

## HOT-MIX ASPHALT



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**CURRENT NEWS** 

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### OHIO'S FIRST PERPETUAL PAVEMENT UNDER CONSTRUCTION



Placing layer 2 of the perpetual pavement on I77. This layer is formulated to take the pounding inflicted by trucks.

Engineers from around the state and nation gather at open house to learn more about the "pavement of the future".

The much-anticipated arrival of Perpetual Pavement is here. Construction of Ohio's first Perpetual Pavement is in progress on a segment of I-77 near Canton as an Ohio Department of Transportation demonstration project. The project is relatively small, spanning a little more than 2 miles between exits for Portage Street and the Akron/Canton Airport, but its implications are huge.

Perpetual Pavement is designed to last a lifetime without the need for major reconstruction, answering the motoring public's call for an end to the repetitive and disruptive cycle of road reconstruction. Industry experts told engineers at a September 10 open house event that they would not see orange barrels on that stretch of I-77 again.

Flexible Pavements of Ohio partnered with ODOT, the Federal Highway Administration, The Asphalt Paving Alliance, Ruhlin Construction and Northstar Asphalt in sponsoring the open house at the Four Points Sheraton in Canton. Nearly 200 engineers from all over the state and country attended the event to see for themselves what the

buzz was all about. The event attracted the national spotlight because Ohio is one of only a few states to try this new process and is thought to be leading a national trend in the way we build roads.

Attendees spent the morning in technical information sessions led by the industry's leading Perpetual Pavement experts, including Dr. David Newcomb, vice president of research & technology for the National Asphalt Paving Association, Dr. Shad Sargand, Russ professor of civil engineering at Ohio University, and representatives from ODOT.

In the afternoon, attendees boarded buses and donned cowboy hat-style hard hats to visit the construction site. Issam Khoury of Ohio University led an on-site demonstration of the tensile stress measured in the partially completed pavement. Fully loaded dump trucks were driven over sensors buried in the pavement. Data indicated that the distress level caused by these heavy loadings will be well below the critical level. The final layer, which is yet to be laid, will add more support to the already strong pavement.

The project (ODOT 451 (01) Stark/Summit 17610/00.000) involves removing a 4- lane concrete highway and replacing it with a new 6-lane Perpetual Pavement. Ruhlin Construction is the general contractor for the job and Northstar Asphalt is the asphalt paving subcontractor. Current construction on northbound lanes will continue through the end of this construction season. Next spring traffic will be diverted to the newly paved northbound lanes while the southbound lanes are rebuilt.

Costing \$16,189,650, the project will use more than 164,000 tons of asphalt. The 4-inch fatigue resistant asphalt base layer was bid at \$4.45 per square yard. The rest of the pavement, 13.25 inches of Perpetual Pavement layers will cost \$19.76 per square yard. This cost is approximately the same as it would have been using traditional asphalt paving methods.

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**Ohio's First**, continued from page 1

Crews construct a perpetual pavement on I77 near Canton.

"The real savings will come several decades down the road when traffic is still running smoothly and there

is no need for expensive reconstruction," said Roger Sandburg of the Asphalt Paving Alliance. "You won't have to tear out this road, delay traffic and spend tax dollars to build a new one like they are now."

During the bidding process, Northstar Asphalt suggested that ODOT give Perpetual Pavement a try as a demonstration project. ODOT officials seem cautiously optimistic about the pavement's future and plan to assess its performance before implementing it elsewhere in the state.

Perpetual Pavement's three-layer design ensures the pavement base remains sound and distress is limited to the surface where it can be maintained



Open house attendees visit I-77 construction site to view work in progress.

quickly and cheaply during off-peak traffic hours. The make-up of each layer is determined through the use of mechanistic design, which takes into account local climate conditions, predicted traffic loading and other variables in a process that allows engineers to design a pavement that will not exceed a critical stress.

"In the past we've designed pavement to perform for a certain period of time or for a certain number of loadings before it needs to be replaced," said Fred Frecker, president of Flexible Pavements of Ohio. "Perpetual Pavement is designed never to exceed the critical stress, like you would build a bridge. This is a pavement designed to last a lifetime. That means less traffic congestion and huge tax savings. Of course it offers the same smooth and quiet ride as traditional asphalt."



Bryan Shaw, Northstar Asphalt, addresses attendees at Ohio's inaugural perpetual pavement project.



Mary Ellen Kimberlin, Asst. Director (rt.) and Walid Gemayel, Deputy Director Division of Construction (ctr.), ODOT, discuss the design concepts of perpetual pavement with OSU student Steven Risser (lt.).

### FPO ANNUAL MEETING COMMITTEE SETS PROGRAM FOR MARCH 4 & 5, 2003 EVENT

### Date Moved One Day

FPO's Annual Meeting Committee met recently to set the program for the 41st Annual Convention and Trade Show. The first item was to shift the date for the event forward one day to avoid conflict with the OCA Convention. The new date for the FPO Annual Meeting is now Tuesday and Wednesday, March 4th and 5th, 2003.

The excellent program includes a presentation by Charles Potts, President of APAC, Inc. and NAPA Vice Chairman. APAC is one of the nations largest asphalt producers with operations in a dozen states. Of major importance to our industry is the new pavement type selection process being developed by the Ohio Department of Transportation. An explanation of the process and a preview of how we will be impacted by it will be presented along with the usual specifications update by Dave Powers. An interesting HMA/PCC face-off project in a high stress area, being constructed by the Hamilton County Engineer, will be highlighted along with presentations on state and federal funding legislation, perpetual pavements, the asphalt/concrete war and alternate bid projects in Kentucky.

This year's local government agency roundtables will focus on smoothseal experiences, work zone safety, and proper mix type selection.

Two schools will be held concurrent with the Annual Meeting. The first will be a 2-day school on the Basics of Asphalt Production Facilities. This school, developed by the National Highway Institute, is an excellent school to gain an understanding of plant operation for new plant operators, government agency personnel whose responsibilities include oversight of HMA operations as well as those in other field and office areas of the HMA industry. The second school, Proper Compaction Procedures for Today's Mixes, will be presented by Chuck Deahl with Compaction America.

Rounding out the program will be the indoor and outdoor trade shows featuring the latest in paving equipment and products, awards program and annual banquet.

Be sure and mark March 4th and 5th on your calendars for the 41st FPO Annual Meeting, Convention and Trade Show.



### It will still be a good idea when your grandchildren get to be your age.

Designs for asphalt pavement have evolved so that you can expect to get a lifetime of smooth performance while reducing costs and improving safety. Here's how:

The Perpetual Pavement technology involves the use of multiple layers of durable, recyclable asphalt. When the surface layer needs maintenance, it can be quickly and easily milled off and replaced without disturbing the rest of the roadway's structure. And, many decades from now, the pavement structure will still be intact.

For more information, and for a free interactive CD discussing the Perpetual Pavement concept and research, visit www.AsphaltAlliance.com or call toll-free 888-468-6499.

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### SMOOTHSEAL ROLLS OVER MICROSURFACING IN ALTERNATE BID PROJECT

#### Economies of Smoothseal Showcased

The July 31st bid letting of the Ohio Department of Transportation was witness to Ohio's first head to head competition for preventive maintenance dollars. Facing off were smoothseal (ODOT SS854) and microsurfacing. The result? – a whopping 20% savings for the smoothseal item when compared to the cost of microsurfacing.

The project was Lucas County Interstate Route 475 and US23 located just south of the Michigan State line. ODOT District 2, desiring to keep IR475 and US23 in good condition and seeing the benefits of preventive maintenance, set out to find a surface treatment that most cost-effectively meets this objective. Two preventive maintenance treatments were considered. The first was microsurfacing and the second, smoothseal – a fine-graded polymer-modified asphalt mixture. Previous experience with using smoothseal on US6, a heavily traveled roadway in District 2, provided the needed assurance to select smoothseal as a feasible alternate.

At issue were two viable preventive maintenance techniques. Both materials fit the Department's definition for preventive maintenance materials, and pavement conditions were such that both could be successfully used on the IR475/US23 project. With this information the District determined that alternate bids would provide the best opportunity to get a suitable product for the least cost.

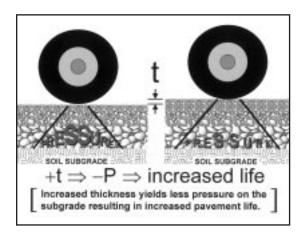
Alternates selected by District 2 were microsurfacing, with warranty, and smoothseal, type B (Supl. Spec. 854) with warranty. Both materials carry a 3-year warranty. The microsurfacing alternate called for crack sealing, 2-course construction on the mainline and single course on the shoulders. Smoothseal was to be placed 1-inch thick over the full width of the pavement. An application of rubberized tack coat was specified as pavement surface preparation for the smoothseal.

As bids were opened the apparent low bidder was Gerken Paving, Napoleon, bidding the smooth-seal alternate. Gerken's bid for Item 854, Fine Graded Polymer Asphalt Concrete (a.k.a. smooth-seal), Type B, was \$75.20 per cubic yard. At 1-inch thickness this equates to a square yard price of \$2.09 – a 20% savings over the lowest microsurfacing bid coming in at \$2.51.

#### **Added Benefits With Smoothseal**

Additional benefits accrued to ODOT as a result of smoothseal's selection are increased load carrying capacity, longer attendant life, and the highest level of riding comfort.

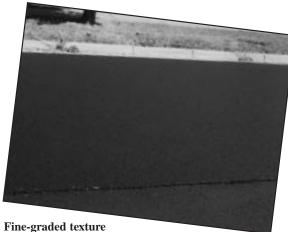
Its no secret and is well understood in the highway engineering community that with every inch of pavement comes added load-carrying capacity. Although how much benefit depends upon additional factors such as the thickness of the total pavement structure the fact remains that thicker is better. As pavement thickness increases, pressure per square inch on the subgrade decreases. This is due to the increased size of the footprint. The net result? – greater load carrying capacity and hence, increased pavement life. The additional thickness provided by smoothseal will add to the structural life of the IR475 / US23 pavements.



Longer life is expected not only from the added structure smoothseal provides, but greater surface life too. The smoothseal being used on ODOT District 2's IR475 / US23 project is packed with polymers – ODOT's highest specified dosage – and can be expected to provide enhanced wear resistance and withstand attacks from weathering. Polymer use in Ohio has skyrocketed as the Ohio Department of Transportation has now made polymer use a regular part of heavy-highway asphalt construction. Thirty years of history using SBR latex asphalt mix on Ohio highways, and more recently SBS asphalt mixtures, validate that polymer-modified asphalt mixes result in longer surface life.

Smoothseal, continued from page 4

Smoothseal's ride quality is superior to any highway paving material today in Ohio's market. Being "smoothsealed" as this article goes to print is the US23 portion of the District 2 project. Ride quality on this pavement is exceptional. The reason for this is that smoothseal is a fine-graded material. Additionally, using smoothseal takes advantage of attributes common only to asphalt paving. That is, unlike microsurfacing, the free-floating screed of the asphalt paver has allowed smoothseal to eliminate roughness in the US23 pavement by filling in the low spots and trimming off high spots. This smooth riding surface is capable of being provided without fear of rutting. The use of polymers and crushed stone in the mixture enhance the mixture's stability and stiffness. Also, a silicon dioxide requirement for the sand portion of the mix will help ensure good skid resistance. Fine-graded texture of smoothseal provides superior riding comfort.



of smoothseal provides superior riding comfort.



#### **Smoothseal Operation Reduces Congestion**

A key component to the IR475/US23 project was mitigation of delays to the road user during construction. ODOT has been working hard to reduce congestion through construction zones. For this reason ODOT is requiring the use of nighttime paving on the IR475/US23 project. Its well known that asphalt pavements are the solution to keeping traffic moving and nighttime paving coupled with the speed of constructing asphalt pavements has been key to ODOT's success. Smoothseal, because it is a preventive maintenance material and is placed in a thin layer, is complimenting this success by its quick application.

#### **Warranty Construction Utilized**

A first for smoothseal is warranted asphalt construction. The ODOT, District 2 project required warranties for both preventive maintenance alternatives. ODOT, Supplemental Specification 1059, outlines the requirements for 3-year warranties on asphalt pavements. With the use of warranty construction ODOT is seeking added assurance that their preventive maintenance strategies aren't a gamble. For smoothseal that's a pretty safe bet.



Nighttime paving keeps traffic moving on US23. Smoothseal placed this Septmeber.

Smoothseal, continued on page 5

### RUTTING OF ASPHALT PAVEMENTS NON-EXISTENT IN HOTTEST SUMMER SINCE 1930

Quality
Improvements
Put To
The Test

The benefits of the quality improvements put into HMA pavements over the last 5 to 8 years was put to the test this past summer. In spite of record breaking heat, Ohio's asphalt pavements remained rut free and laid to rest any questions about their ability to carry heavy truck traffic.

According to WBNS-TV in Columbus, this was the hottest summer on record since 1930. The abnormally high temperatures started in mid-June when the daily high averaged 90°F during the 7 day period from June 20 to 27. This was followed with a 4 day run to start July when the daily high averaged 94°F. Another run came July 15 to 22 with a 91°F average daily high. During the 9 days from July 28 to August 5 the daily high averaged over 92°F. That is a total of 28 out of the 47 days from June 20 to August 5 where the average daily high was 90°F or greater. Stated another way, 60% of that time period was composed of sustained periods where the daily high temperature averaged 90°F or greater. September was no better. The aver-

age temperature for the first 10 days of the month was also over 90°F.

The absence of surface rutting under these adverse conditions lays to rest any questions about the ability of performance graded binders and rut resistant mixes such as superpave to eliminate rutting from heavy trucks. These mixes combine a strong skeleton of good quality aggregate with a polymer modified binder specifically designed for the climate and traffic it will experience. These, combined with laboratory performance test such as loaded wheel testing devices, ensure the industry's customers of a pavement that will perform as designed. When combined with their smooth and quiet ride, speed of construction, ease of maintenance, low initial and life cycle cost, asphalt pavements are the clear choice for today's high traffic roadways as well as low volume local roads and provide the most economical and longest lasting pavements available.

#### OHIO TRANSPORTATION ENGINEERING CONFERENCE (OTEC)

The Ohio Transportation Engineering Conference (OTEC) is still accepting registrations for the 2002 conference, which will be held October 22 and 23 in Columbus, Ohio. One of the largest transportation conferences in the nation, OTEC 2002 will bring together engineers, contractors, government officials, consultants and industry representatives to discuss topics and issues in transportation, and learn about the latest technologies and trends.

Co-sponsored by the Ohio Department of Transportation and The Ohio State University, OTEC 2002 will feature exciting speakers, including Rodney Slater, former Secretary of Transportation.

The two-day conference, held at the Greater Columbus Convention Center, will offer technical sessions, group sessions and a transportation expo where commercial and university exhibitors will display transportation products and research.

To obtain registration materials, please contact Terri Barnhart, OTEC administrator, at (614) 387-3102 or <a href="mailto:terri.barnhart@dot.state.oh.us">terri.barnhart@dot.state.oh.us</a>.

Further information regarding the conference, sessions and speakers can be found on the OTEC Website at <a href="https://www.otecohio.org">www.otecohio.org</a>.

### MAR-ZANE PLANT #29 AND VALLEY ASPHALT PLANTS #9 AND #23 RECEIVE DIAMOND ACHIEVEMENT COMMENDATIONS

# 10 Ohio Plants Now Diamonds

Three Ohio asphalt plants recently were awarded NAPA's Diamond Achievement Commendation, bringing the total of Ohio plants so honored to ten.

The latest additions were Valley Asphalt Corporation's plants number 9 and 23. Both of the plants are located at Valley's headquarters on Mosteller Road at I-275 in Cincinnati. Plant #9 is a 220-ton per hour batch plant built in 1970. Plant #23 is a 350-ton per hour double barrel drum plant built in 1994. Each plant is equipped to feed two of the three silos at anyone time during production. Both plants are equipped with Hauck Star-Jet burners with silent burner packages for tighter environmental controls on emissions and noise. Other controls put in place to assist with emissions/dust control involves paved entrances, truck routes and stockpile areas. The facility also has a truckload out wash bay. The use of water trucks and power brooms are also utilized.

Also gaining a Diamond Achievement Commendation in 2002 was Mar-Zane, Inc. Plant #29 located at Morristown in Belmont County. The plant, a 225-ton per hour Barber Green batch plant was originally erected in 1976 by Ohio Valley Paving. It was purchased by Mar-Zane in 1999 and in 2001 the improvement project began. The stockpile area was leveled by removing 40,000 cubic yards of dirt and rock. The area was then paved on an incline to promote drainage and improve efficiency. All truck routes were paved to reduce fugi-

**OHIO S DIAMONDS** 

Valley Asphalt Corporation

tive dust. Two retention ponds for containment of storm water and liquid storage were installed. A bag house was erected to filter emissions and four new belt feeders with controls to improve the overall accuracy and production capability of the plant. A RAP system was added to utilize recyclable materials. Finally, the plant was completely painted and lettered with Mar-Zane, Inc. Plant #29 to compliment the overall appearance.

The entrance was artistically landscaped to improve the plant's appearance along the National Road. A handsome rail fence, accompanied by fifteen flowering pear trees, compliments the historic vintage setting. A community Open House is slated for early this fall when they will welcome the many neighbors who have expressed their support and appreciation for the noticeable environmental improvements.

Earning a Diamond Achievement Commendation is not an easy task. The plants and sites must meet stringent requirements for appearance, operation, environmental, safety, regulatory compliance and community relations. Each year they must resubmit in order to verify continued compliance in order to maintain their Diamond status. The idea is to be proactive rather than reactive in dealings with regulatory agencies and the communities where facilities are located. Ask any of those who have made this effort and they will tell you it is worth it.

2001

#### **Inaugural Year Company Name Plant Name** 2001 Kokosing Construction Company, Inc. Columbus Plant The Osterland Company, Cuyahoga **CRP West 3rd Street Plant** 1999 Road Products Mansfield Asphalt Paving Company Mar-Zane Plant #21 2000 Shelly & Sands, Inc. Mar-Zane Plant #2 2001 Shelly & Sands, Inc. Mar-Zane Plant #29 2002 Valley Asphalt Corporation Plant #6 2000 Valley Asphalt Corporation Plant #9 2002 Valley Asphalt Corporation Plant #14 1999 Valley Asphalt Corporation Plant #23 2002

Plant #25

### Member Spotlight

#### **BUCKEYE PAVING STANDS OUT WITH NEW LOOK**

Marketing has traditionally been a low priority for most of Ohio's paving industry. Historically and still today, most contractors generate business through referrals, repeat customers and relationships. Steve Dolgin, President of Buckeye Paving Company in Toledo sees an opportunity he believes others have missed.

It starts with Buckeye Paving's web site (www.buckeyepaving.com), which is among the sharpest and best designed in the state for a contractor of its size. Dolgin's marketing vision involved the creation of a new logo, repainted trucks, and a slick direct marketing promotional brochure. Over the past few years, he has personally overseen a transformation of the company's look and image in an effort to reach new customers in an increasingly competitive environment.

"We are focused on our customer," says Dolgin. "This is about reaching out to customers who want a contractor they can trust." He acknowledges that there are very few contractors with marketing efforts of this magnitude and hopes Buckeye's communications campaign will differentiate it from the rest of the pack. The company already maintains a solid group of regular customers, including some who began working with Dolgin's father and uncle when they founded the company in 1955. The marketing efforts aim to solidify old relationships and build new ones.

Buckeye Paving's communication outreach also includes an educational component. A significant portion of the web site is devoted to helping customers understand the paving process better.

"We do a lot of commercial work, so commonly we deal with customers who don't have much experience in dealing with pavement issues," says Dolgin. "Our web site helps them understand the problems and processes involved in constructing or rehabilitating a pavement properly, so they can make a more informed decision."

The web site walks visitors through a three-step process Dolgin calls "C.P.R.," which stands for Cause, Problem and Repair. Visitors can find out what causes various problems they might encounter, what that problem looks like, and how it

can be remedied. The web site also includes a list of tips for selecting a trustworthy contractor and evaluating bids. Buckeye Asphalt also offers customers a free "pavement assessment," helping them evaluate current and future maintenance needs.

These services are based on a philosophy that free advice will eventually translate into increased business. Dolgin hopes these services will establish his company as a go-to information source, for current and potential customers alike. The theory is that if customers think of C.P.R. as a starting point in the pavement assessment process, it's only logical for them think of Buckeye Paving during the bidding process.

"This is all part of an effort to build stronger relationships with our customers and become the contractor of choice in the area," Dolgin says. "We want them to trust us for good information, and when they hire us to know that we will do good work."

The company's target market includes customers like property managers, schools, hospitals, and business facilities. Services provided by the company include asphalt paving, stone base, excavating, sewers, and geotextile fabric work.

Buckeye Paving is headquartered at 6100 N. Detroit Ave. in Toledo. Steve Dolgin began running the operation in the early 90s. He is assisted in steering operations by Site Foreman Ron Zabawa and Paving Foreman Tony Womack, and by his office staff, Donna Phlegar and Michelle Lashuay.

Despite its extensive marketing efforts, Buckeye Paving is not focused on large-scale growth. "We feel we are at a comfortable size right now," says Dolgin. "If we get too big we would be afraid our service would slip. We hope to stay about the same size, but strengthen our relationships with customers by providing great service."

"We want our customers to make the right choices. We not only offer them solutions, but also provide them with knowledge they can use to make the proper decisions about their pavement. No one likes to spend money on their parking lot, but like any other business expense, the wiser those dollars are spent, the better."

#### SOME OF THE QUALITY PROJECTS CONSTRUCTED BY BUCKEYE PAVING.







#### HAMILTON COUNTY COMPLETES PROJECT TO COMPARE HIGH STRESS ASPHALT RESURFACING TO ULTRA-THIN WHITETOPPING

HMA 72% Cheaper & 9 Times Faster

The Hamilton County Engineer's Office has completed a long planned project to compare the merits of rut-resistant asphalt resurfacing to ultrathin whitetopping (UTW) which uses fiber-reinforced portland cement concrete. The project is located on Harrison Pike in western Hamilton County running northwest from the entrance to the Green Township administration building about one mile to Rybolt Road near I-74. This section of Harrison Pike is a heavily traveled 4-lane road with a significant grade. The existing asphalt surfaced pavement was subject to rutting from trucks climbing the grade southeast from the Rybolt intersection and northwest from trucks stopping for the signal at Rybolt. The project was envisioned over 2 years ago, but was delayed by the necessary coordination with replacement of sanitary sewers and a major shopping development.

The existing pavement was a composite of concrete and brick pavement with several asphalt overlays. It had about 5 1/2 inches of HMA (assumed to be all 404/type 1 material placed over a large number of years) over brick on sand and concrete base. There was evidence of poor subgrade drainage. It had some bad transverse cracks and some fatigue failure in the curb line, probably over the old concrete gutter that confined the brick pavement. There was moderate rutting in the curb lane. The traffic count is 23,000 vehicles per day; however, because of its proximity to the Interstate, the percentage of heavy trucks is higher than typical of a county arterial. Overall the road appeared to be a medium traffic situation with high stress loading conditions.

The engineer's office contacted Flexible Pavements of Ohio for a suggestion as to what asphalt concrete mixture type to use for this application. They told us that they intended to use the 4-inch ultra-thin whitetopping on the 2 downgrade lanes and wanted to use asphalt on the 2 up-grade lanes. The county believed that the pavement was structurally adequate and wanted a mill and fill resurfacing of not more than the 4 inch UTW to correct the existing and prevent future rutting.

Based on our understanding that for this project the county wished to achieve a highly rut resistant surface, but did not wish to do more than a moderate mill and fill type treatment, the association's suggestion to the county in April of 1999 was:

"to mill the existing surface 3 and  $\frac{1}{2}$  inches deep and place 2 courses of 1 and  $\frac{3}{4}$  inches each of

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ODOT Item 446, Asphalt Concrete, type 1H, modified as per plan. The center turn lane, where it exists, could be milled 1 and <sup>3</sup>/<sub>4</sub> inches deep and receive only a single course.

### The "as per plan" note should include the following provisions:

- The coarse and fine aggregates for the Item 446, Asphalt Concrete, Type 1H, as per plan, shall be 100% mechanically crushed particles (ODOT Mechanical Crush Definition).
- The Asphalt binder for the mixture shall consist of a PG64-22 neat asphalt, modified by the addition of 5% (plus or minus 0.3%) weight of solids of SBS block co-polymer, or SBR latex additive, certified by the manufacturer as having been produced expressly for the purpose of modifying highway paying asphalt".

These suggestions were intended to produce a tough, highly rut resistant surface that will also help retard reflection cracking over the existing distressed areas.

As the project developed, delays were encountered due the need to coordinate the work with a sanitary sewer replacement project and then a major retail development. The County finally bid the sanitary sewer and UTW project late in 2000 and the asphalt project in spring 2002. The developer built substantial concrete widening adjacent to the downgrade lanes, work that was only finished in the spring of 2002. The successful bidder for the UTW was Ray Prus and Son and for the asphalt paving it was the Shelly Company. The good news was that the sanitary sewer installation replaced much of the most distressed pavement in the curb lane on the up-grade side of the road.

The specification for the UTW was for 4 inches of ODOT 899.03, class S, modified with the addition of fiber reinforcement (either nylon, polypropylene or steel) and admixtures for water reduction and air entrainment. The specification for the asphalt was as the association had suggested except that the existing surface was milled just 2 inches and the courses were specified as a 2 and 1/2 inch leveling and a 1 and 1/2 inch surface for a total thickness of 4 inches of new asphalt concrete. The binder specification for the asphalt concrete was later changed by addendum to permit the use of an asphalt binder meeting the requirements of ODOT SS 908, PG 76-22M and that was what was

**Hamilton County**, continued from page 10

ultimately used. Both the UTW and the asphalt concrete were placed on a milled surfaced created by milling off approximately 2 inches of the existing asphalt surface.

Areas to receive the UTW and the asphalt concrete were nearly the same, approximately 15, 000 square yards each. The UTW was bid at \$14 per square yard, the Asphalt Concrete at a derived cost of \$8.15 /sy. ( 1070 cy leveling @ \$71.90/cy and 650 cy surface @ 73.15/cy, divided by 15,280 sy) Milling costs were similar for the UTW and the asphalt resurfacing, \$1.25/sy and 1.09/sy, respectively.

Placement of the UTW began on June 5, 2002 and was completed on July 12, 2002. The UTW had to match the elevation of the concrete widening that had been placed by the developer, maintain cross slope and be a minimum of 4 inches thick. As a result the UTW was considerably thicker than 4 inches in some areas.

Placement of the Asphalt concrete began on August 20, 2002 and was completed on August 22, 2002. Technicians from the Shelly Company performed the required quality control and field density tests. The required in place density was achieved.

Thus, the stage is set for a comparison of the performance of the UTW, which cost 72% more than the asphalt and took 9 times as long to construct (26 working days to 3 working days) with that of the High Stress asphalt concrete. Can the UTW perform sufficiently better than the asphalt to justify the extra cost and construction inconvenience? Time and traffic will tell.

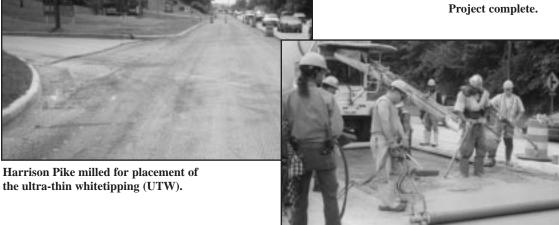


UTW open to traffic, up-grade lanes being milled for asphalt resurfacing.



Type 1H surface, PG 76-22M, hard as rocks.





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UTW being placed.

Hamilton County, continued on page 11

### 2002 TRANSPORTATION CONSTRUCTION COALITION FLY-IN TOUCHES DOWN

The message is "Money & Jobs"

**FPO member Pete Alex** 

of The Osterland

billion highway

program for FY

Jones (D-11).

Company explains

importance of a \$31.8

2003 to Frank Biggio,

Legislative Assistant,

for Stephanie Tubbs

Construction Coalition touched down in D.C. last month to lobby lawmakers over the pending highway reauthorization legislation, 2003 highway funding, and the need for increased investment in the nation's highway system. The Coalition is comprised of members from 27 national construction associations and labor union members. Industry execs. and labor union representatives from across the country were present to participate in this very important event. Among the coalition were Flexible Pavements of Ohio staff and member

Members of the 2002 Transportation

Pavements of Ohio staff and member companies John R. Jurgensen Company, The L. P. Cavett Company, The Shelly Company, The Osterland Company, Northern Ohio Paving Company, Northwood Stone & Asphalt and Kokosing Construction Company, Inc.

#### \$31.8 BILLION MEANS JOBS!!

 was the message that reverberated through the halls of Congress as

the Transportation Construction Coalition stormed the Hill. Of highest priority was the highway program appropriation level for fiscal year (FY) 2003. Coalition members strongly encouraged House members, at a minimum, to maintain a \$31.8 billion highway program funding level in FY 2003. At stake are jobs, safety, mobility and the environment. Currently, the Senate Appropriations Committee has unanimously approved bipartisan legislation to fully fund the federal highway program at \$31.8 billion next year. The House Appropriations Committee, however, is considering its own version of the FY2003 transportation funding legislation this fall. Earlier this year the House acted giving indication that it would support only a \$27.7 billion investment - a \$4.1 billion shortfall from last year. Coalition members tried to impress upon House members the importance of maintaining a \$31.8 billion funding level.

In Ohio, the shortfall in funding would result in a loss of about 4,700 jobs. A USDOT study concludes that for each \$1 billion of federal spending on highway construction nationwide, 47,500 jobs are generated annually. The USDOT study also states that every dollar invested in the nation's highway system yields \$5.70 in economic benefits because of reduced delays, improved safety and reduced vehicle operating costs. Coalition members argued that in a down economy invest-

ment in transportation makes cents! Also, a 1999 U.S. DOT Conditions and Performance Report recommends a \$50 billion per year federal highway investment just to maintain physical conditions, safety performance and congestion levels on the nation's highways.

A challenge facing lawmakers is the revenue stream for the Highway Trust Fund. Projected revenues are insufficient to even maintain current safety, physical conditions and traffic congestion. Senators and Representatives were requested to be open to all options that could be used to increase revenue to the Trust Fund.

The federal-aid highway and mass transit improvement programs were last authorized in 1998 by the Transportation Equity Act for the 21st Century (TEA-21). TEA-21 changed federal budget rules to require that all proceeds of the federal excise tax (user fee) on gasoline and diesel fuel be spent on highways and transit improvements. This historic measure expires on September 30, 2003. Coalition members lobbied Senators and Representatives for the reauthorization by October 1, 2003 to eliminate disruption of state transportation programs.

On the docket for Flexible Pavements of Ohio member companies was "Ethanol & Equity." Ohio faces a serious shortfall in highway revenues. Besides decreased motor fuel usage, several reasons exist for Ohio's funding crisis. First, Ohio is a donor state. That is, Ohio receives about 91 cents on every dollar it sends to the Highway Trust Fund. Members of FPO emphasized the need to raise this return to a more equitable level. A 95% return was pushed for. Attaining this level would generate an additional \$140 million for roadwork in Ohio.

Ohio is a good environmental steward – however, the state is being penalized for such. Here's how. Ohio is a large user of ethanol in motor fuel. In fact, Ohio's use is about 40 percent compared to 5 percent nationally. Because gasohol – which contains 10% ethanol - is taxed at a lesser amount, and Ohio is such a large user of it, Ohio's contribution to the Trust Fund is lessened. That, coupled with a diversion of tax revenue from gasohol to the General Fund, exacerbates the situation making Ohio's contribution look even less. This amounts to \$160 million in lost revenue to Ohio. Flexible Pavements of Ohio members sought to stimulate a partnership with Ohio's congressional delegation to remedy this inequity.

#### STEALTH PAVING IN TOLEDO

# Convenience To Traveling Public Paramount

The project being done in the City of Toledo this summer by Miller Brothers Paving to restore the Anthony Wayne Trail (SR 25) has brought public attention to the advantages of nighttime (stealth) paving using hot mix asphalt pavement. The following letter to the editor appeared in the "Readers' Forum" section of The Blade on August 19, 2002. We quote:

"Road repair work on Trail is magical

This letter is in regard to the current road construction on the Anthony Wayne Trail. Each morning, driving from Maumee to downtown Toledo, I have been amazed at the smooth transition with no delay in getting to my destination. It's been magical to see the transformation. Recently, I had an emergency that took me on the Trail again, but this time it was in the wee morning hours. It's one thing driving during the morning work hours, but what a sight it was to see the convoy of trucks and workers in the middle of the night strutting their stuff. I was so impressed at the enormous number of trucks lined up and the organization and efficiency of this huge project.

Kudos to all involved. You are doing a great job! I now have a true appreciation of what it takes to accomplish such a task.

D. Harmon Maumee"

The project consists of milling the existing pavement down 3 inches and re-paving with a total of 3 inches of ODOT specification 446 type 1 surface and type 2 intermediate courses, both using a polymer modified PG 76-22M binder. The project includes approximately 230,000 square yards of milling and 42,000 tons of hot mix asphalt. Drainage will be repaired, curbs and medians will be replaced and wheelchair ramps will be installed as part of the project. Total cost of the project is about \$1.8 million. The City of Toledo bid the restoration project with partial ODOT funding as an LPA project.

The project was written up in The Blade on August 2. The Blade announced that the overdue project would begin the following Monday, but that the pavement milling and resurfacing work would be done at night. The blade quoted David Moebius, the city's acting Commissioner of Engineering Services, as saying "We're doing everything we can to limit the inconvenience to the motoring public."



The Anthony Wayne Trail remains open to daytime traffic while waiting for the nighttime completion of the final surface course.

The City and ODOT are obviously very interested in minimizing inconvenience to motorists. Earlier this year ODOT announced that they spent \$30 million in 2001 to minimize work zone congestion. However, this project won't add to that bill. The City bid the project with restrictions on work hours in the peak hour traffic directions and asked for an alternate bid to perform the major work at night. Miller Brothers actually bid a savings deduction to the project for the nighttime schedule. Bob White of Miller Brothers Paving told us that, because of the heavy traffic on the Trail, they believed nighttime paving would be more economical as well as more considerate of motorists.

Stealth Paving, paving while the most of us sleep, is a unique advantage of hot mix asphalt pavement construction that more and more agencies are using to reduce construction stress. In this case, it even cost less!

### Notice to the Membership.

Ohio Hot Mix Asphalt welcomes and appreciates your forwarding clippings of articles about hot mix asphalt paving projects. A clipping regarding the Miller Brothers Paving project in Toledo was sent to us by Larry Palmer of member company Seneca Petroleum and led to the article that appears in this edition of OHMA.

### THE CLEVELAND BROWNS AND ASPHALT HAVE A NUMBER-ONE FAN

#### Bone Mobile Appreciates Smoothness

On a recent trip between Columbus and Cleveland, Flexible Pavements had a pleasant encounter with the "Bone Lady" who graciously

stopped to let us look at the "Bone Mobile" and to explain the significance of the tribute to the Cleveland Browns football team. Turns out that the Browns' number-one fan is also a fan of smooth asphalt pavement.

The "Bone Lady's" "Bone Mobile" is a Volvo station wagon professionally painted in the exact color scheme of the Cleveland Browns' helmets. It even sports a facemask across the front! The vehicle is decorated and filled with all manner of Browns' memorabilia, has the autograph of many present and former players on the headliner and displays the Ohio license plate "wer back".

The "Bone Lady" declined our invitation to be photographed with the "Bone Mobile", since, like other super-heroes, she only appears in public in her full costume. The "Bone Lady" has been recognized as the national number-one fan. She was inducted into the Pro Football Hall of Fame as the fan of the year for 2001. Originally from the Richfield area, The "Bone Lady" now resides in the Columbus area and makes frequent trips to Cleveland for games, practices and Browns' special events. She told us that she appreciates the smooth asphalt pavement on I-71. She said we could quote her that "the Bone Lady loves a smooth ride".

We enjoyed meeting the "Bone Lady", seeing the "Bone Mobile" and learning that the Browns' number-one fan is also a fan of smooth asphalt highways.

#### Go Browns!



ation to be

The "Bone Mobile" can be frequently seen traveling
I-71 between Columbus and Cleveland.

The "Bone Lady" appreciates smooth asphalt pavement.

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#### **LEGAL CORNER**

#### **Combination Bid Wins Out**

A recent case out of Warren County, Ohio involving a sewer project for the County Commissioners has raised an interesting and novel issue concerning the recent 1995 amendments to the multi-prime contracting statute here in Ohio. At that time, amendments were made so that combination bids could be received and an award could go to the lowest combination bidder if the combination bid was lower than the collective multiple prime bids in the aggregate.

A County is permitted to award the contract to the "lowest and best" bidder and Warren County in this case determined that the "lowest and best" bidder would be the combination bid which was only about \$7,000 or .24 percent higher than the multiple prime bids in the aggregate. The County found such a price difference advantageous (in its opinion) because it could potentially avoid "finger pointing" between multiple prime contractors and additional paperwork.

One of the multiple prime contractors sued the County and sought a restraining order against the award to the combination bidder with the higher price arguing that the combination can only be considered if it were lower than the multiple prime bids in the aggregate. The Magistrate hearing the matter struggled with the perceived inconsistencies between Revised Code 153.52(B) which states that as between a combination bid and an aggregate of individual prime bids the "lowest and best" wins the contract and 153.52(A) which states that no contract for the entire job shall be awarded unless the combination bid is lower than the separate bids in the aggregate. The Magistrate then went on to dodge that important issue and state that the disappointed multiple prime contractor had not proved that the actions of the Commissioners were "unreasonable, arbitrary or unconscionable." Therefore, at the moment, the decision of the County Commissioners stands, but it is likely that this matter will be appealed further.

Many groups, including those in favor of multiple prime contracting, are greatly concerned about the import of this decision if it is somehow construed to authorize awarding to a higher combination bid because the public authority thinks it is "best" to avoid the perceived costs or lack of coordination potentially involved in multiple prime contracts.

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