



Under Tight Limits

SAMPSON MEETS CHALLENGES AS IT BUILDS A NEW HIGH SCHOOL. BY ALAN DORICH

The state of Wyoming holds education in high regard, Sampson Construction Project Executive Thad Lienemann says. “Wyoming has made education a priority and we’ve been grateful and successful working with the state and districts on their school projects.”

Sampson is at work on the construction of a largely new building for Kelly Walsh High School in Casper, Wyo. When finished, the \$87 million facility will stand two stories with a basement featuring a 160-meter running track.

Sampson Construction – Kelly Walsh High School
www.sampson-construction.com
 • Project budget: \$87 million
 • Location: Casper, Wyo.
 • Scope: New 300,000-square-foot school
 “We’re proud to be part of the education process in the state of Wyoming.” –Thad Lienemann, project executive

Natrona County School District Chief Information Officer Kelly Eastes says the new school is needed. “Kelly Walsh has had issues on capacity, HVAC and [structure] for many years,” he says. “The state legislature has afforded us the opportunity to make the schools better learning environments for our students.”

Rising to the Occasion

Both Sampson and designer RB+B Architects, Inc. have worked under tight constraints dur-

ing the project, RB+B Senior Associate Matt Arabasz says. For instance, since construction has occurred while classes are in session, the project team had to maintain accommodations for parking and deliveries on site.

Additionally, construction and design timelines had to run concurrently to meet the owner’s schedule, Arabasz says. “The RB+B/Sampson team worked together to prioritize design work to facilitate construction, worked with the owner to secure incremental design and budget approvals, and worked with the city of Casper to secure incremental building permits for construction,” he says.

The design team also worked with many stakeholders, including the Wyoming School Facilities Department, the Natrona County School District and its Board of Trustees, the school administration, staff, and students and the Casper community. “[We had to find out] what they would want to see in the building,” Lienemann says.

Both Lienemann and Arabasz praise their staffs for meeting the requirements. “We’re proud of the team that we have,” Lienemann says.

Arabasz adds that he is pleased with how



The new Kelly Walsh High School is scheduled for completion in summer 2016.



The \$87 million project will stand two stories with a basement once completed.

RB+B remained resilient even as the project evolved from a renovation to a new build with retained elements. "At various points during this journey, the design team was called upon to fundamentally reimagine the project, and each time, working with Sampson Construction, we rose to the occasion to keep the project moving forward," he says.

LEED in Spirit

Kelly Walsh High School is not aiming for LEED certification, but it is being built with sustainability in mind, Arabasz says. For instance, the new school will integrate the old building's theater, indoor swimming pool, outdoor stadium and other elements.

"Retaining these serviceable elements reduces impacts and costs inherent in new construction," Arabasz says. "Unfortunately, much of the main existing building could not be retained due to its programmatically awkward and sprawling plan, failing materials and systems, and encapsulated asbestos-containing materials."

The new building also will integrate LED-based lighting. "We anticipate our lighting

power density will be less than 0.6 watts per square foot," Arabasz says, noting that the building also will incorporate daylighting.

Additionally, due to strong winds, site and square-footage constraints, and an outside value-engineering analysis, the high school will have a compact footprint. "A compact building reduces initial material and cost impacts; reduces ongoing operational costs, [such as] building envelope energy losses; and reduces class change times through reduced travel distances," he states.

Keeping Busy

Construction on the Kelly Walsh High School is aiming for completion in summer 2016. Afterward, demolition will begin on the older facility, Lienemann says.

He adds that Sampson would like to keep taking on projects for the district. "The school district has been really good to work with, and we're proud to be part of the education process in the state of Wyoming," he says.

Eastes adds that the district is also pleased with Sampson's work. "They have worked collaboratively with the district to make sure they stay on schedule and have minimum impact on the student and community during the project," he says.

Eastes notes that the district is also renovating and enlarging Natrona County High School and building a new facility for Roosevelt High School in Casper, which bodes well for the company's activity in the future.

"We do have quite a few more schools that will be built in the future," he adds. ♦

A Great Space

Because of poor native soils on the site, Kelly Walsh High School's structural floors will be built over a crawlspace. RB+B Architects, Inc. Senior Associate Matt Arabasz notes that the building's design uses the space to its advantage.

The crawlspace, he explains, will house the majority of required mechanical equipment, which will extend its service life and allow for safe maintenance. "Second, the district desired a separate indoor athletic practice facility, but did not have the funds to construct a free-standing facility," he says.

"The crawlspace beneath the new gymnasium will now become an integrated, garden-level athletic practice facility, meeting the district's goals within their means while eliminating the large site footprint of a separate free-standing facility," he says.