

# HIGHLIGHTS

## GENESEE LAKES OUTLET PIPE DESIGNED TO STOP FLOODING

Construction of the Genesee Lakes Outlet Pipe in the Village of Summit, Wisconsin is complete and water is flowing through the pipe, much to the relief of local property owners and elected officials.

According to Mark Mickelson, Principal of Yaggy Colby Associates and storm water management expert, "This outlet is a very unique and rare solution for flooding in the state."

There is a three-lake system within the Village's boundaries, which consists of Lower, Middle, and Upper Genesee lakes. Upper Genesee Lake feeds into the middle and lower lakes. The system has no natural outlet and relies on overland flow under flooding conditions.

Degrees of flooding have affected the area about every ten years. Solutions had been discussed, but insufficient funding remained a roadblock. However, severe flooding in 2008 caused extensive

damage to private properties and closed a major street for over four months, spurring local residents and Village officials to action.

Yaggy Colby helped the Village apply for a Community Development Block Grant for designing and constructing the outlet pipe. The Village was awarded \$506,000 for the project, and Yaggy Colby subsequently designed



Flooded properties in the Village of Summit  
(June, 2008)

*Continued on page 3*

## CAPITAL IMPROVEMENT PROGRAMS PLANNING FOR THE FUTURE

Yaggy Colby Associates' municipal planners assist communities with a wide range of planning activities. Planning for the future is the best way to manage infrastructure needs while balancing the cost to maintain important services. It also helps ensure that monies are spent and invested strategically, which is especially vital now, in a world of shrinking budgets.

A Capital Improvements Plan (CIP) is an effective way to plan for the maintenance, improvement, and replacement of infrastructure. Sanitary sewers, water mains, streets, and storm sewers most commonly come to mind. However, municipal infrastructure goes well beyond these features to include wells, water storage, water treatment, wastewater treatment, and municipal buildings. In addition there are many non-essential public facilities in a community that enhance its identity and improve the quality of

living for its residents. These amenities include parks, trails, natural resources, and landscapes.

A comprehensive CIP can include consideration of all these infrastructure components. That said it is recommended that the basic components of sanitary sewers, water mains, streets, and storm sewers be evaluated in greater detail. In general those are the infrastructure parts that impact a community's citizens every day on a more recognizable basis. Also, those are generally the components that are in the greatest need of maintenance or upgrade.

A CIP can be as detailed as desired. However, to be effective it must be a workable and understandable plan that can be utilized by successive councils or boards. To meet the needs of a community and its decision makers, a CIP should identify the following:

*Continued on page 3*



**YAGGY  
COLBY**

ASSOCIATES

ENGINEERS

LANDSCAPE  
ARCHITECTS

SURVEYORS

PLANNERS

**DECEMBER 2011**

**IN THIS ISSUE:**

**PAGE 2**

\$150 Million Biotech  
Facility Planned for  
Mitchell County, Iowa

Waukesha County Trails  
Improvements and Expansion

YCA's New Projects

**PAGE 3**

Construction Quality  
Management Plan

**PAGE 4**

Funding Assistance: Grant and  
Loan Applications

Office News

[www.yaggy.com](http://www.yaggy.com)



# \$150 MILLION BIOTECH FACILITY PLANNED FOR MITCHELL COUNTY, IOWA

Earlier this year Iowa Governor, Terry Branstad, attended a news conference to announce that the Iowa Department of Economic Development was awarding Valent BioSciences a \$1 million grant for a new biotech facility in Mitchell County, Iowa, next to the City of Osage.

This new facility will ultimately add over 90 jobs to the area and has a construction budget of approximately \$150 million. It will produce a high strength wastewater that must be pretreated prior to discharge to the Osage Wastewater Collection System. In addition the Osage Wastewater Treatment Facility (WWTF) will require upgrading to treat the additional load from the facility.

Yaggy Colby Associates provided Mitchell County with initial site investigation services for the project, and has been retained to provide engineering services for design and construction of both the pretreatment facility and the improvements to the Osage WWTF.

The Valent BioSciences project is a result of successful teamwork between Mitchell County and Osage community leaders. It serves as a roadmap for success that can be used as a model for communities throughout northern Iowa.

Yaggy Colby Associates has provided comprehensive wastewater design services to public and private clients since 1994.

## WAUKESHA COUNTY TRAIL NETWORK IMPROVEMENTS AND EXPANSION

Waukesha County is enjoying significant expansion to its trail network, including recent improvements to the Lake Country Trail and the new Cushing Park Road Path arterial.

A ribbon cutting ceremony for the “Grand Reopening” of the Lake Country Trail in Waukesha County, Wisconsin was held this summer. The ceremony celebrated a major reconstruction and paving project that was completed last year, which transformed seven miles of the multi-use recreation trail from gravel to asphalt. Yaggy Colby Associates provided construction management for this 2010 WisDOT construction project.

In addition a separate project--and the final phase--of the Lake Country Trail reconstruction was completed this fall. As a result the 15-mile trail is now completely paved. These improvements both



Waukesha County Executive Dan Vrakas leads the ride through the ribbon at the Lake Country Trail grand reopening ceremony this summer.

open the trail to additional recreational users and extend trail use to year-round.

Besides the Lake Country Trail improvements, the second phase of the Cushing Park Road Path was completed this year. Completion of this arterial is significant, as it connects the Lake Country Trail, Glacial Drumlin Trail, and Ice Age Trail segment running through Lapham Peak State Park. It also serves as a linkage to the City of Delafield’s Cushing Park and downtown region. YCA provided design and construction management for the first phase of the Cushing Park Road Path, which was completed in 2010.

YCA offers a full array of planning, design, and construction services for trails and related facilities. The firm is pleased to have contributed to the expansion of Waukesha County’s trail network.

## NEW AND RECENT PROJECTS:

### MINNESOTA

- Rochester Trail Signage Project  
Rochester, MN
- Monroe Street Reconstruction  
Lake City, MN
- Metropolitan Marketplace  
Rochester, MN
- Mayo Proton Therapy Building  
Rochester, MN
- MN Trunk Highway 12  
Mn/DOT Metro District
- MN Trunk Highway 23  
Mn/DOT District 7



### IOWA

- Water System Improvement Project  
Floyd, IA
- Wastewater Treatment Facility  
Improvements  
Mitchell County, IA
- 2011 State Street Utility Extension  
Osage, IA
- 2011 Street Restoration Project  
New Hampton, IA
- Sanitary Sewer System Improvements  
Nora Springs, IA
- Dudley’s Corner Inc. On Site  
Wastewater Treatment System  
Latimer, IA



### WISCONSIN

- Innovation Park Accelerator Building  
Infrastructure  
Wauwatosa, WI
- Lapham Peak State Park / Ethan Allen  
Facility Property Survey  
Delafield, WI
- Kenosha Correction Center  
Parking Addition  
Kenosha, WI
- Shoreland & Floodplain Ordinance  
Summit, WI
- Fish Hatchery Building Addition  
Delafield, WI
- Preserve at Prairie Creek Development  
Oconomowoc, WI

# CONSTRUCTION QUALITY MANAGEMENT

## MINNESOTA DEPT. OF TRANSPORTATION

Yaggy Colby Associates is proud to be involved with a new initiative for Construction Quality management under the Design-Bid-Build delivery process for the Minnesota Department of Transportation (Mn/DOT).

A high quality end product is a primary goal of every construction project. Mn/DOT has historically relied on their internal staff to monitor and test for construction quality. Under the new initiative, the construction Contractor takes responsibility to develop and implement a Construction Quality Management Plan (CQMP) that is specific and unique to each project.

Minnowa Construction selected Yaggy Colby Associates to prepare a CQMP plan and lead its implementation on the TH 61 Bridge Replacement in Lake City, Minnesota. The TH 61 Bridge, pictured at the right, also happens to be Mn/DOT's first pre-cast bridge being built in stages to eliminate a detour or bypass. Bridge pre-cast components include abutments, wing walls, pier caps, and inverted T-deck panels.

The CQMP prepared by Yaggy Colby Associates comprehensively establishes

the inspection, testing, and material certifications required for the project in accordance with Mn/DOT standards and procedures. This initiative is based on



nationwide findings that contractors can efficiently and cost effectively deliver top quality projects through use of highly structured Quality Management Plans. The effective use of CQMP has shown to improve construction quality while reducing costs and delays associated with non-conforming work.

Yaggy Colby Associates is pleased to be working with Minnowa Construction to deliver a quality bridge project under this innovative Mn/DOT initiative.

## CAPITAL IMPROVEMENT PROGRAMS

*Continued from page 1*

1. Brief history of infrastructure
2. Evaluation of each component
3. Needed or desired improvements
4. Budgetary costs for each project
5. Prioritization of projects
6. Funding sources for each project
7. Schedule for completing projects

An effective CIP is an investment. Good planning will ensure that monies are spent wisely the first time. For instance paving a street one year and digging it up a few years later to replace a deficient water main is an obvious waste of money. Proper evaluation and planning prevents this.

Economic conditions have been trying for everyone, including communities. Some feel it

is not a good time to spend money, whether for studies or improvements. To the contrary, it is always a good time to be planning.

With regard to improvements, construction costs are extremely competitive now, driven by a weak economy. Communities with the fortitude to move forward in these times will reap the benefits of lower projects costs, a trend that appears likely to continue for several years. Planning for the future and continuing to make needed improvements has never been more crucial.

If your community needs assistance with any of its planning activities, YCA's municipal planners are available to help.

## GENESEE LAKES OUTLET PIPE

*Continued from page 1*

the outlet pipe and performed construction management.

Water from the lake system overflows through lowlands to Lower Lake Rd. In the past this could create flooding conditions; however, water now enters the outlet structure at the road. Via gravity, it travels about one mile through the 18-inch discharge pipe. The water exits the pipe to a swale area, and then enters an area of wetlands where it drains to the Bark River.

One of the most challenging parts of the design was analyzing the outlet structure's downstream impacts to the Bark River to ensure it did not raise the floodplain elevation by more than 0.01 feet. The design and resulting lake elevation were approved by both the Department of Natural Resources (DNR) and Waukesha County.

Construction was completed earlier this year and restoration is complete. Early indicators of project function are very positive. Water was flowing through the pipe in spring, when there was moderate to heavy snow melt and spring rain.

YCA is proud to have designed this unique engineering solution. Highlighting the importance of the project Mickelson stated, "This outlet brings to a close decades of frustrating flooding occurrences in this area."

If your community has ongoing storm water or flooding concerns, or would like help with a grant application, please contact us.



Water from lowlands enters outlet structure at Lower Lake Road

# FUNDING ASSISTANCE

## GRANT AND LOAN APPLICATIONS

Costs and budgets have always been paramount, but this is true now more than ever. The gap between what communities want and need to accomplish and the funding available is growing. To help clients bridge this gap and realize projects, Yaggy Colby Associates offers assistance with securing grants and loans.

YCA maintains a list of state and federal funding programs, as well as private foundation sources. Funding types include both grants and loans. The firm also searches for new funding sources by following news, government websites, blogs, and other information resources. YCA's staff makes connections between our clients' needs and available funding.

After identifying potential funding, YCA performs an objective, thorough analysis to

verify project qualifications. The firm's staff ensures the project satisfies all applicable criteria before investing further time and effort to prepare an application or grant proposal.

In preparing the grant submittal or funding request, staff go beyond a dry, technical description to persuasively demonstrate need. They appeal to the agency or foundation by illustrating how the project responds to its mission. This approach has proven to be very successful in obtaining funds for clients' projects.

Yaggy Colby Associates has secured funding for a number of recent projects, and would be happy to consult with you regard your project funding needs.

## HIGHLIGHTS

### DECEMBER 2011

- |                            |                |
|----------------------------|----------------|
| <b>Robert Ellis</b>        | President, COO |
| bellis@yaggy.com           |                |
| <b>Scott Samuelson, PE</b> | CFO            |
| ssamuels@yaggy.com         |                |
| <b>Michael Court, PE</b>   | Vice President |
| mikec@yaggy.com            |                |
| <b>Terrance McCarthy</b>   | Vice President |
| tmccarth@yaggy.com         |                |
| <b>Mark Mickelson, PE</b>  | Principal      |
| markm@yaggy.com            |                |

### REGIONAL OFFICES

- |                                   |   |
|-----------------------------------|---|
| <b>ROCHESTER:</b>                 | 717 Third Avenue, SE<br>Rochester, MN 55904<br>507.288.6464                 |
| <b>MINNEAPOLIS/<br/>ST. PAUL:</b> | 201 W. Travelers Trail<br>Suite 210<br>Burnsville, MN 55337<br>651.681.9040 |
| <b>MILWAUKEE<br/>METRO:</b>       | 501 Maple Avenue<br>Delafield, WI 53018<br>262.646.6855                     |
| <b>MASON CITY:</b>                | 215 North Adams<br>Mason City, IA 50401<br>641.424.6344                     |

## OFFICE NEWS

Christina Peterson, Project Engineer, presented a "**Green Alleys**" plan to the Spring Grove City Council on Nov 1. The project, which proposes to improve northwest, southwest and southeast alleys, could utilize sustainable infrastructure. In addition to design details, Peterson outlined 11 possible funding sources.

The **Grand Pumpkin Illumination**, a unique and special Halloween event, was held on October 22 in Delafield, Wisconsin. YCA both sponsored the event and helped distribute and set up the pumpkins. Roger Dupler, City Planner, and Buffalo Big Mountain, Surveyor, both assisted with delivery and set up of the pumpkins.

As requirements of the **Americans with Disabilities Act (ADA)** change, YCA's staff is making sure they are keeping up-to-date with any new proposed requirements. A group of designers recently attended a MnDOT-led training to see how MnDOT is planning on transitioning to better compliance.

On October 27, YCA's Delafield office did its part to make Hillside Drive in the City of Delafield more beautiful. YCA has performed **volunteer street clean-up** of Hillside Drive on a biannual basis, for over five years.

YCA's Mason City, Iowa and Rochester offices wrapped up their **2011 United Way campaigns** this fall. YCA and its employees are proud to participate in the United Way campaign each year to assist those in need in our communities.

Since the MN Dept. of Transportation's (Mn/DOT) **Adopt A Highway program** began in 1990, YCA has picked up trash along T.H. 63 South from Third Avenue SE to 48th Street South. The last pick up for 2011 was completed at the end of September.

YCA won the "**Best Booth**" award at the Iowa League of Cities! Our "Home Town Heroes", baseball-themed booth was a crowd favorite. YCA is a regular exhibitor at the League of Cities.

Please join us on the web located at: [www.yaggy.com](http://www.yaggy.com). The site includes an overview of the firm and its services. Current projects, site photographs, and employment opportunities are also presented.

