

3D Solutions

Newsletter

Haag 3D Solutions

Haag 3D Solutions provides 3D imaging and BIM technologies to deliver highly accurate, reliable as-built documentation. Haag 3D Solutions specializes in professional 3D geospatial solutions for all types of design and construction projects. Haag 3D Solutions is a division of Haag Engineering.



3D Solutions

Exciting News at Haag!



After 88 years of providing professional engineering services, the board of directors of Haag is excited to announce the new rebranding and look of the entire Haag organization. Earlier this year they initiated a campaign to launch an entire new and fresh look to better promote all of its new divisions. “Haag Engineering is not only our brand & logo...it is a promise. It promises the unique set of benefits our company as a whole provides to its customers.” (John Stewart, President). “Our brand and logo represent the essence of our company’s culture to Haag’s employees and anyone who comes in contact with us.” “*Change is Good*, and it was time for Haag Engineering to change. These new branding changes the way the company looks and feels without changing the underline culture and philosophy of the company. We have moved beyond just engineering. It’s not all that we do. We have grown, matured and expanded. On our foundation of engineering excellence, Haag has built a first class reputation that we now have expanded to include: Construction Consulting, Geotechnical Consulting, 3D Solutions, Research and Testing and Education.”

“Everyone here at Haag is so enthusiastic about our new image” says Polly Prado, Director of Corporate Communications. Over the next few months Polly will be in charge of rolling out the new image, new divisions, and the establishment of the new, interactive website. More to follow in the coming months on this exciting, fresh look of Haag...

Events:

May Chris Zmijewski attended the
Atlanta **RAPID Conference 2012**

June **Hexagon 2012 Conference**
Las Vegas Kevin Kianka and Rob Ashley attended Hexagon 2012 in Las Vegas, NV, a conference focusing on 3DLS and Modeling utilizing Leica equipment.

July Christopher Zmijewski authored an article for **Lidar News** entitled “Career Paths” discussing industry trends for training and education regarding LIDAR.

Kevin Kianka authored an article for **GeoDataPoint** entitled “Verify in Field-Defining the Levels of Building Documentation” discussing upcoming standards for noting how existing buildings are documented.

Upcoming: **SPAR Europe**-World Forum, The Hague, The Netherlands

2012 Construction SuperConference-San Francisco, CA

Laser scanning for BIM (Building Information Model) requires close collaboration among team members and an in-depth understanding of the client’s needs.



Project Highlight: Princeton Hoyt Lab



When construction completed in 1979 for Hoyt Lab, it contained the most up to date equipment and infrastructure for research, instructional and office use. 32 years later the building and its infrastructure components have reached the end of its useful life, requiring Princeton University to evaluate the building for renewal (renovation) or demolition. As part of Princeton's Sustainability plan the building was chosen for renewal with energy efficient HVAC systems and lighting, improved laboratory safety and complete refurbishment of the interior spaced to extend its useful life.



Presenting at the 2012
Construction Super Conference in
December

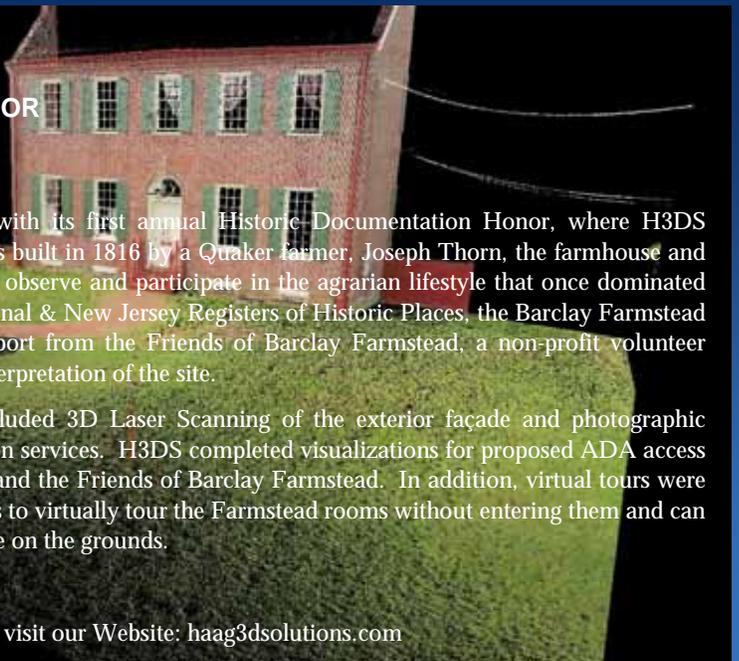
Christopher Zmijewski and Jim Wiethorn (Haag Engineering) will team up and present "Tracing the Evidence" in San Francisco, CA in December 2012. This session will review new 3DLS and photogrammetry technologies for gathering data and how the information is processed and incorporated into compelling visual evidence in presenting engineering conclusions.

LF Driscoll Co., LLC was awarded the contract for the renewal of the lab and retained Haag 3D Solutions to perform 3D Laser Scanning to verify the existing as-built condition and validate the design models prior to equipment and materials being ordered. H3DS completed 3D Models from the scan data, identifying mechanical and plumbing components to remain and for connections within the design team's coordinate system. The as-built model was then compared with the design model and used by the various trades to coordinate the materials and connection plans.

Staff from H3DS also participated in a variety of model and BIM coordination meetings with LF Driscoll, the Design Team and the trade subcontractors to review use of the point cloud data, TruView files and models prior to the fabrication of materials saving the project money and improving the schedule of the project.



**1st ANNUAL HISTORIC
DOCUMENTATION HONOR
Awarded to
The Barclay Farmstead**



Haag 3D Solutions has bestowed The Barclay Farmstead with its first annual Historic Documentation Honor, where H3DS provided services, free of charge. The Barclay Farmstead, was built in 1816 by a Quaker farmer, Joseph Thorn, the farmhouse and surrounding 32-acre property offers visitors an opportunity to observe and participate in the agrarian lifestyle that once dominated the South Jersey landscape. The farmstead listed on the National & New Jersey Registers of Historic Places, the Barclay Farmstead is owned and operated by Cherry Hill Township, with support from the Friends of Barclay Farmstead, a non-profit volunteer organization dedicated to the restoration, maintenance and interpretation of the site.

Services (provided to the Friend of Barclay Farmstead) included 3D Laser Scanning of the exterior façade and photographic documentation of the interior spaces for historic documentation services. H3DS completed visualizations for proposed ADA access improvements to be presented to both Cherry Hill Township and the Friends of Barclay Farmstead. In addition, virtual tours were created, utilizing spherical photography that will allow persons to virtually tour the Farmstead rooms without entering them and can be utilized either as a web based application or via tablet device on the grounds.

For Consideration on the next Historic Documentation Honor visit our Website: haag3dsolutions.com

Haag 3D Solutions Expands its role in Accident Reconstruction



Expanding its accident documentation resume, H3DS recently completing the 3D Laser Scan documentation of a motor boat accident. In the northeastern US, H3DS was retained by State and County Prosecutors office, to document two boats that were involved in a fatal collision. Utilizing 3D Laser Scanning H3DS quickly documented the boats and provided the data to an outside forensic engineering firm for analysis.

In the southeastern US, H3DS worked with forensic engineers from our parent company, Haag Engineering, to document the scene of a collision between a motor vehicle and a tractor-trailer. In addition the vehicles involved were also documented and data was provided to determine the factors involved in the collision.

Haag Engineering, the parent company of Haag 3D Solutions, is also excited to welcome Justin Smith to the Mechanical Engineering team, based in Dallas, TX. Justin Smith brings 17 years of professional mechanical engineering experience, having spent the last 13 years as an engineer at U-Haul, where he was responsible for conducting on-scene motor vehicle accident inspections and inspecting vehicles involved in accidents. In addition Justin conducted forensic evaluations of components; developed component designs, designed and conducted tests of vehicles and vehicle components (such as hitch, suspension and braking systems).

Haag Helping Local Bucks County School Bucks County Technical High School

One day in late May, at the end of the past school Year, an unexpected phone call came from a member of Haag 3D Solutions, inquiring on the status of our Civil Engineering Program and an interest in meeting this year's upcoming graduating students. An unexpected offer was extended, an opportunity for our present Civil Engineering Technology students to be awed, as well as to learn from an interactive presentation on scanning technology; its theory, equipment, uses and translation into AutoCAD Civil 3D and Revit. That BCTHS alumnus was Rob Ashley, Dir. of Field Operations at Haag, in Mt. Laurel, NJ, who with Kevin Kianka delivered an informative and inspiring presentation on the state of this powerful technology. In attendance were nearly 40 of our Civil Engineering Technology Students interested in learning about this technology. By introducing the theory, equipment and uses of scanning technology, Rob and Kevin artfully connected with the students' existing knowledge of surveying and AutoCAD Civil 3D, added new vocabulary, furthered surveying concepts that our students are currently developing and transferred these concepts so that they could be viewed through the "lens" of scanning technology. The presentation focused on uses in Civil Engineering and Surveying, BIM with architectural and construction applications, as well as Forensic Engineering, noting that Haag is the oldest firm of its kind in the United States. During the presentation, Rob and Kevin gave examples of as-built generation and compared and contrasted data collection using a Scanner as opposed to a Total Station-the need for establishing control points, labor costs, levels of accuracy, methods of filtering data points, coordinate systems, with a discussion of coordinating State Plane with assumed coordinates, and BIM. Simply put, my students were excited, amazed and grateful for the opportunity to attend this presentation on such cutting edge technology. I would like to say thank you to Haag, Kevin Kianka, and especially to Rob Ashley for their time, as well as for serving as an inspiration to our students as someone who once sat in the same seats where our students currently sit.

Douglas Bennet, BCTHS Civil Engineering Technology Instructor



Update on USIBD By Kevin Kianka

As part of the USIBD Standards Committee, Kevin Kianka (Director of BIM/Modeling for Haag 3D Solutions) is initiating the creation of documents that will allow owners and clients to issue Requests For Proposals (RFP's), Requests for Qualifications (RFQ's) and Bid Evaluation documents that will become building documentation industry standards. The goal is to have documents that even those with unfamiliarity with building documentation can utilize to request and evaluation proposals and firms bidding on projects.

In addition Kevin is also working on standard notes that will be added to design plans to indicate the level of detail for which the existing building was documented to generate the plans. Currently there are no industry standards to indicate how existing plans were generated, leaving many owners and contractors on the hook when discrepancies are found. The goal is that design firms will provide a note to indicate the level at which the existing building was documented so that owner have a confidence regarding potential change orders (related to inaccurate field condition depiction) and contractors can bid projects with knowledge of how the data was developed.

Look for an article by Kevin on this topic at <http://www.geodatapoint.com/>

Haag 3D Solutions is a Founding Member of the USIBD and proudly supports and promotes the organization, its initiatives and members in furthering the building documentation industry.

For the upcoming 2012-2013 Academic year, H3DS will be assisting in providing new curriculum focusing on The Technology of 3D Scanning & Imaging at:

Gloucester County Community College as well as Bucks County Technical High School

For further information Contact:
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Haag Engineering Co., Forensic Engineers & Consultants since 1924, is excited to announce the establishment of a new company division, **Haag 3D Solutions, LLC**. **Haag 3D Solutions** is a technology and services company specializing in the application of 3D imaging and BIM technologies, delivering highly accurate and reliable as-built documentation for both public and private sector clients. **Haag 3D Solutions** was created to provide professional 3D geospatial solutions for all types of design and construction projects.

Centered in the northeast, The **Haag 3D Solutions** division is headquartered in Mt. Laurel, New Jersey, and will compliment the entire Haag Engineering team and offices throughout the United States.



Office Locations:

- Dallas, TX
- Houston, TX
- Austin, TX
- Los Angeles, CA
- Minneapolis, MN
- Tampa, FL
- Denver, CO
- Atlanta, GA
- Mt. Laurel, NJ

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