

The Quote

Richard Brady & Associates

35 MG EARL THOMAS RESERVOIR

It's safe to say that the Earl Thomas Reservoir Replacement project at the City of San Diego's Alvarado Water Treatment Plant has been a type of dream assignment for those of us involved here at Richard Brady & Associates. It's a project that can be described as challenging and dramatic, if not a bit imposing, due to its sheer scale.

Essentially, this project involves the replacement of the existing 35 million gallon (MG) Earl Thomas Reservoir with a buried 35 MG reservoir built of prestressed concrete. The design also includes a complete redesign of Alvarado's entrance, which was originally constructed in 1950.

The \$25 million construction contract, awarded to C.E. Wylie in October of 2002, has a construction duration of 27 months. When construction for the new reservoir is complete, the circular tank will have an inside diameter of 406 feet and a water depth of 39 feet. As for the design of the new entrance, which is based upon the original formal entry gates that once graced the entrance to the Alvarado Water Treatment Plant, many design considerations had to be taken into account. In 1950, the entrance directed all plant traffic through a residential neighborhood. However, this entrance was later closed and plant traffic was redirected through a back gate. The new entrance to Alvarado will resurrect the idea of a grand



sequential entry and provide for the expansion of additional plant security capabilities.

The project's landscaping, encompassing the facility's perimeter, is primarily native, making use of both sycamore trees and coast live oaks. In addition, the reservoir roof, which is considered an environmental artwork, was designed by Project Artist Robert Millar. Ringed with hundreds of Italian Cypress trees, the landscaping helps all who enter to visualize the enormous scale of the underground reservoir. Millar says, "The design of the original plant celebrated the accomplishment of providing such an abundance of water for arid San Diego. Our redesign of the entry procession presents the spectacular feat of providing much larger quantities today, but I think the design also adds a healthy dose of self-examination to the finished product."

Many thanks to Mike Wallace, P.E., the City's Project Manager, for his persistence and tenacity in getting this project funded and awarded. ■

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Spring 2003

STANDING TALL

In June of 2002, Richard Brady & Associates was retained by the City of Cerritos to perform a seismic evaluation study on its three circular prestressed concrete water reservoirs. Two of the reservoirs, both of which are 6 MG, are located in the City's Corporate Yard, and the third, a 12 MG tank, is located in Reservoir Hill Park. All three reservoirs were built in the 1970's with wire wrapping and prestressing performed by DYK Incorporated.

In a continually proactive approach to ensure a safe and reliable source of drinking water for its community, the City of Cerritos commissioned an evaluation study in order to identify any reservoir deficiencies at the earliest possible time and to establish a plan for the appropriate improvements that may be required.

The evaluation included archival documents and records research associated with the original design and construction of the reservoirs, a tank interior-dive and exterior physical inspection, and an analysis of the tanks' structural integrity under current code design requirements.

The findings of the evaluation revealed that the reservoirs, given their age, are in surprisingly good condition. However, as anticipated, each of the three reservoirs, in order to satisfy today's design requirements for this type of facility, will require some upgrades. A number of possible upgrade options to increase the structural integrity and performance of the reservoirs include interior column strengthening, restraining of roof slabs, and the installation of new overflow piping and valves.

This reservoir "check-up" and the planned improvements by the City of Cerritos for some of its aging water facilities will ensure a safe and healthy water infrastructure system that will continue to meet the needs and demands of the community, now and long into the future.

A debt of gratitude goes to Joe Holdren, Water Supervisor, and Ron Babel, Water Superintendent, of the City of Cerritos Public Works Department. Each of these individuals enthusiastically provided all of the information required and made access available on short notice. Without their hard work and dedication, it would not have been possible to complete this thorough evaluation within the required time frame. ■



Richard Brady & Associates
Civil Engineers and Construction Managers

EMPLOYEES OF THE YEAR

Each year we make a special effort to acknowledge the talent, drive, and sheer stamina of certain individuals who have distinguished themselves throughout the year. These are people who not only excel in their particular craft, be it engineering, drafting, accounting, or any other important function, but who also make an extra effort, consistently, to make Richard Brady & Associates a better engineering firm. So allow us a moment to introduce you to Aaron Steele, P.E. and Sara Carnett, Richard Brady & Associates' newest employees of the year.

Aaron Steele, P.E., has five years of experience in the field of structural engineering, with particular emphasis in design, using many structural systems and materials on a wide range of projects involving steel, timber, concrete, aluminum, and masonry construction. Aaron's experience covers institutional, commercial, hospitals, residential, and water and wastewater treatment. As a graduate of California Polytechnic State University in 1998, Aaron began his career in structural engineering with R. L. Biggers & Associates. Now, five years later, as result of the recent merger with Richard Brady & Associates, he is one of RBA's employees of the year for 2002.

Sara Carnett, the Marketing Coordinator here at Richard Brady & Associates, has four years of experience in marketing. After graduating from the University of North Texas in 2000, where she received a degree in Advertising and a degree in Psychology, Sara began working as a free-lance graphic designer. However, in September of 2001 she took up residence with RBA and hasn't looked back since.

So, there you go. We would like to say thank you and congratulations to both Aaron and Sara for their hard work and dedication to our firm. ■



EINSTEIN AND NON-EINSTEIN AWARDS

Like nominating an employee of the year, a special effort is also made each year to recognize certain individuals for their wit, their ability to problem-solve, and their absolute brilliance. Which, when you think about it, is a tall order when you're dealing with the kinds of people that work for a company like Richard Brady & Associates. But, we manage. This year, two people stood out above the rest, Nick Kanetis, P.E. and Sean Manning, P.E., AEE.

Nick was an obvious choice for the Einstein Award. In fact, Rick would be the first to say that he has no idea what he did before Nick came on board. Always upbeat. Always ready to lend a hand. Always available to solve whatever problems might arise. Nick has been a most valuable addition to the Richard Brady & Associates' team.

Now for Sean. As most of you already know, Sean is an excellent engineer. He's creative. Talented. And an absolute hoot to have around the office. But, to put it nicely, he has his moments. This year Sean was the recipient of the Non-Einstein Award, specifically because of his difficulty with spelling his name correctly.

Again, we would like to congratulate both Sean and Nick for their hard work and dedication to our firm. And, we hope that you'll do the same the next time you see them as well. ■





OUR NEW TEAM MEMBERS

Gary Tubach, S.E. has 23 years of experience in the preparation of complete structural documents from conceptual studies through construction period services for various types of engineered building structures. Such structures include hospitals and other types of medical facilities, aircraft hangars, airport terminals, libraries, banks, training facilities, personal residences, maintenance facilities, office buildings, auditoriums, post-tensioned concrete bridges, and the seismic retrofit of numerous structures. In addition, his general experience covers the full range of structural materials, including the design of steel, concrete, prestressed and post-tensioned concrete, masonry, and timber structures. Gary Tubach's structural design experience also includes both static and dynamic analysis for earthquake loads in seismic zone four.

Kenneth Dawson has 35 years of experience in engineering and program management, mechanical, civil, energy and aerospace system design, and analysis and system integration. Currently, Ken is studying for his P.E. license, which he will earn later this year.

Pamela Willis is a CADD designer and drafter with 30 years of experience in the civil engineering industry. Pamela has worked on a number of significant civil projects involving roads, bridges, and water and wastewater treatment. In addition, Pamela is proficient in MicroStation.

Ellen Baumgarten, Richard Brady & Associates' newest and brightest accounting wiz, has over 20 years of experience in the construction industry, possessing skills that range from project start-up to claims negotiations. With Richard Brady & Associates, Ellen will work hard to insure that business operations run smoothly both in the field and at the office.

Zena Doss, Richard Brady & Associates' new administrative assistant, has 7 years of experience in office management. Zena is currently working part-time on her Bachelor of Arts degree in Business Administration at San Diego State University and expects to graduate in 2006.

