

APPENDIX F: BYLAW UPDATE CHECKLISTS

These are intended as a reference for use by town and regional planning staff and the Hartford Planning Commission in the process of updating local regulations to incorporate corridor management plan recommendations, particularly with regard to access management

HARTFORD ZONING REGULATIONS (1/23/07)

ARTICLE I. AUTHORITIES AND AUTHORIZATION

Section 1-4 Zoning Permits

- Application Referrals.** Add a provision for the referral of any application for development located within 500 feet of an interstate interchange area, or that fronts on or accesses a state highway, to the Vermont Agency of Transportation and, for development that fronts on or accesses a town highway, to the town highway superintendent. Require that no zoning permit or other approval be issued by the town until comments have been received, or 30 days have elapsed from the date of referral. Recommendations consistent with these regulations should be incorporated findings and conditions of approval. Note: such referrals, once required for interchange area development, are no longer required under 24 V.S.A. Chapter 117, but are recommended to better coordinate local and state development review and permitting processes along highway corridors, including US 4.

Section 1-5 Certificates of Occupancy

- Compliance.** Require that state and local highway access permits be obtained prior to the issuing a certificate of occupancy (e.g., under 1-5.3).

ARTICLE II. DISTRICTS & DISTRICT REGULATIONS

Sections 2-1, 2-9 Zoning Districts/ District Objectives & Land Use Controls

- Establish a US 4 Corridor Management Overlay District** (under Article II or as a separate article) to reference general access management standards and to apply district-specific corridor preservation and access management standards to all lots fronting on or accessing US Route 4, and to reference needed access and infrastructure improvements as identified in the US Route 4 Corridor Management Plan, the town's capital improvement program and/or the state's transportation improvement program (see attached language); and/or
- District Access Management Standards.** If not adopted elsewhere for general use (under access requirements), incorporate by reference applicable state access management guidelines (e.g., Vermont Agency of Transportation's *Access Management Program Guidelines*) under all zoning districts along the US Route 4 corridor – and especially under the Quechee Interstate Interchange (QII) District, which now specifies only the need “to apply access management principals” to development within the district (p.17).
- Allowed Uses.** Re-evaluate allowed uses and densities within zoning districts along US Route 4, and particularly within the Quechee Interstate Interchange District, based on the results of build-out analyses and traffic and corridor impact assessments conducted for the US Route 4 Corridor Management Plan. Consider “down zoning” (limiting uses, densities) along segments of the corridor identified for higher speed through-traffic, and in areas with existing and anticipated transportation infrastructure deficiencies.

- ❑ **Plan Conformance.** Require that all subdivisions and development within the Quechee Interstate Interchange (QII) District conform to an interchange area or access management plan for the district (as also recommended). This would further the current stated objective for the QII District: *“To provide for well-planned and coordinated development (commercial facilities/services and residential) that can be effectively integrated with the scenic character of the I-89/Route 4 gateway while maintaining safe and efficient traffic flow.*
- ❑ **Lot Width/Frontage.** Redefine district lot “width” standards (as measured along the front setback line) as lot “frontage” standards (as measured along the road right-of-way) to better regulate the linear density and spacing of development along state and town highways (see related discussion below regarding Section 3-1.3). Increase required lot road frontage within zoning districts along US Route 4 (and other highways) in relation to state access spacing guidelines – as recommended in the Hartford Town Plan.
- ❑ **Front Setbacks.** Re-evaluate front setback requirements for lots adjacent to US Route 4 and other roads in relation to their functional and access management classifications – and particularly in areas proposed for right-of-way and infrastructure improvements, as identified in the US Route 4 corridor management plan or related project design and engineering studies (see related discussion under 3-1.2).

Section 2-5 Conditional Uses – Capacity of Roads & Highways

Conditional use review is a key regulatory tool for addressing the off-site impacts of proposed development – including existing and planned facilities, and traffic on roads and highways in the vicinity of a project – as currently provided for under Sections 2-5.1.3 (criteria) and 2-5.2 (conditions) of the zoning bylaw.

- ❑ **Application Requirements.** The zoning bylaw currently does not include or reference application requirements for conditional use review under 2-5 (as it does elsewhere for site plan review) – but these may be addressed administratively (e.g., through application forms and checklists) rather than being listed in the regulations. For purposes of evaluating impacts to the transportation network, current application requirements should be reviewed to ensure that they are consistent with the requirements for other applicable review processes (e.g., site plan, highway access) and that the information submitted is adequate to make findings under related criteria, and determinations under related conditions. For purposes of highway corridor management, applications at minimum should include a site plan (not currently required, unless requested by the board) and associated information regarding:
 - The locations, and functional and access management classifications, of all existing and proposed road rights-of-way (public and private) and intersections in the vicinity of the project.
 - Lot lines, lot dimensions and required setback distances for the lot to be developed, and for adjacent and facing lots.
 - The locations of existing and proposed accesses, driveways, and parking areas for the lot to be developed and for adjoining and facing lots.
 - The locations of existing and planned pedestrian walkways, recreation/bicycle paths and transit routes in the vicinity of the project.
 - Traffic data (counts, turning movements, trip generation, etc.) and existing and anticipated levels of service for roads and intersections in the vicinity of the project.
 - Design specifications for proposed roads, intersections, accesses and driveways.
 - Proposed dedications and improvements (rights-of-way, infrastructure, traffic control, etc.) to serve the project.

- ❑ **Traffic Impact Analyses.** The regulations currently allow the zoning board of adjustment to require the submission of a more detailed traffic impact study (under 2-5.1.3), presumably to be paid for by the applicant as now required for such studies under site plan review. This section could also reference Section 4-7 which provides for an independent technical review of the study, to be paid for by the applicant under adopted town policies.

- ❑ **Review Criteria/Findings.** There are no specific criteria under Section 2-5.2 for making related board findings and determinations regarding highway impacts under Section 2-5.1.3. At minimum this section should be updated to reference the following, as needed to support associated conditions of approval under Section 2-5.2:
 - consultations with town and state highway officials (per application referrals),
 - prior conditions of approval for roads, accesses, etc. (e.g., under subdivision approvals),
 - applicable highway and access design and management standards,
 - the town’s adopted municipal plan (transportation section, appended studies), capital improvement plan, and potentially official map, with regard to planned facilities, levels of service and needed improvements, and
 - applicable highway engineering studies or designs, for projects under development.

- ❑ **Determinations/Conditions.** Section 2-5.2 currently includes several general conditions of approval that may be applied by the board to mitigate identified impacts – i.e., increasing required lot size or setback distances, controlling access points, requiring highway infrastructure improvements (turning lanes, intersection and access improvements) and bonding to ensure that required improvements are installed and maintained. These could be further clarified and expanded upon to allow the board to:
 - Incorporate recommended conditions of approval as proposed by the state (for US 4 and other state highways) or the town highway superintendent (for town highways) based on comments received from application referrals.
 - Require the dedication of land or easements within the project area as needed to accommodate planned rights-of-way, facilities or transportation infrastructure improvements.
 - Require the installation improvements or retrofits identified in the town’s municipal or capital improvement plans and related studies, as needed to accommodate the project, in proportion to its impacts (currently this is required only if the level of service drops below a Level C).
 - Require the phasing of development in relation to available and planned highway infrastructure capacity, as supported by the town’s adopted municipal and capital plans (or the state transportation improvement program).

- ❑ **Changes in Use.** In addition to enlargements or alterations, specify that changes in approved access locations or trip generation rates (number, type) will trigger conditional use review by the Board of Adjustment under 2-5.4 (Changes to an Approved Use).

2-8 Classification of Lots

- ❑ **Functional Class/Access Management Categories.** Consider lot classifications based on highway infrastructure capacity (functional, access management categories) as well the availability of water and sewage service (under 2-8)– e.g., to require greater frontage and front setback distances for lots on arterials and collector roads in relation to access spacing and highway right-of-way width standards.

ARTICLE III. GENERAL PROVISIONS

This article includes standards that generally apply to all development under zoning, whether subject to administrative, site plan or conditional use review. Provisions that relate to access management are found under a number of sections, as addressed in more detail below.

Section 3-1 Lots

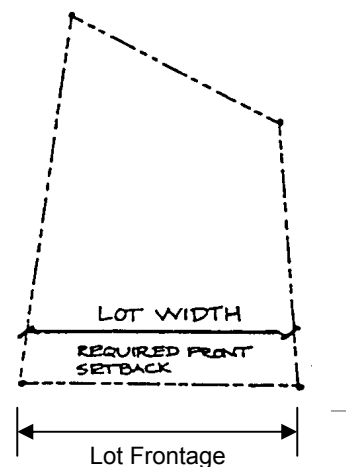
☐ **Setbacks.** Section 3-1.2 includes standard guidelines for measuring required setback distances (front setbacks) from the edge of public and private road rights-of-way, or from a distance of 25 feet from centerline (assuming a 50-foot right-of-way) if the right-of-way width is unknown. For corner lots, front setbacks must be met for all sides adjoining streets. These standards are generally consistent with accepted state (A-76) right-of-way width standards for local and private development roads, and for measuring front setback distances for purposes of highway corridor preservation and access management. It is recommended, however, that this section also include:

Note: For development on US Route 4 and other state highways, it is especially important to document the location and width of the right-of-way, which can vary along the corridor, and around intersections and interchange areas.

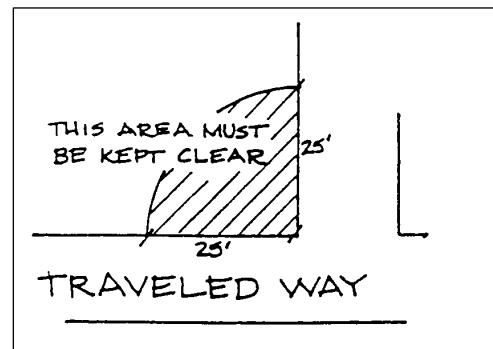
- Similar requirements for through or “double frontage” lots (with frontage on and potential access from two or more roads) and, in association with access management provisions, reverse frontage requirements specifying that frontage and front setbacks shall be measured along the secondary or less traveled road, and
- A requirement to measure front setbacks from planned right-of-way realignments, especially where the location of the re-alignment has been established through project design or engineering studies, and associated dedication of the right-of-way area to the town or state.

☐ **Width/Frontage.** Section 3-1.3 specifies that lot widths be measured along the required front setback distance – not the road right-of-way. As shown, lot frontage is greater than the lot width. Since measured lot widths often differ (more or less) from actual road frontage distances, they are not as useful for purposes of access management, or for controlling linear densities of development along road rights-of-way.

- It is recommended, at least for access management purposes, that lot frontage standards be adopted in lieu of or in addition to lot width standards, e.g., in relation to access spacing standards.



☐ **Corner Clearance.** Section 3–1.6 also includes a single corner clearance distance (obstruction of vision) standard that applies to all travel way intersections. This provision is more appropriately included under related access and intersection requirements (e.g., under an expanded Section 3-3) and should be updated to incorporate or reference standard clearance and site distance standards that vary based on a road’s posted speed limit.



- ❑ **Lot Depth/Width Ratios.** Defining and regulating minimum lot depth to width ratios, to avoid the creation of long, narrow lots, is also an accepted access management technique that could be easily incorporated under this section.

Section 3-3 Access and Parking

This section of the zoning bylaw incorporates current access management standards. It is recommended that it be:

- Updated to consolidate related access management requirements found under Section 2-5 (Conditional Uses) as described above, and under Section 4-1 (Site Development Plan Approval) discussed in more detail below, to be cross-referenced elsewhere in the regulations for consistent application under administrative, conditional use and site plan review.
- Expanded to include other commonly recommended access management provisions – at minimum to incorporate by reference applicable town highway (curb cut) ordinance requirements and, for US Route 4 and other state highways, the Agency of Transportation’s *Access Management Program Guidelines*.

Useful access management resources:

- Vermont Access Management Web Site (www.vtaccessmanagement.info)
- *Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads and Streets*, Vermont Agency of Transportation (July 1997)
- *Access Management on Roads and Streets: Handbook for Community and Transportation Planners* (September 1996), prepared for the Vermont Agency of Transportation by Wilbur Smith Associates.

- ❑ **Non-frontage Lots.** The current bylaw includes the statutory provision for planning commission review of access to (pre-existing) lots that do not have frontage on public roads or public waters. The regulations specify access by a permanent easement or right-of-way of at least 50 feet (road width), but allow the commission to reduce this to 20 feet (driveway width) for drives serving four or fewer dwelling units (3-3.1).

- For purposes of access management, this section should also specify that newly subdivided lots must meet applicable district lot frontage (width) requirements on public or private rights-of-way to avoid the creation of flag and non-frontage lots.

- ❑ **Limits on Accesses/Curb Cuts.** There currently are no specific limits on the number of accesses (curb cuts, driveways) allowed to serve a lot or use, though both the planning commission and board of adjustment can consider and impose limits on the number of access points for development subject to site plan or conditional use review.

A principal tenant of access management is to restrict the number of access (conflict) points along a road. As such it is recommended that the regulations clearly establish access limits, to be applied in consultation with the highway superintendent or VTrans, for example to:

- Allow only one two-way access per lot in existence as of the effective date of the regulations – even if the lot is subsequently re-subdivided – unless it is documented that a second access is needed due to site constraints, the size of a proposed subdivision or development, or for emergency vehicle access.

Hierarchy of Access Management Requirements:

1. Eliminate (unnecessary accesses)
2. Minimize (restrict, consolidate)
3. Regulate (turning movements)
4. Redesign (barriers, deceleration lanes)

Source: *Access Management on Roads and Streets, Handbook for Community and Transportation Planners* Vermont Agency of Transportation (1996)

- For larger parcels (e.g., in more rural areas), allow one access per length of road frontage, based upon documented access spacing requirements.
 - Limit direct access to arterials such as US Route 4 to collector roads (prohibiting individual driveways) – especially for residential uses.
 - Require that access be provided from a secondary (less traveled) side road wherever feasible.
 - Require the elimination, relocation or retrofitting of existing, nonconforming accesses associated with a change or use (to include an increase in traffic generation) redevelopment, or subdivision, or in association with planned highway improvements (as may now generally be required by the planning commission and/or board of adjustment).
 - Require joint (shared) access to serve adjoining parcels (as may now be required by the planning commission as a condition of site plan approval).
 - Require that approved access points be visually defined and physically confined by curbing, landscaping or other structural barriers so that they do not extend along the length of a lot.
 - Control turning movements, or require infrastructure improvements, such as left turn lanes, deceleration lands or traffic barriers (as may currently be required by the board of adjustment if the LOS drops below C).
- ☐ **Access Spacing.** The current bylaw includes a requirement that driveway accesses (curb cuts) be located at least 100 feet from any intersecting public right-of-way on the same side of the street, except for curb cuts serving single and two-family dwellings (3-3.2).

While setting a minimum standard, this section does not address access spacing requirements for adjoining lots, for exempted dwelling units, nor for access locations in relation to accesses on the opposite side of the street. As such it is not consistent with generally accepted access spacing and corner clearance recommendations for unsignalized intersections (including driveways) that vary based on a road's posted or design speed and associated stopping distances. For example, the minimum recommended spacing distance for a speed limit of 25 mph is 115 feet. Wider driveway spacing is recommended along highways such as US Route 4 with higher design and posted speeds, and driveways that serve higher volumes of traffic – which should be treated the same as public roads. There are also separate spacing standards for highway intersections that are, or may become, signalized (¼ mile urban, ½ mile rural) on collectors and arterials such as US Route 4.

- This section should be updated to incorporate recommended corner sight distance, access spacing and corner clearance standards (as noted above, for 3-1.6), and to include some flexibility in their application by the planning commission or board of adjustment, based on site limitations, development patterns, etc.
- ☐ **Access design.** Except for parking area access (as noted below), access and driveway design and construction standards are not specified in the regulations. At minimum this section should incorporate, or include by reference, applicable town and state design and construction standards – for example:
- Hartford Town Highway Ordinance access (curb cut) and construction standards
 - VAOT Access Management Program Guidelines –Design Standards and Specifications (as used by the Agency to review state highway access permit applications)
 - VAOT B-71 Standards for Residential and Commercial Drives
 - VAOT A-76 Standards for Town and Development Roads

- **Parking Areas.** The current regulations under Section 3-3 include fairly extensive parking requirements that regulate the minimum size and number of parking spaces, and the location and design of parking lots (e.g., related access, dimensional and circulation standards), to be applied by the planning commission under site plan review. The commission, under this section, can require the submission of a traffic study, prepared at the applicant’s expense (under 3-3.3.9 (F)), and also can require, as a condition of approval, improvements to the street network and public sidewalks that provide access to the parking area (under 3-3.3.7(F)).

The current regulations specify that, wherever feasible, off-street parking must be located on the same lot as the principal use (3-3.3.3.1), and that the planning commission can require that parking areas be located behind the front building line (3-3.3.8) – which could allow for cross connections, though these are not required under this section. There are also provisions for shared parking for nonresidential or mixed uses (3-3.3.9). At present, the regulations require internal circulation roads only for parking lots with 100 or more parking spaces. The planning commission, however, may consider and impose conditions for “auxiliary roadways connecting with adjacent properties where appropriate” for development subject to site plan review (under Section 4-1.3.1).

- It is recommended, to minimize direct access to state and town highways, and to promote greater vehicular (and pedestrian) connectivity between adjoining parcels and uses, that specific requirements for joint access and cross connections (auxiliary service or access roads), and associated easement, deed and recording requirements, be included under this section for application under site plan and/or conditional use review. This could include a requirement that new parking areas be located to the side or rear of principal buildings – especially along arterials and collectors – to allow for the incorporation of shared access and cross connections in site design.

- **Transit/Pedestrian/Bicycle Access.** This section includes requirements for off-street loading facilities (under 3-3.4.1.) but not for public transit, pedestrian or bicycle access or facilities, which are, however, identified as considerations (without supporting design criteria) under site plan review (4-1.3). It is recommended that the regulations here (as applied to all development), or under site plan review, include specific requirements, and associated design standards for:

- Incorporating existing and planned facilities, and dedications of land or easements, in site (and subdivision) design – e.g., as identified from the adopted town plan, capital or transportation improvement programs, associated studies, or an official map.
- Requiring transit facilities (e.g., turnouts, shelters) for destination development along existing and planned transit routes.

ARTICLE IV. SPECIAL PROVISIONS

Section 4-1 Site Development Plan Approval

Site plan review, as enabled under state law, is typically used to evaluate and regulate internal site layout and design, including site access and circulation, parking, landscaping and screening. These considerations are reflected in adopted site development approval standards under Section 4-1. Planning commission jurisdiction for the review of vehicle and pedestrian access to the site (from the road or adjoining properties) often overlaps with board of adjustment jurisdiction for evaluating the impacts of a project on traffic and highways in the

Single and Two-Family Dwellings

Single and two-family dwellings are specifically exempted from site plan review under the zoning bylaw, as required by statute. For access management purposes, standards for these uses must be applied when lots are subdivided (under subdivision regulations), or administratively by the zoning administrator (under Article 3), or through a much more extensive conditional use review process. For example, within a US4 Corridor Management Overlay District all uses, including single and two family dwellings, could be classified as conditional uses, but given the other ordinances, and conditional use standards, would apply this could be considered overly restrictive.

vicinity, so it's important that consistent application requirements and review criteria are applied under each review process.

❑ **Application Requirements.** Site development plan application requirements (under 4-1.2) are more extensive than conditional use application requirements. Submitted site development plans must show lot size and location, access road(s), internal streets, driveways and walks, utility easements and rights-of-way, parking and loading areas, and other site features that may be considered and regulated by the commission. The planning commission can also require estimates of daily and peak hour traffic generation and/or a traffic impact study, a plan for emergency vehicle access, and timetables for the completion of improvements for phased developments. As noted earlier, for purposes of access management, application requirements should be consistent with similar conditional use application requirements, and at minimum include associated information regarding:

- Lot lines, lot dimensions and required setback distances for the lot to be developed, and for adjacent and facing lots.
- The locations of existing and proposed accesses, driveways, and parking areas for the lot to be developed (as now required) and for adjoining and facing lots – including joint accesses and cross connections with adjoining lots and uses.
- The locations of existing and planned pedestrian walkways, recreation/bicycle paths and transit routes in the vicinity of the project.
- Traffic data (counts, turning movements, trip generation, etc.) as currently required, and existing and anticipated levels of service for adjacent roads and intersections serving the project.
- Design specifications for proposed accesses and driveways.
- Proposed dedications and improvements (rights-of-way, infrastructure, traffic control, etc.) to serve the project.

❑ **Review Standards.** Site development standards identify a number of considerations intended to “maximize safety of traffic circulations between the site and street network and integration with the overall traffic pattern” (under 4-1.3.2) – which overlap with similar considerations identified under conditional use review – e.g., auxiliary roads, the number, location and width of access points, acceleration and deceleration lanes on adjacent streets, and sight distances.

Considerations are also listed to determine the “adequacy of on-site circulation, parking and loading facilities, to include traffic movement patterns, drive and aisle widths, the location and design of parking areas and emergency vehicle access; and for the “provision for safety and convenience of pedestrians, bicyclists, and handicapped persons (under 4-1.3.4). These considerations provide the framework for a comprehensive review of site plans, but include few specific standards of review – including any reference to related standards under Article 3 pertaining to access and parking.

As recommended for conditional use review, at minimum this section should be updated to reference the following, as needed to support associated conditions of site plan approval:

- consultations with town and state highway officials (per application referrals),
- prior conditions of approval for roads, accesses, etc. (e.g., subdivision, conditional use),
- applicable highway and access design and management standards (e.g., as consolidated under Article 3),
- the town's adopted municipal plan (transportation section, appended studies), capital improvement plan, or official map, with regard to planned facilities, levels of service and needed improvements, and
- applicable highway engineering studies or designs, for projects under development, and
- criteria and standards for transit facilities.

- ❑ **Determinations/Conditions.** Section 4-1.3 also states that the planning commission can impose conditions with regard to any of the listed considerations under that section, which could be further clarified and expanded upon to allow the commission to:
 - Incorporate recommended conditions of approval as proposed by the state (for US 4 and other state highways) or the town highway superintendent (for town highways) based on comments received from application referrals.
 - Require the dedication of land or easements within the project area as needed to accommodate planned rights-of-way, facilities or transportation infrastructure improvements.
 - Require the installation improvements or retrofits identified in the town’s municipal or capital improvement plans and related studies, as needed to accommodate the project, in proportion to its impacts (currently this is required only if the level of service drops below a Level C).
 - Require the phasing of development in relation to available and planned highway infrastructure capacity, as supported by the town’s adopted municipal and capital plans (or the state transportation improvement program).

- ❑ **Changes in Use.** Changes that involve curb cuts, internal or external circulation patterns and pedestrian circulation require site plan review by the planning commission under Section 4-1.1. This should also include changes in trip generation rates, as also recommended for conditional use review under Section 2-5.4.

4-3 Planned Development

Planned unit development provisions, as enabled under 24 VSA Chapter 117 (§), allow the planning commission, in association with the review of major subdivisions (or conditional uses) to modify applicable zoning regulations in order to encourage (or require) clustering, a transfer or increase in allowed densities of development, and other more creative or efficient patterns of development, for purposes specified in the regulations. Planned development can be especially useful for corridor preservation and access management, by encouraging or requiring:

- Clustered (nodal) site and subdivision development, served by an internal circulation network that limits direct access onto a town or state highway,
- Transfers or increases in density that support the dedication of rights-of-ways, easements or infrastructure improvements on portions of the site, and.
- Master planning, especially for phased development.

Hartford’s bylaw provisions for planned development are allowed, but not required, for major subdivisions in all zoning districts, and specify that approval for a planned development may be granted with the approval of a subdivision plat (under separately adopted subdivision regulations). It can therefore be assumed, if not stated, that subdivision standards also apply. At present, the primary intent of planned development is to encourage the efficient use of land, and preserve the natural and scenic qualities of open land in town. To this end, density transfers and residential density increases are allowed, as determined by the commission, for innovative design, and there is a minimum 50% open space requirement.

- ❑ **Corridor Preservation Standards.** To support highway corridor preservation and access management, it is recommended that this section be expanded to:
 - Incorporate related objectives in the stated purposes for planned development.

- Allow planned development modifications or other dimensional waivers for mixed use development where no subdivision of land is proposed (subject to conditional use review), to support nodal, clustered development.
 - Reference applicable corridor preservation and access management guidelines as defined elsewhere in the regulations (e.g., as for site plan and conditional use review) – and as incorporated under the town’s subdivision regulations.
- ❑ **Mandatory Planned Developments.** Consider mandating planned unit development requirements for all major subdivisions within a US Route 4 Corridor Management Overlay District and the Quechee Interstate Interchange District to allow for transfers of density, and to require an integrated, clustered (nodal) pattern of development along the highway to be served by an internal circulation network that limits direct access to the state highway. This would further stated district objectives for well-planned, coordinated development in this district.

HARTFORD SUBDIVISION REGULATIONS (9/1/87)

ARTICLE I. TITLE & PURPOSE

Section 5-1-2 Statement of Purpose

- ❑ **Broad Considerations.** This section requires that planning commission approvals be based on “broad considerations” – i.e., regulatory objectives that may (or may not) be referenced in more specified findings and determinations. These include conformance with the municipal plan and zoning regulations, standards of subdivision design (e.g., for pedestrian and vehicular traffic), provisions for facilities that complement the intended use (e.g., parking areas), the provision of adequate utilities and services, provisions for planned development (statutory reference) and the clustering of lots, and “awareness of the municipality’s capital investment in community facilities such as ...roads....”
 - These broad objectives should be updated to reference state planning goals (as now required by statute), including related transportation system goals; and to more specifically identify related objectives for highway corridor preservation (for town and state highways) and access management.
 - It may be appropriate to incorporate some of these objectives – i.e., conformance with the municipal plan (as now defined in 24 V.S.A. Chapter 117), etc. under Section 5-4-1 (Planning Standards) for more specific application (findings, determinations) in subdivision review.

ARTICLE II. DEFINITIONS

Section 5-2-1 Definitions

- ❑ The definition of “subdivision” included in this section predates but is generally consistent with statutory definitions under Chapter 117 – though the boundary adjustment exemption for “small parcels (< 1 acre) between adjoining property owners included under this definition may be questionable (in relation to state interpretations of the requirement to hold a public hearing prior to filing any plat). Statutory and zoning definitions are also incorporated by reference under Section 5-2-2. It should be noted, however, that statutory (not local) definitions control, if more restrictive than those included in the regulations.

This section also includes local definitions for “major subdivisions” (5 or more lots, or that require new street or municipal facility extensions), “minor” subdivisions (up to 4 lots, with frontage on or access to a public street), and “resubdivisions” which include any changes affecting streets, reserved lands or lot lines (as previously approved by the planning commission).

Note: The Hartford Town Plan specifically recommends changing the definition of “minor subdivision” to include lot splits in rural areas, which would also allow for the review of existing and proposed accesses to these parcels.

This section also includes “Transportation Network” (functional class) definitions for interstates, minor arterials, major collectors, minor collectors, and local collectors, but these are not further referenced in the regulations under related standards. It does not provide definitions for, or otherwise differentiate public streets from private streets or driveways.

Recommendations:

- Separately define and elsewhere clarify the review process for lot splits (as recommended in the town plan) and boundary adjustments between lots (of any size) – e.g., for administrative review, to prohibit the creation of nonconforming lots, etc. – and to make sure that boundary

adjustments address access locations (existing or proposed) in conformance with adopted frontage and access management requirements.

- Clarify, under the definition of “major subdivision” that planned developments are also considered and are to be reviewed as major subdivisions, as specified elsewhere in the regulations, and under the zoning bylaw.
- Depict on adopted town plan transportation maps those functional classes currently defined in the subdivision regulations, for application under related highway corridor preservation and access management standards. Also include these definitions in the zoning bylaw for similar purposes.
- Include definitions for “road” (public and private), “driveway” and “access” (curb cut) as may be referenced under the regulations for purposes of meeting lot frontage (width), road and access requirements under applicable standards.
- Include additional definitions for common access management terms as appropriate, in association with proposed standards.
- Ensure that definitions included under the subdivision regulations are consistent with those included under the zoning bylaw.

ARTICLE III. PROCEDURE FOR THE REVIEW OF SUBDIVISION APPLICATIONS

Sections 5-3-1 – 5-3-4 Review and Approval

□ **Review Procedures.** These sections outline procedures for the submission and review of pre-application sketch plans (under 5-3-1), for minor subdivisions (5-3-2), and for major subdivisions (and planned unit developments) – including preliminary (5-3-3) and final (5-4-4) subdivision plats. Warned public hearings are required for all but sketch plan review. Referenced sections outline the timing and sequence of subdivision review, but not other applicable review processes. Section 5-3-1.1 (General Provisions) does state that the subdivider must apply for all municipal and state permits required by the proposed development, including but not limited to zoning permits, highway access permits, and Act 250 permits. There are no specified application referral requirements to other local or state officials here, or under Article V (Required Submissions). Recommendations:

The need for coordinated review...

Under state law (19 V.S.A §1111) state highway access permits must conform to local plans, development regulations and approvals; however, in order to comply with state standards, the agency can, as a condition of subdivision highway access approval:

- Limit access to proposed lots in the subdivision to the access in existence at the time of subdivision – no additional access rights accrue with the subdivision of land along a state highway.
- Require the elimination, retrofit or relocation of access points, the installation of frontage or development roads and other access and highway improvements necessitated by the proposed project.
- Reconfigure the subdivision (number and location of lots to meet applicable state standards.

Given overlapping jurisdiction for the subdivision of land along state highways, it is especially important to coordinate state and local review of development along the highway corridor through an application referral or some other notification process.

- Add application referral requirements for the review of highway and access design by the town highway superintendent for subdivisions fronting on or accessing town highways, or that include private access/development roads, and to the Vermont Agency of Transportation for subdivisions fronting on or accessing state highways, or within 500 feet of an interchange ramp. Note: this should also include referrals for the review of impacts to other community facilities as referenced in the regulations, and to the state for development within designated flood hazard areas. Per a similar recommendation regarding applications under zoning, no approval would be

issued until written comments are received or 30 days have elapsed from the date of referral. Associated recommendations could then be incorporated in relevant findings and determinations under applicable subdivision standards.

- Clarify when the subdivider should expect to apply for other permits (e.g., at the beginning of the process, following preliminary approval, prior to or following final subdivision approval). Some state approvals (e.g., highway access, Act 250) require project conformance with local plans and bylaws – and require the applicant to indicate whether local approvals have been obtained.
- Clarify the effect and application of subdivision approvals (e.g., required conditions of approval) under subsequent local review processes – i.e., for administrative, site plan and conditional use review under the zoning bylaw – to include required highway infrastructure and access improvements.
- To expedite the local review process, as now required under Chapter 117 where feasible (§4462), provisions also could be added to allow for concurrent site plan and/or conditional use approval in association with final subdivision plat approval (especially for planned development), now that the statutory requirements for each are the same (for public hearings, warnings, and the issuance of decisions) – though this is more easily accomplished when only one review board is involved.

Section 5-3-6 Required Improvements

- **Required Improvements List.** This section of Article 3 lists those improvements that must be provided for all subdivisions unless waived by the planning commission as not requisite in the interest of public health, safety and welfare under applicable review standards. Note that Chapter 117 also enables such waivers if the improvements “are inappropriate because of the inadequacy or lack of connecting facilities adjacent to or in proximity to the subdivision” (§4418). Listed improvements include, but are not limited to: streets, sidewalks, street signs . . . and “other capital improvements as required by the commission” – though there are no standards (under this section) for such facilities. Recommendation:
 - Expand the list of required improvements to specify other capital improvements as identified an adopted plan, capital or transportation improvement program, an official map or related studies and designs – to also generally reference other planned improvements, including those associated with highway corridor preservation and access management (e.g., off-site road improvements, dedicated rights-of-way, etc.).
 - Clarify here that all required improvements, unless waived, must be shown on preliminary and final subdivision plats (as required under Article 5).
- **Certifications and Assurances.** This section also includes fairly detailed standards for design certification, bonding, installation, inspection, and the dedication and acceptance of locally required improvements, including road improvements, not but not for affected state facilities, including state highways. Recommendations:
 - Design certifications by other municipal officials (e.g., the town highway superintendent) as referenced elsewhere in the regulations, could be done through the application referral process suggested above, rather than through separate certification submission requirements.
 - Similar certification or acknowledgement from the state regarding the design of improvements involving or affecting state facilities (e.g., state highways) also could be required in association with state application (and design modification) referral requirements.

ARTICLE IV. GENERAL REQUIREMENTS AND DESIGN STANDARDS

Subdivision regulations are intended to regulate the pattern of development, and associated infrastructure improvements. This article of the regulations includes all existing standards for the local review of proposed subdivisions, including but not limited to current standards for lot and street layout, and street design, as highlighted in more detail below. Any new standards proposed for highway corridor preservation, access management, or associated infrastructure improvements should be incorporated under this article where appropriate.

Section 5-4-1 Planning Standards

- ❑ **Lot Layout.** Lot layouts (under 5-4-1.4) must conform to zoning requirements currently in effect (e.g., for size, depth, width). This section also notes that corner lots should have extra width to permit setbacks from each street, and that lot lines should generally intersect straight streets at right angles. Recommendations:
 - Review comments and recommendations for related zoning updates pertaining to lots – particularly for defining lot frontage requirements separately from lot width requirements, and in relation to access spacing standards, for purposes of access management.
 - Specifically prohibit the creation of flag and through (double frontage) lots in all new subdivisions (including simple subdivisions or lot splits), unless required due to site constraints. *Note: Flag lots are typically discouraged under access management ordinances, however flag lots that meet frontage requirements may be okay, as long as access spacing distances along the town or state highway are maintained, and any further subdivisions of the rear portion of the lot are required to share the same access. To maintain access spacing distances, frontage requirements should not be waived to allow for flag lots that do not meet frontage requirements.*
 - Clarify that additional access rights do not accrue with the subdivision of land along a town or state highway (here, or under Section 5-4-2), in accordance with adopted town and state access management standards.
 - Encourage (or require) lot clustering in association with planned development (as now provided for energy conservation under 5-4-1.2) to promote nodal development along arterials and collector roads.
 - Require that lot layout maximize internal circulation between and access to newly subdivided lots (e.g., through shared access, development roads) to limit direct access onto town and state highways.
 - Allow the planning commission to waive district lot width/frontage requirements for minor subdivisions to be served by a shared driveway, or require the installation of development roads that establish alternative frontage off the public highway – particularly for subdivisions along arterials and collectors (as defined in the regulations).
- ❑ **Reserve Strips.** Prohibiting the creation of reserve strips (under 5-4-1.3) to control access to any part of a subdivision or to any other parcel from a public street is common to protect individual access rights, but may also have the effect of prohibiting a useful tool (the dedication of access rights) to limit direct access onto town and state highways, when other reasonable access to individual lots is provided.
 - Restate this section to allow the planning commission to require the dedication of a reserve strip or access rights to the town or state, for lots fronting on public streets (town and state highways)

that have reasonable, alternative means of access – e.g., for double frontage lots or lots served by shared driveway or development roads.

Section 5-4-2 Streets

This section includes several qualitative standards that apply to subdivision streets, as discussed below, but few specific (quantitative) design, construction or access management standards. This section does incorporate, by reference, town highway ordinance standards, (under 5-4-2.5) to apply to all new streets, and presumably to any needed improvements to existing town highways, though this is not specified. Approvals from the town highway superintendent are also specified for certain types of improvements (e.g., dead end streets, curbs and sidewalks). There are no specific access management standards, or reference to applicable state standards for subdivisions accessing or fronting on state highways. There are also no specific standards or provisions for requiring highway infrastructure improvements, within or in the vicinity of a proposed subdivision, as needed to safely accommodate anticipated development. As such, it is generally recommended that this section be updated to:

- Reference application referrals and reviews by the town highway superintendent, other town officials (manager, emergency services) and/or the state, as recommended under related application referral requirements.
 - Reference, and incorporate minimum town or state design and construction standards for roads, intersections, driveways, and access points – e.g., under an expanded subsection 5-4-2.5 that currently requires conformance with the town highway ordinance. It is also recommended that the town highway ordinance be reviewed and updated as appropriate to reference or incorporate applicable state highway construction and access management standards (as recommended in the town plan).
 - Include an expanded subsection for access management on town and state highways (including sections 5-4-2.3 and 5-4-2.7) that incorporates or references applicable state access management standards by functional class, traffic volumes, etc. (i.e., Vermont Agency of Transportation Access Management Program Guidelines), and restricts direct subdivision access onto town and state highways.
 - Include a new section that addresses traffic impacts and required public (town, state) highway infrastructure improvements within and in the vicinity of the proposed subdivision (e.g., as now required for utility, water supply and wastewater extensions, parks, and schools) – based on a traffic impact analyses and/or as identified in an adopted municipal plan, capital and transportation improvement programs, and related project design and engineering studies – to be paid for by the subdivider.
- ☐ Street Layout. This subsection (5-4-2.1) currently includes several requirements that are fundamental to highway corridor preservation and access management – including “connectivity requirements” for the continuation or extension of principal streets to adjoining subdivisions (cross connections), the

Useful state design and construction standards:

- *State Construction Drawings (e.g., A-76 Standard for Town and Development Roads, B-71 Standard for Residential and Commercial Drives.*
- *Vermont Access Management Program Guidelines (revised 2005.)*
- *Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads and Streets (July 1997).*

Official Map Requirements

Official maps can be a useful regulatory tool for acquiring road rights-of-way in support of a planned road network. State law (24 V.S.A. §4421) allows municipalities to require the dedication of planned rights-of-way shown on an adopted official map, as currently specified in the regulations. If this is not done, the planning commission can deny the project – but the town must then, within 120 days, institute proceedings to acquire the right-of-way, or otherwise reconsider the application without the dedication requirement. If an official map is adopted by the town, the bylaws should be updated to reflect related statutory review procedures and requirements.

dedication of planned streets as shown on an adopted official map as a condition of plat approval, and the dedication of land reserved for planned street realignments, to be shown on the final plat. Recommendations:

- Include more specific requirements for street (and lot) layout in relation to the transportation network hierarchy (functional classes) as defined – in particular for the location and spacing of street connections (intersections) on town and state highways.
 - Include or reference applicable requirements above for lot layout – i.e., to maximize internal circulation within the subdivision and limit direct access to town and state highways (to joint accesses and collector roads).
 - Restrict the number of allowed accesses (road intersections) on town and state highways in relation to site constraints, the size of the subdivision (number of lots), the need for additional emergency vehicle access, and recommended access spacing requirements for both unsignalized and signalized intersections, and reference applicable access management and construction guidelines.
- ☐ **Topography.** This subsection (5-4-2.2) requires that streets logically be related to site topography to produce useable lots, reasonable grades and safe intersections, in relation to proposed uses. It does not include any specific standards.
- As recommended above, this provision could be included under an expanded subsection 5-4-2.5 that incorporates related road, driveway and access design and construction standards – including acceptable finished grades and related stormwater management requirements.
- ☐ **Access.** This subsection (5-4-2.3) requires only that year-round emergency vehicle access be provided for fire, ambulance and police vehicles, to within 100 feet of the principal entrance to all types of development except single and two-family dwellings.
- This section does not address or incorporate access design or management standards, which could be address under an expanded section that consolidated related design and construction standards, and/or a new access management section that references or incorporates applicable town and state access management standards – including emergency vehicle access design specifications provided by the fire, ambulance and police departments, who are also typically called on to review subdivision applications.
- ☐ **Dead-End Streets and Turnarounds.** This section allows for, but sets length limits on dead-end streets (including cul-de-sacs).
- Dead end streets are not specifically discouraged or allowed only to accommodate site constraints – as such this section may conflict with existing road connectivity requirements as noted above, and as generally recommended for highway corridor preservation and access management (and integrated site circulation).
- ☐ **Access Roads.** This subsection (5-4-2.7) allows the planning commission to require that private roads providing access to a subdivision meet municipal highway construction standards, and references the town highway ordinance. This is consistent with a separate requirement that all streets conform to the town highway ordinance, but it is not clear whether this also applies to other internal subdivision roads. It also does not reference applicable state highway access management and construction standards for access to state highways.
- As noted above, minimum design, construction and access management standards should apply to all new roads – public or private – though such standards often vary based on functional class, traffic volumes, posted and design speeded, and the type of development. These could be

incorporated or adopted by reference under expanded sections that address construction and design and/or access management.

- ❑ **Curbs and Sidewalks.** This subsection under streets (as pertaining to pedestrian infrastructure within the highway right-of-way) allows the Commission to require the installation of curbs and sidewalks based on the density of residential development. Sidewalks and curbing must conform to specifications provided and approved by the town highway superintendent, but no specific standards are referenced.
 - This section should be updated (and possibly moved to Section 5-4-3 below) to include or reference minimum design and construction standards for curbing, sidewalks, crosswalks, and other internal and connecting pathways (e.g., as required under site plan review), for requiring such facilities (or easements) identified in adopted plans (e.g., a municipal, highway corridor or sidewalk plan) improvement programs and, for access management purposes, in relation to traffic circulation patterns, traffic, volumes, etc. associated with the subdivision.

Section 5-4-3 Pedestrian/Bicycle Access

- ❑ This section simply allows the commission to require rights-of-way for pedestrian or bicycle travel and access to facilitate pedestrian circulation within a subdivision and to provide access to public property. It does not include or reference any applicable standards or guidelines.
 - As noted above for sidewalks, this section should be updated to include or reference minimum design and construction standards for pedestrian, bicycle and other paths, including access and connection requirements – at least for the incorporation of planned facilities identified in adopted plans (e.g., a municipal, highway corridor or sidewalk plan) improvement programs.

ARTICLE V. REQUIRED SUBMISSIONS

- ❑ **Submission Requirements.** This article includes submission requirements for sketch plans (5-5-1) and minor and major subdivision plats (5-5-2, 5-5-3). For subdivision plats these generally include surveys of tract boundaries and lots, and presumably existing and proposed road rights-of-way and access points, though these are not specified. Preliminary plats must also include typical cross-sections and grades for proposed roadways and sidewalks, preliminary designs for bridges and culverts, and land proposed for dedication for common or public use, and the locations of required improvements (as noted above) – to include streets, sidewalks and other capital improvements as required by the planning commission. There are no requirements for the submission of supporting studies or analyses, such as traffic impact analysis. Recommendations:
 - As noted above, expand the list of required improvements to specify other capital improvements as identified an adopted plan, capital or transportation improvement program, an official map or related studies and designs – as needed to also reference other planned improvements, including those associated with highway corridor preservation and access management (e.g., off-site road improvements, dedicated rights-of-way, etc.).
 - Require the submission of traffic data and, for larger subdivisions, traffic impact analyses for use in evaluating traffic impacts to highway corridors and planned transportation infrastructure in the vicinity of the subdivision – especially in relation to known deficiencies and planned levels of service. This information can also be used to support required dedications and transportation infrastructure improvements needed to accommodate the subdivision, to be paid for by the subdivider, as noted above.

