

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community Hardwick, Town & Village of C.I.D. 500027# State Vermont

Review of: *Updated 2024 Hardwick Unified Development Bylaws (Draft recv'd 1.10.24)*

Reviewed by: Sacha Pealer, VT DEC, sacha.pealer@vermont.gov (802) 490-6162 Date of Review: 3/8/24

Community Floodplain Management Regulations Reviewed by (circle one): FEMA (State) Other: (Agency Name)

Reviewer's Determination: The floodplain management regulations are compliant.
 The floodplain management regulations are not compliant.

Approved by: _____ (FEMA only) Date of Approval: ___/___/___

The "Item Description" is a synopsis of the regulatory requirement and should not be construed as a complete description. Refer to the actual language contained in the National Flood Insurance Program Floodplain Management Regulations at Title 44 Code of Federal Regulations (CFR) Part 59 and 60 for the complete description of the required minimum criteria. Below the "Level of Regulations" column, you can indicate whether the community ordinance meets or exceeds the respective provision in the non-shaded areas.

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
ORDINANCES MUST CONTAIN THE FOLLOWING PROVISIONS:						
1. Citation of Statutory Authority				Y		1.1
2. Framework for administering the ordinance (including permit system, establishment of the office for administering the ordinance, record keeping, etc.).				Y		Article 7, 2.3, Table 2.8
3. Adequate enforcement provisions (including a violation and penalty section specifying actions the community will take to assure compliance). 24 VSA 4451- 4454				Y		7.5
4. Variance section with evaluation criteria and insurance notice. [60.6(a)]				Y		7.4
5. Effective Date: _____ Adoption Date: _____				n/a		Draft
6. Signature of Appropriate Official and Certification Official.				n/a		Draft
OTHER PROVISIONS AND ACTIONS THAT MAY BE NECESSARY TO MAKE THE ORDINANCE LEGALLY ENFORCEABLE AND ENSURE THAT IT CAN BE PROPERLY ADMINISTERED:						
7: Purpose section citing health, safety, and welfare reasons				Y		1.2 A, Table 2.8

¹ If a community has both floodways and coastal high hazard areas, it must meet the requirements of both level 60.3(d) and 60.3(e).

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for adoption.						
8: Disclaimer of Liability section advising that the degree of flood protection required by the ordinance is considered reasonable but does not imply total flood protection.				Y		5.3 B
9. Abrogation and Greater Restriction section. (e.g., This Ordinance shall not in any way impair/remove the necessity of compliance with any other applicable laws, ordinances, regulations, etc. Where this Ordinance imposes a greater restriction, the provisions of this Ordinance shall control.)				Y		1.3 C
10. Severability section. (e.g., If any section, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court, the remainder of the ordinance shall not be affected.)				Y		1.5
11. Public hearing (State/local laws may require hearings)						Draft
12. Publication (State/local laws may require public notices)						Draft
MINIMUM NFIP CRITERIA:						
13. Definitions: [59.1] <u>Y</u> Base Flood; <u>Y</u> Base Flood Elevation; <u>Y</u> Development; <u>n/a</u> Existing manufactured home park or subdivision; <u>n/a</u> Expansion to an existing manufactured home park or subdivision; <u>Y</u> Flood Insurance Rate Map; <u>Y</u> Flood Insurance Study; <u>Y</u> Floodway; <u>Y</u> Lowest Floor; <u>Y</u> Manufactured Home; <u>n/a</u> Manufactured Home Park or Subdivision; <u>Y</u> New Construction; <u>n/a</u> New Manufactured Home Park or Subdivision; <u>Y</u> Recreational Vehicle; <u>Y</u> Special Flood Hazard Area; <u>Y</u> Start of Construction; <u>Y</u> Structure; <u>Y</u> Substantial Damage; <u>Y</u> Substantial Improvement; <u>Y</u> Violation; Other Definitions as appropriate such as <u>Y</u> Floodproofing; <u>n/a</u> Highest adjacent grade for community's with mapped AO Zones; <u>Y</u> Historic Structures				Y		8.2 Manufactured Homes consistent with Structures.

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14. Adopt or reference correct Map and date. [60.3(b)] (If the community has an automatic adoption provision in its ordinance, is it a valid provision?)				?		5.3 A Please see comments below.
15. Adopt or reference correct Flood Insurance Study and date. [60.3(c), (d), and/or (e)] (If the community has an automatic adoption provision in its ordinance, is it a valid provision?)				Y		5.3 A
16. Require permits for all proposed construction or other development including placement of manufactured homes to determine whether such construction or development is in a floodplain. [60.3(a)(1)]						
17. Require permits for all proposed construction and other development within SFHAs. [60.3(b)(1)]				?		5.3 A Please see comments below.
18. Assure that all other State and Federal permits are obtained. [60.3(a)(2)]				Y		5.3 A
19. Review permits to assure sites are reasonably safe from flooding and require for new construction and substantial improvements in flood-prone areas [60.3(a)(3)]: (a) Anchoring (including manufactured homes) to prevent flotation, collapse, or lateral movement of the structure. [60.3(a)(3)(i)]				Y		5.3 G1 a & b
?(b) Use of flood-resistant materials. [60.3.(a)(3)(ii)]				Y		5.3 G1 c
(c) Construction methods and practices that minimize flood damage. [60.3(a)(3)(iii)]				Y		5.3 G1 d
(d) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities designed and/or located to prevent water entry to accumulation. [60.3(a)(3)(iv)]				Y		5.3 G1 e
20. Review subdivision proposals and other development,				Y		5.3 G1 a & d

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including manufactured home parks or subdivisions, to determine whether such proposals will be reasonably safe from flooding [60.3(a)(4)]. If a subdivision or other development proposal is in a flood-prone area, assure that: (a) Such proposals minimize flood damage. [60.3(a)(4)(i)]						
(b) Public utilities and facilities are constructed so as to minimize flood damage. [60.3(a)(4)(ii)]				Y		5.3 G1 d & e
(c) Adequate drainage is provided. [60.3(a)(4)(iii)]				Y		5.3 G1 f
21. Require new and replacement water supply and sanitary sewage systems to be designed to minimize or eliminate infiltration. [60.3(a)(5) and 60.3(a)(6)]				Y		5.3 G9
22. Require onsite waste disposal systems be designed to avoid impairment or contamination. [60.3(a)(6)(ii)]				Y		5.3 G10
23. Require base flood elevation data for subdivision proposals or other developments greater than 50 lots or 5 acres. [60.3(b)(3)]				Y		2.2 C
24. In A Zones, in the absence of FEMA BFE data and floodway data, obtain, review, and reasonably utilize other BFE and floodway data as a basis for elevating residential structures to or above the base flood level, and for floodproofing or elevating non-residential structures to or above the base flood level. [60.3(b)(4)]				Y		2.2 C
25. Where BFE data are utilized in Zone A, obtain and maintain records of the lowest floor and floodproofing elevations for new and substantially improved construction. [60.3(b)(5)]				Y		5.3 G3, 7.6 E2 & E3
26. In riverine areas, notify adjacent communities of watercourse alterations and relocations. [60.3(b)(6)]				Y		5.3 F2
27. Maintain the carrying capacity of an altered or relocated watercourse. [60.3(b)(7)]				Y		5.3 G11

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28. Require all manufactured homes to be elevated and anchored to resist flotation, collapse, or lateral movement. [60.3(b)(8)]				Y		5.3 G1 b 5.3 G3 5.3 G14
29. Require all new and substantially improved <u>residential</u> structures within A1-30, AE, and AH Zones have their lowest floor (including basement) elevated to or above the Base Flood Elevation. [60.3(c)(2)]				Y		5.3 G3
30. ² In AO Zones, require that new and substantially improved <u>residential</u> structures have their lowest floor (including basement) to or above the highest adjacent grade at least as high as the FIRM's depth number. [60.3(c)(7)]				n/a		No AO Zones in community
31. Require that new and substantially improved <u>non-residential</u> structures within A1-30, AE, and AH Zones have their lowest floor elevated or floodproofed to or above the Base Flood Elevation. [60.3(c)(3)]				Y		5.3 G4
32. ² In AO Zones, require new and substantially improved <u>non-residential</u> structures have their lowest floor elevated or completely floodproofed above the highest adjacent grade to at least as high as the depth number on the FIRM. [60.3(c)(8)]				n/a		No AO Zones in community
33. Require that for floodproofed non-residential structures, a registered professional engineer/architect certify that the design and methods of construction meet requirements at 60.3(c)(3)(ii). [60.3(c)(4)]				Y		5.3 G4 c
34. Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor that are used solely for parking of vehicles, building				Y		5.3 G6

² Item 30 and 32 are not required if the community has no AO Zones.

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access or storage in an area other than a basement and which is subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing the entry and exit of floodwaters in accordance with the specifications in 60.3(c)(5). (Openings requirement)						
35. ³ Until a regulatory floodway is designated, no encroachment may increase the Base Flood level more than 1 foot. [60.3(c)(10)]				Y		5.3 G2
36. ⁴ In Zones AO and AH, require drainage paths around structures on slopes to guide water away from structures. [60.3(c)(11)]				n/a		No AO or AH Zones in community
37. Require that manufactured homes placed or substantially improved within A1-30, AH, and AE Zones, which meet one of the following location criteria, to be elevated such that the lowest floor is to or above the Base Flood Elevation and be securely anchored: (i) outside a manufactured home park or subdivision; (ii) in a new manufactured home park or subdivision; (iii) in an expansion to an existing manufactured home park or subdivision; iv) on a site in an existing park which a manufactured home has incurred substantial damage as a result of a flood. [60.3(c)(6)]				Y		5.3 G1 b 5.3 G3 5.3 G14
38. In A-1-30, AH, and AE Zones, require that manufactured homes to be placed or substantially improved in an <u>existing</u> manufactured home park to be elevated so that (i) the lowest floor is at or above the Base Flood Elevation; OR (ii) the chassis is supported by reinforced piers no less				Y		5.3 G3 5.3 G14

³ Item 35 is not required if all streams have floodways designated.

⁴ Item 36 is not required if the community has no AO or AH Zones.

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than 36 inches in height above grade and securely anchored. [60.3(c)(12)]						
39. In A1-30, AH, and AE Zones, all recreational vehicles to be placed on a site must (i) be elevated and anchored; OR (ii) be on the site for less than 180 consecutive days; OR (iii) be fully licensed and highway ready. [60.3(c)(14)]				Y		5.3 G7
40. Designate a regulatory floodway which will not increase the Base Flood level more than 1 foot. [60.3(d)(2)]				Y		8.2 Definitions
41. In a regulatory floodway, prohibit any encroachment, which would cause any increase in the Base Flood level unless hydrologic and hydraulic analyses prove that the proposed encroachment would not increase flood levels during the Base Flood discharge. [60.3(d)(3)]				Y		5.3 H
42. In V1-30, VE, and V Zones, obtain and maintain the elevation of the bottom of the lowest horizontal structural member of the lowest floor of all new and substantially improved structures. [60.3(e)(2)]						
43. In V1-30, VE, and V Zones, require that all new construction and substantial improvements: (a) Are elevated and secured to anchored pilings or columns so that the bottom of the lowest horizontal structural member is at or above the Base Flood Elevation. [60.3(e)(4)]						
(b) A registered professional engineer/architect certify that the design and methods of construction meet elevation and anchoring requirements at 60.3(e)(4)(i) and (ii). [60.3(e)(4)]						
(c) Have the space below the lowest floor either free of obstruction or constructed with breakaway walls.						

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Any enclosed space shall be used solely for parking, building access, or storage. [60.3(e)(5)]						
(d) All new construction is landward of mean high tide. [60.3(e)(3)]						
(e) Prohibit use of fill for structural support. [60.3(e)(6)]						
(f) Prohibit alteration of sand dunes and mangrove stands, which would increase potential flood damage. [60.3(e)(7)]						
44. Require that manufactured homes placed or substantially improved within V1-30, VE, and V Zones, which meet one of the following location criteria, meet the V Zone standards in 60.3(e)(2) through (e)(7): (i) outside a manufactured home park or subdivision; (ii) in a new manufactured home park or subdivision; (iii) in an expansion to an existing manufactured home park or subdivision; (iv) on a site in an existing park which a manufactured home has incurred substantial damage as a result of a flood. [60.3(e)(8)]						
45. In V1-30, VE, and V Zones, require that manufactured homes to be placed or substantially improved in an <u>existing</u> manufactured home park to be elevated so that (i) the lowest floor is at or above the Base Flood Elevation; OR (ii) the chassis is supported by reinforced piers no less than 36 inches in height above grade and securely anchored. [60.3(e)(8)(iv)]						
46. In V1-30, VE, and V zones, all recreational vehicles to be placed on a site must (i) be elevated and anchored; OR (ii) be on the site for less than 180 consecutive days; OR (iii) be fully licensed and highway ready. [60.3(e)(9)]						

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Additional Information:

N Stand-alone Ordinance?

Y Automatic Adoption?

Y Additional Regulatory Measures? If yes, specify:

-Fill prohibited in SFHA except for elevation of structures and primary access; no net loss of flood storage capacity

-Design Flood Elevation of 2 feet above base flood elevation

-Storage, salvage yards, critical facilities, and caretakers apartments prohibited in the SFHA

-Certificate of Compliance

-Substantial improvement determined over 1 year or common plan of development

-Critical facilities to be elevated or dry floodproofed to 1 foot above 500-year flood elevation or 3 feet above base flood elevation, whichever is higher.

State Requirement:

Y ANR Referral Requirement [24 VSA §4424]? 5.3 F1

Y Town/City/Village changes completed?

General comments: The updated draft for Hardwick contains many protections for the floodplain (Special Flood Hazard Area) and, in many ways, follows the state model bylaw. Small changes in text are recommended for checklist items 14 and 17 to ensure that the bylaws contain all NFIP requirements.

Items 14 & 17: I see that “Special” has been removed from “Special Flood Hazard Area” in multiple places in the draft--5.3 A (first sentence) and 5.3 C (first sentence), 5.3 G, 5.3 E. I’m not sure if this was inspired by the state model text or if the intent is to expand floodplain regulations to additional flood hazard areas beyond the Special Flood Hazard Area such as 500-year flood zones identified on FEMA maps or river corridors. Recall that the Special Flood Hazard Area is the official name for the area with at least 1% annual chance of flood (see definitions) and must be regulated by the community to participate in the NFIP. Although the state model shortens it to “flood hazard area” in multiple places, please note that SFHA is at least once clearly stated in V.B.1. I’m not sure how FEMA would review this, but to make sure the bylaws meet checklist Items 14 and 17, please have them state at least once (e.g., in 5.3 A applicability) that the regulatory area is the *Special* Flood Hazard Area to avoid any ambiguity about which flood hazard areas are regulated. If you are trying to expand the regulatory area, then let’s talk about that....

Item 17: Section 5.3 A states “A permit is required from the Zoning Administrator for all development in all areas defined in Table 2.8 of these bylaws.” To make this clearer, I suggest stating somewhere that the Flood Hazard Overlay District is the Special Flood Hazard Area.

Other edits to consider:

The suggested edits below are not required for NFIP participation per se but may be beneficial clarifications.

- 1) Table 2.8. Why not number the items listed under D & E like under B & C?

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- 2) Table 2.8, B.11. All restoration projects are listed as permitted administratively in the draft; the state model limits administrative review of these restoration projects to where outside the floodway so that if in floodway, such projects would get conditional use review. The community can decide what level of review to use, but be aware that restoration projects in the floodway still need to meet the technical floodway standards in 5.3 H.
- 3) Table 2.8 (D) – This table prohibits storage in the FHO district, so you may want to include a definition for “storage”. The state model definition is: “Storage means the aggregation of materials, items, or objects whether natural or human-made; that is kept as a stockpile, collection, or inventory; where individual materials from the stockpile, collection or inventory may change, but where the general footprint of the stored materials continues to be used for the same purpose; whether set upon the land or within a container, structure, or facility; and that would not otherwise be in compliance with these development standards.”
- 4) 5.3 F1 – While not required for NFIP, we recommend the bylaws require state referral of applications for floodway projects and variances (in addition to substantial improvement and new construction) to help ensure NFIP compliance for these more technical and complex situations. For sample text see VII D.3 of state model language: “Any application regarding New Construction, Substantial Improvement, development in a Floodway, (development in a River Corridor,) or a Variance shall be submitted by the AO to the State National Flood Insurance Program (NFIP) Coordinator at the Vermont Agency of Natural Resources in accordance with 24 V.S.A. § 4424. A permit may be issued following receipt of comments from the Agency, or the expiration of 30 days from the date the application was mailed to the Agency, whichever is sooner.”
- 5) 5.3 G1 – Looks like typo – DFE should be “**design** flood elevation”
- 6) 5.3 G1 h – The revised wording in the draft may be hard to follow. Consider wording this way: “require any fuel storage tanks and vents to be elevated above the DFE and be securely anchored to prevent flotation. Storage tanks may be placed underground if a qualified professional certifies the installation will be anchored and protected from flood forces.”
- 7) 5.3 G3 (second sentence) – stronger to use “shall” rather than “must”
- 8) 5.3 G4 b- Typos? Consider the following changes (new text underlined): “Have the lowest floor, including basement, together with attendant utility and sanitary facilities, ~~be~~ be designed so that ~~at or above the base flood elevation, that~~ to at least two feet above the base flood elevation ~~of~~ the structure is dry floodproofed, meaning watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.”
- 9) 5.3 G16 - Consider placing this important standard closer to 5.3 G1 since it affects most if not all projects.
- 10) 8.2 Definitions – With the separate definitions of Development in the Flood Hazard Area Overlay and the Land Development, you may want to include a note under Land Development referring readers to the other definition for SFHA projects.

TABLE 2.8 FLOOD HAZARD AREA OVERLAY [FHO] DISTRICT

(A) Purposes. The purposes of the Flood Hazard Area Overlay are to 1) avoid and minimize the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditures and demands on public services that result from flooding; 2) ensure that the selection, design, creation, and use of development is reasonably safe and accomplished in a manner that is consistent with public wellbeing, does not impair floodplain services, and 3) manage the flood hazard area designated pursuant to 10 V.S.A. Chapter 32 § 753, the municipal hazard mitigation plan; and make the Town of Hardwick, its citizens, and businesses eligible for federal flood insurance, federal disaster recovery funds, and hazard mitigation funds as may be available;

(B) Permitted Uses	(C) Conditional Use	(D) Prohibited Uses	(E) Exempted
<p>1. Accessory structures <u>not greater than 500 square feet and outside of the Floodway (of 500 square feet or less, outside of floodway)</u></p>	<p>1. Accessory structures larger than 500 square feet, <u>outside of the Floodway</u></p>	<p>Accessory structures in floodway <u>1 All new residential or non-residential structures, including small Accessory Structures, in the Floodway</u></p>	<p>1 Agriculture** 2 Forestry** <u>3 Interior improvements or repairs to existing buildings that cost less than 500 dollars.</u></p>
<p>1.2. <u>Bridges and culverts</u></p>	<p>2. All other new structures, (including accessory <u>Accessory Dwelling Units</u>) <u>outside of the Floodway</u></p>	<p>2 Caretaker's apartments <u>2 Cemetery</u></p>	<p><u>4 Maintenance of roads, bridges, or stormwater drainage.</u></p>
<p>3. Building utilities</p>	<p>3. <u>Bridges and culverts</u></p>	<p>4 Critical facilities</p>	<p>5 Open space</p>
<p>4. <u>Channel Management</u></p>	<p>4. <u>Channel management</u></p>	<p>5 Fill (for any purpose other than elevating structures or primary access)</p>	<p>6 Removal of a structure (in whole or in part), so long as the ground elevations under and adjacent to the removed structure remain unchanged</p>
<p>2-5. <u>Footbridges</u></p>	<p>5-3. <u>Fill (to elevate new and existing structures or for primary access)</u></p>	<p>6 Natural Burial Ground</p>	<p>7 Salvage Yards</p>
<p>3-6. New or replacement storage tanks for existing structures</p>	<p>6-4. <u>Grading, excavation or the creation of a pond</u></p>	<p>8 Storage Facility</p>	<p>8 Streambank stabilization and abutment work that do not reduce the cross-sectional flow area of the river or stream channel and have coverage under a Stream Alteration Permit, if required.</p>
<p>4-7. Non-substantial improvements to existing structures (outside of Floodway)</p>	<p>7-5. Non-substantial improvements to existing structures (in floodway <u>Floodway</u>)</p>		<p>9 Subdivision of land that does not involve or authorize development.</p>
<p>5-8. Parking, at grade (outside of Floodway)</p>	<p>8-6. Parking, at grade (in Floodway)</p>		
<p>6-9. Recreational vehicles (parking of) <u>outside of the Floodway</u></p>	<p>9-7. Public utilities</p>		
<p>10. Replacement of water supply or septic systems</p>	<p>10-8. Road improvements</p>		
<p>7-11. <u>River and floodplain restoration projects, outside of the Floodway, including dam removal, that restore natural & beneficial floodplain functions and include written information from the ANR Regional Floodplain Manager that the project is</u></p>	<p>9. Substantial improvements to existing structures</p>		
	<p>11-10. <u>River and floodplain restoration projects in the Floodway, including dam removal, that restore natural & beneficial floodplain functions and include written information from the ANR</u></p>		

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designed to meet the applicable standards in this bylaw

Regional Floodplain Manager that the project is designed to meet the applicable standards of this bylaw.

**Forestry activities conducted in accordance with the Vermont Department of Forests and Parks Acceptable Management Practices; and agriculture activities conducted in accordance with the Vermont Agency of Agriculture Food & Markets Required Agricultural Practices

(F) Dimensional Standards (unless otherwise specified for a particular use):

As required for the underlying zoning district. Subject to conditional use approval by the Development Review Board, a waiver may be granted to dimensional standards in the underlying district in order to locate development outside of flood hazard prone areas. Such a waiver shall represent the minimum deviation from dimensional standards in order to locate development away from flood prone areas and shall not encroach into public and private rights of way or required replacement fields or separation distances to accommodate on-site potable water and waste water systems.

(G) Development Standards [See section 5.3]

road, which may be crossed by driveways and sidewalks. Form, location, and composition of the landscaped strip shall be shown on the site plan and approved by the Development Review Board.

- (4) **Rural Residential and Compact Residential Districts.** Within the Rural Residential and Compact Residential Districts, development shall be designed in accordance with the following standards:
 - a. Development shall be designed to minimize loss of agricultural land and natural habitat, impact on water quality, and diminishment of the scenic and rural qualities of the site as experienced both on-site and from other vantage points in the Town.
 - b. Access roads, driveways and utility corridors shall be shared to the extent feasible; and, where sites include linear features such as existing roads, tree lines, stone walls, and/or fence lines, shall follow these features to the extent feasible in order to minimize the loss of productive agricultural and forest land, and to avoid physical and visual impacts.
- (5) **Forest Reserve District.** Development within the Forest District should not detract from the site's scenic qualities, nor obstruct significant views from public vantage points, and should blend in with the existing landscape. Development shall take into consideration existing contours and forest cover to ensure that adequate opportunities exist for the siting and natural screening of development to minimize site disturbance and visual impacts. The Board may require the submission of a visual impact assessment for conditional uses within this district, and/or require additional screening of structures consistent with the natural and built environment.

Section 5.3 Flood Hazard Review

- (A) **Applicability.** These regulations shall apply to the Special Flood Hazard Area in and on the most current flood insurance studies and maps published by the Department of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program, as provided by the Secretary of the Agency of Natural Resources pursuant to 10 V.S.A. Chapter 32 Section 753, which are hereby adopted by reference and declared to be part of these regulations. A permit is required from the Zoning Administrator for all development in all areas [in the Special Flood Hazard Area as](#) defined in Table 2.8 of these bylaws. Development that requires conditional use approval, non-conforming use approval, or a variance from the Development Review Board under these regulations must have such approvals prior to the issuance of a permit by the Zoning Administrator. Any development subject to municipal jurisdiction in the designated hazard areas shall meet the criteria of 5.3(G) and 5.3(H). Any permit issued will require that all other necessary permits from State and Federal Agencies have been received before work may begin.
- (B) **Warning of Disclaimer of Liability.** This bylaw does not imply that land outside of the areas covered by this bylaw will be free from flood damages. This regulation shall not create liability on the part of the Town of Hardwick, or any municipal official or employee thereof, for any flood damages that result from reliance on this regulation, or any administrative decision lawfully made hereunder.
- (C) **Permitted Development.** For the purposes of review under these regulations, the

following development activities in the Special Flood Hazard Area ~~where outside of the Floodway, and where~~ meeting the Development Standards in Sections 5.3(G), require only an administrative permit from the Zoning Administrator:

1. Non-substantial improvements to existing structures, outside of the Floodway;
2. Small accessory structures not greater than 500 square feet and outside of the Floodway; of 500 square feet or less;
3. Development related to on-site septic or water supply systems;
4. Building utilities;
5. Bridges and culverts
6. Channel Management
7. Footbridges
8. River and floodplain restoration project, outside of the Floodway, including dam removal, that restore natural and beneficial floodplain functions and include written information from the ANR Regional Floodplain Manager that the project is designed to meet the applicable standards in this bylaw.
59. -At-grade parking for existing buildings, outside of the Floodway;
610. Recreational vehicles (parking of) outside of the Floodway; and
- 7.11. New or replacement storage tanks for existing structures.

(D) **Conditional Use Review.** Conditional use review and approval by the Development Review Board is required prior to the issuance of a permit by the Zoning Administrator for the following development activities:

1. New structures~~Accessory structures larger than 500 square feet, outside of the Floodway.~~
2. All other new structures, (including Accessory Dwelling Units) outside of the Floodway
- 2.3 Substantial improvement, elevation, relocation, or flood proofing of existing structures;
34. Non-Substantial iImprovements to existing structures in the Floodway;
45. Grading, excavation; or the creation of a pond;
56. Improvements to existing roads;
67. Fill to elevate new and existing structures or for primary access. Bridges, culverts, channel management activities, or public projects which are functionally dependent on stream access or stream crossing;:-
98. Public utilities;
9. River and floodplain restoration projects in the Floodway, including dam removal, that restore natural and beneficial floodplain functions and include written information from the ANR Regional Floodplain Manager that the project is designed to meet the applicable standards in this bylaw.

(E) **Application.** An application for development shall include:

- (1) Where applicable, a site plan that depicts the proposed development, all water bodies, Special Flood Hazard Areas, floodways, any existing and proposed drainage, any proposed fill, and pre and post development grades, and the elevation of the proposed lowest floor, as referenced to the same vertical datum as the elevation on the current Flood Insurance Rate Maps;
- (2) A Vermont Agency of Natural Resources Project Review Sheet shall identify all State and Federal agencies from which permit approval is required for the proposal, and shall be filed as a required attachment to the municipal permit application. The identified permits, or letters indicating that such permits are not required, shall be submitted to the Zoning Administrator and attached to the permit before work can begin.

(F) **Referrals.**

1. ~~Upon receipt of a complete application for a substantial improvement or new construction, the Zoning Administrator shall submit a copy of the application and supporting information to the State National Flood Insurance Program (NFIP) Coordinator at the Vermont Agency of Natural Resources, in accordance with 24 V.S.A. §4424. A permit may be issued only following receipt of comments from the Agency, or the expiration of 30 days from the date the application was mailed to the Agency, whichever is sooner. Any application regarding New Construction, Substantial Improvement, development in a Floodway, or a Variance shall be submitted by the Zoning Administrator to the State National Flood Insurance Program (NFIP) Coordinator at the Vermont Agency of Natural Resources in accordance with 24 V.S.A. §4424. A permit may be issued only following receipt of comments from the Agency, or the expiration of 30 days from the date the application was mailed to the Agency, whichever is sooner.~~
2. If the applicant is seeking a permit for the alteration or relocation of a watercourse, copies of the application shall also be submitted to the adjacent communities, the Stream Alteration Engineer at the Vermont Agency of Natural Resources, and the Army Corps of Engineers. Copies of such notice shall be provided to the State National Flood Insurance Program (NFIP) Coordinator at the Vermont Agency of Natural Resources, Department of Environmental Conservation. A permit may be issued only following receipt of comments from the Vermont Agency of Natural Resources, or the expiration of 30 days from the date the application was mailed to the Vermont Agency of Natural Resources, whichever is sooner. The Board should consider comments from the NFIP Coordinator at ANR.

(G) **Development Standards – Special Flood Hazard Area.**

- (1) All development below the Design Flood Elevation (DFE), except development that is exempt under Table 2.8 shall be:
 - a. reasonably safe from flooding;

- b. designed, operated, maintained, modified, and adequately anchored to prevent flotation, collapse, or lateral movement of the structure;
- c. constructed with materials resistant to flood damage;
- d. constructed by methods and practices that minimize flood damage;
- e. constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- f. adequately drained to reduce exposure to flood hazards;

~~g. located so as to minimize conflict with changes in channel location over time and the need to intervene with such changes; and~~

~~h.g. required to locate any fuel storage tanks and vents to be elevated above the DFE and be securely anchored to prevent flotation. (as needed to serve a building in the Special Flood Hazard Zone) a minimum of one foot above the base flood elevation and be securely anchored to prevent flotation, or S storage tanks may be placed underground if a qualified professional certifies the installation will be anchored and protected from flood forces.,-if securely anchored as certified by a qualified professional.~~

- (2) In Zones AE, AH, and A1-30, where ~~base flood elevations and or~~ floodway limits have not been determined, development shall not be permitted unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated encroachment, will not increase the base flood elevation by more than 1.00 foot at any point within the community. The demonstration must be supported by technical data that conforms to standard hydraulic engineering principles and certified by a registered professional engineer.
- (3) All new or substantially improved structures in Zones A, A1-30, AE, and AH shall be located such that the lowest floor is, ~~including the basement, elevated to or above the Design Flood Elevation (two feet above base flood elevation). This -at or above the base flood elevation, and this must shall~~ be documented, in ~~the proposed and~~ as-built condition, with a FEMA Elevation Certificate.
- (4) New or substantially improved non-residential structures shall:

a. Meet the standards in 5.3(G)(3); or,

~~b. Have the lowest floor, including basement, together with attendant utility and sanitary facilities, be designed so that at or above the base flood elevation, that at least two feet above the base flood elevation of the structure is dry floodproofed, meaning watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;~~

~~b.c. A permit for flood-proofing dry floodproofing shall not be issued until a registered professional engineer or architect has reviewed the structural design,~~

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goods raised on the premises, which falls under the definition of agriculture, nor does it include agricultural and forest processing. See also Industry, Light.

Junk Yard: See Salvage Yard.

Kennel: The boarding, breeding, raising, grooming, or training of four or more dogs, cats, or other household pets of any age for a commercial use and/or which are not owned by the owner or occupant of the premises. See also Veterinary Clinic.

Land Development: In accordance with the Act [§4303(10)], the division of a parcel into two or more parcels, the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any building or other structure, or any human-made change to improved or unimproved real estate, including but not limited to paving, mining, excavation, landfill, dredging, grading, or drilling, or storage of equipment or materials, or any changes in the use of any building or other structure or land or extension of use of land. [For projects in the Special Flood Hazard Area, refer to the definition of Development in the Flood Hazard Area Overlay.](#)

Letter of Map Amendment (LOMA): A letter issued by the Federal Emergency Management Agency officially removing a structure or lot from the flood hazard zone based on information provided by a certified engineer or surveyor. This is used where structures or lots are located above the base flood elevation and have been inadvertently included in the mapped special flood hazard area.

Level of Service: (1) A measure of the relationship between public service and facility capacity and the demand for public services and facilities; (2) for traffic, the operating conditions that a driver will experience while traveling on a particular street or highway, including frequency of stops, operating speed, travel time, traffic density and vehicle operating costs.

Loading Space: An off-street space that is at least twelve feet wide, thirty-five feet long, and fourteen feet high, not including the access driveway, and has direct access onto a road, which is used for the temporary parking of one licensed motor vehicle.

Lot: (1) Land occupied or to be occupied by a principal structure or use and its accessory structures and/or uses, together with required open spaces, having not less than the minimum area, width or depth required for a lot in the district in which such land is situated, and having frontage on a road, or other means of access as may be approved by the Board; (2) a portion of land in a subdivision or plat that is separated from other portions by a property line (see also Contiguous Land). A separate deed description for a parcel of land does not necessarily constitute a lot for zoning and development purposes.

Lot Area: The total land area within the property (boundary) lines of a lot, excluding any area within the boundaries of an existing or proposed road right-of-way.

Lot, Corner: Lot at the intersection of two roads (streets) which has an interior angle of less than 135 degrees. A lot abutting a curved street shall be considered a corner lot if the tangents to the curve at the points of intersection of the side lot lines intersect at an interior angle of less than 135 degrees.

Lot Depth: The mean horizontal distance from the street line of the lot to its opposite rear line measured at right angles to the building front line.

Lot Frontage: See Frontage.

Lot Line: Property line bounding a lot (parcel).