

ARTICLE 4 Planning and Design Standards

Article Contents

4.1	Energy Efficient Design	4-2
4.2	Farm and Forestland Preservation	4-2
4.3	Site Design	4-2
4.4	Exterior Storage of Materials or Equipment	4-2
4.5	Landscaping and Screening	4-2
4.6	Outdoor Lighting	4-4
4.7	Vehicular Circulation	4-4
4.8	Pedestrian Accessibility	4-4
4.9	Parking, Traffic Access, and Circulation	4-7
4.10	Street Signs	4-8
4.11	Public and Private Road Standards	4-8
4.12	Site Preservation and Erosion Control	4-10
4.13	Stormwater	4-10
4.14	Utilities	4-11

The DRB shall evaluate Site Plan Review, Subdivision and Planned Unit Development applications against the following Planning and Design Standards, unless the requirement specifically refers to subdivision review. The standards are listed alphabetically. In reviewing the applications, the DRB may consider and impose appropriate safeguards and conditions with respect to whether the project adequately meets the required standards.

4.1 Energy Efficient Design

- A.** Developments are encouraged to incorporate energy-efficient siting of buildings, such as:
1. Orienting buildings on the site to optimize passive solar heating and cooling opportunities.
 2. Orienting buildings so as to minimize wind loads on the structure.
 3. Placing and appropriately shading windows to maximize solar penetration during the winter months and minimize solar penetration during the summer months.
 4. Designing landscaping to provide shading and cooling during the summer months while allowing solar heat penetration during the winter months.
 5. Using the least amount of area for roadways and the least length of sewer, water and utility lines within environmentally and economically sound limits.

4.2 ~~Farm and Forestland Preservation~~

[## Relocated to AR-1, R-1 and N-1 district sections]

4.3 Site Design

- A. Generally.** Sites will be designed with consideration to adjacent and nearby sites and buildings in order to foster an integrated form and a pattern of interconnected uses. Strip development along highways shall be avoided. Redevelopment of sites

with existing strip development shall be designed to minimize the features of strip development.

- B.** ~~Business (B) and Commercial-Light Industrial (I-2) Districts. The siting, layout, and appearance of the building(s) will be consistent and integrated with other uses in the district, will provide access for pedestrians, and will not cause strip development along roads. Interconnecting adjoining properties by shared driveways, parking lots, or frontage roads is encouraged. [## Relocated to B and I-2 district sections]~~

4.4 Exterior Storage of Materials or Equipment

- A.** In certain situations, the DRB may require that exterior storage of materials or equipment be excluded from the front yard and/or screened. [## Should this get its own listing under Requirements for Specific Uses instead?]

4.5 Landscaping and Screening

- A. Adequacy of landscaping and screening.** Particular consideration will be given to preservation of existing vegetation and important features of the site, including large trees, views and vistas, and stone walls; visibility of unsightly or incompatible areas from the road and adjoining properties; and the adequacy of landscaping materials given seasonal conditions, soil conditions and erosion control, and light on the site. Invasive or nuisance plants as delineated by the Vermont Agency of Natural Resources shall be prohibited.
1. Landscaping will take the form of shade trees, deciduous shrubs, evergreens, well-kept grasses and ground cover. Selections shall preferably be native to Vermont, but at a minimum rated for a plant hardiness zone of 4; zone 5 may be acceptable with micro-climate justification.
 2. Landscaping may be required to be installed and maintained in front and side yards and may

be required where rear yards abut residential properties or public roads. Adequate setbacks and site grading may be required to ensure that the plantings are not adversely affected by traffic and road salt. Street trees may be required along state and town highways, particularly in areas where there is little vegetative cover presently. Landscaping will be installed within a time frame established by the DRB.

3. In determining the amount and type of plantings to be required, the DRB will take into account at least the following:
 - a. Existing trees, shrubs, evergreens and other vegetation to be preserved on the site.
 - b. The visibility of incompatible or unsightly areas from public roads and/or adjacent properties.
 - c. The landform and overall landscaping plan for the development;
 - d. Other factors which, in the DRB's judgment, affect the safety and appearance of the development; and
 - e. The owner or developer may be required to provide a letter of credit or other suitable form of surety to guarantee the performance and completion of all planting required pursuant to this section, which surety will also guarantee plantings for a period of two years from the date of installation.
4. The DRB may require a landscaping and screening plan to be provided by the applicant in cases where, in the DRB's judgement, it is necessary to understand the detail of the proposed plan.

B. Requirements of a Landscaping and Screening Plan

1. A landscaping plan shall illustrate to scale all landscaping and screening proposed for the site, including street trees, all other trees, planting beds, shrubs, bushes, and grassed and mulched areas. Plans shall include specifications for planting and a plan for maintenance care (reference sources listed below for guidance). At the time of planting,

deciduous street/shade trees shall be at least two (2) inches in caliper (trunk diameter) measured at a point six (6) inches above finished grade level and have a single straight trunk at least ten (10) feet tall with the lower 5 feet clear of branches. At the time of planting, coniferous shade trees shall be 4' to 6' feet in height.

2. The plan shall include justification that the cultivar selection is appropriate for the planting area, including rooting space, crown and height space, infrastructure limitations, soil conditions, sensitivity to urban conditions, etc. Selections shall preferably be native to Vermont, but at a minimum rated for a plant hardiness zone of 4; zone 5 may be acceptable with micro-climate justification.

Plant Reference Material

A gallery listing of invasive plant species in Vermont which are prohibited can be found at: <https://www.vtinvasives.org/>

Recommended Trees for Vermont Communities: A Guide to Selecting and Purchasing Street, Park, and Landscape Trees, published by the Vermont Urban and Community Forestry Program.

Landscape Plants for Vermont, by Dr. Norman E. Pellett, Horticulturist and Professor Emeritus, University of Vermont, and Dr. Mark C. Starrett, Assistant Professor, University of Vermont, published by University of Vermont Extension

Planting Sustainable Landscapes – A Guide for Plan Reviewers, prepared by the Vermont Department of Forests, Parks, and Recreation and the Vermont Chapter of the American Society of Landscape Architects – Section III.

Street Tree Factsheets – edited by Henry D. Gerhold, Norman L. Lacasse, and Willet N. Wandell, published by the Municipal Tree Restoration Program with support from the USDA Forest Service, Northeastern Area State and Private Forestry.

~~Invasive species are prohibited as listed on <http://www.vtinvasiveplants.org/invaders.php>.~~

C. Street Trees

1. Street trees shall have a high tolerance for road salt, soil compaction and drought, as appropriate. ~~Street trees or shrubs will be required along roads in the AR-2, AR-3, and B districts and along Route 7 in all districts unless waived by the DRB due to topographical or physical limitations. [##Relocated to district sections]~~
2. **Subdivisions.** The DRB may require that suitable hardwood shade trees (such as Sugar Maple, Red Maple, Ash or Oak) be planted along streets where trees do not exist at intervals of forty (40) feet or less. All deciduous street trees shall measure at least ten (10) feet in height and at least two (2) inches in diameter measured at a point six (6) inches above finished grade level. All trees are to be planted not more than ten (10) feet from the edge of the road right-of-way.

4.6 Outdoor Lighting

- A. Outdoor lighting fixtures will be designed to direct light downward and adjusted so as not to cast light directly on adjacent roadways or properties. The DRB may prohibit fixtures that cause excessive glare within the property or on adjoining properties. Outdoor lighting may be required by the DRB to illuminate areas such as streets, sidewalks, and parking areas.
- B. Prohibited lighting fixtures shall include [xx Insert].
- C. An approved lighting plan shall be kept in perpetuity unless such requirement is waived by the DRB. [xx Discuss, do you mean the lighting plan may be required]
- D. Final determination of any lighting violations shall be conducted by the ZA or a third party designated at the discretion of the ZA.

4.7 Vehicular Circulation

Particular consideration will be given to visibility at intersections, to traffic flow and control, to pedestrian safety and convenience, and to access in case of emergency.

- A. The DRB may require shared access to adjoining properties or may limit access to the property to a side street or secondary road.
 1. Where traffic access is required to only a portion of the land, the DRB may require sharing that access with future uses of the remainder of the parcel.
 2. For uses for which a traffic study is required, the proposal will not cause traffic conditions on a Town or State highway to go below a Level of Service of C (as defined by the Vermont Agency of Transportation) unless such a condition already exists, in which case the use will not cause traffic conditions to go to a lower Level of Service. The proposal may be conditioned to mitigate an adverse traffic condition.

4.8 Pedestrian Accessibility

- A. **Applicability.** All applications for land development that require conditional use review, site plan review (including applications approved administratively), Planned Unit Development review, variance review, and/or subdivision review shall be required to comply with the following standards for pedestrian accessibility and sidewalk access.
- B. **Public Sidewalks and Shared Use Paths.** The following standards shall apply to all sidewalks and shared use paths that are intended to serve the general public in Georgia:
 1. **Walkway Type.** DRB has the option to impose either sidewalks or shared use paths to the project during the approval process, as deemed appropriate to local conditions. Any preference for either type shall be done in writing at the first meeting with the DRB.

2. Location. Sidewalks or shared use paths shall be required in the following locations:

- a. On both sides of all public roads in the **South** Village Core district.
- b. On one side of all private roads in the **South** Village Core district.
- c. On both sides of all public roads in the **RN AR-3** zoning district (with the exception of Sodom Road).
- d. On one side of all private roads in the **RN AR-3** zoning district.
- e. As required by the DRB within the PUD or subdivision in any zoning district. The DRB may require a sidewalk or sidewalk easement on at least one side of each road approved as a part of a PUD.

3. Connection. All sidewalks or paths shall form a link to any existing sidewalks on adjoining properties. This standard shall not apply to the existing People's Trust property (SPAN# 237-076-11372) in the **South** Village Core district due to the existing sidewalk on the property being located far outside of the State right-of-way.

4. Location Within Right-of-Way

- a. **Town and Private Roads.** All sidewalks along town roads and private roads shall generally be built at the outer edge of the road right of way (within the right-of-way). The DRB shall also consider topographical constraints, existing structure locations, and existing easements (utility, access, etc.) when determining the location of the sidewalk.
- b. **State Roads:** The sidewalk should be built within the State right-of-way. However, if this is not possible due to State restrictions, sidewalks shall be built on private property located adjacent to the State right-of-way. If a sidewalk is located on private property, the property owner shall provide the Town of Georgia an easement over the land on which the sidewalk is located. The DRB shall also consider topographical constraints, existing

structure locations, and existing easements (utility, access, etc.) when determining the location of the sidewalk and easement.

5. Design Standards and Maintenance. All sidewalks and pedestrian infrastructure shall be designed, constructed, and maintained as follows: according to the **Town of Georgia, VT Sidewalk Ordinance** and the following standards:

- a. **Sidewalks.** All sidewalks shall be constructed according to VTrans C-3a standard for cement sidewalks, as illustrated in **Figure 4.1**.
- b. **Shared Use Paths.** All shared use paths shall be constructed according to VTrans A-78 standard for asphalt paths, constructed at 8 feet wide, as illustrated in **Figure 4.2**.
- c. ~~**Materials.** Sidewalks shall be concrete and shall meet all applicable requirements of the Americans with Disabilities (ADA) standards. Base material, surface crowning, surface drainage, embankments, ditching, culverts, and erosion control shall conform to the Vermont Agency of Transportation's A-76 standard.~~
- d. ~~**Width.** Sidewalks shall be at least 5 feet wide. However, on private roads located outside the South Village Core District, sidewalks shall only be required to be 4 feet wide.~~
- e. **Buffer or Curbing.** Sidewalks and shared use paths shall be separated from adjacent roads or parking areas by a landscaped buffer, curbing, change in elevation, change in surface material and/or crosswalk or surface markings.
- f. **Curbcut Driveway Crossings.** Existing sidewalks, and sidewalks that will be installed as part of the proposed development, must meet the following standards:
 - The sidewalk shall continue across any driveways or private road curbcuts and shall be constructed to a minimum depth of 8 inches across the driveway; OR
 - The sidewalks or shared use path shall be marked with proper crosswalk markings as illustrated in Figure x.x.

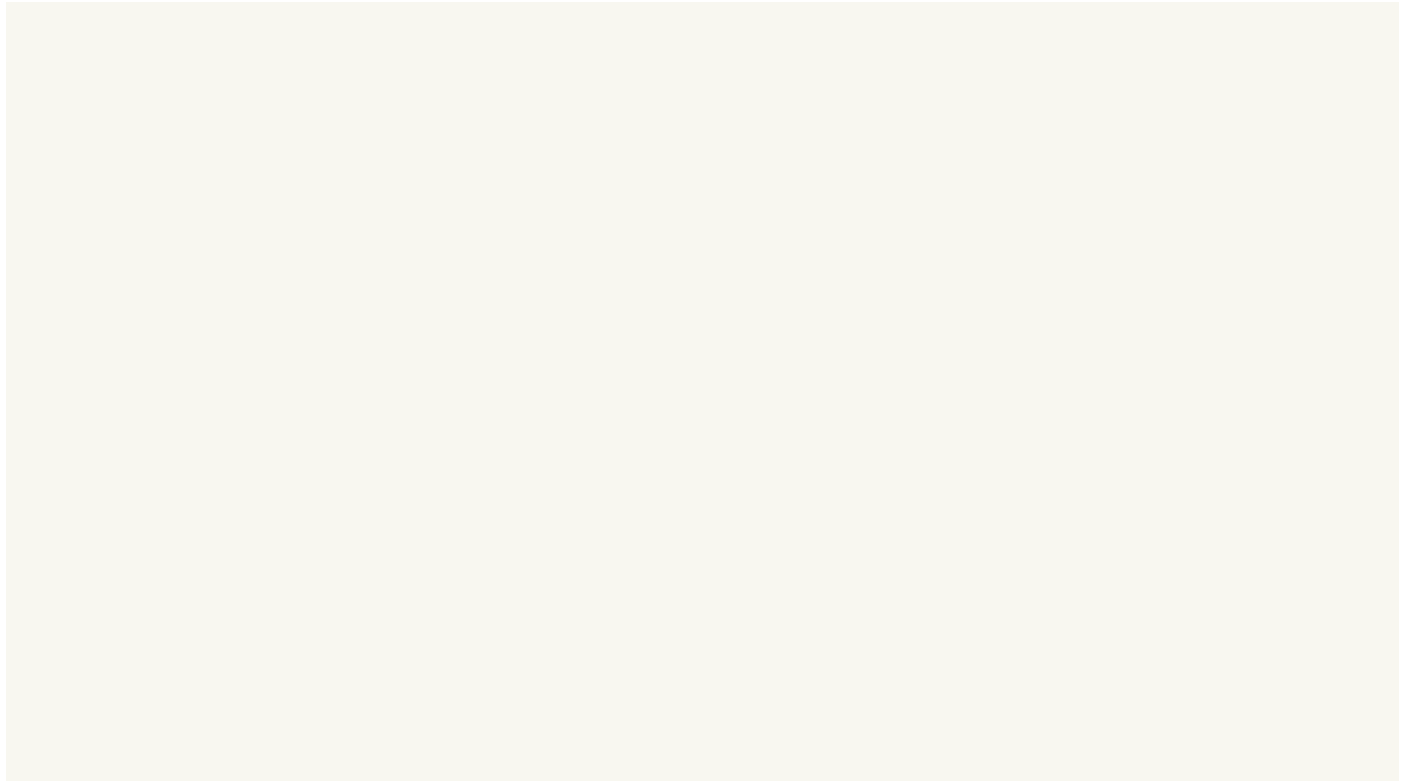


Figure 4.1 - Partial sample of VTrans Standard 3C-a Standards for cement sidewalks.

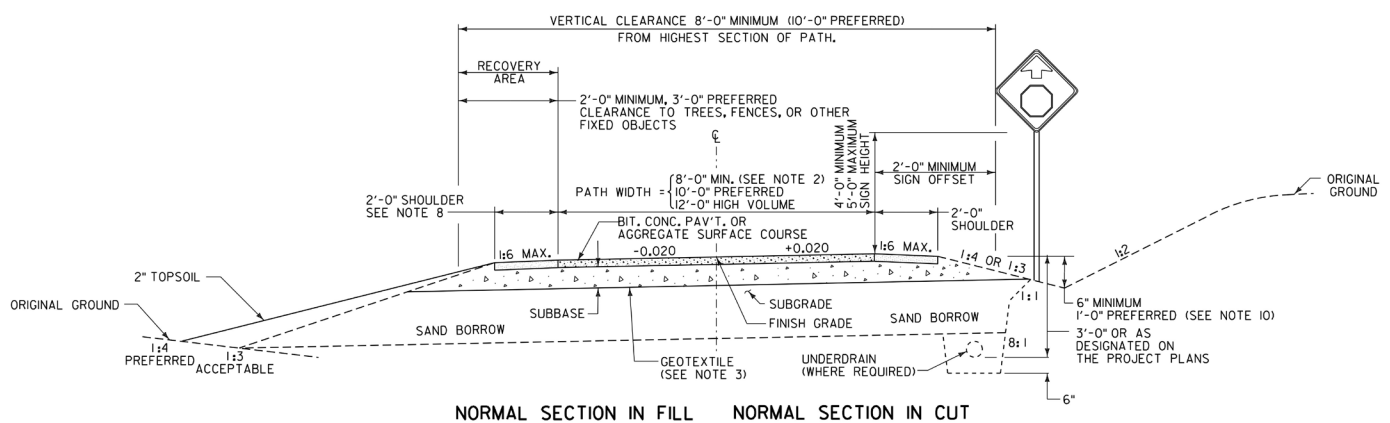


Figure 4.2 - Partial sample of VTrans Standard A-78 Standards for shared use paths.

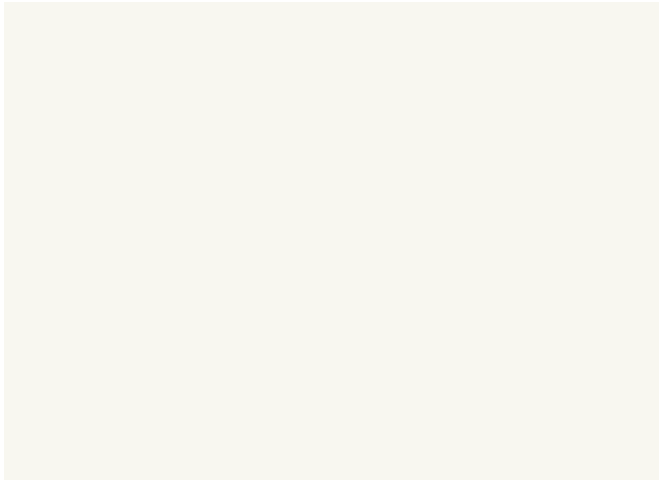


Figure 4.3 - Pedestrian Circulation.

This image is an example of a project that contributes to a logical street and pedestrian network.

- If the installation of a curbcut driveway requires disrupting or damaging an existing sidewalk, the applicant shall be responsible for restoring or replacing the sidewalk in conformance with this standard.

g. Maintenance. All pedestrian infrastructure shall be maintained according to the Town of Georgia, VT Sidewalk Ordinance.

C. Private Sidewalks and Pedestrian Circulation on Site. The following standards shall apply to all sidewalks and pedestrian facilities located on private property and intended to serve a specific structure or property:

1. Adequacy of pedestrian circulation. All development in the VC SV, B, I, I-1, I-2, and RN and RV AR-3—districts, shall provide adequate pedestrian circulation via sidewalks and/or non-motorized shared use improved paths. The DRB shall require a sidewalk to the entrance of the building from any existing public sidewalk to facilitate pedestrian access to the building.

2. Pedestrian Access in Subdivisions and PUDs

a. Pedestrian Accesses. The DRB may require, in order to facilitate pedestrian access from the roads to schools, parks, playgrounds, or

other nearby roads, perpetual unobstructed easements at least twenty (20) feet in width. Easements shall be indicated on the plat.

b. Pedestrian Circulation. Projects will provide adequate pedestrian circulation within the project, such as sidewalks and pathways along public and private streets, connecting the project to public buildings and uses, to other commercial or industrial uses, and to nearby residential and recreation areas.

- The project will promote and contribute to a logical street and pedestrian network within the project and the district, which provides for connections between parcels, between other commercial and industrial uses, and between the site and nearby residential and recreation uses, and for the continuation of streets and pedestrian ways.

4.9 Parking, Traffic Access, and Circulation

A. Parking Lot Screening. Parking areas may be required to be landscaped or screened from adjacent uses and from the roadways in the vicinity.

B. Parking Lot Location

1. Parking may be prohibited in the front, side or rear yard setback areas.
2. In the R AR-2 and RN AR-3 and B Districts, parking, loading, and utility areas may be required to be located to the side or rear of buildings and may be required to be screened.

C. Parking Lot Design

1. Permeable surfaces may be required for proposed parking areas to minimize stormwater runoff off-site. Relocation or redesign of parking areas may be required to limit runoff and control erosion in accordance with approved State standards.
2. The size and location of any paved area may be limited by the DRB.

3. Consideration will be given to the effect of noise, glare or odors associated with parking, loading, and service areas on adjoining properties and State and Town highways.

D. Parking Lot Access

1. In the **R AR-2** and **RN AR-3** districts, access may be limited to one curb cut. Sharing of driveways with adjoining properties may be required.
2. In the B district, access control techniques are required. Sharing of driveways with adjoining properties may be required.

4.10 Street Signs

- A. All roads, whether public or private, will be required to be named and identified by a street sign which is of a standard approved by the Town in accordance with the **E-911 Street Address Ordinance** [Town of Georgia Road and Driveway Policies](#).

4.11 Public and Private Road Standards

- A. **Applicability of Road Standards.** The following standards shall apply to all public roads and to private roads. Acceptance of private roads by the Town is subject to the approval of the Georgia Selectboard. Construction of roads to these standards in no way ensures such acceptance.
- B. **Road Design and Construction Standards.** All roads in the Town of Georgia shall be designed and constructed to comply with the following standards:
 1. **Public Roads.** All public roads shall be designed and constructed in accordance with the **[Town of Georgia Road and Driveway Policies?]** *Town of Georgia Policy for Roads to Be Conveyed to And Maintained by The Town as Town Highways and To Upgrade Class IV Town Roads* (as most recently amended). This policy includes specifications for right-of-way width, road

construction specifications, and specifications for stormwater management (drainage and culverts).

2. **Private Roads.** Private roads shall be constructed to conform to the dimensional and geometric design standards for local roads and streets contained within the Vermont Agency of Transportation's Standard A-76, the Vermont Agency of Transportation's Better Back Roads Manual, the Vermont Agency of Transportation Complete Streets Guidance Document, as most recently amended, and the standards below. If there is conflict between these standards, the stricter standard shall apply:

- a. All accesses servicing three (3) or more single-family dwellings shall be considered "private roads" and shall be constructed using the current Vermont Agency of Transportation's Standard A-76.
- b. All private roads shall be designed by a licensed engineer.
- c. Private roads shall be approved by the DRB. The DRB may require private roads to be paved with a minimum of two inches (2") of asphalt pavement. Additional paving requirements may be required by the DRB.
- d. Prior to the issuance of a Certificate of Occupancy for any structure constructed on the private road, a letter by a licensed engineer shall be submitted to the Zoning Administrator certifying that the road was constructed to the required A-76 standards and meets the plans as approved by the DRB.
- e. All private road construction shall meet current "**Vermont Low Risk Site Handbook for Erosion Prevention and Sediment Control**" requirements.
- f. All private roads must be constructed within a 60' wide right-of-way easement.
- g. All cul-de-sacs shall be located within a right-of-way.
- h. ~~Following approval by the Georgia Fire Chief, applicants may request a waiver by the DRB~~

~~to construct a hammer-head type turn-around in lieu of the required cul-de-sac. Said waiver shall be submitted in writing to the Zoning Administrator. A letter by the Fire Chief approving the request shall be attached to the waiver request.~~

- i. No road or driveway construction shall take place within the town right-of-way without required DRB, Selectboard and/or Georgia Road Foreman approvals.
- j. Private road maintenance agreements shall meet the current Georgia Development Regulations.

C. Connectivity and Coordination. All public and private roads and/or rights-of-way shall be designed to comply with the following standards:

1. **Topography.** Streets shall be logically related to the topography so as to produce usable lots, reasonable grades and safe intersections in appropriate relation to the proposed use of the land to be served by such streets.
2. Proposed streets and rights-of-way shall be extended to the boundary lines of the tract to be subdivided and/or developed, unless prevented by topography or other physical conditions or unless, in the opinion of the DRB, such extension is not necessary or desirable for the coordination of the layout of the proposed subdivision with the existing layout or the most advantageous future development of adjacent tracts.
3. **Reserved Strips.** The creation of reserved strips shall not be permitted adjacent to a proposed street in such a manner as to deny access from adjacent property to such street.

D. Access Permits. In accordance with statute and [Section 5.2](#), all road accesses shall be subject to the approval of the Vermont Agency of Transportation in the case of state highways and the Georgia [Public Works Director](#) ~~Road Foreman~~ in the case of Town roads.

E. Access Management. In addition to access requirements under [Section 5.2](#), to better manage traffic flow and safety, avoid congestion and frequent turning movements, preserve the carrying capacity of roads and to avoid strip development, the following access management standards shall apply:

1. Jog intersections of public and/or private roads with centerline offsets of less than two hundred (200) feet shall not be allowed. All street intersections shall be as near to right angles as possible.

F. Upgrade of Existing Roads

1. All new roads petitioned to be taken over by the Town of Georgia must meet the *Town of Georgia Policy for Roads to Be Conveyed to And Maintained by The Town as Town Highways and To Upgrade Class IV Town Roads* (as most recently amended) prior to being taken over. It is the responsibility of the developer to upgrade the private road to public road standards. Furthermore, the road proposed to be conveyed to the Town shall be maintained by the developer or a homeowner's association until the road is accepted by the Town of Georgia.
2. The DRB, in coordination with the Selectboard, may require the developer to upgrade impacted or connecting existing ~~Class 2 and/or Class 3~~ Town roads if the development will increase traffic flow. Traffic studies may be required to establish the upgrade necessary.
3. Modifications of Road Standards. In the case of unusual topographical or physical conditions or other circumstances which would make the strict adherence to these standards a substantial hardship, the DRB may modify the strict application of one or more of these standards provided 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 or these Regulations.

4.12 Site Preservation and Erosion Control

A. Adequacy of erosion control. To control erosion, the site plan or subdivision plat will meet the following standards.

1. The development plan will fit the topographic, soil and vegetation characteristics of the site with a minimum of clearing and grading.
2. Existing natural drainage patterns will be preserved wherever possible.
3. The sequence of construction activities will be designed so that the smallest area possible is disturbed at any one time. Only areas where active construction is taking place should be exposed. All other areas should be protected by vegetative and structural control measures.
4. Seed and mulch will be applied as soon as possible to disturbed soils.
5. Disturbance should be avoided as much as possible between December 1 ~~October 15~~ and April 15 ~~May 1~~.

4.13 Stormwater

The following applies to projects that affect less than 1/2 acre of impervious surface:

A. Drainage in Subdivisions. An adequate surface storm water drainage plan for the entire land development area shall be provided. The subdivider may be required by the DRB to carry away by pipe or open ditch any spring or surface water that may exist either previous to or as a result of the land development. A culvert or other drainage facility shall, in each case, be large enough to accommodate potential runoff from its entire upland drainage area, whether inside or outside the subdivision. Where it is anticipated that additional runoff incidental to development will overload an existing downstream

drainage facility so that there will be drainage to private property or an increase in the expenditure of public funds, the DRB shall not approve the subdivision until provision has been made for the improvement of said facility. Where a proposed project is traversed by a water course or drainage way, there shall be provided a storm water drainage easement of such width as to encompass the one hundred (100) year flood area of such water course, which easement shall be indicated on the Final Subdivision Plat. The subdivider's engineer shall provide such information as the DRB deems necessary to determine the adequacy of all proposed drainage facilities.

B. Stormwater drainage, infiltration retention and treatment facilities, including culverts and ditches, shall be designed to accommodate potential runoff from the entire upstream drainage area, based on conditions of total potential development, in accordance with the following standards.

1. The DRB will require the applicant to maintain post-development peak storm flows at pre-development levels for development creating ½ acre or more of impervious surface. For smaller projects, the DRB may require use of State Stormwater BMPs.
2. All stormwater management facilities shall be designed in accordance with best management practices for stormwater management as most recently amended by the VT Agency of Natural Resources.
3. The preparation and implementation of a stormwater management plan, prepared by a Vermont Licensed Engineer, may be required by the DRB.
4. Off-site easements and/or management facilities may also be required by the DRB as needed to accommodate stormwater runoff on adjoining properties or downstream from the proposed development.

C. The following projects are required to have a Vermont Stormwater Runoff General Permit 3-9050:

1. A discharge from new development or redevelopment equal to or greater than ½ acre, provided the project does not qualify for one of the transition exemptions in General Permit 3-9050 1.5(F)
 2. A discharge from the redevelopment of an existing impervious surface if the redeveloped portion of the existing impervious surface is equal to or greater than ½ acre provided the project does not qualify for one of the transition exemptions in General Permit 3-9050 1.5(F) (see below for a list of exemptions);
 3. A discharge from the expansion of an existing impervious surface, such that the total resulting impervious surface is equal to or greater than one (1) acre;
 4. A discharge from a combination of expansion and redevelopment of an existing impervious surface, such that the total resulting impervious surface is equal to or greater than one (1) acre;
 5. A discharge from “impervious surfaces of three or more acres,” as defined in General Permit 3-9050;
 6. A discharge that has been previously authorized pursuant to an operational discharge permit
- D. For projects that impact 1 acre or more of impervious surface than [??] a Vermont General Permit 3-9020 for Stormwater Runoff from Construction Sites may be required.

4.14 Utilities

- A. Utility Easements.** Easements of sufficient width shall be provided to serve both a proposed project and existing and anticipated development outside the project's boundaries.