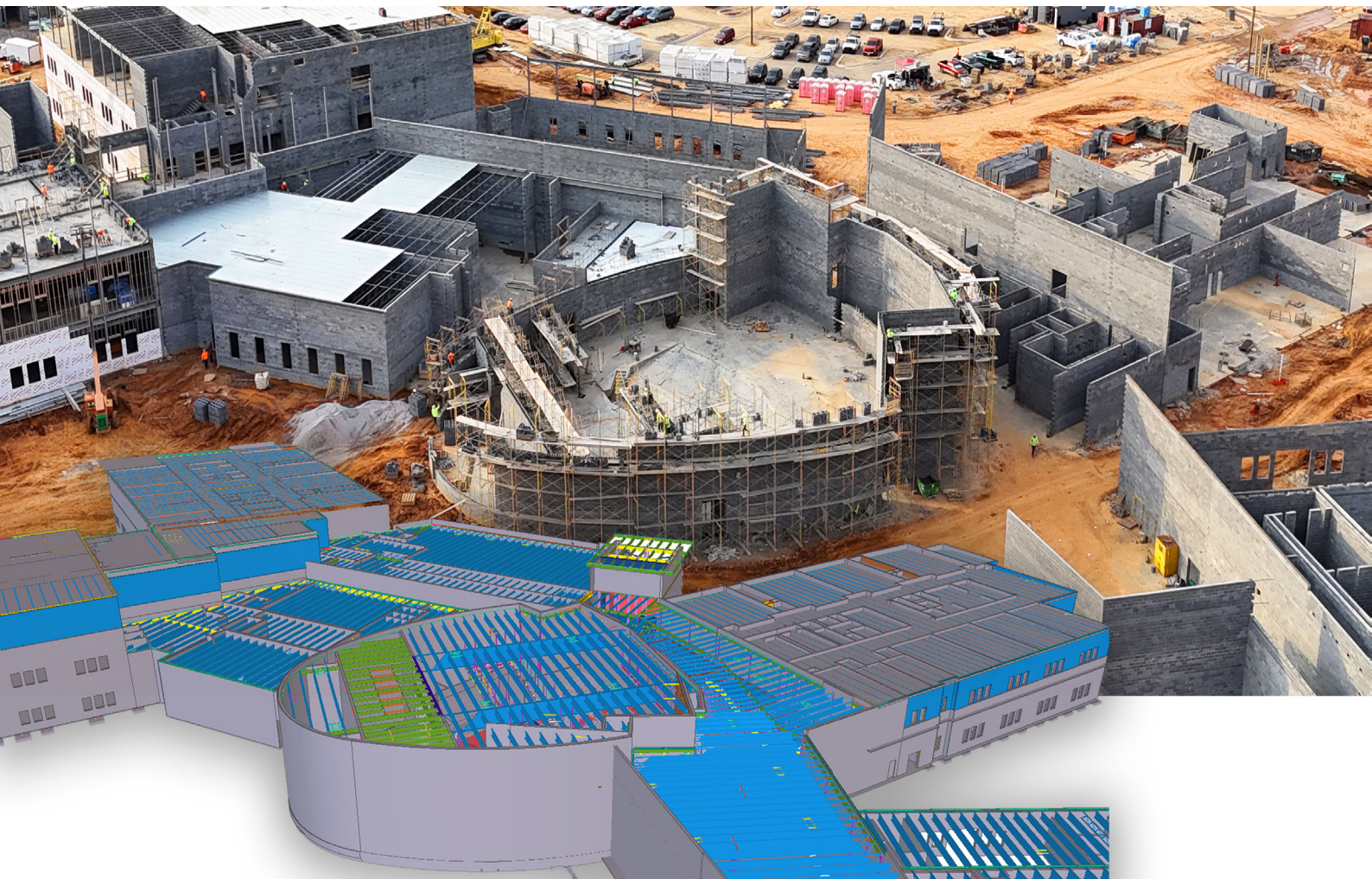




Customer reference

# Building Smarter with BIM: Delivering Accuracy and Efficiency at Lake Wylie High School



# Overview

Telge Projects is an integrated BIM partner delivering high-performance detailing and engineering solutions to the global AEC industry. By combining domain expertise with advanced digital workflows, the team focuses on improving constructability, reducing coordination risks, and enabling predictable project outcomes. With a strong foundation in structural engineering and a deep understanding of fabrication requirements, Telge Projects supports complex projects through intelligent modelling, disciplined coordination, and a solution-driven approach — backed by global project experience and continuous R&D.



LOCATION: Pune, India

## Project Overview: Building Precision for Future Learning: Lake Wylie High School, South Carolina

The Lake Wylie High School project in York, South Carolina, is a large-scale educational facility designed with a focus on functionality, durability, and structural efficiency. Located at 1464 Cannonball Run.

Telge Projects was responsible for delivering the complete structural and miscellaneous steel detailing and engineering scope — including anchor bolts, embeds, lintels, catwalks, ladders, stairs, rails, columns, and beams. Given the project's scale and geometric complexity, the primary objective was to ensure a highly coordinated model that enabled smooth fabrication and efficient on-site execution.



*"Tekla Structures was central to our success on the Lake Wylie High School project. Its automation and parametric modelling saved significant detailing hours while maintaining accuracy. The IFC models helped us integrate seamlessly with architectural and MEP teams, eliminating coordination gaps early in the process. The platform's visual clarity made stakeholder communication faster and more effective, and the CNC-ready outputs ensured a smooth transition from fabrication to erection. Tekla allowed us to deliver precision, efficiency, and confidence at every stage of the project."*

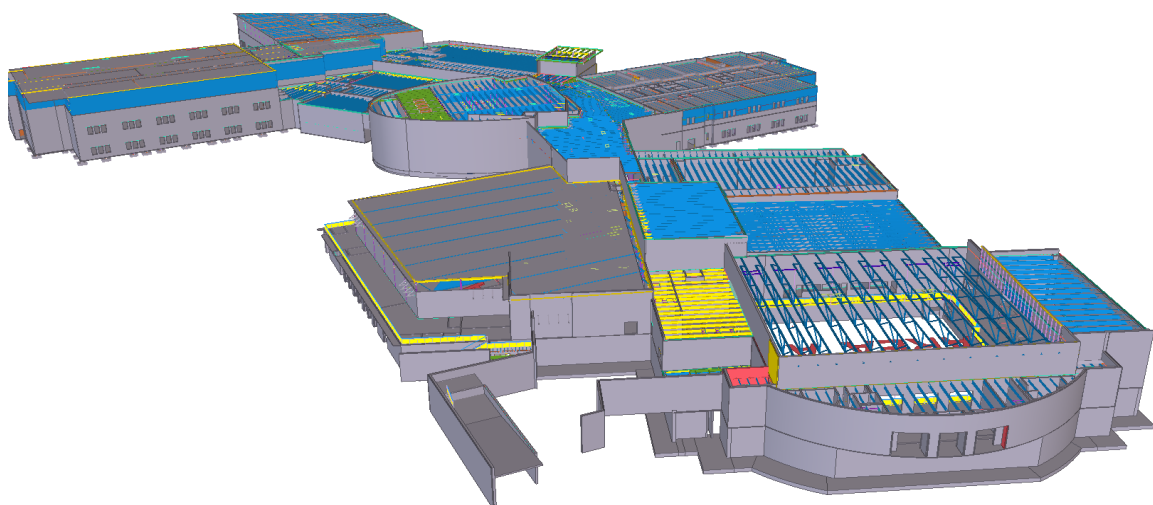
**- Shraddha Telge, MD and CEO, Telge Projects**



## Structural Complexities & Key Challenges

Delivering a project of this scale required navigating multiple coordination and detailing complexities across disciplines:

- **Wall Coordination:** Structural framing intersections with architectural walls across multiple levels required precise alignment and validation of load paths.
- **Joist Coordination:** Variations in joist depths and bridging conditions demanded accurate seat elevations and consistent detailing across all affected areas.
- **RTU (Rooftop Unit) Coordination:** Aligning mechanical rooftop units with the structural system required careful coordination with MEP teams to ensure proper support and accessibility.





Sharing insights on the Lake Wylie High School project the **Structural Steel Team, Telge Projects** stated that the task demanded a high level of coordination and disciplined execution across multiple systems. The team maintained continuous collaboration with design and fabrication stakeholders to ensure alignment throughout the project lifecycle. Early layout validation played a critical role in streamlining detailing workflows and minimising downstream revisions. The combined efforts of the Main and Miscellaneous Steel teams resulted in a well-coordinated model delivered two weeks ahead of schedule, demonstrating the impact of structured processes and strong team collaboration.



## Precision Through Technology: How Telge Projects Delivered Accuracy and Efficiency

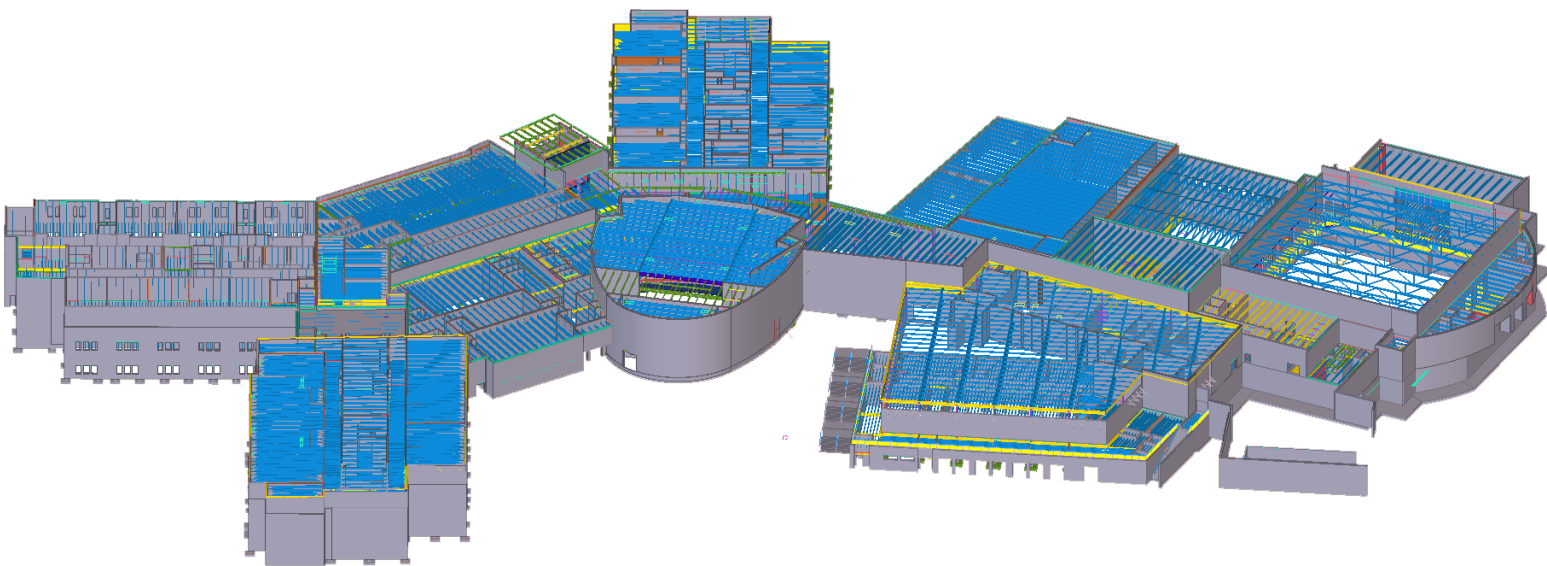
To effectively manage project complexity, Telge Projects followed a structured execution approach focused on clarity, coordination, and constructability:

- **Comprehensive Layout Drawings:** Detailed layout drawings were developed to align all stakeholders on structural intent and detailing requirements from the earliest stage.
- **Clash Detection and Resolution:** Advanced 3D modelling in Tekla Structures enabled identification and resolution of inter-disciplinary conflicts before fabrication, reducing rework and improving efficiency.
- **Collaborative Coordination:** Regular coordination with the Engineer of Record (EOR), architect, and MEP teams ensured all interfaces were validated and aligned prior to execution.

## Delivering excellence through digital accuracy

Through disciplined planning and coordinated execution, Telge Projects delivered a steel detailing package that fully supported fabrication and site requirements. The clarity of deliverables and proactive coordination approach contributed to efficient installation and minimised disruptions during construction.

The Lake Wylie High School project stands as a testament to what is achievable when engineering rigour, digital precision, and collaborative discipline come together. It reinforces Telge Projects' commitment to delivering reliable, scalable outcomes for clients across global markets.

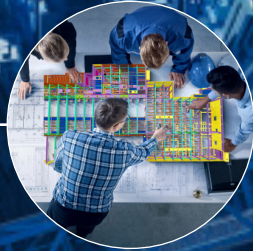




Educate



Design



Detail



Fabricate



Construct

## Tekla software by Trimble

Boost your potential, work in new ways and make a positive impact. Create reliable designs, harness automated processes and collaborate seamlessly to gain relevant insights for better decisions. Offer your customers the best service - create truly constructible building information.

## About Trimble

Trimble is an industrial technology company transforming the way the world works by delivering solutions that enable our customers to thrive. Core technologies in positioning, modeling, connectivity and data analytics connect the digital and physical worlds to improve productivity, quality, safety, transparency and sustainability.

[www.tekla.com/in](http://www.tekla.com/in)



Please note that some products are not available in all areas. Copyright © 2024 Trimble Inc. All rights reserved. Trimble and Tekla are registered trademarks in the United States, in the European Union and in many other countries. For more information, see [www.tekla.com/tekla-trademarks](http://www.tekla.com/tekla-trademarks).