

2015  
 MACDC INNOVATION & EXCELLENCE AWARD  
 HONORABLE MENTION  
 VILLAGE OF MIDDLEVILLE  
 TOWNE CENTER DRAIN

Russ Yarger  
 Barry County Drain  
 Commissioner



Tammy Berdecia  
 Deputy

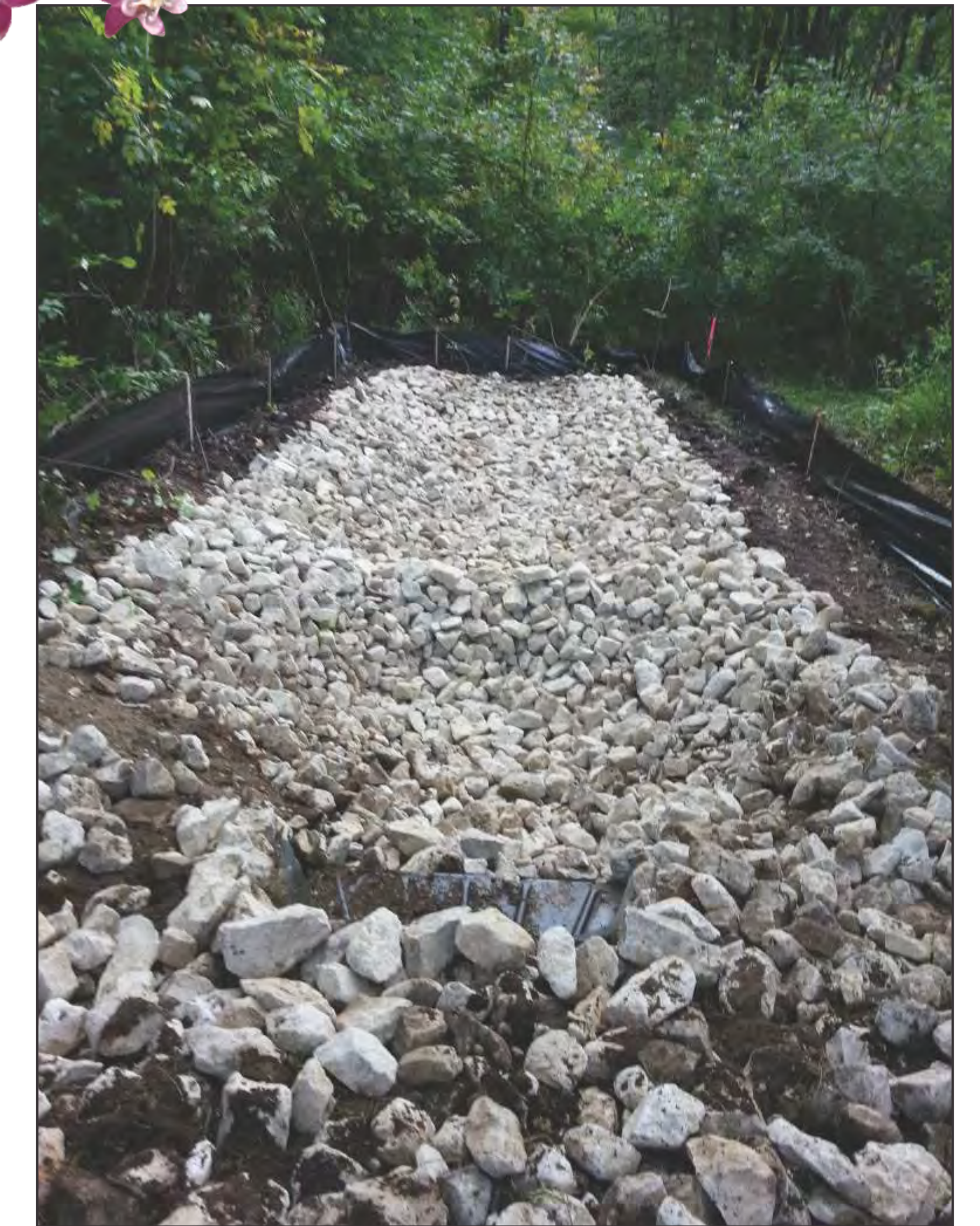
When privately owned ponds hindered commerce and posed a health and safety risk, the Village of Middleville reached out to the Barry County Drain Commissioner (BCDC) for help.

Visitors were “welcomed” by two algae covered ponds with stagnant water and overgrown vegetation. The ponds were designed to service highway runoff and a commercial area. The water was to move from the pond on the east side of Highway M-37, to the pond on the west side. However, there was no outlet and the easterly pond flooded onto neighboring properties.

In 2012, the Village of Middleville filed its first ever Petition to the BCDC to establish a new Drain through Chapters 3 & 4 of the Michigan Drain Code.

Design began in April of 2013, and construction followed. The design used existing infrastructure and terrain to raise the bottom elevation and strategically grade the west pond. This forced the hydraulic gradient to move water through the pipe west to east, effectively reversing the flow. This allowed Eng. to design an outlet above the floodplain of the Thornapple River. Both ponds received underdrains to eliminate standing water, a major concern to the Village, addressing mosquito and algae issues.

These solutions solved the drainage issues with a minimum of added infrastructure, and minimum costs. The BCDC also obtained maintenance easements. Native plantings were added to filter water and beautify the site, accomplishing the inviting landscape the Village desired.



CHALLENGES

- Privately owned ponds
- Flooding, health and safety risk
- Small District = limited funds and design options

SOLUTIONS

- MDOT active partner
- BCDC obtained easements
- Redesigned existing system

RESULTS

- BCDC will maintain
- Native plants filter water
- Positive outlet to Thornapple River



MICHIGAN DEPARTMENT  
 OF TRANSPORTATION

VILLAGE OF MIDDLEVILLE

