DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
DEC 29 2009
BY: IPD

INTERDEPARTMENT CORRESPONDENCE

FILE NH000-0073-03(242) COBB COUNTY
I-75/I-575 Reversible Lanes
P.I No. 714310

DATE December 22, 2009

FROM Paul V. Liles, Jr., P.E., State Bridge Engineer

TO Darryl VanMeter, P.E., State Innovative Program Delivery Engineer
Attn: John Hancock

SUBJECT **I-75 OVER ELIZABETH BRANCH**

The Hydraulic and Hydrological Study and preliminary layout prepared by PBS&J, Inc. for the above crossing were received in the Bridge Office on December 7, 2009. The hydraulic study is incomplete so it was not possible to perform a full review at this time. The following review comments are based on the information provided:

1. Computer runs, tables, roadway plans and other required information should be included in the study to support statements in the report.
2. The study should explain why the bridge is required for such a small drainage area and why the existing culvert cannot be extended instead of building the proposed bridge.
3. For sites located within a regulatory floodway, two sets of computer models should be included. The first set should be based on GDOT criteria including USGS discharges, updated survey data, field-observed Manning's 'n' values, etc. The second set of runs should be the FEMA runs using FEMA discharges, Manning's 'n' values, and updated survey data at the bridge.
4. The bridge should be shown to a larger scale on the preliminary layout and the hydraulic data should be shown also.

Please note that only a very cursory review was made of the Hydraulic and Hydrological Study by the Bridge Design Office. The computer models were not checked and only obvious discrepancies were noted in the study. The Consultant is ultimately responsible for assuring that this hydraulic study adheres to the policies and guidelines contained within Chapters 14 and 2 of the Georgia Drainage Manual and will be held accountable for the accuracy and contents of this study. Copies of these chapters can be obtained by contacting Susan Beck of the Office of Bridge Design.

The Bridge Design Office will be unable to provide multiple reviews for consultant studies. Also, due to space limitations, we cannot keep hard copies of these studies. Please provide the Office of Bridge Design with electronic copies of the final hydraulic study and preliminary bridge layout (and

FEMA package if applicable) for our records. These electronic copies are required to be in Adobe Acrobat Portable Document Format (.PDF). Do not password protect these PDF files. This Adobe Acrobat (.PDF) electronic copy of the study is a requirement for all hydraulic studies initiated after January 1, 2001. The cover sheet of the hydraulic study, as well as the preliminary bridge layout (and FEMA package if applicable), are required to be stamped and signed by a registered Professional Engineer. Please send these electronic copies to the attention of Susan Beck. In addition, please send five half-size copies of the final preliminary bridge layout to the Bridge Design Office for our use.

Any future revisions of the Hydraulic and Hydrological Study and/or preliminary bridge layout should be forwarded to the Bridge Office in the above format.

If you have any questions and/or comments, please contact Susan Beck of the Bridge Design Office at (404) 631-1862 or at email address sbeck@dot.ga.gov.

PVL/STB

Attachments

cc: Bill DuVall (Susan Beck)
Ron Wishon, State Project Review Engineer