

DATE: March 5, 1984

TO: BRIDGE DESIGN PERSONNEL
FROM: Veral Pinkerton, Bridge Engineer
SUBJECT: Detour Bridge

After approval by the FHWA the attached SP 603-3 and Drawings 2391 and 2392 will be included in all jobs that call for a temporary bridge structure.

The plans shall specify when untreated timber may be used. The following criteria shall be used:

1. Untreated timber piling and untreated pine timber may be used on secondary "bridge and approach type" jobs where the new bridge structure is less than 110' for all types of bridge construction; or up to 160' for Precast concrete bridge construction. The following note shall be included with the detour note on the bridge layout.

"Untreated timber piling and untreated pine timber may be used in the construction of the temporary bridge structure."

2. Treated timber piling and treated pine timber will be required for all other projects. Use this note.

"If timber piling and pine timber are used on this temporary bridge structure, the materials shall be treated with a preservative according to the Standard Specifications."

Handwritten:

Use same note for all bridges on one job. If treated timber required on one bridge require treated timber for all bridges on job.

V.P. 10-4-91

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

SPECIAL PROVISION

DETOUR BRIDGE CONSTRUCTION

Subsection 603.02 Methods and Requirements for Maintaining Traffic (a) Detour Construction, of the Standard Specifications, Edition of 1978, is hereby deleted and the following substituted therefor:

(a) Detour Construction. Where shown on the plans for the maintenance and safety of traffic, the Contractor shall construct and maintain detours either to allow the construction of the roadway in half widths under stage construction or around existing bridge structures or culverts which are to be replaced or remodeled.

Temporary bridge structures, specified on the plans as a part of detour construction, shall have a minimum roadway width of 20 feet and a minimum design capacity of H15 loading, unless otherwise designated.

The contract plans include details of standard detour bridges which may be used by the Contractor for construction. If the Contractor elects to use these standard plans, he shall prepare a layout showing length and type of spans along with type of substructure and submit it to the Engineer for his approval. The Contractor at his option may also present his own design for approval for use on the project. Any Contractor's design presented for approval shall be completely detailed showing all materials, dimensions and connections and shall include design calculations by a registered professional engineer for all components of the structure. The rail and curb system proposed by the Contractor shall be at least equal in strength to the details shown on the standard plans.

No work other than driving a test piling shall be performed on the detour bridge until the Contractor has submitted the design and/or details and obtained approval from the Engineer.

All materials used in the detour bridge, whether standard design or Contractor design, shall be inspected and approved by the Engineer prior to being incorporated into the work. Materials shall be new or used materials in good condition and shall meet the materials and construction requirements of the applicable section of the Standard Specifications covering the items.

All timber piling shall be peeled as specified in Subsection 818.02(a) Quality of the Standard Specifications. The contract plans designate when untreated timber piling and untreated pine timber may be used, and when treated timber piling and treated pine timber are required.

Temporary pipes in the detour construction shall be as shown on the plans or shall be approved prior to installation.

Construction of approaches to a temporary bridge structure, or other roadway construction shown on the plans as a part of the detour construction, shall conform to the lines, grades, cross sections, and typical sections shown on the plans or established. Materials used in approaches and detour roadway construction, and the maintenance thereof as directed, shall conform to all applicable specifications.

The detour shall be maintained in a condition to allow the convenient and safe passage of vehicles. When the plans do not provide for a dust-free surfacing on the detour, it shall be maintained dust-free by the application of water or some other approved material.

The temporary bridge structure shall be removed when the new structure has been completed and opened to traffic. Materials furnished by the Contractor for the construction of the temporary bridge structure and temporary pipe shall remain his property and shall be removed and disposed of by him. Other materials removed while obliterating the detour shall be incorporated into the new construction or disposed of as shown on the plans or as directed.

Subsection 603.04 Basis of Payment is hereby revised as follows:

The fourth paragraph is hereby deleted and the following substituted therefor:

Periodic payments will be made for Temporary Bridge Structure and Maintenance of Traffic in proportion to the amount of work accomplished. The periodic payments for Temporary Bridge Structure will be limited to the following percentages of the lump sum bid as being applicable to the listed segment of work.

Substructure - 25% maximum

Superstructure - 45% maximum

Maintenance, Removal and Disposal - 30% maximum

No materials estimate will be allowed for Temporary Bridge Structure.