

ZONING BYLAW

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TOWN OF LEYDEN, MASSACHUSETTS

ZONING BYLAW

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(Not Legally a Part of the Bylaw)

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TOWN OF LEYDEN, MASSACHUSETTS ZONING BYLAW

SECTION 1. ESTABLISHMENT

The purpose of this Bylaw is to promote the health, safety, convenience, and welfare of the Town by regulating growth and development therein, and, in particular, to lessen congestion in the streets; to conserve health; to secure safety from fire, flood, panic and other dangers; to provide adequate light and air; to prevent overcrowding of land; to avoid undue concentration of population; to encourage housing for persons of all income levels; to facilitate the adequate provision of transportation, water, drainage, schools, parks, open space, and other requirements; to conserve the value of the land and buildings, including the conservation of natural resources and the prevention of blight and pollution of the environment; to encourage the most appropriate use of land throughout the town including consideration of the recommendations of the master plan, if any, adopted by the Planning Board and the comprehensive plan, if any, of the regional planning agency; and to preserve and increase amenities by the promulgation of regulations to fulfill said objectives under the authority of Chapter 40A, M.G.L. and of Article 89 of the Amendments to the Constitution.

SECTION 2. GENERAL PROVISIONS

2.1 Districts. The entire area of the Town of Leyden is hereby designated as a "primarily Residential-Agricultural District." *In addition, there shall be a Floodplain Overlay District as defined herein in Section 5.9.*

2.2 Use of Buildings, Structures and Land. Except as provided in Section 4 herein, any lawful building or structure may be constructed, altered or enlarged; and any lawful building or structure or land may be used for any purpose which is not injurious, noxious, offensive or detrimental to a neighborhood, and which does not violate any section of this Bylaw.

2.3 Lot and Yard Requirements.

- A. Any dwelling or structure hereafter constructed shall be erected on a lot of not less than two (2) acres. Said lot shall have a minimum of two hundred (200) feet of frontage along a street except that dwellings or structures constructed within a radius of one-fourth (1/4) mile of the front door of the Town Hall may be erected on a lot of not less than one (1) acre and shall have a minimum of one hundred (100) feet of frontage along a street.
- B. No dwelling or structure shall be erected nearer than fifty (50) feet to the street line or nearer than forty (40) feet to either side or back lines, except that the Planning Board may grant a Special Permit to erect a dwelling or structure no nearer than twentyfive (25) feet to the street line and/or twenty (20) feet to the side or back lines upon its determination that a) in the case of street line, the reduced setback will not be inconsistent with the character of the neighborhood and/or b) in the case of side or back lines, the reduced setback will not be detrimental to the abutting property.

C. No driveway shall be nearer than (10) feet to either side or back line.

2.4 Pre-Existing uses. This Bylaw shall not apply to existing lawful uses of any land or buildings to the extent of that use at the effective date of this Bylaw.

2.5 Nonconforming Uses.

A. **Continuation and Restoration.** Any use or structure, whether conforming to this Bylaw or not, may be continued if that use or structure was lawfully existing at the time that it became nonconforming, and may be restored if destroyed by fire or other accidental or natural cause, but if discontinued or abandoned for more than twenty-four (24) months, subsequent use shall comply with this Bylaw.

B. **Alteration.** Legally nonconforming structures may be altered if without extenuation or change of use. Nonconforming structures or nonconforming uses of structures or land may be extended or altered only if granted by Special Permit by the Planning Board if the Planning Board finds that such extension or alteration will not be substantially more detrimental to the neighborhood nor increase the risk to surface or ground water supplies than the existing nonconforming use. Once changed to a conforming use, no structure or land shall be permitted to revert to a nonconforming use.

C. **Nonconforming Lots.** Any recorded or registered lot not meeting the frontage or area requirements of this bylaw, if having an area of five thousand (5,000) square feet or more and at least fifty (50) feet of frontage on a street, and if also owned separately from any adjoining land at the effective date of the requirements not being met, may be built upon for any otherwise permitted use if involving not more than a single dwelling unit even though not meeting frontage and area requirements. (Refer to Section 6 of Chapter 40A G.L., for certain further exemptions.)

SECTION 3. DEFINITIONS

3.1 In this Bylaw the following terms shall have the following meanings, unless a contrary meaning is required by the context or is specifically prescribed:

Accessory Use - A subordinate building located on the same lot with the principal building or use, the use of which is customarily incidental to that of the main building or to the use of the land. A bridge will not be considered as an accessory use.

Agricultural Use/Operation - Land shall be deemed to be in agricultural use when primarily and directly used in raising animals for the purpose of selling such animals or a product derived from such animals in the regular course of business. Land directly used in raising fruits, vegetables, berries, nuts and other foods for human consumption, feed for animals, flowers, sod, shrubs for the purpose of selling such products in the regular course of business; or when primarily and directly used in raising forest products under a program certified by the state forester to be a planned program to improve the quantity and quality of a continuous crop for the purpose of selling such products in the regular course of business.

Base Flood - The flood having a one percent chance of being equaled or exceeded in any given year (also known as the “one-hundred-year flood”).

Base Flood Elevation (BFE) - The elevation of the flood that has a 1 percent chance of occurring in a given year. Also known as the 1 percent annual chance flood or the 100 year flood.

BioMap - The BioMap, which is updated periodically by the Massachusetts Division of Fisheries and Wildlife’s Natural Heritage and Endangered Species Program, is designed to guide strategic biodiversity conservation in Massachusetts by focusing land protection and stewardship on the areas that are most critical for ensuring the long-term persistence of rare and other native species and their habitats, exemplary natural communities, and a diversity of ecosystems and include:

- Core Habitat: identifies key areas to ensure the long-term persistence of species of conservation concern, exemplary natural communities, and intact ecosystems across the Commonwealth.
- Critical Natural Landscape: identifies larger landscape areas that are better able to support ecological processes, disturbances, and wide-ranging species.

Building Height - The vertical distance from the mean finish grade on the street side of a building to the highest point of the roof. Not included are chimneys, spires, cupolas, television antennas or other parts of structures which do not enclose potentially habitable floor space.

Camper - A portable dwelling, eligible to be registered and insured for highway use, designed to be used for travel, recreational and vacation uses, but not for permanent residence. Includes equipment commonly called travel trailers, pick-up coaches or campers, motorized campers, tent trailers, and motor homes, but not mobile homes.

Contaminant - Any hazardous material or substance.

Contamination - The introduction of any hazardous material or substance into the air, soil or water of Leyden, without a permit from the Commonwealth of Massachusetts for that discharge.

Disposal - The spilling, leaking, pumping, emitting, dumping, discharging, or depositing of hazardous materials or waste upon or into the land, air, or water of Leyden.

Dwelling - Any structure, including mobile homes, containing one or more dwelling units.

Dwelling Unit - Living quarters for a single family plus not more than four (4) boarders or lodgers, with cooking (stove plus either or both a refrigerator and sink), living, sanitary and sleeping facilities independent of any other unit; or quarters for not more than four (4) persons in a lodging house or dormitory.

Family - An individual or two or more persons related by blood or marriage, or a group of not more than five persons not so related, living together as a single housekeeping unit.

Farmland of Statewide Importance: land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops, as determined by the appropriate state agency or agencies. Generally, these include lands that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.

Federal Emergency Management Agency (FEMA) - The federal agency that administers the National Flood Insurance Program. FEMA provides a nationwide flood hazard area mapping study program for communities as well as regulatory standards for development in the flood hazard areas.

Ground Water - All waters found beneath the surface of the ground.

Federally Recognized Tribe's Cultural Authority (FRTCA) - Shall mean, for the purposes of this bylaw, a Tribal Historic Preservation Officer/Office (THPO); or a federally recognized Tribe's formally designated Cultural Authority.

Flood Hazard Boundary Map (FHBM) - An official map of a community issued by FEMA where the boundaries of the flood and related erosion areas having special hazards have been designated as Zone A or E.

Floodway - The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation.

Hazardous Materials - Materials including, but not limited to, any material, in whatever form, which because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious, or radioactive characteristics, either separately or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment, when improperly stored, treated, transported, disposed of, used, or otherwise managed. In particular, any material will be considered to be a hazardous material if in the reportable quantity amount found on the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) list.

Home Occupation - Any occupation conducted entirely within a dwelling and carried on by the inhabitants thereof with not more than four (4) non-resident employees, and which is characterized by outward manifestations (such as traffic generation, noise, public service and utility demand, etc.) not unlike those of dwelling units in the particular neighborhood in which the dwelling is located. The home occupation shall be clearly incidental and secondary to the use of the dwelling for dwelling purposes, shall not change the character thereof, and shall not occupy more than forty (40) percent of the gross floor area or six hundred (600) square feet, whichever is less, of the dwelling unit. In connection with a home occupation, there shall be no display visible from outside the building other than an identification sign not larger than two (2) square feet in area.

Impervious or Impermeable Surfaces - The impermeable or non-porous surfaces of roads, buildings, and other structures or materials on or above the ground that do not allow precipitation to be absorbed into the underlying soil. This includes, but is not limited to plastics, concrete, and asphalt.

Indigenous Ceremonial Stone Landscapes (CSLs) - indigenous stone features on the land of sacred cultural significance that have been identified by a Tribal Historic Preservation Officer or a federally recognized Tribe's formally designated cultural authority. Ceremonial Stone Landscape Sites in the Northeast are locations of ceremonial activity that are characterized by stone assemblages of many types, some earthworks, and usually incorporate a number of natural landscape features into their design. (For further information, reference USET Resolution #2007:037)

Indigenous Cultural Resources: shall include cultural resource(s) that have been identified by a Tribal Historic Preservation Officer (THPO) or a federally recognized Tribe's formally designated cultural authority, as possessing religious and cultural significance to tribes. Said cultural resources may include but are not limited to sites, features, places, cultural landscapes, sacred places, and objects; and shall also include Indigenous Ceremonial Stone Landscapes (CSLs) (reference USET Resolution #2007:037).

Junk or Salvage Yard - An open-air (not enclosed in a structure with an impermeable floor) land use which includes the abandonment, collection, processing, purchase, receipt, storage, or sale of scrap or discarded goods, materials, machinery, or other type of junk. Exceptions to this definition shall be: recycling stations for glass, paper, plastic, aluminum, tin, or other items as the board of health shall deem to be recyclable and safe to the immediate environment, including ground water; leaf and yard waste composting facilities; state licensed transfer stations; and architectural component facilities.

Leachable Wastes - Waste materials, including, but not limited to, solid wastes, septic and other sludge, pesticide and fertilizer residues and wastes, capable of releasing water-borne or soluble contaminants into the environment by leaching.

Lot - A continuous parcel of land in single ownership with legally definable boundaries.

Lot Area - The horizontal area of the lot exclusive of any area in a street or recorded way open to public use. At least ninety percent (90%) of the lot area required for zoning compliance shall be land other than that under any waterbody or bog, swamp, wet meadow, marsh or wetland, as defined in Section 40, Chapter 131, G.L., except if this requirement is waived by Special Permit from the Planning Board.

Lot Frontage - That portion of a lot fronting upon and providing actual access to an accepted Town way, or a way established by or maintained under County, State, or Federal authority, or a way established by a subdivision plan approved in accordance with the Subdivision Control Law, determined by the Planning Board to be sufficient for the needs for access and utilities in relation to all potential uses of the land as allowed under this Bylaw. To be measured continuously along one side of a single street or along two intersecting streets if their angle or intersection is greater than one hundred twenty degrees (120 degrees).

Low Impact Development (LID) - an environmentally friendly approach to land use development. It includes landscaping and design techniques that attempt to maintain the

natural, pre-developed ability of a site to manage rainfall. LID techniques capture water on site, filter it through vegetation, and let it soak into the ground.

Mobil Home - A dwelling built upon a chassis, containing complete electrical, plumbing and sanitary facilities, and designed without necessity of a permanent foundation for year-round living, irrespective of whether actually attached to a foundation or otherwise permanently located.

Natural and existing vegetation - Vegetation which is growing on a lot at the passage of this by-law and/or which grows on the lot over time and which is not planted by a person.

Natural Heritage & Endangered Species Program (NHESP) - NHESP, which is a program of the Massachusetts Division of Fisheries and -Wildlife, is responsible for the conservation and protection of hundreds of species that are not hunted, fished, trapped, or commercially harvested in the state, as well as the protection of the natural communities that make up their habitats.

One-Hundred-Year Flood - See Base Flood.

Open Land - A parcel or parcels of land, not including roads, permanently restricted under Chapter 184 G.L. or otherwise permanently restricted in accordance with Section 5 of this Bylaw to remain in a natural or agricultural condition, provided that such land comprises farmland, steep slopes, hilltops, land within one hundred (100) feet of waterbodies, land contiguous with restricted or conservation land on abutting parcels, land associated with vistas seen from public ways, or any other land determined by the Planning Board to be of prime importance for open space or recreation.

Prime Agricultural Farmland - land that has the best combination of physical and chemical characteristics for economically producing sustained high yields of food, feed, forage, fiber, and oilseed crops, when treated and managed according to acceptable farming methods.

Priority Habitat - Priority Habitat areas are based on the known geographical extent of habitat for all state-listed rare species, both plants and animals, as codified under the Massachusetts Endangered Species Act (MESA). Habitat alteration within Priority Habitats may result in a 'take' of a state-listed species, and is subject to regulatory review by the Natural Heritage & Endangered Species Program.

Privately Owned Waste Water Treatment Plant - A non-municipal facility used for more than one dwelling unit for the treatment and disposal of domestic waste or septage. This shall not include a septic system, nor facilities for the pre-treatment of industrial waste. It shall include facilities sometimes known as "package treatment plants."

Regulatory Floodway - See Floodway.

River - A natural flowing body of water that empties to any ocean, lake, or other river and which flows throughout the year.

Riverine - Relating to or resembling a river, or located beside a river.

Sign - Any device designed to inform or attract the attention of persons who are not on the premises on which the device is located. Any exterior building surfaces which are internally illuminated or decorated with gaseous tube or other lights are considered signs. The following, however, shall not be considered signs within the context of this Bylaw:

1. flags and insignia of any government except when displayed in connection with commercial promotion;
2. legal notices, or informational devices erected or required by public agencies;
3. standard gasoline pumps bearing thereon in usual size and form the name, type, and price of gasoline;
4. integral decorative or architectural features of buildings, except letters, trademarks, moving parts, or parts internally illuminated or decorated with gaseous tube or other lights;
5. on-premises devices guiding and directing traffic and parking, not exceeding two (2) feet in area, and bearing no advertising matter;
6. devices hand-carried or mounted on vehicles, unless regularly located for fixed display.

Sign Area. The area of the smallest horizontally or vertically oriented rectangle which could enclose all the display area of the sign, together with any backing different in color or material from the finish material of the building elements whose judged intent is to extend the effective sign area, exclusive of minimal supporting framework, but without deduction for open space or other irregularities. Only one side of flat, back-to-back signs need be included in calculating sign area.

Special Flood Hazard Area - The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area may also be designated as Zone A.

Street. A public way, or private way shown on a plan approved in accordance with the Subdivision control Law.

Street Line The line defining the boundary of the public or private right of way of a street.

Structure - For floodplain management purposes, structure means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a mobile home. Structure, for insurance coverage purposes, means a walled and roofed building, other than a gas or liquid storage tank, that is principally above ground and affixed to a permanent site, as well as a mobile home on foundation. For the latter

purpose, the term includes a building in the course of construction, alteration, or repair, but does not include building materials or supplies intended for use in such construction, alteration, or repair, unless such materials or supplies are within an enclosed building on the premises.

Top Soil That soil, usually found on the surface, which is identified by the presence of organic matter.

Zone A - The 100-year floodplain area where the base flood elevation (BFE) has not been determined. To determine the BFE, use the best available federal, state, local, or other data as outlined in the State Building Code.

SECTION 4. USE REGULATIONS

4.1 Permitted Uses.

A. The following uses are permitted:

1. detached one-family dwellings, not including temporary or mobile structures, provided that no lot shall contain more than one dwelling;
2. religious, educational, or municipal uses exempt from zoning regulations by M.G.L. Chapter 40A;
3. farm, forest, plant nursery, or other agricultural or horticultural use; and
4. any use customarily accessory to and clearly incidental to a permitted use on the lot, including, but not limited to:
 - a. Home Occupation as defined.
 - b. the display or sale of natural produce raised or prepared in the Town;
 - c. the renting of rooms or boarding of not more than four persons not members of the resident family;
 - d. the storage of unregistered vehicles for the use of the resident family, if screened from view of the public road and adjacent residences;
 - e. the keeping of farm animals, horses, ponies, small animals and poultry for the enjoyment of the resident family;
 - f. Building-mounted and residential ground-mounted solar photovoltaic installations.
5. small scale ground-mounted solar photovoltaic installations, with site plan review by Planning Board.

4.2 Uses Requiring a Special Permit.

A. The following uses require a Special Permit according to the requirements of Section 8 Special Permits:

1. All non-residential or non-agricultural uses other than those specifically permitted according to Section 4.1 Permitted Uses or prohibited according to Section 4.3 Prohibited Uses.
 2. Two-Family (two dwelling units) and Multi-Family Dwellings (three to four dwelling units).
 3. Large scale ground-mounted solar photovoltaic installations up to 5 acres, with site plan review and special permit.
- B. Except for weed control in an agricultural operation which is exempted from this section, the rendering impervious by any means of more than 11,000 square feet or 25% which ever is less, of any single lot, may be allowed only by Special Permit granted by the Planning Board. In order to grant the Special Permit, the Planning Board must find that all surface runoff and erosion will be contained and managed on site.

C. Back Lots with Open Space Set-Aside

Back Lots with Open Space Set-Aside will be allowed by the Planning Board by special permit.

1. Purpose:

The purposes of this section, in addition to the general purposes of these Zoning Bylaws, are to: encourage the efficient use of land resources in new residential development; to increase opportunities for the preservation of agricultural land, forested land, and other open space; to preserve the scenic qualities of the Town; and to protect or enhance the value of properties in the Town by enabling landowners to create appropriate patterns of land ownership, use, and development, subject to public review and approval.

2. Eligible Parcels

There are two categories of eligible parcels to be considered pursuant to this section 4.2.C.

- a. Contiguous Parcels: Land eligible to be considered pursuant to this category shall be parcels which abut the types of roadways eligible for ANR (Approval Not Required) development pursuant to M.G.L. Ch. 41, Sec. 81L, have vital access as contemplated by M.G.L. Ch. 41, Sec. 81M and which have lot frontage as required by Leyden's Zoning Bylaws. Contiguous parcels include lots in single ownership that are separated only by a public way.
- b. Non contiguous Parcels: Land eligible to be considered pursuant to this category shall be limited to two parcels, one of which abuts the types of roadways eligible for ANR development pursuant to M.G.L. Ch. 41, Sec.

81L, has vital access as contemplated by M.G.L. Ch. 41, Sec. 81M, has lot frontage as required by Leyden's Zoning Bylaws, and which is farmland in active agricultural use or has soils classified as "prime" or of "statewide importance" by the Natural Resources Conservation Service (formerly the Soil Conservation Service), and one of which shall not necessarily abut a public way but which must be accessed by a right-of-way and is not farmland in active agricultural use. Parcels which are not contiguous will be considered by the Planning Board if and only if the lots to be protected are farmland in active agricultural use or have soils classified as "prime" or of "statewide importance," and if the Back Lots to be created are set back at least 400' feet from the nearest public way.

For the purposes of the remainder of this section 4.2.C., farmland shall be defined as farmland primarily and directly used in raising animals for the purpose of selling such animals or a product derived from such animals in the regular course of business; in raising fruits, vegetables, berries, nuts and other foods for human consumption; feed for animals; flowers, sod, trees, nursery or greenhouse products, and ornamental plants and shrubs for the purpose of selling such products in a regular course of business or land having soil classified as agriculturally "prime" or of "statewide importance" by the Natural Resources Conservation Service. In addition, the parcels upon which the Back Lots are to be placed must have access via a right-of-way to a public way prior to Planning Board approval and must not be farmland in active agricultural use.

3. General Description

For eligible parcels, the owner or prospective developer may petition for a special permit from the Planning Board to create back building lots meeting the following description: each lot shall be at least two acres in area, shall have no roadway frontage as defined in M.G.L. Ch. 41, Sec. 81L, and shall be accessible from a public way by means of a deeded right-of-way across land of others. This right of way shall be a common driveway serving up to four Back Lots. If two or more Back Lots are created on a tract, they shall be contiguous and compactly laid out to minimize the development of land wherever possible.

In exchange for the special permit to build one or more Back Lots, the applicant shall formally and permanently place conservation restrictions on the same number of ANR lots having a minimum area of 2 acres and 200 feet of lot frontage for each Back Lot to be created and meeting the Requirements outlined in section 4) below. The protected property shall have contiguous road frontage and a minimum depth of 200 feet measured from the edge of the road.

4. Requirements

A special permit may be granted by the Planning Board if it finds that the applicant's Back Lot proposal would serve the purposes set forth above better than an ANR division of the land creating the same number of lots, and would

meet the general standards for special permits set forth in these Zoning Bylaws, and would meet the following additional criteria:

a. Parcel Requirements:

(i) For contiguous parcels:

For one (1) to four (4) Back Lots: For each Back Lot created, a defined portion of the tract of land having a minimum area of two (2) acres and at least two hundred feet (200') of lot frontage eligible for ANR development which meets the requirements of Leyden's Zoning Bylaws, and having vital access as contemplated by M.G.L. Ch. 41, Sec. 81M shall be preserved and permanently restricted to agricultural, forestry, conservation and/or recreational use in accordance with the provisions of M.G.L. Ch. 184, Sec. 31-33. Where any Back Lot exceeds two (2) acres in area, the restricted land area shall be at least as large as the Back Lot area. Acreage counting towards the minimum requirements for protected roadside land under the conservation restriction shall not include wetlands areas as defined by M.G.L. Ch. 131, Sec. 40 (Massachusetts Wetlands Law).

(ii) For non contiguous parcels:

For one (1) to four (4) Back Lots: For each Back Lot created, a defined portion of a tract of land having a minimum area of two (2) acres and at least two hundred feet (200') of lot frontage eligible for ANR development which meets the requirements of Leyden's Zoning Bylaws, and having vital access as contemplated by M.G.L. Ch. 41, Sec. 81M shall be preserved and permanently restricted to agricultural use in accordance with the provisions of M.G.L. Ch. 184, Sec. 31-33. Eligible land to be protected shall be limited to farmland as defined in section 4.2.C.2)b. Where any Back Lot exceeds two (2) acres in area, the restricted land area shall be at least as large as the Back Lot area. Acreage counting towards the minimum requirements for protected roadside land under the conservation restriction shall not include wetlands areas defined by M.G.L. Ch. 131, Sec. 40 (Massachusetts Wetlands Law).

The permanently restricted land shall form a single contiguous tract. The procedures for creating such Back Lots can be found in Leyden' Subdivision Regulations, Section 10.

Applicants are encouraged to prepare a preliminary sketch of the proposed Back Lots and ANR lots to be protected and to meet with the Planning Board to discuss such proposal prior to filing. The Planning Board will work with the landowner to create a plan that meets the best interests of the landowner and the town.

- b. The restricted roadside land shall not be crossed by any access road or driveway serving building lots, except by the common driveway permitted to serve the Back Lots in return for restricting the land.
- c. The maximum number of Back Lots that may be created shall equal the number of roadside lots that meet the subdivision ANR criteria and Leyden's zoning criteria of two hundred (200) feet of lot frontage, vital access as contemplated by M.G.L. Ch. 41, Sec. 81M and the zoning criteria of two (2) acres of area and shall not exceed four (4) lots for every common driveway. Additionally, for every Back Lot created, on-site septic system soil evaluations certified by the Board of Health are required to confirm that all ANR lots could be built upon pursuant to 310 CMR 15.00 (Title 5 of the Massachusetts Environmental Code) and M.G.L. Ch. 111, Sec. 31 (Board of Health) or their equivalents. The Planning Board reserves the right to physically inspect the site with members of the Board of Health.
- d. All Back Lots created shall be in a single, compact portion of the original eligible parcel to the maximum extent possible. Dwelling units shall be integrated into the existing landscape through placement of buildings within woodland, along the edges of fields, or locations visually screened by natural vegetation or topographic features, to the maximum extent possible. Developers are encouraged to construct buildings in a manner which will have the least visual impact as viewed from the roadside. Developers are further encouraged, in the case of farmland to be protected, to provide a vegetated buffer of 40 feet between the residential lot lines and farmland to minimize conflicts between residential and farming activities.
- e. All natural site features including, water courses, one hundred year flood plains, wetlands, ponds and other water bodies, marshes, scenic points and historic sites shall be preserved.
- f. Common driveways shall be used to serve the Back Lots in accordance with this Bylaw Section 4.2.C. A special permit application for Back Lot development featuring a common driveway shall not be granted until satisfactory legal documents have been submitted and approved to guarantee each Back Lot owner access over the common driveway, to guarantee that the common driveway cannot be submitted to the town for acceptance as a public way, and to guarantee that all lot owners using the driveway share equitably in the costs of its maintenance. For noncontiguous eligible parcels, developers must have a right-of-way for access to a public way prior to Planning Board approval.
- g. On Back Lots created under the provisions of this section 4.2.C., the Planning Board has the option to require that building envelopes be defined on the plan submitted to the Planning Board to show placement of buildings and other structures for each proposed lot.

- h. Construction on each Back Lot shall be limited to one single-family house and related accessory buildings. Outbuildings and other structures for agricultural or horticultural use are exempted from this restriction.
- i. The plan submitted to the Planning Board for approval shall state both on the written application and on the accompanying plans that no further subdivision of land will take place upon the common driveway. Upon granting the special permit, the Planning Board will approve the plan with a condition limiting the lots upon which buildings may be erected to the number specified in the plan. Such plan shall include on its face the following notation: "the Common Driveway(s) shown on this plan shall not be considered a 'way shown on a' subdivision plan for the purposes of M.G.L. Sec. 81L".
- j. No Back Lot of any size, once created, shall be further divided.
- k. Every deed conveying a Back Lot created under this section 4.2.C. shall incorporate by reference the special permit authorizing the lot's creation, and any conditions imposed by the said permit.

Special permits may be issued pursuant to the procedural requirements described in M.G.L. Ch. 40A Sec. 9. A special permit granted under this section shall lapse after two (2) years if substantial use or construction has not begun, except for good cause. In granting a special permit the Planning Board shall specify actions which must be taken within two years in order to demonstrate "substantial use".

5. Common Driveway Standards

A common driveway is a driveway which begins at a public way and provides access to one or more building lots. A common driveway serving up to and no more than four Back Lots shall conform to the following requirements and standards.

- a. The following minimum requirements must be met for a common driveway serving one or more Back Lots:
 - (i) An easement providing permanent access for all properties served by the driveway shall be provided upon application and, if approved, recorded by the applicant in the Registry of Deeds.
 - (ii) The special permit shall state that the driveway is not a private road or a public road, that it does not meet the standards for a Town road and/or a public way, and that the driveway shall permanently remain a private driveway.

(iii) Maintenance of the common driveway shall be assured through a homeowners association approved by the Planning Board and binding upon those served by the driveway, which shall require the landowners to maintain the driveway to the standards of this Bylaw at their mutual and exclusive expense. Such maintenance shall include keeping the driveway clear of tree branches to a height of 15 feet and clearing of snow and sanding of ice to provide year-round access for emergency vehicles; and

(iv) The grade, length and location of common driveways and adjacent areas shall be constructed and maintained to provide adequate access and turnaround for vehicles, including emergency vehicles, year round. To assure this, common driveways shall conform with the design standards stated in Leyden's Subdivision Regulations for Common Driveways, Section 10-3 (h).

b. Lot Area Dimensions

Back Lots created pursuant to this section 4.2.C. shall not be required to meet the frontage requirements of Leyden's Zoning Bylaws.

6) Conservation Restrictions Requirements

a. A conservation restriction means a right, in perpetuity, stated in the form of a restriction or covenant in a deed, appropriate to retaining land predominantly in its agricultural farming, forest or recreational use and forbidding or limiting any or all of the following:

- (i) Construction or placing of buildings except for those used for agricultural purposes;
- (ii) Excavation, dredging or removal of loam, peat, gravel, soil, rock or other mineral substance in such a manner as to adversely affect the land's overall future agricultural, forest or recreational potential; or
- (iii) Other acts or uses detrimental to such retention of the land for agriculture, forest or recreational use.

b. The conservation restriction placed on the land shall meet the following minimum criteria:

- (i) The conservation restriction shall be held by the Town of Leyden Conservation Commission or by a non-profit land trust approved by the Planning Board or jointly.
- (ii) The conservation restriction shall be recorded by the holder in the Franklin County Registry of Deeds.

(iii) The conservation restriction shall be approved by the Commissioner of Food and Agriculture or the Secretary of the Executive Office of Environmental Affairs as appropriate, and additionally approved by the Leyden Board of Selectmen if the restriction is held by a non-profit land trust.

(iv) The land covered by the conservation restriction shall be noted on the plan and in the special permit granted by the Planning Board.

(v) The form and content of the conservation restriction will be consistent with the sample included in the Leyden Subdivision Regulations.

c. Protected parcel(s) may be either retained by the original landowner or entity, or may be conveyed out as follows:

(i) Conveyed to an incorporated non-profit Homeowners Association made up of the owners within the Back Lot development subject to a covenant, running with the land which states that the ownership and membership within the Homeowners Association shall pass with conveyances of the lots in perpetuity. In addition, the covenant established shall specify that each lot owner has equal say in determining the affairs of the organization, and that costs shall be assessed equitably to each lot.

(ii) Conveyed to a non-profit land trust whose principal purpose is to conserve farmland and/or forest land, subject to the covenant requiring employment of land management practices which will ensure that existing agricultural fields and pastures will be plowed or mowed at least once per year. Included with the covenant shall be copies of a lease, for a minimum of five years, with a farmer or operator who will use the land for agricultural purposes; or

(iii) Conveyed to the town at no cost. Such a conveyance shall be at the option of the town and shall require approval at Town Meeting.

4.3 Prohibited Uses.

A. Mobile Homes and Mobile Home Parks.

B. Disposal of liquid or leachable wastes, except:

1. The installation or enlargement of a subsurface waste disposal system for a residential dwelling.
2. Normal agricultural operations.

3. Commercial or industrial uses which use septic systems only for wastes from personal hygiene and food preparation for residents, patrons, and employees.
- C. The use of privately owned waste water treatment plants.
 - D. The installation of a new underground storage tanks for oil, or other petroleum products, excluding liquefied petroleum gas. The underground storage of gasoline may be allowed by Special Permit, as provided by Section 4.4, Restricted Uses.
 - E. The outdoor storage of salt, de-icing materials, or pesticides exposed to the environment.
 - F. Commercial or industrial uses, not including restaurants, which use septic systems for wastes other than from personal hygiene and food preparation for residents, patrons, and employees. Wastes from personal hygiene shall not include wastes from beauty salons, hairdressers, or similar commercial uses.
 - G. The removal or sale of top soil from any lot.
 - H. Construction of a building, septic system, or other accessory use in any wetland resource, as defined by the State Wetlands Protection Act. If a lot already in existence at the passage of this by-law has no place to build because of the presence of wetland resources, a Special Permit may be granted by the Planning Board as long as the building, septic system, or other accessory use is allowed by the Wetlands Protection Act and under the conditions provided by the conservation commission or Department of Environmental Protection.
 - I. Multi-family Dwellings with more than four dwelling units.
 - J. Large scale ground-mounted solar photovoltaic installations over 5 acres.
 - K. (Deleted by MA Attorney General).

4.4 Restricted Uses.

- A. Excavation.
 1. No commercial excavation for the removal of sod, loam, clay, sand, gravel, or quarried stone from any site may be undertaken without a Special Permit from the Planning Board. All Special Permits of this type will include the following restrictions and requirements:
 - a. Access roads for sand, gravel, or soil removal operation sites shall include a gate or other secure mechanism to restrict public access to the site.

- b. Excavation for the removal of sod, loam, clay, sand, gravel, or quarried stone shall not extend closer than ten (10) feet above the maximum ground water table for that area. Within one year of the receipt of a special permit to excavate, or prior to the removal of any materials whichever shall occur first, the owner of the excavation enterprise shall engage a registered professional engineer to determine the mean maximum ground water tables for the site. A report of this finding shall be filed with the zoning enforcement officer and Board of Health within thirty (30) days, and in no case later than the beginning of excavation. A report of this finding for existing permitted excavation operations shall be filed within 180 days of the passage of this by-law. The report shall be stamped, sealed, and signed by a registered professional engineer, and shall include a map of the site detailing the maximum ground water table elevations, which shall serve as a base map for further reports required under this section. Between March 1 and May 30 of each year of operation of a commercial facility which has excavated or removed earth, sand, gravel, or other soils in the previous year for any purpose other than the installation or maintenance of building foundations, freshwater ponds, utility conduits, or on-site sewage disposal, the owner shall employ a registered professional engineer to do a site inspection and certified report concerning the maximum depth of removal or excavation relative to the maximum ground water table. The zoning enforcement officer and a representative of the Board of Health shall accompany the engineer on the site examination. The report shall be stamped, sealed, and signed by a registered professional engineer. A written report of the engineer's findings shall be filed with the zoning enforcement officer and Board of Health, a total of two copies, within 30 days of the site inspection. The certified report shall contain a diagram of the property and depths of excavation to the maximum ground water table throughout the effected area.
- c. Before beginning the excavation, the soil shall be studied to determine the existing chemical properties of the topsoil and subsoil (i.e., B-horizon), including pH, available water holding capacity, percent organic matter, depth to water table, percent rock fragment in the A and B horizons, and the results reported in the site plan.
- d. Commercial excavation of sod, loam, clay, sand, gravel, or quarried stone will require that the site be reconstructed after excavation of all the intended materials. Reconstruction will include, but not be limited to, grading, replacement of top soil, suitable stabilizing plantings, and an environmental assessment of the site.
- e. Topsoil and subsoil removal shall be to a minimum of 24 inches of topsoil and subsoil, if available. The soil shall be transported to a designated stockpiling area(s) and saved for reconstruction of the site.

- f. Soil removal as described in sub-section e, above, shall occur within the soil moisture and temperature ranges that is such that the soil material will not form a cast or mold when squeezed by hand.
- g. Before stockpiling, any soil erosion prevention structures required around the stockpiling area shall be constructed.
- h. Soil stockpiles must be seeded and mulched to control erosion, or protected by other demonstrated and proven methods, if not used for reconstruction within 15 days.
- i. Reconstruction of the site shall occur within soil moisture and soil temperature ranges that minimize compaction. Proper moisture conditions are when the soil will not form a cast or mold when squeezed in the hand.
- j. Stockpiled soil shall be returned to excavated areas and reconstruction on the graded spoils at a thickness not less than 24 inches, if that amount was originally available at the site.
- k. The A and B soil horizons will be stockpiled separately, and the B horizon material shall first be placed on the graded spoil. The A horizon material shall then be returned and placed upon the B horizon at 75% or more of the original topsoil thickness. Total thickness of reconstructed soil shall not be less than 24 inches, if that amount was originally available at the site.
- l. Final grade of the reconstructed soil shall provide a uniform slope and positive surface drainage.
- m. Porosity of the top 40 inches of the reconstructed areas shall permit penetration of roots.
- n. Final surface grade elevation shall be a minimum of 10 feet of thickness above the seasonal high water table.
- o. No excavation, grading, or removal shall be allowed below an elevation of 6 feet above bedrock, except for a quarrying operation.
- p. When reconstruction is completed the soils shall have the following characteristics.
 - 24 inches or greater depth of reconstructed soil, if that amount was originally available on the site.
 - 10 feet or greater depth of material above the seasonal high water table.

- pH range of 4.5 to 8.4 in reconstructed soil layer (s).
- Permeability of .06 inches/hour or greater in the upper 24 inches of reconstructed soil.
- Available Water Holding Capacity (AWHC) commensurate with the original soil conditions prior to extraction procedures for the upper 48 inches of the reconstructed area.

q. Revegetation of the site shall include the following procedures and practices:

- Lime and fertilizer shall be applied as recommended by soil tests to achieve targeted desired vegetation as part of reconstruction.
- Soil conservation practices shall be applied to control sheet and rill erosion. The soil surface shall be stabilized using suitable mulch until the area can be seeded or planted with an adequate vegetative cover.
- Tillage to a depth of at least 3 inches shall be performed to prepare a seed bed and to fracture any root limiting layers caused by compaction when the surface layer was reconstructed.
- A seed mixture shall be selected based on Soil Conservation Service (SCS) recommendations and applied uniformly according to the rate indicated by broadcasting, drilling, or hydraulic duplication.
- A rotation that includes grass and deep rooted legume the first 3 years after reconstruction should be considered to improve soil tilth.
- If for some reason seeding cannot be done during the seeding dates recommended by SCS, mulch and/or other conservation practices shall be used to protect the site. Seeding would be delayed until the next recommended period.
- During the second growing season all areas without adequate land cover shall be scarified and, if necessary, fertilized and reseeded.

2. Before a Special Permit for the commercial excavation of sod, loam, clay, sand, gravel, or quarried stone may be granted by the Planning Board, the applicant will be required to submit a site plan which includes the following information, as well as those items required under Section 5.5 of this Bylaw. This restriction shall not apply to activities incidental to permitted uses, including but not limited, to providing for the installation or maintenance of building foundations, freshwater ponds, utility conduits, or on-site sewage disposal.

A. The site plan must include, at a minimum:

- a. The location and exterior limits of the area to be excavated or graded.
- b. Existing contour lines on the site, drawn to a scale of not more than 40 feet to the inch and with a contour interval not exceeding 2 feet.
- c. Proposed contour lines within the area to be excavated or graded, drawn to the same scale as in 2. above.
- d. Proposed contour lines within the area to be excavated or graded, drawn to the same scale as in 2. above, which shows the proposed phasing sequence for the operation.
- e. A map of the site detailing the seasonal high ground water table elevations, as determined by actual measurements during seasonal high water table periods and/or soil mottling as identified by a professional hydrogeologist or registered professional engineer, at the same scale as in 2 above.
- f. Proposed vehicular access to the site and proposed work roadways.
- g. Location of stockpile area(s). Sites subject to flooding or slippage shall be avoided. Environmentally sensitive areas, such as wetlands shall be avoided.
- h. Location and description of soil erosion control measures and surface water control measures.
- i. Temporary and permanent seeding mixture(s), mulch and soil amendments to be applied.
- j. Date(s) of land reconstruction activities for soil removal, soil stockpiling, soil reconstruction, and soil revegetation.
- k. Designated equipment storage area(s).
- l. An outline of spill containment control measures (e.g. lined catchment for oil changes).
- m. Planned elevation(s) of final grade of reconstructed area.
- n. Reconstruction plans for post-closure.

B. Leachable Materials.

1. Pesticides, fertilizers other than manure, or other leachable materials shall not be stored outdoors, nor left outdoors for any period of time when conditions, such as heavy rain, indicate that it is likely to result in the release of material. In addition all necessary precautions shall be taken to prevent hazardous concentrations of leachable materials in the water and on the land as a result of application or other use. Such precautions include but are not limited to: erosion control and related soil conservation techniques, the control of runoff water, the prevention of evaporation and redeposition of pesticides outside the area of application from wind drift.

C. Above Ground Storage Tanks

1. Permanent above ground storage tanks, including tanks within the basement of a building for oil or other petroleum products, except propane, shall, in the case of new construction, be protected from the environment and placed on a diked, impermeable surface, to prevent spills or leaks from reaching ground water. The diked area shall be able to hold 110% of the volume of the tank(s). Such surface may include the basement of a structure if such basement conforms to all the requirements herein, providing that floor faults shall be plugged to prevent discharges or leaks and no floor drains shall be allowed. Conformance with this by-law shall be required when replacing tanks in existing structures. Sump pumps will only be allowed outside of diked areas. Portable tanks must have an impermeable surface underneath the tank with materials which are absorbent for petroleum products on site to control the movement of petroleum products off the impermeable surface.

D. Gasoline Underground Storage Tanks.

1. Underground storage tanks for gasoline may be allowed by special permit granted by the Board of Selectmen, if they find that the tank will be adequately designed, installed, and monitored to endure against contamination of water resources.

SECTION 5. SPECIAL REGULATIONS

5.1 Height Requirements.

A. Buildings.

1. Except for barns and silos, building height shall not exceed 35 feet.

B. Antennas and Towers.

1. No element of any antenna, tower, spire, wind turbine, or similar device exempt from the definition of "Building Height" shall be nearer any property line than a distance equal to its height above average grade at that property line,

nor shall any such device exceed the maximum allowable building height by more than ten (10) feet, unless in either case authorized on Special Permit by the Planning Board upon its determination that the device will not be hazardous or detrimental to the neighborhood.

5.2 Egress Requirements. No egress from a building shall be higher than twenty-two (22) feet above the mean finish grade.

5.3 Sign Regulations.

- A. On-Premises Signs. Any dwelling or its accessory uses may have a single sign of not more than two (2) square feet. Any non-residential premises may have a single on-premises sign of not more than eighteen (18) square feet, either freestanding or attached.
- B. Off-Premises Signs. Off-premises signs (signs with content not relating exclusively to the premises they are on) are allowed only to provide directions to businesses located in Leyden. Off-premises signs shall not be more than six (6) square feet in size.
- C. General Sign Regulations. No sign shall flash or display movement. Signs may be illuminated only during normal business hours.

5.4 Logging Operations. All slash from logging operations must be cleared from within fifty (50) feet of any street and twenty-five (25) feet of all boundaries.

5.5 Review of Large Developments.

A. Review Required.

1. Wherever any development is proposed whose total enclosed floor area is over ten thousand (10,000) square feet or which will require the subdivision of a parcel of land into more than three (3) lots within one year, a review of that development by the Planning Board is required before a building permit may be issued. This review will follow the process described below and is required in addition to other requirements of this Bylaw. The review is designed to prepare the Town for the possible impact of a large development and to allow it to recommend modifications calculated to reduce that impact.

B. Site Plans and Impact Statements.

1. A detailed site plan of the subdivision or development shall be prepared in accordance with Section 5.7 of this Bylaw.

2. The site plan must be accompanied by an impact statement which details the probable effects of the subdivision or development on the following aspects of concern to the Town:

- a. attendance at public schools;
- b. increases in vehicular traffic;
- c. changes in the number of legal residences;
- d. provision of housing for Town residents and for persons of low and moderate income;
- e. increases in municipal services;
- f. load on public utilities or future demand for them;
- g. public safety;
- h. changes in tax revenue;
- i. changes in surface drainage;
- j. increased consumption of ground water;
- k. increased refuse disposal;
- l. contamination of water and air
- m. land erosion or loss of tree cover.
- n. disturbance of other aspects of the natural ecology;
- o. blocking of views;
- p. harmony with the character of surrounding development;
- q. discharges to water and air.

C. Review Process.

1. The Planning Board will review both the site plan and the impact statement, giving weight to the factors in B, above, as they affect the future of the Town and of the neighborhood adjacent to the site. It may ask for further information where necessary to review the application adequately, and may make recommendations for modifications to the development as it thinks proper to protect the Town. The permit must be granted, however, if all other provisions of this Bylaw are met.

5.6 Site Plan Review.

A. For the purpose of administering the provisions of Section 5.5 of this Bylaw, and to ensure the most advantageous use of all properties within the Town and for the reasonable protection of adjoining property owners, no building permit shall be issued for any building or structure for which a site plan is required by this Bylaw until a site plan, prepared by a registered architect, landscape architect, or professional engineer has been submitted to and approved by the Planning Board.

B. All site plans shall be submitted in triplicate and shall be prepared in accordance with the rules and regulations of the Planning Board regarding preliminary subdivision plans. Unless waived by the Planning Board because of the scale of the development, site plans shall be at a scale of one inch equals forty feet (1" = 40') and shall show, as a minimum, all existing and proposed buildings, structures, existing and proposed grades, parking spaces, driveway openings, service areas, lighting, signs, refuse and other waste disposal facilities, and facilities for surface water drainage, all proposed landscape features (such as fences, walks, planting areas, type, size and location of planting materials methods to be employed

for screening) and any existing buildings located on adjoining property within fifty (50) feet of development site, and any other information requested by the Planning Board, provided, in any residential development, the site plan may show the proposed building sites instead of the proposed buildings in cases where there is only one dwelling unit per lot.

C. The procedure applicable to the review of a definitive subdivision plan (notice, hearing, etc.) shall be applicable in all respects to the review of a site plan under this Section. Once approved, site plans may be modified with the approval of the Planning Board, which shall hold a hearing with appropriate notice, unless it deems such modification to be of a minor nature.

D. In approving or disapproving a site plan, the Planning Board shall, as a minimum, take into consideration the following matters:

1. Preservation of Landscape. The landscape shall be preserved in its natural state, insofar as practicable by minimizing tree removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.
2. Relation of Buildings to the Environment. Proposed development shall be related harmoniously to the terrain and to the use, scale, and proportions of existing and proposed buildings in the vicinity that have functional or visual relationship to the proposed buildings. Consideration shall be given to the extent to which building sites avoid farmland, steep slopes, hilltops, and land associated with vistas seen from public ways.
3. Interrelationship of Buildings. The proposed buildings shall be related harmoniously to each other with adequate light, air circulation, privacy, and separation between buildings.
4. Open Space. All open space shall be so designed as to add to the visual amenities of the vicinity by maximizing its visibility for persons passing the site or overlooking it from nearby properties.
5. Circulation. With respect to vehicular and pedestrian circulation, including entrances, ramps, walkways, drives, and parking, special attention shall be given to location and number of access points to the public street, general interior circulation, separation of pedestrian and vehicular traffic, access to community facilities, and arrangement of parking areas that are safe and convenient and, insofar as practicable, do not detract from the use and enjoyment of proposed buildings and structures and the neighboring properties.
6. Surface Water Drainage. Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties. Surface water in all paved areas shall be collected at intervals so that it will not obstruct the flow of vehicular or pedestrian traffic, and will not create puddles in paved areas.

7. Compliance with the Bylaw. Where specific standards are established for parking and loading spaces, lot size, yards, frontage, heights and coverage of buildings, the site plan shall comply with such standards, as well as all other provisions of this Bylaw.

8. Water Resources. The effect that the proposed activity is likely to have on the quality and quantity of ground and surface water. If the activity is likely to degrade the quality or quantity of ground or surface water, it shall be denied, or the proposal amended to ensure the continued high quality of the water supplies of Leyden.

5.7 Driveways, Common Driveways, and Flexible Frontage.

A. Driveway Regulations

1. Every building lot shall have vehicular access from its frontage, unless a special permit has been granted for the use of a common driveway to provide such access.
2. The driveway shall be designed before a building permit for a newly constructed dwelling is approved, and the driveway construction shall be completed before any occupancy or use of the premises is permitted.

3. Driveways shall be constructed so that there will be no discharge of water, soil, stones, or other debris onto the public way.

4. All new driveways shall be constructed to provide a minimum 25 foot long section with a slope not greater than 5% from the intersection with the maintained traveled way of the street, except that the Planning Board may grant a special permit for a greater slope based on sound engineering practice for the site's terrain and usage.
5. The angle of intersection between the driveway and the public way shall be no less than sixty degrees (60°), except that the Planning Board may grant a special permit for a lesser angle based on sound engineering practice for the site's terrain and usage. An angle as close to ninety degrees (90°) as possible is recommended for safety.
6. All driveways shall be designed and constructed in a manner to assure reasonable and safe access to all vehicles, including but not limited to emergency vehicles of all types. The traveled portion of a driveway shall be a minimum of ten (10) feet wide in order to insure such access. The maximum grade of a driveway shall be 15% over any distance.

7. An applicant for a driveway permit shall comply with applicable regulations of the Conservation Commission pursuant to the Wetlands Act, G.L. Chapter 131, Section 40.

B. Common Driveway Regulations

1. Common driveways are allowed by special permit. At most, four (4) dwelling units (counting accessory apartments or each unit in a two-family dwelling as separate dwelling units) may be served by or otherwise share a common driveway. A common driveway shall lie entirely within the lots being served or on open space land in NRPZ designs and shall, if serving more than two dwelling units, be named as a "way" (Example: "Wilson Way") with a sign placed in plain view from its intersection with a public way.

The applicant(s) must provide all of the following:

2. Evidence of deeded covenants for all affected lots which include provisions which are adequate in the opinion of the Planning Board and town counsel to (i) establish a maintenance association comprised of the owners of all lots served by the common driveway; (ii) ensure continued maintenance, repair, plowing, and sanding of the shared driveway surface and its drainage structures; (iii) provide for the collection of dues and assessments necessary for such ongoing maintenance, repair, plowing, and sanding of the shared driveway; and (iv) provide an enforcement mechanism enforceable by the maintenance association in the event of non-payment of dues or assessments by a member.
3. Guarantees including but not limited to financial surety as provided by the Town of Leyden Subdivision Regulations that the common driveway will be constructed as proposed if the special permit is issued.
4. A plan signed by a registered professional engineer for the common driveway showing alignments, grades, subsurface preparation, drainage facilities, and surface materials.
5. The common driveway must be designed to safely handle the proposed traffic and provide year-round access for emergency vehicles, and must satisfy at least the regulations for driveways in this zoning bylaw. The Planning Board may require additional construction enhancements for width, turn-outs, subsurface preparation, drainage, alignment, and surfacing as it deems necessary. Such enhancements may not be more stringent than the requirements for a "Secondary Street," as found in the Town of Leyden Subdivision Regulations.
6. A common driveway shall in no way exempt the applicant(s) from meeting applicable frontage requirements on a public or private way for each individual building lot unless the lots are in an approved

NRPZ design or a reduction in frontage requirements is granted in accordance with subsection C below.

C. Flexible Frontage Regulations

1. In order to reduce the number of curb cuts onto town roadways, preserve the natural, cultural, or scenic resources along these roadways, facilitate the movement of wildlife across roadways, protect recreational trailheads at the roadside, and improve the design and site planning of smaller residential neighborhoods, the Planning Board may approve in its special permit for a common driveway, a reduction or elimination in frontage requirements on a public or private way for one or more of the lots proposed to be served by the common driveway.
2. Such reduction or elimination of frontage requirements shall not affect any other dimensional requirement for the lots to be served by a common driveway or result in more than one lot otherwise possible without such reduction or elimination.
3. In order to take advantage of this option, an applicant shall obtain the required special permit for the common driveway and layout of the lots to be served by it prior to seeking approval for the creation of the subject lots under the "Approval Not Required" provisions of the Town of Leyden Subdivision Regulations. The Planning Board may approve such frontage reductions or eliminations only if it finds that the goals listed in C(1) above will be better achieved than without the reductions or eliminations.

5.8 Personal Wireless Service Facilities

01.0 Purpose and Intent

It is the express purpose of this Section to minimize the visual and environmental impacts of personal wireless service facilities. The Bylaw enables the review and approval of personal wireless service facilities by the Town's Planning Board in keeping with the Town's existing bylaws and historic development patterns, including the size and spacing of structures and open spaces. This bylaw is intended to be used in conjunction with other regulations adopted by the Town, including site plan review and other local bylaws designed to encourage appropriate land use, environmental protection, and provision of adequate infrastructure development in the Town. The regulation of personal wireless service facilities is consistent with planning efforts of the Town to further the conservation and preservation of developed, natural and undeveloped areas, wildlife, flora and habitats for endangered species; the preservation and protection of the natural resources of the Town; balanced economic growth; the provision of adequate capital facilities; the coordination of the provision of adequate capital facilities with the achievement of other goals; and the preservation of historical, cultural, archaeological, architectural and recreational values.

02.0 Definitions. For the purposes of this Section 5.8 the following definitions shall apply:

02.1 Above Ground Level (AGL). A measurement of height from the natural grade of a site to the highest point of a structure.

02.2 Antenna. The surface from which radio signals are sent and received by a radio frequency transmitters and receivers.

02.3 Camouflaged. Components of a wireless service facility that are disguised, hidden, made part of an existing or proposed structure or placed within an existing or proposed structure are considered "camouflaged."

02.4 Carrier. A company that provides wireless services.

02.5 Co-location. The use of a shared tower, building or structure by more than one wireless carrier.

02.6 Concealed. A form of camouflage in which the placement of antennas within an existing structure, a modified structure, or a purpose-built structure conceals wireless facility components from view.

02.7 Environmental Assessment (EA). An EA is an analysis required of licensees by the Federal Communications Commission (FCC) under the authority of the National Environmental Policy Act (NEPA) when a personal wireless service facility is placed in areas that meet certain criteria.

2.8 Equipment Cabinet. An enclosure designed to house equipment related to the operation of a wireless facility. An Equipment Cabinet cannot be entered by an individual and is serviced externally by opening doors or access panels, or by similar means. All-weather equipment cabinets are designed to be placed out-of-doors and function in lieu of an Equipment Shelter.

02.9 Equipment Shelter. An enclosed structure, shed or vault within which are housed equipment related to the operation of a wireless facility. An Equipment Shelter is a structure into which an individual can enter to install and maintain equipment.

02.10 Guyed Tower. A tower that is tied to the ground or other surface by diagonal cables.

02.11 Lattice Tower. A type of mount that is constructed with multiple legs and crossbracing of structural steel.

02.12 Licensed Carrier. A company authorized by the FCC to construct and operate a licensed Personal Wireless Service.

02.13 Monopole. A tower that consists of a hollow cylindrical or hollow tapered cylindrical shaft that is designed to support antennas and contains the antenna connecting cables within the interior of the cylinder.

02.14 Mount. The structure or surface upon which antennas are mounted, including the following three types of mounts:

1. Building mount. A mount attached to a habitable building. For the purpose of this definition, a building is considered to include any habitable structure including barns, churches and other structures not normally used as dwellings.

2. Ground-mount. A structure built from the ground specifically for the purpose of supporting antennas.

3. Structure-mount. A structure, frame, bracket, or the like to which antennas are attached and which is attached to a structure other than a building, such as a silo, water tank or electrical tower.

In some instances, the mount may be an integral part of the antenna that is attached directly to a building or structure, however, the classes of mount defined herein would still apply.

02.15 Personal Wireless Service Facility (PWSF). Facility for the provision of personal wireless services by a licensed carrier, which typically consists of communications equipment and related equipment, transmission lines (antenna cables) one or more mounts, and antennas. A PWSF describes the system of one carrier at one site. A colocated PWSF is considered a separate PWSF at the same site.

02.16 Personal Wireless Services (PWS). Personal Wireless Services as defined in the Telecommunications Act of 1996, and subsequently revised.

02.17 Radiofrequency Energy (RFE). Emissions in the radio frequency spectrum.

02.18 Security Barrier. A locked, impenetrable wall, fence or berm that completely seals an area from unauthorized entry or trespass.

02.19 Wireless Communications. All forms of communication utilizing radio frequencies, including without limitation Personal Wireless Services, radio and television broadcasting, public safety communications, and amateur and business communications.

03.0 District Regulations

03.1 Use Regulations. A personal wireless service facility shall require a building permit in all cases and may be permitted as follows:

03.1.1 A personal wireless service facility may locate on any existing guyed tower, lattice tower, monopole, electric utility transmission tower, fire tower or water tower, provided that the installation of the new facility does not increase the height of the existing structure except as provided in Sub-section 03.3.3 below. Such installations

shall not require a Special Permit but shall require site plan approval by the planning board.

03.1.2 A personal wireless service facility involving construction of one or more ground building or, structure mounts, other than those provided for in 03.1.1 shall require a Special Permit. Such facilities may locate by Special Permit in all zoning districts within the Town, provided that the proposed use complies with the height and setback requirements of Sub-section 03.3 and all of the Special Permit Regulations set forth in Sub-section 04.0 of this Section.

03.1.3 A personal wireless service facility that exceeds the height restrictions of Subsections 03.3.1 - 03.3.3 may be permitted by Special Permit in a designated Wireless Service Overlay District provided that the proposed facility complies with the height restrictions of Sub-section 03.3.4, and all of the setback and Special Permit Regulations set forth in Sub-sections 03.3 and 04.0 of this Section.

03.2 Location: Applicants seeking approval for personal wireless service facilities shall comply with the following:

03.2.1 The applicant shall have the burden of proving that there are no feasible existing structures upon which to locate. The applicant shall also demonstrate that the use of one or more existing structures in concert with new structure(s) of lesser impact to the community are not feasible.

If feasible, personal wireless service facilities shall be located on existing structures, including but not limited to buildings, water towers, existing telecommunications facilities, utility poles and towers, and related facilities, provided that such installation preserves the character and integrity of those structures.

To preserve character and integrity of existing Buildings, PWSF's shall be installed such that their antennas and cables shall be concealed within existing buildings or within appropriate attachments thereto. Absent the ability to fully conceal antennas and cables on existing buildings, camouflage techniques shall be employed to minimize the visibility of the antennas and cables, unless the SPGA determines that the placement of the antennas and cables is sufficiently unobtrusive to render camouflage unnecessary.

Applicants shall also consider use of existing non-building structures, such as telephone and electric utility structures, for mounting PWSF antennas and cables. Camouflage techniques shall be employed to minimize the visibility of the antennas and cables on existing non-building structures, unless the SPGA determines that the placement of the antennas and cables is sufficiently unobtrusive to render camouflage unnecessary.

03.2.2 If the applicant demonstrates that it is not feasible to locate on one or more existing structures, personal wireless service facilities at new Ground Mount structures shall be designed so as to be camouflaged to the greatest extent possible, including but not limited to: use of compatible building materials and colors, screening, landscaping and placement within trees.

03.2.3 The applicant shall submit documentation of the legal right to install the PWSF upon and use the proposed site at the time of application for a building permit and/or Special Permit.

0.3.2.4 The applicant shall demonstrate that the choice of, placement of, and visual impact of the ground based equipment of a proposed PWSF is compatible with its surroundings. Equipment shall be concealed, camouflaged, and/or visually screened to minimize its visual impact on the surroundings. The board may require the applicant to employ mitigation measures such as placement within an existing building, vegetative screening, site-compatible Equipment Shelter architecture, and the like.

03.3 Dimensional Requirements. Personal wireless service facilities shall comply with the following requirements:

03.3.1 Height, Ground-Mounted Facilities. Except in designated overlay districts, ground-mounted personal wireless service facilities shall not project higher than ten feet above the height limits of the zoning district in which the facility is proposed to be located unless there are no buildings within 300 feet of the proposed ground mount (other than buildings on the parcel of the facility), in which case these facilities shall not project higher than one hundred twenty feet measured above ground level (AGL). If there are no buildings within 300 feet of the proposed ground mount, (other than buildings on the parcel of the facility) all ground-mounted personal wireless service facilities shall be obscured by dense tree growth to screen views of the facility from buildings and public ways. These trees may be existing on the subject property or planted on site.

03.3.2 Height, Building-Mounted Facilities. Building-mounted personal wireless service facilities shall not project more than ten feet above the height of an existing building nor project more than ten feet above the height limit of the zoning district within which the facility is located. Personal wireless service facilities may locate on a building that is legally non-conforming with respect to height, provided that the facilities do not project above the existing building height, unless a purpose-built concealment is designed to increase the height of the structure in an architecturally appropriate fashion, in which case the structure height may be extended by up to ten feet.

03.3.3 Height, Structure Mounted Facilities. Existing structures, including existing structures that are legally non-conforming with respect to height, may at the discretion of the Planning Board, be extended up to 20 feet in height by the installation of antennas and structure mounts on the structure, provided that the extension is compatible with the structure and its surroundings, including, but not limited to, residential, scenic, and Historic District assets.

03.3.4 Height, Wireless Facility Overlay Districts (WFOD). Where the town establishes Wireless Facility Overlay Districts (as designated on the town zoning map), personal wireless service facilities may be permitted by Special Permit. The maximum height within each WFOD is indicated on the WFOD on the town zoning map. Monopoles are the preferred type of mount for such taller structures, unless it can be demonstrated that another style of structure provides results that are substantially more beneficial to the

community. Such structures shall comply with all setback and Special Permit Regulations set forth in this Bylaw.

03.3.5 Setbacks. Except when mounted on existing structures, all personal wireless service facilities and their equipment, utilities and equipment shelters shall comply with the building setback provisions of the zoning district in which the facility is located. In addition, the following setbacks shall be observed:

03.3.5.1 In the event that an existing non-conforming building or structure is proposed as a mount for a personal wireless service facility, personal wireless service facilities and their equipment shelters shall not increase any nonconformities, except as provided in Section 03.3.6 below.

03.3.6 Flexibility. In reviewing a Special Permit application for a personal wireless service facility, the Planning Board may reduce the required setback distance of the zoning district by as much as 50% of the required distance if it finds that a substantially better design will result from such reduction. In making such a finding, the Planning Board shall consider both the visual and safety impacts of the proposed use.

04.0 Special Permit Regulations

All personal wireless service facilities shall comply with the Performance Standards set forth in this section.

04.1 Design Standards

04.1.1 Visibility/Camouflage. The visibility of personal wireless service facilities shall be mitigated as follows:

04.1.1.1 Existing Buildings

a. When a personal wireless service facility's antennas and mount extend above the roof height of a building on which they are mounted, every effort shall be made to conceal them within or behind existing or custom made architectural features to limit visibility from public ways. Absent effective concealment alternatives, antennas, cables, and mounts should be placed to minimize their visibility and their impact on the building's silhouette. The use of coloration and other methods of camouflaging the antennas shall be applied as suited to the circumstances.

b. Personal wireless service facilities which are side mounted shall blend with the existing building's architecture and, if over 5 square feet in overall area, shall be concealed or painted in a manner that is consistent with the design features and materials of the building.

04.1.1.2 Existing Structures

When a personal wireless service facility's antennas are attached to existing structures, every effort shall be made to make their appearance to be in harmony

with the existing structure. Absent effective concealment alternatives, antennas, cables, and mounts should be placed to minimize their visibility and their obtrusiveness in the context of their installation. The use of coloration and other methods of camouflaging the antennas shall be applied as suited to the circumstances.

04.1.1.2 Vegetation:

If personal wireless service facilities are not suitably screened from public view by existing buildings or structures, they shall be surrounded by buffers of dense tree growth and understory vegetation in all relevant directions to create an effective year-round visual buffer. Ground-mounted personal wireless service facilities shall provide a vegetated buffer of sufficient height and depth to effectively screen the facility. Trees and vegetation may be existing on the subject property or installed as part of the proposed facility or a combination of both. The Planning Board shall determine the types of trees and plant materials and depth of the needed buffer based on site conditions.

04.1.1.3 Camouflage by Design. Where personal wireless service facilities cannot be screened as provided above, such facility must be designed to blend with the features of the landscape. Planning Board approval shall be required for designs submitted under this paragraph. Such designs may include, but are not limited to, flagpole, lookout tower, or faux tree designs.

04.1.1.4 Color:

- a. Personal wireless service facilities which are side-mounted on buildings shall be painted or constructed of materials to match the color of the building material directly behind them.
- b. To the extent that any personal wireless service facility extends above the height of the vegetation immediately surrounding it, it shall be colored in a manner that best blends with the visual background from the most critical points of view, unless the camouflage or concealment method requires different coloration (such as a white flag pole).

04.1.2 Equipment Shelters

Equipment shelters for personal wireless service facilities shall be designed consistent with one of the following design standards:

- a. Equipment shelters shall be located in underground vaults; or
- b. Equipment shelters shall be designed consistent with traditional New England architectural styles and materials, with a roof pitch of at least 10/12 and clapboard or shingle siding; or

- c. Equipment shelters shall be camouflaged behind an effective year-round landscape buffer, equal to the height of the proposed building, and/or wooden fence. The Planning Board shall determine the style of fencing and/or landscape buffer that is compatible with the neighborhood. Secluded installations may not require visual buffering, at the discretion of the Planning Board.

04.1.3 Lighting and Signage

- a. Personal wireless service facilities shall be lighted only if required by the Federal Aviation Administration (FAA), or unless specifically authorized in the special permit for architectural or safety reasons. Lighting of equipment structures and any other facilities on site shall be shielded from abutting properties. There shall be total cutoff of all light at the property lines of the parcel to be developed, and footcandle measurements at the property line shall be 0.0 initial footcandles when measured at grade.
- b. Signs shall be limited to those needed to identify the property and the owner and warn of any danger. All signs shall comply with the requirements of the Town's sign regulations.
- c. All ground mounted personal wireless service facilities shall be surrounded by a security barrier.

04.1.4 Historic Buildings and Districts

- a. Any personal wireless service facilities located on or within an historic structure shall not alter the character-defining features, distinctive construction methods, or original historic materials of the building. However, the use of special materials is permitted to enable the concealment of the wireless facility is permitted as long as the installation is undetectable to the eye and does not destroy critical features of the building.
- b. Any alteration made to an historic structure to accommodate a personal wireless service facility shall be fully reversible.
- c. Personal wireless service facilities within or in close proximity to an historic district shall be concealed within or behind existing architectural features, or shall be located so that they are not visible from public roads and viewing areas within the district, or shall be designed to complement the district in a manner that other new construction would be expected to do.

04.1.5 Scenic Landscapes and Vistas

- a. Personal wireless service facilities shall not be located within open areas that are visible from public roads, recreational areas or residential development, unless within an overlay district. As required in the Camouflage section above, all ground-mounted personal wireless service facilities which are not sufficiently screened by existing

buildings or structures shall be shielded by a buffer of dense tree growth or shall be designed to look like a natural or ordinary feature of the Leyden environment.

b. Any personal wireless service facility that is located within 300 feet of a scenic vista or scenic landscape as designated by the town in its most recent open space plan and/or master plan shall not exceed the height of vegetation at the proposed location. If the facility is located farther than 300 feet from the scenic vista, scenic landscape or scenic road, the height regulations described elsewhere in this bylaw will apply.

04.2 Environmental Standards

04.2.1 Personal wireless service facilities shall not be located in wetlands. Locating of wireless facilities in wetland buffer areas shall be accorded the same rights and limitations applied to other commercial development.

04.2.2 No hazardous waste shall be discharged on the site of any personal wireless service facility. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least 110% of the volume of the hazardous materials stored or used on the site.

04.2.3 Stormwater run-off shall be contained on-site.

04.2.4 Equipment for personal wireless service facilities shall not generate noise in excess of 50 dBA at the property line.

04.3 Safety Standards

04.3.1 Radiofrequency Energy(RFE) Standards

All personal wireless service facilities shall comply with state and federal standards regarding human exposure to radio frequency energy.

04.4 Other Wireless Communications on PWSF mounts

Mounts that are approved for one or more PWSF's may support other types of wireless communications antennas on a secondary basis such that they do not impede the full use of the mount for the number of PWSF's approved in the Specil Permit. For instance, a ground mount may be approved for three PWSF antenna arrays but occupied by only two. The third position may be utilized on a preemptible basis by another form of wireless communication. If a third PWSF is required in the area, the third position on the ground mount is considered available for the PWSF, notwithstanding the presence of the non PWSF antenna(s) in that position.

Wireless communications that are not PWS communications are subject to applicable provisions of the Bylaws of the Town of Leyden.

05.0 Application Procedures

05.1 Special Permit Granting Authority (SPGA). The Special Permit Granting Authority for personal wireless service facilities shall be the Planning Board.

05.2 Consultants. In order to properly review and evaluate a Special Permit application for a personal wireless service facility, the Planning Board at its sole discretion shall have the option to hire, contract with, or otherwise employ, at the expense of the applicant the services of engineers or other persons with required technical expertise. Such hiring shall be done in consultation with the applicant and for reasonable fees.

05.3 Pre-Application Conference

Prior to the submission of an application for a Special Permit under this regulation, the applicant is strongly encouraged to meet with the SPGA at a public meeting to discuss the proposed personal wireless service facility in general terms and to clarify the filing requirements. The SPGA shall meet with an applicant under this regulation within twenty-one (21) days following a written request submitted to the SPGA and the Town Clerk. If the SPGA fails to meet with an applicant who has requested such a meeting within twenty-one (21) days of said request and said meeting has not been postponed due to mutual agreement, the applicant may proceed with a Special Permit application under this regulation without need for a pre-application conference.

05.4 Pre-Application Filing Requirements

The purpose of the conference is to inform the SPGA as to the preliminary nature of the proposed personal wireless service facility. As such, no formal filings are required for the pre-application conference. However, the applicant is encouraged to prepare sufficient preliminary architectural and/or engineering drawings to inform the SPGA of the location of the proposed facility, as well as its scale and overall design.

05.5 Application Filing Requirements

The following shall be included with an application for a Special Permit for all personal wireless service facilities:

05.5.1 General Filing Requirements

- a) Name, address and telephone number of applicant and any co-applicants as well as any agents for the applicant or co-applicants.
- b) Co-applicants may include the landowner of the subject property, licensed carriers and tenants for the personal wireless service facility.

- c) No application shall be deemed acceptable unless either the applicant or a coapplicant is a licensed carrier. The SPGA may waive this requirement if it appears upon preapplication the proposed facility is sited, designed, and placed in a manner that is optimal for the community and suitable for wireless development in Leyden, and action on the application is in the interest of the community. If such waiver is granted and a special permit is granted, the SPGA may require the applicant submit proof of a valid wireless lease be submitted as a condition of obtaining a building permit.
- d) Original signatures for the applicant and all co-applicants applying for the Special Permit. If the applicant or co-applicant will be represented by an agent, original signature authorizing the agent to represent the applicant and/or co-applicant. Photoreproductions of signatures will not be accepted.
- e) A certified check, bank check, or money order made payable to the Town of Leyden in the amount established by the Planning Board for the filing fee for a Special Permit under this Section.
- f) A signed agreement to pay any fees or other costs if the Planning Board should vote to exercise its option under 05.2 of this Section.

05.5.2 Location Filing Requirements

- a) Identify the subject property by including the Town as well as the name of the locality, name of the nearest road or roads, and street address, if any.
- b) Tax map and parcel number of subject property.
- c) Zoning district designation for the subject parcel (Submit copy of Town zoning map with parcel identified).
- d) A line map to scale showing the lot lines of the subject property and all properties within 300 feet and the location of all buildings, including accessory structures, on all properties shown.
- e) A town-wide map showing the other existing personal wireless service facilities in the Town and outside the Town within one mile of its corporate limits.
- f) The proposed locations of all existing and future personal wireless service facilities in the Town on a Town-wide map for this carrier.

05.5.3 Siting Filing Requirements

- a) A one-inch-equals-40 feet vicinity plan showing the following:
 - 1) Property lines for the subject property.
 - 2) Property lines of all properties adjacent to the subject property within 300 feet.

- 3) Tree cover on the subject property and adjacent properties within 300 feet, by dominant species and average height, as measured by or available from a verifiable source.
- 4) Outline of all existing buildings, including purpose (e.g. residential buildings, garages, accessory structures, etc.) on subject property and all adjacent properties within 300 feet.
- 5) Proposed location of antenna, mount and equipment shelter(s).
- 6) Proposed security barrier, indicating type and extent as well as point of controlled entry.
- 7) Location of all roads, public and private, on the subject property and on all adjacent properties within 300 feet including driveways proposed to serve the personal wireless service facility.
- 8) Distances, at grade, from the proposed personal wireless service facility to each building on the vicinity plan.
- 9) Contours at each two feet AMSL for the subject property and adjacent properties within 300 feet.
- 10) All proposed changes to the existing property, including grading, vegetation removal and temporary or permanent roads and driveways.
- 11) Representations, dimensioned and to scale, of the proposed mount, antennas, equipment shelters, cable runs, parking areas and any other construction or development attendant to the personal wireless service facility.
- 12) Lines representing the sight line showing viewpoint (point from which view is taken) and visible point (point being viewed) from "Sight Lines" sub-section below.

b) Sight lines and photographs as described below:

- 1) Sight line representation. A sight line representation shall be drawn from any public road within 300 feet and the closest facade of each residential building (viewpoint) within 300 feet to the highest point (visible point) of the personal wireless service facility. Each sight line shall be depicted in profile, drawn at one inch equals 40 feet. The profiles shall show all intervening trees and buildings. In the event there is only one residential building within 300 feet there shall be at least two sight lines from the closest habitable structures or public roads, if any.
- 2) Existing (before condition) photographs. Each sight line shall be illustrated by one four-inch by six-inch or larger color photograph of what can currently be seen of the site from any public road within 300 feet.

- 3) Proposed (after condition). Each of the existing condition photographs shall have the proposed personal wireless service facility superimposed on it to show what will be seen from public roads if the proposed personal wireless service facility is built.
 - 4) A visibility map prepared by a qualified professional indicating areas in Leyden from which all or portions of the facility will be visible, with separate indications of locations where visibility of the facility through defoliated vegetation will be possible. The map may be created after the application is filed, in conjunction with a crane or balloon test.
- c) Siting elevations, or views at-grade from the north, south, east and west for a 50-foot radius around the proposed personal wireless service facility plus from all existing public and private roads that serve the subject property. Elevations shall be at either onequarter inch equals one foot or one-eighth inch equals one foot scale and show the following:
- 1) Antennas, mounts and equipment shelter(s), with total elevation dimensions and AGL of the highest point.
 - 2) Security barrier. If the security barrier will block views of the personal wireless service facility, the barrier drawing shall be cut away to show the view behind the barrier.
 - 3) Any and all structures on the subject property.
 - 4) Existing trees and shrubs at current height and proposed trees and shrubs at proposed height at time of installation, with approximate elevations dimensioned.
 - 5) Grade changes, or cuts and fills, to be shown as original grade and new grade line, with two-foot contours above mean sea level.

05.5.4 Design Filing Requirements

- a) Equipment brochures for the proposed personal wireless service facility such as manufacturer's specifications or trade journal reprints shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.
- b) Materials of the proposed personal wireless service facility specified by generic type and specific treatment (e.g., anodized aluminum, stained wood, painted fiberglass, etc.).
These shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.
- c) Colors of the proposed personal wireless service facility represented by a color board showing actual colors proposed. Colors shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.

- d) Dimensions of the personal wireless service facility specified for all three directions: height, width and breadth. These shall be provided for the antennas, mounts, equipment shelters and security barrier, if any.
- e) Appearance shown by at least two photographic superimpositions of the personal wireless service facility within the subject property. The photographic superimpositions shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any, for the total height, width and breadth.
- f) Landscape plan including existing trees and shrubs and those proposed to be added, identified by size of specimen at installation and species.
- g) Within 30 days of the pre-application conference, or within 21 days of filing an application for a Special Permit, the applicant shall arrange for a balloon or crane test at the proposed site to illustrate the height of the proposed facility. This requirement may be waived by the SPGA where the SPGA deems it to be inappropriate. The date, time and location of such test shall be advertised two times, a week apart, in a newspaper of general circulation in the Town with the first advertisement published at least 14 days, but not more than 21 days prior to the test.
- h) If lighting of the site is proposed, the applicant shall submit a manufacturer's computer-generated point-to-point printout, indicating the horizontal footcandle levels at grade, within the property to be developed and twenty-five (25) feet beyond the property lines. The printout shall indicate the locations and types of luminaires proposed.

05.5.5 Noise Filing Requirements

The applicant shall provide a statement, certified and signed by an acoustical engineer, stating that future noise measurements will not exceed the noise standards of this bylaw.

05.5.6 Radiofrequency Energy(RFE) Filing Requirements

The applicant shall provide a statement showing it has evaluated the RFE conditions that would result if the proposed facility is authorized and built. The analysis shall take into account all material existing sources of RFE as well as the proposed facilities. The statement shall be signed by an individual qualified to perform such analysis and state that RFE measurements and/or computations are accurate and meet FCC Guidelines as specified in the RFE Standards sub-section of this Bylaw.

05.5.7 Federal Environmental Filing Requirements

- a) The National Environmental Policy Act (NEPA) applies to construction of personal wireless service facilities. NEPA is administered by the Federal Communications Commission (FCC) via procedures adopted as Subpart 1, Section 1.1301 et seq. (47 CRF Ch. I). The FCC requires that an environmental assessment (EA) be filed with the FCC prior to beginning operations for any personal wireless service facility proposed in or involving any of the following:

Wilderness areas; Wildlife preserves; Endangered species habitat; Historical site; Indian religious site; Flood plain; Wetlands; High intensity white lights in residential neighborhoods; Excessive radiofrequency radiation exposure.

b) At the time of application filing, an EA that meets FCC requirements shall be submitted to the Town for each personal wireless service facility site that requires such an EA to be submitted to the FCC.

c) The applicant shall list location, type and amount (including trace elements) of any materials proposed for use within the personal wireless service facility that are considered hazardous by the federal, state or local government.

05.5.8 Waiver of Filing Requirements. The Special Permit Granting Authority may waive one or more of the application filing requirements of this Sub-section 5.5 if it finds that such information is not needed for a thorough review of a proposed personal wireless service facility.

06.0 Co-location

06.1 Licensed carriers shall share personal wireless service towers and sites where feasible and appropriate, thereby reducing the number of personal wireless service towers that are stand-alone facilities. All applicants for a Special Permit for a personal wireless service facility shall demonstrate a good faith effort to co-locate with other carriers, unless the proposed facility provides substantially better results than colocation would. Such good faith effort includes:

- 1) A survey of all existing structures that may be feasible sites for co-locating personal wireless service facilities;
- 2) Contact with all the other licensed carriers for commercial mobile radio services operating in the County; and
- 3) Sharing information necessary to determine if co-location is feasible under the design configuration most accommodating to co-location.

06.2 In the event that co-location is found to be not feasible, a written statement of the reasons for the infeasibility shall be submitted to the Town. The Town may utilize a technical expert as allowed in Sub-section 03.3.9 to verify if co-location at the site is not feasible or is feasible given the design configuration most accommodating to colocation. The Town may deny a Special Permit to an applicant that has not demonstrated a good faith effort to provide for co-location and has not proposed a substantially better alternative than a co-location.

06.3 If the applicant does intend to co-locate or to permit co-location, the applicant shall provide drawings and analysis which show the ultimate appearance and operation of the personal wireless service facility at full build-out.

06.4 If the SPGA approves a new wireless facility site, the Special Permit shall indicate the quantity and types of facilities permitted on that site without further Special Permits. It shall also indicate the minimum number of colocators that the structure should be designed to accommodate. Facilities specified in the Special Permit approval shall require no further zoning approval. However, the addition of any facilities not specified in the approved Special Permit shall require a new Special Permit.

07.0 Modifications

A modification of a personal wireless service facility may be considered equivalent to an application for a new personal wireless service facility and will require a Special Permit when the following events apply:

a) The applicant and/or co-applicant wants to alter the terms of the Special Permit by changing the personal wireless service facility in one or more of the following ways:

- 1) Change in the number of facilities permitted on the site;
- 2) Change in technology used for the personal wireless service facility.

b) The applicant and/or co-applicant wants to add any equipment or additional height not specified in the original design filing, provided that changes in antenna configurations or equipment configurations that do not substantially alter the appearance of the installation will be permitted.

08.0 Monitoring and Maintenance

08.1 After the personal wireless service facility is operational, the applicant shall submit, within 90 days of beginning operations, and at annual intervals from the date of issuance of the Special Permit, existing measurements of RFE from the personal wireless service facility. Such measurements shall be signed and certified by a radiofrequency (RF) engineer, stating that RFR measurements are accurate and meet FCC Guidelines as specified in the Radiofrequency Standards section of this Section 5.8.

08.2 After the personal wireless service facility is operational, the applicant shall submit, within 90 days of the issuance of the Special Permit, and at annual intervals from the date of issuance of the Special Permit, existing measurements of noise from the personal wireless service facility. Such measurements shall be signed by an acoustical engineer, stating that noise measurements are accurate and meet the Noise Standards sub-section of this Bylaw. The SPGA may waive this requirement if it is given evidence to its satisfaction that the facilities comply with applicable regulations by a substantial margin such that measurements will be unnecessary and unproductive.

08.3 The applicant and co-applicant shall maintain the personal wireless service facility in good condition. Such maintenance shall include, but shall not be limited to, painting, structural integrity of the mount and security barrier, and maintenance of the buffer areas and landscaping.

09.0 Abandonment or Discontinuation of Use

09.1 At such time that a licensed carrier plans to abandon or discontinue operation of a personal wireless service facility, such carrier will notify the Town by certified U.S. mail of the proposed date of abandonment or discontinuation of operations. Such notice shall be given no less than 30 days prior to abandonment or discontinuation of operations. In the event that a licensed carrier fails to give such notice, the personal wireless service facility shall be considered abandoned upon such discontinuation of operations.

09.2 Upon abandonment or discontinuation of use, the carrier shall physically remove the personal wireless service facility within 90 days from the date of abandonment or discontinuation of use. "Physically remove" shall include, but not be limited to:

- a) Removal of antennas, mount, equipment shelters and security barriers from the subject property.
- b) Proper disposal of the waste materials from the site in accordance with local and state solid waste disposal regulations.
- c) Restoring the location of the personal wireless service facility to its natural condition, except that any landscaping and grading shall remain in the after-condition.

09.3 If a carrier fails to remove a ground mounted personal wireless service facility in accordance with this section of this Bylaw, the town shall have the authority to enter the subject property and physically remove the facility. The Planning Board shall require the applicant to post a bond at the time of construction to cover costs for the removal of a ground mounted personal wireless service facility in the event the Town must remove the facility. Additionally, the SPGA may, at its sole discretion, require the applicant to post a bond at the time of construction to cover the costs for removal of other types (not ground mounted) of PWSFs, if it deems such action to be in the best interest of the Town.

11.0 Term of Special Permit

A Special Permit issued for any personal wireless service facility over fifty (50) feet in height shall be valid for fifteen (15) years. At the end of that time period, the personal wireless service facility shall be removed by the carrier or a new Special Permit shall be required.

5.9 FLOODPLAIN OVERLAY DISTRICT

A. Statement Of Purpose

The purposes of the Floodplain Overlay District are to:

1. Ensure public safety through reducing the threats to life and personal injury;
2. Eliminate new hazards to emergency response officials;
3. Prevent the occurrence of public emergencies resulting from a reduction in water quality, contamination, and/or pollution due to flooding;
4. Avoid the loss of utility services which if damaged by flooding would disrupt or shut down the utility network and impact regions of the community beyond the site of flooding;
5. Reduce costs associated with the response and cleanup of flooding conditions;
6. Reduce damage to public and private property resulting from flooding waters.

B. Floodplain District Boundaries And Base Flood Elevation And Floodway Data

1. The Floodplain District is herein established as an overlay district. The District includes all special flood hazard areas designated on the Town of Leyden, MA Flood Hazard Boundary Map (FHBM) issued by the Department of Housing and Urban Development, Federal Insurance Administration, dated February 7, 1975, as Special Flood Hazard Areas or Zone A, which indicates the 100-year regulatory floodplain.
2. The FHBM is incorporated herein by reference and is on file with the Town Clerk, Zoning Board of Appeals, Planning Board, Building Inspector, and Conservation Commission.
3. Floodway Data: In Special Flood Hazard Areas or Zone A, along watercourses that have not had a regulatory floodway designated, the best available Federal, State, local, or other floodway data shall be used as outlined in the State Building Code to prohibit encroachments in floodways which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.
4. Base Flood Elevation Data: Base flood elevation data is required for subdivision proposals or other developments greater than 3 lots or 5 acres, whichever is less, where a portion of the development activity would be located within Special Flood Hazard Areas or A zones.

C. Notification Of Watercourse Alteration

The Leyden Building Inspector shall notify the following of any alteration or relocation of a river:

1. Adjacent Communities
2. State of Vermont

3. NFIP State Coordinator
Massachusetts Department of Conservation and Recreation
251 Causeway Street, Suite 600-700 Boston,
MA 02114-2104
4. NFIP Program Specialist
Federal Emergency Management Agency, Region I
99 High Street, 6th Floor Boston,
MA 02110

D. Use Regulations

1. Reference To Existing Regulations. All development in the Floodplain District, including structural and non-structural activities, whether permitted by right or by special permit, must be in compliance with Chapter 131, Section 40 of the Massachusetts General Laws (the Wetlands Protection Act) and with the following:
 - a. Section of the Massachusetts State Building Code which addresses floodplain hazard areas (currently 780 CMR 120.G, "Flood Resistant Construction");
 - b. Wetlands Protection Regulations, Department of Environmental Protection (DEP) (currently 310 CMR 10.00);
 - c. Inland Wetlands Restriction, DEP (currently 310 CMR 13.00);
 - d. Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, DEP (currently 310 CMR 15, Title 5); and

Any variances from the provisions and requirements of the above referenced state regulations may only be granted in accordance with the required variance procedures of these state regulations.

2. Permitted Uses. The following uses with low flood damage potential and causing no obstructions to flood flows are allowed provided they are permitted in the underlying district:
 - a. Agricultural uses such as farming, truck farming, horticulture, aquaculture, etc.
 - b. Forestry and nursery uses.
 - c. Outdoor recreational uses not requiring permanent structures, including fishing, boating, play areas, etc.
 - d. Conservation of water, plants, wildlife.
 - e. Wildlife management areas, foot, bicycle, and/or horse paths.
 - f. Temporary non-residential structures used in connection with fishing, growing, harvesting, storage, or sale of crops raised on the premises.
 - g. Buildings lawfully existing prior to the adoption of these provisions.

- h. Other legal uses in the underlying district remain permitted unless prohibited by Section D.3.

3. Prohibited Uses

- a. No altering, dumping, filling, or removal of riverine materials or dredging is permitted. Maintenance of the floodway may be done under requirements of M.G.L. Ch. 131, Sec. 40, and any other applicable laws, by-laws, and regulations, and must be done using best management practices.
- b. No new impoundments, dams, or other water obstructions may be constructed within the district.
- c. Commercial or industrial uses are prohibited in the district.
- d. Storage of vehicles or equipment within the floodway, other than for normal residential use, is prohibited. The Zoning Board of Appeals may consider whether a variance from this prohibition is warranted.
- e. Dumping of trash, garbage or other materials in the floodway is prohibited.
- f. Storage or processing of hazardous materials is prohibited.
- g. All other uses not specifically permitted within the district are prohibited.

4. Nonconforming Uses

- a. Any lawful use or structure existing at the effective date of this Bylaw/Ordinance or amendments thereof and not in conformance with the provisions of this bylaw/ordinance shall be considered to be a nonconforming use or structure governed by Section 2.5, Nonconforming Uses, herein.
- b. Any nonconforming use or structure located in the floodplain may continue and may be maintained, repaired, and improved, but may in no event be made larger.
- c. Any nonconforming structure located in the floodplain experiencing damage exceeding 80% of the assessed value may not be rebuilt.

E. Enforcement

Any violation of this section of the bylaw shall be subject to enforcement action by the Building Inspector pursuant to Section 6.1, Enforcement, herein.

- 1. Restoration of Lands. Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the Building Inspector can file an enforcement action in the courts seeking injunctive relief, which could

include a court order directing the violator to take actions to restore disturbed land or similar remedies.

5.10 Natural Resource Protection Zoning (NRPZ)

A. Purpose and Applicability

1. Purpose: The primary purpose of this Section is to preserve the natural resources of Leyden, especially land in or suitable for agricultural production and larger contiguous blocks of forest land suitable for the production of forest products. This is necessary for the continuation of significant resource-based local agricultural activity and for the protection of the Town's water resources and other unique environmental assets. This section is also intended to foster compact development patterns using flexible regulations for density and lot dimensions and to promote and encourage creativity in neighborhood design. The Town wishes to encourage the use of NRPZ because it results in the preservation of contiguous open space and important environmental resources, while allowing design flexibility. NRPZ reduces development impacts on farmland, forests, wildlife habitat, large tracts of contiguous open space, environmentally sensitive areas, steep slopes, hilltops, and historically significant areas.

2. Applicability: To encourage this type of development, NRPZ projects are allowed by-right, subject to the requirements of this section and the Subdivision Rules and Regulations (Subdivision Regulations). An NRPZ (also referred to herein as a "project") may be proposed anywhere in Leyden. All subdivisions, except within or partially within a radius of one-fourth (1/4) mile of the front door of the Town Hall, shall comply with the NRPZ provisions of this Section 5.10, unless the Planning Board allows a development that deviates from the requirements herein by special permit. Such deviations may be approved if the applicant demonstrates that the proposed alternative development configuration provides adequate protection of the site's environmental resources and fulfills the purposes of this section as well as or better than an NRPZ. If the Planning Board determines that the land with the greatest conservation value cannot be protected except by the use of an NRPZ plan, the Planning Board shall deny the special permit for the deviation and require that the applicant submit a plan that complies with the requirements for an NRPZ.

3. Consolidated Special Permits: If the proposed NRPZ also involves proposed deviations, one or more common driveways, density bonuses, transfer of development rights, and/or any other use that requires a special permit, the proceedings for all such special permits shall, insofar as practicable, occur in one consolidated special permit proceeding before the Planning Board.

4. Exemptions: The provisions of A(2), above apply only to subdivisions of land as defined in Section 81L of Chapter 41 of the General Laws, and not to construction of homes or businesses on individual lots existing as such prior to

May 17, 2014 or to lots created at any time through the “Approval Not Required” process described in Article III, Section 234-5 of the Subdivision Regulations with frontage on public ways existing as such as of May 17, 2014.

B. Conservation Analysis and Findings

1. In order to enable the Planning Board to determine whether or not a proposed NRPZ (or development by special permit that deviates from the requirements for NRPZ) satisfies the purposes and standards of this section, an applicant must present sufficient information on the environmental and open space resources for the Planning Board to make such a determination. The required information shall be provided in the form of a “conservation analysis” as described in Article IV, Section 234-9(E)(4) of the Subdivision Regulations.
2. Prior to filing an application, an applicant is encouraged to meet with the Planning Board to discuss the conservation resources on the site. At such a meeting, the Planning Board shall informally indicate to the applicant which land is likely to have the most conservation value and be most important to preserve and where development may be most appropriately located.
3. The Planning Board, in consultation with the Conservation Commission and Open Space Committee, if any, shall study the conservation analysis, may conduct field visits, and shall formally determine which land should be preserved and where development may be located. The Planning Board shall make written findings supporting this determination (the “conservation findings”). The Planning Board may deny any application that does not include sufficient information to make conservation findings or that does not preserve land that the Planning Board determines should be preserved from development as a result of the conservation analysis and findings.
4. The Planning Board’s conservation findings shall be incorporated into its decision to approve, approve with conditions, or deny an application. The conservation findings shall describe the land to be permanently preserved by a Conservation Restriction or other means, any structures, uses, or activities reserved from the terms of the Conservation Restriction, and management guidelines for such land, if appropriate. The conservation findings shall also indicate preferred locations for development if the NRPZ is denied based upon such findings.

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C. Minimum Preserved Open Space

The Plan shall show that at least 80% of the total acreage of the project will be preserved by a Conservation Restriction or other means, the configuration of which shall be based upon the conservation findings.

D. Allowable Residential Units

1. The maximum number of residential units in an NRPZ is calculated by a formula based upon the net acreage of the project. This formula is intended to take into account site-specific development limitations that make some land less developable than other land. This calculation involves two steps, calculating the net acreage and then dividing it by the density divisor.

2. Net Acreage Calculation

- (a) The factors named below are included in this subsection for net acreage calculation purposes only and do not convey or imply any regulatory constraints on development siting that are not contained in other applicable provisions of law, including this zoning bylaw. To determine net acreage, subtract from the gross acreage of the project the total acreage of:
 - (i) one-half of land with slopes of 15% or greater (2000 square feet or more of contiguous sloped area at least 10 feet in width);
 - (ii) all land subject to easements or restrictions prohibiting development;
 - (iii) all FEMA 100-year floodplains; and
 - (iv) all freshwater wetlands as defined in Section 40 of Chapter 131 of the General Laws, as delineated by an accredited wetlands specialist and approved by the Leyden Conservation Commission.

- (b) Applicants shall use the Field Data Form found in Appendix G of the Massachusetts DEP Handbook "Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act" (1995). The complete form shall be submitted including all methods of determination, i.e., vegetation, soil, and any other indicators, as provided for on the form. If detailed vegetative assessments are not required by the Handbook for a particular site, the reasons must be noted on the Field Data Form. At the Planning Board's discretion, any of the information described above may be taken from current geographic information systems data available from the Massachusetts

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Department of Environmental Protection, Mass GIS, and other credible sources including delineations registered by the use of global positioning systems.

3. Unit Count Calculation

To determine the base number of allowable residential dwelling units on the site, divide the net acreage by the base density divisor of 5. Fractional units of less than 0.5 shall be rounded down and 0.5 or more shall be rounded up.

4. Density Bonuses

(a) The unit count determined in D(3), may be increased through density bonuses designed to advance important goals of the Leyden master plan or community development plan, if any. Density bonuses are given by special permit at the discretion of the Planning Board based upon the expected public benefit. They are calculated by first determining the allowable unit count under D(3) without rounding fractional units up or down, and then multiplying that number by 100% plus the percentages that follow. The resulting fractional units, if any, shall be rounded up or down as in D(3).

(b) If the applicant allows deeded public access to the open space portion of the property and the Planning Board finds that such public access provides a significant recreational benefit to the Town (such as access to an important natural area or a trail system): a maximum of 10% over the allowable unit count in D(3).

(c) If the applicant permanently restricts ownership and occupancy of units allowed by D(3) as affordable housing, herein defined as housing units that are eligible for inclusion in the Town's "Subsidized Housing Inventory" for the purposes of Chapter 40B of the General Laws, and makes a binding commitment to construct such affordable residences: a maximum of 25%. For every unit included in the allowable unit count under D(3) that is built and dedicated as an affordable unit, two bonus market rate units may be permitted, up to the maximum of 25% over the allowable unit count in D(3).

(d) If the applicant preserves as permanent open space more than the minimum required percentage: a maximum 10% over the allowable unit count in D(3) per additional 5% of the parcel preserved as open space.

5. Density Transfer (Transfer of Development Rights)

(a) Procedure: The Town of Leyden encourages flexibility in the location and layout of development, within the overall density standards of this Zoning Bylaw. The Town therefore will permit residential density to be transferred from one parcel (the "sending parcel") to another (the "receiving parcel") which shall be an NRPZ project under this Section 5.10 only. The process of density transfer is as follows:

- (i) All density transfers require a special permit from the Planning Board.

- (ii) The special permit application for a density transfer shall be signed by the owners (or their authorized representatives) of both the sending and receiving parcels.
- (iii) The special permit application shall show a proposed NRPZ plan for the receiving parcel (subdivision or site plan) as well as a base unit count calculation prepared according to the provisions of D(3). For the sending parcel, the applicant may calculate the allowable number of units eligible to transfer by either:
 - (aa) calculating the net acreage pursuant to D(2) and dividing by 15; or
 - (bb) dividing the total (gross) project area by 25.
- (iv) Fractional units of less than 0.5 shall be rounded down and 0.5 or more shall be rounded up.
- (v) Sending parcels existing as such on May 17, 2014 may have development rights calculated by either method iii (aa) or (bb), above at the applicant's election. Sending parcels which have been modified by lot line changes after May 17, 2014 must employ method iii (aa). The density calculation for the sending parcel shall not include any of the density bonuses available under Subsection D(4), above.
- (vi) In reviewing an application for density transfer, the Planning Board shall first determine the base number of allowable residential units permitted on the receiving parcel using all of the relevant standards in D(3) and any density bonuses sought under D(4). The Planning Board shall then determine the number of residential units

available to transfer from the sending parcel(s) pursuant to iii (aa) or (bb), above.

- (vii) The Planning Board may then grant a special permit allowing the transfer to the receiving parcel of some or all of the allowable residential units from the sending parcel(s).
- (viii) As a condition of approval of the density transfer, a Conservation Restriction on the sending parcel(s) satisfying the requirements of Section G, below shall be executed and recorded in the Registry of Deeds. The Conservation Restriction shall require that the total area of land used in the calculation required under iii (aa) or (bb), above be permanently restricted. (For example, if development rights to build five units are transferred and the calculation is according to iii (bb), above at least 125 acres of the sending parcel must be permanently restricted.). Those

portions of the sending parcel(s) not required to be subject to the Conservation Restriction may be used in accordance with this zoning bylaw.

- (b) Findings Required: The Planning Board shall not approve any residential density transfer unless it finds all of the following.
- (i) All requirements for the granting of a special permit have been satisfied.
 - (ii) The addition of the transferred units to the receiving parcel will not increase the maximum allowable unit count under D(3) by more than 25%, and will not adversely affect the area surrounding the receiving parcel.
 - (iii) The density transfer will benefit the Town by protecting a substantial area of developable land with conservation value on the sending parcel(s) in a manner that furthers the purposes of this Section 5.10.
 - (iv) The density transfer will be consistent with the master plan, community development plan, or other town-wide comprehensive plan, if any.

6. Maximum Density Bonus and/or Density Transfer

The density bonuses and density transfers allowed in D(4) and D(5), above may be combined to result in a total increase not exceeding 25% of the unit count established in D(3). Density bonuses and/or transfers may only be exercised if the resulting development complies with Title 5.

E. Types of Residential Development

The allowable residential dwelling units may be developed as single-family, or any other housing types otherwise allowed by this zoning by-law, provided that all applicable requirements for the land use district are satisfied and that the number of dwelling units does not exceed the allowable unit count in D(6). The subdivision approval and approvals for any other allowed housing types proposed shall be fulfilled concurrently in one proceeding to the extent practical.

F. Dimensional and Design Requirements

1. Minimum Lot Sizes in NRPZs

The limiting factor on lot area in NRPZs is the need for adequate water supply and sewage disposal. Therefore, there is no required minimum lot area for zoning purposes. This does not affect the powers of the Board of Health to require minimum areas on a lot for the disposal of sewage and the protection of water supply.

2. Setbacks, Road Frontage, and Road Requirements

There shall be no setback requirements, except the minimum building setbacks shall be 20 feet or 10 feet from any property line for a dwelling or accessory structure, respectfully. In the case of adjoining property that is not a part of the NRPZ, the setback requirements from such property lines shall be as otherwise required in this zoning by-law. There shall be no numerical requirements for road frontage in an NRPZ, provided that each lot has legally and practically adequate vehicular access to a public way or a way approved under the Subdivision Regulations across either its own frontage or via a shared driveway approved under Section 5.7 of this zoning bylaw. All dwellings must comply with applicable Board of Health requirements. The Planning Board may modify the applicable road construction requirements for new roads within an NRPZ as provided in the Subdivision Regulations, if it finds that such modifications will be consistent with the purposes of this Section 5.10 and the community development plan or master plan, if any.

3. Arrangement of Lots

(a) Lots shall be located and arranged in a manner that protects: views from roads and other publicly accessible points; farmland; wildlife habitat; large harvestable forest areas; hilltops; ponds; steep slopes; and other sensitive environmental resources, while facilitating pedestrian circulation. Generally, residential lots shall be located the minimum feasible distance from existing public roadways while allowing for adequate visual screening from such roadways. The Planning Board shall take into consideration the conservation analysis and findings in approving the arrangement of lots.

(b) Lot, roadway, and shared driveway layouts, land alterations, and placement of structures shall follow applicable portions of the Rural Siting Principles in Section 5.11 of this zoning bylaw and any design guidelines for NRPZ which may be adopted by the Planning Board.

G. Permanent Open Space

1. Open space set aside in an NRPZ or as a condition of any special permit or site plan review shall be permanently preserved from development. The Planning Board may not require such open space land to be accessible to the public unless a density bonus is allowed under D(4)(b). Any development permitted in connection with the setting aside of open space land shall not compromise the conservation value of such land, based upon the conservation

findings of the Planning Board. Individual or shared water wells may be located upon the open space land if so allowed in the conservation findings of the Planning Board.

2. Permanent Preservation of Open Space Land

All land required to be set aside as open space in connection with any NRPZ shall be so noted on any approved plans and shall be protected by a permanent Conservation Restriction, herein defined as a permanent restriction in the title to land of the type described in G.L. Chapter 184, Sections 31–33, to be held by the Town of Leyden Conservation Commission, the Commonwealth of Massachusetts, or a non-profit conservation organization qualified to hold Conservation Restrictions under Chapter 184, Section 31 of the General laws, and also qualified to hold tax-deductible conservation easements under Section 170(h) of the Internal Revenue Code. As used in this zoning bylaw “Conservation Restriction” also includes an Agricultural Preservation Restriction, a Watershed Preservation Restriction, or a Preservation Restriction as defined in G.L. Chapter 184, Section 31. The restriction shall specify the permitted uses of the restricted land which may otherwise constitute development. The restriction may permit, but the Planning Board may not require public access or access by residents of the development to the protected open space land.

3. Ownership of Open Space Land

(a) The fee interest in the protected open space land, at the applicant’s discretion, may be held: in private ownership; common ownership by a homeowner’s association (HOA); by the town or state governments with their consent; by a non-profit organization; or in such other form of ownership as appropriate to manage the open space land and protect its conservation value.

(b) If the land is owned in common by an HOA, such HOA shall be established in accordance with the following:

(i) The HOA must be created before final approval of the development, and must comply with all applicable provisions of state law.

(ii) Membership must be mandatory for each lot owner, who must be required by recorded covenants and restrictions to pay fees to the HOA for taxes, insurance, and maintenance of common open space, private roads, and other common facilities.

(iii) The HOA must be responsible for liability insurance, property taxes, the maintenance of recreational and other facilities, private roads, and any shared driveways used by all members.

(iv) Property owners must pay their pro rata share of the costs in (b) (ii) and (iii), above, and the assessment levied by the HOA must be able to become a lien on the individual property in the event of non-payment.

(v) The HOA must be able to adjust the assessment to meet changed needs.

(vi) The applicant shall make a conditional offer of dedication to the Town, binding upon the HOA, for all open space to be conveyed to the HOA. Such offer may be accepted by the Town, at the discretion of the Select Board, upon the failure of the HOA to take title to the open space from the applicant or other current owner, upon dissolution of the association at any future time, or upon failure of the HOA to fulfill its maintenance obligations hereunder or to pay its real property taxes.

(vii) Ownership shall be structured in such a manner that real property taxing authorities may satisfy property tax claims against the open space lands by proceeding against individual owners in the HOA and the lots and dwelling units they each own.

(viii) Town Counsel shall find that the HOA documents presented satisfy the conditions in (b)(i-vii), above, and such other conditions as the Planning Board shall deem necessary.

4. Maintenance Standards

(a) Ongoing maintenance standards shall be established as a condition of development approval to ensure that the open space land is not used for storage or dumping of refuse, junk, or other offensive or hazardous materials. Such standards shall be enforceable by the Town against any owner of open space land, including an HOA.

(b) If the Select Board finds that the provisions of (4)(a), above are being violated to the extent that the condition of the land constitutes a public nuisance, it may, upon 30 days written notice to the owner, enter the premises for necessary maintenance, and the actual costs of such maintenance by the Town shall be assessed ratably against the landowner or, in the case of an HOA, the owners of properties within the development, and shall, if unpaid, become a property tax lien on such property or properties.

5.11 Rural Siting Principles

A. Standards for Land Development

The following standards shall apply to the siting of all uses and structures that are in NRPZs or subject to site plan or special permit approval. They are recommended but not required for the siting of individual residences on existing lots where no site plan or special permit review is required.

1. Wherever feasible, retain and reuse existing old farm/woods roads and lanes rather than constructing new roads or driveways. This minimizes clearing and disruption of the landscape and takes advantage of the attractive way that old lanes are often lined with trees and stone walls. (This is not appropriate where reuse of a road would require widening in a manner that destroys trees or stone walls or where an existing road is aligned in a way that disrupts drainage or accelerates erosion.)
2. Preserve stone walls and hedgerows. These traditional landscape features define outdoor areas in a natural way and create corridors useful for wildlife. Using these features as property lines is often appropriate, as long as setback requirements do not result in constructing buildings in the middle of fields.
3. Avoid placing buildings in the middle of open fields. Place them either at the edges of fields or in wooded areas. Septic systems, leach fields, and wells may be located in fields, however.
4. Use existing vegetation and topography to buffer and screen new buildings if possible, unless they are designed and located close to the road in the manner historically found in the Town. If vegetative buffers are used, a minimum depth of 50 feet of mixed ground-covers, shrubs, and trees should be provided. Group buildings in clusters or tuck them behind tree lines or knolls rather than spreading them out across the landscape in a "sprawl" pattern.
5. Minimize clearing of vegetation at the edge of the road, clearing only as much as is necessary to create a driveway entrance with adequate sight distance. Use curves in the driveway to increase the screening of buildings.
6. Site buildings so that they do not protrude above treetops and crest lines of hills as seen from public places and roads. Use vegetation as a backdrop to reduce the prominence of the structure. Wherever possible, open up views by selective cutting of small trees and pruning lower branches of large trees, rather than by clearing large areas or removing mature trees.
7. Minimize crossing of steep slopes with roads and driveways. When building on slopes, take advantage of the topography by building multi-level structures with entrances on more than one level (e.g., walk-out basements, garages under buildings), rather than grading the entire site flat. Use the flattest portions of the site for subsurface sewage disposal systems and parking areas.

8. Where feasible, site buildings and other areas to be developed in a manner that does not block trails or paths that have traditionally provided access to back land. This provision shall not be construed to create any public access rights that do not otherwise exist.

SECTION 5.12 SOLAR PHOTOVOLTAIC INSTALLATIONS (SPVI)

A. PURPOSE

There is a pressing need to promote solar energy development in light of the current global climate crisis. The purpose of this section is to create, town-wide, the opportunity for new Solar Photovoltaic Installations (SPVI) in the Town of Leyden, in order to help advance the Commonwealth's policy goals to transition to non-carbon-based energy production and thereby move away from fossil fuels. Appropriate solar energy development is also a potential opportunity for economic development, diversifying the Town from its dependence on the residential tax base. By providing reasonable standards for the placement, design, construction, operation, monitoring, modifications, and removal of such installations, Leyden can accomplish the above, while protecting the public health, safety, and welfare of its inhabitants, and minimizing impacts on scenic, natural, historic and wildlife habitat resources, as well as providing adequate financial assurance for the eventual decommissioning of such installations.

The protection of the public health, safety and welfare of Leyden's inhabitants requires consideration of the below-ground water on which the entire town is dependent upon for wells, which also depends upon the above-ground wetlands, rivers and streams. So protection of water resources is paramount.

And since the majority of lands within Leyden are either forested or farmed, consideration of maintaining a proper balance of those characteristics, with this new land use, also requires consideration, in order to preserve the character of the Town and the prime agricultural resource values of the Town.

This bylaw section establishes a procedure to find a balance between renewable energy generation and natural and cultural resource protection that serves both our social and environmental responsibilities and protects public health and safety.

B. DEFINITIONS

1. ***As-of-Right Siting:*** *As-of-Right Siting* shall mean that development may proceed without the need for a special permit, variance, amendment, waiver, or other discretionary approval. As-of-right development may be subject to site plan review to determine conformance with local zoning ordinances or bylaws. Projects cannot be prohibited, but can be reasonably regulated by the inspector of buildings or the Site Plan Review Authority, the Leyden Planning Board.
2. ***Battery Energy Storage Facility:*** a system of mechanical, electrical, chemical or electrochemical devices that charges or collects energy from the local electric grid or an

electric generating facility and then discharges that energy at a later time to provide electricity to the grid or homes and businesses.

3. **Building Mounted SPVI:** A solar energy installation that is permanently affixed to a building, as defined by the State Building Code. This definition is inclusive of canopy structures.
4. **Dual-use solar and agriculture:** agricultural production and electricity production from solar photovoltaic (PV) panels occurring together on the same piece of land. These facilities may also be referred to as agrivoltaic systems, agrisolar, or co-location of solar and agriculture.
5. **Large-Scale Ground Mounted SPVI:** A solar photovoltaic system that is structurally mounted on the ground and is not roof-mounted, and covers at least one acre but not more than five (5) acres of land.
6. **On-Site Solar Photovoltaic Installation:** A solar photovoltaic installation that is constructed at a location where other uses of the underlying property occur.
7. **Rated Nameplate Capacity:** The maximum rated output of electric power production of the Photovoltaic system in Direct Current (DC).
8. **Residential ground-mounted SPVI:** an on-site SPVI as an accessory use to the residential structure on the property.
9. **Small-scale ground-mounted SPVI:** SPVI on up to one acre of land.

C. APPLICABILITY

The provisions set forth in this Section shall apply to the construction, operation and/or repair of SPVIs proposed to be constructed after the effective date of this Section. This Section also applies to physical modifications that materially alter the type, configuration, or size of these installations or related equipment.

Whether an SPVI is allowed-by-right, requires a Site Plan Review or a Special Permit is described in the chart below:

Type of SPVI	Allowed As-of-right	Site Plan Review	Special permit
Building-mounted	Y	N	N
Residential Ground-Mounted	Y	N	N
Small Scale Ground-Mounted	Y	Y	N
Large- Scale Ground-Mounted			
1+ to no more than 5 acres	N	Y	Y
Large-Scale Ground-Mounted			
5+ acres Not permitted		

Battery Energy Storage Facility

1. A *Battery Energy Storage Facility* that is accessory to a building mounted or *Residential ground-mounted SPVI* and is utilized in connection with a primary permitted use is allowed by right with a building permit.
2. (Deleted by MA Attorney General).
3. An accessory *Battery Energy Storage Facility* for a *Small-scale ground-mounted SPVI* is subject to site plan review and... (Deleted by MA Attorney General)
4. An accessory *Battery Energy Storage Facility* for a *Large-scale Ground Mounted SPVI* is subject to site plan review, shall be subject to the special permit review for the site, and...(Deleted by MA Attorney General).

D. GENERAL REQUIREMENTS

- a. **Compliance with Laws, Bylaws and Regulations** - The construction and operation of all *SPVIs* shall be consistent with all applicable local, state and federal requirements, including but not limited to all applicable safety, construction, electrical, and communications requirements. All buildings and fixtures forming part of a solar electric installation shall be constructed in accordance with the Massachusetts State Building Code.
- b. **Building Permit and Building Inspection** - No *SPVIs* shall be constructed, installed or modified as provided in this section without first obtaining a building permit and paying any required fees.
- c. **Special Permit** – An applicant for a proposed *SPVI*, that requires a special permit (see Section C. Applicability), must seek a Special Permit from the Special Permit Granting Authority (SPGA) as described in Section 4.2. For the purposes of this bylaw, the Planning Board shall serve as the SPGA.
- d. **Waiver** – Planning Board can consider a request for a waiver of a requirement or standard if it permits the project to better meet the goals of this bylaw.
- e. **Pre-Application Conference** – For all *SPVIs*, that require a site plan review, the applicant is strongly encouraged to meet with the Leyden Planning Board to conduct a pre-application conference to discuss the project, process, waivers, and submittal requirements and proposed management practices for siting, construction, screening, reducing the visual contrast, operation, and maintenance of that type of commercial *SPVI*.
- f. **Utility Notification** – No small-scale or *Large-Scale Ground Mounted SPVI* intended to be connected to the grid, shall be installed until evidence has been given to the Leyden Planning Board that the utility company that operates the electrical grid where the installation is to be located has been informed of the solar electric installation owner or operator’s intent to install an interconnected facility, and the applicant has provided a signed copy of the interconnection agreement with the utility company to the Leyden Planning Board.
- g. **Proof of Liability Insurance** – The applicant for a Building Permit for a Small-scale or *Large-Scale Ground Mounted SPVI* shall be required to provide evidence of liability insurance to the

Building Inspector in an amount and for duration sufficient to cover loss or damage to persons and structures occasioned by the failure of the facility until the system is dismantled. A Certificate of Insurance shall be provided annually to the Building Inspector.

- h. **Site Control** – At the time of its application for a Building Permit, the applicant shall submit documentation of actual or prospective control of the project site sufficient to allow for installation and use of the proposed facility. Documentation shall also include proof of control over setback areas and access roads, if required. Control shall mean the legal authority to prevent the use or construction of any structures for human habitation within the setback areas.
- i. **Independent Consultants** - Upon submission of an application for Site Plan Review and/or a Special Permit, the Site Plan Review Authority and/or the Special Permit Granting Authority are authorized to engage outside consultants and legal counsel to peer review the application and to provide expert advice on topics including but not limited to stormwater management, fire suppression, hazard mitigation, decommissioning, and financial surety measures, pursuant to G.L. c. 44, § 53G, whose services shall be paid for by the applicant.

E. GENERAL SITING STANDARDS

- 1. **Setbacks**—For Small-scale and *Large-Scale Ground Mounted SPVIs*’ front, side and rear setbacks from property lines shall be as follows:
 - a. Front yard: the front yard depth shall not be less than 100 feet.
 - b. Side yard: each side yard shall have a depth of at least 100 feet.
 - c. Rear yard: the rear yard depth shall not be less than 100 feet.
- 2. **Appurtenant Structures** - All appurtenant structures to *SPVIs* shall be subject to regulations concerning the bulk and height of structures, lot area and setbacks as specified in Section 5.12.E.1, open space, parking and building coverage requirements. All such appurtenant structures, including but not limited to, equipment shelters, storage facilities, transformers, and substations, shall be architecturally compatible with each other and the rural character of other structures in the area. Structures shall be screened from view by vegetation and/or joined or clustered to avoid adverse visual impacts.
- 3. **Height of Structures** - The height of any structure associated with a *SPVI* shall not exceed 20 feet.

F. DESIGN AND PERFORMANCE STANDARDS

- a. **Lighting** - Lighting of solar electric installations shall be consistent with local, state and federal law. Lighting of other parts of the installation, such as appurtenant structures, shall be limited to that required for safety and operational purposes, and shall be reasonably shielded from abutting properties. Lighting of the solar electric installation shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution. In addition, such fixtures shall be “dark sky” compliant and meet International Dark Sky FSA certification requirements. The owner/operator shall be responsible for maintenance of lighting systems.

- b. **Signage** - Signs on *SPVIs* shall comply with Leyden's sign regulations, Section 5.3. One (1) sign shall be required to identify the owner and provide a 24-hour emergency contact phone number. Solar electric installations shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the solar electric installation.
- c. **Utility Connections** - Reasonable efforts, as determined by the Planning Board shall be made to place all utility connections from the solar electric installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
- d. **Roads** - Access roads shall be constructed to minimize grading, stormwater/run-off, removal of stone walls or trees and impacts to environmental, wetlands, or historic resources. (See Scenic Road restrictions – M.G.L. Chapter 40 Section 15C).
- e. **Control of Vegetation** – ...(text deleted by MA Attorney General).... Mowing, grazing, or the use of pervious pavers or geotextile materials underneath the solar array, are possible alternatives.(text deleted by MA Attorney General)....Aforementioned invasive plant species must be controlled using best management practices and effective methods least detrimental to the environment.
- f. **Hazardous Materials** - Hazardous materials stored, used, or generated on site shall not exceed the amount for a Very Small Quantity Generator of Hazardous Waste as defined by the Massachusetts Department of Environmental Protection (DEP) pursuant to DEP regulations 310 CMR 30.000 and shall meet all requirements of the DEP including storage of hazardous materials in a building with an impervious floor that is not adjacent to any floor drains to prevent discharge to the outdoor environment. If hazardous materials are utilized within the solar electric equipment, then impervious containment areas capable of controlling any release to the environment and to prevent potential contamination of groundwater are required. A list of any hazardous materials located on the site and a plan to prevent their release shall be provided to the Fire Chief at the time of application and on an annual basis.
- g. **Visual Impacts** – The *SPVI* shall be designed to minimize visual impacts including preserving natural vegetation to the maximum extent practicable, using deer-resistant evergreen vegetative buffers (not fences) to provide an effective visual barrier from any public roads within ½ mile and to visually screen abutting residential properties, whether developed or not. Landscaping shall be maintained by the owner/operator of the *SPVI*. Siting shall be such that the view of the *SPVI* from other areas of Town shall be as minimal as possible.
- h. **Noise** - Noise generated by *SPVIs* and associated equipment and machinery shall conform at a minimum to applicable state and local noise regulations, including the DEP's Division of Air Quality noise regulations, 310 CMR 7.10. In addition, for the purposes of this bylaw, a source of sound will be considered in violation of this bylaw if the source:
 - 1. increases the broadband sound level by more than 5 db(A) above the pre-construction ambient noise level;

2. produces a “pure tone” condition, when an octave band center frequency sound pressure level exceeds the two (2) adjacent center frequency sound pressure levels by three (3) decibels or more; or
3. results in sound or noise levels greater than 33 dBA.

Said criteria are measured both at the property line and at the nearest inhabited residence. In addition, the said criteria shall be measured at any property line that is subject to sound elevations higher than ambient sound as a result of higher or lower topography in the opinion of the acoustical engineer paid for by the applicant and approved by the SPGA. “Ambient” is defined as the background A-weighted sound level that is exceeded 90% of the time measured during the quietest part of the day or night. All testing required by this bylaw shall be done by a licensed professional acoustical engineer chosen by the SPGA and paid for by the applicant. All testing shall be done in accordance with the professional standards of the appropriate accrediting agencies.

- i. **Pollinator-Friendly** – Any solar project of one to five acres would need to be certified pollinator friendly by UMASS Amherst Clean Energy to a minimum of Silver level and maintain such certification for the life of the project. All responsibilities and costs associated with the application, certification, and compliance with certification shall be borne by the SPVI owner.

G. SAFETY AND ENVIRONMENTAL STANDARDS

1. **Emergency Services** - The *SPVI*s owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Leyden Fire Chief and Police Chief. The owner or operator shall cooperate with local emergency services to develop an emergency response plan. All means of shutting down the solar electric installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
2. **Land Clearing** – Forest removal shall be limited to a maximum cumulative total of 3 acres to prevent erosion, protect water and air quality and to provide climate benefits to protect public health and welfare. Installations shall be constructed in a way to minimize impervious surfaces and disruptions to trees, soil and land. Establish ground cover using native plant species to minimize soil erosion and stormwater runoff in order to prevent adverse impacts to water quality. Forest removal completed in the two years preceding the site plan review will be counted as part of the 3 acres maximum permitted.
3. **Soil Erosion and Farmland Impacts** – To the maximum extent feasible, the facility should be located to minimize impacts to agricultural land and should be compatible with continued agricultural use. The facility shall be designed to minimize impacts to environmentally sensitive land. Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of the *SPVI* or otherwise prescribed by applicable laws, regulations, and bylaws. The design shall minimize the use of concrete and other impervious materials to the maximum extent possible. Locating *SPVI*s on grades in excess of 10% should be avoided to the maximum extent feasible. On parcels with soils classified as prime agricultural soils, as identified by the state’s MASS GIS system, the applicant will prepare a dual use solar and agriculture plan. Information on dual use is available through

UMass Clean Energy Extension Program. In no case shall any amount of soil be removed from the site off the property. Any material stripped for structural construction shall remain within and utilized elsewhere on the property.

4. **Habitat Impacts** – To the maximum extent feasible, SPVIs shall not be located on Priority Habitat and BioMap 2 Critical Natural Landscape Core Habitat mapped by the Natural Heritage and Endangered Species Program (NHESP) and “Important Wildlife Habitat” mapped by the DEP.
5. **Wetlands Impacts** - The facilities, including the *SPVI* and access roads, shall meet the wetland buffer and river protection standards set forth by the Massachusetts Wetland Protection Act Regulations (310 CMR 10.0), and any additional local wetlands protection bylaws.
6. **Cultural Landscape Impacts.** Protect locations of Indigenous Cultural Resources including sites of Ceremonial Stone Landscapes 1 . Such locations shall be identified based on responses to written inquiries, with a requirement to respond within 60 days, to the following parties: all federally or state recognized Tribal Historic Preservation Offices (THPO) within MA, RI, NH, CT, VT, NY, or their designated agents (FRTCA); the Massachusetts State Historical Preservation Officer (SHPO); tribes or associations of tribes within MA, RI, NH, CT, VT, NY, not recognized by the federal or state government but with cultural or land affiliation to Leyden; and the Leyden Historical Commission.

Such written inquiries shall be sent to the parties identified above and shall contain a site plan of the project including identification of the location of the project and all proposed facilities, and a statement that permitting for the project has been applied for. Such written inquiries, accompanied by the site plan, shall request responses from the parties to identify and describe any known locations and characteristics, including photographs, of any Indigenous Cultural Resources sites that may be impacted by the facility. The applicant should allow the THPO and/or their designated agents’ access to the site upon their written request. Site visits should occur as soon as practicable after the application has been submitted.

To protect the cultural resources, only the permitting authorities and project applicant shall have access to the report submitted by the THPO or their or appointed cultural authority. If the THPO or appointed cultural authority identifies one or more Indigenous Cultural Resources or Ceremonial Stone Landscapes, a meeting will be held with the applicant, the THPO or their appointed cultural authority, and Town and/or federal officials to review policies and procedures, the process of mapping the cultural resources, and possible deed restrictions. A 50-foot boundary shall be established around any identified Indigenous Cultural Resources and/or Ceremonial Stone Landscapes inside of which no work or other disturbance shall take place. A deed restriction may be requested by the Leyden Planning Board to protect the cultural resources identified by the THPO or SHPO. A failure of parties to respond within 60 days shall be deemed non-opposition to the application.

H. MONITORING, MAINTENANCE AND REPORTING

1. **Solar Electric Generating Installation Conditions** - The SPVI owner or operator shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, neat landscaping maintenance, and integrity of security measures. Site access shall be maintained to a level acceptable to the local Fire Chief and Emergency Management Director. The owner or operator shall be responsible for the cost of maintaining the SPVI and any access road(s).
2. **Modifications** – All modifications (excluding routine repairs and maintenance) to an installation after issuance of Building Permit and Special Permit, shall require approval by the Building Inspector and SPGA.
3. **Annual Reporting** - The owner or operator of the SPVI shall submit an Annual Report that certifies continued compliance with the requirements of the special permit and report the amount of electricity generated by the facility. The Annual Report shall be submitted to the Selectboard and Planning Board no later than 90 days after the end of the calendar year.

I. ABANDONMENT, DECOMMISSIONING, FINANCIAL SURETY & INDEMNIFICATION

1. **Removal Requirements** - Any SPVI which has reached the end of its useful life or has been abandoned consistent with Section 5.12. I.3. of this bylaw, shall be removed. The owner or operator shall physically remove the installation no more than 150 days after the date of discontinued operations. The owner or operator shall notify the Planning Board by certified mail of the proposed date of discontinued operations and plans for removal.
2. **Decommissioning** - Decommissioning shall consist of:
 - a. Physical removal of all SPVIs, structures, equipment, security barriers and transmission lines from the site.
 - b. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
 - c. Stabilization or re-vegetation of the site as necessary to minimize erosion. The Planning Board may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.
3. **Abandonment** - Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the SPVI shall be considered abandoned when it fails to operate for more than one year without the written consent of the Planning Board. If the owner or operator of the SPVI fails to remove the installation in accordance with the requirements of this section within 150 days of abandonment or the proposed date of decommissioning, the Town retains the right, after the receipt of an appropriate court order, to enter and remove an abandoned, hazardous or decommissioned SPVI. As a condition of Site Plan Review and/or Special Permit approval, the applicant and landowner shall agree to allow entry to remove an abandoned or decommissioned installation. The Town's cost for the removal will be charged to the property owner in accordance with the provisions of M.G.L. 139, Section 3A as a tax lien on the property.
4. **Financial Surety** - Proponents of SPVIs shall provide a form of surety, either through an escrow account, bond or other form of surety approved by the Planning Board to cover the

cost of removal in the event the town must remove the installation and stabilization or re-vegetation of the landscape, in an amount and form determined to be reasonable by the Planning Board, but in no event to exceed more than 125 percent of the cost of removal and compliance with the additional requirements set forth herein. Such surety will not be required for municipal or state-owned facilities. The project proponent shall submit a fully inclusive estimate of the costs associated with removal, stabilization, and re-vegetation, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal costs due to inflation.

5. **Indemnification** - The owner/operator shall indemnify and hold harmless the Town of Leyden and/or any of its citizens from any and all liabilities, losses and/or damages, including reasonable attorney fees, resulting from the failure of the owner/operator to comply with the terms of this by-law and/or negligence in the operations and maintenance of any structures built in accordance with it. Any surety provided for in this by-law shall be available for the aforementioned indemnification. The current owner is obligated to maintain the surety in its original amount. The developer and/or any subsequent owner shall adhere to the reporting requirements for the indemnification funds as stipulated by the Planning Board at the time of the application for a Site Plan Review and/or Special Permit. Reporting requirements shall include, but are not limited to, an annual reporting of fund balances and compliance with the type of investments allowed by the Planning Board.

J. SPVI SITE PLAN REVIEW

Site Plan Review is conducted by the Site Plan Review Authority (SPRA) to determine conformance with local zoning ordinances or bylaws. For the purposes of this bylaw, the SPRA is the Leyden Planning Board. Site Plan Review acts as a method for regulating as-of-right uses rather than prohibiting them. When evaluating the Site Plan Applications, the Planning Board may not unconditionally deny the Site Plan Applications that meet the requirements of these bylaws, but rather, it may impose reasonable conditions upon them.

Application Requirements - Each application for a Site Plan Review shall be filed by the applicant with the Leyden Planning Board, see Section 5.6. All plans and maps shall be prepared, stamped and signed by a Professional Engineer licensed to practice in Massachusetts. Any application for a commercial *SPVI* shall contain the following:

1. **Completed Application Form**
2. **Required Documents** - The project proponent shall provide the following documents in addition to or in coordination with those required Special Permit Review under Section 6 of this bylaw.
 - a. Architectural, Engineering, and Site Plans showing:

- b. A title sheet with the following:
- c. A title labeling the company, type of proposal and location.
- d. A locus map showing all major roadways within 2000' feet
- e. A map showing other existing or proposed *SPVIs* within 1,000 feet.
- f. A sheet index describing all parties involved in the project.
- g. A project summary block labeling the applicant, facility address, owner, deed reference, facility parcel number, and current zoning district.
- h. Property lines, map and lot from the Assessor's records, and physical features, including roads and topography, for the project site;
- i. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening, vegetation or structures including their height;
- j. Locations of wetlands as delineated by a wetlands scientist and approved by the Conservation Commission;
- k. Locations of Priority Habitat Areas and Biomap 2 Critical Natural Core Habitat defined by the Natural Heritage & Endangered Species Program (NHESP), "Important Habitat Areas" defined by the DEP, and Permanently Protected Open Space, on or within 100 feet of the property boundary.
- l. Locations of floodplains or inundation areas for moderate or high hazard dams;
- m. Fire protection measures.
- n. Stormwater drainage, including ways that the stormwater will be managed and retained on site using Low Impact Development techniques, and calculations and engineering plans to show how stormwater runoff from the property will not be increased during or after construction or during operation of the installation. The stormwater management plan shall be consistent with the requirements of the Wetlands Protection Act and the stormwater management requirements of Leyden's Subdivision Regulations and employ measures to minimize impervious surfaces at the site.
- o. Existing trees of 10" caliper or better and existing tree/shrub masses; proposed tree removal, planting, landscaping, and screening. Each individual tree does not need to be described; an area that is forested with a continuous canopy greater than 10,000 square feet should be indicated.
- p. A list of any hazardous materials proposed to be located on the site in excess of household quantities and a plan to prevent their release to the environment as appropriate;
- q. Blueprints or drawings of the solar electric installation signed by a Professional Engineer licensed to practice in the Commonwealth of Massachusetts showing the proposed layout of the system and any potential shading from nearby structures;
- r. One- or three-line electrical diagrams detailing the solar electric installation, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and overcurrent devices;
- s. Documentation of the major system components to be used, including the electric generating components, transmission systems, mounting system, inverter, etc.;
- t. Name, address, and contact information for proposed system installer;
- u. Name, address, phone number and signature of the project proponent, as well as all co-proponents or property owners, if any;
- v. The name, contact information and signature of any agents representing the project proponent;
- w. Documentation of actual or prospective access and control of the project site;

- x. Provision fire suppression system needed for fire protection;
 - y. A signed Interconnection Service Agreement for the proposed Solar Electric Generating Installation from the applicable utility.
 - z. A report and analysis on any glare that will be produced by the solar panels and proposed mitigation, by a qualified engineer.
 - aa. Proposed installation of native plants that provide habitat underneath and around the perimeter of the Ground-Mounted Solar Electric Generating Installation and measures to prevent the introduction of invasive species.
3. **Operation and Maintenance Plan** - The project proponent shall submit a plan for the operation and maintenance of the Small-scale or large-scale ground mounted *SPVI*, which shall include measures for maintaining safe access to the installation, storm water and vegetation controls, as well as general procedures for operational maintenance of the installation.
 4. **Landscape Plan** - The project proponent shall submit a Landscape Plan detailing all proposed changes to the landscape of the site including vegetation removal and screening of structures. The Landscape Plan shall show the type and location of vegetation to be removed and vegetation proposed to screen the installation including appurtenant structures from public ways and adjacent properties as deemed appropriate by the SPGA (See Section F.g). The Landscape Plan shall identify all portions of the property that contain prime agricultural soils.
 5. **Grading Plan** The project proponent shall submit a Grading Plan detailing all proposed grading, soil erosion and run-off control, and temporary or permanent access roads.
 6. **Proof of liability insurance** (See Section 5.12.D.g);
 7. **Description of financial surety** (see Section 5.12.I.4);
 8. **Sight line representation.** A sight line representation shall be drawn from that portion of any public road within one (1) mile that would have the clearest view of the proposed facility, and the closest facade of each residential building (viewpoint) within one (1) mile of the highest point (visible point) of the solar electric generating installation. Each sight line shall be depicted in profile, drawn at a scale appropriate to represent the sightline. The profiles shall show all intervening trees and buildings;
 9. **Photographs** - existing (before condition) and proposed (after condition) photographs. Each sight line shall be illustrated by one four-inch by six-inch color photograph of what can currently be seen from any public road within one (1) mile. Each of the existing condition photographs shall have the proposed solar electric generating installation superimposed on it to show what will be seen from public roads if the solar electric generating installation is built; and
 10. **Noise documentation** provided by a licensed professional acoustical engineer, approved by the Leyden Planning Board and paid for by the applicant, of projected noise levels to be generated by the SPVI. – See Section 5.12.F.h

11. **Pesticide Use/Plan** – see Section 5.12.F.e

12. **Dual Use Solar and Agriculture**– If the landscape plan identifies prime agricultural soils on-site, a plan for dual use solar and agriculture shall be submitted.

13. **Additional materials** -- any other drawings, photographs or materials deemed necessary by the Planning Board at a strongly encouraged pre-application meeting to discuss the project, process, waivers, and submittal requirements.

14. **Waivers**-- the Planning Board may waive documentary requirements as it deems appropriate (See Section 5.12.O) .

15. **Procedures** – upon receipt of a complete application for a Site Plan Review, the Planning Board shall review and take action upon the application in compliance with M.G.L. Chapter 40A and Section 5.6 of this bylaw.

K. SPVI SPECIAL PERMIT PROCESS, REQUIREMENTS & ENFORCEMENT

1. **Procedure:** Upon receipt of a complete application for a Special Permit for a *Large-Scale Ground Mounted SPVI*, the Planning Board shall review and take action upon the application in compliance with M.G.L. Chapter 40A. The application should include the full Site Plan Review application, see Section 5.12.J.

2. **Special Permit Approval Criteria** – After notice and public hearing and after due consideration of the evidence submitted, the Leyden Planning Board may grant a Special Permit provided that it finds that:

- a. The proposed *SPVI* complies with the purposes and intent of this Section 5.12 and the Zoning Bylaw.
- b. The application information submitted is sufficient for the Planning Board to consider approval of the Special Permit request.
- c. Documentation regarding potential environmental, scenic, community, and public safety impacts provide sufficient assurance that the project will not result in substantial adverse effects.

3. **Independent Consultants** – Upon submission of an application for a special permit, the Planning Board will be authorized to hire outside consultants at the expense of the applicant, pursuant to section 53G of Chapter 44 of the Massachusetts General Laws.

4. **Expiration** – A permit issued pursuant to this bylaw shall expire if:

- a. The *SPVI* is not installed and functioning within 24-months from the date the permit is issued; the SPGA can extend the permit based upon evidence of progress and due diligence, or
- b. The *SPVI* is abandoned.

L. VIOLATIONS

It is unlawful for any person to construct, install, or operate a *SPVI* that is not in compliance with this bylaw or with any condition contained in a Site Plan Review, Building Permit, or Special Permit issued pursuant to this bylaw. Such systems installed prior to the adoption of this bylaw are exempt.

M. ADMINISTRATION AND ENFORCEMENT

This bylaw shall be administered and enforced by the Building Inspector or other official as designated. The Building Inspector may enter any property for which a building permit and special permit has been issued under this bylaw to conduct an inspection to determine whether the conditions stated in the permit have been met. If the permit holder is found not to be in compliance, the Building Inspector may require the applicant to implement all reasonable measures to mitigate unforeseen adverse impacts of the *SPVI* should they occur. The Building Inspector may request submittal of a mitigation plan outlining measures to address unforeseen adverse impacts. The *SPVI* shall cease to operate if found to not be in compliance with the requirements of the special permit, until such time as the Building Inspector has determined compliance.

N. PENALTIES

Any person who fails to comply with any provision of this bylaw or a permit issued pursuant to this bylaw shall be subject to enforcement and penalties as allowed by applicable law.

O. WAIVER OF COMPLIANCE

The Planning Board may waive strict compliance with the requirements set forth in this Section of the Bylaw when in its judgment the application for said waiver meets all of the following criteria 1) in the public interest, 2) not inconsistent with the intent of Section 8 of the Zoning Bylaw, and 3) is justified due to unusual circumstances relating to the lot, land, or the *SPVI*. Any waiver request must be made in writing at the time of application with supporting documentation.

P. SEVERABILITY

The provisions of this bylaw are severable, and the invalidity of any section, subdivision, paragraph, or other part of this ordinance shall not affect the validity or effectiveness of the remainder of the bylaw.

SECTION 6. ENFORCEMENT

6.1 Responsibility.

A. This Bylaw shall be enforced by the Inspector of Buildings (Building Inspector), who shall take such actions as may be necessary to enforce full compliance with the provisions of this Bylaw and of permits and variances issued thereunder, including

notification of non-compliance and request for legal action through the Selectmen to the town Counsel.

6.2 Compliance Certification.

A. Buildings, structures, or signs may not be erected, substantially altered, moved, or changed in use, and land may not be substantially altered or changed in principal use without certification by the Inspector of Buildings that such action is in compliance with then applicable zoning, or without review by the Inspector of Buildings regarding whether all necessary permits have been received from those governmental agencies from which approval is required by federal, state or local law. Issuance of a Building permit or Certificate of use and Occupancy, where required under the Commonwealth of Massachusetts State building Code, may serve as such certification.

B. The Inspector of Buildings may require of applicants such information as is necessary to determine compliance with this Bylaw, including site plans and elevation information.

6.3 Conformance.

A. Construction or operations under a Building or Special Permit shall conform to any subsequent amendment of this Bylaw unless the use or construction is commenced within a period of six (6) months after the issuance of the permit and in cases involving construction, unless construction is continued through to completion as continuously and expeditiously as is reasonable.

6.4 Penalty.

A. Any person or persons violating any of the provisions of this Bylaw, and of the conditions under which a permit issued, or any decision rendered by the Planning Board shall be fined up to the maximum permitted by the General Laws for each offense. Each day that such violation continues shall constitute a separate offense.

SECTION 7. BOARD OF APPEALS.

7.1 There is hereby established a Board of Appeals of five members, to be appointed by the Selectmen, which Board of Appeals shall act on all matters within its jurisdiction under this Bylaw and Chapter 40A, G.L., in the manner prescribed by said law and by this Bylaw.

SECTION 8. SPECIAL PERMIT GUIDELINES.

8.1 Criteria.

A. Special Permits shall be granted by the Planning Board only for proposals in compliance with the provisions of this Bylaw and of Chapter 40A, G.L., upon the Planning Board's written determination of said compliance.

8.2 Procedures.

A. Special Permits shall be granted or denied only following at least one public hearing to be held within 65 days after the filing of an application with the Planning Board, a copy of which shall forthwith be given to the Town Clerk by the applicant. The planning Board shall act within ninety (90) days following such public hearing as provided in Section 9, Chapter 40A, G.L.,

8.3 Permit Lapse.

A. Special Permits shall lapse within twenty-four (24) months, plus such time required to pursue or await the determination of an appeal referred to in Section 17 of Chapter 40A, G.L., from the grant thereof, if insubstantial use thereof has not sooner commenced except for good cause, or in the case of a permit for construction, if construction has not begun by such date except for good cause.

SECTION 9. APPLICABILITY.

Where the application of this Bylaw imposes greater restrictions than those imposed by any other regulations, permits, restrictions, easements, covenants, or agreements, the provisions of this Bylaw shall control.

SECTION 10. VALIDITY.

The invalidity of any section or provision of this Bylaw shall not invalidate any other section or provision thereof.