Reno Aces

From Vision to Reality

BY ROB SABO

Many said it couldn't be done. And the contractors charged with building the Reno Aces ballpark faced a monumental challenge in constructing what most say was an 18- to 24-month project in about 10 months as SK Baseball owner Stuart Katzoff insisted the park be ready for the Aces home opening on April 17.

A look at how general contractor Devcon Construction and its major subcontractors overcame the myriad challenges of completing the project on time:

DEVCON CONSTRUCTION

Reno Branch Manager and ballpark Project Manager Doug Browne says day-to-day Project Manager Mark Folger, Superintendents Steve Novelli and Corky Hart, Project Engineers Jim Wallace and Wing Wong often worked 80-hour weeks, while Project Assistant Tomara Cleveland handled the immense amount of paperwork generated through the field office.

The main challenge for Devcon and subcontractors RHP Mechanical Systems, Martin Ironworks and Intermountain Electric was that the majority of the stadium was designed during construction, which required an intense amount of planning and coordination.

Devcon had its own mechanical engineers on staff with prior involvement with stadiums and sports facilities. They developed criteria packages in absence of having plans early in the process so that subcontractors were able to bid for what be required.

"If we wouldn't have done that there is no way we would have got to this stage," Browne says. "Having them get going on plans early in the process was critical — we barely made it.

"One of reasons Devcon was brought on board is that we are used to operating on design-build — it is on our shoulders as the general to keep it all going. It was a project where every day, every hour was critical. It took just constant involvement. Our staff wasn't allowed a moment to rest until we were complete."

On any given day Devcon supervised more than 300 workers. Staying in front of work crews — and getting the information needed to build out a particular section of the ballpark — required a great deal of cooperation and coordination. Oftentimes crucial information was compiled and disseminated days or even hours before construction.

"It was like being in battle at times — everything had to be reactionary," Browne says. "The team had to work coherently together, or this thing wouldn't have gotten done."

INTERMOUNTAIN ELECTRIC

Vice President Steve Miller has been in the business 18 years and says Aces Ballpark was easily the most difficult job he's ever been on. Miller enjoyed the high-pressure challenge, though — and Aces Ballpark contributed to the worst day in his professional career.

General Foreman Ralph Pisani led the IME crew, which peaked at 45 men, through months of 58-hour weeks — five 10-hour shifts and eight hours on Saturdays — to complete the project. The most challenging aspect was meeting the 10-month construction schedule, including design.

"A project of this magnitude, in a typical construction and schedule would probably take a year and a half to two years," Miller says.

IME designed and installed all the electrical construction — 7,000 amps worth at 480 volts — and it teamed with Diversified Systems International on the fire alarm and security system work. IME subcontracted with Power Comm Solutions to install telephone and data cabling, and Power Comm teamed with Diversified to install the booming sound system.

Continued on page 14

Continued from page 13

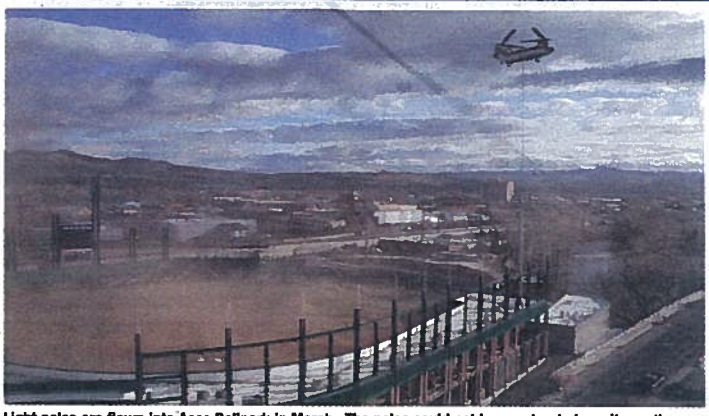
"This project was a whole lot different than any other project," Miller says. "Usually you do a design and it's in the can the next day. You are done. We were designing this project all the way through December."

IME first bid the project on Jan. 24, 2008, and it received a letter of intent in June. But because IME had already pre-engineered a good component of the project, crews were ready to begin working immediately.

"If we hadn't done that, we wouldn't have stood a chance of making the date," Miller says.

"Devcon managed all their subs in such a way that we were all able to succeed," Miller adds. "Devcon put a premier management team together, and that team kept the whole project together. The pressures involved in a project like this, with a high-profile deadline, were extreme. Without the coordination of the Devcon team, there's no possible way this job would have been done on time."

IME knew from the beginning it would deliver the light standards by helicopter because they would be unable to assemble them in the outfield and install them with a crane. IME built and tested the light poles at a nearby property. When it was ready, the company called in the New York-based owners, got permits with the Federal Aviation Administration and invited Reno bigwigs and media to watch the installation on a Sunday morning — and the helicopter failed to start.



Light poles are flown into Aces Ballpark in March. The poles could not be constructed on site, so they were built on another property and transported by helicopter.

Construction materials scatter the site that would eventually take shape as Aces Ballpark. In late fall, the stadium's structure was already beginning to take shape.

"It didn't happen," Miller said. "It was the worst day of my career. It was so embarrassing."

The job went smoothly the following weekend, however — and IME takes no small measure of pride in its accomplishment.

"We built a 16-month project in nine months," Project Manager Jim Smalley says. "That's the fastest a ballpark of this size has ever been built."

RHP MECHANICAL SYSTEMS

RHP installed all the heating, ventilating, air conditioning, plumbing, sheet metal and temperature controls. RHP started estimating the job in February, engineering it in May and June.

"A project of that size, it normally would take us a couple of months to get it put together, and we did it in less than a month," Senior Project Engineer Doug DeAngeli says. "It was very short time period for engineering."

RHP Vice President JT Regan says that volume of work typically would take 16 to 18 months to build out. But crews — 40 at peak — worked 60 hours a week for the duration of the project.

Although engineering stared in May, DeAngeli and plumbing designer Denny Newton worked through months of

Continued to page 15

Continued from page 14

changes as SK Baseball molded the facility into exactly what it wanted. For instance, the second phase of the project calls for restaurant and entertainment spaces on the upper concourse, and RHP had to redesign kitchen equipment, air handling, HVAC, and sewer and gas lines on the lower levels to accommodate the potential expansion. In addition, five huge subterranean grease interceptors were buried in the alleyway on the north end of the stadium.

RHP staged all mechanical equipment from its yard at Spokane and Fourth Street into the back of the stadium.

MARTIN IRON WORKS

One of the first subcontractors on the job, Martin faced its share of challenges in building the stadium's superstructure in an extremely tight timeframe.

"Everybody follows us, so if we end up slipping and we are a little bit behind, then it puts the whole project behind", says Senior Project Manager John Tietjen.

Executive Vice President Mario Bullentini says Martin was forced to procure steel from several different mills in order to get what it needed on time.

"This thing was critical path from Day 1," Bullentini says. "We had to really jumble schedules because we had other projects. Once we got going, there was no turning back."

Martin undertook the job as a design-assist partner, working closely with nationwide architectural firm HNTB to design parts of the stadium on the fly.

A December snowstorm frosts Aces Ballpark during construction. Despite the occasional inclement weather, Aces Ballpark was finished on time for its April 17 opening.

The last steel beams were set in place at Aces Ballpark by late November. Crews often worked six days a week to get the project done on time.

Martin's shop crew — 35 to 40 men — worked 10 hours a day seven days a week fabricating the steel in a sequence that worked for erection, while the installation team — 25 men — sometimes worked six days a week. Once the stadium's superstructure started forming, Martin had to work from the perimeter of building — flying in steel from Second Street and Evans Avenue — rather than from inside the park.

Bullentini says one of the main reasons Martin met its production schedule was because it didn't prime or paint the steel in its shop. Lindell's Painting Service handled that challenge after steel was erected.

"If we would have had to prime and paint, the time it took to put it out in the field and let it dry, they would never have made it," Bullentini says.

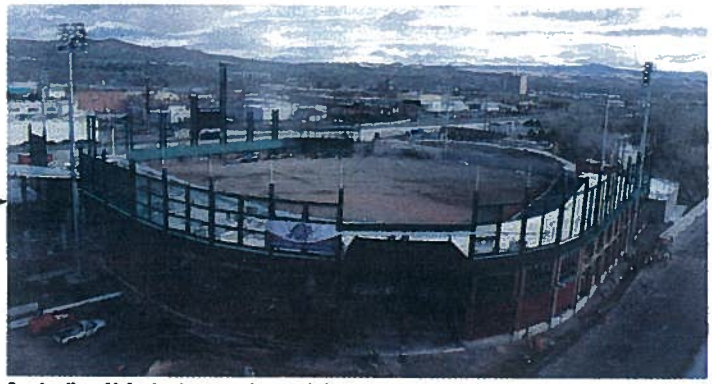
Martin also benefited from its close proximity to the stadium; its yard is less than a quarter mile from the ballpark. And it was able to fabricate several of the largest components in its shop — scoreboard columns were 70 to 80 feet long — and transport them right around the corner.

Martin also contracted to install the fencing, foul ball screens and miles of handrail and guardrail for the stadium.

"We are really grateful to be a part of it," Bullentini says. "It was a feather in our cap to say we did it with the schedule that

Continued to page 16

An overhead view of construction of Aces Ballpark. 275-300 construction workers toiled six days a week to get the stadium ready for the April 17 home opener.



Construction of infrastructure nears its completion at Aces Ballpark. Construction of the stadium took less than a year to complete.

Continued from page 15

was there, and also to be a part of this great renovation of downtown. We have done a lot of projects in this town, but this is something that will be phenomenal for the community. It will be a big anchor for downtown."

LUCKY CONCRETE

Al Craver, vice president, says one of the hardest parts of the job was pouring the stadium in sections rather than in a circle because crews had to work in available or crucial areas and constantly shift focus in pouring more than 10,000 yards of concrete.

"We had to start in one area and jump into another area by the way the job was progressing, and hope it all would fit to the next phase," he says. "But all columns and beams fit well and it worked out well."

Lucky formed, poured and finished all the concrete footings, foundation walls and slab seating, as well as the sidewalks and curbs. It also set all the bolts for the steel infrastructure. Craver said the pour schedule was the fastest the company ever had, and it was even more compressed for the seating. At peak Lucky had 40 men working six 10-hour days and then dropped to six eight-hour days.

"We thought it was going to be very fast track, and we were a little bit unsure how it would come together, but Devcon did a great job pushing the job and making the schedule work. All the subcontractors came together on that job — I have never seen a job work so well for all that pressure."

Jobs created by the Reno Aces coming to town:

275-300 construction workers working up to six days a week to build the stadium.
200 game-day part-time employees for 72 home games and possibly working a total of 100 additional events such as concerts.
175-200 employees working in concession areas.
50 full-time Aces employees.

— Source: Reno Aces

"It should have great positive impact on the community," says SK Baseball owner Stuart Katzoff.