

ORDINANCE NO. 1376

1 AN ORDINANCE regarding accommodation of
2 utilities on county road right of way and
3 adopting WAC 136, Chapter 40, Standards of
4 Good Practice, published by the County Road
5 Administration Board.

6 WHEREAS, King County receives allocations of Federal funds
7 on certain county road projects; and

8 WHEREAS, the Department of Transportation, Federal Highway
9 Administration regulations require that recipients of federal
10 funding develop and adopt a policy on accommodation of utilities
11 on road rights of way, now

12 THEREFORE, BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

13 Section 1: WAC 136, Chapter 40, regarding Accommodation of
14 Utilities on County Road Right of Way as published by the County
15 Road Administration Board, is hereby adopted as policy for use on
16 all King County roads.

17 INTRODUCED AND READ for the first time this 21st day of

18 August, 1972.

19 PASSED this 5th day of September, 1972.

20 KING COUNTY COUNCIL
21 KING COUNTY, WASHINGTON

22 TRACY J. OWEN
23 Chairman

24 ATTEST:

25 LEE KRAFT
26 Administrator-Clerk
27 King County Council

28 APPROVED this 12th day of September, 1972.

29 JOHN D. SPELLMAN
30 King County Executive

31
32 VSS:hn
33 8/7/72

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71	Index pg. 1 of 3	

PURPOSE	WAC 136-40-010
APPLICATION	WAC 136-40-020
DEFINITION OF TERMS	WAC 136-40-030
GENERAL CONSIDERATIONS	
_____ LOCATION	WAC 136-40-040
_____ LOCATION STANDARDS	136-40-044
_____ ROAD PURPOSE UTILITIES	136-40-048
_____ ACCOMMODATION WHERE PRIOR RIGHT	136-40-052
DESIGN OF FACILITIES	
_____ RESPONSIBILITY	WAC 136-40-100
_____ PLANNING	136-40-104
_____ STANDARDS	136-40-108
_____ APPEARANCE	136-40-112
_____ MATERIALS	136-40-116
_____ POWER & COMMUNICATION CODES	136-40-120
_____ WATER LINE CODES	136-40-124
_____ PRESSURE PIPELINE CODES	136-40-128
_____ SEWER LINE CODES	136-40-132
_____ DRAINAGE FACILITY CODES	136-40-136
_____ UTILITY TUNNEL OR BRIDGE	136-40-140
CONSTRUCTION PERMITS & FRANCHISES	
_____ GENERAL	WAC 136-40-200
_____ APPLICATION REQUIREMENTS	136-40-204
_____ PERMIT REQUIREMENTS	136-40-208
_____ ENVIRONMENTAL PROTECTION	136-40-212

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED :	7/9/71	Index pg 2 of 3

PIPELINES

_____ LOCATION	WAC 136-40-300
_____ INSTALLATION	136-40-304
_____ COVER	136-40-308
_____ ENCASEMENT	136-40-312
_____ UNCASED CARRIERS	136-40-316
_____ APPURTENANCES	136-40-320
_____ ADJUSTMENT OF EXISTING FACILITIES	136-40-324

OVERHEAD POWER & COMMUNICATION LINES

_____ TYPE OF CONSTRUCTION	WAC 136-40-400
_____ VERTICAL CLEARANCE	136-40-404
_____ HORIZONTAL CLEARANCE	136-40-408
_____ IRREGULAR RIGHT OF WAY	136-40-412
_____ AESTHETIC CONSIDERATIONS	136-40-416

UNDERGROUND POWER & COMMUNICATION LINES

_____ GENERAL	WAC 136-40-500
_____ DESIGN	136-40-504
_____ MANHOLES	136-40-508
_____ SCENIC AREAS	136-40-512

INSTALLATIONS ON BRIDGES

_____ GENERAL	WAC 136-40-600
_____ LOCATION	136-40-604
_____ CLEARANCE	136-40-608
_____ MOUNTING	136-40-612
_____ POWER & COMMUNICATION LINES	136-40-616
_____ BEYOND ABUTMENTS	136-40-620
_____ RESPONSIBILITY	136-40-624

ALL UTILITIES

_____ DRAINAGE	WAC 136-40-700
_____ RESTORATION	136-40-704
_____ VEGETATION	136-40-708
_____ DEBRIS	136-40-712

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		Index pg. 3 of 3

PUBLIC SAFETY

- _____ **TRAFFIC CONTROL**
- _____ **OPEN EXCAVATION**
- _____ **MAINTENANCE**
- _____ **EMERGENCIES**

- WAC 136-40-800**
- 136-40-804**
- 136-40-808**
- 136-40-812**

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 1 OF 19

WAC 136-40-010 PURPOSE. The Department of Transportation, Federal Highway Administration requires that all states and their local subdivisions develop and adopt a policy on accommodation of utilities on road rights of way which are part of the FAS system. Such a policy is a pre-requisite to allocation of Federal Highway Funds to county road projects. It is advisable that such a policy be made applicable to all county roads.

The policy contained herein has been approved by Federal and state agencies as meeting all mandatory requirements. It may be adopted by reference. It will be applicable only in those counties where it is adopted by resolution of the Board of County Commissioners and only under conditions stated in said resolution.

WAC 136-40-020 APPLICATION. This policy shall apply to all franchises and permits issued, pursuant to RCW 80.32.010, RCW 80.36.040 and RCW 36.55, to all public and private utilities including but not limited to electric power, telephone, telegraph, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation and similar lines that are to be located, adjusted or relocated within the rights of way of county roads.

Nothing in this policy shall be construed as limiting the rights of the county to impose restrictions or requirements in addition to and/or deviations from those stated herein in any franchise or permit where the county deems it advisable to do so.

WAC 136-40-030 DEFINITION OF TERMS. Unless otherwise stated, words and phrases used herein shall have the following meaning:

- (1) Backfill - Replacement of soil around and over a buried facility.
- (2) Carrier - Pipe directly enclosing a transmitted fluid (liquid or gas).
- (3) Casing - A larger pipe enclosing a carrier.
- (4) Coating - Material applied to or wrapped around a pipe.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 2 OF 19

- (5) Conduit or Duct - An enclosed tubular runway for protecting wires or cables.
- (6) Construction Permit - Document required prior to construction of a facility on a right of way.
- (7) Cover - Depth of top of pipe below grade of road or ditch.
- (8) Drain - Appurtenance to discharge accumulated liquid contaminants from casings or other enclosures.
- (9) Encasement - Structural element surrounding a pipe.
- (10) Franchise - Occupancy and use document required for occupancy of road rights of way in accordance with RCW 36.55 and 80.32.
- (11) Gallery - An underpass for two or more pipelines.
- (12) Grounded - Connected to earth or to some extended conducting body which serves as a ground instead of the earth.
- (13) Manhole - An opening in an underground system into which workmen or others may enter for the purpose of making installations, inspections, repairs, connections, and tests.
- (14) Normal - Crossing at a right angle to the road.
- (15) Overcrossing - A grade separation where the subject road passes over an intersecting road or railroad.
- (16) Pipe - A tubular product made as a production item for sale as such.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 3 OF 19

- (17) Pressure - Relative internal pressure in psig (pounds per square inch gage).
- (18) Private Lines - Privately owned facilities which convey or transmit commodities but are devoted exclusively to the use of the owner.
- (19) Rest Area - A roadside area with parking facilities provided for motorists to stop and rest. It may include drinking water, toilets, tables and benches, telephones, information, and other facilities for travelers.
- (20) Restoration - A general term denoting replacing, repairing or otherwise restoring the right of way to the same or equal conditions as before any change or construction thereon.
- (21) Right of Way - A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to highway transportation purposes.
- (22) Road - A general term denoting a street, road or public way including shoulders for purposes of vehicular travel.
- (23) Roadside - A general term denoting the area adjoining the outer edge of the road.
- (24) Roadway Structure - The combination of subbase, base course, and surface course placed on a subgrade to support the traffic load and distribute it to the roadbed.
- (25) Slab, Floating - Slab between but not contacting pipe or pavement.
- (26) Standard Specifications for Road and Bridge Construction - The latest compilation of standard requirements for road and bridge construction issued by the Washington State Highway Commission and/or APWA.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 4 OF 19

- (27) Traffic Control - Those provisions necessary to safeguard the public during construction and maintenance activities.
- (28) Trenched - Installed in a narrow open excavation.
- (29) True Line and Grade - A line reasonably free from variation on both horizontal and vertical alignment.
- (30) Untrenched - Installed without breaking ground or pavement surface, such as by jacking or boring.
- (31) Vent - Appurtenance to ventilate casings.
- (32) Viewpoint - A roadside area provided for motorists to stop their vehicles beyond the shoulder, primarily for viewing the scenery in safety.

WAC 136-40-040 GENERAL CONSIDERATIONS LOCATION. The county may restrict the number of utility service crossings. The utility companies shall make adequate studies to anticipate their present and future needs to determine if several crossings can be combined to make the use of a utility tunnel or bridge feasible.

Utility installations should be located to minimize need for later adjustment to accommodate future road improvements and to permit access for servicing such facilities with minimum interference to traffic.

In all cases, full consideration shall be given to aesthetics, sound engineering principles, and overall economic aspects.

WAC 136-40-044 LOCATION STANDARDS. All utility locations are to be subject to the following:

- (1) Longitudinal installations should be located on a uniform alignment and grade so as to provide a safe environment for traffic operation and preserve space for future road improvements or

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 5 OF 19

other utility installations. Consideration should be given to placing the utility, particularly above ground installations, as near to the right of way line as practical.

- (2) Utility line crossings of the road shall be normal to the road centerline to the extent feasible and practical. Crossings should be made on a true line and grade.
- (3) The vertical location of underground utility lines shall be in accordance with the currently applicable design standards for utilities. The vertical clearance of overhead facilities shall be consistent with the clearance as provided in WAC 136-40-404.

WAC 136-40-048 _____ ROAD PURPOSE UTILITIES. Utility installations that are needed for a road purpose, such as for continuous lighting or traffic signals are to be located and designated in accordance with the requirements of this policy including sections -416 and -512.

WAC 136-40-052 _____ ACCOMMODATION WHERE PRIOR RIGHT. Where the utility facilities are to be adjusted to accommodate road construction and the utility has a prior property right in its location, the county and the utility may enter into a common use agreement providing for joint occupancy of right of way consistent with the requirements of each party.

WAC 136-40-100 DESIGN OF FACILITIES ___ RESPONSIBILITY. The utility company shall be responsible for the design of the utility facility. The county engineer shall review the utility's plans with respect to location and the manner in which the utility facility is to be installed and measures to be taken to preserve safe and free flow of traffic, structural integrity of the roadway structure, ease of the road maintenance, appearance of the road and the integrity of the utility facility.

WAC 136-40-104 _____ PLANNING. On new installations or adjustment of existing utility lines, provision should be made for known or planned expansion of the utility facilities, particularly those located underground or attached to bridges. They should be planned so as to minimize hazards and interference with traffic when additional overhead or underground lines are installed at some future date.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 6 OF 19

WAC 136-40-108 _____ STANDARDS. Government or industry codes required by law or regulation shall be followed in addition to rules and regulations referred to herein. This shall include any road design standards which the county shall deem necessary to provide adequate protection to the road, its safe operation, appearance and maintenance.

WAC 136-40-112 _____ APPEARANCE. Ground mounted utility facilities should be of a design compatible with the visual quality of the specific road section being traversed.

WAC 136-40-116 _____ MATERIALS. All utility installations on, over, or under the right of way and attachments to bridges shall be of durable material designed for long service life expectancy and relatively free from routine servicing and maintenance.

WAC 136-40-120 _____ POWER AND COMMUNICATION CODES. Electric power and communication facilities shall conform with the currently applicable Washington State Safety Code, Chapter 130, Laws of 1913 and/or Electrical Construction Code of the State of Washington.

WAC 136-40-124 _____ WATER LINE CODES. Water lines shall conform with the currently applicable specifications of the American Water Works Association including but not limited to:

- | | |
|---------------------------------------|--------------------------------------------------|
| (1) Welded Steel Water Pipe | AWWA C201 & ASTM A 120
AWWA C203
AWWA C205 |
| (2) Asbestos Cement Pipe | AWWA C400 |
| (3) Reinforced Concrete
Water Pipe | AWWA C300
AWWA C301
AWWA C302 |
| (4) Cast Iron Water Pipe | AWWA C106
AWWA C108
AWWA C111 |
| (5) Wrought Iron Water Pipe | ASTM A72 |

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 7 OF 19

WAC 136-40-128 _____ **PRESSURE PIPELINE CODES.** Pressure pipelines shall conform with the currently applicable sections of the Standard Code for Pressure Piping of the American National Standards Institute and applicable industry codes, including:

- (1) Power Piping, ANSI B31. 10
- (2) Petroleum Refinery Piping, ANSI B 31. 3
- (3) Liquid Petroleum, Federal Pipeline Safety Standards (Part 195, of Title 49, Code of Federal Regulations)
- (4) Gas Transmission and Distribution, Federal Pipeline Safety Standards (Part 192, Title 49, Code of Federal Regulations)
- (5) Liquid petroleum pipelines shall conform with the currently applicable recommended practice of the American Petroleum Institute for Pipeline Crossings Under Railroad and Highways. (APIRP 1102)

WAC 136-40-132 _____ **SEWER LINE CODES.** Sewer pipelines shall conform with the currently applicable Standard Specifications for Road and Bridge Construction.

WAC 136-40-136 _____ **DRAINAGE FACILITY CODES.** Drainage pipelines shall conform with the currently applicable Standard Specifications for Road and Bridge Construction.

WAC 136-40-140 _____ **UTILITY TUNNEL OR BRIDGE.** The utility tunnel or bridge shall comply in appearance, location, cover, earthwork and markers with the standards as set in the currently applicable Standard Specifications for Road and Bridge Construction. In a combined tunnel or bridge, consideration shall be given to the necessity of isolating mutually hazardous transmittants such as fuels and electric energy by compartmentizing or by auxiliary encasement of incompatible carriers.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71	PG. 8 OF 19	

WAC 136-40-200 CONSTRUCTION PERMITS AND FRANCHISES GENERAL.
A permit or franchise shall be required for occupancy of road right of way by utility facilities, including private lines. No facility shall be used for other than the purpose stated in the permit or franchise unless written approval is granted by the county.

WAC 136-40-204 APPLICATION REQUIREMENTS. All permit applications shall:

- (1) Generally describe the facilities to be installed as to size, type, nature and extent.
- (2) Contain adequate exhibits as required by the permit application.
- (3) Contain a summarization of the effects the installation will have on the aesthetics of the right of way and visible natural features.

WAC 136-40-208 PERMIT REQUIREMENTS. All permits shall:

- (1) Incorporate all pertinent provisions of this policy as to location, construction, traffic protection, maintenance, access restriction, preservation of aesthetic qualities, and such special conditions as the county may deem appropriate.
- (2) Specify the extent of liability and responsibilities associated with future adjustment of the utility facilities to accommodate road improvements.
- (3) Specify the effect of non-compliance with the conditions thereof.

WAC 136-40-212 ENVIRONMENTAL PROTECTION. No permit shall give the holder, any agent or contractor of the holder any right to cut, spray, retard, remove or in any other way modify the physical conditions of any vegetative material or natural feature on the right of way without the consent and approval of the county engineer.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71	PG. 9 OF 19	

WAC 136-40-300 PIPELINES ___ LOCATION.

- (1) For all crossings, the angle of crossing should be based on economic considerations of practical alternates. The crossings should be as near normal to the road centerline as practical.
- (2) Pipeline crossings should avoid deep cuts, footings of bridges and retaining walls, wet or rocky terrain or locations where drainage would be affected.
- (3) Longitudinal installations, other than in congested or limited areas, shall parallel the road.
- (4) All locations shall be reviewed and approved by the county engineer to assure the proposed utility installation will not interfere with existing or planned road facilities or impair road maintenance and operation.
- (5) Pipelines and/or casing pipes shall be designed to withstand heavier than legal weights, including extra-legal weights operating under permit, and the loads of construction and earth moving equipment imposed during construction.

WAC 136-40-304 _____ INSTALLATION. Pipeline installations shall insure safety of traffic and preservation of the roadway structure, and required construction shall be in accordance with the following controls:

- (1) Trenched Construction and Backfill:
 - (a) Trenches shall be cut to have vertical faces, where soil and depth condition permit, with a maximum width of outside diameter of pipe plus 2 feet. Shoring shall comply with the Department of Labor and Industries Safety Code for construction and/or as directed by the county engineer.
 - (b) Security of the pipe against deformation likely to cause leakage.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 10 OF 19

- (c) Assurance against the trench becoming a drainage channel or against drainage being blocked by the backfill.
 - (d) Backfill in a manner assuring restoration of the structural integrity of the roadway structure.
 - (e) Shall be done in accordance with permit instructions which in general shall comply with the county road construction standards.
- (2) Untrenched construction may be required for pipelines crossing roads paved with asphaltic concrete or cement concrete and for roads paved with bituminous surface treatment if traffic volume warrants.
- (a) The length of untrenched construction shall extend a minimum of 4 feet from edge of pavement or greater if specified by the engineer, except that 2 foot minimum may be permitted by the county engineer for service connections where conditions warrant.
 - (b) Pipelines installed under a road without disturbing the surface shall be made using a technique approved by the county engineer.
 - (c) Overbreaks, unused holes, or abandoned casings shall be backfilled as directed by the county engineer.

WAC 136-40-308 _____ COVER.

- (1) The grade of the top of the pipe within the right of way shall comply with the applicable design standards for underground utility location but should not be less than 30 inches below the pavement surface, except that 24 inch cover may be permitted where the pipe is laid in consolidated rock and except that lesser cover may be permitted for service connections.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 11 OF 19

- (2) Where less than minimum cover is made necessary to avoid obstacles, the pipe should either be rerouted or protected with a casing, concrete slab or other appropriate measures acceptable to the county engineer.
- (3) Cover for pipelines carrying transmittants which are flammable, corrosive, expansive, energized, or unstable shall not be reduced below safety limits as specified in the appropriate industry standards and specifications.

WAC 136-40-312 _____ ENCASEMENT.

- (1) Casings shall be required for the following conditions:
 - (a) Pipeline crossings where casing is required by appropriate industry code or special conditions.
- (2) Casings may be required where not covered by industry codes for the following conditions:
 - (a) As an expediency in the insertion, removal, replacement or maintenance of carrier pipe crossings of locations where it is necessary in order to avoid open trench construction.
 - (b) As protection for carrier pipe from external loads or shock, either during or after construction of the road.
 - (c) As a means of conveying leaking fluids or gases away from the area directly beneath the traveled way to point of venting at or near the right of way line or to a point of drainage in the road ditch or a natural drainage way.
 - (d) Jacked or bored installations of coated carrier pipes, except where assurance is provided the county engineer that there will be no damage to the protective coating.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 12 OF 19

- (3) Casing pipes shall extend beyond the toe of fill slopes, back of ditch line, or outside of curb an adequate distance to protect the roadway.
- (4) 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 should be composed of materials of sufficient durability to withstand any conditions to which they may normally be exposed.

WAC 136-40-316 _____ UNCASED CARRIERS.

- (1) The carrier pipe shall conform to the material and design requirements of the utility industry and government codes and specifications.
- (2) 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 pressures.
- (3) Suitable bridging, concrete slabs, or other appropriate measures as approved by the county engineer shall be used to protect existing carrier pipes which by reason of shallow bury or location makes them vulnerable to damage from road construction or maintenance operations.
- (4) Existing carrier pipelines may remain in place without further protective measures if they are of adequate depth and do not conflict with road construction or maintenance and provided the county engineer and the utility officials agree that the lines are, and will remain, structurally sound and operationally safe.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 13 OF 19

WAC 136-40-320 APPURTENANCES.

- (1) Vents may be required for casings, tunnels and galleries enclosing carriers of fuel. When required by industry codes, vent standpipes should be located and constructed so as not to interfere with maintenance of the road nor to be concealed by vegetation; preferably they should stand by a fence or on the right of way line.
- (2) Drains shall be required for casings, tunnels, or galleries enclosing carriers of liquid, liquified gas or heavy gas. Drains may outfall into the road ditch or natural water course at locations approved by the county engineer. The outfall should not be used as a wasteway for purging the carrier unless specifically authorized by the county engineer and appropriate state agencies.
- (3) Marker locations and emergency information shall be conspicuously marked for all transmission lines carrying transmittants which are flammable, corrosive, expansive, energized or unstable, using color if necessary to contrast with the environment. They generally should be provided at one end of a normal crossing, at both ends of an oblique crossing and at 500 foot intervals along a longitudinal installation. Markers shall include pipeline identification and station; owner of the pipeline; and telephone number or other means of contact with a local office. Markers may also include cover, size, pressure and contents of carrier, and potential of ducted wires and cables. Other pipelines shall be similarly identified when required by the county engineer.
- (4) Manholes should be designed and located in a manner that will cause the least interference to other utilities or future road expansion. Where practicable, installations in the pavement or shoulders, particularly at intersections, should be avoided.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 14 OF 19

- (5) Shut-off valves should be installed in the line at or near ends of structures and or near unusual hazards, unless the hazardous segments can be isolated by other sectionalizing devices within a reasonable distance.

WAC 136-40-324 _____ ADJUSTMENT OF EXISTING FACILITIES.

- (1) Notwithstanding reinforcement or protection otherwise provided, the road construction or utility construction contractor shall be responsible for the security of each existing pipeline and utility within the construction zone. Where there are unusual utility hazards or where heavy construction equipment will be used, the contractor shall provide adequate temporary protection. In replacing the roadway, the design should give due consideration to the protection of previously existing utilities in the roadway section without sacrificing the geometrics of roadway design.

WAC 136-40-400 OVERHEAD POWER AND COMMUNICATION LINES _____
TYPE OF CONSTRUCTION.

Single pole construction and joint use of the pole is generally desirable and should be used whenever feasible.

WAC 136-40-404 _____ VERTICAL CLEARANCE. The vertical clearance for overhead power and communication lines above the road and the lateral and vertical clearance from bridges shall conform with the State Department of Labor and Industries "Electrical Construction Code," and as shown below:

<u>Type of Utility Line</u>	<u>Lines Crossing Roadways</u>	<u>Longitudinal</u>
Communications	18'	14'
Electrical		
0-750 Volts	18'	15'
751 - 15,000 Volts	20	18
15,000 - 50,000 Volts	22	20

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 15 OF 19

- (1) The minimum height of a road crossing shall be measured from the lowest portion of the line crossing the road.
- (2) The minimum height of longitudinal lines shall be measured from the ground line.
- (3) All clearances shall be at State Electrical Construction Code temperature and loading standards, and comply with all other requirements of this code.

WAC 136-40-408 _____ **HORIZONTAL CLEARANCE.**

- (1) Roadsides should be as free as practicable from physical obstructions. Poles or other ground mounted facilities should be located as far from the pavement edge as practicable and shall not be closer to the traveled way than existing natural or physical obstructions where the safety of the highway user would be adversely affected by the location.
- (2) Guy wires to ground anchors and stub poles should not be placed between a pole and the traveled way unless approved by the county engineer.

WAC 136-40-412 _____ **IRREGULAR RIGHT OF WAY.** Where irregular shaped portions of the right of way extend beyond the normal right of way limits, variances in the location from the right of way line should be allowed as necessary to maintain a reasonably uniform alignment for longitudinal overhead and underground installations.

WAC 136-40-416 _____ **AESTHETIC CONSIDERATIONS.**

- (1) No new installation of overhead communication or power lines shall be permitted within areas of scenic beauty or on rights of way through or adjacent to scenic strips, viewpoints, rest areas, recreation areas, public parks, or historic sites, except as provided in Section (2) below.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 16 OF 19

- (2) Overhead installations of electric power lines and communication lines may be permitted in those areas listed in Section (1) above only when the following conditions exist concurrently:
- (a) Where other utility locations are not available or are unusually difficult and unreasonably costly, or are more undesirable from the standpoint of visual quality.
 - (b) Where the placing of the utility underground is not technically feasible or is unreasonably costly.
 - (c) Where the proposed installation can be made at a location and will employ suitable designs and materials which give adequate attention to the visual qualities of the area being traversed.
- (3) All utility installations shall be designed and constructed to minimize any adverse effect on existing roadside vegetation and other natural or man made amenities.

WAC 136-40-500 UNDERGROUND POWER AND COMMUNICATION LINES
GENERAL

The general controls relative to pipelines shall apply to underground installations of power and communication lines. Conventional plowed in installation of electric power and communication cable will be permitted when specifically approved by the county engineer.

WAC 136-40-504 _____ DESIGN. The design of underground installations should reflect consideration of possible future road and/or utility enlargement.

WAC 136-40-508 _____ MANHOLES. Manholes shall be designed and located in such a manner that will cause the least interference to other utilities and future road expansion.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 17 OF 19

WAC 136-40-512 _____ **SCENIC AREAS.** New underground utility installations may be permitted in scenic strips and overlooks where they will not require extensive removal or alteration of trees visible to the road user or impair the visual quality of the lands being traversed.

WAC 136-40-600 **INSTALLATIONS ON BRIDGES** _____ **GENERAL.** Attachment of utility lines to a bridge may be allowed where such attachment conforms to sound engineering considerations for preserving the road, its safe operation, maintenance and appearance.

Each proposed attachment should be considered on its individual merits and separately designed so as to be compatible with the appearance of the bridge. In the design of new structures consideration should be given to provision of internal utility carriers to accommodate present and potential utility installations.

Attachment of a utility should not be considered unless the bridge in question is of a design that is adequate to support the additional load and to accommodate the utility facility without compromise of road features.

WAC 136-40-604 _____ **LOCATION.** Generally, utility attachments should be beneath the bridge floor, between the girders or beams or within a cell and at an elevation above low superstructure steel or masonry. Attachment to the outside of a bridge should be avoided where there are reasonable alternatives.

Utility location on a bridge which would inhibit access to any structural part for painting, repair or maintenance should not be allowed. Manholes for utility access should not be allowed in the bridge deck on overcrossings.

WAC 136-40-608 _____ **CLEARANCE.** The utility attachment shall not effectively reduce the clearance of the bridge where such clearance is critical.

WAC 136-40-612 _____ **MOUNTING.** Acceptable utility attachment methods are hangers and/or roller assemblies suspended from inserts in

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 18 OF 19

the underside of the bridge floor or from hanger rods clamped to the flange of some substructure member or as otherwise specified or approved by the county engineer.

Utility mountings should be of a type which will not create noise resulting from vibration.

WAC 136-40-616 _____ **POWER AND COMMUNICATION LINES.** Communication and electric power line attachments shall be suitably insulated, grounded, and should be carried in protective conduit or pipe from point of exit from ground to reentry. The cable shall be carried beyond the backwall of the bridge.

WAC 136-40-620 _____ **BEYOND ABUTMENTS.** The hole created in the bridge abutment shall be of the minimum size necessary to accommodate the utility line. The hole shall be sealed to prevent any leakage of water or backfill material.

The utility line back of the bridge abutment should curve or angle out to align outside the road area in as short a distance as is operationally practicable.

WAC 136-40-624 _____ **RESPONSIBILITY.** The utility shall be responsible for any restoration or repair of any portion of bridge or road disturbed by the utility installation or use.

WAC 136-40-700 **ALL UTILITIES** DRAINAGE. Care shall be taken in utility installations to avoid disturbing existing drainage facilities. Underground utility facilities should be backfilled with pervious material and outlets provided for entrapped water. Underdrains shall be provided where necessary.

WAC 136-40-704 _____ **RESTORATION.** The size of the disturbed area shall be kept to a minimum. Restoration methods shall be in accordance with the specifications and/or special provisions of the construction permit. Unsatisfactory restoration work shall be promptly redone by the utility. If not, the work may be redone by the county and billed to the utility.

STANDARDS OF GOOD PRACTICE FOR COUNTY ROAD DEPARTMENTS	WAC 136	CHAPTER	40
	REGARDING ACCOMMODATION OF UTILITIES ON COUNTY ROAD RIGHT OF WAY		
COUNTY ROAD ADMINISTRATION BOARD	DATE ADOPTED : 7/9/71		PG. 19 OF 19

WAC 136-40-708 _____ VEGETATION. The indiscriminate cutting of trees or disfiguring of any feature of scenic value shall not be permitted. The utility shall repair or replace in kind any tree or shrub removed or disfigured when such is not necessary for the utility installation.

If chemical sprays are used to kill weeds and brush, they shall comply with currently applicable Federal and State regulations.

WAC 136-40-712 _____ DEBRIS. Refuse and debris shall be disposed of to the satisfaction of the county engineer.

WAC 136-40-800 PUBLIC SAFETY _____ TRAFFIC CONTROL. Traffic controls including detours for utility construction and maintenance shall conform with the currently applicable "Manual on Uniform Traffic Control Devices for Streets and Highways" and/or "Manual for Emergency Traffic Control for Protection of Men and Equipment". The utility shall confine its operations as much as possible to the nontraveled portion of the right of way and all construction and maintenance activities shall be planned to keep interference with traffic to an absolute minimum. On heavily traveled roads, operations interfering with traffic shall not be allowed during periods of peak traffic flow. Work shall be planned so that closure of intersecting streets, road approaches or other access points is held to a minimum.

WAC 136-40-804 _____ OPEN EXCAVATION. Adequate provisions shall be made to safeguard any open excavation including barricades, lights, flagmen or other protective devices as may be necessary.

WAC 136-40-808 _____ MAINTENANCE. All utility facilities shall be kept in a good state of repair both structurally and from the standpoint of appearance.

WAC 136-40-812 _____ EMERGENCIES. If emergency repairs are required to the right of way, such repairs shall be undertaken immediately and approval, as to the manner of final repair and restoration, secured during the next regular working day.