

SUBDIVISION STREET REQUIREMENTS

CHAPTER 91.

SUBDIVISION STREET REQUIREMENTS.

PART I. GENERAL PROVISIONS.

24 VAC 30-91-10. Definitions.

The following words and terms, when used in these requirements, shall have the following meaning, unless the context clearly indicates otherwise:

“AASHTO” means the American Association of State Highway and Transportation Officials.

“Abandon” in all its forms means the legislative action reserved the local governing body, to extinguish the public’s right to a roadway under the jurisdiction of the Virginia Department of Transportation, pursuant to §33.1-151 and §33.1-155, Code of Virginia.

“ADT” means average daily traffic count (see “Projected Traffic”).

“Apartment building” means a building for residential occupancy containing more than two dwelling units which may be rented or occupied by the owner. For the purposes of this regulation, the term shall include townhouse and condominium buildings.

“Board” means the Commonwealth Transportation Board.

“Commissioner” means the chief executive officer of the Virginia Department of Transportation and the Vice-Chairman of the Commonwealth Transportation Board for the Commonwealth of Virginia.

“Complete development” (land) means the utilization of the available areas in a manner as to realize its highest density for the best potential use based on zoning, pending rezoning, the adopted comprehensive plan of the governing body, or the customary use of similar parcels of land.

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“Complete development” (streets) means the development of a subdivision street in full compliance with all applicable provisions of these regulations to the necessary standards of design and construction for the effective and efficient accommodation of the traffic generated by the complete development of the land, both internal and external to the subdivision.

“County official” means the representative of the governing body appointed to serve as its agent in matters relating to subdivisions.

“Cul-de-sac” means a street with only one outlet and having an appropriate turnaround for a safe and convenient reverse traffic movement and more specifically the turning area.

“Dam” means an embankment or structure intended or used to impound, retain, or store water, either as a permanent pond or as a temporary storage facility.

“Department” means the Virginia Department of Transportation.

“Design manual” means the department’s Road Design Manual (effective July 1, 1998), Location and Design Division.

“Design speed” means a speed selected for purposes of design and correlation of those features of a street such as curvature, super elevation, and sight distance, upon which the safe operation of vehicles is dependent.

“Developer” means an individual, corporation, or registered partnership engaged in the subdivision of land.

“Director of the Asset Management Division” means the department employee responsible for the maintenance program of the State Highway System and the secondary system of state highways or his designee.

“Director of the Local Assistance Division” means the department employee responsible for administering these requirements and the final acceptance of streets as part of the secondary system of state highways maintained by the department or his designee.

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“Discontinue,” in all its forms, means the legislative act of the Commonwealth Transportation Board, pursuant to §33.1-150, Code of Virginia, that determines that a road no longer serves public convenience warranting its maintenance with funds at the disposal of the department.

“District administrator” means the department employee assigned the overall supervision of the departmental operations in each of the Commonwealth's nine construction districts.

“Drainage manual” means the department’s Drainage Manual (effective April, 2002), Location and Design Division.

“Dwelling unit” means a structure or part of a structure containing sleeping, kitchen, and bathroom facilities that is suitable for occupancy as a home or residence by one or more persons.

“Easement” means a grant of a right to use property of an owner for specific, limited use or purpose.

“Extrinsic structure” means any structure whose primary mission is not essential for the operation of a subdivision street. Customarily, an extrinsic structure is intended to separate the movement of people or products (e.g., utilities, unlicensed motor vehicles, golf carts, pedestrians, etc.) from those using the street. The term is primarily intended to identify grade separation structures that are not essential for the purposes of the street but may also apply to other structures within the right of way. Pedestrian or bicycle facilities that are accepted for maintenance as part of the street are exempt from the term.

“Functional classification” means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.

“Governing body” means the board of supervisors of the county but may also mean the local governing body of a town or city if appropriate in the application of these requirements.

“Intersection” means the juncture of two or more streets at which point there are three or more legs.

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“Level of service” means a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and passengers. For the purposes of these requirements, the applicable provisions of the Highway Capacity Manual, Transportation Research Board, shall serve as the basis for determining “levels of service.”

“Level terrain” means that condition where highway sight distances, as governed by both horizontal and vertical restrictions, are generally long or could be made so without construction difficulty or major expense.

“Loop street” means a street whose two outlets are to the same street.

“Minimum entrance standards” means the department’s Minimum Standards of Entrances to State Highways (24 VAC 30-71-10 et seq.), Mobility Management Division.

“Mountainous terrain” means that condition where longitudinal and traverse changes in the elevation of the ground with respect to the road or street are abrupt and where benching and side hill excavation are frequently required to obtain acceptable horizontal and vertical alignment.

“Neotraditional development” means a type of subdivision that creates a neighborhood or community design with qualities of a traditional small town, combining a mix of uses that may include retail establishments, offices, civic buildings, public squares, and multi-family and single-family housing, all within walking distance of one another. These developments may include a variety of buildings and land use densities along the same street. Street layout may follow a grid pattern using narrow streets and having multiple connections to surrounding neighborhoods. These developments may be referred to as “villages” or “hamlets” within the ordinances of the governing body.

“Nonresidential street” means a subdivision street adjacent to property that is anticipated to develop for purposes other than residential use.

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“Office building” means a building that is used primarily for conducting business transactions other than retail sales.

“Parking bay” means an area for parking two or more vehicles that are served by a short driveway connecting the parking area and the public street or, the parking space on a street needed by a vehicle or vehicles.

“Parking lane” means an area, generally 7 or 8 feet in width, adjacent to and parallel with the travel lane of a roadway that is used for parking vehicles.

“Pavement Design Guide” means the edition of the Pavement Design Guide for Subdivision and Secondary Roads in Virginia (effective August 1, 2000), Materials Division and Transportation Research Council.

“Permit Manual” means the department’s Land Use Permit Manual (24 VAC 30-150-10 et. seq.), Local Assistance Division Division.

“Phased development” (streets) means the method outlined in 24 VAC 30-91-130 whereby the acceptance of certain subdivision streets into the secondary system of state highways may be considered before being completely developed in accordance with all applicable requirements. (e.g. Two-lanes of a four-lane facility is considered for acceptance in advance of lanes 3 and 4 being finished.)

“Plans” means the standard drawings, including profile and roadway typical section, which show the location, character, dimensions and details for the proposed construction of the subdivision street.

“Plat” means the schematic representation of the land divided or to be divided.

“Private streets” means subdivision streets that have not been dedicated to public use or which require the permission or invitation of a resident or owner to use the street. Such streets are not intended to be included in the secondary system of state highways.

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“Privately maintained streets” means any public or private street that is not maintained by the department or the local governing body.

“Projected traffic” means the number of vehicles, normally expressed in average daily traffic (ADT), forecast to travel over the segment of the subdivision street involved.

“Public street” means a street dedicated to public use and available to the public’s unrestricted use without regard to the jurisdictional authority responsible for its operation and maintenance.

“PUD” means planned unit development which is a form of development characterized by unified site design for a variety of types and densities of development and as more specifically defined in § 15.1-430(s) of the Code of Virginia.

“Requirements” means the design, construction, and related administrative considerations herein prescribed for the acceptance of a subdivision street for maintenance by the department as part of the secondary system of state highways.

“Resident Engineer” means the department employee assigned to supervise departmental operations within a specified geographical portion of the Commonwealth, consisting of one to four counties, or his designee.

“Residential Street” means a subdivision street adjacent to property that is anticipated to develop as single-family residences, apartment buildings, or other similar dwelling structures.

“Right-of-way” means the land, property, or interest therein, usually in a strip, acquired for or devoted to a public street designated to become part of the secondary system of state highways.

“Roadway” means the portion of the road or street within the limits of construction and all structures, ditches, channels, etc. necessary for the correct drainage thereof.

“Secondary system of state highways” means those public roads, streets, bridges, etc., established by a local governing body pursuant to §33.1-229, Code of Virginia, and subsequently accepted by the

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department for supervision and maintenance under the provisions of Articles 6 and 11 of Chapter 1 or Title 33.1, Code of Virginia.

“Shared path,” means a facility that is intended to be used by pedestrians and bicyclists, and which is set apart from the roadway intended for motor vehicles.

“Shopping center” means a building or buildings containing two or more stores that are used primarily for retail sales but may include commercial trade or professional uses.

“Single-family residence” means a structure, other than an apartment building, maintained and used as a single dwelling unit or any dwelling unit that has direct access to a street and shares neither heating facilities, hot water equipment, nor any other essential facility or service with any other dwelling unit.

“Specifications” means the department’s Road and Bridge Specifications (effective 2002), including related supplemental specifications and special provisions.

“Standards” means the applicable drawings and related criteria contained in the department's Road and Bridge Standards (effective February, 2001).

“Subdivision” means the division of a lot, tract, or parcel into two or more lots, plats, sites, or other division of land for the purpose, whether immediate or future, of sale or of building development. Any resubdivision of a previously subdivided tract or parcel of land shall also be interpreted as a “subdivision.” The division of a lot or parcel permitted by § 15.2-2244 of the Code of Virginia will not be considered a “subdivision” under this definition, provided no new road or street is thereby established. However, any further division of such parcels shall be considered a “subdivision.”

“Subdivision street” means a public way for purposes of vehicular travel that results from the subdivision of land, including the entire area within the right-of-way. Public streets developed in accordance with these requirements and meeting the necessary public service provisions established herein shall be

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eligible for addition to the secondary system of state highways maintained by the department. Streets primarily intended to access property abutting or in the immediate vicinity of the street are deemed “local” subdivision streets.

“Subdivision Street Design Guide” means Appendix B of the Road Design Manual (effective July 1, 1998).

“Swale” means a broad depression within which storm water may drain during inclement weather, but which does not have a defined bed or banks.

“Through street” means a street which provides access between two other streets.

“Traveled way” means the portion of the subdivision street designated for the movement of vehicles, exclusive of shoulders, parking areas, turn lanes, etc.

“VDOT” means the Virginia Department of Transportation.

“VPD” means vehicles per day.

“VPH” means vehicles per hour.

“Watercourse” means a definite channel with bed and banks within which water flows, either continuously or in season.

24 VAC 30-91-20. Applicability.

This regulation is intended to govern subdivision street development and the criteria for acceptance of these streets. The Subdivision Street Design Guide offers guidance on the design and construction features of subdivision street development that may differ from highway construction projects. However, when not specifically addressed in one of these documents, the relevant requirements of the Road Design Manual (effective July 1, 1998), standards, specifications, Pavement Design Guide (effective August 1, 2000) and associated instructions shall govern.



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These requirements apply to all subdivision streets designated to become part of the secondary system of state highways. The department's review and approval shall apply only to streets proposed for addition to the secondary system of state highways maintained by the department. Any plans submitted for review that contain only streets proposed for maintenance by others may be reviewed for general guidance at the discretion of the resident engineer but will not be officially approved. However, any such review shall not represent the department's commitment to accept such streets for maintenance irrespective of the quality of the construction of the street or streets.

If a subdivision plan with streets proposed for VDOT acceptance include any streets that are not initially intended to be accepted into the secondary system, the plan must include a notation identifying these streets. In the absence of this notation, the plans will not be approved. It is also recommended that any streets proposed to be privately maintained also have a notation on the plat and impacted deeds that clearly indicate that as a prerequisite for the streets future acceptance, the streets must be improved to the department's prevailing standards for acceptance at no cost to the department.

24 VAC 30-91-30. Continuity of public street system.

The continuity of a publicly maintained street system is a prerequisite to the addition of any subdivision street into the secondary system of state highways. A street may only be accepted for state maintenance if it is the continuation of the network of public streets whose maintenance has been officially accepted by the department or, if appropriate, a city, town or county.

24 VAC 30-91-40. Large-lot-size subdivision.

Notwithstanding any provision of an ordinance adopted by the governing body that exempts certain large-lot-size subdivisions from its definition of subdivision, any street proposed for addition to the secondary system of state highways shall comply with applicable requirements as herein provided.

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24 VAC 30-91-50. Service requirements.A. Service Consideration

A street may only be accepted by the department for maintenance as part of the secondary system of state highways if it renders sufficient public service to justify expending public funds for its subsequent maintenance.

In the event the governing body requests the addition of a street before it meets these public service provisions, the resident engineer will review each request on an individual case basis and determine if the acceptance of a street prior to normal service requirements is justified. However, the resident engineer shall confer with the Director of the Local Assistance Division prior to deferring acceptance based solely on service requirements.

However, the public service requirements of this subsection may be waived for cul-de-sac streets less than 0.25 miles in length when required to complete the acceptance of all other streets within the subject section of the subdivision.

B. Criteria

For the purpose of these requirements, public service may include, but is not necessarily limited to streets meeting one or more of the following situations:

1. Serves three or more occupied units of varied proprietorship with a unit being a single-family residence, owner occupied apartment, owner occupied residence in a qualifying manufactured home park, a stand-alone business, or single business entity occupying an individual building, or other similar facility. However, streets providing service in settings similar to an apartment building setting will only be considered for acceptance if the street is well defined and appears to be a street rather than a travel way through a parking lot.

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2. Constitutes a connecting link between other streets that qualify from the point of public service.
3. Provides an extension of a street to the subdivision boundary to facilitate the continuity of possible adjacent development, if required by local ordinance. Such streets shall normally incorporate an adequate means for vehicles to turn around and reverse direction if greater than 0.01 miles in length.
4. Serves as access to schools, churches, public sanitary landfills, public recreational facilities, or similar facilities open to public use.
5. Serves at least 100 vehicles per day generated by an office building, industrial site, or other similar nonresidential land use in advance of the occupancy of three or more such units of varied proprietorship. Any addition under this provision shall be limited to the segment of a subdivision street that serves this minimum projected traffic and has been developed in compliance with these requirements.
6. Constitutes a part of the network of streets envisioned in the transportation plan or element of a county's comprehensive plan, which, at the time of acceptance, serves an active traffic volume not less than 100 vehicles per day.

C. Apartment and retail shopping complexes

Through streets that serve shopping centers or rental apartment buildings may be considered for maintenance as part of the secondary system of state highways if it is deemed by the department to provide a public service. However, internal streets do not normally qualify for addition to the system because their operation and maintenance is considered to be a responsibility of the owner, who stands to profit, rather than the tenant or customer.

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1. However, a street that serves as the principal access to rental apartment buildings may be considered to provide public service if unrestricted public use is permitted and maintenance continuity is practical.
2. Entrance streets and the internal traffic circulation system of shopping centers and apartment complexes qualify only if more than three property owners are served and the street is separated from the parking areas.
3. Streets serving manufactured home parks may only be considered if the residents of the park own the land occupied in fee simple.

D. Special Exceptions

There may be other sets of circumstances that could constitute public service. Consequently, any question regarding unclear situations should be referred through the resident engineer to the Director of the Local Assistance Division for resolution.

24 VAC 30-91-60. Administrative procedure.A. Conceptual subdivision sketch.

Prior to preparation of plats or plans, or both, the developer shall prepare a preliminary subdivision plat or conceptual plan of the entire development. The conceptual plat or plan shall provide sufficient information for VDOT to determine the functional classification of each street in the subdivision, depicting as a minimum, in conformance with the applicable provisions of the governing body's zoning and subdivision regulations:

1. The general location and configuration, including the terminus, of each street, including the traffic volume anticipated when the land served is fully developed in accordance with the land uses anticipated.

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2. The location and area of each type of permitted land use within the subdivision.
3. The location of any proposed transportation facility, within the subdivision's boundaries, included in the comprehensive plan of the governing body.
4. Other available information pertinent to the intended development of the subdivision.

The resident engineer shall provide written notice to the appropriate county official and the developer, if applicable, regarding the approved functional classification, as defined in the Subdivision Street Design Guide, for each street in the subdivision. This approval shall be valid as long as the basic concept for the subdivision's development, as submitted for review remains unchanged.

For subdivisions having more than 20 residential lots or a commercial or an industrial subdivision expected to generate more than 200 vehicles per day, a meeting of the developer, the planning staff of the locality in which the development is proposed, and the resident engineer is encouraged prior to the development of plans for submission.

B. Plan submission.

Plats or plans, or both, together with other pertinent data as herein prescribed, shall be submitted to appropriate officials in the local government and to the responsible resident engineer in accordance with the practices of the local government for all proposed subdivisions whose streets are intended to be added to the secondary system of state highways maintained by the department. The resident engineer may, subject to the availability of staff and upon the request of a county, cooperate in the review of proposed subdivisions to be developed to these standards but not initially intended for addition to the secondary system of state highways maintained by the department.

C. Plan review.

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Upon receipt of the plats or plans, or both, the resident engineer will arrange for the appropriate review to determine compliance with all applicable requirements. The general procedure for this review is described in 24 VAC 30-91-280.

D. Plan approval.

The resident engineer will advise the appropriate county official and the developer, if applicable, as to the results of the review.

1. If the street development proposed by the plats or plans, or both, is determined to be in compliance with these requirements, the resident engineer will provide written confirmation of this finding. This action signifies the resident engineer's approval of the street design shown on the plats or plans, as submitted. Any subsequent revision, additions, or deletions thereto shall require specific written approval of the resident engineer for each such change.
2. Where the revision of the submitted plats or plans is determined necessary, the resident engineer will list the required changes in a written response to the county official and the developer, if applicable. Upon completion of the specified revisions, the plats or plans will be resubmitted for review and approval by the resident engineer as prescribed in 24 VAC 30-91-280.

The department's approval of a construction plan shall constitute its commitment to accept the streets depicted thereon, when all applicable provisions of these requirements are satisfied and the streets have been constructed according to the approved construction plan and supporting specifications. However, during VDOT's inspection of construction, if a situation is discovered that was not addressed on the approved plan that could, in the opinion of the resident engineer, adversely affect public safety, acceptance of the street shall be deferred until the situation is corrected.

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The department's approval of a construction plan shall expire after a period of three years if construction has not commenced, in which case the plan shall be resubmitted for subsequent review and approval.

E. Street acceptance.

Upon the satisfactory completion of construction of the subdivision street the department will advise the local governing body regarding the street's readiness for acceptance and the governing body, in consultation with the resident engineer, will initiate its acceptance into the secondary system of state highways maintained by the department provided:

1. The developer dedicates the prescribed right-of-way to public use.
2. The street has been constructed in accordance with the applicable specifications, standards and the plats or plans approved by the department.
3. The street renders a public service as prescribed in 24 VAC 30-91-50 or as may otherwise be approved under those provisions.
4. The street has been properly maintained since its completion.
5. The developer furnishes the surety and fees in accordance with 24 VAC 30-91-160.
6. The governing body has executed all agreements prescribed by these requirements, unless specifically waived on an individual case basis by the Director of the Local Assistance Division.
7. The governing body requests, by proper resolution which includes the guarantee of an unrestricted and unencumbered right-of-way as dedicated, the department's acceptance of the street into the secondary system of state highways under its maintenance.

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Upon the department's determination that the requested addition is in compliance with the applicable provisions of these requirements, the governing body will be officially advised of the street's acceptance into the secondary system of state highways and the effective date of such action.

This notification serves as the resident engineer's authority to begin maintenance thereon.

24 VAC 30-91-70. Discretionary authority.

The department's resident engineers are authorized considerable discretionary authority regarding the development of subdivision streets functionally classified as "local." Such judgments should take into consideration the individual situation, but in no instance are the safety features, structural integrity, or traffic capacities prescribed by these requirements to be sacrificed. Meandering alignment and rolling grades are satisfactory, provided adequate stopping sight distances and reasonable alignment and gradients are provided to safely accommodate the projected traffic at the design speed.

24 VAC 30-91-80. Entrance permits.

An entrance permit is required by the general rules and regulations of the Commonwealth Transportation Board for any form of access to state maintained roads, including the connection of a subdivision street whether the street is intended for acceptance by the department or will remain the responsibility of others. Such a connection shall comply with applicable commercial entrance requirements of the department's Land Use Permit Manual (24 Vac 30-150-10 et seq.) and Minimum Standards of Entrances to State Highways (24 VAC 30-71-10 et seq.).

Due to the wide variation in prevailing conditions, each location shall be evaluated individually to determine exact requirements. Therefore, it is incumbent upon the developer or his designee to apply for any required entrance permit at the appropriate time to insure the desired completion of the development. Such application shall be made to the resident engineer and be consistent with the approved plats or plans for the subdivision or the document reviewed for the connection of a street that is to remain privately maintained.



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24 VAC 30-91-90. Appeal to District Administrator.

The district administrator is authorized to consider and render a ruling on unresolved differences of opinion between the developer and the resident engineer that pertain to the interpretation and application of these requirements.

To obtain this review, the developer shall provide the district administrator, the resident engineer and the county official a written request for such action, describing any unresolved issue. After reviewing all pertinent information, the district administrator will advise the developer in writing regarding the decision of the appeal, with a copy to the county official and the resident engineer. The developer may further appeal the district administrator's decision to the commissioner or his designee. All correspondence requesting an appeal should include copies of all prior correspondence regarding the issue(s) with the county official and department representatives.

24 VAC 30-91-100. Precedence of local subdivision ordinance.

Pursuant to §33.1-229, Code of Virginia, new streets are established by the governing body of the locality in which they are located. Any requirements of the subdivision ordinance adopted by the governing body that are equal to or greater than these requirements shall become the department's requirements in that locality and govern unless the local governing body concurs with an exception to their higher standards.

24 VAC 30-91-110. Applicable requirements of other regulatory agencies.

Should a subdivision street proposed for acceptance into the secondary system of state highways be subject to provisions of any regulatory agency pertaining to the maintenance, control, or operation of the completed street, the developer shall provide the resident engineer with a copy of such requirements at the time its addition is requested.

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PART II. SPECIFIC PROVISIONS.24 VAC 30-91-120. Design requirements.

Most criteria addressing the design of new subdivision streets can be found in the Subdivision Street Design Guide. However, the following provisions are provided for guidance concerning features that require agreements or formal acknowledgements of the governing body before VDOT's acceptance of the street or streets within a subdivision.

When an agreement is required between the local governing body and the department as a prerequisite to the acceptance of a subdivision street, nothing in these requirements shall preclude the local governing body from entering into separate agreements with other entities to fulfill its responsibilities. However, if the provisions are intended to ensure the safety of the public using the street, the department reserves the right to approve the involvement of the other party or parties.

A. New Streets.1. Geometric Requirements

Geometric requirements for new subdivision streets are established in the Supplemental Design Guide for Subdivision Streets. In the event a reduced pavement width is proposed, the reduced roadway will only be considered at the request of the local governing body, which by formal resolution, shall express its commitment to require sufficient off-street parking to accommodate the land served.

2. Turn lanes.

Left or right turn lanes shall be provided at intersections when the department determines that projected turning movements warrant their installation. These facilities shall be designed in accordance with the appropriate provisions of the department's Minimum

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Standards of Entrances to State Highways and, if necessary, additional right-of-way shall be provided to accommodate these facilities.

3. Cul-de-sacs and turnarounds.

An adequate turnaround facility shall be provided at the end of each cul-de-sac or stub street accepted to permit the safe and convenient maneuvering by service vehicles. Various configurations of turnarounds are illustrated in the Subdivision Street Design Guide; however, alternative configurations may be approved by the resident engineer. Additional right of way shall be provided as required by the design of the turnaround. Normally, any non-traveled way areas within the turnaround, such as an island, shall be included in the dedicated right of way of the facility.

For circular turnarounds, a well-defined, identifiable street segment, equal to the normal lot width along the intersected street that serves the cul-de-sac or 50 feet, whichever is greater, shall extend from the intersected street to the turning area.

4. Pavement structure

a. Pavement Design

The pavement structure for new subdivision streets shall be in accordance with the Pavement Design Guide (effective August 1, 2000), including any prescribed underdrains. Prior to construction of the pavement sub-base and finish courses, the resident engineer shall approve the proposed pavement design.

b. Special Pavement Surfaces

The resident engineer may approve special pavement surfaces, such as the use of stamped pavement or the use of paving blocks or bricks. However, if the

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pavement design is a type not addressed by the Pavement Design Guide (effective August 1, 2000) or otherwise not in general use by the department, an agreement shall be provided by the governing body that addresses the future maintenance of such pavement.

c. Pavement additions to existing streets

When an existing VDOT maintained roadway is to be widened to accommodate additional lanes or the addition of turn lanes, the necessary pavement design shall be obtained from the resident engineer and the entire surface of the roadway (old and new portions) shall be overlaid and re-striped as required by the resident engineer.

B. Bridge and Drainage Structures

Bridges and drainage structures shall be designed and constructed in accordance with all department criteria and standards. The resident engineer may require special review of the plans and construction inspection. In addition, pursuant to 24 VAC 30-91-120.D, certain structures may require the execution of an agreement between the local governing body and the department as a prerequisite for the acceptance of the street.

C. Crossings of Dams

Except as otherwise provided in this subsection, subdivision streets that occupy embankments that create a dam may be eligible for acceptance into the secondary system of state highways subject to the following criteria:

1. Criteria

- a. The right of way across the dam is recorded as either an easement for public road purposes or is dedicated specifically to the governing body. Right of way that

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includes a dam and which is dedicated in the name of the Commonwealth or any of its agencies is not acceptable and roads through such right of way will not be accepted as a part of the secondary system of state highways.

- b. An appropriate alternate roadway facility for public ingress and egress, with suitable provisions to assure its perpetual maintenance, is provided.
- c. An engineer, licensed to practice in the Commonwealth of Virginia, certifies that the dam's hydraulic and structural design is in accordance with national engineering practice.
- d. Applicable federal and state permits have been secured prior to VDOT acceptance of the street.
- e. Protection of the roadway from inundation shall be provided as herein prescribed by these requirements. Flow of water over the roadway is not acceptable as an emergency spillway.
- f. VDOT maintenance responsibilities shall be limited to the roadway surface and related elements. The maintenance of the dam shall be the responsibility of the owner, other than VDOT, as established by § 33.1-176 of the Code of Virginia.
- g. The governing body shall provide the department with an acceptable agreement, which acknowledges the department's liability is limited to the maintenance of the roadway and its related elements and that the department has no responsibility or liability due to the presence of the dam.

2. Exceptions – Waiver of Agreement

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For the purposes of this subsection, if the roadway does not share the embankment of the dam, even if the area between the embankments is filled in, the roadway will not be considered to occupy a dam, provided the impoundment includes an overflow facility sufficient to prevent the street from being inundated as the result of a 100 year storm.

Otherwise, the street will be considered to cross a dam if any part of the roadway embankment and that of the dam overlap, in which case the acceptance of the road for maintenance by the department will be subject to all provisions of 24 VAC 30-91-120.C.1

D. Roadway Drainage.

1. Policy and procedures.

All drainage facilities shall be designed in accordance with the department's Drainage Manual (effective April, 2002) and supplemental directives. All drainage computations supporting a proposed drainage design shall be submitted to the department for review as part of the documents necessary for the approval of a construction plan.

2. Storm water management.

The department considers matters regarding storm water management associated with the construction of new subdivision streets to be under the authority of the local governing body. Consequently, the department does not require storm water management in the construction of subdivision streets. However, storm water management, including the construction of detention or retention facilities, or both, is recognized as an available design alternative. Where the developer is required by regulations promulgated by an agency or governmental subdivision other than the department or the developer chooses to use storm water management facilities in the design of a subdivision, the governing body shall, by formal agreement, and as a prerequisite for the transfer of jurisdiction over

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the street to the department, acknowledge that the department is neither responsible nor liable for the storm water detention facility.

Stormwater management controls for VDOT projects are designed in accordance with the VDOT Erosion and Sediment Control and Stormwater Management Program Specifications Manual (effective March 1, 2004), the Virginia Erosion and Sediment Control Regulations, 4 VAC 50-30-10 et seq., and the Virginia Stormwater Management Regulations, 4 VAC 3-20-10 et seq. While the department can not require these controls to be used in the development of new subdivision streets, because such activity is regulated by the local governments rather than by VDOT, developers and counties may find these controls useful in managing land development activity.

Devices and treatments intended to mitigate the impact of storm water shall be placed off of the right of way and shall be designed to prevent the backup of water against the roadbed.

Where development activity results in increased runoff to the extent that adjustment of an outfall facility is required, such adjustment shall be at the developer's expense and be contained within an appropriate easement.

3. Storm water management impoundments.

For the purposes of this subsection, a street proposed for acceptance as part of the secondary system maintained by the department will not be considered to cross a dam if the purpose of the impoundment is exclusively for managing storm water runoff, in which case the aforementioned agreement shall not be required provided:

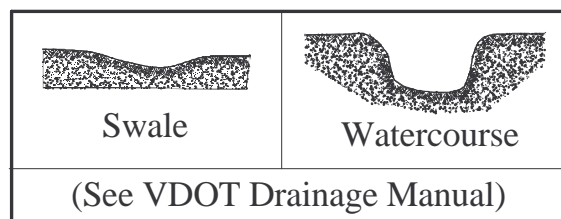
- a. The maximum depth of the water retained at its flood elevation (100-year storm) is not greater than 3 feet, and

## SUBDIVISION STREET REQUIREMENTS

- b. The surface area of the impoundment at full flood is not greater than 2 acres, and
- c. The surface area of the impoundment at full flood is outside of the limits of the right of way dedicated to public use, and
- d. The materials retaining the impoundment are impervious and designed to prevent leakage that might otherwise undermine the adjacent roadway fill, and
- e. An emergency spillway is provided that will ensure the roadway will not be inundated as the result of a 100-year storm, and
- f. The County executes or has executed an agreement acknowledging the department is not responsible for the operation, maintenance, or liability of storm water management facilities established within the subdivision or countywide.

4. Drainage Easements.

- a. An acceptable easement shall be provided from all drainage outfalls to a natural



watercourse, as opposed to a swale. (See 24 VAC 30-91-10 for definitions.)

- b. The department normally accepts and maintains only that portion of a drainage system that falls within the limits of the dedicated right of way for a street. However, the department's responsibility to enter drainage easements outside of the dedicated right-of-way shall be limited to undertaking corrective measures to alleviate problems that may adversely affect the safe operation or integrity of the roadway.



## SUBDIVISION STREET REQUIREMENTS

- c. In the event drainage to a natural watercourse is not accomplished or is interrupted, an acceptable agreement from the governing body that acknowledges that the department is neither responsible nor liable for drainage from the roadway, may be considered as an alternative to providing an easement to a natural watercourse.

24 VAC 30-91-130. Phased development of subdivision streets.A. Policy.

Certain subdivision streets, that would require four or more travel lanes to accommodate the projected traffic, may be accepted by the department for maintenance after completion of the first two lanes to an acceptable initial phase of construction, upon the request of the governing body. It is recognized there is a distinction between those streets that benefit the overall transportation network and those that primarily serve the development of land and therefore the criteria for phased construction for each situation differs as described in section B below.

However, in all cases, the right-of-way required for the road at its complete stage of construction will be dedicated and accepted as part of the initial street acceptance. In addition, the initial phase of construction shall be designed and constructed to facilitate construction of the remaining phase in a manner that will avoid the need to reconstruct the initial two lanes.

Consideration for the acceptance of any street under the provisions of this section shall be limited to the phased development of only the street's roadway. All other applicable requirements, e.g., public service, drainage easements, and administrative procedures shall apply.

B. Criteria.

## SUBDIVISION STREET REQUIREMENTS

1. For streets included in the county's transportation element of its comprehensive plan that serve diverse areas of the region or county, no special agreement or acknowledgement is needed as a prerequisite to acceptance, provided:
  - a. The street is part of a transportation corridor that was formally adopted as a part of the County's Comprehensive Transportation Plan prior to the local governing body's approval of the plat or plan for the development of the adjacent land.
  - b. The transportation corridor is a major thoroughfare planned primarily to move through traffic.
  - c. When fully developed the street must satisfy the department's functional classification criteria as a major collector or higher.
  - d. The street has a projected traffic volume of 8,000 vehicles per day or less for a period of 10 years following the date of the acceptance for maintenance by the department.
  
2. For all other streets, the local governing body's resolution requesting acceptance of the initial two lane section will include provisions that acknowledge:
  - a. The local governing body agrees all costs incurred in the street's complete construction, including right-of-way, engineering, utility adjustment, etc., shall be provided from funds other than those derived from state revenue sources administered by VDOT, except as may be expressly authorized by the department's Director of the Local Assistance Division.
  - b. The local governing body agrees it is their responsibility to ensure that the roadway is completed as needed to accommodate the traffic. However the

## SUBDIVISION STREET REQUIREMENTS

county also acknowledges that a determination that the street needs to be completed to its ultimate section will be made by the resident engineer or his designee once it is determined that the first two lanes will not sustain a minimum level of service of "D."

C. Procedures.

1. Plats or plans, or both, for the street's complete development, in accordance with all applicable provisions of these requirements, shall be submitted for approval.
2. The plats or plans shall also delineate the street's initial development as proposed pursuant to this section. In no case shall this design provide less than one-half of the roadways typical section required by the applicable requirements for the street's complete development.
3. A capacity analysis shall normally be submitted to document that an acceptable level of service will be maintained for the intended duration of the initial phase of development. In determining an acceptable level of service, the beneficial effect of the proposed street on the overall transportation network will be considered. The resident engineer or his designee may waive this requirement for a traffic capacity analysis.
4. A determination will be made by VDOT in consultation with the locality whether the street can be approved for phase development and which criterion in section B applies.
5. Upon the resident engineer's determination that the proposal is in compliance with the applicable provisions of this section, the plans may be approved accordingly.
6. Upon completion of the street's initial phase in accordance with approved plans, its compliance with all other applicable provisions of this section and the inclusion of the

## SUBDIVISION STREET REQUIREMENTS

appropriate language in the resolution, the street may be accepted into the secondary system of state highways.

24 VAC 30-91-140. Relocations, adjustments, and improvements to streets maintained by the department

Relocations of streets currently maintained by the department shall be coordinated with and approved by

VDOT as follows:

- A. All such work shall be accomplished pursuant to a land use permit issued by the department after the required right of way has been dedicated to public use or as otherwise required by the department.
- B. All work, including the relocation, adjustment, and improvement of existing streets under VDOT jurisdiction shall be subject to the department's direction rather than these requirements. Such work shall normally include overlaying and re-striping the old new portions of the roadway.
- C. The relocation of streets maintained by the department shall only be accomplished with the consent of the local governing body.
- D. Traffic shall normally be maintained on streets under the department's jurisdiction until the new portion has been accepted by the department for maintenance unless the department authorizes a closure of the road to traffic.
- E. No street or roadway maintained by the department and actively used by the public shall be abandoned or vacated unless a new street serving the same citizens has been constructed and accepted for maintenance by the department.
- F. Streets previously discontinued exist as a public way under the jurisdiction of the local governing body and should be abandoned or vacated prior to the development of land associated with such streets.

## SUBDIVISION STREET REQUIREMENTS

24 VAC 30-91-150. Right-of-way.A. Width.

A clear and unencumbered right-of-way shall be dedicated to public use for any subdivision street proposed for addition to the secondary system of state highways maintained by the department.

The width of right of way shall be as indicated in the Supplemental Subdivision Street Design Guide and shall be sufficient to include all essential elements of the roadway, including the safe clear zone and pedestrian/bicycle facilities intended to be maintained by the department. However, supplemental easements may be used to accommodate sight distance requirements and slopes for cuts and fills. The right of way line shall be not less than 3 feet behind any roadway facility to be maintained by the department.

When an existing state maintained road is widened, the additional right way should be dedicated as follows:

1. If the existing right of way consists of a prescriptive easement, to the degree that the developer controls the land, the right of way shall be dedicated to public use from the centerline of the alignment.
2. If the existing right of way is dedicated to public use, the additional right of way shall be dedicated to public use.
3. If the existing right of way is titled in the name of the department or the Commonwealth, the additional right of way shall be deeded to the department or to the Commonwealth, consistent with the title of the existing right of way.

B. Utilities.

## SUBDIVISION STREET REQUIREMENTS

Local governments, the development community, and the utility community are encouraged to coordinate and consolidate their interests as part of the initial development plan.

To assure the unencumbered dedication of the right-of-way for subdivision street additions, easements or other interests within the platted right-of-way shall be quitclaimed of any prior rights therein. In exchange, a permit may be issued by the department for a utility to occupy the area involved. This permit will be processed by the resident engineer upon acceptance of the street into the secondary system of state highways maintained by the department. No inspection fee is required for permits so issued. However, the approval of the permit shall be contingent upon the utility's compliance with applicable provisions of the Land Use Permit Manual (24 VAC 30-150-10 et seq.).

1. Underground utilities

The department allows the placement of underground utilities within the dedicated right of way of streets.

Underground utilities should normally be located outside of the travel lanes and desirably beyond the pavement. However, if the governing body has established adequate requirements for the design, location, and construction of underground utilities within the right-of-way of subdivision streets, including provisions that ensure adequate testing and inspection is performed to minimize future settlement, those requirements shall become the department's requirements and govern unless those requirements conflict with a requirement of the department.

When location of the utilities outside of the pavement area is not practical and is endorsed by the local government through their requirements, such installations:

a. Are acceptable within the parking area and the shoulders along the street.

## SUBDIVISION STREET REQUIREMENTS

b. May be acceptable beneath the travel lanes of the street when provisions are made to ensure adequate inspection and compaction tests and

(1) Longitudinal installations and manholes are located outside of the normal travel lanes, or

(2) Longitudinal installations and manholes are placed in the center of an undivided roadway out of the wheel path.

2. Open-cutting of hard-surfaced roadways

The department usually prohibits the open-cutting of hard-surfaced roads except in extenuating circumstances. Therefore, all underground utilities within the right-of-way, as determined necessary by good engineering practice to serve the complete development of adjacent properties, shall be installed during the street's initial construction and prior to the application of its final pavement surface course. This shall include extensions of all necessary cross-street connections or service lines to an appropriate location beyond the pavement and preferably the right of way line.

In the event it is necessary to open the street pavement to work on utilities after the surface has been placed, additional compaction tests and paving as necessary to restore the integrity and appearance of the roadway may be required at the discretion of the resident engineer.

3. Cross-street conduits

To facilitate the placement of future underground utilities, cross-street conduits are encouraged with placement of such conduits occurring on each street at intersections and approximate every 1000 feet along the length of a street.

4. Above ground utilities

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All above ground utilities shall be installed behind the sidewalk or as close as possible to the limits of the street's right-of-way.

C. "Spite strips."

Plans that include a reserved or "spite" strip which prohibits otherwise lawful vehicular access to a street from the adjacent properties, whether within or outside the subdivision, will not be approved.

D. Extrinsic structures and encroachments within the right of way

Recording of a plat causes the fee title interest of areas dedicated to public use to transfer to the local governing body. Therefore, objects installed within the right of way for purposes other than transportation may be considered an unlawful encroachment in the right of way and prevent the right of way from being considered clear and unencumbered.

Posts, walls, signs, or similar ornamental devices that do not interfere with roadway capacity or encroach into the safe clear zone or interfere with prescribed sight distance requirements may be permitted within the right-of-way. However, specific authorization by the resident engineer or as authorized under the Land Use Permit Manual (24 VAC 30-150-10 et seq.) is a requisite for these devices or any other encroachment located within the right of way. For the purposes of this subsection, mailboxes installed on breakaway posts may occupy the right of way without permit. Otherwise such encroachments that do not encroach into the safe clear zone may be allowed under a land use permit issued by the resident engineer.

The department will accept grade separation structures as part of new subdivision streets, if the structure is not considered to be an extrinsic structure and is intended to separate the movement of pedestrians or cyclists from traffic using the roadway provided:



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1. The structure is available and unrestricted to public use, and
2. The structure is accessible to pedestrian facilities, if any, situated along the street, and
3. The projected traffic volume of the street is not less than 4000 vpd or, if the facility provides the principle pedestrian access to a school, a peak hour traffic volume of 450 vph is projected.

In all other instances where an extrinsic structure exists within the right of way of the street, the street will only be accepted as part of the secondary system of state highways maintained by the department if the local governing body and the department have executed an agreement acceptable to the department that acknowledges the department has no responsibility or liability due to the presence of the structure and assures the costs of inspection, maintenance, and future improvements to the structure are provided from sources other than those administered by the department.

In all cases, the responsibility for lighting, safety, and security of those using such facilities shall remain a responsibility of local government.

24 VAC 30-91-160. Surety and fees.

Except as otherwise provided herein, the developer shall provide surety to guarantee the satisfactory performance of the street, a maintenance fee to offset the department's maintenance costs, and an administrative cost recovery fee to recover the department's costs associated with the review of subdivision plans, the inspection of new subdivision streets, and the administrative processing of the acceptance of new streets as determined in this section. All surety and fees collected under this section shall be based on the date of the local governing body's request and the aggregate mileage of new subdivision streets in that request, rounded up to the next tenth. In the event of extenuating circumstances beyond the developers control, the commissioner or his designee may waive all or a portion of any of the surety and fees.

## SUBDIVISION STREET REQUIREMENTS

A. Surety.1. Type of surety and expiration.

The developer shall furnish an acceptable surety, in accordance with this section, to guarantee the satisfactory performance of the street for a period of one year from the date of its acceptance into the secondary system of state highways. In the event the developer fails to provide surety and development fees within the 30-day period following the local governing body's request for the department to accept the maintenance of a street, the department's previous final inspection of the street shall be considered void and a new inspection shall be required. The surety may be in the form of a performance bond, cash deposit, certified check, irrevocable letter of credit, third party escrow account, or other form mutually satisfactory to the department and the developer. Under no circumstances shall the department or any agency of the Commonwealth be named the escrow agent nor shall funds deposited with the department as surety be subject to the payment of interest.

2. Alternatives to surety.

a. In jurisdictions where the staff of the governing body administers a comprehensive subdivision construction inspection program which has been approved by the department, the surety may be waived upon certification by the governing body that the proposed addition has been constructed in accordance with approved plans and specifications.

b. If requested by the developer and subject to availability of departmental personnel, the VDOT may perform the construction inspection of subdivision streets proposed to be added to the secondary system of state highways. In such cases, the developer shall bear all costs incurred by the department and the surety shall be waived.

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3. Amount of surety

Surety shall be calculated at the rate of \$2,000 per lane per tenth mile of street, or portion thereof, to be accepted by the department for maintenance as part of the secondary system of state highways.

B. Maintenance fee.

A maintenance fee will be required for the acceptance of any street as part of the secondary system of state highways. The maintenance fee shall be calculated at the rate of \$150 per lane per tenth mile or portion thereof.

C. Administrative cost recovery fee

1. Application of the administrative cost recovery fee.

To recover a portion of the department's direct costs associated with the review of subdivision plans, the inspection of new subdivision streets, and the administrative processing of the acceptance of new streets, an administrative cost recover fee shall be required from the developer at the time the streets are accepted by the department. The amount of this cost recovery fee shall be based on the following:

a. For streets shown on subdivision construction plans approved prior to the effective date of the regulation,

(1) No cost recovery fee will be collected for street additions requested by the local government before July 1, 2005, and

## SUBDIVISION STREET REQUIREMENTS

(2) The cost recovery fee structure described in subparagraph c of this section shall apply until July 1, 2007, after which the department's prevailing cost recovery fee structure will apply.

b. For streets shown on subdivision construction plans approved after the effective date of the regulation, the department's cost recovery fee structure in effect at the time of construction plan approval shall apply and be fixed for a period of three (3) years from the date of said approval, after which the prevailing cost recovery fee structure shall apply.

c. The administrative cost recovery fee shall be computed at a base rate of \$250 per lane, without regard to street length, plus \$100 per lane per tenth mile, or portion thereof. However, in the event the surety for new streets is waived under the provisions of section 24 VAC 30-91-160.A.2, the administrative cost recovery fee shall be reduced fifty percent (50%).

2. Alternatives to the administrative cost recovery fee

As an alternative to the administrative cost recovery fee, the department may use one of the following approaches to recover its direct costs;

a. For any subdivision, at the developer's request, the department may establish an account for the purposes of tracking these costs and billing the developer not more often than every 30 days.

b. For large, complex, multi-use developments, the department, at its option, may establish an account for the purpose of tracking these costs and billing the developer not more often than every 30 days. However, the cost recovery fee

## SUBDIVISION STREET REQUIREMENTS

assessed under this provision shall not be greater than two times the prevailing cost recovery fee structure.

c. If requested to provide plan review or inspection services or both for subdivision streets that are not intended for maintenance by the department, the department may establish an account for the purposes of tracking these costs and billing the developer not more often than every 30 days.

3. Administrative cost recovery fee, annual adjustments

The department shall have the option of adjusting the annual cost recovery fee, in which case it shall compile information regarding its costs for the review of subdivision plans, the inspection of new subdivision streets, and the administrative processing of the acceptance of new streets during the previous fiscal year and report this information to the commissioner by January 1 of each year. The commissioner may adjust the administrative cost recovery fee by not more than 25 percent of the fee structure in effect on July 1 of the previous calendar year but not greater than the department's average direct cost as established in the report.

If the commissioner deems a change in the cost recovery fee structure is warranted, implementation of the change shall be made as follows:

a. Notice of the adjusted fee structure, including the report on which it is based or information about where the report may be viewed, will be published in the Virginia Register in April of that year and

b. The adjusted fee structure shall become effective on July 1 that year.

## SUBDIVISION STREET REQUIREMENTS

24 VAC 30-91-170. Pedestrian and Bicycle Facilities

Pedestrian and bicycle facilities may be accepted as part of subdivision streets when constructed in accordance with applicable criteria and standards when located within the dedicated right of way.

However, the department's responsibility for maintaining pedestrian facilities, including combined bicycle pedestrian facilities separated from the roadway, shall normally be limited to the replacement of the facility. Routine ordinary maintenance of such facilities (e.g. removal of snow and leaves) shall normally be the responsibility of others.

A. Sidewalk criteria.

Sidewalk shall be constructed in accordance with the Subdivision Street Design Guide. However, sidewalk that meanders vertically in comparison to the grade of the roadway may be considered non-compliant sidewalk.

B. Bicycle facility criteria

Bicycle facilities contiguous with the portion of the street intended for motor vehicles shall be in accordance with the department's design and construction criteria set forth in the Road Design Manual (effective July 1, 1998).

C. Multi-use pedestrian and bicycle trail criteria

Multi-use pedestrian and bicycle trails that are separated from the roadway pavement may be accepted for maintenance as part of the street if constructed in accordance with the Road Design Manual (effective July 1, 1998) and provided they closely follow the vertical alignment of the roadway without meandering on and off the right way.

D. Non-compliant sidewalk and non-compliant multi-use pedestrian and bicycle trails

## SUBDIVISION STREET REQUIREMENTS

Non-compliant sidewalk and multi-use pedestrian and bicycle trails will not be accepted for maintenance, but may be located on the dedicated right of way under a permit issued by the department to the local governing body.

Such permits will clearly specify the responsibility for maintenance of the facility and related activities to the extent the facility occupies the street's right-of-way. The permit applicant shall normally be a county, incorporated town, or other entity that has perpetual maintenance capability.

Non-compliant sidewalk and trails may be constructed of bituminous concrete, hydraulic concrete, gravel, or other stabilizer convenient to the applicant.

24 VAC 30-91-180. Guardrail.

Guardrail shall be used when required by the resident engineer consistent with the Road Design Manual (effective July 1, 1998).

24 VAC 30-91-190. Curb and gutter.

For the purpose of these requirements, the use of a curb and gutter is an acceptable alternative, rather than a requisite, for the acceptance of subdivision streets. However, when used, curb and gutter shall be designed in accordance with the Subdivision Street Design Guide and only one curb and gutter design may be used along the length of a street.

A. Driveway entrance requirements

Without regard to the curb design used, the curb shall incorporate a driveway entrance apron, as illustrated in the Subdivision Street Design Guide to provide a smooth transition from the gutter invert or roadway surface onto the driveway. However, exceptions may be granted by the resident engineer when roll top curb is used if requested by the local official.

## SUBDIVISION STREET REQUIREMENTS

B. Curb cut ramps

All streets that incorporate accessible routes for pedestrian use, such as existing or proposed sidewalks, shall, without regard to the curb design used, include curb-cut ramps at intersections for use by persons with mobility impairments and other applicable provisions of the Americans with Disabilities Act.

24 VAC 30-91-200. Neotraditional developments.

Streets maintained with public transportation funds should be able to safely accommodate the effective and efficient movement of those classes of motor vehicles expected to utilize those streets. Consequently, the design of streets intended for maintenance by the department within neotraditional or other unique developments also must comply with all applicable provisions of these requirements and the department's applicable design criteria.

The Subdivision Street Design Guide offers additional guidance on Neotraditional Developments and acceptable unique features typically seen in these type developments. The utilization of many neotraditional concepts and traffic calming features can normally be accomplished within the flexibility available within VDOT's subdivision street design criteria and specific requests for exceptions when requests cannot be accommodated should be in writing to the resident engineer.

All plans that include neotraditional characteristics or traffic calming measures should have those features clearly identified on the plans for review and approval by the resident engineer in consultation with other disciplines within the department as deemed necessary, as a prerequisite of plan approval, construction, or acceptance of the street as part of the secondary system of state highways maintained by the department.



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24 VAC 30-91-210. Railroad crossing.

Railroad crossings will only be accepted by the department for maintenance pursuant to an agreement with the rail company, which, before being executed by the railroad and the developer or the governing body, has been reviewed and approved by the department in consultation with the Department of Rail and Public Transportation. Such agreements shall be fully executed before the initiation of procedures for the acceptance of the street as part of the secondary system of state highways maintained by the department.

All at grade railroad crossings to be maintained by the department shall be protected with short-arm gates with flashing signals, flashing signals alone, or other protective devices deemed appropriate by the department.

24 VAC 30-91-220. Private entrances.

All private entrances shall be designed and constructed in accordance with the applicable standard of the department's Minimum Entrances to State Highways (24 VAC 30-71-10 et seq.). All entrance pipe culverts shall be sized to accommodate the run off expected from a 10-year frequency storm. On streets with curb and gutter, the appropriate entrance gutter, as prescribed by 24 VAC 30-91-190, shall be provided.

24 VAC 30-91-230. Parking.

Perpendicular and angle parking along subdivision streets shall normally be prohibited. However, perpendicular and angle parking along subdivision streets may be considered provided features along the street cause the street to readily appear to be a street rather than a travel way through a parking lot. In addition, additional pavement width may be necessary between the travel lanes and the parking spaces to allow a car to back from its normal parked position, orient itself for entering the travel lanes and stop

## SUBDIVISION STREET REQUIREMENTS

without either encroaching into the travel lanes or having the driver's vision of on-coming traffic obscured by adjacent, parked vehicles.

Street designs that anticipate the restriction of on street parking shall only be approved with the consent of the county official and the resident engineer.

In the absence of local regulations that are deemed acceptable by the department, the following criteria shall apply for the design of subdivision streets:

- A. A minimum of two off-street parking spaces per dwelling unit, exclusive of garage facilities associated with the unit, shall be provided in the proximity of the unit they are intended to serve. Additional off-street parking space shall be provided when the width of any residential curb and gutter roadway is proposed for reduction as permitted in the Subdivision Street Design Guide. Except as may be associated with corner dwellings, the availability of on-street parking along other streets will not normally be considered as additional off-street parking.
- B. If parking bays are provided, they shall be located off the street's right-of-way and designed to prevent vehicles from backing into the adjacent subdivision street.
- C. Entrances to parking bays shall be separated by at least 50 feet and designed in accordance with the appropriate provisions of the standards or Land Use Permit Manual (24 VAC 30-150-10 et. seq.).

24 VAC 30-91-240. Landscaping.

All disturbed areas within the dedicated right-of-way and easements of any subdivision street shall be restored with vegetation compatible with the surrounding area. No street will be accepted as part of the secondary system of state highways maintained by the department where there is visual evidence of erosion or siltation unless appropriate protective measures, in accordance with VDOT's construction practices, have been taken.

## SUBDIVISION STREET REQUIREMENTS

Except as otherwise approved by the resident engineer, planting of trees or shrubs on the right of way shall be in accordance with the Subdivision Street Design Guide.

24 VAC 30-91-250. Lighting.

Roadway, security, or pedestrian lighting, when required by the governing body or desired by the developer, shall be installed in accordance with the Subdivision Street Design Guide. However, VDOT shall not be responsible for the maintenance or replacement of lighting fixtures or the provision of power for lighting.

24 VAC 30-91-260. Noise abatement.

Where applicable, the governing body and the developer are reminded of the board's adoption, on August 18, 1988, of the State Noise Abatement Policy (24 VAC 30-80-10 et seq.), which applies to nonfederal-aid highway construction and improvement projects.

24 VAC 30-91-270. Effective date and transition.

These requirements are effective 30 days from publication of the final regulation in the “Virginia Register.” However the department will consider approval of streets designed in accordance with either the former requirements (1996) or with these requirements during the six-month period following the effective date of these requirements. Any street design initially submitted for approval after that period shall be in accordance with these requirements.

PART III. REFERENCE SECTION.

24 VAC 30-91-280. Subdivision street development, plan review, and acceptance. (Previous diagram replaced)

A. The County – State Partnership governing VDOT acceptance of new streets for maintenance

## SUBDIVISION STREET REQUIREMENTS

Section 33.1-229, Code of Virginia, (a Byrd Act provision) creates the authority under which local governments establish new roads as part of the secondary system of state highways. §§ 15.2-2240 and 15.2-2241, Code of Virginia, establishes the authority of local subdivision ordinances and the authority of counties to set the standards for new streets within their territories.

VDOT's participation in the development and acceptance of subdivision streets for maintenance is a cooperative commitment of the Commonwealth Transportation Board.

VDOT's concurrence with or approval of a construction plan represents VDOT's commitment to accept the streets depicted upon their satisfactory construction and the satisfaction of all other requirements governing the acceptance of streets upon the County's request for the acceptance of or transfer of jurisdiction over the street, as outlined in these requirements.

Pursuant to these principles:

1. Local government controls land development activity and establishes new streets, the relocation of existing streets, and the criteria governing the development of such streets.
2. VDOT establishes the minimum standards that must be satisfied for new subdivision streets to be considered for maintenance by the department as part of the secondary system of state highways under its jurisdiction.
3. The department's resident engineer or designee represents VDOT to the localities served by the residency office listed in 24 VAC 30-91-290.

The department's Subdivision Street Design Guide sets out design parameters deemed appropriate for most land development scenarios. However, the business of land development is fluid and the department is prepared to consider innovative transportation approaches associated

## SUBDIVISION STREET REQUIREMENTS

with a proposed land development approach that are consistent with the geometric requirements of the Subdivision Street Design Guide in consultation with local government officials.

B. Street development and acceptance of maintenance process

1. Concept and Construction Plan Approval Phase

(Annotation: The document to be distributed by the agency will include a process flow chart.)

The proposed construction plan shall be considered incomplete in the absence of a preliminary pavement design based on the Pavement Design Guide (effective August 1, 2000) and the presumed values therein.

2. Construction Phase

(Annotation: The document to be distributed by the agency will include a process flow chart.)

Upon approval of the construction plan and prior to construction, the resident engineer should advise the developer regarding inspection of the construction phases and the scheduling of those inspections. VDOT approval of each of the following phases of construction is recommended.

a. Installation of any enclosed drainage system before it is covered.

b. Installation of any enclosed utility placements within the right of way before being covered.

c. Construction of the cuts and fills, including field density tests, before placement of roadbed base materials.

SUBDIVISION STREET REQUIREMENTS

- d. A final pavement design, based on actual soil characteristics and certified tests, shall be completed and approved before the pavement structure is placed.
- e. Placement of base materials, including stone depths, consistent with the approved pavement design, prior to placement of the paving course(s), followed by field density and moisture tests and the placement of a paving course as soon as possible.
- f. Construction of pavement, including depth and density, upon completion as part of the final inspection.

3. Street Acceptance Process

(Annotation: The document to be distributed by the agency will include a process flow chart.)

In the absence of any other formal acceptance, the governing body's resolution requesting the department to accept a street for maintenance as part of the secondary system of state highways completes the dedication of a street for public purposes.

4. Post Acceptance Phase

(Annotation: The document to be distributed by the agency will include a process flow chart.)

24 VAC 30-91-290. Listing of documents (publications) incorporated by reference.

Information pertaining to the availability and cost of any of these publications should be directed to the address indicated below the specific document. Requests for documents available from the department may be obtained from the department's division and representative indicated; however, department documents may be available over the Internet at [www.Virginiadot.org](http://www.Virginiadot.org).

SUBDIVISION STREET REQUIREMENTS

1. Drainage Manual, effective April, 2002

Location and Design Division (VDOT)

Location and Design Engineer

1401 E. Broad Street

Richmond, Virginia 23219

2. Land Use Permit Manual, 24 VAC 30-150-10, effective November 15, 1983

Local Assistance Division (VDOT)

Director of the Local Assistance Division

1401 E. Broad Street

Richmond, Virginia 23219

3. Minimum Standards of Entrances to State Highways, 24 VAC 30-71-10 et seq., effective December 3, 2003

Mobility Management Division (VDOT)

Director of Mobility Management

1401 E. Broad Street

Richmond, Virginia 23219

4. Pavement Design Guide for Subdivision and Secondary Roads in Virginia, effective August 1, 2000

Materials Division (VDOT)

State Materials Engineer

1401 E. Broad Street

Richmond, Virginia 23219

SUBDIVISION STREET REQUIREMENTS

5. Road and Bridge Specifications, effective 2002

Construction Division (VDOT)

State Construction Engineer

1401 E. Broad Street

Richmond, Virginia 23219

6. Road Design Manual, effective July 1, 1998

Location and Design Division (VDOT)

Location and Design Engineer

1401 E. Broad Street

Richmond, Virginia 23219

7. Road and Bridge Standards, effective February 1, 2001

Location and Design Division (VDOT)

Location and Design Engineer

1401 E. Broad Street

Richmond, Virginia 23219

8. Standard Specifications for Highway Bridges, effective 1996

American Association of State Highway and Transportation Officials

North Capital Street, Suite 225

Washington, DC 20001

VDOT Modifications to document above

Structure and Bridge Division (VDOT)



SUBDIVISION STREET REQUIREMENTS

Structure and Bridge Engineer

1401 E. Broad Street

Richmond, Virginia 23219

9. Virginia Erosion and Sediment Control Handbook, effective 1992

Division of Soil and Water Conservation with The Virginia Erosion and  
Sediment Control Law and Regulations

Division of Soil and Water Conservation

Governor Street, Suite 206

Richmond, Virginia 23219

10. Highway Capacity Manual, effective 2000

Transportation Research Board

Keck Center of the National Academies

Transportation Research Board

500 Fifth Street, NW

Washington, DC 20001

Attn: TRB Publications Sales & Affiliate Services

11. VDOT Erosion and Sediment Control and Stormwater Management Program Specifications Manual

(effective March 1, 2004)

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