

ASCE

American Society
of Civil Engineers



News

ASCE Illinois Section

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April 2008

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Greetings to the Illinois Section

By Thomas R. Walther, P.E., F. ASCE, Region 3 Director

Greetings to the Illinois Section. The national economy may be a bit weak but ASCE is still a booming professional organization and business. ASCE currently has about 140,000 members and is operating on a 2008 budget of about \$54 million. While everyone is concerned about their dues please note that dues only account for about 28% of Society revenues. Sales of publications (about 2/3 overseas) generate about 30% of revenues and the rapidly growing area of continuing education generates about 17%. Affinity programs (those sometime annoying solicitations for insurance and credit cards under the ASCE banner) also generates significant revenues that help hold down member dues. Another anticipated long-term revenue source will be through various civil engineering certifications. Currently the Water Resources Institute is the only group actively emphasizing specialty certification. However, it appears the next unit to come on board may be a certification for geotechnical engineers under the Geo Institute.

The mention of Institutes brings up another issue of growing importance to the Society. The various Institutes are currently emphasizing better cooperation and affiliations with existing Section and Branch technical committees and technical groups. If local groups have not yet been contacted by Institutes expect to hear from them soon.

Also at the national level, one of the biggest tasks of the Board of Direction over the past couple of years has been the creation of and now the implementation of the Strategic Plan. Detailed information on the plan and the strategic planning process is available on the ASCE web site. Just point to Inside ASCE then point to Governing Documents and then click on Strategic Planning. Currently the Strategic Planning Committee is working with national committees and staff to ensure the work of all entities follows the strategic plan. This includes ensuring that activities being placed into the next budget will work toward meeting the goals of the plan. The committee is also looking for new strategic issues that can be expected to bubble up as hot topics for the Society in the future.

Moving down a step to the Region level the Region 3 Board of Governors met most recently on February 1 and 2 in Chicago. About a third of the meeting was devoted to Board education and discussions on the Strategic Plan and its impacts on Regions. The Board has also taken on the task to update the Region web page. Although a slow process the web site now includes links to all Region 3 Sections and Branches, links to Region officers plus all Region meeting minutes as well as Region governing documents. At the February meeting the Board also chose candidates for Governor

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President's Notes

Kay Whitlock, P.E., M. ASCE



DATA, DATA, DATA. I've been spending time lately focusing on our collective dependence on quality scientific analyses and scientific data. Our work is driven by long lists of data points: topography, geologic maps, stream gage data, rainfall data, water quality records, wetland delineations, species listings, plant

community data, wetland inventories, etc. Illinois has a valuable scientific community that we often take for granted. There are four Illinois surveys:

Illinois Natural History Survey – established 1858

Illinois State Geological Survey – established 1851

Illinois State Water Survey – established 1895

Illinois Waste Management and Research Center – established 1984

You, too, depend on and benefit from this science. For example, you may have read about the proposed billion - plus dollar FutureGen plant at Mattoon, Illinois and the battle with two Texas communities to be the home for the plant. Scientists and scientific data from the Illinois State Geological Survey and Illinois State Water Survey were key in

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that decision process. Nearer the Illinois Section ASCE, we are entering the third and final year of a regional water supply planning effort for Northeastern Illinois. Data and scientists from the Illinois State Water Survey and the Illinois State Geological Survey are major parts of the planning effort for the future of our region.

Again, Illinois scientists providing tools for our future.

The Illinois scientific community competes with other states and has

ASCE Illinois Section News

ILLINOIS SECTION NEWSLETTER

Mailed to all ASCE-IS dues-paying members
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Illinois Section – Zone III – District 8

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Newsletter is the 10th of the month.**

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been losing our scientists at unacceptable frequency. As you may know, I sit as the engineer member of the Illinois Board of Natural Resources and Conservation (BNRC). The BNRC is the statutory oversight board for the surveys. Over the past couple of years, the BNRC has spent considerable time and energy reviewing the ability of the surveys to adequately attract and retain the scientific talent necessary to provide credible scientific data and analyses to meet Illinois opportunities and challenges such as energy generation, water supplies, protection of natural resources, etc.

The Governor's proposed budget for FY 2009, included a proposal to

The Governor's proposed budget for FY 2009, included a proposal to transfer the four scientific surveys from the Department of Natural Resources (IDNR) to a new research institute to be created at the University of Illinois.

transfer the four scientific surveys from the Department of Natural Resources (IDNR) to a new research institute to be created at the University

of Illinois. I am not typically a fan of reorganizations; I appreciate this one. The move would provide a home for the surveys in an environment very familiar with scientists and their work. We expect the excellent reputations of the organizations to build on each other. The University of Illinois, the Surveys, IDNR, and BNRC are now in discussions about the workings of a transition process. Be assured, all eyes are on protecting and enhancing the science and the scientists.

I would be interested in hearing from ASCE members about the proposed transition. Please call if you have a question or comment.

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Section Activities

A P R I L 2 0 0 8

Younger Member Group

Dinner Meeting

Speaker: Mark Lucas

Topic: The Dan Ryan Reconstruction

Description:

The Dan Ryan Reconstruction Project is one of the largest highway reconstruction projects ever undertaken by the Illinois Department of Transportation. The total cost for construction will be over \$800 million at completion. Preliminary planning and environmental documentation began in 2000, and although major roadway work was completed in 2007, landscaping and other miscellaneous contracts are anticipated to carry into 2009. CTE Engineers, Inc., provided planning, design, and construction management for the project, and in doing so, had the unique opportunity to observe the progression of this mega-highway project in its entirety. The challenges encountered and the innovations implemented during Phase I, II, and III of IDOT's project development process for the roadway will be presented and discussed.

Date: Wednesday, April 30

Time: 5:30 pm

Place: CTE Office
303 E. Wacker Dr.
5th Floor Lunch Room
Chicago, IL

RSVP: Roxann Belle @
Roxann.Belle@cte.aecom.com

Structural Group

Monthly Meeting

Speakers: Dan Burke, Rich Dolan

Topic: North Avenue Bridge over the Chicago River

Date: Wednesday, March 12

Time: 5:30 pm

Place: Pazzo's
311 S. Wacker Dr.
Chicago, IL

Cost: \$40 / \$25 Students –
RSVP on or before April 4, 2008
\$45 – at door or
RSVP after April 4, 2008

RSVP: Victor Van Santen, 773-380-7966,
vvansant@hdrinc.com

Urban Planning & Development Group

Technical Seminar

Topic: Erosion Control

Info: Presentations by IEPA, EroTex, McHenry County Soil and Water Conservation District, and Christopher B. Burke Engineering will cover all aspects of erosion control on a project from planning, design, permitting, implementation, inspection, and violations. Each seminary attendee will receive a three-ring binder of the material presented. Space is limited, so please register early. Please see registration form in this newsletter.

Date: Thursday, April 10

Time: 7:30 am to 4:30 pm

Place: Chandler's Chophouse
401 N. Roselle Road
Schaumburg, IL

Cost: \$190, includes breakfast, lunch, and binder

RSVP: Mike MacKinnon, 630-328-1111,
mike.mackinnon@ryancompanies.com

Site Visit

Topic: CTA Brown Line Presentation and Tour of Fullerton Station

Info: The meeting will take place at the CTA Brown Line Construction Management Offices and will include a discussion about the overall CTA Brown Line construction project and the opportunity to interact with CTA staff and program manager. There will be a more detailed presentation on the Fullerton Station followed by a site visit to the Fullerton Station location. Upon returning to the Brown Line CM offices, a meal will be served and there will be time for questions and discussion. One PDH will be offered. Space is limited, so please register early.

Date: Thursday, May 8

Time: 4:30 pm

Place: CTA Brown Line CM Office
2518 N. Lincoln Ave.
Chicago, IL 60614

Cost: \$25

RSVP: Jonathan Vogt, 847-230-3181
jon-v@haegerengineering.com

Environmental Engineering & Water Resources Group

Monthly Group Meeting

Date: Tuesday, March 8

Time: 5:30 pm

Place: MWH
175 W. Jackson Blvd, Suite 1900
Chicago, IL 60604

Major Garage Repairs to Chicago Condo with Minimal Impact on Residential Life

By C. P. Bok, CCS, PE, SE

Award-Winning Garage Repairs Conducted by Local Engineering Firm

CTLGroup received an “Award of Merit” in a 2007 international competition for the repair of the parking garage at a Chicago condominium complex. The repair work was complicated by two unique challenges: 1) The garage is directly underneath a 16-story building, and 2) The work had to be done with minimal inconvenience to owners who continued to live in the building during the repairs.

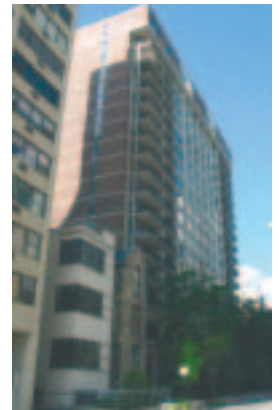
Built in 1975, the reinforced concrete garage provides three levels of parking connected by ramps. About 152 ft. by 76 ft. in plan, the garage can hold 70

cars, and is enclosed and protected from the elements. By 2004, the garage floor slabs exhibited extensive concrete deterioration and cracking. The waterproofing membrane system on the elevated floor slabs had deteriorated, and water leakage was widespread.

CTLGroup performed a comprehensive inspection and materials testing program to determine the extent and causes of concrete deterioration, evaluate the causes of leakage, and recommend appropriate steps for repair and maintenance. The results led us to recommend complete replacement of both elevated parking levels and a connecting ramp.

This work required extreme care in design, sequencing, and execution, to preserve the garage’s existing

masonry facade, maintain structural support for occupied floors above, and minimize disruption to the use of the building. Even given these constraints, the base bid work on this project was completed ahead of schedule and under budget. These time and cost savings allowed the owner to perform additional work such as painting, replacing garage doors, and upgrading other systems and still stay within budget.



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EXCEEDING EXPECTATIONS EVERYDAY

- Transportation
- Water Systems
- Wastewater Systems
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- GIS / Mapping / Database
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Illinois Section News & Secretary Report

M A R C H 2 0 0 8

In an effort to inform Illinois Section members of the discussions at the monthly Board meetings, the Section Secretary contributes this monthly article to the newsletter. Any questions or comments on the Board activities are welcome by contacting Chris King, at cking@reltd.com

■ Treasurer's Report

▲ Treasurer Olson distributed the Treasurer's Monthly Report and Income Statement. The section remains in a healthy financial position.

■ Group Reports

▲ All Groups presented a written report outlining previous and current month's activities.

■ Standing Committee Reports

▲ Communication & Web Site: A new fee structure was rolled out for the advertising space in the Newsletter and on the web page.

▲ Minority Affairs: A seminar on MBE and DBE networking is being planned. The section is looking for more volunteers to join this committee. Please contact Tim Scully-Granzeier for details.

▲ Public Affairs Committee: An overview of the successful February 20 Legislative Reception was provided. A total of 20 legislators attended the reception and many more were met in the halls of the State Capital.

■ New Business

▲ UIC students made a request of \$2,000 for the regional conference. They will be competing with 31 members in 7 competitions.

▲ IIT students made a request for funding as part of the PreTrans program. Additional information was requested to spell out the use of the funding.

▲ The Construction Institute has requested that ASCE consider partnering with them. The

Younger Member Group will explore this issue.

▲ Tara Baldauf was named the co-chair of the Award Committee.

▲ AIA affiliation will be explored.

■ Old Business

▲ Calendar alerts: April 16, 2008 – President Elect Dinner; Oct. 8, 2008 - IL Section Annual Dinner

▲ Work is beginning on the ASCE report card. Bill Cussen will join Abdul Khan as Co-chairs on the report card committee.

▲ The next board meeting is scheduled for Monday, April 7, 5:30pm at MWH Americas, Inc., 175 West Jackson Blvd, 19th Floor

By Christopher J. King, PE, SE, Secretary
cking@reltd.com

McCormick

Northwestern Engineering

Master of Project Management

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Northwestern University's Master of Project Management (MPM) Program, which leads to a master of science degree from the McCormick School of Engineering and Applied Science, is designed to prepare technically qualified individuals for responsible management roles in the construction and operation of major engineering projects. The program's multidisciplinary approach combines the essential components of civil engineering design with concepts of business management and behavioral science to develop graduates who are versatile, technically sophisticated, and prepared to direct complex projects.

The individually tailored program of 12 courses consists of managerial courses (finance, accounting, and engineering law), specialization courses in one of four areas (A/E/C business management, construction management, environmental management, or infrastructure management), and a few elective courses. Most specially designed MPM courses are taught by practicing professionals who offer a wealth of real-world experience to complement regular University courses. Students can pursue the program on either a full-time (9 months) or part-time (18 months) basis, with most classes offered from 4 to 6 or 6:30 to 9:30 p.m. on weekdays. Of the program's 50 students, about half are part-time.

Robert R. McCormick School of
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For more information about the MPM Program or to schedule an appointment, contact Professor Raymond J. Krizek, Program Director:
847-491-4040, rjkrizek@northwestern.edu
2145 Sheridan Road, Evanston, Illinois 60208-3109
<http://mpm.northwestern.edu>



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Greetings to the Illinois Section

(continued from page 1)

positions scheduled for election this fall. Governor Steve Chizek was nominated for a full 3-year term to represent the Michigan Section. Two candidates were interviewed for the Governor #5 position to represent the various Sections from North Dakota, Minnesota, Wisconsin and down state Illinois. Both names were forwarded for the ballot but one candidate has now withdrawn leaving John Frauenhoffer as the sole name on the ballot this summer. The Board also reviewed the biographical data of the 3 declared candidates to become the next ASCE national president.

Although the national Board will not select the 1 or 2 official nominees for the ballot until May 1st the Region Board did endorse Blaine Leonard of Utah for the position. Looking toward the future the Board of Governors is looking to develop better relationships and services for the Sections and Branches. This may include an annual meeting of the Region Board with an “assembly” of all Section and Branch Presidents. The Board is also looking into greater emphasis on governmental relations among Sections and Branches including ideas such as more financial support to get more members to

participate in events such as the legislative “fly in”. The Board is also looking for ideas from members on how they can be better served. Members are encouraged to offer input any member of the Board of Governors and in particular to Governor Wittmer who specifically represents the Illinois Section.

To conclude, it continues to be a pleasure and an honor to serve the members of the Illinois Section on the ASCE national Board of Directors as well as various national committees. Keep up the good work of the Section. **ASCE**

Award-Winning Garage Repairs

(continued from page 5)

Several features of the project added to its complexity. These features included an irregular column layout; the ongoing occupation of the building; the use of state-of-the-art materials; and the desire of the Owner to maintain curb appeal by preserving an existing brick masonry façade of the parking garage.

CTLGroup recommended full slab replacement of the 1st and 2nd floors and the connecting ramp for a number of reasons. First, we believed that extensive concrete deterioration was likely to compromise the floor’s overall structural integrity.

Second, chloride-ion levels high enough to promote corrosion were found throughout each deck. Third, patch repairs were deemed not to

be cost-effective in the long run, because contaminated concrete would continue to deteriorate with time, necessitating another major repair. Finally, only a complete slab replacement would be sure to extend the service life of the garage structure for the 30-plus years required.

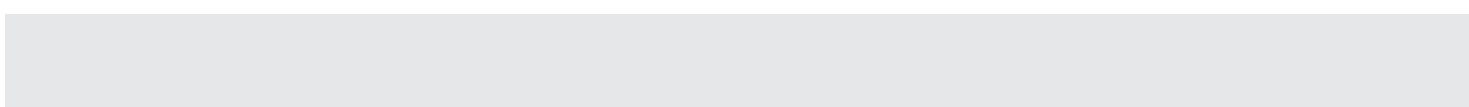
Preservation of the garage exterior masonry façade posed serious design challenges because remaining slab edges that support the masonry façade would become unstable during slab replacement. To meet these challenges, exterior trusses were installed to temporarily brace the masonry wall, and the remaining slab edge section was modified to minimize slab edge rotation. The contractor’s efficient execution of the retrofit repairs kept the overall project on schedule. **ASCE**



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April 9 Structural Group – Monthly Meeting

April 10 Urban Planning & Development Group – Technical Seminar

April 11 Environmental Engineering & Water Resources Group – Monthly Meeting

April 30 Younger Member Group – Dinner Meeting

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INFORMATION REGARDING ILLINOIS SECTION
ACTIVITIES AND EVENTS
