



APWA MINNESOTA CHAPTER PUBLIC WORKS PROJECT OF THE YEAR NOMINATION FORM

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Submission Deadline: October 1, 2021

All nomination and supporting data are to be submitted as a PDF to Sarah at sarah.lloyd@bolton-menk.com with a maximum page size of 5 pages, including photos.

Project Nominated:

Managing Agency: _____

Contact Person: _____

Agency Address: _____

Agency Phone Number: _____

Project Design Firm: _____

Project Construction Administration Firm: _____

Project General Contractor: _____

Name of Person Making Nomination: _____

Phone Number: _____

Criteria for Nomination

- Project must be substantially completed by October 31, 2021.
- Includes use of innovative construction management techniques and completion of the project on schedule.
- Maintained excellent safety performance and safety program throughout construction.
- Evidence of strong community relations during all project phases.
- Consideration given to the environment. Sustainable design techniques involved.
- Unusual accomplishments given adverse conditions.
- Provides future value to the public works profession and perception by the public.
- Additional considerations such as value engineering, innovative project financing, multi-agency coordination and participation.

Reasons for Nomination: Describe the project with the aspects and features of the project that fulfilled any of the applicable criteria listed. (Include description on a separate page.)

Golden Valley long-term flood mitigation projects, Phase 1 Liberty Crossing and DeCola Ponds B&C projects



An aerial view of Phase 1 of the long-term flood mitigation projects at Liberty Crossings and DeCola Ponds B&C, in Golden Valley, Minnesota. The projects lower flood elevations on the DeCola Ponds and on Medicine Lake Road.

Dealing with chronic, long-term flooding requires a planful, cooperative approach

The City of Golden Valley has been working with several project partners and using numerous funding sources over the past few years to implement the first phase of a long-term flood mitigation plan that addresses chronic flooding. Not only has this flooding historically impacted as many as 40 structures, it also makes Medicine Lake Road—a nearby county highway—impassible to emergency vehicles during intense rain events.

The first phase of the flood mitigation projects identified in the plan included the Liberty Crossing Flood Storage Project and the DeCola Ponds B&C Improvement Project. These were implemented in two stages, completed in 2017 and 2020, respectively. Ultimately, they work together to reduce the flooding around the upper DeCola Ponds and at the low point on Medicine Lake Road.

Long-term planning sets the stage for project implementation

Although much of the flooding in the DeCola Ponds and Medicine Lake Road area occurs in the city of Golden Valley, the source of the water is the result of runoff from three municipalities. To address the flooding issues, the city of Golden Valley joined forces with the cities of New Hope and Crystal to develop a comprehensive flood mitigation plan.



After intense rain, water floods Medicine Lake Road with several feet of water, hindering access to nearby properties and damaging structures.



Flooding at Rosalyn Court Condominiums following a large rain event. Additionally, pond levels downstream can rise quickly, flooding backyards and eventually homes with basements.

The public was also a planning partner. Outreach by the City of Golden Valley throughout the flood mitigation planning process turned residents from adversaries—skeptical of the city’s data and motives—to allies, supporting the city in its planning and future feasibility and design efforts.

Planning efforts identified several flood mitigation projects and outlined a funding strategy and partnerships to implement projects in a phased approach over time. These planning efforts were completed in 2016, and several projects were identified throughout the watershed to develop additional conveyance capacity, flood storage, and rate control. The goals of the plan include:

- Constructing several capital projects to create flood storage and lower flood levels.
- Increasing resiliency to a changing climate with more frequent and intense storms.
- Improving public health and safety.
- Reducing risk and damage.
- Keeping neighborhoods and communities intact (versus home acquisition).
- Preserving economic value.

The first phase of projects completed by the City of Golden Valley was targeted at reducing flooding around the low point on Medicine Lake Road. These included the Liberty Crossing Flood Storage Project and the DeCola Ponds B&C Improvement Project. Both projects have been completed in accordance with the phasing and implementation schedule outlined in the plan with funding from a variety of partners (specifics are listed in the project details)—while maintaining an exemplary safety record. The total combined cost of the two projects was \$9 million, including design and construction.

Successful implementation of the Liberty Crossing Flood Storage Project results from public-private partnership

Before the flood mitigation plan was even finalized, the city was presented with the opportunity to implement the first project. The Liberty Crossing Flood Storage Project addressed the flooding on Medicine Lake Road. Recognizing the importance of the housing development site, the city was able to work in partnership with a private developer early on to set aside real estate for green space, flood storage, and conveyance. The public improvements were ultimately funded with tax-increment financing (TIF).

To develop additional flood storage and trail connections, the city worked to remove Rhode Island Avenue (a state aid roadway) while still providing required emergency access for the new development. Known sanitary sewer

issues along the alignment were also addressed. The design also considered the connection to the (future) DeCola Ponds B&C Improvement Project and addressed challenging soils conditions resulting from the area’s history as a wetland.

Ultimately, the Liberty Crossing Flood Storage project reduced the 100-year flood levels at the low point on Medicine Lake road by about 1.5 feet and on DeCola Ponds A, B, C, and D, by about 0.3 feet. In addition, a reduction of impervious surface area helps protect and improve water quality in the DeCola Ponds and Bassett Creek.



Subsurface storage below the dog run at the Liberty Crossing, a private development, provides 3.5 acre-feet of both water quality treatment and flood storage.



The city worked with a private developer to incorporate 5.3 acre-feet of green space and surface flood storage within the development.



Excavation of an additional 24 acre-feet of flood storage as part of the DeCola Ponds B & C Improvement Project

DeCola Ponds B&C Improvement Project meets the goal of safe emergency vehicle passage during intense rains

The DeCola Ponds B&C Improvement Project, also a success due to the many public and private partners, benefited from the following funding sources:

- A Minnesota Department of Natural Resource Flood Damage Reduction (MnDNR FDR) grant
- The Bassett Creek Watershed Management Commission Capital Improvement Program
- Hennepin County
- The City of Golden Valley

This project provided a connection between the storage and conveyance created as part of the Liberty Crossing Flood Storage Project and additional storage created around DeCola Ponds B&C and on private land at the Dover Hill apartment complex, where an easement was granted to the city.

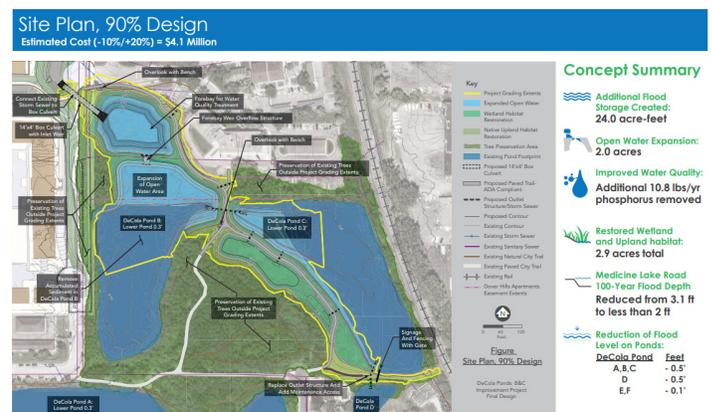
Building off of the engagement started as part of the flood mitigation planning process, the public was engaged throughout the feasibility and design processes, with numerous open houses for input. The city's efforts for transparent and frequent communication resulted in more trust in the city's efforts and a willingness to engage with the city in streamlining the design and construction process. However, even with the past efforts, these projects have and will continue to require sustained public outreach, education, and communication as a result of resident turnover.

The project required significant permitting, including

completion of an environmental assessment worksheet (EAW), permitting for dewatering a public water, and working with the railroad.

Even with winter construction and frozen ground, the project had to overcome challenging dewatering conditions due to a large watershed, high groundwater, and a wetter-than-normal environment during construction. There were also security issues faced during construction, including trespassing, theft, vandalism, and other crime.

Ultimately, the Decola B&C efforts lowered the estimated flood elevation on Medicine Lake Road by an additional 1.1 feet, allowing for safe passage of emergency vehicles during intense rain events.



DeCola Ponds B&C Improvement Project Final Design

Posters with site and restoration plans used at open house events helped residents visualize the DeCola B&C project. Ongoing outreach with the public through each phase of the project has streamlined the design and construction process.



The habitat transitions from the Pennsylvania Woods, through a wet meadow, to the DeCola Ponds, providing both flood storage and habitat diversity.

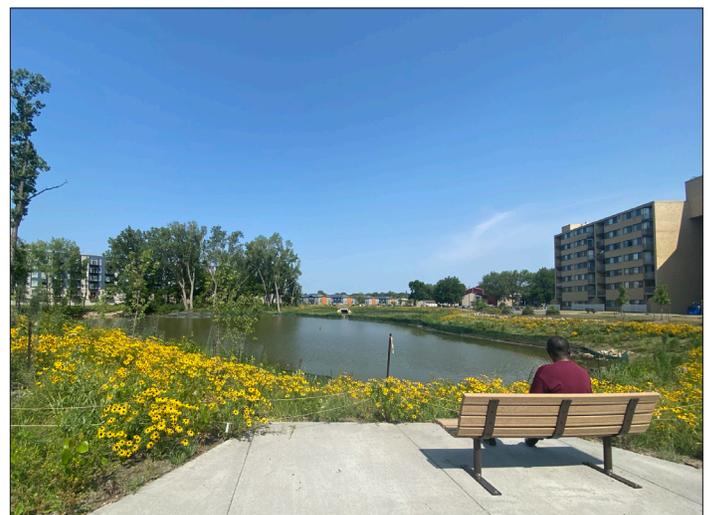
Projects provide benefits beyond flood mitigation

The City of Golden Valley saw the opportunity to achieve multiple benefits through the implementation of the Liberty Crossing Flood Storage Project and the DeCola Ponds B&C Improvement Project: Additional benefits included:

- Improving water quality treatment of stormwater runoff to Bassett Creek.
- Reducing impervious surface area within the project area, through the elimination of Rhode Island Avenue, to help protect and improve water quality in Bassett Creek.
- Creating new green space and restoring native vegetation, providing more habitat diversity, enhancing pollinator habitats, and improving water quality through these native buffer areas.
- Developing additional public open space and trails that connect to the Pennsylvania Woods Nature Area.
- Improving park safety, aesthetics, and increased opportunities for recreation and wildlife viewing.
- Replacing the aging Metropolitan Council Environmental Services sanitary sewer force main located within the Rhode Island Avenue corridor.
- Allowing for the removal and management of contaminated fill and accumulated pond sediments during project construction.
- Improving restoration through use of multiple methods for geese management.



Habitat restoration allowed for inclusion of more pollinator-friendly plantings.



Park improvements include expanded trails, access, benches, signage, and opportunities for wildlife viewing.



The SEA School/Wildwood Park area offers the next opportunity for flood mitigation in the City of Golden Valley, with project design beginning in the fall of 2021.

An example for future efforts

The success of the Liberty Crossing and DeCola Ponds projects provides a road map for future efforts in the city and elsewhere. The projects exemplify the importance of planning and partnerships (both public and private) in implementing large-scale, projects that address public works issues like increased risk of flooding due to climate change. Additionally, multiple funding sources and a phased approach to design and construction can help cities implement these significant capital projects over time.

Although these are considered flood mitigation projects, the work with multiple partners and departments within the city of Golden Valley has resulted in projects that provide multiple benefits and have created spaces that are considered community assets. Emergency vehicle passage on Medicine Lake Road is now possible during large, intense storm events, improving public safety. The public

is able to enjoy increased green space, while restored habitat allows a diverse plant and animal community to thrive. And, improved trails, trail connections, access, passive recreation opportunities, and safety improvements offer a richer experience for park users.

The city is continuing the implementation of the next phase of the long-term flood mitigation plan and is currently moving into final design of the SEA School-Wildwood Park flood storage project, in partnership with the Bassett Creek Watershed Management Commission, the Minnesota Department of Natural Resources, and the Robbinsdale Area School District. Like the Liberty Crossing and DeCola Ponds B&C efforts, this project will reduce flood levels and flood damages, keep a neighborhood intact, improve public health and safety, reduce public liability and cost, preserve economic value—and provide a host of ecological, aesthetic, and educational benefits.

Project partners

