# Amendment #LDR-19-03 Floodplain Overlay District and proposed River Corridors Overlay District

# 2.03 Definitions for Flood Hazard and River Corridor Purposes

The following definitions shall apply to all lands within the Floodplain and River Corridor Overlay District.

Area of special flood hazard. Synonymous in meaning with the term "special flood hazard area" for the purposes of this bylaw.

Associated transportation and utility networks. Those transportation and utility networks connected to a bridge, culvert, or utility for the purpose of crossing a river or stream and do not include transportation or utility networks within the river corridor that merely run parallel to a river or stream.

**Base Flood.** The flood having a one percent chance of being equaled or exceeded in any given year (commonly referred to as the "100-year flood").

**Base Flood Elevation (BFE)**. The elevation of the water surface elevation resulting from a flood that has a 1 percent chance of equaling or exceeding that level in any given year. On the Flood Insurance Rate Map the elevation is usually in feet, in relation to the National Geodetic Vertical Datum of 1929, the North American Vertical Datum of 1988, or other datum referenced in the Flood Insurance Study report, or the average depth of the base flood, usually in feet, above the ground surface.

**Basement.** Any area of a building having its floor elevation below ground level on all sides, including crawlspaces.

<u>Channel.</u> An area that contains continuously or intermittently flowing water that is confined by banks and a <u>streambed.</u>

**Common Plan of Development.** Where a structure will be refurbished <u>or constructed</u> over a period of time <u>under one approved plan or permit, but in separate stages, phases, or in combination with other construction activities</u>. Such work might be planned unit by unit <u>and may take place at different times, on different schedules</u>.

**Critical facilities.** Facilities that are vital to public health and safety I ncluding es police stations, fire and rescue facilities, hospitals, and private schools, shelters providing temporary housing assistance, assisted living facilities, congregate care facilities, and skilled burning facilities.

<u>Designated center.</u> A downtown, village center, new town center, growth center, or neighborhood development area designated pursuant to 24 V.S.A. Chapter 76A.

**Development.** Any human-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

**Encroachment.** Activities or construction including fill, substantial improvements, and other development that may cause an increase in flood levels.

**Equilibrium condition.** The width, depth, meander pattern, and longitudinal slope of a stream channel that occurs when water flow, sediment, and woody debris are transported by the stream in such a manner that it generally maintains dimensions, pattern, and slope without unnaturally aggrading or degrading the channel bed elevation.

Fill. Any placed material that changes the natural grade, redirects the movement of flood water, or diminishes the flood storage capacity at the site. Temporary storage of materials for less than 180 days is not considered fill.

**Flood.** (a) a general and temporary condition of partial or complete inundation of normally dry land areas from: the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source; and mudslides which are proximately caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current; (b) the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

Flood hazard. Those hazards related to damage from flood-related inundation or erosion.

Flood hazard area. Shall have the same meaning as "area of special flood hazard" under 44 C.F.R. § 59.1. "Area of special flood hazard" is synonymous with the term "special flood hazard area."

**Flood Insurance Rate Map (FIRM)**. An official map of a community, on which the Federal Insurance Administrator has delineated both the special flood hazard areas and the risk premium zones applicable to the community. In some communities the hazard boundaries are available in paper, pdf, or Geographic Information System formats as a Digital Flood Insurance Rate Map (DFIRM).

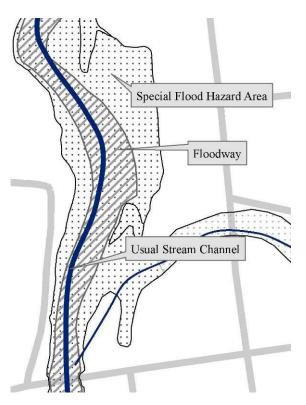
**Flood Insurance Study.** An examination, evaluation and determination of flood hazards and, if appropriate, the corresponding water surface elevations or an examination, evaluation and determination of mudslide (i.e., mudflow) and /or flood related erosion hazards.

Floodplain or flood-prone area. Any land area susceptible to being inundated by water from any source (see definition of "flood").

**Flood proofing**. Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

**Floodway.** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot at any point. Please note that Special Flood Hazard Areas and floodways may be shown on a separate map panels.

Floodway, Regulatory in the City of South Burlington. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot at any point.



**Fluvial erosion.** The erosion or scouring of riverbeds and banks during high flow conditions of a river. Fluvial erosion is most likely to occur within the river corridor.

<u>Functionally dependent use.</u> A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water.

Grading. The movement or replacement of topsoil or other material originating on the site and within the flood hazard area. Grading results in minor or no changes in topographic elevations. If new material is brought from outside the flood hazard area and such new material is not offset with an equal or greater removal of material from the portion of the site within the flood hazard area, the new material shall be considered "fill" and shall not be considered grading.

**Historic Structure.** Any structure that is: (a) listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (i) by an approved state program as determined by the Secretary of the Interior or (ii) directly by the Secretary of the Interior in states without approved programs.

<u>Infill development</u>. A construction, installation, modification, renovation, or rehabilitation of land, interests in land, buildings, structures, facilities, or other development in an area that was not previously developed but is surrounded by existing development.

Letter of Map Change (LOMC). A letter issued by FEMA officially removing a structure or lot from the flood hazard area 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. A LOMC can include a Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), Letter of Map Revision based on Fill (LOMR-F), or a Letter of Map Revision for a Floodway (LOMR-FW).

**Lowest floor.** The lowest floor of the lowest enclosed area, including basement, except an An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of 44 CFR 60.3.

**Manufactured home (or Mobile home).** A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

National Flood Insurance Program. The National Flood Insurance Program under 42 U.S.C. chapter 50 and implementing federal regulations in 44 C.F.R. parts 59 and 60. The National Flood Insurance Program aims to reduce the impact of flooding on private and public structures. It does so by providing affordable insurance to property owners in communities that adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures.

Natural and beneficial floodplain functions. The functions associated with the natural or relatively undisturbed floodplain which include moderating flooding, retaining flood waters, and reducing erosion, sedimentation and flood related damage. Ancillary beneficial functions include support of ecosystem services such as wildlife habitat, water quality, and recharge of ground water.

**New construction.** Structures for which the *start of construction* commenced on or after the effective date of the floodplain management regulation <u>and/or the River Corridor regulations</u> adopted by the community and includes any subsequent improvements to such structures.

Non-residential. Uses not defined as "Residential Use" in Section 2.02.

<u>Public water access.</u> A public access to a water of the State and, except for toilet facilities, shall not include structures as defined in this bylaw.

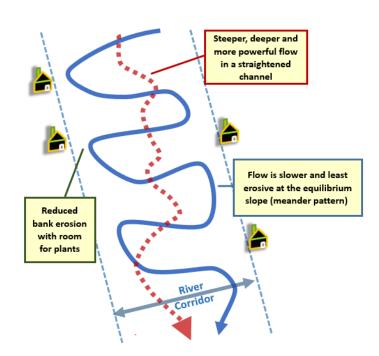
**Recreational vehicle.** A vehicle which is: (a) Built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projection; (c) Designed to be self-propelled or permanently towable by a light duty truck; and (d) Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

**Redevelopment**. The construction, installation, modification, renovation, or rehabilitation of land, interests in land, buildings, structures, facilities, or other development in a previously developed area. The term includes substantial improvements and repairs to substantially damaged buildings.

**Replacement structure.** A new building placed in the same footprint as the pre-existing building and does not include a change in use.

River. The full length and width, including the bed and banks, of any watercourse, including rivers, streams, creeks, brooks, and branches which experience perennial flow. "River" does not mean constructed drainageways, including water bars, swales, and roadside ditches.

River corridor. The land area adjacent to a river that is required to accommodate the dimensions, slope, planform, and buffer of the naturally stable channel and that is necessary for the natural maintenance or natural restoration of an dynamic equilibrium condition and for minimization of fluvial erosion hazards, as delineated by the Vermont Agency of Natural Resources in accordance with river corridor protection procedures. (10 V.S.A. § 1422).



Special Flood Hazard Area. The floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. For purposes of these regulations, the term "area of special flood hazard" is synonymous in meaning with the phrase "special flood hazard area". This area is usually labeled Zone A, AO, AH, AE, or A1-30 in the most current flood insurance studies and on the maps published by the Federal Emergency Management Agency. Maps of this area are available for viewing in the municipal office or online from the FEMA Map Service Center: msc.fema.gov. Base flood elevations have not been determined in Zone A where the flood risk has been mapped by approximate methods. Base flood elevations are shown at selected intervals on maps of Special Flood Hazard Areas that are determined by detailed methods. Please note, where floodways have been determined they may be shown on separate map panels from the Flood Insurance Rate Maps.

Start of construction. For purposes of floodplain management, determines the effective map or bylaw that regulated development in the Special Flood Hazard Area. The "start of construction" includes substantial improvement, and means the date the zoning permit was issued provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footing, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, regardless whether that alteration affects the external dimensions of the building.

**Storage.** 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.

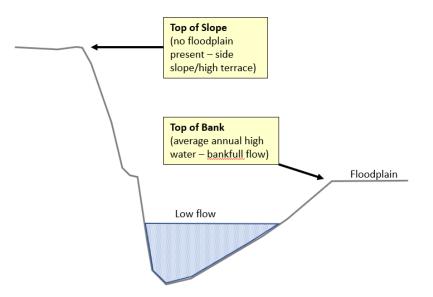
**Structure.** For regulatory purposes under this bylaw, a walled and roofed building, as well as a manufactured home, and any related built systems, including gas or liquid storage tanks.

**Substantial damage**. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged conditions would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**Substantial improvement.** Any <u>repair</u>, reconstruction, rehabilitation, addition, or other improvement of a structure after the date of adoption of this bylaw, the cost of which, over three years, or over the period of a common plan of development, cumulatively equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either: (a) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been <u>previously</u> identified by the local code enforcement

official and which are the minimum necessary to assure safe living conditions or (b) Any alteration of an "historic structure", provided that the alteration will not preclude the structure's continued designation as an "historic structure".

Top of bank. The point along a streambank where an abrupt change in slope is evident, and where the stream is generally able to overflow the banks and enter the adjacent floodplain during flows at or exceeding the average annual high—water stage.



**Top of slope.** A break in slopes adjacent to steep-banked streams that have little or no floodplain; or a break in slope where the side slopes adjacent to an incised, or deeply cut, channel meet floodplains that have been abandoned or are undergoing abandonment.

**Violation.** The failure of a structure or other development to be fully compliant with this bylaw. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR 60.3 is presumed to be in violation until such time as that documentation is provided.

<u>Watercourse</u>. Any perennial stream and shall not include ditches or other constructed channels primarily associated with land drainage or water conveyance through or around private or public infrastructure.

Wet-floodproofing. Permanent or contingent measures applied to a structure that prevent or provide resistance to damage from flooding by allowing water to enter the structure in accordance with Technical Bulletin 7 published by FEMA. https://www.fema.gov/media-library/assets/documents/3503

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# 3.01 Establishment of Districts and Description of Certain Districts

**A. Establishment of Districts.** For the purpose of these regulations, the City of South Burlington is hereby divided into the districts shown on the Official Zoning Map. This zoning code also contains provisions for overlay districts and a floating district.

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(5) Overlay Districts. The following overlay districts are shown on the Overlay Districts Map:

FP-Floodplain Overlay District

**Traffic Overlay District** 

Scenic View Protection Overlay District

**IHO**-Interstate Highway Overlay District

**TO Traffic Overlay District** 

**SVP Scenic View Protection Overlay District** 

**Transit Overlay District** 

**Urban Design Overlay District** 

**BBW Bartlett Brook Watershed Protection Overlay District** 

PBW Potash Brook Watershed Protection Overlay District (reserved)

River Corridor Overlay District

B. Description of Certain Districts.

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(5) River Corridor Overlay District. The boundaries of the River Corridor Overlay District shall include those areas mapped as Statewide River Corridors in the City of South Burlington, Vermont, as published by the Agency of Natural Resources (ANR) including refinements to that data based on field-based assessments which are hereby adopted by reference. On perennial streams with a watershed size greater than half a square mile for which River Corridors are not mapped, the standards in G. (4) Development Standards of Section 10.07 River Corridor Overlay District shall apply to the area measured as 50 feet from the top of the stream bank or slope.

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# 10 OVERLAY DISTRICTS FP, TR, SVP, IHO, TO, UDO, RCO

10.01 Flood Plain Overlay District

10.02 Traffic Overlay District

10.03 Scenic View Protection Overlay District

10.04 Interstate Highway Overlay District

10.05 Transit Overlay District

10.06 Urban Design Overlay District

10.07 River Corridor Overlay District

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# **10.07 River Corridor Overlay District (RCO)**

- **A. Purpose.** It is the purpose of the River Corridor Overlay District to:
- (1) Establish protection of the river corridor to provide rivers and streams with the lateral space necessary to maintain or reestablish floodplain access and minimize erosion hazards through natural, physical processes;
- (2) Allow for wise use of property within river corridors that minimizes potential damage to existing structures and development from flood-related erosion;
- (3) Discourage encroachments in undeveloped river corridors; and
- (4) Reasonably promote and encourage infill and redevelopment of designated centers that are within river corridors.
- **B.** Authority. In accordance with 24 V.S.A. Chapter 117, §4424, and §4414, there is hereby established a bylaw for areas at risk of erosion damage in the City of South Burlington Vermont. These regulations shall apply to development in all areas in the City of South Burlington identified as within the River Corridor Overlay District designated in Section 3.01(B).
- C. Comprehensive Plan. These regulations hereby implement the relevant portions of the City of South Burlington's adopted Comprehensive Plan and are in accord with the policies set forth therein.
- **D.** Warning of Disclaimer of Liability. This bylaw does not imply that land outside of the areas covered by this overlay district will be free from erosion damages. This regulation shall not create liability on the part of the City of South Burlington, or any municipal official or employee thereof, for any erosion damages that result from reliance on this regulation, or any administrative decision lawfully made hereunder.
- **E. Precedence of Bylaw.** The provisions of this River Corridor Overlay District shall not in any way impair or remove the necessity of compliance with any other local, state, or federal laws or regulations. Where this regulation imposes a greater restriction, the provisions in these regulations shall take precedence.

#### F. District General Provisions

(1) Establishment of RCO District. The RCO is an overlay district. All other requirements of the underlying district or another overlay district such as the Flood Hazard Overlay District, shall apply in addition to the provisions herein, unless it is otherwise so indicated. If there is a conflict with another such district, the stricter provision shall apply.

#### (2) RCO District Boundaries

- (a) Section 10.07 shall apply to the Statewide River Corridors in the City of South Burlington, Vermont, as published by the Agency of Natural Resources (ANR) including refinements to that data based on field-based assessments which are hereby adopted by reference.
- (b) On perennial streams with a watershed size greater than half a square mile for which River Corridors have not been mapped by the State of Vermont, the standards in this Section shall apply to the area measured as fifty (50) feet from the top of the stream bank or slope, whichever is applicable

based on a field determination consistent with the Vermont ANR Flood Hazard and River Corridor Protection Procedure.

(c) Requests to update a river corridor map shall be in accordance with the procedure laid out in the ANR Flood Hazard Area and River Corridor Protection Procedure.

#### (3) Jurisdictional Determination and Interpretation

The information presented on any maps, or contained in any studies, adopted by reference, is presumed accurate. If uncertainty exists with respect to the boundaries of the RCO the location of the boundary on the property shall be determined by the Administrative Officer (AO). If the applicant disagrees with the determination made by the AO or the river corridor as mapped, the applicant has the option to either:

- (a) Hire a licensed land surveyor or registered professional engineer to stake out the RCO boundary on the property; or
- (b) Request a letter of determination from ANR which shall constitute proof of the location of the river corridor boundary. In support of a letter of determination request, applicants must provide ANR a description of the physical characteristics that bring the river corridor delineation into question (e.g. the presence of bedrock or other features that may confine lateral river channel adjustment. When ANR receives a request for a letter of determination, ANR evaluates the site and existing data to see if a change to the river corridor delineation is justified, necessitating a river corridor map update. An ANR letter of determination will either confirm the existing river corridor delineation or will result in an update to the river corridor delineation for the area in question. If a map update is justified, an updated map will be provided with the letter of determination.

# G. Prohibited, Exempted, and Permitted Development in River Corridors

(1) Prohibited Development in the RCO District

The following are prohibited in the RCO District

(a) New structures, fill, accessory dwellings and any other development that is not expressly listed as at least one of the Exempted Activities or Permitted Development as described below.

# (2) Exempted Activities

The following activities do not require a permit under this section of the bylaw:

- (a) The removal of a building or other improvement in whole or in part, so long as the ground elevations under and adjacent to the removed structure remain unchanged.
- (b) Any changes, maintenance, repairs, or renovations to a structure that will not result in a change to the footprint of the structure or a change in use.
- (c) Maintenance of existing sidewalks, roads, parking areas, or stormwater drainage; this does not include expansions.
- (d) Maintenance of existing bridges, culverts, and channel stabilization activities; this does not include expansions.
- (e) Construction or repair of stream crossing structures (bridges and culverts), associated transportation and utility networks (New transportation or utility development that runs parallel to the

river is not exempt and shall meet the Development Standards in section 10.07(I) below), dams, dry hydrants, and other functionally dependent uses that must be placed in or over rivers and streams that are not located in a flood hazard area and that have coverage under a Stream Alteration Permit, if required, under 10 V.S.A. Chapter 41 and the rules adopted thereunder.

- (f) Activities exempt from municipal regulation and requiring a permit under the State's "Vermont Flood Hazard Area and River Corridor Rule" (Environmental Protection Rule, Chapter 29):
  - (i) State-owned and operated institutions and facilities.
  - (ii) Forestry operations or silvicultural (forestry) activities conducted in accordance with the Vermont Department of Forests and Parks Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont or other accepted silvicultural practices, as defined by the Commissioner of Forests, Parks and Recreation.
  - (iii) Agricultural activities conducted in accordance with the Vermont Agency of Agriculture, Food and Market's Required Agricultural Practices (RAPs). Prior to the construction of farm structures, the farmer shall notify the AO in writing of the proposed activity. The notice shall contain a sketch of the proposed structure including setbacks.
  - (iv) Public utility power generating plants and transmission facilities regulated under 30 V.S.A. § 248.
  - (v) Telecommunications facilities regulated under 30 V.S.A. § 248a.
- (g) Planting projects which do not include any construction or grading activities in accordance with 24 V.S.A. § 4424(c).
- (h) Subdivision of land that does not involve or authorize development.
- (3) Permitted Development. The following development activities in the RCO District are permissible upon approval, provided they meet all other requirements of the LDRs.
  - (a) Construction of or additions to accessory structures that do not exceed, cumulatively, 500 square feet, and are not used for habitation.
  - (b) Improvements to existing utilities that are within or immediately adjacent to an existing right of way and serve a building.
  - (c) Replacement of on-site septic systems.
  - (d) Construction of or additions to an unenclosed deck or patio attached to an existing structure, where such construction or additions are cumulatively 200 square feet or less and are located no less than 100 feet from the top of bank (or top of slope, if applicable).
  - (e) River or floodplain restoration projects that do not involve fill, structures, utilities, or other improvements, and which the ANR Regional Floodplain Manager has confirmed in writing are designed to meet or exceed the applicable standards in this bylaw.

# H. Development Review Classification & Referral to Outside Agencies

(1) A zoning permit is required from the Administrative Officer for all development, as defined in Section 2.03 (Floodplain and River Corridor Definitions), in the River Corridor Overlay District. All permits

shall require that a permittee have all other necessary permits from state and federal agencies before work may begin.

- (a) If a permitted development activity listed in subsection G(3) above meets the criteria for infill development and/or certain non-habitable and accessory structures in subsections I(2)(a) or I(2)(b), below, then the activity shall require an administrative review by the AO and may receive a Zoning Permit from the AO.
- (b) If permitted development activity listed in subsection G(3) above does not meet the criteria for infill development and certain non-habitable and accessory structures in subsections I(2)(a) or I(2)(b) then the proposal shall be reviewed by the Development Review Board as a Conditional Use and the DRB must find that the proposed development meets the River Corridor Performance Standard outlined in subsection I(2)(c) prior to issuance of a Zoning Permit by the AO.

#### (2) Referrals to outside agencies

- (a) Upon receipt of a complete application for new construction or a substantial improvement, the Administrative Officer 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. The AO and DRB shall consider all comments from ANR.
- (b) If the applicant is seeking a permit for the alteration or relocation of a watercourse, copies of the application shall also be provided to the following entities: affected adjacent communities, the River Management Engineer at the Vermont Agency of Natural Resources, the Army Corps of Engineers, and 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.

#### I. Development Standards.

The criteria below are the minimum standards for development in the RCO District. Where more than one district is involved, the most restrictive standard shall take precedence.

- (1) Development within designated centers shall be allowed within the river corridor if the applicant can demonstrate that the proposed development will not be any closer to the river than existing adjacent development.
- (2) Development outside of designated centers shall meet the following criteria:
  - (a) In-fill Development must be located no closer to the channel than the adjacent existing principal buildings, within a gap that is no more than 300 feet (see Figure 1); or,

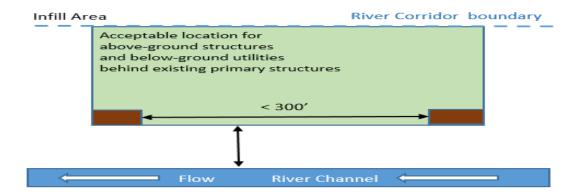


Figure 1: In-fill Development Standard

(b) Down River Shadow: A non-habitable addition (garage, deck, patio, stairs, etc.) to an existing habitable structure, or an accessory structure that is adjacent to an existing structure, shall be located in the shadow area directly behind and further from the channel than the existing structure, or within 50 feet of the downstream side of the existing habitable structure and no closer to the top of bank or slope, as applicable. Below-ground utilities may also be placed within the same shadow dimensions of an existing below-ground system (see Figure 2); or,

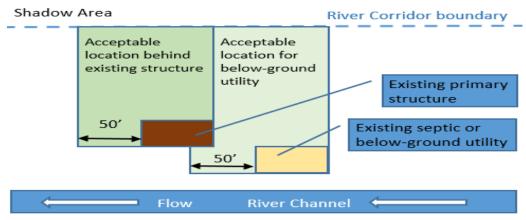


Figure 2: Shadow Area Development Standard

- (c) River Corridor Performance Standard.
  - (i) The proposed development shall:
    - a. not be placed on land with a history of fluvial erosion damage or that is imminently threatened by fluvial erosion; and,
    - b. not cause the river reach to depart from, or further depart from, the channel width, depth, meander pattern or slope associated with natural stream processes and equilibrium conditions; and,

- c. not result in an immediate need or anticipated future need for stream channelization that would increase flood elevations and velocities or alter the sediment regime, triggering channel adjustments and erosion in adjacent and downstream locations.
- (ii) In making its determination, the DRB may request or consider additional information to determine if the proposal meets the River Corridor Performance Standard, including:
  - a. Description of why the criteria for infill development and certain non-habitable and accessory structures in sub sections I(2)(a) and I(2)(b) above cannot be met;
  - <u>b</u> <u>Data and analysis from a consultant qualified in the evaluation of river dynamics and erosion</u> hazards;
  - c. Comments provided by the DEC Regional Floodplain Manager on whether the proposal meets the River Corridor Performance Standard.
- J. Submission Requirements. In addition to all information required for permitted development, the application shall include:
  - (1) Plan. A plan that depicts the proposed development, all water bodies, all River Corridor Overlay District boundaries, the shortest horizontal distance from the proposed development to the top of bank (and/or top of slope, if applicable) of any river, any existing and proposed drainage, any proposed fill, preand 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) Project Review Sheet. A Vermont Agency of Natural Resources Project Review Sheet. The 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 Administrative Officer and attached to the zoning permit before work can begin.
  - (3) Supplemental Application Requirements.
    - (a) Information clearly demonstrating how the proposed development meets the requirements for infill development and certain non-habitable and accessory structures in subsection 10.07(I) Development Standards above; or
    - (b) A narrative and supporting technical information from a qualified consultant that demonstrates how the proposal meets the River Corridor Performance Standard in subsection 10.07(I) Development Standards above, or
    - (c) Evidence of an approved major or minor map update issued by ANR in accordance with the process outlined in the *DEC Flood Hazard Area* & *River Corridor Protection Procedure*, finding the proposed development is not located within the river corridor.
  - (4) Waivers. Upon written request from the applicant, the Administrative Officer or DRB may waive specific application requirements when the data or information is not needed to comply with Section 10.07 of this bylaw.

# K. Permit Conditions

Permits for public water accesses and unimproved paths that provide access to the water for the general public and promote the public trust uses of the water shall include a condition prohibiting the permittee from actively managing the applicable section of river solely to protect the public water access from lateral river channel adjustment.