



McMullan & Associates, Inc.

June 14, 2013

Ms. Maya K van Rossum, The Delaware Riverkeeper
Delaware Riverkeeper Network
925 Canal St., Suite 3701
Bristol, PA 19007

M&A 3575-1

RE: Headquarters Road Bridge

Dear Ms van Rossum,

As requested we re-examined our preliminary report of 2012 for the Headquarters Road bridge (a.k.a. Burnt Mill or Sheephole Bridge), made a site inspection on Monday June 3, 2012, and re-evaluated some documents provided by the Delaware Riverkeeper Network. We offer the following:

Headquarters Road Bridge is a recognized historic structure that can be rehabilitated to continue to be a useful element in the county road system. The construction work for this rehabilitation can be accomplished within the set of standards for historic properties as published by the Secretary of the Interior. The Secretary's Standards are to be used by the National Park Service and the State Historic Preservation Officers and their staff in planning the treatment of such properties.

The proposed **Rehabilitation** of the bridge would be composed of the following elements:

1. Repair the existing Stone Masonry Piers and Abutments and improve the existing scour countermeasures using approved materials and techniques. This would preserve key features "... that convey historical, cultural or architectural values".
2. Replace the existing deteriorated concrete deck and steel stringers with a new concrete deck and steel stringers similar in spacing and appearance that is capable of supporting HS-20 and Emergency Vehicle loading.
3. Reconstruct portions of the stone masonry wing walls using the original stones. The location of the wing wall at the northwest corner of the bridge will be adjusted to accommodate wider vehicular turns.

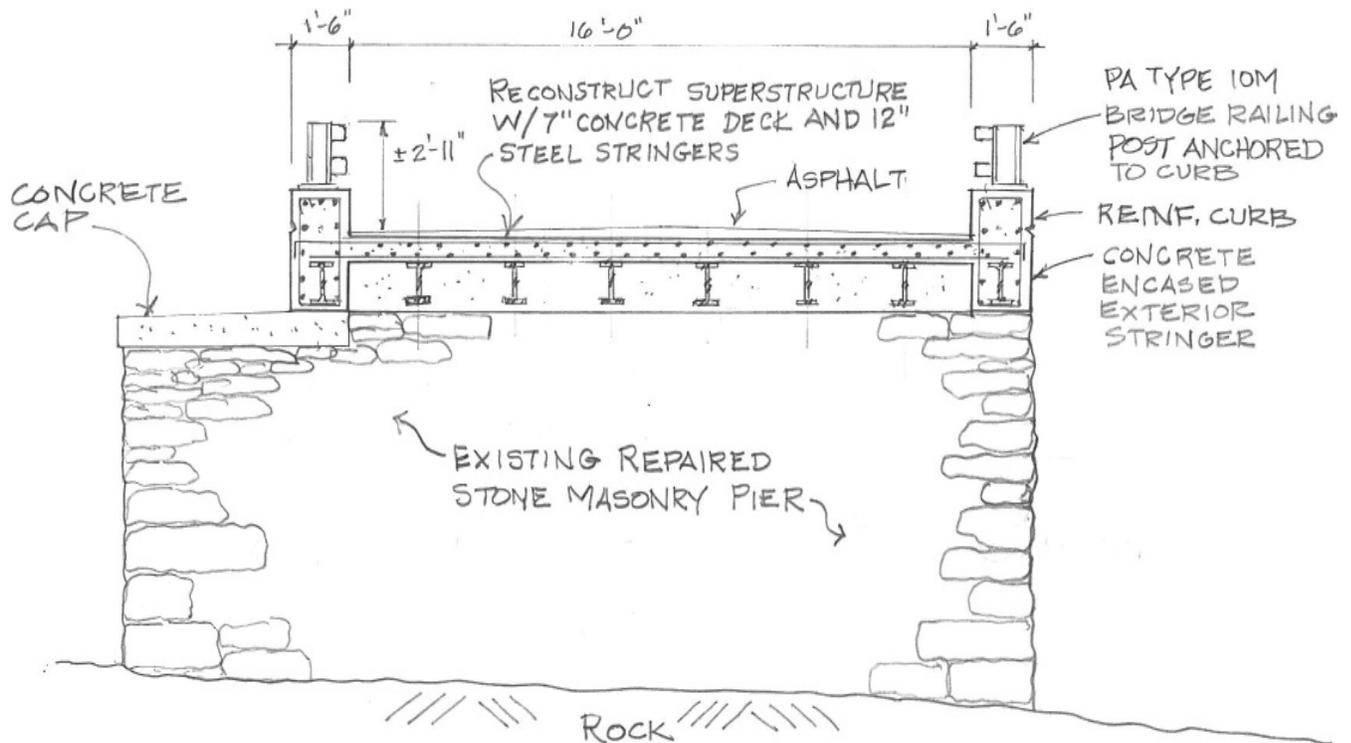


Figure 1 - PROPOSED REHABILITATION SECTION

We reviewed the April 27, 2011 Public Plans proposed by PennDot for the **Replacement** of the bridge as prepared by Urban Engineering, Inc. These plans contain several elements that are in direct conflict with the Secretary's Standards as follows:

1. The proposed replacement of the existing stone piers, abutments and walls with new reinforced concrete construction with fake stone masonry facing does not meet the Secretary of Interior Standards. The Standards state "...changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken."
2. The proposed replacement of the existing steel and concrete deck superstructure with precast concrete box beams is contrary to the Secretary of Interior's Standards "...Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials."
3. The proposed width of the bridge roadway of 24 feet drastically changes the character of the span and does not comply with the Secretary's standard "...The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided."

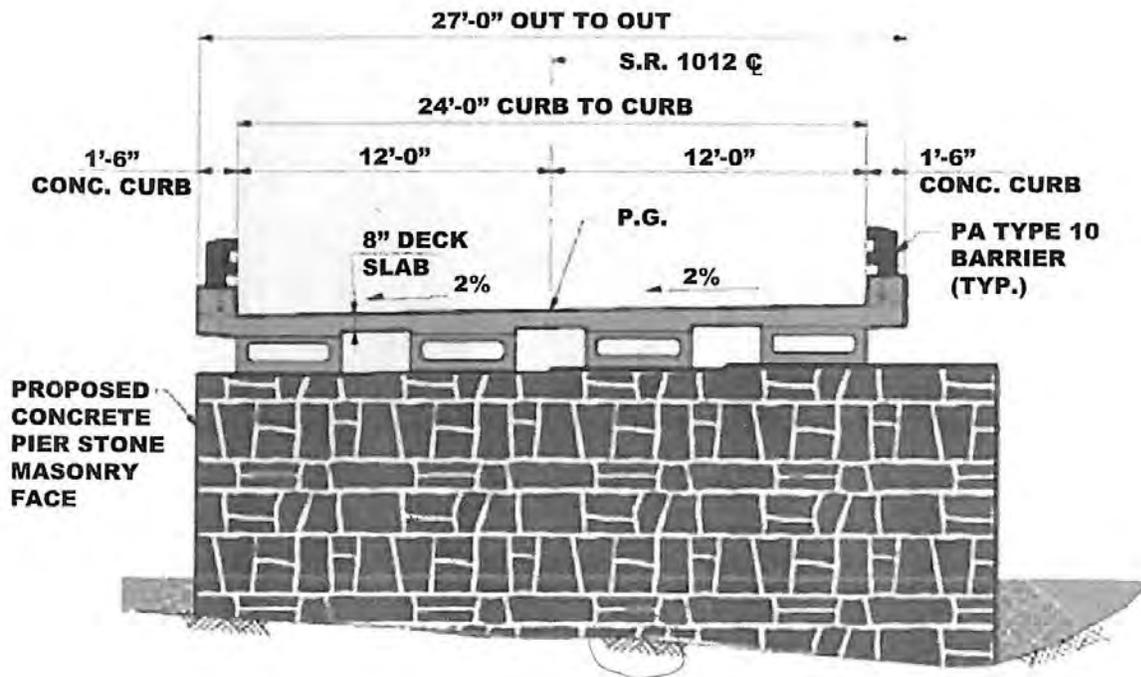


Figure 2 - **PROPOSED REPLACEMENT SECTION** by PENNDOT

In summary, the Headquarter's Road Bridge bridge can be economically rehabilitated following the Interior Secretary's standards to create a safe and effective structure that can be used by the public for many years to come.

We trust that you will find this update of our report of assistance to you in your efforts to preserve the bridge and in the upcoming meeting. Thanks You,

Very truly yours,

Douglas E. Bond, PE
McMULLAN & ASSOCIATES, INC.
CC: Abba Lichtenstein, Director of Bridges and Canals