

SCANNER

NEWSLETTER OF THE AMERICAN SOCIETY OF
HIGHWAY ENGINEERS

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Fall 2004-4

ASHE National Conference, June 2-5, 2005: Details page 5

New York Metro Section Chartered

Albert Algazi, P.E., Region 6 Director

Jonathan Crince, P.E., M.Y. Metro Section Secretary

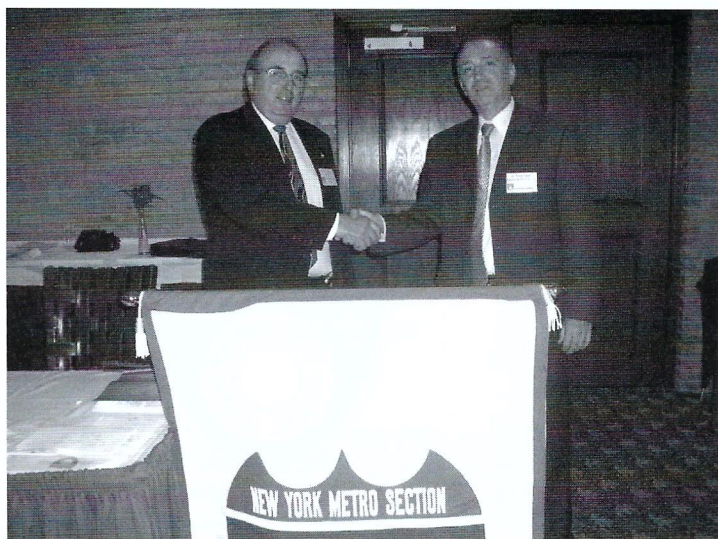
Less than a year ago, I invited Mike Hershey from Hardesty & Hanover, New York Office, and Roland Ericsson from Urban Engineers to attend a N. Central Section dinner meeting. The intent was to expose them to the ASHE culture and introduce them to the goals of the organization. The ultimate goal was to entice them to initiate a new section in New York City. Fortunately, they were interested.

We arranged a lunch meeting in New York City with a group no bigger than 40 people that represented public and consultant's sections of our transportation industry. The next meeting involved preliminary selection of officers and board members that would include a president, vice presidents, treasurer, secretary and other board members to represent Membership, Programs, and others. National President, David Jones, and National 1st Vice President,

Rod Pello, attended several meetings that encouraged the formation of this new section. I personally attended every meeting before the official Chartering.

Less than one year later, a new section of the American Society of Highway Engineers (ASHE) was chartered on September 28, 2004. This new section was welcomed and supported by Region 6, our National President Rod Pello, and several other National Board Members. The New York Metro Section held the charter ceremony dinner in downtown New York City at the Captain's Ketch Restaurant with over 120 guests in attendance. Attendees braved heavy rains and flooding from Hurricane Jeanne to make it to the meeting place. The evening included a networking hour, three guest speakers, dinner, and signing of the official charter by 80

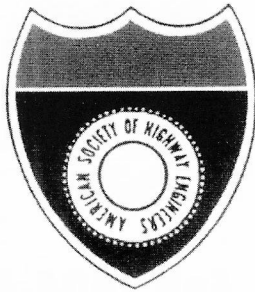
"NY Metro Chapter" continued p. 21



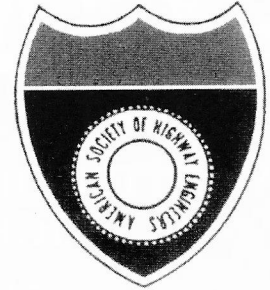
Left to Right: ASHE National President, Rod Pello, P.E. and ASHE Region 6 Director, Albert Algazi, P.E.



From Left to Right: Tom Tehrani, Dr. Special Events; Glen Kartalis, Dr. of Programs; Nellia Shakhmina, Treasurer; Manny Beigelmacher, Dr. of Membership; Mike Hershey, President; Jonathan Crince, Secretary; Anthony Fasulo, Consultant to the Board; Roland Ericsson, 1st Vice President; Alison Foxworth, Dr. Public Relations/Legislation; William Colon, 2nd Vice President; Rashid Siddiqui, Dr. of Technical Programs



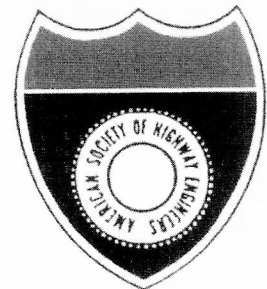
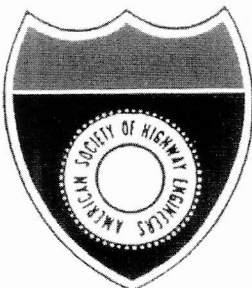
**Congratulations
to
Rodney P. Pello, P.E.**



on his election to the position of National President
of the American Society of Highway Engineers
for the year 2004-2005

From all of your friends, colleagues,
members, officers and directors
of the North Central New Jersey ASHE section.

We are proud to have one of our own
as National President representing the entire
membership.



President's Message

Rodney P. Pello, P.E.

As I stressed in my last President's Message, growth will be one of our key goals this year. The New York Metro Section chartered 90 new members on September 28, 2004, at the Captain's Ketch Restaurant in New York City with over 130 guests in attendance. Everyone braved the flooding rains and wind of Hurricane Jeanne to attend this festive occasion. I am very hopeful that more sections will crop up within New York City's five boroughs.

Michael Hershey, P.E., President of the New York Metro Section, was ASHE's champion to bring this very strong section to charter. Michael saw the potential for an ASHE section in the metropolitan area of New York over a year ago. Because of his background in maintenance, design, and construction of highways and bridges, Michael connected with a diverse cross section of professional people in our highway industry.

I want to thank Albert Algazi, a Region 6 Director from the Southern New Jersey Section, for planting the seed to raise the New York Metro Section with Michael Hershey and Roland Ericsson. Al attended all the precharter meetings and spoke very proudly of the new section at the charter ceremony. It was my distinct pleasure to be present, introduce, and install the New York Metro Board Members. The National Board congratulates and welcomes all of the incoming charter members of the New York Metro Section of ASHE. I would also like to personally commend the incoming Officers and Directors. I have worked with them briefly during the development of the New York Metro Section and have been impressed with their dedication and commitment to the values of ASHE.

The vision of the ASHE Strategic Plan is to become a nationally recognized forum for the highway industry by, among other things, increasing membership and organizational visibility. One way, of course, is to charter new sections. Rich Clifton, Kevin Duris, Dave Jones, and I expect to charter the Potomac Highlands Section in Burlington, West Virginia, on January 26, 2005. We also have preliminary discussions for new sections in Nashville, Tennessee; Louisville, Kentucky; Indianapolis, Indiana; and Boston, Massachusetts.

Equally important to the visibility of ASHE is focus on retention of current members and growth within existing Sections. We all experience the rise and fall of our membership each year. I ask you to be diligent in determining the root cause of membership

loss and dedicate yourselves to correcting those causes and strive to retain our current membership.

During the two-day workshop and National Board meeting on October 15 and 16, 2004, in Pittsburgh, the Board drafted proposed modifications to the ASHE National Constitution and Bylaws in order to conform to the way ASHE functions today. The six-hour workshop was intense and productive. Membership participation and support in this effort has been extremely important and far reaching. The modified Constitution will be submitted to the membership for approval during the first quarter of 2005.

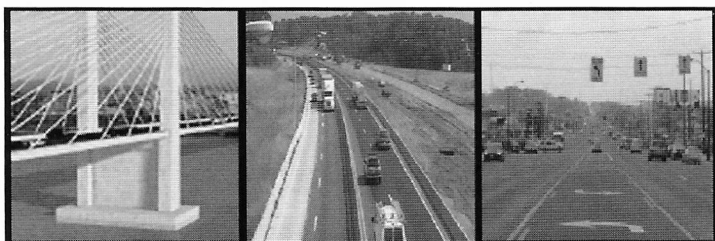
The 2005 National Conference will be held June 2-5, 2005 in Pittsburgh, Pennsylvania, at the Sheraton Station Square in the heart of Pittsburgh's nightlife, shopping, and restaurants; planning is underway. The hotel overlooks the Monongahela River and the city to the north. Click on the Pittsburgh Triangle on your National Website to learn more about the next National Conference as the Pittsburgh Section updates their conference website.

The 2006 Conference will be held in Williamsburg, Virginia; the 2007 Conference is set for Atlantic City, New Jersey; and the 50th Anniversary Conference in 2008 will be in Hershey, Pennsylvania. Plans are well underway for these conferences.

In conjunction with the 50th Anniversary Conference in 2008, ASHE is preparing a history of our organization for distribution. We encourage members to prepare a history of your Section for inclusion in the History of ASHE. Your help is essential. Don't let your Section be left out. Help us to compile a complete history of ASHE. If your Section has not already done so, submit your Section History to your National Director.

The ASHE National Board recently entered into an agreement with Fulcrum International to provide a Career Bank on our national website. This service will allow our members to post their resumes free of charge. Company ads will be assessed a fee, but ASHE members receive a 10% discount. In addition, Fulcrum is supporting ASHE by contributing 5% of the proceeds from all company ads back to ASHE National.

I would like to wish everyone a joyous and happy Holiday Season and look forward to the continued quality of our services to our members and future friendships with new sections, new members, and all ye ole members. ■



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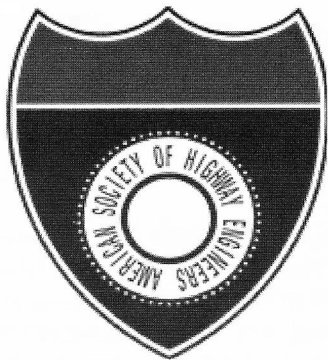
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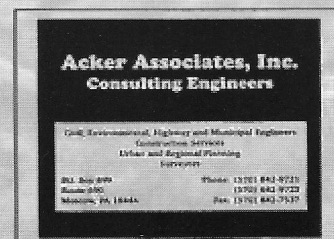
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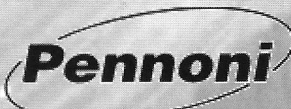
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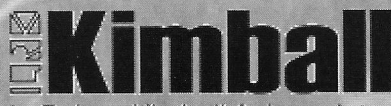
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2005 ASHE National Conference

Katie Anderson, Marketing Committee Chairman

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The Point

Wonder what city they're talking about? Well, it's PITTSBURGH, PENNSYLVANIA, frequently listed as one of the 5 most Livable Cities in America and the site of the 2005 ASHE National Conference. Scheduled June 2-5 at the Sheraton Station Square Hotel, the Conference will focus attention on "Transportation Choices and Challenges."

A 25-member Conference Committee has been working since January 2003 to ensure that this Conference will offer the highest quality technical programs, complemented by unique guest tours and fabulous hotel accommodations.

The Technical Program Committee has assembled an outstanding array of topics and speakers for sessions that will be held Thursday afternoon and all day Friday. CEU Credits will be awarded for attendance at these programs. A special, one-day registration will enable participants to only attend the Friday Technical Programs.

Here are just a few of the programs that will be presented: A History of Pittsburgh Bridges; The Fort Pitt Bridge and Tunnel Project; The LRT North Shore Connector Project; A History of the Pennsylvania Turnpike; Rails to Trails; the Cooper River Bridges project; Sustainable Highways; and a panel discussion on Context Sensitive Design.

Don't think that this Conference will only emphasize the technical aspects of our industry. This is Pittsburgh after all, and we know how to throw a party! There will be an abundance of special fun-filled tours for members and their guests each day. To whet your appetite, here's a sample of just a few of the guest tours we have planned: Just Ducky land and water tours of Pittsburgh; a tour of the beautiful Phipps Conservatory; a tour of Clayton (home of Henry Clay Frick) and the Frick Museum; a Steel History Tour; a visit to the National Aviary and a tour of PNC Park (home of the Pittsburgh Pirates). Our Conference coincides with the opening of the Three Rivers Arts Festival with artists from across America selling original art, jewelry, pottery and clothing. The conference hotel, Sheraton at Station Square, is located adjacent to the Shops at Station Square and a variety of entertainment venues including the Hot Rock Café. There is plenty for everyone to do. That's why

we encourage ASHE members to plan now to bring the whole family to spend a weekend in Pittsburgh. Before or after the Conference, families can enjoy Kennywood, one of the country's most exciting amusement parks, or the beautiful waterpark - Sandcastle. The same special conference hotel rates will apply.

No visit to Pittsburgh is complete without a stop at the Carnegie Museum of Natural History to view one of the world's best collections of dinosaurs. The schedule is not available yet, but maybe the Pittsburgh Pirates will be playing a home game in the renowned PNC Park.

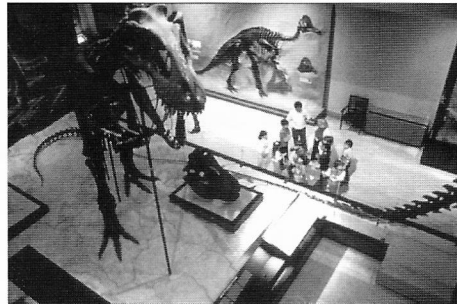


Exhibit at the Carnegie Museum of Natural History

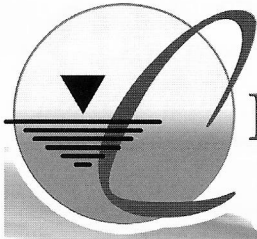
One Conference highlight will be Friday night at the Senator John Heinz Pittsburgh Regional History Center. This renovated ice plant features incredible displays of the history of Western Pennsylvania, as well as the brand new Sports Museum where memorabilia from the likes of Roberto Clemente, Bruno Sanmartino, Ty Cobb, Willie Stargell, and Terry Bradshaw will be on display. Food and drink stations will be available as guests wander throughout the museum to the accompaniment of live music.

Did you think we forgot golf? Of course not! We have made arrangements to accommodate 144 golfers in a modified scramble format at the beautiful Birdsfoot Golf Course on Saturday, June 4th. Companies interested in sponsoring one of the 18 holes can contact our Golf Committee Chairman, Bill Gross, at (412)497-6017.

Our Ice Breaker Reception on Thursday evening will be in the beautiful Reflections Room of the Sheraton where members will enjoy hearty finger foods while visiting the outstanding array of exhibit booths. Companies interested in securing a prime exhibit location are invited to contact Gene Lipovich, Exhibit Chairman, at 724/916-0300.

We hope you'll make plans now to join us in Pittsburgh. We're looking forward to welcoming you to what promises to be a truly outstanding ASHE National Conference. For more information, check our website: www.ashe2005.org. ■

Katie Anderson, Marketing Committee Chairman
412/854-3606 or kabob@adelphia.net



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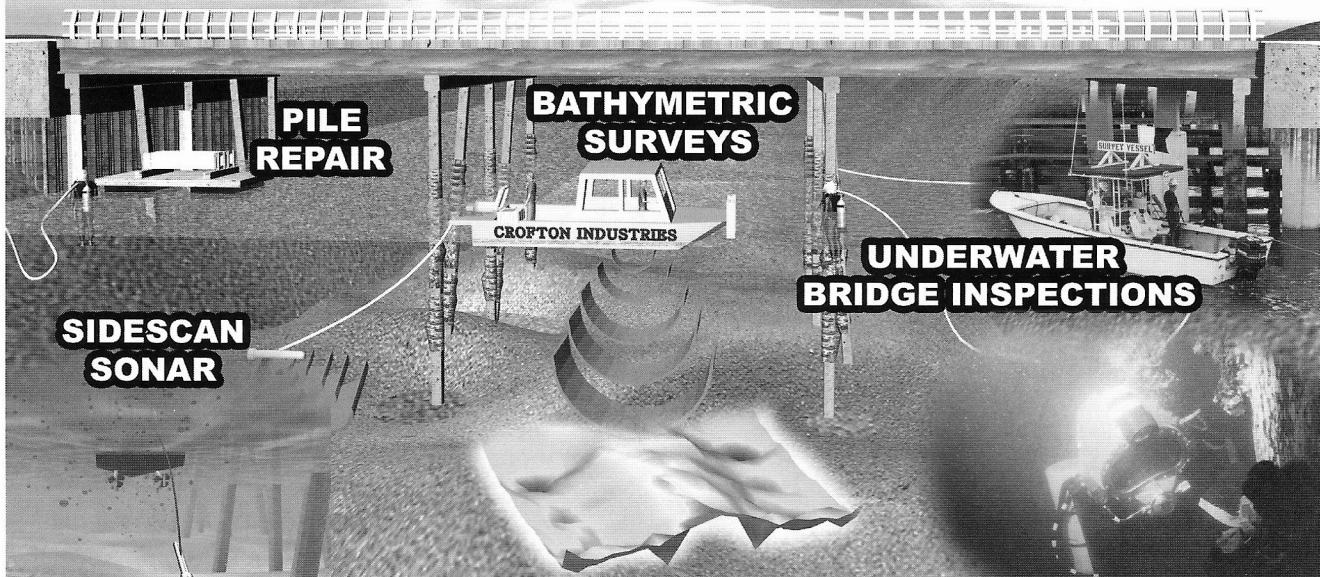
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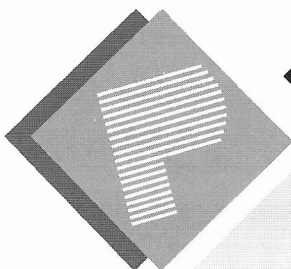
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Using ITS to Save Lives

The Route 38 Crash Avoidance System

James B Struzzi II, Mid Allegheny Section

The most powerful voices are not always the strongest or the loudest. In 1999, students from Moniteau High School, Butler County, had a safety concern. Every day, their bus passed through the intersections of Route 38 at Route 1010 (Hooker Road) in Concord Township and Route 138 (North Washington Road) in Washington Township. Students feared for their safety every time they passed through these intersections because of speeding, and limited sight distance due to vertical crests and several buildings close to Route 38. Although the speed limit on Route 38 through the area was 45 mph, motorists typically traveled at faster speeds. The intersections had a reportable crash history of seven between 1995 and 1999 at the Hooker Road intersection, and three at the North Washington Road intersection. Basically, it was difficult to see approaching traffic when pulling out of the side streets onto Route 38.

The students didn't point angry fingers or send scathing letters to the local newspaper; instead, they asked former PennDOT District 10 Traffic Engineer Tim Pieples, P.E. (now Maintenance Services Engineer) and Community Relations Coordinator Jim Struzzi, to visit the school and discuss their concerns.

After listening to the students and reviewing the sites, Pieples realized the situation was not easily resolved. Using traditional methods to improve sight distance would essentially eliminate small towns located near the intersections; cost for right-of way and reconstruction would be high. Traffic signals were not feasible because of several engineering challenges. Recognizing the need to be community sensitive, the District had to find another option.

District 10 responded with an out-of-the-box solution, earning the District a Pennsylvania Partnership for Highway Quality (PPHQ) Safety Award and a 2004 Federal Highway Administration Excellence in Highway Design Award.

District 10 researched a state-of-the-art Intelligent Transportation System (ITS) used only once before as a pilot application in the United States in Virginia. The Crash Avoidance System uses sensors in the pavement to identify vehicles approaching the intersection; the sensors relay this information to fiber optic light emitting diode (LED) signs that convey this information to motorists.

Before moving forward with this system, District 10 shared the various options including the use of ITS with the students. Students and local and state officials agreed the Crash Avoidance System was the best option for improving safety at the intersections.

Trans Associates, Inc. of Pittsburgh was tasked with designing the system. In 2001, Post Construction of New Castle, PA was awarded the contract to construct the system.

Creating only the second application of its kind in the country was not without challenges and the system in Virginia was no longer in use. LED signage for the system was only in a prototype phase which presented significant scheduling challenges for Post

Construction. Computer software to operate the system involved state-of-the-art programming language that had not been written before. Acquiring this software proved to be a major hurdle for the construction contractor. Software developers were hesitant to design or program language to run the Crash Avoidance System. Software design firms were concerned with the tort liability of a system malfunction and potential crashes occurring if the system failed to identify approaching vehicles. Ultimately, the system was designed with a battery back-up system to power the LEDs to flash in case of an electricity outage, alerting motorists that the system was malfunctioning.

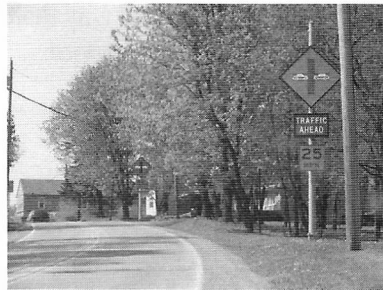
Working diligently, Post Construction successfully partnered with McKain Traffic, a software vendor from California, to design the system software. This software operating system put the project under an extreme completion delay. Constant communication between Trans Associates, Post, the developer, local municipalities, and the District was paramount to the success of the project. In the end, constant communication enabled the Crash Avoidance System to become a successful reality.

The Crash Avoidance System provides motorists on the mainline and side roads of the two intersections with valuable real-time information to assist them with travel through or into the intersections. Crossroad Warning Signs on Route 38 precede the intersections to assist approaching motorists in traveling safely through the intersections. LED signs illuminate "TRAFFIC AHEAD" when the system senses a vehicle waiting to enter into the intersection from the side roads. The signs display an LED picture of a car on the right and/or left side of the Crossroad sign to make drivers aware of the side from which a vehicle may be approaching.

LED signs are located at each approach of the side roads at the intersections with the mainline. Signs illuminate "CROSSING TRAFFIC" when a vehicle is approaching the intersection within the distance needed to safely cross the intersection. It also provides a moving image of a car traveling in the direction from which the vehicle is approaching. This information can be used by the motorist awaiting clearance to enter into the intersection to determine when it is safe to do so.

The systems went online in November 2003. Final design cost for these devices at both locations was \$52,000. The cost to construct them was \$370,000. A significant portion of the cost can be attributed to the project's uniqueness; however, the cost of the ITS was significantly lower than the cost to reconstruct the vertical geometry at the two intersections.

Pending advancements in the software system may provide the District with a tool to monitor traffic along the Route 38 corridor. The technology is new and presently limited in its use in the United States. The LED signage, sign controllers, and computer software system are state-of-the-art and have many potential applications as engineers continue to improve transportation safety. ■



Mainline signs traveling south

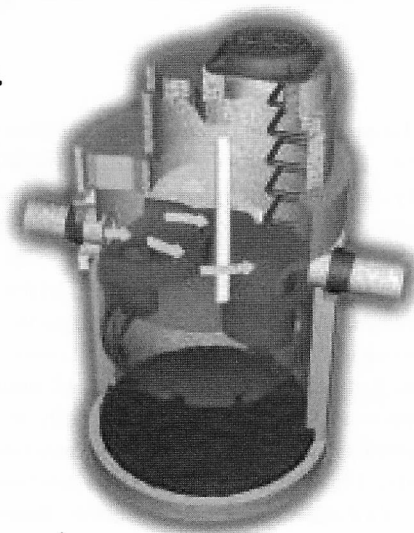


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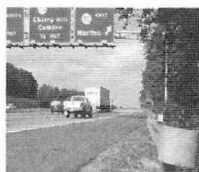
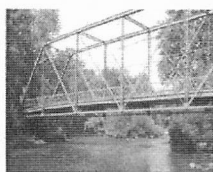
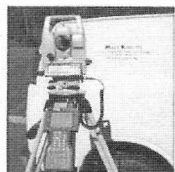
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ASHE National Officers 2004-2005

Terence D. Connor National Secretary

Terry is a member of the ASHE Southwest Section in Region 3. He was a two term President of the Southwestern Section. He has been our National Secretary for approximately 26 years. As a result of his dedicated service to the ASHE Organization, the National Board granted him an Honorary Membership.

Terry earned his B.S. in Civil Engineering from Pennsylvania State University in 1961. He began his engineering career in the public sector by gaining employment with the Pennsylvania Department of Transportation. Terry worked more than 30+ years in PennDOT at various levels of design and management before retiring from the State. At that time he moved to the private sector and took the position of Vice President - Western PA with McTish, Kunkel & Associates, Inc. in Rostraver, Pennsylvania. Terry has been employed at MKA for the last 13+ years. Terry is a Professional Engineer and Professional Land Surveyor in the state of Pennsylvania. He's also a member of ASCE, PSPE, and NSPE.

Terry and Diane have been married for 44 years. They reside in Uniontown, Pennsylvania. They have 4 children and 5 grandchildren. He and his wife like to attend plays at various theaters, and he enjoys playing golf. Terry also sings in the Uniontown Chorale, attends various church functions, and is a Director of AAA East Central.

Rodney P. Pello, P.E. National President

Rod is a charter member of the North/Central New Jersey Section in Region 6. He served as their Section President for two terms. Rod also served as the National Director of Region 6 from 1995 to 2001. In 2002 he was elected as the 2nd Vice President of ASHE National and now serves as National President.

Rod earned his B.S. in Civil Engineering from Tri State University in 1963. He has over 40 years of experience in the design, management, and implementation of transportation improvement projects in the New Jersey-New York region. Rod began his career in engineering with the HNTB Corporation, working there for 30 years. He then worked for the URS Corporation for the next three years as the Director of Engineering in their New York Office. From 1997 to 2003 he worked for the Parsons Transportation Group in Newark, New Jersey as their Vice President/Area Manager. In 2003 Rod completed the circle and returned to the HNTB Corporation where he is now an Associate Vice President.

Rod is a Professional Engineer in the State of New Jersey. He is currently the President of the American Council of Engineering Companies of NJ (ACECNJ), and also serves as the Chairman of the ACECNJ Transportation Committee. The Transportation Committee serves as the liaison between the consulting engineering community and all public transportation agencies in New Jersey.

Rod resides in Randolph Township, New Jersey and has two daughters, Cynthia and Christine, as well as two grandsons, Jake

and Jesse. Rod's spare time is usually spent watching his grandsons play soccer and watching the New York Giants try to win!

Richard S. Prentice National 2nd Vice President

Dick has been a member of the Delaware Valley Section for over 30 years. Elected to the Section Board of Directors in 1984, he served as a Section Officer from 1988-1991, holding the positions of 2nd Vice President, 1st Vice President, and President. When the National Board reorganized the ASHE organization in 1995, Dick was named as the Delaware Valley Section's Regional Director. He volunteered to be the Region 6 Secretary and served in that capacity for the next six years. Dick was a motivating force in starting the Region 6 Seminars that are now offered every October. In 2001 he was elected to be the Region 6 President/National Director. On the National Board, Dick chaired the Legislation Committee and currently Chairs the Membership Committee. He was the assistant Registration Chair for the 1985 National Conference hosted by the Delaware Valley Section, the Registration Chair of the 1997 National Conference hosted by the Delaware Valley Section, and currently involved in the development of the 2007 National Conference hosted by Region 6. In 2002 the Delaware Valley Section named Dick the "ASHE Person of the Year" by the Delaware Valley Section, and in 2003 he was named an "Honorary Member" of the First State Section. Dick was instrumental in getting our IACET recertification. In 2004 he received the "President's Award" for his significant contributions to ASHE.

Dick received a degree in Architecture from Temple University in 1968, and then earned a B.S. in Structural Engineering in 1978 and a M.S. in Civil Engineering in 1981, both from Drexel University. He began his engineering career in 1968 with Pennsylvania Department of Transportation working in Bridge Design (13 yrs), Project Management (12 yrs), and Traffic/Transportation Engineering (11 yrs). After 36 years in the public sector Dick retired from PennDOT and moved into the private sector. He accepted a position with McMahon Associates, Inc. in Fort Washington, PA, where his talents, diversity and experience in highways, structures and traffic engineering fit extremely well with the needs of the firm.

Dick is active in other engineering organizations. He sits on the Board of Directors of the Delaware Valley Engineers Council (24 yrs), and the Board of Directors of the American Public Works Association - Delaware Valley Section (3 yrs). Dick is also a member in the Institute of Transportation Engineers (6 yrs), and the Engineers Club of Philadelphia (2 yrs).

Dick resides in Mont Clare, Pennsylvania. Unfortunately, he lost his wife, Donna, to cancer in September 2003 after 28 years of marriage. Dick is the proud father of their two daughters, Jessica, a Chemical Engineer and Kristen, a senior at the University of Delaware. He is an active member of Saint Andrew's Lutheran Church. Dick has served on the Church Council (6 yrs), taught 7th Grade Sunday School (15 yrs), and currently chairs the Church Property Committee (20 yrs). Dick likes to travel and enjoys reading.

"Officers" continued p. 17



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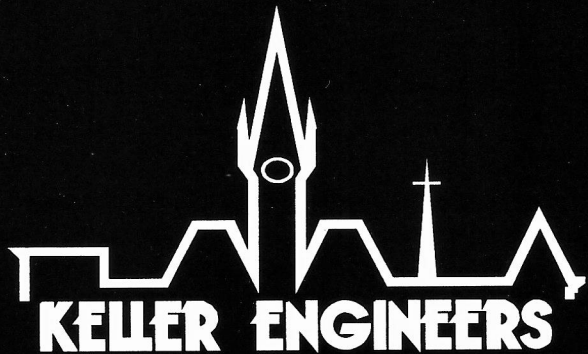
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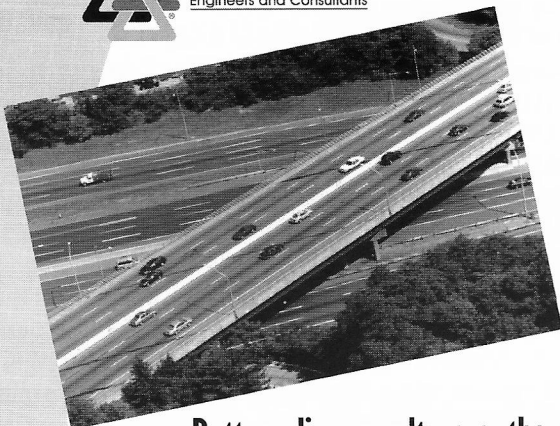
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Charley, Jeanne and Francis Central Florida's Unwanted Tourists

Emergency Preparedness – Observations from the Region's Transportation Agencies

Chris Rizzolo, URS

Jackie VanderPol, The Fulcrum International

Friday, August 13, 2004, Category 4 Hurricane Charley made landfall on the southwest Florida coast. Throughout the night Charley raced across the state, slamming into Central Florida and knocking over thousands of enormous oaks and other trees onto buildings, downing miles upon miles of power lines, and blocking roadways. Charlie was the worst hurricane that most Central Floridians had ever experienced. Damage was extensive and virtually shut the region down for nearly ten long, muggy, mostly-powerless days.

Within the next six weeks, three more hurricanes would make landfall in Florida, and two of these (Frances and Jeanne) would directly impact Central Florida. An already weary population suffered these two more blows with resignation to their fate, a quiet bravery, and an uncommon sense of teamwork. Statewide, more than 53,000 residential and business buildings were claimed as a total loss. Orange County topped the list in the number of insurance claims with more than 128,000, though "only" 808 facilities were deemed a "total loss."

Thankfully, the transportation system fared comparatively well due to previous Emergency Operations Planning. Transportation agencies in Central Florida (FDOT District 5, Florida's Turnpike Enterprise, Orlando-Orange County Expressway Authority, and Orange County) each did their part to ensure safe evacuation routes and speedy system repair. Many heroes helped get Central Florida through these disasters...from sound planning before the storms, to Herculean efforts in the long and redundant recovery process.

Below are brief summaries of events and activities related to these natural disasters that could be applied to a variety of disaster plans for transportation systems.

Florida Department of Transportation

Under the leadership of District Secretary George Gilhooley, FDOT District 5 faced hurricane-related impacts in all nine counties of the District. The District was a flurry of activity even before the storms hit. All districts teleconferenced and made sure the Continuity of Operations Plan (COOP) was up to date. Staff meetings were held and then all employees were allowed to get their personal affairs in order. As each storm approached, Mark Wiseman, District 5 Safety and Health Manager / District Emergency Coordination Officer activated the Emergency Operations Center (EOC) to coordinate disaster recovery with local and state agencies.

FDOT maintenance crews took home their vehicles and hardware such as chainsaws and were ready to act as soon as the worst of the storms passed. In the case of Hurricane Charley,

which passed through Central Florida between 9:00 pm and midnight on August 13, this meant clearing the roads in the dead of night. By early afternoon, every State Road in District 5 was

open to traffic. This was no small task, since many power lines in the area were knocked down and twisted amongst the debris. In cases such as this, FDOT maintenance workers worked closely with the appropriate utility companies before beginning any work.

The top priority when clearing debris from roadways was the Interstate system and essential roadways leading to hospitals, fire stations, etc. Once these facilities were cleared, work began on the state road system. Many roads were completely barricaded by fallen debris, and in some cases only enough room for one vehicle was initially provided.

Once the State Roads were cleared, District 5 assisted local municipalities in their recovery efforts. This assistance did not end with clearing road debris. For example, Secretary Gilhooley provided 250,000 sandbags to various local municipalities and requisitioned a refrigerated tractor-trailer from Tallahassee for Lake County.

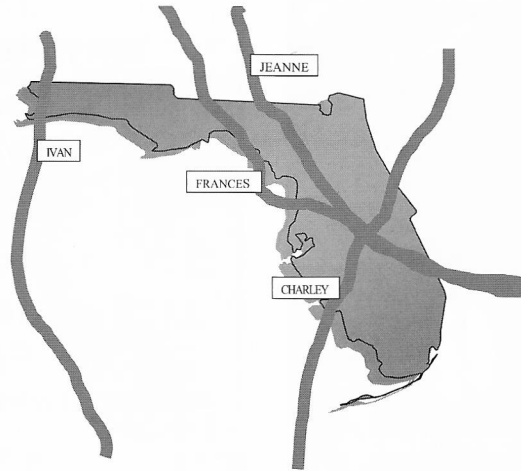
Loss of traffic signals was another huge impact from each storm. Hurricane Frances severely impacted the coastal regions of District 5, destroying or damaging close to 300 traffic signals. Within one week, District 5 repaired or replaced all damaged and destroyed traffic signals.

District 5 did not simply assist the citizens within its boundaries. When Hurricane Ivan ravaged the Panhandle in September, 36 District 5 employees with trucks and equipment assisted District 3 in their clean-up efforts. In addition, several District 5 workers are still deployed assisting FEMA with Public Assistance and Damage Assessments and may still be through May of next year. Just in time for next hurricane season! Florida's ASHE National Director, Steve Tidwell, may still be in a tent on the panhandle of Florida assisting FEMA.

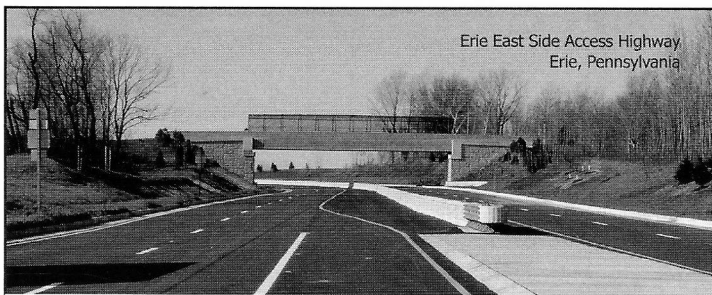
Central Florida's Tolling Agencies

(Orlando-Orange County Expressway Authority (OOCEA) and Florida's Turnpike Enterprise)

Tolling agencies were hard hit with about \$14 million dollars in physical damages and nearly \$48 million dollars in revenue loss as a result of suspending the tolls before, during and after each storm. These roadways were crucial to the evacuation of millions of residents and served exceptionally well in this capacity due to careful planning and coordination with other emergency services.



"Hurricanes" continued p. 13



Erie East Side Access Highway
Erie, Pennsylvania

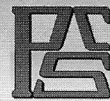
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Activities Before the Storms

Well in advance of the storms, OOCEA key staff carefully reviewed the Emergency Operations Plan and updated the contact list. Before each storm's arrival, the number one activity was clearing all debris from drainage structures and securing all signage and construction materials. The systems are undergoing a massive expansion and this was no small task.

OOCEA implemented a rule that there would be no lane closures before the storms and no construction-related work performed immediately after the storms. Knowing that tolls would likely be suspended before, during and after the storms, discussions were held with Florida Tolls Services, the private firm that operates the toll booths, to discuss toll suspensions and reinstatement plans. These plans had to be carefully communicated and coordinated with the Turnpike Enterprise. This was necessary to reduce confusion and prevent possible rear-end accidents at toll booths, since many of the routes feed directly into each other.

Emergency generators were rounded up and topped off. Contractors were contacted and put the systems on "First Call" for repair of tree damage and fence repair.

During Hurricane Charley, the Turnpike experienced bumper-to-bumper traffic for 80 miles; remarkably all traffic moved safely off the system within 24 hours. Interestingly, the Turnpike restricted the number of open toll lanes at the booths. This actually reduced congestion and provided safer travel, though a few frustrated motorists did not agree with the logic. This technique was modeled after the Homestead NASCAR race. Traffic moved safely and steadily throughout the evacuation period at 20 to 25 mph.

Plans were made by the Turnpike prior to each storm for a system Contra-Flow, if necessary, meaning both the northbound and southbound routes would become northbound. This presented many challenges and luckily was not necessary. But the Turnpike was fully prepared during each storm, having staff available and the proper equipment ready at each ingress and egress point.

During the Storms - Hunker Down

Personnel were asked to be with their families as the storm hit, and to report back to assist at the earliest possible time.

After the Storms

As soon as they were able, staff reported in to assess and repair the physical damage. Communications systems were unreliable so this presented many challenges.

Most damage at OOCEA was limited to downed signage and fallen trees. Toll booths suffered minor damages on roofs and from air conditioners that had blown off the tops of the facilities. There were no drainage issues due to early clearing. "We fared well because the system was designed to very high standards, and we took the proper steps to prepare," said Mike Snyder, OOCEA Executive Director. "The biggest problem now is absorbing the financial impact, but suspending the tolls was the right thing to do," he added.

Under Governor Jeb Bush's approval, tolls on both OOCEA and the Turnpike were suspended for six days with Charley, seven days with Frances, and four days with Jeanne. "Collection of revenue takes a back seat to moving people safely to shelter," said Evelio Suarez, the Turnpike Enterprise's Toll Operations Director.

OOCEA and the Turnpike issued a joint press release when it was determined that tolls could resume. Emergency and disaster relief vehicles, including thousands of power service and tree removal trucks from other states, continued to drive toll-free on the system for an extended period of time. Agencies worked closely with FDOT District 5 and Orange County to ensure that major roadways connecting to the toll roads would be capable of handling the increased traffic once the tolls were reinstated.

TEAMFL, (Transportation Expressway Authorities Membership of Florida) an organization formed to bring together the talents of the state's toll agencies and consultants, is in the process of gathering the Emergency Operations Plans from each toll agency in the state. They will create a comprehensive EOP that will be available upon request. TEAMFL's Executive Director, Bob Hartnett, is spearheading that effort. (www.teamfl.org)

Orange County

"Disaster preparations for public agencies are fairly routine, yet communities suffer from hurricane amnesia," said Jim Harrison, Director of Growth Management. "By that I mean, people tend to forget how severe these storms can be. We are fortunate at the County to have trained emergency personnel, very sound leadership, and a well-developed emergency response plan that allowed us to react swiftly and aggressively. With Charley, we dutifully studied the Emergency Operations Plan and prepared well. When Frances hit, we knew exactly what needed to be done. And by Jeanne we were disaster experts!"

Before the Storms

Key preparations before the storm included stocking up on traffic signals and signs, and locating and inventorying everything. The county roadway system did fairly well due to a long-standing policy requiring upgrades to mast arm traffic signals which are much less vulnerable. Drainage areas were cleared and retention ponds and lake levels were lowered as much as possible to create storage for the flood of water.

As did the other agencies, the County hired emergency debris removal contractors who were ready to hit the ground running at first light (clearing major arterials first for life/safety, then collectors, and finally local roads.) Field Operations Centers were created and staff was briefed and hundreds of county vehicles were fueled and equipment was positioned across the county.

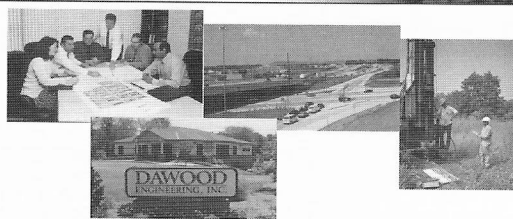
County leaders initiated the regional Emergency Operations Center which included over 200 staff and agency representatives. An important early step was to implement a public information campaign for preparedness - locals will remember Chairman Crotty's mantra "Folks, this is not a drill!"

After the Storms

The County maintains good communications regularly with other agencies such as the Orange County Sheriff's Department, Public Works, and the utilities companies. Orange County staff from all departments...from public works, to legal, to administrative staff, worked side by side in recovery efforts after the storm. They performed search & rescue, damage assessment, manned information call-in centers, repaired roofs for the elderly or handicapped, cleared roadways, and distributed sand bags, water and more than 15 tons of ice to residents. There were more than 200 people working at the Emergency Operations



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Indian River Inlet Bridge - Rising Above the Ordinary

W. Denney Pate, P.E.

Construction will begin late this fall on the new Indian River Inlet Bridge - a striking concrete cable-stayed arch that will blend with the sand dunes of the Delaware State Seashore Park as it crosses the Indian River Inlet. Designed with significant input from the public, the bridge will span the entire inlet with a 1,000' main span, thereby eliminating concerns over scour around piers in the inlet - the nemesis of previous bridges at this location.

The Delaware Department of Transportation, under the direction of Secretary Nathan Hayward, III, empowered interested parties in southern Delaware to actively participate in the selection of aesthetic features for this unique bridge, the first major highway bridge of its type. Community design charrettes, held over a six-month period in 2003, attracted hundreds of involved citizens and stakeholders. Through consensus voting, they determined the bridge type, shapes, colors, lighting and all aesthetic elements, resulting in a bridge design that is being closely watched and greatly anticipated by bridge enthusiasts nationwide.

Figg Bridge Engineers is responsible for the bridge design and is leading the design team, with member Rummel, Klepper & Kahl, LLP for highway design; public participation and community liaison team member Kramer & Associates, Inc.; geotechnical design by MACTEC; landscape design by LDR, Inc. and lighting design provided by The Mintz Lighting Group Inc.

DelDOT had taken active measures in the past twenty years to address scour issues in the Inlet, however, the long-term economical solution is to remove all piers from the water with a 1,000' main span. Piers for the new bridge will be founded on land both north and south of the Inlet. This configuration also provides for potential future expansion of the Inlet width to mitigate navigational challenges of the swift water flow. Concurrent with the bridge construction, significant enhancement plans for the Delaware State Seashore Park will be undertaken. The enhancements include an

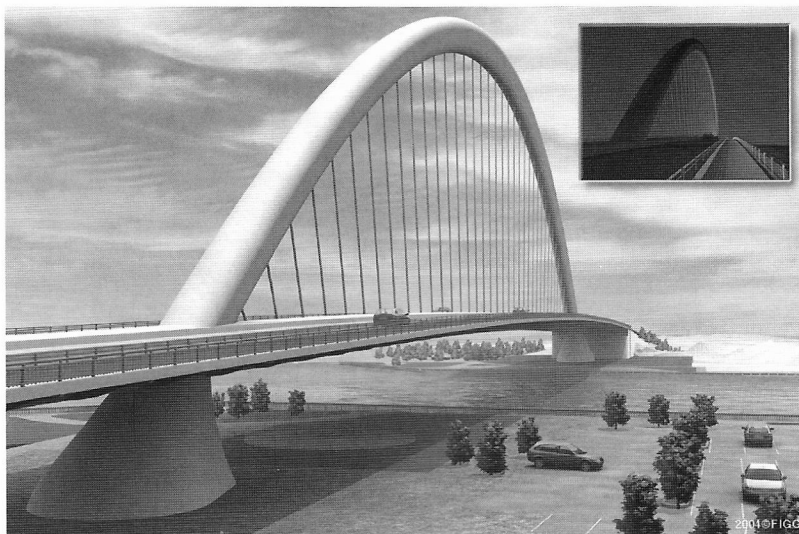
inlet promenade, park buildings, campground facilities, and playgrounds.

At the first community design charrette, participants voted for a design theme of "Harmony with Nature". This influenced the future design alternatives created by the team and presented in subsequent charrettes for participant voting. The need to span the inlet drove the decision for a cable-supported bridge type; however, based on input at the first charrette, the arch design was selected instead of a more traditional pylon shape. Subsequent public input resulted in the single plane of radial stays, open back spans, a tulip shape for the arch cross section, subtle blue feature lighting, an ornamental pedestrian railing that incorporates natural elements and a surface for the pedestrian pathway that mimics the beach.

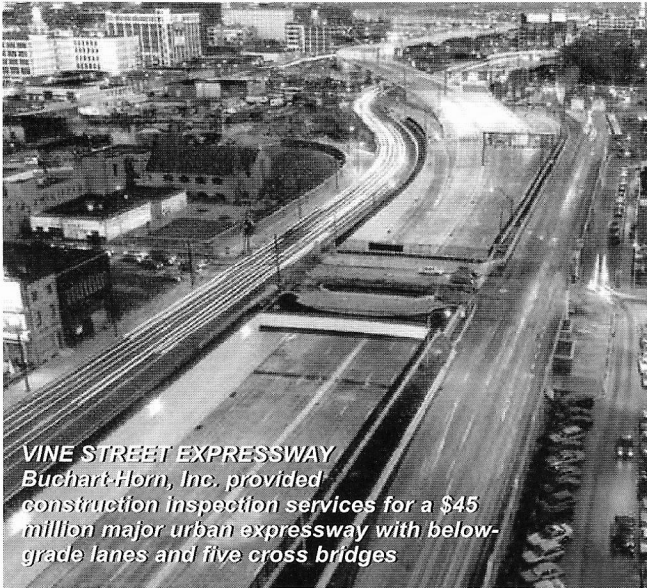
Final design activities for this unique structure are underway and will be completed principally under the requirements of the AASHTO LRFD Design Specifications. The bridge arrangement includes spans of 150' - 1000' - 150'. The 150' back spans, selected by the charrette participants, provide additional visual openness below the bridge to accentuate the below deck arch supports. The unique cross section of the bridge deck consists transversely of a precast southbound box girder, a cast-in-place arch tie beam and a precast northbound box girder. The northbound girder includes additional width for the 12' pedestrian sidewalk on the east (or ocean) side of the structure.

Construction of the bridge is anticipated over a three-year time frame with the entire project completed in four years. Numerous events and activities involving the public, who assisted in the creation of this unique structure, are planned beginning with a groundbreaking ceremony in October. ■

W. Denney Pate, P.E. is Senior Vice President/Principal Bridge Engineer for Figg Bridge Engineers, Inc.



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Ronald L. Purvis
National 1st Vice President

Ron currently serves as National 1st Vice President. Before serving as National 2nd VP in 2003-4, he served as National Director of Region 7 (2000-03). He is a charter member of the Potomac Section in Region 7. He has served at various capacities including 2nd Vice President, 1st Vice President, and President of the Potomac Section. He has also served as Chair of the National New Sections Committee (2002-04) and helped to charter the Greater Hampton Roads Section.

Ron served in the public sector from 1961-1979 with Virginia DOT performing various jobs including Bridge Engineer in charge of bridge inspection, inspection, maintenance and repair work. From 1979-1999 Ron was employed by an ENR Top 500 international consulting engineering firm starting as project engineer and ending as Vice President and Director of firm wide bridge remedial technology. In 1999 he opened and managed a Washington DC office for another large highway and bridge engineering firm.

Ron started Ron Purvis Associates in 2000, providing bridge related research and training services to transportation agencies nationwide. From 2000-2002 he also provided Pontis Bridge Management System implementation services for state DOTs. Ron is a Professional Engineer in the states of Virginia, Pennsylvania, Maryland, New York, Florida, and Washington D.C.

He has published over 25 papers presented at national conferences such as Transportation Research Board (TRB) and International Bridge Conference (IBC). Ron is the current Chair of TRB Structures Maintenance Committee. He is past President of the Washington D.C Chapter of ACI and received the "1995 Outstanding Accomplishment Award" from the National Capital Section of ACI. In 1991 he was invited to testify at a Congressional Hearing on "Condition of Nation's Bridges" by the House Subcommittee on Investigation and Oversight. He served on the FHWA expert panel for "Nondestructive Evaluation of Highway Bridges". Ron was chosen by American Road & Transportation Builders Association to visit several highway agencies in Russia as part of a technology exchange program.


Ron and Dorothy have been married for over 20 years. They reside in Chantilly, Virginia. They have three grown children, Deborah, Chris, and Jenny. Dorothy is also an ASHE Member and works as a Transportation Engineering Supervisor for Virginia DOT.

Robert E. Yeager
National Treasurer

Bob is a member of the Altoona Section in Region 4. Joining ASHE in 1963, he was a Board Member and President of the Altoona Section. Bob then served on the National Board and became National President in 1974. He has been our National Treasurer since 1975. With over 28 years of dedicated service to the ASHE Organization, the National Board granted him an Honorary Membership on April 17, 1998.

Bob earned his B.S. in Civil Engineering from Pennsylvania State University in 1959. He later continued his education at Cornell University in Construction Engineering. Bob began his career as a field engineer with the Harrison Construction Company and then with the S. J. Groves Construction Company. Over the next 23 years, he continued to refine his construction skills with Vipond & Vipond, Inc., earning promotions from Supervisor to Project Manager, to Vice President of Construction. Bob switched to the I. A. Construction Company where he worked for 10 years as their District Manager. From 1995 to 1997 Bob was the owner of R. E. Yeager Consulting, Inc. He retired in 1997 after working more than 38 years in the construction industry. Bob has an E.I.T and is a Professional Land Surveyor in Pennsylvania.

Bob and Mariann have been married for 47 years. They reside at their horse farm in Hollidaysburg, PA. Bob and Mariann are members of the Zion Lutheran Church. They have 2 grown children, Susan and Jeffrey. Bob and his wife enjoy traveling around the country in their mobile home, so their Yorkshire terrier can travel with them. Bob is an active member of the Juniata Lodge F & A.M. #282, the Altoon Valley of Scottish Rites Consistory, the B.P.O. Elks Lodge #212, and the 796th Military Police Battalion Association. Bob enjoys hunting and is a member of the Trout Run Rod & Gun Club in Clearfield County. ■

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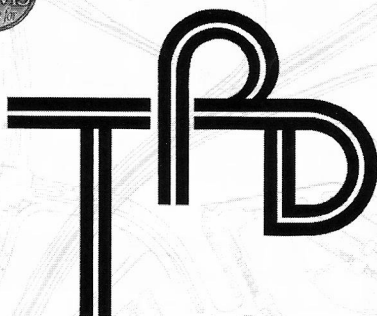
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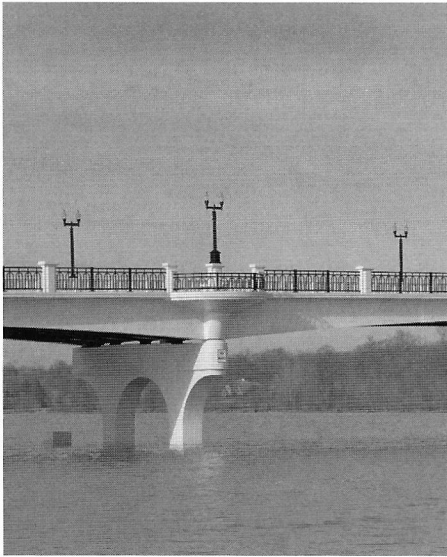
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Ex-SPAN-ding for the Future

Jeff Griffin, PE, and Sarah Johanssen



Located in one of the fastest growing areas in Ohio, Delaware County's new Home Road Bridge over the O'Shaughnessy Reservoir was designed with the future in mind. The new bridge replaces a deteriorating 1920's steel truss structure that could no longer support the estimated 8,900 vehicles that crossed the bridge each day - a number anticipated to double by 2023. As a result, the Delaware

County Engineer's office required a solution that would provide for this anticipated growth.

Burgess & Niple, Inc. designed the new bridge with the ability to expand from two lanes to four with minimal disruption to traffic, impact to the reservoir below, or modification to the substructure and superstructure. Additional drilled shafts and pier columns were added at each pier location to support the future pier widening. Mechanical reinforcing steel connectors were placed at the top of the additional columns and in the end of the pier caps in order to tie the new pier section into these bridge components.

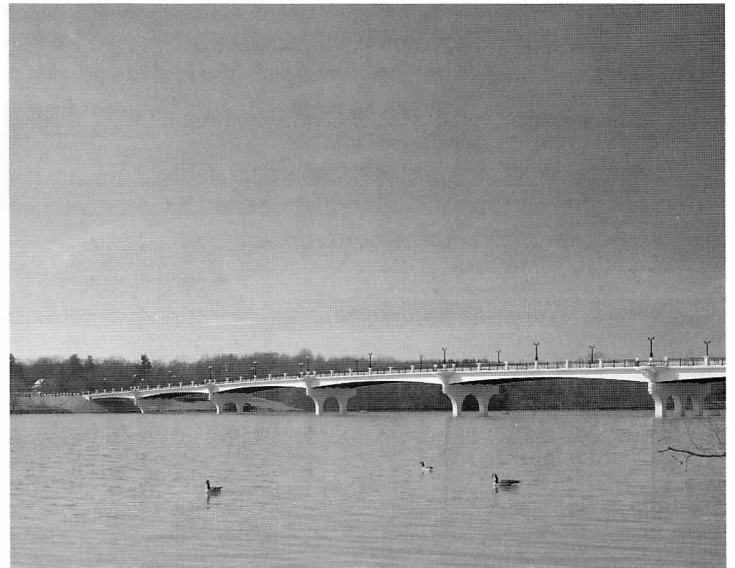
The future widened pier section will be built without working below the water surface, which will expedite its construction. This method also was desirable from an environmental standpoint because O'Shaughnessy Reservoir serves as a water supply source for the City of Columbus.

The north exterior girder was designed to also function as an interior girder for the future widened superstructure. This means

that future widening will be accomplished by constructing the additional pier section, adding the necessary girder lines and framing to accommodate the future deck width, removing the current parapet and portions of the concrete deck adjacent to the north exterior girder, and pouring the widened concrete deck and new parapets.

Other project features include 1,500 feet of new roadway construction, decorative lighting on the bridge, roadway approaches, an 11-foot walkway/bikeway and observation balconies located at each pier.

Dedicated in November 2003, the 1,145-foot, seven-span steel girder superstructure is the longest bridge in Delaware County and the single largest transportation project constructed by the County. The Home Road Bridge received the 2004 Project of the Year Award from the Central Ohio Chapter of the American Society of Highway Engineers (ASHE). ■



"Hurricanes" continued from p. 13

Center in Orange County. At its height, the message center was taking more than 1,000 calls per hour.

One of the major difficulties included getting an accurate listing of signal outages. More than 300,000 residences were without power. "We need to, and plan to develop, a good database of the signals and a plan to inspect them," said Harrison. These inspections had to be done manually; better signal maps would have helped the crews immensely. Crews were in close contact with various power agencies, and by mapping major power outages it was easy to see where the transportation problems would be greatest. Police and sheriffs directed traffic or free-standing four-way stop signs were posted at intersections without power. (Interestingly, after several days, power companies asked all residents to turn their porch lights on. In this way, they could visually determine where the smaller pockets of outages were.)

Debris clearing crews were mobilized before the storm, and then were out working at first light. The main priority was to make sure

emergency vehicles could get through. There were more than 2.8 million cubic yards of tree debris in Orange County alone!

One other problem, and a big one for Orange County residents, was the fact that the sewage lift stations are electrically operated. Four hundred of the county's 600 lift stations were out after Charley. "We had made inter-local agreements to share equipment such as generators with neighboring counties. But no one really expected such widespread damage. With none available to borrow, we rotated our 25 generators until more generators came." Staff had to venture out in the pouring rain immediately after the hurricane, moving generators from one lift station to another every few hours.

County Chairman had declared the county in a state of emergency and accelerated purchasing activities early on. The cost of these storms to Orange County tops approximately \$80-\$90 million dollars, \$60 million of which included the debris removal. Thankfully, much of this will be reimbursed by FEMA. ■



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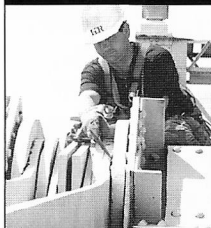
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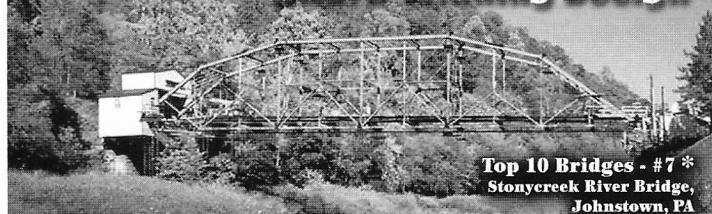
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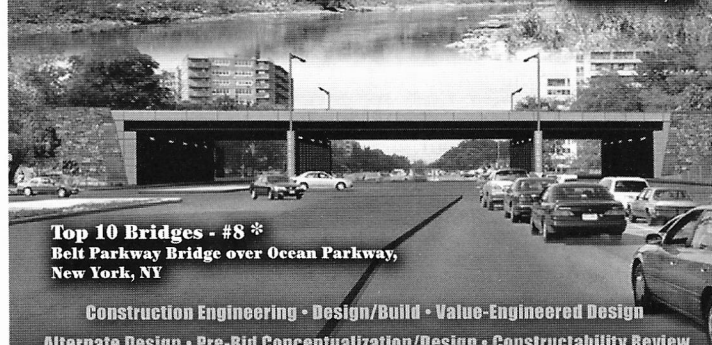
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"NY Metro Chapter" continued from p. 1

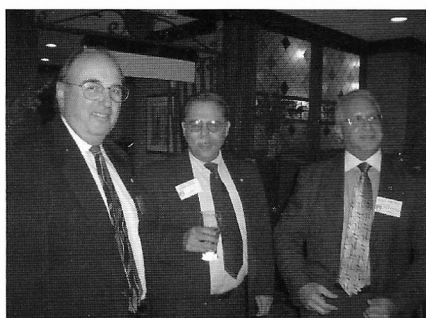
charter members and swearing in of the ten-member board by National President Rod Pello. Currently, the section has over 100 active members. The section developed a schedule of meetings and events through 2005 even before the official chartering.

A key function of ASHE New York Metro will be to engage, educate, and inform members of the transportation community on issues directly touching their profession. To accomplish this task, several technical presentations will be held throughout the year. New York Metro Section already held their first successful technical presentation with 80 in attendance. Richard Schmalz, project manager from the New York State Department of Transportation, presented the Route 9A reconstruction project. The project is critical to the redevelopment of lower Manhattan and reconstruction of the World Trade Center in particular, and was well received by the membership. The second technical

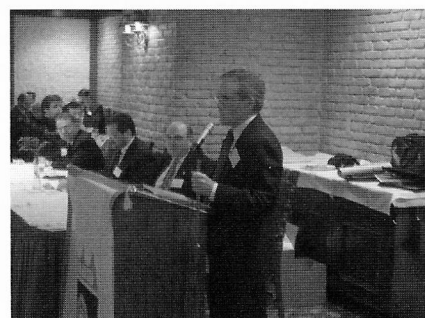
presentation was held on November 18, 2004, and featured Mrs. Brenda Levine, Chair of the New York City 2012 Olympic Community Relations Committee.

The ASHE New York Metro Section is generating a large amount of interest within Manhattan and the adjoining five boroughs of New York. There are strong indications that other sections will spout all over the New York metropolitan area that could include Long Island and Connecticut.

The success of creating this new section is attributed to Michael Hershey and a very committed Board. Michael was the glue that allowed the formation of the New York Metro Section. Michael is currently the president of the New York Metro Section. I believe that with a strong board in place and motivated members within the section, the ASHE New York Metro Section is set to grow by leaps and bounds. ■



*ASHE
New York Metro Section
Chartered September 28, 2004*



The American Society of Highway Engineers Announces New Service for Members

...an online Job Bank

The ASHE Board of Directors voted recently to partner with The Fulcrum International (www.thefulcrumintl.com), a new company that provides a mechanism for engineers, architects and contractors to connect with potential employers. "The board felt that it was important to offer this service to our membership, and The Fulcrum International provided a great way to accomplish this," said Drew Bitner, ASHE National Director and Website Chair. He added, "The website is easy to use, affordable, and we think it will be very effective in helping our members and the companies for whom they work."

ASHE members now have total access to the website services at free or reduced prices. Individuals can always post resumes and search for jobs at no charge. Resumes stay on the system for 90-day increments. After 90 days, the resume goes off the system but can be reloaded at any time...always at no cost. In this way, The Fulcrum International assures that resumes on the system always remain fresh.

Employers pay an annual fee to post jobs on the website. Jacklyn VanderPol, founder and president of The Fulcrum International, explains, "Employers can purchase a one-year spot on the site and then switch out any job openings with different positions as needed. They have total control of their information and it's very easy to load and update." The cost of one spot on the site for an entire year is only \$750 (average \$62.50 per month), and the cost goes down as a company purchases multiple spots. This is very cost effective compared to companies such as Monster.com, who charge for each individual job posting, averaging \$182.50 per month. "By using a major credit card, companies can even pay on a monthly basis, which helps them preserve their cash flow, particularly when several job openings develop."

Additionally, companies can place advertisements for fast-track project needs. Artwork can be provided by the company or contracted through The Fulcrum International's web design staff. Each ad provides a link to the advertising company's website.

The key to The Fulcrum International's success is in getting "hits" to the site. Several mechanisms support the site's "hit" rate:

- **Colleges & Universities** - The website is being marketed to more than 200 colleges, universities and trade schools with recognized programs for engineers, architects and contractors. Students are invited to post their resumes.

Employers can always get a copy of The Fulcrum International's database of Career Fair dates and locations.

- **Free Bi-Weekly E-Newsletter** - The Fulcrum International sends out a free bi-weekly e-newsletter to all subscribers. The newsletter contains a snapshot of all new posts in the past two weeks; articles of interest to Job Seekers, Employers and HR Professionals; and a link to the website.
- **Industry Organizations** - The Fulcrum International is a new company and we are beginning partnering discussions with many organizations in our industry, similar to ASHE. Fulcrum staff attends various industry conferences and promotes the organization through press releases, presentations and personal visits.
- **Direct Mail and Advertising** - The Fulcrum International maintains a working database of nearly 4,000 industry professionals (CEO's, HR Managers, College/University Deans, and Individuals) that is updated daily. The direct mail program is vital to the success of this program.

"Through these and other ongoing marketing activities we can consistently drive traffic to the website," said VanderPol. "Our number one goal is to provide a system that is affordable and effective, and we think we've come up with the best system available to do that. And with ASHE's support, we are taking a big step forward in our ability to be a valuable asset to our industry."

For more information you can check out the site at www.thefulcrumintl.com or contact Ms. VanderPol at 407/228-1747 or Jacklyn.vanderpol@thefulcrumintl.com. ■



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