

ARTICLE 7. SUBDIVISION STANDARDS

As Amended & Adopted by the Warren Select Board March 25, 2008

Section 7.1 Application of Standards

(A) The Development Review Board shall evaluate any minor or major subdivision of land as defined in Section 6.1 in accordance with the standards set forth in this Article. Where these standards conflict with other provisions of these regulations, the more stringent shall apply.

(B) Pursuant to the Act [§4418((2)(A))] and Section 6.1(E), the Board may waive or vary subdivision review standards, subject to appropriate conditions. Any request for a waiver shall be submitted in writing by the applicant at the time of application. In granting such waivers, the Board shall require such conditions that will, in its judgement, substantially secure the objectives of any waived or varied requirements.

(C) The Board may require the subdivider to submit additional information to determine conformance with the following standards. The Board may also, in light of findings based on these standards, require the modification or phasing of a proposed subdivision, or measures to avoid or mitigate any adverse impacts.

(D) The Board may require from the subdivider for the benefit of the town a performance bond in an amount sufficient to cover the full cost of constructing any public improvements that the Board may require in approving the project under these standards. Such performance bond shall be submitted prior to final plan approval under Section 6.5(C).

Section 7.2 General Standards

(A) **Character of the Land.** All land to be subdivided shall be, in the judgement of the Development Review Board, of such a character that it can be used for intended purpose(s), as stated in the application, without danger to public health or safety, the environment, neighboring properties, or the character of the area or district in which it is located.

(B) **Conformance with the Warren Town Plan & Other Regulations.** Subdivisions of land shall be in conformance with all applicable requirements of these regulations, the Warren Town Plan as most recently adopted, the municipal capital budget and program and all other municipal bylaws and ordinances currently in effect.

(C) **Compatibility with Existing Settlement Patterns.** Subdivisions shall be designed and laid out to achieve the purpose and desired settlement pattern of the district in which they are located. To the extent feasible, new subdivisions of land shall:

- (1) maintain and extend desired settlement patterns, including lot area and configuration, road layout, and building locations, for the neighborhood or district in which they are located;
- (2) maintain contiguous tracts of open land, including conservation areas as defined under Section 7.4, with adjoining parcels;
- (3) connect to, and extend where appropriate, existing road, path, utility and open space corridors; and,

- (4) within the Warren Village Historic Residential and Warren Village Commercial Districts, all proposed subdivisions shall conform to the standards set forth in Section 8.3(E).

(D) **Density & Lot Lay-out.** Density, lot size and layout shall conform to zoning district standards, and general standards pertaining to frontage, lot and yard requirements (Section 3.7), unless modified or waived by the Development Review Board under planned residential and planned unit development provisions, in accordance with Article 8. In addition:

- (1) Lower densities of development may be required by the Board based on site limitations.
- (2) Lot layout shall be appropriate for the intended use, and reflect the purpose of the district in which the lots are located.
- (3) Corner lots shall have sufficient width to permit a front yard setback from each road.
- (4) Side lot lines shall be generally at right angles to straight roads, or radial to curved roads.
- (5) Lots with irregular shapes (curves, jogs, dog-legs, etc.) shall not be created unless warranted by conditions of topography, the location of natural features, or existing roads.
- (6) Boundary adjustments involving one or more non-conforming lots may be permitted providing the boundary adjustment does not increase the degree of non-conformance.

(E) **Establishment of Building Envelopes.** All lots shall have a designated building envelope. Such building envelope shall be designated to identify and limit the location of principal and accessory structures, parking areas, and associated site development (excluding road and utility rights-of-way or easements) on one or more portions of a lot. The size and shape of the building envelope shall at minimum be determined by district setback requirements, unless otherwise specified in these regulations. The Development Review Board may require the identification of specific building footprints if, in their judgement, such information is required to meet the standards set forth in these regulations.

(F) **Landscaping & Screening.** The preservation, planting and/or maintenance of trees, hedges, ground cover and other vegetation in one or more areas of land to be subdivided, may be required by the Development Review Board in the following instances:

- (1) to provide an undisturbed, vegetated buffer between developed and undeveloped portions of a subdivision to protect water quality and/or other natural features in accordance with Section 7.3;
- (2) to provide for stormwater infiltration and management;
- (3) to provide screening of development to increase privacy, reduce noise and glare, or to otherwise soften and/or lessen its visual impacts;
- (4) to establish and maintain street trees along public or private roads to create a canopy effect and/or maintain a pedestrian scale where the board deems appropriate;
- (5) to preserve existing specimen trees, tree lines, hedgerows, and wooded areas of particular natural or aesthetic value to the site, or critical wildlife habitat; and/or

- (6) to establish buffers or barriers between incompatible land uses.

Nothing in these regulations shall prohibit a property owner from performing normal maintenance on approved landscaping to maintain its intended effect and purpose.

(G) **Energy Conservation.** Energy efficient site design and layout shall be encouraged in the review of a proposed subdivision. In order to promote energy conservation, to the extent that is economically and environmentally feasible:

- (1) building locations shall maximize solar access (e.g., through southern orientation);
- (2) landscaping shall be effectively incorporated to provide wind barriers and to reduce heat loss or gain as appropriate;
- (3) the siting of lots and buildings shall minimize the length of road and utility corridors required; and
- (4) supporting infrastructure for alternative modes of transportation (e.g., interconnected bicycle and pedestrian paths, transit stops) will be incorporated into subdivision design as appropriate.

(H) **Disclosure of Subsequent Development Plans.** Whenever a subdivider submits a proposal for development on a minor portion of a parcel, the applicant shall provide a general indication of the intended use of the remaining portion of the land in accordance with the following requirements.

- (1) Such indication shall include at minimum a written description of the proposed type and intensity of use, access, and schedule for the development of the remainder of the parcel.
- (2) For major subdivisions, including but not limited to phased and/or planned unit developments, a master plan for the entire parcel may be required in accordance with Section 8.4, which identifies designated primary and secondary conservation areas and other common land and open space; proposed development areas; the general location of proposed infrastructure, including road, utility and green space corridors; and an estimate of the type, density, and timing of future development.
- (3) Within the Forest Reserve District (Table 2.1), the submission of a subdivision plan shall be required for forest management activities which include pre-development site preparation work for more than one building site, as defined under Table 2.1 (E)(1). In accordance with district requirements, when a landowner fails to submit a pre-development plan, the Board may limit development to the non-impacted portion of the parcel, and direct the manner in which the site shall be restored or revegetated prior to development.

Section 7.3 Protection of Primary & Secondary Conservation Areas

(A) **Design Process.** All major subdivisions as defined under Section 6.1, and minor subdivisions as required by the Development Review Board under sketch plan approval (Section 6.2) that include primary or secondary conservation areas as defined herein, shall be designed in accordance with the design process summarized in Table 7.1. Steps shall be followed in the sequence presented. This process is intended to ensure compliance with the Warren Town Plan, and that maximum consideration is given to the identification and protection of primary and secondary conservation areas in association with the subdivision of land and siting of structures and associated infrastructure.

(B) **Primary Conservation Areas.** Subdivision boundaries, lot layouts, the location of roads, driveways and infrastructure, and building envelopes shall be located and configured to avoid any adverse impact to primary conservation areas. For the purposes of these regulations, primary conservation areas shall include all lands within the flood hazard and meadowland overlay districts (see Tables 2.13, 2.14), slopes with a gradient of 25% or greater (see Section 3.4), and wetlands, surface waters and associated buffers (see Section 3.13) Methods for avoiding adverse impacts include but may not be limited to the following:

- (1) Building envelopes shall be located and configured to exclude these areas. No lot may be created within the Meadowland Overlay District which does not include a designated building envelope located outside of the overlay district.
- (2) Lot lines, infrastructure and road, driveway and utility corridors shall be located to avoid the parcelization, fragmentation, isolation or destruction of primary conservation areas.
- (3) Roads, driveways and utility corridors shall be shared where practical. Where sites include linear features such as existing roads, tree lines, stone walls, and/or fence lines, roads, driveways and utility corridors shall follow these to minimize the fragmentation of primary conservation areas, and associated visual impacts.
- (4) Primary conservation areas are to be included as designated open space under Section 7.4. Management plans; conservation easements, limitations on further subdivision, or comparable site protection mechanisms may be required.

(C) **Secondary Conservation Areas.** Subdivision boundaries, lot layout and building envelopes shall be located and configured to avoid to the extent feasible any adverse impacts to secondary conservation areas. For the purposes of these regulations, secondary conservation areas shall include critical wildlife habitat and corridors; groundwater source protection areas; slopes from 15% to 25%; designated archaeological and historic sites; and ridgelines and knolls which are visible from public vantage points. Methods for avoiding such adverse impacts include but may not be limited to the following:

- (1) Building envelopes, to the extent feasible, shall be located to exclude secondary conservation areas. In the event that no other land is practical for development, building envelopes and subsequent development shall be designed to minimize encroachments into these areas, and/or any associated adverse impacts. Buffers, management plans, or other appropriate mitigation measures may be required to ensure the long-term conservation of these areas.
- (2) Lot lines, infrastructure, and road, driveway and utility corridors shall be located to avoid, to the extent feasible, the parcelization, fragmentation, isolation or destruction of secondary conservation areas.
- (3) 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 to minimize the fragmentation of secondary conservation areas and associated visual impacts.
- (4) Secondary conservation areas are to be included as designated open space under Section 7.4; conservation easements, limitations on further subdivision, or comparable site protection mechanisms may be required.

Section 7.4 Open Space & Common Land

(A) **Intent.** Subdivisions shall be designed to preserve open space areas and common land for parks, recreation, greenways, viewshed and historic site protection and/or to preserve primary and secondary conservation areas as defined under Section 7.3.

(B) **Preservation of Open Space.** Provision shall be made for the preservation of open space. The location, size and shape of lands set aside to be preserved for open space shall be approved by the Development Review Board, in accordance with the following:

- (1) Designated open space may include the portion of a single lot outside of the building envelope which is characterized by one or more of the above referenced features and/or may encompass the contiguous boundaries of the above referenced feature located on multiple lots.
- (2) The location, shape, size and character of the open space shall be suitable for its context and intended use. Open space that includes primary or secondary conservation areas shall be identified pursuant to the conservation subdivision design process described in Table 7.1. Planned residential and planned unit developments must also meet open space requirements under Section 8.5.
- (3) Provisions shall be made to enable open space designated for agriculture and forestry to be used for these purposes. Management plans for farm land, forests, wildlife habitat, shorelands and buffers may be required by the Development Review Board as appropriate to ensure their long-term protection and management.
- (4) Areas preserved for agricultural and forestry use should be of a size that retains their eligibility for available tax abatement programs.
- (5) Open space land shall be located so as to conform with and extend existing areas sharing similar characteristics or natural features and resources on adjacent parcels.
- (6) Sewage disposal areas and utility and road rights-of-way or easements, access and parking areas shall not be counted as open space areas, except where the applicant can prove, to the satisfaction of the Development Review Board, that they will in no way disrupt or detract from the values for which the open space is to be protected. Stormwater management practices or facilities that require, incorporate or establish open space areas may be counted as open space.

Table 7.1 Subdivision Design Process to protect Conservation Areas

To be followed in order:

Step 1. Identify Conservation Areas. The subdivider shall delineate the boundaries of all primary and secondary conservation areas defined in Section 7.3. Based on the delineation of these features, goals and policies set forth in the Warren Town Plan, and any guidance provided by the Development Review Board during sketch plan review, a conservation plan shall be developed to ensure the preservation of these features to the fullest extent feasible. The plan shall clearly define the location and area of designated conservation areas and the method of protection in accordance with Section 7.4.

Step 2. Identify Potential Development Areas. Potential development areas should be identified to exclude designated conservation areas. Development areas shall be selected to avoid any adverse impact to primary conservation areas, and to minimize to the extent feasible, adverse impacts to secondary conservation areas. Maximum development density shall be determined based on the density requirements for the zoning district in which the subdivision is located. Subdividers should refer to planned residential or planned unit development provisions under Article 8 to allow for increased densities of development outside of designated conservation areas.

Step 3. Identify Building Sites & Envelopes. Building footprints for principal structures, and building envelopes (to include the area for accessory structures and/or parking), shall be identified and laid out in accordance with Sections 7.2 and 7.3, and any other applicable requirements of these regulations.

Step 4. Layout Roads, Driveways & Utilities. Roads, driveways, and utilities shall be laid out in accordance with Section 7.3 and other applicable requirements of these regulations.

Step 5. Identify Proposed Lot Boundaries. Lot boundary lines shall be laid out to avoid the fragmentation of designated conservation areas, and to encompass building sites and envelopes, in accordance with Section 7.3 and any other applicable requirements of these regulations.

(C) **Creation of Common Land.** Land held in common for the preservation and maintenance of open space; the maintenance and protection of shared facilities, such as community wastewater systems, community water supplies, recreation or community facilities, or recreation, including road and trails rights-of-way, may be held under separate ownership from contiguous parcels and shall be subject to the legal requirements set forth below.

(D) **Legal Requirements.** The Development Review Board may require that protected open space be dedicated, either in fee or through a conservation easement approved by the Board (see Appendix A), to the Town of Warren, a community association comprising all of the present and future owners of lots in the subdivision, and/or a non-profit land conservation organization. At a minimum, designated open space shall be indicated with appropriate notation on the final plat. Land held in common shall be subject to deed restrictions stipulating the permitted and restricted use of such lot, and establishing the person or entity responsible for maintenance and long term stewardship. All costs associated with administering and maintaining open space and/or common land shall be the responsibility of the applicant and subsequent land owners.

Section 7.5 Stormwater Management & Erosion Control

(A) The Development Review Board may require such temporary and permanent stormwater

management and erosion control measures as may be necessary to control surface runoff, sedimentation and water pollution on-site and downstream from the proposed subdivision. Factors to be considered in determining the types of controls necessary shall include pre-development site and runoff conditions, vegetation and ground cover, slope and drainage patterns (including steep and very steep slopes regulated under Section 3.4), soil types (i.e., hydric soils), the percentage of land covered in impermeable surfaces, types of pollutants generated, distances to streams and other surface waters, and impact on adjoining properties.

(B) The Development Review Board may require the preparation and implementation of stormwater management and/or erosion prevention and sedimentation control plans and associated analyses to ensure that site improvements, including excavation, road and driveway construction and site clearing and grading, shall not unduly impact neighboring properties or surface waters. Such plans, if required, shall be prepared by a licensed Vermont engineer, in accordance with the 'Vermont Stormwater Management Manual and the Vermont Handbook for Erosion Prevention and Sedimentation Control' as most recently amended, and include provisions for the inspection and long-term maintenance of stormwater management and erosion control facilities.

(C) Land shall be subdivided and improved in reasonable conformity to existing topography in order to minimize grading, cut and fill, and to retain, insofar as possible, natural contours, ground cover, and soils. For effective stormwater management, subdivision and/or site design and layout shall:

- (1) be designed to avoid areas of steep and very steep slope, in accordance with Section 3.4 (steep slopes) and Section 7.3 (Protection of Primary and Secondary Conservation Areas).
- (2) minimize lot frontage and setback distances, building envelope and footprint areas, in accordance with district standards and other applicable requirements;
- (3) minimize the length, width and paved area of roads, driveways and parking areas, in accordance with applicable road and parking standards;
- (4) minimize the impervious area connected directly to stormwater conveyance systems (e.g., by draining such areas over stable, vegetated pervious areas);
- (5) incorporate landscaped areas to absorb stormwater runoff from adjoining impervious surfaces (e.g., yard areas, filter strips, parking and cul-de-sac islands);
- (6) incorporate shared driveways and parking areas;
- (7) avoid or minimize the use of curbing and gutters;
- (8) maximize the use of pervious materials (e.g., for paths, spillover parking, residential driveways);
- (9) maintain natural vegetative cover and designated wetland, riparian and shoreland buffers;
- (10) use vegetated, open channels within road rights-of-way to convey and treat stormwater, where density, topography, soils, and slopes permit; and
- (11) incorporate naturally occurring ponding and drainage areas.

(D) Best management and treatment practices as defined by the Vermont Agency of Natural Resources

in the 'Vermont Handbook for Erosion Prevention and Sedimentation Control or the Vermont Stormwater Management Manual, as most recently amended' shall be used to:

- (1) minimize stormwater runoff;
- (2) maximize on-site infiltration;
- (3) encourage natural filtration functions;
- (4) incorporate and/or simulate natural drainage systems; and
- (5) minimize the discharge of pollutants to ground and surface waters.

Best management practices may consist of one or more structural and/or nonstructural techniques, including but not limited to vegetated buffers and filter strips, grassed or lined swales, retention basins, recharge trenches, constructed wetlands, and bioretention and filtration facilities, but should be appropriate for site conditions and the intended pattern and density of development.

(E) Control of stormwater runoff flows from all impervious surfaces shall be accomplished by limiting the post-development peak discharge rate from the subdivision so that it does not exceed the pre-development peak discharge rate from the site for a 2-year, 24 hour event. Additional control of treated stormwater (e.g., for 10- or 25-year or 100-year, 24 hour storm events) may be required if site specific considerations warrant the attenuation of larger storm events.

(F) Stormwater facilities, including detention ponds, culverts and ditches, shall be designed to accommodate potential run-off from the entire upstream drainage area at full development, as well as runoff resulting from the proposed subdivision, and should at minimum accommodate a 25-year, 24-hour storm event.

(G) The designation of on-site snow storage areas may be required as part of subdivision design. These areas shall not be located within wetland or surface water buffer areas, and shall be contained in such a manner that runoff is managed through a detention or infiltration facility or other best management practice that removes pollutants. An off-site storage area may be approved if an appropriate site is available and secured for long-term use.

(H) The Development Review Board may request determination of the effect of the subdivision on existing downstream drainage capacity and facilities outside of the area of the subdivision. Where the Board anticipates that increased runoff incident to the development may overload the capacity of the downstream system or facility, it may require the subdivider to delay construction until adequate capacity exists, or to contribute to capacity improvements to prevent such an overload. Any required construction may be on- or off-site.

(I) If a subdivision will result in changes in flow type, flow channel, increased stormwater discharge or flooding in areas not owned or controlled by the applicant, the applicant must secure easements for all areas of flow or flooding on affected properties. Easements must extend up to, but need not include, the channel of any river or stream accepting flow from the subdivision. Suitable land use restrictions will be included in easements to prevent any activity that may affect drainage across the area.

(J) All areas exposed during construction shall be protected in accordance with standards of the Vermont Department of Environmental Conservation, the U.S. Natural Resource Conservation Service or other appropriate regulatory body. Permanent vegetation and erosion control measures shall be established according to a schedule as required by the Development Review Board. The Board also may require the phasing of construction to reduce the amount of land disturbed at any one time, and

may stipulate deadlines for the installation of temporary and permanent erosion control or stabilization measures.

Section 7.6 Community Services and Facilities

(A) **Municipal Facilities and Services.** The proposed subdivision will not create an undue burden on municipal facilities or create an unreasonable demand for public services. The Development Review Board will consider whether the anticipated tax return from the proposed development is equal to or exceeds the cost of anticipated municipal services and facilities directly attributable to the proposed development, and whether the proposed development will place an unreasonable burden on the ability of local governmental units to provide municipal, governmental, or educational services and facilities. A fiscal impact analysis and/or the phasing of development in accordance with a duly adopted capital budget and program may be required as appropriate, the cost of which is to be borne by the applicant.

(B) **Fire Protection Facilities.** Adequate water storage or distribution facilities for fire protection within the subdivision shall be provided to the satisfaction of the Development Review Board. Where practicable, or where required by the Board, fire hydrants, dry hydrants, or ponds shall be installed by the subdivider. The applicant shall submit documentation from the Warren Fire Department as to the adequacy of emergency access and fire protection facilities. For all driveways serving one or more dwelling units in a subdivision, the following minimum emergency access standards shall be required:

- (1) one 12' x 50' turnout for every 400 feet; and
- (2) a turn around area with a "Y" or "T" configuration or a cul-de-sac with an inside turn radius of not less than 30 feet.

(C) **Parks & Playgrounds.** The Development Review Board may require the dedication of up to 15% of the plat area for a park, playground, trail or pathway or other recreation purposes for use by the occupants of the subdivided parcels. All such land shall be of a reasonable character for park or other recreational uses, and included as designated open space under Section 7.4.

Section 7.7 Roads & Pedestrian Access

(A) **Applicability of Road Standards.** The standards contained herein shall apply to all proposed public roads and to private roads serving four or more lots. In addition, these standards may be applied to private roads serving three or fewer lots when the Development Review Board determines such standards are necessary to provide suitable access to, or accommodate, anticipated future subdivision. Acceptance of private roads by the town is subject to the approval of the Warren Select Board pursuant to state law for the laying out of public rights-of-way. Construction of roads to these standards in no way ensures such acceptance.

(B) **Road Design.** All roads serving proposed subdivisions shall be designed in accordance with the Warren Road Ordinance adopted and administered by the Select Board, and shall generally conform to the dimensional and geometric design standards for local roads and streets contained within the Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads and Streets, dated October, 1997, or as most recently amended. Minimum design standards include the following:

- (1) Rights-of-way for all roads shall be a minimum of 50 feet in width.

- (2) To ensure adequate safety and service, the width of travel lanes and shoulders shall be based on average daily traffic (ADT) and design (anticipated posted) speeds. The design standards for rural roads are included in Table 7.2. The standards set forth in Table 7.2 shall be considered the maximum standards, although the Development Review Board may modify such standards in situations in which such modification is warranted to ensure pedestrian and vehicular safety, and when the strict application of the standards would adversely impact the scenic character and/or natural resources or features located on the site.
- (3) Lower design and posted speeds may be considered to avoid and/or minimize impacts to historic, architectural, scenic, natural or other resources; to avoid excess costs of construction; or to better comply with the Warren Town Plan.

Table 7.2 Lane and Shoulder Widths for Rural Roads							
Design Volume (ADT)	0-25	25-50	50-100	100-400	400-1500	1500-2000	2000+
Design Speed (mph)	Width of Lane/Shoulder (ft)						
25	7/0	8/0	9/0	9/2	9/2	10/3	11/3
30	7/0	8/0	9/0	9/2	9/2	10/3	11/3
35	7/0	8/0	9/0	9/2	9/2	10/3	11/3
40	7/0	8/0	9/2	9/2	9/2	10/3	11/3
45	---	---	9/2	9/2	9/2	10/3	11/3
50	---	---	9/2	9/2	10/2	10/3	11/3

Source: Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads and Streets, October 1997.

- (4) Wider travel lanes and/or shoulders may be required as appropriate to road function (i.e., for on-street parking, collector and arterial roads), or to safely accommodate shared use by bicycles.
- (5) Permanent dead end roads and cul-de-sacs shall be discouraged unless deemed necessary by the Board due to physical site limitations or safety considerations. No dead end road shall be permitted without a suitable turn around at its terminus. "T" or "Y" configurations suitable to topography are preferred, but a cul-de-sac with a radius of not less than 30 feet may also be considered as appropriate.
- (6) Roads shall logically relate to topography to minimize site disturbance, including the amount of cut and fill required, and to produce usable lots, reasonable grades and safe intersections in relation to the proposed use of the land to be served by such roads. Road grades should be consistent with local terrain. Maximum road grade shall not, for any 50 feet section, exceed an average grade of 12%.
- (7) Roads shall, to the extent feasible be designed and laid out to:
 - (a) to avoid adverse impacts to natural, historic, cultural and scenic resources;
 - (b) to be consistent with existing road patterns in village and other settlement areas;
 - (c) to maximize connectivity within the subdivision and to adjoining parcels and road networks;
 - (d) to follow existing linear features, such as utility corridors, tree lines, hedgerows and fence

- lines,
- (e) to avoid fragmentation of meadow land and other designated conservation areas under Section 7.3.
- (8) Techniques for the preservation of scenic road corridors and streetscapes should be employed for the construction and maintenance of roads within designated scenic or village areas, including but not limited to the selection of visually compatible materials, the preservation of existing features, and the management of vegetation within the road corridor.
- (C) **Road Construction Standards.** Road construction, including specifications relating to the crown, grade, sub-base and surfacing, shall conform to the Vermont Agency of Transportation's Standard A-76, as most recently amended.
- (D) **Intersections.** In addition to access requirements under Section 3.1, a new or relocated road shall be located so that:
- (1) Minimum corner and sight stopping distances are provided in relation to design speed and road type, in accordance with the standards set forth in the Vermont Agency of Transportation's Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads and Streets, dated October 1997, or as most recently amended. Minimum stopping and corner sight distances of rural local roads are provided in Table 7.3.

Table 7.3 Minimum Stopping & Corner Site Distances for Rural Roads		
Design Speed (mph)	Stopping Sight Distance (ft) ^a	Corner Site Distance (ft) ^b
25	150	275
30	200	330
35	225	385
40	275	440
45	325	495
50	400	605
^a Wet pavement; ^b Corner site distance is measured from a point on the intersecting road or driveway, at least 15 feet from the edge of the traveled way on the main road. Source: Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads and Streets, October 1997.		

- (2) It is directly opposite an existing road or driveway to form a four-way intersection wherever feasible. Intersections creating centerline offsets of less than 125 feet shall not be permitted, except for driveways serving single and two-family dwellings, which shall have a centerline offset of at least 75 feet.
- (3) It intersects the existing road at an angle that is as close to 90 degrees as possible.
- (4) The intersection grade does not exceed 3% for a distance of 35 feet from the edge of the travel lane.

(5) No structure or planting is situated to impair corner visibility.

(E) **Drainage & Stormwater.** A stormwater drainage system shall be provided which is designed to control and accommodate stormwater collected on all proposed roads and/or parking areas in accordance with Section 7.5 of these regulations. Generally, roadbeds, shoulders, ditches and culverts shall be designed and maintained in conformance with the Vermont Better Backroads Manual, as most recently amended.

(F) **Coordination with Adjoining Properties.** The arrangement of roads in the subdivision shall provide for the continuation of roads of adjoining subdivisions and for proper projection of roads through adjoining properties which are not yet subdivided, in order to make possible necessary fire protection, movement of traffic and construction or extension, presently or when later required of needed utilities and public services. Where, in the opinion of the Development Review Board, topographic or other conditions make such continuance undesirable or impracticable, the above conditions may be modified.

(G) **Access Permits.** In accordance with statute and Section 3.1, all road access shall be subject to the approval of the Vermont Agency of Transportation in the case of state highways and the Warren Select Board in the case of town roads. Access to all lots created by subdivision of any such parcel and to all buildings or other land development located thereon shall be only from such permitted access road or driveway.

(H) **Access Management.** In addition to access requirements under Section 3.1, to better manage traffic flow and safety, avoid congestion and frequent turning movements, preserve the carrying capacity of important travel corridors, and to avoid strip development, the following access management standards shall apply to all subdivisions:

- (1) Shared driveways and/or internal development roads providing access to multiple lots are encouraged and may be required to limit the number of access points onto public highways in accordance with Section 3.1.
- (2) If a subdivision has frontage on primary and secondary roads, access shall be from the secondary road unless the Board determines that topographic or traffic safety conditions make such an access impracticable.
- (3) Where extensions of new roads could provide future access to adjoining parcels, a right-of-way shall be provided.
- (4) The creation of reserved strips shall not be permitted adjacent to a proposed road in such a manner as to deny access from adjacent property to such road.

(I) **Traffic & Road Capacity.** Traffic to be generated by the proposed subdivision shall not result in unreasonable traffic congestion or exceed the capacity of roads and intersections in the vicinity of the subdivision. The Board may request the preparation of a traffic impact study to identify impacts and mitigation measures necessary to ensure road safety and efficiency, the cost of which is to be borne by the applicant. The implementation of mitigation measures, including required road improvements necessitated by the subdivision, shall be the responsibility of the applicant as follows:

- (1) Where an existing access road is inadequate or unsafe, the Development Review Board may require the subdivider to upgrade the access road to the extent necessary to serve additional traffic

resulting from the subdivision and to conform to these standards.

- (2) In situations where a development may require the realignment, widening or an increase in the capacity of an existing road, or where the Warren Town Plan or capital program indicates that such improvements may be required in the future, the subdivider may be required to reserve land for such improvements.
- (3) In the case of subdivisions requiring construction of new roads, any existing road that provides either frontage to new lots or access to new roads shall meet these standards.
- (4) Where a subdivision requires expenditures by the Town to improve existing road(s) to conform to these standards, the Development Review Board may disapprove such subdivision until the Select Board certifies that funds for the improvements have been ensured. The subdivider may be required to contribute to any or all of the expenses involved with road improvements necessitated by the project.

(J) Road Names & Signs. Roads shall be named in accordance with the Warren Road Naming Ordinance, and shall have specific historic, cultural or geographical relevance. Said names shall be identified on signs designed and located in accordance with the Town policy, and shall be clearly depicted on the final plat. Road name signs shall be installed by the applicant.

(K) Driveways. Driveways serving three or fewer lots shall meet the standards set forth in Section 3.1(C). In addition:

- (1) Driveways should be laid out to follow existing linear features, such as utility corridors, tree lines, hedgerows and fence lines; to avoid the fragmentation of meadowland and other designated conservation areas under Section 7.3, and to avoid adverse impacts to natural, cultural and scenic features.
- (2) The use of common or shared driveways is encouraged and may be required in order to minimize the number of access points in accordance with Subsection (H).

(L) Modification of Road Standards. In the case of unusual topographic conditions or other circumstances which would make the strict adherence to these standards a substantial hardship, the Board may modify the strict application of one or more of these standards providing the applicant can demonstrate that the proposed road is accessible by emergency response vehicles, does not pose any threat to the safety of motorists or pedestrians, will not result in unreasonable maintenance requirements for landowners, and is designed in a manner that is consistent with other applicable standards of these regulations.

(M) Parking & Transit Stops. Parking areas shall be included within designated building envelope areas, in accordance with the requirements of Section 3.10. For major subdivisions located on existing or proposed public transit routes, sheltered transit stops, which may include centrally located park and ride areas and bike racks to serve the development, will be incorporated in subdivision design. Major residential subdivisions shall also incorporate one or more sheltered school bus stops as appropriate.

(N) Pedestrian Access. The Development Review Board may require pedestrian rights-of-way to facilitate pedestrian circulation within the subdivision and to ensure access to adjoining properties or uses or public facilities.

- (1) The Board may require, in order to facilitate pedestrian access from a subdivision to schools, parks, playgrounds, or other nearby roads, perpetual unobstructed easements at least 20 feet in width. Easements shall be indicated on the plat.
- (2) Unless specifically waived by the Board, sidewalks shall be required along internal streets of major subdivisions, major arteries within or bordering the subdivision, and to connect to existing sidewalks on adjoining properties.

(O) **Legal Requirements.**

- (1) Every subdivision plat shall show all proposed road and pedestrian rights-of-way, as required under these regulations, regardless of whether the proposed right-of-way is intended to be accepted by the Town. In the event that the right-of-way is not intended for acceptance by the Town, the mechanism by which the right-of-way is to be maintained, owned and/or conveyed shall be clearly documented.
- (2) Documentation and assurance shall be provided that all proposed roads and rights-of-way will be adequately maintained either by the subdivider, a homeowners' association or through other legal mechanisms. Such documentation shall be in a form approved by the Board and filed in the Warren Land Records.

Section 7.8 Water Supply & Wastewater Disposal

(A) **Water Supply.** Water supply systems shall be designed and built to meet all applicable state and municipal requirements. There shall be no adverse impact on existing water supplies from the proposed water supply for the subdivision. The Development Review Board may require evidence that adequate water supply is available through an existing or proposed system prior to granting final approval. The Board may require as a condition of approval, or as a condition of issuing zoning permits, that the subdivider provide the results of water samples tested by the Vermont Health Department.

(B) **Wastewater Disposal Capacity.** The applicant shall demonstrate that soil conditions on-site are adequate to accommodate the installation of a wastewater disposal system designed in accordance with municipal requirements, and are of sufficient capacity for the intended density and types of use; or that an alternative, off-site disposal location, secured through an easement or other form of legal conveyance, is similarly suitable and available. Subdivisions involving an existing structure shall provide documentation that any existing sewage disposal system serving existing structures or uses is adequate to meet the intended use of the site without adverse impact to public health, safety or water supplies, and that either a suitable replacement area able to accommodate a new system in accordance with these regulations is available in the event that the existing system fails, or that adequate capacity is available and committed in a community system or commercial sewage treatment facility.

(C) **Individual Systems.** Individual water and wastewater systems shall meet all municipal regulations for design, installation and maintenance.

(D) **Connection to Existing System.** Where connection to an existing water or wastewater system is proposed, the subdivider shall provide evidence as to the adequacy of the system to meet the needs of the proposed development. The subdivider will be required to provide such pumping and other facilities as may be necessary. The Board also may require that the subdivider provide, or to have installed, at his expense, larger lines, pumping, storage and other facilities outside of the subdivision,

if required specifically to meet the requirements of the proposed development.

(E) **Community Systems.** Proposed development may be serviced by private, community water and/or wastewater systems which shall be designed and installed in accordance with all applicable municipal and state regulations and standards.

(F) **Waivers.** In the event that the subdivider is proposing the creation of a lot(s) not requiring water or wastewater systems, the Board may waive all provisions of these regulations pertaining to water and wastewater disposal, providing that the plan recorded with the Town Clerk clearly indicates that the intended use of the lot(s) will not require water or wastewater disposal systems, and the subdivider submits an affidavit to the Board stating his/her intent which will be incorporated as a condition of subdivision approval.

Section 7.9 Utilities

(A) **Location.** All utilities systems, existing and proposed, throughout the subdivision shall be shown on the final plat, and be located as follows:

- (1) All utility systems, which may include but not be limited to electric, gas, telephone, fiber optics, and television cable, shall be located underground throughout the subdivision, unless deemed unreasonable and prohibitively expensive by the Development Review Board (e.g., burial would require extensive blasting and ledge removal for most of length of the utility extension.)
- (2) The subdivider shall coordinate subdivision design with the utility companies to insure adequate and suitable areas for under or above ground installation, both for the proposed subdivision, and areas adjacent to the subdivision.
- (3) Utility corridors shall be shared with other utility and/or transportation corridors where feasible, and be located to minimize site disturbance, the fragmentation of meadowland and other designated conservation areas under Section 7.3, and any adverse impacts to natural, cultural or scenic resources, and to public health.

(B) **Easements.** Easements of sufficient width shall be provided so as to serve both the proposed subdivision and existing and anticipate development outside the subdivision. Such easements shall be shown on the final plat.

Section 7.10 Signs

(A) Signs will be regulated in accordance with Section 3.12, however, the Development Review Board may place more restrictive conditions regarding the size, height, number and location of signs that those specified under Section 3.12 or by state regulations in order to maintain the visual character of the area and ensure the safety and efficiency of pedestrian and vehicular circulation.

