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# Newsletter *Commentary*

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The Consulting Engineers Group Inc.



## ***Morse Brothers & CEG Build Trendwest Resorts Parking Structure***

The Morse Brothers Precast Group and The Consulting Engineers Group, Inc. (CEG) relationship continued to grow with the recent completion of the Trendwest Resorts Parking Structure in picturesque Seaside, Oregon. The five level garage with architectural spandrels is set directly against the ocean. Quite literally, the “sands turn to precast.”

Despite the beautiful sur-

roundings, there were many engineering challenges. The high west coast seismic zone required the use of interior cast-in-place shear walls with special seismic detailing. This detailing included boundary zone reinforcement in the shearwalls and heavy shear wall to diaphragm connections. CEG designed and detailed the entire precast superstructure and the cast-in-place shearwalls with attention to a tight construction schedule.

The excellent product fit-up was remarkable! Credit goes to both CEG detailers and high quality Morse Brothers production. The job was largely a success due to the collaborative efforts between CEG and Morse Brothers.

CEG certainly looks forward to working with Morse Brothers again and especially along the beautiful Oregon coast. Jobsite visits were never so much fun!



## **CEG Assists the Wilmington Parking Authority**

What has 48 lanes, 4300 spaces, and 8 parking facilities? The answer is the Wilmington, Delaware Parking Authority. CEG was selected to prepare equipment and performance specifications for a new parking access and revenue control system for the Authority. The new system will stress service (to their customers) and serviceability (for their equipment).

The process of providing any parking revenue control begins, like all CEG projects, with a thorough understanding of the client's needs and desires. To ensure this understanding on this project, both Dick Beebe (CEG-IL) and Chuck Cullen (CEG-OH) met with representatives of the Authority and

visited each of the parking facilities. With the information gathered on these trips to Wilmington, the process of writing a comprehensive set of specifications began in earnest. First, detailed specifications for each type of revenue control device were developed. Then, the intended functionality of the equipment was written to explain to the vendors how the equipment was to operate.

At this time, the specifications are undergoing final review. Shortly, the formal bid documents will be prepared and sent to equipment manufacturers for submission of a proposal. CEG will assist the Wilmington Parking Authority in reviewing the proposals and recommending the one that best meets the

needs of the Authority. As the selected vendor installs the new equipment, CEG will also inspect the work to ensure compliance with the specifications.

When the project is completed, the Wilmington Parking Authority will have a state-of-the-art parking access and revenue control system.



## **CEG Serves Up P.I.E.**

The 2002 Parking Industry Exposition (PIE) was recently held at the Chicago Holiday Inn - O'Hare. PIE is the fastest growing exposition of parking equipment and services in the country. Representatives from hundreds of airports, municipalities, medical centers, universities, and developers convened over the course of three days to see the latest parking technology and listen to industry experts speak on important topics.

The Consulting Engineers Group, Inc. was well represented at this important conference. At the CEG display, Dick Beebe, Jeff Carlson, Chuck Cullen, Rey Ymson, and Dan Stevens greeted visitors and answered their questions about CEG and the variety of profes-

sional services offered by the firm.

The seminars included presentations by both Dick Beebe and Chuck Cullen. Mr. Beebe spoke on the impact of recent security requirements at airport parking facilities and the impending implementation of new, Federally mandated security requirements to commence by the end of the year. Mr. Cullen spoke as part of a panel of experts on onstreet parking issues. His topic was selecting the right electronic ticket issuing device.

For the first time ever, the conference began with a four hour Parking "Boot Camp." This special program was designed for those new to the parking industry. It provided

valuable information to parking "rookies" and allowed them to participate more effectively at the conference. Chuck Cullen from our Cincinnati Office was selected to lead the initial "Boot Camp". The conference organizers initially anticipated approximately 40 participants. Based upon an attendance of 149, the Boot Camp was an overwhelming success.

Philadelphia is the site for the 2003 Parking Industry Exposition and CEG will once again actively participate in the event.



## **Greg Leean Joins CEG**

Minneapolis Office Established

We are extremely pleased and proud to welcome Greg Leean to the ranks of CEG. He will serve as Director of Airport Parking and Transportation Consulting, providing a major impetus to CEG's expanding airport practice.

Greg has just retired from Minneapolis – St Paul International Airport following more than 31 years of service. In his most recent position as Assistant Airport Director for Landside Operations Greg gained national prominence for his understanding of the interactions of landside operations and quality of services provided to Airport customers and employees. Among his principal duties were the management and operation of facilities housing 31,000 parking spaces; a revenue control system producing annual income of \$50,000,000; taxi dispatch and commercial roadway controls; on-site rental car ready/return areas and a number of other vital ground transportation functions.

Greg will be working out of CEG's newest office (now seven in number) at 4825 138th Street West in Apple Valley, MN, 55124. Telephone and fax number are (952) 240-1101 and (952) 423-5061, respectively. E-mail address is [gregleean@charter.net](mailto:gregleean@charter.net).

## **Go Ducks!!**

Thirteen thousand additional Duck fans will pack the University of Oregon's stadium for the upcoming 2002 football season. With the superstructure finished this past April, the 88-million dollar addition and renovation to Autzen Stadium is nearing completion. Morse Bros. of Harrisburg, Oregon produced the precast concrete for the project with CEG serving as their specialty engineer.

Two significant challenges were encountered during the design, detailing, production, and construction phases of this project. The first challenge was providing precast concrete "Y-Columns" used to support precast raker beams. This proved to be one of the most architecturally impressive but structurally difficult facets of the project. Due to production, shipping, and erection concerns, these columns were designed and "match-cast" as two separate pieces to be joined in the field with splice sleeve connectors. The second challenge involved the precast raker beams themselves. Long beam lengths, some greater than 150-feet, were constructed with one, two, or three separate members. A structural requirement necessitated that these separate members behave as one beam so as to continuously transfer axial load. A post-tensioning system was used for this application, with as many as 27 strands, each 1/2-inch diameter, required for beams with the largest axial forces. CEG closely coordinated our work with Haris Engineering (Structural Engineer) and Ellerbe Becket (Architect) during the entire design phase of the project.



The need for accuracy combined with extreme tolerance limits at the intricate interface between "Y-Columns" and raker beams demanded that precast production be very precise. Morse Bros. met this challenge by producing outstanding products with near perfect fit-up.

How does one go about designing a structurally challenging but architecturally breathtaking stadium? One answer is by utilizing precast "Y-Columns" for support of precast raker beams. The second is by making the collaborative efforts between Morse Bros., CEG, Ellerbe Becket, and Haris Engineering the essential ingredient in producing a successful project.

# News Bites

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The Consulting Engineers Group Inc.

- CEG is pleased to announce the promotion of **Peter Troiani** to Vice President and his election to our Board of Directors.
- CEG is pleased to welcome **John Schwab** to our Texas office and **Rennie Mendoza** to our Mt. Prospect office.
- Congratulations to **Keith Allen** on receiving his 15-year service pin, and to **David Nasser**, **James Henderson**, and **Sinisha Salatich** upon receipt of their 5-year service pins.
- The Texas office is glad to have **Anna Salazar** back after her recent surgery. Welcome back Anna!

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