

Survey Number: T-44

Bridge Name and Address: Charleroi-Monessen Bridge
L.R. 247 over Monongahela River
Washington County and Westmoreland
County

Owner: Commonwealth of Pennsylvania
Department of Transportation
Transportation & Safety Building
Harrisburg, Pennsylvania 17120

Statement of Significance: The Charleroi-Monessen Bridge is a good example of a multiple span Pennsylvania (Petit) truss bridge. It was built in 1906 by the Mercantile Bridge Company. It combines three of the longer Pennsylvania (petit) truss spans in the nominated group with thirteen deck girder spans to form one of the longest bridges in the nominated group. It is located in the southwestern portion of the state, one of the areas of heavy truss bridge concentration in Pennsylvania.

Area of Significance: Engineering.

Boundary Description: The nominated property consists of a 2,458 feet long by 29 feet wide rectangle whose verticies coincide with the outside corners of the bridge piers at each end of the bridge, and includes only bridge superstructure and substructure.

Acreage of Nominated Property: One and one-half acres.

PENNSYLVANIA HISTORIC RESOURCE SURVEY FORM
 Bureau for Historic Preservation Box 1026
 PA Historical & Museum Commission Harrisburg, PA 17120

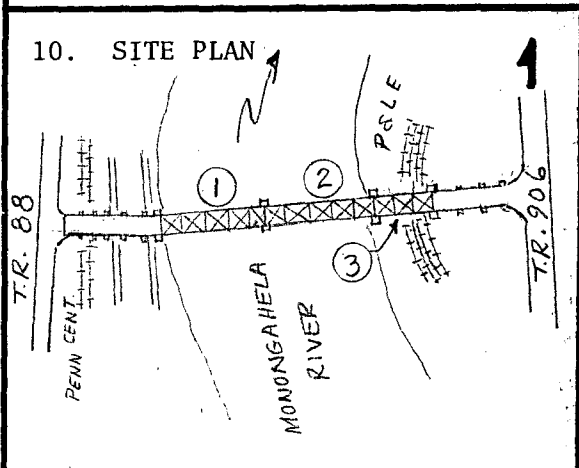
9. HISTORICAL DATA 1 of 3

8. USGS QUAD. 54 *Mon. Argahela*
 UTM's: Zone 17
 E | F | 9 | 3 | 3 | 4 | 0 |
 N | 4 | 4 | 4 | 4 | 9 | 7 | 0 |
 E | | | | | | | |
 N | | | | | | | |

Designer/Engineer: *SWENSSON, Emil*
Emil Swensson

Builder/Contractor:

Bridge Company:
~~Merchantile Br. Co., J. K. Tenner, Pres.; C. F. Thompson, V. P. P. M. McGloskey, Sec.~~
 Date(s): 1906; basis
 _____; basis
 _____; basis



Bridge File
1906; basis *dot took over*
bill 1951 when Penn Bridge Plaque
 _____; basis
 _____; basis
 Use: Vehicular present; Vehicular original.

11. INTEGRITY
 _____ altered;
 unaltered;
 _____ moved;
 Explain:

12. VIEW no.



13. COMMENTS
 Unusual features:
 Mixed Bridge has Metal & Steel Stair to Sidewalk
 * 3 Truss spans and 13 Deck Girder Spans

Locale/environment: *Connect Charleroi to Factories Accross River*
observed
 Machinery (describe/identify type/equipment):

14. DIMENSIONS
 spans: 19* _____ no., 1857.5ft. O/A
 main: 2 no., 400 ft. each
 secondary: _____ no., _____ ft.
 approach: _____ no., _____ ft.
 piers: 4 no.
 towers: _____ no., _____ ft.
 bents: 14

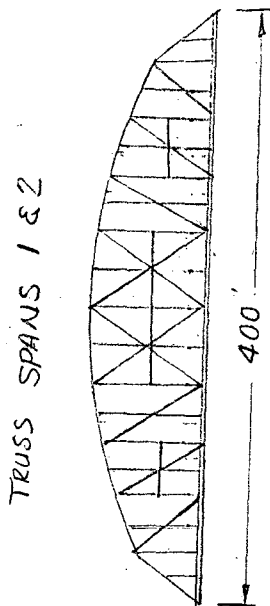
1. County Washington 125
 2. Municipality Charleroi
 3. Structure No. [6] [2] [1] [1] [0] [0] [2] [4] [7] [4] [0] [0] [0] [9] [2] [7]
 4. Survey Code 12-310
 5. Present Name
 6. Other name (historic name if any)
 7. Crossing I.R. 2177 over Mon River

15. TYPE 10

CHARACTERISTICS 60,58

Truss: continuous/cantilever:
 X PLAQUE:
 Built in 1906
 by the Merchantile
 Bridge Company
 John K. Tenner - Pres.
 Charles F. Thompson - Vice. Pres.
 David M. McCloskey, Sec.
 Emil Swensson, Engineer

Arch: masonry/metal:



Suspension:

Bascule:

Swing:

Vertical Lift:

Other:

- webbing: Lacing
- anchor span: 400 Feet
- cantilever span: _____
- suspended span: _____
- thru/deck/low (pony) / full slope / half hip
- connections: pin/riveted.
- eyebars: loop welded/die forged.
- railing: Steel Rail
- columns: I-Beam Lacing
- thru/deck/1/2-thru.
- fixed (hingeless) / 1/2/3-hinged.
- ribs: solid/braced; crescent/parallel.
- spandrels: open/solid/braced.
- intrados/vault; ribbed/solid.
- shape: semi-circular/elliptical/segmental; stilted.
- skew
- stiffening: braced-chain (1/2/3-hinged) /suspended truss.
- wire cable: twisted/parallel.
- eyebar chain.
- back-stay: straight/curved.
- single/double leaf.
- rolling lift: Schertzer.
- trunnion: simple (Chicago) /multiple (Strauss).
- counterweights: heel/overhead.
- Page/Rail.
- semi-lift/direct lift.
- bearing: center/rim/combination.
- (see Truss above).
- (see Truss above).
- other: _____

16. ~~MATERIALS (PRIMARY)~~ TWO APPROACHES 06,09 14

Superstructure	type	treatment/finish	source
main span:	<u>Steel I-Beam</u>	_____	_____
towers:	_____	_____	_____
railings:	<u>Steel Rail</u>	_____	_____
Substructure			
piers:	<u>Truss Configuration</u>	_____	_____
abutments:	<u>Coursed Ashlar Broken Face</u>	_____	_____
wings:	_____	_____	_____
intrados/ribs:	_____	_____	_____
voussiors:	_____	_____	_____

17. PHOTO NO's.
 12-04 (28-35) WA-4
 12-05 (4-15) WA-5

18. PREPARED BY: J. Over & J. Hudachek
 AGENCY/ORGANIZATION: PA DOT/District 12-0
 ; DATE: 7/82

1. County

5. Present Name

2. Municipality

6. Other name (historic name if any)

3. Structure No.

7. Crossing

over

4. Survey Code

8. USGS QUAD.

UTM's: Zone

E									
N									
E									
N									

Designer/Engineer:

Builder/Contractor:

Bridge Company:

10. SITE PLAN

1

Date(s): _____; basis

_____; basis

_____; basis

_____; basis

Use: present; original.

11. INTEGRITY

_____ altered; _____.

_____ unaltered; _____.

_____ moved; _____.

Explain:

12. VIEW

no.



13. COMMENTS

Unusual features:

Contained both loop - Welded and Die Forged Eye Bars.

Locale/environment:

Machinery (describe/identify type/equipment):

14. DIMENSIONS

spans: _____ no., _____ ft. O/A

main: _____ no., _____ ft.

secondary: _____ no., _____ ft.

approach: _____ no., _____ ft.

piers: _____ no.

towers: _____ no., _____ ft.

[6] [2] [1] [1] [0] [0] [2] [1] [7] [1] [10] [10] [9] [2] [19]

15. TYPE

CHARACTERISTICS

Truss: continuous/cantilever:

- webbing: Lacing
- anchor span: 400 ft.
- cantilever span: _____
- suspended span: _____
- thru/deck/low (pony)/full slope/half slope
- connections: pin/~~riveted~~
- eyebars: (loop welded/die forged.)
- railing: Steel Rail
- columns: I Beam Lacing

Arch: masonry/metal:

- thru/deck/1/2-thru.
- fixed (hingeless) /1/2/3-hinged.
- ribs: solid/braced; crescent/parallel.
- spandrels: open/solid/braced.
- intrados/vault; ribbed/solid.
- shape: semi-circular/elliptical/segmental; stilted.
- skew

Suspension:

- stiffening: braced-chain (1/2/3-hinged) /suspended truss.
- wire cable: twisted/parallel.
- eyebar chain.
- back-stay: straight/curved.

Bascule:

- single/double leaf.
- rolling lift: Schertzer.
- trunnion: simple (Chicago) /multiple (Strauss).
- counterweights: heel/overhead.
- Page/Rail.
- semi-lift/direct lift.

Swing:

- bearing: center/rim/combination.
- (see Truss above).

Vertical Lift:

- (see Truss above).

Other:

- other: _____)

TRUSS SAME AS SPAN 1

16. MATERIALS (primary)

Superstructure	type	treatment/finish	source
main span:	<u>Steel</u>	;	<u>Carnegie</u>
towers:	_____	;	_____
railings:	_____	;	_____
Substructure			
piers:	<u>Coursed Ashlar</u>	- <u>Broken Face</u>	;
abutments:	_____	;	_____
wings:	_____	;	_____
intrados/ribs:	_____	;	_____
voussiors:	_____	;	_____

17. PHOTO NO's.

18. PREPARED BY: J. Over & J. Hudacheck
 AGENCY/ORGANIZATION: PA DOT/District 12-0
 ; DATE: 7/82

1. County
 2. Municipality
 3. Structure No.
 4. Survey Code
 5. Present Name
 6. Other name (historic name if any)
 7. Crossing

8. USGS QUAD.

UTM's: Zone

E											
N											
E											
N											

Designer/Engineer:

Builder/Contractor:

Bridge Company:

10. SITE PLAN

1

Date(s): _____; basis

_____; basis

_____; basis

_____; basis

Use: present; original.

11. INTEGRITY

altered; _____
 unaltered; _____
 moved; _____

Explain:

12. VIEW

no.



13. COMMENTS

Unusual features:

2 Bridge Plaques Mounted on Top

Locale/environment:

Machinery (describe/identify type/equipment):

14. DIMENSIONS

spans: _____ no., _____ ft. O/A
 main: _____ no., _____ ft. 2450'
 secondary: _____ no., _____ ft. w 29'
 approach: _____ no., _____ ft.
 piers: _____ no.
 towers: _____ no., _____ ft.

over

62110012174101019127

4. Survey Code

15. TYPE

CHARACTERISTICS

Truss: continuous/cantilever:

- webbing: Lacing
- anchor span: 200 ft.
- cantilever span: _____
- suspended span: _____
- thru/~~deck/law (many) / full stops/half stops~~
- connections: pin/~~riveted~~
- eyebars: ~~loop welded~~/die forged.
- railing: Steel Railings
- columns: Laced Angles

Arch: masonry/metal:

- thru/deck/1/2-thru.
- fixed (hingeless) /1/2/3-hinged.
- ribs: solid/braced; crescent/parallel.
- spandrels: open/solid/braced.
- intrados/vault; ribbed/solid.
- shape: semi-circular/elliptical/segmental; stilted.
- skew

Suspension:

- stiffening: braced-chain (1/2/3-hinged) /suspended truss.
- wire cable: twisted/parallel.
- eyebar chain.
- back-stay: straight/curved.

Bascule:

- single/double leaf.
- rolling lift: Schertzer.
- trunnion: simple (Chicago) /multiple (Strauss).
- counterweights: heel/overhead.
- Page/Rail.
- semi-lift/direct lift.

Swing:

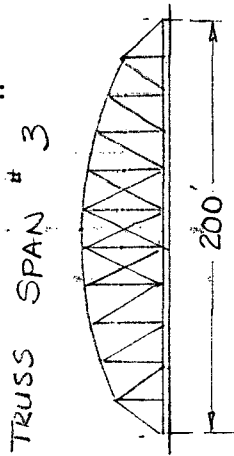
- bearing: center/rim/combination.
- (see Truss above).)

Vertical Lift:

- (see Truss above).)

Other:

- other: _____

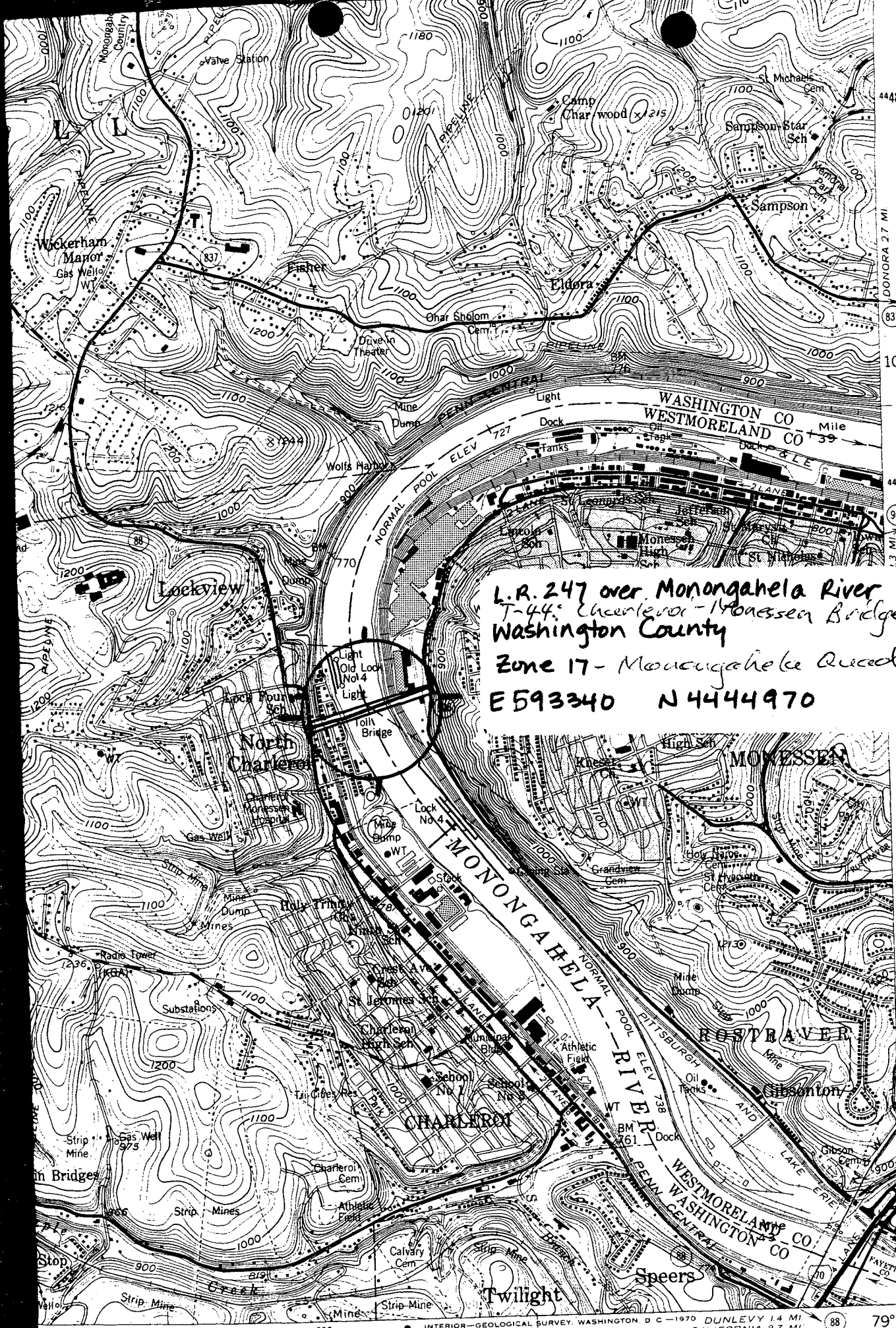


16. MATERIALS (primary)

Superstructure	type	treatment/finish	source
main span:	<u>Steel</u>	_____	_____
towers:	_____	_____	_____
railings:	_____	_____	_____
Substructure			
piers:	<u>Coursed Ashlar</u>	<u>Broken Face</u>	_____
abutments:	_____	_____	_____
wings:	_____	_____	_____
intrados/ribs:	_____	_____	_____
voussoirs:	_____	_____	_____

17. PHOTO NO's.

18. PREPARED BY: J. Over & J. Hudacheck
 AGENCY/ORGANIZATION: PA DOT/District 12-0
 ; DATE: 7/82



L.R. 247 over Monongahela River
 T-44 Charleroi-Monessen Bridge
 Washington County
 Zone 17 - Monongahela Record
 E 593340 N 4444970

Pennsylvania D.O.T. Owned Highway Bridges.
 Charleroi-Monessen Bridge
 T-44

4448
 10
 4446
 1.3 MI
 906
 444,000m N.
 444
 906
 40°07'30"
 79°52'30"