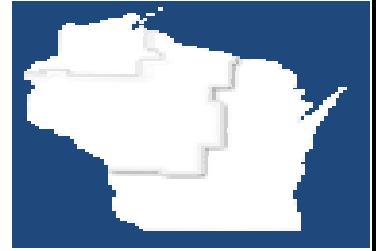




WISCONSIN SECTION
Northwest Branch



Newsletter No. 125
January 26th, 2015

President's Message – Past & Future



Dear ASCE Northwest Branch,

Winter is here and if you are fortunate enough, it's time to relax and recuperate from the busyness of the construction season. Your Northwest Branch Board is staying on their toes with fun activities planned for Engineering Week, February 22nd through the 28th. Please read on to find out when a celebration is planned for your area. The board members look forward to getting to know you better and to celebrate the engineering profession in a fun and casual way. Some of the socials will also take place during the Wisconsin Badger vs. Maryland Terrapins basketball game. The next newsletter will have a complete recap of all Engineering Week festivities from the Branch.

Past and present Northwest Branch board members are busy finalizing the details for the 2015 Wisconsin Section Spring Technical Conference in La Crosse on March 12th. The planning committee is in need of volunteers and those positions are discussed within the newsletter. Planning committee names and contact information are provided for ease of expressing your interest in volunteer positions. The Spring Technical Conference is sure to be a fantastic event full of high caliber speakers, an ethics course to help earn required PDH credits, and plenty of networking opportunities. We hope you will join us in La Crosse!

The Northwest Branch is still looking for three Directors-at-Large positions. If you or someone you know would like to join the board, please let us know. We look forward to expanding our leadership team.

This edition's engineering feature highlights a novel type of intersection, the Single Point Urban Interchange (SPUI), which is located in Eau Claire at the junction of US Highway 12 (Clairemont Avenue) and US Highway 53. The Point Douglas Drawbridge in Prescott along US Highway 10 is also discussed. I encourage you to visit these sites and enjoy the engineering aspects of what most people take for granted in their everyday lives.

Finally, I encourage you to be proud of the work you do to make better lives for us all. That said, please come and celebrate Civil Engineering during Engineering Week and all of the accomplishments to build a better world. We'll save a seat for you.

Sincerely,

Teresa L. Davis

Northwest Branch President
Email: brunnete.80@gmail.com

As always, the views expressed in the president's message are those of the author and do not necessarily represent the official positions of ASCE.

MEMBER NEWS



**Mr. Thomas R. Walther, P.E., F.ASCE
2016 President-Elect Official Nominee**

We are proud to have Mr. Walther represent the Northwest Branch and Wisconsin Section as he campaigns for the distinguished position of ASCE President-Elect. Please read on about Mr. Walther's experiences in education and industry, as well as his vision for ASCE. Congratulations on your official nomination, Mr. Walther!

EDUCATION

Bachelor of Science Civil Engineering, University of Wisconsin - Platteville, WI, 1971

Traffic Institute, Northwestern University, Evanston, IL, 1979

Registered Professional Engineer, State of Wisconsin

Registered Professional Engineer, State of Iowa

WORK EXPERIENCE

Ayres Associates, Eau Claire, WI; Utilities Coordination Engineer, 2013-2014

Chippewa County, Chippewa Falls, WI; Staff Engineer, Highway Department, 2012-2013

TEC Design, Eau Claire, WI; Transportation Advisor, 2008-2009

Eau Claire County, Altoona, WI; Highway Commissioner, 1980-2008. Managed all operations of the county highway department covering all work on county highways, all maintenance work on State highways and contract work for various local governmental units. Also included managerial oversight of the Chippewa Valley Regional Airport for five (5) years and managerial oversight of the Eau Claire County Landfill for fifteen (15) years.

Iowa Department of Transportation, Resident Maintenance Engineer, Denison, Iowa, 1977-1980; Assistant Resident Construction Engineer, Waterloo, Iowa, 1973-1977; construction inspection and training program, Ames, Iowa, 1971-1973

ASCE INVOLVEMENT

Fellow since 1996

Life Member since 2013

Charter member, University of Wisconsin-Platteville Student Chapter, 1967

Northwest Branch - Wisconsin Section:

Secretary/Treasurer, 1987-1992

President

Wisconsin Section

Branch Director

Director at Large, 1989, 1990

Vice President, 1995

President Elect, 1996

President, 1997

Chair, History and Heritage Committee, 1999-2002

Section Report Card Committee, 2003

Section Awards Committee

Section Nominating Committee

Spring Technical Conference Planning Committee, 2015

ASCE National

District 8 Director, 2004-2006

Chair, Region 3 Formation Team, 2005

Region 3 Director, 2007-2009

Chair, Region 3 Board of Governors, 2006-2009

At-Large Director Review Subcommittee, 2008

Audit Committee, 2007-2008, 2011-2012

Board Contact Member, Civil Engineering Forum for Innovation (CEFI), 2007

Engineers Joint Contract Documents Committee (EJCDC), 2008-2009

EJCDC Budget and Finance Committee, 2008-2009

Executive Committee, 2009

Finance Committee, 2008-2009

Governing Documents Committee, 2013-2015

Program Committee, 2004, 2006-2007

Strategic Planning Committee, 2008

Task Committee on Elections, 2011

Technical Activities Committee, 2004-2006

Web Site Awards Committee, 2004

Blue Ribbon Panel to Review Updates to Manual 45, 2011

Legislative Fly-In, 2007, 2009-2014

Key Contact Member

Zone III Management Conferences, 2004-2006

Multi-Region Leadership Conferences, 2007-2009

Leadership Training in Government Relations, 2009

Judge, Great Lakes Conference Concrete Canoe Competition, 2005

Awards

Wisconsin Section Engineer in Government Service Award, 1998

Wisconsin Section Distinguished Service Award, 2008

OTHER VOLUNTEER ACTIVITIES

Eau Claire County Position Evaluation Board, Citizen Member, 2009-2012

Iowa Jaycees member, 1977-1980

Iowa Jaycees Region Director, 1980

St. John's Lutheran Church Choir

PERSONAL

Widower

Daughter: ReNee Hanson and husband Marc Hanson, Anoka, MN

Son: Brian Walther, Eau Claire, WI

Grandchildren: Kiersten Clifford, Taylor Walther, Preston Walther, Larissa Walther, Bailey Hanson

VISION STATEMENT

ASCE has developed a strong Vision and Mission for the Society and the profession. Civil engineers are expected to be global leaders building a better quality of life for everyone. ASCE as an organization does and will continue to assist its members in attaining that vision by providing value to its members, helping members advance the profession and thus allowing members to maximize their service to the public. As a continuous active member of ASCE for over 45 years, starting as a Charter Member of the UW-Platteville Student Chapter, ASCE has continuously helped me advance my career and knowledge base. I have tried to reciprocate by serving the Society. This service ranges from holding multiple positions at Branch and Section levels up to serving two terms on the national Board of Direction with service on 13 national committees covering a wide spectrum of Society activities. The knowledge acquired through this broad scope of activities helped me form my vision for the Society.

The first step is to guide and lead the Board and the Society in implementing current Board strategies plus developing updated strategies to move the Society forward.

I will strongly support and be a forceful advocate of the ASCE strategy to emphasize infrastructure improvements and where necessary expansions. High quality infrastructure does more than anything to achieve the ASCE vision of building a better quality of life for the citizens of America and the world. The water and wastewater systems civil engineers created have done more to overcome epidemics than many medicines. The transportation systems civil engineers created, from railroads to highways to waterways to pipelines to electrical distribution systems, are the bloodstream that keeps the worldwide economy functioning smoothly and efficiently. We civil engineers must continue to educate the public and politicians about how critical a high quality and when necessary an expanding infrastructure is to the quality of life of everyone on the planet.

ASCE and civil engineers must also continue to emphasize that what we create must be sustainable. A top-notch water system is of no value if we don't have a safe and adequate supply of potable water to push through the pipes. The one sad part of the sustainability strategy is that we should not even need to have this discussion. Civil engineers should have been, and often were, creating sustainable systems as part of our ethical obligation to serve the public over the centuries. Today, with the concept of sustainability having spread across the nation and world in the broadest sense of the word, from sustainable systems which civil engineers create to sustainable agriculture, we civil engineers must advocate for and more importantly must practice the art of creating, building and maintaining sustainable systems necessary for continuation of the human race. As ASCE President I will push the Society and the profession to ensure sustainability is nurtured and practiced.

Next, to ensure future generations of civil engineers are fully capable of developing needed products and systems in a sustainable manner, I will continue to strongly advocate the Raise the Bar strategy. The breadth of skills needed by the civil engineer of today and tomorrow has broadened greatly over time. These issues are outlined in "The Engineer of 2020" by the National Academy of Engineering and by "The Vision of Civil Engineering in 2025" and "Achieving the Vision of Civil Engineering in 2025", both by ASCE. While the Bachelor degree of today gives civil engineers a sound and basic technical platform the "soft" skills and advanced technical skills needed to perform the work are only learned over time through practice and continuing education. The professional skills of communication, collaboration, management, leadership and creativity are not acquired in a 1 semester class. They are acquired through a combination of post-graduate classes, seminars and similar formalized training interspersed with on-the-job practice. The National Council of Examiners for Engineering and Surveying recently updated their model law to remove the master's degree or equivalent to avoid confusion regarding licensure comity between states. The 2012 NCEES Strategic Plan continues to emphasize the need to increase educational requirements for initial licensure. Only by implementing these requirements, plus getting every state to implement post-licensure continuing education, will the public be ensured that the engineer of tomorrow will be fully prepared to practice the profession.

The second step is to guide the Society itself to enhance and maximize service to its members.

The first vision point is enhanced transparency within ASCE itself. While ASCE staff does a very good job of informing and educating membership I will encourage staff to expand information items offered to members. With today's technology ASCE should be able to better show its members what the Board, Board Committees, Institutes and other organizational entities are doing. I will strive to have summarized minutes of the above entities readily available on a members only sector of the ASCE website. I firmly believe this will allow members to better comprehend what the Society is doing for them and with their dues money. The added information and transparency may even enhance member participation. Members who better understand organizational operations and opportunities are more likely to step forward and volunteer to move the Society in the directions the general membership desires.

Second, I want to ensure ASCE continues to maintain and strengthen its ties to our international members and other international civil engineering organizations. The Society should pursue more members from around the world. Options may include coordination with international societies to offer a single payment joint membership in ASCE and their home organization, expanding upon current multilingual publication activities, and maximizing on-line and face-to-face training opportunities for our international members.

To conclude, while following the vision and strategies set by the Board, my vision seeks to strengthen and expand upon these issues to move ASCE forward and most importantly to enhance the ways the Society serves its members.

(Source: www.asce.org)

UPCOMING EVENTS

Engineering Week Social Events

February 22nd - 28th

Thank you for your membership in ASCE and your continued support of the Northwest Branch. Please join us to celebrate Civil Engineering, meet new people, see old friends, and maybe even talk some shop. We look forward to seeing you! Watch your email for the official invitation.



Hudson: Monday, February 23rd

5:00 PM - ?

Agave Kitchen, 501 2nd Street, Hudson, WI, 54016
Organizer: Teresa Davis, brunnete.80@gmail.com

**Wausau: Tuesday, February 24th**

Come watch the Wisconsin Badgers take on the Maryland Terrapins!
6:00 PM - ?

Coral Lanes, 1025 Grand Avenue, Rothschild, WI 54474
Organizer: Andrew Walters, awalters@amengtest.com

**La Crosse: Tuesday, February 24th**

Join us to also watch the Wisconsin Badgers take on the Maryland Terrapins!
6:00 PM - ?

Buffalo Wild Wings, 3132 Market Place, Onalaska, WI 54650
Organizer: Kris Roppe, kris.roppe@is-grp.com

**Eau Claire: Tuesday, February 24th**

Join us to also watch the Wisconsin Badgers take on the Maryland Terrapins!
5:30 PM - ?

Buffalo Wild Wings, 4612 Keystone Crossing, Eau Claire, WI 54701
Organizer: Teresa Davis, brunnete.80@gmail.com

2015 ASCE Wisconsin Spring Technical Conference**Save the Date – March 12th**

The Wisconsin Section Spring Technical Conference will take place on March 12th in La Crosse at the La Crosse Center. The Northwest Branch is hosting the conference for the first time and we are working hard to make it a fabulous, memorable experience. We encourage you to attend the conference and bring your colleagues, friends and acquaintances. You are sure to learn valuable information and establish great networking contacts. Keep an eye on your inbox for a Save the Date email as well as the official invitation.

Call for Volunteers

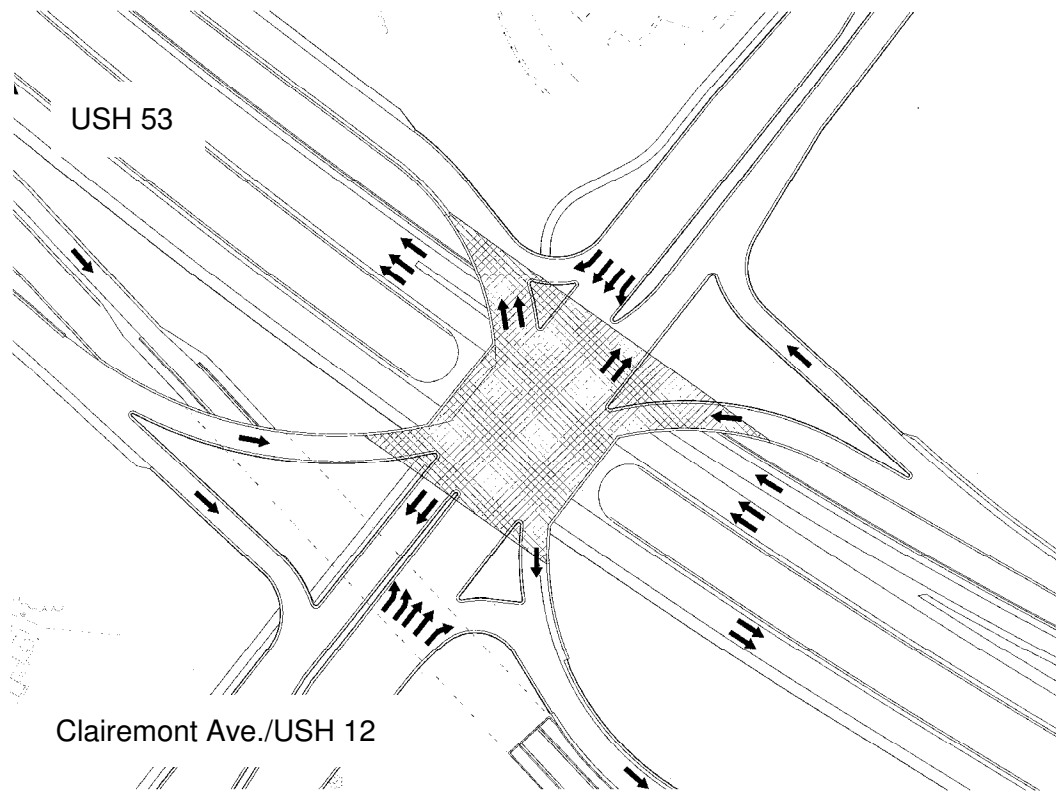
Many hands make light work, and we are grateful for any extra helpful hands to make the conference a success on March 12th. We have approximately 10 open spots, consisting of registration and acting as room moderators. If you are interested in helping us out the day of the conference, please contact one of the Spring Technical Conference planning chairpersons: Mike Binsfeld at mikebinsfeld@jfbrennan.com, Will Kratt at william.kratt@gmail.com, or Kris Roppe at kris.roppe@is-grp.com.

NORTHWEST WISCONSIN CIVIL ENGINEERING HIGHLIGHTS

The Single Point Urban Interchange, Clairemont Avenue/USH 12 and USH 53, Eau Claire

The Single Point Urban Interchange (SPUI) is an intersection system that simplifies a complex set of ramp connections into a single workable location under signalized control. Said another way, the four turning movements, where left turn operations operate to the left of one another, are controlled by a single traffic signal. The specific interchange in Eau Claire provided alignments for the various ramps, as well as a structure upon which to mount traffic signals.

The SPUI causes traffic to queue on the ramps leading up to the interchange, rather than using lanes located on Clairemont Avenue (USH 12). Due to space limitations, the ramps were located very close to USH 53, and parts of the ramps jut out over the freeway as the ramps connect to Clairemont Avenue. The final alignment of this interchange has a bow-tie shape, as shown in the images below. (Source: WisDOT)



Designed Single Point Urban Interchange in Eau Claire (Source: WisDOT).



The final constructed Single Point Urban Interchange in Eau Claire (Source: Google Earth).

Point Douglas Drawbridge, STH 10, Prescott

The city of Prescott is located on the Saint Croix River, just upstream of the confluence of the Mississippi and Saint Croix rivers. Many people commute daily from western Wisconsin into Minnesota and the Twin Cities metropolitan area via US Highway 10. During the summer, boaters make the Saint Croix River a busy place. A drawbridge was needed to accommodate for the two types of traveling along the river. Driving over this bridge, you might not notice that it is a drawbridge, except for the little control building near the center of the bridge's span on the downstream side and the connections located in the center of the bridge span.

According to the website www.johnweeks.com/bridges, "The Point Douglas Drawbridge has an uncommon design. Most drawbridges have a large counterweight to balance the weight of the roadway sections that are lifted. That design is known as a bascule bridge. The Point Douglas Drawbridge does not use counterweights, so it is not a bascule bridge. Rather, the end of the bridge has a large round gear on it, and matching flat gear that is operated by hydraulics. To open the bridge, the flat gear is moved, which causes the round gear to spin, which tips the bridge deck up into the air. The Point Douglas Drawbridge is the only drawbridge in the metro area.

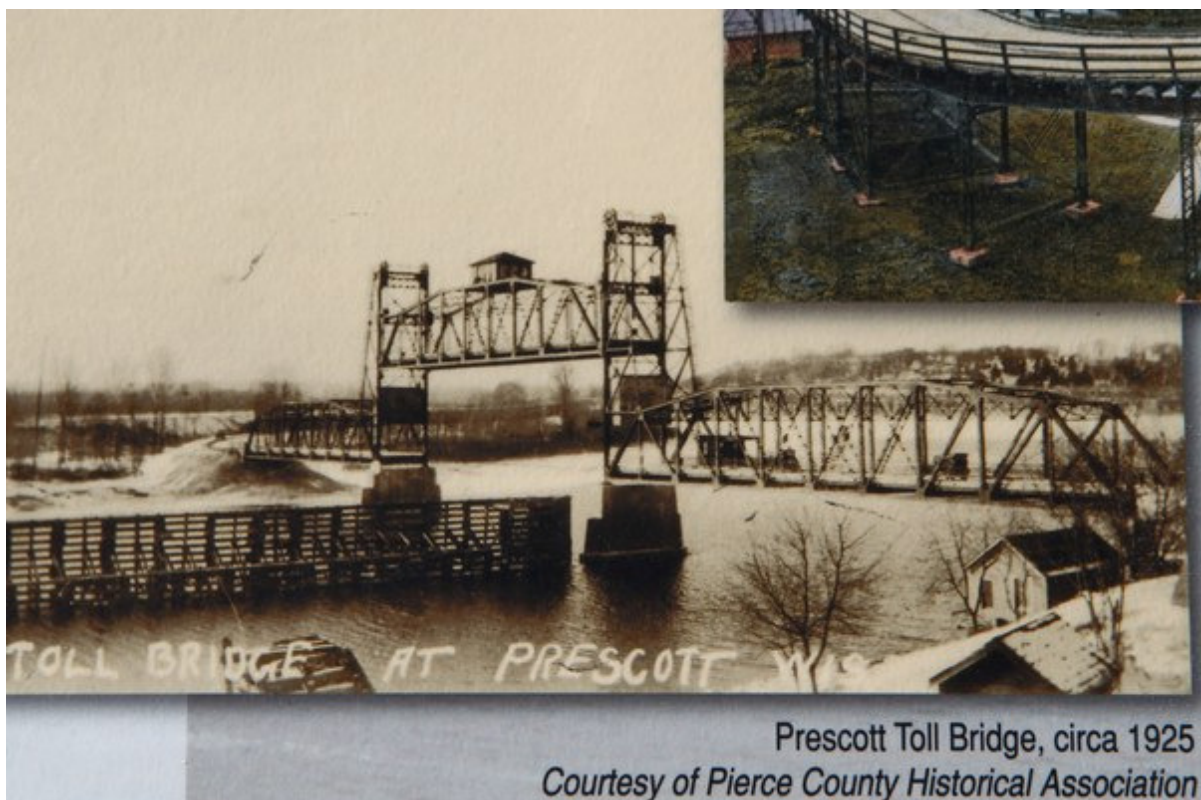
Prior to the Point Douglas Drawbridge being completed, a lift bridge known as the Prescott Bridge carried US-10 across the Saint Croix River. The lift bridge was built in 1922. It was designed by the firm of Waddell & Harrington. Waddell was the developer and early pioneer of the lift bridge, a design that was attempted after the War Department banned swing bridges on the Chicago River, and an alternative was needed.

Waddell's first bridge had mechanical problems, so he teamed with Harrington, a skilled mechanical engineer. The bridge had spans of 172 feet, 174 feet, and 192 feet. Each of these spans was through truss spans, with the 174-foot span being the lift span.

The Prescott Bridge was built by a local group of businessmen attempting to revitalize the economy of Prescott as the logging boom was winding down. While the bridge was successful and played a key part in the regional transportation system, it never brought the growth to Prescott that was hoped for. The state took over the bridge in 1946 and removed the tolls. By the mid-1960s, the bridge was becoming obsolete. Highway traffic had picked up to the point where opening the bridge caused large backups. The vertical clearance for the highway was low causing a hardship for truckers as well as an increasing number of trucks striking the bridge. Since the clearance in the down position was only 16 feet, the bridge had to be frequently operated in the summer for recreational boaters.

The state of Wisconsin identified the Prescott Bridge to be included in a program to replace high priority bridges starting in 1969. This bridge, however, never actually received funding from that program. It wasn't until 1989 that the bridge replacement was started, with the new bridge being opened in 1990. The lift bridge was removed that year, but the bridge piers remain in place acting as barricades to protect the north side of the new drawbridge from boat and barge strikes."

The Northwest Branch is working to arrange a tour of this bridge in May, so watch your email for more information.



The old Prescott lift bridge.



The Point Douglas Drawbridge, looking north.



The Point Douglas Drawbridge, open and ready for boat passage. (Source: WisDOT)



The Point Douglas Drawbridge, looking southwest into Minnesota. Notice the piers of the original lift bridge.

Renew your ASCE Membership for 2015



Online, in person, and wherever your membership takes you, ASCE benefits every Civil Engineer. See the ways you benefit from your ASCE membership, such as **5 free PDHs**, savings with car rentals and United Parcel Service (UPS), and technology discounts with HP and DataSource Mobility. Keep your benefits and [renew today!](#)

UPDATE ASCE ONLINE PROFILE REGULARLY

Please update your ASCE online profile with current E-mail and mailing addresses to guarantee you receive ASCE newsletters and important information. As a reminder, those of you that have passed your PE exam, make sure to change your account with ASCE National. To update your ASCE profile, go to www.asce.org or call (800) 548-2723.

2014-2015 Calendar of Events

The calendar is simply a guide and may change throughout the year

JANUARY 2015:

- January 30-31, 2015 Central Region Younger Member Council (CRYMC) Annual General Meeting, Houston, TX
- Spring Technical Conference Planning Committee meeting

FEBRUARY:

- Northwest Branch Board Meeting
- E-week Social and Celebration of Engineering, February 22nd – 28th; various locations, times and dates in the Northwest Branch.

MARCH:

- Spring Technical Conference Planning Committee meeting
- March 12 – ASCE Wisconsin Section Annual Spring Technical Conference, La Crosse

APRIL:

- April 12 – PE, PS, and SE Vertical Exam (offered in Madison, Milwaukee and Platteville)
- April 13 – SE Lateral Exam (offered in Madison, Milwaukee and Platteville)
- Northwest Branch Board Meeting
- Tour of the Saint Croix Crossing, Houlton, WI and Stillwater, MN

MAY:

- Northwest Branch Board Meeting
- Tour of the Point Douglas Drawbridge in Prescott

JUNE:

- Northwest Branch Board Meeting

JULY:

- Northwest Branch Board Meeting

CURRENT NORTHWEST BRANCH OFFICERS

President: Teresa Davis, WisDOT Northwest Region: Eau Claire; (715) 836-7277; brunnete.80@gmail.com

President-Elect: Mike Binsfeld, J.F. Brennan Company: La Crosse, WI; mikebinsfeld@jfbrennan.com

Secretary-Treasurer: Andy Walters, American Engineering Testing, Inc., Wausau, WI; awalters@amengtest.com

Past President: Jessica Felix, WisDOT Northwest Region: Eau Claire; (715) 225-9302; jessica.felix@dot.wi.gov

Wisconsin Section Northwest Branch Representative: Jessica Felix, WisDOT Northwest Region: Eau Claire; (715) 225-9302; jessica.felix@dot.wi.gov

Northwest Branch Directors-At-Large:

1. Kris Roppe, I&S Group, Inc.: La Crosse; kris.roppe@is-grp.com
2. Position Available
3. Position Available
4. Position Available

Newsletter Editors:

Teresa Davis; brunnete.80@gmail.com and Andy Walters; awalters@amengtest.com

