PROCEDURES FOR THE INSTALLATION OF UTILITIES AND MONITORING WELLS WITHIN THE ROAD RIGHT-OF-WAY

FOR THE

LIVINGSTON COUNTY ROAD COMMISSION

February 28, 2019

Preface

This document has been prepared to consolidate the procedures and regulations for the issuance of permits to install public utilities and monitoring wells within the right-of-way of roads under the jurisdiction of the Livingston County Road Commission (LCRC). These procedures are made part of a permit issued by the LCRC for such activities.

The Livingston County Road Commission's Engineering Department is responsible for administering these Procedures through the permit process in conformance with applicable provisions of federal and state law. Specific standards, regulations, permit conditions, and procedures are necessary to determine whether permit applicant's intentions are acceptable. The permitting staff at the LCRC will provide timely, professional, and equitable service to all permit applicants.

The intent of this document is to provide guidelines for the installation of public utilities and monitoring wells within the right-of-way of county roads. It is not intended to be a detailed design manual that could supersede the need for the application of sound principles by the knowledgeable design professional.

Should any part of these procedures be found by public act of law or a court of competent jurisdiction to be invalid, void or illegal, such finding shall in no way affect, impair or invalidate any other provision contained in these procedures and regulations are declared to be severable.

Questions regarding these procedures may be directed to the Engineering Department of the Livingston County Road Commission at (517) 546-4250.

PROCEDURES FOR UTILITY INSTALLATIONS

As referred to herein:
"LCRC" shall denote the Engineering Department of the Livingston County Road Commission.
"Utility" shall denote any public cable, conduit, pipe, structure, or similar facility installed within the road right-of-way.
"Permit Holder" shall denote an individual or legal entity responsible for the proposed utility's installation.

1. All proposed utility installations within county road right-of-way shall be reviewed and approved by means of a permit issued by the LCRC, regardless of the type, size, location, or installation method.

2. To issue a utility installation permit, the applicant must provide drawings that illustrate all the work to be performed, the method of installation, and materials to be used, and the approximate start and completion date shall be provided on the permit application.

3. Utilities installed parallel to the roadway should be placed a minimum of 25 feet off the traveled centerline of the road on a two-lane road. On a multilane road, parallel utilities should be placed a minimum of 10 feet off the back of curb or back of shoulder.

4. If a utility easement exists adjacent and parallel to the road right-of-way, proposed utilities must be constructed within this easement.

5. Aerial crossings shall have a minimum of 18' of clearance between the line and the road grade.

6. All drainage courses shall be restored to their pre-construction condition and design, and vegetation shall be established with a minimum of topsoil, seed, and mulch immediately after completion of utility installations.

7. Soil Erosion and Sedimentation Control Measures shall be employed and maintained per the Michigan Department of Environmental Quality and the Livingston County Drain Commissioner's standards.

8. All existing storm sewer, drainage structures, culverts, and similar facilities shall be protected during utility installation.

9. All traffic signs requiring replacement or needing to be relocated due to utility installation shall be replaced or relocated by the LCRC and their costs reimbursed by the Permit Holder.

10. Traffic control shall be maintained in accordance with the current edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD). Once work is completed for the day, traffic control signs which are not appropriate shall be covered or removed.

11. All proposed utility crossings of county roads shall be performed using methods other than open cut methods unless otherwise permitted by the LCRC. The following are general specification or provision to be followed when installing utilities using methods other than open cut methods.

    a. The methods of utility installation described in this document include, but are not limited to, tunneling, bore and jacking, and directional boring. These methods represent

preferred installation methods and allow the installation of utility road crossings without closing the road to through traffic or damaging the existing road pavement.

b. When a utility is to be installed by tunneling methods, the tunnel shall be adequately sheeted and shored to prevent the tunnel walls from collapsing and the road pavement form settling or cracking.

c. When a utility is to be installed by bore and jacking methods, a casing pipe will be required. The annular space between the utility and the casing pipe shall be filled and sealed using pressure grouting or other approved methods.

d. All bore pits should be located at least 10 feet off the back of shoulder or behind the back of curb.

e. All utilities shall have a minimum cover of 4 feet below the road surface.

12. If crossing the road cannot be bored due to extenuating circumstances, an open cut crossing may be approved and the following requirements should be followed.

    a. Provisions for handling traffic shall be per the MMUTCD and approved by the LCRC. The Permit Holder shall submit a traffic control plan to the LCRC which includes a diagram of the detours and all detour signage.

    b. Open cut crossing shall be made during off-peak traffic hours. Lane closures may not commence before 9:00 AM and shall be completed and normal traffic flow restored before 3:00 PM unless otherwise approved by the LCRC.

    c. Open cut crossings shall not begin if inclement weather is threatening, which may impede the contractor's ability to restore the traveled way in a timely manner.

    d. Open cut crossings may not be approved during the winter months.

    e. The LCRC may require the open-cut crossing to be completed using part width construction, requiring through traffic to be maintained at all times.

    f. Maintenance of open cut work zones is the responsibility of the Permit Holder.

13. The Permit Holder shall submit a corrective action plan for all open cut utility installations needing reconstruction. At a minimum, reconstruction shall conform to the following specifications or provisions.

    a. All pavement to be removed shall be saw cut, full depth, to its removal limit and removed as to not damage the saw cut edge. All damaged edges shall be subsequently saw cut and removed back to sound pavement. The pavement removal limit shall extend to at least 1 foot beyond both sides of the open cut trench.

    b. Both bituminous and concrete pavement removal shall have a minimum width of 30 feet, be perpendicular to the centerline of the road, and extend the full width of the existing lanes. Diagonal pavement removal and replacements will not be allowed unless approved by the engineering department. Based on road conditions, the LCRC may increase the width requirement of the pavement removal.

c. Concrete pavement removal limits are to utilize existing joints whenever possible.

d. Aggregate base material under pavement shall be a minimum of 7-inches thick and meet MDOT 21AA or 22A aggregate specifications.

e. Bituminous pavement replacement shall either match the existing pavement thickness or be 5 inches thick, whichever is greater and utilize hot mix asphalt materials that meet or exceed MDOT 13A mix specifications.

f. Concrete pavement replacement shall either match the existing pavement thickness or be 7 inches thick, whichever is greater, and utilize 4500 psi strength concrete that meets or exceeds MDOT specifications.

g. Repair of gravel surface roadways shall have a minimum of 8 inches of 23 A gravel (natural aggregate or limestone, whichever is existing) on Class II backfill.

h. All utility trenches, holes, bore pits, and other excavations within the county road right-of-way shall be backfilled with granular material that meets or exceeds MDOT Class II material. Refer to MDOT Trench Detail "B".

i. All under drain systems and similar facilities destroyed or disturbed due to the utility installation shall be rebuilt using similar materials and in a manner that completely restores their function.

j. Any geotextile fabric or geogrid encountered in the excavation shall be restored in a manner that endures the integrity of the material as it was originally intended. The LCRC must approve the material and methods of repair prior to installation.

14. The Permit Holder shall store construction materials as far off the road so that the materials do not pose a hazard nor block the vision of the traveling public and those seeking egress and ingress to private property. Only materials to be installed immediately can be stored within the right-of-way. All other materials and equipment shall be stored outside of the right-of-way.

15. The Permit Holder shall be responsible for the proper location of all existing underground utilities.

PROCEDURES FOR MONITORING WELL INSTALLATIONS

1. The Applicant must submit a written request from the United States Environmental Protection Agency (U.S. EPA) or the Michigan Department of Environmental Quality (MDEQ) for monitoring wells to be situated in the county road right-of-way.

2. Prior to applying for a permit for monitoring wells to be situated in the right-of-way, the Applicant must obtain written permission from the owners of adjoining lands and shall be submitted with the permit application.

3. The Applicant must submit a brief description of the project including but not limited to the reason monitoring wells are needed, the time period for which the wells are necessary, the frequency of testing, and an abandonment plan.

4. Alternative locations, outside of the public road right-of-way, shall be investigated prior to applying for a permit to install monitoring wells within the right-of-way. The Applicant must provide documentation describing the alternatives considered to avoid installation within the road right-of-way.

5. The LCRC reserves the right to require the Permit Holder to remove the well as a result of road and drainage construction purposes without replacement or reimbursement of any costs incurred by the Permit Holder or any other party.

6. Any costs of cleanup and restoration shall be the sole responsibility of the Permit Holder pursuant to the permit.

7. If not implemented within 6 months of issuance, the permit shall expire. A written request to extend the permit for an additional 6 months may be accepted one time.

8. At the request of the LCRC, the Permit Holder shall provide a copy of the data collected from the monitoring well operation.

9. If any wells encountered soil and/or groundwater contamination, or if any evidence of contamination was observed in the right-of-way, a copy of the report shall be submitted to the LCRC.

10. It is the responsibility of the Applicant to locate nearby drainage facilities prior to installing monitoring wells.

11. Since the character, time limits, area, and particular requirements of each non-intrusive testing project vary significantly, such permits are generally addressed on a case-by-case basis. Fees, insurance, surety and general requirements are handled similarly. The permit shall not sanction drilling or the taking of physical samples. However, since there is potential for surface damage when moving heavy equipment within the right-of-way, permits are required for all such activities.

12. The installation of monitoring wells within the traveled portions of the roadway or in the shoulder will not be permitted. The wells should be installed within 5 feet of the right-of-way line.

13. The Applicant shall specify the proposed dimensions of the wells. The wells shall be drilled and installed in accordance with industry standards.

14. Wells shall be completed with a cap that is mounted flush with the existing grade to minimize interference with landscaping, mowing, road maintenance, pedestrian, and/or automotive traffic using or maintaining the right-of-way.

15. All soil and water (drilling muds included) produced during the drilling, testing, and/or sampling operations shall be disposed of outside of the right-of-way in a manner acceptable to the MDEQ.

16. The Permit Holder shall restore the right-of-way to its previous condition immediately upon the installation of monitoring wells and all other tasks designated on the permit shall be completed before the permit is closed.

17. An as-built diagram which identifies the final location of all Monitoring Wells in the right-of-way shall be submitted before the permit is closed.

18. All wells (whether successful or not) shall be sealed and abandoned as prescribed by MDEQ regulations and/or the Livingston County Health Department (LCHD) regulations.