

ZONING BYLAWS

TOWN OF BUCKLAND, MASSACHUSETTS

AS AMENDED BY:

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**ZONING BYLAWS
TOWN OF BUCKLAND, MASSACHUSETTS**

SECTION I: INTRODUCTION

1-1 PURPOSE OF LAW

The Buckland Zoning Bylaws are enacted pursuant to Chapter 40A of the General Laws and the Home Rule Amendment to the Massachusetts Constitution, to promote the health, safety, convenience and general welfare of the inhabitants of the Town of Buckland, to conserve the value of land and buildings, conserve natural resources, preserve the Town's cultural heritage, the rural character and open farmland, and to facilitate residential, commercial and industrial development in a responsible manner.

SECTION II: DEFINITIONS

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

ACCESSORY APARTMENT: the alteration of an existing single-family home with no expansion of square footage to create one additional dwelling unit consisting of no more than four rooms and no more than 800 square feet of living area. The Accessory Apartment shall be occupied by no more than two people. The owner of the property shall permanently occupy the principal or accessory residence. Adequate off-street parking shall be provided.

ACCESSORY USE: any building or structure whose use is incidental and accessory to the use of the principal building or structure.

AGRICULTURAL MANUFACTURING: processing or manufacturing of value-added agricultural products from raw materials produced locally such as cheese or herbal products which cannot meet the requirements for a Home Based Business (see Section 4-4 HOME BASED BUSINESS).

ARTISAN STUDIO: the working space of a practitioner of a handicraft or art requiring special skills, such as handweaving, pottery-making, glassblowing, leatherworking or sculpting.

AUTOMOTIVE REPAIR GARAGE: a building or part thereof with no more than two service bays where the principal activity is the repair and servicing of motor vehicles.

BED-AND-BREAKFAST -- An accessory use to a dwelling unit consisting of overnight lodging with breakfast. No meals other than a breakfast shall be served, and no breakfast shall be served nor any retail or consumer services shall be provided to any member of the public not lodged as an overnight guest.

BUILDING: a structure having a roof supported by columns or walls for the shelter of persons, animals and/or chattels.

BUILDING (PRINCIPAL): a building in which is conducted the principal use of the lot on which it is situated.

BUSINESS OFFICE: the workplace of computer software, insurance or other business professionals which may include space for appropriate support staff (e.g. administrative assistants, etc).

CAMP (SINGLE FAMILY): a private dwelling used not more than six (6) months each year.

COMMON DRIVEWAY: A common driveway is a driveway that begins at a public way and provides access to one or more building lots. Common driveways for any types of lots should meet the criteria of the common driveway provisions in the Buckland Subdivision Regulations, Section IX, and require a Special Permit through the Planning Board.

DWELLING: a building used in whole or in part for human habitation, whether for single, two-family, or multiple family use.

DWELLING UNIT: a room or group of rooms within a structure, said room or group of rooms having its own sanitary and kitchen facilities forming a habitable unit for one family, used or intended to be used for living, sleeping, cooking and eating.

DWELLING, TWO-FAMILY: a principal building designated for or converted for occupancy by two families, each family occupying a single dwelling unit.

DWELLING, MULTIPLE-FAMILY: a principal building designed for or converted for occupancy by no more than three or four families living in separate dwelling units. Historic Industrial or Commercial Structures converted for Multiple-Family Residential Use may have more than four dwelling units. An historic structure for the purposes of this definition shall be a building fifty (50) years or more in age.

HOTEL: a building containing rooms used or designed to be used for sleeping purposes by transient guests where the only kitchen and dining facilities provided are for public use within the building or in an accessory building.

INN: an historic structure used or designed for overnight lodging for transient guests, and which may also provide a restaurant to lodgers and the public. An historic structure for the purposes of this definition shall be a building fifty (50) years or more in age. A guest(s) may not stay at an Inn for more than 90 days in any six-month period.

LINE (FRONT LOT): the front lot line is the line separating the lot from the street line.

LINE (REAR LOT): the lot line opposite and most distant from the front lot line.

LINE (SIDE LOT): any lot line not a front line or a rear lot line.

LIVING AREA: shall be the outside dimensions of a dwelling commonly known as living quarters by the occupants, excluding unheated attached garage, porches, and breezeways.

LOT: a plot or parcel of land occupied or capable of being occupied by one principal building and the accessory buildings or uses customarily incident to it, including such open spaces as are required by this Bylaw. In the case of multiple dwellings, and public, institutional, commercial, or industrial buildings, a

group of buildings under the same ownership may be considered as occupying the same lot.

LOT FRONTAGE: the boundary of a lot coinciding with a street line provided that there must be both rights-of-access and potential vehicular access across that boundary to a potential building site and the street is a public way and has been determined by the Planning Board to provide adequate access to the premises under the provisions of the Subdivision Control Law and the Buckland Subdivision Regulations currently in effect. Lot frontage shall be measured continuously along one street line between side lot lines or, in the case of corner lots, between one side lot line and the midpoint of the corner radius. The portion of a lot fronting on a discontinued road, or a road which is not continuously constructed to a point beyond the border of the subject lot, does not constitute frontage for purposes of Approval Not Required Plans.

LOT LINE: a division line between adjoining properties, or a division line between individual lots established by a plan filed in the Registry of Deeds or Land Court.

MANUFACTURING: Heavy or light industry, manufacture or assembly of a product, including processing, fabrication, assembly, treatment, packaging, and allowed accessory uses such as office space and warehousing of products.

MOTEL: attached, semi-detached, or detached dwelling units having separate outside entrances, parking space convenient to each unit and providing lodging for transient clientele.

MOTOR VEHICLE SALES: premises used for the display and for the sale of new or used motor vehicles, as that term is defined under the Massachusetts General Laws.

PARKING SPACE: An area, not less than 10 feet by 20 feet, which has unimpeded access and egress to a street or traveled way.

PRINCIPAL USE: The primary purpose for which land or a building is designed, arranged, maintained or occupied.

PROFESSIONAL OFFICE: The workplace of physicians, lawyers, engineers, or other licensed professionals which may include space for appropriate support staff (e.g. administrative assistants, nurses, etc).

ROAD – see **STREET**

SIGN: Any device displaying or any display of any letter, word, picture, symbol, or object designed to inform or attract the attention of persons including billboards, advertising devices attached to vehicles, trailers or other movable objects regularly on display, and any internally illuminated building surfaces, including window signs, provided however, that the following shall not be regulated as signs under this Bylaw:

(a) Flags and insignia of any government except when displayed in connection with commercial promotion.

(b) Legal notices; identification, information or directional signs erected or required by governmental

bodies.

(c) Integral decorative or architectural features or buildings, except letters, trademarks, moving parts, or moving lights.

(d) Signs directing and guiding traffic and parking on private property, but bearing no advertising matter.

STREET, ROAD OR WAY -- A public way; a way which the Town Clerk certifies is maintained and used as a public way; a way shown on an approved and endorsed subdivision plan in accordance with the Subdivision Control Law which approval has not been rescinded by the Planning Board and which has either been constructed in accordance with the approved Definitive Plan or is properly secured pursuant to the Subdivision Control Law; or a way in existence at the time the Subdivision Control Law was adopted by the town. The way in existence at the time the Subdivision Control Law was adopted by the town shall have, in the opinion of the Planning Board, sufficient width, suitable grades, and adequate construction to provide for the needs of vehicular traffic and utilities for the proposed use of the land abutting the way.

STREET LINE: the dividing line between a street and a lot, and in the case of a public way, the street-line established by the public authority laying out the way upon which the lot abuts.

STRUCTURE: anything constructed or erected, the use of which requires fixed location on the ground, or attachment to something located on the ground, including swimming pools having a capacity of 4,000 gallons or more, but not including walls or fences less than 6 feet high.

YARD: a required open space, unobstructed by structure(s) more than 30' high, other than fences or other customary yard accessories.

YARD (FRONT): a yard extending across the full width of the lot and lying between the front lot line and the nearest line of the building. The depth of a front yard shall be the minimum distance between the building and the front line measured at right angles to the front line of the lot.

YARD (REAR): a yard across the full width of the lot extending from the rear line of the building to the rear lot line.

YARD (SIDE): a yard between the building and the adjacent sideline of a lot extending from the front yard to the rear yard.

TRAILER OR MOBILE HOME: trailer or mobile home shall mean any vehicle or object on wheels, excluding railroad cars, having no motive power of its own, but which is drawn by or used in connection with a motor vehicle and which is so designed and constructed or reconstructed or added to any means of such accessories as to permit the use and occupancy thereof for human habitation, whether resting on wheels, jacks, or other foundations and shall include a type of vehicle commonly known as a mobile home, which shall be defined to mean a dwelling unit built on a chassis and containing complete electrical, plumbing, and sanitary facilities and designed to be installed on a temporary or permanent foundation for permanent living quarters.

SECTION III: ESTABLISHMENT OF DISTRICTS

3-1 ESTABLISHMENT OF DISTRICTS

For the purposes of the Bylaw, the Town of Buckland is hereby divided into the following types of districts:

- a) Rural Residential b) Village Residential c) Village Commercial
- d) Commercial e) Industrial f) Historic Industrial
- g) Floodplain h) Farm Building Reuse Overlay District

3-2 LOCATION OF DISTRICTS

The boundaries of each of the said districts are hereby established as shown, defined and bounded on a map entitled "Zoning Map of Buckland" dated January 14, 2010. The Zoning Map, with all explanatory matter thereon, is hereby made a part of this Bylaw.

- a) Where the boundary lines are shown upon said map within the street lines of public and private ways, the centerline of such ways shall be the boundary lines.
- b) Where the boundary lines are shown upon said map approximately on the location of a property, lot, or boundary line, and the exact location of the property, lot or boundary line is not indicated by means of dimensions shown in figures, then the property or lot line shall be the boundary line.
- c) Boundary lines located outside of such street lines and shown approximately parallel thereto, shall be regarded as parallel to street lines, and dimensions shown in figures placed upon said map between such boundary lines from such street lines shall govern; such distance being measured at right angles to such street lines unless otherwise indicated.
- d) In all cases which are not covered by other provisions of this section, the location of boundary lines shall be determined by the distance in feet, if given, from other lines upon said map, the use of indication as shown on said map, or by the scale of said map.
- e) The Flood Plain District is herein established as an overlay district. The underlying permitted uses are allowed provided that they meet the requirements of Section VII of these Zoning Bylaws as well as those of the Massachusetts State Building Code dealing with construction in flood plains.

SECTION IV: USE REGULATIONS

4-1 EXISTING USES NOT AFFECTED

This Bylaw shall not apply to existing buildings or structures, nor to the existing use of any buildings, structures or land which were lawfully in existence at the effective date of this chapter. However, this Bylaw shall apply to any substantial extension or change in use or to any reconstruction, extension, alteration, or structural change to a building or structure in accordance with the Zoning Act, MGL C. 40A, Section 6, as amended.

4-2 LIMIT ON PRINCIPAL STRUCTURES PER LOT

No building or structure shall be erected or land used except as permitted in this section and all other sections of this Bylaw. No more than one principal structure or use may be allowed on a lot unless otherwise specified in this Bylaw. More than one principal structure or use on a lot may be allowed in the Village Commercial, Commercial, Industrial or Historic Industrial Districts provided that all the dimensional requirements of Section 5-2 can be met and a Special Permit is granted by the Zoning Board of Appeals. In addition, more than one principal use or structure on a lot may be allowed without a Special Permit for conversion of Historic Structure(s) as specified in 4-3 Table of Use Regulations.

4-3 TABLE OF USE REGULATIONS

a) The following Table of Use Regulations is hereby adopted as part of this Zoning Bylaw. The following codes shall apply:

Y = Yes, the use is permitted by right in that zoning district.

N = No, the use is not permitted in that zoning district.

SP = The use is allowed in that zoning district only if a special permit has been granted by the Zoning Board of Appeals.

SPP = The use is allowed in that zoning district only if a special permit has been granted by the Planning Board.

SPR = The use is allowed in that zoning district only if a site plan review has been conducted under the approval of the Planning Board. See Section 12.

VC = Village Commercial

VR = Village Residential

RR = Rural Residential

C = Commercial

I = Industrial

HI = Historic Industrial

b) The Table of Use Regulations shall be as follows:

	VC	VR	RR	C	I	HI
RESIDENTIAL USES						
Single-Family Dwelling	Y	Y	Y	Y	SP	Y
Two-Family Dwelling	Y	Y	Y	Y	SP	Y
Accessory Apartment	Y	Y	Y	Y	N	Y
Temporary Mobile Home (see Section 8-4)	Y	Y	Y	Y	Y	Y
Mobile Home	N	N	Y	N	N	N
Mobile Home Parks	N	N	N	N	N	N
Bed and Breakfast, up to 4 rooms	Y	SP	Y	Y	N	SP
Multi-Family Dwelling	SP	SP	SP	SP	N	SP

Conversion of a Single Family Home to a Two-Family	Y	Y	Y	Y	SP	Y
Conversion of a Single Family Home to a Multi-Family Dwelling	SP	SP	SP	SP	SP	SP
Conversion of an Historic (50 years or older) Industrial or Commercial Structure for Residential Use	SP	SP	N	SP	SP	SP
Apartments on the Upper Floors of New Commercial Structures	Y	SP	N	Y	N	SP
AGRICULTURAL & RECREATIONAL USES						
Chicken Farming on a lot 2 acres or greater, and less than 5 acres (see Section 4-6 for restrictions)	Y	Y	Y	Y	Y	Y
Forestry	Y	Y	Y	Y	Y	Y
Farming on a lot equal to or greater than 5 acres	Y	Y	Y	Y	Y	Y
Livestock Farming on a lot less than 5 acres	SP	SP	SP	SP	SP	SP
Other Farming on a lot less than 5 acres	SP	SP	Y	Y	SP	SP
Commercial Greenhouse(s) on a lot equal to or greater than 5 acres	Y	Y	Y	Y	Y	Y
Commercial Greenhouse(s) on a lot less than 5 acres but 2 acres or more	SP	SP	Y	Y	SP	SP
Commercial Greenhouse(s) on a lot less than 2 acres	SP	SP	SP	Y	SP	SP
Commercial Recreation other than a Health or Exercise Club or Dance or Yoga Studio	SP	SP	SP	SP	SP	SP
Health or Exercise Club, Dance or Yoga Studio	Y	N	SP	Y	SP	SP
Wildlife Preserve or Other Conservation Uses	Y	Y	Y	Y	Y	Y
COMMUNITY SERVICES						
Public Service Corporation Facility not exempted from zoning regulation by M.G.L. Ch.40A	SP	N	N	SP	SP	SP
Wireless Communication Facility (see Section X)	SPP	N	SPP	SPP	SPP	N
Educational Uses exempted from zoning regulation by M.G.L. Ch.40A, Section 3	Y	Y	Y	Y	Y	Y
Other educational uses not exempted from zoning regulation by M.G.L. Ch.40A, Section 3	SP	SP	SP	SP	SP	SP
COMMUNITY SERVICES (CONT.)						
Church, other Religious Use	Y	Y	Y	Y	Y	Y
Family Day Care Home for six (6) or fewer children or adults	Y	SP	Y	Y	SP	SP
Family Day Care Home for more than six (6) children or adults	SP	SP	SP	SP	SP	SP

Day Care Center for children exempted from zoning regulations by M.G.L. Ch. 40A, Section 3	Y	Y	Y	Y	Y	Y
Nursing Home	SP	SP	SP	SP	N	SP
Cemetery	N	N	SP	SP	N	N
Hospital, Medical Clinic	SP	SP	SP	SP	N	SP
Parking Lot (Public or Private)	SP	SP	N	SP	SP	SP
Municipal Uses not covered elsewhere	SP	SP	SP	SP	SP	SP
BUSINESS USES						
Business, Professional Offices with 3,000 square feet of enclosed floor space or less	Y	SP	SP	Y	Y	Y
Business, Professional Offices with more than 3,000 square feet of enclosed floor space	Y	SP	SP	Y	Y	SP
Banks	Y	N	N	Y	Y	SP
Conversion of an Historic (50 Years or older) Industrial or Commercial Structure(s) on one lot to a mix of Retail Stores, Business or Professional Offices, Restaurants, Artisan Studios, or Residential Uses within the existing footprint of the Historic Structure(s) and no more than an average of 280 passenger vehicle trips per day.	Y	SP	N	SP	Y	Y
Standalone Automated Teller Machines (ATM)	N	N	N	N	N	N
Restaurant, drive through	N	N	N	N	N	N
Restaurant, other	Y	SP	SP	Y	SP	SP
Motor Vehicle Sales which comply with Section 4-5	SP	N	N	SP	SP	Y
Motor Vehicle Sales which do not comply with Section 4-5	SP	N	N	SP	SP	SP
Car Wash	SP	N	N	N	SP	SP
Laundry, Laundromat	SP	N	N	SP	N	SP
Theaters	SP	N	SP	SP	SP	SP
Motels, Hotels	SP	N	N	SP	N	SP
Inns	SP	SP	SP	SP	N	SP
Building Materials, Sales & Storage	SP	N	N	SP	Y	SP
Home Based Business (see Section 4-4 for performance standards)	Y	Y	Y	Y	Y	Y
Funeral Home	Y	SP	SP	SP	N	SP
Retail Store(s) – Building 2,500 sq. ft. or less	Y	SP	SP	Y	Y	SP

BUSINESS USES (CONT.)	VC	VR	RR	C	I	HI
Retail Store(s) – Building greater than 2,500 sq. ft. up to 5,000 sq. ft.	Y	N	N	SP	SP	SP
Retail Store(s) – Building greater than 5,000 sq. ft. up to 8,000 sq. ft.	SP	N	N	SP	SP	SP
Equipment Rentals	SP	N	N	Y	SP	SP
Kennel	N	N	SP	SP	SP	SP
Veterinarians	Y	SP	SP	SP	SP	SP
Farm Stand allowed by Ch. 40A, Sec. 3	Y	Y	Y	Y	Y	Y
Commercial Uses not listed above, other than retail uses, where the physical appearance, operation, parking requirements and traffic impacts resemble a use permitted (Y or SP) above and which will not have a detrimental impact on adjacent or nearby uses	SP	N	N	SP	SP	SP
INDUSTRIAL USES						
Junk yards, dumps, and landfills	N	N	N	N	N	N
Manufacturing of Cutlery or Culinary Products	N	N	N	N	SP	Y
Other Manufacturing Uses with 5,000 square feet or less enclosed floor area and complying with Section 4-5	Y	N	N	N	Y	Y
Other Manufacturing Uses with 5,000 square feet or less enclosed floor area which do not comply with Section 4-5	SP	N	N	N	SP	SP
Other Manufacturing Uses with greater than 5,000 square feet of enclosed floor area	N	N	N	N	SP	SP
Agricultural Manufacturing Uses, except slaughterhouses, with 8,000 square feet or less of enclosed floor area (see Footnote 1)	SP	SP	Y	Y	Y	SP
Slaughterhouse	N	N	SP	N	N	N
Reuse of Historic (50 years or older) Agricultural Buildings or Structures for Agricultural Manufacturing (no limit to the square footage) provided that no more than an average of 50 passenger vehicle trips per day and 6 truck trips per day are generated.	SP	SP	Y	Y	Y	Y
Processing & Laboratories	SP	N	N	N	SP	SP
Freight or Transportation Facilities	SP	N	SP	N	SP	SP
Gasoline Station	SP	N	N	SP	SP	N

1 - Only the area actually used for agricultural manufacturing purposes counts towards the 8,000 square feet. For example, if a portion of a new barn is proposed to be used for cheese manufacturing, only the area devoted to cheesemaking would be counted, not the entire square footage of the barn.

INDUSTRIAL USES (CONT.)	VC	VR	RR	C	I	HI
Automotive Repair Garage which is not a Home Based Business	SP	N	N	SP	N	SP
Quarrying, Gravel Mining & Earth Removal	N	N	SP	N	N	N
Wind or Hydro Electric Generating Facilities	N	N	SP	SP	SP	SP
Ground-Mounted Solar Electric Generating Installations occupying 1,000 square feet or less ^{1, 2}	SPR	SPR	SPR	SPR	SPR	SPR
Large-Scale Ground-Mounted Solar Electric Generating Installations occupying more than 1,000 square feet up to 1 acre ² (see Section XIV)	N	N	SPP and SPR	SPP and SPR	SPP and SPR	SPP and SPR
Large-Scale Ground-Mounted Solar Electric Generating Installations occupying more than 1 acre up to five acres provided that the business and/or residence on the property utilizes at least 51% of the electricity generated annually based on the documented average annual electricity consumption of the existing business or residence on the property over the previous 3 years (see Section XIV) ²	N	N	SPP and SPR	SPP and SPR	SPP and SPR	SPP and SPR
Large-Scale Ground-Mounted Solar Electric Generating Installations occupying greater than 5 acres (see Section XIV)	N	N	N	N	N	N
Other Non-Nuclear Electric Generating Facilities	N	N	N	N	SP	SP
Very Small and Small Wind Energy Facilities (see Section XIII) ³	N	N	SPP and SPR	SPP and SPR	SPP and SPR	SPP and SPR
Large Wind Energy Facility (see Section XIII)	N	N	N	N	N	N
Transmission Lines, Substations and Switchyards	N	N	SP	SP	SP	SP

1 - Ground-Mounted Solar Electric Generating Installations occupying 1,000 square feet or less which are an accessory use to a residential or non-residential use are allowed “by right” (Yes) but require Site Plan Review.

2- Solar power generating facilities attached to a roof or wall of a structure are allowed “by-right” but require a building permit and must comply with all applicable local, state and federal requirements, including but not limited to all applicable safety, construction, electrical, and communications requirements.

3 - Roof mounted Small or Very Small Wind Energy Facilities that are an accessory use to a residential or non-residential use that are not taller than 8 feet and do not exceed the maximum building height requirements (see Section 5-2 Dimensional Schedule) and that comply with the noise and flicker requirements of this bylaw are allowed “by-right” but require a building permit and must comply with all applicable local, state and federal requirements, including but not limited to all applicable safety, construction, electrical, and communications requirements.

4-4 HOME BASED BUSINESS

- a) A business or profession is allowed as an accessory use of a dwelling (“home occupation”), provided
- b) that:
 - 1. Such use is clearly secondary to the residential use and the home occupation shall be carried on within the principal building or an accessory building on the lot or an adjoining lot in common ownership. Such adjoining lot in common ownership must be either adjacent to or only separated by a street from the lot on which the principal building is located. No more than 50% of the gross floor area of the residence shall be used for the purposes of the home occupation. If the home occupation is located in an accessory building, the gross floor area devoted to the home occupation shall not exceed 50% of the gross floor area of the residence or 2,000 square feet, whichever is greater.
 - 2. The home occupation shall be carried on by a resident of the principal dwelling and not more than two nonresidents shall be employed on the premises at any one time.
 - 3. No external change is made which alters the residential appearance of the building(s) on the lot.
 - 4. Except for a permitted sign of not more than two (2) square feet, per Section 8-3, there shall be no exterior display or other exterior indication of the home occupation or other variation from the residential character of the premises. No outside storage shall be allowed unless a special permit is granted by the Zoning Board of Appeals and such outside storage is screened from neighboring properties and the public way by a fence or an evergreen hedge of sufficient depth or height to provide screening.
 - 5. Traffic shall not exceed volumes normally expected in a residential neighborhood. For purposes of this Bylaw, this shall be defined as 15 trips per day per dwelling unit which is approximately 150% of the average weekday trip rate for single family homes from the Institute for Traffic Engineers Trip Generation Manual.
 - 6. Adequate off-street parking shall be provided. Parking areas shall not be within 20 feet of a street line or within any required side or rear yard and shall be adequately screened from neighboring residential uses. Parking areas shall not have more than four spaces per dwelling unit and shall not be greater than 1,200 square feet in size.
 - 7. Automotive repair shops operating out of a residential property may have no more than four (4) cars to be repaired located on the premises at any one time, must meet all other criteria for a home based business, and shall require a special permit from the Zoning Board of Appeals. Commercial used or new car sales from residential properties are prohibited.
 - 8. No retail sales shall be allowed except for products produced on the premises, provided that all other requirements of Section 4-4 can be met and a Special Permit is granted by the Zoning Board of Appeals.

4-5 PERFORMANCE STANDARDS

Other Manufacturing Uses (i.e. manufacturing other than Manufacturing of Cutlery or Culinary Products which is allowed “By Right” with no performance standards) with up to 5,000 square feet of enclosed floor area, which may be allowed by right according to Section 4-3 provided that they comply with the requirements of this Section 4-5 must meet all the Performance Standards of this section and the Review and Submission requirements. In order for the Building Inspector to make this determination in consultation with the Planning Board, the following information is required.

a) Review and Submission Procedures

1. Plan Filing Requirements

The following plans and items shall be submitted to the Building Inspector with an application form and three (3) copies of the drawings. Plans shall be prepared by a registered architect, landscape architect or professional engineer licensed in Massachusetts. The Planning Board may waive one or more of the requirements for Plan Filing under Section 4-5 (see Section 4-5 c.).

- a.) A locus map at a scale of 1”=1,000’ inset within the plans noted below to identify the location of the proposed development.
- b.) A plan view at a scale not to exceed 1”= 100’ showing location and dimensions of all existing and proposed buildings, parking areas and access roads on the site subject to this application. Clearly show the relationship between proposed and existing structures and adjacent lots within a radius of five hundred (500) feet.
- c.) A plan view at a scale not to exceed 1”= 40’ showing the location and dimensions of all existing and proposed buildings, access points, parking areas, bicycle racks, roads, sidewalks, open spaces and utilities, including underground utility lines, water, sewer, electric power, telephone, gas, outdoor illumination and cable television.
- d.) A narrative identifying the type of business proposed, the hours of operation, and information on the types and quantities of hazardous materials which shall be used or stored on site in excess of household quantities.
- e.) A letter from the Superintendent of Wastewater Treatment Plant certifying that sufficient wastewater treatment capacity exists to accommodate the new use if sewer is needed.

b) Performance Standards

1. Traffic generation shall not exceed the lesser of: (i) an average of 100 passenger vehicle trips per day as estimated using the greater of the number of employees expected or the average weekday trip rate for the proposed use from the Institute for Transportation Engineers Trip Generation Manual and an average of 16 truck trips per day (Note: do not include UPS or FedEx vehicles in truck trip amount) or (ii) 25% of the existing traffic volumes based on actual traffic counts on the road where vehicles enter and exit the site and no more than 16 truck trips per day (Note: do not include UPS or FedEx vehicles in truck trip amount);

2. Sound or noise levels may not exceed 50 dBA, at the boundary of the property between 6 p.m. and 6 a.m.;
3. Sound or noise levels may not exceed 65 dBA, at the boundary of the property between 6 a.m. and 6 p.m.;
4. Vibration, odor, or flashing at night that is perceptible without instruments may not occur beyond the parcel boundaries of the originating premises, except for warning devices or construction work;
5. The hours of operation must be no earlier than 6 a.m. and no later than 9 p.m.;
6. There is adequate wastewater treatment capacity to accommodate the new or expanded manufacturing use;
7. No increase in stormwater runoff to neighboring properties or roads;
8. On site parking and loading areas sufficient to accommodate employees and truck deliveries must be provided;
9. Adequate screening of parking areas from abutting residential parcels and roadways shall be provided. A minimum five (5) foot wide buffer area shall provide adequate screening of the parking area from abutting residential uses. Such buffer area shall be planted with a combination of evergreen and deciduous shrubs that are at least five (5) feet in height. Solid wood fencing may also be used which may reduce the buffer area required.
10. Adequate screening of refuse areas containing dumpsters or other containers shall be provided from abutting parcels and roadways. Solid wood fencing should be used unless an alternative acceptable to the ZBA is approved.
11. Lighting shall be pedestrian in scale with fixtures not exceeding sixteen (16) feet in height and cut-off fixtures that direct light downward should be used; and
12. Lighting shall not produce direct illumination or glare beyond the property boundaries.

c) Provision for Waivers

The Zoning Board of Appeals may waive one or more of the requirements for Plan Filing under Section 4-5 if the simplicity or scale of the project warrants such action. Request for waivers may be submitted at the time of the application or prior to the application by scheduling a meeting with the Zoning Board of Appeals. The applicant must provide sufficient information about the project to allow the Zoning Board of Appeals to make that determination.

4-6 CHICKEN FARMING

Chicken farming restrictions for lots 2 acres or greater, and less than 5 acres. The following performance standards apply:

1. Chicken farming is subject to all applicable rules and regulations established by the Buckland Board of Health.
2. Bird species shall be restricted to the common domestic chicken (*Gallus gallus domesticus*).
3. Roosters are prohibited without a special permit.
4. Ownership and care are the responsibility of a resident on the lot. Chickens must be kept in an enclosure so that they do not forage off the property.
5. A maximum of eight (8) hens and eight (8) meat chickens/broilers may be kept on a lot without a special permit.
6. Housing of chickens not permitted within 30 feet of any lot line.

SECTION V: INTENSITY REGULATIONS

5-1 DIMENSIONAL REQUIREMENTS

A structure shall be erected or used, or a lot shall be changed in size or shape, only in conformity with the following requirements.

5-2 DIMENSIONAL SCHEDULE

	Minimum Lot Area in sq. ft.	Minimum Lot Frontage in feet	Front Yard in feet	Side Yard in feet	Rear Yard in feet	Maximum Height in feet	Maximum* Lot Coverage
Village*** Residential	20,000	100	20**	10	10	35	50%
Rural Residential	80,000	200	20	15	30	35	35%
Village Commercial	20,000	100	20**	10	10	50	70%
Commercial	80,000	200	30	30	30	35	50%
Historic Industrial	20,000	100	20**	10	10	50	70%
Industrial	80,000	200	50	30	30	35	50%

*Lot Coverage -- The area of a lot occupied by structures, walkways, drives, parking or other impervious or semi-pervious surfaces.

**The front yard dimension may be determined by the setback of existing structures on adjacent parcels where these setbacks are less than the minimum front yard dimension required by this Bylaw.

*** Increase the lot size to 40,000 square feet and lot frontage to 150 feet if water or sewer is not available.

5-3 EXCEPTION TO DIMENSIONAL REQUIREMENTS FOR YARDS

- a) The Zoning Board of Appeals may reduce, by Special Permit, the dimensional requirements for front, rear, and side yards related to building setbacks provided that the Zoning Board of Appeals makes a determination that the proposed structure is consistent in scale or setback with the structures in abutting parcels and the immediate neighborhood. The Zoning Board of Appeals shall make the following determinations before granting an exception:
1. The Zoning Board of Appeals shall specifically determine that the reduced dimensional requirement for a front, side or rear yard will have no adverse effect on adjacent properties or historic structures.
 2. The Zoning Board of Appeals shall specifically determine that the reduced dimensional requirement for a front, side or rear yard will not be a detriment to the public good and will not substantially undermine the intent of the Buckland Zoning Bylaws.
- b) The applicant shall file, with the application for a Special Permit, a detailed plan drawn to scale of the property that shows the lot lines and dimensions of the property, the dimensional setbacks requirements as they currently exist for front, side or rear yards, the proposed location of the structure, and any proposed reduction to the dimensional requirements. In addition, the diagram shall include all utility accesses and shall be signed under pains and penalties of perjury. The applicant shall provide an explanation as to why they are requesting a reduction in setbacks from the dimensional requirements of the Zoning Bylaws. The Zoning Board of Appeals may grant any setback reduction where the boundary or lot line from which setback relief is requested has been established, by survey or other recognized documentation from which the ZBA can readily determine the location of the lot lines.

SECTION VI: ALTERNATE DEVELOPMENT METHODS

6-1 BACKLOTS WITH FARMLAND SET ASIDE

a) 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 and continued agricultural use of productive farmland, to preserve land with prime agricultural soil conditions, 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.

b) Eligible Parcels

Land eligible to be considered pursuant to this Subsection 6-1, shall be limited to parcels with roadside farmland or parcels with roadside frontage land with soils classified as agriculturally “prime” or of “statewide importance” by the Soil Conservation Service which abut the three types of roadways eligible for ANR development pursuant to M.G.L. Ch. 41, Sec. 81L. For purposes of the remainder of this Subsection 6-1, farmland shall be defined as farmland presently and primarily used in producing or raising agricultural, commodities including, but not limited to livestock, poultry, bees, fruits, vegetables,

berries, nuts, feed, forage, seed, flowers, sod, greenhouse products and ornamental plants and shrubs or land having soils classified as agriculturally “prime” or of “statewide importance” by the Soil Conservation Service which abut the three types of roadways eligible for ANR development pursuant to M.G.L. Ch. 41, Sec. 81L. For purposes of the remainder of this Subsection 6-1, farmland shall be defined as farmland presently and primarily used in producing or raising agricultural commodities including, but not limited to livestock, poultry, bees, fruits, vegetables, berries, nuts, feed, forage, seed, flowers, sod, greenhouse products and ornamental plants and shrubs or land having soil classified as agriculturally “prime” or of “statewide importance” by the Soil Conservation Service (see Appendix A of these Bylaw).

c) General Description

Where a tract of land, defined for the purposes of this Subsection 6-1 as a lot or several contiguous lots in single ownership, contains farmland along the public roadside and buildable non-productive land farther from the road, 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 one acre in area, shall have no roadway frontage as defined by 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 farmland wherever possible.

In exchange for the special permit to build two (2) or more back lots, the applicant shall formally and permanently place conservation restrictions on the same number of ANR lots comprised, to the maximum extent possible, of farmland as defined in 6-1 b) Eligible Parcels having a minimum area of 2 acres and 200 feet of road frontage for each back lot to be created and meeting the Requirements outlined in 6-1 d) below. If only one back lot is created, a conservation restriction shall be placed on an ANR lot comprised, to the maximum extent possible, of farmland as defined in 6-1 b) Eligible Parcels having a minimum area of four (4) acres in size with 400 feet frontage and meeting the Requirements outlined in 6-1 d) below. The protected property shall have contiguous road frontage and a minimum depth measured from the edge of the road of 200 feet.

d) 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 “Approval Not Required” (ANR) division of the land creating the same number of lots, and would meet the general standards for special permits set forth in Section IX.

1. For one (1) back lot: If only one back lot is created, a defined portion of the tract of land comprised, to the maximum extent possible, of farmland as defined in 6-1 b) Eligible Parcels and having a minimum area of four (4) acres and four hundred feet (400") of roadway frontage eligible for ANR development, 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, unless such back lot is larger than four (4) acres, in which case the conservation restriction must cover an area of farmland at least as large as the back lot area. Acreage counting

towards the minimum requirements for protected roadside farmland under the conservation restriction shall not include wetlands areas as defined by M.G.L. Ch 131, Sec. 40 (Massachusetts Wetlands Law) for the single back lot created.

For two (2) or three (3) Back Lots: For each back lot created, a defined portion of the tract of land comprised to the maximum extent possible of farmland as defined in Subsection 6-1 b) Eligible Parcels and having a minimum area of two (2) acres and at least two hundred feet (200') of roadway frontage eligible for ANR development 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 farmland area shall be at least as large as the back lot area. Acreage counting towards the minimum requirements for protected roadside farmland under the conservation restriction, shall not include wetlands areas as defined by M.G.L. Ch. 131, Sec. 40 (Massachusetts Wetlands Law).

For four (4) Back Lots: For each back lot created, a defined portion of the tract of land comprised to the maximum extent possible of farmland as defined in Subsection 6-1 b) Eligible Parcels and having a minimum area of two (2) acres and at least two hundred feet (200') of roadway frontage eligible for ANR development 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 farmland area shall be at least as large as the back lot area. Acreage counting towards the minimum requirements for protected roadside farmland under the conservation restriction, shall not include wetlands areas as defined by M.G.L. Ch. 131, Sec. 40 (Massachusetts Wetlands Law) for three or the four back lots.

Regardless of the total number of back lots created, the permanently restricted farmland shall to the maximum extent possible, form a single contiguous tract. The procedures for creating such back lots can be found in Section IX of Buckland's Subdivision Regulations. 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 under Section IC of the Subdivision Regulations.

2. The restricted roadside farmland shall not be crossed by any access road or driveway serving building lots, except the common driveway permitted to serve the back lots in return for restricting the land.
3. The maximum number of back lots that may be created on any tract of land shall equal the number of lots that meet the "subdivision approval not required" (ANR) criteria of two hundred (200') feet of roadway frontage and the zoning criteria of two (2) acres of area. Additionally, for every four (4) back lots created, percolation tests certified by the Board of Health are required to confirm that at least three (3) 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). The reduction in percable lots has been added as an incentive to build back lots and preserve farmland frontage and this bonus is calculated based on the number of back lots created pursuant to a single special permit application under this Subsection 6-1 and such bonus cannot be carried

forward to future special permit applications for additional back lots. The Planning Board reserves the right to physically inspect the site with members of the Board of Health.

4. All the back lots created shall be in a single, compact portion of the original tract 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 and to provide a vegetated buffer of 40 feet between the residential lot lines and the farmland to minimize conflicts between residential and farming activities.
5. To the maximum extent practical, all buildings and common driveways shall be located on that portion of the site with soil least suitable for the production of crops or livestock. This provision shall not apply to the location of on-site septic disposal facilities, which must be located in soil meeting Massachusetts Title 5 Environmental Code.
6. 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.
7. Common driveways shall be used to serve back lots in accordance with Subsection 6-1 e) of this Bylaw. 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.
8. On back lots created under the provisions of this section, no permanent building or structure shall be constructed within fifteen feet (15') of any lot line.
9. Construction on each back lot shall be limited to one single-family or one two-family home and related accessory buildings. Outbuildings and other structures for agricultural or horticultural use are exempted from this restriction.
10. 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."
11. No back lot of any size, once created, shall be further divided.
12. Every deed conveying a back lot created under this Section 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 a substantial use or construction has not been, except for good cause. In granting a special permit the Planning Board shall specify actions that must be taken within two years in order to demonstrate “substantial use.”

e) Common Driveway Standards

A common driveway is a driveway that 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 lots shall conform to the following requirements and standards.

1. The following minimum requirements must be met for a common driveway serving one or more back lots:
 - a.) 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;
 - b.) 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;
 - c.) 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 the Bylaw at their mutual and exclusive expense; and
 - d.) The grade, length and location of common driveways 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 to the design standards stated in Section IX, of
 - e.) Buckland’s Subdivision Regulations for Common Driveways.

f) Lot Area Dimensions

Back lots created pursuant to this Subsection 6-1 shall not be required to meet the minimum area and frontage requirements of Section V of these Zoning Bylaws.

g) Conservation Restrictions Requirements

1. A conservation restriction means a right, in perpetuity, stated in the form of a restriction of covenant in a deed, appropriate to retaining land predominantly in its agricultural farming or forest use and forbidding or limiting any or all of the following:
 - a.) Construction or placing of buildings except for those used for agricultural purposes;

- b.) 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 potential; or
 - c.) Other acts or uses detrimental to such retention of the land for agriculture use.
2. The conservation restriction placed on the land shall meet the following minimum criteria
- a.) The conservation restriction shall be held by the Town of Buckland or by a non-profit land trust approved by the Planning Board.
 - b.) The conservation restriction shall be recorded by the holder in the Franklin County Registry of Deeds.
 - c.) The conservation restriction shall be approved by the commissioner of food and agriculture of the Secretary of the Executive Office of Environmental Affairs as appropriate, and additionally approved by the Buckland Board of Selectmen if the restriction is held by a non-profit land trust.
 - d.) The land covered by the conservation restriction shall be noted on the plan and in the special permit granted by the Planning Board.
 - e.) The form and content of the conservation restriction will be consistent with the sample included in the Buckland Subdivision Regulations as Form R.

6-2 CLUSTER DEVELOPMENT/CONSERVATION BYLAW

a) Purpose

The purpose of this section, in addition to the general purposes of these Zoning Bylaws, is to:

1. Promote and protect agricultural and forestry-related activities by preserving the most viable agricultural and prime forest land;
2. Allow landowners a reasonable return on the value of their holdings while protecting the majority of existing farmland and forest;
3. Preserve agricultural open space and farmland features that have historically defined the area;
4. Promote the efficient installation and maintenance of utilities, streets, and other facilities in a more concentrated area to make housing more affordable; *and*
5. Promote a greater diversity of housing stock.

b) General Description

This optional bylaw provides residents and developers of land with an alternative to a standard subdivision development that is often incompatible with agricultural and forested land use and

operations. Cluster Development refers to residential development in which lots for buildings and accessories are grouped together in one or more clusters within the boundaries of a larger parcel of land. The building lots are of reduced size and concentrated together, taking up only a portion of the parcel of land. Land not included in building lots and land other than the shared common land of the residential development used for utilities, shared septic systems, roadways, active recreation areas (e.g. tennis courts, pool), etc. shall be permanently preserved as agricultural, conservation, or forested land. A conservation restriction preventing future development shall be placed on the open space to be preserved. Cluster developments to provide for senior housing (age 55 and older) are encouraged (see Section 6-2 i)).

c) Procedures

1. The Planning Board may approve a Site Plan (see Section XII, Site Plan Review) for the construction of a cluster development in the Village Commercial, Village Residential, Rural Residential, Commercial, or Historic Industrial districts, subject to the regulations and conditions set forth under this section, Section XII (Site Plan Review) and Sections I through VIII of the Subdivision Regulations, if it finds that the applicant's proposal would serve the purposes of this section and the general purposes of these Zoning Bylaws.
2. Applicants are encouraged to contact the Planning Board prior to an application for a Cluster Development to discuss applicant's plans.
3. Applicants for a Cluster Development shall submit a Site Plan meeting all requirements of this Cluster Development Bylaw, Site Plan Review (Section XII) and all requirements of the Buckland Subdivision Rules and Regulations for a preliminary plan, which plan shall show locations of proposed streets, building envelopes and protected open space.
4. In addition to any information required by the above-referenced Subdivision Rules and Regulations, the application shall include the following information:
 - a.) The form of organization proposed to own and maintain the preserved land;
 - b.) The substance of covenants to be imposed upon use of land;
 - c.) A preliminary septic system design; and
 - d.) A development schedule.
5. Upon receipt of the application, the Planning Board shall give one copy to the Conservation Commission and one copy to the Board of Health who shall provide written comments to the Planning Board within 45 days. If no written comment is received within that time period, it will be considered approved by the respective Board. The Planning Board may also give one copy to the Fire or Police Department to ensure that the Preliminary Plan proposal addresses adequate emergency vehicle access to all lots. If necessary to ensure compliance with this section, the Planning Board may require further engineering or environmental analysis to be conducted at the expense of the applicant.

d) Minimum Standards

1. The minimum area of land for a cluster development is eight (8) acres. All land within the cluster development tract shall be under single ownership at the time of the application.
2. Only one single- or two-family dwelling shall be permitted per lot in the development.
3. In a Cluster Development, the maximum number of building lots will be determined as follows:
 - a.) The maximum number of lots permitted within a Cluster Development in the Rural Residential and Commercial Districts shall be one building lot for each 80,000 sq. ft. of the net developable acreage of the cluster development tract. The maximum number of lots permitted within a Cluster Development in the Village Residential, Village Commercial, or Historic Industrial Districts shall be one building lot for each 40,000 sq. ft. of the net developable acreage of the cluster development tract in areas not served by sewer or one building lot for each 20,000 sq. ft. of the net developable acreage of the cluster development tract in areas directly served by sewer. Net developable acreage is determined by subtracting all wetlands, all areas with slopes of 25% or greater, 100-year floodplains, existing permanently protected open space, and all areas determined by the Board of Health to be unsuitable for on-site sewage disposal.
 - b.) All wetlands shall be defined under the supervision of the Conservation Commission and in accordance with the provisions of the Wetlands Protection Act, M.G.L. Ch. 131, Sec. 40.
 - c.) Under the supervision of the Board of Health, and in conformance with Title 5, percolation tests shall be conducted for all lots in the total acreage of the property that would be developed in a standard subdivision layout. The area of these lots which is determined to be not suitable for on-site sewage disposal shall be subtracted from the net developable acreage of the total parcel.
4. Each lot shall have adequate road access as defined by Section V of the Subdivision Regulations and shall comply with the minimum dimensions required in Section V unless such compliance is waived by the Planning Board pursuant to Section VIIB of the Subdivision Regulations.
5. At least forty percent (40%) of the total parcel shall be permanently protected as agricultural or forested land ("Protected Open Space"). The minimum required Protected Open Space shall not include wetlands, water bodies, all areas with slopes of 25% or greater, 100-year floodplains, existing permanently protected open space, and all other areas determined by the Board of Health to be unsuitable for on-site sewage disposal ("Land with Environmental Constraints"). To the extent possible the preserved land shall form a contiguous tract to enable continued farming or forestry operations. Land with Environmental Constraints may be included in the Protected Open Space subject to a Conservation restriction in perpetuity if it increases the amount of Protected Open Space beyond the 40% minimum amount (e.g. agricultural or forested land equals 40% of the total parcel plus Land with Environmental Constraints equals 10% of the total parcel resulting in Protected Open Space of 50% of the total parcel).
6. The Planning Board may grant a waiver to reduce the minimum required Protected Open Space to thirty-five percent (35%) of the total parcel if at least sixty percent (60%) of the total lot area is permanently protected and no more than twenty-five percent (25%) of that total is composed of wetlands, floodplains, or land with

slopes greater than 25%. Existing permanently protected open space, roadways and accessory uses shall not count towards the sixty percent (60%) of permanently Protected Open Space.

7. With the Definitive Subdivision Plan, the applicant shall submit a septic system design prepared by a Registered Professional Engineer and approved by the Board of Health, in conformance with Title 5 of the State Environmental Code, and a plan illustrating the location of water supply wells with the special permit application. Cluster development may utilize shared systems designed, installed and maintained in accordance with the State Environmental Code Title 5, 310 CMR Sections 15.290-15.293. Such shared systems may be located within the residential common open space or the buffer strip. Septic Systems shared or otherwise shall be located outside of all agricultural land supporting farming operations.
8. Every Site Plan approval for a cluster development shall include a condition that the approved and recorded Definitive Subdivision Plan of said cluster development shall have endorsed upon it a statement that the subdivision is an approved cluster development and that no land within the subdivision may be further subdivided as to increase the number of building lots, and shall contain a reference to the approved Site Plan and associated Conservation and where they are recorded.

e) Dimensional and Density Requirements

1. The minimum building lot size within the cluster development shall be 20,000 square feet, with a minimum of 100 feet of frontage on a street for the Rural Residential and Commercial Districts. The minimum building lot size within a Cluster Development shall be 10,000 square feet, with a minimum of 50 feet of frontage on a street for the Village Residential, Village Commercial, and Historic Industrial Districts.
2. The Front Yard setback shall not be less than 20 feet for all principal and accessory structures. Side and Rear Yard setbacks shall not be less than 10 feet for all principal and accessory structures, except that attached single family dwelling units may be laid out with one side having no Side Yard setback (zero setback). The other Side Yard of an attached single family unit (the nonattached side) shall be at least 10 feet. Nonattached single family units shall have a minimum Side Yard setback of 10 feet. The maximum height of dwelling units and structures shall be 35 feet.

f) Additional Site Design Standards

1. Wherever it is feasible, all buildings shall be located away from agricultural soils that are classified by the U. S. Soil Conservation Service as prime farmland and soils of state and local importance and placed on soils least suitable for production of crops and livestock. This provision does not apply to the location of on-site septic disposal systems that must be placed on soils meeting the Massachusetts Environmental Title 5 Code (including future amendments thereto and corresponding provisions of future laws).
2. The layout and construction of utilities, drainage systems, and roads shall be located to have the least possible impact on on-site and adjacent agricultural lands and uses or mature forest stands.

3. To minimize conflict between agricultural operations, all residential lot lines shall be located at least forty (40) feet from agricultural activities. This area shall be made up of a buffer strip of trees or open space.
4. To the maximum extent possible, residential units should be integrated into the landscape to avoid interrupting the view of the agricultural or forested landscape from adjacent public ways. Vegetative and structural screening, landscaping, grading, and building placement on the lot should be used to minimize visual interference with pre-existing landscape features.
5. To the maximum extent possible, structures should be sited within any woodland contained on the parcel; along the edges of fields; or in locations where structures can be visually screened or absorbed into natural vegetative or topographic features.

g) Open Space Requirements

The following standards shall apply to open space to be protected as part of the cluster development:

1. The area to be preserved as agricultural or forested land, as required under Section 6-2(d)5, shall be made subject to perpetual restriction of the type described in M.G.L. c.184, Sec. 31 (including future amendments thereto and corresponding provisions of future laws) running to or enforceable by the Town of Buckland, which restriction shall limit the use of the protected land to the following:
 - a.) Agricultural production, including but not limited to, the raising of crops and livestock, forest management activities, nurseries, orchards;
 - b.) Activities necessary to successful agricultural production, including but not limited to, farm equipment operations, manure storage, and use of pesticides, herbicides, and fertilizers as regulated by state and federal laws;
 - c.) Farm support operations, including but not limited to, farm equipment storage, agricultural processing, greenhouses, and farm animal veterinary services.

Said restriction shall be in such form and substance as the Planning Board shall prescribe and may contain additional restrictions on development and use of the land as the Planning Board may deem appropriate to meet the purposes of this Section. The restriction shall be recorded in the Registry of Deeds.

2. Subject to the requirements of Section 6-2 (g)1, the protected open space may be conveyed out as follows:
 - a.) Conveyed to a Homeowners Association made up of the owners within the development subject to a covenant, running with the land that provides for the following:
 - I. Ownership and membership within the Homeowners Association shall pass with conveyances of the lots in perpetuity.

II. Maintenance of agricultural open space shall be ensured by establishing a maintenance fee for each lot sufficient to cover maintenance expenses or through a comparable arrangement satisfactory to the Planning Board. The covenant established shall describe land management practices that will ensure that the existing fields and pastures will be maintained by plowing, tilling, discing, mowing or other standard agricultural practice 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. Such a land agreement document shall be submitted with the Definitive Subdivision Plan and shall be subject to approval by the Planning Board and Town Counsel. A tentative agreement should be established and presented with the Preliminary Subdivision Plan.

III. The covenant established shall specify that each lot owner have equal say in determining the affairs of the organization, and that costs shall be assessed equally to each lot.

- b. 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 maintained by plowing, tilling, discing, mowing or other standard agricultural practice 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;
- c. Conveyed to the town, at no cost. Acceptance of such a conveyance shall be at the option of the town and shall require approval at Town Meeting; or
- d. The Planning Board, at the request of Applicant, may grant a Special Permit to have the Protected Open Space retained by a private individual or a trust owned by private individuals provided that the interests of the residents of the Cluster Development will be protected as outlined in the requirements of the Conservation Restriction. Such Special Permit shall meet the requirements of Section IX, Special Permits of the Zoning Bylaws and other requirements to be determined by the Planning Board. A Conservation Restriction shall be placed on the Protected Open Space.

h) Bonus Incentives

1. Creating a subdivision development using the cluster approach is often less expensive for the developer as roads are shorter and utilities are grouped together. Thus, Buckland's provision of a cluster development option should be considered an incentive unto itself. However, to further encourage cluster development the following "point incentive system" has been developed. A development plan that meets any of the following criteria will earn the number of points listed. Depending on the total number of points earned, a developer may earn a bonus in the form of extra building lots allowed within the development. The Planning Board will determine, upon review of the development plan, the bonus point total.

- a.) Any development that increases the amount of land permanently preserved by 5% above the 40% requirement earns 10 points. Each additional 5% increase in preserved land results in an additional 10 points. Such land above the 40% minimum requirement may include Land with Environmental Constraints such as floodplains.

- b.) An agricultural management plan that ensures continued crop production, earns 10 points.
- c.) For protected forestland, a forest management plan for a 10-year term that is prepared by a forester with credentials acceptable to the Planning Board earns 10 points.
- d.) A cluster plan that protects at least 10 acres of land in one contiguous tract earns 5 points; a plan that protects at least 20 acres in one contiguous tract earns 10 points.
- e.) A cluster plan that protects land in a tract that is contiguous to an already protected area so as to increase the area of working agricultural land, forest, or wildlife habitat earns 10 points.
- f.) A development plan that screens structures from view from a public way as evidenced by cross sections of the definitive plan at a scale of 1 inch = 10 feet earns 5 points.
- g.) Architectural designs for the single family or two family structures that match the current character of the area earn 10 points. Architectural elevation drawings of the single-family homes must accompany the site plan to be eligible to receive points in this category.
- h.) A development plan that provides recreational opportunities for residents of Buckland by providing access to walking trails or other passive forms of recreation via an easement will earn 10 points.
- i.) If all houses are certified as Energy Star Homes, 10 points will be earned (to be secured by a covenant).

2. A development plan that earns at least 35 points will earn a 10% building lot bonus above the basic number of building lots allowed under Section 6-2 d. A development plan that earns 50 points or more earns a 20% building lot bonus above the basic number of building lots allowed under Section 6-2 d. If the point total results in a building lot bonus of a fractional number less than .5, the bonus building lot total will be rounded down to the next lowest whole number. The total number of bonus building lots under Section 6-2 h) cannot exceed 120% of the maximum number of building lots allowed before the addition of bonus units.

i) Senior Housing

1. The Town of Buckland would like to promote the provision of senior housing (age 55 and over) using the cluster form of development under this Section 6-2. Provision of this type of housing will diversify the Town's housing stock and will provide an alternative to residents wanting to down-size from a single-family home but still wishing to remain in the community. To encourage the creation of senior housing, a building lot bonus of up to 25% is provided under this section. Where a computation of the building lot bonus results in a fraction equal to or larger than 0.5, the number of bonus building lots shall be rounded to the next higher figure.
2. In order to qualify for the 20% building lot bonus, the proposed Senior Housing Cluster Development must meet all of the following minimum requirements in addition to the requirements of this Section 6.2. For example, a ten (10) lot Senior Housing cluster subdivision would be eligible for a two (2) lot density

bonus (.2x10=2) if it meets all the requirements of Section 6-2 i)2., for a total of twelve lots. A fourteen (14) lot Senior Housing cluster subdivision would be eligible for a three (3) lot density bonus (.2x14=2.8) if it meets all the requirements of Section 6-2 i)2., for a total of seventeen (17) lots. The requirements are:

- a.) The occupancy of units in the Cluster Development shall be restricted to those 55 years of age or older;
 - b.) There shall be 2 or fewer bedrooms in each unit;
 - c.) Units should incorporate renewable energy technologies such as solar hot water heaters and all units should be Energy Star rated;
 - d.) At least 10% of the dwelling units must be available for rent, for a minimum of thirty (30) years, or for sale, in perpetuity, via a deed restriction to seniors qualifying as low or moderate income households as defined by the Executive Office of Communities & Development of the Commonwealth and such units must count towards the 10% requirement of Chapter 40B;
 - e.) At least 50% of the units must be handicapped accessible; and
 - f.) The Senior Housing Cluster Development must be located in the Village Residential or Historic Industrial Districts.
3. In order to qualify for an additional 5% bonus, the proposed Senior Housing Cluster Development must meet all of the following requirements in addition to the requirements of this Section 6.2, including Section 6.2 i) 2. For example, a ten (10) lot Senior Housing cluster subdivision that meets all the requirements of both Section 6-2 i)2. and Section 6-2 i)3., would be eligible for a 25% building lot bonus or three (3) lots (.25x10=2.5) for a total of thirteen (13) lots. The requirements are:
- a.) On-site medical services should be provided;
 - b.) A Community Center should be provided; and
 - c.) At least 25% of the units should have garages.

6-3 CLUSTER DEVELOPMENT FOR COMMERCIAL USES

- a) Purpose. A Cluster Development for Commercial Uses will allow for a unified development containing a mixture of commercial uses and buildings to be developed as a single entity based on a comprehensive site plan. It is the intent of this provision to ensure sound planning and zoning practices while allowing certain desirable departures from the strict provisions of the Zoning Bylaws in order to:
1. Encourage flexibility in the design of development through a careful Site Plan Review process of site plans within Commercial Districts;
 2. Promote the use of a campus-like clustering of buildings to encourage a less sprawling form of development and to maximize the amount of farmland or open space which shall be permanently protected;
 3. Reduce the length of streets and utilities to make it more economical to develop commercial business;
 4. Provide an efficient procedure which will ensure appropriate high-quality design and site planning; and

5. Promote high quality coordinated building and site design which buffers adjacent residential uses and protects both scenic and natural features.
- b) Definition. Cluster Development for Commercial Uses is defined as the development of land for commercial uses under the direction of a comprehensive Site Plan, in which a mixture of business uses, a variety of building types and designs, and open space are provided for in a unified manner.
 - c) Cluster Development for Commercial Uses may be allowed by Special Permit in the Commercial Districts along Route 112. A Cluster Development for Commercial Uses that will result in 5,000 square feet or more of enclosed floor area or requires 10 or more parking spaces shall also require Site Plan Review. The Special Permit Granting and Site Plan Review authority is the Planning Board.
 - d) Dimensional Requirements. To be eligible for a Cluster Development for Commercial Uses, the parcel must have at least 400 feet of frontage and have a minimum lot area of 120,000 square feet. At least 60% of the parcel must be permanently protected as open space, farmland or forest. The area to be preserved as open space, farmland, or forested land, shall be made subject to perpetual restriction of the type described in M.G.L. c.184, Sec. 31 (including future amendments thereto and corresponding provisions of future laws) running to or enforceable by the Town of Buckland. To the maximum extent feasible, open space protection should be given to active farmland and prime farmland soils.
 - e) Use Regulations.
 1. The commercial uses that may be allowed by Special Permit are any uses allowed either by right or Special Permit within the underlying zoning district.
 2. The uses shall comply with all other applicable sections of this Bylaw, including but not limited to Section 8-5 Parking Regulations and 8-3 Sign Regulations, in addition to the required provisions of this section. Shared parking may be allowed for proposed uses.
 3. More than one principal building and use is permitted on a lot.
 4. A maximum building height of 35 feet is permitted.
 5. One or more separate but contiguous parcels may be assembled to create a mixed use Cluster Development. Proposed mixed use Cluster Developments may include pre-existing uses and buildings provided they are integrated into the development plan. Developments may consist of land in more than single ownership and may be subdivided into separate lots provided all current and future owners and lots are continuously bound by restrictive covenant(s) to the Cluster Development for Commercial Uses and permit approvals to maintain the project as a single planned Cluster Development. Subdivision of lots within a Cluster Development for Commercial Uses after final approval of the Site Plan shall be considered an amendment to the Special Permit and will require approval by the Planning Board.
 - f) Access Requirements.
 1. Entrances to a Cluster Development for Commercial Uses shall be limited to one access point onto a

public way. The Planning Board may grant additional access points to improve traffic circulation if deemed necessary.

2. Common driveways and parallel service drives may be required in the Development for Commercial Uses to consolidate driveway openings to one access point unless additional access points are approved under 6-3 f)1.

g) Utilities.

1. Development for Commercial Uses shall be connected to the public water and sewer systems, if available, in accordance with the standards and specifications of the Town or may utilize shared septic systems if sewer is not available.
2. All utility lines shall be placed underground where physically feasible.

h) Design Requirements.

1. Developments shall have an integrated design with respect to building placement, proportion, color, rooflines, and other architectural details.
2. Developments must incorporate human scale features such as landscaping, pedestrian plazas and other public spaces, first floor windows, pedestrian level lighting, benches, awnings and architectural details.
3. The building's main entrance shall be clearly defined with architectural details such as raised parapets, peaked roofs, arches, canopies, and overhangs.
4. Rear or side facades visible from other uses, parking areas, or streets must be of finished quality and should be landscaped.
5. Parking areas shall be located to the side or rear of buildings to the maximum extent feasible.
6. All mechanical equipment including dish antennae, outdoor storage, and waste disposal areas shall be screened from public view.
7. Wall signs for buildings with multiple businesses or tenants must be placed within the same horizontal sign band.
8. Buildings and parking areas must be set back by at least 50 feet from the front lot line and 30 feet from the rear and side lot lines. If multiple parcels are included in the Commercial Cluster Development, the setback requirements shall apply to the exterior lot lines of the assembled parcels.
9. Pitched rooflines are required.

i) Design Guidelines.

1. New buildings shall relate harmoniously to existing buildings on the site and to the surrounding

neighborhood.

2. Boxy buildings with unbroken facades and flat featureless walls shall be avoided or minimized and should be softened with architectural details and landscaping.
 3. Long unbroken facades must be avoided. The use of facade offsets, recesses, angular forms, and landscaping rather than ornamentation is encouraged to break up the mass of large or continuous walls.
 4. The use of exterior building materials such as masonry, stone, wood, and brick is preferred.
 5. Facade details and building elements shall be proportionate to the scale of the building.
 6. Lighting fixtures should complement the architectural design of the Cluster Development for Commercial Uses.
 7. The placement of wall signs on individual buildings should complement the architectural design of the cluster development.
 8. Large expanses of parking should be broken up with internal landscaping and dedicated pedestrian walkways.
 9. To the maximum extent feasible buildings and parking areas should be located outside of the active farmland or prime farmland soils.
- j) Phasing Requirements. All applications for Cluster Development for Commercial Uses shall include sufficient information to evaluate total build-out of the site. The Planning Board may permit a phased schedule in accordance with an approved “Master Site Plan.”
1. The initial construction phase shall provide sufficient on-site and off-site improvements to adequately serve the constructed portion independent of future phases, encourage completion of the build-out design, and minimize disruptions during future construction phases. Improvements shall include but are not limited to driveways, parking, sewer, water, stormwater systems, lighting, and landscaping. The Planning Board may permit phased construction of improvements if deemed appropriate.
 2. The applicant shall provide the Town with a performance guarantee to cover the costs of construction of the on-site and off-site improvements, subject to approval from the Planning Board, in the form of a performance bond, deposit of money in a bank escrow account, or other security acceptable to the Planning Board and Town Counsel.
 3. Any proposed changes in use or amendments to subsequent development phases shall require approval by the Planning Board. Modifications or extensions of less than 24 months to an approved phasing timetable shall not be considered substantive amendments.
- k) Procedural Requirements. All Cluster Developments for Commercial Uses require a Special Permit and those that will result in 5,000 square feet or more of enclosed floor area or 10 or more parking spaces also require Site Plan Review. The Planning Board shall be the Site Plan Approval Authority and Special Permit

Granting Authority for all Cluster Development for Commercial Uses. A Special Permit may be granted by the Planning Board for multiple uses allowed by right or by Special Permit if the Planning Board finds that the proposed uses will not have adverse effects which outweigh the beneficial effects according to the requirements and criteria of Section IX Special Permits. In addition to the Site Plan Review requirements in Section XII and the Special Permit Requirements of Section IX of this Bylaw, site plans shall include:

1. Color renderings of facade elevations of all sides of all proposed new construction and renovations including proposed mature landscaping.
2. Color photographs showing the proposed building site and adjacent properties and buildings.
3. Drawings/cut sheets of all proposed lighting, signs, and pedestrian amenities as they are to be located on the property.
4. A landscaping plan that includes all existing and proposed vegetation with elevation views and a description of all plantings (include common names), size (upon planting and upon maturity), spacing, and numbers of plants.
5. Description of how the project will impact traffic conditions on streets and intersections likely to be affected by the project including the level of service, traffic flow, turning movements, sight distances, traffic controls, pedestrian movement and public transportation. Provide information on the average daily and peak hour traffic projections and directional distribution of site-generated traffic.
6. A map and description of the open space to be permanently protected which must be at a minimum 60% of the parcel acreage. To the maximum extent feasible, open space protection should be given to active farmland and prime farmland soils.

6-4 FARM BUILDING REUSE BYLAW

a) Purpose and Intent

The purpose of this bylaw is to promote the reuse of vacant or underutilized farm buildings for commercial uses while maintaining open space and existing historical and scenic landscapes in Buckland. Within the Farm Building Reuse Overlay District along Route 112 and in other areas of the Rural Residential District as shown on the Official Zoning Map dated January 14, 2010, farmers will have the option to sell or lease existing historic farm buildings for professional business uses, office space, or artisan/craft ventures. The farm buildings eligible for reuse must satisfy the conditions described in this bylaw. The intent of the bylaw is to support farming by allowing an additional revenue source for farmers and to improve the Town's tax base with the addition of commercial uses. The bylaw should also help to balance new development in rural areas with the permanent protection of farmland. More than one principal structure or use on a lot with a reused Farm Building may be allowed if a Special Permit is granted by the Zoning Board of Appeals.

b) Definitions

1. Uses

Within the Farm Building Reuse Overlay District, the following non-residential uses may be allowed by the Planning Board by Site Plan approval provided that for those reuse project on the side roads listed in Section 6-4 f)3., traffic volumes generated by the project on the side roads shall not exceed on average fifty (50) vehicle trips per day estimated using the greater of the number of employees expected or the average weekday trip rate for the proposed use from the Institute for Transportation Engineers Trip Generation Manual.

- a.) Business or professional offices up to 5,000 square feet of enclosed floor area.
- b.) Artisan/craft businesses up to 5,000 square feet of enclosed floor area.

2. Site Plan Review and Performance Standards

The Planning Board shall review a Site Plan in accordance with Section 6-4 e) of this bylaw. In addition, the Planning Board will determine if the proposal can meet the Performance Standards of Section 4-5 of the Zoning Bylaws in addition to the other requirements of this section. A Special Permit for uses listed in 6-4 b) 1. is not required for the reuse of Farm Buildings if the project can meet all the requirements of Sections 4-5 and 6-4, and a Site Plan is approved by the Planning Board in accordance with Section 6-4 e).

3. Eligible Farm Building

An eligible farm building may be any free standing structure such as a barn or an outbuilding that has existed for at least 25 years and whose purpose, past or present, has been to support the active management of the land abutting or surrounding the structure for agricultural or horticultural purposes. An eligible farm building shall be located on an eligible farmland parcel.

4. Eligible Farmland Parcel

An eligible farmland parcel shall be defined as a parcel(s) of land at least five (5) acres in size and presently, or formerly, and primarily used in producing or raising agricultural commodities including, but not limited to, livestock, dairy products, poultry, bees, fruits, vegetables, berries, nuts, feed, forage, seed, flowers, sod, greenhouse products and ornamental plants, shrubs, and trees, including Christmas trees.

c) General Description

For eligible farm buildings and farmland parcels, the owner or prospective developer, business owner or artisan with the approval of the owner, may request Site Plan approval from the Planning Board to reuse up to 5,000 square feet of existing farm building(s) for commercial purposes identified in Section 6-4b)1. In exchange for allowing the commercial use, at least five (5) acres of farmland must be permanently protected and must be owned by or leased to a farmer for agricultural purposes. The five (5) acres to be permanently protected must be farmland that is either on the parcel where the structure is located, on a parcel that is adjacent to the parcel where the structure is located, or can be farmland located on a parcel(s) along Route 112 with at least 400 feet of frontage. The farm building(s) to be reused must exist on a parcel of farmland a minimum of five (5) acres in size. This parcel may be created from the existing acreage owned by the farmer and would include farmland, the structure itself, the parking area, and an area of land required to support a Title 5 septic system meeting all the current State and local wastewater regulations. The boundaries of the Farm Building Reuse Overlay District are shown on the Official Zoning Map for the Town of Buckland.

d) Pre-Application Conference

1. Timing

Prior to the submission of an application for Site Plan Review under this section, the applicant is encouraged to meet with the Planning Board at a public meeting to discuss the proposed development in general terms.

2. Filing Requirements

No formal filings are required for the pre-application conference. However, the applicant is encouraged to prepare sufficient preliminary site drawings to inform the Planning Board of the plans for the reuse of the structure, associated landscaping, access and parking, and a Title 5 septic system.

e) Site Plan Review and Submission Procedures

1. Site Plan Filing Requirements

The following plans and items shall be submitted to the Planning Board with an application form and three (3) copies of the drawings. Plans shall be prepared by a registered architect, registered landscape architect or professional engineer licensed in Massachusetts.

- a.) A locus map at a scale of 1"=1,000' inset within the plans noted below to identify the location of the proposed reuse.
- b.) A plan view at a scale not to exceed 1"=100' showing the location and dimensions of all existing farm buildings scheduled for reuse, parking areas, access roads, and the layout of the eligible farm land parcel(s) including acreage to be protected. Abutting parcels and any residential buildings shall be identified as well.
- c.) An elevation view at a scale not to exceed 1"=20' showing the location and relationships of all existing buildings and proposed structures (e.g. a pole barn for parking) on the site as viewed from the front, side, and rear yards.
- d.) A plan view at a scale not to exceed 1"=40' showing the location and dimensions of all existing and proposed buildings, and utilities, including underground utility lines, water, Title 5 septic system, electric power, telephone, gas, outdoor illumination, and cable television.
- e.) A plan view of the site at a scale not to exceed 1"=40' indicating location, species, and dimensions of trees and other landscaped features, both existing and proposed.
- f.) An estimate of the traffic to be generated by the project using the average weekday trip generation rate from the Institute for Transportation Engineers Trip Generation Manual or an estimate prepared by a qualified professional engineer registered in the State of Massachusetts.
- g.) A narrative identifying the type of business proposed, the hours of operation, the types and quantities, if any, of hazardous materials which shall be used or stored on the site in excess of household quantities.

- h.) Other information and materials as needed to demonstrate that the performance standards of Section 4-5 b) have been met.
- i.) Other information and materials as needed to demonstrate that the layout and design requirements of Section 6-4 f) have been met.

f) Requirements

Site Plan Approval may be granted by the Planning Board if it finds that the applicant's Farm Building Reuse proposal would meet the requirements of this bylaw and the Performance Standards of Section 4-5.

1. Building/Parcel Requirements prior to Reuse

No more than 50% of the acreage of the Eligible Farmland Parcel can be within the 100-year floodplain or within two hundred (200) feet of a perennial stream or body of water. The farm building considered for reuse under this bylaw must comply with the criteria for an Eligible Farm Building and be located within the areas identified in Section 6-4 f)3. In addition, the building must have at least thirty (30) foot setbacks for both side and rear yards. The farm building should be structurally sound so that its reuse would not represent a gross change in outward appearance. Alternatively, a farm building in disrepair can be restored to its original historic appearance and reused in accordance with this bylaw.

2. Layout and Design Requirements for the Farm Building Reuse Overlay District

The layout and design requirements are intended to protect the current historical, scenic, and economic values currently enjoyed by abutting landowners, residents, or the community at large. In addition to the requirements listed above, which identify the minimum conditions needed for consideration by the Planning Board, the following layout and design standards are required for site plan approval.

- a.) Access to the farm building shall be gained by way of a gravel or paved driveway, of similar design standards as is described for a common driveway (See Buckland Subdivision Regulations). The eligible farmland parcel should not be significantly reduced in size nor traversed or bisected through the construction of said driveway to the greatest extent possible. If more than one freestanding building is to be reused under this bylaw, said additional building shall be accessed by the same driveway. Use of asphalt pavement for the driveway should be minimized unless needed for existing farm operations. Curbs or sidewalks are not required. The access should be designed for safe sight distance for both incoming and outgoing traffic.
- b.) The parking area for employees of the business(es) located within each reused farm building will have no more than ten (10) spaces per building and the spaces should be contiguous to the maximum extent possible. The spaces shall be located to the side and rear of the structure in such a way as to minimize their visibility from the public way. Native vegetation and grading shall be used to conceal the parking area. The parking spaces may also be located within an additional structure such as a pole barn (a three (3) sided roofed structure) to reduce the visual impacts of a parking area. Also, the parking area shall be designed so that spillover light, glare, noise, or exhaust fumes entering into or onto abutting parcels shall be minimized. The surface of the parking area should be similar to that of the driveway.
- c.) Landscaping is required under this bylaw to protect the scenic quality of the landscape. The

current landscape surrounding the structure should be maintained as much as possible. A vegetative buffer may be required at the parcel's side yards and rear yards if the abutting parcel's use is residential. This vegetative buffer shall be at least fifteen (15) feet wide. The length of the buffer shall depend on the screening needed to minimize visual impacts to the abutter. Existing vegetation, if adequate, may be substituted for this planting. In addition, any trees or shrubs that die within one (1) year of planting must be replaced by the applicant. Replacement trees or shrubs shall be similar to originals in type and size.

- d.) Any outdoor or interior lighting installed as part of the building's reuse shall be designed so that it does not produce a strong direct light beyond the property's boundaries or onto a public way. Also, any outdoor lighting should direct light downward, using full cutoff light fixtures, and be motion sensitive so as to reduce light pollution.
- e.) Building materials used in the construction and renovation of the exterior of the farm building shall be consistent with the existing structure's siding. For example, an old hay barn is sided with weathered, wide pine boards. Wide pine boards may not be as readily available, but ten (10) to twelve (12) inch pine boards could be used instead.
- f.) The height of the reused farm building shall be no higher than the original structure.
- g.) There shall be no display visible from public ways other than an identification sign placed on the building that meets the sign regulations for Home Based Businesses (Section 4-4) of these Zoning Bylaws.
- h.) All phone and electric wiring must be run underground. Electric panels, fuse boxes and meters shall also be located to the rear of the structure, away from any public way. Water wells must be capped in such a way as to be unobtrusive. Vegetation may be used to produce a barrier for this purpose. A Title 5 certified septic system shall be designed so that its placement does not hinder current and future farming uses of the parcel. Mounded septic systems shall be avoided to the maximum extent possible. All other utilities and telecommunication technology, including cellular towers and satellite dishes shall be allowed only if attached to the structure, and then only if that device is virtually invisible from a public way or an abutter's property.

3. Designation of the Farm Building Reuse Overlay District Boundaries and Other Areas in the Rural Residential District where this Bylaw may be used.

The boundaries of the Farm Building Reuse Overlay District are four hundred (400) feet on either side of Route 112 from the Ashfield town line to Depot Road, in Buckland and on the side roads listed below. The side roads where existing farm buildings may be eligible for reuse are: Clesson Brook Road, Upper Street, Cross Street, Charlemont Road, Old Upper Street, and Purington Road. The Farmland Building Reuse Overlay District is shown on the Official Zoning Map for the Town of Buckland.

4. Conservation Restriction Requirements

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 all of the following:

- a.) Construction of buildings except for those used for agricultural purposes;
- b.) 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
- c.) Other acts or uses detrimental to such retention of the land for agriculture, forest or recreational use.

The conservation restriction placed on the land to be permanently protected shall meet the following minimum criteria:

- a.) The conservation restriction shall be held by the Town of Buckland Conservation Commission or by a non-profit conservation land trust approved by the Planning Board.
- b.) The conservation restriction shall be recorded by the holder in the Franklin County Registry of Deeds.
- c.) The conservation restriction shall be approved by the Commissioner of the Department of Agricultural Resources or the Secretary of the Executive Office of Energy and Environmental Affairs as appropriate, and additionally approved by the Buckland Board of Selectmen and Planning Board if the restriction is held by a non-profit conservation land trust.
- d.) The land covered by the conservation restriction shall be noted on the Site Plan approved by the Planning Board.
- e.) The form and content of the conservation restriction will be consistent with the sample included in Appendix B.

g) Criteria

The Planning Board shall review the Site Plan taking into consideration the following:

1. Adequacy of the farmland parcel and farm building.
2. Impact on traffic and adequacy/condition of the road to accommodate additional vehicular traffic.
3. Impact on the visual character of the area within the overlay district, including views and vistas.
4. Adequacy of utilities including but not limited to sewage disposal, water supply, and stormwater drainage.
5. Value of the farmland to be protected.

6. Requirements of 6-4 f).

h) Severability

If a court of competent jurisdiction holds any provision of this bylaw invalid, the remainder of the bylaw shall not be affected. The invalidity of any section, or parts of any section, shall not affect the validity of the remainder of the zoning bylaw.

SECTION VII: FLOODPLAIN DISTRICT (As amended at Annual Town Meeting, May 5, 1999)

7-1 STATEMENT OF PURPOSE

The purposes of the Floodplain District are to:

- a) Ensure public safety through reducing the threats to life and personal injury.
- b) Eliminate new hazards to emergency response officials;
- c) Prevent the occurrence of public emergencies resulting from water quality contamination, and pollution due to flooding;
- d) 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;
- e) Eliminate costs associated with the response and cleanup of flooding conditions;
- f) Reduce damage to public and private property resulting from flooding waters.

7-2 FLOODPLAIN DISTRICT BOUNDARIES AND BASE FLOOD ELEVATION AND FLOODWAY DATA

a) Floodplain District Boundaries

The Floodplain District is herein established as an overlay district. The underlying uses are allowed provided that they meet the following additional requirements as well as those of the Massachusetts State Building Code dealing with construction in floodplains. The District includes all special flood hazard areas designated on the Buckland Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA) for the administration of the NFIP dated May 15, 1980 as Zone A, A1-30 and the Flood Boundary & Floodway Map dated May 15, 1980, both maps which indicate the 100-year regulatory floodplain. The exact boundaries of the District may be defined by the 100-year base flood elevations shown on the FIRM and further defined by the Flood Insurance study booklet dated November 1979. The FIRM, Floodway Maps and Flood Insurance Study booklet are incorporated herein by reference and are on file with the Town Clerk, Planning Board, Building Inspector and Conservation Commission.

b) Base Flood Elevation and Floodway Data

Floodway Data. In Zone A, A1-30, and AE, along watercourses that have not had a regulatory floodway designated, the best available Federal, State, local, or other floodway data shall be used 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.

c) Base Flood Elevation Data. Base flood elevation data is required for subdivision proposals or other developments greater than 50 lots or 5 acres, whichever is the lesser, within unnumbered A zones.

7-3 NOTIFICATION OF WATERCOURSE ALTERATION

Notify, in a riverine situation, the following of any alteration or relocation of a watercourse:

- Adjacent Communities
- Bordering States (*optional*)
- NFIP State Coordinator
Massachusetts Office of Water Resources
- NFIP Program Specialist
FEMA Region I

7-4 USE REGULATIONS

a) Reference to Existing Regulations

The Floodplain District is established as an overlay district to all other districts. All development in the 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 and with the following:

- Section of the Massachusetts State Building Code which addresses floodplain and coastal high hazard areas (currently 780 CMR 2102.0, "Flood Resistant Construction");
- Wetlands Protection Regulations, Department of Environmental Protection (DEP) (currently 310 CMR 10.00);
- Inland Wetlands Restriction, DEP (currently 302 CMR 6.00);
- Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, DEP (currently 310 CMR 15, Title 5);
- 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.

b) Other Regulations

- 1) In Zones A1-30 along watercourses that have a regulatory floodway designated on Buckland FIRM or Flood Boundary & Floodway Map encroachments are prohibited in the regulatory floodway which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- 2) Review all subdivision proposals to assure that: a) such proposals minimize flood damage; b) all public utilities and facilities are located and constructed to minimize flood damage; c) adequate drainage is provided to reduce exposure to flood hazards.
- 3) Existing contour intervals of site and elevations of existing structures must be included on plan proposal.
- 4) There shall be established a "routing procedure" which will circulate or transmit one copy of the development plan to the Conservation Commission, Planning Board, Board of Health, and Building Inspector for comments which will be considered by the appropriate permitting board prior to issuing applicable permits.

7-5 PERMITTED USES

The following uses of low flood damage potential and causing no obstructions to flood flows are encouraged provided they are permitted in the underlying district and they do not require structures, fill, or storage of materials or equipment:

- 1) Agricultural uses such as farming, grazing, truck farming, horticulture, etc.
- 2) Forestry and nursery uses.
- 3) Outdoor recreational uses, including fishing, boating, play areas, etc.
- 4) Conservation of water, plants, wildlife.
- 5) Wildlife management areas, food, bicycle, and/or horse paths.
- 6) Temporary non-residential structures used in connection with fishing, growing, harvesting, storage or sale of crops raised on the premises.
- 7) Buildings lawfully existing prior to the adoption of these provisions.

7-6 DEFINITIONS

AREA OF SPECIAL FLOOD HAZARD is 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 be designated as Zone A, A), AH, A1-30, AE, A99, V1-30, VE, or V.

BASE FLOOD means the flood having a one percent chance of being equaled or exceeded in any given year.

DEVELOPMENT means any manmade change to improved or unimproved real estate, including but not limited to building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

DISTRICT means floodplain district.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) 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.

FLOOD BOUNDARY AND FLOODWAY MAP means an official map of a community issued by FEMA that depicts, based on detailed analyses, the boundaries of the 100-year and 500-year floods and the 100-year floodway. (For maps done in 1987 and later, the floodway designation is included on the FIRM.)

FLOOD HAZARD BOUNDARY MAP (FHBM) means 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.

FLOOD INSURANCE RATE MAP (FIRM) means the official map of a community on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY means an examination, evaluation, and determination of flood hazards, and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of flood-related erosion hazards.

FLOODWAY means the channel or 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.

LOWEST FLOOR means the lowest floor of the lowest enclosed area (including basement or cellar). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, PROVIDED that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of NFIP Regulations 60.3.

MANUFACTURED HOME means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes, the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes, the term "manufactured home" does not include parker trailers, travel trailers, and other similar vehicles.

NEW CONSTRUCTION means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community. For the purpose of determining insurance rates, NEW CONSTRUCTION means structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 13, 1974, whichever is later.

ONE-HUNDRED YEAR FLOOD – see BASE FLOOD

REGULATORY FLOODWAY – see FLOODWAY

SPECIAL FLOOD HAZARD AREA means an area having special flood and/or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone A, AO, A-1-30, AE, A99, AH, V, V130, VE.

START OF CONSTRUCTION includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation,; or the placement of a manufactured home on a foundation. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, or floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STRUCTURE means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured 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 manufactured home on foundation. For the latter purpose, the term includes a building while 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.

SUBSTANTIAL DAMAGE means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damaged occurred.

SUBSTANTIAL IMPROVEMENT means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “substantial damage”, regardless of the actual repair work performed.

ZONE A means 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.

ZONE A1 – A30 and ZONE AE (for new and revised maps) means the 100-year floodplain where the base flood elevation has been determined.

ZONE AH and ZONE A0 means the 100-year floodplain with flood depths of 1 to 3 feet.

ZONE A99 means areas to be protected from the 100-year flood by federal flood protection system under construction. Base flood elevations have not been determined.

ZONES B, C, and X are areas identified in the community Flood Insurance Study as areas of moderate or minimal flood hazard. Zone X replaces Zones B and C on new and revised maps.

SECTION VIII: GENERAL REGULATIONS

8-1 NON-CONFORMING USES OR STRUCTURES

- a) The lawful use of any structure or land existing at the time of the enactment or subsequent amendment of this Bylaw may be continued although such structure or use does not conform with provisions of this Bylaw.
- b) **ALTERATION, RECONSTRUCTION OR EXTENSION:** No non-conforming use shall be changed, moved or extended, and no non-conforming building or structure shall be constructed or substantially altered or enlarged or replaced by a new building unless upon application to the Zoning Board of Appeals, the Zoning Board of Appeals finds that such change, if carried out, would be less detrimental or objectionable to the neighborhood, or, if not carried out, would pose an unnecessary hardship, or where alteration, reconstruction, extension or structural change to a single or two-family residential structure does not increase the nonconforming nature of said structure.

Applications under this section shall be processed by the Zoning Board of Appeals pursuant to the requirements of Chapter 40A Section 15, except that only a simple majority vote will be required.

- c) **RESTORATION:** In the event that a non-conforming building is destroyed by fire or other causes, the same may be constructed or repaired on the same location for the same or less non-conforming use, provided the new building may be equal in appearance and character to the original structure.

- d) **CHANGES:** Once changed to a conforming use, no structure or land shall be permitted to revert to a nonconforming use.
- e) A non-conforming building or structure, land or premises or part of the use thereof, which has been abandoned or not used for a period of two (2) years shall not be re-established, but shall conform to the provisions of this Bylaw,
- f) **REMOVAL OF NATURAL MATERIALS:** The removal of sod, earth, mineral aggregates, stone, or rock from a parcel of land hereafter shall require a permit of approval authorized by the Board of Appeals; except where such is incident to the construction of an approved building, or is a routine part of normal farming operations.
- g) **NON-CONFORMING MANUFACTURING USES:** Allow a “one-time” expansion By-Right for existing non-conforming manufacturing businesses in the Village Residential District. Non-conforming manufacturing businesses could expand their buildings (measured in square feet of enclosed floor area) provided that the expansion does not exceed 25% of the total square footage of the existing enclosed floor area of all nonconforming use buildings up to 5,000 square feet and provided that the expansion can meet the dimensional requirements of Section V and the performance standards and other requirements of Section 4-5 Performance Standards.

8-2 UNSIGHTLY CONDITIONS

Accumulated or scattered junk, junk yard, trash, debris or scrap materials shall be adequately screened by the occupant or owner away from view of public lands and ways in all cases; and similarly screened from the lands of any adjacent property owners upon their request for such relief to the Selectmen.

8-3 SIGN REGULATIONS

- a) **Purpose.** The following sign regulations are intended to allow the identification and location of activities or premises while protecting the visual character of the town and the safety of its residents. Any exterior sign or advertising device hereafter erected or maintained shall conform to the following regulations.
- b) **On-premises signs.**
 1. Any residential dwelling is allowed one sign up to two square feet in area for each family/household residing on the premises, indicating the name of the owner or occupant or the name of the building, or other non-commercial message. Such sign may pertain to a permitted accessory use such as a Home Based Business.
 2. One announcement or bulletin board up to 12 square feet is allowed for a public, educational, charitable or religious organization. One announcement or bulletin board up to 12 square feet is also allowed for restaurants to lists menus and daily specials.
 3. Commercial and industrial uses shall be allowed two signs, one attached to the building and one freestanding, each up to 12 square feet in area. Any commercial message on such signs shall be

limited to identification of the firm and the products or services available or produced on the premises.

4. Businesses sharing a single building are allowed one wall sign up to 12 square feet per establishment. One shared freestanding sign shall also be allowed for the entire premises, bearing the name of each business located there. Such sign shall not exceed 18 square feet in area.
- c) Off-premises signs. Off-premises signs shall be allowed by special permit from the Zoning Board of Appeals only if the Board finds that such signs will serve the public convenience, will not endanger the public safety and will not be detrimental to the neighborhood. Off-premises signs shall only pertain to directional or identification information for businesses located in Buckland. Such signs shall not exceed nine square feet in area or 10 feet in height. Portable or movable signs may be allowed under a special permit from the Zoning Board of Appeals, provided that such signs are made of wood or metal only, stand on legs and do not exceed four feet in height.
- d) Temporary signs. Signs of a temporary nature, located on or off premises, such as sales promotions, holiday decorations and signs relating to the sale, rental or construction of the premises, are allowed but shall be removed promptly upon completion of the activity to which they relate. Temporary signs shall not exceed nine square feet in area or 10 feet in height.
- e) General sign regulations.
1. No sign shall flash, move or display movement or generate music or an audible message.
 2. Signs may be lighted internally or externally, but illumination of all signs shall be of a white light and shall be shielded or indirect. Signs may be illuminated only during the hours of 7:00 a.m. to 7:00 p.m. in the Rural and Village Residential Zoning Districts. Signs in the Village Commercial, Commercial, Historic Industrial, and Industrial District may be illuminated during the hours of 7:00 a.m. to 10:00 p.m. These time limits do not apply to those establishments with normal business hours other than these times. Neon signs visible from the outside may be allowed by Special Permit from the Zoning Board of Appeals. Sign lighting shall not be directed onto adjacent property, roadways or upward.
 3. Freestanding signs shall not be placed closer than 10 feet to a public right-of-way or within any side or rear yard requirement, and it shall not impair pedestrian or vehicular traffic flow or sight.
 4. Freestanding signs may be up to 15 feet in height above the ground, measured from the average ground grade on the premises to the top of the sign.
 5. Signs attached to a building may be either flat against the wall or perpendicular to it but shall not project more than two feet above the eaves line of the building or more than three feet from the vertical plane of the wall. Signs attached to a parapet shall not project above the top of the parapet.
 6. Double-sided signs with equal and parallel faces providing identical information on both sides shall be measured on one side only in determining square footage.

7. Signs may be allowed which are larger in area or greater in number only under special permit from the Zoning Board of Appeals.
8. On or off premise portable or movable signs may be allowed under a special permit from the Zoning Board of Appeals, provided that such signs are made of wood or metal only, stand on legs and do not exceed four feet in height.

8-4 OTHER REGULATIONS

- a) No sign, fence, wall, tree, hedge, or other vegetation, and no building or other structure shall be more than three and one half (3 ½) feet above the established street grade within the area formed by the intersecting street lines and a straight line joining said street lines at a point which is twenty five (25) feet distant from the point of intersection measured along said street lines.
- b) No buildings, nor parking areas for more than four cars, no outdoor storage, no paved areas other than drives or walks, and no leaching fields shall be located less than 100 feet horizontally from the mean high water line of the Deerfield River.
- c) No trailer or mobile home, for the purpose of living quarters, may be set up except as follows:

A trailer designed for camping, recreational, or business purposes provided the trailer is not used for living purposes for a period longer than sixty consecutive days at any location or locations within the geographic limits of the Town of Buckland. Extended use may be granted by the Board of Appeals.

A trailer or mobile home may be placed by the owner or occupier of a residence destroyed by fire or other natural holocaust for a period not to exceed twelve (12) months while the residence is being rebuilt.

8-5 PARKING REGULATIONS

- a) Parking lots for ten (10) or more cars shall be screened from any residential use which is abutting or separated from it only by a street. Screening shall be provided by a four-foot wide planting strip maintained with densely planted shrubs four (4) feet high or greater or by a fence not less than four (4) feet high.
- b) Parking lots shall be designed so as not to direct drainage onto adjacent properties through the use of swales, retention areas and other drainage methods to control stormwater runoff.
- c) Parking lots for ten (10) or more cars shall contain or be bordered within five (5) feet by at least one (1) tree per five cars. Trees shall be of two-inch caliper or larger and at least fifteen (15) feet in height. Trees planted within the parking area, shall be planted in curbed soil plots providing not less than forty (40) square feet of unpaved soil area per tree. The interior of parking lots with more than twenty (20) spaces shall be landscaped to provide shade and visual relief by planting at least one shade tree in a curbed soil plot or peninsula for each ten (10) parking spaces. For example, a parking lot with twenty (20) spaces would have at a minimum two (2) trees planted within the interior and two (2) trees along the border.

- d) The above requirements may be waived for existing parking areas when there is a change of use provided that a waiver is granted by the ZBA.

8-6 NOISE

- a) Sound or noise levels shall not exceed 65 dBA, at the boundary of the property in any zoning district during the hours from 9:00 p.m. to 6:00 a.m. However, the ZBA may grant a waiver to this requirement for activities not meeting these standards, in cases where the ZBA determines that no objectionable conditions are thereby created for the use of other affected properties.

SECTION IX: SPECIAL PERMITS

9-1 SPECIAL PERMITS.

- a) Purpose. Special Permits are intended to provide a detailed review of certain uses and structures which may have a substantial impact upon traffic, municipal services, and the character of the Town among other considerations. The character of the Town is comprised of historic mixed-use village centers surrounded by rural areas of residential use, limited commercial uses, and farmland and forest. The Special Permit review process is intended to ensure that proposals are consistent with the purpose and intent of this Bylaw.
- b) Procedure for Special Permits. Special Permits shall be granted, denied, or issued with conditions by the Zoning Board of Appeals according to the provisions of Chapter 40A of the Massachusetts General Laws. An applicant for a Special Permit shall file a completed application with the Town Clerk. The application shall include nine (9) copies each of the Special Permit application including the Impact Statement and a plan of the site. The Town Clerk shall acknowledge receipt of the application by signing and dating the application. The Town Clerk shall transmit copies of the application to the Planning Board, Conservation Commission, the Zoning Board of Appeals, the Board of Health, the Historical Commission, the Highway Superintendent, the Fire Chief and the Building Inspector. Town Boards and municipal officials shall have 45 days from the date the completed application is received by the Town Clerk to report to the Zoning Board of Appeals their findings and recommendations.
- c) SPGA Rules and Regulations. Pursuant to Section 9 of Chapter 40A of the Massachusetts General Laws, the Zoning Board of Appeals may adopt rules relative to the issuance of Special Permits. The Zoning Board of Appeals' rules and regulations may relate to the size, form, content and style of the plans and procedures for submission and approval of such Special Permits, and shall not be inconsistent with the General Laws and provisions of this Bylaw. The Zoning Board of Appeals may from time to time amend these rules. Copies of the rules shall be on file and available for review at the office of the Town Clerk.
- d) Application Fee. A fee shall be collected by the Town Clerk at the time that an application for a Special Permit is submitted. Said fee shall reflect the cost of printing, advertising and mailing for the permitting process. Any additional reasonable expenses in excess of the filing fee shall be assessed to the applicant and must be paid in order for the application to be processed by the Special Permit Granting Authority. The Zoning Board of Appeals shall notify the applicant if additional expenses are expected to be assessed and the estimated cost of such expenses.

- e) Waivers. Upon written request from the applicant prior to the filing of an application, the Zoning Board of Appeals may waive the submission of such materials, plans, studies, and analyses or parts thereof, as may not be needed for, or germane to, consideration of the application, if the potential impact of the development is minimal in the opinion of the Zoning Board of Appeals.
- f) Impact Statement. Except as waived under Section 9-1e), above, the Special Permit application must be accompanied by an impact statement.

The Impact Statement shall detail the probable effects of the project, subdivision proposal, or development on the following aspects of concern to the Town:

- 1. attendance at public schools;
 - 2. increase in vehicular traffic, impact on traffic congestion, and impact on vehicular and pedestrian safety at intersections with public ways (e.g. safe sight distances);
 - 3. changes in the number of legal residences;
 - 4. provision of housing for Town residents including housing for persons of low and moderate income, if applicable;
 - 5. impact on demand for municipal services such as police, fire, ambulance, road maintenance, garbage collection and disposal, and school transportation;
 - 6. impact on demand for public water supplies and sewage treatment;
 - 7. public safety concerns related to crime, acts of terrorism, etc.;
 - 8. changes in tax revenue;
 - 9. creation or retention of jobs;
 - 10. changes in surface drainage and stormwater runoff;
 - 11. increased consumption of groundwater;
 - 12. water, air, noise, or light pollution;
 - 13. land erosion or loss of tree cover;
 - 14. disturbance of other aspects of the natural ecology including displacement of natural habitats;
 - 15. impact of development on scenic views;
 - 16. harmony with the character of the surrounding development;
 - 17. preservation of historic and other cultural resources; and
 - 18. other positive impacts such as energy conservation, support of local products or manufacturers, creation of parks, pedestrian facilities or bike paths, preservation of open space, etc.
- g) Review Process. The Zoning Board of Appeals will review the Impact Statement, giving consideration to the factors outlined above as they affect the future of the Town and of the neighborhood adjacent to the site. It may ask for further reasonable information for clarification where necessary in order to review the application adequately, and may make recommendations for modifications to the project, subdivision proposal, or development as is appropriate to protect the Town.
 - h) Public Hearing. After the opportunity for review by other boards has taken place (see Section 9-1 b), the Zoning Board of Appeals shall hold a hearing under this section, in conformity with the provisions of M.G.L., Ch. 40A Section 9. The decision of the board, and any extension, modification or renewal thereof, shall be filed with the Town Clerk within 90 days following the closing of the public hearing.

i) Criteria.

In acting upon Special Permits, the Zoning Board of Appeals shall consider whether:

1. There is sufficient Town capacity to service the premises, considering existing roads, town equipment, and other municipal services and resources.
 2. The impact on adjoining premises from water, air, noise or light pollution and other disturbances is avoided or minimized.
 3. The proposal will avoid or minimize topographic change, removal of mature trees or other botanical assets, removal of cover vegetation, risk of erosion or siltation, increased storm water runoff from the site, or displacement of natural habitats.
 4. The proposal will cause surface or groundwater pollution, surface or subsurface drainage detrimental to abutting properties, or result in adverse effects upon the natural environment in the area where the use is located.
 5. There is adequate sight distance at the entrance to public ways and other traffic and pedestrian safety concerns have been addressed.
 6. The proposal is compatible with the neighborhood character.
 7. The proposal minimizes adverse effects upon historic and other cultural resources.
 8. There are positive employment and fiscal consequences including an increase in tax revenues.
 9. The activity, traffic, site plan, and building design will influence positively the Town's character.
- j) Lapse of Special Permit. If substantial use or construction under a Special Permit has not commenced within one year of the date of issuance of the Special Permit, that permit shall be considered to have lapsed.
- k) Conformance with Bylaw Amendments. When subsequent amendments to the Bylaw are adopted, operations or construction under a Special Permit shall conform to the Amendments unless the use or construction is commenced within one year after issuance of the permit.

**SECTION X: BYLAW FOR PERSONAL WIRELESS SERVICE FACILITIES IN BUCKLAND, MA
4-26-98**

10 - 1 STATEMENT OF PURPOSE

Personal wireless service facilities are subject to the following conditions to minimize their adverse visual and environmental impacts, to avoid damage to adjacent properties, to lessen impacts on surrounding properties, to lessen traffic impacts, to minimize the installation of towers and to reduce the number of towers constructed.

The regulation of personal wireless service facilities is consistent with the purpose of the Buckland Zoning Bylaw and planning efforts at the local government level to further the conservation and preservation of developed, natural and undeveloped areas, wildlife, flora and habitats for endangered species: protection of the

natural resources of Buckland: enhancement of open space areas and respect for Buckland’s rural character.

10-2 DEFINITIONS

In this bylaw, the following terms, unless a variation of meaning is required by the context, or is specifically prescribed, shall have the following meanings:

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

Antenna: The surface from which wireless radio signals are sent and received by a personal wireless service facility.

Camouflaged: A personal wireless service facility that is disguised, hidden, part of an existing or proposed structure or placed within an existing or proposed structure is considered “camouflaged”.

Carrier: A company that provides wireless services.

Co-location: The use of a single mount on the ground by more than one carrier (vertical co-location) and/or several mounts on an existing building or structure by more than one carrier.

Communications Structure: Any structure, tower, or antenna used to support equipment (including antennas) for the transmission or reception of electromagnetic radiation, not including an antenna utilized by a federally licensed amateur radio operator or a home TV antenna or satellite dish.

Communications Building: Any building used primarily for the installation and operation of equipment for generating and detecting electromagnetic radiation and which is accessory to a communication structure.

Communications Appurtenance: Any antenna, device, wiring or equipment used in connection with the reception or transmission of electromagnetic radiations and which is attached to a pre-existing structure. A communication appurtenance shall not include an antenna utilized by a federally licensed amateur radio operator or a home TV antenna or satellite dish.

Cross-polarized (or dual-polarized) antenna: A low mount that has three panels flush mounted or attached very close to the shaft.

Elevation: The measurement of height above sea level (AMSL).

Environmental Assessment (EA): An EA is the document required by the Federal Communications Commission (FCC) and the National Environmental Policy Act (NEPA) when a personal wireless service facility is placed in certain designated areas.

Equipment Shelter: An enclosed structure, cabinet, shed or box at the base of the mount within which are housed batteries and electrical equipment.

Fall Zone: The area on the ground within a prescribed radius from the base of a personal wireless service facility. The fall zone is the area within which there is a potential hazard from falling debris (such as ice) or collapsing material.

Functionally Equivalent Services: Cellular, Personal Communication Services (PCS), Enhanced Specialized Mobile Radio, Specialized Mobile Radio and Paging.

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

Lattice Tower: A type of mount that is self-supporting with multiple legs and cross-bracing of structural steel.

Licensed Carrier: A company authorized by the FCC to construct and operate a commercial mobile radio services system.

Monopole: The type of mount that is self-supporting with a single shaft of wood, steel or concrete and a platform (or racks) for panel antennas arrayed at the top.

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

1. Roof Mounted. Mounted on the roof of a building.
2. Side Mounted. Mounted on the side of a building.
3. Ground Mounted. Mounted on the ground.
4. Structure Mounted. Mounted on a structure other than a building.

Omnidirectional (whip) antenna: A thin rod that beams and receives a signal in all directions.

Panel Antenna: A flat surface antenna usually developed in multiples.

PCS: Personal Communications Services. These are broadband radio wave systems that operate at a radio frequency in the 1850 - 1900 megahertz range.

Personal Wireless Service Facility: Facility for the provision of personal wireless services, as defined by the Telecommunications Act.

Personal Wireless Services: The three types of services regulated by this Bylaw.

Radio frequency (RF) Engineer: An engineer specializing in electrical or microwave engineering, especially the study of radio frequencies.

Radio frequency Radiation (RFR): The emissions from personal wireless service facilities.

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

Separation: The distance between one carrier's array of antennas and another carrier's array.

SPGA: Special Permit Granting Authority. More specifically, The Planning Board and/or The Zoning Board.
Utility: A system of wires or conductors and supports structures that functions in the transmission of electrical energy or communication services (both audio and video) between generating stations, sub-stations, and transmission lines or other utility services.

10 - 3 REGULATIONS GOVERNING PERSONAL WIRELESS SERVICE FACILITIES

- a) No personal wireless service facility shall be placed, constructed or modified within the Town without first obtaining site plan approval from the Special Permit Granting Authority (SPGA). The Planning Board shall be the Special Permit Granting Authority for the issuance of a special permit to allow the placement, construction and modification of personal wireless service facilities within the town.
- b) The carrier must demonstrate that the facility is necessary in order to provide adequate service to the public.
- c) A personal wireless service facility may locate as of right on any existing monopole or electric utility transmission tower for which a special permit issued under this Bylaw is in effect, provided that the new facility shall first obtain site plan approval from the Planning Board and, provided further, that any new facility shall not exceed the terms and conditions of the special permit in effect for the existing facility on which it is to be located.
- d) Amateur radio towers used in accordance with the terms of any amateur radio service license issued by the Federal communication Commission, are exempt from the provisions of this Bylaw provided that (1) the tower is not used or licensed for any commercial purpose; and (2) the tower must be removed upon loss or termination of said FCC license.

10 - 4 LOCATION

The personal wireless service facility and its appurtenances shall be located in accordance with the Federal Communications Commission (FCC) and the Federal Aviation Administration (FAA) regulations in effect at the time of construction, and the operation of the communication structure, building and its appurtenances shall comply with all requirements of these agencies.

All permits for a personal wireless service shall comply with the following:

- a) If feasible, personal wireless service facilities shall be located on pre-existing structures unless the applicant demonstrates that there are no feasible pre-existing structures. The installation shall preserve the character and integrity of such pre-existing structures. The applicant shall have the burden of proving that there are no feasible existing structures upon which to locate.
- b) If the applicant has demonstrated that there are no feasible pre-existing structures to support personal wireless service facilities for the intended use, then all facilities 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.
- c) If the applicant has demonstrated that there are no feasible pre-existing structures to support personal wireless service facilities for the intended use, then any personal wireless service facility shall:
 - 1. To the extent feasible, share facilities and sites with other carriers. Shared use of personal wireless service facilities is preferred. However, when technically not practical, all towers shall be separated on the site so that, if the support structure falls, it will not strike another.

2. Be designed to structurally accommodate the maximum number of foreseeable users technically practicable.

10 - 5 DIMENSIONAL REQUIREMENTS

Personal wireless service facilities shall comply with the following requirements:

a) Height

The Applicant shall demonstrate that the proposed personal wireless service facility is the minimum height necessary to accommodate transmitter receiver.

1. General. Regardless of the type of mount, personal wireless service facilities shall be no higher than ten feet above the average height of buildings within 300 feet of the facility, and in no instance will the total height of personal wireless service facilities be above 150 feet, measured from ground level (AGL), unless the facility is completely camouflaged such as within a flagpole, steeple, chimney, or similar structure, and has been granted special approval by the SPGA.
2. Ground-Mounted Facilities. Ground-mounted personal wireless service facilities shall not project higher than ten feet above the average height of buildings within 300 feet of the proposed facility, or, if there are no buildings within 300 feet, these facilities shall not project higher than ten feet above the average tree canopy height, measured from ground level (AGL). If there are no buildings within 300 feet of the proposed site of the facility, all ground-mounted personal wireless service facilities shall be surrounded by dense tree growth to screen views of the facility in all directions. These trees may exist on the subject property or planted on site. Monopoles are the preferred type of mount for taller personal wireless service facilities.
3. Side and Roof-Mounted Facilities. Side- and roof-mounted personal wireless service facilities shall not project more than ten feet above the height of an existing building. Personal wireless service facilities may be located on a building that is legally non-conforming with respect to height, provided that the facilities do not project above the existing building height.
4. Existing Structures. New antennas located on any of the following structures existing on the effective date of this bylaw shall be exempt from the height restrictions of this bylaw: Water towers, guyed towers, lattice towers, fire towers and monopoles. Any increase in height of the existing structure must be subject to SPGA approval.
5. Existing Structures (Utility). New antennas located on any of the following structures existing on the effective date of this bylaw shall be exempt from the height restrictions of this bylaw: Electric transmission and distribution towers, telephone poles and similar existing utility structures. This exemption shall not apply within the public water and sewer district, historic districts, within 150 feet of the right-of-way of any scenic roadway, or in designated scenic view sheds. Any increase in height of the existing structure must be subject to SPGA approval.

b) Setbacks

1. Minimum distance from the perimeter of the Communication Structure to any property line, road, habitable dwelling, business or institutional use, or public recreational area shall be the height of the structure plus 10 ft. This setback is considered a "fall zone".
2. Minimum distance from any guy wire, anchor, or brace to any property line, road, habitable dwelling, business or institutional use, or public recreational area shall be the length of the guy wire, anchor, or brace plus 10 ft.
3. Setbacks for a communication building shall comply with the set-back requirements of the zoning district.
4. In the event that an existing structure is proposed as a mount for a personal wireless service facility, a fall zone shall not be required, but the setback provisions of the zoning district shall apply. In the case of pre-existing non-conforming structures, personal wireless service facilities and their equipment shelters shall not increase any non-conformities, except as provided in section (e) below.
5. Setback from designated wetlands, water bodies and areas with a slope in excess of five (5) percent shall be at least one hundred and fifty (150) feet, unless the personal wireless service facility is located on a pre-existing structure.
6. In reviewing a special permit application for a personal wireless service facility, the SPGA (SPGA) may reduce the required fall zone and/or 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 SPGA shall consider both the visual and safety impacts of the proposed use.
7. New personal wireless service facilities shall be considered only upon a finding by the SPGA that existing or approved facilities cannot accommodate the new proposed facility.

10 - 6 DESIGN STANDARDS

The installation of a personal wireless service facility shall be designed to minimize visual impact, the maximum amount of natural vegetation shall be preserved; details of construction and finish shall blend with the surroundings; additional vegetative screening shall be employed where practical and particularly to screen abutting residential property whether developed or not. Siting shall be such that the view of the personal wireless service facility from other areas of Town shall be as minimal as possible.

10 - 6.1 FENCING

Fencing shall be provided to control access to the base of the personal wireless service facility, all fencing shall be compatible with the scenic character of the Town and shall not be of barbed wire or razor wire.

10 - 6.2 CAMOUFLAGE BY EXISTING BUILDINGS OR STRUCTURES:

Personal wireless service facilities shall be camouflaged as follows:

- a) When a personal wireless service facility extends above the roof line of a building on which it is mounted, every effort shall be made to conceal the facility within or behind existing architectural features to limit its visibility. Facilities mounted on a roof shall be stepped back from the front facade in order to limit their impact on the building's silhouette.
- b) Personal wireless service facilities which are side mounted shall blend with the existing building's architecture and, if over 5 square feet, shall be painted or shielded with material which is consistent with the design features and materials of the building.

10 - 6.3 CAMOUFLAGE BY VEGETATION

- a) If personal wireless service facilities are not camouflaged from public viewing by existing buildings or structures, they shall be surrounded by buffers of dense tree growth and under story vegetation in all 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. The maximum amount of natural vegetation should be preserved. Trees and vegetation utilized for this purpose should be natural to the area and may be existing on the subject property, or installed as part of the proposed facility or a combination of both. The SPGA shall determine the types of trees and plant materials and the depth of the needed buffer based on-site conditions. If the facility must be painted to further blend into the surroundings then colors must be approved by the SPGA.

10 - 7 EQUIPMENT SHELTERS

- a) Equipment shelters shall be limited to one (1) structure per use per tower, but shall not exceed ten (10) structures per tower. If more than one (1) use, the accessory buildings shall be connected by a common wall. Each structure shall not exceed four hundred (400) square feet in size and ten (10) feet in height, shall be of the same design and color, and shall be designed consistent with one of the following design standards:
 - 1. Equipment shelters must be located in underground vaults;
 - 2. Equipment shelters must be designed consistent with traditional materials, color and design of the area: or
 - 3. Equipment shelters must be camouflaged behind an effective year-round landscape buffer, equal to the height of the proposed building, and/or wooden fence acceptable to the permitting authority.

10 - 8 SIGNAGE AND LIGHTING

- a) Signs will be limited to those needed to identify the property, the owner, to warn of any danger and to provide a phone number where the licensed carrier can be reached on a twenty-four (24) hour basis. All signs shall be in conformance with the sign requirements of this Bylaw and shall be subject to the approval of the SPGA.
- b) Personal wireless service facilities shall be lighted only if required by the Federal Aviation Administration (FAA). Lighting shall be limited to that needed for emergencies and /or as required by the FAA. Such lighting shall then be directed inward, and shielded so as to not project onto surrounding properties. There

shall be total cutoff of all light at the property lines of the parcel to be developed, and foot-candle measurements at the property line shall be 0.0 initial foot-candles when measured at grade.

10 - 9 ACCESS ROADS AND PARKING

- a) Access shall be provided to a site by a roadway which respects the natural terrain, does not appear as a scar on the landscape, and is approved by the SPGA and the Fire Chief to assure emergency access at all times. Designs must minimize erosion, construction on unstable soils and steep slopes.
- b) There shall be a minimum of one (1) parking space and a maximum of two (2) parking spaces for each personal wireless service facility, to be used in connection with the maintenance of the personal wireless service facility and the site, and not to be used for the permanent storage of vehicles.

10 - 10 HISTORIC BUILDINGS

- a) Any construction on or near historic buildings is subject to Planning Board approval.
- b) Any personal wireless service facilities located on or within a historic structure shall not alter the character-defining features, distinctive construction methods, or original historic materials of the building.
- c) Any alteration made to a historic structure to accommodate a personal wireless service facility shall be fully reversible.

10 - 11 SCENIC ROADS AND VISTAS

- a) Any personal wireless service facility that is located within 300 feet of a scenic vista, scenic landscape or scenic road as designated by the town 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.

10 - 12 ENVIRONMENTAL STANDARDS

- a) Any excavation or clearing of vegetation shall be performed in a manner that will maximize preservation of natural beauty and conservation of natural resources. Such work shall also minimize disruption of the landscape, silting of streams, and shall also be subject to the following:
 - 1. The time and method of clearing rights of way should take into account soil stability, the protection of natural vegetation, the protection of adjacent resources, such as the protection of natural habitat for wildlife, and appropriate measures for the prevention of silt deposition in water courses.
 - 2. Clearing of natural vegetation should be limited to that material which poses a hazard to the personal wireless service facility.
 - 3. The use of "brush blades" instead of dirt blades on bulldozers is recommended in clearing operations where such use will preserve the cover crop of grass, low growing brush, or other vegetation.
 - 4. Areas should be cleared only when necessary to the operation, maintenance and construction of the personal wireless service facility.
 - 5. The cost of any actions necessary to repair environmental damage caused by clearing for, construction of, or operation of these facilities will be borne by the applicant.

6. Any excavations of more than one (1) yard in depth shall be clearly shown on all site plans.

- b) There shall be no cutting, clearing or removal of vegetation from any route of access for a wire or cable which has been located up the side of a mountain, hill or summit on which a new or pre-existing personal wireless service facility is located. Any such cable or wire from the base of the natural topographical feature up to the vicinity of the personal wireless service facility shall be strung from tree to tree or from wooden pole to wooden pole at a height of at least ten (10) feet above the ground.
- c) 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.
- d) Storm water run-off shall be contained on-site.
- e) Ground-mounted equipment for personal wireless service facilities shall not generate noise in excess of 50 db at the property line.
- f) Roof-mounted or side-mounted equipment for personal wireless service facilities shall not generate noise in excess of 50 db at ground level at the base of the building closest to the antenna.

10 - 13 SAFETY STANDARDS, RADIO FREQUENCY RADIATION (RFR) STANDARDS

Radio frequency Radiation (RFR) Standards. All equipment proposed for a personal wireless service facility shall be authorized per the most recent revision of "FCC Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation" (FCC Guidelines), or any other applicable FCC Guidelines and regulations.

10 - 14 APPLICATION PROCEDURES

10 - 14.1 SPECIAL PERMIT GRANTING AUTHORITY (SPGA)

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

10 - 14.2 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 applicant is also encouraged to prepare sufficient preliminary architectural and/or engineering drawings to inform the SPGA of the scale and overall design of the proposed facility.

10 - 14.3 PRE-APPLICATION FILING REQUIREMENTS

The purpose of the conference is to inform the SPFA as to the 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.

10 - 15 APPLICATION FILING REQUIREMENTS

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

10 - 15.1 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) A licensed carrier shall either be an applicant or a co-applicant.
- 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. Photo reproductions of signatures will not be accepted.

10 - 15.2 LOCATION FILING REQUIREMENTS

The applicant shall submit the following written information to the SPGA:

- a) A survey of all existing structures that are capable of supporting the equipment necessary to provide the intended service and a technical report that demonstrates why any such structure cannot be used by the applicant.
- b) A survey of any and all sites for the installation of personal wireless service facilities that are feasible for providing the intended services. The survey shall include a rationale for the selection of a prime and at least one alternate site. All sites in the Town of Buckland shall be located on the appropriate copy of the Buckland Assessor's Maps.
 - 1. 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.
 - 2. Tax map and parcel number of subject property.
 - 3. A line map to scale showing the lot lines of the subject property and all properties within 1000 feet and the location of all buildings, accessory structures identified by their proper location and use. This may be done on a reproduced copy of the appropriate Town Assessor's Maps.
 - 4. A town-wide map showing the other existing personal wireless service facilities in the town of Buckland as well as within one mile of its corporate limits.

5. The proposed locations of all existing and future personal wireless service facilities in Buckland on a town wide map for this carrier.
6. A locus map, utilizing the most recent U.S.G.S. topographic maps of the area, which shall show all streets, bodies of water, historic sites, habitats for endangered species within 1000 feet, and all buildings within 1000 feet.

10 - 15.3 SITING FILING REQUIREMENTS

A site plan prepared by a registered professional engineer at a scale of 1:40 which will show the following:

1. Property lines for the subject property.
2. Property lines of all properties adjacent to the subject property within 300 feet.
3. 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
4. Proposed location of antenna, mount and equipment shelter.
5. Location of all roads, public and private, on the subject property and on all properties within 300 feet including driveways proposed to serve the personal wireless service facility.
6. Proposed security barrier, indicating type and extent as well as point of controlled entry.
7. Distances, at grade, from the proposed personal wireless service facility to each building on the vicinity plan.
8. Contours at each two feet AMSL for the subject property and adjacent properties within 300 feet.
9. 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.
10. All proposed changes to the existing property, including excavating, grading vegetation removal and temporary or permanent roads and driveways.
11. Representations, dimensional 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 "Site Lines" sub-section below.

a) Site Lines and photographs as described below:

1. Sight line representation. A site line representation shall be drawn from that portion of any public road within 300 feet that would have the clearest view of the proposed facility, 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 (or more) residential building within 300 feet there shall be at least two Site 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 color photograph of what can currently be seen 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.

- b) 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 one-quarter 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 dimensional.
 - 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.

10 - 15.4 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 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) If lighting of the site is proposed, the applicant shall submit a manufacturers computer-generated point-to-point printout, indicating the horizontal foot-candle 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 luminaries proposed.

- h) Within thirty (30) days prior to the public hearing, the applicant shall arrange to fly a three (3) foot diameter brightly colored and clearly visible balloon, or conduct a crane test, at the maximum height of the proposed installation. The balloon or crane shall remain raised in place for a period of at least three (3) consecutive days, including a weekend day between sunrise and sunset, and will be subject to a repeat if visibility or weather conditions require. The date, time, and location of such test shall be advertised in an newspaper of general circulation in the town at least 7 days prior to, but no more than 21 days, before the beginning date of the test. The Planning Board shall be notified of the planned dates of flight by certified mail at least two (2) weeks before flight.

10 - 15.5 NOISE FILING REQUIREMENTS

The applicant shall provide a statement listing the existing and maximum future projected measurements of noise from the proposed personal wireless service facilities, measured in decibels Ldn (logarithmic scale, accounting for greater sensitivity at night), for the following:

1. Existing, or ambient: the measurements of existing noise.
2. Existing plus proposed personal wireless service facilities: maximum estimate of noise from the proposed personal wireless service facility plus the existing noise environment.

Such statement shall be certified and signed by an acoustical engineer, stating that noise measurements are accurate and meet the Noise Standards of this Bylaw.

10 - 15.6 RADIO FREQUENCY RADIATION (RFR) FILING REQUIREMENTS

The applicant shall provide a statement listing the existing and maximum future projected measurements of RFR from the proposed personal wireless service facility, for the following situations:

- a) Existing, or ambient: the measurements of existing RFR.
- b) Existing plus proposed personal wireless service facilities: maximum estimate of RFR from the proposed personal wireless service facility plus the existing RFR environment.
- c) Certification, signed by a RF engineer, stating that RFR measurements are accurate and meet FCC Guidelines as specified in the Radio frequency Radiation Standards sub-section of this Bylaw.

10 - 15.7 FEDERAL ENVIRONMENTAL FILING REQUIREMENTS

- a) The National Environmental Policy Act (NEPA) applies to all applications for personal wireless service facilities. NEPA is administered by the 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 Radio frequency

radiation exposure.

- b) At the time of application filing, an EA that meets FCC requirements shall be submitted to the Town SPGA 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.

10 - 16 CO-LOCATION

- a) Licensed carriers shall share personal wireless service facilities and sites where feasible and appropriate, thereby reducing the number of personal wireless service facilities 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. 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.
- b) In the event that co-location is found to be not feasible, a written statement of the reasons for the unfeasibility shall be submitted to the Town. The Town may retain a technical expert in the field of RF engineering to verify if co-location at the site is not feasible or is feasible given the design configuration most accommodating to co-location. The cost for such a technical expert will be at the expense of the applicant. The Town may deny a Special Permit to an applicant that has not demonstrated a good faith effort to provide for co-location.
- c) If the applicant does intend to co-locate or to permit co-location, the Town shall request drawings and studies that show the ultimate appearance and operation of the personal wireless service facility at full build-out.
- d) If the SPGA approves co-location for a personal wireless service facility site, the Special Permit shall indicate how many facilities of what type shall be permitted on that site. Facilities specified in the Special Permit approved 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.

Estimates of RFR emissions will be required for all facilities, including proposed and future facilities.

10 - 17 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 the 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.

10 - 18 MONITORING AND MAINTENANCE

- a) 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 RFR from the personal wireless service facility. Such measurements shall be signed and certified by an RF engineer, stating that RFR measurements are accurate and meet FCC Guidelines as specified in the Radio frequency Standards section of this Bylaw.
- b) 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.
- c) The applicant and co-applicant shall maintain the personal wireless service facility in good condition. Such maintenance shall include, but not be limited to, painting, structural integrity of the mount and security barrier, and maintenance of the buffer areas and landscaping.

10 - 19 ABANDONMENT OR DISCONTINUATION OF USE

- a) 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.
- b) 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:
 - 1. Removal of antennas, mount, equipment shelters and security barriers from the subject property.
 - 2. Proper disposal of the waste materials from the site in accordance with local and state solid waste disposal regulations.
 - 3. 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.

c) If a carrier fails to remove a 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 SPGA may require the applicant to post a bond at the time of construction to cover costs for the removal of the personal wireless service facility in the event the Town must remove the facility.

10 - 20 TERM OF SPECIAL PERMIT

A Special Permit issued for any personal wireless service facility shall be valid for five (5) 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.

10 - 21 APPROVAL

Site plan approval and a Special Permit shall be granted by the SPGA in accordance with the Massachusetts General Law and the provisions of the Bylaw relative to special permits.

- a) Any extension, addition or construction of new or replacement personal wireless service facilities or transmitters shall be subject to an amendment to the Special Permit, following the same procedure as for an original grant of a special permit.
- b) At a Pre-Application conference the SPGA may waive one or more of the application filing requirements if it finds that such information is not needed for a thorough review of the proposed facility.

10 - 22 CONDITIONS OF USE

- a) The personal wireless service facility and its transmissions shall comply in all respects with all applicable federal, state and industry standards.
- b) If new technology is developed which is determined by the SPGA to be safer and less obtrusive to the landscape, it shall be substituted as soon as technologically feasible.
- c) As a condition of approval of the application for a special permit, the applicant shall agree, by the execution of a covenant, that within a period of six months, the location of any personal wireless service facility which has not operated for four consecutive months, unless the cause is major damage which prohibits operation, shall be restored to its natural condition, except that any landscaping and grading shall remain in the after-condition.
- d) Failure to comply with the conditions of the covenant shall be grounds for the removal of the personal wireless service facility at the owner's expense.
- e) In the event that major damage has rendered the facility inoperative, repair or removal of the facility shall begin within six months and be completed within an additional six months.

f) If a carrier fails to remove a personal wireless service facility in accordance with this section of this bylaw, the Town of Buckland shall have the authority to enter the subject property and physically remove the facility. The SPGA may require the applicant to post a bond at the time of construction to cover costs for the removal of the personal wireless service facility in the event that the Town must remove the facility.

10 - 23 PERFORMANCE GUARANTEES

- a) Insurance in a reasonable amount determined and approved by the SPGA after consultation at the expense of the Applicant with one (1) or more insurance companies shall be in force to cover damage and/or personal injury from the structure, and damage and/or personal injury from transmissions and other site liabilities. Annual proof of said insurance shall be filed with the Town Clerk.
- b) The applicant shall pay or reimburse the Town for all expenses incurred by the Town in reviewing the application and reviewing the installation of the applicant's facility. These expenses may include, without limitation, engineering, planning, technical or legal services. An annual maintenance bond shall be posted for the access road, site and personal wireless service facility(s) in an amount approved by the SPGA.
- c) Annual certification demonstrating continuing compliance with the standards of the Federal Communications Commission, Federal Aviation Administration and the American National Standards Institute shall be filed with the Building Inspector, the Board of Health, and The SPGA by the special permit holder.

10 - 24 OPERATION

- a) Monitoring, testing and inspection shall be in accordance with the Regulations of the Massachusetts Department of Public Health Massachusetts, 105 CMR 122 Regulations Governing Fixed Facilities Which Generate Electromagnetic Fields in the Frequency Range of 300kHz to 100 GHZ and Microwave Ovens, and other requirements of the Department.

SECTION XI: ADMINISTRATION

11-1 ENFORCEMENT

This Bylaw shall be administered and enforced by the Building Inspector. 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 Building Inspector that such action is in compliance with the then-applicable zoning. In addition, all necessary permits must 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. The penalty for violation of any provision of this Bylaw, or any of the conditions under which a permit or special permit is issued, or any decision rendered by the Zoning Board of Appeals shall be two hundred dollars (\$200.00) for each offense.

Each day that each violation continues shall constitute a separate offense.

11-2 There is hereby established a Zoning Board of Appeals of five (5) members, and two alternates, to be appointed by the Selectmen as provided in Chapter 40A of Generals, which shall act on all matters within its jurisdiction under this Bylaw in the manner prescribed in Chapter 40A of the General Laws. The Zoning Board of Appeals shall have the following powers:

- a) APPEALS: To hear and decide an appeal taken by any person aggrieved by reason of his inability to obtain a permit from any administrative official under the provisions of Chapter 40A, General Laws, or by an officer or Board of the Town; or by any person aggrieved by any order or decisions of the Inspector of Buildings or any other administrative official in violation of any provisions of Chapter 40A, General Laws, or of this Bylaw.
- b) SPECIAL PERMITS: The Zoning Board of Appeals may grant a special permit only for proposals in compliance with the provisions of this Bylaw.

Permit Limitations. Construction or operations under a special permit shall conform to any subsequent amendment of the Bylaw unless the use and/or construction is begun within a period of one year after the issuance of the permit. In cases of construction, such construction shall be carried through to completion as continuously and expeditiously as is reasonable.

c) VARIANCES: The Zoning Board of Appeals shall hear and decide appeals or petitions for dimensional variances from the terms of this Bylaw, with respect to particular land or structures pursuant to M.G.L. Chapter 40A, Section 10, as may be amended from time to time, only in cases where the Board finds all of the following:

- 1. a literal enforcement of the provisions of this Bylaw would involve a substantial hardship, financial or otherwise, to the petitioner or applicant:
- 2. the hardship is owing to circumstances relating to the soil conditions, shape, or topography of such land or structures, and especially affecting such land or structures but not affecting generally the zoning district in which it is located;
- 3. desirable relief may be granted without either:
- 4. substantial detriment to the public good; or
- 5. nullifying or substantially derogating from the intent or purpose of this Bylaw.
- 6. the Zoning Board of Appeals does not have the authority to grant use variances in any district in Town.

11-3 AMENDMENT

This Bylaw may be amended from time to time at an Annual or Special Town Meeting in accordance with the provisions of Section 5 of Chapter 40A, General Laws.

11-4 VALIDITY

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

SECTION XII: SITE PLAN REVIEW

- a) Purpose. The purpose of Site Plan Review is to ensure that new development is designed in a manner which reasonably protects the environmental and scenic qualities of the neighborhood and the Town.
- b) Applicability. Site Plan Review shall be required for the following types of projects:
- Cluster Developments (see Section 6-2)
 - Ground-Mounted Solar Electric Generating Facilities occupying 1,000 square feet or less
 - Large-scale Ground-mounted Solar Electric Generating Facilities (see also Section XIV)
 - Small and Very Small Wind Energy Facilities (except for roof-mounted small or very small wind energy facilities, which are allowed by-right, pursuant to Section IV Use Regulations, footnote 4).”
- Site Plan Review may be required for Cluster Developments for Commercial Uses (see Section 6-3)
- c) Site Plan Review Process. The Site Plan Review process will be conducted by the Planning Board. For ground-mounted solar installations occupying 1,000 square feet or less, please refer to a guidance document prepared by the Planning Board available at Town Hall, and also located on the Town’s Planning Board web page.
- d) Procedures. An applicant for Site Plan Review shall file a completed application with the Town Clerk. The Town Clerk shall acknowledge receipt of the plans by signing and dating the application form. The application submitted to the Town Clerk shall include seven (7) copies each of an application form, Preliminary Plan for the project, and any narrative documents as outlined in the submittal requirements. Upon receipt of the application, the Town Clerk shall transmit copies of the application to the Planning Board, Zoning Board of Appeals, Conservation Commission, Board of Health, the Highway Superintendent, Historical Commission, the Fire Chief and the Police Chief. These Town Boards and municipal officials shall have 45 days from the date the completed application is received by the Town Clerk to report to the Planning Board their findings and recommendations, and they can attend the public hearing(s). No building permits for projects requiring Site Plan Review shall be issued until the Planning Board has approved the Site Plan or unless the required time period for taking action on a Site Plan has lapsed without action from the Planning Board. The applicant is also responsible for obtaining all applicable permits or approvals that may be required for the project from other Town Boards or municipal officials.
- e) Public Hearing. The Planning Board shall hold a public hearing within 65 days after the filing of a completed application and shall take final action on an application for Site Plan Review within 90 days of the close of the public hearing. Notice and posting of the public hearing shall comply with the provisions of M.G.L. Chapter 40A, Section 11, regarding notice for public hearings. To the extent permitted by law, the public hearing should be coordinated with any other public hearing required.
- f) Required Contents of a Site Plan. All Site Plans shall be prepared by a registered architect, registered land surveyor, registered landscape architect, or registered professional engineer. A locus map at a scale of 1” =

100 feet shall be provided showing parcels and roads within 300 feet of the property line. The Site Plans shall be on standard sheets of 24 inches by 36 inches and prepared at a scale of 1"=40 feet or finer. The Site Plan and accompanying narrative shall contain the following:

(NOTE: Specific items may be waivable on request to the Planning Board, including some details about the locus map described above.)

1. Name of project, boundaries, locus map(s) showing site's location in Town, date, north arrow and scale of plan;
2. Name(s), address(es), and phone number(s) of the owner(s) of the land, the developer (if applicable), and/or their designee;
3. Name, title, address, and phone number of person(s) who prepared the plan;
4. Names and addresses of all owners of record of abutting lots and those within 300 feet of the property line;
5. All existing lot lines, easements and rights of way;
6. Location and use of buildings and structures within 300 feet of the site;
7. Location and use of all existing and proposed buildings and structures, including approximate height and floor area;
8. Location and size in acres of wetlands on the site reviewed and approved by the Buckland Conservation Commission;
9. The location and a description of all proposed sewage disposal systems, sewer connections, water supplies, storm drainage systems, utilities and other waste-disposal methods;
10. Location and date of all registered "perc" tests on the site;
11. Location of all proposed new lot lines;
12. Existing and proposed topography at a two-foot contour interval for the proposed grading and landscape plan;
13. Location of proposed public and private ways on the site;
14. Location and size of proposed parking and loading areas, driveways, walkways, access and egress points;
15. The location and a description of proposed open space or recreation areas;
16. The location of existing farmland and agricultural soils classified as prime farmland or soils of state and local importance;
17. Size and location of existing and proposed sign(s);
18. Surface drainage strategy that prevents increased drainage off-site or pollution;
19. Existing vegetation that will be left undisturbed and proposed landscape features, including the location and a description of screening, fencing and plantings using non-invasive species;
20. Design features which will integrate the proposed development into the existing landscape, maintain neighborhood character, and screen objectionable features from neighbors and roadways;
21. Estimated average daily and peak-hour vehicle trips to be generated by the site and traffic flow patterns for both vehicles and pedestrians, showing adequate access to and from the site and adequate circulation within the site; and
22. Other reasonable information the Planning Board may request in order to make a decision.

g) Decision. The Planning Board's action shall consist of either:

1. Approval of the Site Plan based upon the determination that the proposed project is in compliance and consistent with the criteria set forth in this Bylaw;

2. Approval of the Site Plan subject to conditions, modifications, and restrictions as the Planning Board may deem necessary; or
3. Denial of the Site Plan based upon specific findings such as a determination that there was insufficient information submitted with the proposal to adequately review it or that the project is inconsistent with the requirements of these Zoning Bylaws.

The decision of the Planning Board shall be filed with the Town Clerk within 90 days of the close of the Public Hearing. The written record of the Planning Board's decision including any approved Site Plan shall be filed with the Town Clerk within 14 days of the final vote or sooner to meet the 90 day maximum time frame. A copy of any approved Site Plan and the decision of the Planning Board shall be sent by the Town Clerk to the Building Inspector and the applicant. The Site Plan shall be recorded at the Registry of Deeds by the applicant with confirmation of such recording sent to the Town Clerk.

- h) Administration and Waivers. The Planning Board may adopt and from time to time amend regulations for the submission and approval of Site Plans. The Planning Board may waive any of the requirements for Site Plan Review submittals and approval if the simplicity or scale of the project warrants such action. The Planning Board may also request any additional information it should need to render a decision. For large or complex projects, the Planning Board shall have the right to retain a registered professional engineer, planner, designer or other professional to advise the Board regarding any or all aspects of the Site Plan. The applicant shall be responsible for the costs of such advice.
- i) Compliance with Other Bylaws. The Site Plan shall comply with any zoning bylaws for parking, loading, dimensions, environmental controls and all other provisions of the Zoning Bylaw. Before approval of a Site Plan, the Planning Board may request that the applicant make modifications in the proposed design of the project to ensure that the above criteria are met.
- j) Review Criteria

The Planning Board's evaluation of the proposed Site Plan shall include, as appropriate, the following:

1. Adequacy and arrangement of vehicular traffic access and circulation, including intersections, road widths, pavement surfaces, dividers and traffic controls;
2. Adequacy and arrangement of pedestrian traffic access and circulation, pedestrian walkways, control of intersections with vehicular traffic and overall pedestrian safety and convenience;
3. Location, arrangement, appearance and sufficiency of off-street parking and loading;
4. Location, arrangement, size, design and general site compatibility of buildings, lighting and signs in relation to the terrain and to the use, scale, and proportions of existing and proposed buildings in the vicinity;
5. Location of buildings to provide a solar and wind orientation or other construction methods that encourage energy conservation;

6. Adequacy of stormwater and drainage facilities;
7. Adequacy of landscaping and other screening to minimize the visual impact of the project from public ways or abutting properties; and
8. Protection of farmland and forestry resources.

SECTION XIII: SMALL WIND ENERGY FACILITY BYLAW

13-1 Purpose.

The purpose of this bylaw is to facilitate the responsible development of the town’s wind energy resources by providing standards for the design, placement, construction, monitoring, modification and removal of Small or Very Small Wind Energy Facilities that address public health and safety, minimize impacts on property values and the scenic, natural and historic resources of the town, and provide adequate financial assurances for decommissioning.

13-2 Applicability.

This bylaw applies to all Small and Very Small Wind Energy Facilities to be constructed after the effective date of this bylaw. This bylaw also applies to physical modifications to any existing Small or Very Small Wind Energy Facility that materially alter its type, number, location, height or configuration. Large wind energy facilities defined below are prohibited in all zoning districts (see Section IV – Use Regulations).

13-3 Definitions.

HEIGHT – The distance between the natural grade of the land measured vertically to the tip of the wind turbine blade at its highest point.

LARGE WIND ENERGY FACILITY – A wind energy facility with a height greater than 120 feet or with a Rated Nameplate Capacity of more than 250 kW of electricity.

RATED NAMEPLATE CAPACITY - The maximum rated output of electric power production of the Electric system in Alternating Current (AC) or Direct Current (DC).

SMALL WIND ENERGY FACILITY – A wind energy facility with a height equal to or less than 120 feet with a Rated Nameplate Capacity of no more than 250 kW of electricity.

VERY SMALL WIND ENERGY FACILITY – A wind energy facility with a height equal to or less than 100 feet with a Rated Nameplate Capacity of no more than 25 kW of electricity.

WIND ENERGY FACILITY – All equipment, machinery and structures utilized in connection with the conversion of wind to electricity. This includes but is not limited to, transmission, storage, collection and supply equipment, substations, transformers, towers, wind turbines, foundations, stormwater control measures, service roads and other appurtenant structures, facilities and equipment.

WIND TURBINE – A device that converts kinetic wind energy into rotational energy that drives an electrical generator. A wind turbine typically consists of a nacelle body and a rotor with two or more blades.

13-4 Use Regulations.

Small or Very Small Wind Energy Facilities may only be installed as an accessory use to a residential or non-residential use. No Small or Very Small Wind Energy Facility shall be erected, constructed, or installed without first obtaining a special permit from the Planning Board (SPP – see Section IX, Special Permits) and are also subject to Site Plan Review (SPR – see Section XII, Site Plan Review). Physical modifications to an existing Small or Very Small Wind Energy Facility that materially alter its type, number, location, height or configuration shall also require a special permit from the Planning Board (see Section IX).

13-5 General Requirements.

- a) **Compliance.** The construction, operation, modification and removal of all Small and Very Small Wind Energy Facilities shall comply with all local, state and federal laws.
- b) **Site Control.** The applicant shall demonstrate actual control over and legal access to the proposed site sufficient to allow for the construction and operation and, if necessary, removal of a Small or Very Small Wind Energy Facility.
- c) **Utility Notification.** The applicant shall demonstrate that ISO New England or the utility company that controls the electric grid in the area of the proposed site has been informed of the applicant's intent to install an interconnected Small or Very Small Wind Energy Facility. Off-grid Small or Very Small Wind Energy Facilities shall be exempt from this requirement.
- d) **Operation & Maintenance.** The operator of a Small or Very Small Wind Energy Facility shall maintain the facility, access road(s) and stormwater control measures in good condition.
- e) **Contingency Plan.** The applicant shall submit a contingency plan that outlines the protocols to be followed to mitigate adverse impacts to the town, its residents and the environment. At a minimum, the plan shall include mitigation steps to address the possibility of excessive noise or shadow and flicker.
- f) **Liability Insurance.** The operator of the Small or Very Small Wind Energy Facility shall obtain and keep current an insurance policy, against loss or damage to persons or property, including personal injury or death resulting from the Small or Very Small Wind Energy Facility. The SPGA shall determine the minimum amount of liability insurance required. The operator of the Small or Very Small Wind Energy Facility shall provide the SPGA with proof of liability insurance, in the amount determined by the SPGA, prior to the issuance of a building permit.
- g) **Removal Plan & Cost Estimate.** The applicant shall submit a detailed plan for the removal of the Small or Very Small Wind Energy Facility and restoration of the site to its pre-existing condition upon abandonment or decommissioning. The removal plan shall be prepared by a qualified licensed professional engineer and shall include an estimate of the anticipated removal and site restoration costs that includes a mechanism to

account for inflation.

h) Financial Surety. The operator of the Small or Very Small Wind Energy Facility shall provide the SPGA with the following prior to the issuance of a building permit:

1. Surety to ensure that the proposed Small or Very Small Wind Energy Facility site is properly stabilized to protect downslope properties and public ways. The amount and form of the surety shall be determined by the SPGA.
2. Surety to cover the cost of removal of the Small or Very Small Wind Energy Facility and the restoration of the site in the event the town must remove the facility and restore the site.
3. Surety to cover costs associated with the Contingency Plan.

The amount and form of surety shall be determined by the SPGA, but in no event shall the amount be less than one-hundred twenty-five (125%) percent of the total estimated cost of removal. Every five years the amount of the surety will be evaluated against that rate of inflation and the SPGA may require an increase in the amount. No less than ninety (90) days prior to the expiration of any financial surety required by this bylaw or within 60 days after it has been determined that the surety amount must be increased to keep pace with inflation, the current operator of the Small or Very Small Wind Energy Facility shall provide the SPGA with renewed, extended, increased or replacement financial surety in an amount and form determined by the SPGA in accordance with this bylaw. Acceptable forms of financial surety include cash, irrevocable letter of credit, or a bond.

i) NHESP Letter. The applicant shall petition the Massachusetts Natural Heritage & Endangered Species Program (“NHESP”) for a letter of determination as to the possible existence of rare or endangered species and species of special concern at the proposed site.

13-6 Design Standards.

a) Height. No Small Wind Energy Facility shall exceed 120 feet in height. A Very Small Wind Energy Facility shall not exceed 100 feet in height.

b) Appearance. All Small and Very Small Wind Energy Facilities shall be finished a neutral (white or gray) non-reflective color in order to be less visually obtrusive.

c) Signage. All signs shall comply with the Town of Buckland’s sign bylaw (Section 8-3). A sign should provide 24-hour contact information for emergencies.

d) Lighting. Small or Very Small Wind Energy Facilities shall contain a beacon light only if required by the Federal Aviation Administration. A Small or Very Small Wind Energy Facility may include lights necessary for the safe operation of the facility. All operational lighting shall be directed downwards and screened from roadways and abutting properties with native vegetation. Evidence of the FAA requirement for the facility shall be submitted with the application.

e) Shadow & Flicker. All Small or Very Small Wind Energy Facilities shall be located in areas that do not result in any shadowing or flickering on off-site inhabited buildings. The applicant has the burden of proving that any shadowing or flickering on off-site inhabited buildings will not occur.

f) Appurtenant Structures & Equipment. All appurtenant structures and equipment that are part of a Small or Very Small Wind Energy Facility shall comply with the dimensional requirements of the underlying zoning district, including but not limited to setbacks and height.

g) Noise Regulations. Noise generated by Small or Very Small Wind Energy Facilities and appurtenant equipment shall comply with the provisions of the Massachusetts Department of Environmental Protection's, Division of Air Quality Noise Regulations (310 CMR 7.10), as amended, as well as and local regulations. A source of sound will be considered in violation of this bylaw if the source:

- a. increases the broadband sound level by more than 5 db(A) above ambient; or
- b. 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
- c. results in sound or noise levels greater than 30 db(A) (*typical range 30-50 db(A) for rural or quiet residential areas*); or
- d. results in excessive low frequency noise

Said criteria are measured both at the property line and at the nearest inhabited residence. "Ambient" is defined as the background A-weighted sound level that is exceeded 90% of the time measured during equipment hours, unless established by other means with the consent of the Planning Board.

h) Setbacks.

1. No Small or Very Small Wind Energy Facility shall be located within ½ mile (2,640 feet) of the nearest off-site inhabited building in existence on the date the application is received by the SPGA. The SPGA may reduce the setback requirement from off-site inhabited buildings for a Very Small Wind Energy Facility upon written request from the applicant but only if written permission is granted by all abutters within ½ mile of the proposed Very Small Wind Energy Facility.

2. All Small and Very Small Wind Energy Facilities shall be set back a distance equal to the lesser of 360 feet or 3 times the height of the Small or Very Small Wind Energy Facility from property lines, on-site inhabited buildings, public rights of way and recreational trails. The SPGA may reduce the setback requirement from property lines for either Small or Very Small Facilities upon written request from the applicant but only if written permission is granted by all abutters within 300 feet of the property lines.

i) Unauthorized Access. All Small and Very Small Wind Energy Facilities shall be constructed to prevent unauthorized persons from gaining access to the facility.

j) Emergency Response Access. Access to the Small or Very Small Wind Energy Facility shall be maintained to allow for safe access by local emergency vehicles. Local public safety officials shall be provided with the ability to access the facility as needed to respond to emergencies.

k) Habitat Fragmentation. To the maximum extent possible, Small and Very Small Wind Energy Facilities, and any associated roadways or transmission lines shall be located in or adjacent to areas where land is already cleared to avoid habitat fragmentation.

l) Vegetation Clearing. The clearing of natural vegetation shall be limited to that which is necessary for the construction, operation, and maintenance of the Small or Very Small Wind Energy Facility, and any associated roadways or transmission lines. Revegetation shall be provided for restoration areas required for construction but not necessary for ongoing maintenance and operations. Only native species typically found in the facility's environment may be used for restoration.

m) Wetlands. All Small and Very Small Wind Energy Facilities and any associated roadways or transmission lines shall be constructed in compliance with all applicable local, state and federal laws pertaining to wetlands.

n) Wildlife. All Small and Very Small Wind Energy Facilities and any associated roadways and transmission lines shall be constructed to avoid or minimize impacts to wildlife, with particular attention paid to avian and bat species, as well as rare species, endangered species and species of special concern.

o) Stormwater Management. All stormwater controls installed at the Small or Very Small Wind Energy Facility site and on associated roadways shall be constructed and managed according to the Massachusetts Stormwater Policy. Impervious surfaces shall be minimized to the maximum extent feasible.

p) Invasive Species Management. The applicant and subsequent Small or Very Small Wind Energy Facility operator shall utilize best management practices during construction and post-construction to control the introduction of invasive species at the Small or Very Small Wind Energy Facility Site and along the associated roadways and transmission lines.

q) Visual Impacts. The Small or Very Small Wind Energy Facility shall be designed to minimize visual impacts to adjacent roads and abutting properties whether developed or not. Natural vegetation shall be preserved to the maximum extent feasible and vegetative buffers should be provided to blend the equipment into the surroundings in order to minimize the visual impacts of the Small or Very Small Wind Energy Facility from public and private roads open to the public and abutting properties.

13-7 Small and Very Small Wind Energy Facility Site Studies.

a) Balloon/Crane Test. If the height of the proposed Small or Very Small Wind Energy Facility is to be taller than 80 feet, the applicant shall arrange for a balloon or crane test at the proposed site to illustrate the Facility's height. The balloon or crane test is to take place within thirty (30) days prior to the public hearing to construct a Small or Very Small Wind Energy Facility. The balloon, if used, shall be three (3) foot diameter balloon, brightly colored, and clearly visible. The balloon or crane shall remain raised in place for a period of at least three (3) consecutive days including a weekend day between sunrise and sunset, and will be subject to a repeat if visibility or weather conditions require. The date, time and location of such test shall be advertised in a newspaper of general circulation in the town at least seven (7) days prior to, but no more than 21 days before, the date of the test. The Planning Board shall be notified of the planned dates of the

flight be certified mail at least two (2) weeks before the flight.

b) Sight Line Simulations. The SPGA shall select up to four (4) locations from which the applicant shall prepare and submit sight line simulations from the chosen location to the proposed Small or Very Small Wind Energy Facility site. All simulations shall be in color and provide an accurate representation of the height, width and breadth of the proposed Small or Very Small Wind Energy Facility.

c) Project Viewshed Map. The applicant shall submit as part of its application a viewshed map showing all areas within one (1) mile of the proposed Small Wind or Very Small Energy Facility site that will be within sight distance including streets, National Historic Districts, Scenic Byways, historic sites and structures, recreational resources, publicly owned land, and other local landmarks.

d) Noise Analysis. The applicant shall submit as part of its application the results of a noise analysis to the SPGA. The noise analysis shall be conducted in accordance with industry standards and certified by a qualified independent acoustical licensed professional engineer. The noise analysis shall contain sufficient information for the SPGA to determine whether the operation of the proposed Small or Very Small Wind Energy Facility will comply with Massachusetts Department of Environmental Protection's, Division of Air Quality Noise Regulations (310 CMR 7.10) and local regulations (see 13-6 g)). In completing the noise analysis, the acoustical licensed professional engineer shall consider the unique topography of the surrounding area, prevailing wind direction and atmospheric conditions, such as high wind shear or thermal inversion that may affect the propagation of sound emitted from the Small or Very Small Wind Energy Facility. The Noise Analysis shall also include an analysis of any expected impacts of low frequency noise.

e) Shadow & Flicker Analysis. The applicant shall conduct a shadow and flicker analysis and submit its findings to the SPGA as part of its application demonstrating that any shadowing or flickering on off-site inhabited buildings will not occur.

f) Avian & Bat Species Study and Analysis. An avian and bat species study and analysis shall be conducted and certified by a qualified independent wildlife biologist acceptable to the SPGA. The avian and bat species study and analysis shall contain sufficient information to fully characterize and determine the risk posed by the proposed Small or Very Small Wind Energy Facility to avian and bat species. The study and analysis may be required to be conducted at certain times of the year depending on the species and this may impact the timing of the application. The applicant shall submit the results of an avian and bat species study and analysis to the SPGA as part of its application.

13-8 Pre-application Conference.

Prior to the submission of an application for the construction or modification of a Small or Very Small Wind Energy Facility, applicants are strongly encouraged to meet with the SPGA at a public meeting to discuss the proposed facility project and to clarify the filing requirements and permitting process.

13-9 Procedures.

Upon receipt of a complete application for a Small or Very Small Wind Energy Facility, the SPGA shall review and take action upon the application in accordance with the Special Permit procedures set forth in Section IX, the Site Plan Review procedures set forth in Section XII, and this section.

13-10 Reasonable Conditions & Mitigation.

The SPGA may impose reasonable conditions, safeguards and limitations on time and use and may require the applicant to implement all reasonable measures to mitigate unforeseen adverse impacts of the Small or Very Small Wind Energy Facility should they occur.

13-11 Application Requirements.

The applicant shall submit the following required information as part of the application for a Small or Very Small Wind Energy Facility Special Permit. All site plans shall be signed and sealed by a licensed professional engineer or licensed surveyor.

- a) Contact Information. Name, address, phone number, e-mail and signature of the applicant, as well as all co-applicants or property owners, and the name, contact information, and the signature of any agents representing the applicant.
- b) Site Identification. Identify the location of the proposed Small or Very Small Wind Energy Facility. Provide the street address, if any, and the tax map and parcel number(s).
- c) Location Map. A relevant portion of the most recent USGS Quadrangle Map at a scale of 1 inch = 25,000 feet or similar scale showing the proposed Small or Very Small Wind Energy Facility site and any associated roadways or transmission lines and the area within a one (1) mile radius of the proposed site.
- d) Vicinity Map. A map of the proposed Small or Very Small Wind Energy Facility site at a scale of 1 inch = 300 feet or similar scale, with existing contour intervals no greater than ten (10') feet showing the entire area within a one thousand (1000') foot radius of the proposed Small or Very Small Wind Energy Facility and showing the following:
 1. Existing topography, public and private roads, recreation trails, property lines of all abutters within one thousand (1000') feet, structures including their use, historic sites, cultural sites, wetlands, known bat hibernacula, known critical habitat areas, other environmentally sensitive areas, location of existing and any proposed electric transmission lines, transformers, substations, and access easements.
- e) Site Plan. A site plan with a scale of 1 inch = 40 feet, unless otherwise noted with contour intervals no greater than two (2') feet showing the following:
 1. Property lines of the proposed Small or Very Small Wind Energy Facility site and adjacent parcels within three (3) times the height of the Small or Very Small Wind Energy Facility. Use scale of 1 inch = 100 feet;
 2. Outline of all existing structures, including their uses, located within three (3) times the height of the Small or Very Small Wind Energy Facility with distances to the Small or Very Small Wind Energy Facility listed. Use scale of 1 inch = 100 feet;
 3. Existing and proposed public and private roads, driveways, and recreational trails within three (3) times the height of the Small or Very Small Wind Energy Facility. Use scale of 1 inch = 100 feet;
 4. Representations, dimensioned and to scale, of the proposed Small or Very Small Wind Energy Facility including, but not limited to, tower foundations, guy anchors, cable locations, associated equipment and

structures, fencing, electric transmission infrastructure and access roads;

5. All proposed changes to the existing site and any associated access roads and transmission lines, including but not limited to areas of temporary clearing, areas of permanent clearing, areas of grading, and areas of cut and fill;

6. Delineation of all wetland resource areas and buffers on the proposed Small or Very Small Wind Energy Facility site and any associated access roads and transmission lines;

7. Location of known habitat areas for rare species, endangered species and species of special concern including Priority Habitat areas identified by the NHESP; and

8. A cross section of any proposed access road indicating its width, crown, depth of gravel, drainage, and paving or other surface material.

f) Elevations. Siting elevations or views at grade from north, south, west and east for a distance equal to 1.5 times the height of the Small or Very Small Wind Energy Facility around the proposed Small or Very Small Wind Energy Facility. Elevations shall be at one quarter inch equals one foot or similar scale and show the following:

1. The proposed Small or Very Small Wind Energy Facility and any associated equipment, existing and proposed structures, and security barriers with total elevation dimensions.

2. Existing and proposed trees and shrubs at the time of application with approximate elevations dimensioned.

g) Technical Information.

1. Documentation of the Small or Very Small Wind Energy Facility's nameplate capacity, manufacturer, model number, tower height, rotor diameter, braking mechanisms, other safety mechanisms, tower type, color, foundation type and foundation dimensions.

h) Stormwater Control Plans. Site plans showing the drainage of surface water and plans to control erosion and sedimentation, during construction and as a permanent measure, which show conformance to the Massachusetts Stormwater Policy.

i) Other Information.

1. Documents establishing legal access to and control of the proposed Small or Very Small Wind Energy Facility site as required by § 13-5 b).

2. Documents demonstrating that the applicant has notified ISO-New England or the local electric supplier as required by §13-5 c).

3. Operation and maintenance plan as required by § 13-5 d).

4. Plans and costs estimates for the removal of the Small or Very Small Wind Energy Facility as required by § 13-5 g).

5. Studies and materials required by §13-7.

6. Contingency plan as required by §13-5 e).

7. Certification of height approval from the FAA if required, including required lighting.

8. NHESP letter as required by § 13-5 i).

13-12 Waiver.

Upon written request of the applicant, the SPGA may waive any of the application requirements contained in §

13-11, as the SPGA, in its discretion, deems appropriate.

13-13 Abandonment & Removal of Small or Very Small Wind Energy Facilities.

a) The most recent operator shall remove the Small or Very Small Wind Energy Facility, or any part thereof, at the end of its useful life or when it has been abandoned, as defined herein, and shall restore the site in accordance with its removal plan. The most recent operator shall notify the Building Inspector by certified mail of the proposed date of discontinuance. Absent notice of a proposed date of discontinuance, the Small or Very Small Wind Energy Facility shall be considered abandoned if it is not operated for a period of six (6) months.

b) The most recent operator shall physically remove the Small or Very Small Wind Energy Facility and restore the site within one-hundred eighty days (180) days from the date of discontinuance or abandonment. If the most recent operator fails to remove the Small or Very Small Wind Energy Facility within the one-hundred eighty (180) day period, the Town shall have the right, after receipt of an appropriate court order, to enter onto the site and physically remove the Small or Very Small Wind Energy Facility and restore the site at the sole expense of the most recent operator. As a condition of Special Permit approval, an applicant 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 or covered by the Financial Surety (Section 13-5 h) provided by the applicant.

13-14 Technical Review.

Upon receipt of an application for a Small or Very Small Wind Energy Facility special permit, the SPGA may retain independent professional and technical consultants, including legal counsel, at the applicant's expense, pursuant to M.G.L. Chapter 44 §53G, to assist the SPGA with its review of application materials and to monitor the construction project to ensure that all work is conducted in accordance with approved plans and conditions. The SPGA may direct the applicant to deposit funds with the SPGA for such review at the time the application is accepted, and to add funds as needed upon notice. Failure to comply with this section shall be good grounds for denying the application. Upon approval or disapproval of the application, any excess amount in the account attributable to the application processing, including any interest accrued, shall be refunded to the applicant.

13-15 Lapse of Approval.

Any Special Permit approved to construct, operate or modify a Small or Very Small Wind Energy Facility pursuant to this bylaw shall automatically expire if:

a) The Small or Very Small Wind Energy Facility is not installed and operating within two (2) years from the date of approval or if construction has not commenced within one (1) year; or

b) The Small or Very Small Wind Energy Facility is abandoned or discontinued.

13-16 Violations.

It is unlawful for any person or entity to construct, install, modify or operate a Small or Very Small Wind

Energy Facility that is not in compliance with this bylaw or with any condition contained in a Special Permit, issued pursuant to this section. Complaints regarding flicker or noise impacts shall be filed with the Board of Health. The Board of Health may hire an independent consultant, at the expense of the owner and/or operator, to conduct a noise or flicker analysis and will report any violations to the Planning Board and Building Inspector. In the event of a violation, the Planning Board will review the conditions of the Special Permit and may impose mitigation measure including those contained in the Contingency Plan to ensure compliance with the Special Permit and this bylaw.

13-17 Penalties.

Any person or entity that fails to comply with any provision of this bylaw or any condition contained in a special permit, issued pursuant to this section shall be subject to enforcement and penalties as allowed by applicable law.

13-18 Severability.

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

SECTION XIV: LARGE-SCALE GROUND-MOUNTED SOLAR ELECTRIC GENERATING INSTALLATIONS

14-1 Purpose.

The purpose of this bylaw is to facilitate the creation of new Large-Scale Ground-Mounted Solar Electric Generating Installations (see Section 14-3 Definitions) by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations that address public safety, minimize impacts on environmental, scenic, natural and historic resources and to provide adequate financial assurance for the eventual decommissioning of such installations.

The provisions set forth in this section shall apply to the construction, operation, repair and/or removal of Large-Scale Ground-Mounted Solar Electric Installations occupying more than 1,000 square feet of land.

Small-scale (occupying 1,000 square feet or less) ground-mounted solar electric generating installations which are an accessory structure to a residential or nonresidential use do not need to comply with this section, but are subject to Site Plan Review (see Section XII), require a building permit, and must comply with all applicable local, state and federal requirements, including but not limited to all applicable safety, construction, electrical, and communications requirements and other provisions of the Zoning Bylaws, such as setback requirements.

14-2 Applicability

This section applies to Large-Scale Ground-Mounted Solar Electric Generating Installations occupying more than 1,000 square feet of land. This section shall also pertain to physical modifications that materially alter the type, configuration, or size of Large-Scale Ground-Mounted Solar Electric Generating Installations or related equipment.

- a) Large-Scale Ground-Mounted Solar Electric Generating Installations shall require a Special Permit and Site Plan Review in accordance with the Zoning Bylaws of the Town in addition to meeting the requirements of this Section XIV. An installation may be permitted on one or more adjacent parcels existing as of the date of the adoption of this bylaw (including those separated by a roadway) up to a maximum of 5 acres in the Rural Residential, Commercial, Historic Industrial, and Industrial Districts in accordance with Section IV: Use Regulations.
- b) Large-Scale Ground-Mounted Solar Electric Generating Installations covering more than 5 acres are not allowed anywhere in Town.

14-3 Definitions

Large-Scale Ground-Mounted Solar Electric Generating Installation: A solar electric system that is structurally mounted on the ground and is not attached to a roof or wall of a structure, and occupies more than 1,000 square feet of land.

Rated Nameplate Capacity: The maximum rated output of electric power production of the Electric system in Alternating Current (AC) or Direct Current (DC).

Site Plan Review: Review by the Planning Board to determine conformance with the Zoning Bylaws.

14-4 General Requirements for all Large-Scale Solar Ground-Mounted Solar Electric Generating Installations

The following requirements are common to all Large-Scale Ground-Mounted Solar Electric installations.

a) Compliance with Laws, Bylaws and Regulations

The construction and operation of all Large-Scale Ground-Mounted Solar Electric Installations 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 require a building permit and shall be constructed in accordance with the Massachusetts State Building Code.

14-5 Site Plan Review

All Ground-Mounted Solar Electric Installations shall undergo Site Plan Review (see Section XII) by the Planning Board prior to construction, installation or modification as provided in this section.

a) General

All plans and maps shall be prepared, stamped and signed by a Professional Engineer licensed to practice in Massachusetts.

b) Required Documents

The project proponent shall provide the following documents in addition to or in coordination with those required for Site Plan Review (see Section XII).

1. A site plan showing:

- a. Property lines, map and lot number from the Assessor's records, and physical features, including roads and topography, for the project site;

- b. Proposed changes to the landscape of the site including grading, vegetation clearing and planting, exterior lighting, screening, and new structures, including their height;
 - c. Locations of wetlands, Permanently Protected Open Space, Priority Habitat Areas and BioMap 2 Critical Natural Landscape Core Habitat mapped by the Natural Heritage & Endangered Species Program (NHESP) and “Habitat of Potential Regional or Statewide Importance” also known as “Important Habitat” mapped by the DEP.
 - d. Locations of floodplains or inundation areas for moderate or high hazard dams;
 - e. Locations of local or National Historic Districts;
 - f. 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;
 - g. 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;
 - h. One or three line electrical diagram detailing the solar electric installation, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and overcurrent devices;
 - i. Documentation of the major system components to be used, including the electric generating components, transmission systems, mounting system, inverter, etc.;
 - j. Name, address, and contact information for proposed system installer;
 - k. Name, address, phone number and signature of the property owners and project proponent, as well as all co-proponents, if any;
 - l. The name, contact information and signature of any agents representing the project proponent;
 - m. Provision of water including that needed for fire protection; and
 - n. Existing trees 6” caliper or larger and shrubs.
2. An operation and maintenance plan (see Section 14-7 a);
 3. Zoning district designation for the parcel(s) of land comprising the project site (submission of a copy of a zoning map with the parcel(s) identified is suitable for this purpose);
 4. Proof of liability insurance;
 5. Description of financial surety that satisfies Section 14-13 c);
 6. Sight line representation. A sight line representation shall be drawn from that portion of any public road within 300 feet of the solar electric generating installation that would have the clearest view of the proposed facility, and the closest facade of each residential building (viewpoint) within 300 feet of the highest point (visible point) of the solar electric generating installation. Each sight line shall be depicted in profile, drawn at one-inch equals 40 feet. The profiles shall show all intervening trees and buildings;
 7. 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 300 feet of the solar electric generating installation. 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;
 8. Landscape plan that satisfies 14-7 b); and
 9. Documentation provided by a licensed professional acoustical engineer, approved by the Planning Board and paid for by the applicant, of projected noise levels to be generated by the installation.

The project proponent shall submit documentation of actual or prospective access and control of the project site sufficient to allow for construction and operation of the proposed solar electric installation.

14-7 Operation & Maintenance & Landscape Plans

a) Operation & Maintenance Plan

The project proponent shall submit a plan for the operation and maintenance of the Large-Scale Ground-Mounted Solar Electric Generating Installation, 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.

b) Landscape Plan

The project proponent shall submit a Landscape Plan detailing all proposed changes to the landscape of the site including: vegetation removal, temporary or permanent access roads, grading, exterior lighting and screening of structures. The Landscape Plan shall show the type and location of vegetation proposed to screen the installation including appurtenant structures from public ways and adjacent properties. The depth of the screen shall be 30 feet and shall be composed of native trees and shrubs staggered for height and density that shall be properly maintained. The owner/operator shall not remove any naturally occurring vegetation such as trees and shrubs unless it adversely affects the performance and operation of the solar installation.

14-8 Utility Notification

No Large-Scale Ground-Mounted Solar Electric Generating Installations shall be constructed until evidence has been given to the 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. Off-grid systems shall be exempt from this requirement.

14-9 Dimension and Height Requirements

a) Setbacks

For Large-Scale Ground-Mounted Solar Electric Generating Installations, front, side and rear setbacks and setbacks from property lines shall be as follows:

1. Front yard: The front yard depth shall not be less than 50 feet.
2. Side yard. Each side yard shall have a depth of at least 50 feet.
3. Rear yard. The rear yard depth shall not be less than 50 feet.

The required setback areas should not be included in the maximum acre calculations for solar electric generating installations (see Section 14-2 b).

b) Appurtenant Structures

All appurtenant structures to Large-Scale Ground-Mounted Solar Electric Generating Installations shall be subject to the Town's Zoning Bylaw requirements concerning the bulk of structures, lot area, setbacks as specified in Section 14-9 a), open space, parking and building coverage requirements. All such appurtenant structures, including but not limited to, equipment shelters, storage facilities, fencing, transformers, and substations, shall be architecturally compatible with each other. Structures shall be screened from view by vegetation and/or joined or clustered to avoid adverse visual impacts.

c) Height of Structures

The height of any structure associated with a Large-Scale Ground-Mounted Solar Electric Generating Installation shall not exceed 20 feet.

14-10 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. Lighting shall not be kept on after 9:00 p.m. unless there is an emergency or is required for safety purposes as determined by the Buckland Emergency Management Director.

b) Signage

Signs on Large-Scale Ground-Mounted Solar Electric Generating Installations shall comply with the Town’s sign regulations, Section 8-3 of the Zoning Bylaws. A sign consistent with Section 8-3 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, removal of stone walls or trees and minimize impacts to environmental or historic resources.

e) Control of Vegetation

Herbicides may not be used to control vegetation at the solar electric installation. Mowing, grazing, or the use of pervious pavers or geotextile materials underneath the solar array are possible alternatives.

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 DEP pursuant to MassDEP 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 of hazardous materials to the environment and to prevent potential contamination of groundwater are required. A list of any hazardous materials proposed to be located on the site and a plan to prevent their release shall be provided to the

Planning Board and Fire Chief.

g) Noise

Noise generated by Large-Scale Ground-Mounted Solar Electric Generating Installations 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. increases the broadband sound level by more than 5db(C) above the pre-construction ambient noise level;
3. 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
4. results in sound or noise levels greater than 30 dBA.

Sound levels must comply with the above stated criteria, at both 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 applicant's acoustical engineer. "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 Planning Board and paid for by the applicant. All testing shall be done in accordance with the professional standards of the appropriate accrediting agencies.

h) Visual Impacts

The solar electric generating installation shall be designed to minimize visual impacts, including preserving natural vegetation to the maximum extent possible, blending in equipment with the surroundings, and adding vegetative buffers to provide an effective visual barrier from adjacent roads and to screen abutting residential properties, whether developed or not. Landscaping shall be maintained by the owner/operator of the solar electric generating installation. Siting shall be such that the view of the solar electric generating installation from other areas of Town shall be as minimal as possible, in the judgment of the Planning Board.

14-11 Safety and Environmental Standards

a) Emergency Services

The Large-Scale Ground-Mounted Solar Electric Generating Installations owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the local Fire 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.

b) Land Clearing, Soil Erosion and Habitat Impacts

The facility shall be designed to minimize impacts to agricultural land and should be compatible with continued agricultural use to the maximum extent possible. 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 Large-Scale Ground-Mounted Solar Electric Installation or otherwise prescribed by applicable laws, regulations, and bylaws. In no event shall clear cutting of forest exceed 5 acres. The design shall minimize the use of concrete and other impervious materials to the maximum extent possible. Locating Large-Scale Ground-Mounted Solar Electric Generating Installations on grades in excess of 15% shall be avoided to the maximum extent feasible.

c) Habitat Impacts

Large-Scale Ground-Mounted Solar Electric Generating Installations shall not be located on Permanently Protected Open Space or Priority Habitat and BioMap 2 Critical Natural Landscape Core Habitat areas mapped by the Natural Heritage and Endangered Species Program (NHESP) and shall be designed to minimize impacts to “Habitat of Potential Regional or Statewide Importance” also known as “Important Habitat” mapped by the DEP to the maximum extent feasible.

14-12 Monitoring, Maintenance and Reporting

a) Solar Electric Generating Installation Conditions

The Large-Scale Ground-Mounted Solar Electric Generating Installation owner or operator shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and maintaining the 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 solar electric generating installation and any access road(s).

b) Modifications

All material modifications to a solar electric generating installation made after issuance of the required building permit shall require approval by the Planning Board.

c) Annual Reporting

The owner or operator of the installation shall submit an Annual Report which certifies compliance with the requirements of this bylaw and the approved site plan, including control of vegetation, noise standards, and adequacy of road access. The Annual Report shall also provide information on the maintenance completed during the course of the year, the amount of electricity generated by the facility, and the amount of surety available for decommissioning or indemnification (see Section 14- 13). The Annual Report shall be submitted to the Select Board, Planning Board, Fire Chief, Emergency Management Director, Building Inspector, Board of Health and Conservation Commission (if a Wetlands Permit was issued) no later than 45 days after the end of the calendar year.

14-13 Abandonment, Decommissioning, Financial Surety & Indemnification

a) Removal Requirements

Any Large-Scale Ground-Mounted Solar Electric Generating Installation which has reached the end of its useful life or has been abandoned consistent with Section 14-13 b) 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. Decommissioning shall consist of:

1. Physical removal of all Large-Scale Ground-Mounted Solar Electric Generating Installations, structures, equipment, security barriers and transmission lines from the site.

2. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
3. 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.

b) Abandonment

Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the solar electric installation 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 Large-Scale Ground-Mounted Solar Electric Generating Installation 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 Large-Scale Ground-Mounted Solar Electric Generating Installation. As a condition of Site Plan 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.

c) Financial Surety

Proponents of Large-Scale Ground-Mounted Solar Electric Generating Installations 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 remediate 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, as determined by the project proponent and the Town. 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, prepared by a licensed Professional Engineer. The amount shall include a mechanism for calculating increased removal costs due to inflation.

d) Indemnification

The owner/operator shall indemnify and hold harmless the Town of Buckland 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 replenish the surety to its original amount in the event that the surety is drawn down too low to meet indemnification as determined by the Planning Board.

Appendix A: Back Lot Soil Type Eligibility List: Soils in Franklin County Classified as Prime or of Statewide Importance by the Soil Conservation Service.

Soil in Franklin County, Massachusetts that are prime farmland:

Agawam Fine sandy loam (AfA and AfB), 0-8% slopes
Agawam fine sandy loam, silty substratum (AfA and AgB), 0-8% slopes
Belgrade, silt loam (BaA and BaB), 0-8% slopes
Berkshire fine sandy loam (BbB) 3-8% slopes
Berkshire fine sandy loam, dark subsoil (BeB), 3-8% slopes
Bernardston Channery silt loam (BhB), 3-8%
Broadbrook very fine sandy loam (BsB, 3-8%
Buckland fine sand loam (BuA and BuB), 0-8% slopes
Buxton silt loam (BxA and BxB), 0-8% slopes
Charlton fine sandy loam (CkA and CkB), 0-8% slopes
Cheshire fine sandy loam (CoB), 3-8% slopes
Colrain fine sandy loam (CsB), 3-8% slopes
Hadley silt loam (HaA), 0-3% slopes
Hadley very fine dandy loam, overflow (HcA), 0-3% slopes
Hadley very fine sandy loam (HbA), 0-3% slopes
Hartland silt loam (HdA), 0-3% slopes
Marlow loam (MaB), 3-8% slopes
Marlow loam, dark subsoil (MdB), 3-8% slopes
Merrimac fine sandy loam (MgA and MgB), 0-8% slopes
Ninigret fine dandy loam (NfA and NfB), 0-10% slopes
Ninigret fine sandy loam, silty substratum (NgA and NgB), 0-8% slopes
Ondawa fine sandy loam (of)
Peru loam (PbA and PbB), 0-8% slopes
Pittstown silt loam (PnB), 0-8% slopes
Podunk fine sandy loam (Po)
Scituate fine sandy loam (SeA and SeB), 0-8% slopes
Shelburne loam (SnB), 3-8% slopes
Sudbury fine sandy loam (StA and StB), 0-8% slopes
Suffield silt loam (SuB), 3-8% slopes
Sutton fine sandy loam (SwB), 3-8% slopes
Winooski very fine sandy loam (Ww)

Soils in Franklin County, Massachusetts that are classified as farmland of state or local importance.

Agawam fine sandy loam (AfC), 8-15% slopes
Agawam fine sandy loam, silty substratum (AgC), 8-20% slopes
Berkshire fine sandy loam (BbC), 8-15% slopes
Berkshire fine sandy loam, dark subsoil (BeC), 8-15% slopes
Berkshire very stony fine sandy loam (BcB and BcC), 3-15% slopes
Berkshire very stony fine sandy loam, dark subsoil (BfB and BfC), 3-15% slopes
Bernardston channery silt loam (BhC), 8-15%
Bernardston very stony silt loam (BmB and BmC), 3-15%

Broadbrook very fine sandy loam (BsC), 8-15% slopes
 Broadbrook very stony very fine sandy loam (BtC), 3-15% slopes
 Buckland fine sandy loam (BuC), 8-15% slopes
 Buckland very stony fine sandy loam (BvB and BvC), 3-15% slopes
 Buxton silt loam (BxB), 3-10% slopes
 Charlton fine sandy loam (CkC), 8-20% slopes
 Charlton very stony fine sandy loam (CmC), 3-15% slopes
 Cheshire fine sandy loam (CoC), 8-15% slopes
 Cheshire very stony fine sandy loam (CpB and CpC), 3-15% slopes
 Colrain fine sandy loam (CsC), 8-15% slopes
 Colrain Very stony fine sandy loam (CvC), 8-15% slopes
 Deerfield loamy fine sand (DfA), 3-8% slopes
 Dutchess silt loam (DuB and DuC), 3-15% slopes
 Dutchess very stony silt loam (DvC), 3-15% slopes
 Essex Fine sandy loam (EfB and EfC), 3-15% slopes
 Essex very stony fine sandy loam (EvB and EvC), 3-15% slopes
 Gloucester fine sandy loam (GfA, GfB and GfC), 0-15%
 Gloucester sandy loam (GmB and GmC), 3-15%
 Gloucester very stony sandy loam (GvB and GvC), 3-15% slopes
 Hadley silt loam (HaB), 3-8% slopes
 Hadley very fine sandy loam (HbB), 3-8% slopes
 Hartland silt loam (HdB), 3-8% slopes
 Hinckley sandy loam (HkA and HkB), 0-8% slopes
 Hinckley gravelly very fine sandy loam (HgA and HgB), 0-8% slopes
 Hinckley loamy sand (HkA and HkB), 0-8% slopes
 Hollis fine sandy loam (HmB), 3-8% slopes
 Marlow loam (MaC), 8-15% slopes
 Marlow loam, dark subsoil (MdC), 8-15% slopes
 Marlow very stony loam (MbB and MbC), 3-15% slopes
 Marlow very stony loam, dark subsoil (MeB and MeC), 3-15%
 Merrimac fine sandy loam (MgC), 8-15% slopes
 Merrimac sandy loam (MmA, MmB and MmC), 0-15% slopes
 Peru loam (PbC), 8-15% slopes
 Peru very stony loam (PcB and PcC), 3-15% slopes
 Scituate fine sandy loam (SeC), 8-15% slopes
 Scituate very stony fine sandy loam (SfA, SfB and SfC), 0-15% slopes
 Shelburne loam (SnC), 8-15% slopes
 Suffield silt loam (SuC2), 8-15% slopes
 Suncook loamy sand (Sv), 0-5% slopes
 Sutton fine sandy loam (SwC), 8-20% slopes
 Sutton very stony fine sandy loam (SxB and SxC), 3-15% slopes
 Warwick gravelly loam (WgA, WgB and WgC) 0-15% slopes
 Warwick gravelly fine sandy loam (WfA, WfB and WfC), 0-15% slopes
 Westminster loam (WmB), 3-8% slopes
 Windsor loamy fine sand (WuA and WuB), 0-8% slopes
 Winooski very fine sandy loam (Ww)