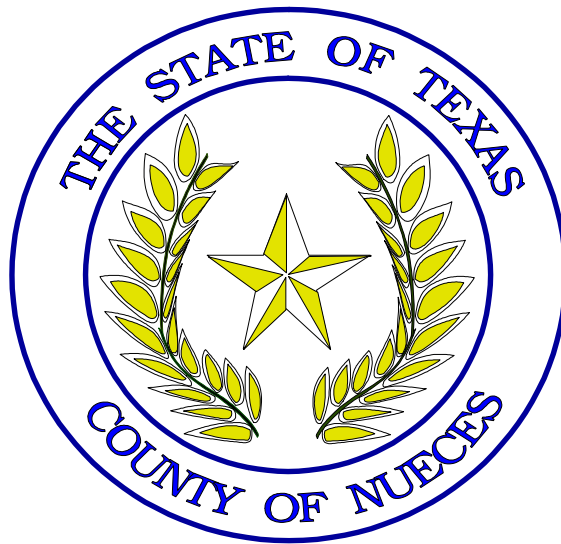


Nueces County, Texas



Accommodation of Utility Facilities
Within County Rights-of-Way

Effective Date: **June 1, 2002**

CONTENTS

	Page
I. Authority.....	1
II. Definitions.....	1
III. Jurisdiction.....	2
IV. Purpose.....	2
V. Scope.....	2
VI. Exceptions.....	3
VII. Authority of Utilities.....	3
VIII. Application.....	3
IX. Notice.....	4
X. Fees.....	4
XI. Indemnification.....	5
XII. Severability.....	5
XIII. Contempt of Commissioners' Court.....	5
XIV. Location.....	6
XV. Design.....	6
XVI. Safety of the Traveling Public.....	8
XVII. Site Clean-up.....	8
XVIII. Underground Utilities - General.....	9
XIX. High-Pressure Gas and Liquid Petroleum Lines.....	10
XX. Low-Pressure Gas Lines.....	12
XXI. Water Lines.....	13
XXII. Sanitary Sewer Lines.....	13
XXIII. Utility Structures.....	14
XXIV. Traffic Structures.....	15
XXV. Overhead Power and Communication Lines.....	16
XXVI. Underground Power Lines.....	16
XXVII. Underground Communication Lines.....	17
XXVIII. Appendix.....	20

I. AUTHORITY

These rules are adopted by the Commissioners' Court of Nueces County, Texas pursuant to the Texas Local Government Code, Transportation Code, and Water Code.

II. DEFINITIONS

The following words and terms, when used in this order, shall have the following meanings, unless the context clearly indicates otherwise.

1. American Association of State Highway and Transportation Officials (AASHTO) – An association of state highway and transportation officials.
2. Common carrier – A person who owns, operates, or manages a pipeline or any part of a pipeline in the State of Texas for the transportation of crude petroleum to or from the public for hire, or engages in the business of transporting crude petroleum by pipeline. A common carrier may transport oil, oil products, gas, salt brine, fuller's earth, sand, clay, liquefied minerals, or other mineral solutions.
3. Design vehicle load (HS-20) – A design load designation used for bridge design analysis representing a three-axle truck loaded with four tons on the front axle and 16 tons on each of the other two axles. The HS-20 designation is one of many established by AASHTO for use in the structural design and analysis of bridges.
4. High and low pressure gas lines – High-pressure gas lines are pipelines that carry a gaseous substance and that are operated or may reasonably be expected in the future to operate at a pressure of over 60 pounds per square inch. Conversely, low-pressure gas lines are those with an operating pressure not expected to exceed 60 pounds per square inch.
5. Pavement structure – The combination of the surface, base course, subbase, and a minimum eight inches of subgrade material, which supports the traffic load and distributes it to the roadbed.
6. Roadway – The portion of a road that is improved, designed, or ordinarily used for vehicular traffic.
7. Texas Manual on Uniform Traffic Control Devices (TMUTCD) – The most recent edition, including any additions or corrections, of the Texas Manual on Uniform Traffic Control Devices for Streets and Highways.

8. Utilities – All lines and/or their accessories within the county rights-of-way, except those for road-oriented needs. Such utilities may involve underground, surface, or overhead facilities, either singularly or in combination. (Accessories are any attachments, appurtenances, or integral parts of the utility such as fire hydrants, valves, gas regulators, etc.)

III. JURISDICTION

This order regulates the accommodation, method, and location for the installation, adjustment, and maintenance of utility facilities within the rights-of-way of roads, streets, and drainage channels in Nueces County, Texas, under the jurisdiction of the Commissioners' Court of Nueces County.

IV. PURPOSE

This order prescribes the minimum requirements relative to the accommodation, method, and location for the installation, adjustment, and maintenance of utility facilities, including privately owned facilities, within the rights-of-way of roads on the county road system and drainage channels where the County holds a drainage easement. These requirements are provided in the interest of safety and protection, utilization, and future development of roads and drainage channels with due consideration given to public service afforded by adequate and economical utility installations.

V. SCOPE

This order shall govern on matters concerning accommodation, location, and methods for the installation, adjustment, relocation, and maintenance of utilities on road rights-of-way and drainage easements under the jurisdiction of Nueces County. Where industry or governmental codes, orders, or laws require utilities to provide a higher degree of protection than provided herein, the higher degree of protection shall prevail. This includes, but is not limited to, the compliance with the Federal Clean Water Act, the Federal Endangered Species Act and the Federal Historic Preservation Act.

VI. EXCEPTIONS

Requests for exceptions will be considered where it is shown that extreme hardship and/or unusual conditions provide justification and where alternate measures can be prescribed in keeping with the intent of this order. All requests for such exceptions shall be fully documented with design data, cost comparisons, and other information that may be pertinent.

VII. AUTHORITY OF UTILITIES

- (a) Under existing state laws, various utility firms and agencies have a right to install their lines along and/or across road right-of-way. This includes those firms that are authorized by the laws of this state to transport and/or distribute natural gas, water, electric power, telephone (including cable television), and salt water; and those which are authorized to construct and operate common carrier petroleum and petroleum product lines.
- (b) Private lines normally will be allowed to cross, but will not be permitted longitudinally on road right-of-way. This includes, but is not limited to, privately-owned lines from gas or oil wells, lines owned by oil companies within refinery and oil storage complexes, by firms which are engaged in businesses other than those described in subsection (a) of this section, and domestic lines owned by individuals.

VIII. APPLICATION

- (a) For roads and drainage channels under the jurisdiction of Nueces County the provisions of this order concerning utility accommodation shall apply to:
 - (1) new utility installations;
 - (2) additions to existing utility installations; and
 - (3) adjustments or relocations of utilities incident to roadway construction.
- (b) Various types of utility lines not specifically covered herein shall be considered within the provisions of this order concerning utility accommodation in accordance with the nature of the line. It shall be general practice to consider all lines carrying caustic, flammable, or explosive materials under the provisions for high-pressure gas and liquid fuel lines.

IX. NOTICE

- (a) Notice of the proposed installation, adjustment, or maintenance of utility facilities is to be provided by the submission of a Notice of Proposed Utility Line Activity form (latest revision) to the County Engineer's office. A copy of the Notice of Proposed Utility Line Activity form is included in Appendix A.
- (b) The Notice of Proposed Utility Line Activity form should be accompanied by:
 - (1) A map or plat of the area of the County in which the utility facility is to be located;
 - (2) A detailed drawing(s) in sufficient detail to show the exact location of the utility facility in relation to the various roadway features such as edge of pavement, right-of-way lines, depth of bury, height above the pavement, etc.
- (c) No work is to be performed within the right-of-way until the Notice of Proposed Utility Line Activity form has been approved by the County Engineer, or his/her designee.
- (d) A copy of the approved Notice of Proposed Utility Line Activity form, as well as all attachments, must be kept on the jobsite at all times.
- (e) Except as noted, a Notice of Proposed Utility Line Activity form is not required from public utility companies when service connections are installed to a location which is immediately adjacent to the connection point. However, service connections are to be installed in accordance with the requirements contained herein. A Notice of Proposed Utility Line Activity form will be required where a service connection involves the installation of a line either over or under the travel way.
- (f) Emergency repairs to protect life and property can be made without the submission of a Notice of Proposed Utility Line Activity form. However, as soon as practical, notification should be given to the County Engineer's office by means of telephone, e-mail, FAX, etc. The notification should include the name of the company, the location and type of work, when work began, duration of repair, and the name and telephone number of a contact person.

X. FEES

- (a) Except as noted, a fee to be paid by the owner must accompany the submission of the Notice of Proposed Utility Line Activity form. The amount of the fee is shown in Appendix B.

- (b) Utilities that are owned by governmental entities are exempt from the payment of a fee otherwise imposed by this section.
- (c) The fee is to help defray the County's cost of inspecting the installation of utility facilities. Such inspections include utility construction or reconstruction across, under, or along County roads and drainage easements and periodic inspections of the condition in which such utility facilities subsequently are maintained.

XI. INDEMNIFICATION

The owner agrees to indemnify and save harmless Nueces County, its agents and employees from all suits, actions or claims and from all liability and damages for any and all injuries or damages sustained by any person or property in consequence of any neglect in the installation, operation or maintenance of the utility facility.

XII. SEVERABILITY

If any provisions, section, subsection, sentence, clause or phrase of this order, or the application of same to any person, firm, limited partnership, joint stock association, or corporation, or set of circumstances is for any reason held to be unconstitutional, void or invalid (or for any reason unenforceable), the validity of the remaining portions of this order or their application to other persons, firm, limited partnerships, joint stock associations, or corporations, or set of circumstances shall not be affected thereby, it being the intent of the Commissioners' Court of Nueces County, Texas, in ordering the above regulations and provisions that no portion hereof or provision or regulations contained herein shall become inoperative or fail by reason of any unconstitutionality or invalidity of any other portion, provision or regulation, and to this end, all provisions of this order are declared to be separable.

XIII. CONTEMPT OF COMMISSIONERS' COURT

Any person found violating this order shall be deemed in contempt of Commissioners' Court and shall be called upon to show cause why he should not be held in, and punished for, contempt, in accordance with section 81.023 of the Texas Local Government Code.

XIV. LOCATION

- (a) Utility lines shall be located to avoid or minimize the need for adjustment for future road improvements and to permit access to the utility lines for their maintenance with minimum interference to traffic.
- (b) The location of utility lines shall not adversely affect the safety, design, construction, operation, maintenance, or stability of the roadway.
- (c) Longitudinal installations shall be located on uniform alignment, as near as practicable to the right-of way line, to provide space for future road construction and/or utility installations.
- (d) Utility lines crossing the road should be located at approximately right angles to the road to the extent feasible and practicable.
- (e) It shall be the utility company's responsibility to determine the location of right-of-way lines, other utilities, and roadway appurtenances.
- (f) The County may require the relocation of an existing utility line to facilitate maintenance or construction of the road or drainage channel. The utility company will be given a minimum of thirty (30) days written notice to relocate. The cost associated with the relocation will be borne entirely by the utility company.

XV. DESIGN

- (a) The design of any utility installation will be the responsibility of the utility company. An installation within the right-of-way must be reviewed and approved by the County with regard to the location and manner of construction. This includes the measures to be taken to preserve the safety and free flow of traffic, integrity of the roadway structure, ease of road or channel maintenance, appearance of the highway, and the integrity of the utility facility. Utility installations on, over, or under the right-of-way of the County road system shall conform with the requirements contained herein and/or, as a minimum, the appropriate requirements outlined in the following, whichever is greater.
 - (1) Safety rules for the installation and maintenance of electrical supply and communication lines—National Electric Safety Code.
 - (2) Title 49, Code of Federal Regulations, Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards, and amendments.

- (3) Title 49, Code of Federal Regulations, Part 195, Transportation of Liquids by Pipelines, and amendments.
 - (4) Latest American Society for Testing and Materials (ASTM) specifications.
 - (5) Most recent edition of the Texas Manual on Uniform Traffic Control Devices for Streets and Highways.
 - (6) Latest edition of the rules and Regulations for Public Water Systems, published by the Texas Department of Health, Water Hygiene Division.
- (b) All utility installations should be of durable materials designed for long life expectancy and relatively free from routine servicing or maintenance. In addition to the requirements herein, any existing utility lines to remain in place must be of satisfactory design and condition.
 - (c) Special precautions should be taken during utility installation to avoid disturbing existing drainage courses. In addition, soil erosion should be held to a minimum and sediment from the construction site should be kept away from the roadway and drainage channels.
 - (d) Underground utility installations should be backfilled with pervious material and outlets provided for entrapped water. Underdrains shall be provided where necessary. No jetting or puddling will be permitted.
 - (e) Clearances between underground utilities and storm sewers shall be a minimum of 12 inches, if the installation can take place without disturbing the storm sewer installation. Otherwise, the minimum clearance will be 24 inches.
 - (f) On new installations, or adjustment of existing utility lines, provision for known or planned expansion of the utility facilities may be made, all at the sole expense of the utility firm. Any such expansion should be planned so as to minimize hazards and interference with traffic.
 - (g) Manholes shall be limited to those necessary for installation and maintenance of underground lines. In no case shall they be placed or permitted to remain in the pavement or shoulders of roadways, except at those locations on roads in urban areas where necessary for existing lines that may be permitted to remain in place under existing or proposed roadways. To conserve space, manhole dimensions should be the minimum acceptable by engineering and safety standards. In general, the only equipment to be installed in manholes located on road right-of-way is that which is essential to the normal flow of the utility, such as circuit reclosures, cable splices, relays, valves, and

regulators. Other equipment such as substation equipment, large transformers, pumps, etc., should be located outside the limits of the road right-of-way. All manhole covers shall be installed flush with the ground and/or pavement surface, whichever is applicable. All underground utilities within the road right-of-way, including manhole rings and covers, must be designed for HS-20 loading.

- (h) Where it is necessary for utility lines to cross drainage easements, outside of road rights-of-way, the same minimum depth of cover shall be maintained as required for crossing ditches inside of the road right-of-way. In cases where soil conditions are such that erosion might occur or where it is not feasible to obtain specified depth, it shall be the responsibility of the utility owner to install retards, encasement, or concrete slabs over the line, or take such other measures as needed for safety and to protect the channel and the line.

XVI. SAFETY OF THE TRAVELING PUBLIC

- (a) Appropriate signs, markings and barricades shall be placed by the utility company prior to the beginning of construction operations and shall be properly maintained. All traffic control devices shall conform to the Texas Manual on Uniform Traffic Control Devices For Streets and Highways.
- (b) If the utility company does not provide and maintain adequate traffic control devices to warn and protect motorists the County may install traffic control devices it considers necessary. The expense of such devices will be borne by the utility company.

XVII. SITE CLEAN-UP

Roadways adjacent to utility construction sites shall be kept free from debris, construction material, and mud. At the end of every construction day, construction equipment and materials shall be removed as far from the roadway edges as feasible. Adequate provisions shall be made to provide for drainage of the roadway ditches during construction operations. Where underground utilities are to be installed the work shall be prosecuted so as to minimize the time between opening of trenches and backfilling. When utility installation is complete, the right-of-way shall be reshaped to its original condition and the area reseeded or resodded to reduce erosion. Should settlement or erosion occur within six months after utility installation, the utility company shall reshape, reseed, or resod the area, as necessary.

XVIII. UNDERGROUND UTILITIES – GENERAL

- (a) Method of protection. In general, underground utility line crossings of roadways shall be encased in the interest of safety, protection of the utility, protection of the roadway, and for access to the utility. Encasement shall be as specified for each type of line discussed herein. Casing shall consist of a pipe or other separate structure around and outside the carrier line and shall be designed to support the load of the roadway and superimposed loads thereon, including that of construction machinery. The strength of the casing shall equal or exceed structural requirements for drainage culverts and it shall be composed of materials of satisfactory durability under conditions to which it may be subjected.
- (b) Manholes. Manholes should be straight, on line installations with a minimum overall width necessary to operate and maintain the enclosed equipment.
- (c) Location.
 - (1) The depth of underground lines shall be as specified herein for each type of utility. Where placement at such depths is impractical or where usual conditions exist, the utility company may submit for approval other protection as may be appropriate in lieu of the depth of bury required for the particular utility line.
 - (2) Longitudinal pipelines are to be placed no closer than 15 feet from the improved section of the roadway unless otherwise approved.
- (d) Methods of installation.
 - (1) Lines placed under any existing roadway and/or paved driveway, shall be installed by boring or tunneling unless otherwise approved.
 - (2) For rural (uncurbed) roadway cross sections, all borings shall extend beneath all travel lanes plus five feet or as approved.
 - (3) For urban (curbed) roadway cross sections, all borings shall extend beneath travel and parking lanes and extend two feet beyond the back of curb.
 - (4) All traffic control devices used to warn motorists of the construction activity must conform to the TMUTCD.
 - (5) Where circumstances necessitate the excavation of a bore pit closer to the edge of pavement than set forth in this section, a guard fence or

other approved protective devices will be installed for the protection of the traveling public. Bore pits shall be located and constructed in such a manner as not to interfere with safe roadside clearance or traffic operations. If necessary shoring shall be utilized.

- (6) Where trenching in the right-of-way is permitted, backfill shall be compacted to densities equal to that of the surrounding soil. Where trenches are allowed to cross a roadway or driveway the backfill shall consist of stabilized material, as approved.
- (e) Unsuitable conditions. Conditions that are generally unsuitable or undesirable for pipeline crossings should be avoided. These include locations such as deep cuts; near footings or bridges or retaining walls; across road intersections; at cross drains; and in wet or rock terrain where minimum depth of cover would be difficult to obtain.
- (f) Clearances. Vertical and horizontal clearances between a pipeline and a structure or other roadway or utility facility should be sufficient to permit maintenance of the pipeline and the other facilities.

XIX. HIGH-PRESSURE GAS AND LIQUID PETROLEUM LINES

- (a) Depth of cover.
 - (1) For encased high-pressure gas or liquid petroleum lines, the minimum depth of cover for casing pipe shall be 30 inches. For that portion of the carrier line outside of the casing pipe, including longitudinal portions, the minimum depth of cover within the road right-of-way shall be 36 inches. Exceptions may be authorized to permit existing lines to remain in place with a reduction of six inches in the above-specified depths of cover. All lines normally shall be a minimum of 18 inches or one-half the diameter of the pipe, whichever is greater, beneath the bottom of the pavement structure.
 - (2) For unencased high-pressure gas or liquid petroleum lines, the minimum depth of cover shall be 60 inches under the pavement surface or 18 inches under the pavement structure, whichever is greater. Under ditches, the minimum depth of cover shall be 48 inches. Exceptions may be authorized to permit a reduction in the specified depths of cover where the pipeline is protected by a reinforced concrete slab. As used herein, depth of lines is the depth to top of carrier (if unencased) or casing (if required).

(b) Crossings

- (1) Where encasement is to be utilized, the encasement shall be provided from top of backslope to top of backslope for cut sections (or five feet beyond the toe of slope for fill sections, or face of curb) of all roadways including side streets, and five feet beyond any structure where the line passes under it.
 - (2) Where encasement is not used the welded steel carrier pipe shall provide sufficient strength to withstand the internal design pressure and the dead and live loads of the pavement structure and traffic. Additional protective measures should include:
 - (A) heavier wall thickness and/or higher factor of safety in design;
 - (B) adequate coating and wrapping;
 - (C) cathodic protection; and
 - (D) other measures as required by Title 49, Code of Federal Regulations, Part 192 or Part 195.
 - (3) Existing lines may be permitted to remain in place without encasement or extension of encasement if they are protected by a reinforced concrete slab or equivalent protection or they are located at a depth of five feet under the pavement surface and not less than four feet under the roadway ditch. If a reinforced concrete slab is to be used, it should meet the following standards:
 - (A) width – three times the diameter of the pipe or five-foot minimum, whichever is greater;
 - (B) thickness – six inch minimum;
 - (C) reinforcement - #4 bars at 12-inch centers each way or equivalent wire mesh
 - (D) cover – the cushion between the bottom of slab and top of pipe shall be no less than six inches.
- (c) Vents. One or more vents shall be provided for each casing or series of casings. For casings longer than 150 feet, vents should be provided at both ends. On shorter casings a vent should be located at the high end with a

marker placed at the low end. Vents shall be placed at the right-of-way line immediately above the pipeline, situated so as not to interfere with roadway maintenance or concealed by vegetation. Ownership of the line shall be shown on the vents.

- (d) Markers. The utility company shall place a readily identifiable and suitable marker at each right-of-way line where it is crossed by any high-pressure gas or liquid petroleum line except where marked by a vent. Readily identifiable and suitable markers shall be placed at the right-of-way line for lines installed longitudinally within the right-of-way.
- (e) Above-ground appurtenances. Above-ground appurtenances, except vents, shall not be permitted within the right-of-way.

XX. LOW-PRESSURE GAS LINES

- (a) Depth of cover. For low-pressure gas lines the minimum depth of cover within the right-of-way and under roadway ditches, but outside the pavement structure, including longitudinal portions, shall be 24 inches for either encased or unencased installations. Exceptions may be authorized to permit existing lines to remain in place with a reduction of six inches in the above-specified depth. All lines normally shall be a minimum of 18 inches or one-half the diameter of the pipe, whichever is greater, beneath the bottom of the pavement structure.
- (b) Encasement. Low-pressure gas lines shall be encased as required for high-pressure gas and liquid petroleum lines or they may be placed without encasement if they are of welded steel construction and are protected from corrosion by adequate and approved cathodic protective measures, with specific agreement that the pavement will not be cut for repairs to the pipeline at any time in the future.
- (c) Vents. Vents shall be installed as provided for in the requirements for High-pressure Gas and Liquid Petroleum Lines.
- (d) Markers. Markers shall be installed as provided for in the requirements for High-Pressure Gas and Liquid Petroleum Lines.
- (e) Plastic lines. Plastic lines may be used provided the internal pressure will not exceed 60 pounds per square inch, they are encased from right-of-way line to right-of-way line on crossings, and have at least 30 inches of cover. The maximum size of plastic lines for crossings shall not exceed 24 inches. The maximum size of plastic lines placed longitudinally shall not exceed six inches. Where plastic pipe is installed longitudinally a durable metal wire or other means shall be concurrently installed for detection purposes.

- (f) Above-ground appurtenances. Above-ground appurtenances, except vents, shall not be permitted within the right-of-way.

XXI. WATER LINES

- (a) Depth of cover. The depth of cover for water lines shall be the same as stipulated for low-pressure gas lines.
- (b) Encasement. Encasement shall be provided from center of ditch to center of ditch for cut sections (or five feet behind toe of slope for fill sections or face of curb) of all roadways. Encasement under side road entrances may be omitted in consideration of traffic volume and, condition of roadway. Encasement under low volume roadways may be omitted on existing water lines having an inside diameter of 24 inches or more and on new lines having an inside diameter of 30 inches or more, provided all other requirements are met.
- (c) Plastic lines. Plastic lines may be used provided they have at least 30 inches of cover for both crossing and longitudinal segments. Crossings shall be encased in accordance with the requirements of High-Pressure and Liquid Petroleum Lines.
- (d) Nonmetallic pipe detection. Where nonmetallic pipe is installed longitudinally a durable metal wire or other means shall be concurrently installed for detection purposes.
- (e) Exceptions to location requirements. Same as stipulated for low-pressure gas lines.
- (f) Markers. The utility company shall place a readily identifiable and suitable marker at each right-of-way line where it is crossed by a water line.
- (g) Above-ground appurtenances. Above-ground appurtenances shall not be permitted within the right-of-way.

XXII. SANITARY SEWER LINES

- (a) Depth of cover. The depth of cover for sanitary sewer lines shall be the same as stipulated for low-pressure gas lines.

- (b) Encasement. Lines to be operated under pressure and those composed of materials not conforming to material or depth of cover requirements herein shall be encased as prescribed for water lines.
- (c) Materials. New and relocated sewer lines crossing high-traffic roadways shall be ductile iron, with satisfactory joints, of materials and designs which will provide equal or better protection of the integrity of the roadway and resistance to damage from sulfide gases and other corrosive elements to which they may be exposed. New and relocated longitudinal lines and those crossing low-traffic roadways may be of any material which has been proven to be of satisfactory strength and durability in local use, provided all other requirements are met.
- (d) Non-metallic pipe. Where non-metallic pipe is installed longitudinally a durable metal wire of other means shall be concurrently installed for detection purposes.
- (e) Manholes. Manholes should be the minimum overall width necessary to operate and maintain the sewer system.
- (f) Exception for existing lines in urban area. Except where relocation is necessary to clear existing sewer lines from structures or other roadway appurtenances or for other specific reasons, existing lines in urban areas may remain in place at any location, provided the line is of satisfactory quality and depth, manholes are adjusted in conformance with general requirements herein, and provisions are made to assure that future service lines installations will not disturb the roadway.

XXIII. UTILITY STRUCTURES

Where one or more utility lines are to be carried across a road right-of-way in a tunnel or on a bridge rather than in separately trenched and encased crossings, the following should be met:

- (1) Mutually hazardous transmittants, such as fuels and electric energy, shall be isolated by compartmentalizing or by auxiliary encasement of incompatible carriers.
- (2) Where a pipeline on or in a utility structure is encased, the casing shall be effectively opened or vented at each end to prevent possible build-up of pressure and to detect leakage of gases or fluids.
- (3) Where a casing is not provided for a pipeline on or in a utility structure, additional protective measures shall be taken, such as

employing a higher factor of safety in the design, construction, and testing of the pipeline than would normally be required for cased construction.

- (4) Communication and electric power lines shall be suitably insulated, grounded, and preferably carried in protective conduit or pipe from the point of exit from the ground to reentry. Carrier and casing pipe should be suitably insulated from electric power line attachments.
- (5) Shut-off valves, preferably automatic, shall be in lines at or near ends of utility structures unless segments of the lines can be isolated by other sectionalizing devices within a reasonable distance.

XXIV. TRAFFIC STRUCTURES

- (a) The attachment of utility lines to bridges and separation structures is discouraged, since the proliferation of such lines and their maintenance constitutes a hazard to traffic as well as complicating the widening or repair of such structures. Attaching utility lines to a roadway structure can materially affect the structure, the safe operation of traffic, the efficiency of maintenance, and the overall appearance. Therefore, when it is feasible and reasonable to locate utility lines elsewhere, attachment to bridge structures will not be allowed.
- (b) Where other arrangements for a utility line to span an obstruction are not feasible, the County may consider the attachment of such a line to a bridge structure. Each such attachment will be considered on an individual basis, and permission to attach will not be considered as establishing a precedent for granting of subsequent requests for attachment. The following guides are established for attachment of utilities to bridges:
 - (1) When it is impractical to carry a self-supporting communication line across a stream or other obstruction, the County policy is to permit the attachment of the line to its bridges. On existing bridges the line must be enclosed in conduits and located so as not to interfere with stream flow, traffic, or routine maintenance operations.
 - (2) No gas or liquid fuel lines shall be attached to a bridge without the specific approval of the Commissioners' Court.
 - (3) Power lines are not permitted on bridges under any condition with the exception of low-voltage distribution lines where the cost of independent facilities to carry these lines would be prohibitive.

- (4) When a utility company requests permission to attach a pipeline to an existing bridge the utility company must furnish a stress analysis which shows the effect of the added load on the structure. Other details of the proposed attachment as they affect safety and maintenance should also be addressed. If the bridge structure is not of adequate strength to carry the increased weight or forces with safety, permission will not be granted.

XXV. OVERHEAD POWER AND COMMUNICATION LINES

- (a) Vertical clearance. The minimum vertical clearance above the roadway shall be no less than 22 feet for power lines. This clearance may be greater, if required by the National Electric Safety Code and/or governing laws.
- (b) Location. In rural areas and at uncurbed sections in urban areas, poles supporting longitudinal lines shall be located from one to three feet from the right-of-way edge. Guy wires placed within the right-of-way shall be held to a minimum and should normally be in line with the pole line. At curbed sections in urban areas, poles shall be located as far as practical behind the outer curbs and preferably adjacent to the right-of-way line. Steel poles with bases greater than 36 inches in diameter shall not be placed within the right-of-way except in extreme hardship situations and if sufficient space remains for other utilities.

XXVI. UNDERGROUND POWER LINES

- (a) Longitudinal placement. All underground power lines placed within the right-of-way may be directly buried as follows:

VOLTAGE	MINIMUM DEPTH OF BURY
22,000 or less	30 inches
22,001 to 40,000	36 inches
40,001 or greater	42 inches

- (b) Crossings. Power lines shall be encased (placed in conduit) and buried a minimum of 36 inches under roadway ditches, and 60 inches below the pavement surface.
- (c) Encasement. Encasement shall be provided from top of backslope to top of backslope for cut sections (or five feet beyond the toe of slope for fill sections, or face of curb) of all roadways including side streets and beneath and five feet beyond any structure where the line passes under it. Existing lines under

low volume roads may be permitted to remain in place without encasement or extension of encasement if they are protected by a reinforced concrete slab or equivalent protection or if they are located at a depth of six feet under the pavement surface and not less than four feet under the roadway ditch. If a reinforced concrete slab is to be used, it should meet the following standards:

- (1) width – five foot minimum;
 - (2) thickness – six inch minimum;
 - (3) reinforcement - #4 bars at 12 inch centers each way or equivalent wire mesh;
 - (4) cover – the cushion between the bottom of slab and top of cable shall be not less than six inches.
- (d) Markers. Readily identifiable and suitable markers in sufficient number shall be placed at the right-of-way line for lines installed longitudinally within the right-of-way. Where an underground power line crosses the right-of-way a marker shall be placed at each right-of-way line.
- (e) Location. Longitudinal underground power lines may be placed by plowing or open trench method and shall be located as set forth in the Location section of this order.
- (f) Above-ground appurtenances. Above-ground utility appurtenances installed as part of an underground power line shall be located at or near the right-of-way line.
- (g) Manholes. Requirements for manholes shall be the same as set forth in the Design section of this order.

XXVII. UNDERGROUND COMMUNICATION LINES

- (a) Longitudinal placement. The minimum depth of cover for cable television and copper cable communication lines shall be 24 inches. The minimum depth of cover for a fiber optic line shall be 42 inches; provided, however, that said minimum depth of cover may be 36 inches if the owner/operator of a fiber optic line waives damages and fully indemnifies the County in a form acceptable to the County.
- (b) Crossings. Lines should be located at right angles to the roadway to the extent feasible and practicable. Reasonable latitude may be exercised as regards the crossing angle of existing lines which are otherwise qualified to remain in place.

- (1) The minimum depth of cover for cable television and copper cable communication lines shall be 24 inches under the flow line of ditches or 18 inches beneath the bottom of the pavement structure, whichever is greater.
 - (2) The top of a fiber optic line shall be placed a minimum of 42 inches below the flow line of the ditch, or 60 inches below the top of the pavement structure, whichever is greater.
 - (3) Lines crossing roadways are not required to be encased, except where such encasement is necessary for the protection of the roadway facility.
 - (4) When the installation of the line is to be accomplished by boring a hole the same or approximately the same diameter as the line and pulling it through, then encasement is not necessary. Where such conditions cannot be met, encasement should be provided. The annular void between the drilled hole and the line or casing should be filled with a satisfactory material to prevent settlement of any part of the roadway facility over the line or casing.
 - (5) Encasement may be of metallic or nonmetallic material. Such encasement material shall be designed to support the load of the roadway and superimposed loads thereon, including that of construction machinery. The strength of the encasement material shall equal or exceed structural requirements for drainage culverts and shall be composed of materials of satisfactory durability under conditions to which it may be subjected. The length of any encasement shall be provided from top of backslope to top of backslope for cut sections (or five feet beyond the toe of slope for fill sections, or face of curb) of all roadways, including side streets
- (c) Markers. Readily identifiable and suitable markers in sufficient number shall be placed at the right-of-way line for lines installed longitudinally within the right-of-way. Where an underground communication line crosses the right-of-way a marker shall be placed at each right-of-way line. Where fiber optic lines are installed without a metal sheath or metal casing, a durable metal wire or other means shall be concurrently installed for detection purposes.

- (d) Placement. Lines may be placed by plowing or open trench method and shall be located on uniform alignment as near as practical to the right-of-way line. Distance from the right-of-way line will depend upon the terrain and other utility lines.

- (e) Above-ground pedestals. Above-ground pedestals or other utility appurtenances installed as part of an underground communication line shall be located at or near the right-of-way line.

- (f) Manholes. Requirements for manholes shall be the same as set forth in the Design section of this order.

XXVIII. APPENDIX

Appendix A – Notice of Proposed Utility Line Activity

Appendix B – Fees

Appendix A

**NOTICE OF PROPOSED
UTILITY LINE ACTIVITY**

To: County Engineer
Nueces County
901 Leopard, Suite 103
Corpus Christi, Texas 78401

Date _____

Permit No. _____

Notice is hereby given that _____

Owner of the Proposed Line proposes to place a _____

line within the right-of-way of _____
as follows: (give location, length, general design, etc.)

The line will be constructed and maintained on the County right-of-way as shown on the attached drawing(s) and in accordance with the Nueces County rules for Accommodation of Utility Facilities Within County Rights-of-Way, and all governing laws, including but not limited to the Federal Clean Water Act, the Federal Endangered Species Act, and the Federal Historic Preservation Act. Upon request by Nueces County, the owner will provide proof of compliance with all governing laws, orders, and regulations.

The owner will use Best Management Practices to minimize erosion and sedimentation resulting from the proposed installation, and will revegetate the project area.

The owner will insure that traffic control devices complying with the applicable portions of the Texas Manual On Uniform Traffic Control Devices will be installed and maintained for the duration of the work involved for this installation.

The location and description of the proposed line, along with any appurtenances, is more fully shown on the attached drawings.

It is expressly understood that Nueces County does not purport to grant any right, claim, title, or easement in, under, or upon this roadway; and it is further understood that Nueces County may require the owner to relocate this line and any appurtenances, subject to provisions of governing laws, by giving thirty (30) days notice. The cost associated with the relocation will be borne entirely by the owner.

The installation shall not damage any part of the roadway and adequate provisions must be made to cause minimum inconvenience to the public. In the event the owner fails to comply with any or all of the requirements as set forth herein, the County may take such action as it deems appropriate to compel compliance at all times.

Appendix A

Permit No. _____

**NOTICE OF PROPOSED
UTILITY LINE ACTIVITY**

The owner agrees to indemnify and save harmless Nueces County, it's agents and employees from all suits, actions or claims and from all liability and damages, including but not limited to attorney fees, for any and all injuries or damages sustained by any person or property in consequence of any neglect in the installation, operation or maintenance of the utility facility.

Construction of this line will begin on or after the ____ day of _____, 20 ____.

By signing below, I certify that I am authorized to represent the owner listed below, and that the owner agrees to the conditions and provisions included in this permit.

Firm: _____ Address: _____

By (Print): _____

Signature: _____

Title: _____ Phone No.: _____

APPROVAL

Nueces County offers no objections to the location of the proposed utility facility except as noted below.

Please notify _____ forty-eight (48) hours prior to start of construction of the line.

Nueces County

By: _____ Date: _____

Title: _____

APPENDIX B - - - FEES

Effective Date: October 1, 2002

TYPE OF INSTALLATION	CROSSINGS	LONGITUDINAL
Overhead Power or Communication Lines	\$50.00/crossing	\$0.05/Linear Foot Minimum \$50.00
Underground Power, Communication, or Pipelines	\$150.00/crossing	\$0.10/Linear Foot Minimum \$150.00

Note: Where the utility installation involves both crossings(s) and longitudinal placement the fee will be determined by adding the fee for each crossing, plus the fee for longitudinal placement

Rev September 18, 2002