



19 November 2006

To whom it may concern:

As the structural engineer for the Burr Elementary School project in Fairfield, Connecticut, it is with pleasure that I write this letter of recommendation for United Steel, Inc., the structural steel fabricator/erector. Although this is a public school constructed with a budget commensurate with most public school projects, the final product was a striking departure from the "cookie-cutter" school designs which have been constructed in so many Connecticut municipalities over the past decade.

The architectural design of this school was developed by the Education Lab of signature architect Skidmore, Owings and Merrill (SOM). From the onset, it was clear that the design of the project would need to be sympathetic to its surroundings, minimizing any environmental impact. As SOM's Education Lab recognizes that the presence of natural light enhances the educational experience, a feeling of openness was emphasized. The building was configured to allow existing trees to perforate the plan, creating a series of courtyards that became outdoor classrooms within the building volume. This approach minimized the site disturbances and provided SOM with the opportunity to integrate nature with the day-to-day experiences of the students.

Burr Elementary's most unique feature is its curved glazed curtainwall which is capped with curved, exposed 27" deep steel girders. This façade system was incorporated at the building's entrances as well as the interior courtyards. These curved portions of the building, many of them amorphous in their plan appearance, created the most significant structural design and construction challenge for this project.

In addition to serving as the structural steel fabricator/erector for the project, United Steel was also brought in during the Design Development Phase of the project by the Construction Manager, Turner Construction Company. The purpose of this early involvement was to assess any potential ramifications associated with the unique structural framing system which had been proposed. Based on these pre-construction services, the geometry of the curves was modified to utilize steel sections with radial curves instead of sections with spiral curves, and this widened the field of steel bending contractors who could potentially furnish the curved steel shapes.

During the construction of the project, there were numerous coordination meetings involving United Steel, SOM, Turner and us. In order to best address the project's complexities, United Steel's in-house detailing department created a three-dimensional model of the steel framing system, and this model directly interfaced with their detailing software used to produce the shop drawings. By taking such care during the detailing stage of this project, many potential difficulties were identified and addressed prior to fabrication. As a result, once fabrication was complete, erection of this extremely complex framing system proceeded without incident.

As the exposed, curved structural steel frame was a key element of this school, United Steel deserves much credit for the success of this project. They recognized that this was a challenging project, and they took the time to thoroughly understand all of the complexities involved. Their workmanship was outstanding. Thanks in large part to their efforts, the Burr Elementary School was constructed on time and under budget, and its unique design earned it AIA New England's *Citation for Design Excellence* in 2005.

It was a pleasure working with United Steel on this project, and I look forward to collaborating with them on future challenges.

Sincerely,

DiBLASI ASSOCIATES, P.C.



Thomas A. DiBlasi, PE, SECB  
President