LAPEER COUNTY ROAD COMMISSION PERSONNEL AND OPERATIONS POLICY MANUAL

Policy Subject: PUBLIC UTILITIES WITHIN THE RIGHT-OF-WAY

Authorized by Board of Road Commissioners Date: 04/02/2014

Amended Date:

STATEMENT OF POLICY

1. Permit Required:

- 1.A. 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 has been obtained from the Lapeer County Road Commission (CRC) Permit Department.
 - 1.A.1. Construct, reconstruct, relocate, repair any facilities (sewer, water, gas, electric, drains, telephone, cable, fiber, guys/anchors, etc.)
 - 1.A.2. Perform any work (ditching, tree trimming, landscaping, etc.)
- 1.B. The construction, maintenance or reconstruction of all facilities shall be as described in an approved permit and drawings.
- 1.C. The Permit Holder shall notify the Permit Department by fax, email or phone call between 24 and 72 hours before beginning construction.
- 1.D. All permits issued shall have clean-up and restoration performed at the time of installation. The restoration shall include, at a minimum: 3" topsoil, seed (summer or winter blend), and staked mulch blankets. Any variances shall be approved by the Lapeer CRC Permit Foreman prior to performing the work. Emergency work restoration shall be completed within 24 hours of completing the work.
- 1.E. Any permits not completed by November 15th must be extended with the Permit Department and will be charged a winter construction fee in accordance with the current Lapeer CRC fee schedule. Winter permits may be issued at the discretion of the Permit Department. Winter Construction Practices (Section "O") shall be followed or the permit will be revoked.
- 1.F. Work crews shall have all applicable permits onsite.
- 1.G. 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.

1.H. 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 Lapeer CRC Permit Foreman for emergency (public safety, health, and welfare) work which requires the removal of the road surface. If the Lapeer CRC Permit Foreman cannot be reached, Lapeer County Central Dispatch (810-667-0292) shall be notified and a phone message/fax shall be submitted to the Lapeer CRC offices.

2. Authorized Applicants:

2.A. Applications shall be acceptable from the property owner; the owner's authorized legal agent, engineer, or general contractor; governmental agencies; and public utilities or corporations. Contractors or others employed by a property owner or leasee (in the case of oil companies) shall not be considered as authorized applicants.

3. Plan Requirements:

- 3.A. All permit applications shall be accompanied by plans which shall include all of the following features:
 - 3.A.1. Drawing(s) on a proper size sheet at a reasonable scale for the proposed work.
 - 3.A.2. Existing road pavement, ditches, cross culverts, and dimensions thereof.
 - 3.A.3. Location of all existing utilities and driveways including surface type; and diameter and length of culverts.
 - 3.A.4. Show location of all proposed construction with dimensions from the Right-of-Way line and existing centerline.
 - 3.A.5. Show the distance to the nearest monument box or section corner.
 - 3.A.6. Ditching plans must show watershed area, existing and proposed grades, ditch depth relative to roadway and calculations used in culvert sizing.
 - 3.A.7. For watermain repairs, a simple drawing or a detailed description of the work and location (work type, road cut dimensions, approximate address, etc.) can be substituted for the above requirements.
- 3.B. Variations to these procedures must be approved by the Permit Department.
- 3.C. No work shall be completed prior to obtaining an approved permit from the Permit Department.

4. Requests for Field Changes:

- 4.A. When unforeseen conditions are encountered in the field, changes may be approved by the Permit Department as follows:
 - 4.A.1. The utility company's authorized representative shall contact the Permit Department and request the specific change required.

- 4.A.2. The Permit Department will review the requested change as soon as conditions and workload will allow.
- 4.A.3. If the change is approved, it will be authorized in writing by the Permit Department.
- 4.A.4. The utility company shall submit revised drawings showing the authorized changes prior to the construction of the changes.
- 4.A.5. Should the contractor or the utility company elect to install the facility at the new location before approval, they will assume all risks should the new location not be approved. The fact that facilities have already been installed will have no bearing on the evaluation of the requested change. Any unauthorized work completed while the change is being reviewed shall immediately be removed and the disturbed area restored. Abandoning such unauthorized work will not be allowed.

5. Road Crossings:

- 5.A. All crossings of paved roads will be done by approved methods other than the open–cut method unless otherwise approved by the Lapeer County Road Commission. Crossing paved roads shall be done by squeeze bore, auger, directional bore, jack & bore, or moleing per the following conditions:
 - 5.A.1. When the pipe is installed by boring and jacking, the leading edge of the pipe shall precede 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 Road Commission.
 - 5.A.2. The maximum diameter of the auger shall be 3" with no casing. A casing is required over 3" without an approved variance from the Permit Department.
 - 5.A.3. All shafts or pits shall be located at least 10 feet off the edge of pavement or edge of gravel. 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, sheeting or shoring shall be used on all sides of the excavation which are closer to the road than the above requirements.
 - 5.A.4. All voids shall be filled by pressure grouting or other approved methods.
 - 5.A.5. If any settlement or other change in grade occurs, the road shall be reconstructed to proper grade.
 - 5.A.6. Watermain, storm sewer and sanitary sewer installations shall meet current Michigan Department of Transportation (MDOT) standards for road crossings.
 - 5.A.7. Underground electric road crossings shall be marked, at a minimum, with red delineator posts located at the right-of-way line on each side.
- 5.B. If the Road Commission approves crossing the road by the open–cut method, the provisions for handling traffic during lane or road closures will follow the Lapeer CRC Workzone Signing Policy. All expenses shall be borne by the Permit Holder. No road will be closed without prior approval of the Road Commission. Approval of road closures will usually require that detours be installed. If a road closure is not approved, traffic shall be maintained at all times. Open–cut crossings shall be made during off–peak traffic hours,

- normally between the hours of 9:00 AM and 3:00 PM unless otherwise approved and/or directed by the Permit Department.
- 5.C. 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 Road Commission.

6. Pavement Removal:

6.A. All utility trenches crossing asphalt roads by the open–cut method shall remove the pavement to a minimum width of at least 1 foot beyond the top of the trench on each side. If the pavement is concrete, it shall be removed to the nearest joints.

7. Backfill and Compaction of Backfill:

- 7.A. All backfill and compaction shall be in accordance with the current MDOT Standard Specifications for Construction manual. The permit holder shall supply sufficient density tests from an approved independent testing company to assure the Lapeer CRC that compaction requirements are being accomplished.
- 7.B. All under drain systems which are disturbed shall be rebuilt in a manner that completely restores their function.

8. Pavement Replacement:

- 8.A. Pavement repairs shall be placed immediately after utility installation. All pavements removed shall be replaced by the Permit Holder in accordance with the following:
 - 8.A.1. When plants are open and hot mixed bituminous pavement is available, a minimum of 3 inches compacted thickness of HMA shall be placed over 8 inches of compacted 22A limestone. If the existing pavement thickness exceeds 3", the pavement placed shall match the existing depth. The Lapeer CRC shall designate the MDOT mix design based on the existing pavement.
 - 8.A.2. If the pavement is concrete, replace with concrete pavement of the same thickness and type as the existing pavement on a sand sub-base equal to the existing sub-base in thickness and compacted to 98% density. All concrete shall conform to the current MDOT Standard Specification for Construction manual.
 - 8.A.3. When hot mixed bituminous pavement or concrete is not available, a minimum of 11 inches of compacted 22A limestone shall be used. Concrete or HMA shall be placed as soon as it becomes available. All temporary repairs shall be maintained in good condition and kept up to grade at all times by the Permit Holder until the final pavement repair is made. If the area is not properly maintained, the Lapeer CRC shall require a cold patch cap to be placed over the location until the HMA repair is made.

9. Gravel Replacement:

9.A. Immediately after the trench is back-filled and compacted, the trench area shall be brought up to grade with a minimum of 8 inches of compacted MDOT 22A crushed gravel (or limestone if existing). Then the affected portion of the road and ditches shall be rough graded to the pre-existing cross section. All excess construction materials, excavated materials and other contaminated materials shall be removed – this includes contaminated materials in areas that may have been used for storage of construction materials or excavated materials. The entire construction area shall then be top dressed with 2 inches of compacted MDOT 22A road gravel (or limestone if existing).

10. Shoulder Restoration:

- 10.A. Gravel shoulders which are removed during construction are to be replaced with 5" of 23A gravel. If the shoulder has a sand sub-base, it shall also be replaced.
- 10.B. Regardless of previous condition, gravel shoulders which are not removed but are contaminated, rutted or otherwise destroyed shall be restored by removing the contaminated material and replacing it with 23A gravel to the original thickness and slope, and flush with road surface.

11. Maintenance & Restoration of the Right-of-Way:

- 11.A. All road drainage shall be restored as soon as possible behind the utility construction.

 Ditches, ditch slopes, and other areas within the Right-of-Way shall be restored to meet the current standards.
- 11.B. All culverts and ditch enclosures in good structural condition removed by the Permit Holder shall be replaced in the proper location. All culverts and ditch enclosures which are not in good condition after removal shall be replaced with new pipe material of equal or better quality. Culverts and other drainage structures that are damaged but not removed during the construction must be fully repaired to the satisfaction of the Permit Department or be replaced with new materials of equal or better quality.
- 11.C. All areas within the road Right-of-Way outside the traveled portion of the road which are disturbed as the result of the Permit Holder's operations must be restored at the time of installation. Restoration shall not be delayed until project completion. Disturbed areas shall be topsoiled, seeded and mulch blanketed. The ground cover shall be maintained until final settlement has occurred and growth is established. If significant settlement occurs in a maintained area, it shall be repaired with topsoil, seed, and mulch blankets.

12. Grade of Top of Structures:

- 12.A. The height of the top of structures shall be determined as follows:
 - 12.A.1. If the structure falls within a paved surface, the cover shall be flush with the pavement on all sides.

- 12.A.2. If the structure falls within a gravel road or the unpaved shoulder of a paved road, the cover shall be 12 inches below the road surface.
- 12.A.3. If the structure falls within a ditch, the cover shall be set at top of ditch elevation and the ditch shall be relocated around the structure and away from the road with a stable earth berm around the structure. Where called for on the plans or as directed by the Lapeer County Road Commission, a culvert shall be installed next to the structure and the ditch enclosed.
- 12.A.4. Any structure on the ditch slopes shall not protrude more than 6 inches above the slope.

13. Dust Control:

13.A. The permit holder shall maintain his work area in a safe, dust free condition until he has completed all work in a given area, including the hauling of materials. Dust control shall be provided at the request of the Road Commission on any unpaved detour, bypass and shoulder which are to be used by traffic.

14. Trees & Tree Work:

- 14.A. A permit will be required for any tree removal, trimming or tunneling. The Permit Holder will be required to show on the construction plans or in separate sheets similar to the plans, the location, size and species of all trees which may be affected by the proposed construction in such a way as they are readily identifiable in the field. He/she must also indicate thereon which individual trees he/she proposes to remove or trim. If a tree is to be trimmed, the type and extent of trimming must be indicated.
- 14.B. Before destroying or removing any tree larger than 4 inches in diameter located in the Right-of-Way which has not been indicated by plat, deed or recorded easement, the Permit Holder must give at least 10 days notice of his intent to destroy or remove any tree, by certified mail to the owner of record of the land where the tree is located. This notification applies to the area within the "assumed 33-foot Right-of-Way" along either side of road centerline adjacent to un-platted property.
- 14.C. All stumps, limbs, litter, and logs are to be disposed outside of the road Right-of-Way. The abutting property owner has the right to the wood if he wants it and the wood shall be placed on the owner's property beyond the road right-of-way.
- 14.D. Tunnel or boring must be below the major root system and extend a distance of one (1) foot on either side of the tree for each two (2) inches of trunk diameter. All voids around the tunneled or bored facility shall be back-filled with excavated material and thoroughly compacted to avoid settlement. If the tree is severely damaged or dies within one year as a result of the tunneling or boring, the Permit Holder will be required to remove it and plant another tree outside the Right-of-Way at a location of the property owner's choosing.
- 14.E. All removed trees shall be, at a minimum, flush cut to the ground. Stumps shall be removed or ground out in maintained areas.

15. Winter Construction Procedure:

- 15.A. Permitted work may be allowed at the discretion of the Permit Department during winter restrictions contingent upon the following:
 - 15.A.1. The work shall be scheduled (day and time) with the Permit Department 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.
 - 15.A.2. All frozen material shall be removed and replaced with suitable material.
 - 15.A.3. 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.
 - 15.A.4. If inclement weather presents itself, all work shall be rescheduled and all equipment shall be removed from the Right-of-Way.

16. Conduct of Operations:

16.A. 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 the expense of maintaining a Road Commission inspector (Full Time) may be required from the Permit Holder before resuming of work.

17. Disposal of Water & Other Substances:

- 17.A. Any water that is disposed of or re-directed in road ditches shall be done in such a manner that it does not create a hazardous condition to either pedestrian or vehicular traffic; or cause erosion, siltation or ponding which adversely affects the stability of the roadway or damages adjacent property.
- 17.B. The outletting of waters into roadside ditches for extended periods of time will generally not be acceptable. The placement of discharge lines on or across the surface of the traveled portion of any road will not be allowed without written permission from the Permit Department.
- 17.C. The Permit Holder agrees to do all necessary restoration of the road drainage system. If the Road Commission deems it necessary for the Permit Holder to either alter de-watering operations or to cease de-watering operations altogether for public safety, the Permit Holder shall locate all de-watering facilities as far from the road surface as possible. If, due to extenuating circumstances, these facilities are located closer to the road than the back slope of the ditch, a flashing light shall be required at each location.

17.D. Other substances (such as slurry, bentonite, etc.) shall not be disposed of in ditches or the road right-of-way. These substances shall be removed by vacuum or another approved method.

18. Vertical Clearance of Overhead Utilities:

18.A. Vertical clearance of wires, conductors, and cables over roadways for an unloaded sag with no wind at 60°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°F shall not be less than 15 foot 6 inches.

19. Depth of Cover for Underground Utilities:

- 19.A. Regardless of construction methods or location within the road Right-of-Way, all utilities shall have a minimum cover of 48 inches below the road centerline or the ditch bottom whichever is lower. Where approved plans require depth greater than 4 feet, the plan depth shall govern.
- 19.B. Buried service leads may have a minimum cover of 18" below existing ground (short-side only).

20. Location of Utilities within the Right-of-Way:

20.A. The following distances apply for county roads with a standard 66-foot wide right-of-way centered on the roadway. In areas with shifted or less than standard right-of-way, the utility shall be placed as far from the center of the roadway as possible.

20.A.1. Storm Sewers- West side, 12 feet from right-of-way line South side, 12 feet from right-of-way line East side, 7 feet from right-of-way line North side, 7 feet from right-of-way line West side, 7 feet from right-of-way line

South side, 7 feet from right-of-way line

- 20.B. **Note:** Storm Sewer, Sanitary Sewer, and Watermain shall maintain a minimum horizontal separation of 10 feet and a vertical separation of 1.5 feet. If that separation is not possible by the above locations, the utilities shall be placed in a location approved by the Lapeer CRC Engineer.
- 20.C. Other Utilities— All other underground utilities shall be located at least 29 feet from the center of the roadway. If a conflict exists, the utility may be placed as close as 26 feet from the center of the roadway with approval from the Lapeer CRC. Under no circumstances shall a utility be placed closer than 26 feet from the center of the roadway without a written variance from the Lapeer CRC Engineer.
- 20.D. All utility poles shall be located a minimum of 31 feet from the center of the roadway. In areas of wider Right-of-Way, poles shall be located a minimum of 40 feet from the center of the roadway.

21. Steel Plating:

- 21.A. Whenever small openings such as "window cuts" are made in a road pavement that must remain open to traffic during the time there is no work activity, they shall be covered with steel plates. The steel plates shall be of adequate size and thickness (minimum ¾") to support all legal axle loads and shall overlap existing pavement by at least two feet on all sides of the hole.
- 21.B. Side by side plating may be used to cover cuts longer than 10 feet provided the abutting edges are supported by a steel beam of adequate strength, firmly supported on sound earth for at least two feet on each end. Steel plates shall be bedded in cold patch and held in position by bolts or pins at least 3 inches long. Cold patch ramps shall be used along all edges of the plates. Steel plates shall also be used to cover concrete patches during the curing period. Upon removal of the steel plates, all cold patch shall be removed from pavement and disposed of outside the road Right-of-Way. The necessary steel plates shall be on the job site before the pavement is removed.

22. Storage of materials:

22.A. The permit holder shall store all materials far enough away from the road surface that they are not a hazard to the traveling public. The Permit Holder shall maintain enough clear area on the shoulder that a car can park off the road in an emergency. Materials and equipment shall not block the vision of traffic seeking ingress onto the road. Only those materials that will be used by the Permit Holder in his immediate operations can be stored in the Right-of-Way. All other materials, equipment and trailers must be stored outside of the Right-of-Way.

23. Erosion and Sedimentation Control (SESC):

23.A. The permit holder shall conform to all applicable state and local laws regarding SESC. All SESC measures shall be in place prior to construction and shall be maintained at all times.

24. Public Utility Annual Maintenance Permit:

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

24.A.1. ALLOWABLE ANNUAL PERMIT ACTIVITIES

- 24.A.1.a. Repair existing underground conduit, buried cable, buried wire, and pipe (not under pavement).
- 24.A.1.b. 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 existing location centerline), special permission is required to do so. (This item does not apply to gas mains see #j)

- 24.A.1.c. Near-side service leads may be installed up to 300 feet parallel to the roadway.
- 24.A.1.d. Insertion of plastic pipe inserts or lining through existing mains. (no pavement cuts)
- 24.A.1.e. 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.
- 24.A.1.f. Install, remove or replace any case with similar size on existing buried cable or wire.
- 24.A.1.g. Replace open wires, single pair rural wire and/or drop wire with multiple line wire or small cable on the same pole line.
- 24.A.1.h. Repair and maintenance of open wire, multiple type wire, drop wire and aerial cable.
- 24.A.1.i. Replace or add up to two poles within or beyond an existing pole line.
- 24.A.1.j. 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.
- 24.A.1.k. Adding or replacing guys and/or anchors to poles parallel to the road or directed away from the road.
- 24.A.1.l. 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.
- 24.A.1.m. Inspect and maintain systems, valves and meters and their associated manholes.
- 24.A.1.n. Conduct soil borings outside of traveled surface. Voids shall be backfilled with suitable material and borings in asphalt or concrete shall be capped.
- 24.A.1.o. System tie-ins to existing near-side facilities (except under pavement).
- 24.A.1.p. Survey work, locating, and investigating utility facilities.
- 24.A.1.q. Tree Work.
- 24.A.1.r. Place and replace utility marker posts.

24.A.2. CONDITIONS FOR ANNUAL MAINTENANCE PERMIT ACTIVITIES

- 24.A.2.a. Miss Dig is to be notified prior to any work. No work shall be allowed on an unmarked location.
- 24.A.2.b. 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).
- 24.A.2.c. The Lapeer CRC 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.
- 24.A.2.d. 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.
- 24.A.2.e. Monthly reports shall be submitted to the Lapeer CRC Permit Foreman 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.
- 24.B. 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.