

# Around Route 53



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## First Route 53 Contract Is Awarded

The Missouri Highways and Transportation Commission held its December meeting in Poplar Bluff and awarded a contract for the first phase of improvements to Route 53 in Butler and Dunklin Counties. The \$3,779,277 contract was awarded to Lake Asphalt Paving & Construction, Osage Beach, Mo.

The first phase includes resurfacing and adding shoulders to a 13-mile section of Route 53 from Qulin to Campbell and improvements to the Route J/Route 53 intersection. The second phase of the project, expected in 2010, includes resurfacing and paving shoulders from Poplar Bluff to Qulin and from Campbell to Holcomb.

"We chose to start with this section because of accident statistics and pavement condition," says Project Manager Eric Krapf. "The corridor from Poplar Bluff to Holcomb is in need of repairs to make it smoother, but we felt this portion needed our attention first."

Construction on the first phase is scheduled to get underway early next year with completion anticipated in fall 2008.

During work, two-way traffic will be reduced to one lane. Traffic control will be handled by motorists following a pilot car. A vehicle, operated by the contractor and signed as "Pilot Car," will lead traffic south through the one lane work zone. Once there, the car will turn to lead northbound traffic through the work zone. All side roads will be signed alerting motorists to wait for the pilot car to pass in the direction they intend to travel. Flaggers will only be stationed at state route intersections. At all other intersections, there will be a sign alerting motorists to the pilot car.

"In addition, the Route J intersection will be closed for two weeks while the intersection is rebuilt. Once all the details and schedule are worked out with the contractor, we will alert drivers before any change to traffic," says Resident Engineer Brian Holt.

### Project Manager Eric Krapf



It's hard to believe that it has been a year since I bragged to you all about the birth of my daughter and the improvements coming your way on Route 53. But at home, we've celebrated her first birthday with cake and ice cream, and at work, we've put the finishing touches on the plans for the first phase of the Route 53 project and awarded a contract.

I've really enjoyed talking with you during the course of the last year, and especially visiting the schools. We've tried our best to design the project with as little inconvenience as possible and to let you know what you can expect as construction starts, but we don't plan on stopping there.

Once construction begins, we still plan to come *Around Route 53* quarterly to keep you informed, and explain what you're seeing as the project progresses. Likewise, please don't hesitate to contact us with your questions.

***Around Route 53* is a publication to keep you informed of upcoming transportation work and share information about the corridor.**

**If you know someone who should be receiving this publication, contact MoDOT at 1-888-ASK-MODOT (1-888-275-6636) or [www.modot.org/southeast](http://www.modot.org/southeast).**

## Contractors Take Options On First Contract

In many of the projects it puts out to bid, MoDOT has been making alternate pavement an option. Alternate paving basically means giving the contractors the option to make some improvements using various pavement designs which may include asphalt, concrete, recycling, and more. Since 2003, alternate pavement options have saved Missouri taxpayers \$17 million.

“It creates the potential for competition, that isn’t there otherwise. Competition means lower bid prices, which is direct savings,” says Project Manager Eric Krapf.

The first phase of the Route 53 improvements are a prime example. Contractors were given the option of resurfacing the route or doing a combination of resurfacing and a process called cold in-place recycling (CIR). That process includes milling the existing pavement and crushing it to ensure the appropriate size of individual particles. Then new asphalt (or other additional materials) are added and mixed with the existing to achieve the appropriate blend and coverage. The material is placed down in a mat to be compacted by the rolling equipment.

“The existing pavement in essence is recycled and becomes the base before the road is resurfaced,” says Krapf. The process is not a new one. Kansas has been successfully using CIR since 1977. The state DOT credits the process with improving the pavement smoothness enough that Kansas ranked in the top five states in the nation for overall ride smoothness.

MoDOT has used the process before, but this is the first CIR project in the state for which we’ve accepted bids using an alternate format. The contractor

was allowed to provide a price for the rehabilitation of the roadway using traditional methods or using the CIR process, but were only allowed to provide one or the other.

“In this format, all five bidders elected to provide prices using the CIR process. By these results, the cost effectiveness of the process is demonstrated,” says Design Liaison Llans Taylor.

“We’ve seen some great things about CIR,” says Krapf. “We were happy to get contractors who opted to use the process and competitive bids to go along with it.”

States who have used CIR say it is a good alternative for rural roads that need something more than resurfacing but less than full-scale reconstruction. Major

advantages include slowing the cracking in the pavement. It takes 15 to 20 years for a pavement using CIR to reach the same frequency of cracking that a standard resurfacing project sees in 10 years. The process also limits disruption to motorists because construction moves fairly quickly. CIR can also add years to the expected life of the pavement with New York state reporting a life of 10-15 years with little maintenance as compared to a five-eight year life with a traditional overlay.

“The major challenge with CIR is matching the process with the right project,” says Krapf. “We look at the condition of the pavement, the stability of what’s beneath the pavement and the amount of traffic on the road. This Route 53 improvement gave us a great opportunity to try the process and reach our goals of smooth pavement and longer service life while saving tax dollars that can be applied to other needed projects in Southeast Missouri.”



## The Birth Of The Bootheel

We've taken a look at the history of several towns along Route 53 in each issue, but this edition will look at just how those towns came to be in the first place. One hundred years ago, Southeast Missouri was the largest wetland in the U.S. Covered in swamps and trees, only the timber industry had interest in the area. Once the trees were gone, there was little use left for Southeast Missouri.

The area had been given to Missouri by the U.S. government, the state gave it to the counties, the counties sold it to land owners and companies. In 1905, a group of businessmen met to discuss making the land useful again. By 1907, the circuit court of Butler County created the Little River Drainage District. A plan was in place for a "marvelous engineering feat that resulted in a drastically changed landscape and the future of Southeast Missouri" (Pracht and Banks).

That feat involved two steps. First the Headwater Diversion Channel diverted the water which created the swamp 40

miles to the Mississippi River. Second, five parallel ditches totaling more than 900 miles drained the district. Sounds simple, right? The project of constructing the ditches, canals and levees to drain more than one million acres of land took more than 20 years to complete, thousands of workers, and required more dirt to be moved than construction of the Panama Canal. The Missouri Society of Professional Engineers called it "a major engineering accomplishment."

Getting there was an accomplishment, too. Not

everyone was excited about the prospect of draining the Bootheel. Railroad companies

opposed the project. The Cotton Belt, Frisco, and St. Louis Iron Mountain and Southern had built lines into the swamp to serve the timber industry. St. Louis Iron Mountain builder Louis Houck fought the plan all the way to the Supreme Court. The Drainage District prevailed.

Once the Panama Canal was finished in 1914, many of those workers migrated to Southeast Missouri to work on the drainage project and helped clear the swamps of whatever trees and stumps remained, some of

which measured 27 feet in circumference. The \$11 million project was funded by bonds and now 96 percent of Southeast Missouri is water-free. Dozens of other districts drained smaller areas as well.

With new-found dry land came new-found soil. What lay beneath the swampy water was some of the best soil in the nation for farming. The birth of an inhabitable Bootheel also brought forth the rise of agriculture in Southeast Missouri. Today, the area is Missouri's number one producing counties of soybeans, wheat, cotton and sorghum. One third of the state's agricultural income is produced in the Bootheel.

Much vision and hard work made the creation of towns in Southeast Missouri and along Route 53 possible. That work

continues today on the largest drainage district in the country with a maintenance cost of about \$1 million a year.

*Painting of a Dredging Operation*



*Draining Southeast Missouri*

*Before the tree stumps were cleared*



## Route 53 Reflection

S o m e - times public perception of agencies like MoDOT is simply government with little at stake when it comes to the day-to-day effects of transportation projects. But the project team associated with Route 53 disproves that. They are people who live, work, and travel the corridor. They are people with more at stake than just professional reputation: they'll be answering to family, neighbors, the people they go to church with and even themselves on daily commutes.

The task given to Highway Designer Mike Harris was "to provide a smooth road with paved shoulders," he says. Harris was part of the team working to create a design to remedy the rough ride drivers experience on Route 53. It's a route he's very familiar with and throughout the design process, he says he's kept his eye on the goal.

"I hope the project is built quickly, and the final product provides a good road that provides improved service to the people who travel it frequently," he says.

Construction Inspector Buddy Cora is one of those people who travels Route 53 every day. He commutes from Elsinore to Kennett. And, while he's excited for improvements, he says the job will be business as

### *with the Project Team*

usual.

"I have always worked with the contractor and our construction personnel to get the highest level of quality," says Cora.



*L to R: A portion of the 53 team  
Lambert, David Wyman, and Harris*

Working with the contractor to ensure that what is built is the plan the design team has in mind is everyone's priority. Resident Engineer Brian Holt says he will be working with inspectors and contractors daily to make sure the project is constructed in accordance with the plans.

"We'll also be focused on working with the contractor to obtain the smoothest ride possible on this roadway," says Holt.

Maintenance Supervisor Roger Tarver says from a maintenance perspective the project will mean fewer complaints and a smoother road for motorists.

"We hope for improved safety with a road that will hopefully require less maintenance so we can focus on other items that need our attention," says Tarver.

Area Engineer Jeff Lambert agrees the project can please the public on many levels. "We want to make a wider, smoother, and safer pavement that will improve convenience to the public and promote the local communities by way of improved transportation," says Lambert. "Route 53 is a major route that crosses the St. Francis River and connects Poplar Bluff and the Ozarks to the Bootheel communities. Without this route, motorists in Missouri

would have to use Route 60 through Dexter, adding time and mileage to their trip."

Likewise Holt says the public is not only the reason for the project but also will be one of his greatest concerns during construction.

"One of the greatest challenges for this project is seeing that the traffic control being used is appropriate and properly maintained. Route 53 is a busy, important roadway and that will be a priority as we make these improvements while still seeing that the traveling public can get through the work zones with as little delay and difficulty as possible."

Cora hopes so, too. He'll be one of the motorists navigating those work zones. His consolation? A better road.

"I really want to see the driving lanes resurfaced and paved shoulders," he says. Smiling about other improvements he hopes to some day see. "Maybe even raise the speed limit to 60 miles per hour?"

But Holt reminds drivers to hold off on any speed increases especially during construction.

"We would ask motorists to slow down, pay attention, and be patient while traveling through the work zones," says Holt.