



Milwaukee Historic Preservation Commission Staff Report

LIVING WITH HISTORY

HPC meeting date: 9/1/2020
Ald. Nik Kovac District: 3
Staff reviewer: Tim Askin
PTS #115008 CCF #200521

Property	3133 E. NEWBERRY BL.	Lake Park Ravine Road Bridge in North Point North
Owner/Applicant	MILWAUKEE COUNTY PARK DEPARTMENT 9480 WATERTOWN PLANK RD WAUWATOSA WI 53226	Mead & Hunt, Inc. 2440 Deming Way Middleton, WI 53562
Proposal	<ol style="list-style-type: none">1. Reconstruct 50% of each abutment. Reconstruct 100% of wing walls. Use new concrete to match the board-formed appearance2. Repair superstructure cracks with elastomeric coating and coat all original structural pieces with elastomeric coating (TexCote)3. Replace deck with new concrete4. Replace railings to be similar to original baluster design, but built with tighter spacing baluster-spacing and a safer height (44")5. Rebuild asphalt approaches for better drainage6. Grade ravine slopes and remove excess vegetation (including 8 volunteer trees).7. Rebuild stone staircase at northwest corner of bridge	

Staff comments

Overall, this is an excellent project and the preservation result that the citizens of the County have been long awaiting. The major character-defining features are preserved or rebuilt. The abutments and wing walls visually appear to have failed. Staff does not have the engineering expertise to question this conclusion. The dispute amongst the engineering reports conducted are related to the structural capacity of the arches and this plan keeps and repairs the existing arches. The plan also brings back the balusters for the railings that were part of the original design.

The placement and spacing of bollards is difficult to understand. Allowing 8' space will allow anything from the smallest golf cart to a fully-loaded 10-passenger van. By paved path, the distance from bridge end to bridge end is roughly 3200 feet. This is not a consequential distance inside a vehicle. Six feet would allow golf carts other typical small maintenance vehicles across without allowing large passenger vehicles or heavy pickups. As has been learned from the nearby lion bridge, only meaningful physical barriers prevent damage from oversized vehicles. No design for any bollards has been submitted. Staff can approve bollard design later without further commission review.

Staff has concerns primarily with the proposed coating material of TexCote XL 70 Bridge Cote with Silane. Staff consulted the cultural resources departments of various state departments of transportation and was also provided with information from other state DOTs and SHPOs by Lake Park Friends. The conclusion is that some sort of coating is appropriate and probably necessary, particularly something containing silane or siloxane. However, the appearance result and constituent materials would seem to constitute an adverse effect on the structure. The National Park Service has noted in its recommendations historic concrete that "It is common for historic concrete to have a highly variable appearance, including color and finish texture." This product is designed to obliterate variability in color and texture and the manufacturer's own literature recommends it only for new concrete. The manufacturer does appear to have other coating products more appropriate to historic concrete. The coating does provide protection from water, freeze thaw, and salt infiltration.

Concrete, particularly for bridges, is different from our usual policy of no coatings or sealants on masonry materials. There are substantial exposed horizontal surfaces and preventing infiltration of water and salt is vital to protect the embedded steel from rusting. However, this is equally possible without an elastomeric coating that eliminate part of the historic character of the bridge. Products exist that allow this protection with a matching cementitious coating rather than an elastomeric film.

The return of balusters to the bridge is welcome, but more information is needed. No information has been provided on their manufacture or dimensions. The size of the originals can be determined from surviving plans and it is also assumed to be identical to the surviving balusters on the grand staircase. Details confirming this match to staff should be provided.

Recommendation

Recommend HPC Approval with conditions

1. Tighter spacing of entry bollards to prevent use by standard cars and trucks
2. Review of bollard design
3. Review of size and shape of new balusters for match to historic.
4. Use a different coating product more appropriate to historic concrete. A simpler non-elastomeric product is preferable.

Conditions

Previous HPC action

Previous Council action