MINNEHAHA CREEK

QUALITY OF WATER



WATERSHED DISTRICT

QUALITY OF LIFE

MEMORANDUM

To:	MCWD Board of Managers
From:	Laura Domyancich, James Wisker
Date:	February 23, 2017
Re:	Methodist Hospital Floodplain Mitigation Construction Update

Purpose: To provide an update on the construction progress of the Methodist Hospital flood wall, floodplain mitigation, and wetland restoration.

Background: Following record flooding in 2014, Park Nicollet and the Minnehaha Creek Watershed District (MCWD) entered into a Memorandum of Understanding to collaboratively explore a range of potential flood solutions for the hospital. Through this investigation, Park Nicollet proposed the construction of a flood wall to remove the hospital's loading docks from the 100-year floodplain, which became inundated during the 2014 flood event.

To provide compensatory storage for the proposed 1,200 cubic yard loss in 100-year floodplain storage caused by construction of the flood wall, Park Nicollet and MCWD collaborated with the Minnesota Department of Natural Resources, the U.S. Army Corps of Engineers, and the City of Saint Louis Park to identify an opportunity to increase the flood resilience of Methodist Hospital, while enhancing 2.6 acres of wetland, and increasing floodplain storage on the site. Based on potential costs, environmental benefit, and aesthetics, the area north of the existing boardwalk was identified as the preferred location for the compensatory floodplain storage. The site design balanced fulfilling the regulatory requirement of creating floodplain storage, while creating ecological lift across the site. This process is outlined in the attached fact sheet, "Creative Problem Solving," Attachment 1.

Construction Status: Construction of the floodwall began in December, and excavation in the wetland began in early January. Knutson Construction subcontracted Bolander & Sons to create floodplain between the normal water level of 883.7 feet and the 100-year floodplain elevation of 890.1 feet. In order to attain the desired ecological lift of the site, which was primarily a narrow-leaf and hybrid cattail monoculture, MCWD offered field direction and recommended that cattail biomass be scraped from the entire original footprint of the project site. MCWD has agreed to assist with the nominal cost of seeding the scraped areas because the cattail biomass removal will greatly improve the chances of reducing cattail density and establishing desirable wetland vegetation, in turn reducing MCWD's long-term maintenance costs. The mitigation areas were then excavated and graded to meet design elevations. Deeper organic soils, which have fewer viable cattail seeds, were spread across the site to meet finished grades. Knutson has also subcontracted with Minnesota Native Landscapes to install 2 seed mixes in the

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excavated and scraped areas along with crimped straw mulch or erosion control fabric. The floodwall is nearly complete with some minor aesthetic work to be completed in the spring.

Next Steps: Upon substantial completion, Park Nicollet will submit to MCWD an as-built survey, and MCWD will provide a letter memorializing, as a credit, the amount of floodplain storage created in excess of MCWD's regulatory requirement. In addition to seeding the site, Park Nicollet will plant focal areas with 30 trees, 1300 shrubs, and 4000 potted plants. Park Nicollet will also convey to MCWD a 2.6-acre easement over the site, which will allow MCWD to fulfill vegetation management including tree and shrub enhancement plantings to provide shade adjacent to the existing boardwalk and to screen the boardwalk from the southern parking garage. Park Nicollet is responsible for maintaining the site throughout the vegetation establishment and warranty period (2 years) after which MCWD will assume maintenance responsibility of the natural area. MCWD staff will also work toward leveraging our partnership with Great River Greening to complete ongoing site enhancement including additional plantings.

If there are questions in advance of the meeting, please contact Laura Domyancich at Idomyancich@minnehahacreek.org / (952) 641-4582 or James Wisker at jwisker@minnehahacreek.org / (952) 641-4509.

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CREATIVE PROBLEM SOLVING

ADDING VALUE THROUGH PERMITTING FOR THE METHODIST HOSPITAL FLOOD WALL

Record rains in 2014 pushed Minnehaha Creek out of its banks for much of that summer. One of the trouble spots was at Methodist Hospital in St. Louis Park where the overflowing stream threatened to cut off access to the loading dock and interrupt the delivery of life-saving medical supplies. Hospital staff worked tirelessly to stack thousands of sandbags into a makeshift levee to keep the water at bay.

To protect its operations from future flood events, the hospital decided to build a permanent wall between the creek and loading dock. Building a flood wall reduces the amount of "floodplain" – a low-lying area where water naturally floods – which increases the flood risk for other areas. As a result, the District's rules required the hospital to make up for that loss by creating a new floodplain.

Working together early in the design process, the hospital and MCWD found a solution that resulted in a plan that will improve both the creek and the hospital campus. The project will protect the hospital from future flooding, create the needed floodplain storage, restore a wetland, improve ecological diversity, and create another amenity for the hospital campus.

This project is another example of what sets us apart from other regulatory agencies. We prefer to partner on new construction projects early in the design process, where we can bring our resources and expertise to the table to achieve higher water quality and project outcomes. This approach achieves greater success than the standard regulatory route where we're among the last to see a project's design before construction.

The Methodist Hospital flood wall project is one of the many efforts to improve Minnehaha Creek through its most historically degraded stretch in St. Louis Park and Hopkins, an area now known as the Minnehaha Creek Greenway.

Sparked by a stream restoration on the Methodist Hospital campus in 2010, the Greenway has evolved through a series of projects, including the rejuvenation of Cottageville Park in Hopkins, the creation of the Minnehaha Creek Preserve in St. Louis Park and the expansion of a nearby business. Our recent collaboration on the Japs-Olson Company expansion resulted in more green space for stormwater treatment, a trail connection to the creek and a business expansion that was finished ahead of schedule, under budget and created 150 jobs.

To learn more about these efforts along the Minnehaha Creek Greenway, visit minnehahacreek.org/greenway.