

**MASON COUNTY
UTILITY ACCOMODATION MANUAL
FOR COUNTY ROAD RIGHTS-OF-WAY**

**FIRST EDITION
(The “Manual”)**

A. INTRODUCTION

- (1) The following policies, standards, regulations, rules, requirements, and guidelines (collectively “Standards”) constitute the Utility Accommodation Manual (the “Manual”) prepared, implemented and published by the County Engineer under authority of Section 12.24.040 of the Mason County Code (“MCC”).
- (2) The Standards **shall apply to all construction, installation, repair, maintenance, removal, replacement, adjustment and relocation of utility facilities (collectively “utility work”) within the county road right-of-way** by public and private operators, including but not limited to electric power, telephone, television, cable, telegraph, communication, information, water, gas, all petroleum products, steam, chemicals, sewage, drainage, irrigation, and similar pipes, lines or cables. Any utility work, which does not comply with these Standards shall be corrected as required by the County Engineer.
- (3) The effective date (“Effective Date”) of this first edition of the Manual is 12:01 a.m. the 6th day of May, 2008. Upon the Effective Date the manual shall replace and supercede in its entirety the Interim Utility Accommodation Policy set forth at Section 12.24.040.C; provided that, the Interim Utility Accommodation Policy shall continue to apply to work in the road right-of-way for which a utility permit application was filed without expiration prior to the Effective Date. Subsequent amendments and editions shall become effective in accordance with the provisions established in such amendment or new edition.
- (4) The Manual may be amended or a new edition issued from time to time by the County Engineer after opportunity for public comments. All amendments and new editions shall be made available in the Office of the County Engineer and on the official Mason County website, and at such other locations as determined by the County Engineer.
- (5) Terms, phrases, words, and abbreviations that are used herein, shall have the same meanings given pursuant to Chapter 12.24 MCC.

B. GENERAL REQUIREMENTS

- (1) Prior to construction, and in addition to any other permits required (including a utility permit), a franchise, master road use permit, or private line utility occupancy permit **MUST** be obtained for all construction work within the road right-of-way.
- (2) It is a requirement of the County Engineer that an approved set of construction plans for all work be kept on the construction site at all times. In addition, a copy of the utility permit shall also be available at the construction site.
- (3) The Contractor/Operator, County Engineer/Manager and County representatives may hold a pre-construction conference prior to starting any construction on the project. One week's notice is required for scheduling pre-construction meetings. Contact the Office of the County Engineer at (360) 427-9670, ext. 606 to coordinate the meeting.
- (4) The County Engineer shall be notified at least 48 hours prior to starting any type of construction activity in the road right-of-way including clearing & grading, sanitary sewers, water mains, fire sprinkler, supply mains, fire standpipes, fire department connections, storm drains, curb and gutters, sidewalks, driveways, street grading and paving or utilities and surface improvements. Normally, the county utility inspector will inspect a job as it progresses. For very large jobs or those which have a high potential for impacting the county road or right of way, the County Engineer may require a permit holder to provide an inspector, who will certify at the completion of the job that the work meets all county standards and requirements.
- 5) Unless otherwise approved by the county, all above-ground utility facilities and their appurtenances as well as all above-ground appurtenances of below-ground utility facilities that may constitute a roadside obstacle for traffic using the road shall be located as close as practicable to the edge of the right-of-way line.

C. UTILITY PLANNING

- (1) Utility installations shall be located to minimize the need for later adjustment to accommodate future roadway improvements and to permit access to service such installations with minimum interference to roadway traffic. The Utility shall review long-range county road improvement plans in order to locate the utility to minimize both utility customer and road user inconvenience should future road improvements on an existing or new alignment require adjustment or relocating of the utility. The county's

involvement will be limited to supplying planning documents and other information but will not include plan review.

- (2) Currently, in Mason County, utilities with a valid franchise or master road use permit are allowed in the right of way on a first come, first served basis. It is the responsibility of the utilities to coordinate with other utilities, purchase right of way or acquire private easements where space is limited.
- (3) Utility installations shall be located to minimize need for later adjustment to accommodate future roadway improvements and to permit access to servicing such installations with minimum interference to roadway traffic.
- (4) It is the responsibility of the utility to relocate its facility in all cases of county maintenance or construction where the facility interferes with the proposed roadwork when it is not practical to adjust the proposed design or when requested by the county to enhance safety. A utility is not required to relocate when their facility does not interfere with construction, such as may occur with overlay projects or shoulder paving. Any final grade adjustments necessary to lids, manholes, or other at or above ground appurtenances due to construction or maintenance activities will be the responsibility of the utility. The utility may choose to keep its facility in place or relocate it. With either choice, the utility must abide by the policies, procedures and standards of this document. Each utility is responsible for the cost of relocation of their facilities including the final adjustments of utility lids or cover within the right of way. For cases of major county road construction, the County Engineer will provide adequate advance notice of relocation requirements. The utility is required to relocate its facility in a timely manner consistent with the construction schedule. For maintenance work, the utility is required to coordinate relocation of its facility within three weeks of written notification.
- (5) The utility is responsible for the design of the utility facility being proposed. This design, in addition to the integrity of the proposed utility facility, shall include provisions for public safety during the course of construction as well as full consideration of traffic safety and traffic accident potential for the life of the installation. The design shall minimize disturbance to the roadway both during and after construction and will comply with applicable environmental and erosion control regulations. The design shall also include implementation of applicable temporary erosion and sediment control plan features as required by Mason County.

D. Specific requirements-Underground Utilities

- (1) Underground Utility Facilities-Location and Alignment

- (a) For all crossings, the angle of crossing should be as near a right angle to the road centerline as practicable. However, lesser angles may be permitted based upon economic considerations of practical alternatives.
 - (b) Where practicable, crossings should avoid deep cuts, footings of bridges and retaining walls, or locations where highway drainage would be affected.
 - (c) Longitudinal installations should run parallel to the roadway and lie as near as practicable to the right-of-way line. Installations which cannot be so installed will be allowed within the right of way, provided that:
 - (i) The installation will not adversely affect the design, construction, stability, structural integrity, traffic safety, or operation of the road facility; or
 - (ii) Failure to allow such installation will create an undue hardship or financial burden upon the operator.
 - (d) Where irregularly shaped portions of the right-of-way extend beyond the normal right-of-way limits, a uniform alignment of facilities shall be allowed.
- (2) Underground Utility Facilities-Cover
- (a) The grade of and resulting cover for an underground utility facility shall be a minimum of thirty inches for all installations within county right-of-ways, or in compliance with applicable federal, state and industry requirements if greater.
 - (b) Where less than the minimum cover is made necessary to avoid obstacles, the utility facility shall either be rerouted or protected with a casing, concrete slab or other method acceptable to the county.
- (3) Underground Utilities-Encasement
- (a) Casings shall be installed for roadway crossings where required by appropriate industry code.
 - (b) Casings may be required for the following conditions:
 - (i) Locations where it is necessary in order to avoid open trench construction.
 - (ii) As protection for carrier lines from external loads or shock either during or after construction of a road.
 - (iii) For jacked or bored installations of coated carrier lines unless assurance is provided to the county that there will be no damage to the protective coating.
 - (iv) Within the road right-of-way, where practicable, casing pipes shall extend beyond the toe of fill slopes, back of roadway ditch, or outside of curb.
 - (v) Other than for necessary vents and/or drains, casing pipes shall be sealed at both ends.

- (vi) Casing pipes shall be designed to support the load of the road and superimposed loads thereon and, as a minimum, shall equal the structural requirements for road drainage facilities. Casings shall be composed of materials of sufficient durability to withstand conditions to which they may normally be exposed.
- (4) Underground Utility Facilities-Uncased Carriers
- (a) The carrier pipe shall conform to the material and design requirements of the appropriate utility industry and governmental codes and specifications.
 - (b) The carrier pipe shall be designed to support the load of the road, plus superimposed loads thereon, when the pipe is operated under all ranges of pressure from maximum internal to zero pressure.
- (5) Underground Utility Facilities-Appurtenances
- (a) Vents shall be required for casings, tunnels and galleries enclosing carriers of fuel where required by federal safety standards. Vent standpipes should be located and constructed so as neither to interfere with maintenance of the road nor to be concealed by vegetation. Preferably, standpipes should stand by a fence or on the right-of-way line.
 - (b) Drains shall be required for casings, tunnels or galleries enclosing carriers of liquid, liquefied gas, or heavy gas. Drains for carriers of hazardous materials shall be directed to natural or artificial holding areas to prevent the potential for surface or groundwater contamination. Drains for which only water or other non-hazardous liquids may discharge may be directed into the roadway ditch or natural water course at locations approved by the county. The drain outfall shall not be used as a wasteway for routine purging of the carrier unless specifically authorized by the county.
 - (c) Location markers and emergency information should be used when required by applicable state and federal standards.
 - (d) Manholes should be designed and located in a manner that will cause the least interference to utility facilities of other operators or future road expansion or improvements. Where practicable, installations in the pavement or shoulders should be avoided.
- (6) Installations shall ensure safety of traffic and preservation of the roadway structure, and required construction shall, unless otherwise provided in the approved permit, be in accordance with the following controls:
- (a) Trenched Construction and Backfill.
 - (i) Where the pavement must be removed, it first shall be cut in vertical (or undercut) continuous straight lines.
 - (ii) Trenches shall be cut to have vertical faces, where soil and depth conditions permit, with a maximum width of outside

- diameter of pipe plus two feet. Shoring shall comply with the Washington State Department of Labor and Industries Safety Code.
- (iii) The pipe or carrier shall be installed and the trench backfilled in a manner assuring no deformation of the pipe likely to cause leakage and restoration of the structural integrity of the roadway structure. The county shall provide specific trench backfill requirements regarding materials and methods. In particular, the county requires all backfill material to be compacted to 95% of maximum density. The county may require a compaction test to verify compaction density.
 - (iv) When trenching is approved on paved roads, the pavement shall be restored as required by the county.
 - (v) When trenching is approved on paved roads, the County Engineer may require the application of cold patch asphalt prior to a final patch with hot mix asphalt.
 - (vi) All excavations shall be a minimum of four feet from the edge of pavement, unless otherwise authorized.
- (b) Untrenched construction may be required for pipelines crossing roads paved with asphalt concrete or cement concrete and for roads paved with bituminous surface treatment when directed by the county.
- (i) If sufficient right-of-way exists, the length of untrenched construction shall extend a minimum of four feet from edge of pavement, except that the County Engineer may permit a lesser standard where conditions warrant.
 - (ii) Overbreaks, unused holes, or abandoned casings shall be backfilled as directed by the County Engineer.
 - (iii) Water boring under roadways shall not be permitted.
 - (iv) Existing carriers and conduit installed under a roadway may be physically located prior to pipeline installation. Such activities shall be approved on a case-by-case basis.
- (c) Plowing of communication and electrical lines adjacent to existing roads by means of a vibratory plow may be allowed by the county, provided that the structural integrity of the roadway is not impaired.
- (6) One-Call System. Utility facilities shall be located and identified in accordance with Title 19 RCW, Chapter 19.122, sections 19.122.010 thru 19.122.900 (Washington State One Call System).
- (8) Pavement cutting will not be allowed unless specifically authorized by permit. Untrenched construction techniques such as pushing, jacking, or boring are the preferred methods for all pavement road crossings. Requests to open cut any pavement type will be addressed on a case by case basis, will be reviewed for road type, pavement condition, and the type and size of the proposed utility work. Pavement cutting may be

allowed in an emergency, for county construction or maintenance projects, or for locating existing utilities, but only after permission has been granted by the county. Pavement cutting wastes must not be discharged into the county's storm drainage systems.

D. SPECIFIC REQUIREMENTS--OVERHEAD UTILITY FACILITIES

- (1) Single-pole construction and joint use of the pole is desirable and should be used whenever feasible.
- (2) The minimum vertical clearance for overhead power and communication lines above the road is 18 feet and the minimum lateral and vertical clearance from bridges shall be 5.5 feet or in compliance with the current rules of the National Electrical Safety Code and Washington State Department of Labor and Industries "Electrical Construction Code."
- (3) Where irregularly shaped portions of the right-of-way extend beyond the normal right-of-way limits, a uniform alignment of utility facilities shall be allowed.

E. AESTHETIC/SCENIC CONSIDERATIONS

Utility facility installations shall be designed and constructed to minimize the adverse effect on existing roadside, manmade or natural amenities. Special efforts shall be taken to minimize any potential negative impact on areas of scenic beauty (i.e., scenic strips, viewpoints, rest areas, recreation areas, public parks or historic sites, etc.).

F. INSTALLATIONS ON ROADWAY BRIDGES AND STRUCTURES

Attachment of utility facilities to a roadway structure (including bridges) may be allowed where such attachment conforms to sound engineering considerations for preserving the roadway structure and its safe operation, maintenance and appearance. The attachment shall be in accordance with the following:

- (1) Attachment of a utility facility shall not be considered unless the structure in question is of a design that is adequate to support the additional load and can accommodate the utility facility without compromise of highway features, including reasonable ease of maintenance.
- (2) Manholes and other utility access panels should be avoided within the roadway portion of the structure.
- (3) Attachment on a structure of a pipeline carrying a hazardous transmittant shall be avoided where practicable.

- (4) The utility facility attachment shall not reduce the clearance of a structure where such clearance is critical. Attachment to the outside of a structure should be avoided where there are reasonable alternatives.
- (5) Utility facility mountings shall be of a type which shall not create noise resulting from vibration.
- (6) The hole created in a structure abutment shall be sleeved, shall be of the minimum size necessary to accommodate the utility line, and shall be sealed to prevent any leakage of water or backfill material.
- (7) The utility line back of the abutment shall curve or angle out to align outside the roadbed area in as short a distance as is operationally practicable.
- (8) Communication and electrical power line attachments shall be suitably insulated, grounded, and preferably carried in protective conduit or pipe from point of exit from the ground to re-entry. Carrier pipe and casing pipe shall be properly isolated from electric power line attachments.
- (9) In the case of proposed attachment to existing bridges and structures, the utility is responsible for submitting engineering information, including all engineering calculations, to the County Engineer concerning the bridge's or structure's ability to carry the additional load. The County Engineer will review all submitted information and make a final determination regarding the utility's request. The County Engineer will establish all design and construction parameters for this work.

G. CLEANUP AND RESTORATION

Unless otherwise approved by the County Engineer, utilities shall comply with the following provisions:

- (1) Restoration methods shall be in accordance with the specifications of this document and with the special provisions of the permit or franchise.
- (2) Unsatisfactory restoration work shall be redone promptly by the utility. This includes immediately replacing any failed patches with at least temporary patches. If necessary, unsatisfactory work may be redone by the county or the county's agent and billed to the utility.
- (2) Cleanup of excavation and debris material shall be accomplished concurrently with the burying operation, whether by plowing or trenching. At no time shall debris and excavation materials extend along a line for more than 500 feet.

- (3) All work shall be completed within the approved working days authorized on the permit. This includes removing replaced or abandoned utility poles from the right of way, complete cleanup of the work site and at least temporary pavement restoration.
- (4) Any temporary restorations shall be made permanent within 45 working days from the date of the temporary restoration.
- (5) All final restoration work shall be guaranteed by the utility for a period of one year from the date of final acceptance.
- (6) All abandoned above ground facilities shall be removed from the right of way within 90 days after they are abandoned unless an alternative timeframe is agreed to by the utility owner and the County Engineer. The above ground facility shall be considered to be abandoned upon completion of the permitted work.
- (8) Utilities that disrupt Mason Transit facilities shall perform restoration according the Mason Transit's requirements.

H. MISCELLANEOUS PROVISIONS

- (1) Preservation, Restoration and Cleanup
 - (a) The size of disturbed area necessary to install a utility facility shall be kept to a minimum.
 - (b) Restoration methods shall be in accordance with the specifications of the county and/or special provisions of the franchise, master road use permit, private line utility occupancy permit or utility permit and shall include but be not limited to restoration of vegetation by sodding or seeding and compaction of backfill materials to 95 percent plus of optimum density for the entire depth of the backfill material.
 - (c) Unsatisfactory restoration work shall be promptly corrected by the operator. If necessary, unsatisfactory restoration work may be corrected by the county and billed to the operator.
 - (d) Excavated material, which will be reused, shall not be stockpiled on the road running surface.
- (2) Emergency Repairs
 - (a) All utility facilities shall be kept in a good state of repair. Emergency repairs shall be undertaken in a timely manner.

- (b) If emergency repairs disturb the right-of-way, such repairs may be immediately undertaken and the right-of-way restored. Approval as to the manner of final restoration of the right-of-way shall be secured from the county in a timely fashion.
- (c) Utility permits shall be issued "after the fact" for emergency repairs. The permit fees and administrative procedures that would apply to scheduled work in the right of way shall apply to emergency work.
- (d) During situations involving the need for emergency repairs to county roads or rights of way, utility operators shall immediately comply with all requirements of the County Engineer pertaining to the location or condition of their utilities.

(3) Monuments

- (a) The Utility is responsible for the care of any and all existing monuments that may be disturbed, removed or covered during the installation or maintenance of the utility. Any monument being disturbed, removed or covered shall have due care taken in accordance with Chapter 332-120 WAC, SURVEY MONUMENTS – REMOVAL OR DESTRUCTION. All restoration work shall include adjusting to finished grade all existing cased and/or surface monuments located within the project limits, in accordance with Washington Department of Transportation Standard Plans H-6 and H-7 (See Appendix B-Standard Drawings).
- (b) The Mason County Public Works Department will assist with the location and marking of all known monuments in the project limits, if notified in a timely manner. Such assistance does not negate any liability of the utility for the restoration of said monuments. The utility shall be required to coordinate the locating and marking work with the Public Works Department.

(4) Above-Ground Structure-Visibility Standards

- (a) All above-ground structures shall be maintained by the utility for visibility.
- (b) At a minimum, all vegetation surrounding the structure shall be cut to within eight inches of the ground for a minimum distance of three feet on all sides of the structure. Overhanging vegetation shall be cut to a minimum of three feet above the highest point of the structure for a minimum of three feet around the top of the structure.
- (c) Electrical transmission and distribution lines shall be maintained to the standards included in RCW 64.12.035.

(5) Coordination with County Projects/Maintenance Activities

- (a) Mason County will make every attempt to notify utilities of upcoming maintenance and construction projects.

- (b) Scheduled maintenance activities can be found on the County web site at http://www.co.mason.wa.us/public_works/road_maint.php.
- (c) The County will provide copies of its one-year and six-year construction plans to utilities. Whenever possible, the County will construct its projects in stages in order to give utilities an opportunity to re-located their facilities with a minimum of interference from construction activities.
- (d) In the event that the timing of utility work adversely affects a county road project or maintenance activity, the utility operator shall be liable for all damages incurred by the county.

I. TRAFFIC

- (1) All traffic controls shall conform with the currently applicable Manual on Uniform Traffic Control Devices (MUTCD). This includes detours for all utility work, including maintenance work. Adequate provision shall be made to safeguard any open excavation including providing barricades, lights, flaggers, or other protective devices as may be necessary.
- (2) All construction and maintenance operations shall be planned to keep interference with traffic to an absolute minimum. On heavily traveled roads, the utility shall not allow construction operations to interfere with traffic during periods of peak traffic flow. Work shall be planned so that closures of intersecting streets, roads approaches, or other access points are held to a minimum.
- (3) If a road closure is required to perform the work, a permit for temporary road closure must be approved prior to commencement of the work. This no cost permit can be obtained through the Public Works Department.
- (4) Adequate provision shall be made to safeguard any open excavation, and shall include barricades, lights, flaggers, or other protective devices as may be necessary.
- (5) The storage of materials on through roadways shall not be allowed. Parking of vehicles on through roadways shall be kept to a minimum.