

*WARREN COUNTY BOARD OF SUPERVISORS
WARREN COUNTY HIGHWAY DEPARTMENT
VICKSBURG, MS*

**Policy for the Accommodation of Utility Facilities
Within the Rights-of-Way
of all Public County Roads**

Warren County Board of Supervisors

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DIVISION 1

SECTION 1 GENERAL PROVISIONS

1.1 PURPOSE:

The purpose of this Policy is to regulate the installation of utility facilities within the rights-of-way of the County-Federal Aid, State Aid Systems roads, and other public roads of Warren County, Mississippi. The County has the responsibility to maintain its highway rights-of-way in such a manner as will preserve the integrity, safety and function of the highway facilities. Since the manner in which utilities cross or otherwise occupy highway rights-of-way can affect the appearance, safety, and maintenance of the highway, it is necessary that such use and occupancy be authorized and reasonably regulated.

1.2 APPLICATION:

This Policy applies 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 accommodated, adjusted, or relocated within the rights-of-way on the County-Federal Aid and State Aid Systems roads. The Board will also apply this Policy to those County roads not on the Federal Aid and State Aid Systems. Such utilities may involve underground or overhead facilities, either singularly or in combination.

1.3 SCOPE:

This Policy provides for regulating the future location, design and methods of installing, adjusting, and maintaining utilities within the rights-of-way of the County-Federal Aid and State Aid Systems roads, as well as all other County roads rights-of-way. It does not alter those regulations governing the location, relocation and/or adjustment of utility facilities previously authorized by the Board of Supervisors. It is limited to matters which are the responsibility of the highway authorities of the County and State for preserving the integrity of the highways and their safe operation.

Where state laws or the orders of the Board of Supervisors or thither public authorities or industry codes prescribe a higher degree of protection than provided by this Policy, then the higher degree of protection shall prevail.

SECTION 2 DEFINITION OF TERMS

- 2.1** The following terms contained in this Policy or in related and supplemental documents, instruments, and/or permits shall be interpreted as follows:

APPLICANT: Any utility company, association or individual receiving a permit from the Board of Supervisors to locate, relocate, adjust and maintain its utility facilities within the County highway rights-of-way.

BACKFILL: The replacement of soil around and over a pipe or conduit.

BEDDING: The organization or soil to support a pipe.

BOARD: The Board of Supervisors of Warren County.

BOND: The approved form of security furnished by the applicant and its surety, if required, as a guaranty of good faith and ability on the part of the applicant to execute the work and maintenance in accordance with the terms of the permit and the specifications included in this Policy.

BURY: Depth of the top of pipe below the grade of roadway or ditch.

CAP: Rigid structural element surmounting a pipe.

CARRIER: A pipe directly enclosing a transmittal fluid (liquid or gas).

CASING: A larger pipe enclosing a carrier pipe.

CLEAR ROADSIDE POLICY: The policy employed by highway authorities to increase safety, improve traffic operations, and enhance the appearance of highways by designing, constructing, and maintaining highway roadsides as wide, flat, and rounded as practicable and to eliminate physical obstructions above the ground, such as trees, drainage structures, sign supports, utility poles, and other ground-mounted obstructions.

COATING: Material applied to or wrapped around a pipe.

CONVENTIONAL HIGHWAY: An arterial highway without access control.

CONDUIT OR DUCT: An enclosed tubular runway for protecting wires or cables.

COUNTY: That area of land, designated by law, under the jurisdiction of the County Board of Supervisors.

CRADLE: Rigid structural element below and supporting a pipe.

CROWN: The vertical rise between the edge of the road (shoulder line) and the center of the road.

CROWN WIDTH: The horizontal distance between the shoulder lines of the road.

DIRECT BURIAL: Installing a utility facility underground without encasement.

DRAIN: Appurtenance to discharge liquid contaminants from casings.

ENCASEMENTS: Structural element surrounding a pipe.

ENCROACHMENT: Authorized or unauthorized use of highway rights-of-way or easements, as for signs, fences, buildings, etc.

ENGINEER: The County Engineer employed by the Warren County Board of Supervisors in accordance with law and acting under the rules and regulations of the Policy and the approval of the State Aid Engineer.

FLEXIBLE PIPE: a plastic, fiberglass or metallic pipe having large ratio of diameter to wall thickness which can be deformed without undue stress.

GALLERY: An underpass for two or more pipelines.

GROUNDING: Connected to earth or to some extended conducting body which serves instead of the earth, whether the connection is intentional or accidental.

GROUT: A cement mortar or a slurry of fine sand or clay, as conditions govern.

HIGHWAY, STREET OR ROAD: A general term denoting a public way for the purpose of vehicular travel, including the entire area within the right-of-way.

JACKET: Encasement by concrete poured around a pipe.

MANHOLE: An opening in an underground system which workmen or others may enter for the purpose of making installations, inspections, repairs, connections and tests.

MEDIAN: The portion of a divided highway separating the traveled way for traffic in opposite directions.

MATERIALS: Any specified substance, manufactured items or raw materials used in the utility facility construction.

NORMAL: Crossing at a right angle.

OBLIQUE: Crossing at an acute angle.

OVERFILL: Backfill above a drainage structure above natural ground.

PAVEMENT STRUCTURE: The combination of sub base, base course, and surface course placed on the sub grade to support the traffic load and distribute it to the roadbed.

PERMIT: The permission, in written form, issued by the Warren County Board of Supervisors through its authorized representative to the applicant to proceed with the utility facility location, relocation, and/or adjustment within the highway rights-of-way under the provisions of this Policy.

PLANS: The proposal of the applicant to do certain utility work within a highway right-of-way, including working drawings showing the location, character of work, dimensions, and details of the work proposed.

PIPE: A tubular product made as a production item for sale as such. Cylinders formed from plate in the course of the fabrication of auxiliary equipment are not pipe as defined here.

PRESSURE: Relative internal pressure in PSIG (pounds per square inch gauge).

PROJECT: Specific construction within a highway right-of-way for which a permit is sought by the applicant.

RIGHT-OF-WAY: The land conveyed, reserved, secured, dedicated, acquired, or used for highway or street purposes.

RIGID PIPE: A welded or bolted metallic pipe or reinforced, prestressed, or pretensioned concrete pressure pipe designed for diametric deflection of less than 1.0 percent.

ROADBED: The graded portion of a road, between the intersection of top and side slopes, upon which the pavement structure and shoulders are constructed.

ROADSIDE: A general term denoting the area adjoining the outer edge of the roadway.

ROADWAY: The portion of a highway, including shoulders, for vehicular use.

SEMI-RIGID PIPE: A large diameter, metallic pipe designed to tolerate diametric deflection up to 3.0 percent.

SIDEFILL: Backfill alongside a pipe.

SHOULDERS: That portion of roadway contiguous with the traveled way for accommodating stopped vehicles and for lateral support of the base and surface courses.

SLEEVE: A short casing through a pier or abutment of a highway structure.

SPECIAL PROVISIONS: Specific directions and provisions additional to the specifications included in the Policy and made a part of the permit, setting forth conditions or requirements peculiar to the permit or project and which govern over said specifications.

STATE AID ENGINEER: The Engineer who is responsible for administering the State Aid Road Program as provided for in Section 8035-02, Mississippi Code of 1942, Recompiled, as amended.

SUBGRADE: That portion of the roadway prepared as foundation for the sub base, base, and pavement structure. The sub grade may be considered as part of the sub base structure when treated with appropriate additives.

SURETY: That corporate body, qualified under the laws of Mississippi, which is bound with and for the applicant for acceptable performance of the project construction and maintenance.

TRAVELED WAY: That portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

TRENCHED: Installed in a narrow open excavation.

UNTRENCHED: Installed without breaking ground or pavement surface, such as by jacking or boring.

USE AND OCCUPANCY AGREEMENT: The document by which the Warren County Board of Supervisors regulates and gives approval of the use and occupancy of County highway right-of-way for utility facilities.

UTILITY: Any public or private company, whether owned by a person, partnership, district, association or corporation, including, but not limited to, operating an electric, telephone, radio, cable, telegraph, gas, oil, water, or sewer transmission or distribution, proposing to construct or adjust its lines within the right-of-way of a County highway or street. A utility shall include any contractor or subcontractor, or other person proposing to perform work for the applicant within a County highway right-of-way. The words "Applicant" and "Utility" mean the same in the Policy.

VENT: An appurtenance to discharge gaseous contaminants from casings.

WALLED: Partially encased by concrete poured alongside the pipe.

SECTION 3 GENERAL CONSIDERATIONS

3.1 LOCATION AND TRAFFIC CONTROL:

A. Utility lines shall be located in such manner as to minimize the need for later adjustments, to accommodate future highway improvements and to permit access for servicing such lines with minimum interference to highway traffic.

B. Longitudinal installations shall be located on reasonably uniform alignment and as near as practical to the right-of-way line so as to provide a safe environment for traffic operation and to preserve space for future highway improvements or other utility installations.

C. Utility line crossings of the highway shall cross on a line generally perpendicular to highway alignment to the maximum practical extent.

D. The proposed horizontal and vertical dimensions and clearances for the various types of utilities must be clearly shown on the plans or stated in the agreement between the Board and the Utility.

E. Utility lines shall be installed within the rights-of-way in such manner and at such locations as will provide the maximum roadside clearance from the edge of the traveled way. Normally the installations will be at or near the backside of the right-of-way and shall be a minimum of thirty (30) feet from the edge of the traveled way where the right-of-way width and typical cross section will permit.

F. No part of the utility (fire hydrants, valve boxes, poles, etc.) shall be placed in the right-of-way which adversely affects the maintenance and function of the roadway, shoulders, ditches, or back slopes.

G. All trenches and disturbed areas of construction shall be backfilled and thoroughly tamped in lifts not to exceed six inches (6"). Disturbed areas of construction will be dressed and resodded to restore the area to original condition of natural growth. When buried utilities are located less than five (5) feet outside of the shoulder of the roadway the utility must provide certified compaction reports that confirm that a trench compaction of 95% standard proctor density has been achieved or must install flowable fill as directed by the Engineer or Road Manager.

H. At no time shall the utility or its agents place any material in the roadway. In addition, the utility shall take the appropriate measures to protect the roadway from any damage or contamination during its operations.

I. Existing County facilities (traffic control devices, riprap, culverts, geotextiles, roadways, shoulder, ditches, etc.) shall not be removed, relocated, disturbed, or damaged by the utility without prior written permission. In the event traffic control devices are compromised in any way, the Road Manager shall be notified immediately in order to protect the traveling public. In those cases where county facilities are compromised by the utility or its agents, the County may at its discretion perform the necessary repairs and replacements and bill the Utility for personnel and equipment time, material costs, and administrative fees.

J. Control of Traffic: Traffic controls for Utility construction and maintenance operations should conform with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways. All construction and maintenance operations should be planned with full regard to safety and to keep traffic interference to an absolute minimum. Prior to performing any maintenance or construction work in the right-of-way the Utility shall certify by letter that they will adhere to the guidelines of the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways.

K. Servicing, Maintenance and Repairs: All Utility facilities shall be kept in a good state of repair both structurally and from a standpoint of appearance. The Utility use and occupancy agreement shall identify maintenance operations which are permitted and indicate situations where prior notification to the Board is required.

L. Utilities will be required to place on deposit with the Board funds sufficient to reasonably repair the damage their work could cause. The Engineer, or his representative, shall be responsible for determining the amount of funds to be placed on deposit and shall make this recommendation to the Board as part of the permit application approval process. Those utilities which are based in Warren County and/or have a continual significant business office in operation in Warren County may request that this requirement be waived. In the event that the utility does not perform the work necessary to restore the County right-of-way in a proper and timely manner the County may perform the work and bill the utility for personnel and equipment time, materials, and administration fees, necessary to properly restore the site. The required deposit shall be retained by the County until the statement rendered for such force account work is paid in full. If the statement for such work is not paid in full within thirty (30) days' receipt thereof, the full deposit shall be forfeited to the County. Further, failure to perform the work necessary to restore the County right-of-way in a proper and timely manner may result in unfavorable consideration of future permit requests by the utility.

M. The Utility must maintain a complete copy of the approved permit on site while any work is being performed. Any violations or nonconformance with the *County Policy For The Accommodation Of Utility Facilities Within The Rights-Of-Way Of All Public County Roads* may result in the voiding of the permit at which time the utility will be responsible for ceasing its construction efforts and returning the affected areas to a safe and functional condition.

N. The Utility shall warrant its work for a period of not less than one year from day of completion as documented by the Utility in letter form to the Engineer. On projects of a significant nature, as determined by the Engineer, a certificate from a licensed professional engineer stating that the work is complete and is in accordance with the approved permit and plans will be required.

O. Any Utility or individual performing work within the County right-of-way limits without the proper County permit having been acquired or without the County permit or the County permit number on site will be subject to a fine of not less than \$500 (five hundred dollars) and not more than \$5000 (five thousand dollars). Any utility or individual violating this Policy in any way will be subject to a fine of not less than \$500 (five hundred dollars) and not more than \$5000 (five thousand dollars).

3.2 PLANS AND DESIGN:

The Utility and its Engineer shall be responsible for the design and development of plans for the proposed installations and/or adjustments.

The Engineer, acting as the duly authorized representative of the Board, shall be responsible for the review of plans and design of utility installation to determine if they meet the requirements set out in this Policy and shall approve or disapprove the permit request based on the information presented.

All utility installations shall meet the following minimum requirements:

A. Electrical power and communication lines shall conform to the National Electrical Safety Code.

B. Water lines shall conform to the specifications of the American Water Works Association.

C. Pressure pipe lines shall conform with current applicable sections of the appropriate codes in Standard Codes for Pressure Piping and applicable industry codes.

D. Sewer lines shall conform with the appropriate ASTM specifications. They shall be pressure tested and certified that they are properly constructed to insure the integrity of the system to the satisfaction of the Engineer.

E. Traffic controls for Utility construction and maintenance operations shall conform with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways. All construction and maintenance operations should be planned with full regard to safety and to keep traffic interference to an absolute minimum. The traffic control plan shall be submitted with the permit application.

3.3 APPLICATION FOR PERMIT:

The Utility shall request a permit to make a specific installation of its facilities within the public road rights-of-way. The request must be submitted on forms obtained from the County Permitting Office, the Road Manager, or the Engineer or other duly authorized representative of the Board, together with detailed sketches and drawings showing the proposed installation. The completed permit forms shall be submitted to the County Permit Office.

The Engineer will review the permit application and if found to meet the requirements of this Policy, and sound engineering practice, will approve the permit application for the Utility construction, or proposed adjustment. When approved, a copy of the approved permit will be furnished to the Utility and one copy retained by the Engineer and the Road Manager.

3.4 BOARD'S JURISDICTION OVER COUNTY ROADS:

The Board of Supervisors of a County has legal jurisdiction of all county roads, and nothing in this Policy is intended to limit that authority.

The Board has authorized its duly appointed Engineer, or other designee, to regulate the manner in which utility facilities are located within the public road rights-of-way, subject to the rules and regulations of the Policy.

3.5 PROSECUTION AND PROGRESS OF THE WORK:

The Board and Engineer will not recognize any contractor, subcontractor, agent, or employee on the project except as a direct representative of the Utility named in the application. The Utility shall be fully responsible for the work performed under the specifications included in this Policy.

The control of proposed work to be done on the county highway public road rights-of-way, especially underground installations, will be staked or painted by the Utility engineering personnel to facilitate inspection by the Engineer prior to installation. Horizontal clearance for the new underground installations shall be sufficient to avoid a conflict with a previously installed utility to prevent interruption of service.

No work on installation and/or adjustments of utility facilities shall be performed until the permit has been approved and executed by the Board and until the Engineer has been given at least a 24 hour advanced notice. When there is a break in the work effort the Utility shall give notice to Engineer 24 hours before resuming work. During the prosecution of the permitted work the Utility shall be responsible for regular inspection of the site to insure that the work is being performed in a safe manner in compliance with the permit and the associated plans, sketches, and specifications.

The Board and Engineer or other designee may require certain phases of the work to be completed first and shall at all times have authority to regulate the progress of the work within the rights-of-way when deemed to be in the public interest, welfare, or safety. Neither the Board, the engineer nor their representatives is responsible, in any way, for the safety of Utility workers. The Utility shall have its own safety procedures and rules in place to properly protect its employees, contractors, subcontractors, agents, and the public.

3.6 UTILITIES RESPONSIBILITY TO THE PUBLIC:

The Utility shall observe and comply with all ordinances and regulations affecting those engaged or employed in the work. The Utility shall also conduct its operations so as to offer the least possible obstruction and inconvenience to the traveling public. The Utility shall provide and maintain, as far as practicable, convenient access to driveways, houses and buildings along the right-of-way under construction, and shall keep the road open, provide barricades, warning signs, lights, flagmen and other safety devices as needed to warn the traveling public that construction is in progress.

The Utility shall take into consideration other Utilities having facilities within the rights-of-way and shall take precautions not to damage or interfere with such property or the use thereof.

3.7 EXCEPTIONS:

A. **EMERGENCY REPAIRS:** Whenever breaks, leaks or other abnormal occurrences interrupt Utility services, the Utility may restore such services without securing a permit but shall perform such work in such manner as will do the least possible damage to the highway facility and as will create the least possible safety hazard to the traveling public. The Utility shall notify the Board or Road Manager of such emergency repairs immediately or notify 911 dispatch if the repair takes place before 8:00 a.m. or later than 5:00 p.m. Monday through Friday or on the weekend. After the personnel and equipment time, materials, and administrative fees required to properly perform the repair work. Where new installations are to be made across a paved highway such new installations shall be made by a jacking or boring process and shall be encased as provided in Sections 4.2 and 5.3 of this Policy. All work involving County rights-of-way, including emergency work, shall be performed in accordance with the most recent edition of the Manual on Uniform Traffic Control Devices.

B. **OVERHEAD SERVICE AND SUPPLY LINES:** Work on overhead facilities and supply lines which do not require trenching, excavating or erecting poles or structures within the rights-of-way may be installed by the Utility without a permit, provided such installation does not conflict with the provisions of this Policy, interfere with traffic in any way, or endanger the public.

C. **UNDERGROUND SERVICE LINES (drop wires):** Connections from pedestals or poles located along the right-of-way line to customers' businesses or homes may be made without a permit form, providing the cables are not installed under a paved road.

D. **THE REPLACEMENT OF EXISTING POLES:** Prior to replacing existing poles located within the right-of-way the Utility shall notify the Engineer by letter or fax five (5) working days prior to the relocation so that the pole can be evaluated with consideration to sight-distance. If a different location is more suitable the Engineer will notify the Utility so that the adjustment can be made.

**DIVISION II
CONSTRUCTION DETAILS**

**SECTION 4
POWER AND COMMUNICATION LINES**

4.1 OVERHEAD POWER AND COMMUNICATION LINES:

A. Location and Alignment:

- (1) All overhead or aboveground facilities, including poles, meters, entrance boxes, connectors, and other devices should be located as near the right-of-way line as is practicable. When the right-of-way is of sufficient width to accommodate same, poles for overhead lines should be not less than thirty feet (30') from the edge of the traveled way.
- (2) Where irregular shaped areas of the rights-of-way extend beyond the normal right-of-way limits, the location of the utility facility should be such as will provide a reasonably uniform alignment.
- (3) Guy wires and cables to ground anchors are not to be placed between the pole and traveled way where they will encroach upon clear roadside or maintenance areas.
- (4) Longitudinal installations of overhead facilities should be limited to single-pole type construction. Where more than one type of overhead facility is to be accommodated, joint use of single pole construction should be encouraged.

B. Vertical Clearances:

- (1) The minimum vertical clearance of overhead lines shall be adequate to fully insure the safety of the public, and shall conform to all applicable codes, standards, and specifications.

4.2 UNDERGROUND POWER AND COMMUNICATION LINES:

Underground facilities shall be installed by accepted methods and practices and shall conform to all applicable codes, standards, and specifications.

A. Location and Alignment:

(1) Longitudinal Installations:

The underground facilities shall be located parallel to and adjacent to the right-of-way line so as to minimize interference with drainage and maintenance of the roadside area.

In special cases where it is not feasible to locate the facility adjacent to the right-of-way line, the Board and Engineer may approve an alternate location. When this location is less than five feet outside of the shoulder of the roadway the Utility must provide compaction reports that confirm trench compaction of 95% standard proctor density has been achieved or must install flowable fill to within six inches (6") of the top of the trench.

- (2) Pedestals or other underground utility appurtenances installed as a part of the buried cable facility shall be located outside of the highway maintenance area.

- (3) Road crossing installations should be located at right angles to the roadway.
- (4) Roadway structures (culverts, boxes, etc.) are not to be used for road crossing installation.
- (5) Unsuitable locations for underground road crossing installations such as in deep cuts, near bridge footings, across intersections at grade, at cross drains, and in rocky terrain should be avoided.
- (6) All installations crossing hard surfaced or paved roads must be accomplished by **jacking or boring**. The cutting of the base and pavement structures by the open trench method will not be permitted.

B. Depth of Bury

- (1) Longitudinal lines should be installed at a depth of bury of not less than 24 inches below the ground surface where such installations are made outside of cut, ditch, or fill slope areas.
- (2) Where longitudinal lines are placed within cut, ditch, or fill slope areas, the depth of bury shall be not less than 36 inches below the ground surface.
- (3) Underground installations of road crossings should have a depth of bury of at least four feet (4') below the road surface, and/or three feet (3') below ditch bottom.

C. Encased and Unencased Construction:

- (1) Electric power or telephone cables must be encased when required by applicable codes and standards governing that particular Utility. Encasement of all lines is encouraged for maintenance reasons, since the cutting of the pavement, base and subbase for maintaining or replacing the cables will not be permitted.
- (2) Unencased cable crossings should be limited to small bores where soil conditions permit boring a hole about the same size of the cable and pulling the cable through.
- (3) Where underground road crossing lines are encased in protective conduit, the encasement should extend a minimum of five feet (5') beyond the toes of slope or to the ditch line. Where appropriate, the encasement should extend to a point outside of construction limits to allow for future widening of the highway facility.
- (4) Where unencased bored installations are proposed, the Utility shall furnish information as to controls and construction methods to be employed before the proposed installations are considered by the Board.

4.3 ATTACHMENT OF UTILITY FACILITIES TO BRIDGES:

General: The Attachment of utility lines to bridges should be avoided where it is feasible and reasonable to locate the utility lines elsewhere. However, where other locations prove to be extremely difficult and unreasonably costly, consideration will be given to allowing the utility line to be attached to a bridge structure by a method acceptable to the Board, the Engineer and the State Aid Division of the Mississippi Department of Transportation if applicable. Such consideration shall conform to logical and sound engineering principles for preserving the highway structure, its safe operation, maintenance, and appearance. Permission for utilities to be attached to bridges will be obtained thru the normal permit process. The following provisions should be adhered to:

- A. Each proposed bridge attachment shall be considered on its merits and shall be separately designed. Such attachment will not be considered unless the structure in question is of a design that is adequate to support the utility facility without compromise of highway features, including reasonable ease of bridge maintenance.
- B. Utility facility mountings must be of a type that will prevent rattling of the lines under traffic vibrations.
- C. Utility installations that would reduce the vertical clearance - otherwise available - above streams, pavements, or rails will not be permitted.
- D. On pipe lines carrying liquids, gases, and other petroleum products, the utility company shall be responsible for designing the lines so as to eliminate the need for encasement. The lines shall also be designed and attached in such a manner as will prevent corrosion to the concrete and steel member of the bridge.
- E. Proposed bridges may be designed over and above normal standards to carry the additional loading of utility lines, provided the additional costs involved are borne by the Utility.
- F. At no time shall the Utilities run temporary or permanent pipes or cables on any part of a bridge without prior written approval.

SECTION 5

PRESSURE PIPELINES CARRYING GASES OR LIQUIDS

5.1 DESIGN:

The Utility is responsible for the design of its facilities in accordance with all applicable codes, standards, and laws. The Engineer, as the authorized agent of the Board, is responsible for the manner in which the facilities are located on the County public road right-of-way, including measures to be taken to preserve the safe and free flow of traffic, structural integrity of the highway, and ease of maintenance.

5.2 LOCATION AND ALIGNMENT:

- A. Pipeline crossings of the highway should be located at right angles to the center line unless practicality and economics warrant and dictate angles of crossing of less than ninety degrees.
- B. Unsuitable pipeline crossings - such as in deep cut, near bridge or retaining wall footings, across intersections at grade, or near cross-drains - should be avoided.
- C. Longitudinal installations should be located generally parallel to and as near the right-of-way line as is practicable so as to minimize interference with drainage and to preserve the integrity of the pavement, shoulders, and slopes, and to promote safety for the traveling public.
- D. Plastic (or vinyl) type pipe used for the mains and service connections of water distribution systems and sanitary sewer force mains shall be taped or wrapped with a single strand of No. 12 plastic coated wire to serve as a means of locating the lines in the future by means of electrical devices.

5.3 ENCASEMENT FOR CARRIER PIPE PROTECTION:

The Board's responsibility pertains primarily to the safety and convenience of the traveling public. The Utility is responsible for the quality and safety of the installation, including non-encased construction, when permitted. The following provisions shall govern:

A. Encased Pipe for Road Crossing:

- (1) Encasement is recommended for all pipe installations across paved or hard-surfaced roads, where feasible, as a means of avoiding open trench construction and as a protection of carrier pipe from external loads or shocks.
- (2) All coated carrier pipes are to be encased.
- (3) All lines carrying gases or liquids shall be encased.
- (4) Lines with less than minimum bury, near footings of bridges and structures, across unstable or subsiding ground, or near other hazards must be encased. All encasements shall be of such design as will support the loads to which they are subjected and shall be of such materials as will be durable under conditions to which they may be exposed.
- (5) Encasement pipe shall be of sufficient thicknesses as to withstand both external and internal pressures, with minimum as follows:

4 through 10 inches.....0.083 to 0.164 inches wall thickness
12 through 18 inches.....0.104 to 0.188 inches wall thickness
24 through 36 inches.....0.164 to 0.250 inches wall thickness
- (6) Encasement pipe should extend seven feet (7') from the normal shoulder line of the roadway or a minimum of five feet (5') from the toe of the embankment slope. In curb and gutter sections, the encasement shall extend at least to the back of the curbs.
- (7) Encasements shall be sealed at the ends to prevent debris, soil, and moisture from entering the space between the carrier pipe and the casing.

B. Unencased Pipeline Crossings:

Under certain conditions, proposed pipeline crossings may be installed, or existing installations may remain in place, without encasement. The following conditions shall govern in such instances:

- (1) The carrier pipe should conform to the material design requirements of the utility facility and to all governmental codes, specifications, and regulations.
- (2) Carrier pipes shall provide for a higher factor of safety than would normally be required outside of the highway area.
- (3) Existing unencased lines may remain in the place without further protection if they were installed at such depth that will not conflict with future highway construction and maintenance and provided that both the Board and the Utility are satisfied that the lines are structurally sound.
- (4) In the event it is necessary to replace unencased lines under the roadway, new lines will be installed by jacking and boring since the cutting of the pavement and base will not be permitted.
- (5) When encasement under a road crossing is not provided or when an existing installation is to remain in place without encasement, the Utility shall furnish the Board with a Certificate as follows:

CERTIFICATE OF _____ UTILITY COMPANY FOR THE
Unencased Pipeline Crossing

PROJECT NO. _____

NAME OF ROAD _____

COUNTY OF _____

STATION NO. _____

_____ do hereby certify that
(Applicant)
the line at the location noted above carrying _____
(gas, oil, or fuels)
shown in this application will not need encasement and that the operating pressure will be _____
pounds per square inch. This line will be regularly inspected and adequately maintained. Extra yield strength
pipe (will be or was) used in this installation as shown on the sketch or plans for this pipe crossing. Adequate
cover for the pipe is provided.

Certified Correct _____

Title _____

Date _____

5.4 DEPTH OF BURY:

The depth of bury established for these pipeline installations should take into consideration a potential increase in ditch depth, resulting from scour, ditch maintenance operations, or the need to increase the capacity of the ditch. Minimum depths are set out below:

- A. Transmission pipelines shall have a depth of bury of three (3) feet or more below the surface of normal ground outside of cut, ditch, or fill slope areas. Distribution mains may be placed with a depth of bury of three (3) feet or more below the normal ground line in open or rocky terrain, outside or cut, ditch, or fill slope areas.
- B. Lines installed in cut ditches on fairly steep grades shall have a minimum depth of bury of three (3) feet below ditch bottom.
- C. The depth of bury below the proposed pavement or riding surface of the road shall be a minimum of four (4) feet.
- D. Bury of pipelines carrying transmittants which are flammable, corrosive, explosive, energized, or unstable, particularly if the transmittants are carried at high pressure, must not be reduced below safety requirements recommended by the utility industry involved.

5.5 APPURTENANCES:

Pipeline installation appurtenances such as vents, drains, markers, manholes, and shut-off valves must comply with governing specifications, regulations, and codes of the particular utility industry involved. The additional following provisions must be adhered to:

- A. The Utility shall place readily identifiable markers at right-of-way lines where crossed by pipelines carrying transmittants under pressure.
- B. All appurtenances shall be located and constructed in such manner so as not to interfere with the proper maintenance of the highway facility.
- C. No appurtenances shall be place within the pavement area or on the shoulders of the highway. Exceptions may be made on streets in urban areas where manholes, as essential parts of existing lines, are permitted to remain in place.

SECTION 6 MISCELLANEOUS

6.1 CLEANING UP CONSTRUCTION SITE:

The Utility shall remove all temporary construction, rubbish, trash, surplus materials, and equipment within the right-of-way area and shall restore such area to a satisfactory condition. In the event the Utility does not adequately restore the site, the Board may at its discretion perform the necessary work and bill the Utility for personnel and equipment time, materials, and administrative fees.

6.2 RESTORATION AND MAINTENANCE OF VARIOUS ELEMENTS OF THE HIGHWAY FACILITY:

- A. Where the Board permits the installation of utility facilities by the open trench method across a dirt or gravel surfaced road prior to construction of the base and pavement structure, the embankment, surface and sodding must be repaired and/or replaced to a condition satisfactory to the Engineer.
- B. The Utility will maintain the highway facility for such length of time as is set out in the Utility Permit.

6.3 COMPLIANCE WITH UTILITY INDUSTRY CODES AND SPECIFICATIONS:

The specifications and standards set out in this Policy are recommended minimums. Utility industry standards and specifications which are higher than those set out herein shall govern in all cases.

6.4 SCENIC ENHANCEMENT:

The type and size of utility facilities and the manner and extent to which they are permitted along or within highway rights-of-way can materially alter the scenic quality, appearance and view of highway roadsides and adjacent areas. For these reasons additional controls are applicable in certain areas that have been acquired or set aside for their scenic quality. Such areas include scenic strips, overlooks, rest areas, the rights-of-way of adjacent highways thereto and the rights-of-way of sections of highways which pass through public parks and historic sites.

New underground utility installations may be permitted within such lands where they do not require extensive removal or alteration of trees or other natural features visible to the highway user or do not impair the visual quality of the lands being traversed.

New aerial installations should be avoided at such location where there is a feasible and prudent alternative to the use of such lands by the aerial facility. Where this is not the case, they should be considered only where:

- A. Other locations are unusually difficult and unreasonably costly, or are more undesirable from the standpoint of visual quality.
- B. Undergrounding is not technically feasible or is unreasonably costly, and
- C. 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.

These controls should also be followed in the location and design of utility installations that are needed for a highway purpose, such as continuous highway lighting, or to serve a weigh station, rest or recreational area.

PERMIT APPLICATION FOR USE AND OCCUPANCY AGREEMENT FOR
THE CONSTRUCTION OF ADJUSTMENT OF A UTILITY
WITHIN ROAD OR HIGHWAY RIGHT-OF-WAY

FACILITY ALONG OR ACROSS _____ COUNTY ROAD

PROJECT NO. _____ WARREN COUNTY

UTILITY NAME _____ BY _____
 (Company Title)

ADDRESS _____ herein called APPLICANT

Proposes to construct a _____ Utility Facility

Along or across _____ County Road, said facility to be

Installed between _____ and _____ Of Project No.

_____ and within road or highway right-of-way, and hereby makes application to the Board of Supervisors for the construction permit.

Attached hereto are drawings or plans for the construction, which will not be changed or altered without approval of the Board of Supervisors, or its authorized representative.

WHEREAS, the Legislature of Mississippi has heretofore granted to the APPLICANT the right to locate its facilities upon, across, under, over and along public highways and streets within the State of Mississippi; APPLICANT agrees to comply with applicable provisions of S.O.P No. SAD 11-2-8, Policy for the Accommodation of Utility Facilities within the Rights-of-Way of County Federal Aid and State Aid Highways (hereinafter referred to as the "Policy"), promulgated by the State Aid Engineer and dated January 1, 1983, and Warren County's *Policy For The Accommodation Of Utility Facilities Within The Rights-Of-Way Of All Public County Roads*, and which is hereby made a part of the Application Agreement, and agrees to perform the construction according to the applicable code and according to the plans and specifications for the Project.

The APPLICANT shall be responsible for future maintenance and repair of the facilities. Further, any maintenance, repair, or construction shall be done in such a manner as to occasion no unreasonable interference with the normal flow and safety of traffic. The Utility warrants all work associated with this permit for a period of one year.

The APPLICANT shall be responsible for providing adequate traffic control (signs, flagmen, warning devices, etc.) in order to assure the public safety as outlined in the latest edition of the Manual on Uniform Traffic Control Devices.

THE COMPLETED PERMIT APPLICATION MUST BE
 RETURNED TO THE WARREN COUNTY PERMIT OFFICE.

A general description of the size, type, nature, and extent of the utility work to be done is as follows:

The APPLICANT understands and agrees that, except as herein granted, no right, title, claim, or easement to said road right-of-way is granted by the issuance of this Permit and that if this Utility Facility is not placed within the allowable horizontal and vertical limits as listed in the general provisions of the Policy, it shall be adjusted to comply with same without cost to the Board of Supervisors, unless the variance from the Policy has been approved by the granting of the Permit pursuant to this Application. Also, any future relocation or adjustment of the utility required to accommodate improvements to the county roadways, drainage facilities, etc. will be performed by the Utility in a timely manner without cost to the Board of Supervisors. The approved permit or a legible copy of the approved permit must be on site while work is being performed, as required in the Board of Supervisors' *Policy For The Accommodation Of Utility Facilities Within The Rights-Of-Way Of All Public County Roads*.

The APPLICANT further understands that the Utility's engineering, plant, or other personnel will be responsible for the staking and construction supervision of the work set out above and as shown on the attached plans.

The Board of Supervisors agrees to the following stipulations:

- (1) To pursue any and all legal means to see that all Policy standards, except to the extent of any variance shown on the plans filed herewith and approved, are complied with in the facility installation.
- (2) If the Engineer or other authorized representative of the Board of Supervisors approved the drawings, sketches, and plans submitted by the APPLICANT, he shall so indicate by signing and dating the Permit Approval at the end of this Application, and the APPLICANT may proceed with the installation; if the drawings, sketches, and plans are not approved, he shall promptly notify the APPLICANT, and advise it of the reason or reasons. He will also act as the duly appointed representative of the Board of Supervisors and will give his approval to the completed work as being in compliance with the location and standards shown in the Policy and in the Agreement for the installation.
- (3) That all joint highway construction and utility adjustment or relocation operations will comply with the requirements of Section S-105.06 and Section S-107.18, Mississippi Standard Specifications for State Aid Road and Bridge Construction, 1989 Edition (or current edition).
- (4) Should any term or provision of this APPLICANT Agreement conflict with the laws of the State of Mississippi, the Mississippi Constitution, the laws of the United States, or the United States Constitution, or impair or deny to the APPLICANT or the Board of Supervisors any right protected thereby, it shall be deemed amended to conform to said laws or Constitutions.

WITNESS the signature of the APPLICANT this the _____ day of _____, 20____.

BY: _____

TITLE: _____

Received By _____ Date: _____

APPROVED BY:

WARREN COUNTY, MS
COUNTY ENGINEER

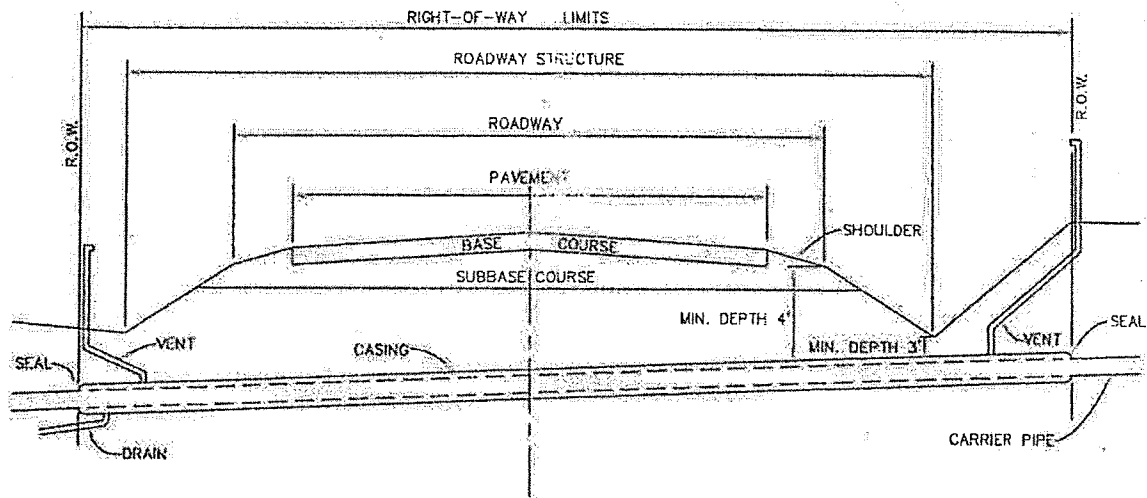
BY: _____
County Engineer (Month) (Day) (Year)

The permit for the installation or adjustment of the utility applied for above is granted under Permit Number _____.

PRESSURE PIPE LINE LOCATIONS

ENCASED CROSSINGS

N.T.S.



PARALLEL LOCATIONS

