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## **PART 1 -- GENERAL PROVISIONS**

### **Rule 1.1 Permit Required**

- (1) Subsequent to the effective date of these rules, no person, organization or governmental unit shall undertake or conduct any of the following activities on or along county roads or within county road rights of way unless a permit to allow such activity shall have been obtained from the Eaton County Road Commission Permit Department.**

  - (a) construct, reconstruct, surface, resurface a driveway;**
  - (b) engage in a use of the land served by the driveway which is changed or expanded from that previously existing and the existing driveway does not meet current standards or is a safety hazard, subject to Paragraphs (3) and (4) below;**
  - (c) operate, use or maintain a new driveway;**
  - (d) erect or suspend a banner, decoration, or similar object;**
  - (e) close a section of a county road to normal traffic for the purpose of staging a parade, celebration, festival or similar activity.**
- (2) Construction of a new driveway or private road connecting to a county road or reconstruction of a driveway or private road connecting to a county road shall be allowed only after an approved permit has been obtained from the Permit Department. The construction or reconstruction of all driveways or private roads shall be as described in an approved permit and plans or drawings accompanying the permit. Significant changes in plans must be approved by the Engineer-Manager or his/her appointed agent.**
- (3) When the use of the land served by the driveway is changed or expanded and the existing driveway does not meet current standards or is a safety hazard, the driveway will be considered a new driveway as per Act 83, Public Acts of 1978. Factors that constitute a safety hazard shall include, but are not limited to, the following:**

  - (a) increased accident rate at or near driveway;**
  - (b) increased traffic volume on main road;**
  - (c) increased turning movements using driveway;**
  - (d) improper drainage;**

- (e) inadequate sight distance;**
  - (f) excessive grades on driveway;**
  - (g) improper driveway design for use;**
  - (h) creates a foreseeable risk of harm to the traveling public.**
- (4) Any proposed use of land that requires a permit from the local land use body shall be deemed to be a changed or expanded use of the land. When the use of the land served by the driveway is changed or expanded, the driveway will be considered a new driveway. Whenever any existing use of land has been discontinued for three (3) consecutive months, or for nine (9) months during any three year period, such discontinuance shall be considered conclusive evidence of an intention to abandon that use. Thereafter, land shall be considered as if vacant.**
- (5) If, upon inspection, a driveway or private road approach constructed or reconstructed after the effective date of these rules is found to be in violation of these rules, the owner shall correct any deficiencies within a period of time not more than 30 days, specified in a notice of violation sent by certified mail to the owner. Factors that constitute a safety hazard shall be corrected immediately. If the owner fails to make the necessary corrections within the period of time stated in the notice, the Road Commission, or its agents, may perform the necessary correction(s), with the costs incurred to be reimbursed to the Road Commission by owner.**
- (6) In the event of failure to comply with the terms and conditions of any permit issued in accordance with these rules, or failure to obtain an appropriate permit, the Eaton County Road Commission shall have the right to halt the ingress and egress activity of the site until such time as adequate corrections have been made. All costs incurred by the Road Commission in correcting any failure to comply with conditions and standards of permits, failure to obtain a permit, or defective workmanship or materials shall be borne by the applicant (or person undertaking the activity).**
- (7) Permit forms are available at the Permit Department office of the Eaton County Road Commission at 1112 Reynolds Road, Charlotte, Michigan 48813.**

## 1.2 Definitions

(1) **ADT:**

Average Daily Traffic.

(2) **Applicant:**

Property owner or the property owner's authorized legal agent who is applying for a permit to connect a "driveway" as defined by Section 1 of Act 200 of the Public Acts of 1969, as amended, with a county road. The term also includes governmental agencies applying for a permit to temporarily close a county road for a parade, celebration, festival or similar activity, authorized by Act 200 of the Public Acts of 1969, as amended.

(3) **Arterial:**

Any roadway which substantially meets the criteria of arterial, minor arterial, and/or rural major collector as outlined in the current edition of "*The Geometric Design Guide for Highways and Streets*" by the American Association of State Highway and Transportation Officials (AASHTO). Generally, any roadway with an ADT volume of 10,000 vehicles or more.

(4) **Banner:**

Any arrangement of words, lettering, symbols or decorative device, including Christmas decorations, suspended over any portion of a road or adjacent to a travel lane.

(5) **Board:**

The Board of County Road Commissioners of the County of Eaton, State of Michigan, a Public Corporate Body.

(6) **Buffer Area:**

An area of the public right of way adjacent to a roadway which serves as a physical barrier to vehicular travel between road traffic and activity on the private property.

(7) **Circle Driveway:**

**A private driveway which enters and leaves private property at two points within the same frontage.**

**(8) Clear Vision Area:**

**Land acquired or used by and in accordance with standard practices of the agency having jurisdiction over a road for the purpose of maintaining unobstructed vision.**

**(9) Commercial Driveway:**

**A driveway serving a commercial establishment, industry, governmental or educational institution, hospital, church, apartment building, mobile home park and all other facilities not included in the definitions for residential, field or utility structure driveways.**

**(10) Collector:**

**Any roadway which meets the criteria for collector or minor collector or rural minor collector as outlined in the current edition of “*The Geometric Design Guide for Highways and Streets*” by the American Association of State Highway and Transportation officials (AASHTO). Generally, any roadway with an ADT volume of 5,000 to 10,000 vehicles.**

**(11) Directional Driveway:**

**A driveway system designed so that traffic leaving the road is separated from and does not conflict with traffic entering the road (with critical turning movements to and from the property restricted) at certain access points.**

**(12) Divided Driveway:**

**A driveway so designed that traffic entering the driveway is separated by a traffic island from the traffic leaving the driveway.**

**(13) Field Driveway:**

**Any driveway serving a farm yard, cultivated or uncultivated field, timberland or undeveloped land not used for industrial, commercial or residential purposes.**

**(14) Frontage:**

The private property line that abuts the road right of way.

15) **Licensee:**

A person, partnership or corporation under the authority, control and responsibility of the applicant to perform the work requested by the applicant in accordance with the requirements set forth in these rules and those of 1969 PA 200, as amended.

(16) **Limited Access:**

Road right of way in respect to which owners or occupants of abutting lands and other persons have no legal right to access to or from the same except at such point only, and in such manner as determined by the public authority having jurisdiction over such road, street or highway.

(17) **Local Road:**

Any roadway which does not meet the criteria for a higher functional classification in the current edition of “*The Geometric Design Guide for Highways and Streets*” by the American Association of State Highway and Transportation Officials (AASHTO). Generally, a roadway with an ADT volume of less than 5,000 vehicles.

(18) **Michigan Department of Transportation Standard Specifications for Construction:**

The current “*Michigan Department of Transportation Standard Specifications for Construction*” which shall also include the current Supplementary Specification and Design Standards on file at the Permit Department, and any other standards published for design use by a recognized authority and accepted for use by the Eaton County Road Commission.

(19) **MMUTCD:**

The current edition of the “*Michigan Manual Of Uniform Traffic Control Devices*” (MMUTCD).

(20) **Owner’s Engineer:**

The professional engineer or architect licensed in the State of Michigan who is employed by the property owner to prepare plans and supervise construction.

(21) **Permit Department:**

The Permit Department of the Eaton County Road Commission.

(22) **Permitee:**

The individual who applies for and obtains a permit.

(23) **Private Road:**

A road which is not under the jurisdiction of a public body and serves more than two businesses or homes.

(24) **Property Owner:**

A natural person, firm, association, partnership, corporation, or combination of any of these, or any other party having an interest in the land involved.

(25) **Reasonable and/or Reasonableness:**

As used herein and as applicable to the standards set forth herein, the determination of reasonable and reasonableness resides in the sole discretion of the Board of Eaton County Road Commissioners, whose determination shall be final.

(26) **Residential Driveway:**

A driveway serving a private one-family or two-family dwelling.

(27) **Resolution:**

A resolution passed by a local governing body authorizing a specific official or officials to apply to the Eaton County Road Commission for an individual permit, or for all permits in the case of a blanket resolution, and wherein the governing body agrees to indemnify and hold harmless all persons from claims of every kind arising out of operations authorized by such permit(s) as is (are) issued.

(28) **Right of Way Frontage:**

That portion of the road right of way that abuts the frontage of a parcel.

(29) **Right of Way Line:**

The boundary between private property and the public lands under the legal control of the agency having jurisdiction over a road.

(30) **Road Commission:**

As referred to in this text, the Eaton County Road Commission.

(31) **Sight Distance:**

The length of highway a specified object is visible to the driver.

(32) **Temporary Approach:**

A point of access that will be used for a particular purpose for a specified short period of time not to exceed one year. After said period of time, either a permanent approach permit must be acquired and the approach built or the approach must be removed and the right of way restored to its original condition.

(33) **Utility Structure Driveway:**

Any driveway serving a structure or utility installation such as a pump house or substation which operates automatically and requires only occasional access.

## **PART 2 -- DRIVEWAY PERMITS**

### **Rule 2.1 Authorized Applicants**

Any person, organization or governmental unit desiring to construct, reconstruct, relocate, or resurface a driveway within Eaton County Road Commission right of way shall make application and secure a permit before beginning construction. Platted street approaches shall be governed by the Board's *Subdivision Regulations*. The acceptable applicants for driveway permits are property owners or agents, or a contractor employed by the property

**owner. However, the owner or his/her agent and the contractor may be required to sign the permit.**

**Rule 2.2 Applications for Permit(s)**

- (1) Applications for driveway permits shall be submitted in the manner prescribed by and on the appropriate forms supplied by the Permit Department. Commercial driveway applications shall be accompanied by two (2) sets of plans or drawings containing the information required by Rule 2.3 of these Rules, and which shall include design standards for all proposed driveways in conformance with the requirements of Part 3 of these Rules.**
- (2) Applications should be submitted as early as possible. In the case of new commercial developments, the Eaton County Road Commission Engineer-Manager should be contacted in the initial site planning stages so that a preliminary access plan satisfactory to all parties can be established early in the development process. This access plan will include satisfactory storm drainage outlets, proper driveway locations and will consider the relationship between parking and storage facilities and other development in the vicinity, either on private property or on public right of way.**
- (3) The permit is fully executed and in force after the plans are approved and the permit signed by the owner or his/her agent, the contractor and the Engineer-Manager of the Eaton County Road Commission.**

**Rule 2.3 Requirements on Plans of Proposed Commercial Driveway(s)**

**All copies of commercial driveway permit applications shall be accompanied by two (2) sets of plans or drawings clearly indicating the following features as the Eaton County Road Commission may require:**

- (a) Existing road pavement, ditches, right of way and property lines, road appurtenances, medians (if existing) and dimensions thereof, and driveways on adjacent property and on property opposite the frontage and names of existing and proposed roads.**

- (b) All buildings, both proposed and existing, and all appurtenances to any business being conducted and dimensions thereof including a notation as to present or proposed use of the buildings.**
- (c) Design standards (in accordance with Part 3 of these Rules) of all driveways, tapers and right turn and passing lanes to be constructed, reconstructed, relocated, surfaced, resurfaced, operated, used or maintained to include the following dimensions and features:**
- **widths of all driveways;**
  - **radii of driveway returns and other points of curvature;**
  - **driveway grades or profile view of driveway;**
  - **road centerline and edge of pavement grades;**
  - **angle of the driveway(s) relative to the roadway centerline;**
  - **dimensions of roadside control island and other traffic islands adjacent to the road;**
  - **driveway surface material and traffic island surface material; and**
  - **sight distance for the approach.**
- (d) Distance from existing driveway(s) and proposed driveway(s) to the nearest intersecting street and distance from driveways to property lines.**
- (e) All roadside features, in addition to driveways, to be constructed within the road right of way including roadside control island, curb, sidewalks, authorized traffic signs and other roadside features such as manholes and poles.**
- (f) Existing and proposed drainage structures and controls to include:**
- **size of drive culvert;**
  - **type of culvert;**
  - **type of culvert end treatment;**
  - **grade of culvert with sufficient elevations upstream and downstream to show the extent of flow across the proposed development and to the proposed outlet;**

- direction of surface water flow on and from adjacent property;
- drainage structures;
- drainage plan and outlet for all storm drainage on the site.

**DRAINAGE FROM ADJACENT PARKING OR STORAGE AREAS OR PRIVATE PROPERTY MAY NOT BE DISCHARGED ONTO THE HIGHWAY OR ITS APPURTENANCES.**

- (g) North directional arrow and scale of drawing.
- (h) The above requirements, when applicable, should be incorporated with appropriate guidelines from Exhibits 1 - 10 to form a complete plan for permit application.

**Rule 2.4 Permit Application Review Procedure**

- (1) A review period begins with the acceptance of a permit application by the Eaton County Road Commission.
- (2) Upon acceptance of the application permit and supplemental information, the Road Commission shall use this regulation and any other applicable state statutes for evaluating and acting on the application. The Road Commission will work cooperatively with the applicant in an attempt to resolve all difficulties prior to taking final action on the application. Normally, the application will be processed within 10 work days. Transmittal of a completed permit, approved by the Road Commission, or transmittal of a denied application constitutes action on the permit application.
- (3) Requests for variance from the standards of this regulation may be submitted to the Road Commission and shall be considered an attachment to the permit application. The review of variance requests shall be in accordance with Rule 2.10. Variance procedures may be used when the design standards of this regulation are not entirely applicable to the proposed request for access. The Road Commission or the applicant may request a meeting to discuss reasons for denial.

- (4) If the Road Commission denies an application, the Road Commission shall provide the applicant a copy of the application marked "denied" along with any attachments and a written explanation for the decision.**
- (5) If the Road Commission approves an application permit, the permit shall be prepared and transmitted to the applicant along with any additional terms and conditions established by review. The owner noted on the permit, normally the property owner, will become the permit holder. If the permittee does not agree to all terms and conditions of the permit, the permit shall be deemed denied.**
- (6) The issue date of the permit is the date the Engineer-Manager of the Eaton County Road Commission, or the Eaton County Road Commission Board, if appealed, signs the permit.**
- (7) The permitted access shall be completed in accordance with the terms and conditions of the permit prior to being used for vehicular access. In accepting the permit, the permit holder agrees to all terms and conditions of the permit.**

#### **Rule 2.5 Design and Placement Requirements**

**The design, location, construction and operation of driveways and related construction within the road right of way shall meet requirements of the current *Michigan Department of Transportation Standard Specifications for Construction* and design standards set forth in Part 3 of these Rules and any other standards used by the Eaton County Road Commission.**

#### **Rule 2.6 Conditions of Issuance of Driveway Permits**

**All driveway permits issued in accordance with these rules shall be subject to the following conditions and limitations:**

- (1) The Eaton County Road Commission reserves the right of inspection by its authorized representative of any driveway construction within the road right of way. The permit applicant shall reimburse the Eaton County Road Commission for the services required for the review and approval of plans and for any on-the-job inspections which are required.**

- (2) **The Permit Department or its representative shall be given at least two days (excluding Saturdays, Sundays and Holidays) notice prior to the commencement of any operation covered by the permit.**
- (3) **The licensee shall have a copy of the permit available at the site during construction.**
- (4) **The licensee and applicant shall take, provide and maintain all necessary precautions to prevent injury or damage to persons and property from operations covered by the permit and shall use warning signs and safety devices which are in accordance with the current *Michigan Manual of Uniform Traffic Control Devices*.**
- (5) **The licensee and applicant shall surrender the permit, cease operation and surrender all rights thereunder, whenever notified to do so by the Eaton County Road Commission because of its need for the right of way covered by the permit or because of a default of any condition of the permit.**
- (6) **The applicant shall furnish all materials and bear all costs of necessary construction, including tapers, widenings, islands, pavement marking, signing, etc. within Eaton County Road Commission right of way.**
- (7) **Altered natural drainage shall not be permitted to flow onto road right of way unless special provisions are approved by the Eaton County Road Commission. COUNTY ROAD DRAINAGE FACILITIES MAY NOT BE USED TO DRAIN STORM WATER,--INCLUDING SUMP PUMP DISCHARGE FROM PRIVATE PROPERTY.**
- (8) **The applicant shall remove all surplus materials to an area outside of the limits of the right of way unless the permit provides the manner of disposal at locations within the right of way. Excavated material shall not be stockpiled so as to adversely affect safety of the traveling public.**
- (9) **All work authorized by the permit shall be completed to the satisfaction of the Eaton County Road Commission on or before the completion date specified in the permit. Any request for an extension of time for completion**

**of work authorized by permit shall include reasons for the request.**

**Approval of extension of time shall be based on extenuating circumstances indicating no neglect on the part of the permit applicant. Additional requirements may be imposed as a condition of extension of time due to seasonal limitations and other considerations.**

- (10) It shall be the responsibility of the property owner or his/her agent to maintain all driveways connecting the property to the roadway including driveway culverts, slopes, and surfacing, as well as those appurtenances set forth in the permit as related requirements, in a manner as not to damage, impair, interfere or obstruct a public road or drainage thereof, or create a foreseeable risk of harm to the traveling public. Maintenance of road widenings which become part of the main roadway will not be the responsibility of the permit holder.**

#### **Rule 2.7 Indemnity and Certificates of Insurance**

**The licensee and applicant shall save harmless, indemnify, defend and represent the Board and the Eaton County Road Commission, its officers and employees against any and all claims for damages arising from operations covered by the permit. Certificates of insurance shall be required on commercial driveways to ensure that all claims, including damage or personal injury, can be met by the licensee and/or applicant. General liability insurance carried by an applicant or licensee may be acceptable if it equals or exceeds current amounts specified by the Board. Insurance must be kept in force until the permitted construction is completed and approved. Failure to do so will be just cause for immediate suspension and/or cancellation of the permit.**

#### **Rule 2.8 Permit Deposits**

- (1) Should a proposed project for a commercial driveway involve road widenings and/or the construction of enclosed storm drainage in the road right of way, full time inspection may be required. In this case a deposit will be taken to cover all direct inspection costs. The amount of the deposit will be**

**determined at the time of application based on the size and scope of the project.**

- (2) The Eaton County Road Commission will keep records of the actual inspection costs incurred in connection with each project. In the event the Road Commission's costs are less than the deposit, the excess will be returned to the owner after completion of all construction activities outlined in the permit and application. In the event the Board's costs are greater than the deposit the owner will be billed for the deficiency. The Board's objective is to recover actual costs incurred.**

#### **Rule 2.9 Bonds**

**Surety is required on all commercial driveways to insure the Eaton County Road Commission against the cost of completing any necessary construction or repairing deficiencies. Acceptable types of surety are cash, certified or cashier's checks, money orders, or by irrevocable letter of credit payable to the Eaton County Road Commission.**

#### **Rule 2.10 Appeals and Variance Procedures For Permit Applications**

- (1) Should the applicant object to a permit application denied by the Road Commission or object to any of the terms or conditions of the permit placed therein by the Road Commission, a written appeal must be filed within 60 days of the transmittal of notice of denial or transmittal of the approved permit. The request shall include reasons for the appeal and may include recommendations by the applicant. The appeal, the permit application, supporting information, and a memorandum from the Road Commission staff regarding the review process will be submitted to the Board of Eaton County Road Commissioners for a final decision.**
- (2) The Board will review the request and the appeal and render a decision. At this final decision point, no other Road Commission employee will be authorized to approve the permit.**

- (3) If an applicant wishes to seek a variance from the standards of this regulation, a written request must be submitted as an attachment to the permit application form. The request for variance should include specific and documented reasons. The request and supporting documents should be submitted at the time of permit application. Requests for a variance will be decided by the Board.**

**Rule 2.11 Fee Schedule (See page 56)**

### **PART 3 -- DRIVEWAY DESIGN STANDARDS**

**Rule 3.1 Number of Driveways**

- (1) The number of access points to any Property should be limited to one, unless it can be shown that the property will generate sufficient traffic volumes to require two points of access or that additional access points are necessary for safe internal operation on the property. Should an additional access point be needed, joint access should be sought with adjacent property owners.**
- (2) Each parcel should be permitted one access point either contained wholly within the property frontage or as part of a joint access with an adjacent property. Additional points of access may be considered if adequate driveway spacing can be maintained (see Rule 3.6) and the following conditions apply:**
- (a) The average daily driveway volume is expected to exceed 3000 vehicles per day (vpd), or**
  - (b) The expected peak hour driveway volume would exceed the acceptable level of service of a stop sign controlled intersection in accordance with the *Highway Capacity Manual* (Transportation Research Board, Special Report 209, 1985), or**
  - (c) A professionally prepared traffic analysis shows that more than one access point is needed to properly and safely serve the property.**
  - (d) Corner lots may have access points on more than one street if warranted**

by a traffic analysis, subject to corner clearance criteria defined in Rule 3.8.

### **Rule 3.2 Number of Ingress Lanes**

At driveways exceeding 1000 vpd and 40 right turn ingress movements during the peak hours, it may be desirable to provide an additional ingress lane, thereby widening the effective width of the throat to facilitate simultaneous left turn and right turn ingress movements.

### **Rule 3.3 Number of Egress Lanes**

The number of lanes required to serve the exiting movements at a driveway location is a function of the number of vehicles expected to exit from the land use served by the driveway. Driveways should be designed with more than one egress lane if either of the following conditions are expected to be present:

- (a) The average daily egress traffic volume exceeds 1000 vehicles.
- (b) If more than 100 vehicles per hour (vph) are expected to turn left from the driveway during any hour when there are more than 500 vehicles per hour on the street being entered.

### **Rule 3.4 One-Way Access**

Access design of a one-way pair of driveways should be considered and is desirable if any of the following conditions are present or expected:

- (a) Roadway Average Daily Traffic (ADT) should be greater than 10,000.
- (b) The peak hour left turn volume into the driveway is expected to exceed 40 vph and the property frontage exceeds 200 feet in length.

**Rule 3.5 Driveway Locations**

- (1) Driveways shall be so located that no undue interference with the free movement of road traffic will result, to provide the required sight distance and the most favorable driveway grade.
- (2) Driveways shall not be constructed along the acceleration or deceleration lanes and tapers connecting to freeway interchange ramp terminals unless no other reasonable access point is available.

**Rule 3.6 Commercial Driveway Spacing**

Adjacent driveways on the same side of the roadway should be spaced as far apart as access and on-site circulation needs permit. Table 1 shows the desirable driveway spacing as a function of posted speed. These spacings are based on average vehicle acceleration and deceleration rates and are considered necessary to maintain safe traffic operations.

**Table 1  
COMMERCIAL DRIVEWAY SPACING (1,2)**

<b>POSTED SPEED (MPH)</b>	<b>MINIMUM SEPARATION (FEET)</b>
25	105
30	125
35	150
40	185
45	230
50	275
55	330

- (1) Between two-way driveways. Distances between adjacent one-way driveways with the inbound drive upstream from the outbound drive can be one-half the distances shown above.
  - (2) Near edge to near edge of adjacent driveways.
- In the event that a particular parcel or parcels lack sufficient frontage to maintain adequate spacing, the owner(s) have several options:**

- (1) The owner may seek a variance from the Road Commission from the desired spacing, but in no case can the variance be greater than the next lowest

classification on Table 1. For example, on a 40 mph roadway requiring a 185 foot spacing, the distance may be reduced to no less than 150 feet which is the standard for a 35 mph facility.

To minimize left turning conflicts, driveways should be either aligned directly with those across the street, or offset a sufficient distance from those across the street in accordance with the minimum spacing standards listed in Table 1.

- (2) The adjacent owners may agree to establish a common driveway. In such case the driveway midpoint should be the property line between the two parcels. The driveway must meet standard specifications, and the estimated driveway volume will be the sum of the trip generation rate of both land uses in question.

**RULE 3.7 Side Setback**

Side setback is the distance between the property line of a parcel and the nearest edge of the nearest driveway. The minimum side setback distance should ideally be one-half of the driveway spacing requirement in Table 1 to ensure proper spacing. Should a property not be of sufficient frontage to provide this distance, joint access with an adjacent property should be pursued. The minimum side setback should be as shown in Table 2.

**Table 2**  
**PROPERTY CLEARANCE (1)**

<b>CLASSIFICATION</b>	<b>PROPERTY CLEARANCE (FEET)</b>
Arterial	75
Collector	50
Local (Non-Residential)	25
Local (Residential)	10

(1) For single-family, duplex, and townhouse residential land uses, lots should be platted so as not to provide direct access to arterial streets.

**Rule 3.8 Intersection Setback**

Spacing between a street intersection and an access driveway shall be adequate to avoid having driveway traffic movements conflict with street traffic movements at the intersection. The corner clearance required is a function of the type of streets which intersect. Table 3 shows the minimum corner clearance.

**Table 3**  
**CORNER CLEARANCE** (1,2)

<b>CLASSIFICATION</b>	<b>INTERSECTING WITH</b>	<b>CLEARANCE (FEET)</b>
<b>Arterial</b>	<b>Arterial</b>	<b>250</b>
	<b>Collector</b>	<b>125</b>
	<b>Local</b>	<b>50</b>
<b>Collector</b>	<b>All</b>	<b>50</b>
<b>Local</b>	<b>All</b>	<b>50</b>

- (1) Setback clearance is measured from the ultimate near cross street curb to the near driveway curb.
- (2) If the property line is closer to the intersection than the minimum setback distance shown, the driveway must be located within 10 feet of the property line farthest away from the intersection.

### **Rule 3.9 Clear Vision Areas**

At intersections or railroad crossings where the Road Commission controls limited access right of way to provide a clear vision area, no driveway shall enter or cross any part of that clear vision area. Where the Road Commission has an easement for a clear vision area at an intersection or railroad crossing, driveways shall not be permitted through the clear vision area if another reasonable access point is available.

### **Rule 3.10 Buffer Areas**

Adjacent to driveways, a buffer area between the right of way line and the pavement edge shall be used as determined by the Eaton County Road Commission, to provide a physical barrier between moving traffic and private property. A buffer area is needed to provide an unobstructed vision area and to physically prohibit potentially hazardous movement of vehicles (especially at

undesirable angles of approach) from and to the road. Where encroachment of parked vehicles takes place or may take place, the Eaton County Road Commission may require this buffer area to be established by guardrail, guard posts, curb or equivalent method. In every case, an area of unobstructed vision shall be provided at either side of driveways. This may require the removal of trees, earthen embankments and other obstructions.

### **Rule 3.11 Sight Distance**

To provide for adequate vision, all obstructions must be removed within the clear vision area. The driveway shall be constructed at a location along the property frontage that meets or exceeds the requirements of Tables 4 through 9. Should this not be obtainable, then the driveway shall be constructed at a location that provides the distance closest to that required in Tables 4 through 9, provided the requirements of Table 11 are met or exceeded.

The recommended distances are based on a 3.5 foot driver eye height and a 4.25 foot object height. Sight distance will be measured 15 feet from the edge of the traveled portion on gravel roads and 15 feet from the edge of pavement on paved roads. The distances shown in Tables 4 through 7 are designed to enable vehicles exiting a private driveway when turning left or right to accelerate to the operating speed of the street without significantly interfering with the vehicles coming from either direction.

Tables 8 and 9 show the minimum distances recommended for vehicles turning left from a public road into a private access to allow them a clear view of oncoming vehicles.

The sight distances presented in Tables 4 through 9 are valid when highway grades are between -3.0 percent and +3.0 percent. With grades steeper than +/- 3.0 percent, the adjustment factors shown in Table 10 must be applied.

### **Table 4**

**SIGHT DISTANCE (FEET) FOR PASSENGER CARS EXITING FROM PRIVATE ACCESSES ONTO TWO-LANE ROADS (1,2,3)**

<b>SPEED (MPH)</b>	<b>(2) SAFE SIGHT DISTANCE LEFT AND RIGHT</b>	<b>(3) SAFE SIGHT DISTANCE LEFT AND RIGHT</b>
25	240 Feet	360 Feet
30	300 Feet	420 Feet
35	380 Feet	520 Feet
40	430 Feet	600 Feet
45	550 Feet	700 Feet
50	650 Feet	830 Feet
55	750 Feet	980 Feet

- (1) Measured from an eye height of 3.5 feet, 15 feet back of the pavement edge.
- (2) Safe sight distance when driving forward out of the driveway.
- (3) Safe sight distance when backing out of the driveway.

**Table 5**  
**SIGHT DISTANCE (FEET) FOR PASSENGER CARS EXITING FROM PRIVATE ACCESSES ONTO FOUR AND SIX LANE ROADS (1, 2)**

<b>SPEED (MPH)</b>	<b>(2) SAFE SIGHT DISTANCE LEFT</b>	<b>SAFE SIGHT DISTANCE RIGHT</b>
25	280 Feet	240 Feet
30	350 Feet	300 Feet
35	400 Feet	380 Feet
40	450 Feet	430 Feet
45	550 Feet	550 Feet
50	650 Feet	650 Feet
55	750 Feet	750 Feet

- (1) Measured from an eye height of 3.5 feet, 15 feet back of the pavement edge to a vehicle in the outside lane.
- (2) Measured from an eye height of 3.5 feet, 15 feet back of the pavement edge to a vehicle approaching in the median lane.

**Table 6**  
**SIGHT DISTANCE (FEET) FOR SEMI-TRAILERS EXITING FROM PRIVATE ACCESSES ONTO TWO LANE ROADS (1)**

<b>SPEED (MPH)</b>	<b>SAFE SIGHT DISTANCE LEFT</b>	<b>SAFE SIGHT DISTANCE RIGHT</b>
25	430 Feet	470 Feet
30	520 Feet	635 Feet
35	600 Feet	845 Feet
40	690 Feet	1110 Feet
45	780 Feet	1370 Feet
50	860 Feet	1780 Feet
55	950 Feet	1900 Feet

(1) Measured from an eye height of 3.5 feet, 15 feet back of the pavement edge.

**Table 7**  
**SIGHT DISTANCE (FEET) FOR SEMI-TRAILERS EXITING FROM PRIVATE ACCESSES ONTO FOUR AND SIX LANE ROADS (1, 2)**

<b>SPEED (MPH)</b>	<b>SAFE SIGHT DISTANCE LEFT</b>	<b>SAFE SIGHT DISTANCE RIGHT</b>
25	470 Feet	500 Feet
30	560 Feet	670 Feet
35	650 Feet	875 Fet
40	750 Feet	1140 Feet
45	840 Feet	1400 Feet
50	940 Feet	1820 Feet
55	1030 Feet	1930 Feet

- (1) Measured from an eye height of 3.5 feet, 15 feet back of the pavement edge to a vehicle in the outside lane.
- (2) Measured from an eye height of 3.5 feet, 15 feet back of the pavement edge to a vehicle approaching in the median lane.

**Table 8**  
**SIGHT DISTANCE (FEET) FOR PASSENGER CARS ENTERING PRIVATE ACCESSES BY LEFT TURNS FROM A PUBLIC ROAD**

SPEED (MPH)	SAFE SIGHT DISTANCE IN FEET		
	2 LANE	4 LANE	6 LANE
25	220 Feet	250 Feet	275 Feet
30	265 Feet	300 Feet	330 Feet
35	310 Feet	350 Feet	385 Feet
40	355 Feet	400 Feet	440 Feet
45	400 Feet	450 Feet	500 Feet
50	440 Feet	500 Feet	550 Feet
55	485 Feet	550 Feet	610 Feet

(1) Measured from the point where a left-turning vehicle stops to a vehicle approaching in the outside lane.

**Table 9  
SIGHT DISTANCE (FEET) FOR SEMI-TRAILERS ENTERING  
PRIVATE ACCESSES BY LEFT TURNS FROM A PUBLIC  
ROAD**

SPEED (MPH)	SAFE SIGHT DISTANCE IN FEET		
	2 LANE	4 LANE	6 LANE
25	400 Feet	440 Feet	480 Feet
30	485 Feet	530 Feet	575 Feet
35	565 Feet	615 Feet	670 Feet
40	650 Feet	705 Feet	765 Feet
45	730 Feet	795 Feet	860 Feet
50	810 Feet	880 Feet	955 Feet
55	890 Feet	970 Feet	1050 Feet

(1) Measured from the point where a left-turning vehicle stops to a vehicle approaching in the outside lane.

**TABLE 10  
FACTORS FOR THE EFFECT OF GRADE ON SIGHT  
DISTANCE**

GRADE	DOWNGRADE (1)	UPGRADE (2)
3.1 - 5.0%	0.6	1.4
5.1 - 8.0%	0.5	1.7

- (1) When the highway in the section to be used for acceleration after leaving the access descends, sight distance in the direction of approaching descending highway traffic should be reduced by these factors.
- (2) When the highway in the section to be used for acceleration after leaving the access ascends, then sight distance in the direction of approaching traffic should be increased by these factors.

**TABLE 11**  
**MINIMUM STOPPING SIGHT DISTANCE (1)**

DESIGN SPEED (MPH)	MINIMUM SIGHT DISTANCE
25	150 Feet
30	200 Feet
35	250 Feet
40	325 Feet
45	400 Feet
50	475 Feet
55	550 Feet

(1) A driver's eye height of 3.5 feet; and an object height of 4.25 feet.  
To allow for the effect of grade on stopping sight distance, the factors in Table 12 must be used.

**TABLE 12**  
**EFFECT OF GRADE ON STOPPING SIGHT DISTANCE**

INCREASE FOR DOWN GRADES				DECREASE IN UPGRADE			
DESIGN SPEED	CORRECTION IN STOPPING DISTANCE (FT)			ASSUMED SPEED (1)	CORRECTION IN STOPPING DISTANCE (FT)		
	3%	6%	9%		3%	6%	9%
20 - 30	10	20	30	20 - 28	--	10	20
31 - 40	20	40	70	29 - 36	10	20	30
41 - 50	30	70	--	37 - 44	20	30	--
51 - 60	50	110	--	45 - 52	30	50	--
61 - 65	60	130	--	53 - 55	30	60	--

(1) Average running speed is assumed to allow for the fact that vehicles normally travel at a slower speed on an upgrade.

An access point shall be located at the point of maximum sight distance along a property frontage. Placement of a driveway in a horizontal curve along a

roadway or just below the high point of a crest vertical curve on a roadway shall be avoided.

Any movement for which sight distance is inadequate shall be prohibited by use of signs, pavement markings, and restrictive design features. If safe sight distance is not available at any point along the frontage of a property, shared driveways or indirect access shall be obtained.

Access to a property shall be denied when minimum safe sight distance (Table 11) cannot be attained. When access is denied, access may be allowed, at the owners expense, in one of the following ways:

- (1) Negotiating with adjacent property owners to acquire access to the subject parcel through easements.
- (2) Constructing a frontage road serving the subject property and connecting with the roadway where a safe driveway can be provided.
- (3) Redesign or reconstruction of the existing roadway to correct the sight distance deficiency.

#### **Rule 3.12 Driveway Dimensions and Details**

The permit applicant shall indicate on the plan the driveway layout requested, including the number, type, dimension, location and spacing of driveways. The Road Commission's Engineer-Manager may approve the requested layout or may require changes so that the proposed layout will accommodate the vehicle normally expected without creating undue congestion or hazard on the highway. Exhibits 1 through 10 provide guidelines which shall be followed in the design and dimensioning of driveways in preparing plans for permit applications.

#### **Rule 3.13 Commercial Driveways**

- (1) The permit application shall specify the driveway system requested, including the number and type (two-way, one-way, divided or directional) of driveways. The Eaton County Road Commission may approve the requested system or may instruct the applicant as to changes to ensure safe operations and necessary spacing between driveways, based on anticipated traffic volumes on the driveways and on the existing traffic volumes on the

**road, type of traffic to use the driveway, type of roadside development and other safety and operational considerations. The maximum number of driveways from the property to each abutting road shall be as follows:**

- (a) One driveway may be permitted for each separately owned parcel with less than 100 feet of frontage provided that the parcel is wide enough for the minimum driveway width plus the required radii; and meet other requirements as necessary in these rules.**
  - (b) Additional driveways may be permitted for commercial property with more than 100 feet of frontage provided that the sum of the driveway widths of these additional driveways does not exceed 15 percent of the frontage in excess of the first 100 feet and further provided that the traffic volume, safety and operational considerations are met as defined in these rules.**
  - (c) The Eaton County Road Commission reserves the right to deny driveway access when such construction would result in the driveway being a safety hazard.**
- (2) Two-way commercial driveways shall be designed to accommodate one lane of traffic in each direction. The dimensions of a two-way commercial driveway shall conform to those given in Exhibit 1.**
- (3) The dimensions of a one-way commercial driveway system shall conform to those given in Exhibit 2.**
- (4) A divided commercial driveway shall have a curbed island separating the entrance drive and the exit drive. The radii forming the edges on this island shall be designed to accommodate the largest vehicle that will normally use the driveway. The minimum area of the island shall be 50 square feet. The dimensions of a divided commercial driveway shall conform to those given in Exhibit 3.**
- (5) Adjacent property owners may and are encouraged to consolidate their driveways by using either a joint driveway system or a frontage road. All frontage roads are to be placed on private property outside of the future right of way. If the Eaton County Road Commission approves such a system, a driveway permit shall be issued to all property owners concerned**

and shall state that there is an agreement that all properties shall have access to the road via the joint driveway and/or frontage road system. A copy of this agreement executed by all parties concerned shall accompany the application.

- (6) For driveways on one-way roads, the dimensions given in this rule may be altered so that the prohibited movements are discouraged. If the driveway system is to the left-hand side of a one-way road, the dimensions used shall be based on the same principles as used on right-hand side driveways.
- (7) The permit applicant shall provide a deceleration lane and/or tapers as part of a commercial driveway if the driveway meets the warrants illustrated on Exhibit 4. Typical dimensions are shown in Exhibit 5. The anticipated peak hour right turns will be determined from the current edition of the Institute of Transportation Engineers *Trip Generation* manual.
- (8) The permit applicant shall construct a passing lane on the side of the road directly opposite a proposed commercial driveway or other heavy traffic generator when warranted by the two-way 24-hour volume and the anticipated peak hour vehicle left turns from the road as determined by Exhibit 6. The anticipated peak hour left turns will be determined from the current edition of the Institute of Transportation Engineers *Trip Generation* manual.

When other conditions such as horizontal and vertical sight distance, traffic signal location and other physical factors directly affect public safety, a passing lane shall be required. Minimum dimensions for a passing lane are shown on Exhibit 7.

- (9) Directional commercial driveways are considered to be special cases and each such driveway shall be designed individually. Directional driveways shall be designed to facilitate the desired turning movements and to discourage the prohibited movement. Radii shall be, as approved by the

**Engineer-Manager, based on the intersecting angle and the turning path of the largest vehicle that will normally use the driveway**

**Rule 3.14 Residential Driveways**

**(1) The number of residential driveways that may be permitted shall be determined as follows:**

- (a) One residential driveway shall be permitted for each platted lot or for unplatted residential property with less than 100 feet of frontage.**
- (b) Additional residential driveways may be permitted for residential property with more than 100 feet of frontage, provided that the sum of the driveway widths of these additional driveways does not exceed 15 percent of the frontage in excess of the first 100 feet.**
- (c) Two residential driveways may be permitted on the same property, in lieu of the above, to serve a circle driveway if the frontage of the property is 80 feet or more.**
- (d) Residential driveways on the same property shall be at least 45 feet apart, center-to-center.**

**(2) The dimensions of a residential driveway shall conform to those given on Exhibits 8 and 9.**

**Rule 3.15 Field Entrances and Utility Structure Driveways**

**Field entrances may be permitted for cultivated land, timber land, or undeveloped land. The dimensions of a field entrance and of a utility structure driveway shall conform to those given on Exhibit 10.**

**Rule 3.16 Driveway Surfacing**

**(1) When the road is paved:**

- a) Commercial driveways shall be paved and curbed to end of the radius. If the road is uncurbed, the curb ending adjacent to the road shall be located at least 13.5 feet from the edge of pavement and shall be parallel to the road.**



- (6) The pavement of all additional lanes and accompanying tapers shall be the same material as the pavement of the road unless the Eaton County Road Commission allows the use of an equivalent pavement. The cross slope of all additional lanes and all tapers shall be a continuation of the cross slope of the existing road pavement unless otherwise specified by the Eaton County Road Commission.**
- (7) The surface of road shoulder adjacent to all additional lanes and tapers shall be of the same material as the surface of the existing road shoulder and conform to the current *Michigan Department of Transportation Standard Specifications*. The shoulder area between adjacent commercial driveways serving the same property which are less than 200 feet apart (centerline to centerline) must be paved as directed by the Road Commission's Engineer-Manager.**

#### **Rule 3.17 Curbing**

**Curbing shall either be the same detail as the existing curb or shall conform to the current Eaton County Road Commission standards for curb and gutter.**

- (a) If the road is uncurbed, the grade of the driveway between the road edge of pavement and the edge of the shoulder shall conform to the slope of the shoulder.**
- (b) The curb height shall be tapered from full height at the edge of pavement to zero height at the sidewalk if the driveway grade meets the grade of an existing sidewalk.**

#### **Rule 3.18 Drainage**

- (1) The driveway, including any new lanes or tapers, shall be constructed so that the existing drainage is not adversely affected. The drainage and the stability of the road sub-grade shall not be altered by driveway construction or roadside development. Roadway drainage shall be carried to the outside edge of the pavement.**
- (2) Drainage from adjacent private property in excess of assumed agricultural runoff from natural ground contours shall not be discharged directly into**

the road drainage system. Drainage from paved areas of the driveway within the right of way shall be directed outside the right of way unless adequate enclosed drainage facilities are available or, are provided by the applicant as part of the driveway construction.

- (3) All culvert pipe used shall be of a size adequate to carry the anticipated natural flow of the ditch; the culvert size shall be determined by the Eaton County Road Commission and shall not be less than 12 inches inside diameter. All culverts, catch basins, drainage channels and other drainage structures required within the road right of way shall be manufactured or constructed and installed in accordance with the current *Michigan Department of Transportation Standard Specifications*. The minimum length of the culvert may be determined as the sum of the width of the driveway and the distance needed to provide slopes to adjacent fore slope and back slope; maximum slope of 1 on 2. The use of headwalls on culvert ends will not be permitted. The use of sloped end sections or mitered ends are required on all culverts over 18" diameter. Sod, rip-rap or other suitable material shall be placed at all culvert ends and slopes to prevent erosion.

**RULE 3.19 Driveway Profile**

The driveway profile shall be determined using the following criteria:

- (1) If the road is uncurbed, the grade of the driveway between the road edge of pavement and the outside edge of the shoulder shall conform to the slope of the shoulder. Where the existing shoulder is less than 6 feet, the grade of the existing road bed or shoulder shall be carried to a point 6 feet off the edge of the existing roadway surface.
- (2) The grade of driveways connecting to curbed road may be the grade required to meet the sidewalk elevation if the sidewalk is 10 feet or less from the road edge of pavement. The grade cannot exceed the maximums given in Rule 3.19 (3). If the driveway grade does exceed the allowable grade, the sidewalk shall be adjusted.
- (3) For uncurbed roads, if the sidewalk is more than 10 feet from the edge of pavement or if there is no sidewalk:

- a) At a point 25 feet from the edge of pavement the grade of two-way, one-way and divided commercial driveways shall be within six inches of the edge of pavement grade. At a point 75 feet from the edge of pavement the grade shall be within 4.5 feet of the edge of pavement grade.
  - b) At a point 25 feet from the edge of pavement, the grade of residential and utility structure driveways and field entrances shall be within 2.5 feet of the edge of pavement.
- (4) Vertical curves (15 foot minimum) shall be provided at all changes of grade of four percent or more.
- (5) If the sidewalk elevation must be adjusted to meet the driveway, the slope of the sidewalk shall not exceed 3/8 inch per foot.

#### **Rule 3.20     Parking and Storage**

**It is the intent of the Board that commercial establishments of a "drive-in" nature (drive-in restaurants, drive-in banks, auto washes, etc.) should provide adequate storage off highway rights of way for vehicles waiting to be serviced since vehicle storage on highway lanes or shoulders may constitute a traffic hazard in the public roadway.**

**Rule 3.21 Traffic Signing**

- 1) **The permit applicant shall provide and properly maintain temporary traffic signs and pavement markings which are necessary for the proper operation of the driveway. All signs and pavement markings shall conform to the current *Michigan Manual of Uniform Traffic Control Devices*. The plans shall indicate the signing and pavement markings required.**
- 2) **The Eaton County Road Commission will determine what permanent signs and markings are necessary for the public road system and install them at the expense of the applicant. Permanent signs and markings will be in conformity with the *Michigan Manual of Uniform Traffic Control Devices*. The plans shall indicate the signing and pavement marking required.**

**Rule 3.22 Traffic Signals**

- (1) **At high-volume access facilities, traffic safety and operations may be enhanced by the installation of a traffic signal. These devices shall be used in accordance with the *Michigan Manual of Uniform Traffic Control Devices*.**
- (2) **A traffic signal may be installed at the developer's expense, subject to approval by the Road Commission's Engineer-Manager as part of an access facility, if the projected traffic generated by development would meet the warrants established by the MMUTCD. This must be documented as part of a traffic engineering study.**
- (3) **The installation of a traffic signal shall require approval of the Road Commission's Engineer-Manager. Although the warrants for the installation of a traffic signal may be satisfied, the Road Commission's Engineer-Manager may determine that a traffic signal would be detrimental to coordinated traffic flow, result in undue delay, impair traffic operations, or impair traffic safety on the county road. In this case, a traffic signal shall not be installed.**
- (4) **The traffic signal shall be designed to meet the current MDOT Standards and Specifications.**
- (5) **All costs associated with a traffic signal installation shall be the sole responsibility of the developer. Prior to approval of an access facility with a**

traffic signal, the developer shall enter into a formal joint agreement with the Road Commission. The joint agreement shall delineate the responsibilities of the Road Commission and the responsibilities of the developer as related to the signal installation. The responsibilities of the developer shall include, but not be limited to, paying, or causing to be paid, all perpetual costs for the energy and maintenance of a traffic signal; paying, or causing to be paid, all costs for any future upgrading, revisions, modifications, and/or modernizations; providing the Road Commission with indemnification; and meeting other provisions related to the traffic signal installation. The ownership of a traffic signal shall rest with the Road Commission. If a traffic signal is required to be a part of an interconnected traffic signal system, the developer shall also be responsible for all costs associated with the interconnection.

- (6) To ensure progression of traffic through a system of traffic signals, spacing of signalized intersections of the arterial with cross streets should be in multiples of at least one-quarter mile. This will ensure the potential for progression of traffic in both directions at speeds of between 25 and 35 mph.
- (7) Signalization of driveways should only be considered if driveway traffic volumes or past accident experience warrants installation. With the approval of the Road Commission's Engineer-Manager, any warranted driveway signals may be located 600-700 feet from adjacent signals if the driveways served form "T" intersections. Four-legged signalized driveway intersections should be avoided unless they are least one-quarter mile from adjacent signals. Driveway signals should also be interconnected and coordinated with any other signals, either existing at the time the driveway signal is installed or added later, within 1,500 feet of the signalized driveway.

**A traffic impact analysis is a specialized study which assesses the effects that a particular development's traffic will have on the surrounding transportation network. A traffic impact study will vary in range and complexity, depending on the type and size of the proposed development.**

**A traffic impact study may be required by the Eaton County Road Commission for the review of any driveway or median access permit or any development that could generate 100 or more peak-hour directional trips, or over 750 daily trips (over a 24 hour period). The difference in traffic generated should be evaluated for its potential impact on the adjacent street system, including nearby intersections and at access points at the development under consideration.**

**A traffic impact "assessment" could be required for a project generating 50-99 peak hour directional trips. This type of study is recommended for smaller scale projects which should not have a significant impact on the overall street system, but will have impacts at the site access. The analysis for this type of study can typically be isolated to the turning movements at all site access points.**

**The estimated trip generation for the site being reviewed must be based on one of two sources: 1) The current edition of the *Trip Generation* manual, published by the Institute of Transportation Engineers (ITE) and, 2) Local data from similar sources.**

**The Level of Service (LOS) should be evaluated for the critical movements at site access points. Also, the traffic study should show the projected level of service for all movements at signalized intersections and for all critical movements at unsignalized intersections. If the LOS of the existing intersections is a "C", "D" or better, and the proposed project will produce a LOS of "E" or worse at one or more movements at a nearby intersection or site access point, mitigation needs to be evaluated. If the intersection LOS is currently an "E", or worse, the current LOS must be maintained or improved.**

**The major benefit of a traffic impact study is to determine what, if any, mitigation measures are needed. The study should present mitigation alternatives and recommendations. Mitigation measures are not limited to physical improvements. Mitigation can include changes to traffic signal timing or reducing the number of trips generated in the peak hour. Sample mitigation measures include but are not limited to, the following:**

**Roadway Improvements**

- **construct a by-pass lane**
- **pave the roadway**
- **re-align the street**
- **improve sight distance**
- **widen the roadway**
- **intersection improvements**
- **add deceleration/acceleration lanes**
- **add a median crossover**

**Access Management Techniques**

- **increase driveway spacing from intersections**
- **relocate driveway or intersection**
- **reduce the number of driveways**
- **install a median**
- **develop a service road system**
- **share access with adjacent land**

**Operational Improvements**

- **change signal timing or phasing**
- **improve signal progression**
- **reduce peak hour trips through transit**
- **off-peak shift changes**

**Site Plan/Land Use Techniques**

- **reduce project size**
- **modify project phasing**
- **use of regulatory, directional signs and pavement markings**
- **pedestrian or bicycle circulation**
- **internal circulation**
- **service vehicle/truck access or circulation**

**When a traffic impact study is required, it shall be prepared under the direction of an experienced traffic/transportation engineer, licensed as a Professional Engineer by the State of Michigan, and shall be accompanied by the resume of the preparer.**

**The study should include a resume of the preparer and/or relevant experience of the firm responsible for the report. The study should also be signed by the preparer with full recognition of potential liability for the results and recommendations outlined in the report.**

## **PART 4 -- BANNER PERMITS**

### **Rule 4.1 Authorized Applicants**

**A permit for the installation of banners to be placed within or over county road right of way may be issued by the Eaton County Road Commission only to the governing body of a city, incorporated village, or township, pursuant to Act 200 of the Public Acts of 1969, as amended.**

**Commercial signs shall not be permitted within the right of way of all roads under the jurisdiction of the Eaton County Road Commission.**

### **Rule 4.2 Application Forms**

**Applications for permits for the erection of banners shall be in the manner prescribed by or on the appropriate forms supplied by the Permit Department.**

### **Rule 4.3 Minimum Requirements**

- (1) Permit applications shall be accompanied by a copy of a resolution from the local governing body designating an authorized official of the city, village or township as having the authority to make the application for the city, village or township. The resolution must indemnify and hold harmless the Eaton County Road Commission from all claims arising as a result of the permitted banner installation. The application should be submitted approximately one month in advance of the proposed installation.**
- (2) Each application shall include the following information:**
  - (a) activity in connection with which the banners are to be placed;**
  - (b) location of the proposed installation including distance to overhead traffic control devices;**
  - (c) a description of the banners, including any legend or symbol thereon;**
  - (d) the height of an overhead banner from the road surface to its lowest point;**

- (e) the dates on which the banner will be erected and removed; this period shall not exceed a time period specified by the Eaton County Road Commission. An acceptable period of time for banners to be in place is three weeks except for Christmas decorations which may be in place for six weeks;
- (f) such other information as the Eaton County Road Commission may require.

#### **Rule 4.4 Design and Placement Requirements**

- (1) The design, method of installation and location of all banners shall be such that they will not be dangerous to those using the road or unduly interfere with the free movement of traffic.
- (2) Overhead banners shall be securely fastened and have a minimum bottom height of 18 feet above the surface of the traveled way and be placed no closer than 100 feet on either side of traffic lights or signals and shall be placed so as not to obstruct a clear view of such traffic lights or signals or other traffic control devices. They shall not be attached to trees.
- (3) Banners shall not have displayed thereon any legend or symbol which may, in any way, be construed to advertise or otherwise promote the sale of or publicize any merchandise or commodity or which may be construed to be political in nature.
- (4) Banners shall not have displayed thereon any device which is or purports to be or is an imitation of or resembles or which may be mistaken for a traffic control device or which attempts to direct the movement of traffic.
- (5) Decorations shall not include flashing lights or other devices that may be distracting to motorists.

#### **Rule 4.5 Conditions of Issuance of Banner Permits**

- (1) Permits for the erection or installation of banners may be canceled by the Eaton County Road Commission if such installation shall become dangerous to those using the road or unduly interfere with the free movement of traffic.
- (2) The city, village or township making application shall faithfully fulfill all permit requirements and shall indemnify and hold harmless the Board from

claims of every kind arising out of operations by any permit or permits issued.

**PART 5 - ROAD CLOSURES FOR PARADES, CELEBRATIONS,  
FESTIVALS, AND SIMILAR ACTIVITIES**

**Rule 5.1 Authorized Applicants**

A permit granting permission for the temporary closure of a county road for a reasonable length of time for a parade, celebration, festival or similar activity or to use a county road as a detour for traffic around a parade, etc., on a non-county road may be issued by the Eaton County Road Commission only to the governing body of a city, incorporated village or township.

**Rule 5.2 Application Forms**

Application for permits to close or partially close or use as a detour a county road for a parade, celebration, festival or similar activity shall be in the manner prescribed by or on the appropriate forms supplied by the Permit Department.

**Rule 5.3 Minimum Requirements**

Permit applications shall be accompanied by a copy of a resolution from the city, village or township requesting permission for the road closure or partial closure or use as a detour. The resolution shall designate and authorize an appropriate official of the requesting government body to sign the permit documents on its behalf. The application shall include, but not be limited to, the following information:

1. The nature of the activity for which the permit is requested;
2. The dates and times it is proposed to close and reopen the county road to traffic;
3. The roads to be closed and the limits for each road, between which the road is to be closed;
4. The proposed detour route or routes;

5. **Such other information which may be useful to or requested by the Eaton County Road Commission.**

#### **Rule 5.4 Road Closure Permit Conditions**

**All permits allowing the closure or partial closure of a road shall be issued subject to the following conditions:**

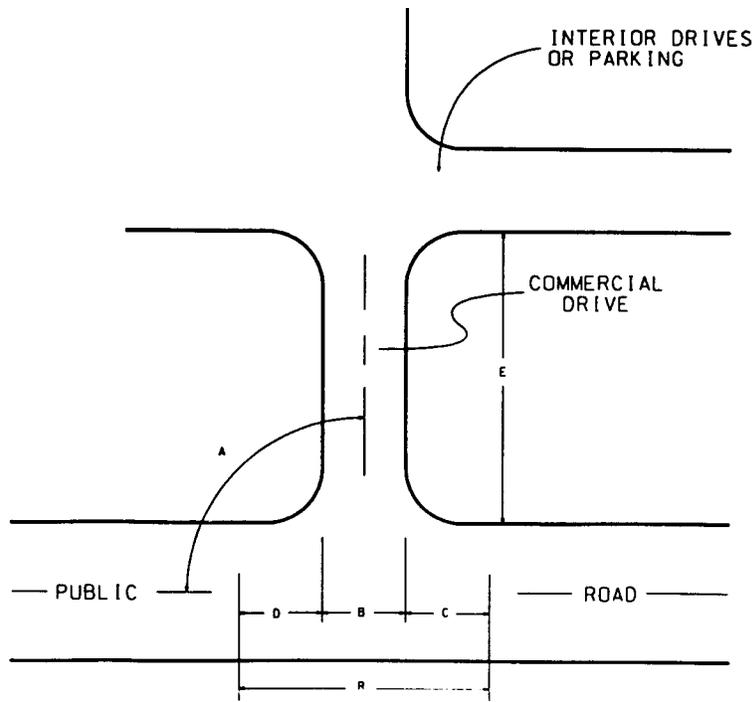
- (1) The closure or partial closure of the road and the detour route selected shall allow for the safe and free movement of traffic.**
- (2) A suitable alternate location is not available for the parade, celebration or festival which is more acceptable for traffic safety and offers less interruption of traffic.**
- (3) Normally, closures or partial closures of roads shall be allowed during daylight hours only. In the special case where a temporary nighttime closure is permitted for a parade, celebration, festival or similar activity, all points of potential hazard and all barricades and warning traffic signs will be lighted at the applicant's expense and such lighting must be in accordance with requirements and specifications of the Eaton County Road Commission.**
- (4) All traffic control devices installed in conjunction with the road closure or partial closure and the detour route shall conform to the provisions of the current *Michigan Manual of Uniform Traffic Control Devices*.**
- (5) Required traffic control devices will be furnished and installed by the applicant or licensee, and all costs arising from the installation, maintenance and removal of such devices shall be borne by the applicant.**
- (6) A city, village or township making such application shall faithfully fulfill all permit requirements and shall indemnify and hold harmless the Board from claims of every kind arising out of operations by any permit or permits issued.**
- (7) The applicant shall clean up any litter, debris, etc., occurring in the road right of way as a result of the permitted event at his own expense and within a reasonable time thereafter. In the event that the Eaton County Road**

**Commission must do the cleanup work, the applicant shall reimburse the Eaton County Road Commission for the cost thereof.**

# Exhibit 1

TWO-WAY COMMERCIAL DRIVEWAY DIMENSIONS			
DESIGN FEATURES		STANDARD	RANGE
Intersecting Angle	A	90°	60° to 120°
Driveway Width	B	30 Feet	20 to 50 Feet
Entering Radius	C	30 Feet	15 to 35 Feet
Exiting Radius	D	30 Feet	15 to 35 Feet
Throat Length	E	50 Feet	30 to 200 Feet
Total Opening R B+C+D	R	80 Feet	45 to 105 Feet

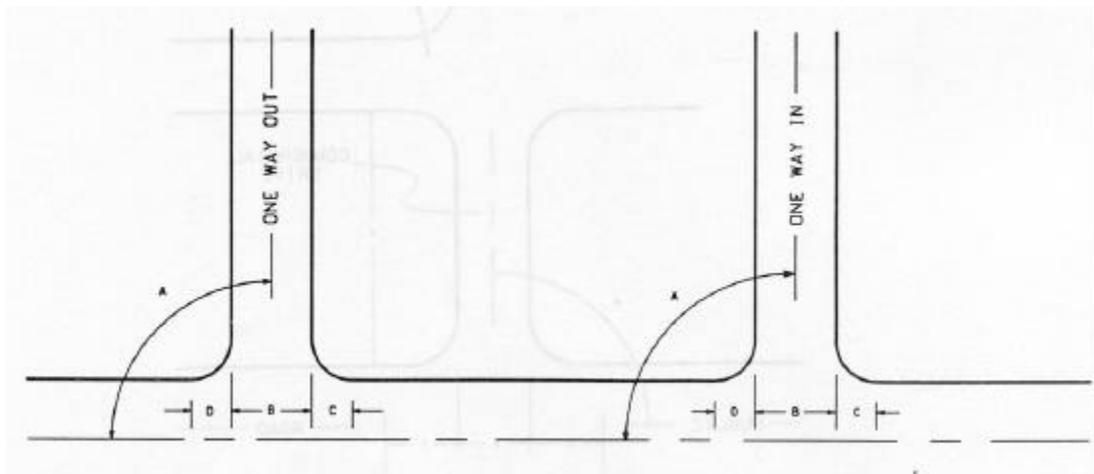
**Note:** The “Standard” dimension shall be used unless the Permit Department specified, or the applicant shows cause for a different value. The “range” in dimensions indicates the working values for each design feature.



## Exhibit 2

ONE-WAY COMMERCIAL DRIVEWAY DIMENSIONS			
DESIGN FEATURES		STANDARD	RANGE
Intersecting Angle	A	90°	60° to 120°
Driveway Width	B	18 Feet	16 to 20 Feet
One Way-In	Entering Radius	30 Feet	20 to 50 Feet
	Exiting Radius	5 Feet	5 to 10 Feet
One Way-Out	Entering Radius	5 Feet	15 to 10 Feet
	Exiting Radius	30 Feet	20 to 40 Feet

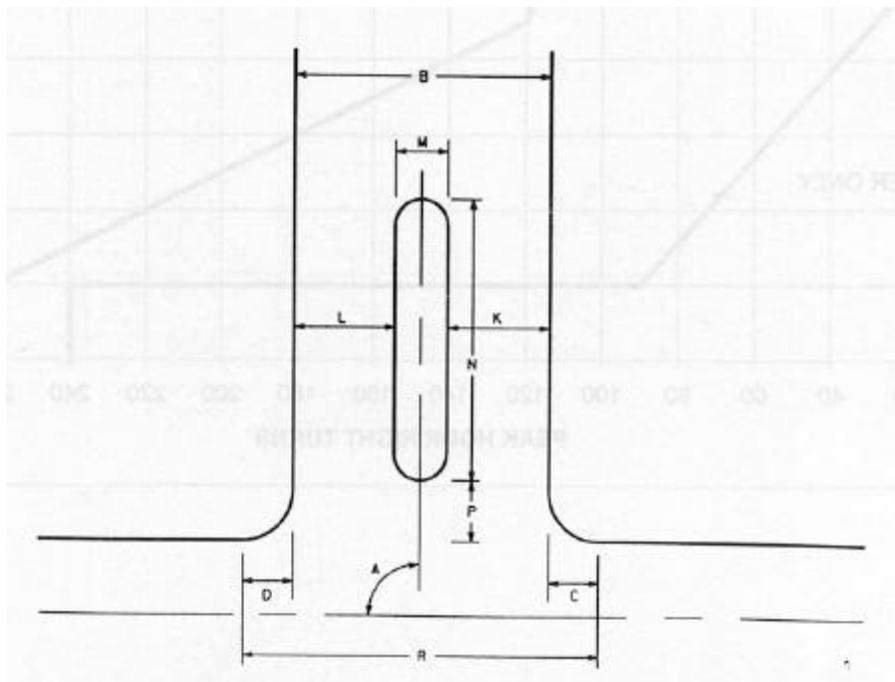
**Note:** The “Standard” dimension shall be used unless the Permit Department specified, or the applicant shows cause for a different value. The “range” in dimensions indicates the working values for each design feature.



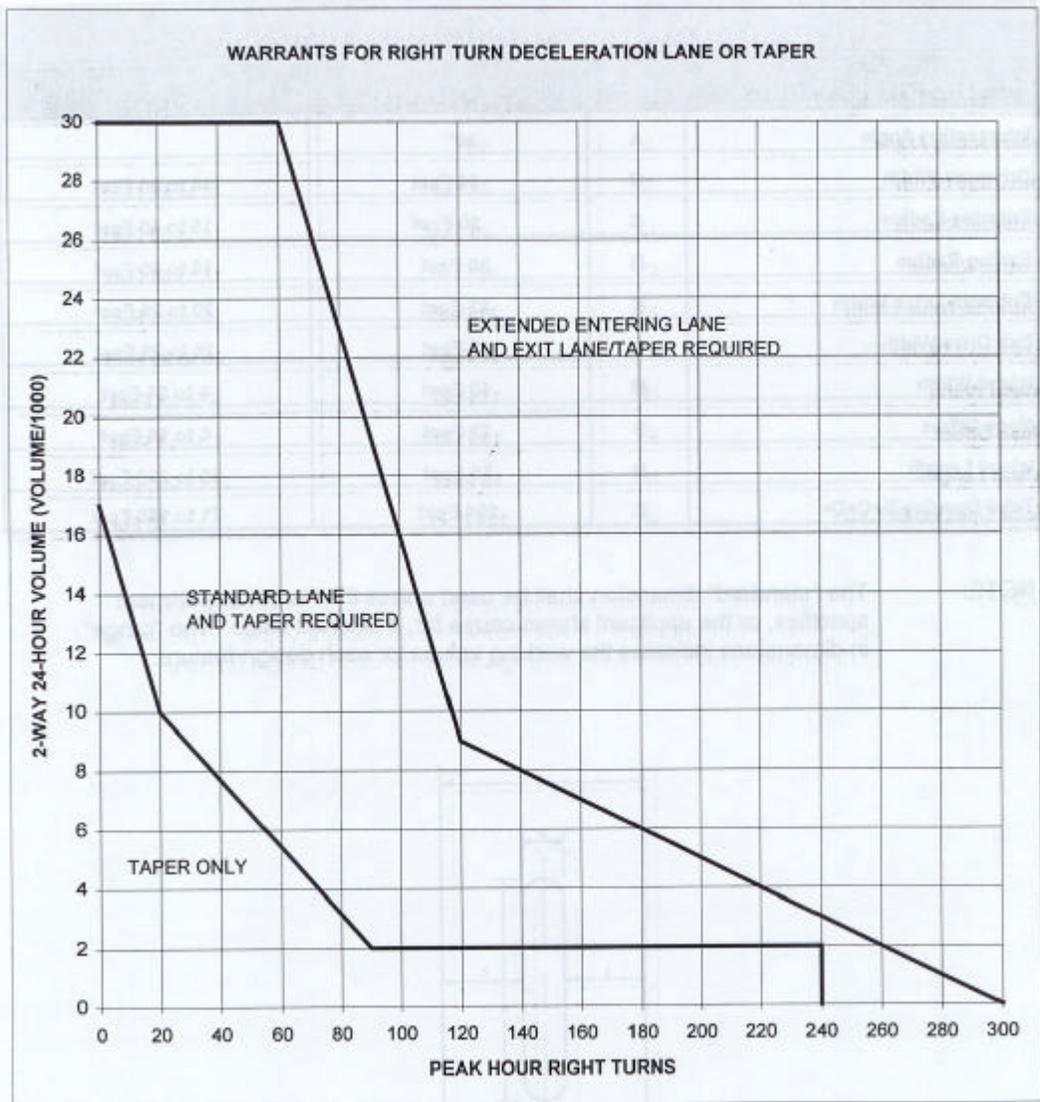
### Exhibit 3

DIVIDED COMMERCIAL DRIVEWAY DIMENSIONS			
DESIGN FEATURES		STANDARD	RANGE
Intersecting Angle	A	90°	
Driveway Width	B	54 Feet	46 to 80 Feet
Entering Radius	C	30 Feet	15 to 50 Feet
Exiting Radius	D	30 Feet	15 to 50 Feet
Entrance Drive Width	K	22 Feet	20 to 28 Feet
Exit Drive Width	L	22 Feet	20 to 28 Feet
Island Width	M	10 Feet	6 to 24 Feet
Nose Offset	P	12 Feet	6 to 18 Feet
Island Length	N	50 Feet	30 to 200 Feet
Total Opening B+C+D	R	104 Feet	71 to 150 Feet

**Note:** The “Standard” dimension shall be used unless the Permit Department specified, or the applicant shows cause for a different value. The “range” in dimensions indicates the working values for each design feature.



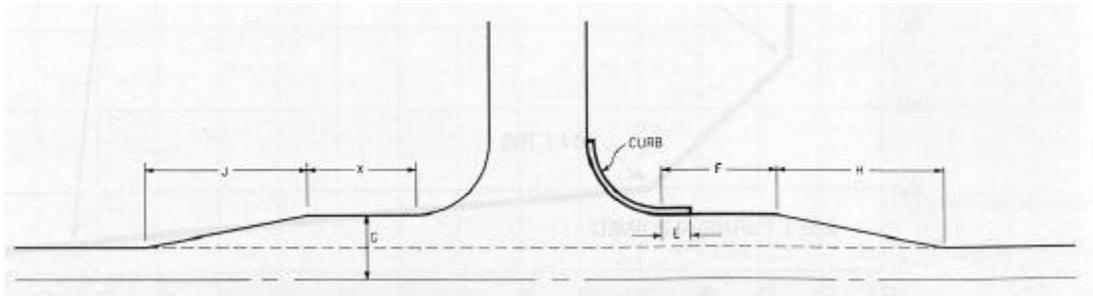
# Exhibit 4



## Exhibit 5

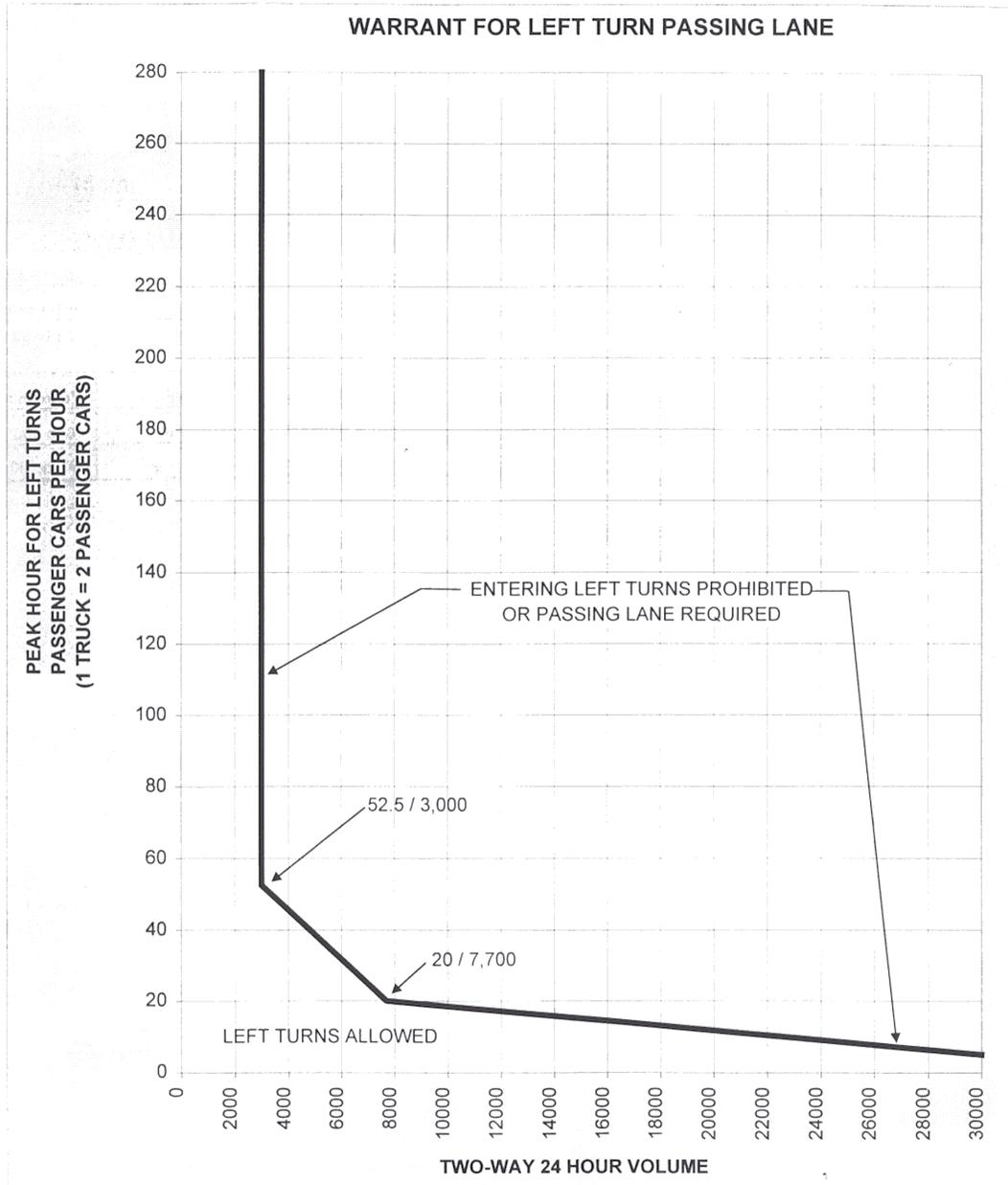
COMMERCIAL RIGHT-TURN LANE AND TAPER					
DESIGN FEATURES		CURBED ROAD		UNCURBED ROAD	
		Standard	Range	Standard	Range
Curb Ending	E	Not Applicable		10 Feet	(no range)
Right-Turn Lane Length	F	100 Feet	0 to 150 Feet	100 Feet	0 to 150 Feet
Pavement Width- from Center Line of Road	G	24 Feet	22 to 30 Feet	24 Feet	22 to 30 Feet
Entering Taper	H	100 Feet	75 to 150 Feet	100 Feet	75 to 150 Feet
Exiting Lane Length	X	0 Feet	0 to 100 Feet	0 Feet	0 to 150 Feet
Exiting Taper	J	75 feet	50 to 100 Feet	75 Feet	50 to 100 Feet

**Note:** The “Standard” dimension shall be used unless the Permit Department specified, or the applicant shows cause for a different value. The “range” in dimensions indicates the working values for each design feature.



# Exhibit 6

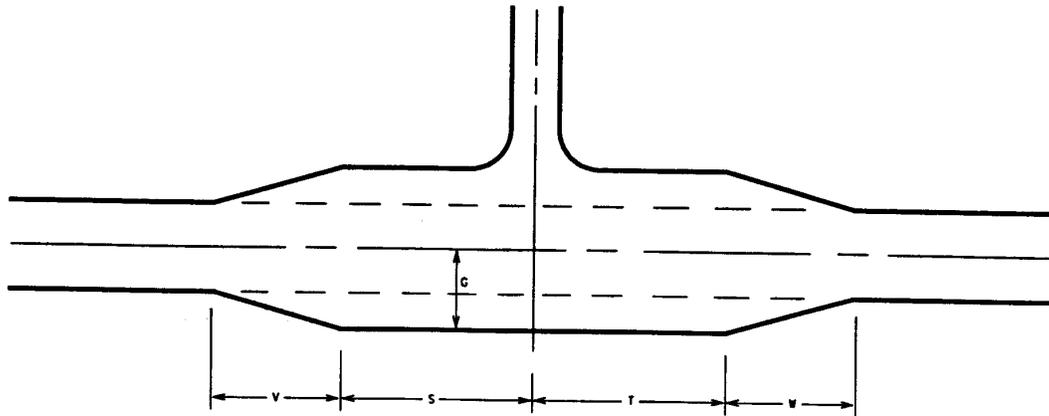
## EXHIBIT 6



## Exhibit 7

PASSING LANE			
DESIGN FEATURES		STANDARD	RANGE
Approaching Taper	V	See Taper Table	50 to 225 Feet
Departing Taper	W	225 Feet	225 Feet
Approaching Lane Length	S	150 Feet	100 to 200 Feet
Departing Lane Length	T	50 Feet	50 to 100 Feet
Pavement Width from Center Line of Road	G	24 Feet	22 to 24 Feet

**Note:** The “Standard” dimension shall be used unless the Permit Department specified, or the applicant shows cause for a different value. The “range” in dimensions indicates the working values for each design feature.

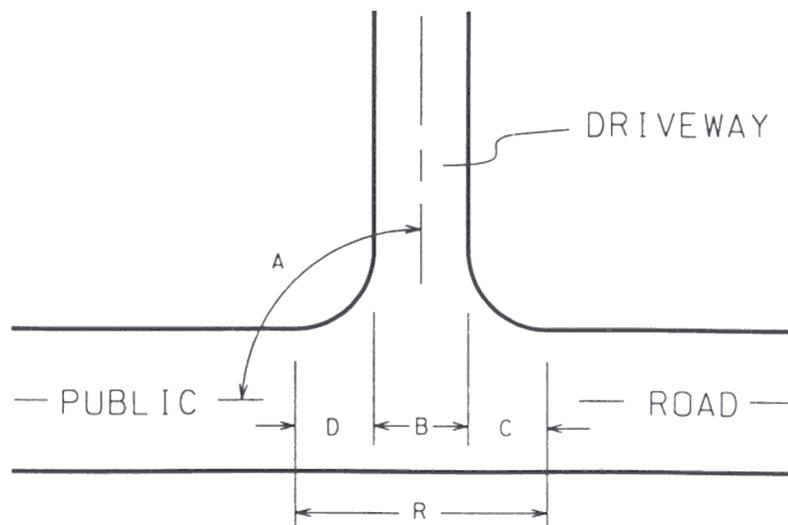


TAPER TABLE		
MPH	FLARE-RATE	TAPER-FEET
30	1:4	50
35	1:6	75
40	1:8	100
45	1:11	130
50	1:15	180
55	1:19	225

## Exhibit 8

RESIDENTIAL DRIVEWAY- UNCURBED ROAD			
DESIGN FEATURES		STANDARD	RANGE
Intersecting Angle	A	90°	70° to 110°
Driveway Width	B	12 Feet	10 to 25 Feet
Entering Radius	C	10 Feet	2 to 15 Feet
Exiting Radius	D	10 Feet	2 to 15 Feet
Total Opening B+C+D=	R	32 feet	14 to 55 Feet

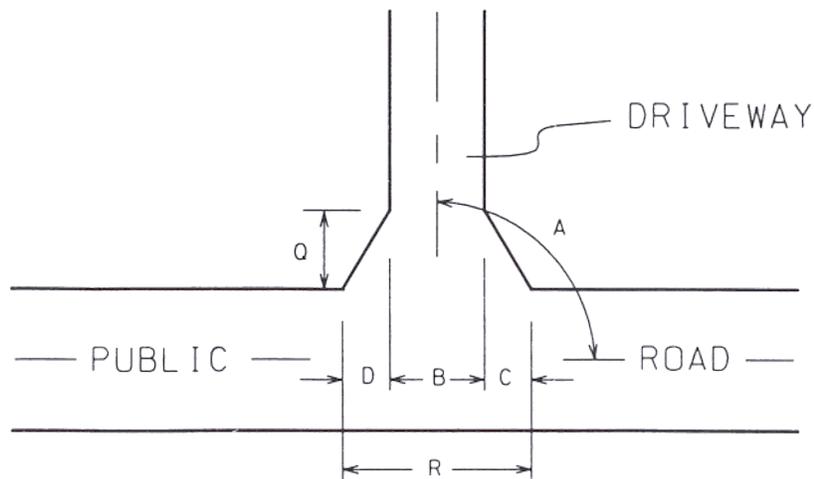
**Note:** The “Standard” dimension shall be used unless the Permit Department specified, or the applicant shows cause for a different value. The “range” in dimensions indicates the working values for each design feature.



## Exhibit 9

RESIDENTIAL DRIVEWAY- CURBED ROAD			
DESIGN FEATURES		STANDARD	RANGE
Intersecting Angle	A	90°	70° to 110°
Driveway Width	B	12 Feet	10 to 25 Feet
Entering Taper Width	C	6 Feet	2 to 15 Feet
Exiting Taper Width	D	6 Feet	2 to 15 Feet
Taper Depth	Q	10 Feet	10 to 20 Feet
Total Opening B+C+D=	R	24 feet	14 to 55 Feet

**Note:** The “Standard” dimension shall be used unless the Permit Department specified, or the applicant shows cause for a different value. The “range” in dimensions indicates the working values for each design feature.



## Exhibit 10

Field Entrance and Utility Structure Driveways			
DESIGN FEATURES		STANDARD	RANGE
Intersecting Angle	A	90°	70° to 110°
Driveway Width	B	16 Feet	12 to 35 Feet
Entering Radius	C	10 Feet	5 to 35 Feet
Exiting Radius	D	10 Feet	5 to 35 Feet
Total Opening B+C+D=	R	36 feet	2 to 105 Feet

**Note:** The “Standard” dimension shall be used unless the Permit Department specified, or the applicant shows cause for a different value. The “range” in dimensions indicates the working values for each design feature.

