

Murray Bridge: An Orphaned Span Adopted in Goshen, Indiana

James L. Cooper,
narrator

**with the assistance of Earlene Nofziger and Dale Garber
of the Goshen Historical Society.**



In 2009 the City of Goshen hired the Troyer Group of Mishawaka to design the repair of the extant pedestrian bridge over the Mill Race Hydraulic Canal at the end of Murray Street. Maryo Pasarel of Troyer contacted the narrator among others for advice on historically-sensitive applications within the city's budget. Neither the city nor its consulting engineers apparently knew when the bridge was erected over the canal, who commissioned construction, or quite how the city became responsible for the structure. The narrator and local history detectives began the sleuthing on which the following interim report is based.

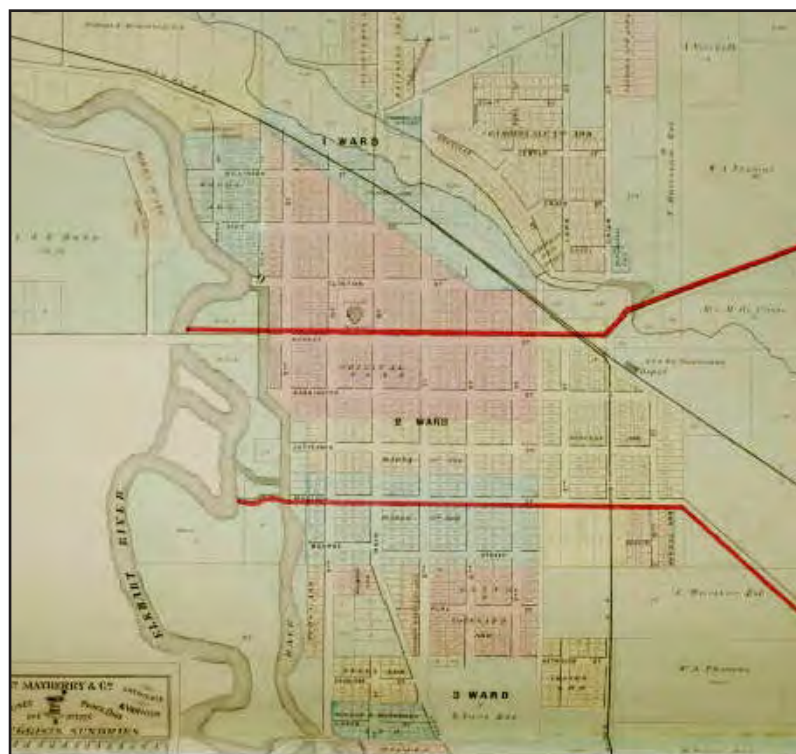
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The Mill Race Hydraulic Canal and its Early Crossings

Having defeated the efforts of the southern confederacy to secede from the union, the industrial barons of the northern states focused their burgeoning production on the wide and deep civilian markets of a reunited nation. In 1866, eight Goshen entrepreneurs invested \$100,000 for the construction of about two miles of hydraulic canal adjacent to the east side of the Elkhart River. By 1874, the canal powered four mills – two flouring, a faxseed oil mill, and a sawmill – plus a pair of wood manufacturers, a door, sash & blind factory, and two furniture manufacturers with a combined total annual product of at least \$1,000,000. Even then, less than half the water power available was being used.¹

No economic development comes without consequent disruptions: Progress has its costs. Digging and watering a canal to the east of the Elkhart River along much of the western edge of Goshen added a second watercourse obstruction to east-west transportation into and out of town. Since township and county governments were responsible for most of the local public roadways in Indiana, the hydraulic canal burdened government budgets by adding some new bridges to its roadways on the western side of Goshen. The 1874 atlas map of Goshen shows three public roadway crossings of the canal: Market Street, Madison Street, and Plymouth Avenue.²

For those living, farming, or manufacturing between the river and the canal who also lacked easy access to one of these public roadway crossings, the location was isolating enough to spur the construction of a number of private timber-beam bridges across the canal. In 1905,



the Hawke Brothers, who were major promoters and users of the canal for their flour mill and furniture manufacturing, pushed the envelope for privage bridges. They replaced the timber bridge they had built earlier to connect their factory on the west bank with Jefferson Street on the east with heavy-duty, stone-arch spans.³



Murray Timber-Beam Bridge

About a mile south of the Hawke Brothers operations, F. & L. Murray owned and worked a 15-acre



farm between the canal and the river. Extended family members also lived on the east side of the canal along what was appropriately called Murray Street. In 1901, the Murrays negotiated the construction of a canal crossing here.⁴





According to the contractual terms agreed to by the Murrays, Benjamin F. Daehl (the mayor of Goshen), and the Hawks Electric Company (owner/manager of the canal), Frank Murray donated \$75 “towards the construction of the bridge” on the understanding that “the city would forever keep the bridge in repair.”⁵



Since inexpensive, uncovered timber bridges were standard for local Hoosier roadway crossings across Indiana, the mayor should have known the nature of the commitment he made for the city. Uncovered, untreated, timber does typically rot within one to two decades. Replacement of a rotted or broken board here and there is a frequent, periodic, and necessary maintenance activity. Rotting of the timber-pile foundation typically led to replacement of the whole structure. In 1924, Frank Murray approached the Goshen Board of Public Works about the deteriorated condition of the Murray Street canal crossing. “The Murray Bridge is unsafe having been badly damaged by ice and current and,” the *Goshen News-Times* reporter noted, “is said to be badly in need of repair.”

At first, the city authorities denied responsibility for the Murray Bridge. But after Frank Murray produced a copy of the 1901 contract, the Board of Public Works ordered Charles L. Kinney, the City Engineer, to inspect the bridge and to recommend what action to take. Apparently Engineer Kinney recommended replacement rather than repair of the bridge, for when Frank Murray was back before the Board in November, he “asked for action by the street [city] in *replacing* the bridge over the hydraulic canal” [emphasis added]. The Board referred Murray to the City Council.⁶ In early December, City Councilman Leroy I. Baker reported that the contract Murray had referenced earlier had been located in the city’s files. The Council then instructed the city engineer “to prepare an estimate of the cost of a new bridge.”⁷

The scanning of Goshen newspapers for information on the Murray Bridge has not yet extended beyond 1925 to uncover the terms of its replacement. Some useful contextual information has, however, been gleaned. In mid-1925, for example, the Elkhart County Surveyor did reportedly condemn “an old wooden bridge [which was] probably the last of its kind in the county.”⁸ It had apparently become unfashionable to replace a county or – by extension – a city bridge in timber. Indeed, James Murray, grandson of Frank Murray, recalls that the metal-truss Murray Bridge was in place when the onset of the Great Depression in 1929 prompted his family to move from Elkhart back to the farm in Goshen.⁹

The Identity of the Extant Murray Bridge

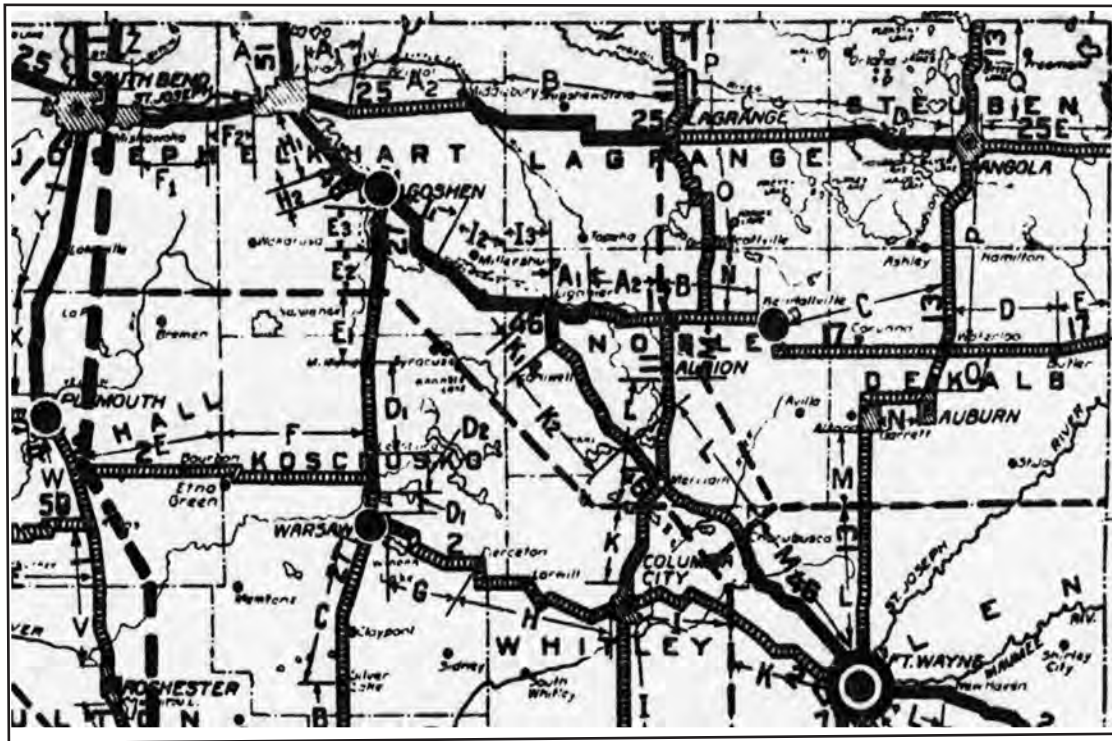
Although information on the City of Goshen's contracting for the pinned Pratt pony-truss span has yet to be located, we are, fortunately, not altogether dependent on the written record to help us identify the mysterious stranger off Murray Street. The structure itself provides – at first glance – seemingly contradictory evidence of its paternity appended to the end-posts. The nameplate – now gone but shown on the east end in a 1998 inspection photograph – revealed that the Elkhart Bridge & Iron Company fabricated and erected this superstructure in 1909. But the erection couldn't have been over the canal just off Murray Street then, since a timber-beam structure provided the crossing at that date.



The notation of "State Road 25" painted within a bordering outline of the state on the west end-post may also seem contradictory when taken together with the 1909 nameplate, since, first, there were no state roads until 1917-1919, and, second, there is no State Route [S.R.] #25 within Elkhart County today.



When the kaleidoscope is turned and the context shifted, the apparent signs supplement rather than contradict one another and point to a pony-truss span orphaned from its original home. The date on the nameplate suggests that the superstructure had to have been erected on a county road, and the stenciled route number tells us (a) the county road was later incorporated into the state highway system and (b), later still, the pony-truss span was moved to its current location. Scanning early state highway maps identifies a State Route #25 starting at the Ohio State line and heading westward through Angola, LaGrange, Elkhart, and South Bend. S.R. #25 had been elevated to U.S. #20 by 1927.¹⁰



-- State Highway System of Indiana (1924)

On Becoming an Air Line

Indiana state highways were by and large formed from segments of county roadways. The state typically undertook careful and detailed surveys of these county road segments and their structures, including bridges. Deeply committed to designing their own roads and bridges, engineers within the federal-state highway alliance systematically removed the considerable diversity of structures that the counties had constructed largely to bridge company plans on a case-by-case basis.

S.R. #25 occupied an especially high priority. It was marked early for automobility, *i.e.*, refurbished with straight, wide, and concrete-paved surfaces and bridges to safely accommodate fast-moving, heavy, motorized vehicles. “Motorists can now [by the fall of 1925] travel from Elkhart to LaGrange on concrete pavement” except for a detour in Middlebury around an incomplete overhead rail crossing. When soon completed, S.R. #25 will be “an air line between Chicago and Toledo – the official route of the United States government for military purposes.”¹¹ Old county bridges on this route would be very high on the state’s list of priority replacements.

FA-67-B
(REVISION)
Sta. 744+67
LINE "R"

EAST FORK OF LITTLE ELKHART RIVER.

10/2/24 P.L.G.

②

Built 1909 - Elkhart Br Co.
Pin Connected Low Truss - 47° 28' skew R
17'-2" ctr. to ctr. Trusses
16'-0" in to in "
15'-8" clear roadway in to in HR
E Carnegie steel
Lo Pin 3" x 2 3/4" x 2 3/4" Hangers - 5 3/4" spacing
Lo U₁ - 1 Cover Pl 14" x 14" - 2-5" x 2 1/2" x 1/2"
Lacing 1 3/4" x 2 1/2" x 1/2" x 1/2" x 1/2" x 1/2"
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Hip splice Hanger 14" x 16" x 1/2" x 1/2"
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4 R 16 1/2" x 6 1/2" x 1/2" x 1/2" x 1/2" x 1/2"
HR - 2-2 x 2 x 1/4" Lacing 1 1/2" x 1 1/2" x 1/2" x 1/2"
1 1/2" x 3/4"
Lo V₂ - 2-Loop Bars - 2 x 3/4"
U₁ L₂ - 2-Loop Bars - 2 3/4" x 3/4"
L₂ U₂ - 2-1 1/2" x 1 1/2" x 1/2" x 1/2" x 1/2" x 1/2"
Lacing 1 1/2" x 1 1/2" x 1/2" x 1/2" x 1/2" x 1/2"
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U_x - Pin 2 1/2" x 2 1/2" x 1/2" Hangers - 5 3/4" spacing
- 2-1 1/2" x 10" x 1/4" Hanger Pl
U₂ L₂ - 2-Loop Bars 2 1/4" x 3/8"
L₂ L₃ - 2- " " 3" x 1/2"
U₃ L₃ - Same as U₂ L₂

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In late March 1925, the state highway commission announced a letting for the replacement of the Little Elkhart River's East Fork bridge on S.R. #25. The new pony-truss span of state design would be slightly shorter, a little less skewed, and – with a 20-foot deck – considerably wider. At the end of April letting, the Elkhart Bridge & Iron Company secured a combination contract for this and two other bridges. The

at Miller's called for a span of 65 feet and a deck width of 16 feet. The Elkhart Bridge & Iron Company brought in the lowest and therefore 'the best' bid at \$1,700.¹⁴

And so the paternity of the extant Murray Bridge is now essentially established, although the terms of its adoption remain to be document



Notes

- ¹. "History of the City of Goshen," Higgins, Belden & Company, *Illustrated Historical Atlas of Elkhart Co., Indiana* (1874), 52; Sue Simerman, "Goshen Hydraulic Canal and River Preserve Park," Canal Society of Indiana, *Newsletter* (December 1998), 2-5.
- ². Higgins, Belden & Company, *Illustrated Historical Atlas of Elkhart Co., Indiana* (1874), 12-13.
- ³. See the *Goshen Daily News-Times*, 26, 29 July 1904; *Goshen Daily Democrat*, 29 July 1904.
- ⁴. Photos courtesy of Jerry Lapp, Red Bridge Bed & Breakfast, 212 Murray St., Goshen and Marilyn (Murray) Kehr, 18 Fairfield Park, Goshen; scanning by Earlene Nofziger.
- ⁵. "Find City Bound to Make Bridge Repair," *Goshen Daily News-Times*, 1 August 1924.

6. "North Fifth Street Accepted by Board," *Goshen Daily News-Times*, 20 November 1924: p1c2.
7. "Council Will Fix Salaries of Employe[e]s," *Goshen Daily News-Times*, 2 December 1924: p1c1.
8. "County Board Requested to Build Bridge," *Goshen Daily Democrat*, 24 July 1925: p1c2.
9. Conversation of Earlene Nofziger with James Murray of 19745 Old Port Cove, Bristol, Indiana, as reported in an email message to the narrator.
10. Indiana State Highway Commission, *State Highway System of Indiana* maps (1924, 1927).
11. "Paving Contractors End Work for Season," *Goshen Daily News-Times*, 9 October 1925.
12. Indiana State Highway Commission, survey logs (Records Department, INDOT, Indianapolis), Bridge Book (1924), #127: 1-15
13. Indiana State Highway Commission, "Notice to Bridge Contractors" (30 March 1925), "Tabulation of Awards" (24 April 1925): Contract 2-25, Division of Construction, Bridge Department; "Bridge Contract Log," SR #20H, Structure FA 67-B-1-A.
14. Elkhart County, "Commissioners Record," 20: 241, 250, 252-254.



