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The New Holbrook School, which was planned and realized with Open BIM. Image courtesy of: Flansburgh Architects, Boston

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Flansburgh Architects Successfully Transitions to Open BIM

Nemetschek Group solutions enabled a LEED Gold certified school building

Munich, 10 September 2020 – Open Building Information Modeling (BIM), better known as Open BIM, was a key enabler for the planning of a new school for the town of Holbrook, Massachusetts. <u>Flansburgh Architects</u> achieved the Leadership in Energy and Environment (LEED) Gold certification on this building project by leveraging software solutions from the Nemetschek Group, including <u>Vectorworks</u>, <u>Bluebeam</u> and <u>Solibri</u>.

The new school merges Holbrook's three existing schools into one building, which will now serve more than 1,000 students from pre-kindergarten through to Grade 12. The building measures more than 200,000 square feet (18,580 square meters) spread across two floors. It is organized by an internal circulation spine bent around the campus green that connects the lower elementary school entrance on one end of the curve to the upper middle-high school entrance on the other end curve. The shared common spaces (such as the gymnasium, art rooms, cafeteria, media center, and auditorium) and academic neighborhoods are accessed directly off this main path of circulation. The defining element of the building's exterior envelope involved the use of a distinctive pre-patinated copper panel system along the entire front curve of the building. This specific building material was selected for its timeless quality and serves as a natural backdrop for the new campus green.

"The Holbrook project has been certified LEED Gold. It boasts 35 percent water savings and 34 percent energy savings over the typical baseline," says Kent Kovacs, vice president and principal-in-charge at Flansburgh Architects, a Boston-based architect firm.

Before the Holbrook project, Flansburgh had already used BIM among the internal design team for architectural documentation and coordination. "Implementing BIM for the coordination was a fairly intuitive process for us. We have been utilizing BIM for years, as it gives us one collaborative model with multiple kinds of data attached to it. The challenge came in expanding our collaboration to work with the consulting engineers and handing off the models to the construction team for this specific project," explains Brian Hores, BIM manager at Flansburgh Architects. "This is when we decided to transition to Open BIM. It allowed the multi-disciplinary design team to use their preferred system."

For the New Holbrook School, Flansburgh Architects used their preferred software in the BIM process, which included the Nemetschek brands Vectorworks, Solibri, and Bluebeam. Flansburgh did their architectural design in **Vectorworks**, then used an Open BIM process to import, export, and reference files from all the consultants and subcontractors. The engineers developed structural and MEP models in other software tools in a smooth workflow due to Vectorworks' ability to handle IFC files for an Open BIM exchange. **Solibri Office** served as the quality control tool checking the model to detect collisions and prevent errors. During the construction process, **Bluebeam** was deployed for document reviews and commenting, as well as the overall coordination and to issue of sketches to project stakeholders.

"Flansburgh's Holbrook School project shows the advantages of Open BIM in a vendor-neutral environment," explains Viktor Várkonyi, chief division officer of the Planning & Design Division and member of the Executive Board of the Nemetschek Group. "It ensures efficient collaboration, whilst allowing architects, engineers, and construction professionals to work in the software they prefer."

More details about the project can be found at here.

About Flansburgh Architects

Flansburgh is a Boston-based architectural firm, internationally recognized as a leader in the planning and design of schools. Our wide-ranging portfolio also includes arts and cultural centers, civic projects, private residences, and theaters. Our designs reflect the culture and environment of the communities they are built for and provide sustainable, long-term value. Our work is guided by our client's vision, needs, and goals, and we are committed to providing exceptional, personal service from the design phase through construction.

About the Nemetschek Group

The Nemetschek Group is a pioneer for the digital transformation in the AEC industry. With its software solutions, it covers the complete life cycle of building and infrastructure projects and guides its customers into the future of digitalization. As one of the world's leading corporate groups in this field, the Nemetschek Group increases quality in the construction process and improves the digital workflow of all those involved in the construction process. This revolves around the use of open standards (Open BIM). The innovative solutions of the 16 brands in the four customer-oriented divisions are used by approximately six million users worldwide. Founded by Prof. Georg Nemetschek in 1963, the Nemetschek Group today employs more than 3,000 experts.

Publicly listed since 1999 and quoted on the MDAX and TecDAX, the company achieved revenue in the amount of EUR 556.9 million and an

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