



The Clarifier

VOLUME EIGHT, ISSUE ONE

DOYLESTOWN, PA

DECEMBER 2011

Inside this issue:

Another Successful Water For People Gala!



Stone Hill Contracting Co., Inc. was again the host sponsor for the Water For People Gala on Thursday evening, November 3rd at the William Penn Inn in Gwynedd, PA. About 80 people attended this annual event, with a large percentage of them being water and wastewater industry professionals.

The featured speaker for the evening was Mr. John Sauer, Assistant Director of Thought Leadership for Water For People. He gave a short presentation on the wonderful work Water For People is doing worldwide.

Throughout the evening, people were given many opportunities to contribute to the work of Water For People, through the purchase of Super Bowl raffle tickets, a holiday wreath sale, where all proceeds will go to Water For People, and a silent auction which had great items available for bidding including golf outings, restaurant gift certificates, framed art, theme baskets, as well as sports memorabilia. All combined, the evening raised over \$7,300 for the work of Water For People.

It is important to note that the success of this event came in large part from the sponsors, who teamed with Stone Hill Contracting, as well as numerous individuals who went above and beyond to make sure that the event accomplished its purpose of raising money to help people in developing countries to realize their goals of having clean water and sanitary conditions. Stone Hill would like to thank everyone for their continued support and make sure to mark your calendars for next years' event, November 1, 2012!

Merry Christmas and Happy New Year From Stone Hill

Another year has passed, and it is once again time to reflect back on the blessings of the past year. The management team at Stone Hill Contracting has so much to be thankful for as they started the year, struggling to find work, but as the year progressed, the backlog has grown, and they are proud to report, that in 2011, they reached the highest backlog in the history of the company!

These blessings are not the result of one individual reason, but rather a myriad of reasons, not the least of which is the Stone Hill family itself. It is not just the employees or the management team, but it includes the vendors, clients, insurance and safety professionals, and design professionals. It is the combination of all of these people, who have made Stone Hill the successful company it has been for over 30 years.

It is encouraging to see the support that Stone Hill receives throughout the year from so many people. Whether it's support offered on the project sites, the annual Stone Hill Water For People Gala, or Thirsty Thursday each month it all counts. The Stone Hill family is extensive, when you take into account all of these individuals, but it is encouraging to see how all of these individuals, work together, and enable a company such as Stone Hill to become a successful thriving company.

It is for this reason, and with no hesitation, that at this time of year the management team of Stone Hill takes the opportunity to look forward with hope and encouragement. At the same time, they look back at the past and give thanks to God for the blessings of this past year, and to offer thanks to all of you who made the past 30 years so successful and ask that you continue to support Stone Hill Contracting in the New Year, and for many years to come. Thank you and Merry Christmas and Happy New Year to all!

NE Philadelphia Hydrogritters, Passaic Valley, Hamilton Township	2
NJDWSC, GROWS Design Build Project	3
Two Bridges, Industry News	4-6
Water For People News	7

- Special points of interest:**
- Another successful Water For People Gala
 - DBIA Conference
 - 2012 Water For People Scheduled Events

Activity Set to Increase at Philadelphia Hydrogritter Project



It's been a pretty slow couple of months at the hydrogritter project, at least as far as the work in the field is concerned. There has been plenty of activity in the office however, with shop drawings, contracts, clarifications, and material releases. It finally feels like the job is moving, with piping scheduled to show up in November, which will allow Stone Hill employees to begin to replace the Grit Discharge piping, one system at a time. Most of the existing piping is steel pipe in various stages of decay, so the new Ductile Iron Pipe supplied by HD Supply will be a welcome addition. The next phase of concrete demolition will begin shortly, filling in the gaps until the major Grit Removal System can be delivered.

Passaic Valley Final Clarifiers Project Underway

Stone Hill Contracting Co., Inc. has mobilized and started the first phase of the Passaic Valley final clarifier project. The project consists of the rehab of twelve final clarifier trains, with each train having three clarifier mechanisms for a total of thirty six mechanisms being rehabbed.

The clarifier equipment has been approved and production has commenced. The items being replaced include rake arm squeegees, clevis rod assemblies, new rotating collection boxes, air piping, new ducking skimmers, and rotating scum troughs. This equipment is being supplied by Envirodyne Systems Inc.



Aulffo Painting has begun sandblasting and painting the first set of clarifier mechanisms.

Stone Hill has started the demolition work in the pipe gallery which includes twelve scum pumps and approximately 750 feet of 8" ductile iron pipe.

To get the new flushing water lines as well as the scum piping into each clarifier, a new 16 foot long hole needs to be cored by Semcor Equipment.

The new glass lined scum piping is being supplied by Raritan Pipe and Supply, The new scum pumps are being supplied by Netzsch Pumps and the new scum mixing pumps are being supplied by the Vaughn Company.

The electrical portion of the project will be handled by MBE Mark III Electric with the instrumentation being provided by Essex Engineering.

Hamilton Township Projects

Stone Hill will be teaming up with Siemens Industry Inc., who will be removing the existing gas cover and supplying and installing the new cover. Eastern Electrical Corporation will be performing the electrical work for the gas storage facilities improvements.

At the same time, Stone Hill Contracting will be replacing the digester boiler. This work needs to be coordinated with the storage facility improvements so that both units are offline at the same time. Siemens Industry Inc. will be supplying the boiler, Cooper Plumbing & Mechanical, LLC will be installing the piping, and AC Scott Electric Company, Inc will be doing the electrical work on this project. Stone Hill Contracting is currently in the submittal stage, and due to long lead times, work is scheduled to begin by the end of January 2012.

The Clarifier Newsletter is published quarterly by Stone Hill Contracting Co., Inc. PO Box 1370 Doylestown, PA 18901

Samuel A. Mott, President
David C. Mott, Vice-President
Robert K. McIntyre, Editor

Designed and Printed by: Grace Media Services, Inc. Perkasie, PA

NJDWSC Plant Improvements

The filter work continues. To date six of the plants 13 filters have been completed with work currently ongoing in the seventh and eighth filters. Filter work includes the removal of the existing surface spray wash piping, media (gravel, sand and anthracite) removal, cleaning of trapped media from underdrains, repair or replacement (as needed) of clay underdrain tile, installation of new gravel media and the installation of the Roberts Filter Aires Air Scour system. Four new Gardner Denver blowers and 16 and 12 inch diameter stainless steel air distribution piping have been installed to supply air to the Aires Scour Systems. The NJDWSC is installing the new sand and anthracite media in the refurbished filters.



The Pacl and Alum Pump Skids have been set and MBE Mark III Electric, Inc. is currently installing conduit and wire to the units.

Aulffo Painting, Inc. has been brought on board to apply the protective coatings to the interior of the two underground concrete Pacl storage tanks. The coatings in these tanks should be complete by the third week of November and they will then apply the protective coatings in the polymer containment areas. Once the polymer coatings are complete Stone Hill will install the three polymer feed skids and complete piping to the units.

Cooper Plumbing has been on site installing copper piping and equipment for the tempered water supply for the new emergency showers and eye washes.

The new lime feed equipment has begun to arrive and Stone Hill will soon begin the first of two new lime feed installations. The new systems will use hydrated lime and replace the current “quick lime” systems. The NJDWSC and Stone Hill are looking forward to this work beginning. More on the lime systems in the next issue.

GROWS Design-Build Project Gets Underway

And the race is on. Stone Hill Contracting is on the run, trying to beat old man winter with the major concrete installations. Under construction, are the Leachate Treatment Building, and the FO-39 Hazardous Tanks. Both structures contain roughly 1800 cubic yards of concrete. At this time, the LTP metal building structure is slated to arrive around mid December, if the weather should turn foul, the majority of the building slabs can be placed under cover of the erected structure, allowing us to have a better grasp on protecting the large slabs.



There is another main structure to be built and that is the secondary process building, but due to the close proximity to the FO-39 tanks it will have to wait until the backfill is complete on the tank structure.



The majority of the process equipment is expected to arrive in late March or early April, with the yard piping commencing during the winter months.

Retrofitting the existing SBR with jet mixers and Tank T-6 into an additional SBR will commence sometime in the spring. As the design team finalizes construction details, ERG oversees the daily quality control at the site. The forms being used on our concrete work are being supplied by Form Services out of Baltimore. It is a Logik 60 clamp system, which is very user friendly and produces a nice finish. Resteel is being supplied by JM Ahle and concrete supplied by a local distributor JFI Ready Mix. Hopefully the kind weather patterns will stay with us and we can continue to make productive strides on the concrete structures.

Two Bridges Project Continues to Move Forward

Work has finally started on the new Sodium Hypochlorite system at Two Bridges. This work involves the demolition of an existing Sodium Bisulphate system, installation of three new Sodium Hypochlorite tanks, four chemical pumps and the installation of other associated appurtenances. Stone Hill Contracting has already completed the demolition of the existing Bisulphate system, poured the new containment flooring, curbs and tank pads.

Industrial Flooring System is currently installing the containment coating, after they are finished Stone Hill will be able to finish the installation of the new system.



Design-Build Project Delivery Used for More Than 40% of Non-Residential Construction Projects, Report Shows

A new study analyzing the design-build project delivery method in the United States shows it was used on average in more than 40 percent of non-residential construction projects in 2010, a ten percent increase since 2005. The study was commissioned by the Design-Build Institute of America (DBIA) and was completed by RSMMeans Reed Construction Data Market Intelligence. Design-build is an integrated approach that delivers design and construction services under one contract with a single point of responsibility.

“This report reinforces that design-build is a growing and popular method of project delivery and is becoming more commonplace across the country,” said Lisa Washington, Executive Director of DBIA. “As an educational resource for the industry, we can help owners learn more about the merits of design-build and help them to make informed contracting decisions.”

In addition to analyzing market share, the report further breaks down the percentage of design-build projects within nine non-residential building categories. Data shows that design-build is most popular in the military sector, where it holds a commanding 80 percent of market share by dollar value. The design-build method is also widely used in the medical, industrial and commercial sectors, holding more than 38 percent of market share in each category.

Geographically, the report shows that the design-build delivery method is used most frequently in the Pacific Census Regional Division (Alaska, California, Hawaii, Oregon and Washington) and the South Atlantic Division (Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia and the District of Columbia).

The research team drew upon RCD RSMMeans’ proprietary database of historical and planning construction projects data as the basis for the study. In addition, the study incorporated other publicly and privately available data sources. Detailed data on nearly one million construction projects, 300,000 plans and specifications, historical and current material and labor construction costs and historical and projected demographic data was integrated for valid comparisons.

The research team estimates that 95 percent of public projects and 75 percent of private projects were captured for the purposes this analysis. Usage rates and market size were calculated for projects bid between 2005 and 2010. For purposes of comparison the delivery methods analyzed include design-bid-build and construction management-at-risk in addition to design-build.

2 Conferences, 1 Week
DESIGN-BUILD III
TRANSPORTATION
April 25 - 27, 2012

SAVE THE DATE
DESIGN-BUILD FOR
WATER/WASTEWATER

April 23 - 25, 2012 Phoenix, AZ
Renaissance Glendale Hotel & Spa

www.dbia.org/conferences/waterww

Industry News

2011 Design-Build Conference and Expo Highlights Importance of Design Within Design-Build Project Delivery

Themed *Integration Magic: Reality of Results*, DBIA's Orlando conference attracted near record-breaking attendance of over 1,650 owners, practitioners, students and academia. At the meeting, experienced design-build proponents shared lessons learned as well as the best practices that make design-build the fastest growing project delivery method today. Less experienced owners and practitioners (about 20 percent of those in attendance according to an onsite survey) were all ears.



Preconference courses focused on the basics needed for DBIA certification, including Principles of Design-Build Project Delivery and Contracts and Risk. Four education tracks geared toward intermediate and advanced learners offered sessions on:

- Teaming,
- Contracts, Documentation & Best Practices,
- Trends, Innovation and Technology, and
- Overcoming Challenges and Obstacles.
-

The Opening General Session, "Unlocking the Magic and Dispelling Myths of Design-Build Project Delivery," brought owners of some of the most challenging and innovative projects together to discuss their experience with design-build and why it was right for their needs. Jeff Baker, Director, Office of Laboratory Operations for the U.S. Department of Energy's Golden Field Office, and Jay Hietpas, P.E., of the Minnesota Department of Transportation, joined architect Marianne O'Brien, AIA, of SmithGroup, and DBIA Board Member Jim Whitaker, AIA, DBIA, of HKS, for an open discussion of some of the misapprehensions surrounding design-build project delivery.

Whitaker led the panel discussion. Each participant represented a design-build project that delivered exceptionally high value to the owner. Baker was the force behind the DOE's National Renewable Energy Laboratory (NREL), the nation's largest net-zero office building. Hietpas was the design-build project manager for the I-35W Bridge in Minneapolis, which was replaced just one year after a rush hour collapse left 13 people dead and dozens more injured. Representing the design-build team that made the University of California San Francisco's highly regarded Ray and Dagmar Dolby Regeneration Medicine Building a reality, O'Brien spoke about her experience delivering design excellence within the design-build framework. That project was the recipient of DBIA's first Excellence in Design Award. Using a response system, audience members also weighed in on many of the questions posed to the panelists.

At the Closing General Session, McGraw Hill Construction's Harvey Bernstein, Vice President of Industry Insights & Alliances, offered a glimpse into the future of the construction industry as a whole. He highlighted trends design-builders have been quick to embrace, including prefabrication, modular construction and the use of Building Information Modeling (BIM), and placed these developments within the context of increased globalization and growing concerns about future workforce shortages.

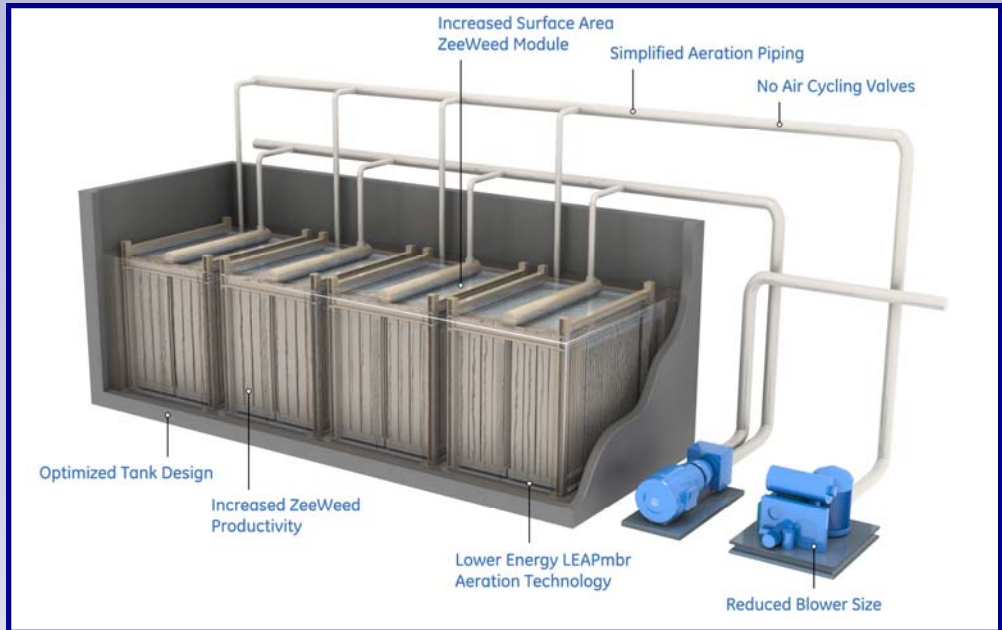
Bernstein also highlighted the value workers and employers currently place on professional certification. This insight was underscored at the conference awards dinner where DBIA's largest ever class of *Designated Design-Build Professionals*[™] was recognized. Twenty-three awards acknowledged the most successful design-build projects in the United States and the most influential people in the advancement of the design and construction industry. A complete listing of the 2011 Design-Build Award Winners, which includes both the NREL facility and the UCSF Regeneration Medicine Building, and a biography of Walker Lee Evey, recipient of the prestigious Brunelleschi Medal are available at www.dbia.org.

GE Introduces LEAPmbr: The Next Generation of ZeeWeed* MBR Technology

Building on the three pillars of simplicity, reliability and efficiency, GE has introduced its next-generation membrane bioreactor (MBR) wastewater treatment technology that provides a 30% reduction in energy costs, a 15% improvement in productivity, a 50% reduction in membrane aeration equipment and controls, and a 20% reduction in plant footprint compared to GE's existing MBR product. This innovative technology, called LEAPmbr, is a multi-year development effort that has resulted in an MBR that offers the lowest cost of ownership in the industry.

A membrane bioreactor couples biological treatment with advanced membrane filtration technology that separates solids from wastewater, resulting in a more consistent and higher quality effluent compared to secondary conventional treatment processes.

Innovations in LEAPmbr include increased surface area of the ZeeWeed membrane modules, optimization of the membrane tank design, increased productivity of the ZeeWeed modules and the introduction of LEAPmbr Aeration Technology. LEAPmbr Aeration Technology employs larger bubbles, released at a shorter cycle times from aerators below the modules. This produces a better scouring action, and the net result is a more efficient membrane air scour process using 30% less energy. As a result of the new aeration technology the MBR system has a simplified aeration piping scheme, eliminates the need for cycling valves, and has smaller blower and air compressor systems.



LEAPmbr Aeration Technology employs larger bubbles, released at a shorter cycle times from aerators below the modules. This produces a better scouring action, and the net result is a more efficient membrane air scour process using 30% less energy. As a result of the new aeration technology the MBR system has a simplified aeration piping scheme, eliminates the need for cycling valves, and has smaller blower and air compressor systems.

In addition to the operating cost savings associated with LEAPmbr, there are significant construction cost savings. These savings are realized through a reduction in membrane tank size, reduced connected load and less mechanical and electrical installation. LEAPmbr also offers a simplified system which translates to a reduction in requirements for automation and controls, and lower maintenance costs for the treatment plant operators.

LEAPmbr's productivity boost comes without a compromise to quality and reliability as the same ZeeWeed 500 module remains at the core of this technology, continuing a legacy of being the most reliable and best performing membrane in the industry. This step change in MBR technology was validated at full-scale at multiple plants to challenge the performance in a range of operating environments.

GE is one of the world's largest manufacturers of ultrafiltration membranes for water and wastewater treatment. With more than 25 years of proven MBR experience, GE continues to set industry standards for research & development, membrane manufacturing, system design and customer support. As the global MBR leader, with more than 1.32 BGD of ZeeWeed MBR capacity, GE MBR systems have continued to combine proven ultrafiltration technology with biological treatment for municipal, commercial and industrial wastewater treatment and water reuse applications. With LEAPmbr GE continues to lead the pack in MBR technology, and this most recent advance will allow treatment plant operators to save both time and money.

For more information on the LEAPmbr and how it can be implemented at your Treatment Facility, please visit www.ge-energy.com/LEAPmbr.

*Trademark of General Electric Company; may be registered in one or more countries.

Water For People Surpasses \$2 Million Goal for “Donate to Drink” Campaign

Water For People, an international nonprofit organization that aims to create a world where everyone has access to safe drinking water and sanitation, surpassed its \$2 million fundraising goal for its two-month “Donate to Drink” campaign, which was hosted on Crowdrise.com.

The campaign ultimately raised \$2,334,100, which will benefit the areas where Water For People works, and will further support the organization’s mission to ensure no one suffers or dies from a water- or sanitation-related disease.

“We are so thrilled and thankful that we were able to surpass our \$2 million goal. It was certainly not an easy feat, and we are tremendously thankful to all of our sponsors, fundraisers, donors and ongoing supporters,” said Ned Breslin, Water For People’s CEO. “The money raised has the potential to transform lives throughout the world and contributes greatly to our goal of ensuring everyone in the areas we serve has access to safe drinking water and sanitation forever. Our significant progress toward this goal is evidenced by our recent success of achieving access for everyone to safe drinking water in Chinda, Honduras and establishing systems to ensure this access lasts forever.”



The campaign’s sponsors included Crowdrise, Marmot, Eagle Creek, AOL and CH2M HILL, a global, full-service consulting, design, construction and operations firm who kicked off the campaign by donating \$150,000. Edward Norton too lent his support to the campaign by filming a PSA for AOL’s [You’ve Got series](#).

The micro-fundraising site Crowdrise.com hosted a variety of fun contests and prizes to encourage giving throughout the campaign, including the opportunity to win an all-expenses paid trip for two to join a Water For People volunteer expedition in Rwanda in 2012 for fundraisers who successfully collected \$1,000 in donations.

Water For People Awards AECOM Global Sponsor Status

AECOM has been awarded “global sponsor” status by the Water For People initiative.

The designation recognizes companies that raise more than US\$100,000 per year for the non-profit organization, which supports resources, sanitation facilities and hygiene-education programs in developing countries. AECOM has raised more than US\$125,000 for WFP since 2010.



More than 90 percent of the funds have been through a payroll deduction program in Canada and the United States, with the remaining money coming from company fundraising initiatives. Prior to the establishment of the workplace giving program, AECOM was involved with WFP fundraising and outreach initiatives for many years.

“The need to provide people in the developing world access to safe water and sanitation is an issue that resonates with our global staff and I am proud of their personal commitment to make a difference,” said AECOM’s Greg Sauter, executive vice president and chief corporate officer. “By partnering with an organization that shares our values and is committed to implementing programs that impact deserving communities, AECOM continues to demonstrate its commitment to creating, enhancing and sustaining the world’s built, natural and social environments.”

2012 Local Water For People Events

May 7, 2012— **9th Annual AWWA NJ Water For People Golf Classic** at Royce Brook Golf Club, Hillsborough, NJ. For more information, contact Bob McIntyre (215) 340-1840.

July 20, 2012— **4th Annual AWWA NJ Water For People Night at the Trenton Thunder** at Riverfront Park in Trenton. Come see the Trenton Thunder take on the Reading Phillies. For information, contact Bob Corvino at (215) 340-1840/

November 1, 2012— **7th Annual Stone Hill Contracting Water For People Gala**, which is being held at the William Penn Inn, Gwynedd, PA.

Stone Hill Contracting Co., Inc.
P.O. Box 1370
Doylestown, PA 18901

Address Correction Requested



**PUBLISHED IN THE
INTERESTS OF
STONE HILL CONTRACTING
CO., INC.**

*P.O. Box 1370
252 W. Swamp Road, Ste. 19
Doylestown, PA 18901*

*Phone: 215-340-1840
Fax: 215-340-1991
Email:
clarifier@StoneHillContracting.com*

*Celebrating 30 Years of
Excellence*

Established in 1981, by Samuel A. Mott, Stone Hill Contracting is proud of their heritage, and their commitment to excellence. Throughout their decades of service, the employees and management of Stone Hill Contracting have prided themselves on their reputation of meeting or exceeding the needs of their clients. Specializing in water and wastewater treatment facilities, Stone Hill has performed work throughout the Mid-Atlantic region from Virginia to Northern New Jersey.

Although the majority of their work over the years has focused on the treatment plant field, they have also completed bridge and water control projects. With a client base mostly in the industrial and municipal markets, Stone Hill is proud to have numerous repeat clients, who have found Stone Hill's teamwork concept of working with the Owner, Design Engineer, Suppliers and Subcontractors, to be beneficial to all involved parties. Stone Hill's management team feels it is necessary for all parties to benefit in order to have a successful project.

**We're on the web at:
www.StoneHillContracting.com**

**Watch for the next issue
of the *Clarifier* coming in
March 2012**