POLICY and STANDARDS for the Design of Entrances to State Highways

September 1, 2017
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POLICY AND STANDARDS FOR THE DESIGN OF ENTRANCES TO STATE HIGHWAYS

PREFACE

This policy (commonly referred to as the “Driveway Design Policy”) outlines the Department’s technical and procedural requirements involved in the planning, design, construction, and maintenance of entrances to a State highway. While this policy is most commonly used for driveways, it applies to all entrances, including walkways, stairways, city and village streets, town and county highways, private access roads, subdivision roads (defined in Section 5A.10 of this policy), and roads owned by other State agencies and authorities.

Property owners seeking to build or improve an entrance to a State highway must, in addition to meeting applicable local requirements and the State Environmental Quality Review Act (SEQRA), obtain and comply with all conditions of a New York State Department of Transportation Highway Work Permit. Issuance of the Highway Work Permit is contingent upon Department review and approval of the planning and design details of the entrance.

Property owners, developers, consultants, and local officials play important roles in the process and should be aware of specific portions of this policy.

- Sections 5A.2 and 5A.3 outline the responsibilities of the property owner. Since residential driveways have less impact on the highway system than commercial driveways and subdivisions, residential property owner responsibilities are generally limited to Sections 5A.2.1, and 5A.3.1 through 5A.3.6. Design requirements for residential driveways are detailed in Sections 5A.4, 5A.5, and 5A.9.

- Sections 5A.4, 5A.6, 5A.7, and 5A.9 contain commercial driveway design requirements, which should be used by consultants hired by the property owner to plan and design minor commercial driveways and may be useful to consultants designing major commercial driveways.

- Section 5A.4, 5A.7, 5A.8, and 5A.9 contain subdivision, municipal street and municipal highway design requirements, which may be useful to developers and municipalities planning and designing access to a State highway.

- Sections 5A.2 and 5A.4 include procedural requirements and general design guidelines, respectively, which may interest local government planning and review agencies or boards.

This policy is in dual units. Metric units are shown in U.S. customary units with metric units in parentheses. The values are hard converted (not a precise conversion) to better represent the degree of accuracy needed.

DRIVEWAY DESIGN POLICY

CONTACT PERSON

Questions concerning this policy should be directed to the appropriate NYSDOT Regional Permit Coordinator. Names and phone numbers for the Permit Coordinators are provided on the Internet at: https://www.dot.ny.gov/permits.

General information can be obtained from NYSDOT Transportation Maintenance Offices, also known as Maintenance Residencies. Contact information for the local residency can be found on the NYSDOT website, at www.dot.ny.gov/about-nysdot/faq/residencies or in the Government Listings of your local phone book. Look under “State Offices,” then “Transportation Department of,” and then “Transportation Maintenance.”
# DRIVEWAY DESIGN POLICY

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DRIVEWAY DESIGN POLICY

5A.1 INTRODUCTION

Section 52 of the New York State Highway Law and Section 1220-a of the New York State Vehicle and Traffic Law prohibit entrance on, and work being performed on, any State highway except pursuant to the authority of a permit and under rules and regulations prescribed by the Commissioner of Transportation.

In accordance with the exercise of these duties, the New York State Department of Transportation has standards and procedures governing such work within the highway right of way, including the construction of entrances to State highways so as to regulate traffic entering or leaving abutting properties. These policies, standards, and procedures (available at www.dot.ny.gov/permits) protect the public through orderly control of traffic movements onto and from the highway, preserve the public’s investment in highway infrastructure, and ensure uniform design and construction of entrances and exits statewide.

A highway serves two major purposes as a part of a transportation facility. It must facilitate safe and efficient movement of people and goods and provide reasonably convenient access to the abutting property owner. Driveway regulation is intended to balance these two roles without allowing one to become a serious detriment to the other, and is implemented by the Highway Work Permit review process described in this and other related publications.

The Department meets with local planning boards and other local officials and works proactively to increase public awareness about access control safety and mobility concerns. Through local officials, the Department encourages developers to apply for a Highway Work Permit early in the local process, so local land use and access control concerns can be addressed in a coordinated fashion. The Department, local officials, and developers all benefit from this coordinated approach since it improves safety and mobility and reduces the potential for design changes.

A universally recommended approach is to utilize the State Environmental Quality Review Act (SEQR) coordinated review process (See Section 5A.2.1.3 of this policy). Successful application of these efforts will allow for a more orderly and comprehensive consideration of transportation and access needs and may facilitate the accommodation of individual Highway Work Permits.

The Department, through the Highway Work Permitting and SEQR processes, identifies impacts on State highways that would occur from proposed developments. As a condition of the Highway Work Permit, the Department requires developers to mitigate significant adverse traffic impacts on State highways caused by the permitted development. The Department recognizes the importance of development to local and regional economies and is committed to assisting developers and local governments in coordinating the Highway Work Permitting process with the SEQR process.

The provisions, guidelines, standards, and procedures set forth in this publication are consistent with those for Department work and represent the official policy of the Department of Transportation governing driveway, walkway, and stairway entrances to State highways. They shall become effective September 1, 2017, thereby superseding previous policy and standards adopted for these same purposes.
While this policy is intended to provide statewide uniformity, Department personnel responsible for access control will exercise judgment to provide the most effective and practical degree of access control. The Department of Transportation shall be the sole authoritative interpreter of the content and intent of this publication.

5A.2 GENERAL POLICY FOR THE DESIGN OF ENTRANCES TO STATE HIGHWAYS

5A.2.1 Non-Department Projects / Highway Work Permits

This section does not apply to Department projects. Highway work permits for entrances to State Highways are subject to the following conditions and limitations:

5A.2.1.1 Access to a State Highway

Any person, institution, or corporation desiring permanent, improved, or temporary access to, or performing work within a State highway right-of-way shall obtain a Highway Work Permit from the Department of Transportation and comply with all conditions of its issuance. The application for a work permit, other documents needed, and the Department contacts are included on the Department's Internet site at www.dot.ny.gov/permits.

The provisions of this policy shall not apply to entrances already in existence on September 1, 2017 or permits submitted for approval by September 1, 2017. This policy shall apply to any new driveways, walkways, or stairways within the State right of way, and improvements to any new driveways, walkways, or stairways within the State right of way, that are submitted for approval after September 1, 2017. Improvement is defined as one or more of the following:

- Resurfacing (excludes driveway sealant)
- Rehabilitation and reconstruction
- Replacement of existing drainage pipe
- A change in width, grade, or location
- A change in traffic control (excluding the installation of stop signs)

5A.2.1.2 Mitigation

A. New Driveways

Developers of commercial property and large subdivisions may, as a condition of the permit or SEQR, be required to mitigate the impacts of their development to maintain the same level of service, safety, operation, and/or other measure of traffic conditions as the affected highway(s) would experience without the development. Such mitigation may include, but is not limited to: acceleration, deceleration, through or turning lanes, traffic signals on the State highway, extended throat lengths, provision of service or access roads, and appropriate internal circulation off the highway. The impacts and required mitigation will be determined, subject to Department approval, by a Traffic Impact Study (TIS) conducted by the permittee based on full build-out of the development in the estimated
year of completion. The TIS should be completed in accordance with Department requirements and is subject to approval by the Department under the Highway Work Permitting process and the SEQR lead agency as a component of the SEQR Environmental Review Process. A template for a TIS can be found on the NYSDOT Highway Design Manual Chapter 5 web page.

Mitigation of full build-out traffic impacts should be completed to the satisfaction of the Regional Traffic Engineer before opening of the development, unless phasing of work is allowed by the Department with adequate controls to assure the performance of future work.

B. Existing Driveways

Whenever a change or expansion of a business or other land use is expected to increase traffic flow on the State highway system through an existing driveway, it may be necessary for the owner to mitigate the impact of the increased traffic by improving the driveway and/or highway. Highway and driveway improvements may include, but are not limited to, driveway relocation or closure, signal installation or modification, and/or widening needed for the safe and efficient flow of traffic. The Regional Traffic Engineer may, in the interest of public safety, authorize restrictions on movements into and/or out of the driveway if the necessary improvements are not completed.

5A.2.1.3 SEQR Coordination

The Department will not issue a Highway Work Permit until all the SEQR requirements are met. The coordination of the two processes (Highway Work Permit and SEQR) is critical; however, the timing can lead to problems. The SEQR process is usually completed (sometimes months) before a permittee’s application for a Highway Work Permit is submitted to the Department. If there has been no coordination between the local government and the Department during the SEQR process, delays can arise during the Highway Work Permitting process. To avoid unnecessary delays and problems, the following suggestions are offered:

- Local governments should notify the Department as early as possible when considering access to a State highway.
- SEQR lead agencies should invite and encourage early Department involvement to identify impacts. A coordinated review should be pursued. A coordinated review is defined by the NYS Department of Environmental Conservation’s SEQR Handbook as, “The process by which all involved agencies cooperate in one integrated environmental review.”
- Lead agencies should consider the merits of the Scoping Phase of the SEQR process particularly when dealing with complex developments involving several agencies and impacts. It is during the scoping phase that involved agencies have an opportunity to identify their data and information needs, concerns, and expectations. Scoping, if done correctly, can help to avoid misunderstandings or unrealistic expectations.
On projects requiring the issuance of a Highway Work Permit, the Department usually participates in the SEQR process as an involved agency and will:

- Issue a Record of Decision when the lead agency prepares an Environmental Impact Statement and issues a Record of Decision.
- Issue a SEQR determination when the Department is the lead agency.
- Coordinate with other involved agencies and issue a SEQR positive declaration if the lead agency has conducted an uncoordinated review processes and must prepare an Environmental Impact Statement.
- Not issue a SEQR determination on other projects.

### 5A.2.1.4 Arterial/Access Management Initiative

The Arterial/Access Management Initiative is a State and local collaborative process combining transportation planning and local land-use planning tools to protect the functional integrity of the highway network and provide safe and efficient access and mobility. The major elements of Arterial/Access Management include a combination of:

- Access management.
- Land use planning and controls.
- Corridor preservation.
- Transportation improvements.
- Finance techniques.

Access points are a major source of accidents and congestion on highways with abutting commercial strip development. In these areas, driveway spacing directly affects the highway’s safety and functionality. Optimal driveway spacing cannot be precisely determined, but there is a consensus that driveway spacing on the order of 300 ft to 500 ft (90 m to 150 m), depending on the operating speed on the highway and the traffic generation of the development, is desirable to reduce accidents and maintain the flow of traffic. Achieving desirable spacing is particularly important on congested highways with existing or emerging commercial and retail development. It may be impractical to achieve desired spacing due to limited lot frontages, existing driveways and site constraints; nonetheless, efforts should be made to improve driveway spacing even if the desired values cannot be attained.

Driveway spacing can sometimes be improved by consolidating the access to multiple sites. These and other access management techniques are typically implemented over time, in cooperation with local government, as a part of local access management plans. They can also be included as elements of Department capital projects. To be effective, access management plans require a high level of coordination with local government, both in the development and implementation of the plans.

For additional information, refer to:

5A.2.2 **Department Projects**

5A.2.2.1 Project Types

On Department Reconstruction or Resurfacing, Restoration and Rehabilitation (2R/3R) contracts, the Department will alter, at its own expense, existing entrances to State highways to comply with the spirit and intent of the policy and standards herein.

On simple resurfacing projects (e.g., 1R) and other preventive and corrective maintenance projects, existing entrances are only altered if they contribute to safety or operational problems. If problems are identified, the driveway should be modified by the Department to comply with the spirit and intent of the policy and standards herein.

5A.2.2.2 Driveway Work Release

If the limit of work is extended beyond the existing highway right of way to obtain adequate driveway geometrics, the Department should attempt to obtain driveway work releases (*Permission to Perform Contract Work on Private Land, Form HC-90*). If the property owner refuses to sign the work release, he/she should be advised that the Department will proceed with the project without reestablishing the driveway. Any future work to reestablish the driveway will be the property owner's responsibility and will require a Highway Work Permit (application available on the Department’s Internet site at [www.dot.ny.gov/permits](http://www.dot.ny.gov/permits)).

5A.2.2.3 Walkways and Stairways

If the limit of work is extended beyond the existing highway right of way to obtain walkway or stairway designs that meet the applicable requirements, the Department should attempt to obtain work releases (*Permission to Perform Contract Work on Private Land, Form HC-90*). If the property owner refuses to sign the work release, he/she should be advised that the Department will proceed with the project without reestablishing the walkway or stairway. The work completed within the public right-of-way cannot result in a condition that reduces the accessibility of an existing pedestrian facility within the right-of-way. Any future work to reestablish the walkway or stairway will be the property owner's responsibility and will require a Highway Work Permit (application available on the Department’s web site at [www.dot.ny.gov/permits](http://www.dot.ny.gov/permits)).

5A.2.2.4 Exceptions

In cases where strict compliance with the provisions of this publication may cause severe hardship to the property owner, the Department may consider exceptions to permit existing driveway entrances to remain unaltered where this is not likely to interfere with efficient and safe flow of traffic on the highway. Driveway locations should not be altered in the field without consultation with the project designer.
5A.3 CONDITIONS AND LIMITATIONS OF HIGHWAY WORK PERMITS

This section does not apply to Department projects. Highway Work Permits for entrances to State Highways are subject to the following conditions and limitations:

5A.3.1 Maintenance Responsibility

Property owners having access to a State highway shall be fully responsible for maintenance of their driveway and channelization, including the portion from the highway right of way line to the outside edge of the highway shoulder or curb. This maintenance responsibility includes removal of snow and ice and keeping the portion within the highway right of way in a safe condition for the general public. Where the owner of a commercial property is required to construct acceleration, deceleration, or turning lanes on the State highway, the Department may, in the interest of public convenience, provide routine maintenance and remove snow and ice on the portions of these lanes constituting an integral part of the State highway. This in no way absolves the property owner of the overall maintenance responsibility for the reconstruction and major repair of these lanes, if necessary.

The property owner shall be responsible for the maintenance of ditches, pipes, catch basins, grates, detention ponds, and other drainage structures constructed in connection with providing access to his property, unless other legally binding arrangements, acceptable to the Department, are made. All traffic control devices, such as traffic signals, stop and yield signs, one-way or other regulatory signs, pavement markings, delineators, etc., installed by the property owner in the highway right of way with the permission of the Department, shall conform to the National MUTCD, NYS Supplement. (Available on the NYSDOT web site at https://www.dot.ny.gov/divisions/operating/oom/transportation-systems/traffic-operations-section/mutcd). Traffic control devices shall, with the exception of traffic signals, be maintained, energized, and replaced by the property owner. Traffic signals installed by the permittee are maintained by the Department for an annual maintenance fee. The Department may, in the interest of public safety or convenience, maintain pavement marking installed by the permittee on the highway. The property owner shall also trim brush and maintain his/her property in such a manner as to maintain optimal sight distance. A maintenance agreement requiring the owner and his/her successors to maintain the above features specified should be filed with the deed in the County Clerk’s office.

5A.3.2 Permit Traffic Signals

To provide safe and expedient movement of traffic to and from a commercial driveway, it may be necessary to install or modify a traffic signal on the State highway. If such traffic signal is at a private road or driveway, it shall be installed, and the energy costs to operate it shall be paid, by the property owner under the terms of a Permit to Install and Operate a Traffic Control Signal on State-Owned Property, issued by the Regional Traffic Engineer. The Department will operate and maintain the signal for an annual fee, to be charged to the permittee as specified in the permit. Operation and maintenance of signals erected prior to April 1, 1986, may, at the Department’s discretion, be done by the permittee under the terms of the existing maintenance
agreement or by the Department for an annual fee. If a traffic signal is to be modified, it may be necessary to obtain a Highway Work Permit as well as a permit for the signal modification.

5A.3.3 Other Traffic Control Devices

If deemed necessary by the Department, other traffic control devices, such as flashing signals, regulatory and warning signs, delineators, pavement markings, etc., shall be installed by the permittee on commercial driveways in accordance with the National MUTCD and NYS Supplement. Both documents are available on the NYSDOT web site at https://www.dot.ny.gov/divisions/operating/oom/transportation-systems/traffic-operations-section/mutcd. Questions on the interpretation of these documents should be referred to the Resident Engineer or the Regional Traffic Engineer.

5A.4 GENERAL DESIGN REQUIREMENTS AND GUIDELINES

The following general design requirements apply to all types of entrances. The design requirements set forth in this section are intended to maintain traffic service and safety on the roadway and convenience for the traveling public and the permittee and are based on the premise that the rights of highway users and abutting property owners can be mutually satisfied. The Department reserves the right to impose any additional requirements it deems necessary for public safety.

A driveway or a driveway system shall be so located as to provide:

- The most favorable vision (sight distance), and horizontal and vertical alignment conditions for users of the proposed driveway and the highway.
- No undue interference with nearby driveways, intersections, interchanges, and turning or acceleration and deceleration lanes.
- Maximum safety and convenience for vehicles, cyclists, pedestrians, and other users of highway right of way.
- Consistency with driveway spacing standards presented in this section.
- Consistency with any local adopted driveway spacing standards or arterial corridor management plan.

In the interest of public safety and traffic flow and convenience, the Department may restrict the placement of a driveway to a particular location along the owner's frontage, restrict the type of access, or require shifting of an existing driveway. When a property fronting on a State highway also fronts on and has access to any other public street, road, or highway that intersects the State highway, the Department may restrict access to the State highway if it determines that such access would be detrimental to the safety and/or operation of the State highway.

5A.4.1 Spacing

The following instructions are provided to help locate new or reconstructed driveways for a particular site. See Figure 5A-3 – Driveway Location Standards (in the back of this policy) for more detailed requirements and guidance. The Department may modify distances if an engineering determination indicates another dimension is more suitable for a particular site.
The Department may restrict or prohibit specific movements if it determines that such movement(s) will interfere with safe and efficient traffic flow within or near an intersection.

Refer to Section 5A.2.1.4 of this policy for information on access management for land use planning, and the development of multiple sites along a highway.

5A.4.1.1 Spacing from Ramps, Auxiliary Lanes, and Transitions

The Department prohibits construction of a driveway along acceleration or deceleration lanes, lane tapers and near expressway or other limited access highway ramps. To enforce this policy, the Department may purchase the owner’s right of access to a public highway. Refer to Chapter 6 of the NYSDOT Highway Design Manual (HDM) for specific access control limits at interchanges.

5A.4.1.2 Location within Frontage

A driveway should be located entirely within the property owner’s frontage, with spacing to intersections and driveways serving adjacent properties as per Figure 5A-3. If the driveway extends onto adjoining property or is to be shared with other property owners, the permit applicant may be required to provide written agreement with the adjoining property owner(s).

5A.4.1.3 Number of Driveways

Normally only one driveway shall be permitted for each residential property, minor commercial property, and subdivision. An additional driveway may be permitted by the Department if both sufficient frontage exists, and extenuating circumstances justify a second driveway.

5A.4.2 Sight Distance

Inadequate sight distance or other safety or operational deficiencies may require that one-way or turn restrictions (e.g., no left turns) be imposed at the driveway.

5A.4.2.1 Intersection Sight Distance

Intersection sight distances should meet or exceed the values in HDM Chapter 7 and HDM Chapter 5, Appendix C. Intersection sight distance at a driveway allows the drivers of approaching vehicles a sufficient view of the highway to decide when to enter the intersection to avoid collisions. Use of signals, turn restrictions, and/or acceleration lanes can mitigate nonconforming intersection sight distance(s). Lower sight distance values may be used if the Regional Traffic Engineer determines that they will not significantly degrade traffic safety and operations, and there is no reasonable alternative.
5A.4.2.2 Stopping Sight Distance

Driveways should be located where the stopping sight distance meets or exceeds the values in HDM Chapter 7 and HDM Chapter 5, Appendix B. Where the stopping sight distance is nonstandard, consider turn restrictions and/or speed change lanes (i.e., acceleration and deceleration lanes) as mitigation, and, if practical, locate the driveway for optimal sight distance.

5A.4.3 Median Openings on State Highways

Avoid median openings on divided highways for left turns to and from residential or commercial driveways. Existing median openings may be closed by the Department if it best serves the safety and operation of the State highway. The Department may, at its discretion, permit median openings to serve major commercial driveways if justified by a traffic engineering study. New median openings must be designed to mitigate operational and safety impacts. Refer to NYSDOT HDM Chapter 3 (Sections 3.2.8.2 and 3.2.8.3) and HDM Chapter 5 (Sections 5.7.9 and 5.9.10) for guidance on median treatments.

5A.4.4 Driveway Profile

5A.4.4.1 Profile Within Highway Edge of Pavement

All driveways shall be constructed to slope away from the edge of the travel lane at the same slope as the highway shoulder which normally varies in down-slope from 2% to 6% (0.25 in/ft to 0.75 in/ft).

5A.4.4.2 Profile Beyond Highway Edge of Pavement

The profile beyond the highway edge of pavement is controlled by the:

- Drainage needs, discussed in Section 5A.4.5
- Maximum grades provided on NYSDOT Residential and Minor Commercial Driveways Standard Sheets 608-03. Where special circumstances require steeper driveway grades, contact the NYSDOT Traffic Engineer for assistance in establishing a safe profile design
- Minimum vertical curve to accommodate the design vehicle. Whenever the driveway grade changes, the profile should be rounded by connecting the two different grades with a smooth vertical curve. Abrupt changes in driveway grade near the highway may cause operational and safety problems. Driveway profiles should prevent vehicle undercarriage damage and facilitate entering and exiting maneuvers. Refer to the driveway profiles found in the Residential and Minor Commercial Driveways Standard Sheets 608-03.
- Sidewalk requirements, if applicable. Refer to the Residential and Minor Commercial Driveways Standard Sheets 608-03.
5A.4.5  **Drainage**

A driveway shall not adversely affect the highway drainage or drainage of adjacent properties. Drainage and the stability of the highway subgrade shall not be impaired by driveway construction or roadside development. The drainage design of a construction project shall not be compromised by field adjustments to compensate for altered driveway location. In no case shall the construction of a driveway cause water to flow across the highway pavement, pond on the shoulders, or pond in the ditch.

5A.4.5.1  **Highway Drainage Ditches and Driveway Culverts**

Where construction of a driveway necessitates crossing a highway ditch, a culvert pipe of adequate capacity shall be installed in the ditch. The low point of the driveway profile shall be at or close to the centerline of the pipe to direct runoff (flowing from the highway and adjacent property) into the ditch.

Driveway side slopes within the highway clear zone defined by the Department should be as flat as practical. Side slopes within the highway clear zone shall be:

- No steeper than 1 vertical on 6 horizontal for driveways on highways with operating speeds or design speeds of 50 mph (80 km/h) or greater.
- No steeper than 1 vertical on 3 horizontal for driveways on highways with operating speeds or design speeds of less than 50 mph (80 km/h).

Where there is a drainage ditch along the frontage, delineation (e.g., pavement markings, delineators, signs, curbing) should be provided to guide motorists to the driveway and away from the ditch.

Culvert pipe shall:

- Be adequate to carry the anticipated flow in the ditch per [NYSDOT Highway Design Manual Chapter 8](#).
- Not be smaller than 15” (375 mm) inside diameter, except in extreme conditions where the Department may approve a pipe with a 12” (300 mm) inside diameter.
- Have structural material and gauge adequate to withstand the load from anticipated vehicular traffic across the driveway.
- Have tapered or flared pipe end sections, instead of head walls, within the highway clear zone defined by the Department. Pipe end sections shall meet current Department design policy in NYSDOT Engineering Instructions, Engineering Bulletins, and [Highway Design Manual Chapter 10](#).
- Have a length determined as the sum of the width of the driveway and any driveway median measured along the ditch centerline and the length needed to accommodate the side slope from the driveway surface to the top of the pipe.
- Have 12” (300 mm) minimum cover over the top of the pipe.
5A.4.5.2 Curbing

Existing curbing may be saw-cut to provide a driveway opening conforming to NYSDOT Residential and Minor Commercial Driveways Standard Sheets 608-03. Where drainage is carried along the curb, the driveway profile should be constructed with a short upgrade beyond the highway edge of pavement to prevent highway runoff from spilling onto private property. Where a short upgrade is not practical for residential and minor commercial driveways, a dropped curb, as shown on Residential and Minor Commercial Driveways Standard Sheets 608-03 should be considered to divert a portion of the runoff being carried along the curb. Grate inlets and slotted inlets (pipe interceptor drains) to a stormwater system may also be considered.

Where an existing curb opening is no longer needed for access, new curbing, matching the adjacent curbing, should be installed.

5A.4.5.3 Drainage for Driveways with Nonconforming Profiles

Driveways with a continuous down grade from the highway may channel stormwater runoff from the highway onto private lands. Where profile adjustments are not practical, consideration should be given to providing gutter sections with grate inlets or slotted inlets (pipe interceptor drains) to a stormwater system.

Driveways with a continuous down grade to the highway may channel stormwater runoff from the private lands onto the highway. Where profile adjustments are not practical, consideration should be given to grate inlets or slotted inlets (pipe interceptor drains) to a stormwater system. A pipe with a top opening is impractical in dirt or gravel driveways or where debris may clog the opening or the pipe.

5A.4.6 Sidewalks and Other Pedestrian Facilities

Existing sidewalks and other pedestrian facilities shall comply with the applicable Americans with Disability Act (ADA) standards at https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/ada-standards. The construction, alteration, or restoration of sidewalks or other pedestrian facilities that are intended to be used by the public, and are located in the right-of-way, shall meet the requirements of HDM Chapter 18, the Critical Elements for the Design, Layout, and Acceptance of Pedestrian Facilities table, and the Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG).

Sidewalk and Curb Ramp Requirements:

- Sidewalk and curb ramp cross slope shall not exceed 1.5% for design and layout, and 2% for acceptance, unless it is technically infeasible due to terrain or other site constraints.
- Sidewalk grade shall not exceed the grade of the adjacent parallel highway.
- Ramped sidewalk sections across the driveway opening shall not be steeper than 7.5% for design and layout, and 8.3% for acceptance, unless it is technically infeasible due to terrain or other site constraints.
- Detectable warnings shall be provided on curb ramps located at stop- or yield-controlled commercial driveways, in accordance with PROWAG. Refer to the NYSDOT 608 Standard Sheets for sidewalk curb ramp and detectable warning details.
Sidewalk Guidelines:

- Where a sidewalk is located close to the curb line and the driveway opening is a taper-type (refer to Residential and Minor Commercial Driveways Standard Sheets 608-03) or the curb drops at the sidewalk, the sidewalk should be warped to conform to the driveway profile provided the sidewalk will meet the above requirements. This may depress one or both edges of the sidewalk across the driveway.

5A.5 RESIDENTIAL DRIVEWAYS AND FIELD ENTRANCES

Residential driveways and field entrances are defined in Section 5A.10 of this policy. They should be designed to permit access without unduly affecting traffic on the highway. Home business driveways and small subdivision driveways can, at the discretion of the Department and based on site specific conditions, be designed as either residential or minor commercial driveways, but should be wide enough to permit two-way traffic. Larger subdivision driveways may require a design typical of a major commercial driveway or an intersection.

For Department projects, refer to Section 5A.9 of this policy for instructions on the preparation of the Driveway Table and its use with Residential and Minor Commercial Driveways Standard Sheets 608-03.

For highway work permits, complete the PERM 33 and any additional documentation, as indicated on the Department’s internet site at https://www.dot.ny.gov/permits.

5A.6 MINOR COMMERCIAL DRIVEWAYS

Minor commercial driveways are defined in Section 5A.10 of this policy. They should be designed to permit access without unduly affecting traffic on the highway. Refer to Section 5A.9 of this policy for instructions on preparing the Driveway Table and its use with Residential and Minor Commercial Driveways Standard Sheets 608-03. For commercial highway work permits, complete the PERM 33-COM, Commercial Access Highway Work Permit Application and Checklist (found on the department’s website at https://www.dot.ny.gov/permits) and any additional documentation, as indicated in the application and website.

Minor commercial driveways that will routinely need to accommodate vehicles larger than AASHTO’s Single Unit (SU) design vehicle are to be designed as major commercial driveways in accordance with Section 5A.7 of this policy. Examples include marinas, recreational areas, mobile home sales, modular home sales, and truck stops that do not meet the traffic volume of a major commercial driveway. In these cases, the Department may waive portions of the Traffic Impact Study requirements in Section 5A.6.4. Where the oversized vehicle enters only occasionally, the driveway may be considered a minor commercial driveway provided the area that will need to accommodate the larger vehicle is either:

- Stabilized using gravel, stone, or other suitable material for uncurbed driveways or,
- A 4 in. (100 mm) mountable or traversable curb is used and backed with asphalt concrete for curbed driveways.
5A.6.1 Access Control

Frontage of all commercial properties shall be controlled by positive means, such as curbing or ditches, which limit access to designated driveways. The purpose of the access control is to direct entering and exiting vehicles into a well-defined flow pattern and separate traffic movements on the private property from the highway traffic. This will provide maximum safety for motorists and minimize interference between traffic on the highway and on the property. Refer to Residential and Minor Commercial Driveways Standard Sheets 608-03 for specific requirements and guidance.

5A.6.1.1 Driveway Configuration

The selected driveway configuration should minimize impact to the State highway. Intersection channelization islands may be used to separate entering from exiting traffic or to separate turning movements at driveway exits. Channelization islands are a portion of the intersection area (delineated using pavement markings, curbing, turf, or plantings) to physically delineate traffic movements. They shall be designed in accordance with NYSDOT Highway Design Manual Chapter 5, Section 5.9.4.

Minor commercial driveways may also use:

- Two-way drives
- Two-way drives separated by a driveway island
- One-way drives separated by a driveway island
- One-way drives separated by a driveway median

Driveway islands and medians are the areas between separated driveways to the same property.

- A driveway island is a raised area, which separates multiple entrances, or places entering and exiting traffic at separate locations. Driveway islands also separate highway traffic from activity on private property. Driveway islands have a minimum width (measured along the edge of highway) of 30 ft. (9 m). They allow the separated entrances and/or exits to be treated as separate intersections with respect to traffic control.
- A driveway median is a narrow raised or physically separated area between the driveway entrance and exit to separate entering and exiting vehicles. Driveway medians are 4 ft. (1.2 m) to 16 ft. (4.9 m) wide. Driveway median widths between 16 ft. (4.9 m) and 30 ft. (9 m) should be avoided as they can confuse motorists when traffic control devices are used. The raised or physically separated areas normally extend the length of the driveway throat (defined below), minus any distance needed for the turning path of the design vehicle.

For one-way roadways and highways with a raised or depressed median, mid-block driveways should be designed to accommodate right turns in and right turns out only. A raised channelization island or driveway median may be preferred in a two-way driveway opening to discourage wrong-way movements.
For highways without a raised median, a single two-way drive is preferred in most cases since one-way drives may be driven the wrong way and driveway medians may be hit by errant vehicles.

If two commercial driveways or driveway halves to the same property are constructed with less than 75 ft. (23 m) between adjacent driveway openings, the entire shoulder area between the driveways shall be replaced with adequate traffic bearing material and, if operating speeds or the design speed on the highway is below 50 mph (80 km/h), the entire area between driveways shall be curbed (with drainage openings as necessary).

5A.6.1.2 Driveway Throat

The driveway throat is an access controlled portion of the driveway entrance that helps delineate the driveway and provides space to store entering and exiting vehicles. The access control between the parking areas and the edge of the driveway throat should be achieved using curbing, wide turfed areas, shrubs, median barrier, or other physical means (i.e., pavement markings and signs are not enough.) The length selected for a particular driveway (measured along the driveway centerline) should be based on the operational, safety, and construction costs.

The entrance should allow all entering traffic to pull off the highway before stopping.

The exit throat length should prevent exiting vehicles from obstructing entering traffic, which could cause entering traffic to queue back onto the highway. The driveway throat should extend beyond the highway right of way line, if necessary.

5A.6.1.3 Clearances and Use of State Property

In rural and suburban areas, a minimum of 15 ft. (4.6 m) should be provided between the right of way line and the near edge of a building, structure, or appurtenance serving vehicular traffic, exclusive of overhead appurtenances such as luminaires or canopies over gas pumps. This offset shall be sufficient to preclude the servicing and parking of vehicles on State property. For sites where the property owner has been using State owned right of way for parking or other purposes, imposing standard driveway controls may create an economic hardship. In such cases, the property owner may be required to obtain a Permit for Use of State Owned Property from the Regional Real Estate Officer.

5A.6.2 Constrained Areas

The radius and taper-type minor commercial driveway designs in NYSDOT Residential and Minor Commercial Driveways Standard Sheets 608-03 were determined using auto-turn software. The software modeled the sharpest possible turning path of a Single Unit Truck turning to and from the minor commercial driveway.
On Department projects, when the driveway opening cannot be reasonably modified to meet the requirements in the NYSDOT Residential and Minor Commercial Driveway Standard Sheets, the driveway shall be individually designed. The proposed design shall be checked using the turning path of the design vehicle. If the design vehicle cannot be accommodated without encroachment, the driveway should be documented as a nonconforming feature with an explanation in the project files.

In urban areas, a minimum offset of 4 ft. (1.2 m) shall be provided from the shoulder or sidewalk to parking areas to prevent parked cars from overhanging into the shoulder or sidewalk. The Department may allow a single line of curb or barrier to be used only in constrained locations where a 4 ft. (1.2 m) or more width cannot be installed, and where it will not be a roadside hazard.

5A.6.3 Drainage Study

This section does not apply to Department projects. Highway Work Permits for entrances to State Highways are subject to the following conditions and limitations.

Projects that propose 2,000 ft² (70 m²) or less impervious pavement draining to a New York State highway open drainage system, and meet the requirements of Figure 5A-1, do not require a drainage study. Projects that propose 2,000 ft² (70 m²) or less impervious pavement draining to a New York State highway closed drainage system, and meet the requirements of Figure 5A-2 do not require a drainage study. Projects that exceed the impervious area thresholds defined in Figures 5A-1 and 5A-2 will require a drainage study. This study must be signed by a New York State Licensed Professional Engineer and contain justification for the drainage system proposed and pipe sizes used. Drainage study requirements are discussed in NYSDOT’s Highway Design Manual Chapter 8, Section 8.9. A standardized report shell is available on the Department’s web page for Chapter 8.
Figure 5A-1
Maximum allowable new impervious area for Minor Commercial Driveways draining to NYS Highway System open drainage

Downstream culvert size (in.)*

*Where there are multiple culverts in succession, the smallest diameter culvert shall dictate allowable new impervious area.

Figure 5A-2
Maximum allowable new impervious area for Minor Commercial Driveways draining to NYS Highway System closed drainage

Downstream pipe size (in.)*

*Where there are multiple structures in succession, the smallest diameter pipe shall dictate allowable new impervious area.
5A.6.4 **Traffic Impact Study**

Refer to [HDM Chapter 5](#), Appendix D to determine if a full Traffic Impact Study (TIS) is required. A standardized report shell for a TIS is available on the Department’s web page for [HDM Chapter 5](#).

The Regional Traffic Group may require the crash analysis portion of the TIS if the site has a Highway Accident Location (HAL) within 0.1 miles (0.16 km).

5A.7 **MAJOR COMMERCIAL DRIVEWAYS**

Major commercial driveways are defined in Section 5A.10 of this policy. Major commercial driveways and highway improvements should be designed to accommodate expected directional traffic volumes and the type of vehicles expected to use them. The resulting design could range from one typical of a minor commercial driveway to one based on high type intersection design principles.

The Department may allow major commercial driveways to use the radii Type 1 or Type 2 minor commercial driveway details shown in [Residential and Minor Commercial Driveways Standard Sheets 608-03](#). Taper-type driveways are not to be used. Entering speed, volume, pavement thickness, and design vehicle must be considered since the minor commercial driveway designs are intended for moderate volumes and AASHTO Single-Unit (SU) design vehicles. Major commercial drives that will use the Type 1 or Type 2 driveway details are to be tabulated in the Driveway Table in accordance with Section 5A.9 of this policy and may employ minor commercial driveway design details shown in [Residential and Minor Commercial Driveways Standard Sheets 608-03](#).

Other major commercial drives are to be tabulated separately, and detailed individually in the plans similar to a highway intersection with a cross street. The following sections are to be followed in addition to, or as an exception to, the requirements in Sections 5A.4 and 5A.6 of this policy and [Residential and Minor Commercial Driveways Standard Sheets 608-03](#).

5A.7.1 **Traffic**

The driveway and any other required highway improvements shall be designed in accordance with the intersection design guidance in [NYSDOT Highway Design Manual Chapter 5](#) and AASHTO’s latest *A Policy on Geometric Design of Highways and Streets*.

5A.7.1.1 Design Vehicle

The design vehicle shall be selected in accordance with [NYSDOT Highway Design Manual Chapter 5](#) and AASHTO’s *A Policy on Geometric Design of Highways and Streets*. The design vehicle should represent the largest type of vehicle expected to routinely use the driveway and is subject to Department approval. Industrial and commercial driveways used by large trucks should have adequate width, radii, and pavement thickness to accommodate the appropriate design vehicle. The Department may require driveways on designated qualifying or access...
highways or within 1 mile (1.6 km) of a qualifying highway to be designed to accommodate the
AASHTO WB-67 (WB-20 Metric) design vehicle, if such vehicles are expected to use the
driveway.

The Department may require reconstruction of affected highways, interchanges, and/or
intersections, if the development will generate larger vehicles than the affected highway system
is designed for.

5A.7.2 Level of Service

Major commercial driveway widths shall provide adequate capacity and design vehicle-turning
paths that do not interfere with other traffic movements for the Estimated Time of Completion
(ETC) of the driveway and full development of the facility. Multiple lane exits and entrances may
be required to maintain an acceptable highway level of service. The level of service should be
determined in accordance with NYSDOT’s Highway Design Manual Chapter 5, Section 5.2.

5A.7.3 Corner Angle

The corner angle between the driveway centerline and the edge of the highway travel lane is
determined by terrain, safety, and operational requirements. The corner angle shall be between
60° and 120°.

A corner angle of 90° should be used for two-way drives. Acute angle turns require significant
reductions in travel speed and pose difficulties for trucks. Since flatter angles tend to encourage
higher operating speeds, consider perpendicular driveways where pedestrian traffic is a
concern.

A corner angle between 60° and 120° is permissible for one-way drives. Angled or one-way
driveways may be considered where access is limited to right turns in and out. Consider angles
flatter than 90° to facilitate the entrance of substantial truck traffic into through traffic on the
highway.
5A.7.4 Material

All major commercial driveways shall have a paved surface extending from the edge of the travel lane to the highway right of way line or for 30 ft. (9 m), whichever is greater.

The material and thickness of commercial driveways within the highway right of way shall be designed to provide adequate support for the volume and character of traffic using the driveway. The existing highway shoulder material shall be removed, if required by the Department, and the shoulder area paved with adequate driveway material, if determined necessary by the Department. In the non-traffic bearing areas of commercial entrances, use of loose stone such as pea gravel as a mulch or for decorative effect shall not be allowed without a suitable binder.

The material information shall be shown on the plans or drawing accompanying the permit application and shall be subject to review and approval by the Department. Under no circumstances may the material thickness be less than that provided for a similar minor commercial driveway using Table 3 on Standard Sheet 608-03.

5A.8 STREETS AND HIGHWAYS OFF THE STATE HIGHWAY SYSTEM

Streets and highways off the State highway system include:

- City and village streets
- Town and county highways
- Private access roads
- Subdivision roads (defined in Section 5A.10 of this policy)
- Roads owned by other State agencies and authorities

Entrances to State highways classified by the Department as non-freeways from streets and highways off the State highway system, shall:

- Be designed in accordance with the intersection design guidance in NYSDOT’s Highway Design Manual Chapter 5 and AASHTO’s latest A Policy on Geometric Design of Highways and Streets.
- Otherwise be considered as major commercial driveways per this policy, unless otherwise directed by the Department.

All entrances to State highways classified by the Department as freeways shall:

- Be designed in accordance with the intersection design guidance in NYSDOT’s Highway Design Manual Chapter 6 and AASHTO’s latest A Policy on Geometric Design of Highways and Streets.
- Follow the procedures and requirements in NYSDOT’s Project Development Manual, Appendix 7, Interstate and Other Freeway Access Control & Modifications
- Otherwise be considered as major commercial driveways per this policy, unless otherwise directed by the Department.
5A.9 DRIVEWAY TABLE

Several variables for each drive must be defined in order for the contractor to construct driveways in accordance with Standard Sheet 608-03. These include:

1. Location – Mainline station of driveway centerline. For projects or permits without mainline stationing, include a reference (e.g., a number) to the driveway, which shall be located to the nearest 1 ft. (0.3 m) on a separate plan sheet.

2. Side – “Left” or “Right” along the stationing. Use north, south, east or west as appropriate for non-stationed projects.

3. Existing Material (Asphalt Concrete, Portland Cement Concrete, Crushed Stone, Gravel, Dirt, or Grass) – The existing material is used by Standard Sheet 608-03 Table 3 - Driveway Materials & Thickness, to define the materials and thickness to be used within the Pavement length (PL) and any transition length (TL), as required. Standard thicknesses are listed for both asphalt concrete and Portland cement concrete drives. If a commercial driveway requires a different thickness, the driveway should be designed as a Special Type SX as defined in item 9 of this section. The asphalt concrete layer composition is determined by the contractor in accordance with Table 608-1 of the NYSDOT Standard Specifications for Construction and Materials.

Note: The NYSDOT Driveway Standard Sheets assume the apron (area between the sidewalk and curb on Type 3 and 4 driveways) will be paved with the same material type as the driveway. In certain situations, the designer may prefer to pave all aprons with the same material regardless of the driveway material. For example, a village or city may request all aprons be concrete for aesthetic purposes. In these situations, an appropriate note should be added to the Driveway Table.

4. Class (Residential (R) or Minor Commercial (MC)) – Refer to definition in Section 5A.10, of this policy.

5. Width (W) – The width (W) is defined as the proposed driveway width beyond the taper or radius entrance. This will usually be the existing width or a revised width if the existing drive does not conform to the widths in Standard Sheet 608-03 Table 1, and an exception is appropriate (e.g., when a wider drive is required for a fire department entrance).

6. Corner Angle (θ<sub>IN</sub>) - The corner angle is the angle between the roadway and driveway as if turning from the roadway onto the driveway. Ninety degree entrances are desirable for two-way drives. Corner angles of 60° to 120° may be desirable for one-way commercial drives to reduce the driveway opening width. Refer to acceptable corner angles in Residential and Minor Commercial Driveways Standard Sheet 608-03.

Taper-type driveways should not be used for minor commercial driveways skewed more than 10° (θ<sub>IN</sub> less than 80° or more than 100°) since the taper-type driveways require
more pavement than radii type driveways and the additional pavement increases with the skew and width of the driveway opening.

The corner angle can be used to determine the “Y_IN” dimension and the “Y_OUT” dimension of the driveway to determine the overall curb opening limits using Standard Sheet 608-03.

7. Pavement Length (PL)—Refer to the definition on Standard Sheet 608-03. Any appropriate paving limit, meeting the minimum pavement length (MPL) requirements on Standard Sheet 608-03 can be specified in the driveway table. The material and thickness are included on Standard Sheet 608-03 Table 3 - Driveway Materials & Thickness.

8. Transition Length (TL)—Refer to the definition on Standard Sheet 608-03. The material and thickness are included on Standard Sheet 608-03 Table 3 - Driveway Materials & Thickness. If no transition is anticipated, the pavement length (PL) is assumed to be at a point where the existing driveway width and elevation can be matched and the TL in the driveway table should be left blank. If a transition length is anticipated, but exact limits cannot be determined in the design stage (i.e., limited survey data available), fill in the table with A.D.B.E (As Determined by Engineer). (Note: It is preferable to define the TL in the plans; use of A.D.B.E. should be avoided if possible).

9. Entrance Type — Standard Sheet 608-03 provides details for four of the most common entrance types. If only a minor modification of the standard type is required, a note similar to one of the following should be provided on the Driveway Table.

"The drive at Sta. 3+231 Lt. shall be constructed in accordance with a Type 1 drive of the NYSDOT "Policy and Standards for Design of Entrances to State Highways," except the driveway thickness shall be 8" (200 mm) of asphalt concrete."

"The drive at Sta. 3+231 Lt. shall be constructed in accordance with a Type 1 drive as shown on NYSDOT Standard Sheet 608-03 or the latest revision, except the driveway thickness shall be 8" (200 mm) of asphalt concrete."

Minor modifications are changes that can be conveyed by notes but do not require a special detail in the plans.

Major commercial and other driveways for which the NYSDOT Driveway Standard Sheets will not be used shall be detailed in the plans and labeled as a special drive, Type SX, where X is the detail number (i.e., S1, S2, etc.). The special type driveway details should either be site-specific with all required dimensions, or use similar dimension labels as Standard Sheet 608-03 and the Driveway Table.

10. Comments—Include additional design information, such as: curb reveal, one-way entrance, and multilane entrance.
11. Pay Items—The Driveway Table also includes a table indicating all separate pay items called out on Standard Sheet 608-03. The designer must fill in the project-specific Item numbers. Space has been left to add additional project specific driveway items as necessary.
5A.10 GLOSSARY OF TERMS

AASHTO – American Association of State Highway and Transportation Officials

Capacity – The maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point or uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions. Refer to the most recent *Highway Capacity Manual* for more information.

Channelization – An at-grade separation or regulation of conflicting traffic movements into defined travel paths by pavement marking, raised islands, or other suitable means to facilitate the safe and orderly movement of vehicles and pedestrians.

Channelization Island – A portion of the intersection area (delineated using pavement markings, curbing, turf, or plantings) to physically delineate traffic movements.

Commercial Driveway – A driveway serving a commercial establishment, industry, governmental or educational institution, private utility, hospital, church, apartment building, or other comparable traffic generator. Types of commercial driveway designs include:

1. Divided Commercial Driveway – A driveway incorporating a raised median or other physical barrier to separate entering traffic from exiting traffic.

2. Undivided Commercial Driveway – A driveway with no physical barrier to separate entering traffic from exiting traffic.

Department – The New York State Department of Transportation.

Driveway – Every entrance or exit used by vehicular traffic to and from lands or buildings abutting a State highway.

Driveway Island – A raised area for separating multiple entrances or to place entering and exiting traffic at separate locations. Driveway islands also separate highway traffic from the activity on private property. Driveway islands have a minimum width (measured along the edge of highway) of 9 m (30 ft). They allow the separated entrances and/or exits to be treated as separate intersections with respect to traffic control.

Driveway Median – A narrow raised or physically separated area between the driveway entrance and exit to separate entering and exiting vehicles. Driveway medians are 1.2 m (4 ft) to 4.9 m (16 ft) wide. The raised or physically separated areas normally extend the length of the driveway throat (defined below), minus any distance needed for the turning path of the design vehicle. Refer to channelization islands for raised areas within the driveway intersection area to physically delineate traffic movements.

Driveway Throat – An access controlled portion of the driveway entrance that helps delineate the driveway and provides space to store entering and exiting vehicles.
Driveway Work Release – A document (attached form HC 199) signed by the owner permitting the State to enter and alter a driveway to accommodate changes of the highway alignment, grade, or cross-section in accordance with Section 54-A, of the Highway Law.

Field Entrance – A driveway serving a farmyard, cultivated or uncultivated field, timberland, or undeveloped land not used for industrial, commercial, or residential purposes.

Frontage – The distance along the highway edge of pavement in front of the owner’s property, measured between lines perpendicular to the centerline of the roadway from each property corner.

Highway Work Permit – A document specifying the authority and conditions under which an individual or organization may perform work within or adjacent to the State highway right of way.

Home Business Driveway – A driveway serving any business which is part of a private residence which produces actual or anticipated traffic volumes on a typical day of 20 or fewer vehicles during the hour of highest driveway activity.

Level of Service – A qualitative measure of operational characteristics within a traffic stream. Levels range from “A,” representing the best operating conditions, to “F” representing traffic breakdown. Refer to the most recent Highway Capacity Manual for more information.

Major Commercial Driveway – Any commercial driveway where the action:
1. Requires a substantial change to the State Highway infrastructure for the safe and efficient flow of traffic;
2. Is a Type I action under SEQRA in 6 NYCRR Part 617; or
3. Restricts planned improvements on the State Highway to address safety or capacity needs.

Substantial changes to the State Highway are:
- Changes in a State Highway alignment or pavement section (e.g., roundabout, additional thru or turn lanes) other than shoulder pavement thickness
- Control of access modification
- Installation of or a traffic signal
- New or replacement of a State Highway bridge or Large Culvert (>5’ opening width)

May – A permissive condition. No requirement for design or application is intended.

Minor Commercial Driveway – Any commercial driveway that is not a “major commercial driveway.”

Municipal Streets and Highways – Streets and highways owned by a village, city, town, or county.

National MUTCD – National Manual of Uniform Traffic Control. It’s the National guide to all aspects of traffic control, and is used in conjunction with the NYS Supplement.

NYS Supplement – New York State Supplement. As the name implies, this is a supplement to the National MUTCD. It’s usually the first place to look for information as only supplemented information will be found here.
Permanent Easement – A permanent possession, by other than the landowner, of specified ownership rights to a parcel of land, usually to accommodate features that are supplementary to the highway such as drainage or slope grading. The State may acquire easements through the exercise of eminent domain.

Permittee – A municipality, public utility company, public benefit corporation (such as Water Authority), private corporation, partnership, association, or individual in whose name the permit has been issued.

Residential Driveway – A driveway serving four or fewer private homes or an apartment building for four or fewer family units.

Right of Way Line – The boundary between private property and State highway lands.

SEQRA (or SEQR) – The State Environmental Quality Review Act: Law and associated regulations governing environmental impact review of proposed actions as detailed in 6 NYCRR Part 617 of the New York Compilation of Codes, Rules and Regulations (NYCRR) and for Department actions, in 17 NYCRR Part 15.

Shall – A mandatory stipulation based on statutory or regulatory requirements.

Should – A recommended, but not mandatory condition.

Sidewalk / Walkway – An exterior pathway with a prepared surface intended for pedestrian use. Sidewalks generally parallel a roadway and are usually intended for public use. Other walkways described in this policy are general approaches to adjoining properties and may be intended for public or private use.

Stairway – One or more flights of steps, including landings, that form a portion of a pedestrian walkway approaching lands or buildings abutting a State highway.

Subdivision Road – A road, drive, or street laid out in a developed residential area by a contractor, builder, or company responsible for developing the area. This includes a new driveway serving more than four private homes or a multiple-unit dwelling containing more than four family units.

Temporary Driveway – A driveway which provides interim access to a property until either closed or reconstructed by authority of the Department as a condition of further development of either the property or the corridor.

Temporary Easement – A temporary possession, by other than the landowner, of specified ownership rights to a parcel of land, usually to accommodate the construction, but not maintenance or operation, of the facility.

Traffic Impact Study – A study of existing traffic conditions, anticipated traffic conditions with and without the development and the traffic impacts of the development. The study should include proposed mitigation of impacts and resulting traffic conditions.
5A.11 REFERENCES


DRIVEWAY DESIGN POLICY

NOTES:

1. DRIVEWAY SPACING MEASURED ALONG THE HIGHWAY EDGE OF PAYMENT.

2. PROPERTY LINE - THE MINIMUM DISTANCE BETWEEN THE DRIVWAYS SPACING LIMITS OR THE POINT WHERE A PROJECTION PERPENDICULAR TO THE CENTERLINE OF THE HIGHWAY FROM THE HIGHWAY EDGE OF PAYMENT IS TO BE 0.125 MI.

3. ONE-HAIND CURIORS DO NOT APPLY TO THE HIGHWAY LARGE ENOUGH SHOWN OF A SHARED ISLAND.

4. COMMERCIAL PROPERTIES - THE MINIMUM DISTANCE BETWEEN THE DRIVWAYS SPACING LIMITS SHALL BE 0.125 MI.

5. ALONG THE HIGHEST OF MULTIPLE CURIORS TO A COMMERCIAL PROPERTY, THE MINIMUM DISTANCE BETWEEN THE DRIVWAYS SPACING LIMITS SHALL BE 0.125 MI. IF THE PROPERTY LAINE IS ANY DISTANCE CLEAR FOR THEproperty line, THE MINIMUM SPACING LIMIT BETWEEN CURIORS SHALL BE DEPENDED ON THE ACCENT AND MATERIAL AND IF CURIORS ARE BELOW 0.125 MI, 0.125 MI, IT SHALL BE CLEANED WITH COMMERCIAL SPACING AS NECESSARY.

6. ONE-HAIND CURIORS SEPARATED BY A ISLAND, THE MINIMUM DISTANCE BETWEEN THE DRIVWAYS SPACING LIMITS SHALL BE 0.125 MI.

7. INTERSECTIONS - THE DISTANCE BETWEEN THE EDGE OF A DRIVWAY PROJECTED TO THE HIGHWAY EDGE OF PAYMENT AND A SIZE THAT TRAVEL LINE EDGE, SHALL BE AT LEAST A LEAST A LEAST 6 FOR 120 MI OFFICER TO A STANDALONE SIZE HIGHWAY EDGE.

8. ONE-HAIND CURIORS SEPARATED BY A MEDIAN, THE MEDIAN WIDTH ON MAY BE 10.5 FT TO 10.5 FT.

9. REFER TO CHAPTER 6 OF THE HIGHWAY DESIGN MANUAL, INERICAN HIGWAY FOR CONTROL OF ACCESS LIMITS FOR (DRIVWAYS) AND OTHER TYPES OF INTERACTIONS.

10. HIGHWAY EDGE OF PAYMENT - THE MEDIAN WIDTH MAY BE 10 FT TO 10 FT.

11. COMMERCIAL ACCESS LIMITS SHALL BE LOCATED TO OFFER OPTIMIZED LEVELED INTERACTIONS WHERE CURIORS ARE ACCESS FROM PUBLIC STREETS, HIGHWAY ON ramps.

12. COMMERCIAL SPACING THREAT MEASURED ALONG HIGHWAY LIMITS.

13. TWO-HAIND SPACING LIMITS BETWEEN A MEDIAN, THE MINIMUM DISTANCE OF THE THREAT SPACING LIMITS SHALL BE 0.125 MI. FOR HIGHWAY COMMERCIAL SPACING AND 0.125 MI. FOR MEDIAN COMMERCIAL SPACING.


15. COMMERCIAL CURIORS MEGANS SHOULD BE OFFSET TO AVOID TURNS PATH OF VEHICLE AS MENTIONED.

16. ON CURVING HIGHWAY, OFFSET THE END OF THE MEGAN AT LEAST 0.125 MI HAVING THE CURVINGwipe.

17. ON HIGHWAY RAMP CURIORS, THE END OF THE MEDIAN SHALL NOT INFRINGE ON THE MEGAN AND SHALL BE OFFSET AT LEAST 0.125 MI HAVING THE OUTSIDE TRAVEL_LINE, WHEREAS IT IS MENTIONED.

18. CURIORS - ANY PROPOSED CURVING SPACING SHALL CONFIRM TO CHAPTER 3 SPECIAL RULES OF THE MEGAN AS MENTIONED int THE TRAVEL LINE TO ALLOW THE INSTALLATION OF A STANDARD MEGAN SPACING ON CURVING SPACING IN ACCORDANCE WITH FIGURE 2-12, SECTION 2.

19. WHERE CURING EXIST AT THE EDGE OF MEDIAN, CURING SPACING SHALL MATCH THE CURVING SPACING AND ALIGNMENT.

20. FIXED OBJECTS SHALL BE LOCATED OUTSIDE OF THE HIGHWAY EDGE OF PAYMENT PER INTEGRAL, CHAPTER 3.

21. REFER TO THE "POLICY AND STANDARDS FOR THE DESIGN OF ENTRANCE TO STATE HIGHWAY" SECTION 3 FOR ADDITIONAL REQUIREMENTS AND THE NEED FOR PERMITS.

DRIVEWAY LOCATION STANDARDS

ALL DIMENSIONS SHOW ARE HIGHEST STANDARDS

DIVIDED COMMERCIAL DRIVEWAY WITH AN ISLAND

(DRIVeway SYSTEM ILLUSTRATED ALL DIMENSIONS SHOWN ARE HIGHEST STANDARDS)

DIVIDED COMMERCIAL DRIVEWAY WITH A MEDIAN

FIGURE 5A-3

DRIVEWAY LOCATION STANDARDS
DRIVEWAY DESIGN POLICY

NOTES
1. If shoulder is present, pave inside a minimum of 2’ beyond shoulder. Dead-end driveways shall have a minimum thickness of 4" except where the minimum grade makes this impractical. In such cases, use a 3’-6" strip length.
2. Place new paving perpendicular to surface of existing concrete, asphalt or gravel.
3. New curb shall not be constructed. Detail slopes to prevent a driveway opening where curb is present. If curb is not present, cut the curb transition.
4. Pavement shoulder width may be designated as a parking lane, bike lane, or curb setback.
5. Round sharp changes in grade to prevent vehicles fromottomming out.

METHOD OF LAYOUT
STEP 1. Locate an offset line 1’ from the inside edge of the outermost travel lane.
STEP 2. Scribe a line parallel to the offset line, offset is distance "a" equal to 2’ minus diameters 1’ or less in widths 13’ and 15’ driveways 1’ or more.
STEP 3. Scribe a line parallel to the edge of driveway rural road offset "f" feet.
STEP 4. Scribe an arc at the center of the outermost travel lane.
STEP 5. From the center point, scribe an arc with radius "a" minus which is tangent to the offset line and the edge of driveway.
STEP 6. Scribe the shoulder opening limit point where the arc intersects the middle edge of pavement.
STEP 7. Repeat steps 1-6 for the other side of the shoulder opening.

FIGURE 5A.4
RESIDENTIAL DRIVEWAY
TYPICAL PLAN, PROFILES AND RADIUS LAYOUT
NOTE:
1. Drive onto a width of 7' beyond sidewalks, sidewalks shall have a 4'-0" minimum thickness of Portland cement concrete.
2. Sidewalk ramps must have a maximum slope of 2:12, except where the driveway grade makes this impracticable. In such cases, use a 12% ramp length.
3. Place kerb/filler backfill 3" below the top surface of Portland cement concrete sidewalks and driveways.
4. New curb shall not be constructed, detail shows how to construct a driveway openings where curb is present. If curb is not present, omit the top-up section and curb transition.
5. Drive shall be designated as a parking lane, side lane, or curb offside.
6. Avoid sharp changes in grade to prevent vehicles from bottoming out.

TAPER METHOD OF LAYOUT

Tapers are not recommended for driveways with corner angles less than 60 degrees or greater than 90 degrees. These are not recommended for driveways with corner angles between 60 and 90 degrees. The values of the corner angle of curbed lanes or in any instance where tapers are not recommended.

The method of determining the turning movement of a fully-constructed curb is to move without considering into other travel lanes or traveling off the edge of the pavement.

Step 1. Score a line layout, refer to the layout distance.
Step 2. Locate the drive entrance point, which is at the intersection of the edge of the driveway and the layout line.
Step 3. Score a drive point from the layout line to the edge of the pavement.
Step 4. Find the drive entrance point, which is where the taper intersects the edge of the pavement.
Step 5. Repeat steps 1-4 for the other side of the driveway opening.

TAPER LAYOUT

Inside edge of outermost travel lane (require the centerline of a 2-lane roadway)
## Driveway Table

<table>
<thead>
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<th>LOCATION</th>
<th>EXISTING MATERIAL</th>
<th>CLASS</th>
<th>#</th>
<th>CORNER ANGLE</th>
<th>DL</th>
<th>TL</th>
<th>ENTRANCE TYPE</th>
<th>COMMENTS</th>
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### Table Data Format/Definitions

**EXISTING MATERIAL**
- Soil
- Sand
- Crushed stone
- Gravel
- Gravel fill
- Fieldstone
- Cobblestone
- Asphalt
- Concrete
- Sealcoat
- Mill and seal

**CLASS PLACEMENT**
- 1 - Main approach
- 2 - Frontage road
- 3 - Sidewalk
- 4 - Parking lot
- 5 - Highway
- 6 - Driveway

**#** - Number of Driveways

**CORNER ANGLE**
- 0° - Gentle curves
- 45° - Moderate curves
- 90° - Sharp curves
- 180° - Reverse curves

**DL** - Distance Length

**TL** - Transition Length

**ENTRY TYPE**
- 0 - Unrestricted
- 1 - Non-restrictive
- 2 - Restrictive
- 3 - 42" fence
- 4 - 60" fence
- 5 - 96" fence

### Pay Item Description

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**Signature**

[Signature]

**Date**

[Date]

### Notes

1. See the standard sheet "Policy and Standards for the Design of Entrances to State Business" for further details.

2. The designer and the appropriate engineer will complete the applicable portions of the form for the driveway length in the individual case.

3. In all cases, the driveway should be marked for the pedestrian length plus any extension beyond the pedestrian length.

4. The length of any work transferred to existing driveway pavement is billed as part of the pedestrian length plus any extension beyond the pedestrian length.

5. The location of any existing driveway pavement is extended beyond the pedestrian length.

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