a necessary evil

Although some don’t like them, cart paths help generate revenue
Jeff Osterfeld, owner of the Golf Club at Stonelick Hills, prefers long, broad curves in cart paths. Photo: Golf Club at Stonelick Hills

BY T.R. MASSEY

If a strip of concrete on the golf course has changed the game forever, blame Henry Ford.

The invention of the car and America’s love affair with vehicles is the genesis of modern cart paths on golf courses. In the mid-1940s, three decades after Ford made a car affordable for most Americans, an enterprising entrepreneur built a small golf cart so golfers with disabilities could move throughout a golf course.

At the time, cart paths didn’t exist. A purist would say it’s a travesty to pave a small road through a pastoral field designed for a game of walking, and carts aren’t needed because carrying a bag is a caddie’s job. But golfers saw the golf cart and loved its convenience, and owners and golf professionals saw a way to make more money in addition to green fees.

Generally, the prevailing notion is that younger people ride and older people walk because of the way they were introduced to the game. At one time, golf carts were a luxury only for the rich. Now, carts are as common as drivers, tees and balls, and so are the paved pathways on which they’re driven.

The golf industry has evolved into one in which motorized transportation is the rule, says Mike Benkusky, a Chicago-area golf course architect.

“Today, whether good or bad, people expect a cart to be part of a round,” he says. “That’s starting to become the rule – $50 includes a cart.”

**CONCRETE OR ASPHALT?**

Cart paths are installed as a course is being constructed, or if an older course is being remodeled, they’re installed as part of the project. Once the decision is made to have cart paths, a material must be chosen. Asphalt generally is cheaper than concrete, although rising oil costs have caused asphalt costs to increase during the past two years. Concrete generally lasts longer and requires less maintenance than asphalt.

Matt Rownd and his father operate The Cart Path Co. in Atlanta. He works with concrete and says it’s better than asphalt.

“Many times you can replace a panel or two [of concrete] in-house,” he says. “You could do it with one or two guys. Asphalt requires a special expertise. Also, concrete can be buried when it’s being disposed of, but not asphalt.”

Rownd says a proper concrete mix matching a course’s freeze/thaw climate and the concrete’s use must be considered. More concrete per square inch is necessary if heavier equipment will use the path. Another part of the equation is whether to use fiber mesh in the concrete or steel rebar, which is more expensive. The end use can dictate sturdier reinforcements.

With all concrete cracks – every eight or 10 feet of a cart path – a control joint must be cut in. This means the concrete cracks where you want it to.

“You’ll never see it because it’s recessed in the concrete about an inch or inch-and-a-half [down from the surface],” Rownd says.

Expansion joints are another must. These allow the concrete to expand and contract depending on the temperature without breaking or cracking. The standard interval is 80 feet.

Another important aspect to remember when installing concrete paths is that concrete attains its designed strength in 28 days after it’s poured, so driving on it before then isn’t recommended.

“Don’t run anything on them until 28 days have passed,” Rownd says. “That’s when you can count on it and when warranty issues can be backed up.”

Concrete can be different colors and have different finishes, from the pitted, coastal look to a broom finish or an exposed aggregate. Asphalt always is black.

Many courses have asphalt cart paths, and if the base is laid well, they work quite well. Clay Dubose, the general manager and golf course superintendent at Tradition Golf Club in Myrtle Beach, S.C., says his asphalt pathways...
are preserved because he runs a vibratory root plow alongside them each year, preventing roots from growing under the paths that can damage them.

"It's a fairly small amount of our budget to maintain them, except when you have to replace them," he says. "A couple of years ago, we cut out some old paths, removed the roots and put a new base in. It was about $30,000."

A typical 7,000-yard course will need about 25,000 lineal feet for wall-to-wall paths, Benkusky says. The cost per yard of concrete or asphalt varies throughout the country, but the range is anywhere from $200,000 to more than $1 million. More width (eight to 10 feet is required for two carts to pass without having to drive off the pavement) and curbing add to the cost.

"It's a significant part of a golf course construction fee," Benkusky says. "Irrigation, greens construction and cart paths are the most expensive."

General guidelines exist for cart path location. Cart paths generally are placed down the right side of a fairway, if possible, because most golfers slice, and it's better to have a path on a high side of a hole so golfers can see the location of their balls. Paths are placed on the outside of a dogleg so players don't have to look at the path in their line of sight. Additionally, it's unwise to place a path between a landing area and a hazard, especially water, because bad bounces are unfair and can ruin a round.

"You look and try to run paths to provide access on and off fairways," Benkusky says. "Put paths closer to landing areas. You don't want to put a path across a fairway unless completely necessary."

Benkusky says topography dictates the design and strategy of a hole in many cases, which trickles down to the placement of cart paths, i.e., one can't put a bunker where a path needs to go or vice versa.
"You try to find the main access points from the cart path," he says. "You don't want a cart path behind the bunker to the green."

Golf course architect P.B. Dye remembers listening to his famous father address a group of golf course superintendents during the mid-1960s. "His advice was to bring cart paths to the high side of every green and build a lip on them so golfers have to park and get out," he says. "Then, they won't remember they three-putted because all they'll be thinking about is walking up a hill to get back to the cart."

Dye says he operates under the general philosophy of building paths close to the level of the tee and on the outside of the hole. "You know where the best place for a cart path is?" he says. "The middle of the fairway. No one ever hits it there."

Aside from location, cart paths need enough slope so they don't retain water. Rownd says safety curbs can be used to direct water to keep it from eroding natural features, but that's more expensive.

"You have to direct water to go somewhere," he says. "Especially in Texas, Florida and other places in the South where there aren't many terrain changes. You have to have at least a 2-percent slope to break the surface tension of the water on concrete. You have to direct it, and if you don't have 2 percent, water won't move."

Though it might look appealing, putting (continued on page 70)
Reducing damage from golf carts

No matter how much golf purists dislike golf cart paths, they're here to stay. Cart paths are the route for owners to collect fees and save a course's flora from damage, especially during wet or cold weather. Mark Johnson, golf course superintendent of TPC Craig Ranch in McKinney, Texas, says he uses rocks around the curves of the course to help prevent the grass from wear.

"The wear around the edges is the biggest headache," Johnson says. According to the U.S. Golf Association, golf carts damage grass and compact the soil. To reduce the damage, managers should establish cart policies. The USGA recommends:

- Encouraging golfers to spread cart traffic over a wider area and avoid turning and driving over the same areas repeatedly.
- Varying the entry and exit points along the cart paths each day to spread traffic and wear more evenly.
- Keeping all vehicles at least 30 feet from the edges of tees and greens to avoid damaging sensitive turf areas.
- Never allowing carts to be taken across excessively wet areas.
- Encouraging golfers to always share a cart.
- Encouraging golfers to use the 90-degree rule by exiting the path and driving to the first ball, then to the next ball, and then returning to the path.
- Restricting carts to the path on all par-3 holes.
- Proposing a "walkers-only day" one time per week when no golf carts are allowed on the course.
- Considering closing one additional hole to cart traffic on each nine on a weekly rotation. This allows the turf to recover from damage and gives the maintenance staff time for extra aeration and other procedures to stimulate turf recovery. GCI
Cart paths generally are placed on the right side of a fairway - as shown on the Palmer Course at Oglebay in West Virginia - because most golfers slice. Photo: T.R. Massey

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Curves in cart paths is a poor idea, says Jeff Osterfeld, owner, operator and designer of the Golf Club at Stonelick Hills in Batavia, Ohio.

"They cut off every inside corner, no matter how soft or subtle the curve," says Osterfeld, who's the founder of the Penn Station East Coast Subs chain. "Then you're sodding and seeding all the time. I would do longer, broader curves if I did it again."

LIABILITY

Cart paths aren't without a bit of controversy, though. It seems no one wants to take responsibility for their placement.

"The problem is everyone gets sued over the damn things," Dye says. "In my contract, I say everything I do is approved by the owner."

Some architects will consult about cart path placement but won't include it on the final layout.

"I'll look at how the circulation is going to affect the golf course and look at it to provide easy access so the pace of play keeps up," Benkusky says. "From there, you work with the contractor and owner. We don't like to say, 'This is where you put the path.' An engineer can do that work. It's such a liability. Someone goes off the path and over a hill or into a pond, they're going to say, 'Who put this path there? I look at it and consult, but don't put them on a plan."

Larry Canini and his business partners designed the Clover Valley Golf Club in Johnstown, Ohio, and hired Lincoln, Neb.-based Landscapes Unlimited to build their public facility. Canini marked the paths, Landscapes cut them in, and Canini's crews installed the gravel base then subcontracted the asphalt installation. But early on he realized that he'd bear final responsibility for the cart path placements.

"Obviously, you have liability insurance," he says.

Michael Geiser, a partner with the Columbus-based law firm The Plymale Partnership, says cart path liability fears make him crazy.

"I've never had anyone call and want to sue because of it," he says. "It's conceivable there would be some liability if a golf course or path was designed in such a manner that it was foreseeable a customer would be injured. But when you think about the circumstances that would be necessary, it's laughable. The only thing I could think of is a cart path on a hill that's so steep it's probable the cart would tip."

Geiser says people take responsibility for themselves when they play golf, whether they know it or not.

"We assume the risk of injury when we play golf," he says. "It's standard law if you're participating in a sport and are injured, you've assumed the risk of injury. You're engaging in an activity that's known to be hazardous."

Geiser says wording of the contract golfers
sign when they take out a cart relieves the course from liability. Only when there's true negligence in design is there a problem.

Golf course builders also require the owner to have the final say when it comes to cart paths. Scott Veazey, president of Tifton, Ga.-based Southeastern Golf, says many jobs he works on are a collaboration between the architect, builder, owner and subcontractors.

"Some architects flag out the path area, and we cut them in," he says. "They'll kind of do it, but they indemnify themselves from the final decision. Every course has a few critical areas. Some decisions have to be made, such as where the cart paths need to go, and that's where the owner is involved."

THE BOTTOM LINE
Considering the good and bad of cart paths, they still mean a lot to the bottom line of a course operation.

"What really affects the bottom line is when a public course has an outing that's been set up in advance, and it rains the day before," Benkusky says. "They can't say, 'No carts today,' because they'd lose the outing. That affects the bottom line."

Cart rentals represent a big item on a course's income ledger each year, with each cart generating several thousand dollars of fees during in-season months. Osterfeld says he put much thought into his cart paths when designing his layout because there's no question carts are a welcome and significant addition to the bottom line.

Mark Johnson, golf course superintendent of the TPC Craig Ranch in McKinney, Texas, says his operational line item for cart path repairs and his requests for capital dollars for cart path repairs is roughly $50,000 a year for 7.5 miles of path. Johnson says it's worth it.

"If you get a rain day and it's walkers, you lose a lot of money," he says. "We are against them, but we manage them because they're always going to be here in this country."