

June 5, 2008

Via Email

Narayana Velaga
PennDOT Engineering District 6-0
Consultant Project Management
7000 Geerdes Boulevard
King of Prussia, PA 19406-1525

Subject: SR 1014, Section 16S
Geigel Hill Road over Tincum Creek
Hydrology & Hydraulics Report Submission

Mr. Velaga:

We've completed a review of the response to comments submitted by Alfred Benesch and Company on May 30, 2008 and found the revisions satisfactory. We provide the following comments for consideration. It is recommended these be addressed prior to submission to DEP. We do not require another submission for review.

2. (d) Stream cross section 502.6 is still labeled as an "existing bridge cross section," per the legend.
8. (a) The 50'-8" normal clear span of the modeled structures are consistent with the narrative and summary data sheet; however the hydrologic and hydraulic plan still reflects a normal span of 56'-11". This project is a unique case where the abutments are not parallel to the flow path; technically the normal clear span is equal to the 53'-10" clear span and would be manually adjusted. The 50'-8" normal clear span addressed in the model and narrative is acceptable as it is conservative and consistent between plans.

A skewed structure exhibits a slightly larger flow path than one perpendicular to the stream path. When reflecting skew, the bridge width is generally adjusted to reflect this length. It doesn't appear that this adjustment was made for the existing or proposed structure. The hydrologic and hydraulic plan in Appendix J describes a proposed structure width of 24'-11" with the ornamental truss. The model reflects a width of 20.79'. Per the structural plans it appears the 20.79' is accurate, but the distance is not specifically labeled. The modeled bridge width should be specifically addressed in the report and consistently labeled to avoid confusion.

Additionally, the velocity values for the existing structure do not appear to have been updated in the summary data sheet on page 12.

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Please feel free to call me or Charles Sacavage with any questions at 717-432-4425.

Sincerely,

A handwritten signature in blue ink that reads "Donna M. Newell". The signature is written in a cursive style with a large initial 'D'.

Donna Newell, PE, CFM
President

cc: Nathan G. Bevan, PE – Alfred Benesch & Company
Sandi K. Yeakley, PE – Alfred Benesch & Company