SCANNER

NEWSLETTER OF THE AMERICAN SOCIETY OF HIGHWAY ENGINEERS



December 1998 - 4

GOLD COAST SECTION CHARTERED

On July 29, 1998 the Gold Coast Section of ASHE officially became a Section of the American Society of Highway Engineers. Mr. David Greenwood, representing the National Board of Directors, attended a special dinner meeting and conducted the installation of officers and members.

David was assisted by Mr. Cooper Curtis at the installation ceremony, which included the signing of the Charter by all 59 Charter members of the Section. Cooper Curtis, also a National Board Director, has been instrumental in the formation of all three Florida Sections as well as the Georgia Section. Words of inspiration were provided by Ms. Leila Jammal Nodarse who was a driving force in expanding ASHE's presence in the state by encouraging the development of what is now the Gold Coast Section.

Although the Charter Meeting was an exciting event for the membership, it does not begin to describe the effort and dedication involved. The beginning of the section goes back to September 1996 when Leila Nodarse, Dave Greenwood and Cooper Curtis invited some South Florida representatives of the transportation industry to an organizational meeting.

A follow-up meeting was held one month later with the early organizers from South Florida including Jamie Cochran, Mario Echangarrua, Jack Conte and Joan Gould, representing both consulting engineering firms and material suppliers. It was at this meeting that the diversity of the

membership was first scrutinized. The group decided that a more representative membership from the contracting industry and the Florida Department of Transportation (FDOT) was necessary. It was this forward thinking group that led to the goal of expanding the diversity of the membership.

In November of 1996 Mario and Joan attended a Regional meeting which provided networking with other Sections and information on expansion of membership. To expand membership and develop the Section it was decided that a social meeting would be utilized to present ASHE to the rest of the South Florida community. The first such meeting was held in January 1997 with Mr. Rick Chesser, District 4 Secretary, FDOT, as a guest speaker. Membership began to grow at this point and a membership survey indicated that quarterly meetings with a social/technical format was preferred.

The third quarterly meeting deviated from the standard format in favor of elections of Officers and Board of Directors. The following Board Members were elected:

R.J. Pippitt
Mario Echagarrua
Alaa El-Halwagy
Joan Gould
Jamie Cochran
Jack Conte
Irwin Oster
George Sterling

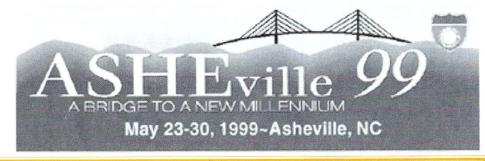
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Vice President
Secretary
Treasurer
Director
Director
Director
Director

Committees were also formed at this time, including a by-laws committee. The goal of the organization at this point was to have by-laws written and adopted by the end of the year. The by-laws committee presented the results of their efforts to the Board for recommendation to the total membership at the quarterly meeting on November 20,1997.

In December 1997 the Sections by-laws were submitted to the National Board for acceptance and the plans were begun for the Charter meeting.

During the development of the Gulf Coast Section some important milestones have been reached . We currently have a membership of 68 individuals including consultants, contractors, material suppli-

(continued on page 2)



Visit the ASHE Web Site at www.highwayengineers.org

National Board News

The National Board met for a regular board meeting on October 31, 1998 in the Great Smokies Holiday Inn SunSpree Resort at ASHEville, North Carolina, with President James W. Charles, P.E., presiding over the meeting. The following are the highlights of the committee reports and board actions:

Membership

There have been 34 new members since the June 1998 board Meeting as reported by Secretary Conner. Total membership in ASHE now stands at 4,909.

President's Report

President Charles reported he recently attended ASHE functions in Southwest Penn and First State. Future visits will include Central Dacotah and Georgia.

Jim Charles reported that Charles L. Flowe, P.E. moved into the 1st Vice President position due to the passing away of Robert E. Pearson, P.E., and Tracy I. Hill, P.E. will replace Flowe as Region 8 Director.

New Sections

Director Curtis of Region 9 announced that Tracy Hill was added to the New Sections Committee. Current committee activities include pursuing new sections in the Dallas/Fort Worth area of Texas and in Detroit, Michigan.

Constitution and By-Laws

Article III - Members, Paragraph 6 of the By-Laws was amended to clarify that members in arrears more than four months but less than twelve months shall lose the right to vote and to receive publications normally furnished without charge, however they may be reinstated without penalty. Also, a motion was made to revise the October 1, deadline to November 1, of the same paragraph, but defeated.

Conferences

Conference 1999 - The Conference

Committee hosted the October National Board Meeting in ASHEville, North Carolina at the Great Smokies Holiday Inn SunSpree Resort. Plans are progressing well with an interesting balance of technical sessions, tours, exhibits, spouse activities and a candlelight dinner and tour of the world-famous Biltmore Estate. The dates are May 26 through 29, 1999. Visit their website linked to the ASHE web site at www.highwayengineers.org.

Conference 2000 - Central Dacotah will host the conference in late June, 2000.

ASHE Web Site

Director David Jones of Region 1 reported that Region 8 was authorized a link to the ASHE home page to publicize Conference 1999. A new page entitled "Current Events" will be added to allow sections to input their own current events. This data will be purged monthly to keep the page up to date. A request for SCANNER articles will be included as a trial. Also, the board approved a motion to sell links at \$150 per year for a maximum of 15 to 20 links.

Nominating Committee

Past President Pasquale Dougherty received three nominations for the office of Second Vice President and two nominations for Person of the Year. The Nominating Committee will distribute their resumes along with the Section's Nomination form which must be returned by January 14, 1999. Additional nominations may be accepted up to January 14, 1999, however, the nominating section will be responsible for distributing materials in support of their nominee.

Person of the Year

The board renamed this award to the "Robert E. Pearson - Person of the Year", in honor of recently deceased Second Vice President, Bob Pearson.

(continued from page 1)

ers and Florida Department of Transportation employees.

The Section has established a regular schedule of quarterly dinner meetings accompanied with presentations by local representatives of the transportation industry. Currently a Section newsletter is published four times a year with plans to expand the publication to six issues annually. We may be the newest section in ASHE, but we feel that with the talent and dedication of our membership we will continue to grow to become one of the strongest.

President's Message



I promised to discuss Congestion Pricing as authorized in ISTEA in 1991. C on gress changed the program to Value Pricing in TEA-21. The two programs are funda-

mentally different in that Congestion Pricing imposes peak period charges on users (taxpayers commuting to and from work) of existing heavily traveled roads. The charges are intended as punitive retaliation for driving a car during rush hour and not using mass transit. Value Pricing charges motorists for the use of uncongested roads. Those who pay receive value for their money in the form of faster more reliable travel. One example is HOT (High Occupancy/Toll) lanes which allow toll paying single occupant vehicles in underutilized (aren't they all?) HOV lanes. The driver has a choice of no toll, slower moving or toll, faster moving. Under the previous program, there was no choice, travel during the peak hours and you get hammered.

Changing gears, there was a recently settled case in Pennsylvania. A motorist exceeding 50 mph in a posted 25 mph zone, on bald tires, in the rain, lost control. The vehicle slid sideways across the double vellow line and was hit broadside by a tractor trailer. Both the front and rear seat right side passengers were killed. The driver was convicted of vehicular homicide. The road was designed and constructed 18 years prior to the accident (statute of repose?). The estate of one of the decedents sued the design engineer, trucking company, and municipality. After several years of lawyers stuff, the case finally came before a local judge who, the law be damned, ordered the three innocent defendants to leave the court room and come back with a plan to pay the estate \$300,000.00. Absolutely mind boggling.

> James Charles ASHE National President



1999 National Conference May 26-30, 1999

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When Are Site Conditions "Unforeseen"?

by Travis L. Kresier, Esquire Korn & Cohn, P.C.

Recent Pennsylvania Case Upholds Limitation on Owner's Unforeseen Site Condition Disclaimer

Many of you are familiar with the various disclaimers and exculpatory provisions contained in owner contracts, which attempt to bar recovery of costs incurred by a contractor as a result of differing or unforeseen site conditions. While the precise language of these disclaimers varies by contract and owner, they all share the common goal of attempting to place the entire risk and expense of differing site conditions on the contractor. Some of these provisions attempt to reach this goal by requiring the contractor to conduct its own "pre-bid" site investigation. Other provisions attempt to allocate the risk of unforeseen site conditions to the contractor by expressly precluding the contractor from relying on the owner's subsurface testing information, by stating that the work is to be performed on an "unclassified" basis or by stating that the contractor is responsible to complete the entire project at the contract price regardless of the site conditions encountered.

Differing site condition disclaimers and exculpatory provisions are not favored by the Courts, but these clauses are enforceable and have been routinely enforced by the Pennsylvania Courts. As a result, contractors often encounter difficulty recovering the unanticipated costs incurred as a result of differing or unforeseen site conditions. These disclaimers, however, are not enforced without limitation. For instance, in one recent case, Pennsylvania Department of Transportation v. P. DiMarco & Company, Inc. 711 A.2d 1088 (May 13, 1998), the Pennsylvania Commonwealth Court limited the enforcement of a differing site condition disclaimer, by limiting the scope of the pre-bid investigation required by the contract.

In the DiMarco case, the Pennsylvania Department of Transportation awarded P. DiMarco & Company a contract to improve approximately two miles of state road in Lancaster County for approximately \$675,000.00. After beginning performance, DiMarco encountered certain "soft spots" under the existing roadway, which required additional labor and material to remedy. Nothing contained in PennDOT's bid package identified any soft spots, and DiMarco was unaware of the soft spots at the time it submitted its bid. DiMarco, therefore, requested additional compensation from PennDOT to cover the unanticipated costs associated with correcting the soft spots. PennDOT refused to compensate DiMarco for the soft spots, relying on a contract provision which stated that:

The contractor further covenants and warrants that he has had sufficient time to . . . examine the site of the project to determine the character of the subsurface materials and conditions to be encountered; that he is fully aware and knows of the character of the subsurface materials and conditions to be encountered.

According to PennDOT, this provision required DiMarco to

conduct its own pre-bid site investigation and shifted the risk of any and all costs associated with any unforeseen subsurface site conditions to DiMarco.

Unable to resolve the dispute, DiMarco brought a claim against PennDOT before the Pennsylvania Board of Claims. The Board of Claims awarded DiMarco damages totaling \$556,429.00, in part for the costs associated with correcting the soft spots.

PennDOT appealed to the Pennsylvania Commonwealth Court, arguing that the contractual disclaimer provisions completely barred DiMarco's unforeseen site conditions claim. The Commonwealth Court rejected PennDOT's argument and upheld the Board of Claims' award of damages to DiMarco (although for a smaller amount). The Court first explained that "if the investigation . . . required by the contract could not reasonably have been performed, [the exculpatory provisions contained in the contract] cannot be used to deny recovery to the contractor" for unforeseen site conditions. The Court further explained that in DiMarco's situation, enforceability of the clause relied upon by PennDOT depends upon whether it was "reasonable" to expect DiMarco to dig beneath the surface of the roadway in order to test for soft spots prior to submitting its bid. The evidence showed that performing such tests on a pre-bid basis would have been impractical and overly burdensome. The evidence also showed that the Department of Transportation made no arrangements to halt traffic in order to permit such digging or testing. As a consequence, the Court concluded that under the precise circumstances presented, DiMarco was not under a duty to perform subsurface testing before submitting its bid, and therefore, PennDOT was not legally entitled to assert the pre-bid investigation clause as a defense to payment of DiMarco's unforeseen site conditions claim. Ultimately, the Court awarded DiMarco damages in the amount of \$466,429.00.

The <u>DiMarco</u> case broadly illustrates that recovery of differing site condition claims may be difficult, but under the right circumstances, not impossible, even if the contract contains language which seems to preclude the recovery of differing site condition costs. As a general rule, contractors attempting to avoid a contractual disclaimer and recover costs associated with unforeseen site conditions must establish that: (1) the contractor acted reasonably; (2) the contractor was not and should not have been aware of the conditions encountered; and (3) the differing conditions actually caused the costs sought to be recovered by the contractor. In the end, DiMarco successfully recovered its costs, because a "reasonable" site inspection would not have revealed the soft spots. What constitutes a reasonable pre-bid investigation will necessarily vary by project; however, prudence dictates erring on the side

(continued on page 5)

Transportation and Air Quality in Metro-Atlanta, Georgia

On September 15th, over 120 engineers and friends explored the complex connection between poor air quality and transportation in the 10-county Atlanta Region. The joint lunch meeting of the Consulting Engineers Council of Georgia and the Georgia Society of Professional Engineers featured a panel of speakers who call the shots on much of this issue: Harold Reheis, Director of the Georgia Environmental Protection Division; Frank Danchez, Chief Engineer, the Georgia Department of Transportation; Joel Stone, Director of Planning, the Atlanta Regional Commission; and Helen Tapp, Executive Director, the Regional Business Coalition. Many members of the Georgia Section of ASHE were in attendance.

The fundamental problem is that the Atlanta Region violates Federal air quality standards for low level ozone. The violations are largely due to auto emissions. The Atlanta Regional Commission has not been able to develop a Regional Transportation Plan that shows consistency with the State Air Quality Implementation Plan. The Regional Transportation Plan that can be implemented results in continued violations (or exceeds the allocation of 113 tons per day of ozone that was set in the State Implementation Plan). Without an approved Regional Transportation Plan, no Federal money can be spent on projects in the region (except for grandfathered projects and those that mitigate the ozone problem).

The problem is complex and the solution even more so. The panel spoke of the need for car pooling, alternative modes of transportation, staggered work schedules, low polluting fuels/cars, denser land use patterns, telecommuting, etc. This issue is about as important as things get in public policy that affects the highway engineering community. Members of the Georgia Section of ASHE are involved in monitoring this issue and providing assistance in describing the way other regions have dealt with the complex web of air quality/transportation/land use.

(continued from page 4)

of conducting a more expansive investigation rather than a less expansive investigation.

In addition to the common disclaimer provisions, many contracts contain clauses, which govern the recovery of differing site condition costs. These clauses typically require the contractor to promptly notify the owner of any differing site conditions and establish the procedure and burden of proof required to recover any unanticipated costs. Contractors should always notify the project owner of any differing site conditions as soon as they are discovered and must strictly comply with any and all contractual provisions regarding the presentation and preservation of extra work and differing site condition claims. Although careful site investigation and strict compliance with all contract provisions will not guarantee success, it is the only way to preserve the right to seek recovery of the costs associated with "unforeseen" conditions.

Travis L. Kreiser is an attorney associated with the law firm of Korn & Cohn, P.C., which focuses its practice in the areas of construction law and litigation. Mr. Kreiser is also an Associate Member of the American Society of Highway Engineers, Delaware Valley Section. Questions or comments concerning this article may be directed to Mr. Kreiser at 620 West Germantown Pike, Suite 450, Plymouth Meeting, PA 19462 (610-825-7070).



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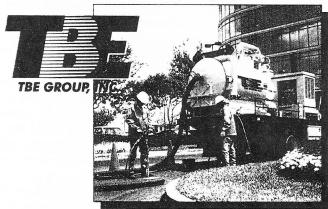
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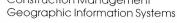


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PennDOT is Road Testing the Road Safety Audit Process

By Tim Pieples, P.E., District Traffic Engineer Mid Allegheny Section

The Road Safety Audit is a process that examines a roadway construction project and formally reports on safety issues using an independent, qualified, and experienced team. The Road Safety Audit has its origins in the United Kingdom and has been further developed and is being used in other countries, including Australia, New Zealand, and Canada. The Pennsylvania Department of Transportation (PennDOT) began piloting the Road Safety Audit Process in April 1997 to determine if and how the process should be incorporated into roadway construction projects in Pennsylvania. The pilot quickly determined that the Road Safety Audit Process can add value in the form of real safety benefits to road users. The Pennsylvania Transportation Institute of the Pennsylvania State University is assisting PennDOT and is currently evaluating the progress to determine how to effectively adapt it so development of roadway construction projects produce the safest possible design for all road users with minimum disruptions.

To appreciate the Road Safety Audit's value and uniqueness, one must understand its elements. The process ensures that safety is an integral part of project development through conducting a detailed safety analysis at five critical stages, i.e., feasibility, preliminary design, final design, pre-opening (construction), and in-service phases. Audits are conducted by a team of experts from all disciplines of highway engineering, with assistance from experts in fields of human factors, law enforcement, and risk management. Audit teams are independent from those involved with the design to ensure that it remains resistant to constraints, like time and money, often found in project development. A series of field reviews are conducted throughout project development that can identify safety concerns which routine plan reviews cannot. Comprehensive checklists are used to prompt thought and raise multi-modal safety concerns for all road users including pedestrians, bicyclists, trucks, buses, emergency vehicles, and railroads. Audits do not evaluate the project manager as the term "audit" may imply. They evaluate the roadway's crash potential and proactively attempt to prevent crashes from occurring. Audits also attempt to anticipate potential problems based on human factors. They are not intended to reactively resolve existing crash problems. A formal audit report is generated by the audit team after each review and the project manager formally responds with actions taken or why actions were not taken.

The Road Safety Audit is still relatively new to the United States. The Federal Highway Administration is actively promoting its use and is performing a pilot study that is evaluating the progress of several other State Transportation Departments that have recently begun to implement the process.

The Road Safety Audit process begins with management commitment that allows the process to succeed by having support when time and money are jeopardized. There must be a willingness to redesign, investigate new ideas, move outside scopes of work, and possibly adjust the overall program to find funds. An audit team is comprised of experienced members in the various facets of highway engineering. Additional members having experience in key areas are added to the team on a project by project basis or for the different phases of the audit. The team begins the audit by reviewing all background information to obtain a good understanding of the plans, scope, purpose, history, and needs of all road users and stakeholders. A field review is conducted using detailed checklists. Through interaction and brainstorming, the team of experts use their knowledge and experience to cite general safety concerns. Solutions are not required. Consensus of the team is reached so the concerns are labeled as audit needs and not self-serving. The concerns that surfaced from the audit are drafted into a clear, concise report.

The project manager identifies remedial treatments, resolves conflicts with those responsible for the audit, incorporates the remedial treatment into the design, and drafts a formal response to the audit report. The audit procedure is repeated as the project enters into the next phase to provide continual safety input.

PennDOT's pilot has created awareness and an appreciation for the Road Safety Audit Process as a useful tool that can maximize the safety potential of roadway construction projects.

Cuyahoga Valley Section of ASHE Celebrates 20 Year Anniversary

In the fall of 1977, Gene G. Smith, Chairman of the ASHE National Board's "New Section Committee", contacted Tom Criswell and Chuck Luff, Akron area engineers, about the possibility of forming a new Canton-Akron chapter. That October, Smith and the Committee met with Criswell, Luff, and several others in the local highway industry and decided to indeed form a new Section, which would be named the Cuyahoga Valley Section. On March 28, 1978, a charter was presented to the new Section by the national vice president of ASHE, Joseph Martenelli, along with Smith. At that time, 46 Charter members were signed up. They Cuyahoga Valley Section was the 2nd formed in Ohio, after the Western Reserve Section. Four more Ohio Sections would later be chartered.

The Cuyahoga Valley Section has grown from those original 46 charter members to it's present membership of 140. By providing informative technical sessions along with entertaining social functions, we have been able to sustain our membership and continue to promote all that ASHE stands for. ASHE meetings have been an excellent forum for local highway workers to communicate with each other and to facilitate their career growth. Thanks to the dedication of past and present officers, the Cuyahoga Valley Section expects to remain an active force in the highway industry for year to come.



Cuyahoga Valley Section's Past Presidents prepare to indulge in a 20th Anniversary cake as the original Charter hangs behind them. Pictured from left to right are current President Scott Basinger and past presidents Bob Hochevar, Tom Criswell, and Patrick Welsh.



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Transit

Preparing for Winter's Worst.... PennDOT Style

By Steve Chizmar, Community Relations Coordinator for Highway Administration Pennsylvania Department of Transportation

Although temperatures were in the low 70's in State College, the collective thoughts of nearly 2,000 individuals attending the Eastern Winter Road Maintenance Symposium and Equipment Expo in September were focused on much colder and snowier days ahead.

Penn State's Bryce Jordan Center was the site for the event that was sponsored by the Federal Highway Administration (FHWA) and PennDOT. Equipment Division Chief, Ron Doemland, co-chaired the event with a representative from FHWA. The annual gathering invites winter road maintenance managers from all boroughs, cities, counties, townships and states east of the Mississippi River to exchange the most current information, technologies and winter-storm fighting techniques.

The FHWA set out to provide this forum following the "Blizzard of 1996," which paralyzed transportation in America's east-

ern states.

This year, 33 states, the District of Columbia and several Canadian provinces made the trip to Happy Valley to see the wares of more than 150 exhibitors - the stuff that snowfighters will be

asking for during the upcoming gift-giving season.

Heated windshield wipers, tire chains that help just about any vehicle crawl up a glacier, and hoists that will lift a 50,000 pound snowblower eight feet in the air, making oil changes much easierall were among the equipment in the vendor display area. PennDOT equipment manager Ray Rugh handled arrangements for the show on the floor of the huge arena.

But the one and a half day event was much more than vendor displays. Secretary Bradley L. Mallory, PennDOT Chief Engineer, Gary Hoffman and FHWA Division Administrator David Gendell

made remarks and formally opened the show.

Tucker Ferguson, program services section manager for the Bureau of Maintenance and Operations, organized 20 different break-out sessions, including presentations on "Internet Weather Forecasting," "Mobile Infrared TempSensors" and "Keeping the Public Informed".

Of particular interest was a mammoth machine that weighs in at more than 55,000 pounds, is 10 feet wide and 70 feet long and sports bright yellow paint and a shiny new PennDOT logo on the door. What is this Behemoth? Among the engineering and equipment professionals it's called the "Rear Discharge Snow Blowing Conveyor," but it's been nicknamed the "Urban Snowblower" here at PennDOT.

Although the name may not be official, what it is capable of doing is official - and that is, of course, removing deep snow from urban streets and bridges in a faster and safer way than ever before.

The blower that was used for modifications, a 1986 Norland, came from Somerset County, where it had been used for clearing

deep snow from rural roads for the past several years.

"I'm going to miss the "Snow Shark" which is what we named the old Norland," says county manager Ron Nicodemus. "But we're team players here and are always willing to do whatever it takes to advance technology, particularly in the area of snow removal."

Let's go back to late 1996, when the FHWA commissioned PennDOT to lead the nation in the development of a machine

that could remove deep snow from streets and bridges. Sounds simple enough, but there's more to the story. The FHWA also said that this device and the dumptrucks that follow it must occupy only one lane of traffic; that the trucks must be traveling in the same direction as the blower; and it must be able to fill a dumptruck in under 30 seconds. The FHWA was willing to put up \$100,000 to help PennDOT with this endeavor.

True to its tradition as national leader in snow removal, PennDOT took on the assignment and decided to modify one of its existing snow blowers to meet the challenge.

The entire modification project was coordinate by PennDOT's Equipment Division, where, under the watchful eye of Doemland, the Urban Snowblower took shape.

"Ray Rugh was assigned as project manager and, true to his attention for detail, Ray delivered a product that is unparalleled in its craftsmanship and usefulness," says Doemland.

The result of this effort cost more, but this prototype equipment not only meets the FHWA requirement for safety, it surpassed the time requirement by 50 percent, filling a 15-ton dump truck in as little as 15 seconds.

The urban snowblower will be sent to PennDOT's District 4 this winter for testing, along with a similar device, a modified Athey belt loader. PennDOT has used belt loaders for many years during summer operations. They're used to remove loose soil and asphalt from the road and place the material into a truck either following the unit in reverse or directly beside it.

PennDOT's Chief Engineer, Gary Hoffman, says, "We expect that after testing this year, the final product will be a hybrid of

the two pieces of equipment".

Hoffman added that although the urban snowblower is more than capable of fulfilling the requirements, its size might be somewhat of a drawback on city streets. After testing this year, PennDOT will take the results back to the drawing board and perfect just the right type of equipment. The Department will then make the information on how to build one of these units available to every state in the nation.

Was this year's symposium a hit? Of course! One participant said, "it's only fitting that PennDOT put on the best winter symposium ever. After all, they have really set the standard for other states to follow as far as snow and ice control goes, so how could we expect less from them"?

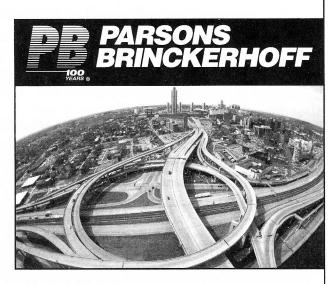
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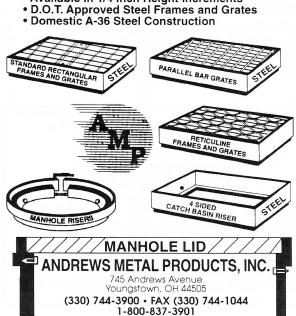
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Mid-Atlantic States' SHRP Technology Conference, Partnering to Implement New Highway Construction Products

By Andrew Reed, Civil Engineer Engineering, Information, and Technology Division Bureau of Construction and Materials, Pennsylvania Department of Transportation

More than 500 Federal, State, and Local highway agency staff from the Mid-Atlantic States including Delaware, the District of Columbia, New Jersey, Maryland, Pennsylvania, Virginia, and West Virginia plus guests from Kansas, Nevada, New York, North Carolina and Washington participated in sharing of experiences and information regarding the innovative highway products of the Strategic Highway Research Program (SHRP). A Mid-Atlantic Region SHRP Technology and Exchange Conference was held on October 13, and 14 in Hagerstown, Maryland, and was hosted by the Federal Highway Administration (FHWA) and the Maryland Department of Transportation's State Highway Administration (MSHA). The conference allowed the users of the previously experimental highway products to share their evaluation results and offer recommendations on how to implement or improve upon the SHRP products.

During the opening session the speakers reflected on the lessons learned from SHRP and on applying these lessons to improve future highway research programs. The keynote speaker, Tony Kane, Executive Director of the FHWA, emphasized that SHRP's winning mix consisted of "products, people, and partnerships." National, state, and regional level partnerships continue to drive the implementation efforts.

PennDOT's Chief Engineer, Gary Hoffman, accentuated the importance of partnerships and highlighted the activities of the Lead State teams. "We took States with the passion to implement products and gave them the resources and authority to lead," said Hoffman. That leadership was well represented at the conference, with members of each of the Region's Lead

State Teams available to make presentations and participate in discussions.

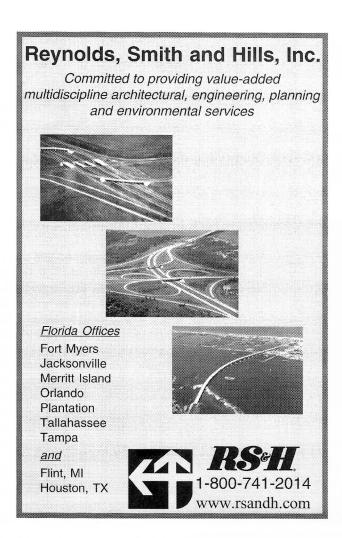
Participants chose from three focused break-out sessions in each of the major SHRP technology areas. The Highway Operations sessions included discussions on long term pavement performance, work zone traffic control safety devices, roadway weather information systems, and anti-icing winter maintenance. The Asphalt sessions featured updates on Superpave performance models, and perspectives on the Superpave asphalt mix design system from the Lead States, industry, and regional contractors. The Concrete and Structures sessions covered use of high performance concrete in pavements and structures, alkali-silica-reactivity (ASR) issues, and assessment, repair, and rehabilitation of concrete structures.

The sessions highlighted the Lead States' successes and the lessons learned from their failures with the SHRP products. All of the Region's States have on going plans to fully implement the Superpave system for all asphalt paving projects by the year 2000. Tucker Ferguson of PennDOT, Dave Rossbach of MSHA and Rick Nelson of Nevada DOT, each detailed how their state is proceeding with the installation of Roadway Weather Information Systems. These systems will allow winter maintenance personnel to monitor weather and pavement conditions at various locations enabling them to respond more efficiently with application of anti-icing solutions and other traction control techniques. The Concrete sessions highlighted several assessment techniques like using ground penetrating radar to evaluate the condition of the structure, and using a life cycle cost analysis to evaluate repair alternatives.

Attendees were also able to speak with more than 40 vendors of such products as flashing stop slow paddles, work zone intrusion alarms, and a spray-injec-

tion pothole patcher.

The great success of SHRP is that beneficial research products are being incorporated into highway construction practices by State and Local transportation departments. This is possible from the sharing of information by the Lead States, and their partnerships with industry, and with Federal, State, and Local transportation officials. For more information on the status of PennDOT's SHRP Implementation efforts, or to obtain a complimentary copy of PennDOT's SHRP Implementation Catalog, please contact Andrew Reed at (717) 783-3392.







PennDOT Wins National Awards for 22/renew

The Pennsylvania Department of Transportation has won two national transportation industry awards for the Public Information Program for the Rt. 22 expressway improvement project, 22/renew.

At the AASHTO (American Association of State Highway and Transportation Officials) National Public Affairs Workshop last month in Phoenix, Arizona, PennDOT's Allentown-based Engineering District 5 was awarded 1998 Public Affairs Awards for Overall Public Relations Program and for Project Website.

The winning PennDOT entries stressed the community's involvement in planning and developing the Program's messages and materials.

"Throughout the planning for 22/renew, we focused on communicating with the community to minimize the projects' impact on Lehigh Valley residents and to enhance safety in the work zone," said Walter E. Bortree, district engineer. "The Public Information program has succeeded in both these areas through the first, critical year of construction."

The Public Information Program, spearheaded by Rt. 22 Project Manager, Jack Proter and District Community Relations Coordinator, Tricia Charlesworth, utilized a Citizen's Advisory Council of local business and civic leaders to help develop and disseminate program materials. Those materials, included newsletters, brochures, posters, a telephone information line and an internet website.

The website, www.22renew.com, was singled out as the best Project Website in the nation. Featuring work zone traffic conditions, a regularly-updated construction schedule, e-mail and other informational features, www.22renew.com has attracted more than 40,000 cyberspace visits since its activation last January.

Under PennDOT's direction, two local firms, consulting engineers McTish Kunkel & Associates, of Allentown, and planners/designers Urban Research & Development Corporation, of Bethlehem, created and distributed program materials and managed the website and information line.

The 22/renew Public Information Program will remain in place through the completion of the \$61 million project in late 1999.

Competition for the annual awards was open to all state Departments of Transportation. Awards were given in 13 public affairs categories.

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Barbara H. Mulkey Engineering, Inc. **Receives Top Award**

Barbara H. Mulkey Engineering, Inc. was recently recognized for its success by the Greater Raleigh Chamber

of Commerce. The firm received the Chamber's Pinnacle Award that is presented to local companies identified as top emerging businesses in the Triangle. The award was presented as part of The Celebration, an annual business awards event which was held at the Raleigh Convention and Conference Center Complex.

Barbara H. Mulkey Engineering, Inc. was founded in 1993 and specializes in civil engineering site, development, roadways and structure design, land surveying, and construction engineering and inspection services.

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In Memoriam

Robert E. Pearson PE **National First Vice President American Society of Highway Engineers**

The American Society of Highway Engineers mourns the loss of one of its most dedicated and energetic members. On September 6, 1998, Robert E. (Bob) Pearson succumbed to cancer after a relatively short illness. In addition to the family he left behind, including his wife Hazel, two daughters Kathryn Pearson and Natalie Pearson Coble, and a granddaughter Elizabeth Sloane Coble, he left an indelible mark on the transportation industry in the United States.

Throughout Bob's career of more than 40 years in transportation engineering, he led roadway design teams for all types of highway projects. Bob was instrumental in developing and delivering projects for the Highway Trust Fund in North Carolina, which has proven to be a sustainable and defensible delivery system maintaining a \$2 billion highway program.

Bob joined ASHE and spearheaded the organization of ASHE chapters throughout the southeastern United States because he believed in the importance of the nation's highway system. He believed in an organization through which persons involved in the highway industry could network and through which information could be shared. Bob served on the formation committee and was the first president of the Carolina Triangle Section. He served as National Director from the section and was instrumental in forming new sections in Charlotte, Tampa, and Atlanta. He served as National Second Vice President and, at the time of his death, was serving a term as National First Vice President.

In Bob's passing, ASHE and the industry lost an advocate and a dear friend. Anyone wishing to make a donation in Bob's memory may contribute to Hospice of Wake County, 1300 St. Mary's St., Raleigh, NC 27605 or The Pearson Scholarship Fund c/o Carolina Triangle ASHE, 5800 Faringdon Place, Suite 105, Raleigh, NC

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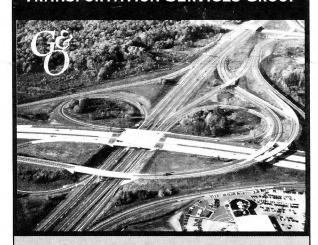
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