

**County Engineer
Environmental Engineer**

233 W. Sixth Street
Marysville, Ohio 43040
P 937. 645. 3021
F 937. 645. 3161

www.unioncountyohio.gov/engineer

Building Department

233 W. Sixth Street
Marysville, Ohio 43040
P 937. 645. 3018

Marysville Operations Facility

16400 County Home Road
Marysville, Ohio 43040
P 937. 645. 3017
F 937. 645. 3111

Richwood Outpost

190 Beatty Avenue
Richwood, Ohio 43344

Public Service with integrity

Requirements for Work within Road Right-of-Way in Union County

Effective Date: April 1, 2026

These requirements are to provide for orderly and systematic use of the county and township road right-of-way within Union County. The requirements are considered minimum requirements and may be exceeded as desired. The requirements apply to above-ground, at-ground, and underground work. All work within county and township road right-of-way shall conform to these requirements, including, but not limited to, electric lines, telephone lines, cable TV lines, gas lines, fiber optic cable, petroleum lines, water lines, sanitary sewer, driveways, driveway pipes, roadside pipes, storm sewers, agricultural drainage tiles, signs, mailboxes, trees, bushes, etc. The requirements are issued under the Sections 4933.01, 4933.05; 5543.16; 5547.03, 5547.04; 5589.10, 5589.31, 5589.33 of the Ohio Revised Code. If, for any reason, any clause, sentence, paragraph, section, or other part of these regulations should be decided by a court of competent jurisdiction to be invalid, such judgment shall not affect the validity of these regulations, or any part thereof, other than the part so held to be invalid.

1. Permit Required and Permit Exempt Work

Permit Required Work

- Driveway Installation (Requires separate Driveway Permit)
- Ditch Enclosures
- Grading/Excavation
- Road Cuts/Pavement Removal/Surface Restoration
- Flock Camera Installation
- Utility Installation
- Boring
- Drainage
- Lane Closures

Work Not Requiring a Permit

- Routine Maintenance and Repair
- Mowing
- Trimming
- Installing Mailboxes
- Installing a fence outside of the right-of-way
- Seeding, sodding, ect.
- Removing trees and shrubs
- Detecting, locating, and marking underground lines

2. General Permit Provisions

- 2.1. **Boring is the required method for installing underground utilities** within the right-of-way. Alternative installation methods will be considered only when boring is demonstrated to be infeasible and supporting documentation is submitted and approved by the Union County Engineer.
- 2.2. The permit holder acknowledges that townships within Union County may require additional permits for work on township-maintained roads. The Union County Commissioners and the Union County Engineer's Office assume no responsibility for the permit holder's failure to obtain all the necessary permits.
- 2.3. Permit holders are responsible for properly maintaining the area of roadway where the work is being performed.

- 2.4. All permits expire 120 days from the date of approval or other time period as indicated on the approved permit, unless an extension has been granted in writing by the Union County Engineer.
- 2.5. All OSHA safety regulations shall be followed while work is being completed.
- 2.6. Once the work is completed, the permit holder shall submit as-built drawings or sketches documenting the location and depth of all installations.
- 2.7. Any permit to occupy a part of a right-of-way is subject to the Ohio Revised Code 5547.03, as amended from time to time. If the Board of County Commissioners determines that it is necessary in the future to enhance the road, street, or highway through relocation, change of grade, or abandonment, or to construct storm sewers, sanitary lines, or water lines, the permit holder shall relocate, rearrange, or completely remove its lines at its own cost. If the permit holder does not, within five (5) days after notice, proceed to remove or relocate and complete the removal or relocation within a reasonable time, the Board of County Commissioners may do so by employing the necessary labor. All associated costs for such removal or relocation may be recovered as permitted by law.
- 2.8. This section provides for Notices of Violation, Opportunity to Cure, and Remedies, including Stop Work Orders, and Permit Revocation.
- 2.8.1. If, upon inspection or investigation, the County Engineer, or its designee, believes a permit holder has violated a requirement of law, rule, order, or permit condition administered by the County Engineer, the County Engineer shall, with reasonable promptness, issue a Notice of Violation (NOV) to the permit holder.
- 2.8.2. The NOV shall be in writing and shall describe with particularity the nature of the alleged violation, including a reference to the provision of law, rule, order, or permit condition alleged to have been violated.
- 2.8.3. The NOV shall fix a time for abatement or cure of the violation deadline and state the manner in which the permit holder may demonstrate cure.
- 2.8.4. The County Engineer shall not issue an NOV more than six months after the final occurrence of the alleged violation.
- 2.8.5. **Cure period and cure plan**
- 2.8.5.1. The permit holder may cure the alleged violation within the time fixed in the NOV.
- 2.8.5.2. The County Engineer may require the permit holder to submit a written cure plan within a time specified in the NOV.
- 2.8.5.3. The County Engineer may extend the cure period for good cause shown, provided that the extension is consistent with protection of the public interest and the purposes of the permitting program.
- 2.8.5.4. **Verification of cure**
- 2.8.5.5. The County Engineer may verify cure by reinspection, documentation, or other reasonable means.
- 2.8.5.6. If the County Engineer determines the violation has been cured within the cure period, the County Engineer may close the NOV without further enforcement action.
- 2.8.6. **Effect of cure on further action**
- 2.8.6.1. Cure does not preclude the County Engineer from pursuing an adjudication for suspension, revocation, or cancellation where authorized by law or where the County Engineer determines that the nature of the violation warrants further action.
- 2.8.7. **Stop-work orders**
- 2.8.7.1. **Issuance standard and form**
- 2.8.7.1.1. Upon County Engineer investigation of an alleged violation and determination of reasonable cause, the County Engineer may issue a stop-work order directing the permit holder to cease and desist specified work or operations.
- 2.8.7.1.2. A stop-work order shall be in writing and shall identify the conduct to be stopped and the basis for the County Engineer's reasonable cause determination.

2.8.7.2. Effective date and duration

2.8.7.2.1. A stop-work order is effective immediately upon service unless the order states a later effective time.

2.8.7.2.2. The stop-work order shall remain in effect until the County Engineer verifies cure, issues a written modification or termination, or issues a final adjudication order.

2.8.7.3. Stay

2.8.7.3.1. The County Engineer may grant a stay of a stop-work order for good cause shown, conditioned upon the posting of a bond with good and sufficient surety in an amount set by the County Engineer to protect the public from harm or loss.

2.8.7.3.2. The County Engineer may deny a stay if it certifies that it has reasonable cause to believe that a public emergency exists

2.8.8. Permit Suspension or Revocation

2.8.8.1. If the County Engineer finds that the permit holder has failed to cure the violations identified in a Notice of Violation within the time designated in the NOV or Cure Plan, the County Engineer may recommend that the Board of County Commissioners revoke or suspend the permit.

2.9. Before any excavation or ground-disturbing activity under an issued permit takes place, the permit holder shall contact the Ohio Utilities Protection Service (OUPS) at least 48 hours in advance (or as OUPS requirements may require from time-to-time) to ensure underground utilities are properly marked.

3. Permit Application and Submittal Requirements

3.1. A complete right-of-way permit application is required to be submitted for review and approval for any work to be performed in the right-of-way.

3.2. Submittal Requirements:

- Complete Permit Application
 - The application shall include a proposed work schedule and all required plans or documents.
- Performance Bond
- Certificate of Insurance, including documentation of additional insurance coverage and XCU coverage by policy or endorsement.
- Complete Construction Plans
- Complete Maintenance of Traffic Plan

4. Surety – Performance Bond/Certified or Cashier's Check

4.1. A surety in the form of a bond or certified or cashier's check is required for all work performed within the right- of-way and shall be provided with the permit application.

4.2. The bond shall be issued by a licensed surety company authorized to operate in the State of Ohio and be in favor of the Board of County Commissioners, Union County, Ohio. A certified check or cashier's check to the order of the Board of County Commissioners, Union County, Ohio, may be provided instead of a bond.

4.3. Bond/Check Amount

4.3.1. A bond/check in the amount of \$5,000 shall be provided to cover all single-point installations (i.e. catch basin, pedestal, etc.).

4.3.2. A bond/check in the amount of \$10,000 shall be provided for linear projects up to one-half a mile (aerial or underground) or road crossings (boring or excavation).

4.3.3. A bond or certified/cashier's check in the amount of \$15,000 per mile, with the bond amount rounded to the nearest \$100 and the project length rounded to the nearest one-hundredth (0.01) of a mile, shall be required for all linear projects over one-half mile (aerial or underground) or for road crossings (boring or excavation).

4.4. Filing and Duration

4.4.1. An executed copy of the performance bond or certified/cashier's check shall be provided with the permit application. All bonds, including project-specific bonds and single annual bonds, shall be held and remain active until three (3) years after the permitted work is completed and the as-built drawings have been accepted.

4.4.2. Any person seeking to occupy the right-of-way may submit a single annual bond to cover work planned within the right-of-way for that calendar year, rather than submitting separate bonds for each project.

4.4.2.1. The value of the annual bond will be based on the estimated work to be completed during the calendar year and shall be calculated in accordance with Section 4.3.3. The bond shall be submitted and maintained in accordance with Section 4.4.1.

4.4.2.2. Additional bond coverage may be required if the work extends into a new calendar year or if the actual work exceeds the estimated mileage or scope used to establish the initial bond amount.

4.4.3. Failure to submit a complete set of as-built drawings within the required time frame, as set by the Union County Engineer, will result in the retention of the performance bond/certified or cashier's check until such drawings are submitted and approved by the Union County Engineer. The Union County Engineer reserves the right to withhold acceptance of the work and to maintain the bond until all required documents have been approved.

4.5. The Union County Engineer's Office reserves the right to levy additional performance bond/certified or cashier's check values for complex work or special circumstances.

5. Certificate of Insurance

5.1. For projects under Par. 4.3.1, 4.3.2, and 4.3.3, a certificate of insurance, insured with limits of no less than one million dollars (\$1,000,000) naming the Union County, its elected officials, employees, and agents as additional insureds, shall be provided. Insured risks must include Commercial General Liability (CGL), Commercial Auto Liability, Underground Hazard/Explosion/Collapse (XCU), and Environmental/Pollution Liability. See Appendix A for the permit insurance requirements.

5.2. The permit holder shall indemnify and hold harmless Union County, its elected officials, its employees, and its agents from any claims of any type and nature arising out of the performance of any work along, on, or across the county's road right-of-way and to defend any action which may be instituted. The permit holder further agrees that during the performance of any such work, a policy of liability insurance will be maintained with a company acceptable to Union County Engineer, which designates Union County Engineer, its elected officials, and employees as with limits of no less than one million dollars (\$1,000,000) issued by the company licensed to do business in the state of Ohio.

5.3. Permit holder must have proof of Workers' Compensation coverage as required by Ohio law.

5.4. Proof of such coverage is to be provided before the performance of any work.

6. Placement Specifications

6.1. Underground Installations

6.1.1. **Boring is the required method for installing underground utilities.**

6.1.2. Shall occupy only one side of the roadway.

6.2. Above-ground Installations

6.2.1. Shall occupy only one side of the roadway.

6.2.2. No above-ground installation may be placed closer to the pavement edge than 2 feet from the nearest right-of-way line without the specific written approval from the Union County Engineer.

6.2.3. Longitudinal installations shall run parallel to the pavement edge or right-of-way line.

6.2.4. Any above-ground installation crossing over a roadway shall maintain a minimum vertical clearance of 16 ft from the pavement surface perpendicular to the lowest point of the installation.

6.3. Driveways

6.3.1. See the Driveway & Pipe Standards document for installation requirements in Appendix B. Driveway and roadside pipe installations require a separate permit found on the *Driveway and Address* page on the Union County Engineer website.

6.4. Signs

6.4.1. All signage shall be placed outside of the right-of-way, including but not limited to political, real estate, and any temporary signage not used for traffic control.

6.5. Mailboxes

6.5.1. See the Mailbox Installation document for installation requirements in Appendix C.

6.6. Landscaping

6.6.1. The placement of trees, shrubs, large rocks, or any other items that restrict visibility or create safety hazards within the right-of-way of county roads is not permitted.

7. Construction Plans

7.1. All work in the right-of-way shall have construction plans for the proposed work.

7.2. Submissions shall be received at a minimum of 4 weeks before work is scheduled to begin.

7.3. Plans shall be drawn to scale and readable at 1 inch = 40 feet when printed to 11" by 17" sheets.

7.4. Plans are required to show all existing utilities, drainage, and topographic features as well as identify all horizontal and vertical clearances between existing and proposed utilities to ensure compliance with required offset standards.

7.5. Utilities lines, such as water and sewer, shall be shown on the plans with horizontal and vertical alignment based on an actual field inspection and information from county and/or city records. Plans shall include road centerlines, right-of-way limits, pavement edges, bridges, culverts, profiles, elevations, existing underground utilities, existing and proposed poles, vaults/handholds, equipment pedestals, bore pits, and other features necessary to identify the proposed installation. A legend identifying all existing and proposed features shall be included on the plans.

7.6. It is the permit applicant's responsibility to identify any conflicts with existing utilities or structures before installation. All conflicts with any county or city infrastructure or other existing utilities shall be resolved to the satisfaction of the owner.

7.7. No structures (including, but not limited to, vaults, handholes, or system equipment) of any kind are permitted in the flow line of waterways/ditches/existing tiles.

7.8. When working near a bridge or culvert, details related to the structure should be provided.

7.9. The Union County Engineer may require pre-engineering or pre-construction meetings.

7.10. Plan reviews by other agencies may be required based on project location and type of work. This may extend review times outlined in section 18.

8. Construction

8.1. Road rights-of-way are reserved for roadway purposes and utilities that provide direct public benefit. Utilities determined to be primarily for private use, or not serving adjoining parcels for public use, may be required to be located within a private easement outside of the right-of-way.

8.2. Utility companies proposing to install underground utilities shall remove any existing above-ground utilities and associated poles.

8.3. Any pavement markings that are damaged or removed over 50 feet or more shall be replaced. Road structures that were impacted, i.e., curbs and culverts, shall be restored. Drainage or roadside ditches must be cleaned and returned to proper working order, and all excavation debris shall be cleared from the site.

8.4. The permit holder shall ensure that the nearby and adjoining property owners always have safe and reasonable access to their driveways during work being performed. Temporary driveways or access routes shall be provided when needed to prevent any interruption to local property access.

8.5. The permit holder shall also protect, maintain, and preserve all public features during construction, including but not limited to cornerstones, monuments, and land markers. Any such public feature disturbed or removed during the project shall be replaced or restored under the supervision of a registered surveyor to ensure its accuracy and proper placement.

8.6. Any underground drainage tile, culvert, or drainage structure damaged during construction shall be repaired or replaced at the permit holder's expense and to the satisfaction of the Union County Engineer.

8.7. Underground gas, petroleum, and electric lines shall be marked by visible above-ground means at the right-of-way line.

- 8.8. The permit holder shall have the approved permit available on-site at all times while work is being performed within the right-of-way.
- 8.9. Any vehicle actively performing work within the right-of-way shall be clearly marked with the name or logo of the company or person performing the work.

9. Boring

- 9.1. **Boring is the required method for installing underground utilities** within the right-of-way. Alternative installation methods will be considered if and only if boring is demonstrated to be infeasible, and supporting documentation is submitted and approved by the Union County Engineer.
- 9.2. All boring within the right-of-way shall be installed at a minimum depth of 42 inches measured from the bottom of the roadside ditch.
- 9.3. Pedestals, handholds, and/or pull boxes shall be installed flush to the existing surface and shall be traffic-rated so as not to interfere with right-of-way maintenance.
- 9.4. All fiber optic cables shall be installed by directional drilling within a conduit at a minimum depth of 42 inches measured from the bottom of the roadside ditch.
- 9.5. Fiber optic cables shall be installed within 3 feet of the back side of the right-of-way, unless otherwise approved by the Union County Engineer.
- 9.6. All boring operations shall maintain a minimum of 10 feet below the stream bottom when boring beyond or around a pipe, unless otherwise approved by the Union County Engineer.
- 9.7. If conflicts with existing utilities prevent the installation of fiber optic cable or other permitted facilities in accordance with the approved permit conditions, the utility company shall notify the Union County Engineer's Office immediately. Failure to resolve the conflict(s) may result in the permit being voided and may require removal of the installed facilities if the issue cannot be remedied to the satisfaction of the Union County Engineer.
- 9.8. Bore pits shall be located on the backside of the road ditch at least 3 feet from the bottom of the road ditch when boring under the roadway. The conduit shall extend continuously under ditches and the full width of the roadway.
- 9.9. If a proposed utility cannot be reasonably accommodated within the right-of-way due to space limitations, infrastructure conflicts, or future roadway needs, the Union County Engineer may require the utility to be located within a private easement.

10. Water and Sewer Installation

- 10.1. If installing water or sewer, a copy of the plan approved by the utility owner shall be provided.
- 10.2. Installation and inspection around water and sewer mains and laterals belonging to the utility owner shall be inspected jointly by the utility owner and the Union County Engineer's Office. A copy of the completed inspection report shall be provided to the Union County Engineer for filing upon completion.

11. Backfill and Disturbed Earth

- 11.1. Disturbance of the road surface, shoulders, and ditches shall be kept to a minimum.
- 11.2. Controlled Density Fill (CDF) is the required method for backfill crossing under the pavement unless otherwise approved by the Union County Engineer. Trenches through roads or private drives within the right-of-way will be backfilled with CDF from 12 inches above the utility to the bottom of the asphalt concrete surface.
 - 11.2.1. An inspector is required for the following:
 - 11.2.1.1. Backfilling around any existing sanitary line, water line, storm water structure, or bridge.
 - 11.2.1.2. Backfilling within the pavement influence.
 - 11.2.2. CDF shall not be put in place when the trench bottom or walls are frozen or contain frozen materials. Flowable fill must be protected from freezing until it has hardened.

12. Road Crossings

- 12.1. Installations crossing the pavement or right-of-way shall be placed perpendicular to the pavement or right-of-way.
- 12.2. All underground cables shall be installed in a conduit at a minimum of 42" measured from the bottom of the roadside ditch.
- 12.3. Underground electric crossing is allowable only at the Union County Engineer's discretion. A detailed exhibit will be required. See Appendix D for a detailed typical section.
- 12.4. Open cutting may be permitted for the installation of underground lines greater than 16 inches. Underground lines 16 inches or less shall be installed by boring.

13. Road Repair

- 13.1. The road surface removed or damaged shall be replaced according to the "Typical Road Section Repair Work" drawing in Appendix E and shall be repaired within 48 hours.
- 13.2. The Union County Engineer's Office shall be notified 48 hours before completing surface repair and restoration whenever work is discontinued or resumed.
- 13.3. Joints shall be sealed with liquid asphalt.

14. Restoration

- 14.1. Restoration of any sidewalk, curb, shoulder, etc. shall occur no later than 14 calendar days after the conclusion of any utility repair or installation activity unless expressly authorized otherwise by the Union County Engineer. Construction activity completed from December through April shall be permanently restored no later than May 31st. After May 31st, non-compliance with this required restoration work shall be considered a violation and may result in forfeiture of the performance bond.
- 14.2. When a disturbance from excavation is performed in the right-of-way, the right-of-way conditions shall be returned to the same quality condition or better than before the excavation. The restoration shall be completed by such times as required by the Union County Engineer, i.e., seeding, sidewalks, roadways, drives, mailboxes, storm drainage, culverts, etc.
- 14.3. The performance bond or surety check will not be released until restoration is completed satisfactorily.
- 14.4. Grading shall be returned to original elevations, and material (topsoil) placed on the surface will support the regrowth of grass and vegetation.

15. Maintenance of Traffic

15.1. Maintenance of Traffic Plans

- 15.1.1. Any work that results in a lane closure must submit a permit application with a maintenance of traffic plan.
- 15.1.2. The maintenance of traffic (MOT) plan shall be submitted for approval before any work begins. An MOT plan is required for projects that perform work on any county roadway where traffic flow would be interrupted at any time. All MOT Plans shall follow the Ohio Manual of Uniform Traffic Control Devices (OMUTCD). The appropriate traffic control diagrams from the Ohio Department of Transportation (ODOT) should be used, based on road type, speed limit, and the type of work being performed.

The MOT plans shall include:
 - 15.1.2.1. Use of correct ODOT traffic control standards such as TA-1, TA-3, TA-10 for two-way flagging or TA-10 for single-lane closures.
 - 15.1.2.2. All signage and barricades shall conform to the latest edition of the OMUTCD.
 - 15.1.2.3. Lights, signs, barricades, and, if necessary, flagmen, watchmen, and workers shall be placed on the job for the protection of traffic at all times of the day and night during the time any work is being performed.
 - 15.1.2.4. All open excavations shall be plated or backfilled before the end of each workday. Plates in the pavement shall have the appropriate signage and shall be anchored/staked and must be approved in advance by the Union County Engineer's Office.
 - 15.1.2.5. Utility companies shall contact the Union County Engineer's Office two (2) business days ahead of planned construction of the utility, so proper notification for travel and emergency services can occur.

15.1.2.6. Work during peak morning and evening times is prohibited, unless approved by the Union County Engineer. The Union County Engineer must approve of work outside of normal business hours, on holidays, or on weekends.

15.1.2.7. When flaggers are not actively working, all “Flagger Ahead” and “One Lane Ahead” signs shall be covered or removed.

15.2. Regulations

15.2.1. The Union County Engineer’s Office reserves the right to void this permit if maintenance of traffic requirements are not being met.

15.2.2. The permit holder agrees that at the end of each workday, project equipment will be clear of the right-of-way or at the back edge.

15.2.3. Only one lane of traffic may be closed at a time, unless otherwise approved by the Union County Engineer.

15.2.4. The work area shall be left clean and stable, with no soil erosion, runoff, or stream pollution caused by the project. Preventive measures should be used as needed to protect nearby waterways and the surrounding land.

15.2.5. No permit is required for emergency repair work to existing utilities due to unexpected outages or the risk of property or bodily harm. The Union County Engineer shall be promptly notified of necessary work and any accompanying traffic disruption.

16. Notifications

16.1. The Union County Engineer’s Office shall be notified two (2) business days in advance of lane closures, excavations, or anything that will impede traffic.

17. Inspections

17.1. Inspections will be performed during normal business hours.

17.2. The Union County Engineer reserves the right to charge overtime fees for inspections outside of normal business hours. These fees shall be paid prior to the release of the surety.

18. Permit Review

18.1. Review times vary based on the complexity of the project, and adequate review time shall be considered in the applicant’s schedule.

18.2. Complex reviews can take up thirty (30) working days by staff (this does not include any time the applicant has the plans in their possession for revisions).

18.3. Subsequent reviews can take up to ten (10) working days each.

18.4. The permit request shall include plans, details, and specifications as outlined in these requirements.

19. Permit Fee Schedule

19.1. Base Fee: \$250 (Covers single-point projects or lineal projects up to 1 mile)

19.2. Linear projects over 1 mile: \$300 per additional mile, rounded to the next mile

19.3. Road Crossings

19.3.1. Additional fee of \$100 per crossing if boring

19.3.2. Additional fee of \$400 per crossing if open cutting

Appendices

A: Permit Insurance Requirements

B: Driveway & Pipe Standards

C: Mailbox Installation Requirements Pamphlet

D : Underground electric Placement Requirements

E: Typical Road Section Repair Work

APPENDIX A

Permit Insurance Requirements

PERMIT INSURANCE REQUIREMENTS

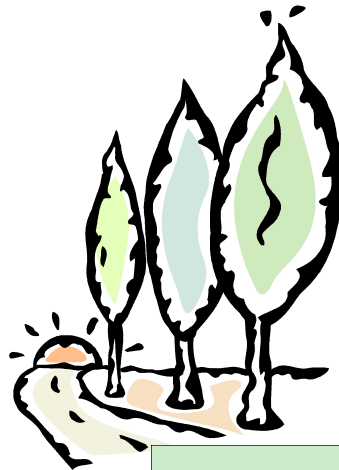
TYPE OF INSURANCE	LIMITS	
COMMERCIAL GENERAL LIABILITY	EACH OCCURRENCE	\$1,000,000
	PERSONAL & ADV INJURY	\$2,000,000
	GENERAL AGGREGATE	\$1,000,000
	PRODUCTS – COMP/OP AGG	\$1,000,000
AUTOMOBILE LIABILITY	COMBINED SINGLE LIMIT (EACH ACCIDENT)	\$1,000,000
	UNINSURED MOTORIST	\$1,000,000
UNDERGROUND HAZARD/EXPLOSION/COLLAPSE	EACH OCCURRENCE	\$1,000,000
ENVIRONMENTAL/POLLUTION LIABILITY	EACH OCCURRENCE	\$1,000,000
WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY	EMPLOYERS' LIABILITY EACH ACCIDENT	\$1,000,000
	EMPLOYERS' LIABILITY DISEASE – EACH EMPLOYEE	\$1,000,000
	EMPLOYERS' LIABILITY DISEASE – POLICY LIMIT	\$1,000,000

APPENDIX B

Driveway & Pipe Standards

DRIVEWAY & PIPE STANDARDS

INSTALLING A
DRIVEWAY, DRIVEWAY
PIPE, OR ROADSIDE
PIPE?



ALL INSTALLATIONS
SHALL BE DONE IN
ACCORDANCE WITH
THESE STANDARD
SPECIFICATIONS
AND DRAWINGS

general design

DRIVE WIDTHS & RADII

minimum residential drive width is ten (10) feet [special drives, such as common access drives or multi-family drives may be wider, but should not exceed twenty four (24) feet; field drives may be wider than 24' to accommodate equipment]

min radius for each approach (adjacent to the road) **is twenty (20) feet**

DRIVEWAY MATERIAL (MINIMUMS)

field Drive—6" crushed aggregate base

residential drive—2" asphalt over 6" crushed aggregate base, or 8" crushed aggregate base, or 6" concrete (reinforcing recommended)

commercial, industrial, or multi-family drive—design shall be based on specific use requirements

common access drive—see CAD regulations

CONCRETE DRIVES

concrete drives on **uncurbed** county and township roads shall be terminated four (4) feet from the edge of pavement

the area between the drive and the pavement shall be filled with either 2" asphalt over 6" crushed aggregate base or 8" of crushed aggregate base

concrete drives on **uncurbed** township roads, in residential subdivisions with posted speed limits of 25 mph, shall be terminated as described above **or** can be brought to the edge of pavement **if the concrete drive is "held down" 1/4" lower than the road pavement**

general design

INTERSECTION ANGLE

drives should intersect the road at an angle between 70° and 90° ; 90° is preferable

PROFILE

drives on **uncurbed** roads shall slope down and away from the edge of pavement for a minimum distance of four (4) feet

beyond four (4) feet the driveway may slope up or down, but at a slope no greater than ten percent (10%)

LOCATION ALONG PUBLIC ROADS

sight distance due to vertical or horizontal curves shall be no less than 495'

driveway spacing from other driveways or roads: local—250'
minor collector—360'
major collector—495'
(may be greater for commercial, industrial or multi-family drives)

VARIANCES

a variance may be granted for extreme situations where these standards can not be met



CR 164

working to keep
your roads safe

UNION COUNTY
ENGINEER

233 West Sixth Street

Marysville, Ohio 43040

937.645.3018

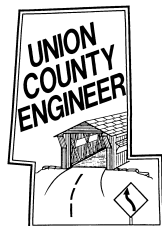
800.258.8278 inside Union Co. only

engineer@unioncountyohio.gov

Hours

730A—430P

Monday—Friday



INSTALLATION STANDARDS

PIPES—DRIVEWAY

pipe size (diameter) will be determined by county engineer staff

minimum diameter for residential & field drives is 10" (minimum diameter for all other drives is 12")

minimum pipe length is 30'

ALLOWABLE PIPE MATERIAL—DRIVEWAY

reinforced concrete pipe (RCP)

smooth wall high density polyethylene pipe (HDPE)

corrugated metal pipe (CMP)

COVER—DRIVEWAY

pipe must be covered by a minimum of eight (8) inches of material or as otherwise recommended by the manufacturer

PIPES—DITCH ENCLOSURE

pipe size (diameter) will be determined by county engineer staff (minimum 10")

pipe may be perforated or solid

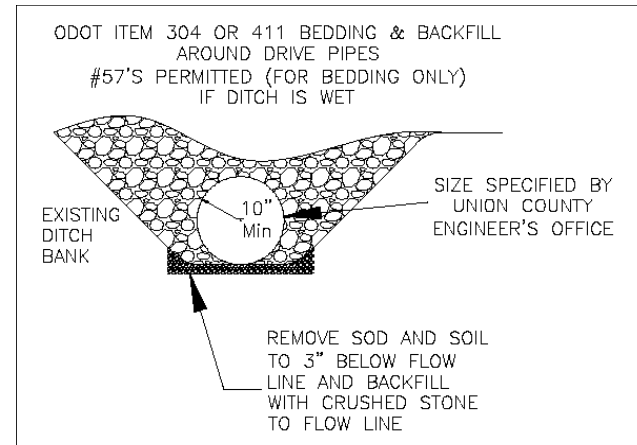
backfill may be granular material or soil

INLETS—DITCH ENCLOSURE

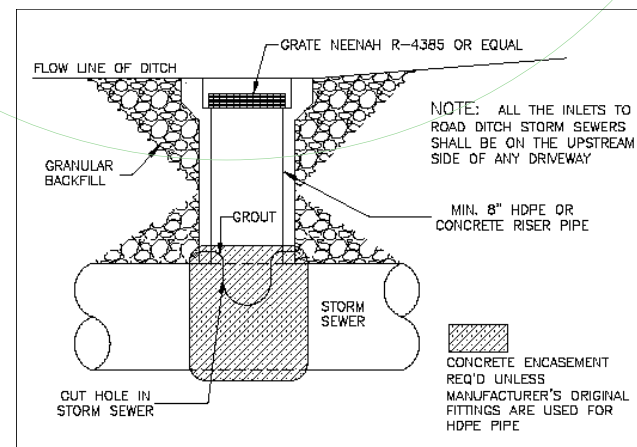
minimum 8" diameter drop inlet is required in residential subdivisions with storm sewer systems

must be installed on "high" or upstream side of driveway

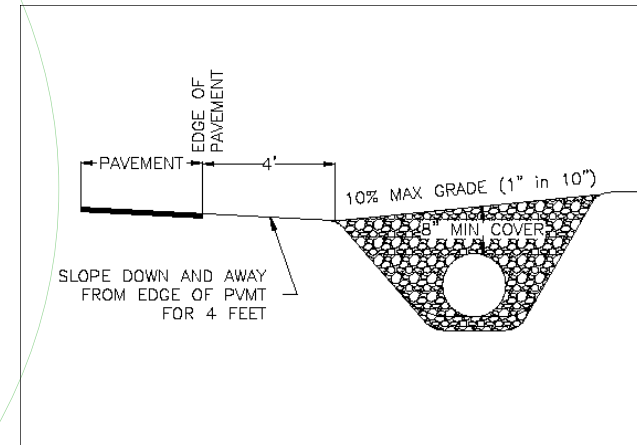
drops are also required every 200' along ditch enclosures, regardless of road type



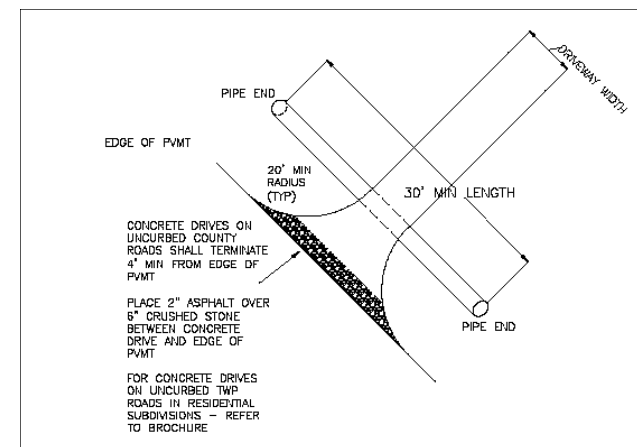
DRIVE PIPE DETAIL



DROP INLET DETAIL



DRIVEWAY PROFILE



DRIVEWAY LAYOUT

RESPONSIBILITY

when a new driveway is proposed, a property owner must fill out a driveway application, pay associated fees, and obtain a driveway permit prior to construction

property owners are responsible for purchase, installation, replacement, and repair of driveways, driveway pipe, and roadside pipe (ditch enclosure)

deficient drives or pipes shall be replaced by the owner within 30 days of notification by the county engineer

work not completed within 30 days of notification will be completed by the county engineer and the cost will be assessed to the property owner

PLEASE NOTE

these guidelines are intended for single drive use

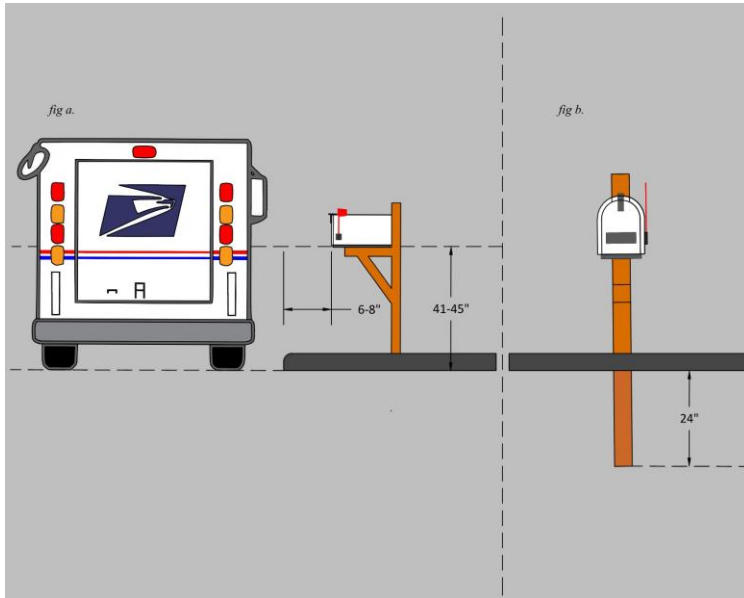
additional standards may apply for commercial, industrial, multi-family, and common access drives

APPENDIX C

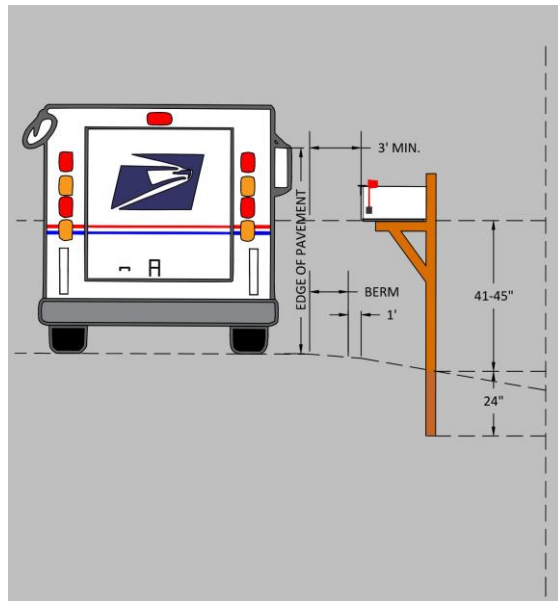
Mailbox Installation Requirements Pamphlet

Here are some helpful guidelines to follow when placing your Mailbox:

- Position your mailbox 41" to 45" from the road surface to the bottom of the mailbox or point of mail entry.
- Place your mailbox 6" to 8" back from the curb. If you do not have a raised curb, place your mailbox 3' (36") MIN. postmaster for guidance.
- Put your house or apartment number on the mailbox.
- If your mailbox is on a different street from your house or apartment, put your full street address on the box.



**MAILBOX INSTALLATION
REQUIREMENTS WITH
RAISED CURB**



**MAILBOX INSTALLATION
REQUIREMENTS
WITHOUT RAISED CURB**

Union County Engineer

Requirements for

INSTALLING MAILBOXES



Prepared by:

**JEFF STAUCH
UNION COUNTY ENGINEER**

**233 W. Sixth Street
Marysville, Ohio 43040**

**Office Hours
7:30am-4:30pm
Monday thru Friday**

**937-645-3021
*800-258-8278**

***Inside Union County only**

**engineer@unioncountyohio.gov
www.unioncountyohio.gov**

REQUIRMENTS FOR INSTALLING MAILBOXES

Mailboxes represent obstructions within the road right-of-way and hazards to the travelling public.

The purpose of this policy is to encourage mailbox installations, which minimize the hazard to the travelling public.

The following specifications and the standard drawing represent the recommended mailbox installation to be used along county roads.

MATERIALS

Wood posts shall be nominal 4" X 4" square or 4 ½" diameter round.

Steel posts shall be nominal pipe size 2" in diameter.

Hardware (plates, screws, bolts, etc.) shall be commercial grade galvanized steel.

SETTING POSTS

Posts shall be set in compacted earth or driven into the ground and shall NOT be encased in concrete.

MOUNTING BOXES

Support hardware shall accommodate either a single or a double mailbox installation. No more than two boxes shall be mounted on a single post.

The mailbox shall be securely attached to the post.

The roadside face of the mailbox shall be no closer than 3 feet from the edge of pavement.

LOCATION

Check with your local postmaster to determine which side of the road your mailbox must be located for mail delivery service to your address.

Irwin	937-349-2121
East Liberty	937-666-4292
Marysville	937-642-1961
Milford Center	937-349-2061
Mt. Victory	937-354-4081
North Lewisburg	937-747-2278
Ostrander	740-666-7345
Plain City	614-873-4004
Raymond	937-246-2561
Richwood	740-943-2033
West Mansfield	937-355-4001

ADDRESS NUMBERS

Address numbers make finding your residence easier for emergency vehicles and rural mail carriers alike.

Reflective address numbers offer the best visibility after dark.

Reflective address sign kits may be available at the following locations:

Allen Twp. Fire Dept.	937-642-5536
Jerome Twp. Fire Dept.	614-873-8990
Liberty Twp. Fire Dept.	937-246-2156
Northern Union County Fire & EMS	740-943-2715
Sheriff (Senior Citizens Only)	937-645-4110

APPENDIX D

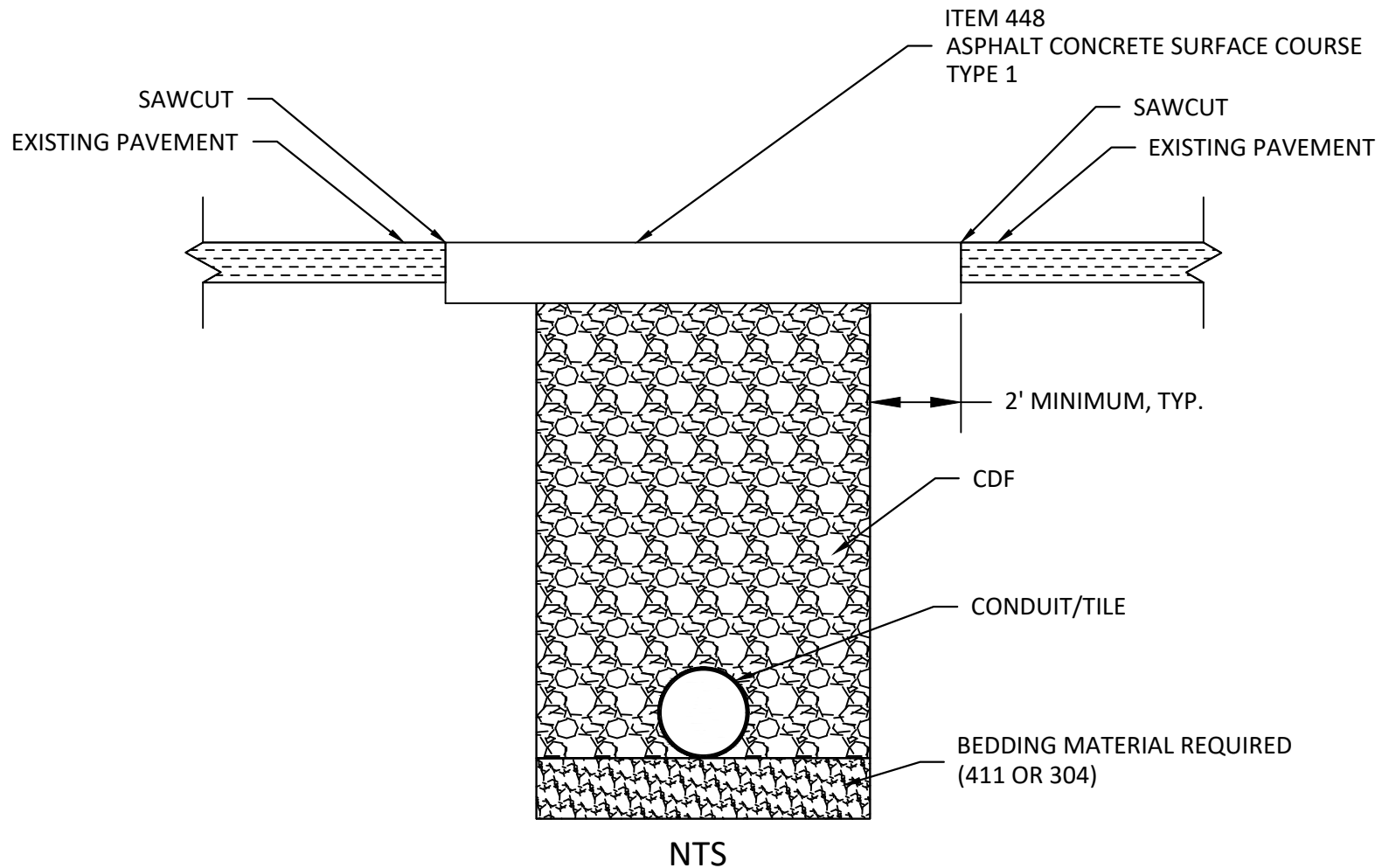
Underground Electric Placement Requirements

This diagram illustrates the cross-section of a bored conduit installation. The central element is a horizontal conduit labeled "CONDUIT, BORED". Above the conduit, a dashed vertical line represents the "C/L" (Center Line). The ground surface is indicated by a horizontal line with "E/P" (Existing Profile) labels. The conduit is surrounded by "CDF, FLOWABLE FILL (DYE RED OR USE CAUTION TAPE)", shown as a hatched area. The fill is placed in two sections: one on the left and one on the right, each with a "4:1 SLOPE OF INFLUENCE" and a "1' TYP REF" (typical reference) dimension. The fill is placed "MIN 1 FT. INSIDE LINE OF INFLUENCE" and "MIN 4\"-6\" BELOW BOTTOM OF CONDUIT, TYP". The conduit is also "MIN 1 FT. ABOVE TOP OF CONDUIT, TYP". The ground surface is "VARIES" and "MIN 6 FT BELOW BOTTOM OF DITCH, TYP". The diagram also shows "UTILITY MARKER" locations and "R/W" (Right of Way) lines. The conduit is labeled "3/16\"/FT" and "1\"/FT".

CDF,
FLOWABLE FILL
(**DYE RED** OR USE ~~CAUTION TAPE~~)

APPENDIX E

Typical Road Section Repair Work



NOTES:

1. IF EXISTING PAVEMENT THICKNESS EXCEEDS 6", THE REPLACEMENT PAVEMENT SHALL MATCH THE EXISTING PAVEMENT THICKNESS
2. IF EXISTING PAVEMENT THICKNESS IS 6" OR LESS, A MINIMUM OF 6" OF NEW ASPHALT PAVEMENT SHALL BE INSTALLED IN LIFTS NOT TO EXCEED 3"
3. ALL JOINTS BETWEEN NEW AND EXISTING PAVEMENT SHALL BE SEALED WITH ASPHALT EMULSION AND LOOSE SAND