustees authorizes, for a specific use, all or part of the required off-street parking spaces to be located on a lot that does not contain the principal use or structure, provided such facilities are within one thousand (1,000) feet, measured along the shortest line of public access, of said building. In cases where parking facilities are permitted on a lot other than the lot on which the structure or use served is located, the owner of record of such lot shall be the same as the owner of record of the lot occupied by the structure or use in which the parking facilities are accessory, or the right of use of such lot may be granted for the duration of the structure or use served. In either case, a covenant running with the land must be recorded in the office of the Recorder of Deeds of Lake County, Illinois, for the lot upon which the accessory off-street parking is located, with the same requirements and conditions attaching to such substitute accessory use lot as would otherwise apply for such facilities. Copies of the recorded covenants and the lease agreements, if any, shall be deposited at the office of the zoning administrator. The covenants shall not be released and the lease agreement shall not be

terminated, until such time as either one of the following conditions occur:

(1). The structure on the lot containing the principal use is terminated; or

(2). Another lot of the required size, within the required distance, is properly developed and used for the required off-street parking, in place of the initial lot used for off-street parking, with the same requirements, covenants, and conditions attaching to such substitute accessory use lot, as approved by the same authority as required for approval of such initial use lot.

- b. Off-street parking facilities for different buildings, structures or uses, or for mixed uses on the same lot or parcel, may be provided collectively; provided, that the total number of spaces so located together shall not be less than the sum of the separate requirements for each use, and that such facilities are maintained in the same ownership as the use or uses served.

4. Location of Required Parking.

No required parking spaces shall be located within any required or landscaped buffer strip.

5. Computation of parking requirements.

In determining the number of off-street parking spaces required:

- a. Floor area shall mean the gross floor area of the specific use, excluding any floor or portion thereof used for parking;
- b. Where fractional spaces result, any fraction of one-half or less may be disregarded, while a fraction in excess of one-half shall be counted as one (1) parking space;
- c. Areas designated for loading and unloading, and driveways shall not be considered as parking spaces;
- d. In the case of mixed uses, the parking spaces required shall equal the sum of the requirements of the various uses computed separately.

6. Parking requirements for permitted and special uses.

a. Manufacture and Industrial Uses. 2.0 spaces per each three employees.

b. Transportation, Communication and Utilities.

(1) Telegraph office, telephone operator and business office - 4.0 spaces per 1,000 square feet of floor area.

(2) Public and private utilities installation - 2.0 spaces per each three employees.

c. Retail and Wholesale Trade.

(1) General commercial/retail (individual businesses) - 1.0 space per 250 square feet of floor area.

(2) Shopping Centers - 1.0 space per 220 square feet floor area. In a case where a major tenant is of a nature that would require a significant deviation from this standard, the parking requirement for that individual use shall be used.

(3) Eating and drinking establishments - 1.0 space per 100 square feet of floor area. Establishments with a drive-thru window shall provide a minimum of ten (10) stacking spaces per window.

(4) Household appliance stores, furniture stores, motor vehicle sales - 2.0 spaces per 1,000 square feet of floor area.

d. Services and Institutions.

(1) Business and professional offices - 1.0 spaces per each 300 square feet of floor area.

(2) Bank, savings and loans, and financial institutions - 1.0 space per each 250 square feet of floor area.

Drive-in establishments shall provide six (6) stacking spaces per teller or customer service area.

(3) Hotel, motel - 1.0 space per each dwelling unit plus one space per each employee plus

additional parking spaces for the retail/service/entertainment area.

(4) Health or medical institutions or sanitarium - 1.5 spaces per each 1,000 square feet of floor area.

(5) Dental and medical clinic or office - 5.0 spaces per each 1,000 square feet of floor area.

(6) Day care center, child care center, nursery school, pre-school - 2.0 spaces per each 1,000 square feet of floor area.

(7) Business school, commercial school, trade school, vocational school - 1.0 space per employee plus 1.0 space per each student based on rated design capacity.

(8) Dance school, music school, vocal school - 1.0 space per employee plus 1.0 space per each three (3) students based on rated design capacity.

(9) Governmental services - 4.0 spaces per 1,000 square feet of floor area.

(10) Philanthropic and charitable institutions, religious retreat - 1.0 space per 1,000 square feet of floor area.

e. Cultural Uses, Entertainment and Sports.

(1) Art gallery, historic site, library, museum - 2.0 spaces per 1,000 square feet of floor area.

(2) Community center, convention hall, exhibition hall, meeting hall, recreation building - 1.0 space per 1,000 square feet of floor area.

(3) Theater - 1.0 space per 2.5 seats.

7. Design and maintenance of parking facilities.

- a. Every parking lot shall be graded for proper drainage and provided with an all-weather surface, as approved by the Building Commissioner, maintained at all times in such manner as to prevent the release of dust, and shall be kept free of dust, trash and debris. The required maintenance shall include snow removal during the winter season.

- b. Every parking area shall be so designed that each parking space shall open directly upon an aisle or driveway, of such width and design as to provide safe and efficient means of vehicular access to such space(s).
- c. Every parking area shall be designed with appropriate means of vehicular access to a street, in such manner as to minimize interference with traffic movement.
- d. Entrances and exits to and from a parking area shall be not less than sixteen (16) feet and not more than thirty-six (36) feet in width.
- e. All open parking spaces shall be provided with curbs. No wheel guards or bumper stops are required.
- f. Where hazards exist which can be minimized or eliminated by lighting, or where parking use extends into hours of darkness, the corporate authorities may require lighting of the parking area, in such manner and during such hours as may be deemed necessary in the interest of public safety and security. Such lighting facilities shall be so arranged and operated that they neither unreasonably disturb occupants of adjacent properties, nor interfere with traffic. Parking area light levels shall be deemed adequate if:
 - (1) a minimum average of 0.6 footcandles per square foot is maintained for the entire parking area; and
 - (2) a minimum of 0.25 footcandles per square foot is maintained in all locations within the parking area; and
 - (3) shielded luminaries are utilized adjacent to residential areas.
- g. No public parking area shall be used for the sale, repair, dismantling or servicing of any vehicles, equipment materials or supplies.
- h. Each off-street parking space shall have an area of not less than one hundred eighty (180) square feet, exclusive of access drives or aisles, and shall have a length of not less than twenty (20)

feet, a width of not less than nine (9) feet, and a vertical clearance of not less than seven (7) feet, except as provided in subsection j below.

- i. Landscaping within every parking lot shall be provided in accordance with a plan, as approved by the Village Building Commissioner, specifying the location, type and size of all plant material to be used. The area devoted to such landscaping shall be not less than one hundred eighty (180) square feet of area for each fifteen (15) parking spaces.
- j. Handicapped parking spaces shall be provided in accordance with the Village building codes.
- k. The minimum standards for automobile parking lots and drives shall be 10" of Aggregate Base Course, Type B, and 2 1/2" of Bituminous Concrete Surface and a Binder Course, Class I. The minimum standard for truck staging areas and truck drives shall be 12" of Aggregate Base Course, Type B, and 3" of Bituminous Concrete Surface and a Binder Course, Class I.

8. Location of off-street loading spaces.

- a. Off-street loading spaces, when required by the provisions of Section I.9. below, shall be located on the same lot or parcel as the use served.
- b. No off-street loading space shall be located within forty (40) feet of the closest point of intersection of two (2) or more public rights-of-way.
- c. No loading space shall be located in a required yard. Access lanes to enclosed loading docks within the building are permitted in all yards. Loading space adjacent to any street must be totally enclosed within a building.

9. Required off-street loading spaces.

- a. For hotels or apartment-hotel buildings wherein there are contained exhibition halls, convention halls, auditoriums, office facilities or retail shops, one (1) off-street loading and unloading space for the first forty thousand (40,000) square feet of gross floor area, plus one (1)

- additional off-street loading space for each one hundred and fifty thousand (150,000) square feet of gross floor area or fraction thereof in excess of forty thousand (40,000) square feet.
- b. For buildings containing eating and drinking establishments, or any retail shops and having ten thousand (10,000) to one hundred thousand (100,000) square feet of gross floor area, one (1) off-street loading and unloading space, plus one additional such space for each additional one hundred thousand (100,000) square feet of gross floor area or fraction thereof in excess of one hundred thousand (100,000) square feet.
 - c. For banks, business, or professional offices or public administration buildings containing forty thousand (40,000) to one hundred thousand (100,000) square feet of gross floor area, one (1) off-street loading and unloading space, plus one (1) additional such space for each additional one hundred thousand (100,000) square feet of gross floor area or fraction thereof in excess of one hundred thousand (100,000) square feet.
 - d. For buildings containing furniture and appliance stores, wholesale stores, or machinery sales and having eight thousand (8,000) to twenty-five thousand (25,000) square feet of gross floor area, one (1) off-street loading and unloading space, plus one (1) additional space for each additional twenty-five thousand (25,000) square feet of gross floor area or fraction thereof in excess of twenty-five thousand (25,000) square feet.
 - e. For buildings containing manufacturing uses, research and testing laboratories, laundry and dry-cleaning establishments, printing, binding, publishing, and issuing of newspapers, periodicals, books, and other reading matter, warehouse and storage facilities, engraving shops, assembly of materials and products, processing and distribution of materials and products, and other similar uses having more than ten thousand (10,000) square feet of gross floor area, exclusive of basement area, and less than forty thousand (40,000) square feet of gross floor area, one (1) off-street loading and unloading space, plus one (1) additional such space for each additional sixty thousand (60,000) square feet of gross floor area in excess of forty thousand (40,000) square feet.

10. Design and maintenance of off-street loading facilities.

- a. Except as otherwise provided herein, off-street loading spaces may be internal or external. A required off-street loading space for all uses other than those set forth in subsection J.9.e. shall be at least ten (10) feet in width and at least twenty-five (25) feet in length, exclusive of access drives, aisles, ramps, maneuvering space, columns, and work areas, and shall have a vertical clearance of not less than fourteen (14) feet. A required off-street loading space for uses specified in subsection J.9.e. above shall be at least twelve (12) feet in width and at least forty (40) feet in length, exclusive of access drives, aisles, ramps, maneuvering space, columns and work areas, and shall have a vertical clearance of not less than fourteen (14) feet. Off-street loading spaces in a yard adjacent to a street shall be enclosed and shall be at least twelve (12) feet in width and at least sixty-five (65) feet in length, exclusive of access drives, aisles, ramps, maneuvering space, columns and work areas, and shall have a vertical clearance of not less than fourteen (14) feet. Where a use is not required to have a loading space, according to Section J.9. provisions shall be made for incidental deliveries and refuse pickup, following the same general rules as provided in Section J.10., excepting subsection J.10.a.
- b. Each required off-street loading space shall be designed with appropriate means of vehicular access to a street or drive, in a manner which will least interfere with traffic movements, and no area allocated to any off-street loading spaces shall be used to satisfy the space requirements for any off-street parking facilities or emergency access drive or portions thereof.
- c. All open off-street loading spaces, access drives, aisles, and maneuvering space shall be improved with a compacted base and a permanent wearing surface, as approved by the village.
- d. Open off-street loading spaces shall be screened from adjacent uses by a fence, wall or door, or any combination thereof or a densely planted screen consisting of trees and/or hedge.