

1 **DEPARTMENT OF TRANSPORTATION'S TESTIMONY**
2 **DOCKET NO. C-20054822**
3 **HEARING STATEMENT NO. 3**
4 **HEARING DATE: July 25-26, 2017**

5 **Q. Please state your name and business address.**

6 A. Kamlesh A. Ashar and my business address is 1002 Hamilton Street, Allentown,
7 Pennsylvania 18101.

8 **Q. By whom are you employed and in what capacity?**

9 A. I work for the Pennsylvania Department of Transportation (“Department”) as the District
10 5-0 Bridge Engineer.

11 **Q. How long have you been employed by the Department and in what other capacities**
12 **have you been employed?**

13 A. I have been employed by the Department for 28 years. I’ve also served the Department as
14 the Bridge Inspection/Bridge Design Engineer.

15 **Q. Please generally describe your duties as the District Bridge Engineer.**

16 A. I oversee the District’s Bridge Unit which includes the Bridge Inspection, Bridge Design,
17 and Geotechnical units.

18 **Q. What is your educational background?**

19 A. I have a B.S. in Civil Engineering from the University of Bombay, India.

20 **Q. Are you a registered professional engineer in Pennsylvania?**

21 A. Yes.

22 **Q. Are you authorized to testify in this proceeding on behalf of the Department?**

23 A. Yes.

24

1 **Q. Are you familiar with the crossing and Retaining Wall which is the subject of today's**
2 **proceeding?**

3 A. Yes.

4 **Q. When was the last time that you visited the site?**

5 A. April 4, 2017.

6 **Q. Please describe the Race Street Bridge?**

7 A. It is a rolled steel multi-girder I-Beam bridge with welded cover plates. The Race Street
8 Bridge was built in 1957 and carries State Route 1004 (Race / Bridge Street) across the
9 former tracks of the RJ Corman Railroad and the Lehigh River from in the West
10 Catasauqua section of Whitehall Township in Lehigh County to Catasauqua in
11 Northampton County, PA.

12 **Q. What is the total out-to-out width of the bridge's superstructure at the abutments?**

13 A. According to the Department's Bridge Management System II (BMS2), the recorded out-
14 to-out width, from the outside of southern parapet to the northern parapet, in is 34 feet.

15 **Q. What is the Bridge Management System II (BMS2)?**

16 A. The Department's computer database that stores all inspection, inventory, and maintenance
17 information.

18 **Q. Please describe what has been marked for identification purposes as Department**
19 **Exhibit T.**

20 A. Exhibit T is the right of way and construction plans from 1955-56. These plans were
21 submitted to and approved by the Commission as part of the proceeding at Commission
22 Docket Number C-16444.

23

1 **Q. What is the width of the Department's legal right-of-way for the Race Street Bridge?**

2 A. The Department's legal right of way is approximately 74 feet wide at the abutment nearest
3 South Lehigh Avenue and then the right of way is 40 feet wide for the remainder of the
4 Bridge.

5 **Q. Where is that information on Department Exhibit T?**

6 A. Page 4.

7 **Q. Please describe the Retaining Wall involved in this proceeding.**

8 A. The upper portion of the Retaining Wall was built at approximately the same time as the
9 Race Street Bridge in 1956-1957. The upper portion of the wall was built directly on top
10 of the lower portion. The lower portion of the Retaining Wall was built earlier in 1910, by
11 the Lehigh Valley Railroad Company, to support an earlier structure which has now been
12 replaced. There are three horizontal sections or portions of the Retaining Wall: (1) a
13 southern portion which is south of the Race Street Bridge; (2) the middle portion that is
14 underneath the Race Street Bridge, and which is a part of the Race Street Bridge abutment
15 and supports the bridge beam seat; (3) and a northern portion which is north of the Race
16 Street Bridge. The southern and northern portions support South Lehigh Avenue, while the
17 middle or abutment section supports the bridge beams of the Race Street Bridge.

18 **Q. Does the Retaining Wall support South Lehigh Avenue?**

19 A. Yes, the southern and north portions of the Retaining Wall support South Lehigh Avenue.

20 **Q. Does the Retaining Wall serve any purpose to the State Highway System?**

21 A. No, the northern and the southern portions of the Retaining Wall do not serve any purpose
22 to the State Highway System

1 **Q. What is the total length of South Lehigh Avenue supported or partially supported by**
2 **the Retaining Wall?**

3 A. Approximately 464 feet. The Southern portion approximately starts at Station 0+88 South
4 to approximately Station 0+24 South and the Northern portion approximately starts at
5 Station 0+50 North to approximately Station 4+50 North. The entire Retaining wall
6 stretches from Station 0+88 South to 4+50 North. These stations can be seen on the
7 structure plans, Department Exhibit L.

8 **Q. Does the Retaining Wall support the Race Street Bridge?**

9 A. Yes, a portion of the wall or abutment that is underneath the bridge supports the Race Street
10 Bridge beams. This is the area shown on the structure plan, Department Exhibit L, at
11 approximately Stations 0+24 South to 0+50 North on the Retaining Wall.

12 **Q. Is the rest of the Retaining Wall necessary to support the Race Street Bridge?**

13 A. No, the northern and southern portions of the Retaining Wall are not necessary for the Race
14 Street Bridge.

15 **Q. Are you aware of the Drainage Design Feasibility Study that the Department had**
16 **conducted pursuant to the Commission's prior Order in this matter?**

17 A. Yes, it was completed in October 2008 and then revised in January 2009.

18 **Q. Have you reviewed that Study?**

19 A. Yes.

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1 **Q. Can you describe what the Study concluded as the cause of the deterioration of the**
2 **Retaining Wall involved in this proceeding?**

3 A. The Study concluded that the poor condition of the water runoff (drainage) system for
4 South Lehigh Avenue, which includes the drains and pipes, “played a contributory role in
5 the deterioration and damage to the structural retaining wall along South Lehigh Avenue.”

6 **Q. Which party to this proceeding has been responsible for the South Lehigh Avenue**
7 **drainage system?**

8 A. Whitehall Township.

9

10 **** Please refer to the Department’s Hearing Statement No. 3a (Confidential Testimony) ****

11

12 **Q. Do all of the repairs performed by the Department on the Retaining Wall comply with**
13 **the Department’s standards?**

14 A. Yes, the recent wall repairs completed by the Department were done per our standards.

15 **Q. Which standards would those be?**

16 A. The repairs performed comply with the American Association of State Highway and
17 Transportation Officials’ (AASHTO) Load and Resistance Factor Design (LRFD) design
18 method and the Bridge Design Specification (2004 Edition). They also comply with the
19 Department’s standards found in Design Manual Part 4 (September 2007 Edition) and the
20 Department’s Publication 408, Construction Specifications.

21 **Q. Are you aware of any national inspection standards, guidelines, or statutes for**
22 **retaining walls?**

23 A. Currently, none that I am aware of.

1 **Q. What about Pennsylvania standards, guidelines, or statutes?**

2 A. Yes. Department Publication 238, Bridge Safety Inspection Manual, 2nd Edition.

3 **Q. And what standards does Department Publication 238 provide in regards to**
4 **inspecting retaining walls?**

5 A. Department Publication 238, Chapter 2, Section 2.15, page IP 02-47, describes the
6 inspection requirements for retaining walls.

7 **Q. Please describe what has been marked for identification purposes as Department**
8 **Exhibit V.**

9 A. Department Exhibit V is the relevant chapter, Chapter 2, of the latest version of Department
10 Publication 238, Bridge Safety Inspection Manual, 2nd Edition.

11 **Q. Are you aware of any federal or state programs which allocates funding to cover the**
12 **costs associated with retaining wall inspections?**

13 A. No.

14 **Q. Does the Department agree to perform safety inspections on the Retaining Wall in**
15 **this proceeding?**

16 A. No, the Department does not agree to perform inspections of the southern and northern
17 sections or portions of the Retaining Wall.

18 **Q. Why not?**

19 A. The Department is not required to inspect retaining walls on local roads. The local owners
20 are responsible and should be completing them as they benefit from the existence of the
21 Retaining Wall. The southern and northern portions of the Retaining Wall support South
22 Lehigh Avenue.

23

1 **Q. Does the Department agree to assume maintenance of the Retaining Wall?**

2 A. No, the Department does not agree to assume maintenance responsibilities for the southern
3 and northern sections or portions of the Retaining Wall.

4 **Q. Why not?**

5 A. The Department does not agree to perform maintenance on the Retaining Wall because it
6 supports a local road.

7 **Q. Does the Department agree to performing safety inspections to the Race Street
8 Bridge?**

9 A. Yes.

10 **Q. Why?**

11 A. The Race Street Bridge carries State Route 1004 and is a National Bridge Inspection
12 Standard (“NBIS”) structure which the Department is required to inspect by Federal law.

13 **Q. Does that include the portion of the Retaining Wall that serves a Race Street Bridge
14 abutment?**

15 A. Yes, the portion of the Retaining Wall or abutment that is underneath the bridge and
16 supporting the bridge beams, 74 feet found at Stations 0+24 South to 0+50 North as shown
17 on Department Exhibit L.

18 **Q. Does the Department agree to assume maintenance of the Race Street Bridge
19 including the abutments?**

20 A. Yes, the Department already performs maintenance on the Race Street Bridge because it
21 was assigned maintenance as part of the Commission’s 1956 Order at Docket Number C-
22 16444, Township Exhibit H.

1 **Q. Does the Department benefit from the existence of the South Lehigh Avenue**
2 **Retaining Wall?**

3 A. No. The Retaining Wall is not necessary for the bridge. It is necessary for South Lehigh
4 Avenue. If the Retaining Wall was removed the abutment would need to be altered to be
5 more like a traditional bridge abutment. However, the Retaining Wall is not necessary for
6 the existence of the Race Street Bridge.

7 **Q. Which party benefits from the repairs performed to the Retaining Wall?**

8 A. Whitehall Township. The Retaining Wall supports both the portion of South Lehigh
9 Avenue north and south of the Race Street Bridge abutment. Furthermore, the major
10 repairs, Type B and C repairs indicated on the structure plan, Department Exhibit L, were
11 done to the northern portions of the Retaining Wall.

12 **Q. Do you see any logistical or engineering concerns if the Department is ordered to**
13 **inspect the Race Street Bridge and its abutments and the Township is ordered to**
14 **inspect the Retaining Wall?**

15 A. No.

16 **Q. Why not?**

17 A. The limits or boundaries of the Retaining Wall and the Race Street Bridge abutment have
18 been identified. The abutment is the portion of the Retaining Wall from Stations 0+24
19 South to 0+50 North. The rest is the Retaining Wall that supports South Lehigh Avenue.
20 These stations can be seen on the structure plan, Department Exhibit L.

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1 **Q. In your opinion, is the Township capable of performing routine inspections and**
2 **maintenance of the Retaining Wall?**

3 A. Yes, there are consulting engineering firms that could perform the inspection for the
4 Township.

5 **Q. Does this conclude your direct testimony?**

6 A. Yes.