

Standards and Specifications For Roads and Streets

Within the jurisdiction of the
Iosco County Road Commission



By
Iosco County Road Commission
3939 West M-55
Tawas City, Michigan 48763

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PURPOSE

This BOARD has from time to time adopted various standards and specifications for the construction of subdivision streets and roads, so that when constructed, they may be of a standard that can be taken over as part of the county road system. This BOARD wishes to maintain a uniform set of standards and specifications for the construction of said streets and roads in proposed subdivisions and therefore has prepared this publication.

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DEFINITIONS

- THE ACT:** Act No. 288, Public Acts of 1967, approved by the Governor August 1, 1967, and known as the “Subdivision Control Act of 1967”.
- BOARD:** The BOARD of County Road Commissioners of the County of IOSCO, State of Michigan.
- MANAGING DIRECTOR:** The Managing Director employed by the BOARD or any of their associates designated to act for them in carrying out the duties, as designated, of THE ACT.
- PROPRIETOR:** The person, firm, association, partnership, corporation or combination of any of these that may hold ownership interest in lands to be platted.

THE SUBDIVISION CONTROL ACT OF 1967

“AN ACT to regulate the subdivision of land; to promote the public health, safety, and general welfare; to further the orderly layout and use of land...to provide for proper ingress and egress to lots...to provide for the approvals to be obtained by subdividers prior to recording and filing of plats...and to repeal certain acts and parts of acts.

PROVISIONS OF THE ACT

Any division of land which results in a subdivision as defined in Section 102 of THE ACT shall be surveyed and a plat made thereof and submitted, approved, and recorded as required by the provisions of THE ACT. Section 183 of THE ACT reads as follows:

(1) The county road commission may require the following as a condition of approval of final plat for all highways, streets and alleys in its jurisdiction or to come under its jurisdiction and also for all private roads in unincorporated areas:

- (a) Conformance to the general plan, width and location requirements that the board may have adopted and published.
- (b) Adequate provisions for traffic safety in laying out drives which enter county roads and streets, as provided in the board's current published construction standards.
- (c) Proper drainage, grading and construction of approved materials of a thickness and width provided in its current published construction standards.
- (d) Submission of complete plan for grading, drainage and construction are to be prepared and sealed by a civil engineer registered in the state.
- (e) Installation of bridges, culverts and drainage structures where it deems necessary.
- (f) Completion of all required improvements relative to streets, alleys and road, or a deposit by the proprietor with the board in the form of cash, a certified check or irrevocable bank letter of credit, whichever the proprietor selects, or a surety bond acceptable to the board, in an amount sufficient to insure completion within the time specified.

(2) As a condition of approval of the final plat, the board may require a deposit to be made in the same manner as provided in the subdivision (f) of subsection (1), to insure performance of any of the obligations of the proprietor, to make required improvements.

- (3) The board shall rebate to the proprietor, as the work progresses, amounts of any cash deposits equal to the ratio of the work completed to the entire project.
- (4) The board shall reject a final plat isolating lands from existing public streets or roads, unless suitable access is provided, and shall also require that such access be granted by easement or dedicated to public use.

PRELIMINARY REQUIREMENTS

PRELIMINARY PLAT

In order that subdivision plats may be prepared in conformity with the general highway and street plans of the BOARD, the PROPRIETOR shall have prepared a preliminary plat of the area that is to be platted. The plat shall be prepared under the direction of a Registered Land Surveyor or Registered Civil Engineer and shall be drawn to a convenient scale not smaller than one inch equals 200 feet.

The preliminary plat shall give the name of the proposed subdivision and its location with reference to the section and township in which the parcel is situated. The plat shall show the proposed road and street layout, lot and plat dimensions (dimension to the nearest foot are adequate on the preliminary plat), and governing factors such as adjoining subdivisions, streams, lakes, highways, railroads, parks, cemeteries, natural water courses, sewers, or any other feature which might affect the layout of the plat.

Three copies of the preliminary plat, prepared as noted above, shall be submitted to the BOARD, together with a letter requesting preliminary approval of the plat. The BOARD, within 30 days of receipt of the preliminary plat, shall approve it and note its approval on the copy to be returned to the PROPRIETOR, or reject it. If rejected, the reasons for the rejection and requirements for approval shall be given to the PROPRIETOR in writing.

DRAINAGE PLAN

A drainage plan shall be submitted indicating the manner in which surface drainage is to be disposed. This will usually require making use of existing ditches, natural watercourses, or constructing tributaries thereto. In all cases an easement of twenty (20) or more feet in width shall be provided when the drain crosses private property within or adjacent to the subdivision.

The drainage plan may be superimposed on the preliminary plan, or it may be submitted as a supplement to the preliminary plan.

RIGHT-OF-WAY WIDTH

The following minimum widths of right-of-way will be required of all roads, streets and alleys:

Alleys(Private).....	33 feet
Alleys(Public).....	33 feet
Local Roads and Streets.....	66 feet
Primary Roads.....	66 feet

The BOARD may require greater right-of-way width when considered necessary.

Section line and quarter line roads shall be centered on said lines unless the BOARD approves an exception.

Half width dedications of roads, streets or alleys will be acceptable only when the boundary of the proposed plat must coincides with the boundary of a recorded plat on which a half road, street or alley has been previously dedicated, or along an existing county road or street.

STREET LAYOUT

The street layout shall conform to the pattern established by adjacent roads and streets. All existing public roads, streets or alleys that terminate at the boundaries of a proposed plat must be connected with the street system of the proposed plat. Suitable

access from an isolated plat to existing public streets or roads must be provided by either an easement or dedication.

The layout of streets and alleys in a proposed plat shall provide a continuous circuit for travel except when, in the opinion of the BOARD, the lands to be subdivided are limited in area or are subject to a natural barrier. In such cases a dedication that provides access to another road or street at one end only will be acceptable if a turnaround of 60-foot minimum radius is provided at the terminus of the street to permit turning in a continuous circuit. Lot arrangement shall be such that the number of turnarounds required is held to a minimum.

STREET NAMES

Road and street dedications shown on plats shall be designated by name. Roads and streets which are extensions of, or in line with, existing roads and streets must be named to agree with those in existence. Other roads and streets may be given such names as the PROPRIETOR may choose subject to the approval of the BOARD.

The PROPRIETOR shall furnish and erect street names and traffic control signs at all intersections within the subdivision and entrance thereto. The design of the signs shall be similar to road name signs currently being purchased for use on existing county roads.

Signs marked "Private Road" shall be erected and maintained by the PROPRIETOR at the entrances to all private roads and streets in the subdivision.

REQUIRED STANDARDS AND SPECIFICATIONS

The owner of the platted lands, or his/her agent, shall be required to grade, drain and surface the streets and alleys shown on the plat in accordance with the standards and specifications of the Board of County Road Commissioners. These specifications apply to either public or private roads.

PLAN AND PROFILE

Plan and profile drawings shall be prepared by the Proprietor's engineer in detail, complete enough to be used as construction plans. The drawings shall show the proposed

gradients of all roads and streets and the location of drainage facilities and structures, as well as other pertinent information.

The maximum grade permitted shall be seven (7) percent on primary and local roads. Vertical curves shall be used at all changes in grade. Sight distance and horizontal and vertical alignment shall be based on a suitable design speed approved by the Engineer, and shall be in accordance with the American Association of State Highway and Transportation Officials (AASHTO) standards for geometric design.

It is desirable that all intersecting roads and streets meet at right angles, but in no case shall the intersection angle be less than seventy degrees. Turning radii shall be provided at all intersections, with a minimum radius of thirty feet at the lot lines.

A minimum of fifty feet of flat gradient measured from the shoulder line shall be provided at the approach of a secondary road or street to a main road or street.

Two copies of the plan and profile drawings shall be forwarded to the Engineer for approval. One copy will be returned to the Proprietor's engineer with approval or necessary revisions marked thereon. Approval must be obtained before construction begins.

CLEARING AND GRUBBING AND MUCK REMOVAL

All muck, trees, brush and the roots thereof shall be entirely removed from within the grading limits of all streets and alleys in the proposed plat and shall be disposed of outside the right-of-way.

GRADING AND DRAINAGE

A roadway, centered on the street right-of-way, shall be constructed conforming to the requirements shown on the BOARD's standard plans for subdivision road grading and described herein.

Roadbeds shall have a minimum width of thirty (30) feet between shoulder lines. Wider and flatter slopes than the minimum are recommended wherever possible to give a more pleasing appearance.

The presence of other than granular materials in the sub-grade soil shall require a compacted twelve- (12) inch granular subbase or other special treatment approved by the Engineer.

The level of the finished sub-grade shall be at least two and one-half (2 ½) feet above the water table.

Drainage ditches shall be constructed on each side of the roadway in cut sections and in fill sections when required. Ditches shall be a minimum of two (2) feet in depth, and deeper where necessary to permit placing of future driveway culverts.

Alleys shall have a minimum width of eighteen (18) feet between shoulder lines and shall have a minimum crown of 3 inches. Ditches shall be provided, as outlined above, where necessary for drainage.

DRAINAGE STRUCTURES AND EROSION CONTROL

Drainage structures shall be installed as indicated on the Drainage Plan using plastic, concrete or corrugated metal pipe of the required size specified by the Engineer. Minimum inside diameter of crossroad culverts shall be 15 inches; minimum inside diameter of driveway culverts shall be 15 inches. Curb and gutter may be required for drainage purposes.

All culverts are to be provided by either the PROPRIETOR or the lot owners. Driveway permits will be required after roads have been taken over by the BOARD.

Any bridge or other structure proposed to be constructed in conjunction with a subdivision road shall be designed in accordance with the following AASHTO standard loads:

Primary Roads:	HS20-44
Local Roads	HS20-44

EROSION CONTROL

Sodding, rip-rapping, topsoiling, seeding, mulching and fertilizing and/or other methods of erosion control shall be used on right-of-way areas outside of the surfaced portion of the roadway. All erosion control methods shall comply with Michigan

Department of State Highways and Transportation Specifications and the Erosion and Sediment Control Program of the Iosco County Road Commission.

A description of the erosion control methods to be used by the PROPRIETOR shall be included on the plan and profile drawings submitted to the Iosco County Road Commission.

BASE CONSTRUCTION AND SURFACING

An aggregate base shall be placed on a Class II sand subbase that is compacted to 95% of its maximum density and the entire roadway is finished in accordance with the standards and specifications for subdivision road and streets. Typical cross sections are provided in the back of this book. A minimum base of thirty (30) feet on all roads and streets shall be provided to accommodate twenty-two (22) feet of bituminous pavement and eight (8) feet of aggregate shoulders; four foot (4') on each side. Minimum width on alleys shall be eighteen (18) feet.

A minimum total compacted depth of six (6) inches of aggregate base 22A, produced in accordance with the Michigan Department of Transportation Standards Specifications, shall be placed on public and private roads and streets. This material shall be compacted to 98% of its maximum density prior to paving. Alternate methods of base construction shall be subject to approval of the Iosco County Road Commission.

Surfacing of the subdivision streets shall consist of a minimum of 200 pounds per square yard of bituminous plant-mix pavement in accordance with Michigan Department of Transportation Standards and Specifications. Pre-approval of mixture number and type shall be required prior to paving of roads and streets. If any of the roads or streets is designated as Primary additional aggregate base and bituminous shall be required.

Shoulders shall be constructed to a compacted thickness equal to the bituminous application, with 23A aggregate. In all cases, the area of the right-of-way outside the surfaced portion shall be treated, as a minimum in accordance with the 1990 Michigan Department of Transportation specification 6052 "Turf Establishment".

In subdivision development, such as industrial parks, trailer parks, etc..., right-of-way width requirement, drainage, base construction, and surfacing shall be evaluated on

an individual project basis. The Iosco County Road Commission shall direct the standard road commission cross-section in these developments.

SCHEDULE OF FEES

In accordance with section 24B, Act 308, Public Acts of 1969, the following fees covering the examination and inspection of proposed plats shall be paid to the Iosco County Road Commission at the time of submission of the preliminary plat plan for approval and paid as follows:

- a. Processing of preliminary plat plan and the final plat: \$1.00 per lot or \$25.00 minimum.
- b. Processing of Road and Drainage Plans, Inspection, etc.: \$2.00 per lot or \$50.00 minimum.
- c. Inspector at gravel processing site:

If the proprietor does not obtain the services of a full time qualified aggregate inspector who is acceptable to the county, the county will assign on and the cost of all labor and materials, plus 15% office overhead will be charged to the proprietor.

GUARANTEE OF IMPROVEMENTS

The PROPRIETOR will be required to grade, drain and surface the roads, streets and alleys in accordance with the specification and standards contained herein, within 18 months from the date of approval of the final plat by the BOARD.

The PROPRIETOR will be required to furnish cash, a certified check or an irrevocable bank letter of credit, whichever the PROPRIETOR selects in an amount sufficient to insure completion of all improvements within the 10 month period from the date of approval of the final plat by the BOARD. A surety bond will not be acceptable by the BOARD.

PRIVATE ROADS

If the plat includes roads, streets, or alleys which are private, the PROPRIETOR shall submit a letter to the BOARD stating that he/she will inform purchasers of lots that the roads, streets or alleys are not required to be maintained by the BOARD of the County Road Commissioners as outlined in Section 261 of the Subdivision Control Act.

These published minimum standards and specifications are subject to change without notice by the Board of County Road Commissioners. The BOARD reserves the right to require construction to higher standards where warranted by special conditions.

These published Standards and Specifications are effective on the date of adoption by the BOARD and cancel and supersede all previously published regulations.

Public and Local Acts of Legislature of the State of Michigan passed at the Regular Session of 1967. James M. Hare, Secretary of State and the Legislature Service Bureau Speaker. Lansing: Hines and Thomas, Inc. 1967.