

American Society of Highway Engineers

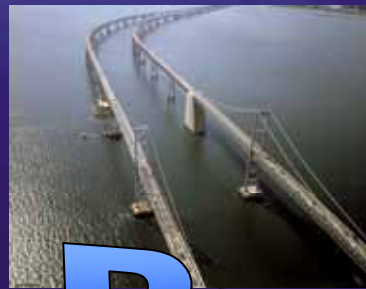


ASHE

Chesapeake Section



Newsletter Spring 2007



Bay Breeze



PREPARED BY: MARCO V. AVILA

ASHE 2006/2007

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MESSAGE FROM THE PRESIDENT

Spring is here! The Orioles should be at least interesting this year, and the Maryland highway industry continues to be strong. We have concluded our four technical/dinner meetings for the year, but several fun and exciting events are forthcoming. Each of our meetings was a great success! They provided information on: new trends, new design guidelines, innovative products, projects in planning, assessment of the impact BRAC will have on transportations, updates on Maryland's MEGA Projects and the outlook at the Maryland State Highway Administration. This newsletter provides an excellent documentary of these meetings, their content and other

construction projects our gold members have shared with the society.

The 2006 ASHE Chesapeake program consists of the four technical/dinner meetings held at Baltimore's Engineers Club and several social events. We had great participation from our members and the meetings were very informative. Our February 21st meeting was a **joint meeting with SAME** and focused on the Impact BRAC will have on transportations. Our final meeting on March 20th was a **joint meeting with ITE** and focused on Traffic and Planning. I truly appreciate the commitment of our Advocate Directors Roger Carriker and Tom Turner possessed. They worked with our advocates (Chris Brooks, Chris Fronheiser, Jason Ridgway, Jim Wynn and Brian Smith) and board to schedule quality presenters for each meeting. A lot of hard work and coordination was required to organize each meeting, which was lead by Tony Frascarella with support from Hospitality Committee members Angelica Bennett and Vince Pielli.

The **winter social** was a big success and attendance was higher than years past. Vince Pielli is now planning the details for the **spring social** (likely happy hour in Canton). If you missed last year's ASHE **Golf Outing** (a.k.a. Bernie Levin – "You Touch It... You Bought It" Classic), then get your calendar out and mark June 7th now! Our golf committee, lead by Tony Mawry and Eric Marabello, has been instrumental in managing the outing which is the society's largest contributor to the scholarship fund. If you are not a lucky golfer, but like another type of green, then maybe you can press your luck at this year's **ASHE National Convention in Atlantic City**. I am looking forward to a great technical convention with fun nightlife. The convention is sure to be well attended, so make your reservations early.

Leon Kriebel informed us of the new **Regional Technical Conference** at our last meeting, to be held on April 26 in Fredericksburg VA (see details in the newsletter). Our **website** contains information about upcoming and past events and is maintained by Nimish Desai. Nimish is also leading our **scholarship** committee. He successfully coordinated with Professor Reginald Amory of Morgan State University to identify this year's scholarship recipient, Mr. David Bombach.

Opportunity knocks! Tony Frascarella will be leading the society next year and there are opportunities for members to join a committee, serve as an advocate or a board member. I encourage each of you to promote the society to your co-workers and encourage them to join or become more active. Rob Hudson, our Secretary, distributes all society messages and is also committee chair for **membership**. The board has established long term goals including growth and multiple scholarship awards. Marco Avila is our **recruitment, sponsorship and newsletter** chair. Marco recently volunteered with the Ecuadent Foundation and traveled to Ecuador as a coordinator for a medical mission (article included). I have been active with ASHE for several years and can attest that the small amount of time our board/committee members commit to the society is nothing compared to the benefit we receive.

Our society offers a great opportunity for individuals to develop leadership skills, make contacts, publicize technological advances and facilitate the career growth of our members. Feel free to contact me at any time regarding the society events. I have enjoyed serving as your President and look forward to the exciting upcoming events!

MEMBERSHIP RENEWAL

If you know someone who would like to become a member of ASHE, please contact Rob Hudson

R_Hudson@wallacemontgomery.com
at (410) 265-9500.

The Chesapeake Section again extends the "Sponsor a Friend Program". Any member in good standing is eligible to receive \$25 for sponsoring three (3) new members and \$10 for each additional member per calendar year. Payments will be awarded to the sponsor's at our final meeting or, if not in attendance, mailed to them at the end of the program year. New member applications are accepted year round.

Also keep an eye out for the annual renewal notices in May. Dues will be increasing this year from \$25 to \$35 per member, as a result of an increase in what ASHE National assesses each local chapter per member. In the past, \$10 of your annual dues were in support of National. That assessment is being raised to \$20 per member this year, and is the first increase in the National assessment in nearly 25-years.

NEW RESERVATION POLICY

ESB will no longer take reservations for our members and guests. All meeting reservations should be sent to: ASHE-Chesapeake@yahoo.com (Alternately, fax to JMT: (410) 472-2200, Attn: Angelica Bennett, if you are without e-mail access).

Please include your name, total number in your party and whether you will attend tech sessions only, dinner only, or both. The cost is \$25 for members, \$30 for non-members, \$5 for tech session only - payable at the door (cash, check, ESB Chit). You do not need to be a member to make a reservation. The reservation deadline is 12 noon on the Friday before the meeting. Cancellations must be made by 12 noon on the Monday prior to the meeting. Reservations can only be held until 5:45 pm. Please make checks payable to: ASHE-Chesapeake Section

UPCOMING EVENTS

(2006-2007)

April 26, 2007

Regional Technical Conference

Fredericksburg VA

May 10, 2007—Spring Social Event:

Bay Café

May 20-24, 2007:

2007 ASHE National Conference

Atlantic City, NJ



June 7, 2007:

GOLF OUTING

Oakmont GC, Hampstead



SPONSORS

The three level meeting sponsorship consists of Gold, Silver and Bronze sponsors.

Gold Sponsors: (\$400) will be invited to provide a 15-minute presentation prior to the dinner guest speaker along with the opportunity to set up a display table during the social hour and recognition on a board with other Gold Sponsors.

Silver Sponsors: (\$200) will have the opportunity to set up a display table during the social hour and recommended on a board with other Silver Sponsors.

Bronze Sponsors: (\$100) will be recognized on a board with other Bronze Sponsors.

Newsletter: Your firm may also sponsor a newsletter, there is no limit for advertising your company in our newsletter. For \$75 you can submit your companies' business card that will be placed in the newsletter.

We will have four newsletters during the 2006/2007.

The Board of Directors of ASHE-Chesapeake Section cordially invites you to participate in our sponsorship program this year. Sponsorships will be accepted on a first-come first-serve basis after the release of the newsletter by contacting Marco Avila, Sponsor Director at 410-385-4168 or avila@pbworld.com

Thank you for your continued support of our Section.



MEET THE BOARD MEMBERS OF 2006/2007

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ADVOCATES



Chris Brooks



Chris Fronheiser



Brian Smith

Jason Ridgway

Jim Wynn

2007 MdQI Conference Continues to Break Records



The 14th Annual MdQI Conference was another success, setting new attendance record for both the Conference and the “Awards of Excellence” Dinner. The 2007 MdQI Conference was held on January 17th

Please look for information concerning the 2008 MdQI Conference. This conference will be a landmark event celebrating “Maryland’s Highway Centennial” as well as “15 years of MdQI.”

by: Ray Moravec,
MdQI Conference Committee Co-Chari, Wallace, Montgomery & Associates

and 18th at the Wyndham/Sheraton Hotel in Downtown Baltimore. Over 575 registered attendees for the conference and 700 registered for the awards dinner came out to learn and share information on several topics centered on the conference theme “Quality and Safety through Innovation.”

Doug Rose, MdQI Steering Committee Co-Chair and Neil Pedersen, SHA Administrator, kicked off the conference with a charge to participate and learn to help improve Maryland’s Highway Industry. Several workshops and presentations were held during both days of the conference to help identify and move toward solving the current challenges we face in our industry. A list of the topics presented is provided on the Maryland Quality Initiative website at www.MdQI.org.

This year’s conference for the first time included a special full session on “Finance for Transportation Projects” moderated by Hal Kassoff from PB Americas. This special session focused on Public Private Partnerships and national efforts around the country. Specific presentations included the Missouri 800 Bridges Program, a design build maintain procurement for 800 of Missouri’s secondary road bridges, the Indiana Toll Road as a long term lease agreement and other initiative across the county.

The conference concluded with the annual “Awards of Excellence” Dinner with Brian Holmes, Executive Director for the Maryland Highway Contractors Association as Master of Ceremonies. Neil Pedersen, SHA Administrator joined Doug Rose and Dan Chang, MdQI Steering Committee Co-Chairs, in presenting the award along with Congratulations to this year’s winners.

For more information on the 2007 MdQI conference or MdQI, please visit the website at www.MdQI.org. PowerPoint presentations from the last two conferences are available. In addition, information concerning the MdQI subcommittees and other MdQI sponsored activities are updated regularly for you information.



Designs I-70/MD 85

Urban Diamond Interchange in a Highly Karst Geotechnical Area Fredrick County, Maryland

Whitman, Requardt and Associates, LLP

The Maryland State Highway Administration is currently constructing the \$75 million highway improvement project on I-70 at the MD 355 interchange, extending east of MD 85 to west of MD 914 in Frederick County. WR&A provided complete design and construction related services for the project which was designed and built in four phases under separate contract documents and bids. The goal of this project is to replace the deficient interchange at MD 355, improve access to the City of Frederick, and increase mobility, safety, and traffic capacity to motorists driving through this congested corridor. To ensure successful completion of the project, key design features included geotechnical design to cost effectively construct structures in the karst topography.

Highway Improvements

The interstate highway design includes interstate roadway widening, a new interchange, and adjacent roadway improvements, in-



I-70 roadway that was awarded the 2004 Excellence in Concrete Award from the American Concrete Institute.

cluding major at-grade intersection improvements.

Whitman, Requardt and Associates, LLP (WR&A) is responsible for the design of Phase 2 and Phase 3, which includes: 0.92 miles of widening and resurfacing of I-70 from west of South Street to west of MD 355, a new urban diamond interchange at I-70 and MD 85, reconstruction of the MD 355/MD 85 and MD 355/Walser Drive intersections, 0.75 mile of realignment and widening of MD 355, 0.87 miles of relocating and reconstruction of MD 88 and a new 100 space Park and Ride lot. The I-70 ramps, constructed with Portland Cement Concrete pavement, won the 2004 Excellence in Concrete Award from American Concrete Institute.

Public Involvement

This project involved extensive public involvement support and coordination with adjacent developers and impacted property owners. As part of context sensitive design, urban streetscape and landscape designs were created to reinforce and integrate the characteristic of the existing location. Prior to initiating roadway improvements, special consideration was taken to minimize construction impacts on this highly congested area in the City of Frederick.

Maryland 85 Bridge and Foundation Design

WR&A design for the single urban point interchange included a butterfly-shape bridge and retaining walls. The bridge is comprised of 227'-5" wide abutments, and a single 114'-11" wide median pier. The site is underlain largely by karst limestone formations and lies within one of the worst karst areas in Maryland with numerous examples of solution depressions, sinkholes, soil raveling, inverted soil strength, slot and pinnacle rock surface, and cavities in rock.

The geotechnical team from WR&A collaborated with the Maryland State Highway Administration to design a bridge foundation using micropiles. Micropiles were selected instead of other deep foundation types because of the anticipated cost savings, improved constructability, and the unpredictable geologic conditions of karst areas have a minimal effect on micropile installation. Each micropile was installed a minimum of 8 feet into competent limestone bedrock and approximately 1000 micropiles were installed for the bridge foundations. Pile load tests were conducted to prove the capacity of the selected micropiles.



I-70/MD 85 bridge construction



Upper Photo: On site limestone cavity

Lower Photo: Installed micropiles for bridge stability in one of the worst karst areas in Maryland.

East Baltimore Development Infrastructure

KCI Technologies, Inc.

new buildings rise from the ground, the \$1 Billion New East Baltimore Community project moves closer to its goal of revitalizing an 80-acre section of Baltimore City. The project is transforming a distressed community adjacent to Johns Hopkins Hospital and Research Center into a mixed-use development featuring a Life Sciences and Technology Park, community amenities, new transportation options, and residential development, including town homes, garden condominiums, and senior, mid-rise, and workforce housing.

"The New East Baltimore Community is, first and foremost, a community building project," says Jack Shannon, President and CEO of East Baltimore Development Inc. (EBDI), the non-profit organization responsible for managing the project. Once completed, the site will include 1,500 new or renovated homes for mixed-income buyers and renters, and will create up to 6,000 new jobs for people ranging from high school graduates to those with advanced college degrees. "There will not be another project like this in most of our lifetimes," said the District 7 Congressman Rep. Elijah Cummings. "This is an historic moment in a wonderful place called East Baltimore." (*The JHU Gazette Online*, Greg Rienzi, April 22, 2002)

To develop the infrastructure associated with this groundbreaking project, EBDI turned to Hunt Valley-based consulting engineer KCI Technologies, Inc. KCI's experience within the city, and specifically with the Johns Hopkins Bayview Research Center and Flaghouse Courts Redevelopment, would prove invaluable during design. Infrastructure coordination and design work included reconstruction of 2.5 miles of city streets and alleys, including pocket parking, bus stop reconfiguration, streetscaping, and varying sidewalk widths; utility coordination and design for water, sanitary and storm drain relocations and upgrades; and undergrounding of all overhead utilities, including cable, power, and communications. All bid documents were prepared to meet City of Baltimore Department of Public Works and Department of Transportation requirements.

A Challenging Project

The New East Baltimore Community project presented several crucial design challenges to be met within an aggressive schedule, including establishing and coordinating phasing for horizontal and vertical utility corridors, and developing a roadway system with a sense of community.

Utilities caused complications throughout the site in terms of location and phasing. Designers faced crowded utility corridors along major thruways and large storm drain and water trunk lines that traverse the site. The project required major utility upgrades to transform this historically residential community of minimal power demand into a mixed-use area of high power demand. Because the project's lengthy development schedule spans more than eight years, utility construction phasing often contrasted with the locales and funding for other infrastructure improvements and buildings.

The team worked with the developer, city and utility companies to locate a proposed ductbank within a reconstructed alley to avoid an already congested corridor under Eager Street. Although seemingly simple, moving the ductbank required changes to the long-term construction schedule since the proposed alley was not scheduled for completion until well after the utility service needed to be available. Engineers designed tunnels carrying conduit under a shallow 89" brick storm drain and 99" sanitary sewer main, which required deep access shafts using jack and bore techniques.

"The fast track project included active participation by all utility owners, such as BGE, Verizon, Comcast and Baltimore City in the design process to develop solutions to resolve some challenging conflicts" said KCI Utility Coordinator Joseph Siemek, P.E.

The roadway system spanned 2.5 miles within the seven-square block area. The developer came to the design team with a concept that focused on establishing a sense of community within the area. The team refined the concept in terms of roadway width, parking, bus stop configurations and right-of-way to meet city requirements. "The sense of community is a major goal of the developer," according to KCI Project Manager Jerry Dougherty, P.E. "We addressed this issue by reducing street width, implementing traffic calming measures, and differentiating between residential and commercial areas. Measures like these help create a pedestrian-friendly environment that brings neighbors together in residential streets and common areas."



Distressed Neighborhood Before Construction Began

Key to Success

Working against what seemed like an impossible deadline, the project team completed in six months—a design job that should have taken a year and a half. "This was a schedule like we've never seen before on a project of this magnitude—with all the streets, alleys, utilities and so forth," said KCI Principal Charles A. Phillips, Jr., RPLS.

Stanford R. Britt, Vice President of Real Estate Development for EBDI, agreed: "We were very pleased that KCI was able to work with us on a very aggressive schedule. Everything was done in half the time it would normally take, and we appreciate them for recognizing that a lot of work had to be done under extremely challenging conditions."

East Baltimore Development Infrastructure Cont.’

KCI Technologies, Inc.



The 855 North Wolfe Street Building broke ground on April 17, 2006



Stairway and elevator towers rise as construction progresses on Park View at Ashland Terrace – an affordable senior housing apartment.



Planner’s Rendering of Residential Area

By cultivating successful partnerships, KCI was able to complete the design work on schedule. KCI’s team encompassed its four major local operating divisions—transportation, environmental, urban planning, and construction management—along with 40% minority participation through five local subconsultants: Avalon Consulting Services; E2CR; Mercado Consultants; Sabra, Wang & Associates, Inc.; and Williams Associates-Engineers, P.A. “It was phenomenal the way people worked together, with all the interaction of the groups at KCI and the coordination with our subconsultants,” said Phillips.

The key to meeting the project deadline was the establishment of effective file-sharing procedures early-on. “Our system allowed for document sharing, referencing, quality control and design markups,” said Dougherty. “Everyone was very proactive in trying to accommodate each other and anticipate problems so they could be solved in advance.”

The project also required a high level of cooperation by the city, the developer and EBDI—all of whom helped KCI tailor the project to meet the design criteria. Various city agencies agreed to multiple interim reviews in addition to the milestone 60-percent and 100-percent reviews, an accommodation that was critical for meeting the design schedule.



East Baltimore Development Neighborhood Plan

Hampstead Bypass

Whitney Bailey Cox & Magnani, LLC

Whitney Bailey Cox & Magnani, LLC (WBCM) is the Lead Design Consultant for Corman Construction Inc., the Design/Builder who was selected by the Maryland State Highway Administration to design and construct the Hampstead Bypass project which is a bypass for MD 30 around the Town of Hampstead in Carroll County, Maryland. The design team consists of WBCM as the Lead Designer, STV Incorporated as a major design subconsultant, Schnabel Engineering Associates, Inc. as the Geotechnical Engineer, Skelly & Loy, Inc. as the Environmental Consultant and Aria Environmental Inc. as the Industrial Hygienist. Corman's bid on the project was \$40,645,200.

MD 30 experiences severe congestion in the AM and PM peaks through the Town of Hampstead. It is estimated that approximately two-thirds of the traffic on existing MD 30 in Hampstead would divert to the new route enabling the Town of Hampstead to redevelop the downtown area in accordance with its "Main Street Revitalization Plan".

The new alignment begins just north of Wolf Hill Drive, south of Hampstead and diverges to the northwest of existing MD 30. The alignment runs on the western side of MD 30, diverges as much as 4,500 feet from existing MD 30, crosses MD 482 approximately midpoint of the bypass and rejoins existing MD 30 at Brodbeck Road, north of Hampstead. There are two grade separations at Houcksville Road and Shiloh Road and three at-grade intersections which are roundabouts. One is at the southern end of the project where the alignment diverges from existing MD 30 to provide a connection to existing MD 30 to the north and a connection into the Wolf Hill community due to Wolf Hill Drive being closed at MD 30 as part of the project; one at the intersection of MD 482 to provide access east and west on MD 482; and one at the northern terminus to provide a connection to existing MD 30 to the south.

There are six structures on the project, four bridges and two noise walls. This is the first SHA Design/Build project that included structures designed by the Design/Build team. Structure S-1 is a single span prestressed concrete girder bridge carrying Houcksville Road over the bypass. Structure S-2 is a single span steel girder bridge carrying the bypass over Shiloh Road. Structure S-3 is a single span prestressed concrete girder bridge over Indian Run. Structure S-4 is a single span concrete girder bridge over a tributary to the east branch of the Patapsco River. Structure S-5 is a noise wall on the east side of the bypass adjacent to the Singer Heights community and Structure S-6 is a noise wall on the west side of the bypass adjacent to the Westwood Community.

The project crosses downstream of a bog turtle habitat. The bog turtle is state and federally listed threatened or endangered species. As a result, in the area of the bog turtle habitat stormwater management ponds are design to contain a 10,000 gallon accidental hazardous spill during a 2-year rainfall event. There are total of 24 stormwater management facilities on the project and ten stream crossings. The project requires approximately 1,000,000 CY of excavation and fill. The bypass will be open to traffic in September, 2008.




I-95 ETL SECTION 200 - Maryland Transportation Authority

95 SECTION 200

SECTION 200

I-95, North of MD 43 to North of MD 22

American Society of Highway Engineers
Chesapeake Section
March 20, 2007



95 SECTION 200

Four Independent Projects from the I-95 Master Plan





95 SECTION 200

Section 200 Purpose and Need

Purpose: The purpose of the proposed action is to address capacity and safety needs on Section 200 and thereby improve access, mobility, and safety for local, regional, and inter-regional traffic, including passenger, freight, and transit vehicles.

Need: The proposed action is intended to address the following capacity and safety needs on Section 200.



95 SECTION 200

Alternates Being Considered For Section 200


- No-Build Alternate
- General Purpose Lane Alternate
- Express Toll Lane Alternate




95 SECTION 200

General Purpose Lane Alternate


Typical Roadway Section - New Forge Road to MD 24




Typical Roadway Section - MD 24 to MD 543



Typical Roadway Section - MD 543 to MD 22




Legend:
■ 12' to 14' Shoulder
■ General Purpose Lanes




95 SECTION 200

Express Toll Lanes Alternate


Typical Roadway Section - New Forge Road to MD 24




Typical Roadway Section - MD 24 to MD 543



Typical Roadway Section - MD 543 to MD 22



Legend:
■ Express Toll Lanes
■ General Purpose Lanes
■ 8' Shoulder
■ 12' to 14' Shoulder



95 SECTION 200

Section 200 Interchanges


- MD 152
- MD 24
- MD 543
- MD 22




95 SECTION 200

Anticipated Project Schedule

- Agency Scoping Meeting – November 15, 2005
- Public Workshop – June 22, 2006
- Final Technical Reports – Spring 2007
- Alternates Retained for Detailed Study – Spring 2007
- Public Hearing – Fall 2007
- Final Environmental Document – Spring 2008
- Final Decision Document – Fall 2008
- Design/Construction – To Be Determined



95 SECTION 200


Other Related Projects and Studies

Related Projects

- I-95 Express Toll Lanes
- I-95/MD 24/ MD 924 Interchange Improvements
- I-95 Travel Plazas

Related Studies

- Park & Ride Study
- Maintenance Facilities Study
- ETL Northern Terminus Study



95 SECTION 200

I-95 Express Toll Lanes Construction



I-95/I-895 (N) Split to MD 43




95 SECTION 200

I-95 Express Toll Lanes Construction

I-95/I-895(N) Split to North of MD 43

Contracts Underway	Completion
■ Rossville Boulevard Bridge	Spring 2007
■ Coventon Avenue and Joppa Road Bridges	Fall 2007
■ I-95/I-895 Northbound General Purpose Lanes	Fall 2008
■ Kenwood Avenue and Lillian Holt Bridges	2010
■ I-95/I-895 Interchange	2010


Future Contracts	Start Dates
■ White Marsh Run Wetland Mitigation	T.B.D.
■ I-95 Mainline between Rossville Boulevard and Campbell Boulevard	Spring 2007
■ I-95 Mainline between MD 43 and New Forge Road	Spring 2008
■ I-95/I-895 ETLs.	Spring 2008

OPEN TO TRAFFIC LATE 2011




95 SECTION 200

I-95/MD 24/MD 924 Improvements



- First Phase Toward Ultimate Section 200 Improvements
- Advertise for Bids in March 2007
- Notice to Proceed for Construction on June 30, 2007
- Construction Completed in Fall 2009



Safety Needs

- The accident rate for Section 200 is higher than similar state highways.
- Approximately 50 percent of the reported accidents were identified as congestion related.
- The number and severity of congestion-related accidents would likely increase if congestion is not addressed.




SECTION 200:

I-95, North of MD 43 to North of MD 22




BRAC & Transportation Presentation
An MDOT Perspective

BRAC and Transportation: An MDOT Perspective

March 13, 2007

-SMPS Chesapeake Chapter



BRAC Overview

The Base Realignment And Closure Program

- Congressionally authorized process used by the Department Of Defense (DOD) to reorganize its base structure to more efficiently and effectively support the Military
- Approximately 40,000 to 60,000 military and civilian jobs are expected over six to ten years

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BRAC Overview

Effect on Maryland's Transportation System

- Highway and Transit Access to and from:
 - Aberdeen Proving Ground
 - Andrews Air Force Base
 - Naval Medical Center at Bethesda
 - Ft. Detrick
 - Ft. Meade
- Highway and transit access to associated development

3

BRAC Challenges

- Translating projected BRAC jobs to traffic modeling assumptions
- Coordinating technical data
- Consideration of Enhanced Use Leases (EULs) – military-owned land leased to developers
- Developers not required to mitigate for EUL traffic impacts
- Other growth and secondary effects of growth

4

BRAC Overview

Types of Growth



5

BRAC STRATEGY

**MDOT Response...
All Hands On Deck**



Base Locations in Maryland

6

Maryland's Statewide Project Development Process

A Tried and True Process

- Used to develop all transportation projects
- Consolidated Transportation Program
- Coordination between State and Local Governments

10

State Transportation Budget process – Balancing BRAC with other Transportation Needs



11

Two-Prong Approach

\$\$\$\$\$ HIGH ←→ \$\$ LOW

- Major Construction Projects
- Long-Term Needs
- Four Plus Years to Complete
- Examples – MD 175, MD 24, I-95, MARC

- Minor Projects
- Short-Term Fix
- One to Three Years
- Examples – Geometric Improvements, turn lanes, streetscaping, commuter buses

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Funding of CTP vs. BRAC Related Projects

Where will the Money Come From?

- State and Federal Transportation funding
- DOD's Office of Economic Adjustment (OEA) Grants – planning purposes only
- DAR Program Grants for design and construction
- Partnerships with County and Local agencies
- Partnerships with developers
- Other innovative financing methods

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Three Points

- Maryland's Growth is BRAC and Non-BRAC
- Meeting BRAC needs is a multi-year effort
- MDOT's strategy will utilize HIGH and LOW projects

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Conclusion

- Continued coordination
 - State Partners
 - County Governments
 - Local Municipalities and Communities
 - MPO's
 - Military Communities
- Working cooperatively to find the answers
- Strong communication will remain key

19

Boebling Bridge Lackawaxen, PA

Roebling Bridge Lackawaxen, PA



Brandon Zerilla

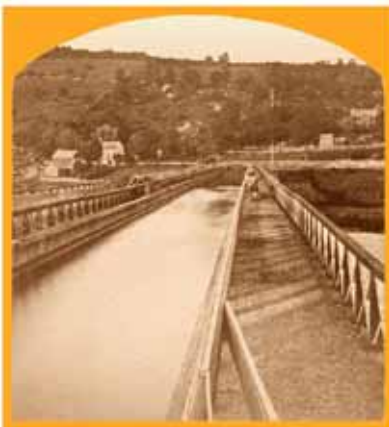


Roebling Facts

- Previously known as Delaware Aqueduct
- Designed and built under the supervision of John A. Roebling
 - Engineer of Brooklyn Bridge
- Began in 1847 as one of four aqueducts on the Delaware and Hudson Canal – is now the oldest wire suspension bridge in the United States
- Bridge is 527.8' Long x 11.5' wide (deck area)
- Designated a National Civil Engineering Landmark



Roebling Purchased



- Built to alleviate conflict between canal traffic and timber rafting
- Built in 1948 for approximately \$41,750
- Operated for 50 years until the closing of the canal in 1898

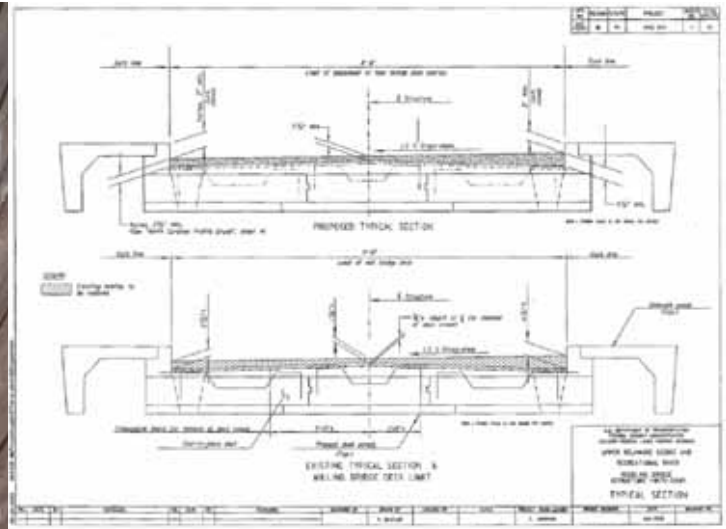
- Strategic location and value as road bridge prevented its demolition
- 1980 National Park Service purchased bridge to preserve



Bridge Restoration

- Almost all of the existing ironwork is still in place
 - Cables, saddles, suspenders
- The two suspension cable are made of wrought iron strands, spun on site in 1847
 - Each cable carries 2150 wires bunched into seven strands
 - Lab test in 1983, concluded the cable was still "viable"
- The cable strands are held in place by wrapping wire, which was replaced in 1985
- The last surviving canal-era timbers were removed in the 1930s
- In 1986, the superstructure was reconstructed using Roebling's original plans, drawings, and specs.





- Removal of the deck took 3 days to complete
- Covered timber side panels with plastic

WAGMAN
Real Construction Solutions • Since 1982

Wagman Gives Roebling Complete Makeover



Summary

- Poured 71.83 CY of LMC
- Average Depth was approximately 3.75"
- Average Compressive strength @ 28 days = 5500 psi
- Obtained 3000 psi in 4 days
 - Allowed us to open bridge early
- Opened structure to traffic 9 days after start of project

ASHE Scholarship Award

David Bombach



My name is David Bombach, and I am a student at Morgan State University. I appreciate the opportunity of receiving this scholarship award. My journey in the field of engineering began in the summer of 2005 while enrolling for summer courses at Morgan State and culminated in choosing the School of Engineering and the Civil Engineering program in the spring of 2006.

I don't fall into the typical age demographic of my fellow students. After graduating from high school with the class of 1994 I did not have the motivation to go to college and instead decided that it would be better to reinvent the wheel and so immediately went into the work force as a laborer in an asphalt maintenance company, eventually becoming a manager and a supervisor. I became heavily involved in the line striping part of the company working very odd hours and it took a toll on my health. It was close to this point that I felt I was approaching the ceiling in earnings and experience. Circumstances in late 2004 opened the opportunity for me to start looking at college as an option. Morgan State was my choice. It had a good reputation, was local and an excellent value.

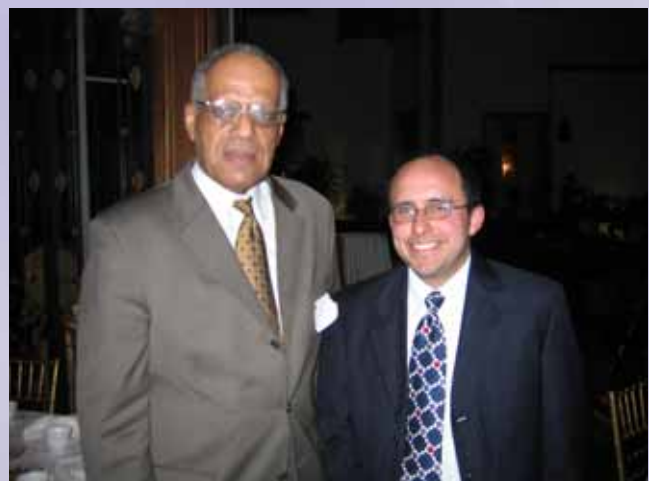
Currently I am a junior at Morgan with a 3.9 GPA. I am close to reaching another set of crossroads as I choose the specific discipline to concentrate on during my final three semesters. This summer I have chosen an internship with the State of Maryland in the SHA. In the up and coming academic year I will be taking the courses that deal with the transportation aspect of civil engineering. If events go as planned I will graduate in the spring of 2009 with the completion of my senior project.

As for future plans in my civil engineering career I have not progressed far enough into my studies to know the exact direction that I will take. However graduate studies are a definite possibility.

In general I see a need now and in the future to more thoroughly plan projects with an environmentally friendly and cooperative outlook; with a concentration on protecting and conserving natural resources and energy. Being a father and a family man I have a definite stake in our community and the environment that my children will grow up in. I would like to be involved in a "greener" future for America and to make that proverbial difference and improve living conditions as well as quality of life for our communities. My time and studies at Morgan will start me on the way to accomplish this with the skills and knowledge I receive in the civil engineering program, and to that end I am grateful for the scholarship award to further my education.



David Bombach Receiving the Scholarship Award from Todd Lang and Chris McGuire



David Bombach with Professor Reginald L. Amory

ASHE Meeting Pictures - March 20, 2007



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ASHE MEMBER VOLUNTEERING IN A MEDICAL MISSION IN ECUADOR



MARCO V. AVILA member of ASHE has volunteered with the Ecuadent Foundation and traveled to Esmeraldas—Ecuador as a translator and coordinator of this medical mission. Ecuadent is a non-profit organization built on the talent of dedicated volunteers. Volunteer healthcare professionals from all over the United States travel to impoverished villages of Ecuador and deliver free medical and dental care to children in need.

During each mission, Ecuadent volunteers provide desperately needed treatments from cleft lip and palate surgeries to difficult dental extractions. Housed and hosted by the Navy of Ecuador, Ecuadent volunteers are able to make full use of the Navy Hospital's modest facilities.

On February 8, 2007 Marco traveled to Esmeraldas Ecuador along with 59 other volunteers. The volunteers consisted of Surgens, Destist, Nurses, Dental Assistance, Hyginist, Translator. This trip Ecuadent treated close to 1000 patients. The Dental team was able to perform around 950 procedures. These procedures were: 435 Restorations, 179 Extractions, 19 Frenectomies and Adjustments, 219 Propphies, 85 Sealants, 13 Orthodontic Appliances.

The Medical Team performed a total of 79 surgeries: 34 of these surgeries were plastic surgeries cases, including cleft lips, cleft palates, burns, tumors of the face and body. And the other 45 surgeries consisted of inguinal and umbilical hernias. The medical team had four operating rooms running at the same time. Marco's roll was to make sure there was accurate communications between the doctors and the patients. Also it was very important to have all the kids calm before they went under anesthetics. Some kids were scared listening to a different language and Marco's job was to make sure the patients were calm and cooperative with the American Doctors.

Marco has been involved with the Ecuadent Foundation for 11 years and he is looking forward to go to the next trip in February 2008.



For More details about this mission please go to:

<http://marcovavila.blogspot.com> or you can contact Marco directly at 410-440-0473 or e-mail at marcovavila@gmail.com



BEFORE



AFTER





ASHE 2007 NATIONAL CONFERENCE

May 20-24, 2007

The Tropicana Hotel & Casino
Brighton and The Boardwalk
Atlantic City, NJ 08401



2007 NATIONAL CONFERENCE UPDATE

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For more information about the 2007 National Conference in Atlantic City, NJ please go to the following Website:

www.ashe2007.com



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PREPARED BY: MARCO V. AVILA