United States Department of the Interior National Park Service

National Register of Historic Places Registration Form

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KATIONAL PEGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines* for Completing National Register Forms (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

(Form 10-900a). Type all entries.			
1. Name of Property			
historic name Interlac	chen Bridge		
	City Bridge (Bridge No.	L-9328)	
_			
2. Location			
street & number (see continuati	on sheet)		ot for publication
city, town Minneapolis		N/A └ ∪ v	icinity
state Minnesota code	MN county Hennepin	code 053	zip code 55410
	-		
3. Classification			
Ownership of Property	Category of Property	Number of Resources	• •
private	building(s)	Contributing No	ncontributing
X public-local	district		buildings
public-State	site		sites
public-Federal	structure	1	structures
	object		objects
			_0 Total
Name of related multiple property listing			g resources previously
Reinforced-Concrete Highway	Bridges in Minn., 1900-	1945 listed in the National	Register0
4. State/Federal Agency Certifica		·····	······································
In my opinion, the property Ameet Signature of certifying official Nina M State Historic Preservati State or Federal agency and bureauMin In my opinion, the property meets	A. Archabal on Officer nesota Historical Societ	У	9/22/89 Date
Signature of commenting or other official		i	Date
State or Federal agency and bureau			
5. National Park Service Certification	tion		41.
, hereby, certify that this property is:		NO. 10 THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TO THE PE	A SE
entered in the National Register. See continuation sheet. determined eligible for the National Register. See continuation sheet. determined not eligible for the National Register.	Allous 18	Kus	11/6/84
removed from the National Register. other, (explain:)			
	Signature of	the Keeper	Date of Action

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2. LOCATION

street & number: William Berry Drive over Minnesota Transportation Museum street railway track.

Current Functions (enter categories from instructions Transportation, road-related		
Materials (enter categories from instructions)		
foundationwalls		
roof		
other <u>reinforced concrete</u>		

Describe present and historic physical appearance.

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INTERLACHEN BRIDGE (BRIDGE NO. L-9328)

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DESCRIPTION

The Interlachen Bridge (Bridge No. L-9328), also known historically as the Cottage City Bridge, ¹ is located in what was Interlachen Park and now is known as William Berry Park, city of Minneapolis, Hennepin County, Minnesota. It is within the right-of-way that is part of the National Register of Historic Places property "`1300'/Como-Interurban-Harriet Streetcar Line." The name "Interlachen" came from the "inter-lake" location, between Lake Calhoun on the north and Lake Harriet on the south. The bridge carries William Berry Drive (formerly Interlachen Drive), which joins the roads which circle each lake. This short, gently curving drive passes through the western edge of the relatively small park. The park is a mixture of grassy and wooded hills. With lakes on north and south, it lies between Lakewood Cemetery on the east and an older residential neighborhood on the west. The bridge crosses the restored Lake Harriet streetcar right-of-way and single track of the Minnesota Transportation Museum. This brief segment of trackage terminates not far north of the bridge; originally, it was the Lake Harriet end of the Twin City Rapid Transit Company's Como-Harriet line, with the other end in St. Paul's Como Park.

Aligned on a northwest-southeast axis (almost east-west), Interlachen Bridge is single-span, reinforced-concrete, filled-spandrel, barrel-arch bridge, with an overall structure length of 40 feet, span length of 38.6 feet, out-out width of 63 feet, carrying a 40-foot roadway and two 7-foot sidewalks. It has U-type abutments. Interlachen Bridge is reinforced with the Melan system of I-beams.² The vertical clearance beneath the arch soffit is about 16 feet.

With the exception of the soffit of the arch, the entire bridge is faced with limestone. The spandrel areas are faced in blue stone; the arch ring, abutment faces, and railing coping and ends are faced in yellow stone. With the exception of the rounded, bush-hammered railing coping and end stones; the remainder of the stone is random-coursed ashlar. Overall, the stylistic treatment and form of Interlachen Bridge is basically Classical Revival.

- The name "Interlachen Bridge" is first found in Minneapolis Board of Park Commissioners, Proceedings...for the Year 1900 (Minneapolis, 1901), p. 37, May 21, 1900. The name "Cottage City Bridge" is found in Minneapolis Engineer Department, Report on the Value of the Properties of the Minneapolis Street Railway Co as of January 1, 1916, by F.W. Cappelen, Vol. 1 (Minneapolis, n.d.), p. 211. The name apparently derived from the "Cottage City" stop on the railway line, which was at the bridge.
- 2. See Maurice W. Hewett, "William Sherman Hewett: A Biography," unpublished typescript in the Minnesota Historical Library, 1956, p. 2.

8. Statement of Significance		
Certifying official has considered the significance of this prope $\ \ \ \ \ \ \ \ \ \ \ \ \ $	rty in relation to other properties: statewide locally	
Applicable National Register Criteria A B C C	□ D	
Criteria Considerations (Exceptions)	D DE F G	
Areas of Significance (enter categories from instructions) Engineering	Period of Significance	Significant Dates 1900
	Cultural Affiliation	
Significant Person N/A	Architect/Builder Engineer: Melan, Josef	
	Builder: Hewett, William S	., & Co.

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

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8. SIGNIFICANCE

Interlachen Bridge (Bridge No. L-9328) is significant under Criterion C in the area of engineering in the context of "Minnesota Reinforced-Concrete Highway Bridges, 1900-1945." It is within the right-of-way that is part of the Minnesota Transportation Museum's "`1300'/Como-Interurban-Harriet Streetcar Line," entered in the National Register of Historic Places (see UTM coordinates). Interlachen bridge is one of the most significant bridges in Minnesota. It is an outstanding, virtually unaltered, extremely early example of reinforced-concrete arch bridge employing the patented Melan reinforcing system in Minnesota. Built in 1900 by William S. Hewett, it is the earliest known extant concrete bridge in Minnesota with a documented construction date.

The I-beam, arch-reinforcing-system invented by the Viennese engineer Josef Melan, was patented in the United States in 1894 and the first Melan-system bridge was built in Rock Rapids, Iowa, that same year. The contractor who built that first Melan bridge was William S. Hewett & Company of Minneapolis. When the Twin City Rapid Transit Company embarked on electrification and expansion in the 1890s and into the early twentieth century, Hewett designed and built all the bridges required by the system on a cost-plus basis. ²

Four years later, in 1904, William S. Hewett and Company was the contractor for bridge 92247 in St. Paul's Como Park. Except for minor differences in some dimensions (92247 total length is 7 feet shorter; 92247 out-out width is 10 feet wider), and minor differences in the stone facing, Bridge 92247 is virtually identical to the Interlachen Bridge. Bridge 92247 is thoroughly documented in engineering literature as a Hewett-built, Melan-system bridge. This evidence strongly supports Maurice Hewett's statement that the Interlachen Bridge was built on the Melan system.

Contractor William S. Hewett (1864-1951) is significant as a major Minneapolis bridge builder from the 1890s until well into the twentieth century. He is further significant

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for his pioneering work in reinforced and pre-stressed concrete. Hewett probably became familiar with the Melan reinforcing system when he built the first American Melan bridge while he was doing general bridge construction in northwest Iowa, and built the first Melan bridge in the United States. At the time he was an agent for his uncle, Seth M. Hewett. In 1899 he formed his own William S. Hewett and Company, specializing in reinforced-concrete bridges, and it was this firm that built bridges 92247 and L-5853 in St. Paul in 1904. In 1907 he formed the Security Bridge Company and in 1913 Hewett Systems, after which he focused on the development of pre-stressed concrete. 8

- See Historic Context, "Minnesota Reinforced-Concrete Highway Bridges, 1900-1945," Section II, "Engineering and Design."
- 2. See Maurice W. Hewitt, "William Sherman Hewett: A Biography," unpublished typescript in the Minnesota Historical Library, 1956, p. 2.
- 3. Minneapolis Board of Park Commissioners, <u>Proceedings...for the Year 1900</u> (Minneapolis, 1901), p. 62, 33.
- 4. Minneapolis Park Board, Proceedings...1900, August 6, 1900.
- 5. Minneapolis Park Board, 17th Annual Report, p. 49.
- 6. Maurice W. Hewett, p. 2.
- 7. See "Reinforced Concrete Arch Bridges, Como Park, St. Paul," in <u>Engineering Record</u> 50 (December 3, 1904): 648-49; and "A Reinforced Concrete Foot-Bridge at Como Park, St. Paul, Minn.," in <u>Engineering News</u> 53 (April 6, 1905): 352.
- 8. The Hewetts' background is discussed in William Mueser, "The Development of Reinforced Concrete Bridge Construction," in <u>The Cornell Civil Engineer</u>, 33 (May 1925): 162-63; Fredric L. Quivik, "Montana's Minneapolis Bridge Builders," <u>IA: The Journal of the Society for Industrial Archeology</u> 10 (1984): 35-54; and Maurice W. Hewett, "William Sherman Hewett: A Biography."

9. Major Bibliographical References	
Hewett, Maurice W. "William Sherman Hewett: A Biograph Minnesota Historical Library. 1956.	ny." Unpublished typescript in the
Minneapolis. Board of Park Commissioners. <u>17th Annual</u> 1900.	Report1899. Minneapolis,
Minneapolis. Board of Park Commissioners. <u>Proceedings</u> neapolis, 1901.	sfor the Year 1900. Min-
Minneapolis. Engineer Department. Report on the Value neapolis Street Railway Co as of January 1, 1916 neapolis, n.d.	e of the Properties of the Min- By F.W. Cappelen. Vol. 1. Min-
Quivik, Fredric L. "Montana's Minneapolis Bridge Build Society for Industrial Archeology 10 (1984): 35-5	lers." <u>IA: The Journal of the</u>
□s	ee continuation sheet
has been requested previously listed in the National Register previously determined eligible by the National Register designated a National Historic Landmark recorded by Historic American Buildings Survey #	ary location of additional data: tate historic preservation office ther State agency ederal agency ocal government niversity ther ify repository:
10. Geographical Data	
Acreage of property <u>less than one acre</u>	
UTM References A 1 15 1/7 15 6 15 10 1/7 15 1 15 10 B L J Zone Easting Northing Zone C L L L L L L L L L L L L L L L L L L	Easting Northing
X S UTMs are re-typed on	ee continuation sheet a continuation sheet
Verbal Boundary Description	
The nominated property defines a rectangle measuring 75 south, the vertices of which coincide with the outside	
□ s	ee continuation sheet
Boundary Justification Based on dimensions for overall structure length and overal structure length and over the Minnesota Department of Transportation and reported for Bridge L-9328, the boundaries are designed to enclosure, total substructure, and all other integral abutments.	on the Structure Inventory Sheet se the total bridge superstruc-
□ se	ee continuation sheet
11. Form Prepared By	
name/title Dr. Robert M. Frame III, Historical Consulta	
707 McBoal Street	date August 15, 1988 telephone 12-227-9531
city or town St. Paul	state MN zip code 55102

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UTM References:

A: Zone 15

Easting: 475650 Northing: 4975150