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RULES FOR PLAT STREET DEVELOPMENT

SECTION I Order of Procedure

The following steps, which will be explained in detail in subsequent sections, will be followed by the Board in considering any plat:

1. Approval of a Preliminary Plat.
2. Approval of Construction Plans for Road and Utilities.
3. Construction of Roads and Utilities.
4. Final Inspection Approval and Acceptance of Constructed Road.
5. Approval of Final Plat.

Deviations from this order of procedure can cause delays, confusion and unnecessary expenses.

SECTION II Definitions

- A. **A.A.S.H.T.O.** The American Association of State Highway and Transportation Officials.
- B. **A.S.T.M.** The American Society for Testing Materials.
- C. **Board:** The Board of County Road Commissioners of the County of Eaton, State of Michigan.
- D. **County Engineer:** The Engineer-Manager or other representative designated by the Board to carry out the duties entailed by the Subdivision Act and these Subdivision Regulations.
- E. **Final Plat:** A map of all or part of the subdivision prepared and certified by the Proprietor's Engineer or the Proprietor's Land Surveyor in accordance with the requirements of the Subdivision Control Act of 1967, Act 288, of the Public Acts of 1967, as amended.
- F. **Governing Body:** Township Board, City Council or Village Board having jurisdiction of the land in which the plat is to be located.
- G. **Laboratory:** Any materials testing laboratory which is approved by the County Engineer.
- H. **M.D.O.T.** Michigan Department of Transportation.
- I. **M.D.O.T. Specifications:** The current edition of Michigan Department of Transportation Standard Specifications for Construction.
- J. **Pre-Preliminary Plat:** A Pre-Preliminary Plat is a sketch plan or informal plan drawn to scale and may be in pencil, if desired, showing the existing features of a site and its surroundings and the general layout of the proposed subdivision.
- K. **Preliminary Plat:** A map showing the preliminary layout of a subdivision in sufficient detail to allow review by the Board and other interested agencies.
- L. **Proprietor:** A natural person, firm, association, partnership, corporation or combination of any of them which may hold ownership interest in land whether recorded or not.
- M. **Proprietor's Engineer or Proprietor's Land Surveyor:**
 - 1. With reference to the Preliminary Plat, and /or the Final Plat means a civil engineer who is licensed in the State of Michigan as a licensed professional engineer or a land surveyor who is licensed in the State of Michigan as a licensed land surveyor and who is representing the Proprietor.
 - 2. With reference to design and construction plans means a civil engineer who is licensed in the State of Michigan as a licensed professional engineer and who is representing the Proprietor.
- N. **Subdivision Control Act of 1967:** Act 288 of the Michigan Public Acts of 1967 and all amendments thereto.
- O. **Utilities:** All persons, firms, corporations, copartnerships or municipal or other public authority providing gas, electricity, water, steam, telephone, sanitary sewer, storm sewer or other services of a similar nature. Also included is the service that these utilities would provide.

- P. **Urban or Urban Area:** The urbanized area of Eaton County defined as all of the Charter Townships of Delta, Windsor and Oneida, and those areas of the remaining townships which lie within two (2) miles of the corporate limits of the following cities and villages: Charlotte, Eaton Rapids, Olivet, Bellevue, Vermontville, Sunfield, Mulliken, Potterville, or such other areas that the Board deems necessary.
- Q. **Rural or Rural Area:** All areas of Eaton County not designated as urban.
- R. **Clear Vision Area:** Additional right of way which may be required at or near intersections which must be kept free of obstructions in order to provide adequate sight distance for motorists.
- S. **Service Road:** A roadway, either public or private, which generally parallels a public road, and which serves to separate the public road from adjacent land use. A service road limits access to the through road while providing for free circulation of local traffic for the adjacent land use.

SECTION III

General Requirements

- A. The contents of this publication do not supersede any part of the Subdivision control Act of 1967.
- B. A Pre-Preliminary Plat may be made by a Proprietor or a Proprietor's Engineer to submit to the County Engineer. This Pre-Preliminary Plat should contain basic information concerning the proposed development for discussion prior to commencing with the Proprietor's land plans and preliminary designs. It is hoped that these discussions will avoid needless delays and wasted effort by acquainting the Proprietor and the Proprietor's Engineer with any long range plans of the Board which may have bearing on the development, any coordination which may be required between the Board and the affected township, and to discuss any points of these Procedures for Plat Street Development that may not be clear to the Proprietor or the Proprietor's Engineer.
- C. Private roads within plats shall conform to the minimum requirements for public roads as established in these Subdivision Regulations.
- D. Streets that are to be public streets in unplatted areas shall conform to the current Board's Procedures for Plat Street Development. The standard fees covering engineering review costs and construction inspection costs will be required for these streets.
- E. Proprietors desiring variations from these requirements may submit their requests in writing to the Board. The Board, in cases which it considers meritorious, may waive individual requirements in specific instances.
- F. When a proposed plat incorporates an existing county road which is not constructed to current standards, said road shall be reconstructed by the Proprietor as necessary to improve the road to conform with standards acceptable to the Board. The Board may require service roads to be constructed by the Proprietor where commercial development is proposed. When a proposed lot is bordered by an interior subdivision street, an existing local road or a primary road, access will be allowed only from an interior subdivision street in the proposed plat.
- G. Permits must be obtained from the Board by the Proprietor for any construction within the right-of-way of existing county roads.
- H. All work, including plans for such work, within any proposed road right-of-way must be reviewed and approved by the County Engineer.
- I. It is desired that all initially proposed public underground utilities in the street right-of-way should be installed prior to the construction of the subbase and base of the street. The final determination is to be made by the County Engineer.
- J. It is also desirable that the street base construction and underground utility work be accomplished in one construction season, and the street surfacing be done after construction traffic and one freeze/thaw season has passed. Proper construction methods and materials shall be used to achieve 95% density of the roadway to the satisfaction of the County Engineer.
- K. The Board reserves the right, at its discretion, to add requirements and to delete or modify existing requirements in the exercise of its statutory authority to maintain streets in a condition reasonable safe and convenient for public travel.

SECTION IV

Preliminary Requirements

The Proprietor is reminded that approvals of the Preliminary Plat by the Governing Body and the Eaton County Drain Commissioner are also required under the Subdivision Control Act. If a preliminary plat approved by the Board is revised because of requirements of such approving agencies or revisions are otherwise made by the Proprietor, such revisions shall be incorporated in a revised preliminary plat and resubmitted for approval or disapproval by the Board. The Proprietor is further reminded that under certain conditions, the Michigan Department of Transportation, the Michigan Department of Natural Resources, Michigan Water Resources Commission and the Eaton County Health Department are also required to give their approvals to the Preliminary Plat.

When received, the final approval of the Preliminary Plat by the Board confers upon the Proprietor for a period of two years from date of approval, the conditional right that the general terms and conditions under which Preliminary Plat approval was granted, will not be changed.

The Proprietor must resubmit the Preliminary Plat to the Board for approval or disapproval if the Governing Body has not given its final approval within one year after the date of the Board's approval.

A. Preliminary Plat

Four copies of the Preliminary Plat layout drawn to scale not smaller than one inch to 200 feet on a 24" x 36" sheet by the Proprietor's Engineer shall be submitted to the Board for approval. (See Example N in Section X)

The preliminary plat layout shall show plainly all of the following and meet the requirements listed:

1. Show locations and extent of property. This shall include a location map showing the plat in relation to the county road system.
2. Show plat dimensions on the portion of layout for which approval is requested. Approximate dimensions are sufficient.
3. Give the location of the plat with reference to the part of section and township in which the parcel is situated.
4. Each initial Preliminary Plat layout shall be accompanied by a topographic map showing relief with not more than two foot contour intervals (referenced to USGS elevation datum) and upon which the overall plat layout is superimposed. Provided the dimension scale allows it without sacrificing other details, the plan layout complete with contours can be submitted as a single unit.
5. Show locations and names of proposed streets and alleys together with arrows showing drainage flow.
6. Show plainly all governing conditions such as:
 - a. Adjoining named subdivisions, lot numbers and adjacent named streets.
 - b. State highways.
 - c. Rivers, one hundred year flood plain datum, natural water courses, existing county or private drains, sewers and cross culverts on existing roads.
 - d. Railroads, cemeteries and parks.
 - e. All other features that the location or existence of which might influence the

layout of the plat, including streets and driveways, existing and proposed, within 300 feet of the proposed subdivision.

7. Show typical cross section of street to be constructed including right-of-way width which shall comply with the requirements as established in the Procedures for Plat Street Development.

8. Show the name of the Proprietor and Proprietor's Engineer or Land Surveyor, with mailing address and telephone number of each.

9. In the case where the Proprietor proposes to subdivide a given area but wishes to begin with only a portion of the total area, the original preliminary plat shall include the proposed general layout for the entire area (master plan). The part which is proposed to be subdivided first shall be clearly superimposed upon the master plan in order to illustrate clearly the method of development which the Proprietor intends to follow. Each subsequent plat shall follow the same procedure until the entire area controlled by the Proprietor is subdivided.

If an individual phase is part of a preliminary master plan approved by the Board within the last two years (24 months), and is in accordance with the current standards, the individual phase will not require separate preliminary approval. However, the individual phase shall require construction plans approved by the County Engineer.

The minimum street length to be constructed in each subdivision or phase of a subdivision shall not be less than 500 feet.

10. The layout of roads, streets and alleys in the proposed plat shall provide a continuous circuit for travel except when, in the opinion of the Board, the lands are limited in area or are subject to a natural barrier. In such cases a dedication that provides access to a public highway of one end only will be acceptable, if a dedication or easement is given on additional land at its terminus so as to permit turning in a continuous circuit or by some other means approved by the Board. The street layout shall fit the pattern established by the adjacent roads and streets and/or as may be required by the master or comprehensive plan adopted by the governing body having jurisdiction. All existing public roads, streets or alleys that terminate at the boundaries must be connected with the road and street system of the proposed plat. When the proposed plat abuts unplatted land, provisions shall be made for street extensions to the title line of the unplatted area. In this regard, the Eaton County Road Commission will not approve plats which result in the creation of narrow or irregular shaped parcels of land of negligible economic or aesthetic value, where the predominant function of such parcels is to unreasonably deny access to public roads, utilities, or services from adjacent land.

11. The edge of pavement, both left and right of the centerline, must maintain a parallel alignment. "Elbows" and other non-uniform sections of roadway will not be allowed.

12. All streets and highways which are extensions of, or in line with, existing streets must carry the names of those in existence. Other streets and highways shall be given such names as the owner may choose, subject to the recommendation of the Tri-County Regional Planning Commission and the approval of the Board.

13. Half width streets or alleys will be acceptable only when the boundary of the proposed plat coincides with the boundary of a recorded plat on which a half width street or alley has previously been dedicated.

14. Strip-type subdivisions along existing roads where access to each lot is from the existing roadway shall be discouraged. The concept of fronting lots on an internal road system is encouraged for reasons of safety.

15. The Preliminary Plat shall be filed with the County Engineer for the consideration by the Board. The Board will give approval or disapproval of the Preliminary Plat in writing within 30 days. If the Preliminary Plat is rejected, the reasons for the rejection will be provided to the Proprietor.

Preliminary plat approval by the Board shall be void after two years from the date of approval unless otherwise extended in writing.

When approval of the Preliminary Plat is granted, the Proprietor's Engineer may proceed with the road and drainage plans.

B. Preliminary Construction Plans

1. General

After approval of the Preliminary Plat, three copies of a preliminary road and utility construction plan as prepared by the Proprietor's Engineer covering all the roads within the plat shall be submitted to the County Engineer for approval. These plans shall consist of plan and profile drawings and cross sections, which shall comply with the current specifications required by the Board. The preliminary plans shall show all pertinent data necessary to develop construction plans and shall be drawn on standard size (24" x 36") sheets to a scale of not less than one inch to 50 feet.

All dead-end streets shall be provided with a turnaround (cul-de-sac). This treatment shall be designed in accordance with the Board's specifications (See Example L in Section X). Cul-de-sac length shall not exceed 1320 feet measured from the centerline intersection of the streets to the center point of the cul-de-sac circle. Special consideration may be given by the Board for longer cul-de-sacs for topographic conditions or other unusual situations. Galvanized steel beam guard rails, erected by the Proprietor, will normally be required at the stub end of streets which are temporarily dead-ended at the subdivision limits. At such dead-end streets, the Proprietor will be required to place such signs as the County Engineer specifies, informing the public that the street is not a through street. Temporary turnarounds may be required regardless of the length of the stub end street.

Intersections shall not be permitted less than 250 feet apart. Intersections of platted streets entering primary county roads shall not be permitted less than 660 feet apart.

The maximum length of blocks shall be 1320 feet. The maximum distance between access points (public streets) to abutting property shall be 1320 feet.

All streets and alleys shall be provided with facilities for adequate surface drainage. This may be accomplished by the use of ditches, county drains, natural water courses, or constructed tributaries thereto. It is strongly recommended that this be done with underground storm drains. In the Urban Area of Eaton County, the storm drainage system shall be of the underground type.

Where ditches, other than standard roadside ditches, or underground drainage are provided, they shall be made a part of the county drain system, by proper legal procedures through the Eaton County Drain Commissioner, and meet all necessary requirements as to right-of-way, easements and permits for use of land.

No construction of roads or utilities shall be started until the preliminary road and utility construction plans have been approved.

When the plans are approved or disapproved, such action will be marked on the plans and one copy will be returned to the Proprietor's Engineer. Revised plans will be approved when they show compliance with all requirements. If sidewalk and/or curb and gutter are to be provided in the subdivision they must be detailed in the preliminary road and drainage plans.

2. Preliminary Road and Utility Plans

All work within the proposed right-of-way must have plans reviewed and approved by the County Engineer. The plans must show plainly all of the following information:

- a. Plan view with the centerline profile or top of curb profile directly below the plan view.
- b. Typical cross section of the road to be constructed.
- c. The proposed grades shall coincide with datum determined by the USGS or USC&GS, if practicable. A permanent bench mark shall be established in the plat and shown on the plans.
- d. The location, size and depth of all underground utilities used for road drainage within the plat.
 - (1) Show clearly sizes, lengths and locations of all cross road culverts
 - (2) Show location and type of inlets and cleanout points for underground drainage systems.
 - (3) Show standard plan for all catch basins, inlets, manholes, etc. This may be done by reference to M.D.O.T. Standard Plans.
- e. Show locations and profile of all drains outside of the roadway area that are to be utilized for roadside drainage.
- f. Soil borings will be required and shown on the plans if unstable soils are present.
- g. The preliminary utility plan may be superimposed on the preliminary road plan if this can be done without sacrificing clarity.

Locations for underground utilities:

- a. Storm sewers: Either side, 13 feet from property line.
- b. Sanitary sewers: Near centerline of roadway.
- c. Water Mains:
 - (1) North side of road, near 8 feet from property line.
 - (2) West side of road, near 8 feet from property line.
- d. Gas Mains and Electric:
 - (1) South side of road, near 8 feet from property line.
 - (2) East side of road, near 8 feet from property line.
 - (3) Depth of cover in roadway, 48 inch minimum.
 - (4) Depth of cover outside of roadway, 36 inch minimum.
- e. Other: By approval of the County Engineer.

C. Right-of-Way Requirements

1. These road right-of-way requirements are the minimum widths of the Board. All street construction shall be centered on the street right-of-way. Section line and quarter line roads shall be centered on those lines unless the Board approves an exception.
2. State or U.S. highways shall be of the width required by the Michigan Department of Transportation.
3. All primary roads and local roads (excluding subdivision streets) shall be a minimum right-of-way width of 100 feet.
4. Residential subdivision street right-of-way shall be a minimum width of 66 feet.
5. The right-of-way on all curvilinear streets shall be the same width as the right-of-way on the tangents.
6. Widths of right-of-way in excess of the widths required above may be required by the Board when considered necessary due to situations including, but not limited to, commercial areas, multilane roadway, non-motorized travelways, utilities, cut or fill sections of roadway, clear vision areas, or for reasons of safety.



SECTION V
Final Plans and Specifications for Street Construction

A. Construction Plans

The construction plans shall be of the same dimension and clarity as the preliminary construction plans. The approved preliminary construction plans may be used as final construction plans if approved by the County Engineer. If a change in the road design effects a utility, the Proprietor's Engineer shall inform the utility owner. The drawings shall include drawings of all construction details, paving layout, sanitary sewer layout, water main layout and drainage layout, together with profiles of the above. The plan and profile drawings shall be on standard size 24" x 36" sheets with horizontal scale not smaller than 1" = 50' and vertical scale not smaller than 1" = 5' (See Example O in Section X). The construction plans shall include the following drawings.

1. Typical cross section
2. Paving and drainage layout
3. Sanitary sewer and water main layout
4. Construction details referred to

The construction plans must bear the seal of a licensed professional engineer.

TABLE B-1 Typical Pavement Sections - Urban

Pavement Section / Design Feature	Light Residential Section	Medium Residential Section	Heavy Residential Section	Indus. or Heavy Commercial Section
No. of Lots Served	0-25	26-50	51+	----
Width of R/W, ft.	66	66	66-80	66-100
Bituminous Pavement with Granular Base:				
Curb & Gutter, Face to Face, ft.	30	30	36	To be determined
Bit. Top, inches	1.5	1.5	2	To be determined
Bit. Leveling	2.5	2.5	3	To be determined
22A Aggregate Base, inches	8	8	8	8
Class II, Subbase, inches	8	8	12	12
Edge Drain, inches	4	4	6	6
Full Depth Asphalt Pavement:				
Curb & Gutter, Face to Face, ft.	30	30	36	36 Minimum
Bit. Top, inches	2	2	1.5	2
Bit. Leveling	----	----	1.5	2
Bit. Base, inches	5	6	6	6
Subbase Under Curb and Gutter, inches	8	8	12 or 8 w/C4 C & G	12 and C4 C & G
Edge Drain, inches	4	4	6	6
Concrete Pavement:				
Curb & Gutter, Face to Face, ft.	30	30	36	36-60
Portland Cement Concrete, inches	6	6	7	9
Class I Subbase, inches	6	6	6	6
Edge Drain, inches	4	4	4	4

TABLE B-2 Typical Pavement Sections - Rural

Pavement Section / Design Feature	Light Residential Section	Medium Residential Section	Heavy Residential Section	Indus. or Heavy Commercial Section
No. of Lots Served	0-25	26-50	51+	----
Width of R/W, ft.	66	66	66-80	66-100
Bituminous Pavement with Granular Base:				
Width of Surfacing, Edge to Edge, ft	22	22	24	To be determined
Shoulder Width, ft	3	4	6	To be determined
Bit. Leveling, inches	2.5	2.5	3	To be determined
Bit. Top, inches	1.5	1.5	2	To be determined
22A Aggregate Base, inches	8	8	8	8
Class II, Subbase, inches	8	8	12	12
Edge Drain, inches	----	----	----	6
Full Depth Asphalt Pavement:				
Width of Surfacing, Edge to Edge, ft	22	22	24	33
Shoulder Width, ft	3	4	6	C-4 Curb & Gutter
Bit. Top, inches	2	2	1.5	1.5
Bit. Leveling, inches	----	----	1.5	1.5
Bit. Base, inches	5	6	6	8
Subbase Under Curb, inches	----	----	----	12
Edge Drain, inches	----	----	----	6
Concrete Pavement:				
Curb & Gutter, Face to Face, ft.	30	30	36	36-60
Portland Cement Concrete, inches	6	6	7	9
Class II Subbase, inches	6	6	6	6
Edge Drain, inches	4	4	4	4

C. Alignment

1. Minimum sight distance onto existing county roads from subdivision streets shall be as follows:
 - a. Stopping sight distance shall meet or exceed the desirable stopping sight distance in accordance with Table 1 - Minimum Stopping Sight Distance, (See Example F₁ in Section X).
 - b. Corner sight distance at internal subdivision intersections shall meet or exceed Table 2-Corner Sight Distance at Rural Intersections, (See Example F₁ in Section X).
 - c. Corner sight distance at an intersection of a subdivision street with a local road or primary road shall meet or exceed the distance in Table 3 - Subdivision Corner Sight Distance at a Local Road or Primary Road Intersection (See Example F₂ in Section X).
 - d. Special conditions, in the County Engineer's judgement, may warrant adjustments to the above standards. (See Design Tables - Examples B, C, & D in Section X).
2. Vertical curves shall be designed with a minimum length of 100 feet and a minimum sight distance as required in Section V, C.1. a. above.
3. Horizontal curves shall be designed with a minimum centerline radius as shown in Table 4 - Minimum Horizontal Curves (Centerline Radius). (See Example F₂ in Section X).
4. The minimum grade on any street shall be 0.5 %.
5. The maximum grade on any street shall be 5.0 %.
6. The crown on any street shall be 2.0 %.
7. A minimum edge radius of 30 feet shall be provided at 90 degree intersections within the subdivision streets and where intersecting streets meet the existing county roads.
8. Intersection streets should meet at approximately a 90 degree angle. Skewed intersections will be discouraged. Edge radii of skewed intersections shall be increased as necessary to comply with current AASHTO guidelines.
9. Where intersecting streets meet existing county roads the grade of the proposed street shall match the cross slope of the existing county road as extended to the right-of-way lines.

D. **Storm Sewer**

1. **Design**

- a. Size shall be in accordance with the Eaton County Drain Commissioner's design standards and approved by the Eaton County Drain Commissioner and the County Engineer.
- b. Material shall meet the requirements of the current M.D.O.T. **Standard Specifications for Construction.**

2. **Structures and Covers**

- a. All structure design shall be in accordance with the current M.D.O.T. Standard Plans for Manholes, Catchbasins and Inlets.
- b. Covers - all structure covers shall be in accordance with current M.D.O.T. Standard Plans, or approved equivalent.

3. **Spacing of Structures**

- a. Catchbasins and inlets and culverts shall be placed such that all intersections, low points and necessary intermediate points are properly drained or as indicated and approved by the County Engineer.
- b. The drainage structures should, if practical, be placed in alignment with the side lot lines and/or their intersection to avoid conflict with drive way openings.
- c. Manholes shall be located at all changes in alignment, size or grade and be spaced a maximum of approximately 300 feet apart.

4. **Construction**

All Storm Sewers are to be inspected by the Proprietor's Engineer and shall be true to line and grade and properly bedded and backfilled. See Subsection H. below, Utilities and Backfill.

E. **Roadside Ditches and Crossroad Culverts**

1. The minimum ditch grade shall be 0.5%. Grades from 1% to 4% shall be sodded. Grades over 4% shall be rip-rapped or paved. Grades of ditches less than 1% shall have an established growth of vegetation provided by topsoiling, seeding and mulching in accordance with the current M.D.O.T. Specifications.

2. Where drains cross the roadway at depths of three feet or less, the crossing shall be made with reinforced concrete culvert pipe or as specified by the Eaton County Drain Commissioner.

- a. Reinforced concrete culvert pipe shall meet or exceed the current specifications of ASTM, Designation C-76, without elliptical reinforcement.
- b. Corrugated metal pipe shall meet the current specifications of ASTM, Designation M-36.
- c. Materials and methods for construction of culverts shall be in accordance with current M.D.O.T. **Standard Specifications for Construction.**

3. Roadside ditches shall be stabilized and free of sedimentation and erosion prior to acceptance of the streets for maintenance by the Board.

4. Where drainage ditches, other than standard roadside ditches, or where enclosed drainage is provided, all shall be made part of the Eaton County Drain System by the proper legal procedures and shall meet all the necessary requirements of the Eaton County Drain Commission. Proprietor or proprietor's engineer or agent shall provide certified written acceptance by the Eaton County Drain Commission of all drainage areas, systems, facilities and structures accepted and adopted into the County Drain System.

5. The maximum distance that surface water may be carried in an open roadside ditch should be 600 feet.

6. The Proprietor shall provide an acceptable system of drainage to enable lot owners to drain sump pump outlets, roof drains and similar private drainage. In all cases, discharge of any water or drainage on the roadway is prohibited.

F. Clearing and Grubbing

All trees and brush including the roots thereof shall be removed from the right-of-way of the streets within the limits of the subdivision, unless otherwise permitted in writing by the County Engineer.

G. Existing Road Cleanup

Ditches along existing county roads shown on the plat shall be cleaned out to such a depth as to provide positive drainage. All brush, fences, obstructions, etc., shall be removed from the right-of-way. Trees shall be removed as directed by the County Engineer.

H. Utilities and Backfill

All utilities should be located in accordance with Section IV, B. of Subdivision Regulations and all lot or house services stubbed to the right-of-way line prior to curb and gutter construction. In this connection, it is strongly recommended that all public underground utilities be installed after the rough grading has been completed. (See Example K in Section X).

1. **Trench Backfill in Roadway:** This shall apply to all utilities located within an area delineated by a 1 on 1 slope measured from a point on the bottom of the back of curb or a point on the outside edge of shoulder.

a. To apply at all times:

(1) M.D.O.T. Class II Granular material placed and compacted to at least one foot above any buried pipe with minimum 95% compaction. Sound native material may be used for backfill from one foot above pipe to top of subgrade. Ninety five percent compaction shall be obtained on all material, and shall be verified by density tests.

2. **Catchbasin and Manhole Backfill in Roadway:** At all times, structures shall be backfilled with M.D.O.T. Class II granular material and compacted to the same requirements for trench backfill in roadway.

I. Finished Earth Grade

The finished subgrade shall be free of all topsoil, stones, stumps, organic matter, muck, peat, and frost heave material and shall be prepared in accordance with the current M.D.O.T. **Standard Specifications for Construction**. The backfill of all trenches (such as trenches for sewer, water, utility or culverts) that are within the grade of the proposed streets, shall be thoroughly compacted. The entire width of the right-of-way shall be graded so that any point on the right-of-way shall be not more than 1.0' above

or below the finished centerline grade. The County Engineer may vary this requirement if topographic conditions warrant.

J. Subbase, Base Material and Construction Methods

1. Subbase and base materials and construction methods for this placement shall be in accordance with the current M.D.O.T. **Standard Specifications for Construction**.

a. The Proprietor's Engineer shall present to the County Engineer a Certified analysis, made by a laboratory, of all aggregates that are intended to be used on the streets. This analysis must be presented and approved before any surfacing is placed on the streets.

b. The use of bituminous base course mixture is permissible. The method of construction shall be according to Section 4.00 of the current M.D.O.T. **Standard Specifications for Construction** laid at a compacted uniform depth as shown in table Section V B.1 or B.2 in two or more courses. A tolerance of one quarter inch, plus or minus, will be allowed in the compacted bituminous aggregate base course. The bituminous mixture shall be in accordance with the current M.D.O.T. **Standard Specifications for Construction** Section 7.10 for Bituminous Base Mixture No. 700, 20C Aggregate.

2. The completed aggregate or bituminous base course shall conform to the required line, grade, and cross section. The use of water or chemical admixtures to aid in the consolidation of the aggregate base course may be used subject to the prior written approval of the County Engineer.

3. Road construction specifications for industrial streets and/or collector streets will be as outlined in general requirements and as shown on the typical section for industrial streets.

K. Surfacing Materials and Construction Methods

1. Bituminous surface courses shall be constructed in accordance with the current M.D.O.T. **Standard Specifications for Construction** Section 4.00. The bituminous mixtures shall be in accordance with the current M.D.O.T. **Standard Specifications for Construction** Section 7.10 for mixture No. 1100, 20AA designation.

2. Concrete pavements shall be constructed in accordance with the current M.D.O.T. **Standard Specifications for Construction** Section 4.50. Pavement integral with the curb will be permitted at the option of the proprietor.

L. Sidewalks and Curb and Gutter

1. Sidewalks:

Sidewalk, when called for on the plans, shall meet the current M.D.O.T. **Standard Specifications for Construction**. The depth of walk shall be not less than four inches, except at driveways where it shall be not less than six inches. Sidewalk grades shall be shown on the plans, when the walks are to be constructed. Concrete for sidewalk shall meet all requirements of M.D.O.T. Grade 35S concrete.

2. Curb and Gutter:

a. The roadway, curb elevation, and Eaton County Road Commission curb and gutter cross section shall be shown on the plans. Materials and methods for construction of concrete curb and gutter shall meet the requirements of the current M.D.O.T. **Standard Specifications for Construction** and shall include three and one half inch reinforcing bars. M.D.O.T. Standard C-4 or F-4 curb may be used at the proprietor's option.

- b. Expansion joint material shall be placed at all spring points and at 100' intervals. Contraction joints shall be located at 10 foot spacings.
- c. Either straight faced curb and gutter or rolled curb and gutter may be used at the option of the Proprietor. (See Example K in Section X)
- d. All concrete shall meet the requirements for M.D.O.T. Grade 35S.
- e. All standard curb cuts shall be done by sawcutting to a minimum depth of two inches.

M. Topsoil, Seed, Fertilizer and Mulch

All graded areas within the right-of-way shall be seeded, fertilized and mulched. The methods and time of seeding and mulching shall meet the requirements of the current M.D.O.T. **Standard Specifications for Construction**. All disturbed areas shall be covered with a minimum of 2" of topsoil. No road will be accepted by the County Engineer where ditch or bank erosion or sedimentation is evident. All disturbed areas within the road right-of-way, excluding the roadbed, must have vegetative ground cover established to such an extent that washing will not occur.

N. Trees

1. Tree Planting Standards:

Any new trees being planted must be a minimum of 15 feet behind the curb.

2. Existing Tree Standards:

The above shall also apply to existing trees except, when in the opinion of the County Engineer, a deciduous tree is of significant aesthetic value and not closer than five feet behind the curb.

O. Nonspecified Materials and Construction

All items that are not specified within these specifications but that are essential to the proper construction of the roads in question, shall be of material and construction in accordance with the current M.D.O.T. **Standard Specifications for Construction**.

SECTION VI Construction of Streets

A. Coordination

1. It is recommended that a preconstruction meeting be conducted by the Proprietor's Engineer, including the County Engineer, before street construction commences and that a systematic procedure of construction be followed in order to eliminate any possible disagreements between the County Engineer and the Proprietor and its agents.
2. At the start of construction the Eaton County Road Commission may, or contract to, furnish and install a sign(s) stating, "**STREET NOT OPEN FOR PUBLIC TRAVEL**", at each access point to a public road or extension of a public road until the County Engineer determines that the roadway is reasonably safe for the public to travel. The actual cost of the installation and maintenance of such sign(s) shall be included in the street sign installation fee and shall be paid by the Proprietor.

B. Inspection and Testing

1. Inspections may be made by the County Engineer prior to and during any construction operations. Any road cuts made after the placing of the aggregate base shall be properly backfilled and compacted.
2. Inspection by the County Engineer shall not relieve the Proprietor's Engineer of any of his obligations. The Proprietor's Engineer shall inform the County Engineer of the start of the various stages of any construction within the street right of way, and keep him informed as the work progresses. The Proprietor's Engineer shall furnish copies of laboratory and field test results, inspection reports, and related information regarding the quality and progress of the work to the County Engineer in a timely manner during the course of construction.
3. The Proprietor's Engineer shall set and check grade and alignment, supervise all construction, and make all inspections necessary during all phases of construction to verify that proper materials and construction methods are used, and that the work conforms to the approved plans and specifications.
4. Construction on, or use of, frozen material will not be approved.
5. Minimum testing requirements shall be documented by the Proprietor's Engineer as follows:
 - a. Subgrade - visual inspection that all unstable material is removed. Uncertain situations may warrant soil borings and/or testing of questionable soils. A minimum 2% slope in the subgrade surface shall be constructed from the centerline to the edge of the subgrade.
 - b. Subbase - one sieve analysis per 3,000 cubic yards of material. Density tests shall be taken at least once every 400 lineal feet per lift per lane of roadway. Frequency of density test may be increased if compaction is a problem and decreased if consistent acceptable compaction is obtained. This includes granular material under the concrete curb and gutter.
 - c. Aggregate Base - one sieve analysis per 1,200 cubic yards of 22A aggregate. Density test same as for the subbase.
 - d. Concrete Curb & Gutter - proper base construction, air, slump and strength tests of concrete. The concrete shall be tested at least once in the A.M. and once in the P.M. Air content at least once every two hours.

- e. Bituminous Mixtures - one extraction/gradation test per 1,000 tons of each mixture, and/or a minimum of one extraction/gradation per day for each mixture.

C. Acceptance and Maintenance

1. After construction of the roads, streets, alleys and drains is completed, the Proprietor shall furnish the Board with a letter requesting an inspection by the County Engineer, a certificate (See Example J in Section X) from the Proprietor's Engineer, a set of as built plans reflecting field changes, and a letter from the Eaton County Drain Commissioner stating that the storm drainage system within the plat is a part of the County drain system.
2. If the work is not complete and acceptable, the Proprietor and the Proprietor's Engineer will be notified by the County Engineer as to the deficiency. The County Engineer will make a reinspection of the work after being notified by the Proprietor that the deficiencies have been corrected.
3. Approval of any construction phase by the County Engineer does not guarantee acceptance by the Board or relieve the Proprietor of responsibilities or liabilities incurred by the development of the plat.
4. When all plat procedures have been completed satisfactorily, the Final Plat will be recommended by the County Engineer for signature by the Board.
5. The Eaton County Road Commission will assume maintenance of the street(s) if the construction has been accepted by the County Engineer and the plat has been recorded at the Eaton County Register of Deeds. However, before assuming maintenance, if any material or reconstruction is required, it shall be accomplished at the expense of and by the Proprietor.
6. If the Eaton County Road Commission has assumed maintenance of streets that have not received the final bituminous top course, only routine maintenance such as blading for snow removal will be included at Road Commission expense. Other than routine maintenance shall be done by the Road Commission at the Proprietor's expense.
7. In no case will a partial acceptance of a street in the plat be given for maintenance.

SECTION VII
Procedures When Street Improvements Are
Made After Approval of the Final Plat

A. Escrow Agreements

If the Proprietor has entered into a street construction agreement and/or a bituminous pavement agreement with escrow funds deposited to guarantee the completion of all street improvements in accordance with the Board's specifications, the Board may approve the Final Plat upon execution of the agreements and the deposit of the funds.

1. Escrow agreements covering street construction and/or pavement are furnished by the Board. The agreements are to be for approximately a one year period or longer. (See Example G & H in Section X).
2. Deposits shall be in the form of cash, certified checks, certificates of deposit or an irrevocable bank letter of credit. (See Example I in Section X).
3. The deposit required shall be equal to at least 100 percent of the County Engineer's estimate of the cost of the street improvements.
4. If the streets are not completed and in acceptable condition within the terms of the escrow agreement or one year after the approval of the Final Plat by the Board, the Proprietor will be held in default and procedures will be taken to have the streets completed.
5. Release of the deposit will be made upon receipt of the final certificate from the Proprietor's Engineer and copies of acceptable test results for construction materials and approval of the construction of the streets by the County Engineer.
6. The Board will rebate to the Proprietor, as work progresses, amounts of any deposits equal to the ratio of the work completed to the entire project. However, a minimum balance of \$5,000 shall be retained until all items of work in the agreement are complete and acceptable to the County Engineer.

B. Insurance Requirements

The Proprietor, prior to performing any work within any existing or proposed county road right-of-way and continuing through completion of the project, shall furnish to the Eaton County Road Commission, and maintain, the following:

1. Copy of Comprehensive General Liability Certificate, naming the Eaton County Road Commission and it's Commissioners and Employees, as an Additional Named Insured under the contractors Comprehensive General Liability Certificate, with minimum policy limits of \$500,000 per occurrence.

The Chief Engineer and the Board Secretary are authorized to perform a review process to determine whether higher limits of insurance coverage will be required according to risk exposure, size of plat or ultimate size of the plat, location, any unique characteristics, current stage of construction of the road right-of-way, and including any other criteria pertinent to the individual plat.

The policy should protect against all risks of liability typically associated with the work performed, including but not limited to, coverage for products and completed operations, coverage for property of others in the contractors care, custody and control, coverage against the perils of explosion, collapse and underground hazards, XCU, and contractual.

In addition, the Proprietor shall furnish, or cause to be furnished, a Certificate of

Insurance covering Workers' Compensation Insurance, as required under the Michigan Workers' Compensation Act. A sample Certificate of Insurance identifying the minimum protective insurance requirements is included herein. (See Example P in Section X)

2. In the alternative, rather than comply with Section VII B.1., the Proprietor shall provide an Owner's Protective policy, naming the Proprietor and Eaton County Road Commission and its Commissioners and Employees, as a named insured covering the project as described in the proposal. Limits of the coverage under the Owners Protective policy shall be the amount of limits indicated in Section VII B.1.

SECTION VIII Fees

A. **Street Construction Fee**

A fee in the amount of 1% of the County Engineer's estimate of the total cost of construction, not including drainage and pavement, of the street improvements shall be paid to the Board prior to construction and plat approval. This fee is to cover administrative costs and inspections made by the County Engineer in relation to the plat and/or street construction agreement, (See Example G in Section X) and shall be paid in cash.

B. **Bituminous Pavement Agreement**

The minimum street requirements include a bituminous pavement placed by contract with the Board. To accomplish this, it will be necessary for the Proprietor to enter into a Bituminous Pavement Agreement with the Board (See Example H in Section X) and place sufficient funds in escrow to accomplish the bituminous pavement. Normally the Board will take sealed bids and contract for this bituminous pavement. However, this bituminous pavement may be completed by a contractor hired by the Proprietor. The pavement contractor's equipment and work force must be of a type and magnitude to perform the work in a satisfactory manner as determined by the Eaton County Road Commission. The amount of the escrow funds required will be estimated by the County Engineer. The estimate shall include a fee, to be paid to the Board, to cover the Board's expenses for administrative costs, engineering, inspections and testing, based on the following schedules:

1. **Bids taken by Eaton County Road Commission:**

A base fee of \$450 will be charged to the Proprietor of all plats.

When the actual cost for all pavement construction exceeds \$15,000, a charge of three percent (3%) of the actual cost of pavement construction of the surface of the streets in the plat will be made in lieu of the base fee.

2. **Bids taken by the Proprietor:**

When the Proprietor hires a pavement contractor, the Board's fee shall be the base fee in Section VIII, B.1. above plus the actual cost incurred by the Eaton County Road Commission to provide the necessary engineering, inspection and testing.

C. **Sign Fee**

The Proprietor shall pay to the Board, the amount necessary to furnish and erect street name signs and traffic control signs and devices as determined necessary at locations specified by the County Engineer. The payment shall be made to the Board prior to Final Plat approval.

D. **Permits**

1. All work scheduled within existing and proposed right-of-way of roads and streets must have plans reviewed and approved by the County Engineer.

2. If the schedule work is within the proposed right-of-way of streets or within right of way of roads dedicated in the plat, and is included in the construction plans approved by the County Engineer and the street has not been accepted by the Eaton County Road Commission for maintenance, a permit will not be required.

3. If the work is within the right of way of an existing road or street, a permit is

required, including the applicable fee, from the Permit Office of the Eaton County Road Commission.

4. If the work is not included in the construction plans approved by the County Engineer or the street has been accepted by the Eaton County Road Commission for maintenance, a permit, including applicable fee, is required from the Permit Office of the Eaton County Road Commission.

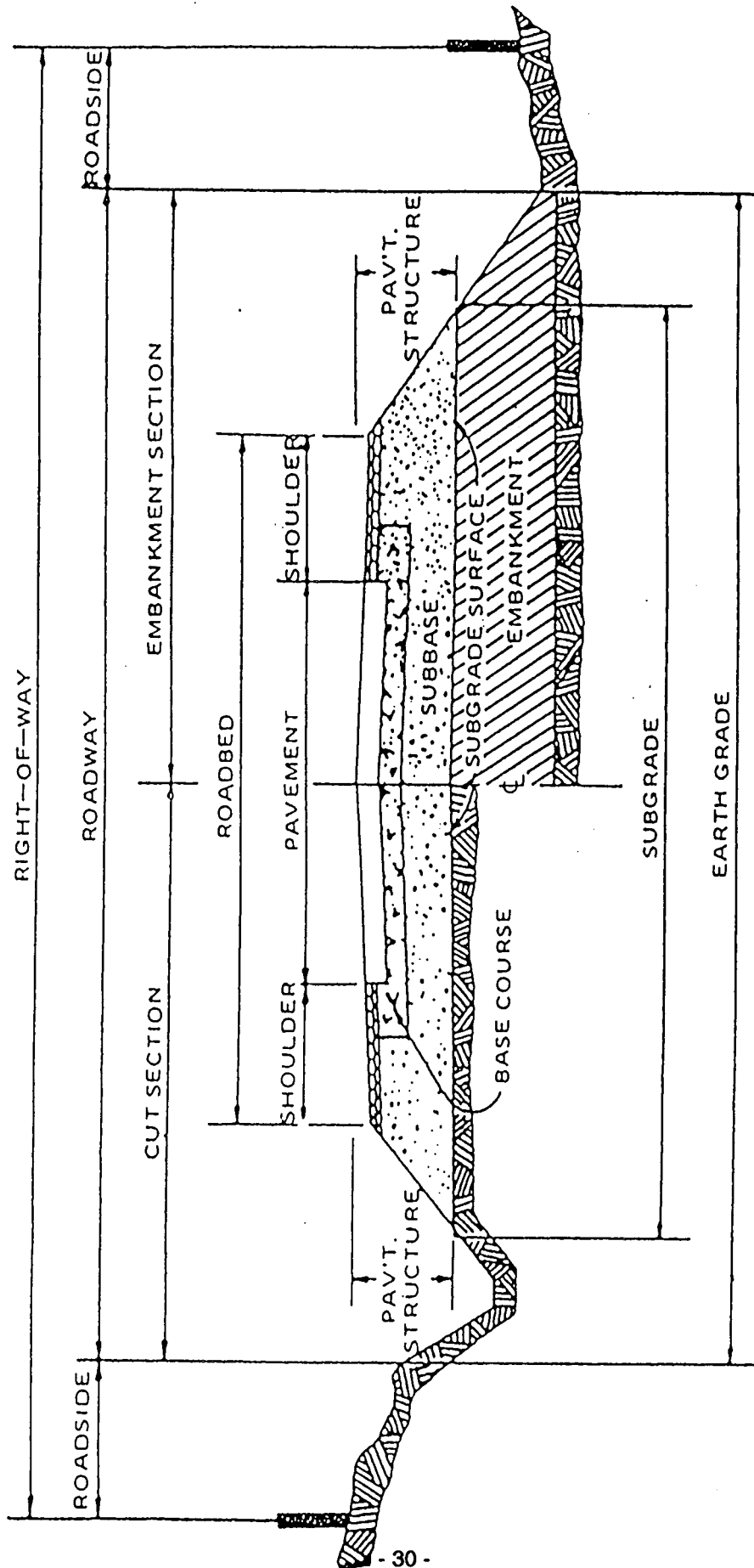
5. Where public utilities are installed under a permit issued by the Eaton County Road Commission to a township, city or public utility, fees will be charged for necessary road restoration only.

6. All driveways installed prior to acceptance of the street for maintenance will be inspected during final inspection. If not included on the construction plans, a driveway shall require a completed driveway permit, including applicable fee, processed through the Permit Office of the Eaton County Road Commission.

SECTION IX
Severability Clause

If any part of these procedures or requirements are found to be invalid, each invalidity shall not affect the remaining portion of the procedures or requirements which can be given effect without the invalid portion, and to this end the procedures or requirements are declared to be severable.

SECTION X
Examples of Required Documents
and
Sketches of Other Requirements



Road Section Nomenclature

DESIGN STANDARDS

Example B

RESIDENTIAL-RURAL no scale

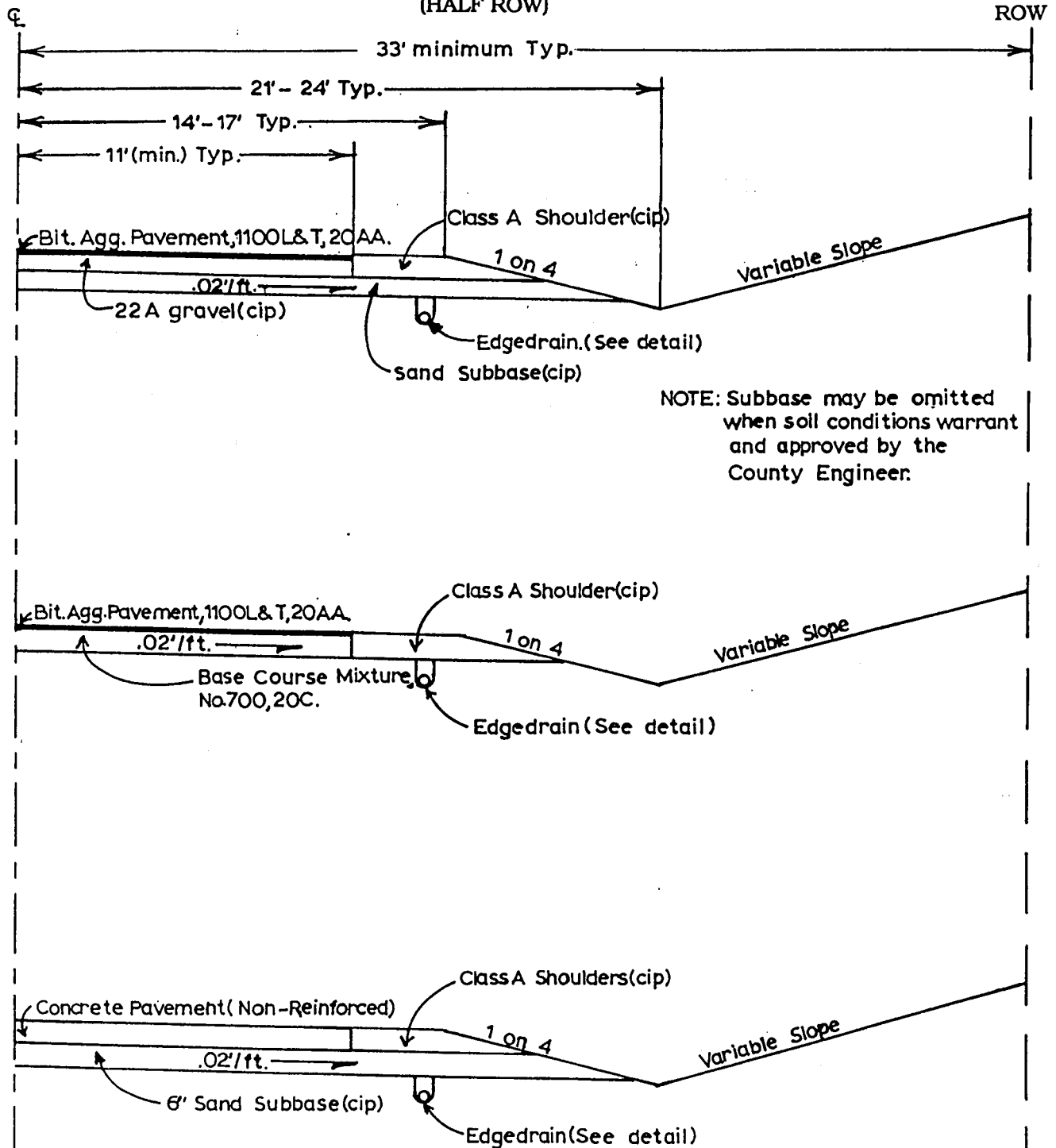
66' ROW (minimum)

22' wide Pavement (min.) For required Pavement Sections. See Tables B1 & B2.

Surface drainage

Class A Shoulders (23A Gravel)

TYPICAL SECTIONS (HALF ROW)



DESIGN STANDARDS

Example C

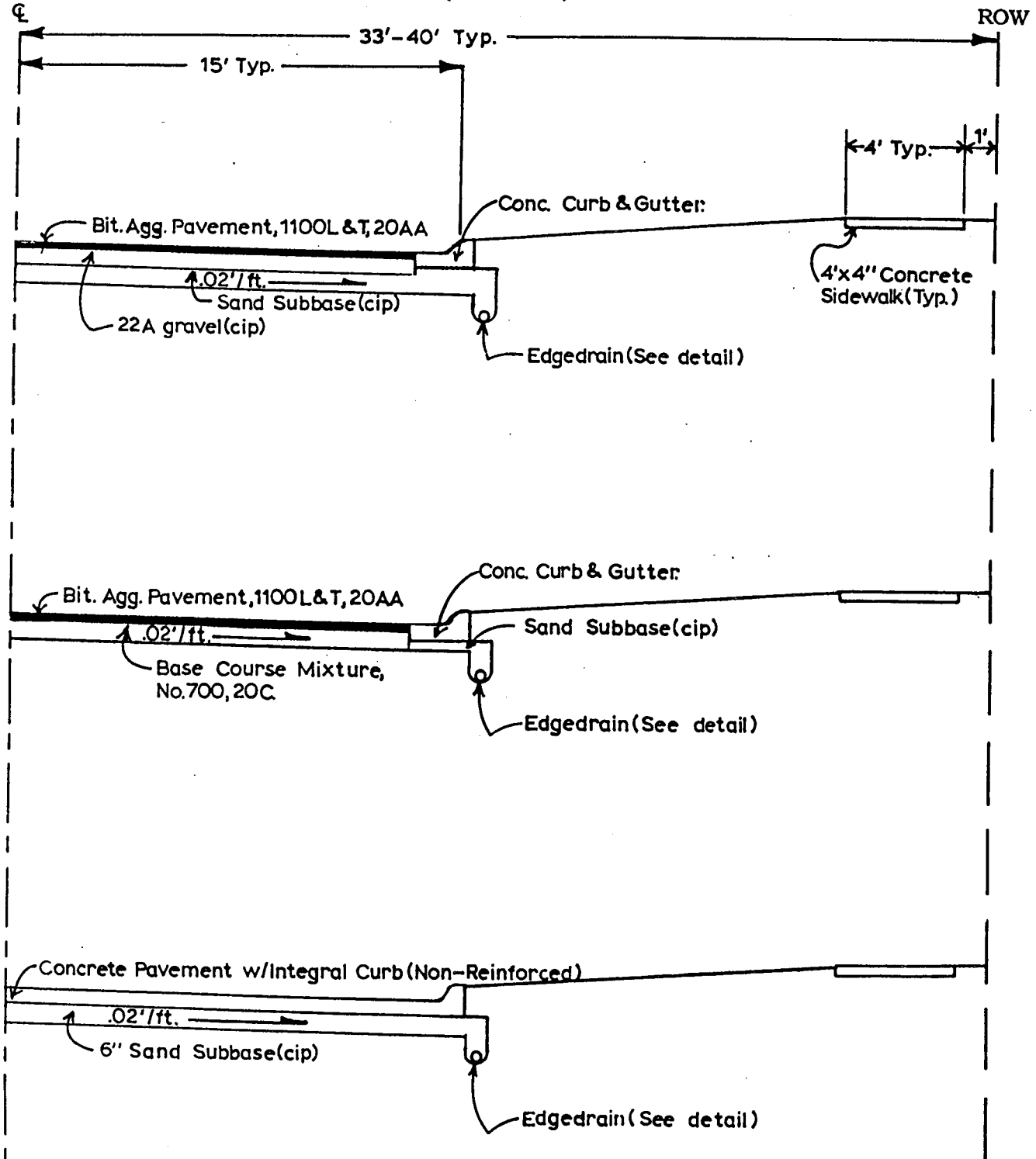
RESIDENTIAL-URBAN no scale

66' ROW (minimum)

CURB & GUTTER - 30' face to face. For required Pavement Sections. See Tables B1 & B2.

Underground Storm Drainage

TYPICAL SECTIONS (HALF ROW)



INDUSTRIAL

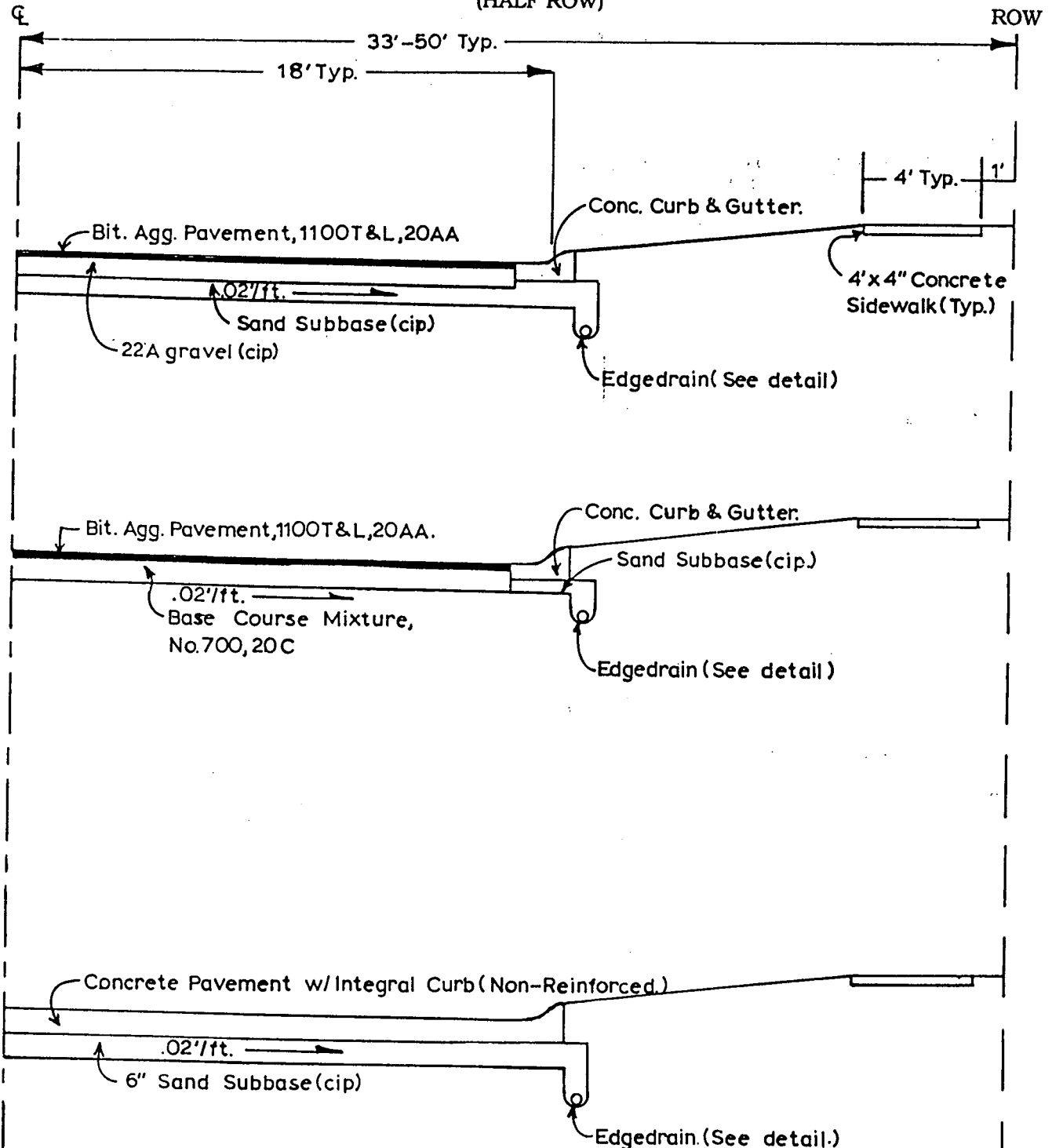
no scale

66' ROW (minimum)
CURB & GUTTER - 36' face to face.
Underground Storm Drainage
For required Pavement Sections. See Tables B1 & B2.

NOTE: This standard may be required on Residential Collector streets as directed by the County Engineer.

TYPICAL SECTIONS

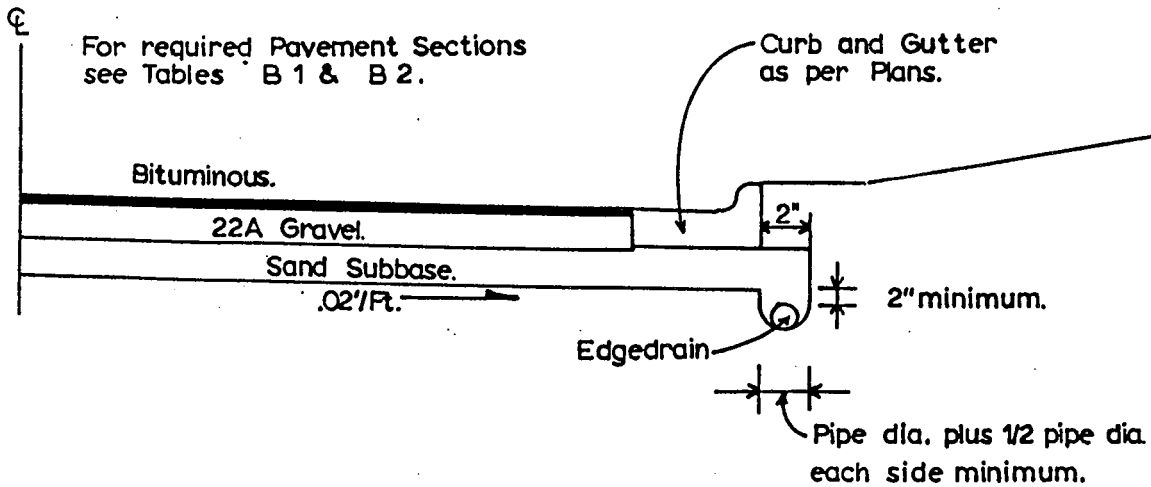
(HALF ROW)



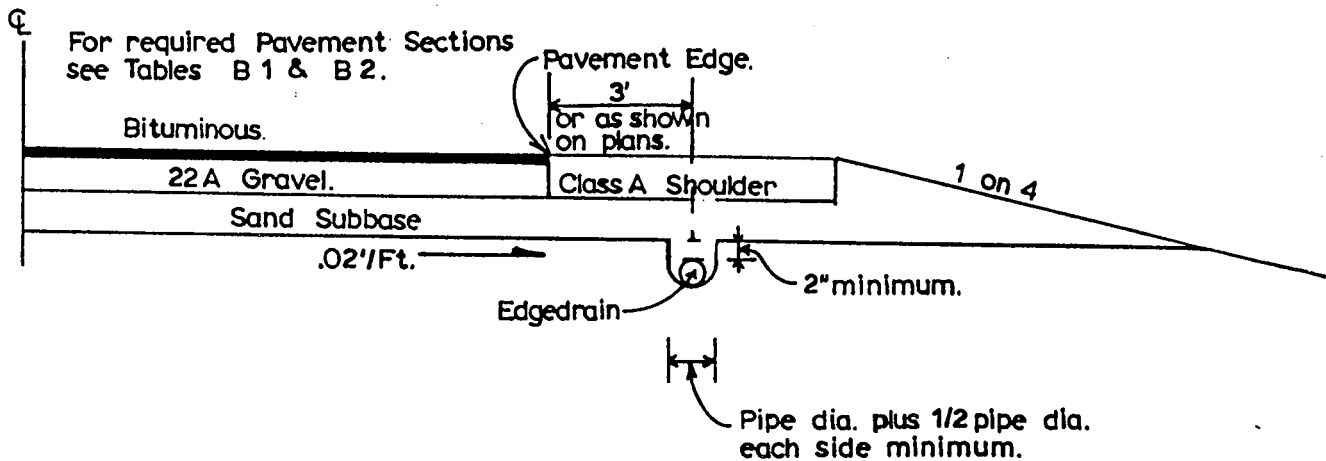
Note: The Board of Eaton County Road Commissioners may require wider widths of streets in Industrial Parks if they deem it necessary.

EDGEDRAIN DETAIL **no scale**

Example E



Curbed Roadway



Residential Rural

Minimum Stopping Sight Distance**TABLE 1**

Design Speed (mph)	Assumed Speed for Condition (mph)	Stopping Sight Distance (Rounded for Design) (ft.)	K Value for Crest Vertical Curves (Rounded)	K Value for Sag Vertical Curves (Rounded)
25	24-25	150-150	20-20	30-30
30	28-30	200-200	30-30	40-40
35	32-35	225-250	40-50	50-50
40	36-40	275-325	60-80	60-70
45	40-45	325-400	80-120	70-90
50	44-50	400-475	110-160	90-110
55	48-55	450-550	150-220	100-130

K Value is a coefficient by which the algebraic difference in grade may be multiplied to determine the length in feet of the vertical curve which will provide minimum sight distance.

For stopping sight distance the height of eye is 3.5 feet and the height of object is 0.5 feet.

Minimum Corner Sight Distances at Internal Subdivision Intersection**TABLE 2**

Design Speed (mph)	Corner Intersection Sight Distance (ft.)
55	565
45	465
35	365
25	265

Corner sight distance measured from a point on the minor road at least 15 feet from the edge of the major road pavement and measured from a height of eye at 3.50 feet on the minor road to a height of object at 4.25 feet on the major road.

**Subdivision Corner Sight Distances at a
Local Road or Primary Road Intersection**

TABLE 3

Design Speed (mph)	Corner Intersection Sight Distance (ft.)
55	565-810
45	465-660
35	365-510
25	330

Corner sight distance measured from a point on the subdivision street at least 18 feet from the edge of the crossing roadway pavement and measured from a height of eye at 3.50 feet on the subdivision street to a height of object at 4.25 feet on the crossing roadway.

Minimum Horizontal Curves (Centerline Radius)

TABLE 4

Type of Street	Design Speed 25 mph	Design Speed 35 mph
Light Residential	150 feet	
Medium Residential	175 feet	350 feet
Heavy Residential	175 feet	350 feet
Indus. or Heavy Commercial	175 feet	450 feet

STREET CONSTRUCTION AGREEMENT

Plat Name: _____

This agreement made and entered into this _____ day of _____, A.D., 19_____, by and between _____, party of the first part, and the Board of County Road Commissioners of the County of Eaton, Michigan, a public body corporate, party of the second part.

WITNESSETH:

WHEREAS, the party of the first part is the proprietor of the proposed plat of _____, a subdivision lying in the _____ of Section _____, in _____ Township, Eaton County, Michigan.

WHEREAS, it is a prerequisite to the recording of said plat that _____, be improved in accordance with the Subdivision Regulations of the Eaton County Road Commission, party of the second part, and in a manner hereinafter more particularly set forth; and

WHEREAS, said streets have not been improved as herein specified and the party of the first part is desirous of recording said plat prior to making such improvements:

NOW THEREFORE, IT IS AGREED AS FOLLOWS:

1. The party of the first part agrees to improve _____, before _____, 19_____, in accordance with the Subdivision Regulations of the party of the second part and more particularly as follows:

(a) Grading and Storm Drainage. The streets shall be graded to provide roadway widths as shown on the street construction plans filed by the party of the first part with, and approved by, the party of the second part. Storm Drainage shall be accomplished in accordance with said plans.

(b) Surfacing and Surfacing Materials. The surfacing materials specified shall be placed in the manner set forth in the Subdivision Regulations of the Eaton County Road Commission and in accordance with the approved Preliminary Plat, which becomes a part of this agreement.

(c) Inspection and Approval. The work shall be subject to inspection by the party of the second part during the period of construction and the completed project shall meet with

the approval of the party of the second part. The party of the first part shall hire a competent testing firm who shall provide acceptable documentation that all materials and workmanship comply with the subdivision regulations of the party of the second part.

2. The party of the first part further agrees to procure and deliver to the party of the second part an Irrevocable Letter of Credit having an expiration date no earlier than _____, 19_____, and acceptable to the party of the second part in the amount of _____ Dollars (\$_____), which shall insure the completion of the street improvements as per approved plans and conditional upon the satisfactory performance by the party of the first part of this agreement.

3. The party of the first part further agrees that if at any time during the term of this Agreement the party of the second part shall determine that there is a public necessity for the making of all or any of the improvements hereinbefore mentioned, the party of the first part shall immediately, upon receiving notice of such necessity from the party of the second part, proceed to make such necessary improvement, or improvements, the same to be completed within the period of time to be specified in such notice. The party of the first part agrees that upon their failure to immediately proceed with the improvements so determined to be a public necessity or to complete the same within the period of time specified in such notice and/or upon their failure to complete all of the improvements hereinbefore specified before _____, 19 ____, the party of the second part may immediately terminate this Agreement and proceed to make such improvement or improvements and shall immediately proceed to make such improvement or improvements and shall immediately draw on and retain as liquidated damages the total amount of the Irrevocable Letter of Credit (\$ _____) given by the party of the first part to insure completion of said improvements.

4. The party of the first part shall hold harmless and defend the party of the second part against any and all claims, lawsuits and demands of any kind whatsoever for damage to public or private property and/or for injuries or death to persons arising out of and during the progress of the work under this Agreement.

5. The party of the second part agrees that upon the completion of all street grading, drainage, and surfacing by the party of the first part to the satisfaction of the party of the second part under the terms of the Agreement, the performance guarantee deposit shall be returned to the party of the first part.

6. The party of the second part further agrees upon receipt of this Agreement, properly executed by the party of the first part, together with the performance guarantee deposit as hereinbefore specified, to approve said plat and endorse such approval thereon.

7. IT IS FURTHER AGREED that during the term of this Agreement and at all times prior to completion of road construction, the party of the first part shall, at his expense, maintain the roads and streets within said subdivision in a safe condition. This shall include adequate shaping, grading, and the placement of needed additional gravel, and the removal of snow and foreign materials such as stones, mud and building materials from the road and street surfaces.

The party of the first part further agrees that at any time during the term of this Agreement, the second party shall determine that any of said roads are not maintained in safe condition, the party of the first part shall immediately, upon receiving written notice of such necessity from the party of the second part, proceed to correct conditions in a manner acceptable to the party of the second part, which shall be completed within the period of time specified in the notice. The party of the first part agrees that upon his failure to immediately proceed with correcting the condition(s) or to complete the same within the period of time specified in the notice, the party of the second part shall proceed to make such correction(s) and shall charge the costs of said correction(s) to the party of the first part and retain an amount equivalent to said costs from the performance guarantee deposit.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first written.

Name _____

Address _____

IN THE PRESENCE OF:

Name _____

Address _____

BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF EATON, MICHIGAN

By: _____
Chairman

By: _____
Vice Chairman

By: _____
Member

BITUMINOUS PAVING AGREEMENT

Plat Name: _____

This agreement made and entered into this _____ day of _____ A.D., 19_____, by and between _____, party of the first part, and the Board of County Road Commissioners of the County of Eaton, Michigan, a public body corporate, party of the second part.

WITNESSETH:

WHEREAS, the party of the first part is the proprietor of the plat of _____, a subdivision lying in the _____ of Section _____, Township, Eaton County, Michigan.

WHEREAS, the party of the first part is desirous that _____ lying in said subdivision be surfaced with bituminous aggregate pavement, and the bituminous aggregate pavement to consist of materials meeting the specifications of the party of the second part, and it shall be applied approximately _____ feet in width and approximately _____ inches in depth on the above named streets in said subdivision.

WHEREAS, said constructed streets shall come or are under the control and jurisdiction of the party of the second part and all work upon these streets must conform to the standards and specifications of the party of the second part and must be accomplished under the control of said party of the second part;

NOW THEREFORE, IT IS AGREED AS FOLLOWS:

1. The party of the first part agrees to:

(a) Deposit with the party of the second part, the sum of _____ Dollars (\$ _____) in the form of an Irrevocable Letter of Credit with an expiration date of _____, 19_____, as a commitment for payment for the placing of a bituminous aggregate pavement and restoration and final cleanup on _____.

(b) It is understood that if the costs exceed _____ Dollars (\$ _____), the part of the first part will reimburse the party of the second part for the total cost as outlined in paragraph 2 (c) below.

(c) Make himself aware of and abide by all current applicable Subdivision Regulations of the Eaton County Road Commission.

2. The party of the second part agrees to:

(a) Keep cost records on the work accomplished.

(b) Accomplish the placing of the bituminous aggregate pavement before _____, 19_____.

(c) Upon completion of the work when final costs have been determined, including overhead, engineering and inspection, the party of the second part will submit a billing to _____, party of the first part, for payment and payment shall be made forthwith.

(d) The party of the second part may, if it so desires, subcontract for the performances of the work specified herein. The costs shall be submitted as provided in 2 (c) above.

(e) In the event the irrevocable letter of credit will expire prior to the date for completion of construction, the party of the second part shall have the right to draw upon the entire amount of said letter of credit and to deposit same in its own name in a savings account or certificate of deposit pending completion of construction. The party of the second part shall have the right to withdraw funds from said account or certificate of deposit for any of the reasons it could draw upon the letter of credit. Any funds remaining at the termination of construction and acceptance of same by the party of the second part shall be returned to the party of the first part.

3. IT IS FURTHER AGREED that during the term of this Agreement and at all times prior to completion of the bituminuous aggregate pavement, the party of the first part shall, at his expense, maintain the gravel surfaced roads and streets within said subdivision in a safe condition. This shall include adequate shaping, grading and the placement of needed additional gravel, and the removal of snow and foreign materials such as stones, mud and building materials from the road and street surfaces.

The party of the first part further agrees that if at any time during the term of this Agreement the party of the second part shall determine that any of said roads are not maintained in a safe condition, the party of the first part shall immediately upon receiving written notice of such necessity from the party of the second part, proceed to correct such conditions in a manner acceptable to the party of the second part, which shall be completed within the period of time specified in the notice. The party of the first part agrees that upon his failure to immediately proceed with correcting the condition(s) or to complete the same within the period of time specified in the notice, the party of the second part may proceed to make such correction(s) and shall charge the costs of such work against the performance guarantee deposit.

4. The party of the first part shall hold harmless and defend the party of the second part against any and all claims, lawsuits and demands of any kind whatsoever for damage to public or private property and/or for injuries or death to persons arising out of and during the progress of the work under this Agreement.

ANY BANK, MICHIGAN

Number _____

DATE

IRREVOCABLE COMMERCIAL LETTER OF CREDIT

Board of Eaton County Road Commissioners
1112 Reynolds Road
Charlotte, Michigan 48813

Dear Commissioners:

We hereby establish our Irrevocable Letter of Credit # _____ and hereby authorize the Eaton County Road Commission to draw on us at sight for the account of _____ (Proprietor's Name and Address) up to a total of \$ _____.

Funds are available hereunder in an amount not exceeding in the aggregate \$ _____ for bituminous paving or street construction (select one) in _____ (Name of Plat).

This Letter of Credit will expire _____ (Date).

All drafts must be marked "Drawn under Letter of Credit of _____ (Name of Proprietor) number _____ dated _____".

We hereby agree with the drawers, endorsers, and bona fide holders of drafts drawn under and in compliance with the terms of this credit, that such drafts will be duly honored on presentation to us on or before the expiration date of this Letter, or presented at this office together with this Letter of Credit on or before that date.

NAME OF BANK

Signature of Authorized Bank Official

CERTIFICATE

TO: **ENGINEERING DEPARTMENT
EATON COUNTY ROAD COMMISSION**

Please be advised that the finished grades on the streets in the plat of _____
_____ Township, Eaton County, Michigan, are in accordance with
those shown on the street and utility plans reviewed by the Eaton County Road Commission
and approved on _____,
or are as subsequently changed and approved on construction and shown on the enclosed "as
constructed" street and utility plans.

I certify that the construction of all the streets is complete and that:

1. Water, storm sewers and sanitary sewers have been installed in Accordance with the approved plans.
2. All streets are built in accordance with the approved plans and the specifications of the Eaton County Road Commission.
3. All specified materials and workmanship incorporated in the work conform to the requirements of the Michigan Department of Transportation Standard Specifications for Construction and that inspection and test reports have been filed with the Eaton County Road Commission.

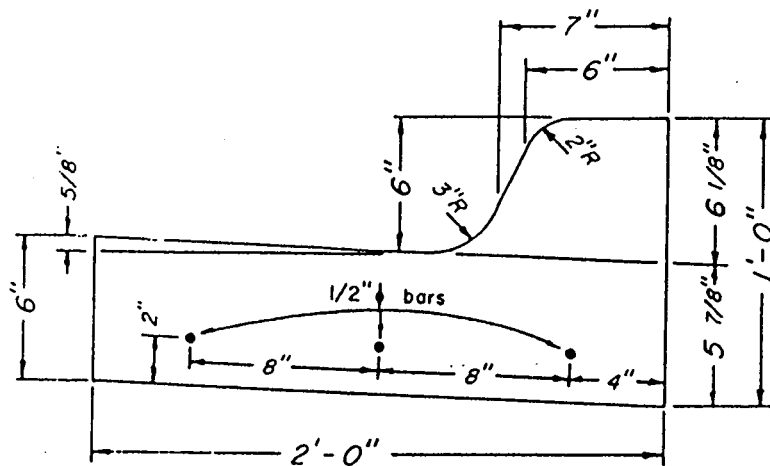
(Consulting Firm)

By _____
(Licensed Professional Engineer)

SEAL

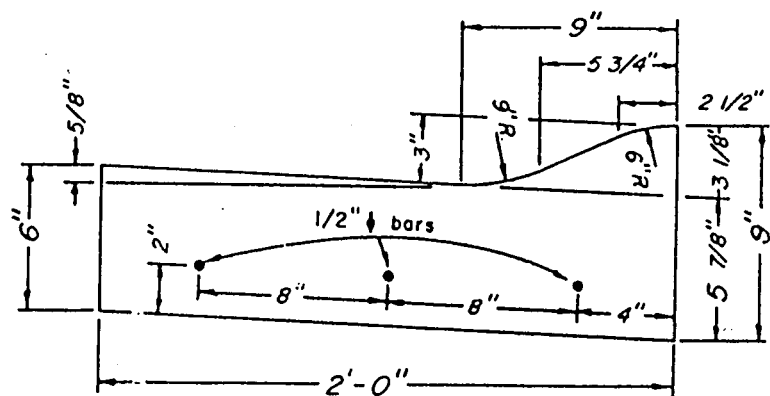
Date: _____

Eaton County DETAIL FOR CURB & GUTTER

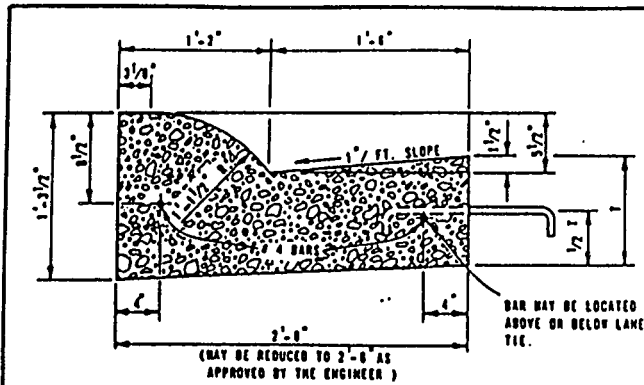


Standard Curb & Gutter

Roll Curb & Gutter

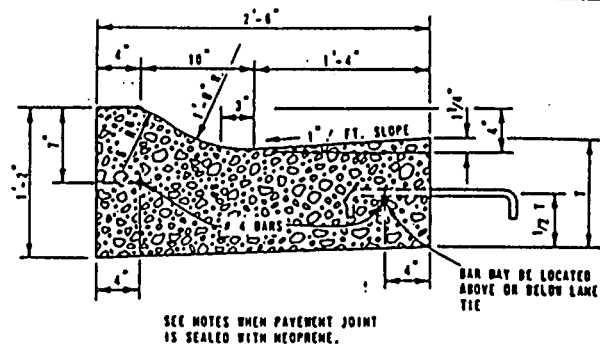


**NOTE: Minimum standard for concrete is -
MDOT grade 35S.**



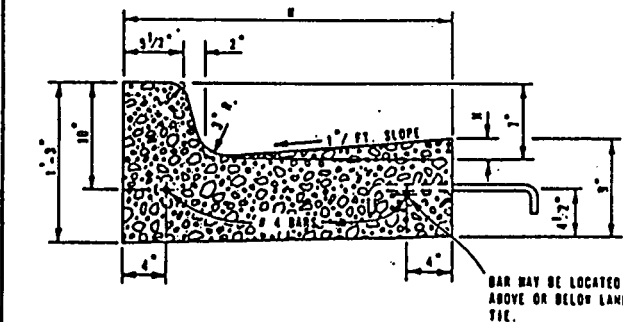
DETAIL	DIMENSION T	LANE TIES	CONCRETE CU. YD. / LIN. FT.
B1	6"	AS SHOWN	0.0800
B2	9"	OMITTED	0.0900
B3	10"	AS SHOWN	0.0941

B



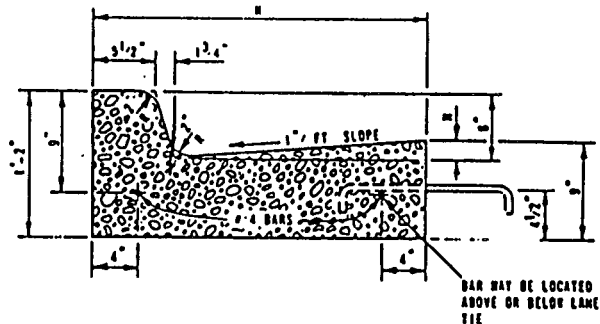
DETAIL	DIMENSION T	LANE TIES	CONCRETE CU. YD. / LIN. FT.
D1	6"	AS SHOWN	0.0788
D2	9"	OMITTED	0.0788
D3	10"	AS SHOWN	0.0826

D



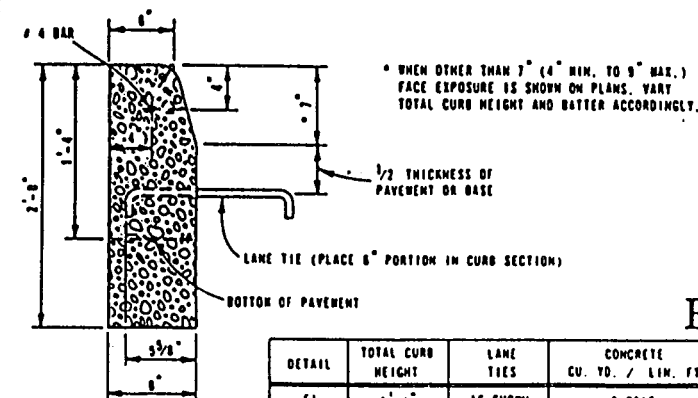
DETAIL	DIMENSIONS H	M	LANE TIES	CONCRETE CU. YD. / LIN. FT.
C1	1'-6"	3/8"	AS SHOWN	0.0500
C2	1'-6"	3/8"	OMITTED	0.0500
C3	2'-0"	1 1/8"	AS SHOWN	0.0632
C4	2'-0"	1 1/8"	OMITTED	0.0632
C5	2'-0"	1 1/8"	AS SHOWN	0.0757
C6	2'-0"	1 1/8"	OMITTED	0.0757

C



DETAIL	DIMENSIONS H	M	LANE TIES	CONCRETE CU. YD. / LIN. FT.
F1	1'-6"	3/8"	AS SHOWN	0.0484
F2	1'-6"	3/8"	OMITTED	0.0484
F3	2'-0"	1 1/8"	AS SHOWN	0.0610
F4	2'-0"	1 1/8"	OMITTED	0.0610
F5	2'-0"	1 1/8"	AS SHOWN	0.0737
F6	2'-0"	1 1/8"	OMITTED	0.0737

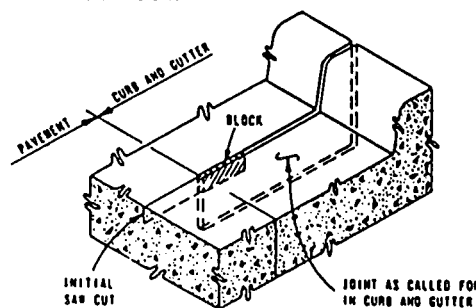
F



E

DETAIL	TOTAL CURB HEIGHT	LANE TIES	CONCRETE CU. YD. / LIN. FT.
E1	1'-4"	AS SHOWN	0.0310
E2	1'-4"	OMITTED	0.0310
E3	2'-0"	AS SHOWN	0.0477
E4	2'-0"	OMITTED	0.0477

NOTE:
PLACE BLOCK IN FRONT EDGE OF GUTTER PAN. BLOCK WIDTH AND DEPTH SHALL BE THE SAME WIDTH AND DEPTH AS PROPOSED JOINT IN PAVEMENT. THE LENGTH OF BLOCK SHALL BE SUCH THAT THE FULL DEPTH OF THE JOINT IN CONCRETE PAVEMENT CAN BE OBTAINED. BLOCKED OUT AREA SHALL BE SEALED WITH THE SAME SEALER AS USED IN CONCRETE PAVEMENT.



PROVISION FOR SAW CUT
(TO BE MADE WHEN FINAL SAW CUT IN PAVEMENT IS MADE AFTER CURB AND GUTTER IS PLACED)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS STANDARD PLAN FOR

CONCRETE CURB AND CONCRETE CURB & GUTTER

PREPARED BY
DESIGN DIVISION

DRAWN BY: D.F.H.
CHECKED BY: V.R.

J. J. Casey
ENGINEER - CONSTRUCTION

H. W. Winters
ENGINEER OF MAINTENANCE

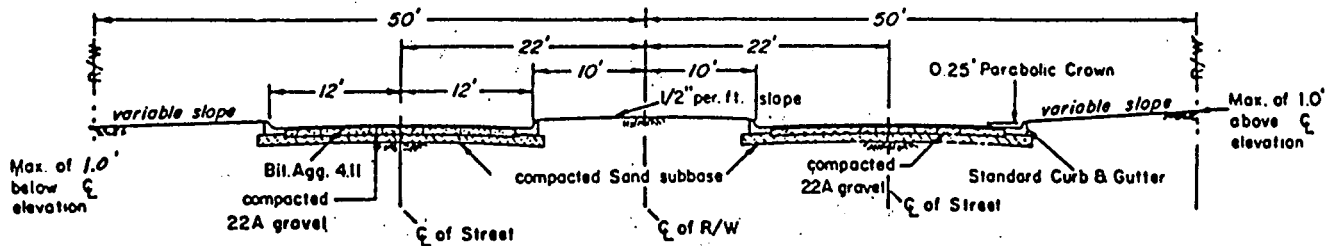
Bob Ma...
ENGINEER OF MATERIALS & TECHNOLOGY

James P. Pittz
DEPARTMENT DIRECTOR

James P. Pittz
DEPUTY DIRECTOR - HIGHWAYS

7-22-87 F.H.D.A. APPROVAL	1-20-87 PLAN DATE	II-30D	SHEET 1 OF 2
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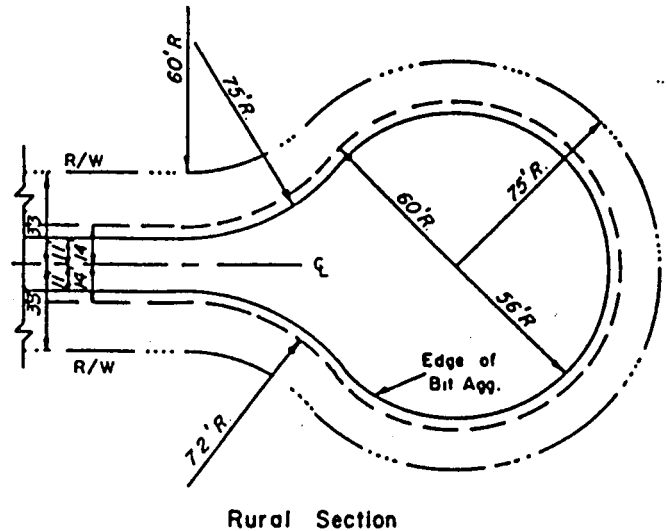
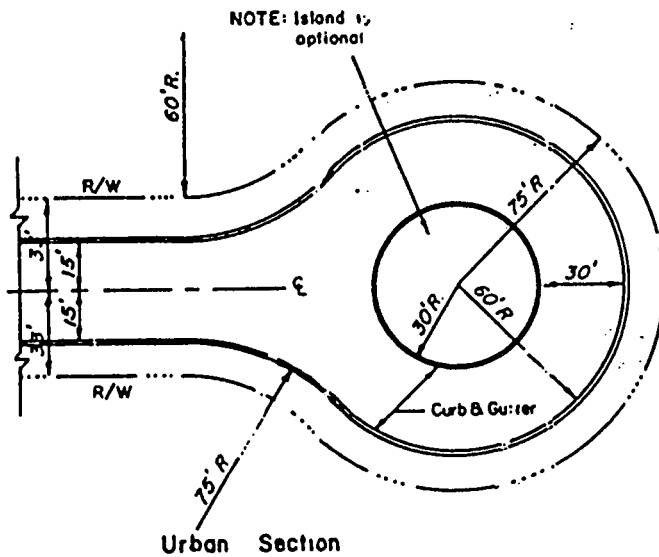
MINIMUM STANDARDS for BOULEVARD & CUL-DE-SAC



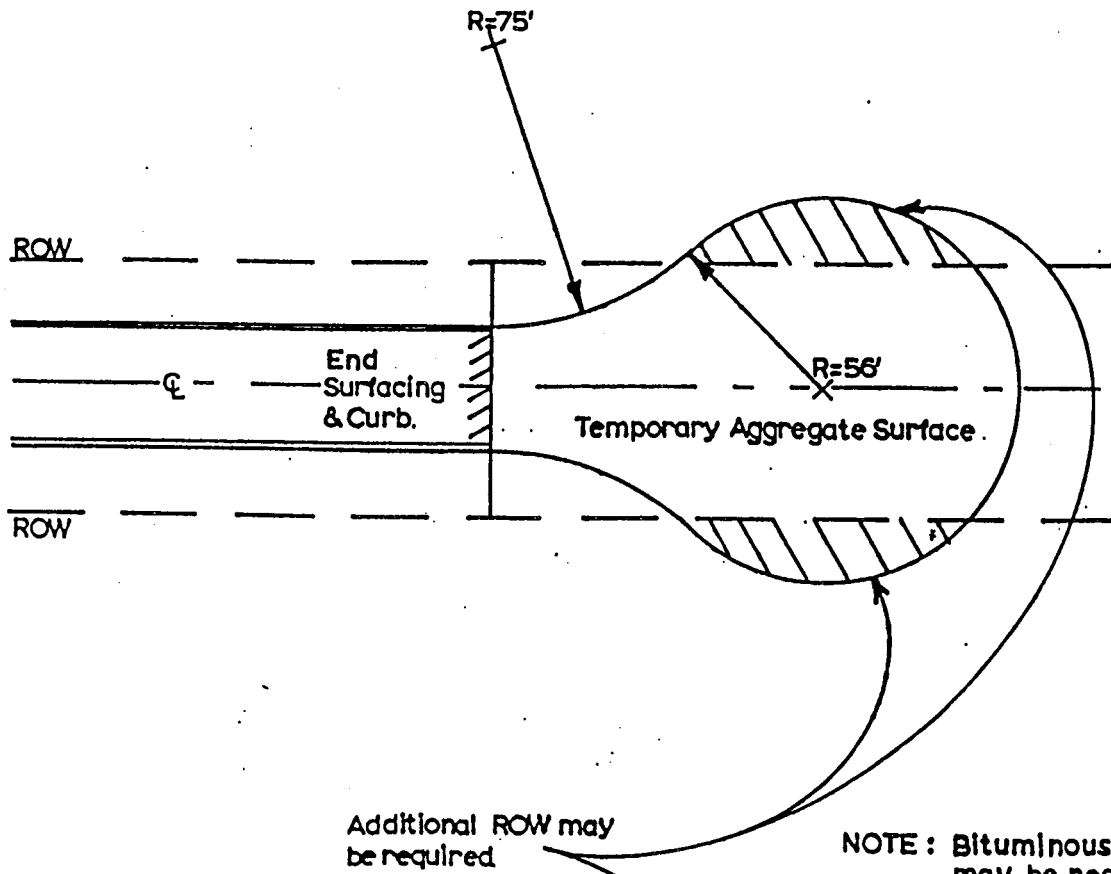
NOTE: Subbase maybe omitted when soil conditions warrant and approved by the County Engineer

Boulevard Section
(max. length = 300')

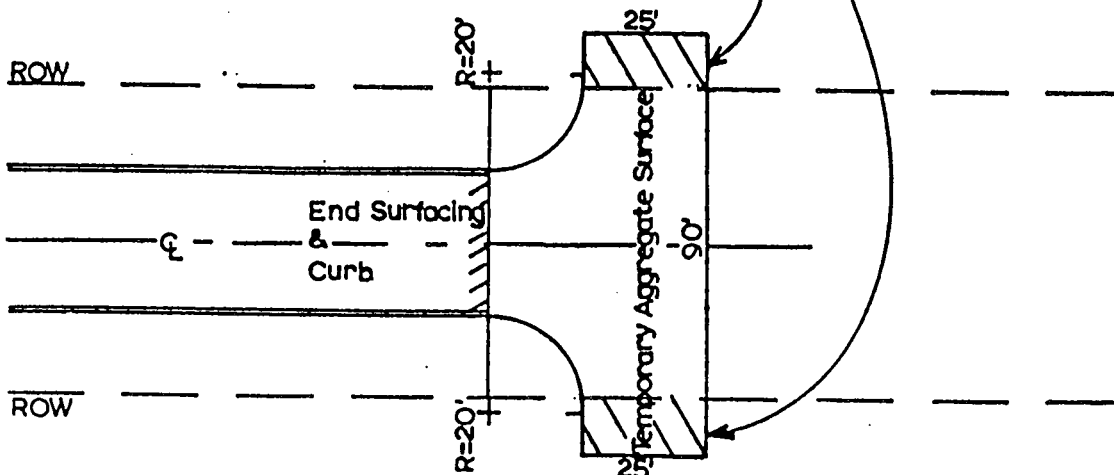
Cul-de-Sac Section
(max. length = 1,320')



TEMPORARY TURN-AROUNDS no scale

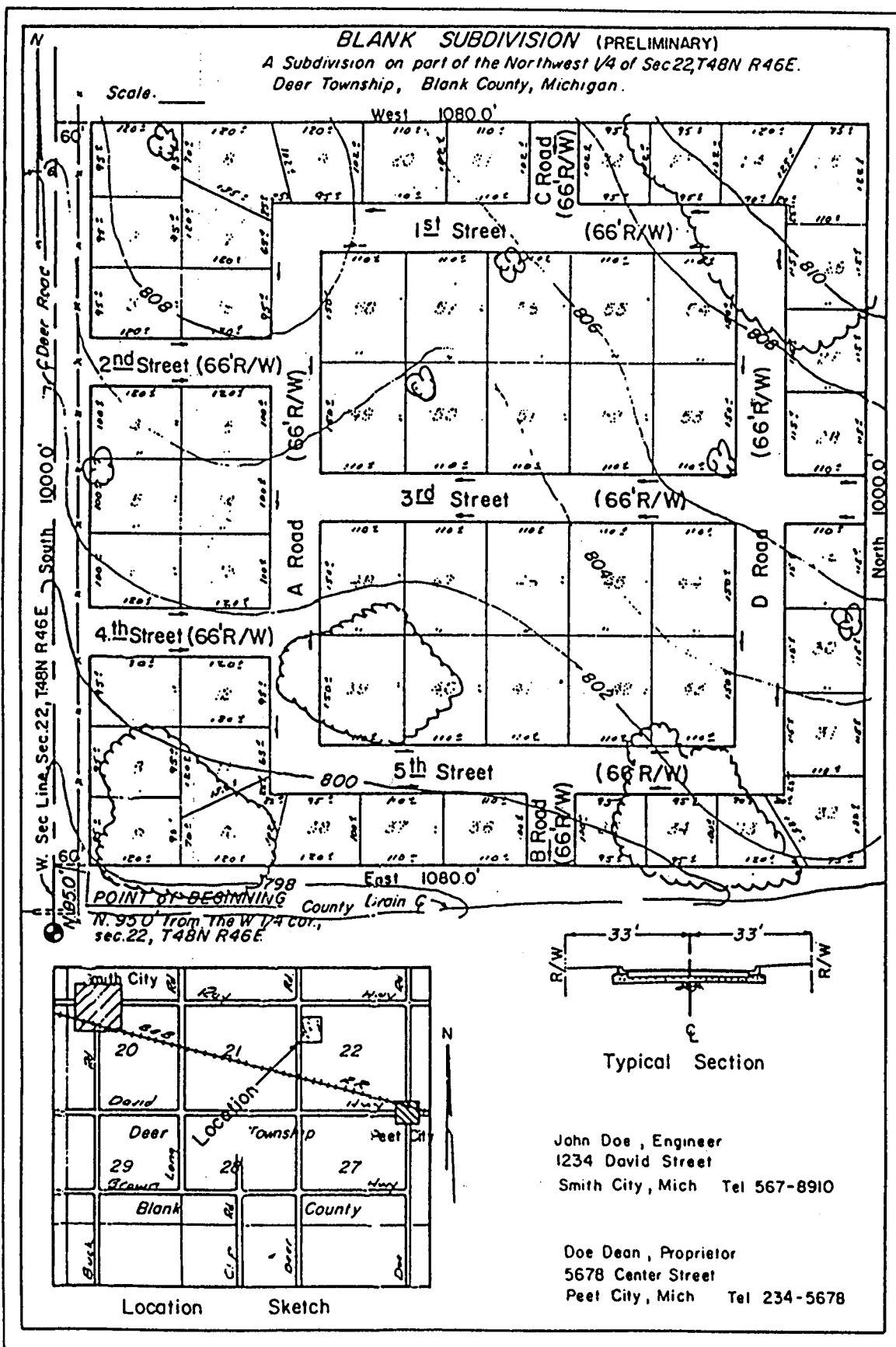


NOTE: Bituminous surface may be required.



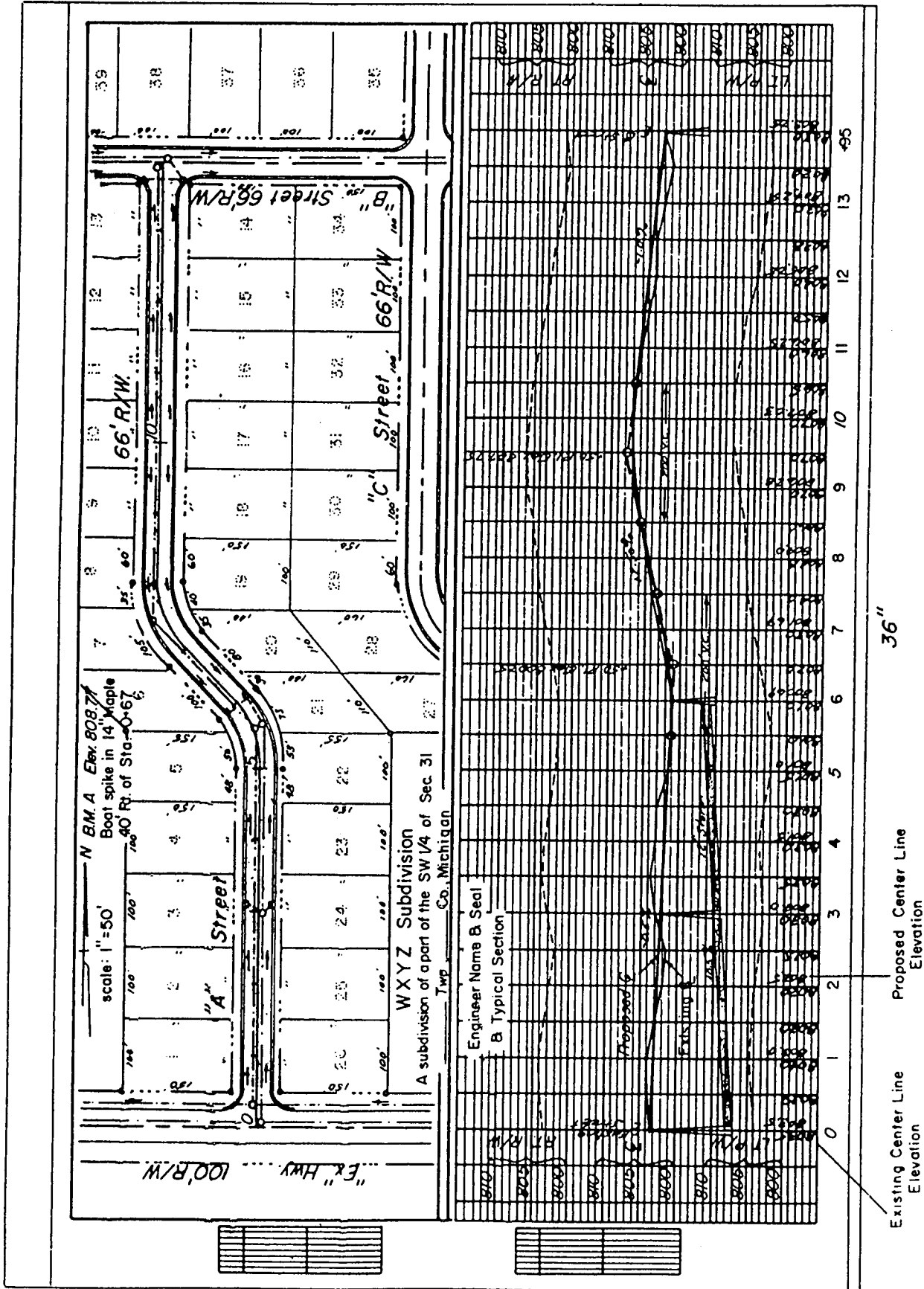
Typical Preliminary Plat

Scale, not smaller than 1" = 200' & the preliminary approval is good for 2 years only



TYPICAL PLAN & PROFILE SHEET (Urban)

Scale, not smaller than 1" = 100' (Horz.) 1" = 10' (Vert.)



24"

OCORC. CERTIFICATE OF INSURANCESEE TAB STOPS AT ARROWS
ISSUE DATE (MM/DD/YY)**PRODUCER**Smith & Smith Ins. Agency
345 Maple Street
Anytown, Michigan 48000

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

COMPANY LETTER A	XYZ Insurance Company
COMPANY LETTER B	LMN Insurance Company
COMPANY LETTER C	DEF Insurance Company
COMPANY LETTER D	
COMPANY LETTER E	

INSUREDABC Development Company
564 Main Street
Anytown, Michigan 48000**COVERAGES**

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH POLICIES.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIABILITY LIMITS IN THOUSANDS		
					PER OCCURRENCE	AGGREGATE	
A	GENERAL LIABILITY	12345	xx/xx/xx	xx/xx/xx			
	<input checked="" type="checkbox"/> COMPREHENSIVE FORM						
	<input checked="" type="checkbox"/> PREMISES/OPERATIONS				BODY INJURY \$ 500	\$ 500	
	<input checked="" type="checkbox"/> UNDERGROUND EXPLOSION & COLLAPSE HAZARD				PROPERTY DAMAGE \$ 500	\$ 500	
	<input checked="" type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS						
	<input checked="" type="checkbox"/> CONTRACTUAL				BI & PD COMBINED \$ 500	\$ 500	
	<input checked="" type="checkbox"/> INDEPENDENT CONTRACTORS						
	<input checked="" type="checkbox"/> BROAD FORM PROPERTY DAMAGE						
	<input checked="" type="checkbox"/> PERSONAL INJURY						
	AUTOMOBILE LIABILITY						
	<input type="checkbox"/> ANY AUTO				BODY INJURY PER PERSON \$		
	<input type="checkbox"/> ALL OWNED AUTOS (PRIV. PASS.)				BODY INJURY PER ACCIDENT \$		
	<input type="checkbox"/> ALL OWNED AUTOS (OTHER THAN PRIV. PASS.)				PROPERTY DAMAGE \$		
	<input type="checkbox"/> HIRED AUTOS				BI & PD COMBINED \$		
	<input type="checkbox"/> NON-OWNED AUTOS						
	<input type="checkbox"/> GARAGE LIABILITY						
B	EXCESS LIABILITY ***To be determined at time of review and furnished, if found necessary, before Final Plat.***				BI & PD COMBINED \$		
	<input checked="" type="checkbox"/> UMBRELLA FORM						
	<input type="checkbox"/> OTHER THAN UMBRELLA FORM						
C	WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY	4567	xx/xx/xx	xx/xx/xx	STATUTORY		
					\$100 (EACH ACCIDENT)		
					\$100 (DISEASE-POLICY LIMIT)		
					\$100 (DISEASE-EACH EMPLOYEE)		
	OTHER						

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

Description of proposed plat

CERTIFICATE HOLDER**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

AS ADDITIONAL NAMED INSURED
ACORD 25 (8/84)

IIR/ACORD CORPORATION 1984

FLOW DIAGRAM OF PLATTING PROCEDURE

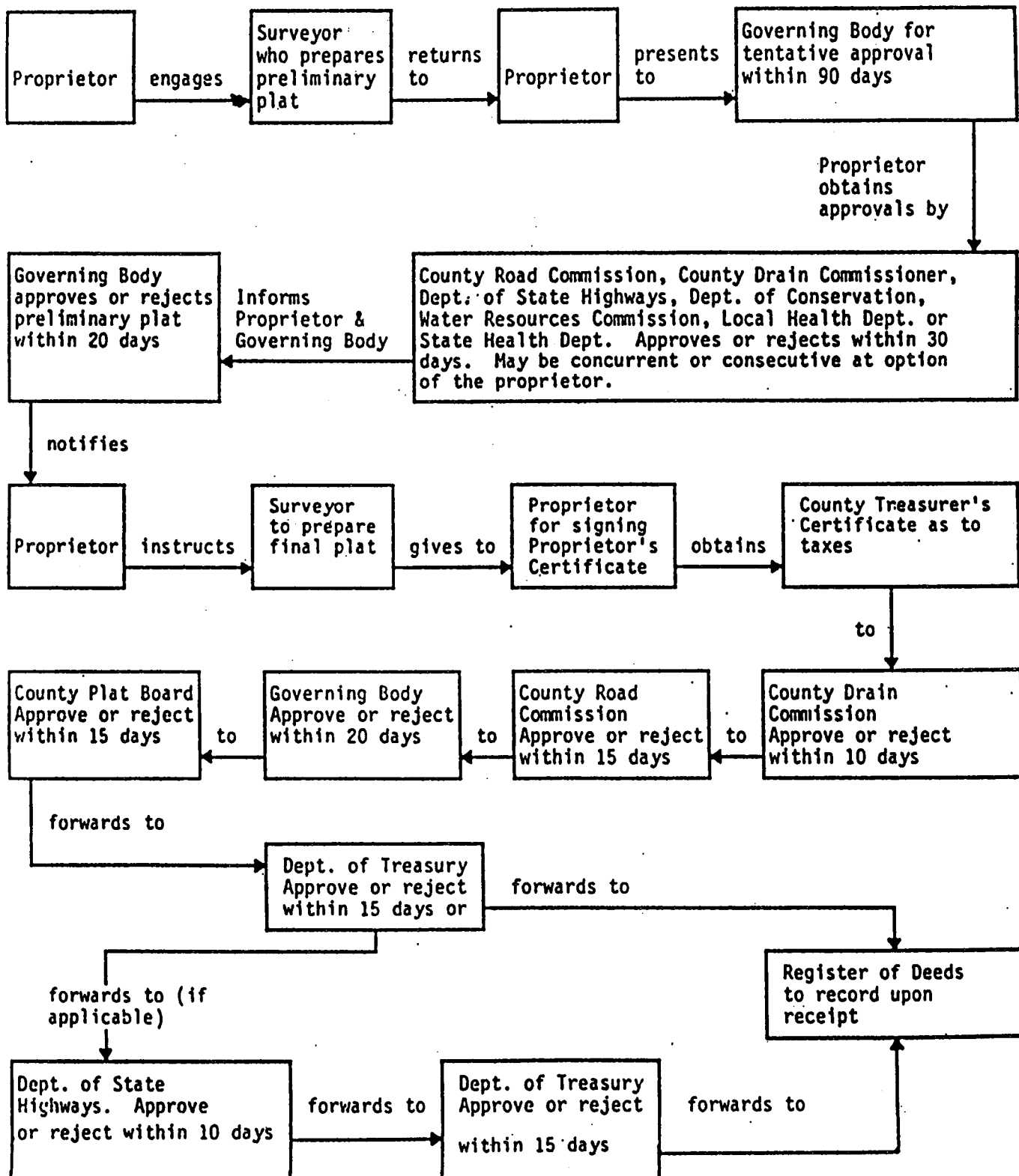


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PART 1 -- GENERAL PROVISIONS

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.**

Rule 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.**

**EATON COUNTY ROAD COMMISSION
ADMINISTRATIVE AND CONSTRUCTION FEES FOR PERMITS
EFFECTIVE JANUARY 1, 1998**

The following Fees shall be charged for issuing Permits, and must accompany the application for the Permit:

TRANSPORTATION:

	<u>Charge</u>	<u>Max/Day</u>
Annual Permit for Oversize and/or Overweight Loads, Each Unit	\$ 100.00	
Single Move Permit Exceeding Annual Permit Limitations, Each Unit	\$50.00	
Each Additional Move Within the Same Day, Each Unit	\$50.00	\$100.00
Building Move Permit Less than 8 Ft Wide	No Chg	
Building Move Permit Greater than 8 Ft Wide	\$50.00	
Annual Permit for Mobile Homes and Modules	\$ 100.00	
Single Move Permit for Mobile Homes and Modules Exceeding Annual Permit Limitations	\$50.00	\$100.00

SPECIAL USE PERMITS:

Geophysical Survey Permit	\$50.00
Haul Route Permit	\$500.00
Temporary Street Closure	No Chg
Applying Dust Layer	No Chg
Milk Hauler Frost Law Permit	\$40.00

CONSTRUCTION WITHIN THE RIGHT OF WAY:

	<u>By Mail</u>	<u>By Fax</u>	<u>After The Fact</u>
Residential Driveway Permit	\$30.00		
Commercial Driveway Permit	\$100.00		
24 Ft X 12 In CMP Installed/5 Cyd Gravel	\$300.00		
Utility Permit, Overhead	\$40.00	\$30.00	\$400.00
Utility Permit, Underground	\$50.00	\$40.00	\$500.00
Utility Permit, Annual Blanket	\$40.00		
Tap In Permit	\$50.00	\$40.00	\$500.00
Road Bore	\$50.00	\$40.00	\$500.00
Tree Removal	No Chg		
Road Cut in Gravel Surface or Shoulder	\$150.00		\$300.00
Road Cut in Hard Surf Road, 0 Sft to 40 Sft (Min Chg)	\$400.00		\$800.00
Road Cut in Hard Surface Road, 41 Sft to 100 Sft	\$8.00 /Sft		\$800.00 + \$8.00 /Sft
Road Cut in Hard Surface Road, 101 Sft to 300 Sft	\$7.00 /Sft		\$800.00 + \$7.00 /Sft
Road Cut in Hard Surface Road, 300 Sft - over	\$6.00 /Sft		\$800.00 + \$6.00 /Sft
Inspection Time, Per Hour	\$50.00		
Land Division Access Review - Office	No Chg		
Field	\$50.00 + Cost		

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)

POSTED SPEED (MPH)	MINIMUM SEPARATION (FEET)
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⁾

CLASSIFICATION	PROPERTY CLEARANCE (FEET)
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)

CLASSIFICATION	INTERSECTING WITH	CLEARANCE (FEET)
Arterial	Arterial	250
	Collector	125
	Local	50
Collector	All	50
Local	All	50

- (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)**

SPEED (MPH)	(2) SAFE SIGHT DISTANCE LEFT AND RIGHT	(3) SAFE SIGHT DISTANCE LEFT AND RIGHT
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)**

SPEED (MPH)	(2) SAFE SIGHT DISTANCE LEFT	SAFE SIGHT DISTANCE RIGHT
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)**

SPEED (MPH)	SAFE SIGHT DISTANCE LEFT	SAFE SIGHT DISTANCE RIGHT
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)**

SPEED (MPH)	SAFE SIGHT DISTANCE LEFT	SAFE SIGHT DISTANCE RIGHT
25	470 Feet	500 Feet
30	560 Feet	670 Feet
35	650 Feet	875 Feet
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	CORRECTION IN STOPPING DISTANCE (FT)			ASSUMED	CORRECTION IN STOPPING DISTANCE (FT)		
SPEED	3%	6%	9%	SPEED (1)	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.**
- (b) Residential driveways may be paved between the edge of pavement and the existing sidewalk. If there is no existing sidewalk, the surfacing shall extend at least 10 feet from the edge of pavement. On residential driveways either curb cuts or curb returns shall be constructed based on the current Eaton County Road Commission standards for curb and gutter.**

(2) When the road is unpaved:

- (a) Commercial and residential driveways may be surfaced with stabilized gravel. The minimum requirement for commercial driveways is 10 inches of compacted stabilized aggregate, and the minimum requirement for residential driveways is six inches of compacted stabilized aggregate.**
 - (b) If driveways are paved, the paving shall extend no closer to the road than one foot behind the driveway culvert location or five feet from the graded edge of the road.**
- (3) Field entrances and utility structure driveways may be surfaced with stabilized gravel and may be uncurbed. In certain locations, paving and curbing may be required on utility structure driveways.**

- (4) The surface of paved commercial driveways, including tapers without right-turn lanes, shall be concrete, bituminous or equivalent surfacing material. The thickness of the surface and the base to be used shall be sufficient to provide the bearing capacity needed to carry the proposed traffic loads. A three inch (330 pounds per square yard) bituminous mix on eight inches of compacted gravel, eight inches of asphalt on existing ground, eight inches of un-reinforced concrete on sand or equivalent surfacing material which meets current *Michigan Department of Transportation Standard Specifications* may be considered acceptable for normal commercial driveway traffic loads over stable soil.
- (5) Residential driveways may be paved with a design that is one-half the thickness requirements of commercial driveways.
- (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 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.**

Rule 3.23 Traffic Impact Study

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.

EXHIBIT 1

TWO-WAY COMMERCIAL DRIVEWAY DIMENSIONS			
DESIGN FEATURES		STANDARD	RANGE
Intersecting Angle	A	90°	60° to 120°
Driveway Width	B	30 Feet	20 t 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 specifies, or the applicant shows cause for, a different value. The "range" in dimensions indicates the working values for each design feature.

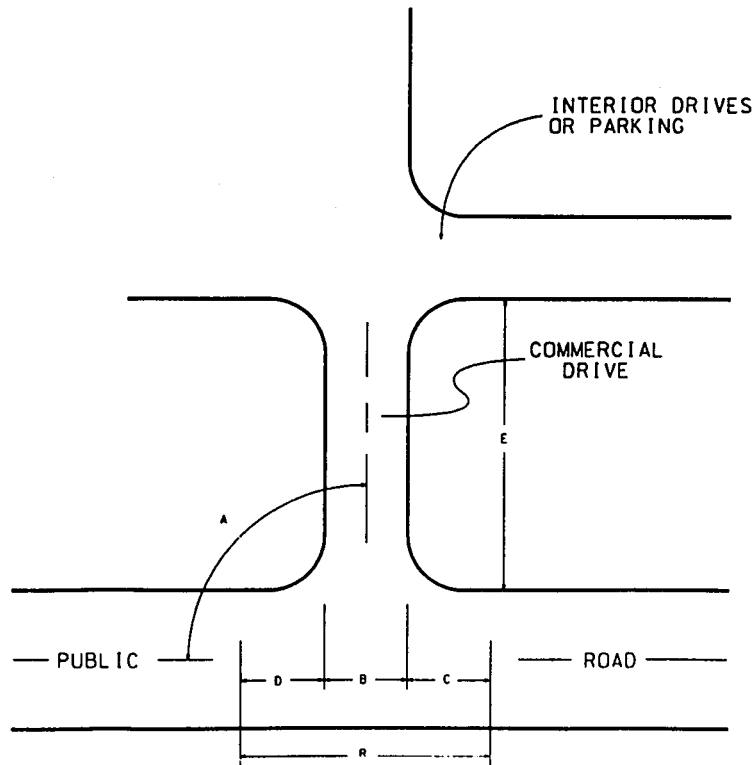


EXHIBIT 2

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	C	30 Feet	20 to 50 Feet
	Exiting Radius	D	5 Feet	5 to 10 Feet
One-Way Out	Entering Radius	C	5 Feet	15 to 10 Feet
	Exiting Radius	D	30 Feet	20 to 40 Feet

NOTE: The "standard" dimension shall be used unless the Permit Department specifies, or the applicant shows cause for, a different value. The "range" in dimensions indicates the working values for each design feature.

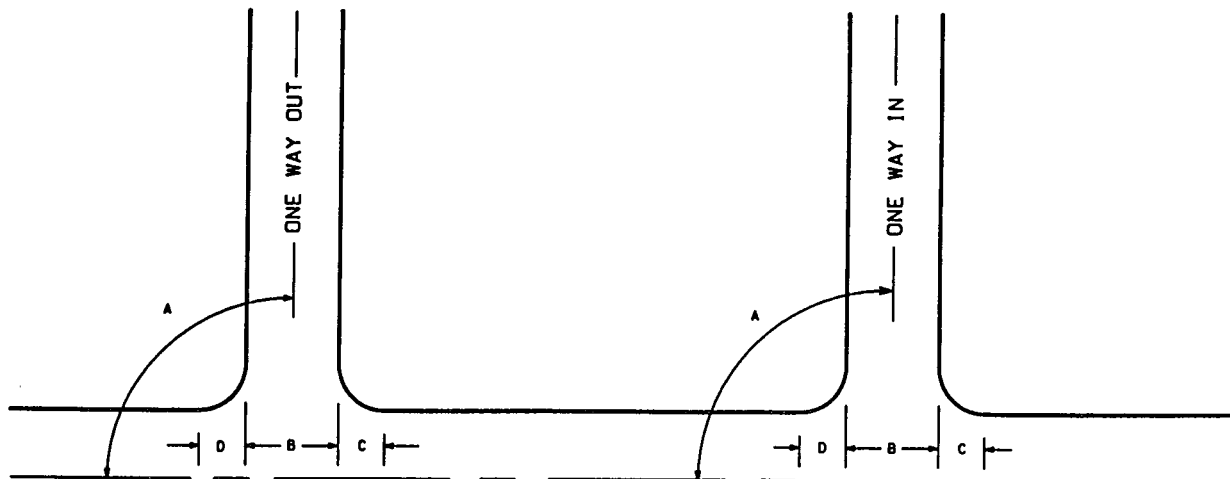


EXHIBIT 3

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 specifies, or the applicant shows cause for, a different value. The "range" in dimensions indicates the working values for each design feature.

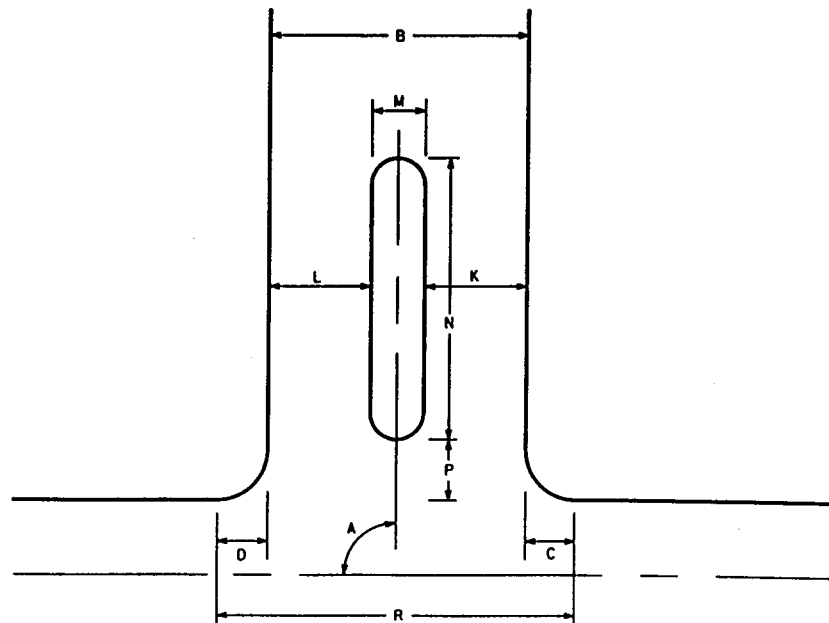


EXHIBIT 4

WARRANTS FOR RIGHT TURN DECELERATION LANE OR TAPER

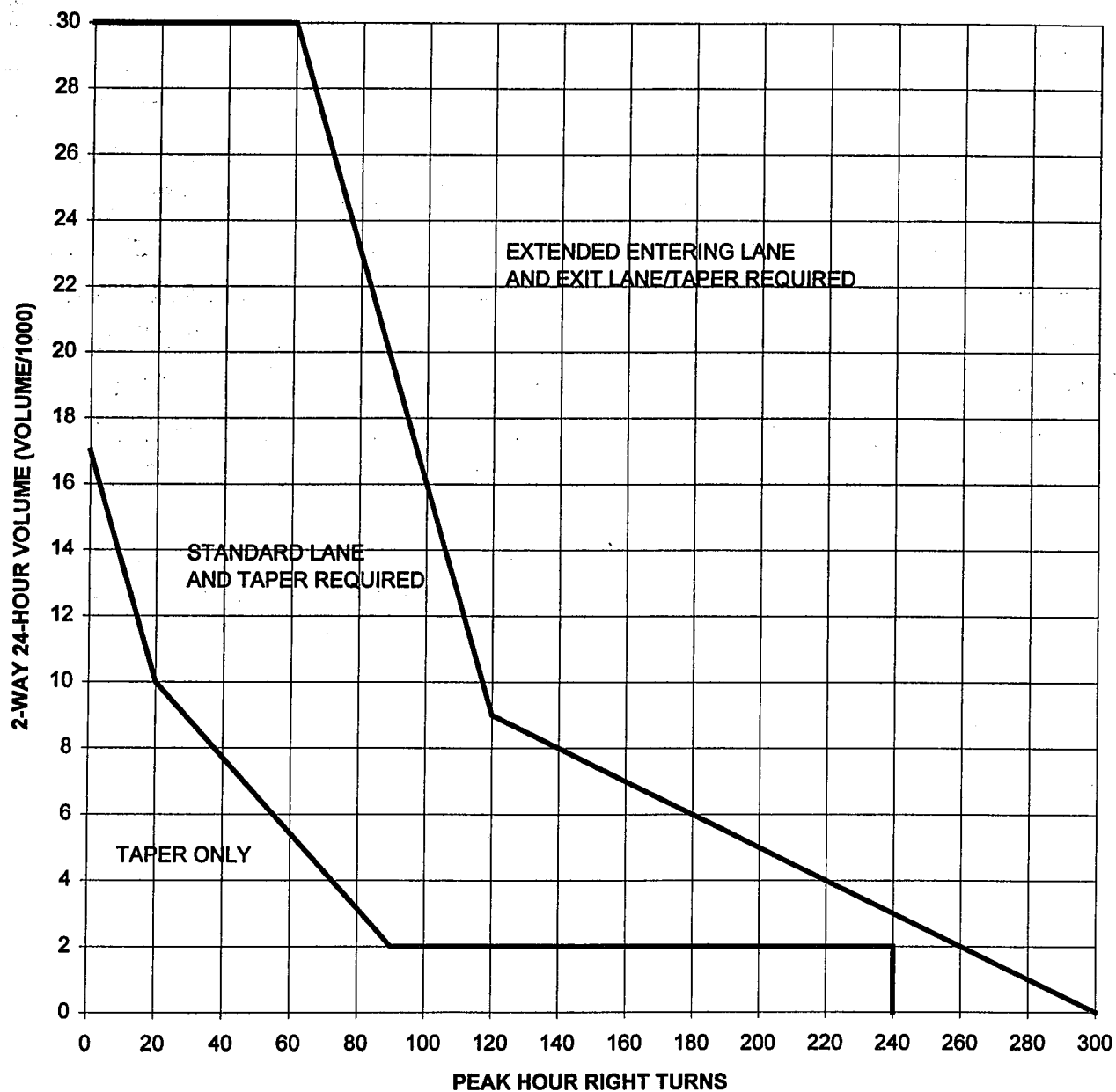
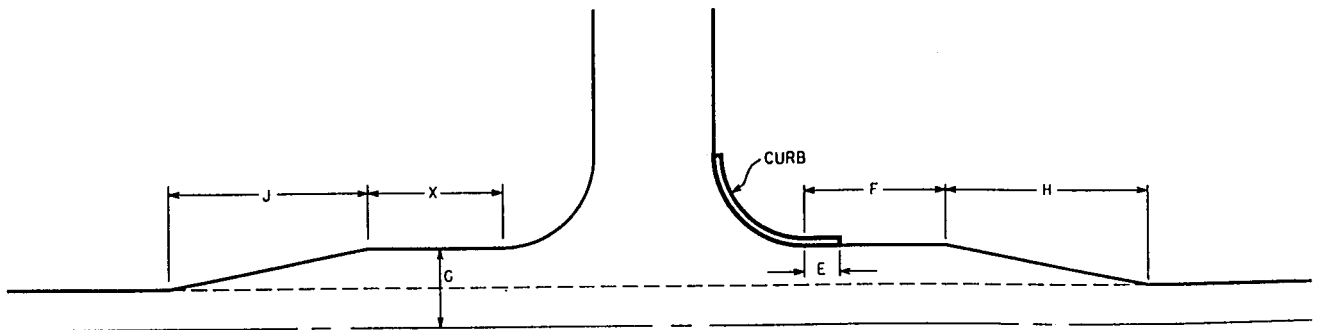


EXHIBIT 5

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 100 Feet
Elting 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 specifies, or the applicant shows cause for, a different value. The "range" in dimensions indicates the working values for each design feature.



WARRANT FOR LEFT TURN PASSING LANE

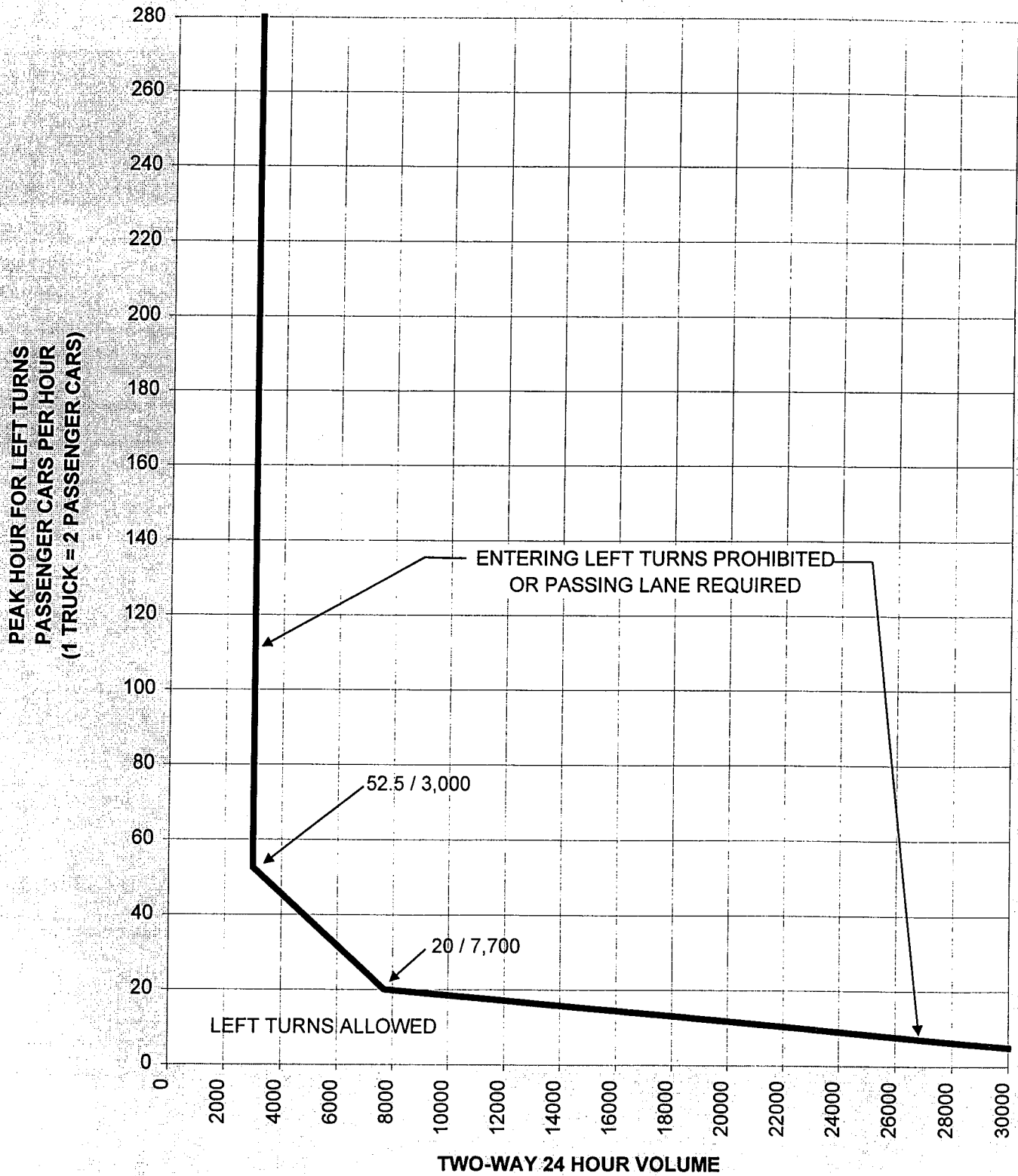
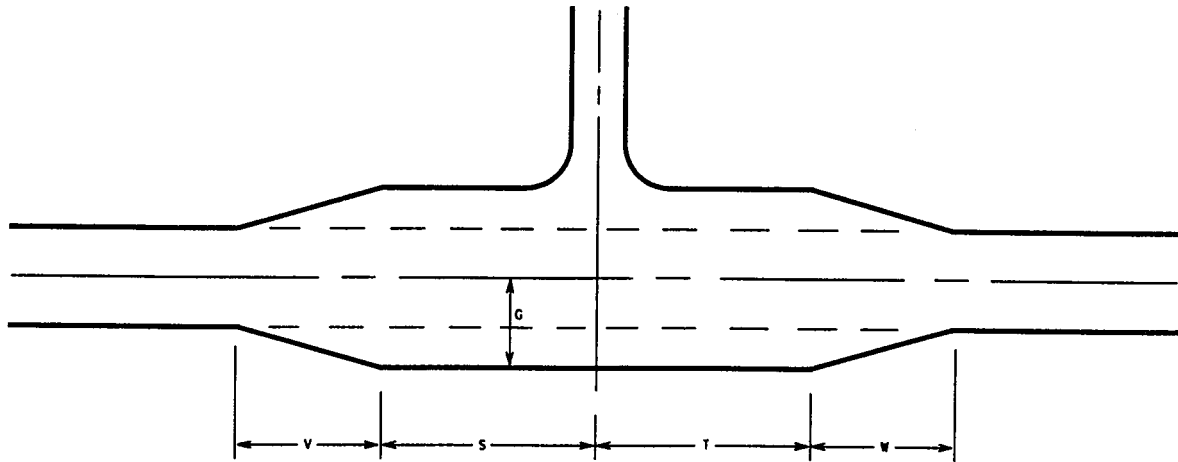


EXHIBIT 7

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 10 Feet
Pavement Width from Center Line o Road	G	24 Feet	22 to 24 Feet

NOTE: The "standard" dimension shall be used unless the Permit Department specifies, 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 ROADWAY			
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 specifies, or the applicant shows cause for, a different value. The "range" in dimensions indicates the working values for each design feature.

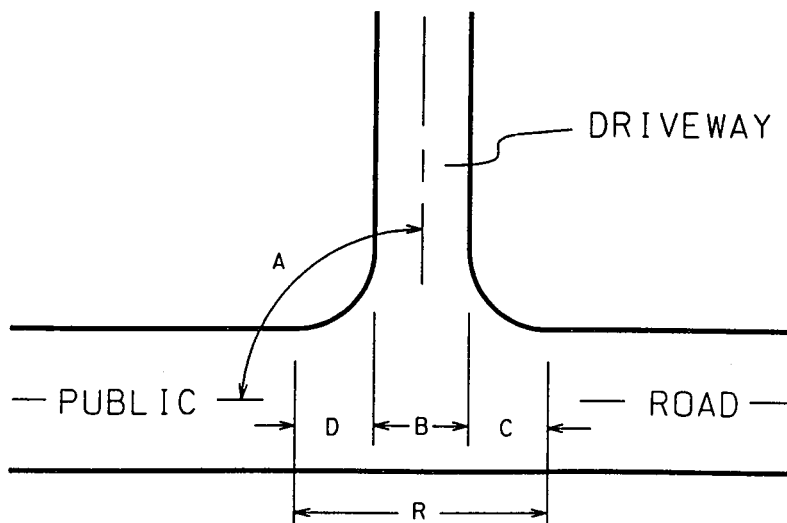


EXHIBIT 9

RESIDENTIAL DRIVEWAY-CURBED ROADWAY			
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 specifies, or the applicant shows cause for, a different value. The "range" in dimensions indicates the working values for each design feature.

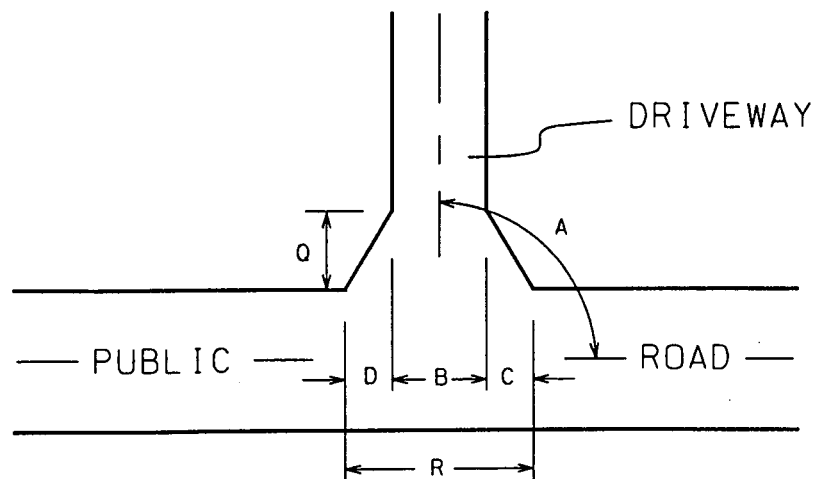
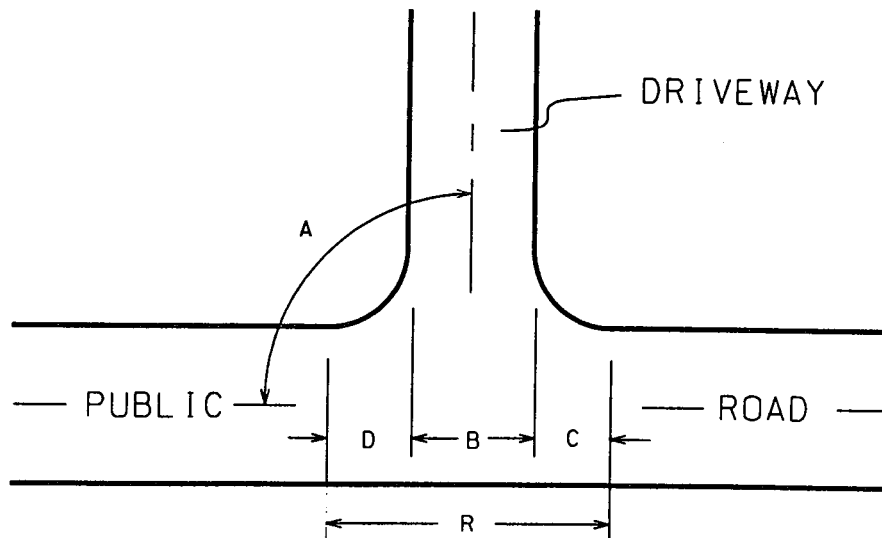


EXHIBIT 10

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	22 to 105 Feet

NOTE: The "standard" dimension shall be used unless the Permit Department specifies, or the applicant shows cause for, a different value. The "range" in dimensions indicates the working values for each design feature.



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.**