TOWN OF MORRISTOWN PLANNING COMMISSION
MEETING NOTICE & AGENDA
COMMUNITY MEETING ROOM
43 Portland St. Morrisville, VT 05661
5:00 PM Tuesday, September 8, 2026

Join Zoom Meeting or by phone join via conference call (audio only): 1 (646) 558-8656 | Meeting ID: 810 342 4528 | Passcode 05661
The meetings will be live-streamed on the Town of Morristown's website: https://www.morristownvt.gov/community/page/meetings-agendas-minutes

I. CALL TO ORDER

II. AGENDA CHANGES/ADDITIONS

III. APPROVE PRIOR MEETING MINUTES

1. Approve minutes from 8-25-26

IV. NEW BUSINESS

1. Review interm bylaw on data centers and high-impact uses passed by the Selectboard.
2. Review letter on planning implementation priorities.
3. Discussion on town visioning event being organized by the Morristown Civic Project to be held Nov 5.
4. Discussion of Morristown sidewalk policy.

V. FUTURE PLANNING AGENDA TOPICS

VI. OLD BUSINESS

1. Continued discussion on earth extraction regulations.
2. : Discussion on revised earth extraction language to address legal feedback.
3. : Consider whether to continue with a tiered approach or consider other alternatives.

VII. CORRESPONDENCE/NOTICES

VIII. ADJOURN

PLANNING COMMISSION MEETING MINUTES
OF AUGUST 25, 2026

Members: Etienne Hancock, Joshua Goldstein, Wally Reeve

Absent: John Meyer, James Morris,

ADMINISTRATION and STAFF: Tyler Machia Zoning and Planning Administrator

PARTICIPANTS/GUESTS: Martin Green

CALL TO ORDER

Joshua Goldstein called the Planning Committee to order at 5:00 PM at the Tegu Building.

AGENDA CHANGES/ADDITIONS

None

APPROVE PRIOR MEETING MINUTES

1. **Approve minutes from 7/14/26.**

   Motion made by Wally Reeve to approve the minutes of 7/14/26. Motion seconded by Etienne Hancock. Motion carried. (3/0)

NEW BUSINESS

1. **Continued discussion of Identify 5 priorities from chapter 7 of the town plan to discuss with MACC and the Economic Development Coordinator at a future meeting.**

   The planning commission discussed several priority items from the implementation section of the town plan that other relevant stockholders could help implement. The commission decided to draft a letter to send to these stakeholders outlining these priorities and asking if any of these specific priorities could be taken on as part of their ongoing work.

2. **Continued discussion on earth extraction regulations.**

   The commissioners briefly reviewed the Selectboard's proposed interim bylaws. Staff noted that some of the ideas that the Selectboard was considering had relevance to the ongoing conversation on earth extraction. The Commission reviewed revisions made to the proposed earth extraction rules based on legal advice about ongoing monitoring and compliance requirements. The changes included removing sections related to air pollution standards, blasting operations, and complaint processes that required ongoing monitoring, while keeping one-time requirement standards that the DRB could effectively review at a public hearing. The Commissioners discussed challenges with monitoring earth extraction projects, particularly noting that the proposed tiered approach may be impractical for small projects like single-family homes while being necessary for larger developments. Josh emphasized the need to find a middle ground between avoiding onerous requirements for small builders and properly monitoring high-impact projects. Staff asked if the commission was interested in continuing to develop a tiered approach focused on earth extraction alone or to shift the focus to a broader conversation around performance standards that would apply to all projects. It was decided to wait till there were additional members present to continue this conversation.

a. **Discuss Selectboards interm zoning bylaws and its impact on earth extraction.**

b. **Discussion on revised earth extraction language to address legal feedback.**

    a. **Consider whether to continue with a tiered approach or consider other alternatives.**

FUTURE PLANNING AGENDA TOPICS

1. **Discussion of Morristown sidewalk policy.**

   The group discussed adding the sidewalk policy and driveway width requirements to a future agenda.

OLD BUSINESS

None

CORRESPONDENCE/NOTICES

None

ADJOURN

Motion made by Wally Reeve to adjourn. Motion seconded by Etienne Hancock. Motion carried. (3/0)

Meeting adjourned at 6:45 pm
Submitted and filed this 8/2726.
Bonnie McDermott, Scribe

Please note all minutes are in Draft form and are subject to approval at the next Planning Commission meeting.

TOWN OF MORRISTOWN AND VILLAGE OF MORRISVILLE
INTERIM ZONING BYLAW
MORATORIUM ON DATA CENTERS AND HIGH IMPACT USES
August 31, 2026

1. PURPOSE

This Interim Zoning Bylaw is adopted to provide the Town of Morristown and the Village of Morrisville ("Town" and "Village," respectively) sufficient time to conduct and complete studies to determine what, if any, amendments may be needed to the 2026 Town and Village Zoning and Subdivision Bylaws (the "Bylaws") to address the land use impacts associated with high impact uses, such as but not limited to AI and Crypto Data Centers, before any zoning permit application for such use is filed. The rapid growth of artificial intelligence has created unprecedented demand for large-scale data centers throughout North America. Although the Town and Village presently have no pending application for such a facility, the Vermont Legislature, neighboring municipalities, and other states have begun evaluating, or have adopted, standards or moratoria to mitigate the land use impacts from such facilities. The purposes of this Interim Zoning Bylaw are to:

(1) protect existing residential neighborhoods, commercial uses, and municipal facilities from the impacts of a Data Center project or a High Impact Use without adequate performance standards in place;

(2) preserve the Town's and Village's ability to coordinate land use planning with Morrisville Water and Light's ("MWL") electric and water utility capacity and its long-term resource planning obligations including Vermont's Renewable Energy Standard and Clean Energy Standard;

(3) prevent the zoning approval of a Data Center project or High Impact Use under existing standards that do not adequately address power/electricity demand, water consumption, wastewater discharge, noise, traffic, air quality, and other impacts to the public health, safety and welfare; and

(4) provide the Planning Commission and Selectboard sufficient time to develop permanent zoning standards applicable to Data Center and High Impact Use projects while preserving flexibility for future economic development.

This Interim Zoning Bylaw is not intended to prohibit all development permanently, but rather to ensure that appropriate regulations are in place before a Data Center and/or High Impact Use project is proposed.

2. AREA AFFECTED

This Interim Zoning Bylaw affects all lands and zoning districts within the Town of Morristown and the Village of Morrisville.

3. LIMITATIONS ON LAND DEVELOPMENT

A. Prohibited Uses. During the effective term of this Interim Zoning Bylaw, the Town and Village shall not accept, review, or approve any application proposing the siting, construction, or expansion of a Data Center or High Impact Use, as defined in Section 4 below, regardless of how such use may be proposed or categorized under the existing Bylaws. In other words, in an area subject to the existing Bylaws, all Data Center uses and High Impact Uses are prohibited.

B. Exceptions. This Interim Zoning Bylaw shall not apply to:

(1) a conventional, small-scale data center that is necessary for the administrative or operational support of an existing business, hospital, school, municipal service, or residence; or

(2) a facility that has obtained complete local permits before the effective date of this Interim Zoning Bylaw.

C. No Waivers or Modifications. There shall be no approval of a waiver, modification, variance, or conditional use permit that would authorize a use prohibited under Section 3(A).

4. DEFINITIONS

Words specifically defined in the existing Bylaws shall have the same meaning in this Interim Zoning Bylaw unless another meaning is clearly indicated below.

Data Center: A facility used for the storage, management, processing, and/or transmission of digital data, including for data processing, machine learning, model training, hosting or operating artificial intelligence models, AI computational processing, or validating blockchain transactions, generating digital assets, or proof-of-work processing, that typically contains computers, network equipment, systems, servers, appliances, and other accessory components necessary for such operations, whether operated by a single entity for its own primary use or for the shared use of entities engaged in other primary uses. All data center structures on a property, or within one-half-mile of any point on a property on which a Data Center is or is proposed to be located, shall be aggregated to calculate the total scale of the use.

High Impact Use: A facility shall be defined as a High Impact Use and subject to this Interim Zoning Bylaw if it meets the above definition or one or more of the following criteria: (i) is capable of consuming 10 or more megawatts of electric power from any source; (ii) uses 57,600 gallons or more per day (40 gallons per minute) of surface or ground water; (iii) contains PFAS in amounts over 10 parts per trillion or other hazardous waste as defined in 10 V.S.A. § 6602 in its wastewater discharge; (iv) creates 10 acres or more of new impervious surface area within three years of the effective date of this Interim Zoning Bylaw; and/or (v) emits 70 decibels Lmax or more of persistent noise, or 35 dB of noise between 10 and 200 Hz, detectable at adjacent property boundary lines. .

5. EFFECT OF EXISTING REGULATIONS

Except as otherwise provided herein, this Interim Zoning Bylaw shall not repeal or alter any existing ordinances, regulations, or bylaws of the Town of Morristown or the Village of Morrisville. The restrictions established in this Interim Zoning Bylaw are in addition to those contained in any other Town or Village ordinances, bylaws, or regulations.

6. SEVERABILITY

If any provision of this Interim Zoning Bylaw is deemed by a court of competent jurisdiction to be unconstitutional, invalid or unenforceable, that provision shall be severed from the Interim Zoning Bylaw and the remaining provisions that can be given effect without the severed provision shall continue in effect.

7. ENACTMENT PROVISIONS

This Interim Zoning Bylaw is enacted pursuant to 24 V.S.A. § 4415, shall be administered in the manner provided in said section, and shall be effective upon passage for a period of two (2) years. It may be extended for one additional one-year period beyond the initial two-year term in accordance with the procedures for adoption set forth in 24 V.S.A. § 4415.

Adopted this _______ day of ______________, 2026.

SELECTBOARD OF THE TOWN OF MORRISTOWN

By: ____________________________
Don McDowell, Chair

By: ____________________________
Richard Craig

By: ____________________________
George Cormier

By: ____________________________
Leah Hollenberger

By: ____________________________
Rose Belanger

TRUSTEES OF THE VILLAGE OF MORRISVILLE

By: ______________________________
Carl Fortune, Chair

By: ______________________________
Thomas Snipp

By: ______________________________
Travis Knapp

By: ______________________________
Robert Heanue

By: ______________________________
Bradley Limoge

The Vermont Statutes Online

The Statutes below include the actions of the 2025 session of the General Assembly.

NOTE: The Vermont Statutes Online is an unofficial copy of the Vermont Statutes Annotated that is provided as a convenience.

Title 10 : Conservation and Development

Chapter 159 : Waste Management

Subchapter 001 : GENERAL PROVISIONS

(Cite as: 10 V.S.A. § 6602)

§ 6602. Definitions

As used in this chapter:

(1) "Secretary" means the Secretary of Natural Resources or his or her duly authorized representative.

(2) "Solid waste" means any discarded garbage; refuse; septage; sludge from a waste treatment plant, water supply plant, or pollution control facility; and other discarded material, including solid, liquid, semi-solid, or contained gaseous materials resulting from industrial, commercial, mining, or agricultural operations and from community activities but does not include animal manure and absorbent bedding used for soil enrichment; high carbon bulking agents used in composting; or solid or dissolved materials in industrial discharges that are point sources subject to permits under the Water Pollution Control Act, chapter 47 of this title.

(3) "Generator" means any person, by site, whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation.

(4) "Hazardous waste" means any waste or combination of wastes of a solid, liquid, contained gaseous, or semi-solid form, including those that are toxic, corrosive, ignitable, reactive, strong sensitizers, or that generate pressure through decomposition, heat, or other means, that in the judgment of the Secretary may cause or contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, taking into account the toxicity of such waste, its persistence and degradability in nature, and its potential for assimilation, or concentration in tissue, and other factors that may otherwise cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms, or any matter that may have an unusually destructive effect on water

quality if discharged to ground or surface waters of the State. All special nuclear, source, or by-product material, as defined by the Atomic Energy Act of 1954 as subsequently amended and codified in 42 U.S.C. § 2014, is specifically excluded from this definition.

(5) "Hazardous waste management" means the systematic and comprehensive management of the generation; storage; transport; treatment, including recycling and recovery; or disposal of hazardous waste materials.

(6) "Person" means any individual; partnership; company; corporation; association; unincorporated association; joint venture; trust; municipality; the State of Vermont or any agency, department, or subdivision of the State; federal agency; or any other legal or commercial entity.

(7) "Storage" means the actual or intended containment of wastes, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such wastes.

(8) "Transport" or "transportation" means the movement of wastes by air, rail, highway, or water.

(9) "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous or solid waste, so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste safer for transport, amenable for recovery, amenable for storage, or reduced in volume, or for hazardous wastes, so as to render such waste nonhazardous.

(10) "Facility" means all contiguous land, structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of waste. A facility may consist of several treatment, storage, or disposal operational units.

(11) "Sanitary landfill" means a land disposal site employing an engineered method of disposing of solid waste on land in a manner that minimizes environmental hazards by spreading the solid waste in thin layers, compacting the solid waste to the smallest practical volume, and applying and compacting cover material at the end of each operating day.

(12) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, emitting, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any ground or surface waters.

(13) "Waste" means a material that is discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded or has served its original intended use and is normally discarded or is a manufacturing or mining by-product and is normally discarded.

(14) "Economic poison" means:

(A) any substance produced, distributed, or used as a plant regulator, defoliant, or desiccant; and

(B) any substance produced, distributed, or used for preventing, destroying, or repelling any insects, rodents, nematodes, fungi, weeds, or other forms of plant or animal life or viruses, except viruses on or in living human or other animals, which the Commissioner shall declare to be a pest.

(15) [Repealed.]

(16)(A) "Hazardous material" means all petroleum and toxic, corrosive, or other chemicals and related sludge included in any of the following:

(i) any substance defined in section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980;

(ii) petroleum, including crude oil or any fraction thereof;

(iii) hazardous wastes, as determined under subdivision (4) of this section; or

(iv) a chemical or substance that, when released, poses a risk to human health or other living organisms and that is listed by the Secretary by rule.

(B) "Hazardous material" does not include herbicides and pesticides when applied consistent with good practice conducted in conformity with federal, State, and local laws, rules, and regulations and according to manufacturer's instructions. Nothing in this subdivision shall affect the authority granted and the limitations imposed by section 6608a of this title.

(17) "Release" means any intentional or unintentional action or omission resulting in the spilling, leaking, pumping, pouring, emitting, emptying, dumping, or disposing of hazardous materials into the surface or groundwaters, or onto the lands in the State, or into waters outside the jurisdiction of the State when damage may result to the public health, lands, waters, or natural resources within the jurisdiction of the State. "Release" also means the intentional or unintentional action or omission resulting in the spilling, leaking, emission, or disposal of polychlorinated biphenyls (PCBs) from building materials in public schools and approved and recognized independent schools, as those terms are defined in 16 V.S.A. § 11, that were constructed or renovated before 1980.

(18) "Administrative costs" mean those additional costs incurred by an applicant to directly manage the specific planning or implementation project approved in the assistance application.

(19) "Implementation plan" means that plan that is adopted to be consistent with the State solid waste management plan. This plan must include all the elements required for consistency with the State plan and an applicable regional plan and shall be approved by the Secretary. This implementation plan is the basis for State certification of facilities under subsection 6605(c) of this title.

(20) “Regional plan” means that plan that is prepared and adopted in accordance with the provisions of 24 V.S.A. § 4348.

(21) “Municipal plan” means that plan that is prepared and adopted in accordance with the provisions of 24 V.S.A. § 4385.

(22) [Repealed.]

(23) “Secured lender” means a person who holds indicia of ownership in a facility, furnished by the owner or person in lawful possession, primarily to ensure the repayment of a financial obligation. Such indicia include interests in real or personal property that are held as security or collateral for repayment of a financial obligation, such as a mortgage, lien, security interest, assignment, pledge, surety bond, or guarantee, and include participation rights, held by a financial institution solely for legitimate commercial purposes, in making or servicing loans. The term “secured lender” includes a person who acquires indicia of ownership by assignment from another secured lender.

(24) “Municipal solid waste” means combined household, commercial, and industrial waste materials generated in a given area.

(25) “Compost” means a stable humus-like material produced by the controlled biological decomposition of organic matter through active management but shall not mean sewage, septage, or materials derived from sewage or septage.

(26) “Household hazardous waste” means any waste from households that would be subject to regulation as hazardous wastes if it were not from households.

(27) “Closed-loop recycling” means a system in which a product made from one type of material is reclaimed and reused in the production process or the manufacturing of a new or separate product.

(28) “Commercial hauler” means any person that transports:

(A) regulated quantities of hazardous waste; or

(B) solid waste for compensation in a motor vehicle.

(29) “Mandated recyclable” means the following source-separated materials: aluminum and steel cans, aluminum foil and aluminum pie plates, glass bottles and jars from foods and beverages, polyethylene terephthalate (PET) plastic bottles or jugs, high density polyethylene (HDPE) plastic bottles and jugs, corrugated cardboard, white and colored paper, newspaper, magazines, catalogues, paper mail and envelopes, boxboard, and paper bags.

(30) “Leaf and yard residual” means source-separated, compostable untreated vegetative matter, including grass clippings, leaves, kraft paper bags, and brush, that is free from noncompostable materials. It does not include such materials as pre- and postconsumer food residuals, food processing residuals, or soiled paper.

(31) "Food residual" means source-separated and uncontaminated material that is derived from processing or discarding of food and that is recyclable, in a manner consistent with section 6605k of this title. Food residual may include preconsumer and postconsumer food scraps. "Food residual" does not mean meat and meat-related products when the food residuals are composted by a resident on site.

(32) "Source-separated" or "source separation" means the separation of compostable and recyclable materials from noncompostable, nonrecyclable materials at the point of generation.

(33) "Wood waste" means trees, untreated wood, and other natural woody debris, including tree stumps, brush and limbs, root mats, and logs.

(34) "Participation in management" means, for the purpose of subsection 6615(g) of this title, a secured lender's or fiduciary's actual participation in the management or operational affairs of a facility. It does not mean a secured lender's or fiduciary's mere capacity to influence, or unexercised right to control, facility operations. A secured lender or fiduciary shall be considered to have participated in management if the secured lender or fiduciary:

(A) exercises decision-making control over environmental compliance related to the facility, such that the secured lender or fiduciary has undertaken responsibility for hazardous materials handling or disposal practices related to the facility; or

(B) exercises control at a level comparable to that of a manager of the facility, such that the secured lender or fiduciary has assumed or manifested responsibility:

(i) for the overall management of the facility encompassing day-to-day decision making with respect to environmental compliance; or

(ii) over all or substantially all of the operational functions, as distinguished from financial or administrative functions, of the facility other than the function of environmental compliance.

(35) "Regional development corporation" means a nonprofit corporation organized in this State whose principal purpose is to promote, organize, or accomplish economic development, including providing planning and resource development services to local communities, supporting existing industry, assisting the growth and development of new and existing small businesses, and attracting industry or commerce to a particular economic region of the State.

(36) "Regional planning commission" means a planning commission created for a region established under 24 V.S.A. chapter 117, subchapter 3.

(37) "Background concentration level" means the concentration level of PAHs, arsenic, or lead in soils, expressed in units of mass per mass, that is attributable to site contamination caused by atmospheric deposition or is naturally occurring and determined

to be representative of statewide or regional concentrations through a scientifically valid means as determined by the Secretary.

(38) "Commencement of construction" means the construction of the first improvement on the land or to any structure or facility located on the land. "Commencement of construction" shall not mean soil testing or other work necessary for assessment of the environmental conditions of the land and subsurface of the land.

(39) "Development soils" means unconsolidated mineral and organic matter overlying bedrock that contains PAHs, arsenic, or lead in concentrations that:

(A) exceed the relevant soil screening level for residential soil;

(B) when managed in compliance with section 6604c, 6605, or 6605c of this title:

(i) pose no greater risk than the Agency-established soil screening value for the intended reuse of the property; and

(ii) pose no unreasonable risk to human health through a dermal, inhalation, or ingestion exposure pathway;

(C) do not leach compounds at concentrations that exceed groundwater enforcement standards; and

(D) do not result in an exceedance of Vermont groundwater enforcement standards.

(40) "Development soils concentration level" means those levels of PAHs, arsenic, or lead expressed in units of mass per mass, contained in the development soils.

(41) "Downtown development district" shall have the meaning stated in 24 V.S.A. § 2791(4).

(42) "Growth center" shall have the meaning stated in 24 V.S.A. § 2793c.

(43) "Neighborhood development area" shall have the meaning stated in 24 V.S.A. § 2793e.

(44) "Origin site" means a location where development soils originate.

(45) "PAHs" means polycyclic aromatic hydrocarbons.

(46) "Receiving site" means a location where development soils are deposited.

(47) "Receiving site concentration level" means those levels of PAHs, arsenic, or lead, expressed in units of mass per mass, that exist in soils at a receiving site.

(48) "TIF district" means a Tax Increment Financing District created by a municipality pursuant to 24 V.S.A. § 1892.

(49) "Village center" shall have the meaning stated in 24 V.S.A. § 2791(10). (Added 1977, No. 106, § 1; amended 1979, No. 195 (Adj. Sess.), § 3, eff. May 6, 1980; 1981, No. 102, § 2; 1983, No. 148 (Adj. Sess.), § 1; 1985, No. 70, § 3, eff. May 20, 1985; 1985, No. 231 (Adj.

Sess.), § 3; 1987, No. 76, § 18; 1989, No. 30, § 1, eff. April 27, 1989; 1989, No. 281 (Adj. Sess.), § 1, eff. June 22, 1990; 1989, No. 282 (Adj. Sess.), § 9, eff. June 22, 1990; 1993, No. 29, § 2, eff. May 26, 1993; 2003, No. 115 (Adj. Sess.), § 60, eff. Jan. 31, 2005; 2005, No. 65, § 2; 2007, No. 130 (Adj. Sess.), § 9, eff. May 12, 2008; 2009, No. 41, § 1; 2009, No. 146 (Adj. Sess.), § F10; 2011, No. 148 (Adj. Sess.), § 1; 2013, No. 55, § 11; 2015, No. 52, § 2, eff. June 5, 2015; 2017, No. 55, §§ 3, 4, eff. June 2, 2017; 2017, No. 113 (Adj. Sess.), § 46; 2019, No. 131 (Adj. Sess.), § 24; 2021, No. 74, § E.709.3; 2021, No. 185 (Adj. Sess.), § E.709.1, eff. July 1, 2021; 2021, No. 170 (Adj. Sess.), § 6, eff. July 1, 2022; 2023, No. 6, § 81, eff. July 1, 2023.)

State of Vermont Chartered in 1781

MORRISTOWN

9/4/26

Re: implementation priorities Memo (DRAFT)

Over the past several months, the Planning Commission has completed a review of the implementation section of the 2023 Town Plan. While the Town has made progress addressing several of the priorities identified in the Town Plan, the Commission would like to highlight a few items it believes are of particular importance. This list is not an attempt to assign specific tasks to any one organization. Rather, it is meant to highlight areas of particular importance so they can be front of mind for future projects.

These include the following:

- Funding to update the North End Circulation Study.
- Development of a boardwalk along the Lamoille River, parallel to Portland Street (linking Lower Main Street to Bridge Street), including lighting and benches, with the purpose of relinking downtown Morrisville to its riverfront.
- Acquisition of properties abutting town-owned sites, such as the Police, Fire, and EMS building, to support future expansion or redevelopment to meet town needs.
- A traffic study of the intersection of Upper Main Street, Park Street, Summer Street, Richmond Street, and Copley Avenue.

Once again it is important to note that the Commission is not seeking to assign these tasks to any specific body or organization. Rather, this is an attempt to highlight actionable items of high priority for the town that fall outside the Planning Commission's ability to implement on its own. The Commission respectfully requests that these priorities be kept in mind when evaluating future or ongoing projects so they can be included if practicable.

(Commission should consider emphasizing what we have been working on and what parts of the implantation plan section we are focused on.)

43 Portland Street – PO Box 748 – Morrisville VT 05661

Morristown Sidewalk Policy

1. The construction cost of sidewalks for new development shall not be borne by the general taxpaying public.
2. It is expected that the residents of Morrisville shall be able to walk on a sidewalk to the shops and business where products are sold or services are offered to the general public. The Rural Residential Agricultural Zone, Industrial Zone, and Low Density Residential Zones (outside the Sewer Service Management Area only) are the only areas where sidewalks are not required. Sidewalks are required in all other zones on at least one side of the street.
3. Other than in the exempted zones as provided for in #2, sidewalks shall be provided as part of any commercial (re)development, any multi-family residential development, and within all major subdivisions, and located within the right-of-way of Town and private roads.
4. Sidewalks shall also be required in the locations shown in the North End Circulation Study (published in 2011 by consultant RSG Inc).
5. Sidewalks shall be constructed to meet the below requirements in the following zones:
    A. Commercial Sidewalks: In the Central Business Zone, Commercial Zone, and Hospital Zone, sidewalks shall be at least 60 inches wide, not including curb width, and composed of Portland concrete with a psi of 4,000 lbs. and be at least 4 inches thick (8 inches thick for all driveway (but not road) crossings.
    B. Residential Sidewalks: In the Mixed Office Residential Zone, High Density Residential Zone, Medium Density Residential Zone, and within the Sewer Service Management Area of the Low Density Residential Zone, sidewalks shall be at least 60 inches wide, not including the curb, and comprised of bituminous asphalt, and be at least 4 inches thick.
    C. Regardless if a sidewalk is located in a Commercial Area (per above section A) or in a Residential Area (per above Section B), sidewalk replacement, patching, and elongation shall be completed to match the material of the existing sidewalk on the street in question (ex. majority concrete sidewalks receive concrete patches & majority bituminous sidewalks shall receive bituminous patches).
    D. Where a sidewalk turns, changes direction, or intersects with another sidewalk, at least a 5-foot radius inside curve shall be provided for sidewalk plow turning movement.
6. Sidewalks shall be separated from adjacent roadways by vertical granite curbing with an 8-inch reveal or alternatively via a grass strip that is at least 2 feet in width.
7. Within 30 days from the completion of construction, concrete sidewalks shall be protected from salt via an application of Harris 1315 Seal-VT.
8. New sidewalk construction shall meet all ADA requirements and an ADA compliant transition shall be provided at all property lines where a new sidewalk dead-ends into a property that is yet to be (re)developed to include a sidewalk.
9. The Town of Morristown may act as co-permittee for any sidewalks located in the State right-of-way that are being built by others.
10. Whenever an existing sidewalk is destroyed due to construction, new segments of sidewalk shall meet the requirements of this policy, and shall be replaced in-kind at the developer's expense.

Approved by the Planning Council on 6 October 2015
Approved by the Morristown Selectboard on 13 October 2015, and revised by the Selectboard on 27 July 2019, 20 July 2020, 20 June 2022, & 19 December 2022.

Morristown Sidewalk Policy

1. The construction cost of sidewalks for new development shall not be borne by the general taxpaying public.
2. It is expected that the residents of Morrisville shall be able to walk on a sidewalk to the shops and business where products are sold or services are offered to the general public. The Rural Residential Agricultural Zone, Industrial Zone, and Low Density Residential Zones (outside the Sewer Service Management Area only) are the only areas where sidewalks are not required. Sidewalks are required in all other zones on at least one side of the street. Sidewalks shall not be required on gravel roads.
3. Other than in the exempted zones as provided for in #2, sidewalks shall be provided as part of any commercial (re)development, any multi-family residential development, and within all major subdivisions, and located within the right-of-way of Town and private roads.
4. Sidewalks shall also be required in the locations shown in the North End Circulation Study (published in 2011 by consultant RSG Inc).
5. Sidewalks shall be constructed to meet the below requirements in the following zones:
   A. Commercial Sidewalks: In the Central Business Zone, Commercial Zone, and Hospital Zone, sidewalks shall be at least 60 inches wide, not including curb width, and composed of Portland concrete with a psi of 4,000 lbs. and be at least 4 inches thick (8 inches thick for all driveway (but not road) crossings.
   B. Residential Sidewalks: In the Mixed Office Residential Zone, High Density Residential Zone, Medium Density Residential Zone, and within the Sewer Service Management Area of the Low Density Residential Zone, sidewalks shall be at least 60 inches wide, not including the curb, and comprised of bituminous asphalt, and be at least 4 inches thick.
   C. Regardless if a sidewalk is located in a Commercial Area (per above section A) or in a Residential Area (per above Section B), sidewalk replacement, patching, and elongation shall be completed to match the material of the existing sidewalk on the street in question (ex. majority concrete sidewalks receive concrete patches & majority bituminous sidewalks shall receive bituminous patches).
   D. Where a sidewalk turns, changes direction, or intersects with another sidewalk, at least a 5-foot radius inside curve shall be provided for sidewalk plow turning movement.
6. Sidewalks shall be separated from adjacent roadways by vertical granite curbing with an 8-inch reveal or alternatively via a grass strip that is at least 2 feet in width.
7. Within 30 days from the completion of construction, concrete sidewalks shall be protected from salt via an application of Harris 1315 Seal-VT.
8. New sidewalk construction shall meet all ADA requirements and an ADA compliant transition shall be provided at all property lines where a new sidewalk dead-ends into a property that is yet to be (re)developed to include a sidewalk.
9. The Town of Morristown may act as co-permittee for any sidewalks located in the State right-of-way that are being built by others.
10. Whenever an existing sidewalk is destroyed due to construction, new segments of sidewalk shall meet the requirements of this policy, and shall be replaced in-kind at the developer's expense.

Approved by the Planning Council on 6 October 2015
Approved by the Morristown Selectboard on 13 October 2015, and revised by the Selectboard on 27 July 2019, 20 July 2020, 20 June 2022, & 19 December 2022.

Public Summary

The Planning Commission asked whether the Town may use its zoning bylaws to adopt a tiered approach to regulating earth extraction operations. Tiered regulation based on the size or intensity of a particular use like an earth extraction operation is generally permissible; however, the applicable review criteria or standards must be clear, administrable from a technical and practical perspective, and enforceable. The Town's existing zoning regulations already provide tools to review impacts from earth extraction operations and impose conditions addressing dust, noise, drainage, erosion, setbacks, and site operations. However, adopting specific, technical regulations that are not tied to performance standards but that require monitoring the quantity of certain air pollutants in emissions from such facilities is problematic for both practical and legal reasons.

In the first instance, we have significant practical concerns about the ability of the Town to reliably enforce such standards. In Vermont, jurisdiction over air pollutants and monitoring rests with the Agency of Natural Resources because it has been formally delegated that authority from the U.S. Environmental Protection Agency (EPA) and because it has the technical expertise to accurately measure and monitor emissions, which is no small feat. It would be very rare for a Vermont municipality, even one as sophisticated as Morristown, to have the staff expertise (scientists), technical equipment, and reliable methods to accurately measure air pollutants in a manner that would be admissible in an enforcement proceeding. As such, it's best that the Town defer to the experts in air pollutant monitoring and enforcement at ANR.

Aside from the costs and technical challenges with attempting to regulate ongoing air emissions or dust levels through zoning, any zoning approval that imposes an on-going monitoring requirement is likely unenforceable. It is likely unlawful for a zoning approval to impose on-going, post-construction monitoring conditions due to Vermont's strong policy of repose, meaning that municipal zoning decisions are entitled to finality once the 30-day appeal period passes. As the Vermont Supreme Court held in a 2017 opinion, any condition of approval requiring post-construction monitoring of a project's impacts that might then allow the DRB to subsequently alter or change permit conditions offends the principle of finality. While this does not prevent a Town from enforcing a violation of its performance standards, the Town cannot require a project owner or developer to engage in on-going compliance monitoring and expect future changes to continuously mitigate a project's impacts.

Town of Morristown, Vermont
Earth Extraction Operations & Dust Control Regulations

Tiered Approach | Conceptual Outline

Tiered Earth Extraction Report 8-24-26

Introduction: The purpose of this document is to provide draft regulations on earth extraction with a focus on dust control regulations. Earth Extraction means any activity involving the removal, excavation, quarrying, blasting, crushing, screening, or stockpiling of rock, ledge, soil, gravel, or other earth material. The Planning Commission is interested in adopting a tiered approach to regulating earth extraction and the corresponding dust associated with this activity. The tiered approach is intended to scale the regulations based on the intensity of the activity. This introduction is intended to provide a general overview of the different tiers. Please see the specific tier sections for more specific information on each tier.

Tier 1.

The purpose of this tier is to regulate earth extraction of 1,000-5000 cubic yards of material associated with residential projects with none of the material being used for sale offsite. The standards in this section are intended to provide additional protection to abutting properties and the public at large. The following is a list of some of the regulations in this section:

- Basic dust control regulations at the operator's discretion to make sure visible dust standards are met.
- Plan to prevent dust and mud tracking onto public roads.

Tier 2.

The purpose of these regulations is to regulate residential or commercial extraction between 5,000 and 10,000 cubic yards of extraction or the sale of more than 1,000 cubic yards of materials. This tier has stricter regulations than Tier 1 but is not as restrictive as Tier 3. The following is a list of some of the regulations in this section:

- A fugitive dust control plan with clear standards for compliance with visible dust standards.
- Required dust control measures.
- Required windbreak and vegetative buffers.
- Specific standards for truck exit measures.

Tier 3.

The purpose of these regulations is to regulate all projects over 10,000 cubic yards of material. This is the strictest of the tiers and would only apply to larger projects.

- More stringent fugitive dust control standards than Tier 2.
- More stringent dust control measures.
- Site reclamation plan for the site when extraction ceases.
- Required setbacks for extraction equipment.

Disclosure: It is important to note that these draft regulations are very much open to change. Their main purpose is to help frame the issue and show what a tiered approach to earth extraction could look like. Further refinement of the particular regulations found in this document will be required; however, the basic framework outlined in this approach would allow the town to tailor the regulations to the intensity of the project.

Regulatory References

Reference	Description
EPA Fugitive Dust Control Best Practices (2022)	U.S. EPA guidance on fugitive dust control plan elements, hierarchy of control methods, and monitoring. epa.gov
MSHA (30 CFR Part 56)	Mine Safety and Health Administration standards for surface metal and nonmetal mines.
Vermont Planning Act (24 V.S.A. §4414)	Grants municipalities authority to regulate uses of land and structures, including performance standards for operations generating dust.
Morristown/Morrisville Zoning and Subdivision Bylaws (2023) §485	Current bylaw provision governing Extraction of Earth Resources via the Special Industry Use.

Definitions

Earth Extraction Operation:	Any activity involving the removal, excavation, quarrying, blasting, crushing, screening, or stockpiling of rock, ledge, soil, gravel, or other earth material.
Fugitive Dust:	Particulate matter that becomes airborne from earth extraction operations and is not emitted through a stack or duct. Includes dust from drilling, blasting, crushing, vehicle traffic, stockpiles, and wind erosion.
Active Work Area:	The immediate area within which extraction equipment is operating at any given time, typically defined as within 50 feet of the operating equipment.
Sensitive Receptor:	A residence, school, childcare facility, hospital, public water supply intake, or other location where dust exposure poses an elevated risk to human health or the environment.
Dust Control Plan / FDCP:	A written plan describing all dust-generating activities and the measures to be taken to prevent, reduce, and monitor airborne dust emissions from the site.
Visible Dust:	Any emission of particulate matter that is detectable to the unaided human eye under normal daylight conditions.
Off-Site Sale or Use:	The transfer, sale, conveyance, or delivery of extracted earth material to any party other than the landowner of the extraction site, or the use of extracted material at a location other than the extraction site.
Residential Extraction:	An earth extraction operation conducted in connection with residential site preparation where extracted material is not sold or conveyed off-site.
Commercial Extraction Operation (Option E):	Any earth extraction activity conducted for commercial purposes, including quarrying or aggregate production, or extraction of material primarily for sale, exchange, or offsite use.

Table 1 —Comparison with Morristown §485 Special Industry Use

This table compares the three tiers with the special industry used noted in the 2023 zoning and subdivision bylaws for Morristown located in section 485.

Feature / Requirement	Tier 1 (1,000–5,000 cy | Residential | No Off-Site Sale)	Tier 2 (5,000–10,000 cy | or Any with Off-Site Sale >1,000 cy)	Tier 3 (>10,000 cy | Any Project)	Current §485 Language (Morristown Zoning Bylaws 2023)
Permit Trigger	Residential project generating >1,000 and up to 5,000 cy; no off-site sale	Residential or commercial project generating >5,000 up to 10,000 cy; OR any project >1,000 cy with off-site sale	Any project generating >10,000 cy regardless of off-site sale	Removal of rock, soil, sand, or gravel for sale (except incidental to development on same parcel) requires DRB approval after a site rehabilitation plan is approved at a public hearing. No volume based thresholds. Extension of a non-conforming operation by DRB only (§485.8).
Dust Control Plan	Basic Dust Control Plan submitted with permit application	Full FDCP submitted to DRB for approval before operations begin; optional independent consultant at applicant's expense	Full FDCP required before permit issued; DRB may require independent consultant at applicant's expense; annual update; posted on-site in weatherproof enclosure	No dust control plan of any kind required. §485.10 allows the DRB to attach additional conditions as it may find necessary for public safety and general welfare, which could include a plan requirement, but none is mandated.
Visible Dust Standard	No visible dust crossing property line	No visible dust crossing property line; proactive suppression required before dust is generated	Zero visible dust beyond active work area (within 50 ft of equipment); continuous suppression required; operations suspended immediately if systems inoperative	§485.6: All power-activated sorting machinery or equipment shall be equipped with satisfactory dust elimination devices. No visible dust performance standard or property line prohibition.
Water Suppression	Required; method at operator discretion	Required at all active extraction and processing points: drilling, crushing, screening, conveyors, haul roads, stockpiles	Automated misting systems required at extraction face; pre/post-blast misting (10 min before, 15 min after); all processing equipment continuously suppressed	No water suppression requirement. §485.6 requires "satisfactory dust elimination devices" on power-activated machinery but specifies no suppression methods.
Haul Road Treatment	Graveled access apron at public road	Water or approved suppressant on internal roads; 10	Roads paved, calcium chloride treated, or EPA-certified polymer	§485.6: No power-activated sorting machinery within 300 ft of any street or property line.

	exit; reasonable precautions to prevent tracking	mph speed limit posted; 50 ft graveled apron at public road	suppressant; 10 mph limit; wheel wash station at every exit; daily road sweep	No haul road treatment, speed limit, access apron, or wheel wash requirement.
Stockpile Management	Wetting or covering during dry or windy conditions; best efforts	Stockpiles >500 cy covered or stabilized; 100 ft setback from property lines	All stockpiles covered or stabilized within 24 hrs; 150 ft setback; misting during loading and unloading	§485.5: No stockpiling of materials within 200 ft of any street or other property line. §485.6: No stockpiles greater than 50 ft high. No cover, wetting, or stabilization requirement.
Blasting	24 hr abutter notice; 7:00 am–5:00 pm weekdays only	48 hr abutter + ZA written notice; 8:00 am–4:00 pm weekdays; misting at blast zone before and after detonation	72 hr abutter + ZA written notice; 9:00 am–3:00 pm weekdays; no blasting >15 mph wind or during inversions; licensed blaster documentation; pre/post misting	§485.5: No blasting within 200 ft of any street or other property line. No abutter notification requirement, no time-of-day restrictions, no weather limits, no licensed blaster requirement, and no blast dust misting provision.
Buffer / Windbreak	None required	25 ft vegetated buffer along residential and road frontages; native species; removable post operation with ZA approval	50 ft vegetated buffer all property lines; 100 ft near schools, childcare, water supply; native tree/shrub species; replaced within one growing season if lost	§485.5: No excavation, blasting, or stockpiling within 200 ft of any street or property line. §485.6: No power activated machinery within 300 ft. These are safety setbacks, not vegetated buffers or windbreaks.
Enforcement	NOV + order to cease operations	NOV within 48 hrs; cease operations; civil fines; DRB revocation referral	1st: NOV + cease; 2nd: 5-day suspension + civil fine + DRB hearing; 3rd: revocation + bond forfeiture; independent	§485.8: Extension of an existing non-conforming operation shall only be permitted by the DRB. §485.10: The DRB may attach any additional conditions as it may find necessary for the

Feature / Requirement	**Tier 1 (1,000–5,000 cy | Residential | No Off-Site Sale)**	**Tier 2 (5,000–10,000 cy | or Any with Off-Site Sale >1,000 cy)**	**Tier 3 (>10,000 cy | Any Project)**	**Current §485 Language (Morristown Zoning Bylaws 2023)**

			monitor at operator's expense.	safety and general welfare of the public. No tiered penalty structure, no NOV procedure, no civil fine schedule.
Financial Assurance	None	None	Performance bond, escrow account, or irrevocable letter of credit required before permit issued; covers cost of dust impact remediation and buffer/vegetation restoration.	§485.1: Before approval of any new or proposed extension of a soil, sand, or gravel operation, a performance bond shall be secured from the applicant sufficient to ensure the abandoned site is left in a safe, attractive, and useful condition. Bond covers redevelopment as a park, lake, recreation area, or other usable open space.
Site Reclamation	Not addressed	Not addressed	§485 language directly incorporated in Section __.07: removal to improve land contours; no pits or steep slopes unless provision to refill; graded smooth; cut slopes and spoil banks not permitted to remain; 4" topsoil, fertilized, mulched, seeded under ZA supervision; topsoil stripping for off-site sale prohibited	§485.2: Removal to improve land contours; no pits or steep slopes unless provision to refill. §485.3: Sites graded smooth and left in neat condition; cut slopes/spoil banks not permitted; 4" topsoil, fertilized, mulched, seeded to ZA satisfaction. §485.9: Stripping of topsoil for sale or use on other premises prohibited.
Drainage	Not addressed	Not addressed	§485 language directly incorporated in Section __.05(F): all surface drainage affected by excavation controlled by owner to prevent erosion debris from filling drainage courses, streets, or private property	§485.4: All surface drainage affected by excavation operations shall be controlled by the owner to prevent erosion debris and other loose materials from filling any drainage course, street or private property. All drainage control provisions require ZA approval.
Equipment Setbacks	Not addressed	Not addressed	§485 language directly incorporated in Section __.08: no excavation, blasting, or stockpiling within 200 ft of any	§485.5: No excavation, blasting or stockpiling of materials within 200 ft of any street or other property line. §485.6: No power-activated sorting

Feature / Requirement	Tier 1 (1,000–5,000 cy | Residential | No Off-Site Sale)	Tier 2 (5,000–10,000 cy | or Any with Off-Site Sale >1,000 cy)	Tier 3 (>10,000 cy | Any Project)	Current §485 Language (Morristown Zoning Bylaws 2023)
			street or property line; no power-activated sorting machinery within 300 ft; all such machinery must have satisfactory dust elimination devices	machinery or equipment within 300 ft of any street or other property line; all such machinery shall be equipped with satisfactory dust elimination devices.
Slopes	Not addressed	Not addressed	§485 language incorporated in two sections: no pits or steep slopes unless provision to refill, all excavation slopes in excess of 1:2 shall be adequately fenced as determined by the ZA.	§485.2: The digging or creating of pits or steep slopes shall not be permitted, unless provision is made to refill such pit. §485.7: All excavation slopes in excess of 1:2 shall be adequately fenced as determined by the Zoning Administrator.
Best Suited For	Residential site work: home sites, driveways, accessory structures; no commercial sale of material	Residential or commercial projects with offsite material sale; moderate-scale operations	Large commercial quarrying; aggregate production; high volume extraction near sensitive receptors	§485 applies to all commercial extraction for sale (rock, soil, sand, gravel) not incidental to development on the same parcel, operating as a Special Industry Use in applicable zoning districts. No scale-based differentiation.

Tiered Approach | Tiers 1, 2, and 3

Tier Applicability — Summary

The applicable tier is determined by the volume of material to be extracted and whether extracted material will be sold or used off-site:

- Tier 1 applies to residential extraction projects generating more than 1,000 and up to 5,000 cubic yards of material.
- Tier 2 applies to residential or commercial extraction projects generating more than 5,000 and up to 10,000 cubic yards, OR any project generating more than 1,000 cubic yards where extracted material will be sold or used off-site.
- Tier 3 applies to any extraction project generating more than 10,000 cubic yards, regardless of whether material is sold or used off-site.

Where a project's characteristics could place it in more than one tier, the more stringent tier shall apply. The Zoning Administrator shall determine the applicable tier at the time of permit application. **Tier-Specific Definitions**

Residential Extraction Project:	An earth extraction operation conducted in connection with residential site preparation, including but not limited to construction of a dwelling, driveway, accessory structure, or on-site utility installation, where extracted material is not sold or conveyed off-site.
Commercial Extraction Operation:	Any earth extraction activity conducted for commercial purposes, including quarrying, aggregate production, or the extraction of material primarily for sale, exchange, or off-site use by a party other than the landowner.
Off-Site Sale or Use:	The transfer, sale, conveyance, or delivery of extracted earth material to any party other than the landowner of the extraction site, or the use of extracted material at a location other than the extraction site.

Tier 1 — Residential Projects | 1,000 to 5,000 Cubic Yards | No Off-Site Sale

Section __.01 — Purpose (Tier 1)

These regulations apply to residential extraction projects generating more than 1,000 and up to 5,000 cubic yards of material where no extracted material will be sold or used off-site. These regulations are adopted to protect the public health, safety, and welfare of town residents and abutting property owners

Section __.02 — Applicability (Tier 1)

These provisions apply to residential earth extraction operations meeting the volume thresholds above, including ledge blasting, aggregate crushing, and related activities conducted in connection with residential site preparation. Residential projects with less than 1,000 cubic yards of extraction are exempt from these regulations.

Section __.03 — Dust Control Plan (Tier 1)

A. All applicants shall submit a Dust Control Plan as part of their permit application. The Plan shall identify:

- The types and locations of dust-generating activities on the site;
- The dust suppression methods and equipment to be used at each activity area;
- The water source(s) available for dust suppression; and

Section __.04 — Visible Dust Standard (Tier 1)

No visible dust from any earth extraction operation shall be permitted to cross a property line or reach a public road.

Section __.05 — Dust Suppression Measures (Tier 1)

Operators shall implement dust suppression appropriate to site conditions, including but not limited to:

- Water spraying at the active extraction face, drilling areas, and rock processing equipment;
- Water application on internal haul roads at a frequency sufficient to prevent visible dust;
- Wetting or covering of material stockpiles during dry or windy conditions; and
- Minimizing material dropped from heights that would generate airborne dust.

The specific method of suppression is at the operator's discretion provided the visible dust standard in Section __.04 is maintained.

Section __.07 — Public Roads (Tier 1)

The operator shall take reasonable precautions to prevent dust and mud from being tracked onto public roads. This includes use of a graveled access apron at site exits or other equivalent measures. The Applicant shall provided this plan as part of there application materials.

Section __.09 — Enforcement (Tier 1)

Upon a verified violation of the visible dust standard or any provision of this section, the Zoning Administrator shall follow the steps for zoning enforcement noted in Section 630 of the bylaws.

Tier 2 — Residential or Commercial Projects | 5,000 to 10,000 CY, or Any Project with Off-Site Sale >1,000 CY

Section __.01 — Purpose (Tier 2)

These regulations apply to residential or commercial extraction projects generating more than 5,000 and up to 10,000 cubic yards of material, or to any project generating more than 1,000 cubic yards where extracted material will be sold or used off-site. These regulations are adopted to protect the public health, safety, and welfare of residents, abutting landowners, and the broader community by establishing enhanced standards for controlling airborne dust..

Section __.02 — Applicability (Tier 2)

These provisions apply to all earth extraction operations meeting the Tier 2 thresholds above, including rock quarrying, ledge blasting, aggregate crushing, screening, and related activities requiring a permit under this bylaw.

Section __.03 — Fugitive Dust Control Plan (FDCP) (Tier 2)

A. Prior to the issuance of any earth extraction permit, the applicant shall submit a written Fugitive Dust Control Plan (FDCP) to the Development Review Board (DRB) for review and approval through conditional use review. No operations shall commence until the FDCP is approved. The DRB may retain a qualified environmental consultant at the applicant's expense to review the Plan.

B. The FDCP shall include, at minimum:

- A site map identifying all dust-generating activity areas, access roads, stockpile locations, and property boundaries;
- A description of dust suppression methods and equipment for each activity area, including water sources, application rates, and equipment specifications;
- Identification of sensitive receptors within 1,000 feet of the extraction area (residences, schools, water bodies);
- Wind and weather conditions under which operations must be modified or suspended;

Section __.04 — Visible Dust Standard (Tier 2)

A. No visible dust from earth extraction operations shall cross a property line or reach a public road or right-of way.

Section __.05 — Required Dust Suppression Measures (Tier 2)

The applicants plan set shall include information noting the following:

- Water injections through drill bits or surface water spraying shall be applied continuously during all drilling operations;
- Water misting or suppression shall be applied at the active extraction face during and after blasting and mechanical excavation.

B. Crushing and Screening Equipment

- Water spray nozzles or misting systems shall be installed and operated at all crushers, screening equipment, and conveyor transfer points;
- Equipment enclosures or shrouds shall be used where feasible to contain dust at the point of generation.

C. Haul Roads

- The applicants plan set shall provide documentation noting the following:
    - All internal unpaved haul roads shall be treated with water or an approved dust suppressant at a frequency sufficient to prevent visible dust.
    - A maximum vehicle speed of 10 miles per hour shall be posted and enforced on all unpaved internal roads.
    - A graveled or paved apron of not less than 50 feet shall be maintained at the public road access point.

D. Stockpile Management

- Stockpiles exceeding 500 cubic yards shall be covered with tarps, treated with a dust-binding agent, or stabilized with surface crusting material;
- Stockpiles shall be set back a minimum of 100 feet from any property line.

Section __.06 — Blasting Operations (Tier 2): Any applicant shall provide written documentation demonstrating compliance with the following blasting regulations:

A. Blasting shall be permitted only between 8:00 a.m. and 4:00 p.m. on weekdays excluding state and federal holidays.

B. Water misting equipment shall be activated in the blast zone prior to and immediately following each detonation to suppress blast dust.

Section __.07 — Windbreaks and Buffers (Tier 2)

A. A vegetated buffer, earthen berm, or retained natural vegetation of not less than 25 feet in depth shall be maintained along all property lines abutting a residential use, public road, or public right-of-way. The buffer shall be maintained in healthy condition throughout the life of the operation.

B. Once extraction operations have permanently ceased, the property owner may remove the vegetative buffer with prior written approval from the Zoning Administrator. Native vegetation shall be retained and or used.

Section __.08 — Truck Exit Measures (Tier 2)

The operator shall install and maintain a rumble strip, wheel wash station, or equivalent measure at each site exit to prevent mud and dust from being carried onto public roads. Public road access points shall be inspected daily and cleaned as needed.

Section __.09 — Enforcement (Tier 2)

Upon a verified violation of the visible dust standard or any provision of this section, the Zoning Administrator shall follow the steps for zoning enforcement noted in Section 630 of the bylaws.

Tier 3 — Any Project | More than 10,000 Cubic Yards

Section __.01 — Purpose (Tier 3)

These regulations apply to any earth extraction project generating more than 10,000 cubic yards of material, regardless of whether extracted material is sold or used off-site. These regulations establish strict performance standards for the control of airborne dust. The town finds that uncontrolled dust from large-scale rock quarrying and earth extraction poses a direct risk to public health, diminishes quality of life for neighboring residents, and may harm aquatic and terrestrial ecosystems.

Section __.02 — Applicability (Tier 3)

These provisions apply to all earth extraction operations generating more than 10,000 cubic yards, including rock quarrying, ledge blasting, aggregate crushing, screening, material handling, and related activities requiring a permit under this bylaw.

Section __.03 — Fugitive Dust Control Plan (FDCP) — Required Prior to Approval (Tier 3)

A. No earth extraction permit shall be issued until a Fugitive Dust Control Plan (FDCP) has been reviewed and approved by the Development Review Board (DRB) through conditional use review. The DRB may retain a qualified environmental consultant at the applicant's expense to review the Plan.

B. The FDCP shall include all of the following:

- A scaled site plan identifying all dust-generating areas, haul roads, stockpile locations, buffers, and sensitive receptors within 1,500 feet of the extraction area;
- A complete inventory of dust-generating activities and equipment with manufacturer specifications;
- A detailed description of suppression methods, water sources, application rates, and equipment at each dust generation point;

Section __.04 — Zero Visible Dust Standard (Tier 3)

A. The applicants plan set shall demonstrate that no visible dust from any earth extraction operation shall be permitted to become airborne beyond the active work area. For purposes of this section, the active work area is defined as within 50 feet of the equipment or activity generating the dust.

B. Dust suppression measures shall be continuously active during all dust-generating operations.

Section __.05 — Required Dust Suppression Measures (Tier 3)

The applicant's hall provided documentation that all of the following measures will be in place during extraction operations as part of their application.. Operators may not substitute or omit measures without approval from the DRB.

A. Extraction Face, Drilling, and Blasting

- Water injection through drill bits shall be used continuously during all drilling operations;
- Automated water misting or atomized mist cannon systems shall be deployed at the active extraction face during all mechanical excavation;
- Pre-blast misting shall be activated for a minimum of 10 minutes before detonation; post-blast misting shall continue for a minimum of 15 minutes following detonation.

B. Crushing, Screening, and Processing Equipment

- All crushers, screening equipment, and conveyor transfer points shall be equipped with integrated water spray or atomized misting systems operated continuously during processing;
- Equipment enclosures with dust-tight seals shall be installed on all screening equipment;

C. Haul Roads and Vehicle Traffic

- All internal haul roads shall be paved, treated with calcium chloride, or treated with a polymer-based dust suppressant certified by the U.S. EPA;

- A maximum vehicle speed of 10 miles per hour shall be posted and enforced on all unpaved internal roads;
- A wheel wash station shall be installed and maintained at each public road access point. All vehicles shall pass through the wheel wash before exiting the site;

D. Stockpile Management

- All material stockpiles shall be covered with tarps or treated with an EPA-certified dust-binding or crusting agent within 24 hours of formation;
- Stockpiles shall be set back a minimum of 150 feet from all property lines;
- Active stockpile loading and unloading shall be conducted with misting systems in operation.

E. Drainage

- All surface drainage affected by excavation operations shall be controlled by the owner to prevent erosion debris and other loose materials from filling any drainage course, street or private property.

F. Slope Fencing All excavation slopes in excess of 1:2 shall be adequately fenced as determined by the Zoning Administrator.

Section __.06 — Blasting Operations (Tier 3)

A. Blasting is permitted only between 9:00 a.m. and 3:00 p.m. on weekdays, excluding state and federal holidays. No blasting shall occur when wind speed exceeds 15 mph or during temperature inversions that may concentrate dust at ground level.

B. Pre-blast water misting shall be activated a minimum of 10 minutes before detonation. Post-blast suppression shall be maintained for a minimum of 15 minutes following each detonation.

Section __.07 — Site Reclamation (Tier 3) (Existing §485 Language)

A. The removal of all material shall be conducted so as to result in the improvement of the land, giving due regard to the contours in the vicinity, such as leveling slopes and removing hills. The digging or creating of pits or steep slopes shall not be permitted, unless provision is made to refill such pits.

B. The excavation operation sites shall be graded smooth and left in a neat condition. Cut slopes and spoil banks shall not be allowed to remain. The operation site shall have 4" of topsoil, fertilized, mulched and seeded so as to establish a firm cover of grass or other vegetation sufficient to prevent erosion under the supervision and to the satisfaction of the Zoning Administrator.

D. Stripping of topsoil for sale or for use on other premises, shall be prohibited.

Section __.08 — Equipment Setbacks (Tier 3) (Existing §485 Language)

A. No excavation, blasting or stock piling of materials shall be located within two hundred feet of any street or other property line.

B. No power-activated sorting machinery or equipment shall be located within three hundred feet of any street or other property line, and all such machinery shall be equipped with satisfactory dust elimination devices.

Section __.09 — Buffers and Windbreaks (Tier 3)

A. A vegetated buffer, earthen berm, or retained natural vegetation of not less than 50 feet in depth shall be maintained along all property lines.

B. Where the extraction site abuts a residential use, school, childcare facility, or public water supply watershed, the buffer depth shall be increased to not less than 100 feet.

C. Vegetated buffers shall consist of native tree and shrub species of sufficient density to function as a wind barrier. Buffer plantings shall be replaced within one (1) growing season if they die or are removed.

Section __.11 — Financial Assurance (Tier 3)

As a condition of permit issuance, the operator shall provide a performance bond, escrow account, or irrevocable letter of credit in an amount determined by the DRB to be sufficient to cover the cost of remediating off-site dust impacts and restoring any affected buffers or vegetated areas.

Section __.12 — Enforcement and Penalties (Tier 3)

C. Upon a verified violation of the visible dust standard or any provision of this section, the Zoning Administrator shall follow the steps for zoning enforcement noted in Section 630 of the bylaws.

Town of Morristown, Vermont

Earth Extraction Operations & Dust Control Regulations

Tiered Approach | Conceptual Outline

Tiered Earth Extraction Report 8-24-26

Introduction: The purpose of this document is to provide draft regulations on earth extraction with a focus on dust control regulations. Earth Extraction means any activity involving the removal, excavation, quarrying, blasting, crushing, screening, or stockpiling of rock, ledge, soil, gravel, or other earth material. The Planning Commission is interested in adopting a tiered approach to regulating earth extraction and the corresponding dust associated with this activity. The tiered approach is intended to scale the regulations based on the intensity of the activity. This introduction is intended to provide a general overview of the different tiers. Please see the specific tier sections for more specific information on each tier.

Tier 1.

The purpose of this tier is to regulate earth extraction of 1,000-5000 cubic yards of material associated with residential projects with none of the material being used for sale offsite. The standards in this section are intended to provide additional protection to abutting properties and the public at large. The following is a list of some of the regulations in this section:

- Basic dust control regulations at the operator's discretion to make sure visible dust standards are met.
- ~~24 hour's notice in advance of blasting operations.~~
- Plan to prevent dust and mud tracking onto public roads.

Tier 2.

The purpose of these regulations is to regulate residential or commercial extraction between 5,000 and 10,000 cubic yards of extraction or the sale of more than 1,000 cubic yards of materials. This tier has stricter regulations than Tier 1 but is not as restrictive as Tier 3. The following is a list of some of the regulations in this section:

- A fugitive dust control plan with clear standards for compliance with visible dust standards.
- Required dust control measures.
- ~~48 hour's notice for blasting operations.~~
- Required windbreak and vegetative buffers.
- Specific standards for truck exit measures.

Tier 3.

The purpose of these regulations is to regulate all projects over 10,000 cubic yards of material. This is the strictest of the tiers and would only apply to larger projects.

- More stringent fugitive dust control standards than Tier 2.
- More stringent dust control measures.
- ~~72 hours' notice for blasting operations.~~
- Site reclamation plan for the site when extraction ceases.
- Required setbacks for extraction equipment.

Disclosure: It is important to note that these draft regulations are very much open to change. Their main purpose is to help frame the issue and show what a tiered approach to earth extraction could look like. Further refinement of the particular regulations found in this document will be required; however, the basic framework outlined in this approach would allow the town to tailor the regulations to the intensity of the project.

Regulatory References

Reference	Description
~~VAPCR 5-211~~	~~Vermont Air Pollution Control Regulation — Prohibition of Visible Air Contaminants.~~
~~VAPCR 5-231(4)~~	~~Vermont Air Pollution Control Regulation — Requires all reasonable precautions to prevent particulate matter from becoming airborne at quarries and gravel pits.~~
~~Vermont DEC Air Quality~~	~~Vermont Department of Environmental Conservation, Air Quality & Climate Division. dec.vermont.gov~~
EPA Fugitive Dust Control Best Practices (2022)	U.S. EPA guidance on fugitive dust control plan elements, hierarchy of control methods, and monitoring. epa.gov
~~40 CFR Part 60 Subpart OOO~~	~~Federal air regulation for nonmetallic mineral processing operations.~~
MSHA (30 CFR Part 56)	Mine Safety and Health Administration standards for surface metal and nonmetal mines.
Vermont Planning Act (24 V.S.A. §4414)	Grants municipalities authority to regulate uses of land and structures, including performance standards for operations generating dust.
Morristown/Morrisville Zoning and Subdivision Bylaws (2023) §485	Current bylaw provision governing Extraction of Earth Resources via the Special Industry Use.

Definitions

Earth Extraction Operation:	Any activity involving the removal, excavation, quarrying, blasting, crushing, screening, or stockpiling of rock, ledge, soil, gravel, or other earth material.
Fugitive Dust:	Particulate matter that becomes airborne from earth extraction operations and is not emitted through a stack or duct. Includes dust from drilling, blasting, crushing, vehicle traffic, stockpiles, and wind erosion.
Active Work Area:	The immediate area within which extraction equipment is operating at any given time, typically defined as within 50 feet of the operating equipment.
Sensitive Receptor:	A residence, school, childcare facility, hospital, public water supply intake, or other location where dust exposure poses an elevated risk to human health or the environment.
Dust Control Plan / FDCP:	A written plan describing all dust-generating activities and the measures to be taken to prevent, reduce, and monitor airborne dust emissions from the site.
Visible Dust:	Any emission of particulate matter that is detectable to the unaided human eye under normal daylight conditions.
Off-Site Sale or Use:	The transfer, sale, conveyance, or delivery of extracted earth material to any party other than the landowner of the extraction site, or the use of extracted material at a location other than the extraction site.
Residential Extraction:	An earth extraction operation conducted in connection with residential site preparation where extracted material is not sold or conveyed off-site.

Commercial Extraction Operation (Option E):	Any earth extraction activity conducted for commercial purposes, including quarrying or aggregate production, or extraction of material primarily for sale, exchange, or offsite use.

Table 1 —Comparison with Morristown §485 Special Industry Use

This table compares the three tiers with the special industry used noted in the 2023 zoning and subdivision bylaws for Morristown located in section 485.

Feature / Requirement	Tier 1 (1,000–5,000 cy | Residential | No Off-Site Sale)	Tier 2 (5,000–10,000 cy | or Any with Off-Site Sale >1,000 cy)	Tier 3 (>10,000 cy | Any Project)	Current §485 Language (Morristown Zoning Bylaws 2023)
Permit Trigger	Residential project generating >1,000 and up to 5,000 cy; no off-site sale	Residential or commercial project generating >5,000 up to 10,000 cy; OR any project >1,000 cy with off-site sale	Any project generating >10,000 cy regardless of off-site sale	Removal of rock, soil, sand, or gravel for sale (except incidental to development on same parcel) requires DRB approval after a site rehabilitation plan is approved at a public hearing. No ~~volumebased~~volume based thresholds. Extension of a non-conforming operation by DRB only (§485.8).
Dust Control Plan	Basic Dust Control Plan submitted with permit application	Full FDCP submitted to DRB for approval before operations begin; optional independent consultant at applicant's expense	Full FDCP required before permit issued; DRB may require independent consultant at applicant's expense; annual update; posted on-site in weatherproof enclosure	No dust control plan of any kind required. §485.10 allows the DRB to attach additional conditions as it may find necessary for public safety and general welfare, which could include a plan requirement, but none is mandated.
Visible Dust Standard	No visible dust crossing property line	No visible dust crossing property line; proactive suppression required before dust is generated	Zero visible dust beyond active work area (within 50 ft of equipment); continuous suppression required; operations suspended immediately if systems inoperative	§485.6: All power-activated sorting machinery or equipment shall be equipped with satisfactory dust elimination devices. No visible dust performance standard or property line prohibition.

~~Feature / Requirement~~	~~Tier 1 (1,000–5,000 cy | Residential | No Off-Site Sale)~~	~~Tier 2 (5,000–10,000 cy | or Any with Off-Site Sale >1,000 cy)~~	~~Tier 3 (>10,000 cy | Any Project)~~	~~Current §485 Language (Morristown Zoning Bylaws 2023)~~
Water Suppression	Required; method at operator discretion	Required at all active extraction and processing points: drilling, crushing, screening, conveyors, haul roads, stockpiles	Automated misting systems required at extraction face; pre/post-blast misting (10 min before, 15 min after); all processing equipment continuously suppressed	No water suppression requirement. §485.6 requires "satisfactory dust elimination devices" on power-activated machinery but specifies no suppression methods.
Haul Road Treatment	Graveled access apron at public road exit; reasonable precautions to prevent tracking	Water or approved suppressant on internal roads; 10 mph speed limit posted; 50 ft graveled apron at public road	Roads paved, calcium chloride treated, or EPA-certified polymer suppressant; 10 mph limit; wheel wash station at every exit; daily road sweep	§485.6: No power-activated sorting machinery within 300 ft of any street or property line. No haul road treatment, speed limit, access apron, or wheel wash requirement.
Stockpile Management	Wetting or covering during dry or windy conditions; best efforts	Stockpiles >500 cy covered or stabilized; 100 ft setback from property lines	All stockpiles covered or stabilized within 24 hrs; 150 ft setback; misting during loading and unloading	§485.5: No stockpiling of materials within 200 ft of any street or other property line. §485.6: No stockpiles greater than 50 ft high. No cover, wetting, or stabilization requirement.
Blasting	24 hr abutter notice; 7:00 am–5:00 pm weekdays only	48 hr abutter + ZA written notice; 8:00 am–4:00 pm weekdays; misting at blast zone before and after detonation	72 hr abutter + ZA written notice; 9:00 am–3:00 pm weekdays; no blasting >15 mph wind or during inversions; licensed blaster documentation; pre/post misting	§485.5: No blasting within 200 ft of any street or other property line. No abutter notification requirement, no time-of-day restrictions, no weather limits, no licensed blaster requirement, and no blast dust misting provision.

Buffer / Windbreak	None required	25 ft vegetated buffer along residential and road frontages; native species; removable ~~postoperation~~post operation with ZA approval	50 ft vegetated buffer all property lines; 100 ft near schools, childcare, water supply; native tree/shrub species; replaced within one growing season if lost	§485.5: No excavation, blasting, or stockpiling within 200 ft of any street or property line. §485.6: No ~~poweractivated~~power activated machinery within 300 ft. These are safety setbacks, not vegetated buffers or windbreaks.
Enforcement ~~**Monitoring & Recordkeeping**~~	NOV + order to cease operations ~~Complaint log; 3-year retention~~	NOV within 48 hrs; cease operations; civil fines; DRB revocation referral ~~Quarterly selfinspection log; complaint log; 5year retention~~	1st: NOV + cease; 2nd: 5-day suspension + civil fine + DRB hearing; 3rd: revocation + bond forfeiture; independent ~~Monthly inspection on ZA-approved form; complaint log with weather data; Annual Dust Control Report to ZA by March 1; 7-year retention; open to public~~	§485.8: Extension of an existing non-conforming operation shall only be permitted by the DRB. §485.10: The DRB may attach any additional conditions as it may find necessary for the ~~No monitoring or recordkeeping requirements of any kind. §485.10 allows DRB to attach conditions but mandates nothing. No inspection log, complaint log, annual report, or retention period is required.~~
~~**Enforcement**~~	~~NOV + order to cease operations~~	~~NOV within 48 hrs; cease operations; civil fines; DRB revocation referral~~	~~1st: NOV + cease; 2nd: 5-day suspension + civil fine + DRB hearing; 3rd: revocation + bond forfeiture; independent~~	~~§485.8: Extension of an existing non-conforming operation shall only be permitted by the DRB. §485.10: The DRB may attach any additional conditions as it may find necessary for the~~

Feature / Requirement	Tier 1 (1,000–5,000 cy | Residential | No Off-Site Sale)	Tier 2 (5,000–10,000 cy | or Any with Off-Site Sale >1,000 cy)	Tier 3 (>10,000 cy | Any Project)	Current §485 Language (Morristown Zoning Bylaws 2023)
			monitor at operator's expense.	safety and general welfare of the public. No tiered penalty structure, no NOV procedure, no civil fine schedule.

Feature / Requirement	Tier 1 (1,000–5,000 cy | Residential | No Off-Site Sale)	Tier 2 (5,000–10,000 cy | or Any with Off-Site Sale >1,000 cy)	Tier 3 (>10,000 cy | Any Project)	Current §485 Language (Morristown Zoning Bylaws 2023)
Financial Assurance	None	None	Performance bond, escrow account, or irrevocable letter of credit required before permit issued; covers cost of dust impact remediation and buffer/vegetation restoration.	§485.1: Before approval of any new or proposed extension of a soil, sand, or gravel operation, a performance bond shall be secured from the applicant sufficient to ensure the abandoned site is left in a safe, attractive, and useful condition. Bond covers redevelopment as a park, lake, recreation area, or other usable open space.
Site Reclamation	Not addressed	Not addressed	§485 language directly incorporated in Section __.07: removal to improve land contours; no pits or steep slopes unless provision to refill; graded smooth; cut slopes and spoil banks not permitted to remain; 4" topsoil, fertilized, mulched, seeded under ZA supervision; topsoil stripping for off-site sale prohibited	§485.2: Removal to improve land contours; no pits or steep slopes unless provision to refill. §485.3: Sites graded smooth and left in neat condition; cut slopes/spoil banks not permitted; 4" topsoil, fertilized, mulched, seeded to ZA satisfaction. §485.9: Stripping of topsoil for sale or use on other premises prohibited.
Drainage	Not addressed	Not addressed	§485 language directly incorporated in Section __.05(F): all surface drainage affected by excavation controlled by owner to prevent erosion debris from filling drainage courses, streets, or private property	§485.4: All surface drainage affected by excavation operations shall be controlled by the owner to prevent erosion debris and other loose materials from filling any drainage course, street or private property. All drainage control provisions require ZA approval.
Equipment Setbacks	Not addressed	Not addressed	§485 language directly incorporated in Section __.08: no excavation, blasting, or stockpiling within 200 ft of any	§485.5: No excavation, blasting or stockpiling of materials within 200 ft of any street or other property line. §485.6: No power-activated sorting

			street or property line; no power-activated sorting machinery within 300 ft; all such machinery must have satisfactory dust elimination devices	machinery or equipment within 300 ft of any street or other property line; all such machinery shall be equipped with satisfactory dust elimination devices.
Slopes	Not addressed	Not addressed	§485 language incorporated in two sections: no pits or steep slopes unless provision to refill, all excavation slopes in excess of 1:2 shall be adequately fenced as determined by the ZA.	§485.2: The digging or creating of pits or steep slopes shall not be permitted, unless provision is made to refill such pit. §485.7: All excavation slopes in excess of 1:2 shall be adequately fenced as determined by the Zoning Administrator.
Best Suited For	Residential site work: home sites, driveways, accessory structures; no commercial sale of material	Residential or commercial projects with offsite material sale; moderate-scale operations	Large commercial quarrying; aggregate production; high volume extraction near sensitive receptors	§485 applies to all commercial extraction for sale (rock, soil, sand, gravel) not incidental to development on the same parcel, operating as a Special Industry Use in applicable zoning districts. No scale-based differentiation.

Tiered Approach | Tiers 1, 2, and 3

Tier Applicability — Summary

The applicable tier is determined by the volume of material to be extracted and whether extracted material will be sold or used off-site:

- Tier 1 applies to residential extraction projects generating more than 1,000 and up to 5,000 cubic yards of material.
- Tier 2 applies to residential or commercial extraction projects generating more than 5,000 and up to 10,000 cubic yards, OR any project generating more than 1,000 cubic yards where extracted material will be sold or used off-site.
- Tier 3 applies to any extraction project generating more than 10,000 cubic yards, regardless of whether material is sold or used off-site.

Where a project's characteristics could place it in more than one tier, the more stringent tier shall apply. The Zoning Administrator shall determine the applicable tier at the time of permit application. **Tier-Specific Definitions**

Residential Extraction Project:	An earth extraction operation conducted in connection with residential site preparation, including but not limited to construction of a dwelling, driveway, accessory structure, or on-site utility installation, where extracted material is not sold or conveyed off-site.
Commercial Extraction Operation:	Any earth extraction activity conducted for commercial purposes, including quarrying, aggregate production, or the extraction of material primarily for sale, exchange, or off-site use by a party other than the landowner.
Off-Site Sale or Use:	The transfer, sale, conveyance, or delivery of extracted earth material to any party other than the landowner of the extraction site, or the use of extracted material at a location other than the extraction site.

Tier 1 — Residential Projects | 1,000 to 5,000 Cubic Yards | No Off-Site Sale

Section __.01 — Purpose (Tier 1)

These regulations apply to residential extraction projects generating more than 1,000 and up to 5,000 cubic yards of material where no extracted material will be sold or used off-site. These regulations are adopted to protect the public health, safety, and welfare of town residents and abutting property owners ~~by minimizing airborne dust, consistent with Vermont Air Pollution Control Regulations VAPCR 5-211 and 5-231(4).~~

Section __.02 — Applicability (Tier 1)

These provisions apply to residential earth extraction operations meeting the volume thresholds above, including ledge blasting, aggregate crushing, and related activities conducted in connection with residential site preparation. Residential projects with less than 1,000 cubic yards of extraction are exempt from these regulations.

Section __.03 — Dust Control Plan (Tier 1)

A. All applicants shall submit a Dust Control Plan as part of their permit application. The Plan shall identify:

- The types and locations of dust-generating activities on the site;
- The dust suppression methods and equipment to be used at each activity area;

- The water source(s) available for dust suppression; and
- ~~The name and contact information of the individual responsible for dust control compliance.~~

~~B. The Dust Control Plan shall be kept on-site during all operations and made available to the Zoning Administrator upon request.~~

Section __.04 — Visible Dust Standard (Tier 1)

No visible dust from any earth extraction operation shall be permitted to cross a property line or reach a public road. ~~This standard is consistent with VAPCR 5-211, which prohibits visible air contaminants.~~

~~Reference: Vermont Air Pollution Control Regulation 5-211 — Prohibition of Visible Air Contaminants; VAPCR 5-231(4) — Reasonable precautions to prevent particulate matter from becoming airborne.~~

Section __.05 — Dust Suppression Measures (Tier 1)

Operators shall implement dust suppression appropriate to site conditions, including but not limited to:

- Water spraying at the active extraction face, drilling areas, and rock processing equipment;
- Water application on internal haul roads at a frequency sufficient to prevent visible dust;
- Wetting or covering of material stockpiles during dry or windy conditions; and
- Minimizing material dropped from heights that would generate airborne dust.

The specific method of suppression is at the operator's discretion provided the visible dust standard in Section __.04 is maintained.

~~**Section __.06 — Blasting Operations (Tier 1)**~~

~~Prior to any blasting operation, the operator shall notify all abutting landowners and the Zoning Administrator at least twenty-four (24) hours in advance. Blasting shall be conducted only between 7:00 a.m. and 5:00 p.m. on weekdays, unless otherwise approved by the Zoning Administrator.~~

Section __.07 — Public Roads (Tier 1)

The operator shall take reasonable precautions to prevent dust and mud from being tracked onto public roads. This includes use of a graveled access apron at site exits or other equivalent measures. The Applicant shall provided this plan as part of there application materials.

~~**Section __.08 — Complaints and Corrective Action (Tier 1)**~~

~~The operator shall maintain a written log of all dust-related complaints received from the public or town officials, together with a record of corrective actions taken in response. This log shall be retained for a minimum of three (3) years and made available to the Zoning Administrator upon request.~~

Section __.09 — Enforcement (Tier 1)

Upon a verified violation of the visible dust standard or any provision of this section, the Zoning Administrator shall follow the steps for zoning enforcement noted in Section 630 of the bylaws.~~:~~

- ~~Issue a written notice of violation requiring immediate corrective action; and/or~~
- ~~Upon failure to achieve compliance, order the suspension of dust-generating operations until compliance is restored.~~

Tier 2 — Residential or Commercial Projects | 5,000 to 10,000 CY, or Any Project with Off-Site Sale >1,000 CY

Section __.01 — Purpose (Tier 2)

These regulations apply to residential or commercial extraction projects generating more than 5,000 and up to 10,000 cubic yards of material, or to any project generating more than 1,000 cubic yards where extracted material will be sold or used off-site. These regulations are adopted to protect the public health, safety, and welfare of residents, abutting landowners, and the broader community by establishing enhanced standards for controlling airborne dust. ~~These provisions are consistent with and supplement Vermont Air Pollution Control Regulations VAPCR 5-211 and 5-231(4) and reflect industry best practices for fugitive dust management~~.

Section __.02 — Applicability (Tier 2)

These provisions apply to all earth extraction operations meeting the Tier 2 thresholds above, including rock quarrying, ledge blasting, aggregate crushing, screening, and related activities requiring a permit under this bylaw.

Section __.03 — Fugitive Dust Control Plan (FDCP) (Tier 2)

A. Prior to the issuance of any earth extraction permit, the applicant shall submit a written Fugitive Dust Control Plan (FDCP) to the Development Review Board (DRB) for review and approval through conditional use review. No operations shall commence until the FDCP is approved. The DRB may retain a qualified environmental consultant at the applicant's expense to review the Plan.

B. The FDCP shall include, at minimum:

- A site map identifying all dust-generating activity areas, access roads, stockpile locations, and property boundaries;
- A description of dust suppression methods and equipment for each activity area, including water sources, application rates, and equipment specifications;
- Identification of sensitive receptors within 1,000 feet of the extraction area (residences, schools, water bodies);
- Wind and weather conditions under which operations must be modified or suspended;
- ~~A complaint response procedure; and~~
- ~~The name and qualifications of the individual responsible for FDCP implementation.~~

~~C. The FDCP shall be kept on-site during all operations and provided to the Zoning Administrator upon request.~~

Section __.04 — Visible Dust Standard (Tier 2)

A. No visible dust from earth extraction operations shall cross a property line or reach a public road or right-of way. ~~This standard applies at all times during active operations.~~

~~B. Dust suppression measures shall be activated before visible dust is generated, not in response to it. Operators shall not wait for visible dust to appear before applying suppression.~~

~~Reference: Vermont Air Pollution Control Regulation 5-211 — Prohibition of Visible Air Contaminants; VAPCR 5-231(4) — Reasonable precautions to prevent particulate matter from becoming airborne.~~

Section __.05 — Required Dust Suppression Measures (Tier 2)

~~Operators~~The applicants plan set shall include information noting ~~implement~~ the followin~~g dust suppression measures~~: ~~at a minimum:~~

~~Extraction Face and Drilling~~

- Water ~~injection~~injections through drill bits or surface water spraying shall be applied continuously during all drilling operations;
- Water misting or suppression shall be applied at the active extraction face during and after blasting and mechanical excavation.

B. Crushing and Screening Equipment

- Water spray nozzles or misting systems shall be installed and operated at all crushers, screening equipment, and conveyor transfer points;
- Equipment enclosures or shrouds shall be used where feasible to contain dust at the point of generation.

C. Haul Roads

- The applicants plan set shall provide documentation noting the following:

- A~~A~~ll internal unpaved haul roads shall be treated with water or an approved dust suppressant at a frequency sufficient to prevent visible dust.~~;~~
- A maximum vehicle speed of 10 miles per hour shall be posted and enforced on all unpaved internal roads.~~;~~
- A graveled or paved apron of not less than 50 feet shall be maintained at the public road access point.

D. Stockpile Management

- Stockpiles exceeding 500 cubic yards shall be covered with tarps, treated with a dust-binding agent, or stabilized with surface crusting material;
- Stockpiles shall be set back a minimum of 100 feet from any property line.

~~E. Wind Conditions~~

- ~~During sustained wind events exceeding 20 miles per hour, the operator shall increase the frequency of water applications or suspend dust-generating operations until wind conditions subside.~~

Section __.06 — Blasting Operations (Tier 2): Any applicant shall provide written documentation demonstrating compliance with the following blasting regulations:

~~A. Prior to any blasting operation, the operator shall provide written notification to all abutting landowners and the Zoning Administrator at least forty-eight (48) hours in advance.~~

~~B.~~A. Blasting shall be permitted only between 8:00 a.m. and 4:00 p.m. on weekdays excluding state and federal holidays.

~~C.~~B. Water misting equipment shall be activated in the blast zone prior to and immediately following each detonation to suppress blast dust.

Section __.07 — Windbreaks and Buffers (Tier 2)

A. A vegetated buffer, earthen berm, or retained natural vegetation of not less than 25 feet in depth shall be maintained along all property lines abutting a residential use, public road, or public right-of-way. The buffer shall be maintained in healthy condition throughout the life of the operation.

B. Once extraction operations have permanently ceased, the property owner may remove the vegetative buffer with prior written approval from the Zoning Administrator. Native vegetation shall be retained and or used.

Section __.08 — Truck Exit Measures (Tier 2)

The operator shall install and maintain a rumble strip, wheel wash station, or equivalent measure at each site exit to prevent mud and dust from being carried onto public roads. Public road access points shall be inspected daily and cleaned as needed.

~~**Section __.09 — Monitoring and Recordkeeping (Tier 2)**~~

~~A. The operator shall conduct a quarterly self-inspection of all dust control measures and maintain a written inspection log documenting the date of inspection, conditions observed, and any corrective actions taken.~~

~~B. A log of all dust-related complaints shall be maintained, together with the operator's response and corrective actions. Logs shall be retained for a minimum of five (5) years and provided to the Zoning Administrator upon request.~~

Section __.09 — Enforcement (Tier 2)

Upon a verified violation of the visible dust standard or any provision of this section, the Zoning Administrator shall follow the steps for zoning **enforcement** noted in Section 630 of the bylaws.~~Section __.10 — Enforcement (Tier 2)~~

~~A. Upon a verified violation of any provision of this section, the Zoning Administrator shall issue a written notice of violation specifying the nature of the violation and requiring corrective action within forty-eight (48) hours. B. Failure to achieve compliance within the time specified may result in:~~

- ~~Suspension of earth extraction operations pending correction;~~
- ~~Civil fines as provided by this bylaw; and/or~~
- ~~Referral to the Development Review Board for permit revocation proceedings.~~

Tier~~er~~ 3 — Any Project | More than 10,000 Cubic Yards

Section __.01 — Purpose (Tier 3)

These regulations apply to any earth extraction project generating more than 10,000 cubic yards of material, regardless of whether extracted material is sold or used off-site. These regulations establish strict performance standards for the control of airborne dust. The town finds that uncontrolled dust from large-scale rock quarrying and earth extraction poses a direct risk to public health, diminishes quality of life for neighboring residents, and may harm aquatic and terrestrial ecosystems. ~~These provisions are adopted consistent with Vermont Air Pollution Control Regulations VAPCR 5-211 and 5-231(4) and are grounded in current industry best practices for fugitive dust management.~~

Section __.02 — Applicability (Tier 3)

These provisions apply to all earth extraction operations generating more than 10,000 cubic yards, including rock quarrying, ledge blasting, aggregate crushing, screening, material handling, and related activities requiring a permit under this bylaw.

Section __.03 — Fugitive Dust Control Plan (FDCP) — Required Prior to Approval (Tier 3)

A. No earth extraction permit shall be issued until a Fugitive Dust Control Plan (FDCP) has been reviewed and approved by the Development Review Board (DRB) through conditional use review. The DRB may retain a qualified environmental consultant at the applicant's expense to review the Plan.

B. The FDCP shall include all of the following:

- A scaled site plan identifying all dust-generating areas, haul roads, stockpile locations, buffers, and sensitive receptors within 1,500 feet of the extraction area;
- A complete inventory of dust-generating activities and equipment with manufacturer specifications;
- A detailed description of suppression methods, water sources, application rates, and equipment at each dust generation point;
- ~~A weather monitoring protocol specifying operational limits for wind speed, temperature, and drought conditions;~~
- ~~A complaint response and public notification procedure;~~
- ~~A monitoring and recordkeeping schedule; and~~
- ~~Emergency shutdown procedures for uncontrolled dust events.~~

~~C. The FDCP shall be updated annually and resubmitted to the Zoning Administrator. Material changes to extraction areas or equipment shall require an amended FDCP prior to implementation.~~

~~D. The approved FDCP shall be posted on-site in a weatherproof enclosure at the main site access point.~~

Section __.04 — Zero Visible Dust Standard (Tier 3)

A. The applicants plan set shall demonstrate that n~~N~~o visible dust from any earth extraction operation shall be permitted to become airborne beyond the active work area. For purposes of this section, the active work area is defined as within 50 feet of the equipment or activity generating the dust.

B. Dust suppression measures shall be continuously active during all dust-generating operations. ~~Operations shall be suspended immediately if suppression systems are inoperative.~~

~~C. If visible dust is observed reaching the site boundary or public road by any town official or verified complaint, the operator shall immediately suspend the dust-generating operation and shall not resume until corrective measures have been implemented and verified.~~

~~Reference: VAPCR 5-211 — Prohibition of Visible Air Contaminants; VAPCR 5-231(4); EPA Fugitive Dust Control Best Practices (2022).~~

Section __.05 — Required Dust Suppression Measures (Tier 3)

The applicant's hall provided documentation that a~~A~~ll of the following measures will be in place during extraction operations as part of their application.~~ are required~~. Operators may not substitute or omit measures without ~~prior written~~ approval from the ~~Zoning Administrator~~DRB.

A. Extraction Face, Drilling, and Blasting

- Water injection through drill bits shall be used continuously during all drilling operations;
- Automated water misting or atomized mist cannon systems shall be deployed at the active extraction face during all mechanical excavation;
- Pre-blast misting shall be activated for a minimum of 10 minutes before detonation; post-blast misting shall continue for a minimum of 15 minutes following detonation.

B. Crushing, Screening, and Processing Equipment

- All crushers, screening equipment, and conveyor transfer points shall be equipped with integrated water spray or atomized misting systems operated continuously during processing;
- Equipment enclosures with dust-tight seals shall be installed on all screening equipment;
- ~~Operators shall consider local exhaust ventilation (LEV) systems at primary crushing stations where feasible.~~

C. Haul Roads and Vehicle Traffic

- All internal haul roads shall be paved, treated with calcium chloride, or treated with a polymer-based dust suppressant certified by the U.S. EPA;
- A maximum vehicle speed of 10 miles per hour shall be posted and enforced on all unpaved internal roads;
- A wheel wash station shall be installed and maintained at each public road access point. All vehicles shall pass through the wheel wash before exiting the site;
- ~~Public road access points shall be swept or washed at the end of each operating day.~~

D. Stockpile Management

- All material stockpiles shall be covered with tarps or treated with an EPA-certified dust-binding or crusting agent within 24 hours of formation;
- Stockpiles shall be set back a minimum of 150 feet from all property lines;
- Active stockpile loading and unloading shall be conducted with misting systems in operation.

~~E. Weather and Wind Conditions~~

- ~~Operations shall be suspended when sustained wind speeds exceed 15 miles per hour at the site, unless automated misting systems can demonstrably prevent off-site dust migration;~~
- ~~A wind monitoring instrument shall be maintained at the site and readings logged during all operational hours.~~

~~F.~~E. Drainage

- All surface drainage affected by excavation operations shall be controlled by the owner to prevent erosion debris and other loose materials from filling any drainage course, street or private property.

~~G.~~F. Slope Fencing All excavation slopes in excess of 1:2 shall be adequately fenced as determined by the Zoning Administrator.

Section __.06 — Blasting Operations (Tier 3)

~~A. The operator shall provide written notification to all abutting landowners and the Zoning Administrator at least seventy-two (72) hours prior to any blasting operation.~~

~~B.~~A. Blasting is permitted only between 9:00 a.m. and 3:00 p.m. on weekdays, excluding state and federal holidays. No blasting shall occur when wind speed exceeds 15 mph or during temperature inversions that may concentrate dust at ground level.

~~C.~~B. Pre-blast water misting shall be activated a minimum of 10 minutes before detonation. Post-blast suppression shall be maintained for a minimum of 15 minutes following each detonation.

~~D. Blast design shall be documented by a licensed blaster and retained in the site file for inspection.~~

Section __.07 — Site Reclamation (Tier 3) (Existing §485 Language)

A. The removal of all material shall be conducted so as to result in the improvement of the land, giving due regard to the contours in the vicinity, such as leveling slopes and removing hills. The digging or creating of pits or steep slopes shall not be permitted, unless provision is made to refill such pits.

B. The excavation operation sites shall be graded smooth and left in a neat condition. Cut slopes and spoil banks shall not be allowed to remain. The operation site shall have 4" of topsoil, fertilized, mulched and seeded so as to establish a firm cover of grass or other vegetation sufficient to prevent erosion under the supervision and to the satisfaction of the Zoning Administrator.

D. Stripping of topsoil for sale or for use on other premises, shall be prohibited.

Section __.08 — Equipment Setbacks (Tier 3) (Existing §485 Language)

A. No excavation, blasting or stock piling of materials shall be located within two hundred feet of any street or other property line.

B. No power-activated sorting machinery or equipment shall be located within three hundred feet of any street or other property line, and all such machinery shall be equipped with satisfactory dust elimination devices.

Section __.09 — Buffers and Windbreaks (Tier 3)

A. A vegetated buffer, earthen berm, or retained natural vegetation of not less than 50 feet in depth shall be maintained along all property lines.

B. Where the extraction site abuts a residential use, school, childcare facility, or public water supply watershed, the buffer depth shall be increased to not less than 100 feet.

C. Vegetated buffers shall consist of native tree and shrub species of sufficient density to function as a wind barrier. Buffer plantings shall be replaced within one (1) growing season if they die or are removed.

~~**Section __.10 — Monitoring, Recordkeeping, and Reporting (Tier 3)**~~

~~A. The operator shall conduct a monthly visual inspection of all dust control measures. Inspection results shall be recorded on a standardized form approved by the Zoning Administrator, documenting conditions, suppression system status, and any corrective actions.~~

~~B. A dust complaint log shall be maintained and shall include the date and time of complaint, nature of complaint, weather conditions at time of complaint, and the operator's response and corrective actions.~~

~~C. The operator shall submit an Annual Dust Control Report to the Zoning Administrator by March 1 of each year summarizing: operations conducted in the prior year, dust suppression measures used, complaints received and resolved, and any changes proposed to the FDCP.~~

~~D. All records shall be retained for a minimum of seven (7) years and shall be open to public inspection upon request.~~

Section __.11 — Financial Assurance (Tier 3)

As a condition of permit issuance, the operator shall provide a performance bond, escrow account, or irrevocable letter of credit in an amount determined by the DRB to be sufficient to cover the cost of remediating off-site dust impacts and restoring any affected buffers or vegetated areas.

Section __.12 — Enforcement and Penalties (Tier 3)

Upon a verified violation of the visible dust standard or any provision of this section, the Zoning Administrator shall follow the steps for zoning enforcement noted in Section 630 of the bylaws.~~A. Upon a first verified violation, the Zoning Administrator shall issue a written notice of violation and order immediate corrective action. Operations shall be suspended until compliance is demonstrated. B. A second violation within any twelve (12) month period shall result in:~~

- ~~Mandatory suspension of operations for a minimum of five (5) business days;~~
- ~~A civil penalty as set forth in this bylaw; and~~
- ~~Automatic referral to the DRB for a permit compliance hearing.~~

~~C. A third or subsequent violation shall be grounds for permit revocation and forfeiture of any performance bond.~~

~~D. The town may engage an independent air quality monitor at the operator's expense following a second or subsequent violation to assess ongoing compliance.~~

~~E. The DRB may attach any additional conditions as it may find necessary for the safety and general welfare of the public.~~

~~F.~~C. ~~Extension of an existing non-conforming operation shall only be permitted by the DRB.~~

(2) All temporary structures including, but not limited to, trailers, tents, trucks and other registered vehicles and carts with an area greater than 32 sq. ft. selling or serving goods or food, and mobile homes used for temporary office or storage space may be permitted as a temporary accessory structure to an existing or proposed approved use. Such structures shall not be used for dwelling purposes.

(3) A permit for a temporary structure may be issued for a specified period of time not to exceed six (6) months.

(4) A temporary structure that is to be used as an extension or expansion of a conditional use will require conditional use approval from the DRB, unless the Zoning Administrator determines that the structure is a minor alteration to a conditional use and can be administratively approved.

(5) A temporary structure shall be dismantled or removed upon expiration of the permit, unless the applicant applies for a new permit.

4.16 Setback Waiver For Gas Station Canopies

(1) Canopy structures accessory to a gasoline service station in existence as of January 1, 2012 may be permitted to extend into a required yard setback when the following conditions are met:

A. Such canopies shall remain unenclosed.

B. Canopies shall be no closer than 10 feet to a lot line or highway right-of-way.

C. The canopy is designed in a manner that promotes a high quality of design and construction; incorporates traditional building materials, when possible; and should generally be designed with a pitched roof and of a mass and scale compatible with neighboring properties.

D. The DRB receives a recommendation from the Stowe Historic Preservation Commission after review of a submitted application.

4.17 Performance Standards

(1) No land or building in any zoning district shall be used or occupied in any manner that creates any dangerous, injurious, noxious, or otherwise objectionable use, or fire, explosive, or other hazard, noise or vibration, smoke, dust, odor, or other form of air pollution, heat, cold, dampness, electromagnetic disturbance, or other substance, condition, or element in such manner or in such amount as to adversely affect the reasonable use of the surrounding area or adjoining premises.

(2) All new development and all existing land uses, except for agriculture and forestry, whether permitted by these regulations or otherwise, including non-conforming uses and uses approved by the Development Review Board as conditional uses, must at all times comply with the standards and requirements set forth below:

A. Noise. Unless otherwise approved by the Development Review Board, noise emanating off site must not be distinct from the background sound level beyond the property line, and must not interfere with the reasonable use and enjoyment of other properties. If a proposed land use and development is deemed likely to have noise impacts, the Development Review Board may:

1. Require the applicant to submit an acoustical analysis of sound generation on the site prepared by a qualified professional.

2. Require acoustical site design strategies, and acoustical architectural design strategies to manage noise generated on the site.

B. Glare. Outdoor lighting shall not be used or directed in such a manner that it produces glare on roads, on nearby property, or in the windows of nearby buildings. All new or replacement outdoor lighting fixtures must have the Dark Sky Fixture Seal of Approval from the International Dark-Sky Association and meet the requirement of Section 4.8 of these regulations.

C. Odors. No ongoing emission of objectionable odor beyond the property line of a premise shall be discharged, caused, allowed or permitted. In addition, the temporary emission of objectionable odors for a duration of more than 30 minutes in any two-hour period is prohibited. This provision does not apply to odors generated by the preparation and cooking of food.

D. Air Quality. Generation of dust, dirt, fly ash, smoke, particulate matter or other airborne solids that accumulate at any point beyond the property line or that interfere with the reasonable use and enjoyment of other properties is prohibited except when related to approved construction activities and wood burning for residential use.

E. Vibration. Vibration that is easily discernible without special instruments at any point beyond the property line is prohibited except that:

1. This will not apply to vibration caused by motor vehicle or aircraft traffic.

2. The Development Review Board may approve greater vibration levels for a specified period, frequency and purpose.

F. Fire and Explosion Hazards. All activities involving use, handling or storage of hazardous material shall be provided with adequate safety devices against the hazard of fire and explosion, and adequate firefighting and fire suppression equipment and devices standard in the industry, as determined by the Stowe Fire Chief. Burning of waste materials in open fires is prohibited. The relevant provisions of all State and local laws and regulations shall also apply. Storage of flammable liquids, with the exception of propane gas and gasoline/diesel fuel in containers of six gallons or less, in residential areas is prohibited.

G. Waste Storage. Storage of wastes that attract insects or rodents, or otherwise create a health hazard is prohibited. All waste must be stored in tightly sealed storage containers or within a fully enclosed building unless specifically approved otherwise by the Development Review Board. Solid waste removal must occur on a regular basis to prevent accumulation. Waste receptacles must be appropriate screened per Section 4.6.

H. Electrical or Radio Interference. Creating interference with electrical or radio apparatus beyond the property line is prohibited.

4.18 Accessory On-Farm Businesses

(1) Accessory on-farm businesses are allowed in all zoning districts at the same location as a farm. Accessory on-farm business means activity that is accessory to a farm and comprises one or both of the following:

A. The storage, preparation, processing, and sale of qualifying products, provided that more than 50 percent of the total annual sales are from qualifying products that are principally produced on the farm at which the business is located.

B. Educational, recreational, or social events that feature agricultural practices or qualifying products, or both. Such events may include tours of the farm, farm stays, tastings and meals featuring qualifying products, and classes or exhibits in the preparation, processing, or harvesting of qualifying products. As used in this subdivision (II), "farm stay" means a paid, overnight guest accommodation on a farm for the purpose of participating in educational, recreational, or social activities on the farm that feature agricultural practices or qualifying products, or both. A farm stay includes the option for guests to participate in such activities.

(2) Eligibility. For an accessory on-farm business to be eligible under this section, the business shall comply with each of the following:

A. The business is operated by the farm owner, one or more persons residing on the farm parcel, or the lessee of a portion of the farm.

B. The farm meets the threshold criteria for the applicability of the Vermont Required Agricultural Practices rules as set forth in those rules.

(3) Use of structures or land. An accessory on-farm business may take place inside new or existing structures or on the land.

(4) Review; permit. Activities of an accessory on-farm business that are not exempt under Section 2.5 of these regulations require review by the DRB and can only be regulated with respect to: the adequacy of parking, traffic access, and circulation for pedestrians and vehicles; landscaping and screening; and exterior lighting. Accessory on-farm business are also subject to the performance standards of Section 4.17.

4.19 Outdoor Seating for Restaurants

(1) Any new proposal for outdoor seating for a restaurant, or expansion of existing outdoor seating, will require conditional use approval from the DRB.

(2) Outdoor seating is exempt from minimum parking requirements.

(3) Restaurants may provide outdoor seating on another commercial property other than their own, including mixed-use properties.

(4) Outdoor seating may be permitted within the town highway ROW or on public sidewalks with permission from the Selectboard.

(5) Outdoor seating shall not interfere with pedestrian travel by maintaining a 5-foot-wide continuous pathway.

(6) Outdoor seating shall not interfere with vehicular or emergency access.

(7) Outdoor seating shall not reduce the number of on-site parking spaces.

(8) Temporary tents used for outdoor seating may be erected without obtaining a zoning permit provided they comply with the following provisions:

A. Any tent erected shall not interfere with pedestrian or emergency access and shall not reduce the number of on-site parking spaces.

B. Tents shall adhere to the setback and building height requirements of the underlying zoning district.

4.20 Cannabis Establishments

A. PURPOSE. The purpose of these provisions is to provide for the placement of cannabis establishments in suitable locations. Restrictions on the location, size, and operation of such facilities are necessary to protect residential neighborhoods, civic and educational institutions, and public gathering places from any adverse secondary impacts associated with cannabis establishments and to ensure that such uses operate in a safe manner. It is

v. Lighting fixtures shall be connected to dimmer switches and be dimmable.
vi. Materials lit by uplighting shall not be glossy or any other type of surface that would produce unnecessary reflection or glare.
vii. Lighting fixtures shall be carefully located, aimed, and shielded so that light is directed only onto the building facade. Illumination shall be confined to the property boundaries. Lighting fixtures shall not be directed toward adjacent streets or roads.

b. Landscaping:
   i. When landscaping is to be illuminated, the Design Advisory Board shall be presented with a landscaping lighting plan, prepared by a qualified lighting professional, that presents the purpose and objective of the lighting, shows the location of all lighting fixtures and what landscaping each is to illuminate, and demonstrates that the installation will not generally exceed light levels or cause glare or direct light beyond the landscaping into the night sky.
   ii. No one landscaping lighting fixture shall exceed 1,100 lumens.

c. The lighting design shall be prepared by a qualified lighting professional with information specific to how the installed lighting will comply with these regulations. A qualified lighting professional must be a licensed engineer, a licensed architect, or other licensed or certified professional acceptable to the Board.

Section 519 Performance Standards
In accordance with Section 4414(5) of the Act, in all districts the following performance standards together with all applicable state standards must be met.

A. Noise

No noises shall be permitted in excess of the following levels specified in Table 1 as measured at or within the property lines of a receiving property.

Table 1.

	Time of Day	
Receiving Property	6:00 AM – 9:00 PM	9:00 PM – 6:00 AM
Located in Residential Districts	60 dBA	55 dBA
Located Elsewhere	65 dBA	65 dBA

B. Odor

No emission shall be permitted of odorous gases or other odorous matter in such quantities as to be readily detected or as to interfere unreasonably with the comfort of the public. Any process which may involve the creation or emission of any odors shall be provided with a secondary safeguard system so that control will be maintained if primary safeguard system should fail. Table III, Odor Thresholds, in Chapter 5, Air Pollution Manual, copyright 1951 by Manufacturing Chemists' Association, Inc., Washington, D.C. or its equivalent shall serve as a guide in determining such quantities of offensive odors.

C. **Smoke**

There shall not be discharged into the atmosphere from any source at any time any air pollutant in excess of specified darkness standards (No. 1 on the Ringlemann Chart). This shall include emissions of air pollutants of such capacity as to obscure an observer's view to a degree equal to or greater than the above visible emission standard. Visible emission of any kind at ground level past the lot line of the property on which the source of the emissions is located is prohibited.

D. **Vibration**

No vibration shall be produced which is transmitted through the ground and is discernible without the aid of instrument at or beyond the lot lines; nor shall any vibration produces exceed 0.002g peak at up to 60ops frequency, measured at or beyond the lot lines using either seismic or electronic vibration measuring equipment. Vibrations occurring at higher than 50ops frequency or random vibrations shall not induce accelerations exceeding .00lg. Single impulse random vibrations occurring at an average interval greater than 5 minutes shall not induce accelerations exceeding .01g.

E. **Glare**

1. Direct Glare: Illumination beyond property lines caused by direct or spectrally reflected rays from incandescent, fluorescent, or arc lighting, or from such high temperature processes as welding or metal refinement. No such direct glare shall be permitted with the exceptions that the parking areas and walkways may be illuminated by luminaries so hooded or shielded that the maximum angle at the cone of direct illumination shall be 60 degrees drawn perpendicular to the ground, with the exception that such angle may be increased to 90 degrees if the luminary is less than four feet above the ground. Such luminaries shall be placed not more than sixteen feet above the ground level and the maximum illumination at ground level shall not be in excess of three foot candles.

2. Indirect Glare: Illumination beyond property lines caused by diffuse reflection from a surface such as a wall or roof of a structure. Indirect glare from a reflecting surface shall not exceed: 0.3 foot candles - maximum; 0.1 foot candles - average.

Section 520 Extraction of Soil, Sand or Gravel

In accordance with Section 4464 (b)(2) of the Act, in any district the removal of soil, sand or gravel for sale, except when incidental to construction of a building on the same premises, shall be permitted only upon approval of a plan for the rehabilitation of the site by the Development Review Board and after a public hearing. In any district, the following provisions shall apply:

A. Before approval of any new or extension to a sand or gravel operation, a performance bond shall be secured from the applicant sufficient to ensure that upon completion of the extraction operations, the abandoned site will be left in a safe, attractive and useful condition in the interest of public safety and the general welfare. The owner shall submit a plan of proposed improvements to accomplish this end. The bond shall be sufficient to cover the cost of redevelopment of the site as a park, lake, recreation area or other usable open space.

B. The removal of all material shall be conducted so as to result in the improvement of the land, giving due regard to the contours in the vicinity, such as leveling slopes and removing hills. The digging or creating of pits or steep slopes shall not be permitted, unless provisions are made to refill such pit.

C. The excavation operation sites shall be graded smooth and left in a neat condition. Cut slopes and spoil banks shall not be allowed to remain. The operation site shall be fertilized, mulched and reseeded so as to establish a firm cover of grass or other vegetation sufficient to prevent erosion under the supervision and satisfaction of the Zoning Administrator.

D. All surface drainage affected by excavation operations shall be controlled by the owner to prevent erosion debris and other loose materials form filling any drainage course, street or private property. All provisions to control natural drainage water shall meet with the approval of the Zoning Administrator.

E. No excavation or blasting shall take place within 200 feet of any street or other property line.

F. No power activated sorting machinery or equipment shall be located within 300 feet of any street or other property line, and all such machinery shall be equipped with satisfactory dust elimination devices.

G. All excavation slopes in excess of one to two shall be adequately fenced as determined by the Zoning Administrator.

H. Extensions of an existing non-conforming operation shall not be permitted.

I. Stripping of topsoil for sale or for use on other premises, except as may be incidental to a construction project, shall be prohibited.

J. The Development Review Board may attach any additional conditions as it may find necessary for the safety and general welfare of the public.

Section 521 Accessory Structures and Uses

Accessory structures and uses shall be permitted under permit review and approval from the Zoning Administrator subject to the following requirements:

A. Relation to principal buildings – Accessory structures and uses are permitted only in connection with, incidental to, and on the same lot with, a principal structure or use which is permitted in the particular zoning district. No accessory structure or use shall be occupied or utilized unless the principal structure to which it is accessory is occupied or utilized.

B. Maximum number – A maximum of two (2) accessory structures may be permitted on a Single- or Two-Household Dwelling lot, provided that all other requirements of this section are met. Only one (1) detached garage shall be permitted. A maximum of one (1) detached accessory structure shall be permitted on any other residential lot. The Development Review Board may approve an increase to the number of accessory structures after receipt of a site plan and conducting a public hearing in accordance with Section 908 of these Land Development Regulations, based upon consideration of the size of the lot.

C. Location – Accessory Structures shall not be erected in any right-of-way, easement or required front yard. When an accessory structure is located on a corner lot, the side lot line of which is substantially a continuation of the front lot line of the lot to its rear, said structure shall not project beyond the front yard setback required to the rear of such corner lot.

D. Setbacks and spacing for detached accessory structures – Setbacks for accessory structures shall conform to the applicable dimensional requirements in Sections 303 and 523.

Spacing requirements for accessory structures are as follows:

1. Where the accessory structure is structurally attached to a principal building or structure (e.g. a deck, garage or breezeway), or is less than ten (10) feet from the principal building, the accessory building shall be subject to all regulations applicable to principal structures and uses.
2. Spacing from another accessory building shall be a minimum five (5) feet.
3. The front building line of a detached garage shall be a minimum of ten (10) feet behind the front building line of the principal structure.
4. The front building line of all other accessory structures shall be a minimum of ten (10) feet behind the rear building line of the principal structure.

E. Garage or carport location in developments of multiple Dwelling Units – In the case of attached residential dwelling complexes of multiple Dwelling Units on the same lot, detached parking garages or carports may be permitted in the non-required front yard if, during site plan review, the design and locations are found to be complementary with adjacent uses and will not detract from the view or visibility of motorists.

F. Yard coverage and footprint – Accessory buildings in a residential district shall have a combined maximum rear yard coverage of twenty-five (25) percent and a maximum combined footprint of nine hundred (900) square feet. For substandard lots, coverage may be increased an additional ten (10) percent if the accessory building does not exceed five hundred seventy-six (576) square feet in size. The footprint of accessory buildings in all districts shall not be greater than the square footage of the principal building.

G. Maximum height for detached accessory structures:

1. The maximum building height of any detached accessory structure on any Single- or Two-Household Dwelling shall be as follows, measured from the average height between the eaves and the ridge:

a. Seventeen (17) feet where the principal building or structure is of two (2) or more stories in height; and
b. Fourteen (14) feet where the principal building or structure is less than two (2) stories in height.

2. For the above, in no case shall the height of the accessory structure exceed that of the principal building or structure.

3. Accessory buildings in all other districts may be constructed to equal the permitted maximum height of structures in said districts if the building exceeds twenty (20) feet in height.

H. Drainage – The placement and design of any accessory structure shall not have a significant impact on stormwater runoff. The Zoning Administrator may require grading plans or a sketch plan to ensure compliance with this provision.

I. Restrictions on Use – Accessory structures shall not be occupied for dwelling purposes, nor used for any business, profession, trade or occupation except as allowed by other sections of the Land Development Regulations.

Section 522 Front Entrances in Residential Districts

A. All principal buildings in Residential Districts shall provide a prominent front entrance directly toward the public street, if one is adjacent to the property. Such an entrance shall be signified by at least one doorway into the building, and its prominence shall be signified through architectural means including such items as a stoop, a porch, the amount and symmetry of glazing on the façade, one or more gables or dormers in the roof, the use of differentiated materials and colors, and/or other means as accepted by the Zoning Administrator or Development Review Board.

B. On lots bordered by more than one street, the Zoning Administrator or Development Review Board shall determine which street frontage shall be provided with a prominent front entrance. This determination shall take into account the historical interaction of the property and neighboring lots, especially other nearby corner lots, with the adjacent streets. The selected building entrance does not necessarily need to face the same street that contains the property's curb cut. The building may also provide an entrance to more than one street.

C. Accessory structures and those that accommodate vehicles shall not detract from the prominence of the entrance to the building.

D. The inclusion of a paved, brick, stone or gravel walkway connecting a front entrance to a driveway, City sidewalk and/or street is encouraged.

Section 523 Development and Other Activities in Stream Corridor Areas

A. Delineation of Stream Corridor Area – The Stream Corridor Area shall run along a perennial stream and shall consist of the area within 30 horizontal feet of the stream center-line.

B. Delineation of Riparian Buffer Area – The Riparian Buffer Area is within a Stream Corridor Area and shall consist of the area within 15 horizontal feet of the stream center-line.

C. Clearing of Trees and Vegetation – A permit is required to remove any healthy native trees of 2 inches in diameter as measured 4 feet from the ground in the Riparian Buffer Area. In considering such a permit, the Zoning Administrator shall take into account the ability of the property owner to access the stream and care for their property, other vegetation that will be left in place, and any vegetation that could be added to replace the tree(s).

D. Limitations on Expansion of Impervious Areas and Structures - Unless authorized by the Development Review Board as a Waiver pursuant to Section 604 of the City of St. Albans Land Development Regulations, and save for the allowance of subsections E and H below, no new or expanded impervious surface, building footprint area, including overhangs, or service areas, such as dumpsters, shall be constructed within the Stream Corridor Area.

E. Provisions for Single- and Two-Household Dwellings - For Single- and Two-Household Dwellings, in conjunction with issuance of a Zoning Permit, one (1) accessory structure with a floor area located at grade totaling less than twenty (20) square feet, may be permitted within the Stream Corridor Area but not within the Riparian Buffer Area.

F. Stabilization and Planting Required - Regardless of any legal nonconformity or existing practice, any existing used and permitted or legally nonconforming impervious areas within the Stream Corridor Area that consist of bare dirt and any impervious areas in states of disrepair that present erosion risks shall be either repaired with an acceptable hard surface, as permitted by the Zoning Administrator, or seeded and stabilized with a mix of vegetation suitable to the climate of Northwest Vermont by July 30, 2019.

G. Drainage Outfalls - Existing drainage outfalls within the Stream Corridor Area and Riparian Buffer Area may remain, although this allowance does not preclude any rules requiring disconnection of these outfalls from potential sources of pollution. New outfalls for roof drains, perimeter drains, and stormwater are allowed, as permitted by the Zoning Administrator, and provided that they are free of any source of illicit discharge. Outfalls directly within the bank of a stream shall also require a Stream Alteration and

APPENDIX A PERFORMANCE STANDARDS

A.1 Fire and Explosion Hazards

(a) All activities involving storage of flammable and explosive materials shall be provided with adequate safety and fire-fighting devices in accordance with all applicable state and local laws and regulations.

(b) Burning of waste materials in open fires is prohibited.

A.2 Vibration

(a) No vibration shall be produced which is transmitted through the ground and is discernible without the aid of instrument at or beyond the lot lines, nor shall any vibration produced exceed 0.002g peak at up to 60 cps frequency, measured at or beyond the lot lines using either seismic or electronic vibration measuring equipment.

(b) Vibrations occurring at higher than 50 cps frequency or random vibrations shall not induce accelerations exceeding .001g. Single impulse random vibrations occurring at an average interval greater than 5 minutes shall not induce accelerations exceeding .01g.

A.3 Noise

(a) Chapter 14, Article II. (*Nuisances*) of the City's Code of Ordinances regulates noise generated by the operation of vehicles, action of individual persons, and the temporary use of loud-speakers, amplifiers, and sound-generating equipment. These Land Development Regulations regulate excessive noise generated by fixed equipment and the ongoing operations of a business.

(b) **Specific Standards for Noise Generated by Operation of the Use.**

(i) The creation of noise by fixed equipment or ongoing commercial operations that is plainly audible at a distance of fifty feet (50’) from the building, structure, or other source of noise shall be prima facie evidence of a violation of these Regulations.

(ii) It shall be a violation of these Regulations for any property owner to create or allow the creation of noise exceeding the following limits during the hours of 12:00 AM and 8:00 AM:

a. 45 dBA based on a one-hour average measured at any point along the legal boundary between the noise-generating property and a residential property. Any property containing at least one (1) permitted dwelling unit shall be considered a residential property for the purpose of this section

b. 60 dBA based on a one-hour average measured at any point along the legal boundary between the noise-generating property and a commercial property.

(iii) For purposes of this Appendix, the following terms shall be defined as stated below:

a. Decibel – a unit measure of sound level.

b. Sound level – in decibels measured by a sound meter, by using the "A" frequency weighing, expressed in dBA.

c. Average sound level – a sound level during a given period of time (e.g. one hour) found by the general rule of combination of sound levels. Also called "equivalent sound level."

(c) **Sound Measurement Standards.** Sound shall be measured in accordance with the standards specified by the American National Standards Institute.

A.4 Air Pollution

(a) **Visible Emissions.** There shall not be discharged into the atmosphere from any source at any time any air pollutant in excess of specified darkness standards (No. 1 on the Ringlemann Chart, except under specified conditions contained within air pollution standards). This shall include emissions of air pollutants of such capacity as to obscure an observer's view to a degree equal to or greater than the above visible emission standard. Visible emission of any kind at ground level past the lot line of the property on which the source of the emissions is located are prohibited.

(b) **Pollutants.** All discharge or emission of potentially dangerous or offensive elements into the air shall be subject to the requirements of all applicable local, state, and federal regulations.

A.5 Odors

(a) No emission shall be permitted of odorous gases or other odorous matter in such quantities as to be readily detected or as to interfere unreasonably with the comfort of the public.

(b) Any process which may involve the creation or emission of any odors shall be provided with a secondary safeguard system so that control will be maintained if the primary safeguard system should fail.

(c) Table III, Odor Thresholds in Chapter 5 of the Air Pollution Abatement Manual, copyright 1951 by the Manufacturing Chemists' Association, Inc. or its equivalent shall serve as a guide to determining such quantities of offensive odors.

A.6 Electromagnetic Radiation

(a) It shall be unlawful to operate, or cause to be operated, a planned or intentional source of electromagnetic radiation except in compliance with the applicable regulations of the Federal Communications Commission or the Inter-department Radio Advisory Committee regarding such sources of electromagnetic radiation. Said operation shall be unlawful if such radiation causes an abnormal degradation in performance of other electromagnetic radiators or electromagnetic receptors of quality and design because of proximity, primary field, blanketing, spurious re-radiation, harmonic content, modulation or energy conducted by power or telephone lines.

(b) The determination of "abnormal degradation in performance" and "of quality and property design" shall be made in accordance with good engineering practices as defined in the most current principles and standards of the Institute of Electrical and Electronic Engineers.

A.7 Radioactive Radiation

(a) No activities shall be permitted which emit dangerous radioactivity at any point beyond the property line.

(b) The handling of radioactive materials, the discharge of such materials into air and water, and the disposal of radioactive materials shall be in conformance with all applicable state and federal regulations.

A.8 Heat

(a) For the purposes of these Regulations, heat is defined as thermal energy of a radioactive, conductive, or convective nature.

(b) Heat emitted at any or all points shall not at any time cause a temperature increase on any adjacent property, whether such change be in the air or the ground, in a natural stream or lake, or in any structure on such adjacent property.

A.9 Direct Glare

(a) Direct glare is defined for the purposes of these Regulations as illumination within property lines caused by direct or spectrally reflected rays from incandescent, fluorescent, or arc lighting, or from such high temperature processes as welding or petroleum or metallurgical refining.

(b) No such direct glare shall be permitted, except that parking areas and walkways may be illuminated by luminaries so hooded or shielded that the angle of maximum candlepower shall be sixty degrees (60o) drawn perpendicular to the ground. Such luminaries shall be placed not more than thirty feet (30') above ground level and the maximum illumination at ground level shall not be in excess of an average of three (3) foot candles.

A.10 Indirect Glare

(a) Indirect glare is defined for the purposes of these Regulations as illumination beyond property lines caused by diffuse reflection from a surface such as a wall or roof of a structure.

(b) Indirect glare produced by illumination at ground level shall not exceed 0.3 foot candles maximum, and 0.1 foot candles average.

(c) Deliberately induced sky-reflected glare, as by casting a beam upward for advertising purposes, is specifically prohibited.

A.11 Liquid and Solid Wastes

No discharge or emission of any potentially dangerous or offensive elements shall be permitted at any point into any sewage disposal system, water supply system, watercourse, or lake, or into the ground or air, except in accord with all applicable local, state and federal regulations.

A.12 Other Requirements

Where the requirements of these performance standards may be replaced by newer standards or may conflict with other local, state or federal statutes or regulations, the stricter standards shall apply.

Section 743 – Universal Design

For the purpose of encouraging universal building design and providing for ease of mobility as residents choose to spend later years in single family residential settings, all new home construction may incorporate the following features:

A. At least one stairless or ramped access
B. 36” wide exterior and interior doors and hallways;
C. Ground floor bedroom and complete bath; and,
D. 5’ by 5’ clear/turn space in living area, kitchen, ground floor bedroom

Section 745 – Inns in the R-4, R-8, R-12, MU and INS Districts

The DRB may grant conditional use approval to allow conversion of a large older home, located on a major collector street in the R-4, R-8, R-12, MU or INS Districts, to an inn. It is intended that estates such as the Means House or The Heights or similar large properties be eligible for such conversion, and that conditions be set to ensure historic preservation in a manner such as the Waybury Inn and Swift House Inn. Conditional use approval shall also be required for any future substantial change or increase in use, and the DRB shall guard against changes which result in excessive commercial use or appearance which would be out of character with the neighborhood or the district.

Section 747 – Multiple Dwelling Units in MU, HI, and CBD

In the MU, HI and CBD Districts, subject to conditional use approval in accordance with Section 540, dwelling units may be added notwithstanding lot area. The other dimensional requirements of Section 620 remain in effect and may constrain the development potential of the parcel. Adequate off-street parking shall be available in accordance with Section 760.

Section 750 - Performance Standards for All Uses

All new land development and existing land uses shall be constructed and maintained to comply with the following performance standards:

I. Noise

Noise volume shall be limited to levels that will not be a nuisance to adjacent uses. Customary agricultural operations and customary safety alarms are excluded. Noise levels or frequencies which are not customary or reasonably expected in consideration of the character of the district or neighborhood and which represent a substantial repeated disturbance to others shall be presumed to constitute a nuisance. To avoid noise disturbances to neighbors, reasonable conditions may be attached to any permit, including but not limited to: hours of operation; type, placement, muffling or enclosure of equipment or facilities; and noise levels.

II. Construction activities

Where there are nearby neighbors, reasonable conditions may be attached to any permit involving construction activities, including but not limited to earth moving and hauling, rock drilling or crushing, jack hammer and other loud equipment. Reasonable conditions may also be established regarding construction staging, parking for construction trailers and workers, and truck routes, and limitation or prohibition of construction activities on Saturdays or Sundays or holidays, and between 4 p.m. and 7 a.m. This section shall not apply to emergency activities such as utility repairs.

Note: See also the Town of Middlebury Ordinance for the Regulation of Noise

III. Blasting and Vibration

Blasting, vehicle traffic, and other activities causing substantial vibration shall not exceed a particle velocity of 0.5 inches per second below 40 Hz, nor 2.0 inches per second for frequencies above 40 Hz measured at the property line. Property owners and applicants and their blasting contractors shall be responsible for: notifying neighbors of proposed blasting; video documentation of conditions in the neighboring properties before and after blasting; adequate insurance and other customary measures that avoid and minimize the risk of damages and injury.

IV. Dust and air pollution

Dust and air pollution shall be controlled to conform to the State of Vermont Air Quality Performance Standards. Construction waste, brush or trees shall be disposed of at the Addison County Solid Waste Management transfer Station or other facilities approved by the Town.

V. Electromagnetic & microwave transmissions

Electromagnetic and microwave transmissions shall not to cause a health hazard or a nuisance to adjacent land uses. Transmissions exclusively regulated by the Federal Communications Commission are exempt.

VI. Drainage

Drainage shall not cause a nuisance or damage to other properties. Changes in grading shall be directed to established drainage courses and controlled to avoid ponding or flooding of other properties. Changes in volume or direction of drainage shall not exceed the capacity of downstream drainage facilities, have an undue adverse effect upon water quality or wetlands or cause any maintenance burden upon the Town.

VII. Excavation, filling and regrading

Excavation, filling and regrading shall conform to the Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites (1982 edition - as amended). The location of fill sites and access restrictions for hauling equipment shall be reviewed and approved by the Administrative Officer after consultation with the Department of Public Works and be consistent with State Solid Waste Management Regulations (Rule 6-309 or as amended).

Fill shall not be placed in or adjacent to streams or wetlands, or in any manner that would impair the functions of a stream buffer or wetland. A wetland delineation and evaluation by a qualified wetlands consultant may be required. See also Sections 660 and 665 regarding shorelands, riparian buffers, and wetland buffers.

The following shall be subject to conditional use review: fill of more than 1,000 cubic yards; and fill to elevate a house site more than 2 ft. higher than the average of the abutting house sites

VIII. Odors

Noxious odors shall not be detectable beyond property lines. Odors from customary agricultural activities are exempted.

IX. Fire, explosive and similar safety hazards

Fire, explosive and similar safety hazards which would substantially increase the risk to an abutting property, or place an unreasonable burden on the Fire Department, shall be prohibited (See also (XII) below).

X. Water Pollution

All sewage and other wastes shall be safely managed and disposed of so that there is no hazard to public health. Any activity that poses an undue threat to water supplies or that would cause undue water pollution, shall be prohibited.

XI. Ambulance Stretcher Access

Ambulance Dept. emergency access for the 80” x 24" stretcher shall be maintained in new or substantially improved buildings, as follows:

A. Public buildings or residential facilities over 2 stories shall include access by an elevator which will accommodate the stretcher horizontally.

B. Common stairwells for multi-story public buildings and residential facilities shall be constructed so that these stairwells can accommodate the stretcher carried at arm's length (not overhead or tipped excessively).

C. Elderly or handicapped facilities shall be constructed to permit access to all bedrooms via a stretcher on wheels.

Note: Owned or rented multi-story dwelling units with individual ground level entrances and private internal stairways shall be exempt from this regulation (although owners and developers are encouraged to incorporate these design standards).

XII. Fuel or Hazardous Materials Storage Facilities
Commercial, Industrial or Institutional fuel storage facilities, where regulated by the Vermont Department of Labor and Industry, shall incorporate the best available safety practices and technology, consistent with government and industry standards. Additional reasonable limitations and safeguards may be imposed as recommended by the Middlebury Fire Chief. This may include but is not limited to a requirement that fuel tanks or other hazardous materials be bunkered or underground or sited at suitable distances.

Section 753 - Demolition and Removal of Structures

I. Within three months after a permanent or temporary building or structure in any district has been destroyed or demolished, the owner shall remove all structural materials, and shall cover over or fill any excavation or basement, to normal grade.

II. The DRB may hold a hearing to determine whether a structure has been abandoned. Notice of the hearing shall be provided pursuant to Section 1090. The structure shall be deemed to have been abandoned if the DRB determines that it has been unoccupied for over one (1) year and that it is inadequately maintained. In determining whether the structure is inadequately maintained, the DRB shall consider whether lack of maintenance has given rise to any or all of the following conditions: (i) a threat to public health or safety, (ii) an undue adverse impact on the aesthetics of the neighborhood and surrounding area, and/or (iii) an undue adverse impact on neighboring property values. If the DRB determines that the structure has been abandoned, it may, consistent with the purposes of the Town Plan and this Ordinance, order that the abandoned structure be secured, repaired or removed at the expense of the owner.

Section 758 - Mini-Storage Facilities

I. Rental storage units shall be subject to conditional use review. Rental storage buildings, doors and trim shall be all white or all single neutral color.

II. Rental of an existing barn or shed may be permitted as a home occupation. See Section 730.

c. in approving any waiver, the DRB may impose conditions requiring design features, screening, or other remedy as may be necessary to mitigate anticipated impacts of granting any such waiver.

Sec. 5.4.13 Emergency Shelters

Emergency shelters shall be subject to the site and design review standards in Art 6.

In addition to conditional use standards where applicable, proposals for all new emergency shelters shall comply with the following requirements:

(a) All dimensional standards for the underlying zoning per the requirements of Art. 4 shall be applicable;

(b) Density within the residential zones shall be per the residential density standards of Article 4. For the purposes of density calculation for emergency shelters, every four (4) beds shall count as one (1) dwelling unit;

(c) Density within the neighborhood mixed use zones shall be limited to fifty (50) beds, and there is no density limit in the FD5 and FD6 zones;

(d) Overnight stays by any individual are limited to 180 consecutive days. An extension of up to 60 days may be provided if no alternative housing is available;

(e) There shall be onsite management by qualified adults during all hours of operation with at least 1 management person for every 25 beds; and,

(f) An emergency shelter may be the primary use of a property, or it may be accessory to another primary use on a property.

PART 5: PERFORMANCE STANDARDS

Sec. 5.5.1 Nuisance Regulations

All applications for a zoning permit shall be required to demonstrate compliance with the applicable nuisance regulations and performance standards pursuant to the requirements of the Burlington Code of Ordinances. All such standards shall be met and maintained for all uses, except for agriculture and forestry, in all districts, as determined or measured at the property line. In determining ongoing compliance, the burden of proof shall fall on the applicant, property owner, and/or all successors and assigns.

Sec. 5.5.2 Outdoor Lighting

It is the intent of these standards to encourage outdoor lighting practices and systems which will minimize light pollution and trespass; conserve energy while facilitating night-time visibility, surveillance and evening commercial and recreational activity ; and curtailing the degradation of the night time visual environment. All outdoor lighting shall be evaluated to ensure that the functional and security needs of the project are met in a way that will not adversely affect the adjacent properties or the surrounding neighborhood.

(a) Site Plan Review Required:

Unless otherwise exempt by this Section, all outdoor light fixtures shall be subject to review and approval in conjunction with any land use and development permits under the requirements of Article 3 – Site Plan Review.

(b) Exemptions:

The following types of outdoor lighting and lighting fixtures shall be exempt from the requirements of this chapter subpart as specified below:

1. Outdoor light fixtures for single-family dwellings not otherwise subject to the requirements of Art 3 - Design Review;
2. All outdoor light fixtures existing and legally installed prior to the effective date of this article. This exemption shall only apply for the replacement of an existing light fixture when it is replaced in-kind;
3. All outdoor light fixtures producing light directly by the combustion of fossil fuels, such as citronella or kerosene lanterns or gas lamps;
4. Seasonal or holiday low output lighting decorations. Such lighting may not be moving or otherwise animated to the point of being distracting to motorists;
5. Decorative fixtures using low output lamps used for landscaping that do not emit direct illumination or glare, or cast a shadow onto adjacent property;
6. Lighting fixtures using low output lamps to light building entryways that do not emit direct illumination or glare, or cast a shadow onto adjacent property;
7. Construction or emergency lighting provided that such lighting is temporary and is discontinued immediately upon completion of construction work or abatement of said emergency. Such lighting shall not emit direct illumination or glare onto adjacent property; and,
8. Lighting of temporary uses and special events permitted by the city consistent with the provisions of the Title.

(c) Lighting Prohibited:

The following outdoor lighting shall be prohibited as specified below.

1. Up-lighting or back-lit canopies unless otherwise allowed under this Section;
2. The operation of searchlights or beacons for advertising or promotional purposes;

3. Moving or otherwise animated lighting to the point of being distracting to motorists; and,
4. Any light that imitates or causes visual interference with a traffic signal or other necessary safety or emergency light.

(d) Lighting Plan Submission Requirements:

In addition to the application submission requirements of Article 3, projects involving outdoor lighting not otherwise exempt from this Section shall also include a lighting plan. The following information shall be included within a lighting plan:

1. A site plan showing:
   A. The area(s) to be illuminated;
   B. A point-by-point photometric analysis of the anticipated illumination levels, including the maximum, minimum, and average illumination levels for each area specified to be illuminated;
   C. A calculation of the initial and mean lamp lumens per net acre across the entire site; and,
   D. The number, type, location, and mounting heights of all pole mounted and building mounted fixtures;
2. If vertical surfaces are to be illuminated, a point by point distribution of vertical illumination levels shall be provided, along with an indication of the maximum illumination level to be generated;
3. Specifications of all fixtures to be used including lamps, poles or other supports, and refractors, reflectors and lenses, along with documentation for cut-off classification, horizontal and vertical light distribution patterns which may be provided as catalogue cut sheets from the manufacturer; and,
4. Any additional information as may be required by the administrative officer in order to determine compliance with this Article.

(e) General Outdoor Lighting Standards:

All outdoor lighting shall be designed to provide no more than the minimum lighting necessary to ensure adequate vision and safety for the intended task to be performed in the lighted area. Light levels shall be compatible with or have gradual transitions with lighted public streets and sidewalks, and to not cause glare or cast direct illumination onto adjacent properties or streets.

Unless otherwise specified in Sec 5.5.2 (f) below, all outdoor lighting shall comply with the applicable sections of one or more of following general standards as may be required and interpreted by the administrative officer. In the case of conflicts, the lowest light level or most restrictive standard shall apply:

1. Standards developed by the Illuminating Engineering Society of North America (IESNA) *Lighting for Exterior Environments* (RP-33-99) or the most current edition.

2. Standards developed by the Illuminating Engineering Society of North America (IESNA) *Lighting for Parking Facilities* (RP-20-98) or the most current edition.
3. *Outdoor Lighting Manual for Vermont Municipalities* published by the Chittenden County Regional Planning Commission (1996) or the most current edition.
4. All outdoor lighting fixtures, other than those using only low output lamps and alternatives specifically allowed under these regulation, shall be "Full Cut-off" or "Cut-off" as defined by the Illuminating Engineering Society of North America (IESNA) to ensure that glare is minimized, that lighting is directed only to the area to be illuminated, that illumination is directed below a horizontal plane, and that illumination does not cast direct light beyond the boundaries of the property on which they are located. Light levels on adjacent properties shall not exceed one-tenth (0.1) footcandle as a direct result of the on-site lighting measured twenty (20) feet beyond the property line of the development site.
5. All illumination shall be of a white light, such as a fluorescent, metal halide, incandescent or a combination of lamps having a color rendering index greater than seventy (70).
6. Illumination levels where indicated are to be measured in mean footcandles (fc) produced by the mean light output of the lamps specified. Actual or estimated illumination levels shall be measured horizontally at ground level unless otherwise specified in these regulations.
7. The use of laser source light or any similar high intensity light for outdoor advertising or entertainment shall not project above the horizontal plane and shall not extend beyond the property line, nor in the direction of the public right of way used for traffic or pedestrians or residential properties.
8. The illumination of all flags, other than the flag of a state or national government as may be required under law, shall be extinguished at the end of public business hours or by 10:00 PM whichever is later.

   Such flags not taken down at sunset may be illuminated by down-directed lighting or pole mounted up-lighting using no more illumination than is necessary for it to be recognized by the casual observer. All fixtures used to illuminate flags shall be narrow beam spot lights using low voltage and low level lighting selected to focus only on the area of the flag. Spot lights shall conceal the source by employing shields, grids, and hoods that prevent lamp glare from impacting surrounding uses.
9. Neon tubing or band lighting along a building or structure highlighting articulations shall only be allowed after review and approval subject to the requirements of Article 3 - Design Review. Such lights are exempt from the shielding and color rendering requirements of this ordinance.

(f) Specific Outdoor Lighting Standards:

In addition to the general standards above, the following specific lighting standards shall apply to each of the following outdoor lighting applications:

1. Parking Lot Lighting:

Outdoor lighting of parking and related circulation areas shall comply with the following standards:

A. The maximum mounting height for any fixture shall be 25 ft.

B. The maximum illumination level shall not exceed 4 footcandles (fc) at any point.

C. The maximum illumination level shall only be computed for the functional area of the parking lot.

D. The maximum to minimum uniformity ratio shall not exceed 20:1.

E. Illumination levels are encouraged to be reduced by at least 50% within one hour after the end of public business hours

These standards also shall apply to the top and/or unenclosed level of any parking garage. Enclosed areas within parking garages such as parking and circulation areas, internal stairways, and attendant booths are subject to the lighting regulations pertaining to Parking Garages found in Sec 5.5.2(f)(5).

2. Walkway Lighting:

Outdoor lighting of walkways, alleys, and pedestrian paths shall comply with the following standards:

A. The average illumination level on a walkway or pathway surface shall not exceed 0.5 footcandles. Maximum lighting levels shall not exceed 2 footcandles;

B. The area over which the average illumination level is computed shall only include the walkway surface plus an area on each side not more than 5 feet in width; and,

C. Lighting fixtures other than full cut-off fixtures may be used but shall be designed to minimize glare, direct illumination downward, and shall have an initial output of no more than 1,200 initial lumens.

Lighting of walkways and paths in all RCO districts is discouraged. If lighting is installed, in no case shall such lighting exceed the levels cited above under (A) above.

3. Lighting of Gasoline Fueling Pump Islands and Canopies:

Lighting of areas around fueling pump islands, and under canopies sheltering such fueling pump islands, shall meet the following standards:

A. The average illumination level for canopies in commercial and other zones where permitted shall not be more than 10.0 footcandles. Canopies in Residential Zones and/or where they are associated with a non-conforming use, average illumination levels shall not exceed 5.0 footcandles;

B. Light fixtures mounted under a canopy shall be recessed so that the lens cover is recessed into, or flush with, the underside (ceiling) of the canopy;

C. No light fixtures may be mounted on top of the canopy, and the sides of the canopy (fascia) shall be opaque and shall not be illuminated;

D. Illumination levels shall be reduced by at least 50% within one hour after the end of public business hours; and,

E. Areas away from fueling pump islands, as defined by the extent of the canopy, shall be considered parking and circulation areas. They shall be identified as such on the lighting plan submitted in accordance with Sec 5.5.2(d), and shall be subject to parking area lighting regulations as set forth in Sec 5.5.2(f)(1) above.

4. Other Vehicular Canopies:

This section applies to canopies associated with commercial buildings that are used to protect drivers and pedestrians from inclement weather

A. Average illumination levels below the perimeter of the canopy shall not exceed 2 footcandles.

B. Light fixtures mounted under a canopy shall be full cut off.

C. No light fixtures may be mounted on top or on the sides (fascia) of the canopy. Opaque or translucent canopies and shall not be illuminated.

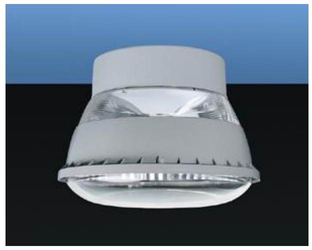
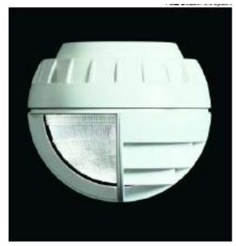
D. Lights shall be turned off during non-business hours. If security lighting is required, such lighting shall be submitted and reviewed as per Sec 5.5.2 (f)7.

5. Parking Garage Lighting

Recommended illumination levels for parking garages are generally higher and more uniform that that of exterior parking lots. Non-cut-off, up-light and in-direct light is often used to create a uniform lighting environment and an added feeling of security.

A. Light levels shall not exceed minimums currently recommended by IESNA.

B. Any fixture visible from the exterior of the garage facility shall be a full cutoff or cut-off fixture or shall be constructed in a manner that prevents glare to be visible from the exterior of the parking garage (see examples pictured below)

6. Lighting of Exterior Sales/Display Areas:

Illumination of exterior sales/display areas shall meet the following standards:

A. Areas designated for exterior display or sales shall have an average illumination level of no more than 2.0 footcandles and a maximum illumination of no more than 10 footcandles;

B. The average illumination level shall be computed only for the area used for exterior display or sales;

C. Illumination levels shall be reduced by at least 50% within one hour after the end of public business hours; and,

D. Areas used for passive storage or parking and circulation shall be illuminated in accordance with the parking area standards of these regulations, and indicated as such on the lighting plan submitted in accordance with Sec 5.5.2 (d).

7. Security Lighting:

Lighting for security surveillance should be kept to a minimum. Use of motion/heat activated light and security alarms are encouraged to minimize the use of full site lighting when the building is not occupied or in use.

All applications involving security lighting shall include a written narrative outlining the need for and purposes of security lighting as part of a security plan. A site plan shall designate the area to be illuminated for security purposes. To the extent that the area designated for security lighting may also be illuminated for other purposes, independent security lighting fixtures shall be discouraged.

A. All fixtures used for security lighting shall be full cut-off as defined by IESNA.

B. The use of flood light fixtures is prohibited unless approved by the DRB. The applicant shall present cause as to why cut-off fixtures cannot be used for the illumination needed.

C. If flood lights are used, the fixtures shall be positioned so that the lamp or reflector cannot be view directly from any point beyond the property and shall include grids and/or baffles to prevent glare.

D. Security lighting fixtures may be mounted on poles located no more than ten (10) feet from the perimeter of the designated area being illuminated. Illumination from pole mounted fixtures outside the property line is not permitted.

E. Security lighting designed to illuminate a perimeter (such as a fence) are encouraged to include motion/heat sensors designed to be off unless triggered by an intruder located within five (5) feet of the perimeter.

F. Security lighting may illuminate vertical surfaces up to a level eight (8) feet above grade or eight (8) feet above the bottom of doorways or entries, whichever is greater.

G. The average illumination level of vertical surfaces shall be measured at a height of 5 feet above grade, and computed over the area of the surface designated to be illuminated in the security plan.

H. Security lighting may remain illuminated beyond 10:00pm or the close of business to one hour after sunrise.

8. Outdoor Recreational Facility Lighting:

There are a variety of outdoor recreation facilities that may be illuminated to allow nighttime use. Examples include tennis courts, ball fields, swimming pools, outdoor skating rinks, and public parks. The regulations in this section are intended to allow illumination of such activities while minimizing adverse impacts such as glare, unwanted illumination of nearby properties and streets, and skyglow. Such lighting shall be consistent with the following regulations:

A. Cut-off, shielded, and/or louvered lighting are recommended for fields designed for Class III or IV levels of play (typically amateur or municipal league, elementary to high school, training, recreational or social levels; cf. IESNA Lighting Handbook and IESNA RP-6 *Sports and Recreational Area Lighting*).

B. Lighting for facilities designed for Class I and II levels of play (typically college, semi-professional, professional, or national levels) shall utilize luminaires with minimal uplight consistent with the illumination constraints of the design.

C. Where cut-off fixtures are not utilized, acceptable luminaires shall include those which:

i. Are provided with internal and/or external glare control louvers and installed so as to minimize uplight and offsite light trespass;

ii. Are installed and maintained with aiming angles that permit no greater than five percent (5%) of the light emitted by each fixture to project above the horizontal; and;

iii. All lighting installations shall be designed to achieve no greater than the minimal illuminance levels for the activity as recommended by the Illuminating Engineering Society of North America (IESNA).

D. Lighting fixtures other than full cut-off fixtures may be allowed only if their beams fall within the primary playing area and immediate surroundings, and so that no direct illumination is directed offsite.

E. Lighting shall be turned off except when the facilities are in use or being maintained.

9. Lighting of Building Facades:

Low level illumination of building facades may be allowed behind and beneath covered walkways. Lighting of building facades other than behind and beneath covered walkways may be allowed only for buildings of cultural or religious significance. Façade lighting shall meet the following requirements.

A. The maximum illumination level on any vertical surface shall not exceed 5.0 footcandles;

B. If a first floor façade is illuminated by lights mounted under a canopy sheltering a walkway, the maximum horizontal illumination of the walkways shall not exceed 3.0 footcandles at grade level. If there is no walkway under the canopy, the average horizontal illumination shall not exceed 1.0 footcandle at grade level;

C. Roofs shall not be illuminated;

D. Light fixtures under translucent canopies shall be cut-off or fully cut-off so that illumination is not directed to the underside of the canopy;

E. Lighting fixtures shall be shielded so that the light source and/or lens is not visible from adjacent or adjoining properties or streets; and,

F. Cut-off lighting fixtures shall be used for lighting of building facades behind and beneath covered walkways. Non-cut-off lighting fixtures may be used for building façade lighting of significant public or institutional buildings.

(g) Exceptions

Technological advances in outdoor lighting lamp sources and luminaires may allow for options not considered in these regulations. Induction (electrodeless) or LED lighting are two current examples. The use of new technologies, and especially those that have energy saving properties, are encouraged. Applications that use new technologies, and follow the spirit of the ordinance will be considered and evaluated for approval.

Sec. 5.5.3 Stormwater and Erosion Control

All new development and redevelopment projects that require a zoning permit shall be required to demonstrate compliance with the standards in Article 3, Stormwater & Erosion Control of Chapter 26 of the City Code of Ordinances: Wastewater, Stormwater, and Pollution Control.

Sec. 5.5.4 Tree Removal

Zoning permit requests for tree removal are subject to DRB review per the following criteria.

(a) Review criteria for zoning permit requests for tree removal.

1. Grounds for Approval

Tree removal involving six (6) or more trees, each of ten (10) inches or greater in caliper or the removal of ten (10) or more trees, each of which is three (3) inches or greater in caliper during any consecutive twelve (12) month period may be permitted for any of the following reasons:

A. Removal of dead, diseased, or infested trees

B. Thinning of trees for the health of remaining trees according to recognized accepted forestry practices

C. Removal of trees that are a danger to life or property; or

D. As part of a development with an approved zoning permit

2. Grounds for Denial

Tree removal involving six (6) or more trees, each of ten (10) inches or greater in caliper or the removal of ten (10) or more trees, each of which is three (3) inches or greater in caliper during any consecutive twelve (12) month period may be denied if existing healthy trees are known to be:

A. Providing a significant privacy or aesthetic buffer or barrier between properties

B. Providing stabilization on slopes vulnerable to erosion

C. Located within a riparian or littoral buffer

D. Provide unique wildlife habitat

E. A rare northern Vermont tree species as listed by the Vermont Natural Heritage Program; or

F. A significant element of, or significantly enhances, an historic site

(b) Tree Maintenance Plans

Institutions or other property owners who practice ongoing tree removal shall be exempt from the requirement to obtain a zoning permit for individual tree removal projects subject to obtaining approval from the DRB for a plan as follows:

1. A Tree Maintenance Plan prepared by a certified arborist shall be submitted as a Level I Certificate of Appropriateness, with a level I application fee. This plan shall include general and specific criteria for removing trees based on the criteria as per Sec. 5.5.4 (a).
2. The Tree Maintenance Plan if approved by the Development Review Board. Approval of the Plan is valid for up to five (5) years.
3. In order to continue tree removal, Tree Maintenance Plans must be updated or re-written and approved by the Development Review Board at five (5) year intervals.