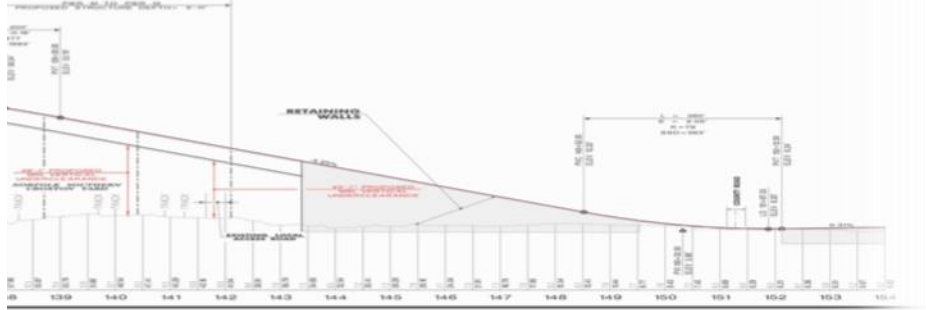




ASHE
Southern New Jersey

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Spring 2019



A Message from Matt Bencoter ASHE SNJ President 2019

My ASHE SNJ presidency is in the endgame. Had to get that in there. My kids and I are big fans of the Marvel Cinematic Universe and we cannot wait for April 26th. To go back and think how Marvel started with Iron Man in 2008 to the Avengers: Endgame and a total domestic box office to-date of over \$7 billion for MCU is amazing. The amount of success they have achieved with this franchise comes down to proper planning and having a group of dedicated people working that plan. Comparing MCU to the success of ASHE SNJ this past year is not as ridiculous as it sounds (Just go with it...). Over the past year, ASHE SNJ has increased its membership and attendance at events, provided a remarkable program, and expanded its reach at local colleges and universities. We set ambitious goals for ourselves at our planning session last summer, and I am happy to say that we have met our goals. The time and dedication of our board and committee members helped us reach our goals, so I would like to recognize the following: Mike Frabizzio, Heather Jones, Joe Macios, Lori Wade, Joe Danyo, Richard Grubb, Chris Gentz, Amy Sokalski, Chris Donahey, Carrie Strehle, Phil Thompson, Brent Bitsko, Joe Wittman, Katie Daly, Steve Forney, and George Zimmer. Thank you all for your efforts this year!

I wanted to make sure I had the opportunity to thank the crew, because this will be my last issue as ASHE SNJ president. Mike Frabizzio will be our president for the 2019-2020 year and will have his message in the Fall newsletter. I wish Mike all the best and look forward to helping out as Past President next year.

Please join us at the remaining events for our 2018-2019 season. May 15th will be our Spring Field Trip to the NJDOT's I-295/I-76/Route 42 Direct Connection project. The dinner presentation will be at Adelphia Restaurant in Deptford, NJ. The end of season Member Appreciation Event will be in June and held at

TopGolf in Mount Laurel, NJ. Just in time for you to fine tune your swing prior to our scholarship golf outing. The 2019 ASHE SNJ Scholarship Golf Outing is set for July 17th at Little Mill Country Club, Marlton, NJ. Registration is open on our website. Be the first to register your foursome and sponsor the event.

The 2019 ASHE National Conference is fast approaching. This year's conference is in Nashville, TN from May 8th to May 12th. I hope to see you there. If you have not done so, there is still time to register at 2019.conference.ashe.pro. Speaking of the National Conference, I am happy to announce that ASHE SNJ and ASHE NC-NJ will be forming a committee to submit a bid to host the 2023 ASHE National Conference. For ASHE SNJ, that effort will be led out of our newly formed Past Presidents' Committee led by Lori Wade. Lori has begun contacting ASHE SNJ past presidents to join a Committee to help preserve the history of ASHE SNJ and to pursue special projects such as this. If you are a past president and would like to join the committee, please contact Lori at LWade@mbakerintl.com.

Thank you for your involvement with ASHE SNJ. If you see me or one of the other board members, please stop and tell us how we are doing with ASHE SNJ.

Regards,

A handwritten signature in black ink, appearing to read 'Matt Bencoter', written over a white background.

Matthew Bencoter

ASHE SNJ President 2019

MEET THE SNJ OFFICERS

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PE



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DRONING ON... BUT WITH A PURPOSE

Spotlight on Taylor, Wiseman & Taylor

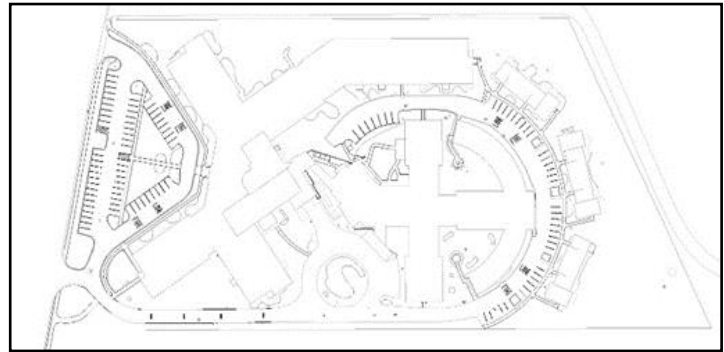
The use of drones in land surveying and engineering has taken off over the last several years and has become another tool in the toolbox. As with any tool, consideration must be given when selecting the right tool for a particular job, and there is a right time and place to use drones. Drones are generally classified into three categories – Consumer, Prosumer, and Commercial. This article focuses on the use of a prosumer level drone (costing \$1,000-\$2,000) to produce cost-effective mapping and survey-grade photogrammetry.

Taylor Wiseman & Taylor used drone imagery here to supplement conventional survey data for base mapping and the development of land use/land cover reports. The equipment used was a DJI Phantom 4 Pro with a 20-megapixel camera, paired with an iPad running Autopilot by Hangar and Airmap. Flight preparation, imagery acquisition, and review took approximately 90 minutes for the subject 10-acre site. Image processing ran about 14 hours, and vector conversion/extraction took three days.

The drone imagery was used to augment key data collected through conventional survey methods and “see” into areas such as atriums and courtyards, which had no line of sight from the exterior of the building. Use of the drone significantly reduced the field time that would have been needed to collect the same amount of data, and it provided a current and highly detailed image comparable to other sources such as Bing Maps or Google Earth.

Survey grade horizontal accuracy was required so that the imagery could be related to the state plane coordinate system and tied back to conventional data. The positional accuracy was accomplished using GPS qualified ground control points around the boundary of the site that were visible in multiple images during acquisition. Additional control for the photogrammetry QA/QC was derived from conventionally collected data. Photogrammetric raw data was acquired with nadir and oblique imagery from the drone, allowing for the creation of a highly detailed model. Figures 1 and 2 represent data which has been down-sampled 25 percent to control the file size, but still provide imagery far more detailed than other common, publicly available imagery sources like WMS, LIDAR, or SID files.

The photogrammetry was completed using Bentley System’s Context Capture. Bentley’s MicroStation and AutoDesk’s AutoCAD suites were used collaboratively in parallel to develop closed shapes and vector work. The extracted vector data, and its compiled orthomosaic image, were used to develop and report on impervious coverage and other topographic elements, and to quantify areas where pedestrian traffic was prohibited or compromised. In the future, the imagery may be used to evaluate and quantify paved/concrete areas in need of repair or replacement.



Vector Data



Orthomosaic View



Oblique View of 3D Model

has proven that survey grade elevations can be achieved with properly spaced ground control points.

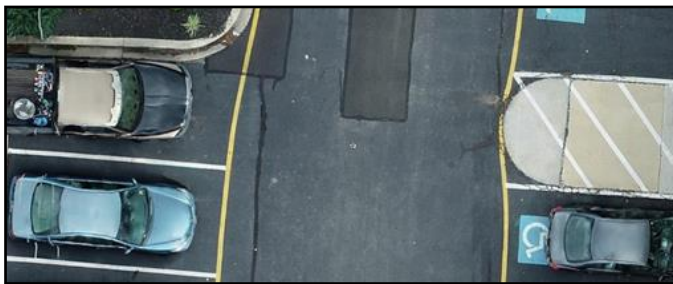
Drones have found their place in all aspects of business. Up-to-date, low cost, high resolution imagery and video have become invaluable resources to the AEC industry. In addition to the case study presented here, Taylor Wiseman & Taylor has used drones for construction progress photographs, traffic counts in areas not conducive to traditional methods, volumetric calculations, site recognizance, and roadway corridor studies.

Drone data, when acquired and used properly, provides engineers and surveyors with data that could only otherwise be obtained by traditional aerial photography. When combined with 3D laser scanning data, categorized and classified, point clouds may be rendered in full color and used to produce detailed and accurate models of any location. ■



Figure 1

3D Model from Orthophotography



Pavement Condition

Figure 2



Curb Detail



Monitoring Project Progress

Traffic Counts Using Drone Video



By Jeff Berleth & Patrick Kane
Taylor Wiseman & Taylor

Section Meetings

January Meeting

Ethics

On a brisk January evening at Maggiano's Christopher W. Boyle, J.D. conducted his presentation: Engineering Ethics vs. The Law. He described the obligations of engineers to maintain a moral, ethical code of conduct and spoke on the dangers of violating the code. There are at least 2,500 individual Codes of Ethics that exist for 1,500 different professions and organizations – doctors, architects, educators, health care providers, the media, engineers and lawyers, just to name a few. The purpose of the Code of Ethics, however, can be significantly different.



**Featured Speaker Chris Boyle J.D. with
ASHE SNJ President Matt Benscoter**

By contrasting the codes Mr. Biddle explained the importance of conduct as a professional and how your actions can affect the health, safety, and welfare of the public. Practical application of the Engineering Code of Ethics requires critical moral reasoning as well as effective organizational communication. He also touched on issues such as sustainability, acceptable risk, whistle-blowing, and globalized standards for engineering. ■

February Meeting

Route 37 Eastbound Mathis Bridge over the Barnegat Bay Rehabilitation and Improvements

In February the Section met at Maggiano's for a special presentation on the Rt.37 Eastbound Mathis Bridge over the Barnegat Bay Rehabilitation and Improvements. Speakers included: Rama Krishnagiri, P.E., Rishi Rishindran, P.E., Steve Esposito, P.E., and George Zimmer. The presenters touched on key aspects of the design and construction phases of the project including: optimal seasonal construction staging, precast Exodermic decking, electrical systems, bridge lighting, pier repairs, mechanical systems, the maintaining of evacuation routes and through traffic during construction periods, compressed construction scheduling, cast in place concrete for varying span configurations, and barrier gates and the testing of them.

Mathis Bridge is a mile long viaduct which supports three eastbound NJ Route 37 lanes over the Barnegat Bay. Route 37 links the mainland to beach communities in Seaside Heights and serves as a major evacuation route. The \$60 Million rehabilitation included one of NJ's largest precast Exodermic deck, elastomeric and pot bearings, improved traffic controls, movable bridge safety features, customized resistance barrier gates and warning gates, substructure repair, major electrical/mechanical rehabilitation. The eastern 21 piers suffered major scour damage in the aftermath of Superstorm Sandy in 2012, emergency scour retrofit measures were installed and the improvements are performing well. ■



Exodermic deck reconstruction

Section Meetings

March Meeting

US Route 1 Hard Shoulder Running

At the March meeting in Hamilton Manor the members got a real example of the importance of coordination and collaboration when delivering a project. During the joint outing with MASITE an impressive array of government officials and consultants explained how they changed patterns along Route 1, from Independence Way to Raymond Road one of the most congested commuter corridors in New Jersey. Speakers for the Route 1 Hard Shoulder Running Pilot Project included Peter A. Drinkwater, P.E., Wasif Mirza, Richard G. Jaffe, P.E., James R Hogan, P.E., and Lt. Frank Lombardo. The presentation detailed the use of shoulders as additional travel lanes to commuter vehicles during weekday peak hour traffic and its effectiveness in terms of cost, safety, and practicality. This two-mile stretch of Route 1 was restriped to accommodate lane widths in accordance with NJ DOT specifications, equipped with custom signage and closed-circuit TV cameras to regulate and monitor, and repaved throughout the shoulder to adequately support live traffic.

The New Jersey Department of Transportation (NJDOT) implemented this Pilot Project along a 2-mile section of Route 1 within South Brunswick Township to investigate the potential operational benefits of a congestion management strategy known as Hard Shoulder Running (HSR). HSR consists of the use of the shoulders as temporary travel lanes during weekday peak hours. The Pilot Project consisted of repaving shoulders where needed to provide adequate support, and the re-striping of Route 1 to narrow the existing lanes to provide an adequate HSR width. Signage

was installed alerting the traveling public to the temporary shoulder use condition. Closed-circuit TV cameras were installed for monitoring on a continual basis by NJDOT and South Brunswick officials. For the pilot project analysis, traffic volume data was obtained via NJDOT remote traffic microwave sensors (RTMS). Crash data was obtained from the South Brunswick Police Department (SBPD). Travel times through the corridor were measured using TRANSCOM data. The results of the analysis were incorporated into a Benefit-Cost Analysis (BCA) to determine if implementation of HSR along this section of Route 1 is a safe and cost-effective solution to continuing traffic congestion issues. ■



Route 37 Mathis Bridge over Barnegat Bay connecting the New Jersey mainland with beach communities such as Sea Isle City

ROUTE 1 & 9 Truck / NEW ROAD

Spotlighton HNTB

The New Jersey Department of Transportation (NJDOT) is proposing to construct a new two-lane roadway, with shoulders, on a new alignment from St. Paul's Avenue northward to Secaucus Road (County Route 678) in the City of Jersey City, Hudson County. The proposed roadway, currently designated as Route 1&9T/New Road, is one component of the Portway Phase I Corridor Program, which consists of a series of infrastructure improvement projects intended to strengthen freight movement to and from warehousing, storage areas and railroad facilities from Port Elizabeth/Port Newark to Secaucus Road by rail facilities, trucking and the regional surface transportation system. Existing congestion and safety concerns on nearby Route 1&9/Tonnele Avenue will be mitigated with the New Road construction while improving the efficient movement of freight through the area.

The proposed New Road will be two miles in length and divided into three separate construction contracts with a total construction value of \$250 million dollars. Contract 1 will be awarded by NJDOT in June 2019. HNTB Corporation, in coordination with its teaming partners AmerCom (Right of Way/Survey), Dresdner Robin (Hazardous Materials), NV5 (Environmental) and So-Deep (Subsurface Utility Engineering), has led a multi-disciplinary team from the initial Feasibility Assessment phase of work through Final Design. This new roadway connection includes four new bridges and four new traffic signals as the alignment traverses heavily industrialized Jersey City. Continuous stakeholder coordination with the numerous railroads, utility companies, NJDEP, United States Postal Service Distribution Center, Jersey City, Hudson County, NJ Sports & Exposition Authority (NJSEA), Jersey City Municipal Utilities Authority (JCMUA) and other industrial and business owners was the priority during design, in addition to the many engineering challenges. Highlights of this project include the following:

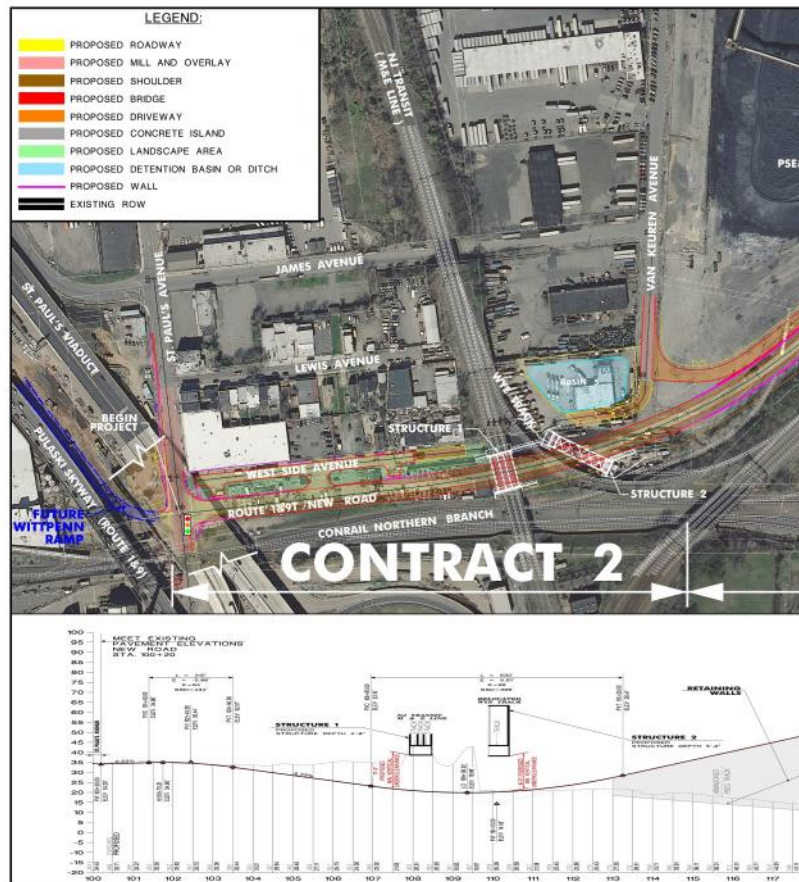
TRAFFIC: The corridor features four proposed traffic signals, which will operate as part of the NJSEA's adaptive signal network (MASSTR). All approaches and movements at the signalized intersections will operate at Level of Service (LOS) 'C' or better during both the AM and PM peak hours.

ROADWAY: The proposed alignment is designed as an express roadway to accommodate trucks with a minimum of access points. Wider shoulder widths (15 feet) are proposed to accommodate any future additional lanes. The minimum roadway elevation is 6.5 feet to accommodate the desired FEMA Advisory Base Flood Elevation (ABFE).

ENVIRONMENTAL: An EO-215 environmental document has been approved for this project and includes Technical Environmental Studies (TES) for hazardous materials, natural ecosystems, noise study, air quality and environmental justice/socioeconomic impacts. Additionally, several significant historic rail corridors have been identified, and the project is in compliance with Section 106 of the National Historic Preservation Act.

RAILROAD: Design coordination and obtaining the necessary and timely approvals from NJ Transit, Norfolk Southern and Conrail railroads was critical to the success of this project. Design constraints included avoiding sensitive areas within the Croxton Intermodal Terminal, minimizing track outages on the NJ Transit M&E and Main Line tracks, and reconstructing an at-grade railroad crossing at St. Paul's Avenue.

STRUCTURES: The project includes the replacement of two bridges carrying NJ Transit tracks over New Road. The bridge structure carrying NJ Transit's M&E Line will be replaced using Accelerated Bridge Construction (ABC) techniques (lateral slide-out/slide-in



on temporary bents) over two three-track weekend outages, each with a duration of 51 total hours. The bridge replacing the existing structure carrying NJ Transit's Wye track is a gusset-less through-truss that will be constructed offline to avoid impacts to existing rail operations. Another notable structure is a reverse curved bridge carrying New Road over NJ Transit's Main Line and Norfolk Southern's Croxton Yard. This steel deck girder bridge comprises 14 spans with a total length of 2,428 feet. Proposed sheet pile and prefabricated modular retaining walls totaling almost 13,000 linear feet will be used to support the proposed New Road embankment while minimizing environmental and ROW impacts.

GEOTECHNICAL: The design of the bridge foundations, retaining walls, and roadway embankments was complicated by low strength compressible organic silts and clays, peats, and glacial lake clays, which result in low lateral resistances, global stability concerns, and significant consolidation and secondary settlements. Proposed ground improvements include lightweight fills, pre-load surcharge with wick drains, and column supported embankment. Bridge foundation types included 12.75" OD micropiles at the two rail bridges, wingwalls and temporary jump span, 24" x 0.5" pipe piles filled with concrete for the 14-span bridge, and HP 12x84 piles at the two integral abutments for the single span bridge.

UTILITIES: The proposed utility relocations on this project include sanitary sewers (42-inch and 54-inch), underground electric (230 kV transmission), overhead electric and communications, water, gas and petroleum. Two existing JCMUA 72-inch water mains in County Road will be sliplined with a smaller diameter HOBAS centrifugally cast, fiberglass reinforced, polymer mortar (CCFRPM) pipe. These pipes are unique, strong and light with consistent dimensions, smooth surfaces, high stiffness, corrosion resistant and provide a design service life of more than 100 years.

RIGHT OF WAY: There are 45 total parcels including seven full and four partial acquisitions, as well as roadway, bridge, utility, drainage, slope, private, perpetual access, conveyance, construction and maintenance, temporary construction and temporary site mitigation easements.

ITS / ELECTRICAL: Two cameras will be installed and connect to the Statewide Traffic Management Center (STMC) Control Center System. Four Controlled Traffic Signal System (CTSS) controllers for the adaptive traffic signal network will also be installed, along with the required lighting at the signalized intersections. One Dynamic Message Sign (DMS) is to be installed along the existing Route 1&9T roadway near Sip Avenue. ■



Federal Street Gateway

Spotlight on Naik Consulting Group, P.C.

BRINGING COMPLETE STREETS TO EAST CAMDEN

Camden County, in cooperation with Cooper's Ferry Partnership (CFP), sponsored a Concept Development (CD) study for the intersections of Federal Street (CR 537)/Baird Boulevard (CR 608)/N 27th Street (CR 609), Westfield Avenue (CR 610)/ N 27th Street (CR 609), and Federal Street (CR 537)/ Westfield Avenue (CR 610)/N 26th Street in the City of Camden. **The Naik Consulting Group, P.C.** was engaged to undertake this study in response to the 2013 'My East Camden Neighborhood Plan' which identified desired infrastructure improvements that will support the on-going development and revitalization effort in East Camden. This triangular network of roads is a center of commercial activity in East Camden, however, the current configuration creates unsafe conditions for pedestrians and bicyclists and is confusing for motorists. Improving this gateway will help revitalize the downtown commercial corridor of East Camden.

This study is being performed using the NJDOT Local Aid Infrastructure Fund (LAIF).

The Goals and Objectives of the project were determined to be:

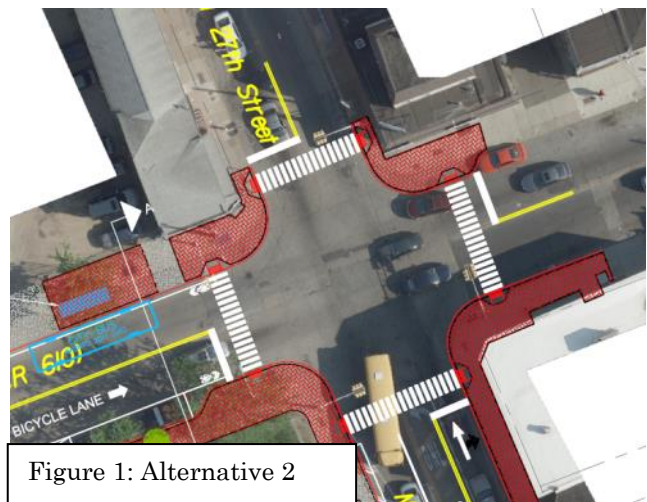
- Enhance motor vehicle, bicycle, and pedestrian mobility while reducing congestion within the project area;
- Upgrade the operation and functionality of the signalized intersections to satisfy ADA and MUTCD compliance;
- Upgrade/replace the underground infrastructure such as potable water, combined sewer system, municipal separate storm sewer system and sanitary sewer system. Particularly challenging is the irregular shape of the existing combined sewer system. Explore methods to re-line these sewers such as cured-in-place pipe (CIPP) lining;
- Introduce traffic calming, streetscape and pedestrian accessibility improvements, including designated bicycle lanes, enhanced crosswalks and landscaped medians to create an inviting gateway to the Federal Street business district;
- Improve the roadway intersection geometry for safety and pavement to a State of Good Repair. The existing pavement within the project limits is a patchwork of concrete with multiple saw cuts

and asphalt patches. Rehabilitation methods such as concrete rehabilitation with asphalt overlay, ultra-thin overlays, hot mix asphalt overlays, or stone matrix asphalt overlays are being considered for implementation;

And finally, the development of a preferred alternative that is community-driven and stakeholder-supported.

One of the first tasks initiated during this CD was the development and implementation of a viable Public Involvement Action Plan (PIAP). CFP assisted with implementation of the PIAP by leading the Public Outreach efforts. Two Stakeholder Meetings and a Public Information Center was held as part of this study. Stakeholders ranged from individual residents, neighborhood improvement associations, local business leaders, NJ Transit officials, as well as police, fire, and Camden DPW.

As a result of this outreach, four alternatives were developed. **Alternative 1** was a No-Build option.



Alternative 2 is a modified version of the existing intersection geometry that introduces features such as curb bump outs to shorten pedestrian cross walks, calm traffic, and ADA compliant bus stops for NJ Transit within the project area. In addition, it proposes conversion of Federal Street and Westfield Avenue into 15' shared vehicle and bicycle lanes with 8' parking lanes.

Alternative 3 introduced an Urban Compact Roundabout to the improvements in an effort to simplify the confusing intersection of Westfield Avenue and Federal Street and eliminate the existing traffic signal.

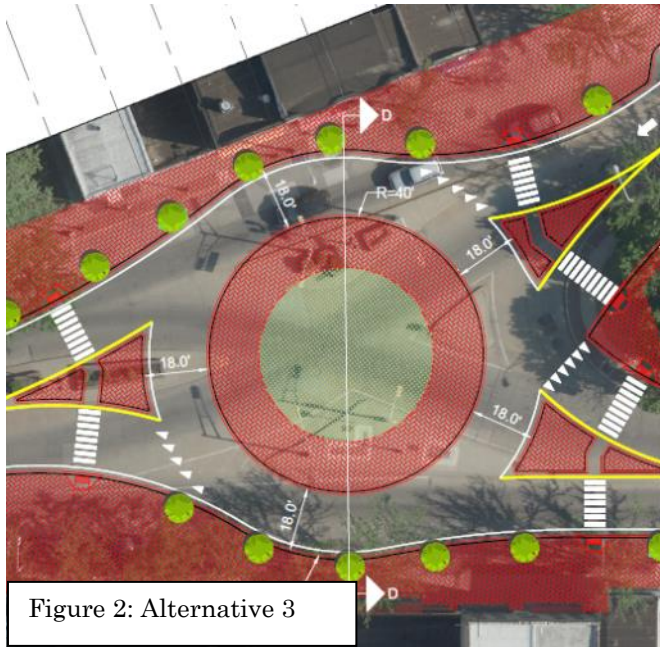


Figure 2: Alternative 3

Alternative 4 proposed improvements including the previously mentioned pedestrian, bicycle, and traffic calming measures included in Alternatives 1 & 2, while converting Westfield Avenue and Federal Street to one-way roadways.

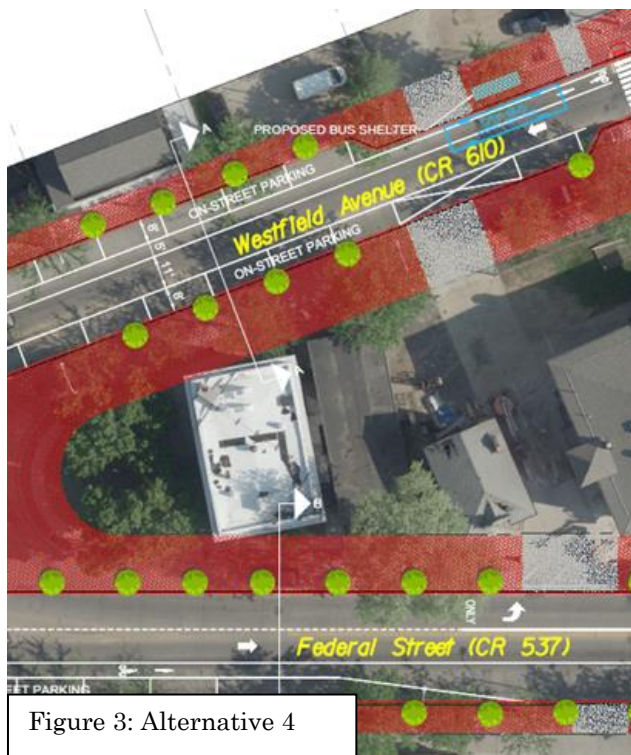


Figure 3: Alternative 4

The project team is currently evaluating the alternatives to determine the Preliminary Preferred Alternative (PPA).

SYNCHRO and Rodel were used for traffic modeling, with analyses being run on the build year (2020) and the design year (2040) for all alternatives. Alternatives 2, 3, & 4 offered significant improvements to the Level of Service over the No-Build alternative.

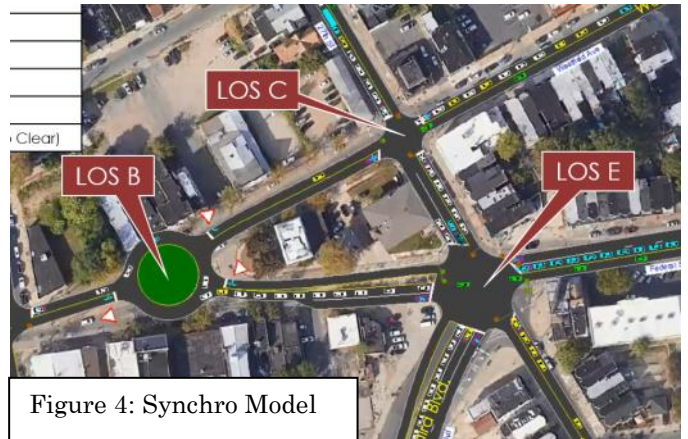


Figure 4: Synchro Model

Alternatives 2, 3 and 4 received relatively equal amounts of support from Stakeholders and general public which has made it challenging to select a PPA. An additional Stakeholder Meeting was conducted with the fire department to address concerns of maneuverability in Alternative 3. The project team utilized AutoTurn to analyze the movement of the City of Camden's fire apparatus through the roundabout.

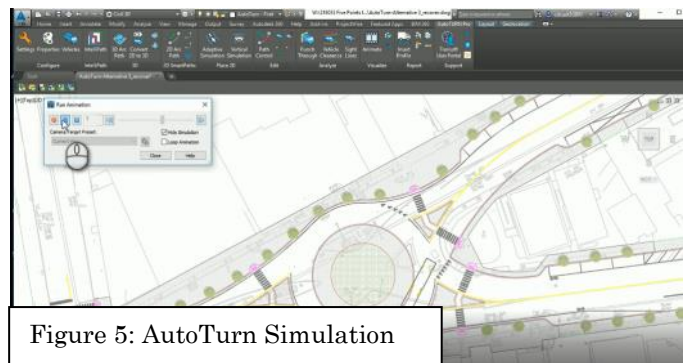


Figure 5: AutoTurn Simulation

During the week of April 1st, 2019 the project team is planning to lay out the exact roundabout geometry in an empty parking lot so that the Camden Fire Department can run their vehicles through to determine if there are significant maneuverability issues. This should be the last step before finalizing the PPA and submitting the study to the NJDOT for review. Upon review by the NJDOT, it will be determined if the project should progress to Preliminary Engineering and Final Design. ■

Section News & Reminders

2019 Scholarships

This year there were eleven applications for a limited number of available scholarships, and it looks like the competition is going to be tough. Our judges are busy evaluating the candidates to determine the awards. We expect that the applicants will be notified in late April and the Awards will be during the May meeting. Keep an eye on the website for the latest. ■

Scholarship Golf Outing

This year the Golf Outing will be at a new venue, the award winning Little Mill County Club, one of the most pristine private courses in southern New Jersey. The golf outing is one of the most anticipated ASHE annual events, and will raise funds to benefit the scholarship program. Every year it seems we get a bigger and better turnout and this year is poised to be no different. A fun round of 18 holes on the beautiful course will be followed by lunch, a door prize giveaway, a 50/50, and a raffle with so many good prizes you'll be sure to win! We are bringing out more prizes, contests and challenges than ever before, where the day will be packed with chances to win prizes such as tickets to a Philadelphia Flyers game, a new 50' Samsung TV, and even a shot at winning \$15,000 in cash



To make the outing a success for our scholarship winners we need your help in pushing the envelope in raising funds for our tournament. We are currently seeking hole sponsorships, prize donors, beverage sponsors and so much more. If

you would like to contribute to this year's fund raising efforts please feel free to reach out to Steve Forney at Stephen.forney@mbakerintl.com and we will be happy to work with you in any way we can to get you involved. With the support and donations from last year's golfers and sponsors, we were able to raise \$9,500 toward our annual scholarship fund, but this year we are hoping to bring in over \$10,000. ■

Education Committee

The Education Committee is seeking speakers for the Rowan University and Mercer County Community College Student Chapter Meetings. Presentations should be 15-20 minutes long and topics can include current or past projects, new technology, innovative approach to a project, or even advice on entering into the job market.



ASHE Rowan University Student Chapter meets every other Friday 2-3PM at their Glassboro campus.

ASHE Mercer County Community College Student Chapter meets every other Thursday 12-1PM at the West Windsor campus.

Contact Rich Grubb rgubb@rgaincorpoarted.com for more information. We look forward to your assistance helping students better understand our profession and prepare for the future. We believe that you will find your participation with the student chapters truly rewarding. ■

ASHE SNJ Committee & Board Positions

Its never too early to start planning for next year. Reach out to Vice President Mike Frabizzio, mfrabizzio@aidpe.com to learn about available board and committee positions for next year. ■

Section News & Reminders

Scanner Magazine

Congratulations to Robert Wise of Richard Grubb & Associates for writing the article about the Bayonne Bridge which was just recently published in the national Scanner Magazine. This award winning project successfully executed a reconstruction scheme that upgraded the bridge travel lanes and approaches while raising the deck by 64 feet to allow new “Panamax” vessels access to the ports of Elizabeth

May Field Trip

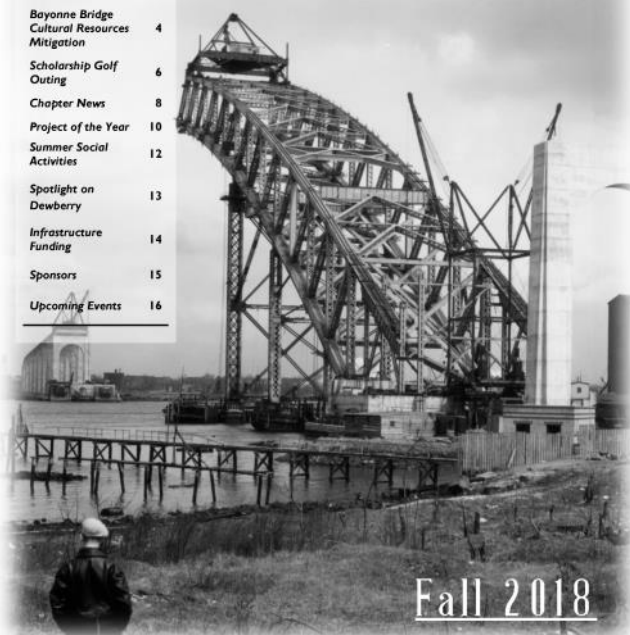
I-295/I-76/Route 42

Direct Connection Project

In May we will meet at Adelphia’s in Deptford, NJ to participate in a field trip of the largest ongoing transportation project in southern New Jersey. Construction began in March 2013 and is expected to continue until 2023. The project was split into five construction contracts and includes 13 bridges and 22 retaining walls. The new interchange will reduce traffic congestion and improve safety through the I-295, I-76 and Route 42 interchange.

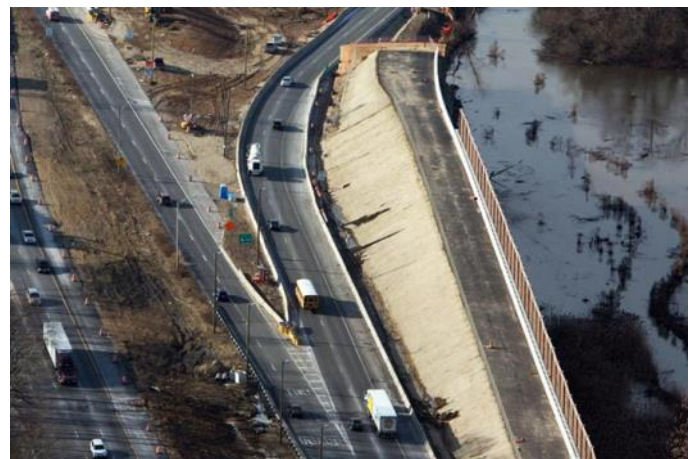
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Fall 2018

and Newark. The design approach preserved the overall bridge appearance, and many of the original elements of the historic structure while accommodating modern vehicular and marine traffic. The design required intense collaboration between the structural design team, the cultural resource consultants and the US Coast Guard, the lead federal agency for Section 106 compliance. The article is an interesting look at the cultural resources work necessary for the reconstruction and modernization of an iconic bridge. If this sounds familiar it might be because you read the article in the ASHE SNJ Fall Newsletter. ■



It should be a great outing where we will have the opportunity to see how the pieces are coming together. ■

Summer Membership Drive

While we are all looking forward to the Scholarship Golf Outing and the other events of the 2018 summer social season, remember that it will soon be time to renew for the 2019/2020 season. In May keep an eye out for the membership renewal email. As a token of our appreciation, ASHE SNJ will send a gift to members that renew by the end of August. ■



Essay: Why Community College is more than you think

Community college... What does it mean? Is there a stigma and is it warranted? In this article, I will be explaining why community college is a smart and financially favorable choice for your children. There are many benefits to attending a community college. Some of those pros include:

1. The cost of tuition. The most obvious reason that students attend community college is for the financial advantage and vast amount of scholarships that are available at that level. Take into consideration that most parents do not want their child to start off their adult life with \$200k in student debt.
2. The flexible schedule. This will give your child firsthand experience in decision making when it comes to prioritizing their schedule. Community college also provides an opportunity for your child to work while continuing their education resulting in gaining 'real world' experience and learning to balance work and school.
3. Smaller classes with qualified professors. Most professors at community colleges are well known and also teach at other universities and colleges.
4. Transitional credits. In New Jersey, thanks to legislation by past governor Chris Christie, every community college credit will be accepted by all state universities and colleges in New Jersey.

So, when it's time to help your child choose the next step don't forget about community colleges and their benefit. ■

Why Community Colleges Are More Than What You'd Expect

What makes community colleges such a valuable opportunity? What separates them from four-year colleges? The biggest difference is tuition as community college is far less expensive than a four-year school. Community college students will be in less debt than if they had attended a four-year school and can transition much easier into their lives and careers after schooling. If that isn't convenient enough, community colleges offer credit transfer services which allow students to transfer their credits to top quality four-year colleges within their state including schools like NJIT,

Fairleigh and Dickinson, etc. This means they can still complete their bachelors for far cheaper prices after graduating their two-year school. A common worry when contemplating community college education is the quality of professors teaching there verses a four-year school. This is nothing to worry about because most professors working in community colleges also teach at four-year colleges. Also, if a student is having difficulty community colleges offer tutoring services from retired professors and professionals just like four-year schools.

An interesting fact: community colleges have more students who work full time than four-year students overall. As explained in a research brief from the Educational Organization College Board, policy research scientist Jennifer Ma and nonresident Sandy Baum wrote "Trends in Community Colleges: Enrollment, Prices, Student Debt, and Completion..." "...in 2011-2012, more than two-thirds of community colleges students worked: one-third worked full time; compared to about one out of five students in the public and private nonprofit four year sectors...". Students who worked full time while taking classes show a strong drive to succeed and improve themselves. Not only does this example show how hardworking community college students are, but also that many of these students developed crucial skills such as time management and communication skills. Some of these students develop backgrounds in careers such as surveying, welding, and management, which are valuable in engineering and construction. Students who come from such skilled careers can pursue specialized fields while completing their bachelors; becoming even more valuable to their potential employers. An internship may also give these motivated students incentive to transfer to a four-year university and succeed in both their education and their career.

Overall, community colleges have the resources their students need to succeed and are less expensive than going straight to a four-year program. Many community college students are hardworking, motivated, and are willing to improve upon their current positions in life and become successful. These traits make community colleges and its students stand out from other colleges and by giving them a chance your child too can prove how valuable these schools are. ■

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