

THE

# Addendum

Volume 1, Fall 2006

A Newsletter of Hallberg Engineering, Inc.

*Welcome to the first edition of the updated Hallberg Engineering Newsletter! As always, we are excited to showcase our departments, projects, and people.*

*Our retail group continues to expand with engineering services for themed restaurants such as Corona Cantina and the Rainforest Café, as well as other recognizable retail establishments such as Aeropostale and ALDI Grocery Stores.*

*Our commissioning/recommissioning group also continues to broaden our customer base with projects in state and private colleges and universities, federal buildings, and Minnesota K-12 schools.*

*Our Schools for Energy Efficiency™ (SEE) program continues to show consistent energy cost avoidance results for all school districts that fully participate in the program. We look forward to the continued success of this program beyond Minnesota borders.*

*Demographics and aged school facilities provide opportunities to our engineering department, yet rapidly rising commodity and energy prices challenge us to provide affordable first cost solutions that yield long term operating cost savings.*

*As you can see, we are busy on many fronts primarily due to our continued success through the relationships we have maintained with many of you. For this we are grateful.*

*Joe Hallberg, PE  
President/Principal*



*Exterior rendering of the Rainforest Café on the San Antonio Riverwalk.  
All Rainforest Café renderings provided by Cunningham Group Architecture, P.A., 2006*

## Themed Restaurant Design

*By Mr. Ken Snare, Hallberg's Retail Project Manager*

Generally, the design of themed restaurants can present many challenges from an HVAC, plumbing, and electrical standpoint. The Rainforest Café project in San Antonio, Texas presented several challenges above and beyond what would be considered normal, but in the end turned out to be quite a success and is a highlight on the ever popular San Antonio Riverwalk.

The building itself is a historical building registered with the City of San Antonio. It is a four level wood structure that is over 100-years old. Other hurdles that restricted design options was the fact that the site is located on the popular Riverwalk of downtown San Antonio which created visual restrictions from the City. Also, the

kitchen is located on the second of four levels creating the need to route large make-up air and multiple exhaust ducts to the roof. New HVAC equipment was installed on the roof with several vertical shafts located throughout the building for ductwork and piping.

Plumbing design was complicated due to the fact that the City sanitary connection is at an invert corresponding to the third level. This meant that the bar, which is located on the lowest level as well as the kitchen, had to be drained into a sanitary lift station located on the lowest level and lifted to the City sanitary connection. The two upper levels were gravity drained to a second sanitary connection. There was no physical



## Restaurant . . .

(continued from front page)

space on the site for installation of a 5,000-gallon grease interceptor so it had to be installed below the kitchen slab.

Electrical design was fairly straightforward with the exception of inadequate utility capacity at the street for the 3,000-amps required for the restaurant. An underground primary vault (34' x 14') was constructed in the street with power transformed to 208/120 volts and routed into the second level of the building.

For more information on this project, or to find out more about our engineering services for retail and restaurant facilities, please contact Ken at 651.748.4345.



Rendering of the North-South section of the Rainforest Café on the San Antonio Riverwalk.

### Rainforest Café Stats

#### Client

Landry's

#### Location

San Antonio, TX

#### Square Feet

20,000 sq. ft.

#### Architect

Cunningham Group Architecture

#### Date

2005

## Energy Cost Avoidance Reaches over \$4 Million Dollars for School Districts in Energy Program

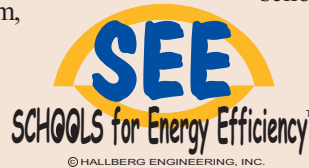
Hallberg's energy program for schools is a proven success with 14 school districts in Minnesota currently participating - all with solid results showing reduced energy use and costs.

In 2002, Hallberg created the Schools for Energy Efficiency (SEE) program, which is designed to support K-12 schools with methods to reduce energy use and energy-related expenses. Focusing on no and low cost strategies, schools follow a systemized plan promoting efficient facility operations and behavior modification through energy awareness.

Together, the SEE districts have avoided over \$4 million in utility expenses by reducing their energy use. With an average annual energy use savings of

11 percent, districts are seeing immediate results and a positive impact on their communities. Several school facilities are even gaining national recognition with ENERGY STAR® labels for top performing buildings. In fact, five SEE school districts are the only ones in the Midwest to have received the ENERGY STAR Leader Award that recognizes district-wide energy efficiency achievements of 10 percent or more.

If you are interested in becoming part of our success, contact Sheri Rosenthal, Program Manager, at 651.748.4356 for more information on our newly redesigned SEE program. Also, be sure to check us out on the Web at [www.seeprograms.com](http://www.seeprograms.com).



## Here's What We're Up To . . .

### Design Projects

- Aeropostale Stores—Nationwide
- ALDI Grocery Stores—Midwest
- Buffalo Public Schools IAQ Projects
- Cantina Corona
- Inver Grove Heights Public Schools
- Monticello Middle School IAQ
- Moose Lake MSOP Facility
- New Chaska High School
- New St. Michael High School
- Wayzata Central Middle School IAQ

### Construction Projects

- College of Saint Benedict's
  - Auditorium Renovation
  - Food Service
- Inver Grove Heights Middle School Addition
- Minnetonka High School Science Rooms
- Morris Football Stadium
- New Prague Elementary Schools
- Stillwater and Oakland Junior High
- St. Michael Big Woods II Elementary
- St. Paul Washington Middle School Renovation
- Waconia Public Schools (multiple projects)
- White Bear Lake Public Schools (multiple projects)

### Commissioning

- Edina Schools ISD 273 Construction Project
- Minnesota State University-Mankato Trafton Science Facility
- Rochester Community Technical College Health Sciences
- University of Minnesota-Duluth Labovitz School of Business
- West St. Paul Schools ISD 197 Construction Projects
- Winona State University Pasteur Hall Renovation

### SEE Program

- Austin ISD 492
- Burnsville/Eagan/Savage ISD 191
- Buffalo/Hanover/Montrose ISD 877
- Cambridge/Isanti ISD 911
- Columbia Heights ISD 13
- Mahtomedi ISD 832
- N. St. Paul/Maplewood/Oakdale ISD 622
- St. Louis Park ISD 283
- St. Paul Public Schools ISD 625
- South Washington County ISD 833
- St. Cloud ISD 742
- Stillwater ISD 834
- West St. Paul ISD 197
- Willmar ISD 347

## Joe Hallberg Receives 2006 Tom Roche Award



*Joe Hallberg (left) displays his Tom Roche Award trophy presented to him by past award winner Lane Hersey (right).*

Congratulations to Joe Hallberg, our company president, on receiving the Tom Roche Award from the American Council of Engineering Companies (Minnesota).

Each year ACEC/MN selects an individual whose career achievements merit the receipt of the Tom Roche Award. The Tom Roche Award is bestowed annually to an individual who has contributed a great deal over the course of their career to the profession of consulting engineering, ACEC/MN, and the community.

The Tom Roche Award Committee is comprised of the three most recent ACEC/MN past presidents, the three most recent Tom Roche Award winners and the current president, president-elect, and vice president.

Joe has proven to be a strong leader with ACEC/MN, serving as president of the association in 2001-2002, and he's also been active with legislative issues, Mechanical/Electrical Practices Committee, and a strong supporter of the Citizen's Fund.

## AIA Announces 2005 Minnesota Honor Awards

The Andover YMCA Community Center was recently recognized with an Honor Award by *Architecture Minnesota* and is featured in their March/April 2006 issue.

The building, which was designed by Rozeboom Miller Architects, Inc. of Minneapolis, is a collaborative venture between the Greater Twin Cities YMCA and the City of Andover that emphasizes active lifestyles and physical fitness. The building program was built around three major sports venues: a fieldhouse with three regulation basketball courts, an NHL size ice arena, and an aquatics center. Constructed entirely with public funding from the local community, the frugal budget led to innovative uses of utilitarian materials.



Hallberg was involved in the pre-design, schematic design, and design development phases of the project which included the plumbing and piping systems, HVAC and control systems, fire sprinkler systems, electrical, and technology systems.

## Construction Communications Picks Top Minnesota Projects



*Como Town Amusement Park*

Construction Communications annually publishes 35 regional *Real Estate and Construction Reviews* across the country. Each edition showcases a region's most important, innovative, and unique new construction and renovation projects. Only the companies referred for their work in helping to design, build, and supply the Minnesota region with the best projects are included in the publication. Hallberg was fortunate enough to have been involved with three of the top 50 new construction or renovation projects for our region.

Congratulations to the Andover YMCA Community Center, designed by Rozeboom Miller Architects, Buffalo High School Athletic Center, designed by Architects Rego and Youngquist, and the Como Town Amusement Park, designed by the Cuningham Group, who were selected to be honored from more than 500 possible inclusions. These projects will be featured in the upcoming issue of Minnesota's *Real Estate and Construction Review*. Watch for the publication due out early next year!

## The Many Benefits of Recommissioning

Before replacing equipment in your building, consider that all most buildings need is a tune-up. Over time, non-operational control strategies, faulty equipment, and deferred maintenance can result in system inefficiencies that are not readily noticeable. Recommissioning is an economical way to improve the performance of your building without investing in equipment upgrades. It can find and correct problems and inefficiencies with your system and insure that your facility operates at an optimum level. Most recommissioning measures have low or no costs, but can result in energy savings in the range of 8-12 percent.

Since its inception in 1998, the Hallberg Engineering Commissioning Group has successfully recommissioned mechanical and electrical systems and provided

custom efficiency studies for hundreds of buildings including K-12 schools, higher education, retail, government, and private industry facilities.

### Benefits of Recommissioning

- Lower your energy costs while improving system operation
- Extend the life of your facility's equipment and reduce maintenance and repair costs
- Improve occupant comfort and productivity for your tenants



*Hallberg recently performed recommissioning services at Skyview Community School in Oakdale.*

### Recommissioning Services

- Site survey report
- Mechanical, electrical, and controls deficiency report
- Test and balance report
- Energy conservation opportunities list
- Implementation costs and payback
- Implementation project management

### Funding

- Health and Safety Funding: Costs toward testing and balancing and commissioning mechanical ventilation systems - Per laws 2006, testing and balancing or recommissioning are allowed to be funded under H&S, at intervals of no less than five years, commencing with FY 2008
- Xcel Energy customer rebates

For more information on how you can save, please contact Rick Lucio, PE, Commissioning Project Manager, at 651.748.4386.



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