Developers, architect and Indian tribe work together to produce an award-winning golf experience in New Mexico for a mere $3.5 million.
state trust land. Because that site was adjacent to property owned by the Santa Clara, the developers approached the tribe for easement rights to run pipes to carry sewage effluent for irrigation. By coincidence, Calvin Tafoya, a former governor of the Santa Clara Pueblo and now the CEO of a tribal development corporation, had been considering a tribe-owned golf course. He came up with a proposal that suited everyone. The timing, in this case, was everything.

"I pointed out to them," Tafoya recalls, "that rather than us competing, why don’t we work together on tribal lands."

"We had a great site, but this one was better," says Brockwell, who is Black Mesa’s superintendent. "And partnering with the tribe also simplified a lot of the planning and permitting. It got us down to one set of rules instead of dealing with state, county, neighborhood associations and everyone else."

That saved time and money, naturally. In addition, the jaw-dropping scenery at the course site — with the namesake Black Mesa and mountain vistas in the background and rugged sandstone ridges and sparse native vegetation in the foreground — made it easy for the developers to let the land determine the links, not the other way around. This was another big cost-cutter.

"If you have a routing plan that utilizes natural features, you don’t have to disturb as much land to create sculpting so that you have cer-

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tain elements of play," says Baxter Spann, the course's architect, a partner in Houston-based Finger Dye Spann. "You're able to use the land as it is and disturb less of it, which means there's less grading, there's less irrigation, there's less grassing, there's less water use. I think we have somewhere around 85 acres of irrigated turfgrass, and that includes a pretty large practice facility."

Other budget-preserving steps made Black Mesa possible for $3.5 million:

- **California greens.** Spann says about $60,000 to $80,000 was saved using this technique instead of USGA-type greens. The native soils and climate favored this type of construction, which eliminates a gravel blanket layer by placing 12 inches of seedbed sand directly over the subgrade. "We found no detriment at all to building the greens that way," Spann says.

- **Irrigation control.** Water is a precious commodity in New Mexico, and its use was limited by allowing natural vegetation (or rock) to populate areas to the sides of fairways, which are not irrigated. The developers also simplified the watering of tees, greens and fairways by installing a block system with decoders. Because each valve in this system runs two or three sprinklers, there are fewer valves with less-pressurized pipe and a less-complex wiring system. Brockwell estimates a 15-percent savings when compared with the more common practice of valve-and-head irrigation.

- **Limited revegetation.** By disturbing little native ground, the builders were required to replant only about 6 acres, most of it on the banks of tee areas. "There was nothing else that had large areas that were disturbed and needed to be revegetated, which is a real chore in our climate," says Brockwell, who has seen courses in his region with up to 50 acres to repair. "There's just no help from Mother Nature. Those areas on other courses tend to require some kind of temporary irrigation, and it's several years before they look natural again."

- **Gravel cart paths.** The arid climate allowed Black Mesa's developers to forgo paved paths for less-expensive crushed rock. The result blends more naturally with the course's environment, which is isolated from roads and residences.

- **Few chemicals.** "I've saved a lot of money on pesticides," Brockwell says. "We have a strong organic component to our fertility and maintenance and that's really suppressed a lot of disease problems." All pesticide so far has been applied with hand-held sprayers, and fungicides and herbicides have hardly been needed. "Our climate helps us there," he adds. "I can always dry things out. We maintain the course on the dry side so it plays more like a true links course."

- **Grow your own.** No sod was laid, even on greens and tees. "We used straw mulch mats on areas that would normally have been sodded, and they were very effective," the superintendent says.

The greens were planted with creeping bentsgrass (Penn A-4) and the fairways are Kentucky bluegrass. The grow-in suffered because of an unusually hot, windy year. But because those areas were irrigated, the course that was planted in April 2002 was able to open for play exactly one year later.

- **Budget bunkers.** The developers planted fine fescues around the bunkers, making them no-mow areas and saving maintenance costs. The wispy, Scottish-links look is easy on the eye but a sore sight for errant shotmakers, who now pray they wind up in the sand rather
than the high grass. "It gives those bunkers a lot more respect," Brockwell says.

The Santa Clara Pueblo tribe owns the majority interest in the course, with the development team of Peck, who is the principal, Brockwell and Ortiz, who did the construction work, holding the rest. This team acts as Black Mesa’s managing partners.

Tafoya says the group projected profitability within three to five years of opening and that it is "pretty much on schedule" to achieve that. Greens fees, which were set low to compete against municipal courses in an area not noted as a golfing destination, are expected to creep upwards as the reputation of Black Mesa grows.

Tribal leaders approved the golf course plan on their property because the area was considered otherwise difficult to develop and because it gave the Santa Clara a way to preserve more of their water rights. "In New Mexico," Tafoya says, "it’s getting more and more a case of, if you’re not using (water capacity), you might lose it."

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Allowing the site to be the star appealed to the Native-American residents, and Tafoya sees that as a lesson. “The biggest thing is when you design your golf course you don’t need a big name to do it,” he says. “The hills and the mountainsides were the features here, not a name from the high ranks of the golf community.”

Synchronicity was at work on the design end as well. Ortiz had worked with Spann on other projects in the area and introduced him to Peck early in the process that would eventually birth Black Mesa. The Finger Dye Spann firm is developing a niche in designing affordable golfing venues, but the project in northern New Mexico became something special to Spann the moment he looked over the proposed site.

“I was in awe of it,” Spann says. “It was a fantastic piece of ground. It has all of those 100- to 200-foot sandstone ridges that go right through the middle of it and then little spurs that peel off of those. My initial thought was it looked like an Irish or Scottish links setting with those dune-like formations and all this grass blowing in the wind.”

A key to success — and to staying on the low budget — was the deep personal commitment of all principal players. “We had ownership involved in key roles; it wasn’t hired out,” Brockwell says. “This was the project for us, not just another project, so we were able to build at a wholesale cost and with an ownership eye.”

“Everyone involved in the creation of this agreed that we
How to Choose the Right Seashore Paspalum

There's been a lot of talk about some of the newer seashore paspalums over the last few months. Don't believe everything you read. Do your homework. And be sure to remember the old adage, "If it sounds too good to be true, it probably is."

1. Ask for University-Generated Research Data on Turf Quality

National Turfgrass Evaluation Program trials are an important source of performance data for most turfgrasses. However, NTEP trials have not been conducted for the seashore paspalums due to the newness of these cultivars in the turf arena. For now, you should insist on reliable data from universities or individuals who develop and release new cultivars. Valid data implies replicated trials, statistically analyzed data, more than one year of evaluation, and data on particular abiotic and biotic stresses.

2. Ask for Data on Salt Tolerance Before Choosing Your Cultivar

If you're going to be managing a salt-affected site, or using seawater to irrigate, it's important to make sure you have reliable data on how your particular cultivar responds to salt.

3. Talk to Other Superintendents

Talk or visit with other superintendents with conditions similar to yours to find out what kind of experiences they've had with a particular cultivar.

4. Make Personal Visits to Research Plots, Golf Course Sites and Grower Fields

Go see the grass in the field, including research plots and/or golf course test plots. putt on the greens. Hit drives off the tees and shots from the fairways.

5. Plant a Practice Green or Tee Using the Cultivar Under Consideration

Plant a practice green or practice tee with the variety under consideration. Plant a problem area in one of your fairways to see if the grass will tolerate your course conditions. Conduct trials for at least a year so you experience an entire growth cycle.

6. Purchase Only Certified Plant Material to Help Ensure Quality and Varietal Purity

Be sure to ask for the blue certification tag upon delivery of your sod or sprigs. It's your guarantee that the paspalum you purchase has been grown under protocols and conditions designed to promote on-going genetic purity.

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Black Mesa

plays 7,300 yards
from the tips,
but the carries
are long because
the course sits
more than a mile
above sea level.

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Spann fashioned a 100-yard-wide bowl of a
landing area on its other side that is actually
quite easy to hit. The result: Golfers are in-
timidated by the view and then exhilarated
by the result — sitting in the fairway and aim-
ing for the green.

"Allow the site to give you what it has,
and don't try to impose pre-set criteria on
the form of the golf hole," Spann says. "Let
it be a wild and semi-uncontrolled ride
through the landscape."
Black Mesa plays 7,300 yards from the tips,
but the carries are long because the course sits
more than a mile above sea level. Well-planned
yardages from the other tees make it enjoyable
for hitters of any length. Varying winds change
shots, providing a different challenge nearly
every time out. And with a few par 4s that
might be drivable as well as par 5s reachable
in two, it can yield some very low scores on
certain holes while extracting 7s and 8s on
those that are played poorly.

"It's a little bit tricky because it's so exposed
and treeless. When the wind kicks up, it can
really be brutal," the architect says. "So we tried
to keep some width to the fairways and sort
of a random placement of bunkers that are to-
tally out of play on one day but will be ex-
tremely integral to the play of the hole (on an-
other day). It's the kind of course that gives
you a lot of variety from day to day."
The wild, rugged experience appeals to
many golfers. It brings them back, as does
knowing that they'll be in for a challenge,
though not an impossible one.
Says Brockwell, "I know
with other pro-
jects I've been involved — and with some big-
name designers — we'd have moved a lot of
mountains, and it would've cost a lot of money.
And it wouldn't have turned out as well as this.
"Having a few quirks out there isn't a bad
thing."

Bruce Allar is a freelance writer from Floyds
Knobs, Ind.

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