SAFETY ADVISORY AND TRANSPORTATION COMMITTEE

The Safety Advisory and Transportation Committee Meeting was held on September 25, 2013, at 5:00 p.m. with Councilman Perza presiding in the absence of Chairman Hutchison. Members present were Mr. Davis and Mr. Keller. Mr. Dixon was absent. Mayor Carey (departed at 5:32 p.m.) was also present.

AGENDA ADDITIONS/DELETIONS

Mr. Keller moved for approval of the agenda, seconded by Mr. Davis and unanimously carried.

Dover High School Construction Update

Mrs. Ann Marie Townshend, Director of Planning and Community Development, reminded members that monthly coordination meetings with the Capital School District (the District) were continuing and had been very successful, with the next meeting scheduled for September 26, 2013. The meetings had been attended by representatives of the District, City and State agencies, and recently included the engineer from the Leander Lakes subdivision project. Mrs. Townshend reviewed a map depicting the layout of the New Dover High School Project ***(Attachment #1)***.

Mrs. Townshend reminded members that concerns had been relayed by the District regarding the availability of funds and the District had indicated a possible need to re-evaluate whether they could construct the east entrance, as previously planned. She stated that last week she had attended a meeting of the Capital School Board where an update on school construction was provided by EDiS, the building contractor, and ABHA, the architect. Mrs. Townshend stated that the site plan had been approved, a request for a parking reduction had been submitted, and a public hearing had been scheduled for the Planning Commission on October 21, 2013. She indicated that the plan was to reserve areas for parking in the future rather than build the parking lots at this time. In addition, EDIS and ABHA would be providing an overview of the project similar to that provided to the Capital School Board last week. She noted that there were several issues that the District wished to present for possible revisions that would help to reduce costs, such as the number of tennis courts, seating capacity in the stadium, etc.

Mrs. Townshend stated that the issue of greatest interest to the City was the east entrance to the school and she assured members that the District was aware of the City's concerns regarding this matter. Should the District wish to eliminate the east entrance, she stated that they would be required to submit the request to the Planning Commission for a public hearing. At this time, there was no indication that the District would not move forward with construction of the east entrance. She assured members that staff would meet with the Delaware Department of Transportation (DelDOT) to discuss the functionality of the intersection and reminded members that the City had discussed the possibility of revisiting the entrance design to be reduced to "right in/right out."

Mrs. Townshend stated that all other construction on site was proceeding as planned. She stated that she would advise members of the action taken by the Planning Commission when they consider the parking request during their meeting in October.

Mr. Davis noted that the east entrance was planned to accommodate bus traffic and that the west entrance was planned to accommodate vehicular traffic. According to a recent newspaper article, he stated that the road on the west entrance was augmented as a necessity by DelDOT, which is why the monies were not available for the east entrance. Responding, Mrs. Townshend stated that Leander Lakes submitted the apartment complex site plan before the new high school plan was submitted; however, due to the economy, construction by Leander Lakes slowed. To her recollection, the roadway was originally planned to be a 24' - 26' wide City street. With the addition of the school project, there was discussion as to how the road would be redesigned, and the initial conceptual design of the road by Leander Lakes did not meet the needs to serve both properties. As a result, the design of the roadway was widened in order to serve both properties. She noted that there were additional concerns regarding the connection to Tribbitt Street and connecting through Cannon Mill. As a result, it was decided to bring the connector road all the way through to Hazlettville Road, and, at that time, it was determined that the road would serve as a regional connector road. As such, it then became a DelDOT road which would be built to DelDOT standards. She was not aware of the cost difference between construction as a DelDOT road versus a City road.

Responding to Mr. Davis, Mrs. Townshend explained that after the connector road was determined to be a DelDOT road, the District entered into an agreement which specified that the District would be responsible for designing and building the entrance and the road down to the school's points of access, and Leander Lakes would pay for the additional section of the road. According to the agreement, construction must be complete by May 2014. The design, as prepared by Landmark Engineering, the engineers for Leander Lakes, had been submitted to DelDOT, who had submitted comments. The intent was to have the design finalized by the end of the year in order for construction to begin shortly after the first of the year. In addition, Mrs. Townshend noted that DelDOT was responsible for the design and installation of the HAWK signal and was paying for approximately $700,000 in sidewalk improvements on the north side of Route 8. Therefore, she assured members that DelDOT had a share of the responsibilities for the completion of this project.

Ms. Karen Nickerson, 24 Stoney Drive, Heatherfield, requested additional information regarding the road that would travel through Cannon Mills. She relayed concerns that such a road would provide additional traffic on Route 8. Responding, Mrs. Townshend explained that the intent was for the road to improve traffic conditions. She stated that staff's concern, and the reason that the interconnection was urged, was that there were over 900 units in both Cannon Mill and Village of Westover, with several of these units containing children who would attend the new school. She explained that it was assumed that some of these children would drive to school rather than walk, and without the interconnection it would be necessary for them to utilize Hazlettville Road, either Artis Drive or Mifflin Road, and Route 8 in order to access the school. She stated that since the road would not be a direct route through the subdivision, it was not anticipated that it would be utilized as a "pass through," like Mifflin Road and Artis Drive.

Ms. Nickerson explained her concern regarding the current difficulty in leaving the subdivision due to traffic. Residents were previously advised that the traffic signal at Mifflin Road would help; however, she stated that this had not provided relief. Responding, Mrs. Townshend noted that an additional traffic signal would be installed and, with signal timing, she felt that those concerns would be addressed.

In response to Mr. Keller regarding whether current traffic information was analyzed, it was Mrs. Townshend's recollection that DelDOT utilized information from the 2008 Route 8 Study in reviewing the traffic plan. Mr. Mark Luszcz, representative of DelDOT, stated that a report was received in 2011 from the District's engineer which included a justification for the proposed traffic signal at the west entrance and that this report would have contained updated traffic counts.

Mr. Les Blakeman, 209 Falmouth Way, Cranberry Run, questioned if the roadway extension would eventually travel to Hazlettville Road. Responding, Mrs. Townshend stated that although this continued to be a part of the plan, it had not been "pushed out" by DelDOT and there was no funding associated with this project. In addition, she stated that the property owner did not necessarily want to sell the right-of-way; therefore, there were several obstacles that would need to be overcome before the extension could come to fruition.

Mr. Ray Paylor, 10 Yarmouth Way, Cranberry Run, stated that his property was located directly across from the new Dover High School. He questioned if there was an estimated date for the construction of the apartment complex by Leander Lakes. Responding, Mrs. Townshend stated that the City recently received comments from the Kent Conservation District relating to the stormwater review for the project. At the current pace, she estimated that construction would begin in a year.

No further action was taken.

Presentation on the High-Intensity Activated crossWalK (HAWK) Signal *(Delaware Department of Transportation)*

Mr. Mark Luszcz, Chief Traffic Engineer for the Delaware Department of Transportation (DelDOT), and Mr. Steve Brown, Project Development - Road Design for DelDOT, introduced themselves and reviewed a Presentation - Route 8 & Heatherfield Way: Pedestrian Hybrid Beacon ***(Attachment #2)***. Mr. Luszcz explained that the traffic control device known as the HAWK, (High-intensity Activated crossWalK) is officially called a Pedestrian Hybrid Beacon. He indicated that the device was not a full traffic signal nor a beacon, which would be a constant flashing yellow light or a red signal ahead when flashing, but served as a hybrid of these two (2) devices.

Mr. Luszcz indicated that the HAWK is used to safely control pedestrian and vehicular traffic in locations where there is a moderate to high volume of both pedestrians and vehicles in instances where a full traffic signal is not justified. He stated that many years of research had been performed to determine when a full operating traffic signal should be utilized. He explained that when a full traffic signal is utilized but not justified (based on certain criteria), negative results occur, such as accidents, unacceptable and unnecessary delays, etc. He stated that, according to the analyses of the Capital School District (the District) and DelDOT, based on the traffic and expected pedestrian volume criteria, a full traffic signal was not warranted at the east entrance of the new Dover High School (the school) at this time; however, a full traffic signal was warranted at the west entrance. He noted that the criteria could change in the future.

Mr. Luszcz explained that the HAWK signal would be installed at the intersection of Route 8 and Heatherfield Way, near the proposed east entrance of the school, which was scheduled to open in the Fall of 2014. He explained that a HAWK signal would remain normally dark for vehicular traffic

and is activated when a pedestrian presses the activation button, much like at a crosswalk at a regular traffic signal. He stated that, once activated, the HAWK signal goes through stages to stop traffic long enough for the pedestrian to safely cross the street. Once the pedestrian crosses, traffic resumes as normal and the HAWK signal resets itself for future activation. Members reviewed a video depicting proper and improper use of a HAWK signal located in Newark.

Referring to the video, Mr. Brett Martine, Traffic Engineer with DelDOT, suggested the possibility of placing an article in a local newspaper and including some type of narrative to the presentation to provide an explanation on proper utilization of the HAWK signal. Mr. Luszcz offered to take whatever action necessary to inform the public, indicating that DelDOT took extensive measures with public outreach in Newark when the signal was installed; however, there was no cooperation with the media, explaining that a press conference was held and no one attended, nor was there newspaper coverage of any kind regarding the information.

Mr. Jeff Brown of the *Dover Post* offered to include a link on the newspaper's website directing the public to DelDOT to obtain information on the HAWK signal.

In response to Mr. Perza regarding whether any special legislation should be enacted in relation to the HAWK signal since there was no other such device being utilized in Delaware with the exception of Newark, Mr. Luszcz suggested that this be discussed with the Dover Police Department. If the City were to request some type of legislation to address violations in connection with the device, DelDOT could offer assistance. In addition, Mrs. Townshend suggested that the District become involved and introduce students to the device and how it functions.

Ms. Ann Alexander, 15 Stoney Drive, Heatherfield, suggested the possibility of using a camera at the intersection. Responding, Mr. Luszcz stated that cameras installed for red light enforcement are placed in locations based on a very regimented, State-wide, data-driven prioritization system (based on accidents, etc.). He stated that DelDOT utilizes traffic monitoring cameras, which are not recorded, and that surveillance cameras were not installed by DelDOT. Mrs. Townshend confirmed that the City had installed surveillance cameras in the downtown area.

Responding to Mr. Les Blakeman, 209 Falmouth Way, Cranberry Run, regarding concerns of out-of-town visitors, particularly during NASCAR weekend, Mr. Luszcz assured members that message boards, as well as permanent signage, would be erected to notify drivers of the new signal. Consideration would be given to erecting message boards specifically for race weekend.

In response to Mr. Davis, Mr. Luszcz advised members that the portion of Route 8 adjacent to the school was not considered a "school zone;" therefore, no signage would be erected indicating such, nor would there be a reduction in speed limit. He stated that there was no evidence that drivers react to speed limit signs, explaining that traffic does not change speed based on the speed limit but rather the surrounding environment (main arterial road, rural area, vacant land, etc.). Should the area develop and traffic increase, this would adjust the speed of traffic in the area. Mr. Davis suggested that this matter be further considered by the Committee in the future, noting his opinion that this portion of Route 8 should be a designated school zone.

Mr. Perza referred to other areas in the City where crossing guards control the traffic signal, allowing pedestrians to cross roadways, and questioned if the HAWK signal could be used in a similar manner. Responding, Mr. Luszcz stated opposition, explaining that DelDOT was making a concerted effort in New Castle County to eliminate the use of crossing guards for controlling traffic signals, with plans for elimination throughout the State. Noting that crossing guards "do a great job," he indicated that they are not professionally trained and that they actually cause more safety and operational problems than they solve.

Responding to Mr. Perza, Mr. Luszcz stated that the HAWK signal had been designed so that it could potentially be converted to a full traffic signal if it met that justification, based on a future traffic study. He explained that the current actions being taken were based on projected pedestrian and vehicular traffic numbers. Mr. Luszcz indicated that it would be the State's financial responsibility to make such changes in the future. He felt confident that the school, City, and State, would be monitoring the intersections and if there were significant issues, DelDOT staff would conduct an updated traffic study.

Ms. Karen Nickerson, 24 Stoney Drive, Heatherfield, relayed concern that the children living in Cranberry Run who were attending school would not walk down to Heatherfield East to cross over to the school. Responding, Mr. Luszcz stated that Route 8 should not be crossed without the assistance of a traffic signal; however, DelDOT had no control over the actions individuals would take in this regard.

At the request of Mrs. Townshend, Mr. Bruce Ashby, Transportation Supervisor for the District, stated that it was anticipated that the students residing in Cranberry Run, Heatherfield, and off Route 8 down to the traffic signal at Dover-Kenton Road, such as the apartments in the area, Mallard Pond, etc. would be walking to school. It had been estimated that this would consist of approximately 100 students.

Responding to Mrs. Townshend, Mr. Luszcz stated that a crosswalk at the west entrance was not currently in the plans. Noting that there were no sidewalks, Mrs. Townshend questioned if there would be more compliance with using the signals to cross Route 8, particularly for those students who reside in Cranberry Run, if they could cross at the west entrance. Mr. Ashby indicated that it would be a shorter distance for students from Cranberry Run to walk to the east intersection than the west intersection.

Mr. Martine stated that, in addition to working for DelDOT, he also served as the President of the Cranberry Run Homeowners Association. He advised members that since sidewalk had not been installed all the way down to the west intersection, it was anticipated that the students would do some type of diagonal crossing. He felt that consideration of any type of connection down to the west entrance may be more accommodating than to have a "backtrack" situation. Responding, Mr. Luszcz felt that, although it would not be difficult to retrofit the west entrance to include a crosswalk, it was not currently included in the plans.

Mr. Steve Brown advised members that DelDOT was currently tasked to install sidewalks only from Marsh Creek connecting to the existing sidewalk in Heatherfield and then on the west side of Stoney Drive to Cranberry Run. He stated that a five-foot (5') sidewalk, hugging the curb, would be installed, weaving in and out for mailboxes and utility poles. He stated that DelDOT was tasked to have these sidewalks installed in order to get students safely from those developments to the HAWK signal.

Mr. Blakeman referred to an "S" shaped sidewalk from Route 8 to the front door of the school, which he felt would encourage students to cross at the appropriate location. Responding, Mrs. Townshend stated that this sidewalk had not yet been constructed and suggested that it be re-evaluated.

Mr. Perza noted that Delaware State University had a wall erected across their facility along Route 13 and questioned the possibility of erecting a wall or fence to deter students from crossing Route 8.

In response to Ms. Alexander's concerns regarding the traffic flow in the area, Mrs. Townshend stated that the entire function of the west intersection would be evaluated.

Responding to Ms. Dorothy Adams, 102 Falmouth Way, Cranberry Run, Mr. Luszcz stated that a presentation and a mock demonstration of the HAWK signal had been provided to students in Newark and he offered to do the same or similar for the students at the new High School.

Ms. Adams advised members that there was not a right turn lane into Cranberry Run, noting that there was a lane present but that there was a white line which discouraged crossing. When turning into Cranberry Run, she stated that vehicles pass using the lane for oncoming traffic. She relayed concern that this may cause a bad accident and questioned the possibility of a turn lane being installed. Responding, Mr. Martine, indicated his opinion that the recent street resurfacing in front the subdivision, provided a great opportunity for the addition of a turn lane. However, he explained that the guidelines for a turn lane stipulate the accommodation for a bike lane as well, and with the additional 4 foot bike lane, the roadway in front of Cranberry Run was 1 foot, 6 inches shy of the correct layout. He stated that, after examining the matter, the only recommendation was to possibly increase the shoulder from 8.5 feet. He stated that there was a 12 foot gore area (the yellow marking in the center of the roadway), which provides a neutral space for vehicles traveling west to pass turning vehicles, but he highly recommended that all motorists use the shoulder when turning into the subdivision, to allow vehicles to pass.

In response to concerns of Mr. Sam Adams, 102 Falmouth Way, Cranberry Run, Mr. Luszcz indicated that when there is a single white line, vehicles are discouraged from crossing over; however, it is permitted. He explained that when there is a double white line, vehicles are prohibited from crossing over.

Mr. Ray Paylor, 10 Yarmouth Way, Cranberry Run, advised members of an incident whereby he was given a warning by a Camden Police Officer for making a right turn from the shoulder, explaining that there was a vehicle in front of him stopped to make a left and he wanted to make a right, so he went around the vehicle on the shoulder and turned. Responding, Mr. Martine could not explain the

Police Officer's position since there was only one (1) vehicle being "passed," explaining that if more than one (1) vehicle had been passed and the shoulder was used to advance, he would better understand the situation. He assured members that, in accordance with the governing publications utilized by traffic engineers, such a movement is legal. He again encouraged the use of the shoulder for residents turning into Cranberry Run.

Mrs. Townshend personally thanked Mr. Luszcz, Mr. Brown, and Mr. Jim Satterfield from DelDOT for all of their work and diligence in working with the City and the District on this project.

Mr. Perza thanked everyone for their participation at this meeting.

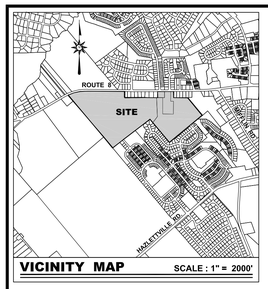
Mr. Davis moved for adjournment, seconded by Mr. Keller and unanimously carried.

Meeting adjourned at 6:12 p.m.

Adam M. Perza
Acting Chairman

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Attachments
Attachment #1 - Map Depicting the Layout of the New Dover High School Project
Attachment #2 - Presentation - Route 8 & Heatherfield Way: Pedestrian Hybrid Beacon



VICINITY MAP SCALE : 1" = 2000'

PARKING DATA

PARKING AREA	NUMBER OF SPACES	ACCESSIBLE SPACES	DROP-OFF SPACES
A	33	6	20
B	103	8	
C	292		
D	221	8	
E	28 (BUS) 162 (CAR)	TEMP. EVENT PROVISIONS	
F	38	2	4
G	111	5	
EAST ROAD		3	49
TOTAL	871 - INCLUDING 24 DROP-OFF SPACES AND 49 PARALLEL SPACES (EAST ROAD)		

BUILDING DATA

	FOOTPRINT AREA	NUMBER OF FLOORS	GROSS FLR. AREA	BLDG. HEIGHT
PHASE 1				
NEW HIGH SCHOOL	198,000 S.F.	3	295,000 S.F.	60'
FIELD HOUSE	3,800 S.F.	1	3,800 S.F.	16'
CONCESSION BUILDING:	2,600 S.F.	1	2,600 S.F.	16'
CONCESSION BUILDING:	2,200 S.F.	1	2,200 S.F.	16'
PHASE 1 TOTAL:	**206,600 S.F.**		**303,600 S.F.**	
PHASE 2				
OUT BUILDING - BALL FIELD AREA	6,200 S.F.	1	6,200 S.F.	23'-8"
PHASE 3				
FUTURE C.T.E. EXPANSION	20,000 S.F.	1	20,000 S.F.	25'
PHASE 4				
FUTURE CLASSROOM EXPANSION	25,000 S.F.	3	75,000 S.F.	60'
TOTAL BUILDING AREA	**257,800 S.F.**		**404,800 S.F.**	

GENERAL NOTES :

1. TOPOGRAPHIC SURVEY DATA SHOWN HEREON IS BASED ON AERIAL PHOTOGRAPHY PERFORMED BY COOPER AERIAL IN JULY 2010 AND FIELD VERIFIED BY BECKER MORGAN GROUP, INC. VERTICAL DATUM IS BASED ON NAVD 88, DERIVED FROM N.G.S. VERTICAL CONTROL MONUMENTS. HORIZONTAL DATUM IS BASED ON DELAWARE STATE PLANE NAD 83, GPS DERIVED FROM N.G.S. HORIZONTAL CONTROL MONUMENTS.
2. THE BOUNDARY LINES PORTRAYED HEREON HAVE BEEN TAKEN FROM A PARCEL CONSOLIDATION & DEDICATION PLAT FOR THE LANDS OF THE CAPITAL SCHOOL DISTRICT AS RECORDED IN THE KENT COUNTY LAND RECORDS. PLAT BOOK _____ PG_____ ON _____ 2011.
3. SUBJECT PROPERTIES SHOWN HEREON ARE NOT LOCATED WITHIN THE ONE HUNDRED YEAR FLOOD PLAIN, BASED ON FIRM MAP NOS. 10001C0162H & 164H, DATED MAY 5, 2003.
4. THE EXISTING UTILITIES SHOWN WERE TAKEN FROM THE BEST AVAILABLE RECORDS. THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA (1-800-282-8555) TO VERIFY THEIR EXACT LOCATION PRIOR TO THE START OF ANY CONSTRUCTION. ANY DAMAGE INCURRED TO ANY UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE. IF THE CONTRACTOR RELIES ON THE UTILITY LOCATIONS SHOWN HEREON, HE DOES SO AT HIS OWN RISK AND WILL NOT BE ENTITLED TO ADDITIONAL COMPENSATION DUE TO TIME DELAYS FROM SAID RELIANCE.
5. BECKER MORGAN GROUP CERTIFIES THAT THERE ARE NO WETLANDS LOCATED WITHIN THE IMPROVED AREA. AN APPROVED JURISDICTIONAL DETERMINATION WAS RECEIVED BY THE U.S. ARMY CORPS OF ENGINEERS ON NOVEMBER 4, 2010. THE CORPS OF ENGINEERS HAS DETERMINED THAT THE PROPERTY DOES NOT INCLUDE NAVIGABLE WATERS OF THE UNITED STATES OR ANY OTHER WATERS OF THE UNITED STATES, INCLUDING WETLANDS.
6. ALL ROADS, PARKING AND OTHER PAVED AREAS WILL BE PRIVATELY OWNED AND MAINTAINED AND ARE NOT INTENDED FOR DEDICATION.
7. DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING EXCAVATION MUST BE REMOVED AND PROPERLY DISCARDED.
8. ALL HANDICAPPED PARKING DEMARCATION, STALLS, AND BUILDING ACCESSIBLE ROUTES SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT".
9. THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENT FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
10. BEFORE THE CONTRACTOR CAN BEGIN CONSTRUCTION HE MUST OBTAIN THE PROPER PERMITS AND/OR APPROVALS FROM THE CITY OF DOVER (C.O.D.), DELAWARE DEPARTMENT OF NATURAL RESOURCES (D.N.R.E.C.), DELAWARE DEPARTMENT OF TRANSPORTATION (DELDOT), CITY OF DOVER DEPARTMENT OF PUBLIC WORKS, CITY OF DOVER DEPARTMENT OF PUBLIC UTILITIES AND APPROPRIATE STATE AND COUNTY AGENCIES.
11. ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE ACCORDANCE WITH THE CITY OF DOVER DEPARTMENT OF PUBLIC UTILITIES CONSTRUCTION STANDARDS AND SPECIFICATIONS AND THE STATE OF DELAWARE CONSTRUCTION STANDARDS AND SPECIFICATIONS.
12. ALL FIRE LANE DEMARCATION AND FIRE LANE SIGNS SHALL BE IN ACCORDANCE WITH ALL THE STATE FIRE PREVENTION REGULATIONS.
13. THE CAPITAL SCHOOL DISTRICT AND LEANDER LAKES, LLC, HAVE ENTERED INTO AN AGREEMENT TO ALLOW THE FUTURE ROADWAY, BISECTING THE WESTERN PROPERTY LINE, TO BE CONSTRUCTED ON BOTH PROPERTIES. THE ACCESS AND DEVELOPMENT AGREEMENT WAS RECORDED IN THE KENT COUNTY LAND RECORDS ON MARCH 22, 2011 IN BOOK VL-5751 PAGE 315.

ON DECEMBER 20, 2010 THE CITY OF DOVER PLANNING COMMISSION TOOK ACTION ON THE WAIVER REQUESTS AND A SERIES OF CONDSIERATIONS FOR THE PROJECT. THE DECISION ON EACH IS AS FOLLOWS:

14. PURSUANT TO ZONING ORDINANCE, ARTICLE 6 §3.6 (B), THE PLANNING COMMISSION APPROVED THE WAIVER TO ALLOW FOR THE PARTIAL ELIMINATION OF CURBING FOR SPECIFIC PORTIONS OF THE PARKING LOT FOR THE FACILITATION OF STORMWATER MANAGEMENT.
15. PURSUANT TO ZONING ORDINANCE, ARTICLE 5 §7.21, THE PLANNING COMMISSION APPROVED THE WAIVER OF THE FENCE COMPONENT OF THE OPAQUE BARRIER. THIS ALLOWS THE PROPOSED FENCE TO BE NON-OPAQUE.
16. THE PLANNING COMMISSION DENIED THE REQUEST FOR THE USE OF ALTERNATIVE SIDEWALK MATERIALS (BITUMINOUS PAVING) FOR THE PROJECT. THE SIDEWALKS AND MULTI-USE PATH ARE TO BE CONSTRUCTED OF CONCRETE WITH THE POTENTIAL FOR THE MULTI-USE PATH WIDTH TO BE REDUCED FROM TEN FEET TO EIGHT FEET.
17. THE PLANNING COMMISSION FINDS THAT THE DESIGN PRESENTED DEMONSTRATES "SUPERIOR URBAN DESIGN" ESPECIALLY IN THE CRITERIA OF ARCHITECTURE. THIS ALLOWS THE PARKING (PARKING LOT A) TO BE LOCATED BETWEEN THE BUILDING AND THE STREET (FORREST AVE. / DE ROUTE 8) UNDER THE PROVISIONS OF ZONING ORDINANCE, ARTICLE 3 §27.63 (a)(ii).
18. THE PLANNING COMMISSION REVIEWED AND ACCEPTED THE CAMPUS PARKING PLAN ENTITLED "PARKING REQUIREMENT JUSTIFICATION". THE REQUIRED NUMBER OF PARKING SPACES WAS SET AT 840 SPACES (ZONING ORDINANCE ARTICLE 3 §3.8)
19. THE PLANNING COMMISSION ACCEPTED THE LOADING BERTH JUSTIFICATION PRESENTED BY THE APPLICANT AND RECOGNIZED THAT THE SITE WILL INCLUDE TWO LOADING BERTHS IN THE SERVICE YARD AREA.
20. THE PLANNING COMMISSION DETERMINED THAT THE LOCATION AND TYPE OF VEGETATIVE BUFFERS (TREE PLANTINGS) AS DEPICTED ON THE LANDSCAPE PLAN ARE SUFFICIENT SCREENING BETWEEN THE RESIDENTIAL AREAS AND THE NON-RESIDENTIAL USE OF THE SCHOOL.
21. THE PLANNING COMMISSION GRANTED APPROVAL OF THE TREE MITIGATION PLAN WHICH PROPOSES THE REFORESTATION AREAS ON OTHER PROPERTIES OF SCHOOL DISTRICT IN AREAS SERVING AS RIPARIAN BUFFERS OR OTHER NATURAL AREAS. THIS PROJECT REQUIRES A TOTAL OF 1,547 TREES. IF THE NUMBER OF TREES REQUIRED CANNOT BE PLANTED ON THIS SITE, THE BALANCE OF THE TREES NEEDED CAN BE PLANTED IN SELECTED REFORESTATION AREAS. (ZONING ORDINANCE, ARTICLE 5 §16.9)

SITE DATA

1. OWNER OF RECORD: THE CAPITAL SCHOOL DISTRICT, C/O DR. MICHAEL THOMAS, SUPERINTENDENT, 945 FOREST STREET, DOVER, DE 19904
2. ENGINEER / SURVEYOR: BECKER MORGAN GROUP INC., 309 S. GOVERNORS AVE., DOVER, DE 19904, (302) 734-7950
3. PROPERTY MAP NUMBER: ED-05-075.00-01-03.00-00001, ED-05-076.00-02-05.00-00001, ED-05-076.00-02-06.00-00001, ED-05-076.00-02-07.00-00001
4. ZONING CLASSIFICATION: R-10 & C/OZ-1 CORRIDOR OVERLAY ZONE
5. DEED REFERENCES: D/4050/267, H/49/244, D/274/241, D/51/301 & D/2822/043
6. PLAT REFERENCE: PB. 45 PG. 34
7. PRESENT USE: AGRICULTURAL
8. PROPOSED USE: HIGH SCHOOL
9. EXISTING SITE AREA: 70.4265 ACRES (P. 03.00); 30.0673 ACRES (P. 05.00); 1.0330 ACRES (P. 06.00); 4.9954 ACRES (P. 07.00); **106.5222 ACRES (TOTAL AREA)**
10. BUILDING SETBACKS: FRONT YARD: 50' / SIDE YARD: 25' / REAR YARD: 25'
11. ROADWAY CLASSIFICATION: ROUTE 8 (FORREST AVENUE) - MINOR ARTERIAL
12. UTILITIES: WATER - CITY OF DOVER; SEWER - CITY OF DOVER; ELECTRIC - CITY OF DOVER; GAS - CHESAPEAKE UTILITIES
13. BUILDING HEIGHT: PERMITTED: 35' WITH A MAXIMUM OF TWO STORIES CITY OF DOVER BOARD OF ADJUSTMENT CASE: V-10-10 GRANTED A VARIANCE FOR A MAXIMUM BUILDING HEIGHT OF 60' WITH ARCHITECTURAL FEATURES UP TO 85' IN HEIGHT AND THREE STORIES MAXIMUM.
14. TREE PRESERVATION: EXISTING WOODLAND AREA: 0.0 ACRES
15. TREE DENSITY REQUIREMENT: 1 TREE PER 3,000 S.F. OF SITE AREA; TOTAL AREA OF SITE: 4,640,011 S.F. / 3,000 S.F. = 1,547 PROPOSED: 1,547 TREES
16. LANDSCAPED OPEN SPACE: ± 46.5 %
17. IMPERVIOUS COVER: 1,213,525 S.F. / 27.9 ± ACRES
18. LOT COVERAGE: R-10 ZONING - BUILDING AREA 20% OF TOTAL SITE AREA PROPOSED: 257,800 / 4,640,011 = 5.55%
19. PARKING REQUIRED: 840 SPACES
20. PARKING PROVIDED: CAR: 871 / BUS: 28 / BICYCLE: 100 (SEE DATA CHART)
21. SURVEY BENCHMARK: N.G.S. CONTROL MONUMENTS; VERTICAL: NAVD 88 (NGS - M34); HORIZONTAL: D.S.P. / NAD 83 (NGS - DNREC)
22. MONUMENTATION: EXISTING: 17 FOUND; PROPOSED: 1 SET



OWNERS CERTIFICATION

WE, CAPITAL SCHOOL DISTRICT, HEREBY CERTIFY THAT WE ARE THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT OUR DIRECTION, AND THAT WE ACKNOWLEDGE THE SAME TO BE OUR ACT AND DESIRE THE PLAN TO BE DEVELOPED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

DR. MICHAEL D. THOMAS - SUPERINTENDENT — DATE

ENGINEERS CERTIFICATION

I, GREGORY V. MOORE, HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

GREGORY V. MOORE — P.E. NO. 9311 — DATE

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ABHA architects
1621 N. Lincoln Street
Wilmington, DE 19806
(P) 302 . 658 . 6426
(F) 302 . 658 . 8431
abhagen@ABHA.com
www.ABHA.com

CONSULTANTS

Becker Morgan Group
Civil Engineer
Phone: 302-734-7950
309 SOUTH GOVERNORS AVE.
DOVER, DE 19904

Hord Coplan Macht
Architectural Planners
750 East Pratt Steet, Suite 1100
Elkton, MD 21921

Baker, Ingram, & Associates
Structural Engineers
1050 South State Street
Dover, DE 19901

Gipe Associates
Mechanical/Electrical Engineers
8719 Brooks Drive
Easton, MD 21601

EDIS COMPANY
Construction Manager
110 South Poplar Street, Suite 400
Wilmington, DE 19805-4697

PROJECT

THE NEW DOVER HIGH SCHOOL

1570 Forrest Avenue
Dover, Delaware 19904

0 30 60 120
SCALE : 1" = 120'

OWNER

Capital School District
945 Forest Street
Dover, Delaware 19904-3498
Phone: 302-672-1500

BID PACKAGE "C"

MARK	DATE	DESCRIPTION
F	01-24-2012	REVISED PER C.O.D. PLANNING
E	12-14-2011	REVISED PER PUBLIC UTILITIES
D	11-30-2011	REVISED PER AGENCY COMMENTS
C	11-09-2011	REVISED PER DNREC COMMENTS
B	10-19-2011	REVISED PER AGENCY COMMENTS
A	08-08-2011	BID PACKAGE C

PROJECT NUMBER: ABHA: 1012 BMG: 2010057.00
FILE NAME: 2010057-SITE-C3D
PREPARED BY: BECKER MORGAN GROUP
DRAWN BY: J.S.F. CHECKED BY: M.A.R.

The professional services of ABHA architects, Inc. are undertaken for and performed in the interest of Capital School District. No contractual obligation is assumed by ABHA Architects, Inc. for the benefit of any other person involved in the project.

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SHEET TITLE

COVER SHEET & OVERALL LAYOUT

C-001C

F:\AutoCAD\Projects\2010\2010057\DWG\2010057-SITE-C3D.dwg, Jan 25, 2012 - 2:35pm

Route 8 & Heatherfield Way: Pedestrian Hybrid Beacon

Mark Luszcz, P.E., PTOE
DelDOT Chief Traffic Engineer

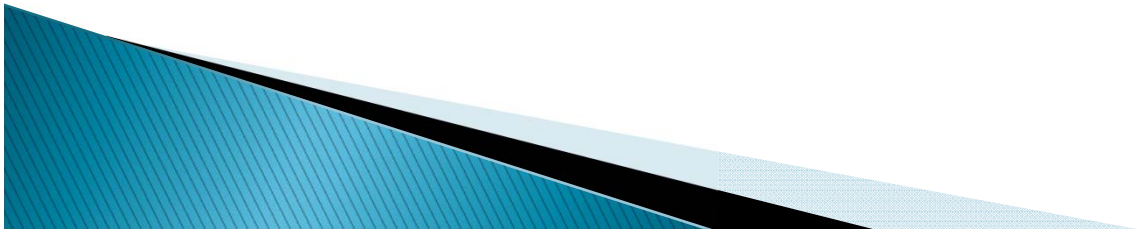
Presentation to:
Dover Safety Advisory & Transportation Committee
September 25, 2013



ATTACHMENT #2
SA&T Committee Meeting of 09/25/2013

Agenda

- What?
- Why?
- Delaware Experience



TEAM DelDOT

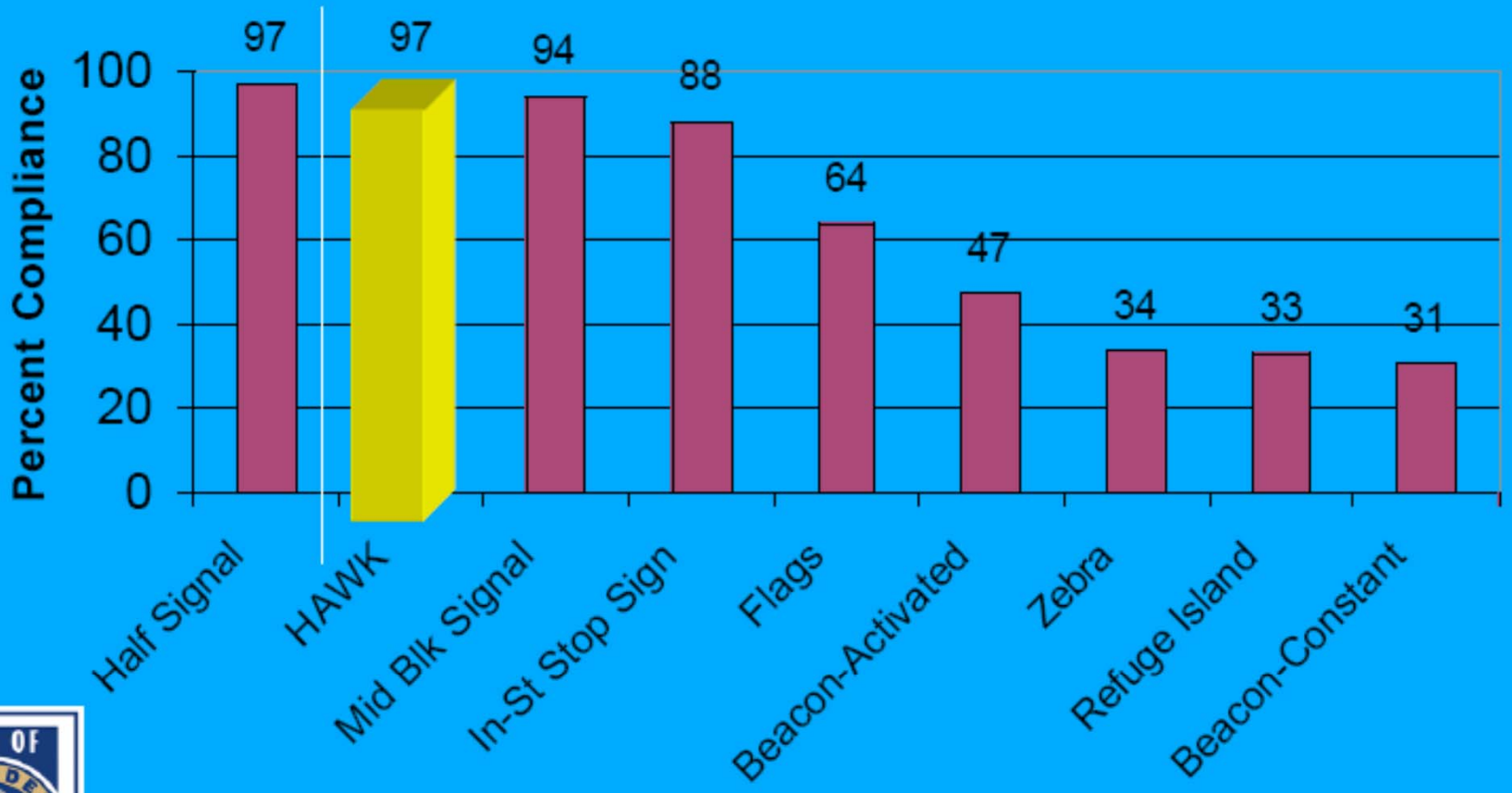
Transparent Efficient Accountable Measured

Pedestrian Hybrid Beacon

- Also known as a HAWK: High-Intensity Activated Crosswalk
- Invented in Tucson, AZ
- Successfully tested for over 10 years
- Adopted by FHWA in 2010
- Goal: safely control pedestrian and vehicular traffic, where there is a moderate to high volume of both pedestrians and vehicles, but a full traffic signal is not justified

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Innovative Crosswalk Treatments



Source: Texas Transportation Institute, 2006

How the HAWK Signal Works

What You See:

What You Do:



Drivers: ***Proceed through the Signal***

Pedestrians: ***Press button to Cross***



Drivers: ***Signal has been Activated***

Pedestrians: ***Wait to Cross***



Drivers: ***Prepare to Stop***

Pedestrians: ***Continue Waiting to Cross***



Drivers: ***Stop and Remain Stopped***

Pedestrians: ***Cross the Roadway with Caution***



Flashing Timer

Drivers: ***Continue with Caution after Coming to a Complete Stop***

Pedestrians: ***Already Crossing - <u>Continue</u>***
Not Yet Crossing - <u>Don't Start</u>

►SYSTEM RESETS◄

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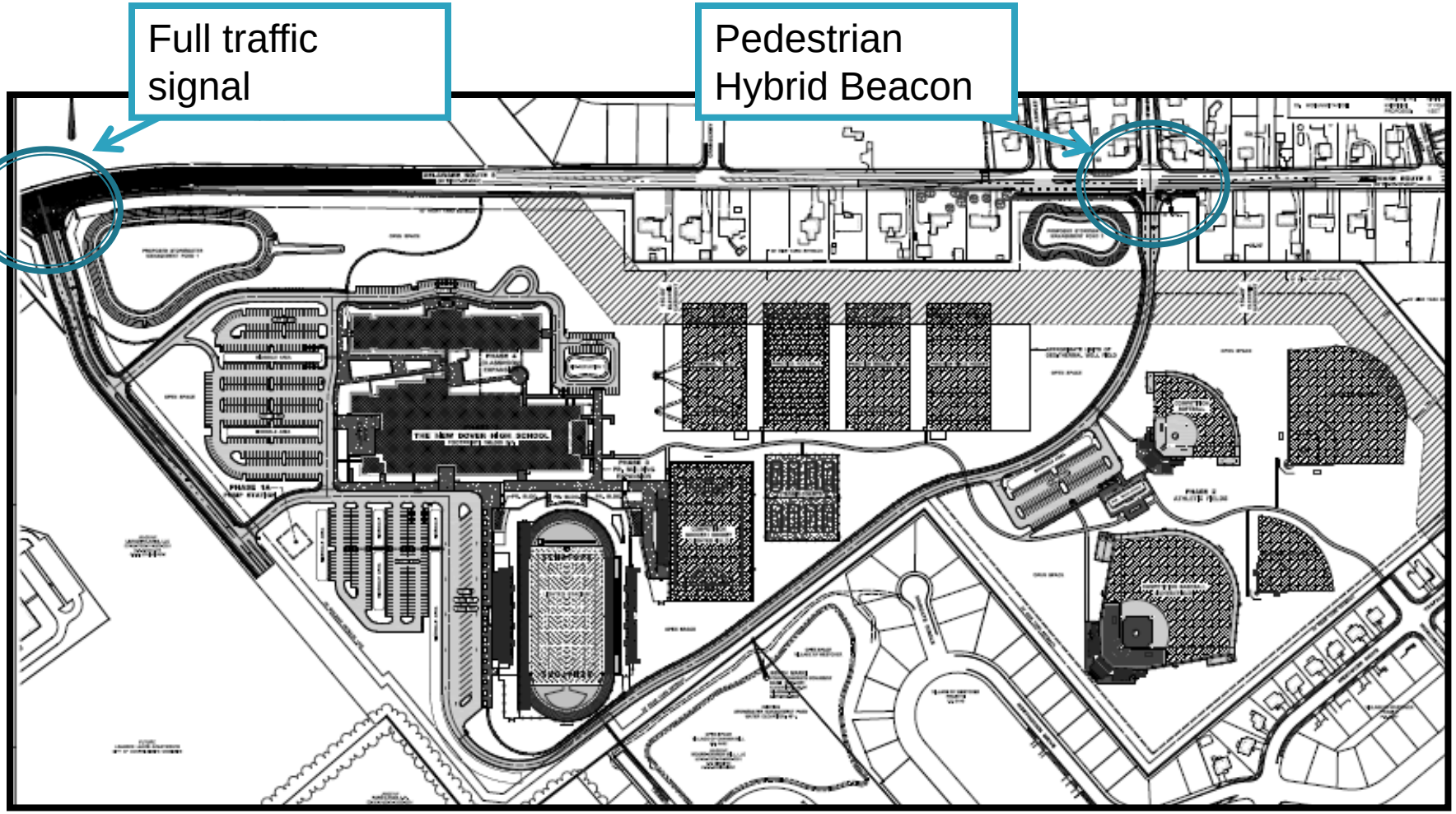


Why is the PHB Proposed on SR 8?

- Full traffic signal not justified
- High pedestrian traffic expected
- High speeds and traffic volume on SR 8
- Use of western access traffic signal not feasible:
  - No sidewalk
  - Unreasonably far from pedestrian routes
- FHWA PHB criteria met

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Dover High School Plan

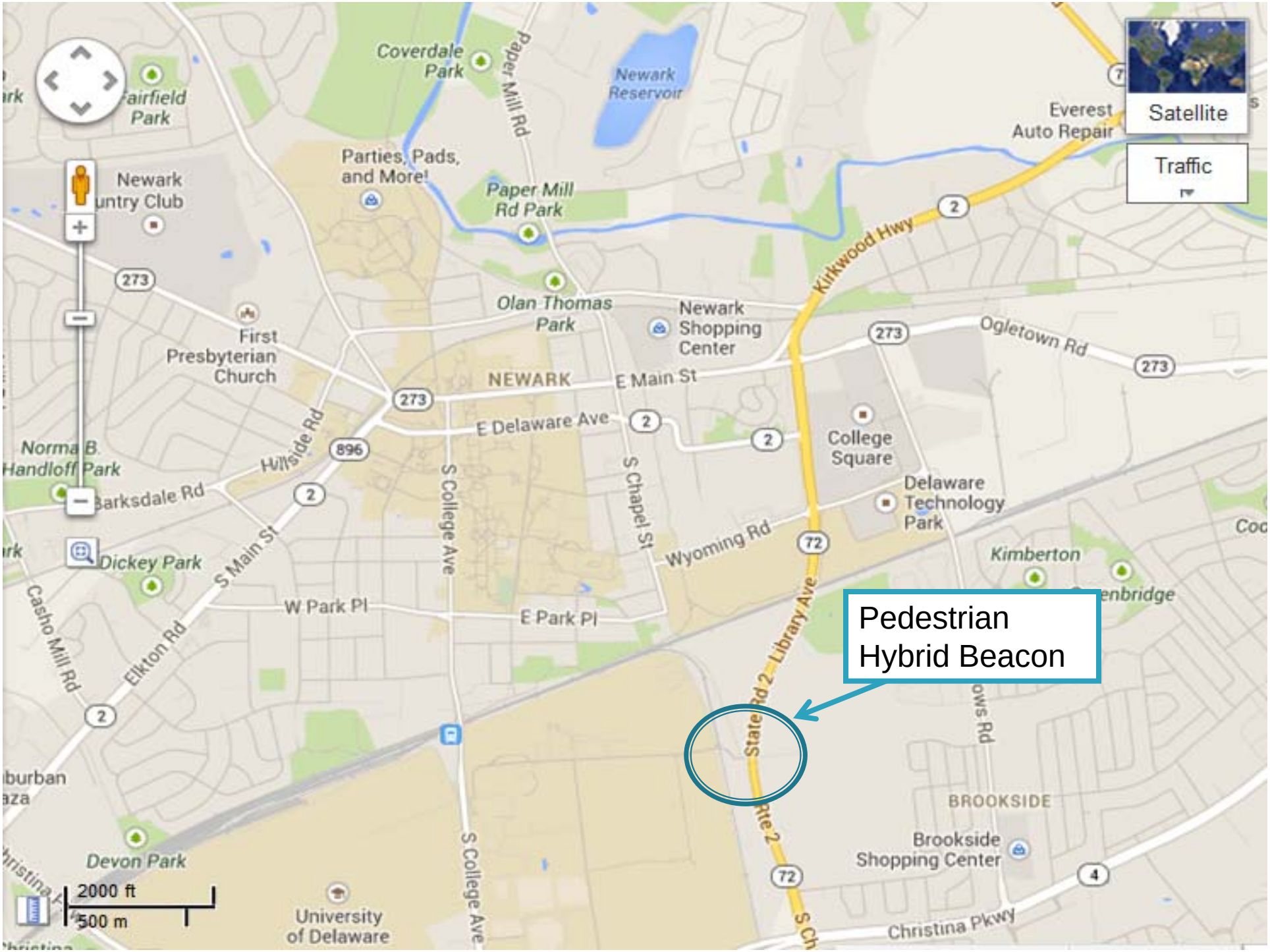


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Delaware's First PHB

- Route 72 & Farm/Webb Lane
- Southeast side of Newark
- Serves UD Agricultural Building
- Installed in August 2010

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Pedestrian
Hybrid Beacon
Satellite
Traffic
Coverdale Park
Paper Mill Rd
Newark Reservoir
Everest Auto Repair
Parties, Pads, and More!
Paper Mill Rd Park
Newark Country Club
Fairfield Park
Kirkwood Hwy
Olan Thomas Park
Newark Shopping Center
Ogletown Rd
First Presbyterian Church
NEWARK
E Main St
E Delaware Ave
College Square
Norma B. Handloff Park
Hillside Rd
Barksdale Rd
S College Ave
S Chapel St
Delaware Technology Park
Wyoming Rd
Kimberton
Dickey Park
S Main St
W Park Pl
E Park Pl
Casho Mill Rd
Elkton Rd
State Rd 2 - Library Ave
BROOKSIDE
Brookside Shopping Center
Devon Park
University of Delaware
Christina Pkwy
2000 ft
500 m

Delaware's First PHB

- Much lower compliance than expected led to:
  - Continued monitoring
  - In depth study (including National Expert)
  - Targeted police enforcement
  - Several modifications:
    - Reduced sign clutter
    - Installed overhead ped warning signs
    - Added backplates
    - Added roadway lighting
    - Installed supplemental beacons
    - Re-striped for separate left-turn lanes
- Problems related to high speeds, curve, low ped volumes
- Compliance improved but not ideal

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Original Installation
Route 72 & Farm/Webb Lane



Current PHB
Route 72 & Farm/Webb Lane



Thanks!

Mark Luszcz, P.E., PTOE
Delaware Department of Transportation
Chief Traffic Engineer
(302) 659-4062
mark.luszcz@state.de.us

TEAM DelDOT
Transparent Efficient Accountable Measured