

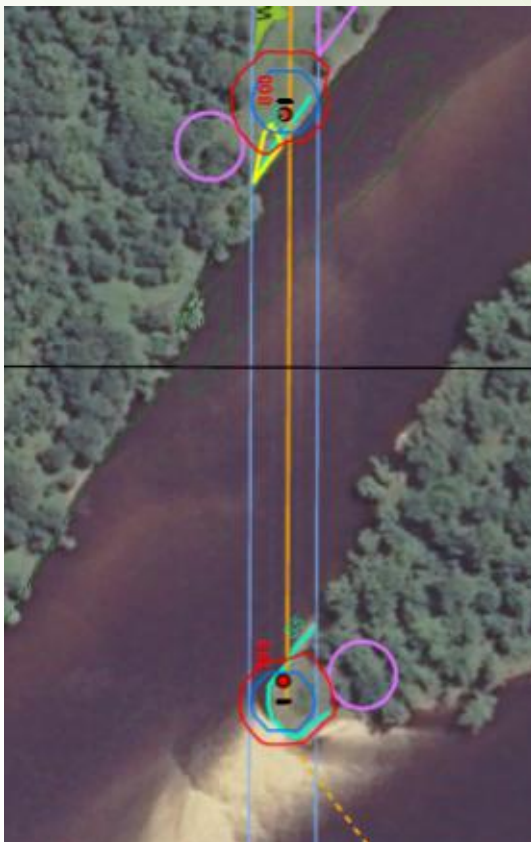


# ATC X52 TRANSMISSION LINE STRUCTURE REPLACEMENT

COLUMBIA COUNTY, WISCONSIN

American Transmission Company is proposing replacing several structures on its X52 138-kilovolt transmission line which crosses the Wisconsin River between Portage and Baraboo. Two of the wooden H-Frame structures, located along the banks of the main river, are at immediate risk of failure due to streambank erosion. Construction access is very limited and would require crossing several regulatory wetlands and waterways during low flow.

Montgomery Associates evaluated existing conditions and performed field surveys and hydrologic assessments to develop a range of alternatives to stabilize the streambank for the anticipated service life of the replacement structures.



Project Base Map showing access route, environmental features, and extents of construction impacts.

Concurrently, MARS also worked with ATC staff in discussing the project with regulatory stakeholders to ensure permits could be issued to meet the anticipated construction schedule.

MARS developed a permit support document and application materials for submittal to Wisconsin DNR and US Army Corps of Engineers.

The structure replacement was tentatively delayed and MARS was asked to develop streambank stabilization alternatives to protect the existing structures for the next 1-2 years. A design was developed in coordination with ATC, the contractor, suppliers, and regulatory stakeholders. This alternative is expected to be constructed in December 2009.

## HIGH-VOLTAGE ELECTRIC TRANSMISSION LINE



138 kV H-Frame Structure next to Wisconsin River Substation

### Client

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### Project Manager

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### Key Staff

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### Collaborators

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### Project Schedule

2009-Present