

MEMORANDUM

To: Mr. Mark Mansfield, U. S. Army Corps of Engineers

From: Jeff Cutright, VDOT

Date: December 6, 2000

Subj: Modification recommendations on the options presented in the *Concept Study Plans for Norfolk Harbor and Channels Eastward Expansion of Craney Island* as they relate to the proposed location, design and operation of the 3rd Crossing

At an October 30, 2000 meeting with the Corps of Engineers, VDOT, Baker and Moffatt and Nichol, VDOT was asked to further review the Concept Study Plans for Norfolk Harbor and Channels Eastward Expansion of Craney Island. In particular, VDOT was asked to determine if any of the twelve options, with minor modifications, might be viable options for the Corps' Feasibility Study, with respect to the proposed location, design and operation of the 3rd Crossing.

Bud Morgan and Philip Shucet attended a follow-up meeting with the Corps and Moffatt and Nichol on November 13, 2000 to discuss the results of the additional study. The following is a summary the discussion with the Corps. These comments are based on the best available information from the Corps, and the planning level of preliminary engineering drawings used for the 3rd Crossing's EIS.

- As stated in Mr. J. T. Mills comments dated September 27, 2000, Options 1, 2, 3, 4, 5, 10, 11, and 12 are not compatible with the design or operation of the 3rd Crossing. Furthermore, there are not any alterations that could be made to the 3rd Crossing to make it compatible with any of the above-enumerated Options. This situation arises from the fact that all of the above options require the relocation of the VA 164 to a point further west on Craney Island, thereby shifting the two over-water interchanges closer together. Shifting these interchanges any closer together creates potentially unsafe operational conditions, because of the fact that four distinct traffic weave movements must be accommodated between the two interchanges.

Options 6, 7, 8, and 9 are potential alternatives that may work, with slight modifications, in conjunction with the approved location of the 3rd Crossing.

- Options 6 and 9: An adjustment in the profile of the proposed 3rd Crossing would be required so a rail and roadway corridor could access the northern expansion area. This rail and road corridor could run along the east side of Craney Island and the roadway portion connect to the 3rd Crossing at an interchange located at the southeast corner of the Island. In addition, a

DRAFT LETTER - NOT FOR DISTRIBUTION – FILE USE ONLY

roadway corridor, at a desirable elevation and on suitable fill, would be required on the expansion to accommodate the 3rd Crossing. This would reduce the area currently shown for Dredge Material Placement. Short to medium height retaining walls may be required to compensate for the difference in desired elevations.

- Option 8: The northern portion of the expansion area would need to be modified to allow for sufficient area to accommodate the 3rd Crossing's roadway corridor. The area would need to be at a desirable elevation and on suitable fill or allow for bridge structures. This would reduce the area currently shown for Dredge Material Placement.
- Option 7: This option does not require any adjustments to the alignment of the 3rd Crossing or to the Option as currently presented by the Corps for the expansion area.
- NOTE 1: Our comments do not include any additional engineering data pertaining to the geotechnical issues which must be further investigated both during the final design of the 3rd Crossing, as well as the final design of the Corps' selected option.
- NOTE 2: Additional area for the disposal of dredged material could be added on the west side of Craney Island for Options 6, 7, 8, and 9 without effecting the alignment of the 3rd Crossing.