

Rule No.: 941 - 7501 - 04005

Agency: Mississippi Department of Transportation

Agency Effective Date: May 15, 2005

Agency Issued Date: March 8, 2005

Secretary of State Authority Date: May 15, 2005

Supercedes Rule:

Division: MAINTENANCE

Rule Title: Application for Permit to Construct Pipe Line, Form MND-002

The person to be contacted regarding the proposed rule is: Facility and Records Management Director

Name of person originating the proposed rule: John Vance

Name of supervisor or person who approved the proposed rule: Melinda McGrath

Purpose:

To provide a permit form for the construction of a pipe line along or across MDOT right of way.

Summary:

This rule establishes permit forms for the construction of a pipe line along or across MDOT maintained right of way.

The full text of the proposed rule is:

All cites herein refer to the most current version of the cited document.

MND-002
Rev. 2/01/04

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION
APPLICATION FOR PERMIT TO CONSTRUCT PIPELINE ALONG
OR ACROSS STATE HIGHWAY AND AGREEMENT OF APPLICANT
GIVEN IN CONSIDERATION OF SAID PERMIT**

(Please Print) Name: _____ Address: _____
Street/Route

City _____ County _____ State _____ Zip Code _____

herein called the applicant, who at the present time proposes to construct a pipeline along or across Highway No. _____ between _____ and _____ in _____ County, Mississippi, does hereby make application to the Mississippi Department of Transportation, the duly authorized agent for the Mississippi Transportation Commission, for permission to construct the said pipeline mentioned above and shown herein below and in consideration of this permit being granted to said applicant for the construction of the pipeline, said applicant does hereby agree to construct the pipeline in accordance with the plan shown herein below and does further agree, with full understanding of the terms thereof, to all of the following provisions:

- (a) That the Mississippi Department of Transportation does not purport to grant to said applicant any right, title, claim or easement in or upon said highway or right-of-way appurtenant thereto.
- (b) That the said Mississippi Department of Transportation may at any time require and compel the removal, reconstruction or relocation of said pipeline or any appurtenance thereto herein described, shown or referred to, when said Mississippi Department of Transportation deems it necessary. Unless the applicant, its heirs, assigns or legal representatives, qualify under Section 65-1-8(2)(e) Mississippi Code (1972) Annotated and/or the parties have agreed otherwise in a Utility Agreement, all expense of said removal, reconstruction or relocation is to be borne exclusively by the applicant, and the Mississippi Department of Transportation is to be in no way liable.
- (c) Said applicant hereby expressly agrees for himself, his heirs, assigns and legal representatives, that upon request of said Mississippi Department of Transportation, he will without delay either reconstruct, remove or move the facility herein described to another location, all in accordance with the terms of the request so made by the said Mississippi Department of Transportation. It is distinctly understood that said new location will be made or designated by said Mississippi Department of Transportation after agreement with said applicant or its

successors, if possible. It is further understood and agreed that, if this permit is granted and acted upon by the said applicant, the said Mississippi Department of Transportation will use all reasonable effort to avoid the necessity of requesting that the herein mentioned facility be removed, moved, altered, or reconstructed.

- (d) The plan of proposed construction set out below is incorporated herein by reference and made a part of this application, as if fully copied out herein in words and figures.
- (e) It is agreed that this permit is void if all work shown on this plan is not completed in accordance with this plan within one year after date of approval.
- (f) It is expressly agreed that no trees or shrubs on the highway right-of-way will be cut, trimmed, or damaged during the construction or maintenance of this work or facility except as expressly shown herein below.
- (g) All sod disturbed by the proposed work shall be neatly dressed and grassed in accordance with the vegetation schedule outlined elsewhere in this permit. The applicant shall maintain the dressed and grassed area for a sufficient length of time to insure a growing sod.
- (h) The applicant is responsible for any conflicts with other utilities on the highway right-of-way and is to secure permission from said utilities for said conflicts and for any necessary alterations.
- (i) The applicant accepts the responsibility of the safety of the traveling public and his/her workers and agrees to furnish, place and maintain traffic control devices, if required, in accordance with Part 6 of the Manual On Uniform Traffic Control Devices For Streets and Highways (MUTCD), Current Edition as a minimum. The applicant shall attach a special traffic control plan to the application if special traffic control details are required.
- (j) A copy of the approved plan is to be kept at the site of the work at all times during construction.
- (k) The applicant does hereby covenant and agree to indemnify and hold harmless the Mississippi Transportation Commission and the Mississippi Department of Transportation from and against any claims, actions, suits, causes or demands, including court costs and reasonable attorney's fees, proximately resulting from acts or omissions of the applicant, or applicant's servants, agents or employees in the construction and maintenance of all facilities outlined under this permit.

Witness my signature this _____ day of _____ 20_____, which is applicable to sheets 1 through _____ of permit number _____.

Applicant

By: _____
Name and Title

STATE OF MISSISSIPPI
COUNTY OF _____

Personally appeared before me, the undersigned authority, _____
_____ whose
names(s) _____ subscribed to this instrument as the _____ of
_____ who having been first fully sworn acknowledged
that
he/they executed the above agreement as the act and deed of the said applicant for the purpose and consideration
and in the
capacity therein expressed and on the date above written.

Given under my hand and seal of office this the _____ day of _____ 20_____

Title of Officer

My Commission Expires:

Sheet No. 1 of _____

Permit No: _____

Field Inspection By: _____ 20_____

Approved: MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Deputy Executive Director/Chief Engineer

By: _____ 20 _____

Installation Inspection By: _____ 20 _____

Sheet No. _____ of _____

NOTICE:

Before jacking, dry boring, boring with drilling fluid, tunneling or directional boring is begun, written approval must be obtained from the District Engineer on the method to be used. The District Engineer reserves the right to require a change in the method when, due to soil conditions or other reasons, the desired results are not being obtained.

Before any jacking, dry boring, boring with drilling fluid, tunneling or directional boring is begun, the District Engineer will be advised, in writing, whether the work will be performed by the applicant's forces or by contract and, if by contract, the name of the contractor.

Jetting will not be permitted.

Any overcutting exceeding the tolerances set forth in this document shall be filled immediately with flowable fill or other approved materials.

The applicant shall be responsible for correction of any distortion caused by his/her operation on any road, street, frontage road, ramp, conventional highway, partially controlled highway, fully controlled access highway and/or roadway cross-section. The method of correction shall be approved by the District Engineer.

Failure to comply with the requirements for jacking, dry boring, boring with drilling fluid, tunneling, and/or directional boring operations or failure to comply with the approved permit requirements shall be cause for canceling the permit.

The applicant, by signing this document, certifies that the design and type of materials and method of operations are of the industry standard where the industry standard is indicated below.

JACKING

JACKING will be accomplished as follows:

Pushing or jacking of casing or carrier pipes under the highway larger than three and one half (3-1/2) inches in diameter is prohibited. All casing or carrier pipe will be of strength sufficient to withstand the stress resulting from jacking pressures.

DRY BORING

DRY BORING will be accomplished as follows:

For pipes greater than eight (8) inches in diameter, the maximum diameter of the borehole shall be the outside diameter of the casing or carrier pipe plus two (2) inches (Pipe O.D. + 2"). For pipes less than or equal to eight (8) inches in diameter, the maximum diameter of the borehole shall be the outside diameter of the casing or carrier pipe plus one (1) inch (Pipe O.D. + 1").

Water bearing sands and muck soils will be well pointed as necessary prior to commencing the bore.

All bores will be accomplished with the auger inside the casing or carrier pipe with the cutting edges positioned just ahead of the pipe except as follows:

- (1) Dry boring with the auger not inside the casing or carrier pipe may be permitted in bores eight (8) inches or less in diameter in dense consolidated soils.
- (2) Dry boring with the auger not inside the casing or carrier pipe may be permitted in bores three (3) inches or less in diameter in loose sandy soils or other soils which easily cave or spall.

Care should be exercised at all times to keep the auger properly positioned within the casing or carrier pipe and to maintain sufficient forward pressure upon the casing or carrier pipe to quickly run through any pockets of loose soil.

All boring with or without the auger inside the casing or carrier pipe will be carefully observed for comparison between the amount of cuttings removed from the hole and the diameter of the bore, together with the distance the auger has traveled in the bore. An excessive amount of cuttings removed from the bore indicates caving or spalling of the bore wall, in this case, the bore shall be stopped until a method for completing the bore acceptable to the Mississippi Department of Transportation has been agreed upon.

An acceptable fluid may be introduced by gravity flow approximately three (3) feet back of the forward end of the casing or carrier pipe to lubricate the cuttings in order to facilitate the removal thereof; however, the excessive use of such fluid causing undue flow back and erosion of the bore is prohibited.

BORING WITH DRILLING FLUID

Boring with Drilling Fluid will be accomplished as follows:

The maximum diameter of the borehole shall be the outside diameter of the casing or carrier pipe plus two inches (Pipe O.D. + 2") with an open type bit that leaves the cuttings in place.

The design and type of drilling fluid and the method used for the boring with drilling fluid work shall be of the industry standard.

Drilling fluid is used to lubricate the cutters or reamers, consolidate the cuttings into plugs of appropriate length, seal the wall of the bore to form a filter cake in order to prevent cave-ins or spalling, maintain the arch, and lubricate the bore for easy removal of masses or plugs of cuttings from the bore by using compressed air and for the installation of the casing or carrier pipe immediately thereafter. The excessive use of drilling fluid that causes undue flow back and erosion of the bore may be a violation of the approved method and, pending a Department evaluation, be cause for canceling the permit.

When boring in sandy subsoils, fine sands, water-bearing sands, or any solid which easily spalls or caves, the bores entrance will be plugged or dammed in order to retain both the drilling fluid and the cuttings within the bore until the time immediately before the casing or carrier pipe is installed. Water bearing sands and mucky soils will be pointed as necessary prior to commencing the bore. When drilling through dense consolidated soils, the cuttings may be partially removed from the hole in approximately three (3) foot plugs by the use of compressed air or by retraction of the cutter or reamer. No cutter or reamer larger than three (3) inches in diameter shall have holes therein larger than five sixteenth (5/16) inches in diameter through which drilling fluid is forced during boring.

TUNNELING

Tunneling will be accomplished by the following methods:

First, using jacking equipment where the pipe is aimed and jacked ahead as the earth is excavated by hand or with the aid of mechanical tools just ahead of the pipe end, OR

Second, when enough opening for the tunnel is excavated ahead, the tunnel liner plates are bolted together to extend the liner until it is complete.

In both methods, the pipe or tunnel must be of sufficient size to permit entry, excavating ahead, and disposal of the material through the pipe or tunnel. Excavation around the pipe or liner should be the minimum necessary for jacking or working clearances.

The pipe specifications used in the tunneling method of the crossing installation shall comply with the same specifications for pipe used for jacking and boring.

The tunnel liner plate or section specifications shall be fabricated of galvanized steel of the proper gauge and section modulus to withstand the live load and fill height. In acid soil areas, the liner will be required to be asphalt coated. If used as a cross drain, a paved invert may be required.

All pipe or liner tunneled will be fitted with grout vents and grout pumped into the voids around the pipe or liner at not less than 45 psi. The design and spacing of the vents, the grout mixture and method used for filling the void between the finished tunnel and outline of the excavation shall be of the industry standard.

DIRECTIONAL BORING

Directional boring will be accomplished by the following method:

A pilot hole is drilled beginning at a prescribed angle from horizontal and continues across the obstruction along a design profile made of straight tangents and long radius arcs.

Once the pilot hole is made, the casing or carrier line can be pulled through. The casing or carrier line is prefabricated on the bank opposite the drilling rig. A reamer is attached to the drill string and then connected to the casing or carrier line pull head via a swivel. The swivel prevents any translation of the reamer's rotation into the casing or carrier line string allowing for a smooth pull in to the drilled hole. The drilling rig then begins the pullback operation, rotating and pulling on the drill string and once again circulating high volumes of drill slurry. The pull back continues until the reamer and casing or carrier line returns to the drilling rig.

The design and type of drilling slurry and method used for the drilling operation shall be of the industry standard.

Signed: _____
Name of Party Signing Application

Title

Date

Field Inspection By: _____ 20 _____

Approved: MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Deputy Executive Director/Chief Engineer

By: _____ 20 _____

Installation Inspection By: _____ 20 _____