

**DEPARTMENT OF THE ARMY**

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P.O. BOX 80267

NEW ORLEANS, LOUISIANA 70160-0267

March 16, 1987

REPLY TO

ATTENTION OF:

Engineering Division
Projects Engineering Section

Mr. Charles Higgins
Director of Planning and Design Division
Louisiana Department of
Transportation and Development
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245

Dear Mr. Higgins:

Reference is made to your March 2, 1987 letter concerning the 17th Street Canal Bridge Crossings in Jefferson Parish. I concur with your assessment of the need for all concerned parties to review design plans in an expeditious manner, and I assure you that this office will make every effort to minimize any delays.

Relative to your question concerning placement of pile bents within the levee section, I offer the following observations:

In general, we would prefer not to have pile bents located within the theoretical levee section inasmuch as there exists a potential for development of a seepage path between strata of permeable and impermeable materials. However, as you might expect, this potential would certainly be site-specific. Therefore, if there were compelling reasons (economic or otherwise) to place the bents within the levee section, we would consider the proposal on a case-by-case basis. As I mentioned in paragraph 5 of my October 3, 1986 letter, it is likely that the least costly alternative for the bridges, which would also allow for a portion of the bridge's substructure to be creditable under the hurricane protection project, would employ the bridge abutment as part of the line of flood protection. Provisions for seepage cutoffs at the abutments would likely have to be a part of the bridge plan. If the bridge replacement proposal employs an abutment arrangement as outlined above, we will be glad to meet with your design engineers and also provide your office with our design criteria. We will also conduct any necessary reviews of designs, as your office develops them and submits them to this office. This arrangement will hopefully provide for the quickest way to develop an acceptable plan for all agencies concerned.

The recommendation for providing "temporary" flood protection at the existing Hammond Highway Bridge may be a viable alternative, if it is LDOTD's intent to eventually abandon this

bridge and, in the future, place the new crossing in the vicinity of West Esplanade Ave. However, if LDOTD's intent is to also keep the existing bridge open as a secondary local traffic route, then we would have to develop a permanent flood protection plan for the existing Hammond Highway Bridge. I would appreciate it if you could provide this office with LDOTD's position.

We are currently evaluating two alternatives for providing hurricane flood protection at the 17th Street Canal. The first involves improvements of the levee system paralleling the canal on both banks from Lake Pontchartrain to Pumping Station No. 6. The second provides for construction of an automatic floodgate in the canal at the lake. In order that the essential flood protection for both Jefferson and Orleans not be further delayed, we propose to proceed with our designs on the basis that action to deal with the Hammond Highway and I-10/I-610 crossings by your agency is not in early prospect. This means that our alternate hurricane protection plan for improving the parallel levees would include floodgates at the Hammond Highway Bridge, and reconstruction of the I-10 and I-610 crossings. With the large costs involved in the latter crossings chargeable to the hurricane protection plan, the alternate plan for fronting protection apparently will be substantially less costly than the improvements of the lateral levees, and under the circumstances, would necessarily serve as the basis for setting the limits for Corps participation in the costs for constructing either alternate.

We would be happy to meet with you to discuss this matter.

Sincerely,

Frederic M. Chatry
Chief, Engineering Division

Copies Furnished:

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