

The Rededication...

On **July 31, 2009**, the Washtenaw County Board of Road Commissioners and Village of Dexter hosted an official **"Rededication Ceremony"** where local dignitaries, the Road Commission and Village staff, media representatives, friends and neighbors gathered to officially rededicate the **Dexter Main Street Bridge** into service for the Washtenaw County community.

The newly completed bridge now serves as a safe, convenient, and welcoming thoroughfare for the Village of Dexter and neighboring township communities. Many thanks go out to area citizens, local officials, and the Washtenaw County Road Commission and Village of Dexter staff for their tireless and cooperative efforts. These individuals are now part of a dynamic, new phase in the bridge's history and its associated recreational and riverbed rehabilitation benefits. Join us as we celebrate the **greening** and **revitalization** of Dexter Village and the Huron River Watershed.

Special Acknowledgments

A special **thank you** goes out to these and many other individuals who generously contributed their time, talent, and support to this project.

Village of Dexter

Shawn Keough, *President*
Ray Tell, *President Pro-Tem*
James Carson, *Trustee*
Paul Cousins, *Trustee*
Donna Fisher, *Trustee*
Joe Semifero, *Trustee*
James Smith, *Trustee*
Carol Jones, *Clerk*
Donna Dettling, *Village Manager*

Huron River Watershed Council

Laura Rubin, *Executive Director*

Michigan Dept. of Transportation

Mark Harrison
Andy Hodges

Consulting Firms

Beckett & Raeder
E.T. MacKenzie
JJR
URS Corporation
Wade Trim

Washtenaw County Road Commission & Staff

David E. Rutledge, *Chair*
Douglas E. Fuller, *Vice-Chair*
Fred Veigel, *Member*
Steven Puuri, *Managing Director*
Roy D. Townsend, P.E., *Director of Engineering & County Highway Engineer*
Aaron L. Berkholz, P.E., *Construction Supervisor & Project Manager*
Dan Heath, *Inspector*

Hosted by the



Dexter Main Street BRIDGE

Rededication Ceremony

July 31, 2009

6:00 p.m.

dexter main street bridge mill creek dam removal

Project Funding...

Through the Michigan Department of Transportation, the **Washtenaw County Road Commission** secured a \$2.5 million **Local Bridge Program** (LBP) grant for the **Dexter Main Street Bridge** project, **Mill Creek Dam removal**, and associated road work. In that the LBP funds covered 95% of the construction costs, the remaining 5% was assumed by the Road Commission and the Village of Dexter. The total construction cost was estimated at \$2,304,400.

Approximately \$560,000 was required of the Road Commission for the preliminary design, materials testing, and local match.

Non-participating items associated with bridge aesthetics, sedimentation management, and stream restoration were borne by the **Village of Dexter** and the **Downtown Development Authority** for the sum of \$950,000.

Mill Creek is the largest tributary of the Huron Watershed with its sub-watershed draining 143 square miles. The downstream stretch of Mill Creek is a state-designated Natural River Zone afforded strict protections from development and alteration due to its high quality.

Village of Dexter President, Shawn Keough, writes of the Dexter Main Street Bridge and Mill Creek Restoration projects, *"The fuel that drives all of this momentum is the positive energy of the people of this community...The village, its residents and those around us that are part of this community should be very proud of what we have been able to accomplish in these tough times."* source: *The Dexter Leader*, July 9, 2009.

the **greening** and **revitalization**...

village of dexter huron river watershed

With a vision for regional growth and outdoor recreational experience, the Village of Dexter provided ***\$580,000** in funding towards **dam removal**, **sedimentation management**, and **stream restoration**.

The benefits of the Mill Pond Dam removal prove far reaching for local residents, visitors, and area wildlife habitat.

**represents a portion of the total \$950,000 contribution*

Goals and objectives of Mill Creek Dam removal

- Remove dam in conjunction with Main Street Bridge replacement
- Restore Mill Creek to free flowing conditions
- Restore fish passage between Huron River and Mill Creek
- Restore natural sediment transport
- Develop recreational and educational opportunities
*Enhanced canoe / kayak usage
Development of recreational trails / wildlife observation*

*Village of Dexter officials now turn their efforts towards the development of **Mill Creek Park**.*



Dexter Main Street Bridge



Dexter Main Street Bridge and old Grist Mill (circa 1932)

The History...

The **Dexter Main Street Bridge** dutifully served area residents and merchants for over 75 years as a primary means of access to the bustling Dexter Village. Located in Scio Township near the north border of the Village, the 1932 concrete bridge spanned **Mill Creek**, just above its confluence with the Huron River.

The Village's founder, Judge Samuel Dexter, built the original wooden dam on this site in 1824. Over 100 years later, automaker **Henry Ford** constructed the current steel and concrete structure in place of the timber crib dam to generate power for his operations. Ford abandoned the Mill Creek location as he could not acquire all of the land necessary for the proposed project. But the dam remained.

The history of this Scio Township intersection moved to the forefront while the new Main Street Bridge project was in its infancy. Initial studies for bridge and riverbed improvements brought into question the true ownership of the dam. Records of Mill Creek Dam and adjacent parcel ownership were difficult to track. A remarkable discovery of Henry Ford's handwritten notes helped set the record straight to determine who was responsible for the road and all the road appurtenances as well as who was responsible for the Dam and flowage rights.

Current Day Conditions and Needs...

The **Washtenaw County Road Commission**, responsible for maintaining the safety of 112 bridges throughout the county, had to impose annual weight restrictions on the Dexter Main Street Bridge starting in 1999. By 2007, due to structural deterioration of the bridge and concern for public safety, a reduced limit of 7-tons was imposed, eliminating critical access for many large vehicles, including fire trucks and buses.

The Road Commission retained **JJR, Inc.** of **Ann Arbor**, Michigan to conduct a feasibility study of possible transportation improvements to the area surrounding the Main Street Bridge over Mill Creek in Scio Township. This study was necessary due to a lowering of the weight restriction on the Main Street Bridge, traffic growth to the north and west of the Village of Dexter, and an increase of inner-village traffic congestion. The study concluded that a new bridge was necessary to convey the 30,000 vehicles per day expected in the future.

While the Road Commission conducted its bridge study, the **Village of Dexter** consulted with the **Huron River Watershed Counsel (HRWC)** and **Michigan DNR** about the benefits of removing Mill Creek Dam. Discussion about the future of the dam gained a sense of urgency when the Road Commission informed Village representatives that a new bridge over Mill Creek was needed as soon as possible.

The Road Commission requested direction from the Village Trustees regarding the future of the dam as the bridge and dam were structurally connected.



Through the assistance of the HRWC, concerned citizens and village officials formed a task force that evaluated the alternatives of removal versus retaining the dam. After months of research and announcement of the LBP grant, the task force recommended full removal of the dam.

The next challenge that lay ahead was development of a design with the assistance of **URS Corporation** that addressed the new road and bridge project along with the dam removal project.

The Rehabilitation...

In April 2008 construction activities were initiated on the Dexter Main Street Bridge project site. Over the ensuing sixteen months, the project team, including the Washtenaw County Road Commission, the Village of Dexter, and the **E.T. MacKenzie** company, undertook the removal and replacement of the existing bridge over Mill Creek, removal of the Henry Ford-era dam, and the reconstruction of the Dexter-Pinckney Road / Dexter-Chelsea Road intersection.

Stage one construction began with the removal of the northerly portion of the old bridge and the building of a new abutment. The first set of four precast concrete I-beams, measuring 101-feet long and 54-inches tall, were placed onto the new bridge abutments mid July and placement of the concrete bridge

deck began two weeks later. The next milestone occurred early September with the reconstruction of the adjacent road approaches and the construction of a new asphalt roadway. Traffic was shifted onto the newly constructed northerly bridge section.

With that work completed, **stage two** construction began. The construction of the new southerly bridge span followed a similar scenario to that of stage one with the new concrete bridge deck cast in mid November. The roadway approach work was subsequently completed and traffic was shifted onto the newly constructed southerly bridge section in late November, 2008.

The **final stage** of the project resumed in April 2009 and included concrete curb, gutter, and sidewalk construction, asphalt paving and striping, installation of signage, hand staining of the stone-textured surfaces, and the final grading and restoration of the site. Removal of the dam began in early June, 2008. Over the ensuing weeks, the phased breach of the dam structure was performed to gradually lower the water level to the natural stream level.



The new 101-foot span concrete I-beam bridge has a deck width of just over 62-feet. The deck area includes three traffic lanes, two shoulders, and two 6-foot sidewalks. Decorative lighting and landscaped areas flank either end of the bridge. With the dam removed, Mill Creek flows unimpeded once again, improving fish and wildlife habitat and providing recreational opportunities. The Village of Dexter has restored natural sediment transport and continues its Mill Creek riverbed restoration efforts.

A Special Appreciation

*"A special acknowledgment goes out to **Aaron Berkholz, Project Manager**, and the rest of our staff who diligently worked to ensure the successful completion of this critical bridge project", states **Steven Puuri, Managing Director** of the Washtenaw County Road Commission. "But our sincere thanks and appreciation must be given to the area residents, business owners, and Village of Dexter officials, who maintained a positive and cooperative spirit as we worked through this very challenging project. Were it not for the financial support and commitment from MDOT and the Village, the Road Commission could not have successfully completed the project, while maintaining our required safety standards."*