Physical Description and Integrity of the Lehigh Water Gap Chain Bridge Toll House

1. Begin by summarizing the property.

The Lehigh Water Gap Bridge toll house and east bridge abutment, along with the accompanying chain bridge, were constructed circa 1826 across the Lehigh River in upper Northampton and Lehigh Counties at what was called Weider's Crossing about ½ mile below the Lehigh Gap proper. Despite the removal the chain bridge itself in 1933, the toll house continues to exist largely intact along with the east abutment of the chain bridge.

The toll house sits roughly 50 feet from the access road from Riverview Drive (Rt. 145) which is located to the east. The rectangular property is level on the south and east elevations, features a dramatic slope on the west side and then has gently sloping ground down to the river on the west side. A stone bridge abutment connects to the south side of the SW corner of the building.

2. Briefly describe the setting of the property by explaining the property's location, natural or landscape features such as orchards, ponds, fields, streetscape planning, etc. and manmade features such as roads, train tracks, signage, etc.

In the early nineteenth century, the Lehigh Gap chain bridge toll house site was part of a once vibrant, larger settled area that stretched along the east bank of the Lehigh River on both the north and south sides of the Lehigh Gap in the Blue or Kittatinny Mountain (Lehigh Gap "village" to the immediate north of the mountain and Weider's Crossing to the south). The toll bridge and east bridge abutment were located on the east side of the river on the lands of John Dieter Bauman, a prominent early landholder in the region. The bridge carried the road from the lower Lehigh Valley through Slatington and then northward into what would later become the anthracite coal region of northeastern Pennsylvania.

3. Describe the exterior of the principal building(s) on the property including general architectural characteristics and important exterior features. Include information on the style, materials, method of construction, additions to the main building, window placement, chimney(s), doors, dormers, etc.

The toll house can be characterized as fitting a Pennsylvania German Traditional style (stone construction, built into a bank, steep gable roof, thick walls and small, irregularly spaced windows.)

The three-story toll house is in the shape of a rectangle 31'x17' and oriented roughly south to north along the Lehigh River. The house, constructed of local fieldstone and lime mortar, is built into a bank, making it appear to only be two stories from the principal, south elevation. Resting on a continuous fieldstone foundation, the building is exposed stone on three of the four elevations. The north (back) elevation is clad with a Portland cement stucco (later addition). The front gable roof is covered with asphalt shingles and an interior end brick chimney, which appears to be a later addition, is located towards the rear of the building. Screened coal particles, screened from the Lehigh River, appear in the original mortar.

The south elevation features a single leaf vertical board door, accessible by a simple wood staircase. The door surround is composed of simple rectangular wood pieces with no decorative trim. The lintel above the door is a simple rectangular piece of wood. East of the door is a 6/6-light double-hung wood sash window. Another centrally placed wood sash 6/6-light window provides light to the upper story of the building. Both windows feature simple rectangular wood sills and lintels. The masonry work on this elevation is more formalized than the side elevations and features some shaped blocks of stone, most notably at the corners.

The east side of building has three windows: a 6/6-light double-hung wood sash window on the main level and two small, paired casement 4/4 windows on the upper level. There is also an opening for a coal chute into the basement.

The north stucco clad elevation straddles ground sloping dramatically from east to west. A modern wooden staircase with wood handrail supported by square balusters provides access from the high land on the east elevation to the low ground on the west elevation. The middle and upper stories are each lit by one centrally placed double-hung wood sash 6/6-light window with simple rectangular wood sills and lintels. The lower level features a single wood sash 1-light window with a similar sill and lintel.

The west elevation is pierced by two double-hung wood sash windows with 1/1-lights. It appears these windows replaced the original windows but are true to the original window size. The lower level has a single wood sash 1-light window centrally positioned in the wall. Episodes of masonry repair and repointing are evident on this elevation but appear to be minimal.

The east bridge abutment is constructed of local fieldstone and lime mortar. Anchor links from the original chain links of the bridge protrude from the stone. A stone wall infill has been added to the top of the abutment in about 1933 when the bridge was taken out of service and the area that was the roadway walled in with similar native stone. At the same time, the southern stone wall of the bridge abutment was extended about an additional 22 feet. This extension has embedded in it some remnants of the iron hangers from the bridge. The area one occupied by the porch between the south wall of the building and the bridge abutment's northside wall is a recent addition to protect people from the severe difference in ground levels at this corner.

The building currently has an asphalt shingle roof which replaced an earlier slate roof. It is probable that a wood shingle roof preceded the slate roof because of the ready availability of wood in the area. Some support wood has been added to the roof trusses. There is a chimney that protrudes through the roof.

The walls of the building are approximately 22" thick. Lime mortar was used in the construction, and as mentioned, the mortar included screened coal particles from the river. These fine coal particles washed into the river from the anthracite coal region to the north of this location. The windows and door are all located in the same location as indicated on historic photographs.

As already noted, the toll house and bridge were part of thriving community along the east bank of the Lehigh River in the immediate vicinity of the Blue Mountain in the nineteenth century. Little to nothing of this settlement remains today as a result of expanded highway construction (Routes 248 and 145) south and through the Gap and the building of the current Route 873 highway bridge in 1931 across the Lehigh River. This bridge is slated to be replaced and that construction may threaten the toll house property. There is one surviving stone house, of similar date and construction to the toll house, located about 200 feet northeast of the toll house. This may be an early house built by the Bauman family. There is nothing left of the village north of the Gap along the Aquashicola Creek.

4. Describe significant interior features of the principal building(s) including the floor plan, stairways, functions of rooms, spatial relationships and so on.

The toll house is small and extremely simple building reflective of early Pennsylvania German traditional architecture with plain white plastered interior walls, thick walls, unevenly placed windows, steep gable roof and a hillside location.

The basement (ground) floor is one rectangular space with a wooden divider about eight feet from the north wall which allowed that area to serve as a coal bin. The remainder of basement is open with current water mechanicals located underneath the wooden stairway from the first floor to the basement along the east wall. The foundation, which on the west side functions as an outer wall is constructed of the same local stone visible above grade and measures about 22” thick as mentioned earlier. Since the house is built into the hillside, the north, east and south foundations are in ground. Some of basemen is whitewashed. There is a small window, approximately 10”x18”, on the west wall.

The entrance door (single leaf vertical board), approximately 42” wide, to the building is on the south wall of the main floor. There are four windows on the floor, one each on the south, east and north. All are 6/6-light double-hung wood sash windows. The windows on the west are 1/1 double-hung sash windows. All windows are set flush to the exterior of the wall, revealing the 22” depth of the wall. It does not appear as if any of the windows are original to the 1826 date of the building, but the window locations have not changed. The first floor is just a simple open rectangle, currently with a wood stove

providing heat for the building. A stove pipe flue goes through to the upper level and then to the roof. There is one heat register in the center of the floor that aligns with the location of the previous chimney location in the center of the roof. The south and east walls are lime plaster applied directly to the stone walls and painted yellow, while the west and north are white. The wood floor has some finish remaining on it. The first floor has a stairway going to the basement and one going upstairs

The upper level also an undivided, open rectangle was most likely the sleeping quarter at one time. Wood floor is unpainted. There is no ceiling, just the wooden roof trusses and roof above. There are four windows on this level (6/6-light double-hung wood sash windows on north and south walls); small casement windows on east side. A bathroom has been built into southwest corner of the upper floor. East and south walls white, west and north partially white.

5. If there are other buildings, sites, structures, or objects on the property, briefly describe them in this section and you may also choose to document them on the Building Complex Form.

Historic photographs of the toll house and bridge show evidence of an outhouse to the north of the building, which no longer exists. Photographs also show on the south side of the roadway coming off the bridge a small wooded structure. That also no longer exists. At the location of that small wooden structure was there remains a partial small stone staircase going down the embankment.

6. Provide a boundary justification and verbal boundary description.

The Lehigh Water Gap chain bridge toll house and east bridge abutment exist on a rectangular property that is bounded on the west by the Lehigh River, on the east by the right-of-way of the Norfolk Southern Railway (before that Conrail and before that the Lehigh and Susquehanna Railroad leased to the Central Railroad of New Jersey), on the north by property of the Norfolk Southern Corporation and on the south by private residential property. A deed search has indicated that the site was part of property owned by John Dieter Bauman in the eighteenth century. Bauman was part of the large family responsible for the settling of the borough of Bowmanstown, PA.

7. End the narrative with a discussion of integrity

The toll house and accompanying bridge abutment remain substantially intact and unchanged almost two hundred years after construction. The house's foundation, walls, floors and locations of openings, such as windows, are original. The original roof has been replaced, as has the location of the chimney. The one notable change to the toll house has been the application of Portland cement stucco to the exterior of the north facing wall, likely due to water damage or settling of that part of the foundation due to river floods. The house is a beautiful structure and is an outstanding example of a simple, early Pennsylvania German building. The east chain bridge abutment also survives intact with only some added wall structure that does not fundamentally alter the

nature of the abutment. Moreover, the abutment still has the surviving chain link anchors visibly embedded in the abutment.

The house and abutment survived numerous floods of the Lehigh River, when other bridges and structures failed, and the house has not been damaged by fire or any other natural disaster. The surviving building and abutment are reflective of the architecture and construction techniques of the early nineteenth century, survivals of a pioneering suspension bridge design (the Finley chain bridge patent), and lasting vestiges of the community that existed in upper Lehigh and Northampton counties along the Lehigh River, a community of which there is little to any extant remains today.

Architecturally and historically the Lehigh Water Gap Bridge toll house and associated east bridge abutment are important survivals of an early nineteenth-century chain suspension bridge and accompanying toll house.