Notes From The Director

I had the pleasure of attending the NPCA 2017 Precast Show in Cleveland Mach 2-5. It often feels like old home week meeting and chatting with industry friends, both old and new, from all over the country. Of particular interest was the Affiliates Meeting held on Friday afternoon hosted by the Ohio Precast Association. PCANY, along with several other state precast associations, is an affiliate member of NPCA. This was an opportunity for meeting with representatives from Ohio, New Jersey, Virginia, Pennsylvania, Illinois, Wisconsin, Pacific Northwest, and New England to discuss ways in which we can better serve our members and to benefit from resources offered by NPCA.

It was a proud moment to see three of our PCANY members receive their gold hardhats upon their graduation from Precast University and achieving their designation as “Master Precasters”.

Warmest Regards,

Ronald E. Thornton, P.E.
Shelter Road Water Building—Town of Richmond, NY

Submitted by Jennifer French of Lakelands Concrete Products.

Precast modular utility buildings are versatile, durable, aesthetic, and readily available for a wide range of uses. The buildings can be configured in a variety of sizes, exterior finishes, roof styles, and accessories such as doors, window, louvers, fans, lights, etc. Uses include pump stations, equipment rooms, rest rooms, baseball dugouts, utility sheds, concession stands, electrical & control housing, and many others. Modular buildings are typically delivered to the jobsite fully assembled. Larger buildings may be erected at the site.

The building shown below is 9′-6″ x 11′-10″ x 8′-0″ and is constructed with precast insulated sandwich panels with an exposed aggregate finish. The solid roof slab is peaked for drainage. The unit serves as a water pump house for residents in the area of East Lake Road in the Town of Richmond.

Project Credits:
Owner: Town of Richmond, NY
Contractor: Highland Construction
Precast Manufacturer: Lakelands Concrete Products, Inc., Lima, NY
Specialty Precast Engineer: Chatfield Engineers
Box Culvert Analyses Simplified Using Specialized Software

Contributed by Roy Eriksson of Eriksson Technologies.

Precast box culverts are used for a wide variety of drainage applications but can also be used for storage tanks as well as vehicular and pedestrian tunnels. Configurations include the tradition 4-sided monolithic culvert, 3-sided frames, and trench style culverts with separate flat slab covers. While the box shape appears simple, the structural analysis is anything but. Each configuration establishes a different set of boundary conditions that define how forces are distributed to the top & bottom slabs and sidewalls. Variations in slab thickness, fill depth, and live loads combine to create a stiffness matrix that could take days to analyze by hand.

PCANY, at one time, had a widely distributed PC based culvert design program that had been converted from a mainframe system developed originally by the South Carolina DOT. The PCANY Culvert program greatly simplified the calculations needed to design a 4-sided or 3-sided frame. Unfortunately, this program became obsolete when implementation of the AASHTO LRFD standard for buried structures became mandated in 2010.

Rather than attempting to convert the PCANY program to comply with LRFD, we began working with Eriksson Technologies on the development of a new program that would cover both AASHTO Standard and LRFD Specifications. ETCulvert™ not only brought the software up to current design standards, it also added a number of useful features such as design and analysis modes, designs using welded wire reinforcing, LFD and LRFR load ratings, user defined truck library, 3D rendering, and auto variable fill depths.

Eriksson Technologies is an Associate Member of PCANY. Check out our members in the PCANY Buyer’s Guide located on our website

Screen shot of 3D Rendering—Wireframe

Screen shot of 3D Rendering—Solid
A.L. Patterson is now ALP Supply...
Effective March 1, 2017. The change represents the evolution of its brand as the “leading single source supplier for manufactured concrete producers”. ALP’s new web address is www.ALPsupply.com and all company email addresses have changed to ___@alpsupply.com

ACI-ENY to hold certification training and exams...
For Grade 1 Concrete Field Testing Technician at Hudson Valley Community College on May 4th (training) & 5th (testing). Contact Ron Vaughn at enyaci@aol.com for information

ASCE Releases 2017 Report Card for US Infrastructure
Still a D+ (NY a C-) See report at www.infrastructurereportcard.org

PCANY Spring Meetings Scheduled
Our Spring 2017 meetings will be held Tuesday May, 9 in the AGC conference room, 10 Airline Drive, Albany 12205. Members will meet at 9:30am followed by our joint meeting with NYSDOT at 1:30pm.