

ADDISON TOWNSHIP

APPLICATION FOR PRIVATE ROAD OR ACCESSWAY

This application is not accepted as complete, and bound by timeframes in the ordinance until it is determined to be administratively complete as evidenced below by the date and the signature of the township representative.

Date _____ BY _____ office use

Application Fee: Included and nonrefundable

Application:	\$2500
Planner Review:	\$500
Engineer Review: Residential	\$4000 and \$50 per building site
Commercial, business, industrial, public or office	
Site plan, special use, rezoning,	
Site condo, PUD, Open space	\$10,500 and \$50 per building site

The Township authorizes cost recovery and any and all professional fees not covered by ordinance or resolution for land development or application paid by the Township will be invoiced to applicant, including but not limited to environmental studies, wetland determinations, planner, engineer and/or legal fees.

Submit (12) engineered plans for a land division, folded & inserted into envelopes for mailing

Submit (20`) engineered plans for Site Condominium Developments: Planning Commission and Township Board folded and inserted into envelopes for mailing.

1. Please complete the following information

Date:	
Parcel ID #	Zoning Classification
Property Owners	
Phone	Email
Address	

SUBMIT A COPY OF THE DEED

2. Owner's Authorization: I/We hereby state to hold title or contract to the above mentioned property and that signers below have read the ordinance regulating Parcel Division and Private Roads.

PROPERTY OWNER SIGNATURE: _____

PROPERTY OWNER SIGNATURE: _____

If an agent, letter of authorization is required by property owners.

AGENT SIGNATURE: _____

- Attachments:
1. Section 4.19 Private Roads/Accessway
 2. Private Road Standards

ADDISON TOWNSHIP

APPLICATION FOR PRIVATE ROAD OR ACCESSWAY

Construction Information.

Road Name	Parcel ID
Contractor	License #
Address	
Phone:	Email

Approved documents submitted to Clerks Office prior to Board review/approval and Final Approval.

- a. Soil Erosion Permit No:
- b. Approach Permit from Road Commission Oakland County:
- c. Utility Easement and Road Maintenance Agreement approved by Township Legal, Planner and Engineer
- d. Parcel Division Application, if applicable, approved by the Planner.
- e. Construction plans approved by the Township Engineer.

Final Approval

Road Name _____ Parcel ID number _____

Road/Utility/Drainage Easement, deed restriction and Road Maintenance Agreement, or other documents that may apply in a recordable as recommend for approval by Township Attorney, Planner and Engineer signed by all parties of interest & recorded at County Liber # _____

Final Approval of Private Road was given by the Board of Trustees at a Meeting held on _____

Pauline Bennett,
Addison Township Clerk

Section 4.19. - Private roads.

Private road development that occurs in the township shall be subject to the minimum private road regulations and standards of this section (Section 4.19). No person, firm or corporation shall hereafter divide or develop any land as hereinafter described without providing for public or permanent private easements for access to such divided lands with said private easements to conform to these minimum requirements.

A. *Definitions.*

1. *Existing easement access.* An easement that is recorded with the Oakland County Register of Deeds, prior to the effective date of this provision of the zoning ordinance, that has not received approval from the township board (as determined by the township board) as part of a land division, private road application, subdivision or site condominium.
2. *Approved existing private road.* A recorded easement that has been approved by the township board as a result of a subdivision, site condominium or private road application as provided in [this] Section 4.19 and has been constructed and received final township board post-construction approval for the full approved final length.
3. *New private road.* A proposed easement that conforms to the requirements of [this] Section 4.19 and is approved by the township board with any and all conditions of approval met.
4. *Nonconforming access.* Any access (e.g., including driveways, unrecorded easements, unapproved easements, unimproved easements) other than a public road, approved existing private road or new private road that does not meet the definitions contained in Section 4.19.A.1—3 or any standard contained in [this] Section 4.19.

B. *Requirements.*

1. Every dwelling hereafter erected or located in the township shall be on a parcel abutting a public road, a new private road or an approved existing private road (both as defined herein) that complies with all provisions of [this] Section 4.19, and with access to the road to provide safe, convenient yearround access/egress for serving emergency access, pedestrian safety and fire protection.
2. When land parcels are being divided and roads created within the township, the resulting road standards shall meet or exceed the standard "C" type described in the cross section drawing of the Oakland County Road Commission, dated December 14, 1972. Rights-of-way or easements, while not required to be dedicated, will be reserved for future dedication and preclude any development within this designated area. Any land division

application or development plans as submitted for approval must show any proposed private road easement including a legal description, and must include the grades for these roads or future extension shall be deemed waived.

3. All private roads (unless an accessway easement as provided in Section 4.19.18) shall have a minimum right-of-way easement of at least sixty (60) feet or the current Road Commission for Oakland County's designated right-of-way width for subdivision roads, whichever is greater. No resultant parcel from the land division shall have lot width less than that required in the zone in which the parcel is located.
4. Construction permits from the Road Commission for Oakland County are required for connection of private roads to county roads. Permits are required from Oakland County Drain Commissioner under the Soil Erosion and Sedimentation Control Act, Act 347 [Part 91 of Public Act No. 451 of 1994 (MCL 324.9101 et seq.)], when applicable. No building permit shall be issued on any private road until such private road is given final approval by the township board following construction. Preexisting parcels on approved existing private roads may be issued one building permit for a single home.
5. Application for new private road approval shall be made at the same time as a land division application, site condominium application, building permit application, or subdivision application occurs. Applicants shall prepare a general property development plan complying with the requirements of Section 4.18 (for land divisions), Section 4.43 (for site condominiums) of this ordinance or the township subdivision ordinance (for subdivisions).

Prior to approval of any new private road by the township board, the applicant will prepare and provide three sets of:

- a. Construction drawings that meet approval of the township engineer prior to township board approval. If the private road will serve a single parcel or building site that is adequately deed-restricted from further division in a manner acceptable to the township land division committee, following review by township legal counsel, the land division committee may waive the requirement of construction drawings.
- b. Road maintenance/reconstruction agreement signed by the applicant/owner.
- c. Road easement agreement signed by applicant/owner, providing for:
 - 1) A method of initiating and financing of such road and/or easements in order to keep the road in a reasonably good and usable condition.
 - 2) A workable method of apportioning the costs of maintenance, reconstruction and improvements to a specified maximum number of parcel owners and/or homeowners at any one time.

3)

A notice that if repairs and maintenance are not made, the township board may bring the road up to class "C" design standards and assess owners of parcels on the private road for the improvements, plus an administrative fee in the amount of twenty-five (25) percent of total costs. In the event further land divisions are proposed on an existing private road, such divisions may only occur with frontage as measured along an approved existing private road or a new private road.

- 4) A representation that no public funds of the Township of Addison are to be used to build, repair, reconstruct or maintain the private road.
 - 5) Easements to the public for purposes of emergency and other public vehicles for whatever public services are necessary for access.
 - 6) A provision that the owners of any and all of the property using the road shall refrain from prohibiting, restricting, limiting or in any manner interfering with normal ingress and egress and use by any of the other owners except by mutual agreement of all involved in the use of the road. Normal ingress and egress and use shall include use by family, guests, invitees, vendors, tradesmen, delivery persons, and others bound to or returning from any of the properties having a need for use of the road.
 - 7) A limitation on the maximum number of parcels/building sites to be served by the easement.
6. The township engineer shall review the plans of the new private road and forward a recommendation of approval, approval with conditions, or denial (with reasons) to the township board. When new private road plans are approved by the township board, a construction permit will be issued by the township clerk and/or supervisor. The township engineer will inspect and review the road during construction. Upon completion of construction of the road, a site inspection of the road including proper placement of any stop sign(s) and street identification sign(s) will be made by township engineer who shall forward his recommendation to the township board who shall be responsible for considering final approval. If final approval contains conditions, the approval shall not be considered final until all conditions have been met to the full satisfaction of the township board.
 7. All private roads shall be designated as such and shall be appropriately signed by the property owner. The township clerk shall check with the county to avoid a duplication of names and give approval of [the] same.
 8. An application fee is to be established by the township board. Before final approval of the cost of review of plans and inspection by the township engineer of the private road and drainage shall be paid for the by the applicant/developer.
 9. Extensions of private roads.

- a. Approved existing private road. Approved existing private roads shall be allowed to be extended in the same manner as the original approved existing private road. Any approved existing private road may apply at any time for township extension approval. Extensions shall be limited to existing parcels that are contiguous to the approved existing private road easement as the original road easement exists according to the existing approved easement prior to the application. Existing parties to any existing road maintenance agreement must agree to any proposed extension by providing a preapproved (by township) road maintenance agreement for the extension in addition to the original length of the private road. (All extensions [which shall be considered a part of the existing road for purposes of maximum length] and the resultant extended road must comply with all of the requirements of [this] Section 4.19.) Any extension of an approved existing private road can only occur on a conforming parcel (complies with all provisions of this zoning ordinance [300]) and extension can only be to a conforming parcel.
 - b. Existing easement access. Unless an easement has been reserved and approved by the township or a preexisting township-approved road maintenance agreement identifies a proposed extension, no existing easement access shall be extended unless the extension and original easement access are altered to comply with all of the requirements of [this] Section 4.19, including maximum length for the entire road.
 - c. New private road. Unless an easement has been reserved and approved by the township board, or a preexisting township-approved road maintenance agreement identifies the proposed extension, no new private road shall be extended after it is approved by the township board. All extensions must comply with all of the requirements of [this] Section 4.19, including maximum length for the entire road.
10. All purchasers of property where a private road provides access to the premises shall, prior to closing of the sale, receive from the seller a notice of easement, in recordable form, substantially conforming to the following:

This parcel of land has private road access across a permanent sixty (60) foot easement which is a matter of record and a part of this deed.

This notice is to make purchaser aware that this parcel of land has egress and ingress over this easement only.

Neither the county nor [the] township has any responsibility for maintenance or upkeep of any improvement across this easement. This is the responsibility of the owners of record. The United States mail service and the local school district are not required to traverse this private improvement and may provide service only to the closest public access. (Public Act No. 139 of 1972 [MCL 247.391 et seq.] as amended.)

11. No fences, structures, and similar elements are permitted within the private road easement.
12. Any parcel across which a private road easement is proposed shall meet the minimum road frontage and lot width requirement on a public (not private) road of the zoning district wherein the parcel to be traversed is located.
13. Maximum private road length. The maximum private road segment length (distance between intersections of private road segments as measured along road centerlines) and length of cul-de-sac shall be eight hundred (800) feet. Public roads may be used for parcels that require lengths in excess of that which is allowed for private roads. A road segment is a length of private road that serves at least four (4) parcels exclusively (no direct access to another portion of a private road). Private road segments (non-cul-de-sac segments) in land divisions, subdivisions and site condominiums may not exceed one thousand six hundred (1,600) feet unless a variance is granted for the minimum variance necessary if multiple access/egress points to the segment and subdivision/site condominium are provided to the development for each and every phase of the development. Private road standards shall be used in any underlying plan (conventional or parallel plan) as provided in Section 25.03.
14. The width of a proposed private road shall not be considered a part of the minimum lot width requirements of this zoning ordinance.
15. The intersection of a private road with a public road and the intersection of private road segments with other private road segments (intersection to intersection) shall be at right angles or as nearly as possible to right angles as conditions permit. Intersections with offsets of less than one hundred twenty-five (125) feet should be avoided where possible. A private road intersection with a public road shall be at least one hundred twenty-five (125) feet from any portion of another private road. Private road and accessway easements should be offset from adjacent property lines at least sixty (60) feet to allow for parallel private roads and minimization of turning conflicts.
16. Cul-de-sac road length shall not exceed eight hundred (800) feet unless no more than four (4) existing or proposed parcels or future divisions or building sites are created from the parent parcel or served by the cul-de-sac road. Parcels with potential access to both a public and proposed private road shall be considered to have access to the proposed private road unless a parcel contains a home and preexisting driveway. For purposes of this provision, the proposed number of divisions shall apply to the parent parcel from which the divisions are proposed and over which a private road (including accessway is proposed). A limitation on future divisions for building site purposes shall be imposed by

the township board as part of private road approval, which limitation shall be so recorded in parcel deeds following review and approval of the proposed deed restrictions by township legal counsel.

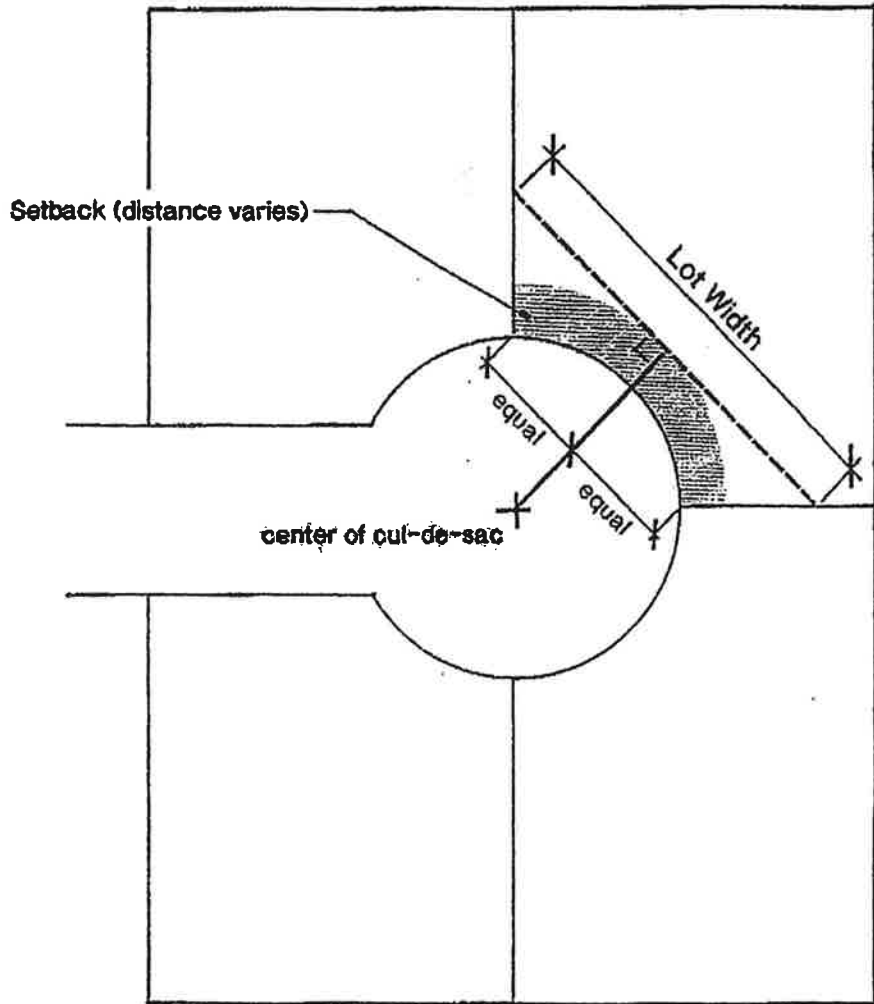
17. Private road configurations that serve more than twenty-five (25) lots, parcels, or condominium units shall provide an alternate access (private road access) for purposes of public safety. A boulevard entrance shall not qualify as the alternative access. The alternate access shall be provided as far as possible from the origin of the private road (intersection with public road) and shall provide maximum alternate access to as many lots, parcels or condominium units as practicable.
18. Parcels which front on a public (not private) road may meet the frontage requirements of Section 4.17 for up to four (4) building sites or parcels through the calculation of frontage on an easement (accessway) which meets the following requirements:
 - a. Each easement shall be recorded with the county register of deeds with a maintenance agreement, the form and content of both (easement and maintenance agreement) shall be acceptable to the township board and approved by the township board following review by township legal counsel at the applicant's expense.
 - b. Each accessway shall be submitted for approval of the township engineer for compliance with recommended standards for design, construction and drainage.
 - c. Each easement shall be twenty (20) feet in width for the finished travel surface and provide for adequate drainage and any required drainage easement, as reviewed and recommended by the township engineer.
 - d. Parcels which had an easement which crosses a parcel which fronts on a public (not private) road, which preexists the date of adoption of this amendment [section], may be utilized for up to four building sites under the provisions of this section and upon issuance on any minimum variance necessary from the zoning board of appeals.
 - e. Land divisions that are proposed to be accessed from an accessway shall be submitted simultaneously with the accessway, application and construction drawings.
 - f. Approvals of accessways shall be by the township board following review and recommendation by the township planning consultant, township engineer and township fire department.
 - g. Land divisions which are approved conditioned upon an accessway shall be considered denied (for lack of zoning ordinance compliant access) unless approval of an accessway is granted.
 - h. Parcels that utilized this subsection shall be deed restricted in a manner acceptable to the township board following review by township legal counsel, at applicant's expense, which prevents further divisions of building sites.

i.

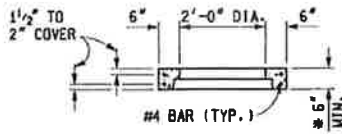
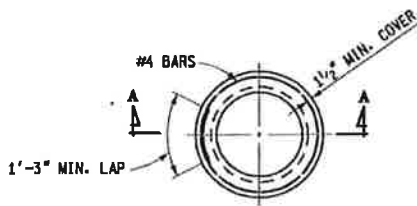
Nothing in this section shall allow the extension of a private road, creation of an accessway from a private road, or access across a parcel which does abut a public (not private) road, unless such parcel is combined with a preexisting parcel in a manner which conforms to this Zoning Ordinance [300 (this ordinance)].

- j. The accessway shall be constructed to comply with private road standards (shall meet or exceed standard "C" type described in the cross section drawing of the Road Commission for Oakland County, [including the cul-de-sac radius for a private road] dated 12-14-[19]72 [except for easement width and any design modification recommended in Subsection "f" above and approved by the township board] when the second parcel is served by the accessway.

(Ord. of 5-16-2005; Ord. No. 17-01, 9-18-2017)



Measurement of Lot Width on a Cul-De-Sac



SECTION A - A

* WHEN RISER TONGUE LENGTH IS GREATER THAN 3", USE 2 TIMES THE TONGUE LENGTH.

NOTE: PRECAST RISER SHALL FULLY ENGAGE THE TONGUE OF THE RISER PIPE.

PRECAST RISER RING
(FOR 2'-0" DIAMETER STRUCTURE)

NOTES:

THE DRAINAGE STRUCTURE COVERS ALLOWED FOR USE ON THESE DRAINAGE STRUCTURES ARE SPECIFIED IN SUBSEQUENT STANDARD PLANS AND ARE INTERCHANGEABLE ON ANY STRUCTURE.

THE TOPS OF MASONRY STRUCTURES SHALL BE SUFFICIENTLY LOW TO PERMIT PROPER ADJUSTMENT OF COVER TO GRADE USING MORTAR OR BRICK AS DIRECTED BY THE ENGINEER.

PREMIUM JOINTS ARE REQUIRED ON ALL SANITARY MANHOLES. SEE ASTM DESIGNATION C-923.

GRANULAR MATERIAL CLASS III SHALL BE USED IN BACKFILLING AROUND ALL STRUCTURES THAT FALL WITHIN THE 1:1 INFLUENCE LINES FROM THE EDGE OF PAVEMENT OR BACK OF CURB.

A STRIP OF SOD 3'-0" WIDE SHALL BE PLACED AROUND THE TOP OF EACH STRUCTURE LYING OUTSIDE THE SURFACED PORTIONS OF THE HIGHWAY.

STEPS FOR DRAINAGE STRUCTURES SHALL BE OF AN APPROVED DESIGN AND MADE FROM CAST IRON, ALUMINUM, OR PLASTIC COATED STEEL. RUNGS SHALL BE A MINIMUM OF 10" IN CLEAR LENGTH, DESIGNED TO PREVENT THE FOOT FROM SLIPPING OFF THE END. THE MINIMUM HORIZONTAL PULL OUT LOAD SHALL BE 400 LBS. THE MINIMUM VERTICAL LOAD SHALL BE 800 LBS.

THE BELL SHALL BE REMOVED FOR THE FIRST LENGTH OF OUTLET PIPE PROJECTING THROUGH THE WALL OF THE MANHOLE.

PRECAST CONCRETE SECTIONS, SUMPS, AND FLAT TOP SLABS SHALL BE BUILT ACCORDING TO ASTM C-478 AND ACCORDING TO DETAILS SPECIFIED ON THIS PLAN. PRECAST REINFORCED CONCRETE FLAT TOP SLAB SHALL BE MARKED TO SHOW LOCATION OF REINFORCEMENT. THE WALLS OF THE PRECAST UNITS MAY HAVE A SLIGHT TAPER TO ALLOW FOR FORM REMOVAL. PRECAST CONCRETE 2'-0" DIAMETER DRAINAGE STRUCTURES SHALL HAVE A MINIMUM 3" WALL THICKNESS WITH A 6" MINIMUM BEARING SURFACE ON TOP. SEE PRECAST RISER RING FOR 2'-0" DIAMETER STRUCTURE.

PIPES ENTERING OR LEAVING PRECAST STRUCTURES SHALL NOT HAVE AN INSIDE DIAMETER GREATER THAN 2'-0" LESS THAN THE INSIDE DIAMETER OF THE STRUCTURE. EXCEPT THAT A PIPE LEAVING A 2'-0" INSIDE DIAMETER STRUCTURE MAY HAVE A 1'-0" INSIDE DIAMETER OR LESS.

THE NUMBER OF PIPE OPENINGS IN A RISER SHALL BE DETERMINED BY THE DESIGNER. SPACING BETWEEN OPENINGS SHALL BE 6" MINIMUM. OPENINGS MAY BE CONSTRUCTED BY CASTING, REMOVING THE GREEN CONCRETE, OR BY DRILLING THE OPENINGS IN CURED CONCRETE.

WHEN A SEWER TRAP IS CALLED FOR ON THE PLANS, IT SHALL BE PLACED IN THE OUTLET SEWER LINE OF CATCH BASINS AND CONSTRUCTED ACCORDING TO STANDARD PLAN R-19-SERIES. SEWER TRAPS SHALL BE PAID FOR SEPARATELY AT THE CONTRACT UNIT PRICE, EACH.

PRECAST CONCRETE FOOTINGS OR BASES SHALL BE REINFORCED WITH #4 BARS SPACED AT 1'-0" BOTH WAYS OR WITH TWO LAYERS OF WELDED WIRE FABRIC OF EQUIVALENT CROSS SECTIONAL AREA LAID AT RIGHT ANGLES AND WIRED TOGETHER. REINFORCEMENT SHALL BE PLACED IN TOP OF FOOTING AND SHALL BE MARKED. STEEL REINFORCEMENT MAY BE OMITTED IN CAST-IN-PLACE CONCRETE FOOTINGS.

PRECAST CONCRETE FOOTINGS SHALL BE SUPPORTED BY A COMPACTED 6" GRANULAR SUBBASE.

THE MINIMUM WALL THICKNESS FOR ALL 2'-0", 4'-0", 5'-0", AND 6'-0" DRAINAGE STRUCTURES USING CONCRETE BLOCK, BRICK, OR CAST-IN-PLACE CONCRETE SHALL BE AS SPECIFIED IN TYPICAL WALL SECTIONS.

THE CONICAL SECTION OF MANHOLES OR CATCH BASINS CONSTRUCTED OF BLOCK OR BRICK SHALL BE SHROUDED WITH GEOTEXTILE FABRIC TO A MINIMUM DEPTH OF 5'-0" OR THROUGH THE FROST ZONE. ENOUGH GEOTEXTILE MATERIAL SHALL BE LEFT ON THE TOP (8" OR MORE) TO ROLL OVER THE TOP OF THE CONE.

PERFORMED HIGH DENSITY POLYSTYRENE FILLER PIECES MAY BE USED TO CHANNEL FLOW IN THE BOTTOM OF MANHOLES PROVIDED THEY HAVE AT LEAST 2" OF CONCRETE COVER. THE USE OF THIS MATERIAL FOR CHANNEL FLOW IS RESTRICTED TO MANHOLES WHERE THE BOTTOM SECTION IS NOT SUBJECT TO FREEZING. THE USE OF THIS MATERIAL MUST BE APPROVED BY THE ENGINEER.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

DRAINAGE STRUCTURES

9-16-2009
F.H.W.A. APPROVAL

4-16-2009
PLAN DATE

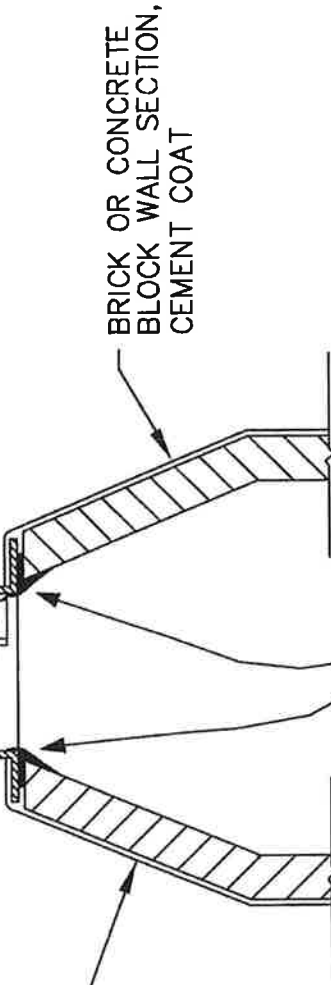
R-1-E

SHEET
5 OF 5

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL SIGNED COPY APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

THE CONICAL SECTION OF THE MANHOLE OR CATCH BASIN CONSTRUCTED OF BLOCK OR BRICK ONLY SHALL BE SHROUDED WITH GEOTEXTILE FABRIC TO A MINIMUM DEPTH OF 5 FEET. ENOUGH GEOTEXTILE MATERIAL SHALL BE LEFT OVER ON THE TOP TO ROLL OVER THE TOP OF THE CONE SECTION

COVER AS CALLED FOR ON THE PLANS AND CONSTRUCTED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION



CLEAN SURFACES PRIOR TO USING MORTAR TO FILL VOIDS BETWEEN CASTING AND BRICK OR CONCRETE STRUCTURE. SURFACE TO BE LEFT SMOOTH AND VOID FREE.

ROAD COMMISSION FOR OAKLAND COUNTY
 SUBDIVISION STANDARD PLAN
 FOR
SEALING
DRAINAGE STRUCTURE
DETAIL

DRAWN BY: D.A.

DRAWN: 8-19-06 REVISED: 3-14-07

FIGURE 3-17

PAVEMENT THICKNESS

SINGLE FAMILY RESIDENTIAL SUBDIVISIONS

PAVEMENT VERSUS SUBGRADE CONDITIONS	GRANULAR SUBGRADE SOILS *		ALL OTHER SUBGRADE SOILS **	
	ASPHALT	CONCRETE	ASPHALT	CONCRETE
CURBED PAVEMENT ON EXISTING SUBGRADE	7" HMA 4½" HMA ON 6" AGG. BASE	7"	4½" HMA ON 10" OF AGG. BASE	7" ON 6" OF AGG. BASE
OPEN DITCH PAVEMENT ON EXISTING SUBGRADE	7" HMA 4½" HMA ON 6" AGG. BASE	7"	4½" HMA ON 10" OF AGG. BASE	7" ON 6" OF AGG. BASE

INDUSTRIAL AND COMMERCIAL DEVELOPMENTS COLLECTOR STREETS

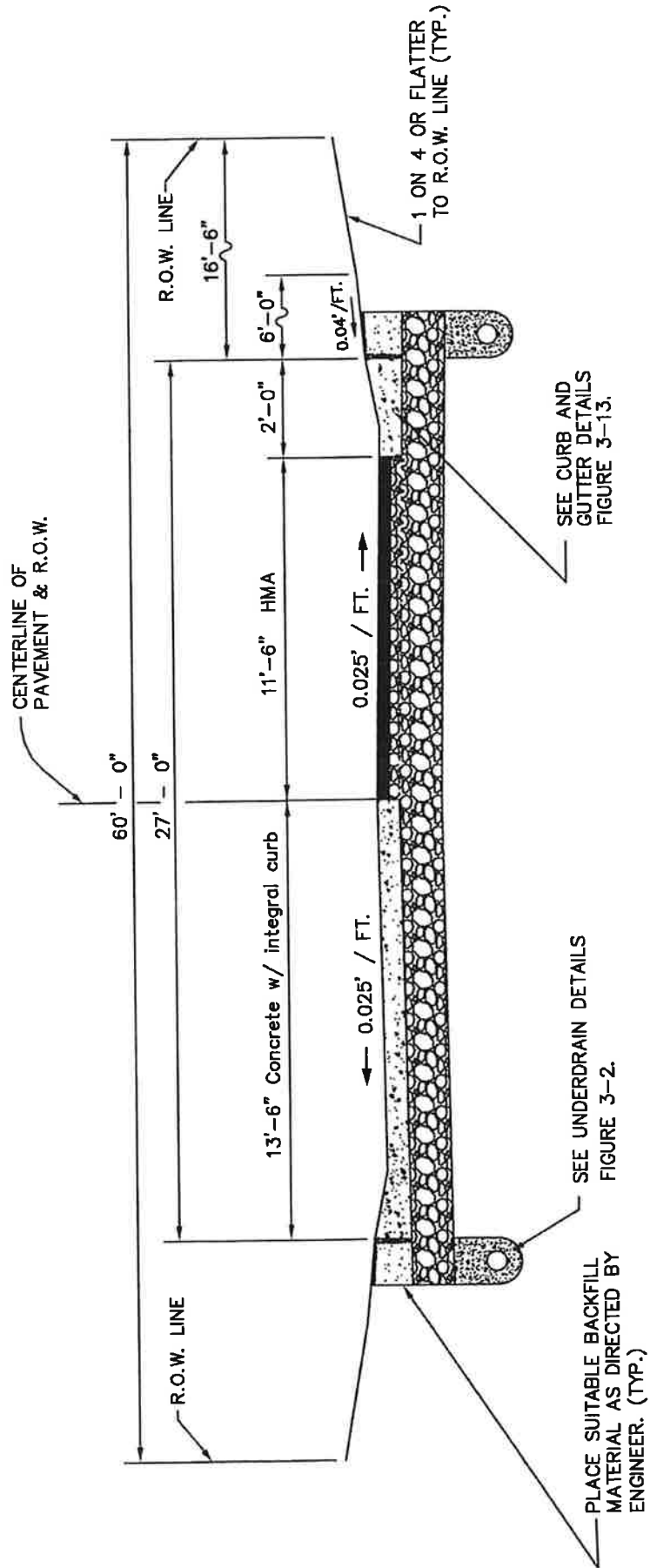
PAVEMENT VERSUS SUBGRADE CONDITIONS	GRANULAR SUBGRADE SOILS *		ALL OTHER SUBGRADE SOILS **	
	ASPHALT	CONCRETE	ASPHALT	CONCRETE
PAVEMENT ON EXISTING SUBGRADE	6" HMA ON 10" OF AGG. BASE	8"	7" HMA ON 10" OF AGG. BASE	8" ON 6" OF AGG. BASE

Alternate designs that provide equal structural stability and longevity will be considered if adequate engineering data is furnished; however, at no time will the thickness of concrete pavement be less than 7" or full depth asphalt pavement be less than 7".

* Existing granular subgrade must meet MDOT granular class II gradation requirements.

** Total edge drain required along both sides of road(s) for the entire length of street(s).

CENTERLINE OF PAVEMENT & R.O.W.



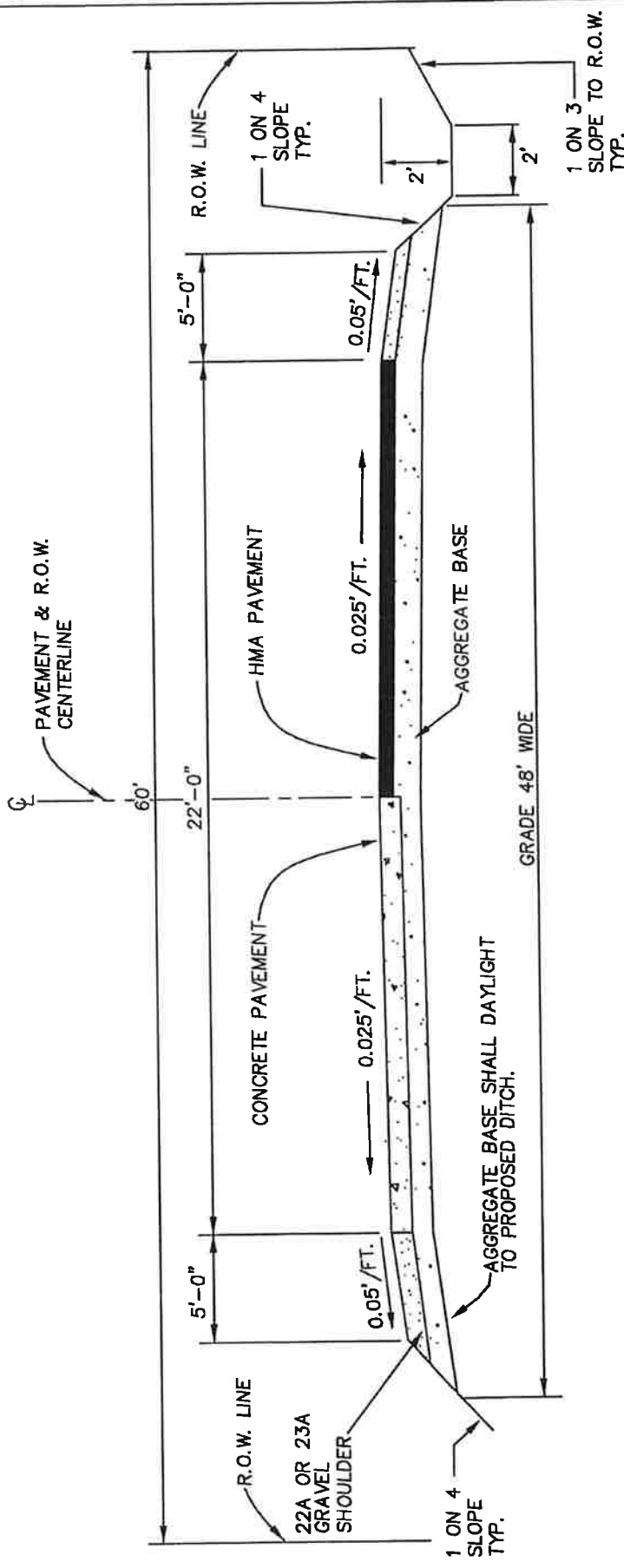
- NOTE: 1. UNDERDRAIN SHALL BE INSTALLED PRIOR TO THE PLACEMENT OF AGGREGATE BASE
2. SEE FIGURES 3-10, 3-10A & 3-10B FOR PAVEMENT SECTIONS

ROAD COMMISSION FOR OAKLAND COUNTY
 SUBDIVISION STANDARD PLAN
 FOR
 TYPICAL CROSS SECTION
 RESIDENTIAL ROAD

DRAWN BY: D.A.

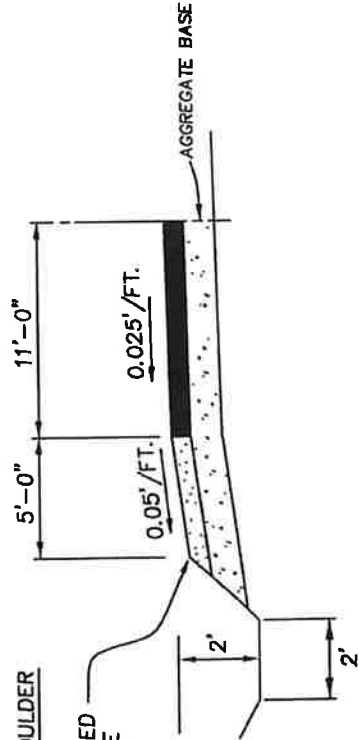
DRAWN: 9-10-06 REVISED: 3-12-07

FIGURE 3-3



OPTIONAL VEGETATED SHOULDER

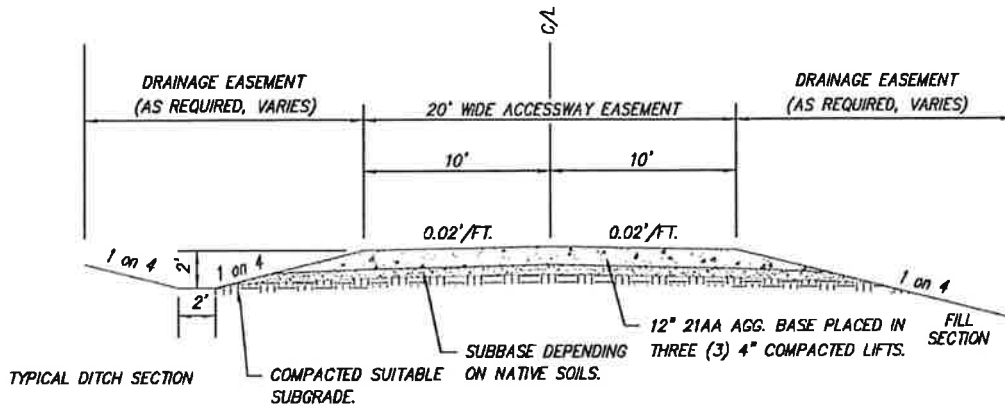
2" TOPSOIL WITH SEED AND MULCH MAY BE USED FOR THE FINAL SURFACE OF THE SHOULDER.



ROAD COMMISSION FOR OAKLAND COUNTY
 SUBDIVISION STANDARD PLAN
 FOR
 TYPICAL RESIDENTIAL ROAD
 CROSS SECTION FOR
 OPEN DITCH CONSTRUCTION

DRAWN BY: D.A. DRAWN: 5-10-06 REVISED: 3-12-07

FIGURE 3-5



CROSS-SECTION FOR ACCESSWAY (TYPICAL)

(NOT TO SCALE)

ROAD GRAVEL & SUBGRADE SHALL BE COMPACTED TO 95% OF ITS MAXIMUM DENSITY AS DETERMINED BY A MODIFIED PROCTOR TEST.

TYPE OF NATIVE SOILS	AGGREGATE SURFACING
SAND	12 INCHES
CLAY	12 INCHES WITH 4 INCHES SUBBASE
SILT	12 INCHES WITH 6 INCHES SUBBASE

SUBBASE MATERIAL: M.D.O.T. GRANULAR MATERIAL CLASS II.

ADDISON TOWNSHIP

1440 ROCHESTER ROAD
LENOARD, MICHIGAN 48367



2430 Rochester Court, Suite 100
Troy, Michigan 48034
(248) 619-2347
Fax: (248) 619-2351

CROSS-SECTION FOR
ACCESSWAY

DATE
5-22-07

DRAWN BY
MJH

PROJECT No.

SCALE
NO SCALE