133rd Avenue Bridge
Spanning Rabbit River
Hopkins Vicinity
Allegan County
Michigan

HAER No. MI-107

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Great Lakes Systems Office
1709 Jackson Street
Omaha, Nebraska 68102-2571

HISTORIC AMERICAN ENGINEERING RECORD

133rd AVENUE BRIDGE

HAER No. MI-107

Location: Spanning the Rabbit River, Hopkins vicinity, Allegan County, Michigan.

UTM: 16.602630.4723650
Quad: Wayland, Michigan

Date of Construction: 1897

Present Owner: Allegan County Road Commission
1308 Lincoln Road
Allegan, MI 490101

Present Use: The bridge is closed to all traffic.

Significance: The 133rd Avenue Bridge is a four-panel half-hip pin-connected Pratt steel truss. The bridge has withstood its environment for many years, having been built in 1897. It has been considered eligible for the National Register of Historic Places since 1992.

Project Information: HAER documentation was undertaken in November of 1995. This photographic documentation is done to record the bridge in it's original setting. The Calhoun County Road Commission will take the superstructure of the bridge and move it to Riverside Park in Section 15, Emmett Township, Calhoun County. The park will include other historic truss bridges also. They will preserve and maintain the structure as a pedestrian bridge.

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Summary Description of Bridge and Setting

The 133rd Avenue Bridge over the Rabbit River is located in Section 8 of Hopkins Township, Allegan County, Michigan. One hundred thirty-third Avenue is an east-west road situated on a 20.12-meter (66-foot) right-of-way owned by the Allegan County Road Commission. The roadway surface in the vicinity of the bridge is gravel. Twentieth Street intersects 133rd Avenue approximately 405 meters (0.25 miles) east of the bridge, and 22nd Street intersects 133rd Avenue approximately 1200 meters (0.75 miles) west of the bridge. The 133rd Avenue bridge served as a crossing for area residents and as an access to markets and fields by farmers on both sides of the river. It is typical of the many "farm to market" bridges constructed in the late 1800's and early 1900's in the rural areas of Michigan.

The original plans for the 133rd Avenue Bridge cannot be located. The bridge has no nameplate. A review of road commission files has uncovered no record of construction or photographs. A review of Hopkins Township records by the firm of Hess, Roise and Company, Minneapolis, Minnesota found that in 1897 the Township hired the Michigan Bridge Company to construct a bridge across the Rabbit River. The description of the constructed bridge appears to match the 133rd Avenue bridge. The proceedings describe the bridge as: "One steel bridge 65 feet span, 14 feet roadway. One end to be on a stone abutment to be erected by the township the other end on tubular piers to be furnished and erected by the Bridge Co. aforesaid."[1]

The 133rd Avenue bridge is a four-panel half-hip pin-connected Pratt steel truss. The trusses are 64 feet long center to center of bearings. The trusses are 7 feet high and have a clear width of 14 feet between them. The upper chords consist of back-to-back steel channels with a flat steel top cover plate and bottom steel V bracing. Back to back steel angles, joined by steel battens, make up the lower chord in the end panels. The lower chords in the center panels are two flat steel eyebars. Diagonals in the center panels are two square steel eyebars crossed by one square steel eyebar. The diagonals in the end panels consist of two flat steel eyebars. Vertical truss members are formed by back-to-back steel channels connected with steel V lacing. The steel floor beams (3) are standard I beams. Each floor beam is 15 inches deep. The floor beams are connected to the truss by steel U bolts.

The bridge's decking consists of side-by-side transverse wood planks (3"x8"). The decking rests on eight (8) longitudinal steel I beam stringers, 6 inches deep. The steel stringers span between floor beams. Two angles with lattice work make up the bridge railing. The railing has been welded to the truss's vertical members and end posts along the inner side.

Steel cylinders encased in concrete serve as the east abutment supporting the east end of the structure. The east backwall and northeast and southeast wingwalls are concrete. A stone masonry abutment supports the west end of the structure. The northwest and southwest wingwalls are stone masonry.

The 133rd Avenue Bridge is typical of most bridges built in southern Michigan around the late 19th century and early 20th century. Because of the relatively lightweight truss superstructure, the bridge was fabricated at a steel fabrication plant and shipped by rail near to the job site. The contractor constructed the substructure units, then assembled and erected the steel truss on-site.

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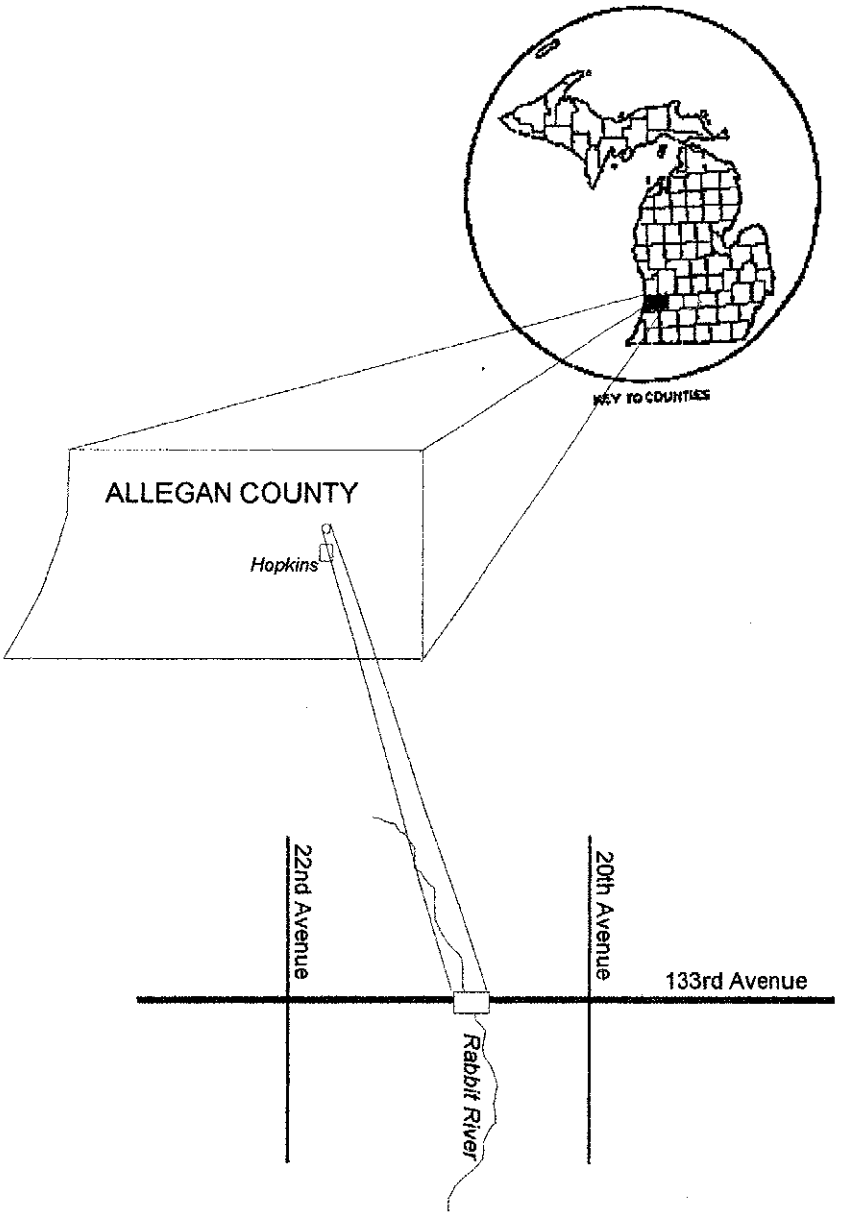
[1]Highway Commissioners Record, Hopkins Township, 29 April 1897, page 46, and 13 May 1897, page 47, Hopkins Township Office, Hopkins.



SITE LOCATION MAP