

Come Visit BCK-IBI Group at NYSCOSS

We will be attending NYSCOSS March 8th-10th in Albany, NY. Stop by booth 46 to say hello. We look forward to seeing everyone at this year's conference.



Reducing Energy Costs with a Co-Generation System

For more than 20 years, Waverly Central School District has operated a co-generation mechanical and electrical system at their Middle/High School as an economical way to provide electricity, heating, and cooling to the building. Five co-generation modules were originally installed and operated at the facility, but age had taken its toll, and maintenance costs started increasing. Through an in-depth evaluation, it was determined that if the co-generation plant was restored to its original operating efficiency, and the controls were restored to provide 100% of the building's needs for electricity, the district would realize a savings of approximately \$15,000 a year.

A co-generation system begins with a natural gas supply that powers the engines in each of the co-generation modules. The engines then drive a generator that creates the electricity for the building. Water is used to cool the engines, and the heated waste water bi-product is then sent to the building's mechanical units to provide heat throughout the facility. In the summer months, an absorption chiller is used to convert the heated water to chilled water, which is then used to cool portions of the building.

The co-generation plant was completely refurbished, restoring all modules back to peak operating efficiency. An additional co-generation unit was added to allow the building's electrical needs to be met in the event one or more of the co-generation modules were off-line for service. The controls for the plant were renovated and restored with electrically actuated valves and new electrical meters to provide an accurate signal to the plant. This allows the system to produce the correct amount of electricity that the building requires. The renovations will provide many years of continued efficient use of the plant along with significant yearly cost savings for the district.



To learn more about this project and similar possibilities for your district, contact [Dan Whelan](#).

Have You Finished Your Building Condition Survey?

We can help.

All NYS school districts and BOCES are required by NYSED to collect, coordinate, analyze, and prioritize their facility infrastructure and building program needs district-wide every five years. This requires a detailed building inventory, district-wide analysis and prioritization, and estimated expenses for each plan year.

Building Condition Surveys (BCS) must be completed by November 15, 2015 and must be submitted to NYSED by January 15, 2016, unless there is an extended date based on NYSED's ability to get the reporting mechanism up and running. The final BCS format will be available in the spring of 2015.

Need some help in completing your district's BCS? BCK-IBI Group has assisted districts in completing their building condition surveys for the past 15 years. We can also help you develop your five-year capital plan, complete with estimated expenses. Contact [Steve Thesier](#) for a no-charge consultation about your schools or for additional information. The planning process might be easier than you think!

Communicate, Communicate, Communicate

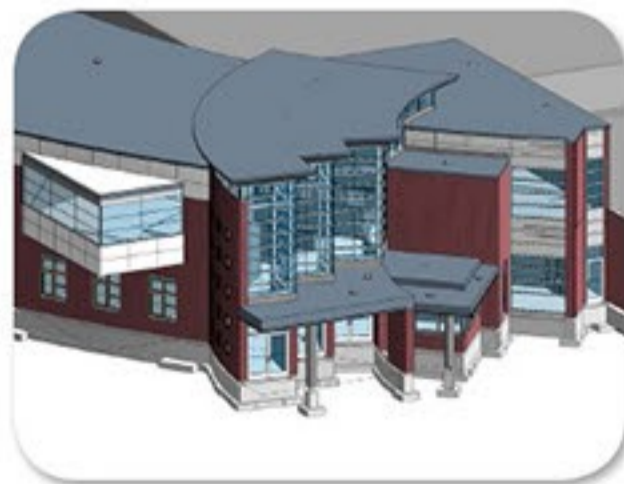


Clear communication is one of the biggest challenges faced when undertaking a capital project. A client may sometimes have a clear picture in his or her mind of what is expected from a project, but other times it is just a general sense or feeling about how something should look or function.

As designers, BCK-IBI Group specializes in visual communication and we use a variety of tools and technologies to facilitate that. One important tool we rely on is known as BIM or Building Information Modeling. Our office utilizes a BIM software program

called Revit that allows us to create 3D models of a building by virtually assembling its components. Revit is a powerful visualization tool that allows us to make the most out of all the information that is collected along the way during the design process. It offers numerous benefits for both the client and the designer, but one key benefit is 3D representation and visualization.

Using this technology allows the designer to view a building or other design element from any angle at any point in the design process. He or she can quickly create and manage multiple design options and view these options from the same angles, making comparisons easy. These views can then be passed on to the client for a snapshot of the total design. This makes it fast and easy for clients to pinpoint parts of a design they like or aspects they want to change. Sometimes these responses are very specific, e.g.: "We would like markerboards on this wall." Sometimes they are broader, e.g.: "We would prefer that the entry have a softer look to it." Either way, this valuable information is integral for the designer to advance the project in the direction the client prefers.



At BCK-IBI Group we value the communication opportunities this tool provides us in working with our clients.

View past issues of [byDESIGN](#).