



9.5. R-O-W PERMITS

Prior to commencement of any work or project, a Right of Way permit application shall be completed. As per Michigan Compiled Law Public Act 368 of 1925 247.184 Section 14 “the consent of the Board of County Road Commissioners shall be obtained before the work of such construction shall be commenced; ...” No person, organization, or governmental unit shall undertake or conduct any of the following activities within county road Right-of-Way unless a permit to allow such activities shall have been obtained from the Tuscola County Road Commission (TCRC). The permit fee schedule for Right-of-Way Permits are as follows:

<u>RIGHT-OF-WAY PERMIT</u>	<u>*PERMIT FEE</u>
<u>RESIDENTIAL:</u>	
New or Existing Driveway	No Charge
Yard Enclosure	\$100.00
General Work in Road R.O.W.	No Charge
<u>AGRICULTURAL:</u>	
New or Existing Driveway	No Charge
General Work in Road R.O.W.	No Charge
<u>COMMERCIAL:</u>	
New or Existing Driveway	\$220.00
General Work in Road R.O.W.	\$100.00
<u>MISCELLANEOUS:</u>	
Private Drive Entrances	\$220.00
Surveyors – Annual County-Wide Permit	\$50.00
Surveyors – Individual Permit	\$100.00
Soil Borings	\$100.00
Seismographic	\$100.00
Under Road Boring	\$150.00
Open Cut Road**	\$150.00 Plus Density Testing
<u>MUNICIPALITY & NON-PROFIT:</u>	
Roadside Mowing	No Charge
Dust Control	No Charge
Road Closures – Parades/Festivals	No Charge
<u>UTILITIES: **</u>	
Annual County-Wide Blanket	\$275.00
Service Drops	\$125.00
Aerial Work***	\$220.00
Underground Work***	\$220.00

** Permit Fee Schedule is for TCRC Charges. There may be additional service charges from Oxcart*

***To Open Cut Paved Surface requires TCRC Board Approval*

****For work up to one mile in length. Additional \$100.00 for each additional mile.*



GENERAL RIGHT-OF-WAY PERMIT STANDARDS (NON-UTILITIES)

Revised November 20, 2025

9.5.1. GENERAL R-O-W PERMITS

Permits are to be obtained prior to the start of any construction within the Right-of-Way (ROW). Failure to obtain a permit prior to the start of any construction within the ROW may be subject to additional charges. Specifications as provided on the permit shall be complied with, including modifications approved by authorized TCRC personnel. Developers of property are encouraged to contact the TCRC during the initial planning stage so an approved preliminary site plan, satisfactory to all parties, may be agreed upon early in the development process. No driveway shall be allowed in a designated intersection clear-vision zone.

RESIDENTIAL/AGRICULTURAL DRIVEWAY

In accordance with PA 200 of 1969 (MCL 247.324), as amended, the highway authority is charged with the responsibility to issue driveway permits consistent with the rules promulgated by the highway authority for public safety and in the public interest. Such rules are based on traffic volumes, drainage needs, the character of adjoining land use, and other requirements. The rules prescribe rational standards for the design and location of driveways within the ROW. It is not the intent of this policy to deny reasonable access to a non-limited access highway.

Any construction, reconstruction, or modification of an existing driveway providing vehicular access to or from a highway under the jurisdiction of the TCRC requires a permit. A permit is also required when the use of the land served by an existing driveway is changed or expanded (PA 200 of 1969 MCL 247.327).

You may apply at the Road Commission's main office located at 1733 Mertz (M-24), Caro, MI 48723, Phone: 989.673.2128. Email Address: permits@tuscolaroad.org Website: www.tuscolaroad.org. The Road Commission also accepts permits through a web-based permitting system called Oxcart Permits (<http://www.oxcartpermits.com>). Additional service fees will apply if utilizing oxcart.

You will need to provide the Road Commission with the following information:

- Location, including road name, township, and nearest crossroad
- [Insurance Requirements](#) see Section 9.7.
- Signature
- Payment if Applicable
- You will be provided with white flags to be placed at the desired location of your proposed work

Road Commission will review site of proposed work. Insurance and payment if applicable will be required prior to review. Upon approval, a permit will be issued with necessary requirements for work within TCRC Road Right-of-Way. The permit will be returned via mail, e-mail, or it can be picked up in person.



Driveway Pipe Length and diameter shall be determined during the TCRC review. Minimum 20 feet for top of drive, with additional length of pipe calculated to construct 1 on 2 side slopes.

If the driveway is to be located adjacent to an intersection, railroad, or bridge:

- At an Intersection or railroad crossing where the TCRC owns ROW to provide a clear vision area, a driveway shall not enter or cross that clear vision area.
- The curvature of the driveway radius shall be at least 50 feet from the edge of pavement of the intersecting highway, railroad, or bridge.
- Adjacent to and on both sides of a driveway, a buffer area between the ROW Line and the road edge shall be used, as determined by the Engineer, to provide a physical barrier between traffic and activity on private property.
 - A buffer area is needed to provide an unobscured vision area and to prevent potentially hazardous movement of vehicles, especially at undesirable angles of approach, from and to the road. The buffer area shall consist of a lawn area, a low shrub area, a ditch or equivalent.
 - Where encroachment of vehicle parking on the buffer area takes place or may take place, the TCRC may require the buffer area to be established by guardrail, guard posts, curb or equivalent.

No vertical headwalls allowed. Minimum 12 inches in diameter required in road right of way. Ends of pipe shall receive top soil, seed, and mulch to prevent erosion.

- Driveway Metal Pipe: Must meet TCRC specifications for gauge thickness.
 - 16 Gauge - 12" to 18"
 - 14 Gauge - 24" to 30"
 - 12 Gauge - 36" to 48"
 - 8 Gauge - 60" to 66"
 - Over 66" contact TCRC Caro Office
- Driveway Concrete Pipe: Must meet standards as specified in the Michigan Department of Transportation Standard Specifications for Construction, current edition.
- Plastic Pipe/Driveways: For diameters 12 inch to 36 inch only. Must be double walled pipe meeting AASHTO Standard M-294, current edition.
 - Metal Flared end sections required or plastic pipe must connect to metal pipe on the ends.
 - Minimum 12 inches of cover over the pipe.
 - Backfill shall include no stones larger than 1 inch in diameter shall be placed within 6 inches of the pipe.

Hard surface driveways shall have the hard surface portion from the edge of the existing hard surface road to the edge of existing shoulder, following the slope of the existing road surface. Hard surface coming to existing gravel roadway should stop a minimum of 20' from road centerline.



COMMERCIAL DRIVEWAY

The Tuscola County Board of Road Commissioners has the responsibility of regulating and controlling the location, design, and operation of access to roads and streets under its jurisdiction and has established certain policy guidelines concerning driveway design and construction. The Board's objectives are to provide maximum protection and safety for the public through the orderly control of traffic entering and leaving roads or streets at driveways, and also to provide a uniform policy throughout the County in the design and construction of driveways.

Prior to applying for a permit for commercial driveways, the site development plans for the complete project must be submitted to the County Highway Engineer for his approval. Plans shall provide sufficient detail so as to be used as construction plans. The Permit Holder shall furnish all materials and bear all costs of necessary construction, including tapers, widenings, islands, pavement marking, signing, etc. Further, it shall be the responsibility of the property owner or lessee to maintain all driveways connecting the property to the roadway, as well as those appurtenances set forth in the permit as related requirements.

The Board reserves the right of inspection by its authorized representatives of any driveway construction within the road right-of-way. The Permit Holder shall reimburse the Board for services required for the review and approval of plans and for any on-the-job inspectors which are required. Failure to obtain a permit or to comply with the terms and conditions of an issued permit will cause the Board to take appropriate action as allowed in Act 200 of the Public Acts of 1969. All costs incurred in corrective action to comply with design standards, defective workmanship and/or materials shall be borne by the Permit Holder.

A non-returnable fixed permit fee to cover the cost of processing the permit will be collected at the time the permit is issued based on the Board's current fee schedule. A plan review fee to recover the cost of plan review may also be collected at the time the permit is issued. The plan review fee will be proportionately higher if deceleration and/or passing lanes are part of the driveway construction. The Board's objective and intent is to recover actual costs incurred in connection with review & inspection of projects by the TCRC.

Commercial driveways shall be designed and constructed in accordance with the Rules and Regulations of the Tuscola County Road Commission, the general guidelines contained herein and in accordance with the specific recommendations of the TCRC Engineer.

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All copies of driveway permit applications must be accompanied by a plan clearly indicating the following:

- Road name and address, roadway pavement, right-of-way and property lines, lot or parcel number, roadway appurtenances, medians (if existing) and dimensions of same.
- All buildings (proposed or existing) and all appurtenances to any business conducted (gas pumps, signs, canopies, etc.) and dimensions of same.
- Driveways to be constructed in accordance to Illustration No (4) GEO-680 Series for County Highway Approach, proposed surfacing, proposed drainage scheme and dimensions including:
 - Width of driveway (20' minimum)
 - Radii of each side of drive (25' minimum)
 - Driveway elevations
 - The approximate angle the driveway makes with the road centerline
 - Proposed culvert or sewer grades with sufficient elevations upstream and downstream to show the extent of flow across the proposed development and to the proposed outlet
 - Typical cross-section thru acceleration-deceleration lane showing proposed subbase, aggregate base, pavement, curb, etc. (if applicable)
 - Location of any proposed landscaping
- Drainage plan and outlet for all storm drainage on the site.
 - DRAINAGE FROM ADJACENT PARKING OR STORAGE AREAS ON PRIVATE PROPERTY MAY NOT BE DISCHARGED ONTO THE ROADWAY OR ITS APPURTENANCES.
- Location of the driveways including dimensions relating to:
 - Property lines and property lines extended to the pavement
 - Buildings and business appurtenances
 - Reference dimension to nearest cross road or street
 - Driveways on opposite side of roadway & adjacent properties
- Drive(s) must also meet sight distance requirements as based on AASHTO Geometric Design of Highways and Streets.
 - A Professional Engineer or Professional Surveyor must certify that the location meets this sight distance requirement as based on the AASHTO Geometric Design of Highways and Streets either by written statement or on the plan, prior to placement of the driveway.
- North directional arrow.

The above requirements, when applicable, should be incorporated with appropriate guidelines from the Typical Drawings to form a complete plan for permit application.

Driveways shall be located so that no undue interference with the free movement of normal traffic will result. Driveways should be located as far from the edge of the intersecting roadway as is possible. Hard surface driveways coming to existing gravel roadway should stop a minimum of 20' from road centerline. The radius of a driveway should not encroach upon the intersection radius of the roadway pavements. All attempts shall be made to locate commercial driveways, including their radii and any associated acceleration/deceleration tapers & lanes if required, entirely within the Permit Holder's roadway frontage, which shall be determined by the extension of the property lines to the pavement



edge. Should this prove to be impractical, the Permit Holder shall secure written permission from adjacent property owners for construction of portions of the commercial driveway which will lie within property owned by others.

The following material thicknesses are minimums required. Additional depth of each or all of the pavement cross-section layers described below may be required, should projected traffic volumes, loadings, or soil conditions warrant an increased pavement cross-section. A geotechnical analysis of the existing soil conditions is recommended to assist in determining a proper pavement cross-section design.

- A minimum twelve-inch (12") CIP sand subbase shall be placed with the construction of either a bituminous or reinforced concrete surface. The sand subbase shall meet the requirements for Granular Material Class II as detailed in the current edition of the MDOT Standard Specifications for Construction.
 - Sand subbase shall be placed as described in the current edition of the MDOT Standard Specifications for Construction for Roadway Earthwork, using the controlled density method.
- A minimum six inches (6") CIP 23A Crushed Limestone or 23A Crushed Gravel Aggregate base shall be placed prior to placement of a bituminous surface course, while a six inch (6") reinforced concrete surface may be placed directly on the sand subbase. The aggregate base material shall meet the requirements for 23A Dense Graded Aggregate as detailed in the current edition of the MDOT Standard Specifications for Construction.
- The bituminous surface shall meet or exceed the current edition of the MDOT Standard Specifications for Construction for Hot Mix Asphalt Construction Practices, and Plant Mixed Hot Mixed Asphalt Mixtures 4EL. The minimum rate of application shall be a total of 330 lbs./sq. yd.
- The reinforced concrete surface shall meet or exceed the current edition of the MDOT Standard Specifications for Construction for Concrete and Steel Reinforcement. The size and weight of reinforcing shall be approved by the Board prior to the start of construction.
- If the proposed commercial drive access abuts to a roadway that has existing curb & gutter, saw cutting and removing the back of curb is NOT allowed. The entire length of existing curb & gutter must be removed and replaced with new curb & gutter that allows for access to the proposed development.
- Sidewalk, when called for on plans, shall be not less than four-inch (4") thickness except at driveways where the thickness shall be six inches (6"). The current edition of the MDOT Standard Specifications for Construction will apply. Width shall be five feet (5'). All Americans with Disabilities Act (ADA) requirements for access shall be met.
- Other items, such as bituminous curb, not included in these specifications shall be approved by the County Engineer prior to design completion or start of construction.
- The pavement section required for road widenings, crossovers or taper sections shall be as directed by the Board and may include submission of soil borings and a pavement design to the County Engineer for approval.
- The shoulder area between adjacent commercial driveways serving the same property which are less than two hundred feet (200') apart (centerline to centerline) must be paved as directed by the County Engineer.



All proposed road approaches shall be provided with facilities for adequate surface and sub-surface drainage which will allow the free flow of existing or additional storm drainage produced from the proposed road approach. Where drains or ditches cross private property, the proprietor shall furnish a recorded easement twenty feet (20') wide for ditches or closed drains, to allow for maintenance and/or surface construction. All easements shall be submitted to the Board before the permit will be signed by the Board. Storm sewers shall meet or exceed standards set forth in TCRC "[Permit Standards for All Utilities within the Right-of-Way](#)". Any areas of the development which do not drain into the approach drainage system shall be shown on the plan with a note indicating disposition of water accumulating on such areas. County road drainage facilities may not be used to drain storm water from private property. Further, no drainage from adjacent parking or storage areas may be discharged onto the roadway.

The Permit Holder will be responsible for the maintenance of all work constructed or placed in the road or street right-of-way except for widening lanes which are incorporated into the main traveled roadway. This responsibility shall include the driveway, pavement and subsurface base materials, curb and gutter, shoulders, drainage, landscaping, sidewalk or other appurtenances associated with the driveway. Maintenance shall also include snow removal.

All driveway construction will be subject to inspection by the Road Commission. The executed permit will provide the telephone number to call for this service. Full time inspection for detailed projects involving road widenings and/or the construction of enclosed storm drainage in the right-of-way shall be performed under the supervision of a registered professional engineer. The engineer shall certify (over his professional seal) that the project has been constructed in accordance with the approved plans and specifications.

It is the Permit Holder's responsibility to provide, erect and maintain all necessary signing (Stop, Keep Right, Do Not Enter, Road Work Ahead, etc.) and/or pavement markings as outlined in the current edition of the Michigan Manual of Uniform Traffic Control Devices, or as required by the Board. The plans shall indicate the signing and pavement marking required, as specified above. All expenses related to maintaining traffic during construction shall be the responsibility of the Permit Holder.



MUNICIPALITY & NON-PROFIT

You may apply at the Road Commission's main office located at 1733 Mertz (M-24), Caro, MI 48723, Phone: 989.673.2128. Email Address: permits@tuscolaroad.org Website: www.tuscolaroad.org. The Road Commission also accepts permits through a web-based permitting system called Oxcart Permits (<http://www.oxcartpermits.com>). Additional service fees will apply if utilizing oxcart.

You will need to provide us with the following information:

- Type of Work (brine, roadside mowing, event, etc.)
- Location, including road name, township, and nearest crossroad
- [Insurance Requirements](#) see Section 9.7.
- Signature

Upon approval, a permit will be issued with necessary requirements for work within TCRC Road Right-of-Way. The permit will be returned via mail or it can be picked up in person.

MISCELLANEOUS

You may apply at the Road Commission's main office located at 1733 Mertz (M-24), Caro, MI 48723, Phone: 989.673.2128. Email Address: permits@tuscolaroad.org Website: www.tuscolaroad.org. The Road Commission also accepts permits through a web-based permitting system called Oxcart Permits (<http://www.oxcartpermits.com>). Additional service fees will apply if utilizing oxcart.

You will need to provide us with the following information:

- Location, including road name, township, and nearest crossroad
- [Insurance Requirements](#) see Section 9.7.
- Signature
- Payment if applicable

Road Commission Staff will review site of proposed work. Insurance and payment if applicable will be required prior to review. Upon approval, a permit will be issued with necessary requirements for work within TCRC Road Right-of-Way. The permit will be returned via mail or it can be picked up in person.



PERMIT STANDARDS FOR ALL UTILITIES WITHIN THE RIGHT-OF-WAY

Revised June 04, 2026

9.5.2. UTILITY PERMITS

Tuscola County Road Commission's Utility Permits are processed using a web-based permitting system called Oxcart Permits (<http://www.oxcartpermits.com>).

Prior to commencement of a project, a Right of Way permit application shall be completed. As per Michigan Compiled Law Public Act 368 of 1925 247.184 Section 14 "the consent of the Board of County Road Commissioners shall be obtained before the work of such construction shall be commenced; ..." No person, organization, or governmental unit shall undertake or conduct any of the following activities within county road Right-of-Way unless a permit to allow such activities shall have been obtained from the Tuscola County Road Commission (TCRC).

- Construct, reconstruct, relocate, repair any facilities (sewer, water, gas, electric, drains, telephone, cable, fiber, guys/anchors, etc.)
- Perform any work (ditching, tree trimming, landscaping, etc.)

Failure to comply with any part of this document shall be just cause for either the temporary or permanent suspension of the permit, as well as the Permit Holder's other permits.

Plan Requirements

All permit applications shall be accompanied by a set of plans which shall include all of the following:

- Drawing(s) on a proper size sheet at a reasonable scale for the proposed work with an arrow depicting North.
- Existing road pavement/surface, ditches, cross culverts, and dimensions thereof.
- Location of all existing utilities and driveways including surface type; and diameter and length of culverts.
- Show location of all proposed construction with dimensions from the Right-of-Way and centerline of Right-of-Way along w/ dimensions to centerline of existing roadway.
- Show the distance to the nearest monument box or section corner.
- Ditching plans must show watershed area, existing and proposed grades, ditch depth relative to roadway and calculations used in culvert sizing.
- A Traffic Control Plan documenting how traffic will be managed and controlled during construction.

Additional information may be required including, but not limited to, the following for special cases:

- Existing topography from centerline of right of way to ten (10) feet beyond right of way or easement on the impacted side of road in one (1) foot contour intervals.



- Proposed grading plan when grade changes exceed 0.5 feet.
- Site plans and restoration plan for the areas to be used for the mobilization, storage and operations of equipment, personnel and materials in the construction of the utility.
- Various engineering information (civil, mechanical, electrical, etc.) submitted, signed and sealed by a licensed Professional Engineer of the State of Michigan.
- Drawings showing road right-of-way signed and sealed by a Professional Licensed Surveyor.
- A Public Communication and Coordination Plan identifying how the permittee will communicate and coordinate with affected townships, property owners, residents, businesses, schools, emergency service providers, and other stakeholders. The plan shall include procedures for advance notification of construction activities, anticipated traffic impacts and road closures, project schedules, emergency contact information, methods for addressing public inquiries and complaints, and ongoing updates throughout the duration of the project.

Variations to these procedures must be approved by the TCRC.

General Requirements for All Utilities

- A. All utility crossings of the public roadway shall be perpendicular within the road right of way, unless TCRC approved variance. Utilities running parallel to the road shall be installed at or near the edge of road right-of-way unless otherwise agreed upon by the Engineer. All material and workmanship shall comply with the current Michigan Department of Transportation Standard Specifications for Construction (MDOT Specs). Materials shall meet American Association of State Highway and Transportation Officials (AASHTO) standards as noted herein.
- B. As per MDOT Road Design Manual; Section 9.02.02 (revised 7-25-2022) ... “Private utilities may be located within trunkline ROW by permit issued by the Department pursuant to Public Act 368 of 1925. If conflicts between private utilities and a trunkline project exist, relocation or adjustment of the utility is at the utility company's expense.” ...
- C. All installation activity shall conform to the permit terms listed on the reverse of the Right-of-Way Permit issued by TCRC.
- D. The construction, maintenance, or reconstruction of all facilities shall be as described in an approved engineered drawing and permit.
- E. The Permit Holder shall notify the TCRC by fax, email, or phone call between 24 and 72 hours before beginning construction.
- F. All permits issued shall have clean-up and restoration performed at the time of installation. The restoration shall include, at a minimum: 4” topsoil, seed (summer or winter blend), and staked mulch blankets. Any variances shall be approved by TCRC prior to performing the work.
- G. Any permits not completed by November 15th must be resubmitted with the TCRC and will be charged with a new permit fee in accordance with the current TCRC fee schedule. Winter permits may be issued at the discretion of TCRC. Winter Construction Practices shall be followed or the permit will be revoked.



- H. Work crews shall have all applicable permits onsite. Miss Dig is to be notified prior to any work. No work shall be allowed on an unmarked location.
- I. All work shall be performed Mondays through Fridays between 8:00 A.M. and 5:00 P.M. unless written approval is obtained from the TCRC. If road closures are permitted by the TCRC they shall be done during off-peak traffic hours, between the hours of 9:00 A.M. and 3:00 P.M. unless otherwise approved and/or directed by the TCRC.
- J. If a road closure is not approved, traffic shall be maintained at all times. Sheeting may be required to protect the road if conditions warrant sheeting. The road surface may not be used for the storage of materials or any other construction purpose without prior approval of the TCRC. Depending on traffic volumes and other conditions, the TCRC may require the Permit Holder to provide bypass lanes (either paved or unpaved), may allow one-lane traffic properly controlled, or some combination of the two. Traffic control shall be in accordance with the TCRC Section 8. [Traffic Control Policy](#).
- K. In the event of an emergency, a permit shall be obtained as soon as possible, but no later than the next working day. Immediate notification must be given to the TCRC for emergency (public safety, health, and welfare) work which requires the removal of the road surface. If the Tuscola County Road Commission cannot be reached, Tuscola County Central Dispatch shall be notified and a phone message/fax/email shall be submitted to the TCRC offices.
- L. Routine inspections may be charged to an account established in the Utility's name. If damages are identified from routine inspections, the Utility will be contacted immediately. Repairs will be determined to keep the road safe for public travel. Charges by TCRC Maintenance crews may be made to the Utility's account for immediate repairs. Examples: bituminous patching or limestone/gravel patching, grading, or dust control.
- M. The Contractor when performing work authorized by permit, within the right of way or on a project is responsible for protecting the life and health of all personnel; the safety and health of the public; and property during the construction of the project. The Contractor must comply with all local, state, and federal laws and regulations governing construction methods and the furnishing and use of safeguards, safety devices, protective equipment, and environmental and hazardous materials controls. All workers must wear high-visibility safety apparel as specified in the MMUTCD. Costs incurred to comply with this requirement will be the responsibility of the Contractor. Failure to follow these requirements may result in termination of the permit/contract.
- N. Any Permit Holder who conducts his/her operations in a manner detrimental to the Road Commission's statutory obligation of maintaining roads and streets at all times in a safe and fit condition for the traveling public will be required to cease all operations within the Right-of-Way. If necessary, additional cash deposits and expense of maintaining a TCRC inspector (full time) may be required from the Permit Holder before the resuming of work.
- O. If utility is being relocated due to conflict with future work, the abandoned utility must be removed from the Right-of-Way.



P. Winter Construction Procedure:

- a. Permitted work may be allowed at the discretion of the TCRC during winter restrictions (Nov. 15-Apr.15) contingent upon the following:
 - i. The work shall be scheduled (day and time) with TCRC at least 36 hours in advance. An inspector shall meet the crew onsite at the stated day and time to ensure they have the proper signs, equipment and restoration materials onsite.
 - ii. All frozen material shall be removed and replaced with suitable material.
 - iii. All cleanups shall be finished immediately following the installation of the utility. This would include topsoil, seed and mulch blankets. Please note that either winter seed or wheat will have to be used to prevent spring erosion. Before beginning another job, all clean-up from the previous job location shall be complete.
 - iv. If inclement weather presents itself, all work shall be rescheduled and all equipment shall be removed from the Right-of-Way

Requirements for Underground Utilities

A. Material

All material shall meet the requirements as stated in the MDOT Standard Specs, Section 401, 402.02, and 909.

- a. HDPE: Smooth-lined corrugated plastic pipe shall meet the requirements of AASHTO M-294, Type S Polyethylene pipe.
- b. PVC: Corrugated Polyvinyl Chloride Pipe shall meet AASHTO M-304, Certa-Lok joint. C900, or equivalent, shall be used for all water main or storm sewer crossings, Certa-Lok joint.
- c. Steel Casing: Casings for under the road drains shall meet MDOT Spec section 909-06 and as herein specified. Casings are to be fabricated with corrugations of 2 2/3" x 1/2", have a galvanized finish, and all casing ends are to be re-rolled. All casings 24" and larger are to be built to a tolerance of plus or minus 1" from the normal size. 15" through 18" bands are to be a minimum of 11" in width. 24" and larger bands are to be a minimum of 21" in width. Bands are to be fully corrugated. Casings for Jack and Bore shall meet MDOT Spec sections 401-03H and 909-05D

*Bell and spigot joint allowed for approved open-cut method. See Table 402-1 in the MDOT Spec Book for further detail.

Note: Tracer Wire is required for all non-metallic pipe installation for post construction location purposes.



B. Depth

Utilities shall be installed at the depths displayed in Chart 1 according to utility type.

Chart 1		
Utility Type	Minimum Plow/Bore Depth in ROW	Minimum Road Crossing Depth
Telecommunications and Cable*	36"	48"
Electric*	48"	48"
Gas and Oil*	48"	48"
Water, Storm Drains, and Sewer*	60"	60"
Agricultural Tile		36"

*Depths shall be measured from the bottom of ditch pan or road grade, whichever is lowest.

C. Exposed Outlet

When the cross road pipe has an exposed outlet a concrete ring, a steel end Section, or a concrete end section shall be installed as per MDOT Specs 404.02.C. A rodent screen shall also be installed. As shown in MDOT Standard Plan R-80-Series.

D. Agricultural Drain

Connections shall be made outside the Right-of-Way unless approved by the TCRC. All Material inside Right-of-Way shall meet TCRC Standards. If surface water may enter the drain, pipe shall be placed inside TCRC Approved Steel Casing under the roadway.

E. Bore or Jack

When the pipe is installed by boring and jacking, the leading edge of the pipe shall proceed the auger by ½ times the diameter of the pipe. If the auger cannot be operated inside the utility pipe, a casing pipe will be required. A casing pipe may also be required at other times when deemed necessary by the TCRC. Directional boring methods may not require casing. If directional boring is to be used, the TCRC will evaluate requirements on a case-by-case basis.

F. Shaft or Pit

All shafts or pits shall be located at least 10 feet off the edge of pavement on all county roads. If the shaft or pit must be closer to the road than the above dimensions due to the location of the utility to be tapped, TCRC approval shall be required. Sheeting or shoring shall be used on all sides of the excavation which are closer to the road than the above requirements. Protection-Fencing barriers shall be installed at the site until Backfilled. Backfill shall meet trench backfill requirements with suitable material.

G. Drilling Fluids

Drilling fluid shall be used during drilling and back reaming operations. Excess drilling fluids shall be contained in a lined pit or containment pond, or trailer-mounted portable tank, until removed from site. Drilling fluids shall not be allowed to enter the streets, manholes, sanitary and storm sewers, and other drainage systems, including county drains, streams, and rivers.

H. Fill Voids

All voids shall be filled by pressure grouting or other approved methods. If any settlement or other change in grade occurs, the road shall be reconstructed per TCRC typical cross section.



I. **Open Cut**

If the TCRC approves crossing the road by the open cut method, the provisions for handling traffic will be as directed by the TCRC. Approval of road closures will usually require that detours be installed in accordance with TCRC Maintaining Traffic Spec. Requests for road closures must be made in writing and include the location, length of time the road will be closed, approximate starting and completion dates and reasons for the request. Open-cut crossings shall be made during off-peak traffic hours, normally between the hours of 9:00 A.M. and 3:00 P.M. unless otherwise approved and/or directed by the TCRC.

J. **Pavement Removal**

All utility trenches crossing major roads by the open-cut method shall remove pavement to a minimum width of 5 feet and at least 1 foot wider on each side than the trench. All Pavement Removals require TCRC Approval.

K. **Saw Cut**

The pavement shall be cut by sawing unless otherwise approved. All saw cuts shall be made in a straight line and shall be parallel to existing transverse and longitudinal joints unless otherwise approved.

L. **Backfill**

Backfill shall be as per MDOT Spec Section 401.03D. MDOT Certified Class II Sand up to 6" (six inches) below the bottom of the existing surface. Remaining 6" backfill shall be 23A Crushed Gravel or 23A Cr. Limestone, matching existing material. A copy of the certified mechanical analysis shall be supplied to TCRC for all material used. Match existing thickness of hard surface or 3" (three inches) of 13A bituminous or LVSP, whichever is greater.

M. **Density**

For all open cuts or If work is done within a 1' on 1' influence from the edge of the gravel shoulder backfill shall be in appropriate lifts with density tests taken. A copy of results shall be supplied to the TCRC. Density to a minimum of 95%. Class II Sand Compacted to 95% of the maximum unit weight as per MDOT Specs Section 401.03.D. Aggregate compacted to 98% of the maximum unit weight at no greater than optimum moisture content, as per MDOT Specs Section 307.03. Density Testing can be supplied by TCRC if the contractor so chooses.

N. **Fiber Optic Cables**

All fiber optic cables shall be installed between 28' and 33' from the center of the road right of way. Installations shall be in straight lines in-so-far as possible, with deflections subject to approval in advance. Marker posts shall be installed at all cross culverts & intersections to clearly mark the location. Additional markers will be required at deflections. Caution ribbon shall be installed with the cable. Caution Ribbons must be 12"-18" above the cable.



Road Crossing Method

All crossings will be done by approved methods other than the open-cut method if possible & all crossings shall be perpendicular within the road right of way. Any variance must be approved by the TCRC.

A. Gravel Road

Allowed to open cut a trench with proper backfill as per MDOT Specs, Section 401.03 D. Class II Sand up to 6" (six inches) from top of road. Remaining 6" (six inches) shall be 23A Cr. Gravel or 23A Crushed limestone, match existing. Contractor shall meet all **Requirements for Underground Utilities**. Proper notification shall be done by Contractor to TCRC, Central Dispatch, Post Office, and School District (if during school year).

B. Hard Surfaced Road

All requests for Hard Surfaced Road open cuts must obtain TCRC Board Approval. If allowed to open cut, proper backfill as per MDOT Specs, Section 401.03 D. Class II Sand up to 6" (six inches) from top of road and the remaining 12" (twelve inches) shall be 23A Cr. Gravel or 23A Crushed limestone (match existing) is required. Match existing thickness of hard surface or 3" (three inches) of 4EL, whichever is greater. Contractor shall meet all **Requirements for Underground Utilities**. Proper notification shall be done by Contractor to TCRC, Central Dispatch, Post Office, and School District (if during school year).

Requirements for Overhead Utilities

- A. All overhead crossings of the public roadway shall be perpendicular within the road right of way, unless TCRC approved variance. Location shall be no closer than 100' (feet) horizontally to a water crossing of 36" (inch) diameter or more. Utilities running parallel to the road shall be installed at or near the edge of road right-of-way unless otherwise agreed upon by the Engineer. All material and workmanship shall comply with the current Michigan Department of Transportation (MDOT) Standard Specifications for Construction (MDOT Specs), the National Electrical Code (NEC) as well as, the National Electrical Safety Code (NESC).
- B. The Utility Company shall notify the TCRC of project completion. All roads affected by the project will be reviewed for damage by TCRC. If deemed necessary by the TCRC, a plan will be identified to have repairs completed within a specific time frame. If repairs are not completed within the time frame, all future permits will be held until an agreement is established with the TCRC.
- C. Vertical clearance of wires, conductors, and cables over TCRC roadways for an unloaded sag with no wind at 60 degrees F shall not be less than 18 feet. The vertical clearance of wires, conductors, and cables over these roadways for a loaded sag with ice at 32 degrees F shall not be less than 15ft 6in.
- D. All utility poles shall be located a minimum of 31 feet from the center of the road right of way. In areas of wider right of way, poles shall be located a minimum of 40 feet from the center of the Right-of-Way. Upon decommissioning of the poles, they shall be removed from the Right-of-Way by the Utility at no additional cost to the TCRC.



Public Utility Annual Maintenance Permit

The following is a list of the activities which utility companies will be allowed to undertake within the Tuscola County Road Right-of-Way under an annual permit, and the conditions under which activities will be allowed:

A. Allowable Annual Permit Activities

- Repair existing underground conduit, buried cable, buried wire, and pipe (not under pavement).
- Replacement of bad cable sections with like size up to 200 feet parallel to the roadway or up to 66 feet perpendicular to the roadway. This only applies if all excavation is at least 10 feet from the edge of the road. If the replacement cable is to be placed outside the immediate area (more than 2 feet away from the existing location centerline), special permission is required to do so. (This item does not apply to gas mains – see below)
- Near-side service leads may be installed up to 300 feet parallel to the roadway.
- Insertion of plastic pipe inserts or lining through existing mains. (no pavement cuts)
- Install buried cable or wire loop/lateral to an existing pole in an existing pole line or to an existing pedestal. This may include crossing of the road by squeeze boring or pushing one pipe 2 inches or less in diameter.
- Install, remove or replace any case with similar size on existing buried cable or wire.
- Replace open wires, single pair rural wire and/or drop wire with multiple line wire or small cable on the same pole line.
- Repair and maintenance of open wire, multiple type wire, drop wire and aerial cable.
- Replace or add up to two poles within or beyond an existing pole line.
- Repair and/or replace leaking, distressed or otherwise damaged sections, up to 50 feet, of existing gas mains (except under pavement). Backfill and restore in accordance with this policy.
- Adding or replacing guys and/or anchors to poles parallel to the road or directed away from the road.
- Install aerial drops which do not require a new pole within road Right-of-Way outside of existing pole line, or install aerial drop along with intermediate pole in an existing pole line to permit installing aerial drop.
- Inspect and maintain systems, valves and meters and their associated manholes.
- Conduct soil borings outside of the traveled surface. Voids shall be backfilled with suitable material and borings in asphalt or concrete shall be capped.
- System tie-ins to existing near-side facilities (except under pavement).
- Survey work, locating, and investigating utility facilities.
- Tree Work.
- Place and replace utility marker posts.



B. Conditions for Annual Maintenance Permit Activities

- Miss Dig is to be notified prior to any work. No work shall be allowed on an unmarked location.
- Except for survey, location, and investigation work, as well as aerial repair, the annual maintenance permit does not apply during winter shutdown (Nov. 15- Apr. 15).
- The TCRC shall be notified of all work in advance with the approximate location and date. Failure to provide the required notification and other disruptions (such as improper signing/safety issues) shall result in an additional inspection charge of four (4) hours of inspection time to cover time lost in scheduling and other related costs incurred by the Road Commission. Emergency repairs may be made with notification being given to the Road Commission as soon as possible, but no later than the next working day.
- Any work requiring pavement removal requires a separate permit. If emergency repairs are necessary under the pavement, refer to the first section of this policy regarding notification.
- Monthly reports shall be submitted to TCRC Permits listing the location, date, and type of work for each activity performed. These reports shall be provided within seven (7) calendar days after the end of each month.

Failure to comply with any of the above conditions, or to submit timely payment of all fees and monthly bills, will result in the cancellation of the annual permit. At such a time, a separate utility permit shall be required for all work within the road right-of-way per the requirements set forth previously in this policy.