#### HYDROLOGIC AND HYDRAULIC ANALYSIS

**NOTE:** The proposed Project does not alter the flow volumes, direction, or geomorphology of any of the streams traversed: all streams temporarily disturbed will be restored to their pre-existing topographic contours. Furthermore, the Project does not involve the creation of impermeable surfaces that would result in a change in the existing 100-year frequency flood discharges. Similarly, the Project will not alter the flood storage capacity of any floodways traversed as there will be no permanent structures built in floodways and no additional/new fill will be placed in the floodways.

#### **STORMWATER MANAGEMENT ANALYSIS**

**NOTE:** The proposed Project has been designed to satisfy Pennsylvania's stormwater management requirements and has incorporated best management practices identified in the Pennsylvania Stormwater Best Management Practices (BMPs) Manual. Stormwater will be managed during construction activities in accordance with the Project's Erosion and Sediment Control Plan (Attachment 11), currently under review. Although the Project involves the construction of permanent access roads and aboveground facilities that will require the addition of gravel/impervious surface, they have been designed to manage all stormwater runoff on-site; therefore, there will be no impacts/increase to stormwater runoff/management post-construction.

Coordination with the local municipalities has been initiated through the Act 14 notification process (Attachment 3). As part of that process, the municipalities will notify the DEP if they have any concerns regarding the proposed Project and their comprehensive plans and/or ordinances.

#### FLOODPLAIN MANAGEMENT ANALYSIS

**NOTE:** As presented in the Environmental Assessment (Attachment 10), the proposed Project does cross mapped Federal Emergency Management Agency (FEMA) floodways in Tioga County. Therefore, the Project will not involve the construction of any aboveground structures within mapped floodways nor will the Project result in any change in the storage capacity of floodways. All floodways temporarily impacted by the Project will be restored their to pre-existing contours and no new/permanent fill or structures will be placed in FEMA mapped floodways.

Accordingly, further coordination regarding this requirement (i.e., analysis and a letter of review from the municipality) is not applicable.

### **RISK ASSESSMENT**

**NOTE:** The proposed Project will not result in an increase in peak runoff rates or flood elevations as all stormwater runoff will be managed on-site by construction of BMPs; therefore, no public property or land uses will be adversely affected. Consequently, further analysis regarding the degree of increased risk to life, property, and the environment is not warranted.

#### **PROFESSIONAL ENGINEER'S SEAL/CERTIFICATION**

**NOTE:** The plans and specifications for the proposed Project are included in Attachment 6 and 11 of this Joint Permit Application Package. In accordance with Title 25 of the Pennsylvania Code §105.13(i), these plans are not required to be affixed with the seal and certification of a registered professional engineer because the proposed water obstructions/encroachments do not pose a threat to human life or substantial potential risk to properties.

#### PRELIMINARY PERMITTEE RESPONSIBLE MITIGATION PLAN

**NOTE:** The Preliminary Conceptual Wetland Mitigation Plan is included as Appendix D in Attachment 10. Once the Preliminary Conceptual Wetland Mitigation Plan is Approved, the final, complete Wetland Mitigation Plan will be placed here/Attachment 17.