

Lower Costs Anchors Concrete Pavement

In the small town of Westover, Alabama, 12 miles from the outskirts of Birmingham, 36,000 square feet of concrete spreads evenly over the grounds of the newly opened Rambo Marine. Generously covered with boats on trailers and cars from customers, the parking lot is a ringing example of an up-and-coming trend in parking lot construction.

"It just made sense to use concrete," said Scott Berry of Virgil Berry Construction in Scottsboro. Berry served as the project

manager of Rambo Marine Westover location. "We had initially planned on using asphalt but it just made more sense to go with concrete."

When Berry quoted the price for asphalt, he was taken by surprise. "With petroleum prices absolutely skyrocketing lately, and asphalt being a petroleum-based product, it was more expensive to use asphalt over concrete," Berry said. The estimate for asphalt with striping for the Rambo Marine lot came to \$160,000. The estimate





for using concrete came to just \$100,000. Historically asphalt parking lots have been cheaper in respect to initial cost. However, with the rising price of petroleum, concrete is often less expensive on initial cost. Concrete still enjoys the benefit of having lower life cycle cost. Depending upon the initial design, an owner of an asphalt parking lot will have to reseal and re-stripe the parking lot every seven years. Concrete on the other hand requires little to no maintenance during its service life.

As the construction team took a closer look at the project, the benefits of using concrete became more obvious. For example, concrete proved to be less time consuming. Essentially, 4000 psi concrete mix was poured over the entire area of the parking lot in three large, back-to-back pours. With asphalt, both light-duty and heavy-duty varieties would have been used in different areas depending on traffic and weight requirements. Cecil Lee, general manager for the Rambo Marine Westover location, also was concerned that the asphalt would sink where some boat trailers would sit stationary for months at a time. The uniform concrete pour throughout the lot would provide ample strength for customer's cars, boats on trailers, and trucks bringing in new products.



Even if asphalt had been used, concrete still would have been needed for curbs, gutters and joints. Not only would this have increased construction time on the lot, it also would have cost the company an additional \$10,000 to \$15,000 in labor and material, Berry said.

Temperature is another important consideration for a business where customers have to actually walk on the parking lot in order to look at the merchandise. "Dark asphalt on a warm Alabama day can absorb the sun's heat and raise the surface temperature to more than 130 degrees" stated Colby Weitman, concrete salesman on the project. "Alternatively, concrete is lighter in color and able to reflect the sun's rays, making for a much cooler, inviting environment."

The cooler surface of concrete also results in cooler storm water runoff, which is more environmentally friendly and benefits area lakes and streams. Concrete lots don't absorb oil that drips from

cars, allowing the oil to pass through gutters and catch basins. Conversely, asphalt does absorb the oil, causing it to seep into the soil, then the bedrock and out into rivers, Weitman said.

The concrete parking lot also is more attractive than asphalt, Weitman added. "This is a highly respected business that wanted the quality of their parking lot to match the quality of their boats."

In the end, the low maintenance and durability of a concrete parking lot made it the most attractive choice for Lee. "It doesn't need annual resealing or repairs. It's just a great product," he said. Berry agreed: "Concrete has a very long life span. It just holds up better over time." ■ by Jennifer Walker

