COUNCIL COMMITTEE OF THE WHOLE

The Council Committee of the Whole Meeting was held on April 26, 2016, at 6:00 p.m., with Mr. Hare presiding in the absence of Council President Slavin. Members of Council present were Mr. Sudler, Mr. Neil, Mr. Cole, Mr. Hosfelt (departed at 7:14 p.m. and returned at 7:31 p.m.), and Mr. Hutchison. Mr. Anderson and Mr. Lewis were absent. Mayor Christiansen was also present. Civilian members present for their Committee meetings were Mr. Keller (*Safety Advisory and Transportation*), Mr. Blakeman and Ms. Stewart (*Utility*), and Mr. Shevock and Ms. Maucher (*Legislative, Finance, and Administration*). Mr. Shelton (*Safety Advisory and Transportation*) was absent.

SAFETY ADVISORY AND TRANSPORTATION COMMITTEE

The Safety Advisory and Transportation Committee met with Councilman Hosfelt presiding.

AGENDA ADDITIONS/DELETIONS

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

Speed Control Measures - Independence Boulevard

Chairman Hosfelt stated that a working group including neighbors, residents, State Representative Sean Lynn, and staff from the Delaware Department of Transportation (DelDOT) had been working on speed control measures for Independence Boulevard in Bicentennial Village since the Summer of 2015.

Representative Sean Lynn, 31st District, stated that Bicentennial Village is situated in his district. Mr. Lynn advised members that residents had brought forward concerns about speeding through the main corridor of Bicentennial Village and the use of this thoroughfare as an alternative to Saulsbury Road as a north/south connector to avoid more highly trafficked or regulated routes. Based upon a request from the neighborhood, a working group was set up with DelDOT to look at traffic calming measures throughout the neighborhood. Mr. Lynn explained that a radar sign had been put in place and other traffic calming measures were proposed. He indicated that approval was being sought from Council to install these measures in Bicentennial Village, noting that he would pay for this project using his Community Transportation Funds (CTF). Mr. Lynn stated that this project was a portion of a two (2) part traffic calming measure proposal. The second portion, located on North State Street, would be brought forward once it is approved by the working group.

Mr. Tom Dix, 664 Independence Boulevard, member of the Bicentennial Village Civic Association and the working group, stated that he had a stake in this problem due to residing at this location. He stated that, last May, a six (6) day survey was done on his street, and 5,000 - 6,000 cars transited Independence Boulevard on any one (1) day. Mr. Dix advised members that when the Police Chief saw this report, he dispatched the motorcycle squad to address speeders, and neighbors were caught going 46 and 40 mph. It was Mr. Dix's opinion that drivers feel they can go as fast as they dare because the street is 37 feet wide, noting that this did not make for a peaceful community. He asked members to consider the proposals before them, noting that the working group had studied and

worked hard on this issue. Mr. Dix requested members' due consideration, noting the desire to return his street to a nice, peaceful street.

Mr. William Garfinkel, 9 Freedom Drive, member of the Bicentennial Village Civic Association and the working group, echoed Mr. Dix's remarks. He stated that Independence Boulevard is now a dangerous street with too many cars using it as a bypass to avoid Kenton Road, noting that there are two (2) blind curves. Mr. Garfinkel stated his understanding that yellow lines would be placed on the road; however, he felt that Independence Boulevard could not be another Kenton Road anymore, reiterating that 6,000 cars per day were using the road and this was dangerous in this residential development that should never have been a pass-through. He explained that he and Mr. Dix were asked to join the group by Mayor Christiansen and it was their job to keep the community involved. Mr. Garfinkel explained that they have a Facebook page used by hundreds of people and also joined Nextdoor, a private social network, to try to get out as much information as possible. He indicated that all these plans were discussed at the civic association meeting held in January, noting that they were not a secret and everybody knew about it. Mr. Garfinkel stated that he was very impressed with what DelDOT had done on the project and hoped that members would vote favorably on this issue.

Members were provided concept drawings of the proposed traffic calming measures in Bicentennial Village, including an Independence Boulevard Realigned Intersection and an Independence Boulevard at Colony Drive Proposed Roundabout ***(Attachment #1).*** Mr. Mike Somers, Traffic Calming Supervisor, DelDOT, indicated that these files would also be provided for the Facebook page referenced by Mr. Garfinkel. Referring to the realigned intersection depicting Lamplighter Lane and Green Blade Drive, Mr. Somers advised members that drivers often run stop signs that do not meet normal warrants, and the concept of a realigned intersection had come out on a national level to help eliminate or reduce the running of stop signs. He stated that DelDOT had installed three (3) way stops in various locations and had good luck with them. In regard to the roundabout depicted at Green Blade Drive and Colony Drive, Mr. Somers advised members that this mini-roundabout would encourage a slow-down at the intersections and would also create a safe intersection, noting that these kinds of circular measures had been applied worldwide and were very effective.

Mr. Glenn (Guy) Pusey III, Engineering Designer, RK&K, advised members that drivers had been observed going very fast around the curve at Green Blade Drive and Colony Drive and that the roundabout would deflect traffic. He noted that roundabouts used in the past in Delaware were not very good and DelDOT had learned from its mistakes.

Mr. Somers indicated that the current roundabout at Mifflin Road was done in a rush and with virtually no money since residents in the apartment complex wanted to try it but did not have money for the project. Although it was not particularly well built, Mr. Somers stated that those in the apartment complex had spoken highly of it and it does what they wanted it to do. He advised members that there are more recent examples at the DelDOT campus, noting that the roundabout closer to Bay Road is a better example than the roundabout in the back, which was not built to standards. Mr. Somers stated that the roundabout program had been in place since 2001; however, it was more widely received in northern Delaware.

Mr. Hosfelt opened the floor for public comment.

Ms. Rhonda Lewis, 27 Liberty Drive, questioned the accuracy of the traffic count of nearly 6,000 cars if the count was taken after Dover High School left the Walker Road area. She stated that Walker Road, from McKee Road to Kenton Road, has only 7,350 cars per day. In regard to the Mifflin Road roundabout, Ms. Lewis stated her belief that this roundabout was put there for speed control and was not about the apartments, noting that she had lived there at the time. She also expressed concern about realigning the Lamplighter Lane intersection since this would take away the parking for Continental Park, noting that kids play football and soccer there and need to be picked up.

Ms. Lewis questioned what would happen to the three (3) way stop sign at Freedom Drive. Responding, Mr. Somers stated that the original idea was to take it out; however, the working group felt strongly about leaving it.

Ms. Lewis expressed her opinion that taking the stop sign out would make a speedway worse than they have now, but keeping it would be a ridiculous amount of traffic control in a very small street, which was 30-some odd feet wide. She indicated that it was built in the 70's to collect the traffic from Route 8 to Walker Road, and there was only a block and a half of houses that face the road. Ms. Lewis felt that this indicated that this had not been the intent of a neighborhood street. She understood that there is speeding in the area; however, she felt the traffic was not as bad as it had been when Dover High was at its previous location. Ms. Lewis stated that, when coming out of the three (3) way stop signs or the stop sign at Liberty Drive, she does not have to wait as long anymore; however, she did not doubt that the gentleman who lives there sees the cars and speeding. Ms. Lewis advised members that she was unaware that there was a neighborhood association or a Facebook page. She indicated that the first notice that she received regarding this matter was a notice for a meeting at the City of Dover Police Department, and she did not think she was alone in this regard. Ms. Lewis stated that she had concerns but was unsure if the measures proposed were the best way to handle them.

Responding to Mr. Hosfelt, Ms. Lewis indicated that she was not in agreement with either of the proposed measures.

Mr. Les Blakeman, 209 Falmouth Way, Cranberry Run, informed members that he uses the road frequently because cars fill the lane at the Route 8/Dover-Kenton Road intersection and are backed up into the lane of traffic. He typically drives down to Bicentennial Village and across to Walker Road. Mr. Blakeman felt that a lot of similar overflow traffic was contributing to traffic in Bicentennial Village and, if some of this were fixed, he believed some of the traffic would dissipate.

Mr. Brad Ebaugh, 172 Continental Drive, agreed with Mr. Blakeman that extending the congested traffic lane would help. Noting that he comes up Mifflin Road every day, he stated that he observes people who cannot make the left-hand turn and instead turn by Redner's grocery store, using this as a cut-through. Mr. Ebaugh felt this cut-through would not be used if there was an adequate turn lane farther back on Route 8. In addition, he stated that he had been at his residence 25 years but had not

received any information about a Facebook page or anything else related to this matter until one of his neighbors made him aware. Mr. Ebaugh felt that the previous comment made that the neighborhood was in on this issue was not accurate. He stated that he would like more information before saying yes or no, but he did not like the idea of crowding the Continental Park field and not allowing parents to park in this area, believing that they would then park all through the streets.

Mr. Tom Monahan, 151 Continental Drive, stated that he was not happy with having four (4) yields at the intersection, noting that there were already speeders on the street who were going through yield signs. He advised members that he would like to see stop signs on Colony Drive and Green Blade Drive so drivers would know to stop and then go on the roundabout. He felt that four (4) yield signs would be asking for a lot of accidents.

Captain Dave Spicer, Dover Police Department, stated that he had been privileged to sit in on a lot of the meetings leading up to this point and thought it would be appropriate to compile data on how many traffic accidents occurred in this area over a three (3) year period. Dating back to 2013, there were approximately three (3) traffic accidents on Independence Boulevard alone. In 2014, there were two (2) traffic accidents on Independence Boulevard, and there were ten (10) in 2015. Captain Spicer did not know why this increase occurred; however, he felt there was definitely a problem occurring on Independence Boulevard. He indicated that there were no traffic accidents so far in 2016.

Mr. Sudler questioned how many community meetings were held in regard to this topic. Responding, Mr. Hosfelt indicated that there had been at least three (3) meetings.

Mr. Dix informed members that he had personally placed flyers on all the doorknobs in his community and everyone was notified. Mr. Garfinkel concurred; however, others in the audience expressed disagreement.

Mr. Neil thanked the homeowners who brought this issue to members' attention and also Representative Lynn. Mr. Neil stated that he had attended a number of related meetings at Legislative Hall. He felt if the proposed projects would slow people down, this would be an advantage. Mr. Neil noted that there would be a cost; however, if one (1) life were saved, it would be worth it. He indicated that the parking issue would be taken into consideration since it was important to a lot of people in the neighborhood. Mr. Neil felt that the road should not be a thoroughfare.

Mr. Hutchison expressed his opinion that the roundabout on Mifflin Road had been very effective from a public safety standpoint. He stated that the proposed roundabout was larger in design and should create an easier way for traffic to flow in and out.

Mr. Cole stated that the Continental Park issue mentioned previously had not come up during any of the previous related meetings and questioned if it is used a lot. Responding, Mrs. Ann Marie Townshend, Director of Planning and Community Development, explained that this is a City park, but the City does not hold programs there, and it is space for the public to use.

Mayor Christiansen echoed the concerns of the community and stated the desire to make sure that the entire community signs onto this plan or another plan. Having attended several of the meetings, he stated that there were quite a few people from the community who were on board with the proposal, however, he cautioned that this should be something that the entire community wants. He noted that police officers had arrested quite a few people that live in the neighborhood due to traffic violations. Once it is explained, and everyone is on board, Mayor Christiansen felt that Council should take the direction needed to provide safety.

Mr. Hare concurred with the Mayor, noting that tonight, two (2) individuals had spoken in favor of the proposal, one (1) not in favor, and one (1) wanted more information. Another gentlemen indicated he would like to see stop signs in a few different places. Mr. Hare felt that this matter had gone to two (2) or three (3) community meetings, but perhaps if another meeting was held, everyone present should sign a paper indicating whether they were for or against the plan. When the matter then came before Council, it would be a representation of more than just two (2) or three (3) people. Mr. Hare indicated that the community has to be the deciding factor, noting that he would like at least to see something reflecting the views of those who live on Independence Boulevard. He felt that someone should go up and down Independence Boulevard and get residents to sign off on the proposal.

In response to Mr. Cole regarding what the deadline would be for him to move forward, Representative Lynn explained that CTF funds had been set aside for this project and, if not expended, these funds would move into another project; therefore, funds would have to be expended relatively quickly.

In regard to community involvement, Representative Lynn stated that the Mayor had selected the individuals who sat on the working group from Bicentennial Village. Representative Lynn indicated that he personally attended multiple community meetings, noting that there are always people who state that they are unaware of such meetings. He advised that multiple meetings were held, they were well advertised on the Nextdoor app and on Facebook, and they were very well attended. Representative Lynn stated that the vast majority of the people at the meetings supported the project.

Mr. Hosfelt stated that he put notices out on Nextdoor and on the Bicentennial Facebook page to ask residents to attend and to speak either in favor or against the proposal so that it could be known where everybody stands. He advised members that some people agree and others do not, and he was unsure if all residents would ever agree to one (1) plan. As a past police chief and current councilman who lives near and travels that roadway, Mr. Hosfelt stated that something needed to be done on Independence Boulevard, noting the increase from two (2) to ten (10) accidents last year. He questioned what it would take to make the change, and whether it would be a child running across the road when leaving Continental Park. Mr. Hosfelt stated that meetings, which had been held since last summer, could continue and members could continue to argue and talk about this; however, he felt the matter was at the point where a decision must be made. He indicated that the funds which were present would go to something else if the City did not take advantage of them. Mr. Hosfelt stated that there were two (2) good speed control alternatives present and expressed his opinion that members needed to make a decision.

Ms. Susan Hessler, 120 Cobblestone Lane, stated that she had attended two (2) of the community meetings and there was not an overwhelming majority that wanted anything done, except for some sort of speed control, whether it was a lighted fixture such as that now on Bicentennial. She expressed concern, if a roundabout were installed, that instead of going through the circle, people would come out onto Colony Drive, go through the light at Meetinghouse Lane and Colony Drive, and then divert onto Bicentennial Boulevard to cut over to Walker Road, and traffic would just be redirected. Ms. Hessler felt that this would create more of an excessive traffic pattern through the neighborhood.

Mr. Hosfelt stated his view that, historically, people had not circumvented the current roundabout on Mifflin Road to go through Woodmill to Route 8.

Based on the size and dimensions of the roundabouts, Ms. Hessler did not think they could be compared. She indicated that people cut through Colony Drive now, and she felt the mindset would be that if people want to get to Walker Road, they would go down to Bicentennial Boulevard and go right or left on Walker Road.

Mr. Sudler questioned how concerns regarding parking at Continental Park would be addressed if the park was used for recreation. He questioned if there would be parking allowed for a time frame or if those who park there would be ticketed.

Mr. Hosfelt stated his belief that there were no signs on the roadway that restrict parking at this time and parking would remain open.

Mr. Sudler moved to recommend acceptance of the recommendation of DelDOT and the working group for the roundabout, seconded by Mr. Neil and unanimously carried.

Traffic Concerns - Proposed Interconnection Between The Arbors Senior Garden Apartments and Emerald Pointe

Mrs. Ann Marie Townshend, Director of Planning and Community Development, reviewed a presentation entitled "The Arbors - Review of Interconnection with Emerald Pointe*"* ***(Attachment #2)***. She explained that, in 2002, the Planning Commission approved the subdivision now known as Emerald Pointe with 107 single-family detached homes. That plan included two (2) stub streets; one (1) extending west to a vacant property between Emerald Pointe and Hidden Oaks, and another extending from Topaz Circle to the south, to the subject property of The Arbors.

Mrs. Townshend advised that, in 2004, there was a minor subdivision of the McKee Property, which resulted in the parcel that was again the subject of The Arbors. At that time, the Delaware Department of Transportation (DelDOT) and the Public Works Department requested a 60-foot cross access easement from the McKee property to Emerald Pointe to line up with the stub street. This easement was approved by the Planning Commission and was on the final recorded plan for that minor subdivision.

Mrs. Townshend indicated that a project called "College Road Garden Apartments" came forward in 2005 and was reviewed as a Planned Neighborhood Design - Senior Citizen Housing option. The site plan was approved by the Planning Commission, but it expired in 2007, before it went to final plan, or construction was begun. She stated that in 2007, The Arbors came forward again as a Planned Neighborhood Design - Senior Citizen Housing, which was essentially the same plan that had expired previously with a few small changes. Mrs. Townshend explained that this project was approved by the Planning Commission and received final site plan approvals from all agencies; however, construction never commenced and the plan expired in 2009. Prior to the expiration of the site plan, the right of way that establishes Senior Way was recorded. She noted that, in 2009 and early 2010, the property was rezoned from R-8 (One-Family Residence Zone), to RG-2 (General Residence Zone), and the previous plans were brought forward as senior apartments, since apartments became a permitted use.

Mrs. Townshend informed members that, in 2010, there was another conditional use site plan application for the Arbors, with essentially the same building layout, which had minor tweaks to the parking and other layout on the site. She noted that this was for a 48-unit apartment building, and that every iteration for the property had been for 48 units. Mrs. Townshend stated that the original proposal would have had all traffic coming through Emerald Pointe, and there would be no access to College Road; however, Planning Department and DelDOT staff expressed concern about this. She noted that the Planning Commission ultimately required the construction of Senior Way, which would include access to College Road, and the connection to the Topaz Circle stub street. Mrs. Townshend indicated that this plan expired again, prior to getting all of the approvals and being finalized.

Mrs. Townshend advised members that the current land plan submission for The Arbors was consistent with the prior submission, but had some changes to the parking layout. It was approved by the Planning Commission on March 21, 2016, and included the interconnection with the Topaz Circle stub street. Mrs. Townshend reviewed the 2007 site plan for The Arbors Planned Neighborhood Design - Senior Citizen Option on Page 5 of the presentation, and reminded members that this project went to final plan approval, but was not constructed. She explained that the active recreation area on the west side of Senior Way showed a multi-use path for the residents of the development, and the connection to Topaz Circle was part of the plan. Mrs. Townshend then reviewed the land plan for the Arbors that was approved by the Planning Commission on Page 6. She indicated that, for the most part, this plan remained unchanged from the 2007 plan, noting that parking would be tweaked and the connections to Topaz Circle and College Road would be retained. Mrs. Townshend advised members that there were concerns regarding how the connections would affect traffic through Emerald Pointe, in particular at the location where Emerald Pointe connects with McKee Road. Mrs. Townshend stated that, in terms of the history and prior approvals of Emerald Pointe, and the prior iterations of The Arbors property interconnection had always been part of the plan approval.

Mr. Hosfelt commented that he travels this road back and forth to work each day, and it was not uncommon to sit through the light at College and McKee Roads for three (3) or four (4) cycles before getting through. He questioned if DelDOT could help with this.

Mr. Marc Cote, Assistant Director, Planning Development Coordination, DelDOT stated that the intersection of McKee and College Roads was eventually planned to be part of the Dover Transportation Improvement District that DelDOT was working with the City on; however, this was in the infancy stages and there were no planned improvements at the intersection at this time. Mr. Cote advised that the interconnection was there to provide the residents of the community another access point to College Road so they do not have to travel through the intersection. He stated that the senior housing generates only a little over 160 trips per day, so not much traffic would be using it, and the interconnection is there mainly for the community to use.

Mr. Hosfelt invited those present who wished to speak to come forward.

Mr. Thomas Disabatino, 346 Topaz Circle, Emerald Pointe, informed members that when he found out about the plan he was immediately concerned, due to the traffic at McKee and College Road. He stated that traffic stacks up from College Road all the way to the entrance and beyond of Emerald Pointe when heading in the direction of Kraft Foods. Mr. DiSabatino feared that Emerald Pointe will just become a pass-through to College Road at those times when the traffic is heavy. In addition, he indicated that when trying to make a left turn from College Road to McKee Road headed toward Delaware Technical and Community College, the left turn cycle allows only five (5) to six (6) cars through; therefore, he felt that people would use Senior Way, go through Emerald Pointe, and take their chances on trying to make a left turn at the Emerald Pointe entrance, which he indicated was already a dangerous proposition. Mr. Disabatino reiterated the major concern that this would become a pass-through for those trying to avoid the intersection, noting that he did not know the date when the improvements would be made.

Mr. Hosfelt indicated that the improvements would take years.

Mr. Dan Maher, 16 Inverness Court, Woodlands of Fox Hall, expressed his desire to raise the same issues that he raised before the Planning Commission. He stated that the distance from the entrance of Fox Hall on College Road to the intersection is roughly 0.3 miles and this area contains two (2) churches, a private residence, and a building development that empty onto College Road. Mr. Maher advised that the Arbors development would be the fourth development between the Woodlands of Fox Hall, Hidden Acres, the Arbors, and a little shopping center. He stated that those who are four (4) or five (5) cars back in the intersection during the day are stuck and cannot get to the left or right turn lane. Mr. Maher felt that having additional cars there would make that matter considerably worse. He did not understand where the projection of 160 trips came from, noting that there would be 48 units, each one with a car going in and out, and he felt the intersection would be a disaster. Mr. Maher expressed concern that the Arbors would be built before improvements are made and that it would make a bad situation worse. Referring to the discussion earlier in the meeting regarding Independence Boulevard, he questioned how many cars were traversing College Road if there were 6,000 per day on Independence Boulevard.

Mr. David Pokrajac, 6 Tanzanite Court, agreed with other members of the public. He stated that two (2) years ago in March he was living at the Courtyards when there was an accident at night. The police were chasing someone in an all-terrain vehicle who entered the neighborhood, causing havoc

and waking up Mr. Pokrajac and his neighbor. He noted this happened before this became a through traffic road and questioned what would happen if the interconnection came to fruition. Mr. Pokrajac noted that earlier in the meeting members discussed measures to improve the traffic situation on Independence Boulevard, which had become a through-traffic road, and now they were proposing to open a through-traffic road. He questioned if they would propose to build a roundabout in one (1) to ten (10) years to prevent traffic accidents, noting that there was no space in the neighborhood for a roundabout. Mr. Pokrajac stated that kids play basketball and baseball on the streets in the neighborhood and run and ride bicycles there. He questioned if there was a desire for kids to be healthy and able to defend our country if needed or to be on Facebook all the time and have spinal injuries.

Ms. LaKeesha Christian, 207 Topaz Circle, advised members that her family had been living in the neighborhood for approximately seven (7) to eight (8) years. She referenced the concerns stated earlier in the meeting of residents living in and around Bicentennial Village, who felt they had lost the peacefulness of their neighborhood with all the traffic constantly going through. Ms. Christian noted that 6,000 cars was a lot of traffic going through and she did not want her neighborhood to experience this. She stated that they have a small community, know each other, and know the cars that travel in and out of the neighborhood. Ms. Christian feels very safe and secure there, her children play there, and she feels comfortable letting them go outside, run around the house, and go down to the park, knowing that they will be safe, and her neighbors will be looking out for them. She stated that she would lose all of that comfort if members agree to let a street cut through from one end to another. She stated her understanding that the purpose of the proposal was to help people to get in and out of the new residential area better, but expressed concern for those who are already living there and dealing with traffic when coming out. Ms. Christian noted that there is no light in front of Emerald Pointe and no approval for a light, so it would take longer to get out of the neighborhood. In addition to the safety concerns, she noted that there would be 48 additional units, which would mean 100 extra cars if people have two (2) cars. Ms. Christian reiterated that she would like her children to be safe and did not think it fair to lose that just to add a new development to the community.

Mr. Mark Reaves, 10 Tanzanite Court, President, Emerald Pointe Homeowners Association, stated his concern that this development had come up numerous times under multiple names, and each time it had expired. He stated that they had no idea of ownership of this project, the owner had not come forward to the residents of the community, and there had been no discussion with the community regarding what was going on with the project. Mr. Reaves noted that Mr. Cote had casually stated that this was a through put to McKee Road on the other side. Mr. Reaves reiterated others' comments that this was a neighborhood, and the road comes directly through a residential area. He indicated that, currently, one (1) vehicle can pass through the street, and drivers must pull over to the side to pass. Mr. Reaves felt it infeasible for cars to pass each other coming through.

Mr. Reaves stated that if the Arbors development moves forward, there should be a "Do Not Enter" indication so others would not be entering his neighborhood, if there is some type of pass-through street. This would facilitate emergency vehicles reaching Emerald Pointe as they would not have to go all the way around and come down McKee Road to get into his community, which would be

a benefit. However, Mr. Reaves felt that normal traffic should come in and out on College Road. He expressed his opinion that there should be discussion with DelDOT, noting that they had sent letters to DelDOT since late 2013 and early 2014 about getting some type of traffic light, such as a flashing yellow or flashing red light, but had been ignored for two (2) years. Mr. Reaves explained that residents must sometimes wait 15 minutes to get out of their neighborhood to go to work. He stated that there had been two (2) or three (3) fatalities. They had lost their neighborhood entrance signs which had not been replaced, although they had asked DelDOT for them numerous times for over two-and-a-half years, but had gotten the run-around. Mr. Reaves felt that if anything were to come before the City in regard to the interconnection, there had to be discussion with the neighborhood. He also commented that there were safety concerns due to numerous young children, expressing the desire to avoid an Amber Alert situation.

Mayor Christiansen stated that Mr. Reaves was correct, noting that he and Council President Slavin had made two (2) requests for traffic studies to be initiated at the entrance to Emerald Pointe, at the request of the residents, and also at the request of the residents of The Meadows. He informed members that he had observed in the morning that it was "Death Wish 2000" coming out of Emerald Pointe and The Meadows. Mayor Christiansen said he did not know if this had any bearing on whether or not there would be a through street. He questioned if staff had received information from DelDOT in regard to traffic counts. Mayor Christiansen stated his belief that, with the completion of the West Dover Connector that runs through the south of the City, the traffic situation on McKee Road and Scarborough Road, and at the entrance and exit to Emerald Pointe, would be exacerbated. Mayor Christiansen indicated that he would like to see those traffic studies in hand for the City to make an intelligent decision on which direction the City would go.

Mrs. Townshend advised that she was not aware of any studies. She indicated that she could follow up with the DelDOT traffic section, especially if there had been fatalities. If a study had not been done, Mrs. Townshend indicated that staff could work with DelDOT on this. [Sent to AMT]

Mr. Cote stated that he would follow up with DelDOT's traffic study section to see what the results were of the requests; however, based on his experience, there was not enough traffic out of Emerald Pointe to warrant a signal.

Mr. Reaves suggested a signal at the intersection of McKee and Scarborough Roads, noting that this would break up the traffic pattern. Responding, Mr. Cote advised that warrants must be satisfied in order to place traffic signals, and even if a warrant is met, this does not necessarily mean that DelDOT would install a signal, just that the location is eligible for one. He reiterated his doubt that a warrant would be met. Mr. Cote noted that the residents were concerned about getting out onto McKee Road; however, he stated that an interconnection would allow them the opportunity to exit onto College Road. He explained that McKee Road has about 15,800 vehicles per day, whereas College Road has almost half that volume with 8,300 vehicles. Mr. Cote indicated that it would be much easier to get out onto College Road, which would provide the opportunity to bypass the intersection completely, when traveling westbound on College Road.

As a resident who lives and works off State College Road, and who grew up on State College Road, Mr. Sudler concurred with the majority of the residents who had voiced their opinion tonight. He stated that he would not vote in favor of the interconnection.

Mr. Scott Koenig, City Manager, stated that he recalled receiving an email from Mr. Mark Luszcz, Assistant Chief Traffic Engineer, regarding the intersection of McKee Road modified to Scarborough Road. It was Mr. Koenig's belief that DelDOT had done a traffic study and recommended that a signal be constructed at that location when the budget allows.

In regard to community planning, Mr. Koenig stated that interconnectivity is a component of the City's Subdivision Code and staff had been working on this with design engineers, developers, and existing developments for more than 25 years. He explained that communities such as Bicentennial Village, Presidential Courts, The Green, Deerfield, Woodmill, and Woodmill Apartments are interconnected by roads. Mr. Koenig explained that roads were constructed all the way to the boundaries of these subdivisions. He noted that Emerald Pointe, Hidden Oaks, the Village of Cannon Mill, and the Village of Westover all have stub roads constructed to the boundaries to attain interconnectivity for school buses, emergency vehicles, vehicular traffic, and general day-to-day activities of a community. Mr. Koenig indicated that staff had fought for many years for cross-access agreements and cross-access construction to facilitate interconnections between various types of developments to alleviate additional traffic on main roads and main intersections. He advised that State growth patterns are pushing development to the communities. Mr. Koenig noted that traffic volumes in the City would continue to go up as Dover grows and becomes more urbanized and this was a reality for which staff had been planning for more than two (2) decades. He stated that transportation systems, transportation planning, utilities, etc., are part of the community fabric. Acknowledging that he understood that there are negatives to interconnectivity, Mr. Koenig noted that there are also positives that the City assumed would happen when developments and construction were planned and authorized. He explained that if Council decides not to approve the interconnection, there would be a subdivision with 150 units that has one (1) connection to the road for emergency vehicles to get in or out.

Mr. Koenig advised that votes by Council and the Planning Commission regarding interconnectivity had not always been unanimous because it is difficult when portions of the community say they do not want it. Some residents who bought lots in a subdivision become upset because roads may actually be connected to other developments. Mr. Koenig expressed his opinion that staff had done a good job of laying the foundation for interconnections because they are important to the community.

Mr. Reaves stated that the community was planned in 2005 or 2006, and he felt the interconnectivity should have happened when they started building the neighborhood. He indicated that a road could have been put through to College Road at that time, noting that it was now coming as a surprise to residents. He expressed his belief that residents did not disagree with interconnectivity; however, they had a problem with traffic flow coming through the neighborhood. Mr. Reaves felt that this should be considered strongly, noting that emergency vehicles coming in from College Road would be welcome; however, studies were incomplete regarding traffic coming in through the other

neighborhood. He indicated that currently there were 107 houses, and children in the neighborhood had grown, and were now driving. Mr. Reaves stated that households that used to have one (1) or two (2) vehicles now had four (4), and all of this traffic was trying to exit at the same time. He stated that DelDOT had denied their request for any type of alleviation for traffic exiting out onto Scarborough/McKee Road. Mr. Reaves indicated that they had asked for the center lane to be extended to allow drivers to pass and get to the center lane and then merge in to the traffic, noting that this lane ends before their development. Mr. Reaves informed members that they had asked for a flashing red or yellow light. All of these things were requested over the past two (2) years and were denied. He stated, if the project goes forward and more cars are added to the flow, nothing had been suggested to alleviate problems getting out of the development, and he reiterated that there have been three (3) fatalities.

Mrs. Townshend pointed out that the subdivision site plan had been approved with the interconnection. The Planning Commission had acted, and this matter was not being brought to the Committee or Council for approval. She indicated that if Council determines that they want to look at how this could be eliminated, there would be ways to consider this; however, approval was not on the current agenda.

Mr. Hosfelt questioned the process if there was a desire to take action. Responding, Mrs. Townshend explained that she provided information to Mr. William Pepper, Deputy City Solicitor, who evaluated the various codes and stated that Council would have the purview to abandon the right of way of the stub street in Emerald Pointe. Mrs. Townshend advised that if this was something that Council wants to do, it would be initiated. This matter would have to go through the Development Advisory Committee process and through the Planning Commission, with a recommendation, so this would not be a simple motion, but a process that would have to go forward to effect a change.

Mr. Sudler moved to look into the process of abandoning the stub street that was recommended by the Planning Commission in Emerald Pointe, seconded by Mr. Hare.

Mr. Hare stated his belief that there was plenty of time on this issue, noting that the project had not yet been developed or built. He suggested reviewing it for access for emergency vehicles or school buses. Mr. Hare pointed out that there are other developments, such as Hidden Acres, that have only one (1) way in and out. He felt that if the development is built and there are issues and problems, they could be addressed in two (2) or three (3) years, as problems were being addressed in Bicentennial Village.

Ms. Rose Shields, 339 Topaz Circle, stated that when she purchased her property, she asked about this section and was told not to worry about it. She expressed concern about the two (2) houses on either side with traffic going through.

Mr. Sudler stated that he did not oppose interconnection; however, he opposed it at the location discussed at the present moment. He felt that with further input from the community and further

planning, a happy medium would be found. He noted that the Village of Westover had one (1) way in and out and they had been fine.

Mr. Hutchison felt, based on the comments made by neighbors this evening, that members had an opportunity and responsibility to review this matter further to make sure that everyone is on the same page, and understands the issue. He also felt that there was a responsibility to address the concerns, due to public safety.

Mr. Hosfelt advised that he lives in Fox Hall West, where residents suffer every day with interconnection from Westfield cutting through the neighborhood to get to Kenton Road more quickly. He stated that he receives complaints from his neighbors, understood the concerns it causes, and could only imagine what this would cause for the development of Emerald Pointe. Mr. Hosfelt noted that representatives from DelDOT had indicated there would be 8,500 vehicles going back and forth each day. He believed that growth and speeds would become greater. Based on Captain Mark Spicer's comments earlier in the evening, Mr. Hosfelt felt that accidents would increase and expressed the desire to learn from the discussions earlier in the evening in regard to Bicentennial Village.

Mr. Keller stated that he lives in Fox Hall and that any more traffic on College Road would be a mess. He stated that he travels two (2) to three (3) times per day from Oakmont Road to College Road.

The motion to recommend looking into the process of abandoning the stub street that was recommended by the Planning Commission in Emerald Pointe unanimously carried.

Mr. Marion Wright, 118 Topaz Circle, expressed concern about the traffic problems they had experienced, noting that there had been two (2) or three (3) fatalities at the intersection where residents exit. He indicated that when he is exiting to the left or right and he sees a car turning the corner, he thinks he has adequate time to exit; however, the next thing he knows, the car is on top of him, going about 60 or 65 miles per hour. Mr. Wright advised that he and his wife see people flying on their way to work and home at night. He felt this was a dangerous problem that might be reduced if there were stop or speed limit signs. Mr. Wright stated that when making a left-hand turn, he must pull up because he is afraid that someone will hit him from behind instead of going around. Mr. Wright advised members that cars in back cannot see the curve in the road. He felt that bringing a policeman to this location from time to time to warn people about high speeds would probably help, and hopefully there would be no more fatalities.

Review of Position Description/Requirements - City Fire Marshal (Inspector III)
Due to time constraints, this item was deferred.

Mr. Hutchison moved for adjournment of the Safety Advisory and Transportation Committee meeting, seconded by Mr. Cole and unanimously carried.

Meeting adjourned at 7:14 p.m.

UTILITY COMMITTEE

The Utility Committee met with Chairman Hutchison presiding.

AGENDA ADDITIONS/DELETIONS

Mr. Sudler moved for approval of the agenda, seconded by Mr. Blakeman and unanimously carried.

Dedication of Rights-of-Way and Public Infrastructure - Tribbitt Street Extension and Southern Portion of Dover High Drive (Leander Lakes)

Mr. Scott Koenig, City Manager, informed members that as part of the approved plans of the new Dover High School and Leander Lakes Apartments, a road connection was required to the Village of Cannon Mill. He stated that this infrastructure dedication includes a portion of Tribbitt Street and a portion of Dover High Drive, and this improvement would guarantee both vehicular and pedestrian interconnection from the development to the new Dover High School. Mr. Koenig stated that the total amount of road dedication is approximately 940 linear feet, and the total construction value of the associated public improvements is approximately $335,368. He explained that these improvements were required as part of the development project, and Dixie Construction has completed construction of the improvements in accordance with City standards and specifications. After construction was completed, City staff inspected the public improvements and developed a list of repairs to be made to meet the City of Dover Standards and Specifications for Public Works Construction. As of this date, all work required by the Public Works Director has been completed. A one (1) year Maintenance Agreement and a Release of Liabilities will be submitted as part of the dedication process.

Staff recommended acceptance of the dedication of rights-of-way and public infrastructure of the Tribbitt Street Extension and southern portion of Dover High Drive, to include all of the referenced public improvements, as well as their construction values.

Mr. Blakeman moved to recommend approval of staff's recommendation, seconded by Mr. Neil and unanimously carried.

Annual Engineering Consultant's Report on the Operation and Maintenance of the Electric System - Fiscal Year 2015

Mrs. Donna Mitchell, Controller/Treasurer, reviewed the conclusions of the Engineering Consultant's Report on the Operation and Maintenance of the Electric System, Fiscal Year 2015, prepared by Burns & McDonnell Engineering Company, Inc. She reminded members that the Annual Engineering Consultant's Report was required by Section 705 and Section 504 of the City's Resolution, Authorizing and Securing Electric Revenue Bonds, adopted December 23, 1985.

Mrs. Mitchell noted that pages 3-17 through 3-19 describe the projects completed during the past year, as well as upcoming projects.

Mrs. Mitchell, referring to Page 4-3 of Table 4-1: Annual Sales and Customer Accounts, advised members that there was a typographical error, and the Total Energy Sales for FY 2015 should reflect 723M kilowatt hours (kWh), not 715M kWh, and a revised Report would be provided ***(Attachment #3)***.

Mrs. Mitchell informed members that one (1) difference in this year's report was that the consultant included an Appendix A with pictures of each the City's substations, identified by location, noting that St. Jones was spelled incorrectly.

Staff recommended acceptance of the Report.

Mr. Blakeman, referring to Page 3-5 of Table 3-2: FY 2015 Generating Plant Operating Statistics, noted that the statistics regarding Forced Outage were listed as hours, and the Availability Factor did not seem to coincide with the hours. He asked if the planned outages that reduce availability were not listed. Responding, Mr. Harry Maloney, Electric Director, explained that the table only listed the forced outage rates. He stated that he would examine the numbers and provide clarification.

Mr. Blakeman, referring to Table 4-3 Revenue Margins and Unaccounted for Energy on Page 4-5, questioned if outdoor lighting was moved from the losses area into a separate line item account, noting that the Report indicated that "In previous Annual Engineering Consultant's Reports, Outdoor Lighting energy was recorded as losses. In this report, Outdoor Lighting customer accounts, energy sales, and revenues were recorded as a separate rate class." In response, Mrs. Mitchell confirmed that the outdoor lighting was moved out of the loss area because that was inappropriate. Mr. Blakeman commended staff for moving it, noting that it was a good thing to do.

Mr. Blakeman moved to recommend acceptance of the report, as recommended by Staff, seconded by Mr. Neil and unanimously carried.

TEA/NAES Reports (January and February)

The TEA/NAES Monthly Reports for January and February 2016 were provided to members to enable them to monitor electric sales and revenues received, which will provide a better understanding of any fluctuations that occur and allow the opportunity to make improvements if deemed necessary.

Mr. Scott Koenig, City Manager, reviewed Page 12 of the TEA Report for February 2016, noting that the Gross Load Actual YTD was tracking slightly above what was budgeted for the year. Referring to the Total - Utilities Cost, he stated that $33,855,500 was budgeted as projected expense through February, and the actual expenses through February were $29,251,658, which was favorable by approximately $4.6M. Mr. Koenig indicated that this trend seems to be continuing through the FY 2017 budget.

Staff recommended acceptance of the reports.

Mr. Neil moved to recommend acceptance of the reports, as recommended by Staff, seconded by Mr. Blakeman and unanimously carried.

Garrison Oak Technical Park Project Updates

Mr. Scott Koenig, City Manager, informed members that this would be the final update regarding Garrison Oak construction projects, since the projects are coming to a close. He provided the following updates:

City Infrastructure

Mr. Koenig reminded members that Council awarded three (3) different construction contracts for the Garrison Oak Technical Park (GOTP). He stated that one (1) contract was awarded to A-Del Construction Co., Inc. in the original amount of $6,214,700 to build internal gravity sewer, water distribution system and General Fund infrastructure for streets, drainage ditches and pipes, as well as landscaping associated with the technical park. Mr. Koenig stated that the second contract was to CB & I, Inc. for the elevated 1.5MG water tower and the value of the original contract was $3,487,660. Mr. Koenig advised that the last infrastructure contract was awarded to George & Lynch, Inc. for the construction of the sanitary sewer pump stations and force mains inside the GOTP, as well as the upgrade of the pumping station in White Oak Farms, and the abandonment of the small pump station on White Oak Road, noting that the value of that contract was $2,572,065. Mr. Koenig stated that the total infrastructure contracts related to these three (3) projects are valued at $12,274,425, and the final contracts are currently tracking at $12,246,788.10, which is a slight reduction of the amount that was initially authorized.

Mr. Koenig informed members that the George & Lynch contract is complete, they have submitted all their paperwork, and the infrastructure is operational, including all the pump stations and abandonments. Referring to the CB & I contract, he stated that the elevated storage tower is in operation; however, there are some final closeout items that need to be done on that project. He advised that staff is holding approximately $174,000 for project closeout and documentation that needs to be submitted prior to releasing the final payment. Mr. Koenig stated that staff is holding approximately $611,000 for the A-Del contract until they finalize all of the work. He explained that A-Del has some sediment and erosion control that needs to be finished; however, the City is nearing the very end stages of that contract, and staff expects to release the retainage back to the contractor by the end of the fiscal year in order to wrap up the construction contracts.

Mr. Koenig advised that there were some miscellaneous contracts associated with the development that include final design. He stated that surveying in the flood plain must be completed to confirm the final as-builts of the improvements in the flood plain. Mr. Koenig reminded members that there was also work authorized through the Electric Department to relocate the 69 kV line, noting that all that work was completed and all the billing should be finalized by the end of the current fiscal year, if it was not already finalized.

Mr. Koenig stated that construction would wrap up in FY 2016. He informed members that the only thing that currently looks incomplete is the left entrance to the Garrison Energy Center (GEC), explaining that the contractor for the GEC needs to finish the ramping apron into the parking lot as

one (1) of their final construction items. Mr. Koenig stated that the park is operational and the City is still working to market and sell additional lots.

Calpine Energy Center
Mr. Hutchison asked if the Calpine water demand was meeting Staff's expectations. Responding, Mr. Koenig advised that the numbers were running low for the first nine (9) months, explaining that part of reason was related to some outages last fall for construction completion. Mr. Koenig stated that staff would be fully reviewing these numbers during the summer months to make sure that Calpine is hitting the budget numbers or that there is an explanation as to why they are not.

Dover Sun Park
Members reviewed details regarding the White Oak Solar Park incremental cost for Fiscal Year 2016.

Mr. Koenig stated that the incremental costs for the Sun Park through February 2016 indicated an additional $763,204 over what the City would expect to pay for normal electric power coming off of the grid.

Mr. Koenig informed members that, in the future, this report would be included in either the City Manager's Monthly Report or the TEA/NAES Report. He stated that Council will still be provided the information; however, it would no longer be a separate item for discussion at the Utility Committee meeting.

Mr. Sudler moved for adjournment of the Utility Committee meeting. The motion was seconded by Mr. Blakeman and unanimously carried.

Meeting adjourned at 7:31 p.m.

LEGISLATIVE, FINANCE AND ADMINISTRATION COMMITTEE

The Legislative, Finance, and Administration Committee met with Chairman Hare presiding.

AGENDA ADDITIONS/DELETIONS
Mr. Sudler moved for approval of the agenda, seconded by Mr. Neil and unanimously carried.

Update - Transfer of Real Property from Delaware Civic Center Corporation to Delaware State University
During their meeting of August 24, 2015, the Committee recommended continued conversation and information gathering from Delaware State University (DSU), as well as the City Manager, and for DSU to come back at the first meeting in October and give another presentation in regard to how they could economically benefit both the City and DSU. On October 12, 2015 the City Manager provided a status report on the request.

During the Legislative, Finance, and Administration Committee meeting of April 26, 2016, Mr. David Sheppard, General Counsel for DSU, advised that when the University last had an opportunity to present before Council, Mr. Tom Preston was there in the role of General Counsel and he has since retired. Mr. Sheppard advised that he was present at the meeting as the Assistant General Counsel and stated that he did not have anything additional to add in terms of the economic benefit that the development of a convocation center on the civic center property site would bring to the City. He referred members to the Delaware State University Convocation Center Final Report ***(Attachment #4)*** that was presented during the August 24, 2015 meeting. In regard to the economic benefit to the City of a convocation center on the civic center property site, Mr. Sheppard pointed out that Page 24 - Economic Impact reflected the estimate of expert consultants that, if built and fully utilized, the convocation center would generate $7M - $9.5M per year in revenue for the Dover area.

Mr. Sheppard stated that developing such a center would also be to the material benefit of the University. He informed members that for athletic events DSU currently uses Memorial Hall, which is more than 40 years old and not up to what one would expect for a Division 1 NCAA program. There are also events such as convocations and graduations, and DSU was fortunate to have Vice President Joe Biden speaking at graduation this year. Mr. Sheppard expressed his hope that the weather would cooperate on May 7, 2016 for graduation; however, he noted the benefit of having a facility that can house both students and parents during graduation. He stated that DSU is currently relegated to Memorial Hall in the wintertime, which is not ideal, and to the outdoor football stadium in the summertime, which is uncomfortable in the rain.

Mr. Sheppard indicated that the benefit to the City as a whole would be for events that could come to the City. He stated that indoor facilities in Delaware are limited for trade shows, conventions, and athletic events, noting that existing indoor facilities include the Bob Carpenter Center in Newark, the Chase Center in Wilmington, and some limited facilities at Dover Downs.

Mr. Sheppard indicated that they propose to build the facility in two (2) phases. The convocation center in phase 1 would have 3,600 arena-style seats and up to approximately 1,200 floor seats. Phase 2 would allow for total seating of approximately 6,000. Mr. Sheppard stated that the 76ers have an NBA developmental league team that plays their entire schedule at the Bob Carpenter Center. He used this an example of an activity that could be brought to the Dover area, which would allow those on the Delmarva Peninsula an opportunity to see games. In terms of economic benefit, Mr. Sheppard indicated that there would be revenue from the University's use of City utility service and tax dollars from the various businesses who generate revenue from events such as conventions or trade shows.

Mr. Sheppard reminded members that the land was formerly the Frazier's Pit landfill and was not currently being utilized. It was his understanding, from talking to DSU's expert consultants and from information that DSU has on the property, that the vast majority of the property could not be developed because it is landfill. Mr. Sheppard had recently been informed that the sole use of the land at this point in terms of development would be as a parking lot to facilitate the facility that was being discussed because of the desire not to disturb the land and create run-off from a disruption of the land.

Mr. Sheppard reminded members that, during the prior discussion of this topic, the City Manager had expressed his beliefs regarding the value of the land and there was some discussion about obtaining information to support that valuation. Mr. Sheppard had not seen that information to date; therefore, he had no basis to compare and contrast in terms of valuation. He advised members that he serves on the planning board for New Castle County and, based on the information he had received from experts and his own experience, he felt there was very little that could be done with grounds that were formerly landfill. In addition, Mr. Sheppard noted that the property is located on Crawford Carroll Avenue, which sits off Route 13, noting that land with frontage on Route 13 has a value greater than land that is set back.

Mr. Sudler questioned whether DSU would be making a donation in regard to property tax if the City were to give the land to the University. Responding, Mr. Sheppard stated that no decisions had been made in this regard at this point. He stated that Mr. Hare had met with the President and Chief Operating Officer of DSU, as well as the General Counsel serving at that time. They had discussed some ideas for DSU to make a contribution or give something back to the City. Mr. Sheppard advised members that he had not been present at that meeting; however, he had the impression that the President was open to these ideas, which might be subject to future discussion.

Ms. Maucher questioned if the University would participate in off-setting the infrastructure improvement costs that would come from 6,000 extra vehicles coming in for events. Mr. Sheppard stated that they would; however, he indicated that the level of this contribution would depend on the attendant cost. He advised members that DSU met with the Delaware Department of Transportation (DelDOT) last summer regarding the prospect of redeveloping the area to redistribute traffic, utilizing a different entrance of the Dover Mall and having traffic run down that road, and, through eminent domain, capturing some of the existing DSU property in the baseball field to do that. Mr. Sheppard felt that some trade-offs could probably happen to facilitate that, stating that the University would be an active part of that discussion as part of its traditional pedestrian plan for students to access the property.

Mr. Cole stated that he understood the benefits of the proposal and questioned if there were any concrete figures regarding the direct benefit to the City. Noting that Mr. Hare indicated that there had been a meeting and that some other things were in the works, Mr. Cole asked if they would be presenting information that was new since the last meeting. Responding, Mr. Sheppard stated that he had no information to add to what was captured in the Final Report. He indicated that there was a lot of speculation involved, noting that when building a facility like this it is necessary to anticipate the draw of the facility and the attendant benefit. Mr. Sheppard felt this was largely captured in the report and did not want to misrepresent that there would be some greater benefit to the City since the experts had spoken to the issue. In terms of sheer dollars and cents, he felt that nothing had changed. Mr. Sheppard indicated that the previous discussion was complicated by a representation that was made about the valuation of the land and what the City would be entitled to as a consequence of transferring the land to DSU. He felt that this valuation information would be helpful and he did not have it, reiterating his understanding that the property was landfill and its valuation was nominal or nothing at all. Mr. Sheppard advised members that DSU had reached out to the Department of Natural Resources and Environmental Control to figure out what liability

would be inherited for any necessary remediation for the land into the future. If the land were transferred to the University, DSU would have some responsibility to make sure there is no environmental impact, noting that this responsibility now lies with the City. He was unsure how this would translate into true dollars. Mr. Sheppard felt that he was operating at a disadvantage, noting that he was not in a position to answer that question, although the City Manager may be.

Mr. Sudler recalled that, during the previous discussion, DSU had raised $10,000 or $16,000 toward the total estimated cost for this project and questioned the current status. He noted that there had been discussion about how long it would take to get the project up and running so that the City would start receiving some of the economic benefit. In response, Mr. Sheppard stated that DSU was in the process of developing a Request for Information (RFI) for a number of projects, including residence halls, other facilities, and the convocation center. This was the result of someone who came to DSU as part of a public/private partnership to develop the convention center and had a proposal that was shovel-ready. In using the State's and the University's dollars, Mr. Sheppard explained that the project would have to be bid out; however, he stated that there are entities who could turn the project around within 18 months to two (2) years.

Mr. Shevock stated that during the previous presentation there had been discussion about the City possibly using a portion of the property and questioned if this was no longer being considered. Responding, Mr. Scott Koenig, City Manager, stated that he was still interested in using the portion of land for potential solar field development over the next three (3) to twenty (20) years. He explained that this area was shadowed and labeled as future parking on Page 16 of the Delaware State University Convocation Center Final Report. Mr. Koenig indicated that this had not been shared with DSU at this point because survey data had not yet been reviewed.

Mr. Hare stated that State Senators Bonini and Bushweller were offering DSU support for the project and that the land, with the exception of the use for the solar park, is really no immediate benefit to the City. He suggested including a clause that if in two (2) years there is no contract in place to build something, then the land will revert back to the City. Mr. Hare stated that if something positive can come from the land and the State is willing to help, they should move ahead.

Mr. Sudler asked what the value of the land was. Responding, Mr. Scott Koenig, City Manager, stated that he did not have that information with him, noting that the City has not had the land appraised and he did not know what it would be valued at from a tax assessment standpoint. He advised that the City spends approximately $1,000 a year to have an environmental report done related to the closing of the former landfill. Mr. Koenig stated that if there is any mowing or maintenance associated with the cap, it is done by the City at a cost of approximately $3,000 to $5,000 a year so that the reporting mechanism with DNREC does not expire and reopen the City's liability for the landfill closure. He noted that the deed is still in the Civic Center Corporation's name. Mr. Koenig advised that the land would be good for something like a parking lot; however, it is not going to be prime land to actually build the facility on because of the differential settling issues. He noted that they do not have a private, third-party appraisal of the land. Mr. Sudler recalled that, during the last discussion, they were given a value of between $1.7M and $2M for the property.

Mr. Koenig advised that there are three (3) parcels of land associated with this area. One (1) is the old Frazier Landfill area, and there are two (2) other pieces of land that come up to the Crawford Carroll Avenue extended area. He indicated that the value in general is not heavily weighed to the landfill area. Mr. Sudler reminded members that, during the last discussion of this item, Council members voiced concerns that they did not know the value of the land they would be gifting away.

Mr. Hosfelt stated that he was one (1) of the councilmen that expressed concern with the price tag and noted that his other concern was that, historically, colleges and universities do not pay taxes on significant amounts of land and building value. He also noted that Dover Fire Department responds to hundreds of calls to the DSU campus and receives nothing in return, which is upsetting. Mr. Hosfelt stated that he did not foresee the situation getting any better if DSU builds a convocation center, noting that it would continue to tax the City's public safety resources. He noted that DSU has a fine police department; however, the use of the Fire Department alone taxes the equipment, staff, and volunteers.

Responding, Mr. Hare advised that there was something in the works, which will be discussed during the budget review. He indicated that there has been discussion with DSU and they are receptive to this idea.

Mr. Shevock asked if the City was going to dedicate the whole piece of ground or if there was going to be a set aside for the solar farm that Mr. Koenig mentioned. Responding, Mr. Koenig advised that there are three (3) pieces of land associated with the total area of this proposal. He noted that the City donated the land known as Frazier's Pit to the Civic Center Corporation years ago with a clause that if the Civic Center Corporation did not move forward, those land donations would revert back to the donors. Mr. Koenig stated that the land that would revert back to the City is the Frazier Pit and the boundary of Frazier Pit. He noted that there are two (2) other pieces of land owned by the Davey Lumber Company and KW Lands LLC. Mr. Koenig advised that both of those pieces of land run up and touch what is now called Crawford Carroll Avenue.

Mr. Koenig advised members that, if you were standing on Crawford Carroll Avenue and looking towards the woods along the edge of Sam's Club, the land from the road all the way back to the power lines is the KW Lands LLC and the Davey Lumber land. He noted that the land behind the power lines that are traversing the land is where the Frazier Pit land holding starts and runs roughly from that overhead power line all the way to the edge of, and including the slope down to, the lake.

Mr. Koenig advised that a number of the acres of the former landfill are not developable because some of this area is essentially the cap of the landfill. He noted that, under the closure documents for development, the land could be used for parking lots and certain types of infrastructure, affording for differential settlement of the land; however, it is not prime development land.

Mr. Sudler stated that both the City and DSU need to economically coexist and help each other; however, the City will soon be reviewing its budget, which will include the needs of the Police and Fire Departments. Echoing Mr. Hosfelt's concerns, Mr. Sudler stated that when there is a situation that exceeds DSU's capability, whether it is a fire or a criminal matter, the City is hit with the cost.

Mr. Hare advised that he and Mr. Koenig met with DSU President Williams and discussed the amount of tax-exempt property owned by DSU. He noted that one of the proposals was that if the Dover Fire Department needed a new fire truck, DSU could contribute $150,000 a year for the next five (5) to seven (7) years to the City as their Payment-In-Lieu of Taxes (PILOT) and they would be recognized for purchasing the fire truck. Mr. Hare indicated that President Williams was not adverse to the idea and liked that DSU would be recognized.

Mr. Hare advised members that he is pursuing this approach with all non-profits, which account for 40% of the tax-free properties in the City of Dover, noting that all non-profits should pay something toward public safety. He reminded members that property taxes do not cover the Fire and Police Departments.

Mr. Hare reiterated his feeling that donating the property to DSU, with a claw-back clause, would be a win-win situation. He noted that the City wanted a civic center there initially, and if DSU was willing to build it and it is built, then the City will also be able to use it.

Mr. Sudler reiterated that his major concern was that he did not want his constituents to bear the cost. Responding, Mr. Hare stated that it would be saving the constituents money because the City is spending money to maintain the property.

Mr. Hutchison stated that he liked the concept and would like to see the City of Dover sit down with the leadership of DSU to discuss the property. He stated that he thought this was a great opportunity for DSU and the City of Dover to work in partnership.

Referring to Mr. Hare's suggestion of a claw-back clause, Mr. Shepherd recalled that the Civic Center Corporation had 10 years to try to build the Civic Center and could not accomplish it. Responding, Mr. Hare stated that two (2) or three (3) years was just an example and it could be a 10-year clause.

Mr. Shepherd advised that DSU was in discussions and going through a process to build the convocation center.

Responding to Ms. Maucher, Mr. Hare stated that the Civic Center Corporation was also non-profit and the situation would be similar.

Mayor Christiansen stated that he participated in a number of meetings with DSU President Williams, the Provost, and General Counsel, and they made it quite clear that they were interested in this property. He also noted that the Kent County Metropolitan Planning Organization (MPO), of which he is vice-chairman, has proposed the extension of Crawford Carroll Avenue and reconfiguring the intersection from Produce Junction onto the highway in anticipation of the convocation center.

Mayor Christiansen contended that if a happy medium or common ground could be reached for managing the property between DSU and the City of Dover, with no impact on the City's

constituents, then they need to move forward. He noted that, otherwise, they would end up 10 years down the road with a vacant lot that had had the potential of moving Dover into the 21st Century. Mayor Christiansen suggested that it was imperative to handle this request with due diligence, but rather quickly.

State Senator Brian Bushweller recalled that 10 or 15 years ago, when Mr. Hutchison was Mayor, he gave a stump speech around the City talking about the wonderful contributions that the higher education institutions in the City of Dover were providing to the City and to the whole State, but especially to the City of Dover. He noted that Mayor Hutchison would talk about Delaware State University, Wilmington University, Delaware Technical & Community College, and Wesley College, and even the University of Delaware Paradee Center near the Danner Farm. Senator Bushweller stated that Mayor Hutchison was right, and Senator Bushweller saw this project fitting right into that notion. He suggested that the City look to the higher education institutions for economic development and job creation, noting that they are already making major financial and economic contributions.

Senator Bushweller advised that they should be doing anything they can to enhance the ability of those institutions to themselves further develop and add more economic vitality and more jobs to our City. He stated that in economic development they say there are two (2) things you have to do, one (1) is to recruit new businesses and the other is to nurture the businesses you have. Senator Bushweller felt that granting this request would nurture the businesses that the City has.

Senator Bushweller stated that the land for a civic center was donated in the 1990s and the State contributed $7M, which was put into special accounts for the civic center. He thought t was not built because the concept of the civic center never caught on with the people, City Council, or with developers. He advised that, three (3) to five (5) years ago, he was in a meeting at DSU and someone mentioned the civic center land as the potential site for a university facility, and it occurred to him that DSU could be the "anchor tenant" for the site. Senator Bushweller stated that he felt one (1) of the reasons the civic center never worked was because it lacked an anchor to make it all work.

Senator Bushweller advised that the Bond Bill Committee, which he and Senator Bonini are members of, offered language last year or the year before that recognizes the interest of Delaware State in obtaining land from the Civic Center Corporation for a convocation center and directs the Civic Center Corporation, which is now defunct, to reconstitute itself for the purpose of disposing of its assets in a manner consistent with the charter of the Civic Center Corporation, which is to dispose of its land in an appropriate way. He recognized the reversion clause in the deed, which was the current topic of discussion.

Senator Bushweller stated that the State also has language that directs the relevant parties, including the State, to look for appropriate funding mechanisms to build the convocation center. He suggested that the clawback should not be too restrictive because, unless there is a developer that is willing to invest the money, the State will probably end up being the biggest funder of the convocation center, and they are not financially prepared to begin the project.

Senator Bushweller recognized that the property tax was a legitimate issue for the City; however, he suggested that most state capitals have the same problem because so many state buildings are located in the capital. He commended the members of Council and DSU for considering options and hoped that they would continue to work on the tax issue while they move forward on the land transfer. Senator Bushweller noted that it was his understanding that KW Lands LLC had the same reversion clause in the deed, and they have authorized the transfer of their land to DSU.

Senator Bushweller commended Council members for discussing this complicated issue and stated that he would appreciate it if Council could move forward on it, recognizing that there would be outstanding issues to discuss. He offered his assistance moving forward.

State Senator Colin Bonini advised members that he is the most conservative member of the General Assembly and that he hates to spend money; however, as a member of the working group for the convocation center, he realized that the proposal makes sense for two (2) reasons. The first reason is that it is going to bring money into the City and the value of the property is currently zero because the City does not have anybody interested in buying it. The second reason is that DSU, which is a State agency, provides direct accountability for a vitally important project.

Senator Bonini, as the senior Senator on the Bond Bill Committee, assured members that the State anticipates helping to absorb the cost of infrastructure if this becomes necessary, noting that it had been discussed by the working group.

Senator Bonini echoed Senator Bushweller's concern with the length of time for the clawback clause, noting that a compressed timeline for construction could result in a developer increasing their price. He stated that he hoped that Council would move forward as quickly as possible.

Senator Bonini advised that he made his whole career about value for taxpayers, and he felt that the convocation center would be a winner that would bring significant revenue into the City. He suggested that the center can be a significant tax driver, whether through a ticket tax for the events or by some other means.

Senator Bonini stated that he recognized the issue of Payment-In-Lieu of Taxes (PILOT) and indicated that at least two (2) senators were actively working on structurally fixing the issue. He stated that he had also spoken with Mr. Hare about specific projects that he could, and wanted to, help with. Senator Bonini stated that he did not want to see worthwhile projects get caught in the PILOT debate, feeling that the long-term answer is structural.

Senator Bonini reiterated his hope that Council will transfer this land because there is the potential for something fantastic in Dover. He reiterated that if it turns out not to be as fantastic as they hope, there is a direct line of accountability, which is tremendously important.

Mr. Sudler thanked Senators Bonini and Bushweller for supporting DSU. He stated that it is very important for members to discuss this matter and expressed his support for further discussions or staff recommendations.

Mr. Sudler moved to recommend that Delaware State University (DSU) present the Committee with a proposal for City Council to transfer the property to DSU. The motion was seconded by Ms. Maucher.

Mr. Neil indicated that he understands why it is extremely important for the City to do this type of thing and that it is something he would support; however, he stated that he would need to explain this to constituents in layman's terms. He informed members that he had received a letter from a constituent in his community who does not understand the value of this proposal or why he works to protect Dover Downs. Mr. Neil stated that the constituents in his community see the value of the equity in their homes dropping to 40% - 50% because it is a lease land community and complain that their taxes have increased. He indicated that he has explained to these constituents that the value of their homes went down by 28% and they are not actually paying more taxes for the services that the City provides. Mr. Neil stated that the City provides a great value for the cost of water and electricity, noting that the City has the second lowest electric rate during the summer and approximately the fourth lowest during the winter. He explained that by expanding this economic value, the City can bring in more businesses to decrease taxes.

Mr. Neil requested that DSU provide an explanation of the total package of what they are offering. He stated that he is supportive of the educational institutions in the City, but he has to explain this proposal to his constituents. Mr. Neil indicated that information regarding the negotiations that DSU had been discussing with members of Council would also be valuable for him in explaining why the City would like to transfer this property to DSU.

Mr. Sudler called for the question, seconded by Mr. Hare.

Mr. Sudler indicated that the motion was to send this matter to Council for further discussion of the transfer of this City property to DSU. Responding, Mr. Hare stated his understanding that DSU was going to come back to the Committee with a proposal, which would include a clawback, so that members can take an official vote.

Mr. Hare reminded members that the City gave this land to the Civic Center Corporation in the 1990s, and this would just transfer it to another agency hoping to do what the Civic Center Corporation did not do.

Mr. Hosfelt and Mr. Cole requested clarification on the motion. Responding, Mr. Hare stated that DSU is going bring a proposal back to the Committee regarding the transfer of the land.

Mayor Christiansen stated that Mr. Sudler called the question to end the discussion and it was appropriately seconded, so that is the motion on the floor that needs to be acted on, according to Robert's Rules of Order.

Mr. Hosfelt stated that he cannot vote on a motion if he does not know what it is. Responding, Mr. Hare clarified that the motion was to end the discussion.

In response to Mr. Sudler, Mr. Hare stated that the original motion made by Mr. Sudler was to have DSU come back to the Committee with a proposal for the City to transfer the land to DSU.

Responding to Mr. Sudler, Mrs. Traci McDowell, City Clerk, indicated that the original motion was for DSU to bring a proposal back for consideration. Mr. Hare reminded members that the motion was seconded by Ms. Maucher.

The motion to recommend that Delaware State University (DSU) present the Committee with a proposal for City Council to transfer the property to DSU was unanimously carried.

Responding to Mr. Sheppard, Mr. Hare stated that DSU would simply bring the proposal to Council, including a clawback. He explained that the matter would not come back to the Committee.

Senator Bushweller asked if it was the intent of this Committee that Council vote on transferring the land to DSU, subject only to the revision of the proposal from DSU in that regard. Responding, Mr. Neil and Mr. Hare confirmed that this was their understanding.

Mr. Hare moved to recommend in favor of transferring the land to DSU. The motion was seconded by Mr. Sudler.

Mr. Hosfelt stated that there had been no discussion on the motion.

Mr. Neil stated that he wants to see what DSU is proposing, so he knows what he is voting for when it gets to Council. He indicated that he wants to know, in terms of time, when it will come back to Council, what DSU hopes to anticipate, what the fundraising is going to be that they are going to undertake, the building that they are talking about; he wants to see it all.

Mr. Sudler suggested a friendly amendment to the motion, that DSU provide the City with the information requested by Mr. Neil prior to the Council meeting, for inclusion in the Council packet. He stated that this would give members time to review the information and have their questions ready. Once members' questions are answered, they can vote yes or no.

Mayor Christiansen noted that the last motion that passed was to agree to move forward on the transfer of the property. He expressed his opinion that, in the interest of transparency and total understanding by each member of Council on behalf of the constituents, it is imperative that DSU bring the information requested by Mr. Neil back to the Committee for perusal and then move directly to Council. It was Mayor Christiansen's opinion that to do any less is derelict of duty. He asked how the constituents would understand the actions Council takes if the members of Council do not understand them. Mayor Christiansen stated that it is only fair to members of Council, the citizens, and DSU.

Mr. Neil noted that Mr. Hare had mentioned that DSU might want to include in their proposal that they will be making a donation towards fire protection, etc. Responding, Mr. Hare stated that the donation is something totally different and separate from this matter.

Mr. Shevock asked how long it would take for DSU to come back to Council with the proposal. Responding, Mr. Sheppard stated that part of the challenge is trying to figure out what to provide, in addition to what has already been provided in the Delaware State University Convocation Center Final Report, which was done by some very talented people. He indicated that maybe DSU could distill the Report down in a way that may be more easily communicated to the City's constituents, suggesting perhaps a page with bullet points. Mr. Sheppard asked, once DSU has had the opportunity to discuss it and make sure they provide the right product, what an appropriate time would be to bring this back.

Responding to Mr. Hare, Mr. Sheppard indicated that 30 days would probably be sufficient.

Mr. Neil stated that this time frame was fine with him, noting that he did not want to push them and would wait until they are ready. He noted that, in terms of the time, DSU needs to figure out if this will be done within a 5-year period or a 10-year period and inform Council what it is going to take. Responding, Mr. Hare stated that this information would be included in their proposal as the clawback.

In response to Mr. Neil, Mr. Sheppard stated that the challenge, as was demonstrated by the lack of success for the Civic Center Corporation, is that it is difficult for him to tell the City that DSU is going to get this done on a date certain. He explained that this is why a reversionary interest in the language would be for a future date that is far off, noting that it is not as simple as snapping your fingers and making it happen. Mr. Sheppard stated that DSU has to get partners in this and might have to engage the State on the effort.

Mr. Koenig reminded members that when this matter was previously discussed, one (1) of the things that Staff was asked to do was to go back and evaluate the whole issue of whether this land had value to the City. Referring to Page 16 of the DSU Convocation Center Final Report, Mr. Koenig stated that Staff has been on record several times saying that the value for the City is the area shadowed and labeled as future parking, which could be used for a potential solar field. He wanted to make sure that this is part of the discussion, explaining that if the City simply transfers this land, the City may be buying land for a potential solar field. Mr. Koenig stated that his only caveat regarding this matter is to ensure that discussions regarding a potential solar field and the confirming of any easements on this property occur prior to Council taking final action on a land transfer.

Ms. Maucher asked if the Committee can recommend that Council enter into negotiations with DSU for the transfer of the property, and whether that would end the discussion by the Committee. She stated that she did not understand why this would need to come back to the Committee. Responding, Mr. Hare advised that Council can enter into negotiations; however, the matter would have to come back to the Committee for review and recommendation to Council.

In response to Mr. Hare, Mr. Hosfelt stated that, at this point, members had not agreed to enter into negotiations. Based on the motion, it was his understanding that the Committee had agreed to allow time for DSU to bring back information for further discussion. Mr. Hosfelt stated that he did not see the motion as approval to sell the property or give the property or deed over.

Mr. Hare clarified that the motion was to have DSU bring their proposal back to the Committee.

Mr. Sheppard requested additional clarification, explaining that he had heard two (2) different requests. He stated his understanding that Mr. Neil wants a distillation of the Delaware State University Convocation Center Final Report to be able to more easily communicate it to his constituents, which Mr. Sheppard indicated that DSU can do. He stated that he also heard, at least as a suggestion, that the City is looking for language from DSU to set the parameters around how the transfer would operate, what opportunity for reversionary interest there might be to the City and how that would work. He wanted to make sure that he was clear on these requests, so that when he comes back, he has what Council needs to be able to move forward.

Responding to Mr. Sheppard, Mr. Hare indicated that if DSU came back with a proposal that KW Lands and the Frazier Pit be transferred to DSU, the City would still have the right to the other parcel that Mr. Koenig said the City might need for the solar field, there would be a 10-year clawback, and the Committee can discuss what to do.

Mr. Hosfelt stated that he was unsure where the City was at this point. It was his understanding that the City has something that DSU wants and, in his view, DSU would come to Council as a whole with their proposal to take this property off the City's hands. Mr. Hosfelt indicated that it was obvious there had been discussions or negotiations about other costs and factors that may affect the City that not everyone in the room was aware of, which was confusing. He noted that there had been talk about other information that would come to Council during the budget hearings.

Mr. Hare explained that his previous reference to information to be presented during the budget hearings did not pertain to the land transfer but negotiations for something else in the budget that was brought up last year.

Mr. Hosfelt expressed his opinion that the best thing to do at this point was for the motion to be withdrawn, table consideration of the transfer, and come back and review this matter with cooler heads.

Mr. Hutchison noted that many of the current members of Council had not been present when the civic center was previously considered. He assured members that study after study had been completed, a partnership between the City of Dover and State of Delaware was put forth, and the land was transferred to the Civic Center Corporation for economic development reasons. Mr. Hutchison noted that a lot of information showed that the transfer made good sense and, at that time, Council reviewed it and had the same questions that members were currently asking. He assured members that when all was said and done, Council had stepped up to the plate and agreed that it made good sense to move forward with the civic center opportunity; however, it failed. Nothing ever happened with the civic center, so the land came back to the City. Mr. Hutchison advised that members were now back at the table with a new opportunity and he felt that the facts and circumstances had not changed regarding why it made good sense to transfer the land. Mr. Hutchison expressed very strong support for hearing back from DSU regarding the proposal.

Mr. Sudler concurred with Mr. Hutchison, stating that he had reviewed this matter, understood what was happening, and was ready to move forward.

Mr. Hosfelt stated that some of those present did not understand what was being proposed or what DSU was being asked to do. Mr. Hosfelt stated that he thought he knew what he was voting for; however, if he had voted in favor of moving forward on giving the land to DSU, he had done so incorrectly and had to be accountable to this. He had intended to vote in favor of getting more information and discussing the matter.

Mr. Cole felt that the misunderstanding was that DSU thought that they had provided a proposal.

Mr. Sheppard stated that he appreciated the challenges and the needs to satisfy the interest of constituents and to be able to fairly represent to them what would be done with the City's property and how this would impact them as citizens. He stated that the proposal on the table was to facilitate a transfer of the property, at least out of the Committee to the full Council, so that a decision could be rendered. Mr. Sheppard reiterated that a lot had been captured in the Delaware State University Convocation Center Final Report and expressed his understanding that language needed to be worked out in terms of how the actual transfer would function. He stated that DSU would be happy to provide that language and did not believe it would take 30 days. Mr. Sheppard advised that he had the impression that Mr. Neil was looking for something different, so there was a lack of clarity. He indicated that if Council was simply looking for language to facilitate the transfer, he would be happy to put that language together.

Mr. Neil echoed Mr. Hutchison statement that this would allow for the development of the property with a new partner, DSU rather than the Civic Center Corporation. He advised that he was looking for the time parameters for how long it would take to develop and complete. Mr. Neil felt that he and Mr. Hare differed in their view, referring to Mr. Hare's previous remarks about a contribution to the City. Responding, Mr. Hare explained that the discussion he and Mr. Koenig had with DSU was in regard to a different matter that applied to the whole City and not DSU and not the land transfer.

Mr. Sudler moved to rescind his original motion.

Mrs. McDowell stated that the motion was for DSU to bring a proposal and was seconded by Ms. Maucher. She indicated that, immediately after that, Mr. Hare made a motion for the Committee to recommend in favor of transferring the property, which had not been voted on.

Mr. Sudler stated that his motion for DSU to bring back a proposal was now null and void.

Mr. Sudler moved that the current proposal from DSU for the transfer of land go forward from the Committee to Council for further discussion within 30-60 days, with information regarding the concerns brought forth to the Committee today, the breakdown requested by Mr. Neil, and a determination of whether a clawback clause would be included.

Mr. Koenig questioned if a motion was needed, stating his belief that DSU had advised that they were interested in the land; however, he did not recall there ever being a letter or written document requesting a specific number of acres or stating exactly what DSU wants from the City.

In response to Mr. Koenig, Mr. Sheppard stated that DSU sent a letter to Council President Slavin some time ago about this issue. He did not have it with him but offered to provide it and stated his belief that it would address the City Manager's concern.

Mr. Sudler stated that his motion was to move the matter from the Committee to Council for further discussion, with the understanding that the breakdown requested by Mr. Neil and information requested by Mr. Hosfelt would be provided.

Mr. Hare stated that his motion could be amended to add these provisions.

Senator Bonini expressed concern about delaying this matter more than a few weeks, noting that the General Assembly would recess on June 30, 2016. It was his belief that the State would need language from the City to move this matter forward, and he commended Senator Bushweller for including such language in the Bond Bill. Senator Bonini indicated that General Assembly would not go back into regular session until January 2017 and wanted to share this time constraint with members.

After further discussion between Mr. Hare and Mr. Sudler regarding the motion on the floor, Mr. Hosfelt expressed confusion regarding the status of this matter. He stated his belief that one (1) motion was unanimously carried, Mr. Hare had made a motion that had not been voted on, and Mr. Sudler had put another motion on the floor.

Mr. Sudler stated that his original motion was null and void. He stated his recollection that Mr. Hare had made a motion and his last motion was an amendment to Mr. Hare's motion which provides the allotted time and language.

Mrs. McDowell reiterated that the first motion, which indicated that DSU would bring a proposal back, had been acted upon and could not be withdrawn. She stated that the next motion was from Mr. Hare to recommend transfer of the property. It was seconded by Mr. Sudler but had not yet been voted on.

In response to Mr. Hare, Mrs. McDowell explained that the motion was for DSU to bring a proposal back to the Committee and it was unanimously carried.

Mr. Hare withdrew his motion to recommend in favor of transferring the land to DSU.

Mr. Sudler questioned if the matter would be brought back to the Committee if he agreed to withdraw his second, expressing his opinion that consideration of this matter should be forwarded to Council.

Mr. Hare stated that he withdrew his motion and asked Mr. Sudler if he agreed to withdraw his motion. Responding, Mr. Sudler agreed to withdraw his motion.

Mr. Hare stated that DSU would bring back a proposal regarding their recommendation for the transfer of the property.

Mr. Sudler requested clarification as to whether this matter would come back to the Committee, reiterating his opinion that it should be forwarded to Council.

Mr. Cole moved to table the matter, seconded by Mr. Hosfelt.

Mr. Cole suggested a roll call vote.

Mr. Sudler questioned whether there was a vote on the previous motion. Responding, Mr. Hare stated that the motion to table supercedes.

Mr. Sudler called a point of order and requested clarification on the motion previous to the current motion to table the matter when he was asked whether or not he was in agreement with rescinding his second to Mr. Hare's motion. Responding, Mrs. McDowell expressed her belief that the previous motion had been rescinded, and the motion that had been voted on was for DSU to bring a proposal.

Mr. Sudler indicated that he had called a point of order as he was unsure why the matter was being tabled if it had already been voted on. Responding, Mrs. McDowell stated that the motion to table was made because the motion to have DSU bring back a proposal did not end the discussion. She reiterated that the motion for DSU to bring a proposal was unanimously carried.

In response to Mr. Sudler, Mrs. McDowell stated her belief that the motion to table had failed, but suggested a roll call vote.

Mr. Neil stated that, according to the motion that passed, that DSU is supposed to bring the proposal back. He suggested that Mr. Sheppard get together with Mr. Koenig regarding Mr. Koenig's concerns related to the land needed for the solar field. Responding, Mr. Sheppard stated that he would be happy to get together with Mr. Koenig at his convenience.

Mr. Hutchison noted that the issue being discussed was not complicated and expressed the need for Mr. Koenig and the leadership at DSU to sit down together, discuss it, and come back in a short period of time so it can be acted upon. He stated that, to be fair to members, they must see what they are voting on. Mr. Hutchison indicated that it was a matter of DSU putting their request in writing so the City could deal with it in haste, noting the need to work with the General Assembly.

Mr. Cole withdrew the motion to table the matter, and Mr. Hosfelt withdrew his second.

For clarification, Mr. Sheppard questioned if DSU would return to the Committee or if this would be considered by Council. Responding, Mr. Hare stated that it would be brought before the Committee of the Whole, which includes members of Council.

Ms. Maucher expressed concerns regarding time constraints.

Mr. Hare stated that the next meeting of the Council Committee of the Whole was scheduled for May 10, 2016 and the next Council meeting was scheduled for May 23, 2016.

Mr. Sudler commented that the General Assembly would recess on June 30, 2016.

Update - Overgrowth of Bamboo - Rodney Road
Due to time constraints, Mr. Sudler moved to defer this item until the next meeting. The motion was seconded by Mr. Cole and unanimously carried.

Downtown Dover Business Improvement District (BID) Budget and Assessment (Tax) Rates for Fiscal Year 2016-2017
Due to time constraints, Mr. Sudler moved to defer this item until the next meeting. The motion was seconded by Mr. Cole and unanimously carried.

Proposed Ordinance #2016-10 Amending Chapter 2 - Administration, Article IV - Officers and Employees, Division 8 - Deferred Compensation Plan (Sponsors: Cole and Koenig)
Due to time constraints, Mr. Sudler moved to defer this item until the next meeting. The motion was seconded by Mr. Cole and unanimously carried.

Evaluation of Trial Period for Council Committee of the Whole Meetings (Council Resolution No. 2015-16)
Due to time constraints, Mr. Sudler moved to defer this item until the next meeting. The motion was seconded by Mr. Cole and unanimously carried.

By unanimous consent, the Legislative, Finance, and Administration meeting adjourned at 9:01 p.m.

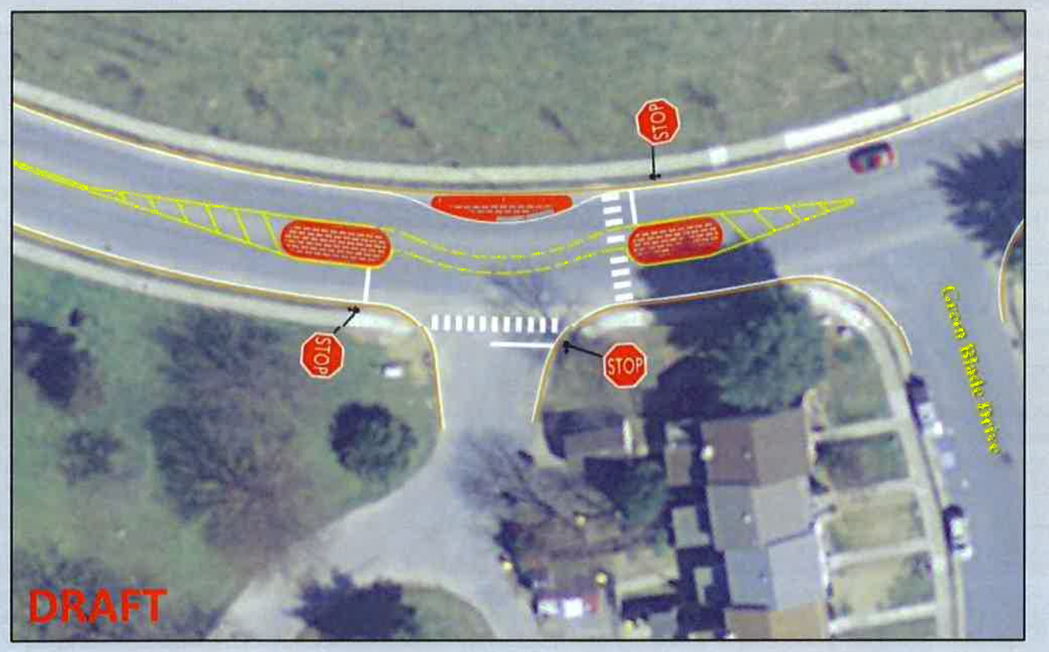
By unanimous consent, the Council Committee of the Whole meeting adjourned at 9:01 p.m.

William F. Hare
Acting Chair

TAS/TM/js/dd
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Attachments
Attachment #1 - Concept Drawings of the Proposed Traffic Calming Measures in Bicentennial Village
Attachment #2 - Presentation - The Arbors - Review of Interconnection with Emerald Point
Attachment #3 - Revised Engineering Consultant's Report on the Operation and Maintenance of the Electric System Fiscal Year 2015
Attachment #4 - Delaware State University Convocation Center Final Report

INDEPENDENCE BOULEVARD REALIGNED INTERSECTION



NOTES:

- **THE ALTERNATIVE SHOWN IN THE MAP AND RENDERINGS IS FOR CONCEPTUAL PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION.**
- **THE DIAGRAM WAS NOT DRAWN TO SCALE. THE EXACT DIMENSIONS WILL NOT BE DETERMINED UNTIL FINAL DESIGN.**





INDEPENDENCE BOULEVARD AT COLONY DRIVE
PROPOSED ROUNDABOUT

EXISTING CONDITIONS



PROPOSED – VIEW 1



NOTES:

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- **THE DIAGRAM WAS NOT DRAWN TO SCALE. THE EXACT DIMENSIONS WILL NOT BE DETERMINED UNTIL FINAL DESIGN.**

PROPOSED – VIEW 2



THE ARBORS

Review of Interconnection with Emerald Point

Chronology of The Arbors and Emerald Point

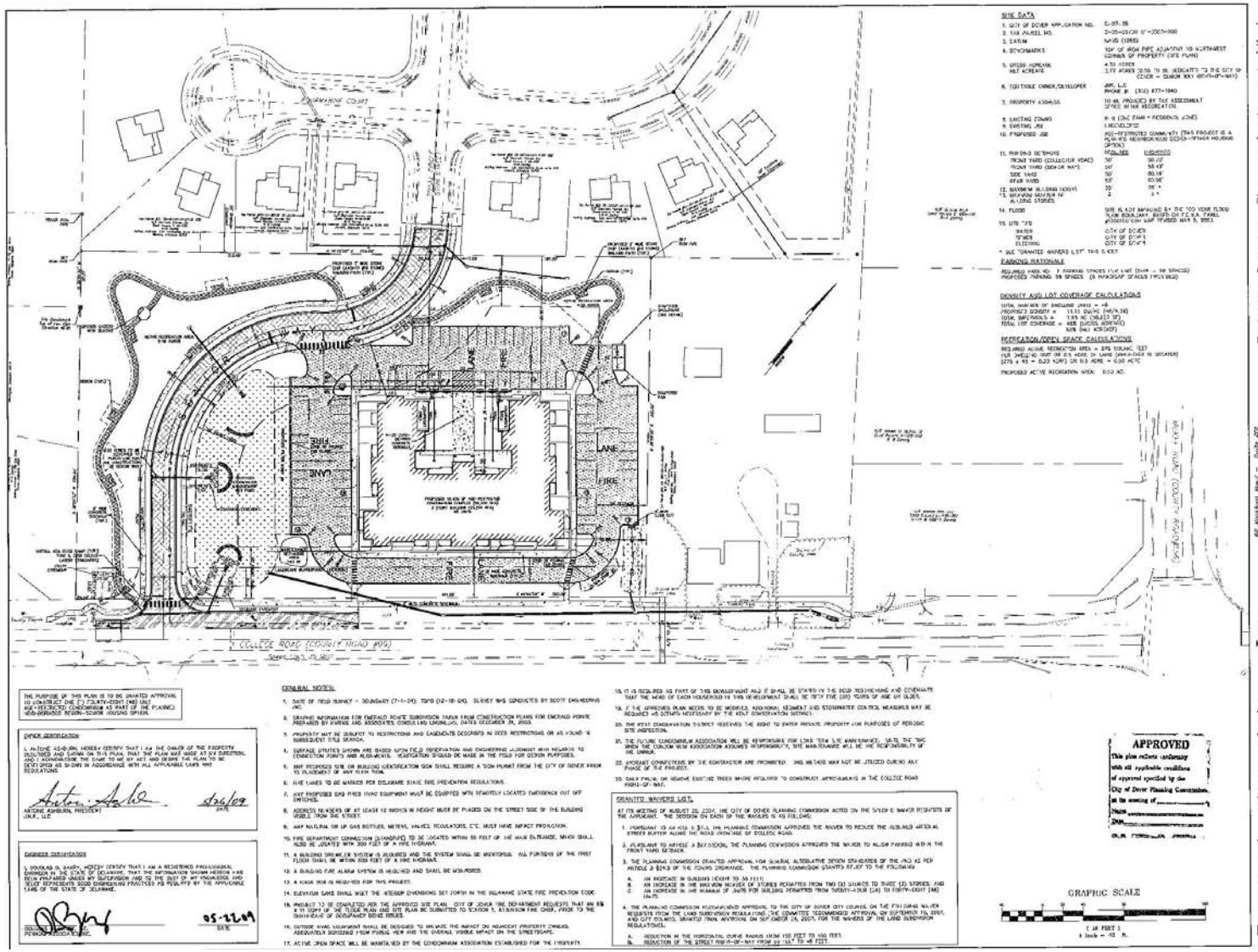
- 2002 Emerald Point Subdivision approved
  - *107 Single Family Detached Dwellings*
  - *Stub street from Topaz Circle to property to the south (The Arbors)*
- 2004 Minor Subdivision of McKee Property
  - *DelDOT requests 60 ft. cross access easement from subject property to Emerald Point*
  - *Public Works also requested a cross access easement*
  - *Cross access approved by Planning Commission and on the final recorded plan*
- 2005 College Road Garden Apartments
  - *Reviewed as Planned Neighborhood Design – Senior Citizen Housing Option*
  - *Site Plan approved by Planning Commission but expired in 2007*

Chronology of The Arbors and Emerald Point

- 2007 The Arbors – Planned Neighborhood Design Senior Citizen Housing Option
  - *Approved by Planning Commission*
  - *Received Final Site Plan Approval*
  - *Expired due to no commencement of construction (August 2009)*
- 2009 Record Plan Established Right-of-Way for Senior Way, which connects with Topaz Circle Stub Street
  - *This connection provides the second access to a public street as required by the* Land Subdivision Regulations
- 2009-10 Rezoning of Lands of JNK, LLC from R-8 to RG-2
- 2010 Conditional Use Site Plan for The Arbors Condominiums (48 units)
  - *Original proposal to have access only through Emerald Point*
  - *Staff recommendation and Planning Commission requirement to construct Senior Way, connecting Topaz Circle and College Road*
  - *Plan expired prior to finalization*

The Arbors – Current Plan

- The Arbors land plan consistent with prior submissions
- Approved by Planning Commission on March 21, 2016
- Includes interconnection with Topaz Circle stub street



Pennoni

Engineers • Surveyors • Planners • Landscape Architects

Pennoni Associates Inc.

THE ARBORS SENIOR CONDOMINIUMS
PLANNED NEIGHBORHOOD DESIGN – SENIOR CITIZEN HOUSING OPTION
EAST DOVER HUNDRED
CITY OF DOVER, KENT COUNTY, DELAWARE

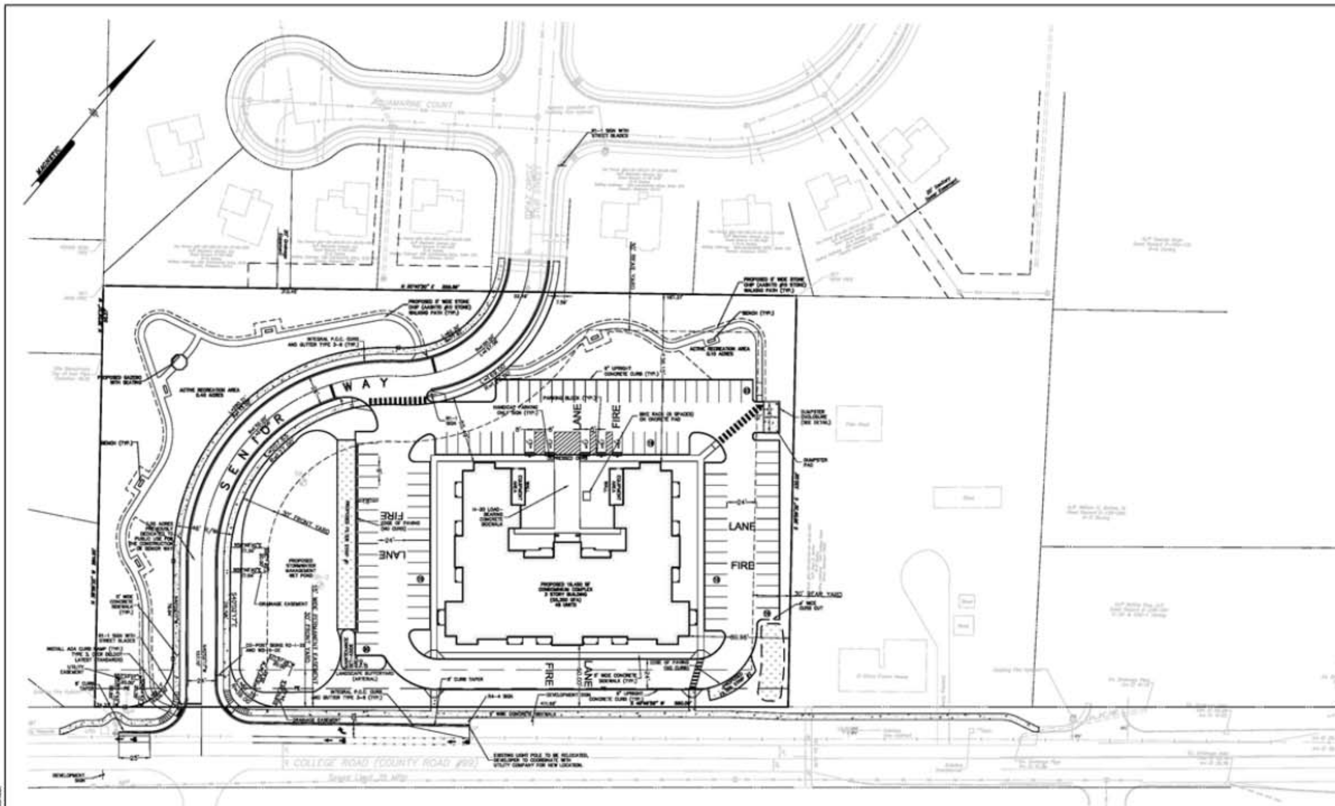
SITE PLAN

ASHBURN HOMES INCORPORATED

Final Plan

NO.	DATE	BY	REVISION
1	4-3-08	JLA	PER AGENCY COMMENTS
2	10-20-08	JLA	PER AGENCY COMMENTS

SCALE	1" = 10'
DRAWN BY	JLA
DATE	02-05-09
APPROVED	
JOB NO.	108.0402
SHEET	2 OF 24
DRAWING NO.	C1001



SITE DATA

CITY OF DOVER APPLICATION NUMBER	X-XX-XX
TAX PARCEL NUMBER	2-05-06700-01-3503-000
DATUM	NAVD 88
BENCHMARK	TOP OF IRON PIPE ADJACENT TO NORTHWEST CORNER OF PROPERTY (SEE PLAN)
ACREAGE	3.77
PROPERTY OWNER	SHREE GANESH, LLC
PROPERTY ADDRESS	1501 COLLEGE ROAD DOVER, DELAWARE 19904
ZONING	RG-2 (GENERAL RESIDENCE ZONE)
EXISTING USE	VACANT
PROPOSED USE	GARDEN APARTMENTS (48 UNITS)
UTILITIES	WATER – CITY OF DOVER SEWER – CITY OF DOVER ELECTRIC – CITY OF DOVER
FLOODPLAIN	OUTSIDE (PER FEMA FIRM PANEL #10001C0169H, EFFECTIVE DATE MAY 5, 2003)
WETLANDS	NONE

ZONING REQUIREMENTS

	REQUIRED	PROPOSED
MINIMUM LOT AREA/DWELLING UNIT	1,700 S.F.	3,421 S.F.
MINIMUM LOT WIDTH	100 FT.	560 FT.
MINIMUM LOT DEPTH	125 FT.	332.02 FT.
MINIMUM FRONT YARD	30 FT.	50 FT.
MINIMUM SIDE YARD	25 FT.	N/A
MINIMUM TOTAL BOTH SIDE YARDS	50 FT.	N/A
MINIMUM REAR YARD	30 FT.	136.15 FT.
MAXIMUM BUILDING HEIGHT	40 FT.	38 FT.
MAXIMUM NUMBER OF STORIES	3	3
MAXIMUM BUILDING LENGTH	220 FT.	147 FT.
MAXIMUM LOT COVERAGE	60%	54%

IMPERVIOUS CALCULATIONS

BUILDING FOOTPRINT	18,450 S.F.
OTHER IMPERVIOUS SURFACE	69,390 S.F.
TOTAL IMPERVIOUS SURFACE	2.02 AC. (54%)

PARKING RATIONALE

OFF-STREET SPACES REQUIRED:	2 SPACES PER DWELLING UNIT + 0.25 PER DWELLING UNIT FOR VISITOR SPACE 2.25 * 48 108
PROPOSED:	108
HANDICAP SPACES REQUIRED:	5
PROPOSED:	5
BICYCLE SPACES REQUIRED:	1 PER 20 PARKING SPACES 6
PROPOSED	6

THE PURPOSE OF THIS PLAN IS TO BE GRANTED APPROVAL TO CONSTRUCT ONE (1) FOURTY-EIGHT (48) UNIT GARDEN APARTMENT COMPLEX ON THE SUBJECT PROPERTY.

OWNER CERTIFICATION

I, MANISH PATEL, HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, AND I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE DEVELOPED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

MANISH PATEL
SHREE GANESH, LLC
DATE

ENGINEER CERTIFICATION

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

DOUGLAS D. BARRY, P.E.
T&M ASSOCIATES
DATE

GENERAL NOTES

1. DATE OF FIELD SURVEY – BOUNDARY (7-1-04); TOPO (12-18-04). SURVEY WAS CONDUCTED BY SCOTT ENGINEERING INC.
2. GRAPHIC INFORMATION FOR EMERALD POINTE SUBDIVISION TAKEN FROM CONSTRUCTION PLANS FOR EMERALD POINTE PREPARED BY KARINS AND ASSOCIATES CONSULTING ENGINEERS, DATED DECEMBER 31, 2003.
3. PROPERTY MAY BE SUBJECT TO RESTRICTIONS AND EASEMENTS DESCRIBED IN DEED RESTRICTIONS OR AS FOUND IN SUBSEQUENT TITLE SEARCH.
4. SURFACE UTILITIES SHOWN ARE BASED UPON FIELD OBSERVATION AND ENGINEERING JUDGMENT WITH REGARDS TO CONNECTION POINTS AND ALIGNMENTS. VERIFICATION SHOULD BE MADE IN THE FIELD.
5. ANY PROPOSED SITE OR BUILDING IDENTIFICATION SIGN SHALL REQUIRE A SIGN PERMIT FROM THE CITY OF DOVER PRIOR TO PLACEMENT OF ANY SUCH SIGN.
6. FIRE LANES TO BE MARKED PER DELAWARE STATE FIRE PREVENTION REGULATIONS.
7. ANY PROPOSED GAS FIRED HVAC EQUIPMENT MUST BE EQUIPPED WITH REMOTELY LOCATED EMERGENCY CUT-OFF SWITCHES.
8. ADDRESS NUMBERS OF AT LEAST 12 INCHES IN HEIGHT MUST BE PLACED ON THE STREET SIDE OF THE BUILDING VISIBLE FROM THE STREET.
9. ANY NATURAL OR LP GAS BOTTLES, METERS, VALVES, REGULATORS, ETC. MUST HAVE IMPACT PROTECTION.
10. FIRE DEPARTMENT CONNECTION (STANDPIPE) TO BE LOCATED WITHIN 50 FEET OF THE MAIN ENTRANCE, WHICH SHALL ALSO BE LOCATED WITH 300 FEET OF A FIRE HYDRANT.
11. A BUILDING SPRINKLER SYSTEM IS REQUIRED AND THE SYSTEM SHALL BE MONITORED. ALL PORTIONS OF THE FIRST FLOOR SHALL BE WITHIN 400 FEET OF A FIRE HYDRANT.
12. A BUILDING FIRE ALARM SYSTEM IS REQUIRED AND SHALL BE MONITORED.
13. A KNOX BOX IS REQUIRED FOR THIS PROJECT.

GENERAL NOTES (CONTINUED)

14. ELEVATOR CARS SHALL MEET THE INTERIOR DIMENSIONS SET FORTH IN THE DELAWARE STATE FIRE PREVENTION CODE.
15. PROJECT TO BE COMPLETED PER THE APPROVED SITE PLAN. CITY OF DOVER FIRE DEPARTMENT REQUESTS THAT AN 8½ X 11 COPY OF THE FLOOR PLAN AND SITE PLAN BE SUBMITTED TO STATION 1, ATTENTION FIRE CHIEF, PRIOR TO THE CERTIFICATE OF OCCUPANCY BEING ISSUED.
16. OUTSIDE HVAC EQUIPMENT SHALL BE DESIGNED TO MINIMIZE THE IMPACT ON ADJACENT PROPERTY OWNERS, ADEQUATELY SCREENED FROM PUBLIC VIEW AND THE OVERALL VISIBLE IMPACT ON THE STREETSCAPE.
17. ACTIVE OPEN SPACE WILL BE MAINTAINED BY THE CONDOMINIUM ASSOCIATION ESTABLISHED FOR THE PROPERTY.
18. IT IS REQUIRED AS PART OF THIS DEVELOPMENT AND IT SHALL BE STATED IN THE DEED RESTRICTIONS AND COVENANTS THAT THE HEAD OF EACH HOUSEHOLD IN THIS DEVELOPMENT SHALL BE FIFTY FIVE (55) YEARS OF AGE OR OLDER.
19. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE KENT CONSERVATION DISTRICT.
20. THE KENT CONSERVATION DISTRICT RESERVES THE RIGHT TO ENTER PRIVATE PROPERTY FOR PURPOSES OF PERIODIC SITE INSPECTION.
21. THE FUTURE CONDOMINIUM ASSOCIATION WILL BE RESPONSIBLE FOR LONG TERM SITE MAINTENANCE. UNTIL THE TIME WHEN THE CONDOMINIUM ASSOCIATION ASSUMES RESPONSIBILITY, SITE MAINTENANCE WILL BE THE RESPONSIBILITY OF THE OWNER.
22. HYDRANT CONNECTIONS BY THE CONTRACTOR ARE PROHIBITED. THIS METHOD MAY NOT BE UTILIZED DURING ANY PHASE OF THE PROJECT.
23. ONLY PRUNE OR REMOVE EXISTING TREES WHERE REQUIRED TO CONSTRUCT IMPROVEMENTS IN THE COLLEGE ROAD RIGHT-OF-WAY.

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

ACTIVE RECREATION AREA CALCULATIONS

REQUIRED:	275 S.F. PER DWELLING UNIT OR 0.5 ACRE OF LAND, WHICHEVER IS GREATER 0.50 ACRE
PROPOSED:	0.50 ACRE

NO.	DATE	REVISIONS	BY	CHECKED

SHREE GANESH, LLC

THE ARBORS SENIOR GARDEN APARTMENTS
CITY OF DOVER APPLICATION #X-XX-XX
CITY OF DOVER, DELAWARE

SITE PLAN

T&M ASSOCIATES
1000 N. WEST STREET, SUITE 1200
WILMINGTON, DE 19801
TEL. 302-295-4925

DOUGLAS D. BARRY, P.E.
PROFESSIONAL ENGINEER
DE LIC. No. 13160
02/05/16
DATE

DATE: 02/05/16
SHEET 2 OF 9

SP-1

DESIGNED BY	DRAWN BY	CHECKED BY
DDB	DDB	DDB
PROJECT NO.	CADD FILE	SCALE
[illegible]	[illegible]	1"=40'

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ATTACHMENT #3
Council Committee of the Whole
Meeting of 04/26/2016

Engineering Consultant's Report

on the
Operation and Maintenance
of the Electric System
Fiscal Year 2015

City of Dover, Delaware

Project No. 89923

4/15/2016

Engineering Consultant's Report

prepared for

City of Dover, Delaware
Dover, Delaware

Project No. 89923

4/15/2016

prepared by

Burns & McDonnell Engineering Company, Inc.
Kansas City, Missouri

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April 15, 2016

Ms. Donna S. Mitchell, CPA
Controller/Treasurer
City of Dover
5 East Reed Street
Weyandt Hall, Suite 300
Dover, Delaware 19901

Re: Engineering Consultant's Report
Project No. 89923

Dear Ms. Mitchell:

In compliance with the requirements of Section 705 and Section 504 of the City of Dover, Delaware Resolution Authorizing and Securing Electric Revenue Bonds, adopted December 23, 1985 (Resolution), Burns & McDonnell presents this Annual Engineering Consultant's Report on the Operation and Maintenance of the Electric System for the fiscal year ended 2015. This report summarizes our review and assessment of the City of Dover's (City) Electric System, its existing retail electric rates, its insurance coverage in effect, and its reserve funds. Financial, statistical, and operating data used in preparing the report were initially reported in the City's annual financial statements and accounting records. Additional information was furnished by City and Electric Division staff.

In the preparation of this Engineering Consultant's Report, Burns & McDonnell completed assessments of the electric generating stations and the transmission and distribution system of the City's Electric Division. Assessments involved interviews, observations, and review of fiscal year 2015 expenditures and fiscal year 2016 budgets. In addition, an analysis of the balances of the Improvement and Extension Fund as well as other funds supporting the Electric Division was performed. Burns & McDonnell also reviewed the adequacy of revenues provided by current retail rates in relation to the requirements of the Resolution. Finally, a high-level assessment of the City's insurance coverage related to the Electric Division was completed.

Based on these reviews and assessments, it is the opinion of Burns & McDonnell that the Electric System is being operated and maintained, including replacements and upgrades as appropriate, in a manner that is consistent with current electric utility practices. In addition, the current retail rates have provided sufficient revenues to satisfy the debt service coverage requirement in the Resolution. Further, it is the opinion of Burns & McDonnell that the balances in the various reserve funds maintained by the City for the Electric Division are sufficient for their intended purposes.

We appreciate the cooperation and assistance provided by the City and the Electric Division staff in the preparation of this report. We will be happy to discuss the report with you at your convenience.

Sincerely,

Burns & McDonnell



Ted J. Kelly
Principal & Senior Project Manager
Business & Technology Services

TJK/sg

9400 Ward Parkway \ Kansas City, MO 64114
O 816-333-9400 \ F 816-333-3690 \ burnsmcd.com

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LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
City	City of Dover, Delaware
DCS	distributed control system
EDQP	Employee Development and Qualification Program
EIA	U.S. Energy Information Administration
FY	Fiscal Year
GWh	gigawatt-hour
I&E Fund	Electric Improvement & Extension Fund
kV	kilovolt
kW	kilowatt
kWh	kilowatt-hour
LAN	local area network
McKee Run	McKee Run Generating Station
MW	megawatt
MWh	megawatt-hour
NAES	North American Energy Services Corporation
NERC	North American Electric Reliability Corporation
NRG	NRG Energy Center
Ohm	standard unit of electrical resistance
PJM	Pennsylvania New Jersey Maryland Interconnection
Report	2014 Engineering Consultant's Report on the Operation and Maintenance of the Electric System
Resolution	Resolution Authorizing and Securing Electric Revenue Bonds, adopted December 23, 1985

VanSant	VanSant Generating Station
TEA	The Energy Authority, Inc.

STATEMENT OF LIMITATIONS

In preparation of the Annual Engineering Consultant's Report on the Operation and Maintenance of the Electric System for the fiscal year ended 2015 (the Report), Burns & McDonnell relied upon information provided by the City of Dover, Delaware (the City). The information included various analyses, computer-generated information and reports, audited financial reports, and other financial and statistical information, as well as other documents such as operating budgets and current retail electric rate schedules. While Burns & McDonnell has no reason to believe that the information provided, and upon which Burns & McDonnell has relied, is inaccurate or incomplete in any material respect, Burns & McDonnell has not independently verified such information and cannot guarantee its accuracy or completeness. In addition, Burns & McDonnell has used the information provided to make certain assumptions with respect to conditions that may exist in the future. While Burns & McDonnell believes the assumptions made are reasonable for the purposes of the Report, it makes no representation that the conditions assumed will occur.

1.0 – EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY

1.1 Introduction

The Fiscal Year 2015 Engineering Consultant's Report on the Operation and Maintenance of the Electric System (Report) has been prepared in compliance with the requirements of the City of Dover, Delaware Resolution Authorizing and Securing Electric Revenue Bonds, adopted December 23, 1985 (Resolution). Burns & McDonnell was retained as the Engineering Consultant by the City of Dover, Delaware (City) to complete an inspection of the Electric System and prepare a report on findings. The Resolution requires that the Engineering Consultant complete the following:

"The City covenants that it will cause the Engineering Consultants employed under the provisions of Section 705 of this Resolution . . . to make an inspection of the Electric System at least once each fiscal year and . . . to submit to the City Manager a report setting forth (a) their findings whether the properties of the Electric System have been maintained in good repair, working order and condition and whether they have been operated efficiently and economically and (b) their recommendation as to

(i) the proper maintenance, repair and condition of the Electric System during the ensuing fiscal year and an estimate of the appropriations which should be made for such purposes,

(ii) the insurance to be carried under the provisions of Article VII of this Resolution,

(iii) the amount that should be deposited during the ensuing fiscal year to the credit of the Improvement and Extension Fund for the purposes set forth in Section 510 of this Article,

(iv) the extensions, improvements, renewals and replacements which should be made during the ensuing fiscal year, and

(v) any necessary or advisable revisions of the electric rates."

This is the twelfth annual Engineering Consultant's Report prepared for the City by Burns & McDonnell.

1.2 Electric System Overview and Assessment

The Electric Division served a monthly average of 24,161 accounts in fiscal year (FY) 2015, approximately 20,070 of which were residential customers. Five of the Electric Division customers take service from the 69-kV transmission system. These customers include the Dover Air Force Base, Kraft, Proctor & Gamble, White Oak Solar and NRG Energy Center (NRG). NRG is an exempt wholesale

generator that sells power that must be transmitted through the City's transmission system to third party purchasers. When the NRG plant is not operational, the Electric Division provides power for the plant site.

1.2.1 General Plant

General plant facilities consist primarily of Electric Division administrative and operations facilities and pollution control related equipment on McKee Run Generating Station (McKee Run) and VanSant Generating Station (VanSant). Other types of general plant include office furniture and equipment, transportation and power-operated equipment, and communication equipment.

Effective July 1, 2011, the City entered into an Energy Management Agreement with The Energy Authority, Inc. (TEA) to assist the City with its energy procurement, energy sale, purchase of fuels, establishment and management of risk policies, and the development and management of hedging protocols and related energy procurement challenges. Headquartered in Jacksonville, Florida, TEA is a non-profit energy manager owned by seven public utility systems operating across the nation.

1.2.2 Production Plant

The City owns two generating plants, the McKee Run and VanSant generating stations. McKee Run consists of three steam turbine generating units with a total combined capacity of 136 megawatts (MW). VanSant is a 39 MW simple-cycle combustion turbine unit. NAES Corporation operates the generating plants. The agreement between the City and NAES Corporation has been in effect since July 1, 2006. The various systems and components of the generating plants reviewed by the Engineering Consultant are listed below:

Major Equipment

- Steam turbines/generators
- Boilers and auxiliaries
- Station cooling water systems
- Fuel handling systems
- Water treatment systems
- Station electrical systems
- Station control systems
- General facilities

Management and Organization

- Safety
- Training
- Staffing

Based on statements and information provided by the City, as well as the observations and reviews performed, it is the Engineering Consultant's opinion that the City's power generation facilities are being operated and maintained consistent with generally accepted electric utility practice in the United States. In general, the performance, operation, maintenance, staff, planning, and training aspects for the McKee Run and VanSant were found to be above average. Specifically, the generation facilities have demonstrated a high level of availability despite the dispatching of the units primarily for peak demand.

1.2.3 Transmission and Distribution Plant

The transmission and distribution network includes 44 miles of overhead transmission lines, 0.12 miles of underground transmission lines, 190 miles of overhead distribution lines and 271 miles of underground distribution lines. Five Electric Division customers take service off of the 69-kV transmission system. The following list includes areas of the transmission and distribution system that were considered and reviewed.

- System reliability
- Power quality
- Operations and maintenance
- Design standards and specifications
- Transmission and distribution improvements

It is the Engineering Consultant's opinion that the design, construction, operation, and maintenance of the City's electric transmission and distribution system and the associated facilities are consistent with current generally accepted electric utility standards. In recent years, the City has made appropriate upgrades and improvements which the Engineering Consultant has observed while conducting the reviews and assessments to complete the annual reports.

1.3 Financial Overview and Assessment

The level of revenues required from the retail electric rates for the Electric Division were determined through the analysis of the financial results and net income or net margins for FY 2015. The Resolution requires that the Electric Division maintain a debt service coverage ratio of 1.25.

Customers of the Electric Division of the City were charged for the electric service they received based on the City's rate schedules and contracts that were in place in FY 2015. A comprehensive cost-of-service and rate design study was completed in 2006 and subsequent rate analyses were completed in 2007, 2008, 2012, 2013, and 2015 to examine revenue requirements and revenue generation. Specifically, the 2006 rate study was conducted to address increased costs associated with a new power supply contract that became effective on July 1, 2006. The rate study recommended combining a number of rate classes and implementing rate increases on July 1, 2006. The 2006 rate study also recommended an additional increase be implemented on January 1, 2007 to cover increased costs associated with operating the generating station. The 2007 and 2008 rate analyses re-examined Electric Division revenues and expenses and recognized additional revisions to power supply costs. As a result of these analyses, additional rate increases were implemented on July 1, 2007, July 1, 2008, and July 2012. The July 2013 rate adjustments established the rate schedules utilized by the Electric Division today.

Total energy sales decreased from 720.8 GWh in FY 2014 to 715 GWh in FY 2015, a decrease of 0.82 percent. Total revenue from sales to electric customers in FY 2015 was $78.34 million, representing an increase of $0.15 million from FY 2014. In FY 2015, the average revenue per kWh for residential customers was 12.62 cents and the system-wide average price was 10.96 cents per kWh.

The Electric Division's largest cost in providing electric service to its customers is the wholesale cost of power purchased from the Pennsylvania New Jersey Maryland Interconnection (PJM) marketplace through its energy manager, TEA. From FY 2014 to FY 2015, the cost of power decreased from $57.2 million to $50 million. Net income loss of $2.3 million in FY 2014 turned to a positive net income of $2.6 million in FY 2015. The net income increase in FY 2015 was due to a decrease in power supply costs while all other expenses stayed relatively constant.

Following is an excerpt from Section 502(c) of the Resolution.

> *"(c) The total amount of the Revenues of the Electric System during the preceding fiscal year shall have been not less than the total of the following:*
>
> *The Current Expenses of the Electric System during the current fiscal years shown by the Annual Budget . . . for such fiscal year, and*
>
> *One hundred twenty-five percent (125%) of the maximum amount of the Principal and Interest Requirements for any fiscal year thereafter on account of all bonds then Outstanding under the provisions of this Resolution."*

The Resolution requires that annual revenues of the Electric Division be no less than the total current expenses plus 125 percent of the greatest remaining annual debt service. The Electric Division achieved debt service coverage ratios for FY 2013, FY 2014, and FY 2015 of 6.56, 3.25, and 5.42, respectively. Therefore, the revenues generated by the current electric rates have been sufficient to meet the applicable covenant of the Resolution.

The City maintains a comprehensive insurance program to cover varying types of liabilities, as well as significant losses related to various Electric Division properties. It is the opinion of Burns & McDonnell as Engineering Consultant, and not as insurance counselor, the insurance in full force and affect appears to satisfy the requirements of Section 706 of the Resolution.

The City established the Electric Revenue Fund and the Electric Improvement & Extension (I&E) Fund to make money available for specific purposes when they are needed. The following is a list of these funds' respective cash accounts:

Electric Revenue Fund

- Insurance Reserve Account
- Contingency Reserve Account
- Electric Rate Stabilization Reserve Account
- Interest and Sinking Account

Electric Improvement and Extension Fund

- Depreciation Reserve Account
- Future Capacity Reserve Account

The Engineering Consultant reviewed activity information on the accounts listed above and found that the balances in those accounts as of June 30, 2015, were consistent with the required or target balances.

1.4 Conclusions

Based on the reviews and assessments completed, it is the opinion of Burns & McDonnell that:

1. The City's power generation facilities are being operated and maintained consistent with generally accepted electric utility practice in the United States.
2. The design, construction, operation, and maintenance of the City's electric transmission and distribution system and the associated facilities are consistent with current generally accepted

electric utility standards and over the past few years, the system has been upgraded in order to improve operation and service to customers.

3. The Electric Division capital projects included in the City's Capital Investment Plan and the FY 2016 Operating Budget are necessary and should provide improved reliability and power quality for the Electric System.
4. The cash balances as of June 30, 2015 for the various accounts maintained by the City for the Electric Division appear to be sufficient for their defined purposes.
5. The insurance coverage for the assets of the Electric Divison is maintained by the City, is in full effect, and appears to satisfy the requirements of Section 706 of the Resolution.
6. The electric revenues generated by the City's current retail rates are more than sufficient to fulfill the debt service coverage requirement (125 percent of current expenses) defined in Section 502(c) of the Resolution.

2.0 – INTRODUCTION

2.0 INTRODUCTION

The City of Dover, Delaware (City) operates a municipally-owned electric utility system that served 23,350 customers, excluding lighting, within the City and surrounding areas at the end of fiscal year (FY) 2015. The 68 square-mile service area of the electric utility is located in central Delaware; with the City itself located approximately 70 miles south of Philadelphia, Pennsylvania.

2.1 Purpose of Report

This FY 2015 Annual Engineering Consultant's Report (Report) has been prepared in compliance with the requirements adopted December 23, 1985 of the City of Dover Electric Bond Resolution (Resolution). Burns & McDonnell was retained by the City as the Engineering Consultant defined in Section 705 of the Resolution, as follows.

> *"The City covenants that it will, for the purpose of performing and carrying out the duties imposed on the Engineering Consultants under the provisions of this Resolution, employ an independent engineer or engineering firm or corporation having a nationwide and favorable repute for skill and experience in such work."*

The required scope of the Report is described in Section 504 of the Resolution, as follows.

> *"The City covenants that it will cause the Engineering Consultants employed under the provisions of Section 705 of this Resolution . . . to make an inspection of the Electric System at least once each fiscal year and . . . to submit to the City Manager a report setting forth (a) their findings whether the properties of the Electric System have been maintained in good repair, working order and condition and whether they have been operated efficiently and economically and (b) their recommendation as to*
>
> *(vi) the proper maintenance, repair and condition of the Electric System during the ensuing fiscal year and a estimate of the appropriations which should be made for such purposes,*
>
> *(vii) the insurance to be carried under the provisions of Article VII of this Resolution,*
>
> *(viii) the amount that should be deposited during the ensuing fiscal year to the credit of the Improvement and Extension Fund for the purposes set forth in Section 510 of this Article,*
>
> *(ix) the extensions, improvements, renewals and replacements which should be made during the ensuing fiscal year, and*

(x) any necessary or advisable revisions of the electric rates."

2.2 Organization

The Electric Utility Director is responsible for the overall management of the Electric Utility Division. Mr. Harry Maloney is the current Electric Utility Director for the Electric Division. The Electric Director oversees the day-to-day operations of the Electric Division and manages the Division's staff. The Director also provides oversight of the production plant budget, monitors the contracts of the energy coordinator and the power generation operator/manager, and is responsible for North American Energy Services Corporation (NAES Corporation) contracts and oversight. The Electric Division is organized into four separate operating sections. Descriptions of the current Electric Division sections are provided below.

Administration Section – Administration provides the overall management of the Electric Division's Engineering and Transmission & Distribution Sections. This section performs all planning and budgeting, monitors all construction projects, administers all power supply and generating station operations agreements, and coordinates with customer service and public relations for the Electric Division.

Electric Engineering Section – Electric Engineering provides design, specifications, construction management, and project inspection for all capital investment projects of the Electric Division. This section also develops and maintains maps, plans, and specifications, as well as engineering standards for construction and maintenance of the Electric System.

The group formerly known as the System Operations Section has been reorganized as part of the Electric Engineering Section. This group is responsible for the operation of a 24/7 system operations control center and is comprised of the System Operators Crew Leader and the Operators.

Transmission & Distribution Section – Transmission & Distribution constructs, operates, and maintains the overhead and underground electric systems and fiber optic communication facilities. This section installs and maintains all electric metering, as well as street and security lighting. This section also investigates and resolves customers' power supply problems and oversees the work of tree trimming contractors.

Figures 2-1 through 2-3 provide organizational charts illustrating the staffing hierarchies of the various sections in the Electric Division. The number of individuals in each position is indicated as appropriate. Electric Division staff totaled 37 at the time this report was issued.

Figure 2-1: Organization

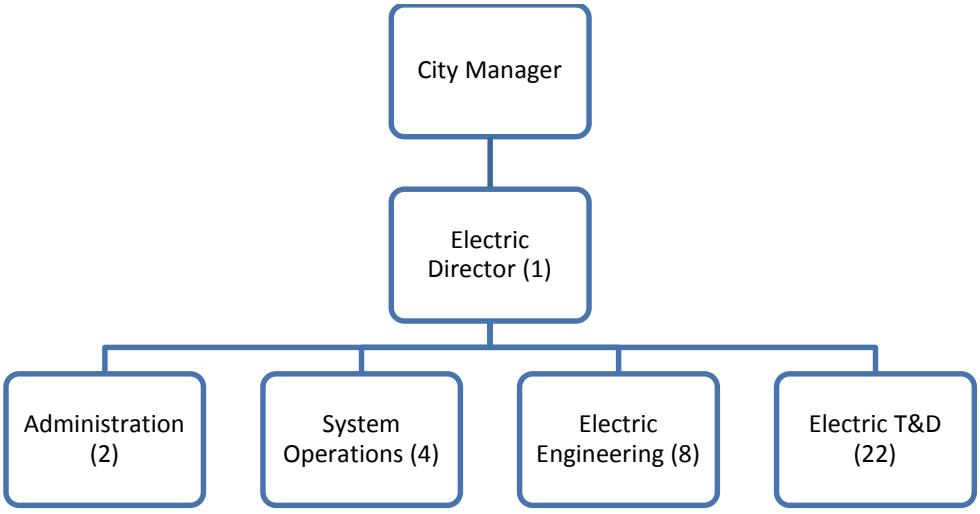


Figure 2-2: Administration Section



Figure 2-3: Electric Engineering Section

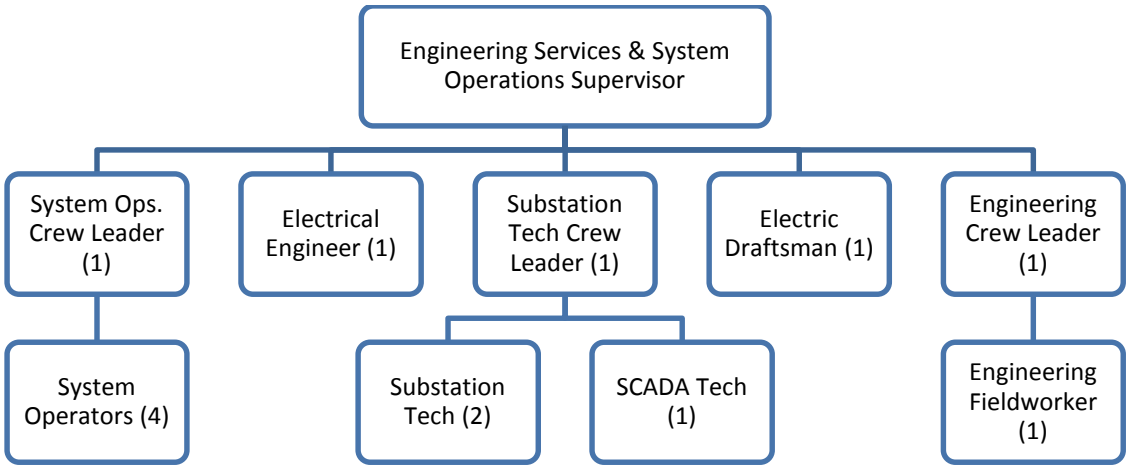
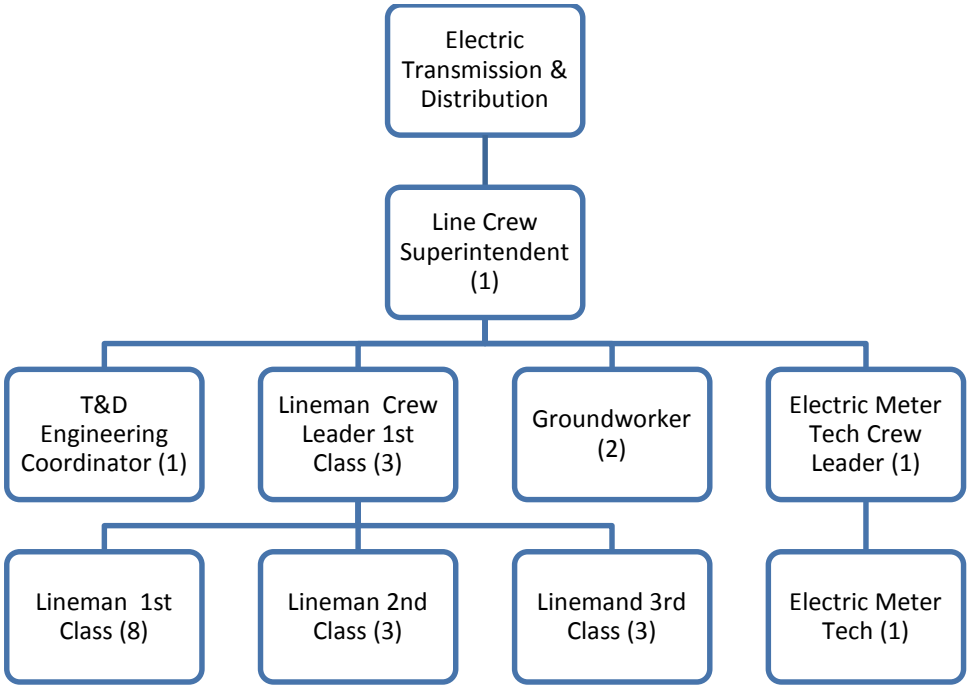


Figure 2-4: Electric Transmission & Distribution Section



The subsequent sections of the Report provide a discussion of the required reviews and inspections conducted pursuant to Section 504 of the Resolution. Section 3.0 describes the assessment of the Electric System and its condition. Section 4.0 presents the financial results for the Electric Division, including an analysis of the adequacy of revenues provided by the electric rates. Section 5.0 summarizes the conclusions of Burns & McDonnell regarding the operation and maintenance of the Dover Electric System.

3.0 – ELECTRIC SYSTEM OVERVIEW AND ASSESSMENT

3.0 ELECTRIC SYSTEM OVERVIEW AND ASSESSMENT

3.1 Electric System Overview

The Electric System owned by the City primarily consists of a production plant, transmission plant, distribution plant, general plant facilities, and construction work in progress. Table 3-1 displays the year-end balances of the various plant components for FY 2013 through FY 2015. Table 3-3itemizes the specific capital investment plan projects and anticipated expenditures included in the FY 2016 budget.

Table 3-1: Year-End Plant in Service

	FY 2013	FY 2014	FY 2015
Capital assets, not being depreciated			
Land	$ 1,458,066	$ 1,458,066	$ 1,458,066
Construction in progress	1,338,909	1,690,462	2,364,099
Total capital assets, non-depreciable	$ 2,796,975	$ 3,148,528	$ 3,822,165
Capital assets, being depreciated			
Buildings	$ 17,619,349	$ 17,666,269	$ 17,675,949
Production	65,040,049	65,913,284	66,561,061
Transmission	34,010,686	35,084,087	35,899,287
Distribution	61,752,469	62,388,947	63,392,975
Administration	1,743,754	1,743,754	1,743,754
Vehicles	625,876	645,747	607,949
Total capital assets, being depreciated	$ 180,792,183	$ 183,442,088	$ 185,880,975
Less accumulated depreciation for:			
Buildings	$ (11,795,879)	$ (12,172,080)	$ (12,576,076)
Production	(42,682,428)	(44,002,794)	(45,423,777)
Transmission	(11,537,017)	(12,776,190)	(14,045,341)
Distribution	(26,832,246)	(28,382,673)	(29,742,291)
Administration	(1,316,532)	(1,427,205)	(1,536,190)
Vehicles	(481,527)	(517,428)	(482,121)
Total accumulated depreciation	$ (94,645,629)	$ (99,278,370)	$(103,805,796)
Total capital assets, being depreciated, net	86,146,554	84,163,718	82,075,179
Total capital assets, net	$ 88,943,529	$ 87,312,246	$ 85,897,344

In FY 2015, the Electric System experienced an increase in the annual system peak demand and a decrease in annual energy sales from the previous year. The Electric System experienced its peak at 4 p.m. on July 2, 2014 of 158.2 MW; a decrease of 6 MW from the previous year. For the year, 715 GWh of energy were sold; a decrease of 0.82 percent from the preceding year. The Electric Division projects energy sales in FY 2016 to total 715 GWh, showing constant energy sales from 2015. The Electric Division expects annual energy sales to grow moderately from FY 2016 through FY 2020.

3.1.1 Production Plant

The City owns two plants, the McKee Run and VanSant generating stations. McKee Run consists of three steam turbine generating units with a total combined capacity of 136 megawatts (MW). VanSant is a 39-MW simple-cycle combustion turbine unit. Generating units 1 and 2 from McKee Run station are currently scheduled to be retired in June 2017.

NAES Corporation operates the generating plants. The organizational structure of NAES has changed based on the city's request and general operating requirements. The agreement between the City and NAES Corporation has been in effect since July 1, 2006. The Engineering Consultant's observations regarding the generating stations and units are described later in this section of the Report.

Effective July 1, 2011, the City entered into an Energy Management Agreement with The Energy Authority, Inc. (TEA) to manage the sales associated with the production plants; the Electric Division's first contract with TEA. TEA also assists the City with its energy procurement, energy sales, purchase of fuels, establishment and management of risk policies, the development and management of hedging protocols and related energy procurement challenges.

3.1.2 Transmission and Distribution Plant

The service area includes 234 miles of overhead lines, 271 miles of underground lines. Five Electric Division customers take service off of the 69-kV transmission system. These customers include the Dover Air Force Base, Kraft, Proctor & Gamble, and NRG Energy Center (NRG). NRG is an exempt wholesale generator that sells power that must be transmitted through the City's transmission system to third party purchasers. When the NRG plant is not operating the Electric Division provides power for the plant site.

The Electric Division has two contracts for providing transmission service through the Electric System. The Electric Division provides transmission service to NRG for the output of its 16 MW electric generator. The Electric Division also has a point-to-point contract for the output of an NRG Combustion Turbine which ties directly to the Kent Substation and is not part of the Dover transmission system.

3.1.3 General Plant

The general plant category consists primarily of Electric Division administrative and operations facilities, and pollution control-related equipment at McKee Run and VanSant. The agreement with NAES Corporation stipulates NAES Corporation manage the operation and maintenance of the facilities while the City funds all replacements and upgrades required for maintaining the capability of the two generating

stations. The City is also responsible for the costs of compliance with new regulations promulgated. Other types of items included in the general plant category include office furniture and equipment, computer-related equipment, transportation and power-operated equipment, and communication equipment. Burns & McDonnell did not specifically assess the items in the general plant category for this Report.

3.2 Production Plant Assessment

Burns & McDonnell made observations and conducted assessments of the Electric System assets in support of the development of this annual Engineering Consultant's Report. On March 4, 2016, Mr. Ted Kelly of Burns & McDonnell met with representatives of NAES Corporation to discuss the condition of the McKee Run and VanSant generating stations. Mr. Don Mordus, the Plant Manager, coordinated the visit. Mr. Kelly also met with Jacob Aucoin, the Plant Engineer during the visit. The findings of Burns & McDonnell from the assessment of the City's production plant assets are documented herein.

3.2.1 Production Plant Operations

McKee Run consists of three units. Units 1 and 2 were originally coal-fired units, which began operations in 1961 and 1962, respectively. In 1972, these units were converted to burn No. 6 fuel oil. Units 1 and 2 each have rated capacities of 17 MW. Unit 3 began operations in 1975 and was designed to fire No. 6 fuel oil and natural gas. Unit 3 has a rated capacity of 102 MW. In FY 2008, the City began work to convert all three units at McKee Run to burn No. 2 fuel oil in order to reduce pollution from the plant. The necessary upgrades and new equipment were installed allowing each of the units to burn both natural gas and No. 2 fuel oil.

VanSant consists of a simple cycle combustion turbine with a rated capacity of 39 MW. This unit commenced operation in 1991. An inlet fogging system was installed in the spring of 2015 and capacity testing performed in June 2015 proved a 6 MW increase in unit capacity. VanSant remains unmanned, except when it is dispatched into service. On the occasions when the unit is dispatched, personnel from McKee Run travel to VanSant to startup and operate the unit until the unit dispatch is released by PJM. There is an action item to restore remote start capability to allow the unit start time to be reduced to 15 minutes, currently the transmission operator is asked to allow 1 hour for starting time because the VanSant site is not manned. A remote start capability for this unit would improve the dispatch starting time and increase unit run hours for quicker response to area transmission needs.

3.2.1.1 Management and Organization

Station management is well organized and knowledgeable. Personnel take a logical approach to the operation and maintenance of the generation facilities. Mr. Don Mordus serves as the Plant Manager. The

management/leadership team consists of eight positions including Mr. Mordus' position. The Administrative Manager, Plant Engineer, Compliance Coordinator, and Materials Coordinator, all report directly to Mr. Mordus. (Note: there will be retirements in the leadership team in the next couple of years.) One Operations Supervisor position is currently open at the plant. The open Operations Supervisor position is part of the management/leadership team but will not be filled. (Note: Three new operators have been hired in calendar year 2015.)

The Plant Engineer oversees and assists with plant operations and engineering compliance. He works closely with the Maintenance Supervisor and three Operations Supervisors to ensure all plant parameters are observed and equipment can be operated per the OEM operating procedures. He provides engineering review for plant modifications and the management of change program. When fully staffed, each operations team consists of a supervisor and three operators working 12-hour rotating shifts. The maintenance team consists of a supervisor and five employees working eight-hour shifts. The operations and maintenance hourly personnel are all union employees. The relationship between the union and management was reported to be excellent. McKee Run is currently at a staff level of 28 employees, with 32 approved positions.

3.2.1.2 Major Equipment Operations and Maintenance

In general, the generation facilities appear to have been properly operated and maintained, and in good condition as evidenced by the high availability of the units. The generation facilities are dispatched sparingly and operate primarily as peaking units. As such, the individual units incur a low annual capacity factor. Table 3-2 summarizes the major FY 2015 operating statistics.

Table 3-2: FY 2015 Generating Plant Operating Statistics

FISCAL YEAR 2015 OPERATING STATISTICS
City of Dover Electric Division

Unit	Rated Capacity - MW	Net Production - kWh	Net Capacity Factor	Net Heat Rate Btu/kWh	Number of Starts
VanSant	39	2,249	0.66%	13.079	15
McKee Run					
Unit 1	17	248	0.17%	15.253	3
Unit 2	17	234	0.16%	13.916	5
Unit 3	102	23,938	2.68%	13.855	40
Total	175	26,669	1.72%	13.592	63

Unit	Forced Outage Hours	Operating Hours	Service Factor	Availability Factor
VanSant	-	68.8	0.79%	58.64%
McKee Run				
Unit 1	203.4	31.0	0.35%	56.31%
Unit 2	282.0	35.1	0.40%	55.42%
Unit 3	273.7	532.2	6.07%	53.44%
Total	759.1	667.1	7.62%	55.95%

The large amount of time that units are not operating allows for maintenance and repair of the units. As a result, the FY 2015 overall equivalent availability factor for the generation facilities averaged 55.95 percent. Low net capacity factors are offset by PJM capacity credits. In FY 2015, $15.1 million of PJM capacity credits helped cover the entirety of purchased capacity costs. PJM capacity credits are expected to continue to offset significant portions of system capacity costs in FY 2016 and beyond.

3.2.1.3 O&M Management System

Maintenance activities are organized, planned, and managed using MP2[tm] by CMMS Data Group, a computer-based management system. All three major categories of maintenance activities (corrective, preventative, and predictive) are electronically managed by MP2[tm]. The city is getting better use of the system and is improving on their outstanding work orders, reducing from approximately 400 to close to 100.

For corrective maintenance activities, any station operator or mechanic can enter a work order into the system at any terminal on the Station local area network (LAN). A supervisor reviews the request, turns it into a work order, and assigns a priority according to a predetermined categorization. The work order is

planned, parts are ordered, and then the work order is assigned to an operator or maintenance technician for completion once the material has been received.

This system is also used to manage and track preventative maintenance activities that follow a schedule. Changing filters, and turning on and off heat tracing are examples of preventative maintenance. Predictive maintenance activities practiced include oil analyses, vibration testing, and infrared surveys. Portable vibration testing equipment is used at the Stations to improve the frequency of and capabilities to trouble-shoot rotating equipment. This technology allows personnel to identify problems and take corrective actions before equipment failure can occur.

In FY 2015, the City started or planned several general upkeep items to the plants as well as initiating several larger items. Starting in FY2016, the plant will be winterized to keep the temperature above 40 degrees Fahrenheit to shorten the time to reach full capacity. The power plant is also working to reinstate the remote start capability of the VanSant unit in order to allow quicker dispatch time, improve PJM's dispatch of the combustion turbine and earn better revenue ultimately to comply with market requirements and the PJM Capacity Performance program.

3.2.1.4 Safety

"Safety First" is an overall theme and attitude of the Electric Division. Near-miss incidents are documented, reviewed, and corrective follow-up actions are taken as required with an employee-run safety committee actively in place. This committee conducts monthly safety meetings, completes safety equipment inspections, and defines and implements tasks to improve safety in all areas. Members of the safety committee complete periodic visual inspections of employee work activities utilizing an observation checklist to detail their findings. Recorded observations are discussed and infractions corrected. Safety is the first topic discussed at all meetings at the generating plant, prior to the start of each meeting a "safety moment" is discussed, before the morning management meeting and at the beginning of each shift turnover. An indoctrination video emphasizing safety is shown to all visitors when entering the Station.

Mr. Mike Benkert, Senior Project Manager – Safety, reported an accident in January 2015 when an employee slipped on ice at the VanSant facility. The incident resulted in a broken ankle and 6 months off work for rehabilitation. The ice buildup was on a walkway sloped towards the building allowing a pooling of water and ice formation in cold weather. The walkway was replaced in the summer of 2015 and sloped for proper rain and water run off to preclude a repeat of this incident at the VanSant site. The updated lost time accident rate for the City of Dover generation plant is 3.67. The Plant Manager has made a strong

commitment to improving the safety culture to reduce or eliminate recordable accidents at the sites through a NAES Safe approach and focus of all employees.

3.2.1.5 Training

The required annual OSHA compliance training is completed and documented for each employee. A formal two-day employee orientation program is required for all new employees. This orientation covers a multitude of subjects from employee benefits to a review of the various Station operating manuals.

For operator training, the Employee Development and Qualification Program (EDQP) was established prior to 2002. EDQP is a formal program for training operators to progressively advance to positions with additional responsibilities. The training program is a combination of a self-paced and instructor-led learning. In addition to the above programs, cross training of various disciplines also occurs. An example of cross training would be plant operators training with maintenance staff. NAES has replaced the EDQP program with the standard NAES Training Manual, it is made up of qualification levels more applicable to the specific technology operated at the City of Dover utility. NAES has implemented the new training manual qualifications procedure in 2015 an all new employees are being trained according to this training program. As current employees complete their existing EDQP qualification level they are shifted in to the NAES TMP Manual program.

Plant staff receive environmental and safety training online via the GPi Learning website. The training includes tutorials and exams to ensure comprehension of the subject matter. Plant manuals, meetings, and lessons learned offer additional safety training topics. The plant staff also performs safety stand downs based on industry events, lessons learned and best practices that occur in other NAES operated facilities and the industry at large.

Plant staff continues to receive appropriate operator certification training for the Pennsylvania New Jersey Maryland Interconnection (PJM) market. This training will continue in the future and is funded by the City to ensure their operators are knowledgeable and conform to the PJM required operator directions when required. The plant also performs, plans, and schedules continuing education training on a regular basis for certified PJM plant operators. Non-certified operators are also encouraged to attend this training to help them prepare for operator certification which is an expectation of all operators by their 18 months anniversary at the generation plants. In FY2015, all plant operators without the operating certification from NAES were required to attend training courses to prepare them for completing the PJM certification.

3.2.1.6 Capital Improvements

The following table describes 2016 fiscal year on-going and planned Capital Expenditures for the system. The table is organized into three categories, completed, on-going, and planned improvements to the City's assets:

Table 3-3: Fiscal Year 2016 On-going/Planned Capital Expenditures

Production		
McKee Run & VanSant Preservation of Structures	$	215,000
McKee Run Building Equipment Replacements		42,000
Unit 3 Software & Computer Upgrades - CEMS		44,500
Unit 3 Stack Repairs		485,000
Unit 3 Boiler Systems		42,000
Unit 3 Auxillary System Components		135,000
Unit 3 Cooling Water Line Replacement/Repairs		469,000
VanSant Software & Computer Upgrades - CEMS		44,500
VanSant Component Replacements		21,000
Safety & Compliance Improvements		157,000
Subtotal Electric Generation Division	$	1,655,000
Transmission & Distribution		
New Developments - UG Transformers	$	1,872,000
New Developments - UG Conductors/Devices		450,000
DNREC R&R Metering		41,000
Public Works Wetland Project		78,000
Washington Street Lights		40,000
NBR Properties, LLC		19,000
Vehicles, Trucks & Equipment		387,600
Subtotal Electric Transmission Division	$	2,887,600
Electric Engineering		
Townpoint Distribution Upgrades	$	350,000
Oak Grove Trailer Park Distribution Upgrade		78,500
Lakeland Laurel Point - Distribution Upgrade		63,000
Rt 8/ Mifflin Road Crossing - Distribution upgrade		51,500
Rt 8/ Taps - Distribution upgrade		38,500
Townsend Brothers - Distribution upgrade		14,500
Persimmon Tree Apartments - Distribution upgrade		62,000
North Street OH to UG (Governots to Queen)		100,000
Dover East Estates - Distribution Upgrade		130,000
Lighting Project and Rehabilitation		67,000
Satellite Syncrhonized Substation Clocks		30,000
Horsepond Road URD - Distribution Feeders		67,000
Transmission Line Maintenance Program		75,000
Distribution Capacitors - Overhead		25,000
Distribution Capacitors - Underground		25,000
Frazier Substation Reliability Upgrade (900 Circuits)		10,000
Horsepond SS to Cartanza 69kV Rebuild		255,500
69kv Substation Cable Replacement North Street		50,000
Weyant Hall Roof Refurbishment		201,800
Dover Air Force Base Substation Relocation		30,000
Subtotal Electric Engineering Division	$	1,724,300
Total Planned Capital Investment Projects	**$**	**6,266,900**

3.2.2 McKee Run Condition Assessment

The following is a summary of the condition assessment of major equipment at McKee Run as presented by the NAES corporation staff. Units 1 and 2 will be decommissioned in 2017; therefore, major maintenance and capital projects have been and will be limited for these units in the near future. Burns & McDonnell made no internal assessments of equipment during the facility tour.

XL Insurance completes inspections of the Electric Division production facilities on an annual basis. After each inspection the insurance provider issues a report detailing its risk reduction recommendations. Burns & McDonnell received the insurance inspection report from XL Insurance conducted on February 24, 2016. The report indicates that there were no major incidents in all units during 2015. However, 2015 oil sample analysis of unit 3B forced draft fan outboard bearing was rated critical due to incorrect oil viscosity and elevated particle counts. The oil sample analyses of unit 1 forced draft fan motor inboard bearing, unit 1 induced draft outboard bearing, unit 2 forced draft fan motor inboard bearing, unit 3A induced draft fan motor inboard bearing, and unit 3 main turbine were rated marginal due to high particle count.

3.2.2.1 Steam Turbines/Generators

The steam turbines and generators for VanSant and McKee Run Units 1 and 2 were reported to be in satisfactory condition with no major problems.

No inspections, planned maintenance or upgrades were completed on Units 1 and 2 during the 2015 outages. During the spring 2014 outage, Unit 3 was dismantled and inspected. Erosion was detected in some places and steps were taken to mitigate. The unit experienced the same vibration issues that were historical on the unit during the startup process after the spring outage. The contractor was dissatisfied with the unit operation and the unit had a rub. The decision was made to go back into the unit and found that the turbine end packing housing was misaligned .050" in the turbine casing and corrected the problem by having the gland box machined for proper alignment and proper gland packing operation without the "rub". The rotor growth was causing the packing to "rub" and wear. Post work testing of the unit after the gland packing box machining revealed that the vibration issue was resolved. The rotor would grow without rubbing and the vibration issue was resolved.

3.2.2.2 Boilers and Auxiliaries

Boiler inspections are conducted every year on each of the boilers. The annual inspections typically include the inspection and cleaning of the major boiler components, including the mud and steam drums, the forced draft and induced draft fans, the wind box, condenser water box, condenser tubes, hot well, air preheater components, and safety valves.

During the spring 2014 outage, piping maintenance and replacements earned the most attention at Unit 1 in addition to typical planned inspections and maintenance on all units. Unit 2 repairs were primarily piping focused as well. Ash and debris was cleared from Unit 3 and a leak was found and repaired.

No adverse conditions, controls, or operational concerns were reported during the 2014 fall outage at Units 1 and 2. During that outage the neutralization pit liner was replaced, new insulation and lagging was installed on the high energy piping, and leaking tubes were replaced all on Unit 3. Additionally, a grating and cover will be added.

During February 2015, there was a severe cold weather event which caused problems for the plant equipment, those problems were all corrected, as stated previously, through winterizing the plant and keeping it above 40 degrees during the winter months. In addition, the chemistry issues have been addresses and corrected. There is a higher focus on maintaining boiler water chemistry to mitigate boiler tube failures and improve oiler water chemistry overall.

3.2.2.3 Station Cooling Water Systems

The Station has split cooling water systems with one system serving Unit 1 and Unit 2 and a separate system serving Unit 3. Projectile tube cleaning was completed on the Unit 1 and Unit 2 condensers during the spring FY 2011 outage. All the tubes in each unit were cleaned utilizing the scraper blade plug method. Samples were taken from the tube cleanings and retained for inspection. No leaks were detected in the expansion joint or condenser tubes. Each condenser box was cleaned. A significant Unit 3 cooling tower project was completed in CY 2014. This project included the change out of a number of columns in the tower, work on the hot deck, and balancing of water flow. The cooling water systems are reported to be sufficiently sized and in satisfactory condition, with no major issues reported at the time of this Report.

3.2.2.4 Fuel Handling Systems

Natural gas is delivered to the Station via a 4-inch pipeline for Unit 1 and Unit 2 and in a 10-inch diameter pipeline for Unit 3. No. 2 fuel oil is delivered to the Station by truck and unloaded into tanks. Forwarding pumps deliver the fuel oil to each of the units. No major fuel projects were reported to be completed in FY 2015 but they will be inspecting and replacing fuel hoses as needed.

3.2.2.5 Water Treatment/Steam Purity

Quality control parameters for boiler feed-water, internal boiler water, cooling tower water, and steam purity are checked at a minimum of twice per day when systems are operating. Results are recorded and graphically compared to control limits. Adjustments are then made as required. Boiler feed water is treated city water (well water from the City) using a regenerative ion resin demineralizer system, along with deaeration for oxygen control. Boilers 1 and 2 use a coordinated phosphate control for boiler internal purity control and Boiler 3 uses a balanced trisodium phosphate and disodium phosphate within a narrow pH range. A deep-bored water well was installed to provide water in addition to the City supplied water. City water has a high chlorine level which may exceed the Station permitted limits. By combining City water with the well water, the chlorine levels can be maintained at the permitted limits. Water for cooling tower makeup is also obtained from City water. The primary control parameter is silica concentration. Blow down is adjusted as required to maintain control. The City received an industrial waste water permit from Kent County to be able to discharge cooling water to the sewer system. No major water treatment issues were reported at the time of this Report.

Steam purity is not continuously monitored. Samples are taken at least twice daily and tested for pH, conductivity, and silica. There have not been any problems with steam purity. Annual inspections of the boiler drums and separation internals have verified that these systems are intact and operating properly.

In FY 2015, the station did not experience any internal corrosion related failures, steam path deposits, or excessive condenser fouling. Condor Technologies provides water treatment consulting services and chemicals. A representative visits the Station periodically to review test data and check chemical usage rates. No major issues were reported at the time of this Report.

3.2.2.6 Station Electrical Systems

Overall, Station electrical systems and transformers are considered to be in satisfactory condition. A condition assessment of the generation facilities' transformers was conducted in 2014 by TJ/H2b Analytical Services. Oil inspections and analyses were conducted. The inspector recommended that normal operation continue for all the transformers at the plant; however, heating was indicated at two of the transformers. The City has a contract with an environmental consultant to check each substation for oil leaks and to provide instruction on cleaning up in the event of an oil spill.

Oil sampling is now completed twice per year on the generator step-up transformers (GSUs). Based on the 2012 XL Insurance annual inspection, there are still no sprinkler protection or blast walls for GSU's 1-3. In 2012, the city had blast walls installed between Units 1 and 2 auxiliary transformers as

recommended in the insurance report. This item has since been closed per the insurance company. All plant transformers are examined annually. In 2015, all breaker relays, CTs, and PTs were tested by Cameo.

3.2.2.7 Station Control Systems

Unit 1 and Unit 2 controls are electro-pneumatic. Unit 3 controls are a distributed control system (DCS). In general, the station control systems are considered to be in satisfactory condition. The Unit 1 and Unit 2 control systems are outdated but perform satisfactorily. All relays have recently been inspected at both McKee Run and VanSant for North American Electric Reliability Corporation, PJM Interconnection and Mid-Atlantic Area Council compliance. The electro hydraulic control system was modified to become a primary/primary system in 2013. In 2013 additional control wiring was installed to upgrade the Unit 1 and Unit 2 gas control system. No additional controls upgrades or issues to report for FY 2014.

3.2.2.8 General Facilities

No major projects or improvements were completed to the General Facilities in FY 2015 other than installing building heaters and routine maintenance and repairs. In general, the station facilities appeared clean and well maintained during the site visit.

3.2.3 VanSant Condition Assessment

The following is a summary of the condition assessment of major equipment at VanSant as presented by the NAES corporation staff. Burns & McDonnell made no internal assessments of equipment during the facility tour.

In general, the unit is operated infrequently, but is well maintained. The VanSant unit has the capability of black starts. The unit does not currently have remote start capability. The Title V permit requires that the station be manned within 15 minutes of stating the unit and when the unit is operating. An operator travels to the site and performs a twice daily walk down of the unit with a checklist of items to review and the walk down results are logged.

XL Insurance completes inspections of the Electric Division production facilities on an annual basis. After each inspection the insurance provider issues a report detailing its risk reduction recommendations. The lone recommendation for VanSant following the FY 2012 inspection addressed safety. XL Insurance recommended the installation of gas detection equipment at the plant. A gas detection system has been installed. The gas detectors will activate the fire suppression system and alarm to the central control system. No other major repairs or upgrades were made at VanSant in FY 2013. No new recommendations were made in 2015. However, 2015 oil sample analysis of VanSant turbine was rated marginal due to

high particle count. During the spring outage in 2016 the unit is scheduled to have the lube oil sump cleaned and inspected by Total Lubrication and inspected which will resolve the high particulate count.

A capital project was completed on the exhaust stack and the D1 water tank was cleaned in FY 2014. NAES Instrument, Control and Electrical (IC&E) Technicians completed four recommended General Electric Technical Information Letters (TIL) projects for VanSant Unit 11 in the spring 2014 outage as shown below:

1. Annual TIL 1004-2R1 (IGV's and first stage corrosion/pitting inspection)
2. Annual TIL 1068-2R1 (IGV's bushing inspection)
3. Annual TIL 1132-2 (IGV thrust washer corrosion inspection)

Spring 2014 inspections indicated normal wear on the unit and minor maintenance was completed. During the fall 2014 outage, several minor projects were identified and will be completed at the time of the next major project on the unit. No issues were reported.

Every five years, the fuel tanks are inspected for rust and corrosion for leak prevention. The scheduled inspection was completed in June 2015. PM Tasks were developed in the CMMS to perform 5 year inspection next due in 2020 and a 15 year API 653 Ultrasonic shell inspection in 2030.

Remote start of the VanSant unit is currently being discussed with the OEM for restoration. The exhaust plenum work will be completed in FY 2016. A weekly diesel start is performed at the site to improve starting reliability of the diesel starting engine. A unit full speed 30-minute no-load test is performed once a month for starting reliability improvements and training purposes, and 26 hours per year has been allocated for the testing of the unit which have little impact on the allowable operating hours (432) under the VanSant Title V diesel engine annual operation

3.2.4 Production Plant Conclusion

Based on statements and information provided, as well as the observations and reviews performed, it is the opinion of Burns & McDonnell that the City's power generation facilities are being operated and maintained consistent with accepted electric utility practice in the United States. In general, the performance, operation, maintenance, staff, planning, and training aspects for the McKee Run and VanSant stations were found to be above average. Specifically, the generation facilities have demonstrated a high level of availability despite the dispatching of the units primarily for peak demand.

3.3 Transmission and Distribution Plant Assessment

On March 3 and 4, 2016, Mr. Ted Kelly visited the City to collect information and to observe the City transmission and distribution system, as operated and maintained by the Electric Division. Mr. Harry Maloney provided information related to the transmission and distribution system. Mr. Maloney also led a tour of the electric transmission and distribution system. Pictures taken of the substations during the inspections are provided in Appendix

3.3.1 Transmission and Distribution Plant Operations

The Electric Division distributes power to its customers by a network of transmission lines, distribution substations, and distribution lines. The transmission lines are rated at 69 kV and are connected to fifteen distribution substations located throughout the service area. The distribution substations reduce the power from transmission voltages to the primary distribution voltages of 12 kV to facilitate distribution of electric power to customers.

3.3.1.1 Operations and Maintenance

The Electric Division has a SCADA system that is monitored continuously for any problems that may arise in the Electric System. The main control room has two system operator desks and a large screen where system operating information is displayed. System operators can monitor the Electric System operation, such as voltage levels, current flows, etc. and make necessary adjustments as problems arise. The systems operators have received some PJM training, but are not required to be certified as Delmarva Power is the controlling agency.

Loading on substation transformers used for an emergency, a switching operation, or maintenance is limited to 120 percent of the rated capacity, followed by a twelve-hour cool-down period. The Electric Division has eight line crews and two ground workers to work on the system. Four crews are responsible for overhead lines, four crews are responsible for underground lines, and one crew is responsible for maintenance. The primary responsibilities of the eight line crews are installation of new service connections and construction of new lines. The trouble crew maintains the street lights, repairs underground services and is the first responder to outages. Tree trimming is contracted out and is no longer performed by the Electrical Division; however, performance of the contractor is monitored by the Line Crew Superintendent.

The Substation/Relay Maintenance Division is responsible for operation and maintenance of the substations and associated equipment. Visual inspections of substations, associated equipment, trip counter checks and battery systems checks are performed regularly. The Substation/Relay Maintenance

Division is also responsible for contractor oversight during annual transformer condition assessments including annual oil testing.

TJ/H2b Analytical Services completed the annual transformer condition assessments in February 2011. No abnormal gas was indicated and since the oil condition was within acceptable parameters, TJ/H2b recommended the continuation of normal operation. The City has a contract with an environmental consultant to check each substation for oil leaks and to provide instruction on cleaning up in the event of an oil spill.

The City contracts with an outside firm to inspect and chemically treat each wood pole in the Electric System every ten years. This is accomplished by awarding a five-year contract to spread out the expenses. Pole treatments were completed in May of 2013. Dover treated and inspected over 760 poles during 2013, of which, only one pole was rejected resulting in a 99.9 percent pass rate.

3.3.1.2 Design Standards and Specifications

The Electric Division designs the transmission and distribution circuits and some substation upgrades in conformance with national safety standards. Other substation and transmission design is contracted to Pike Electric, Inc.

The underground distribution design utilizes road or alley front access construction. This design means the electrical equipment, such as transformers and underground cable, are installed beside the road instead of behind houses or buildings. The advantage of front access construction is the accessibility for maintenance and repairs to cable and electric equipment. The underground cables are installed in polymerized vinyl chloride pipe for added protection and for easy cable replacement. The Electric Division installs jacketed, concentric cable that is rated at 15 kV, with 133 percent ethylene propylene rubber insulation.

The standard overhead distribution design utilizes a flat construction with a single cross-arm and insulators on 45-foot class 2 poles. Typically all electrical equipment locations have ground rods installed with measured readings of 25 ohms or less.

The substation design is generally a low-profile rigid bus design. The circuit breakers are SF6 gas-filled and the relays are microprocessor based with SCADA control and monitoring.

3.3.1.3 System Reliability

The Electric Division provides for reliability of its distribution system by configuring a majority of its distribution circuits in primary open loop arrangements, improving existing circuits, and installing adequate substation transformer capacity. Normal transformer and line loading are limited to provide sufficient margin to convey firm power requirements during an emergency or a switching operation, or for maintenance.

3.3.1.4 Power Quality

The Electric Division does not have any significant power quality problems. The overall power factor for the Electric System is 99.9 percent. Power transformers are equipped with load tap changers that regulate bus voltages at the distribution substations. Distribution transformers are equipped with no-load taps to make voltage adjustments. There are capacitors and voltage regulators on the Electric System that control voltage and vars on the portion of the system furthest away from the current source and generation. The system operators monitor the power factor closely and turn on capacitors or adjust the generation to compensate for low power factors.

3.3.1.5 Safety

Mr. Maloney reported to Burns & McDonnell the Electric Division had no lost time in FY 2015 but they did have one small incident of a bruised hand. No other incidents or details were provided for this report.

3.3.1.6 Capital Improvements

The following describes completed, on-going, and planned improvements to the City's transmission and distribution assets:

Recently Completed (FY 2012-FY 2015):

- Wyoming Avenue - Underground
- Pleasonton Acres - Underground
- Morris Estates - Underground
- Royal Grant - New Underground Service
- Dover Downs Switchgear
- Lebanon 400 Feeder
- Bayside Drive (Persimmon to White Oak Rd)
- Distribution System Upgrades - Unidentified
- Substation Equipment & Fencing (Division St)
- SCADA Master Hardware Replacement

- Transmission Line Maintenance Program
- Distribution Feeder Replacement Program
- Distribution Capacitors - Overhead
- 69-kV Switch Replacement
- McKee Run Transformer/Substation Repairs
- Frazier Substation Reliability Upgrade (900 circuits)
- Substation PT & CT Replacement Program
- Updated Platex Feeder, from 4-5MW to 10MW
- Substation Battery Replacement
- Richardson Circle
- Chandelle Airport URD
- General Scott Switchgear Garrison Oak Technical Park
- Uzin Utz Manufacturing
- Playtex/Energizer System Upgrades
- Dover Downs Tower
- Eden Hill Lights
- Family Dollar Store
- Route 8/Taps - Distribution Upgrade
- Townsend Brothers - Distribution Upgrade
- NBR Properties, LLC

On-Going:

- Capitol Park - Underground
- Townpoint Distribution Upgrades
- Lighting Project and Rehabilitation
- Horsepond Road Substation Reliability Upgrade
- McKee Run & State College Road Feeder replacements
- GOTP Transmission Line Relocation
- Horsepond SS to Cartanza 69-kV Rebuild
- 69kv Substation Cable Replacement North Street
- New Developments - UG Transformers
- New Developments - UG Conductors/Devices
- West Dover Connector

- Meadows at Jefferson Terrace
- Chestnut Grove Development
- Clearview Meadows
- Leander Lakes
- Meter Replacements & System upgrades

Planned (through FY 2020):

- Distribution System Upgrades - Unidentified
- Oak Grove Trailer Park Distribution Upgrade
- Lakeland Laurel Point - Distribution Upgrade
- Rt. 8/ Mifflin Road Crossing - Distribution Upgrade
- Persimmon Tree Apartments - Distribution Upgrade
- North Street OH to UG (Governors to Queen)
- Dover East Estates - Distribution Upgrade
- Satellite Synchronized Substation Clocks
- Horsepond Road URD - Distribution Feeders
- Transmission Line Maintenance Program
- Distribution Capacitors - Overhead
- Distribution Capacitors - Underground
- Frazier Substation Reliability Upgrade (900 circuits)
- Dover Air Force Base Substation Relocation
- System Automation
- DNREC R & R Metering
- Public Works Wetland Project
- Washington Street Lights
- Blue Hen Apartments
- New K-Mart Building
- Ollies Transformer
- Winner Volkswagen
- Del Homes Warehouse
- Clearview Meadow phase 4
- Reed Street Roof
- Dover Town Center

- Outback Steakhouse

3.3.2 Transmission and Distribution Plant Condition Assessment

The transmission and distribution system assessment included drive-by observations of a sample of the transmission circuits and distribution circuits. Each of the fifteen substations was physically observed during the tour.

- McKee Substation
- College Road Substation – Plan to replace oil-filled PTs
- Dover Downs Substation
- Frazier Substation
- VanSant Substation
- General Scott Substation (North Street)
- Division Street Substation – Plan to expand in the future
- Mid-City Substation – Three new breakers
- Mayfair Substation
- St. Joan's Substation – Fence damaged by a car accident, still needing repair
- Cartanza Substation
- Horsepond Substation
- Danner Farm Substation
- Lebanon Substation – New battery set installed

In general, the substations appeared to be in acceptable operating conditions. All battery sets in the system substations are less than ten years of age. Mr. Harry Maloney, the Electric Department Director, provided a tour of the substations with Ted Kelly on March 3, 2016. The General Scott Substation has relatively new breakers, and the 12-kV switchgear and controls are scheduled to be upgraded in FY 2016. Horsepond Substation was recently rebuilt which included a three breaker 69-kV system for the 69-kV bus and the substation logic was reprogrammed. Work started in late February 2013 and was completed in November 2014. At the Cartanza Substation, Delmarva has expanded their side of the substation. In the Lebanon Substation work on the capacitor bank has been completed. Maintenance requirement for battery testing has been completed for NERC requirements.

The City has recently completed the process of replacing conductor throughout the entire 69-kV system. In addition, the City has invested heavily in its undergrounding program to increase system reliability.

Moving forward, the system will continue to be converted from overhead to underground distribution, but this process has slowed to allow for further evaluation.

3.3.3 Transmission and Distribution Plant Conclusion

It is the opinion of Burns & McDonnell that the design, construction, operation and maintenance of the City's electric transmission and distribution system and the associated facilities are consistent with current generally accepted electric utility standards. In completing Annual Engineering Consultant's Reports over the past several years, Burns & McDonnell has observed that the City has made appropriate system upgrades and improvements. The City and the Electric Division are proactive in preventative maintenance and expansion of the Electric System before problems arise.

4.0 – FINANCIAL OVERVIEW AND ASSESSMENT

4.0 FINANCIAL OVERVIEW AND ASSESSMENT

A review of the financial results of the Electric System for the fiscal year ended June 30, 2015, is provided herein.

4.1 Required Revenue

The level of revenues required from the retail electric rates for the Electric Division was determined through the analysis of the financial results and net income or net margins for the most recent fiscal year. The City of Dover, Delaware Resolution Authorizing and Securing Electric Revenue Bonds, adopted December 23, 1985 requires that the Electric Division maintain a debt service coverage ratio of 1.25. The following is an excerpt from Section 502(c) of the resolution.

> *"(c) The total amount of the Revenues of the Electric System during the preceding fiscal year shall have been not less than the total of the following:*
>
> *(3) The Current Expenses of the Electric System during the current fiscal years shown by the Annual Budget . . . for such fiscal year, and*
>
> *(4) One hundred twenty-five percent (125%) of the maximum amount of the Principal and Interest Requirements for any fiscal year thereafter on account of all bonds then Outstanding under the provisions of this Resolution.*
>
> *The City further covenants that, from time to time and as often as it shall appear necessary, it will adjust the electric rates as may be necessary or proper so that the revenues of the Electric System in each fiscal year will not be less than the total of the amounts set forth in subdivision (c) of this section."*

4.2 Electric Rates

Customers of the Electric Division are charged for the electric service based on rate schedules, tariffs, or contracts that reflect the costs to the Electric Division of providing that service. For purposes of setting electric rates, customers with similar load and service characteristics should be placed in the same rate classification.

A comprehensive cost-of-service and rate design study was completed in 2006 and subsequent rate analyses were completed in 2007 and 2008 to examine revenue requirements and revenue generation. Specifically, the 2006 rate study was conducted to address increased costs associated with a new power supply contract that became effective on July 1, 2006. The rate study recommended combining a number

of rate classes and implementing rate increases on July 1, 2006. The 2006 rate study also recommended an additional increase be implemented on January 1, 2007 to cover increased costs associated with operating the generating station. The 2007 and 2008 rate analyses re-examined Electric Division revenues and expenses and recognized additional revisions to power supply costs. As a result of these analyses, additional rate increases were implemented on July 1, 2007 and July 1, 2008.

The City retained Burns & McDonnell to conduct cost-of-service and rate design study in 2012 followed by an update in 2013. The 2012 study examined revenue adequacy, revenue responsibility, and revenue recovery for the Electric Division. It scrutinized customer classes and proposed adjustments for demand rate components and corresponding changes to energy charges. In May 2013, the City retained Burns & McDonnell to incorporate updated power supply cost projections, and other updates, into the model it developed as part of the 2012 Study. An update to the model and rates analysis was completed in early 2015 to reallocate costs and redesign rates in order to remain regionally competitive. Electric rates are approved by Council on an annual basis. The current rate classes are listed below.

- Residential
- Small Commercial (1 Phase, 3 Phase, 1 Phase Heating, Church, and Municipal)
- Medium Commercial (1 Phase & 3 Phase)
- Large Commercial (3 Phase with Reactive Metering)
- Primary
- Transmission
- Outdoor Development Lighting
- Private Outdoor Lighting

4.3 Operating Results

Table 4-1 presents a summary of the annual energy sales, the average monthly number of customer accounts, and the annual average kilowatt-hour (kWh) energy per customer of the Electric Division for FY 2013 through FY 2015. Annual energy sales were 723.1 GWh in FY 2015, an increase of 0.3 percent from FY 2014. Energy sales amounted to 720.9 GWh in FY 2014, a 1.2 percent decline from FY 2013.

Table 4-1: Annual Sales and Customer Accounts

	FY 2013	FY 2014	FY 2015
Energy Sales (kWh)			
Residential	204,759,680	205,302,701	204,121,492
Commercial	232,220,877	230,178,899	233,016,412
Primary	167,144,717	164,218,197	162,698,678
Transmission	119,003,804	114,470,558	115,164,435
Outdoor Lighting	6,704,350	6,724,400	8,109,618
Total Energy Sales	729,833,428	720,894,755	723,110,635
Average Number of Monthly Customers (accounts)			
Residential	19,990	19,900	20,070
Commercial	3,412	3,412	3,239
Primary	37	37	37
Transmission	4	5	4
Outdoor Lighting	811	811	811
Total Customers Accounts	24,254	24,165	24,161
Energy Usage Per Customer (kWh/cust./yr.)			
Residential	10,243	10,317	10,170
Commercial	68,060	67,462	71,941
Primary	4,517,425	4,438,330	4,397,262
Transmission	29,750,951	22,894,112	28,791,109
Outdoor Lighting	8,267	8,291	10,000
Average Usage Per Customer	30,091	29,832	29,929

Table 4-2 presents revenues from sales, revenue per kWh ratios, and average revenue per customer ratios for each revenue classification. Total revenue from sales to electric customers in FY 2015 was $78.3 million, representing an increase of $0.15 million, or 0.19 percent from FY 2014. Total revenue from sales to electric customers includes utility tax revenue and power cost adjustment revenue.

In FY 2015, the average rate revenue per kWh for residential customers was 12.59 cents and the total average rate revenue was 10.83 cents per kWh. The 2015 national average retail prices of electricity to ultimate customers, as published by the US Energy Information Administration (EIA), were 12.67 and 10.42 cents per kWh for residential customers and across all sectors, respectively.[1] For a state-wide comparison, the EIA summarized the Delaware 2015 average monthly utility-level retail sales of electricity and associated revenue per kWh to be 13.46 cents per kWh for residential customers and 11.21 cents per kWh across all sectors.[2]

[1] US Energy Information Administration, Table 5.3. Average Price of Electricity to Ultimate Customers Total by End-Use Sector, 2005-December 2015 Data for December 2015, Release Date: February 26, 2015. http://www.eia.gov/electricity/monthly/pdf/epm.pdf

[2] US Energy Information Administration, Table 5.6.B. Average Price of Electricity to Ultimate Customers by End-Use Sector by State, Year-to-Date through December 2015 and 2014, Data for December 2015, Release Date: February 26, 2016. http://www.eia.gov/electricity/monthly/pdf/epm.pdf

Table 4-2: Annual Revenues and Sales Ratios

	FY 2013	FY 2014	FY 2015
Revenue			
Residential	$ 28,200,423	$ 25,882,393	$ 25,708,276
Commercial	29,642,803	25,852,554	26,360,222
Primary	17,809,562	15,619,663	15,380,906
Transmission	11,376,866	9,674,084	9,468,043
Outdoor Lighting	1,301,542	1,158,558	1,361,018
Total Revenue	$ 88,331,196	$ 78,187,252	$ 78,278,464
Revenue/kWh			
Residential	$ 0.1377	$ 0.1261	$ 0.1259
Commercial	0.1276	0.1123	0.1131
Primary	0.1066	0.0951	0.0945
Transmission	0.0956	0.0845	0.0822
Outdoor Lighting	0.1941	0.1723	0.1678
Total Revenue/kWh	$ 0.1210	$ 0.1085	$ 0.1083
Revenue Per Customer			
Residential	$ 1,411	$ 1,301	$ 1,281
Commercial	8,688	7,577	8,138
Primary	481,340	422,153	415,700
Transmission	2,844,216	1,934,817	2,367,011
Outdoor Lighting	1,605	1,429	1,678
Average Revenue Per Customer	$ 3,642	$ 3,236	$ 3,240

The Electric Division's largest cost in providing electric service to its customers in FY 2015 was the wholesale cost of power. The Electric Division purchased power from the PJM Interconnection marketplace through its Energy Manager, TEA. The cost of non-generated power includes energy and demand costs, power supply management expense, PJM charges and credits, generation fuels cost, and capacity charges and credits.

The significance of power supply cost to the Electric Division is illustrated in Table 4-3. The top portion of the Table shows net operating revenue as the difference between total revenues generated by the rates and the cost of power supply.[3] The ratios of power supply cost to sales revenues were calculated for FY 2013 through FY 2015. As illustrated, the Electric Division's power supply cost as a percentage of rate revenue decreased from 73.2 percent in FY 2014 to 63.4 percent in FY 2015.

[3] For the purposes of this Report, the phrase "Power Supply" refers to the sum of the costs of power purchased and power generated. This includes plant costs and the cost of fuel. Power Supply also includes any expenses in the CIP Fund that are not capital expenses. The phrase "Purchased Power" refers only to the cost of power purchased from the market and other directly associated costs.

Table 4-3: Revenue Margins and Unaccounted for Energy

	FY 2013	FY 2014	FY 2015
Net Revenue Margins ($)			
Sales Revenues	$ 88,331,196	$ 78,187,252	$ 78,278,464
Power Supply	55,681,251	57,233,726	49,645,951
Net Revenue Margin	$ 32,649,945	$ 20,953,526	$ 28,632,513
Net Revenue Ratio	63.0%	73.2%	63.4%
Unaccounted for Energy (kWh)			
Power Supply	752,869,000	762,254,000	756,897,000
Energy Sales	729,833,428	720,894,755	723,110,635
Unaccounted for Energy (Losses)	23,035,572	41,359,245	33,786,365
Percentage	3.1%	5.4%	4.5%

Table 4-3 also illustrates the ratio of the amount of energy purchased and delivered to the electric system to total energy sales. This relationship identifies the level of unaccounted for energy in the Electric System. This unaccounted for energy may include energy that was unmetered, metered inaccurately, stolen, lost, PJM transmission line losses, local system line/transformer losses, etc. The bottom portion of Table 4-3 presents these comparisons for the Electric Division for FY 2013 through FY 2015. As shown, the percentage ratio of the unaccounted for energy to the total energy purchased for FY 2015 was 4.5 percent. This is down from 5.4 percent in FY 2014. In previous Annual Engineering Consultant's Reports, Outdoor Lighting energy was recorded as losses. In this report, Outdoor Lighting customer accounts, energy sales, and revenues were recorded as a separate rate class. The impact this modification has on this Financial Overview and Assessment is most pronounced on the Table 4-3 Unaccounted for Energy analysis, as losses are shown to have increased from corresponding years in previous reports.

Table 4-4 presents a re-creation of the Electric Division's Statement of Revenues, Expenses, and Changes in Unreserved Retained Earnings for the Electric Revenue Fund for FY 2013 through FY 2015. Net income increased in FY 2015 to $2.7 million from -$2.3 million in FY 2014. Steady revenues, a decrease in power supply costs of 13.3 percent and all other expenses staying relatively constant were the main reason for the large swing in net income between 2014 and 2015.

Table 4-4: Comparative Statement of Revenues, Expense, and Changes in Unreserved Retained Earnings

	FY 2013	FY 2014	FY 2015
Operating Revenues:			
Charges for Electric Service	$ 88,331,196	$ 78,187,252	$ 78,278,464
Miscellaneous Services/Incomes	2,354,497	1,287,501	1,484,573
Total Operating Revenues	$ 90,685,693	$ 79,474,753	$ 79,763,037
Operating Expenses:			
General Administration	$ 4,470,795	$ 2,450,884	$ 2,937,003
Power Supply	55,681,251	57,233,726	49,645,951
Transmission/Distribution	3,267,698	3,806,078	3,508,209
Engineering	1,107,231	1,331,909	1,364,077
Metering	219,010	284,229	346,943
System Operations	544,405	739,406	671,048
Utility Tax	1,443,853	1,258,957	1,266,872
Depreciation	4,621,501	4,748,120	4,863,653
Retirees Pension	1,115,765	975,700	-
Retiree Health Care	696,500	513,300	1,523,100
Total Operating Expenses	$ 73,168,009	$ 73,342,309	$ 66,126,856
Net Operating Income	$ 17,517,684	$ 6,132,444	$ 13,636,181
Non-operating Revenues (Expenses)			
Interest Earned			
Operating Fund	$ 190,469	$ 2,112	$ 6,957
Reserved Funds	506,771	216,010	165,827
Net Increase in Fair Value of Investments	(614,989)	426,399	236,779
Interest and Fiscal Charges	(1,432,779)	(1,138,739)	(1,040,204)
Gain/(Loss) on Sale of Assets	5,203	14,439	39,637
Total Non-operating Revenues(Expenses)	$ (1,345,325)	$ (479,779)	$ (591,004)
Net Income Before Operating Transfers	$ 16,172,359	$ 5,652,665	$ 13,045,177
Operating Transfers - In	8,282		
Operating Transfers - Out	(10,000,000)	(8,000,000)	(10,000,000)
Total Net Operating Transfers	$ (9,991,718)	$ (8,000,000)	$ (10,000,000)
Net Income	$ 6,180,641	$ (2,347,335)	$ 3,045,177

4.3.1 Adequacy of Electric Rates

The City's Bond Resolution requires annual revenues of the Electric Division be no less than the total current expenses plus 125 percent of the greatest remaining annual debt service. "Current expenses", as defined in the Resolution, includes all expenses necessary to maintain and repair the Electric System, all administrative expenses, and engineering, legal or other consultant fees. Transfers to reserve accounts and special purpose funds, and allowances for depreciation are specifically excluded from "current expenses."

In order to determine if the City and the Electric Division have met this requirement, the net income shown in Table 4-4 was adjusted to include the interest on bonds, depreciation expense, and other non-cash income and expenses. Table 4-5 summarizes net income adjustments and the calculation of the revenues available for debt service for FY 2013 though FY 2015.

Table 4-5: Debt Service Coverage

	FY 2013	FY 2014	FY 2015
Net Income	$ 6,180,641	$ (2,347,335)	$ 2,650,160
Plus Excluded Expenses:			
Operating Transfers - Out	$ 10,000,000	$ 8,000,000	$ 10,000,000
Depreciation	4,621,501	4,748,120	4,863,653
Interest and Fiscal Charges	1,432,779	1,138,739	1,040,204
Gain/(Loss) on Sale of Assets	(5,203)	(14,439)	(39,637)
Less Excluded Income:			
Net Increase in Fair Value of Investments	614,989	(426,399)	(236,779)
Interest Earned - Reserve Funds	(506,771)	(216,010)	(165,827)
Revenues Available for Debt Service	$ 22,329,654	$ 10,882,676	$ 18,111,774
Maximum Principal and Interest in Any Year	$ 3,401,954	$ 3,344,404	$ 3,344,404
Debt Service Coverage	6.56	3.25	5.42
Minimum Required Debt Service Ratio	1.25	1.25	1.25

As Table 4-5 illustrates, the City and the Electric Division maintained a debt service coverage ratio each year that exceeded the required 125 percent plus current expenses. Therefore, the revenues generated by the current electric rates have been sufficient to meet the applicable covenants of the Resolution.

Section 502 of the Resolution requires that the annual debt service used in evaluating the revenues is to be the maximum amount for any fiscal year thereafter. Table 4-6 presents the annual totals of principal and interest amounts due on bonds currently outstanding. The calculation of the debt service coverage ratio in Table 4-5 is based on the total maximum debt service expense in any fiscal year. The FY 2015 calculation was based on the total FY 2015 debt service expense of $3,344,404.

4.4 Status of Revenue Bonds

At the end of FY 2014, the City had two series of outstanding electric revenue bonds that were issued pursuant to the Resolution. On July 1, 2008, the City issued $22,200,000 in Electric Revenue Bonds (2008 Bonds). The proceeds from the sale of the 2008 Bonds were used (i) to finance or reimburse the City for improvements to the City's electric system; (ii) to fund a Debt Service Reserve Fund; and (iii) to pay the costs of issuance of the 2008 Bonds.

On November 17, 2010, the City issued $8,810,000 of Electric Revenue Refunding Bonds (Series 2010). The proceeds from the sale of the Series 2010 Bonds were used (i) to refund the Series 2004 Bonds, and (ii) to pay the costs of issuance of the Series 2010 Bonds. The non-taxable Series 2010 Bonds received an underlying rating of Aa2 by Moody's Investors Services and an underlying rating of A+ by Fitch Ratings.

Table 4-6 illustrates the debt service schedule for the Series 2008 and 2010 Bonds. The principal and interest and the annual total are shown for each series of bonds. At the time of issuance of the Series 2010 Bonds, the combined outstanding principal balance for both series of bonds was $23,940,000.

Table 4-6: Debt Service Schedule of Electric Revenue Bonds

	2008 Electric Revenue Bonds			2010 Electric Revenue Refunding Bonds			Total Annual
Period	Principal	Interest	Debt Service	Principal	Interest	Debt Service	Debt Service
FY 2016	475,000	930,579	1,405,579	1,890,000	47,250	1,937,250	3,342,829
FY 2017	695,000	901,329	1,596,329	-	-	-	1,596,329
FY 2018	730,000	865,704	1,595,704	-	-	-	1,595,704
FY 2019	765,000	831,580	1,596,580	-	-	-	1,596,580
FY 2020	800,000	798,706	1,598,706	-	-	-	1,598,706
FY 2021	840,000	763,856	1,603,856	-	-	-	1,603,856
FY 2022	880,000	726,756	1,606,756	-	-	-	1,606,756
FY 2023	925,000	686,694	1,611,694	-	-	-	1,611,694
FY 2024	970,000	644,056	1,614,056	-	-	-	1,614,056
FY25-34	12,710,000	3,405,972	16,115,972	-	-	-	16,115,972
Total	$19,790,000	$10,555,232	$30,345,232	$1,890,000	$ 47,250	$ 1,937,250	$32,282,482

4.5 Insurance

The City maintains a comprehensive insurance program to insure against varying types of liabilities and significant losses related to various Electric Division properties. Section 706 of the Resolution reads:

> *"The City covenants that it will maintain a practical insurance program, with reasonable terms, conditions, provisions and costs, which the City Manager determines, with the approval of the Engineering Consultants, will afford adequate protection against loss, including loss of Revenues, caused by damage to or destruction of the Electric System or any part thereof and also comprehensive public liability insurance on the Electric System for bodily injury and property damage in such amounts as may be approved by the Engineering Consultants."*

Table 4-7 summarizes itemized insurance coverage procured by the City for the period July 1, 2014, through June 30, 2015. Burns & McDonnell has reviewed this list of insurance, and in the opinion of Burns & McDonnell, as Engineering Consultant and not as insurance counselor, the insurance in full force and affect appears to satisfy the requirements of Section 706 of the Resolution.

Table 4-7: Schedule of Insurance Coverage in Effect

Starr Technical Risks Agency	July 1, 2014 - June 30, 2015 Coverage
Property	
Earth Movement -Per Occurrence and in the Annual Aggregate, except	$20,000,000
Earth Movement in High Hazard Earth Movement Zones;	EXCLUDED
Earth Movement in California;	EXCLUDED
Flood -Per Occurrence and in the Annual Aggregate;	10,000,000
Accounts Receivable;	100,000
Business Interruption;	EXCLUDED
Contingent Time Element Coverage;	EXCLUDED
Debris Removal (or 25% of Direct Property Loss, whichever the greater);	2,500,000
Demolition and Increased Cost of Construction;	10,000,000
EDP Media;	1,000,000
Errors and Omissions;	2,000,000
Expediting Expense;	1,000,000
Extra Expense, excluding replacement power or increased cost of generation, transmission and/or distribution of electricity, water or natural gas;	2,000,000
Fire Department Service Charges and Extinguishing Expenses;	500,000
Hazardous Substances -Per Occurrence and in the Annual Aggregate;	500,000
Inland Transit;	2,500,000
Newly Acquired Locations -90 Days reporting;	1,000,000
Personal Property Temporarily Off Premises;	100,000
Course of Construction;	EXCLUDED
Miscellaneous Unnamed Locations (except perils of Flood, Earth Movement and	500,000
Valuable Papers and Records;	100,000

Deductibles

All deductibles listed below are per occurrence except with respect to coverage provided under the Boiler & Machinery which shall be any One Accident.

In respect of Damage to Insured Property:

$750,000 per Occurrence, except;

$100,000 per Occurrence as respects Transit.

In respect of Time Element loss (Extra Expense):

45 days per Occurrence, except;

72 hours per Occurrence in respect of Service Interruption.

XL Insurance	July 1, 2014 - June 30, 2015 Coverage
Property	
per Occurrence and in the Annual Aggregate in respect of Flood;	$ 10,000,000
per Occurrence and in the Annual Aggregate in respect of Earth Movement, Excluded. per Occurrence and in the Annual Aggregate applicable in High Hazard Movement zones;	20,000,000
per Occurrence and in the Aggregate in respect Hazardous Substance;	500,000
per Occurrence in respect of Business Interruption;	EXCLUDED
per Occurrence in respect of Accounts Receivable;	100,000
per Occurrence in respect of scheduled, direct Contingent Time Element;	EXCLUDED
per Occurrence in respect of Incidental Course of Construction;	5,000,000
(or 25.00% of the direct physical loss, whichever greater) per Occurrence in respect of Debris Removal;	2,500,000
per Occurrence in respect of Demolition and Increased Cost of Construction;	10,000,000
per Occurrence in respect of Electronic Data Processing Media;	1,000,000
per Occurrence in respect of Errors and Omissions;	2,000,000
per Occurrence in respect of Expediting Expense;	1,000,000
per Occurrence in respect of Extra Expense excluding replacement power of increased cost of generation, transmission and/or distribution of electricity, water or natural gas;	2,000,000
per Occurrence in respect of Fire Department Service Charges and Extinguishing Expenses;	500,000
per Occurrence in respect of Newly Acquired Locations (ninety (90) days reporting);	1,000,000
per Occurrence in respect of property in Course of Inland Transit;	2,500,000
per Occurrence in respect of Miscellaneous Unnamed Locations, except:	500,000
Excluded. per Occurrence in respect of Flood;	
Excluded. per Occurrence in respect of Earth Movement;	
Excluded. per Occurrence in respect of Named Storm;	
per Occurrence in respect of Valuable Papers and Records;	100,000
per Occurrence in respect of Personal Property Temporarily Off Premise.	100,000

Deductibles / Retentions

Application of Deductibles as described in Policy form unless otherwise indicated in Policy Form Revisions Section, if applicable.

In respect of Damage to Insured Property:

$750,000, Per Occurrence, except;

$100,000, per Occurrence as respect Transit;

In respect of Time Element loss (Extra Expense):

45 days per Occurrence except;

72 hours Per Occurrence in respect of Service Interruption

4.6 Operating and Reserve Accounts

The Electric Revenue Fund and the Electric Improvement & Extension (I&E) Fund are the City's two funds devoted to the Electric Division. The funds are used to manage cash and transactions related to utility operations and capital expenditures, respectively. Each fund includes certain cash accounts established to make money available for specific purposes when they are needed. The accounts maintained within the Revenue and I&E Funds are listed herein.

Electric Revenue Fund

- Insurance Reserve Account
- Contingency Reserve Account
- Electric Rate Stabilization Reserve Account
- Interest and Sinking Account

Electric Improvement & Extension Fund

- Depreciation Reserve Account
- Future Capacity Reserve Account

The following are descriptions of each Fund, their respective accounts and their purposes.

4.6.1 Electric Revenue Fund

The Electric Revenue Fund was established in Section 503 of the Resolution. All revenues are to be deposited into the Electric Revenue Fund when received. Current expenses are to be paid and other accounts are to be maintained from the Electric Revenue Fund. Moneys are transferred from the Electric Revenue Fund to the Electric Rate Stabilization Reserve Account, the Interest and Sinking Account, the I&E Fund, the Depreciation Reserve Account, and the Future Capacity Reserve Account.

4.6.1.1 Insurance Reserve Account

The Insurance Reserve Account was established by the City to fund insurance deductibles in the event of loss(es) covered by the City's insurance policies then in effect. The target minimum balance in the Insurance Reserve is $350,000. The reserve balance at the end of FY 2015 was $740,642. In an effort to reduce insurance premiums, the City approved raising the minimum reserve balance to $750,000 in 2014. The new minimum balance will be in force in FY 2016; achieved by the accumulation of interest earnings and a $10,000 appropriation.

4.6.1.2 Contingency Reserve Account

The Contingency Reserve Account was established by the City in FY 2003 to provide for unplanned expenditures that may not be avoidable. The City's Financial Policies require that a minimum balance be maintained in the Contingency Reserve Account equal to 1.0 percent of the current year revenues for the Electric Revenue Fund. The FY 2015 year-end balance was $822,677, which is equal to 1.03 percent of the FY 2015 revenues for the Electric Revenue Fund.

4.6.1.3 Electric Rate Stabilization Account

The Electric Rate Stabilization Reserve Account was established in FY 2005 to offset the costs of the power cost adjustment to the customers of Dover. The account's target balance is a minimum of 3.0 percent, not to exceed 10.0 percent, of purchased power cost in any given year. Any excess of this amount will be refunded to customers in future years by reducing the rate of the power cost adjustment. The account's FY 2015 end-of-year balance was $7,505,354, which was 14.9 percent of the FY 2015 purchased power cost.

4.6.1.4 Interest and Sinking Account

The Interest and Sinking Account was established in Section 507 of the Resolution. This account consists of two restricted accounts: the Bond Service account and the Reserve Account. The Bond Service Account is funded with equal monthly transfers from the Electric Revenue Fund such that the balance, as of each payment date for interest or for principal and interest, will be equal to the amount of the payment due. The payments of principal and interest due on bonds are made from the Bond Service Account. The Reserve Account is funded by transfers from the Electric Revenue Fund, as necessary, to maintain a balance equal to the maximum combined principal and interest for any future fiscal year through the life of all bonds then outstanding. Moneys in the Reserve Account are used for paying interest on and principal of bonds when the balance in the Bond Service Account is insufficient for making those payments. Excess moneys in the Reserve Account are also used towards paying current interest payments. The total amount in the Restricted Accounts for the 2008 and 2010 bonds as of June 30, 2015, was $3,562,746.

4.6.2 Electric Improvement and Extension Fund

The I&E Fund was established in Section 507 of the Resolution. Funds are transferred to the I&E Fund from the Electric Revenue Fund to the extent that the amount of funds available from the Electric Revenue Fund exceeds the total of the amounts required to be added to the Interest and Sinking Account. The I&E Fund also receives additional funding from the Depreciation Reserve Account, the Future Capacity Reserve Account, and from development receipts. Section 510 of the Resolution indicates that,

except for certain situations, moneys held in the I&E Fund are to be used only for payment of costs of unusual maintenance or repairs, renewals or replacements, obtaining or replacing equipment, constructing extensions, additions, or improvements, and engineering expenses related to the foregoing activities.

4.6.2.1 Depreciation Reserve Account

The Depreciation Reserve Account represents moneys that have been set aside for the sole purpose of funding renewals and replacements of the Electric System as components or equipment wear out, deteriorate, or otherwise become unsuitable for the intended purpose. Transfers from the Electric Revenue Fund and investment earnings are the only sources of additional moneys for the Depreciation Reserve Account. Transfers to the I&E Fund are made as necessary to fund capital projects. The target appropriation for the Depreciation Reserve Account each year is the excess of depreciation expense for the year over the amount of principal included in debt service payments made during the year. The reserve balance at the end of FY 2015 was $9,957,873.

4.6.2.2 Future Capacity Reserve Account

The Future Capacity Reserve Account was established to set aside and accumulate funds from the Electric Revenue Fund for use in evaluating and pursuing activities related to the Electric Division's alternatives for power supply resources for future demand for electricity. The target balance for this reserve is $10,000,000. The reserve balance at the end of FY 2015 was $10,107,899.

Table 4-8 presents FY 2013 through FY 2015 year-end summaries of the activity within the cash accounts described above. The Insurance Reserve Account, the Contingency Reserve Account, the Electric Rate Stabilization Reserve Account, and the Interest and Sinking Account are accounts within the Electric Revenue Fund. The Depreciation Reserve Account and the Future Capacity Reserve Account are accounts within the I&E Fund.

Table 4-8: Reserve Account Activity and Balances

	Insurance Reserve Account	Contingency Reserve Account	Electric Rate Stabilization Account	Bond Reserve Account	Depreciation Reserve Account	Future Capacity Account
Year Ended June 30, 2012						
Balance in Account on July 1	$ 403,334	$ 1,056,788	$ 6,160,167	$ 3,519,376	$ 10,412,221	$ 9,178,771
Receipts						
Interest Earned	4,661	14,026	69,966	3,443	129,837	126,711
Appropriations	-	-	5,000,000	3,370,068	-	-
Total Funds Available	$ 407,995	$ 1,070,814	$ 11,230,133	$ 6,892,887	$ 10,542,058	$ 9,305,482
Disbursements						
Debt Service Payments	-	-	-	(3,370,054)	(500,000)	-
Transfer to Capital Projects/Ops.	(70,730)	-	(1,000,000)	-	(300,000)	500,000
Balance in Account on June 30	$ 337,265	$ 1,070,814	$ 10,230,133	$ 3,522,833	$ 9,742,058	$ 9,805,482
Year Ended June 30, 2013						
Balance in Account on July 1	$ 337,265	$ 1,070,814	$ 10,230,133	$ 3,522,833	$ 9,742,058	$ 9,805,482
Receipts						
Interest Earned	10,178	16,022	151,991	3,224	172,146	153,208
Appropriations	385,600	-	12,400,000	3,375,534	-	2,100,000
Total Funds Available	$ 733,043	$ 1,086,836	$ 22,782,124	$ 6,901,591	$ 9,914,204	$ 12,058,690
Disbursements						
Debt Service Payments	-	(272,600)	-	(3,375,534)	(58,500)	(54,500)
Transfer to Capital Projects/Ops.	-	-	(5,400,000)	-	-	(2,000,000)
Balance in Account on June 30	$ 733,043	$ 814,236	$ 17,382,124	$ 3,526,057	$ 9,855,704	$ 10,004,190
Year Ended June 30, 2014						
Balance in Account on July 1	$ 733,043	$ 814,236	$ 17,382,124	$ 3,526,057	$ 9,855,704	$ 10,004,190
Receipts						
Interest Earned	4,415	4,904	83,692	3,388	59,358	60,252
Appropriations	-	-	-	3,391,860	-	-
Total Funds Available	$ 737,458	$ 819,140	$ 17,465,816	$ 6,921,305	$ 9,915,062	$ 10,064,442
Disbursements						
Debt Service Payments	-	-	-	(3,391,860)	-	-
Transfer to Capital Projects/Ops.	-	-	(7,000,000)	-	-	-
Balance in Account on June 30	$ 737,458	$ 819,140	$ 10,465,816	$ 3,529,445	$ 9,915,062	$ 10,064,442
Year Ended June 30, 2015						
Balance in Account on July 1	$ 737,458	$ 819,140	$ 10,465,816	$ 3,529,445	$ 9,915,062	$ 10,064,442
Receipts						
Interest Earned	3,184	3,537	39,538	33,300	42,811	43,457
Appropriations				3,401,952		
Total Funds Available	$ 740,642	$ 822,677	$ 10,505,354	$ 6,964,697	$ 9,957,873	$ 10,107,899
Disbursements						
Debt Service Payments				(3,401,952)		
Transfer to Capital Projects/Ops.			(3,000,000)			
Balance in Account on June 30	$ 740,642	$ 822,677	$ 7,505,354	$ 3,562,746	$ 9,957,873	$ 10,107,899

5.0 – CONCLUSIONS

5.0 CONCLUSIONS

In the preparation of this Engineering Consultant's Report, Burns & McDonnell completed assessments of the electric generating stations and the transmission and distribution system of the City Electric Division. The investigations included interviews, observations, and reviews of FY 2015 expenditures and FY 2016 budgets. In addition, an analysis of the balances of the Improvement and Extension Fund and other funds benefiting the Electric Division was performed. Burns & McDonnell also reviewed the adequacy of the revenues provided by the current retail rates in relation to the requirements of the City of Dover, Delaware Resolution Authorizing and Securing Electric Revenue Bonds, adopted December 23, 1985. A high level assessment of the City's insurance coverage related to the Electric Division was also completed. Based on these reviews and assessments, it is Burns & McDonnell's opinion that:

1. The City's power generation facilities are being operated and maintained consistent with accepted electric utility practice in the United States.
2. The design, construction, operation, and maintenance of the City's electric transmission and distribution system and the associated facilities are consistent with current generally accepted electric utility standards and over the past few years. The system has been upgraded in order to improve operation and service to customers.
3. The Electric Division capital projects included in the City's Capital Investment Plan and the FY 2016 Operating Budget are necessary and should provide improved reliability and power quality for the Electric System.
4. The balances as of June 30, 2015 for the various reserve funds maintained by the City for the Electric Division appear to be sufficient for their defined purposes.
5. The insurance coverage in full force and affect as maintained by the City related to the various assets of the Electric Division appears to satisfy the requirements of Section 706 of the Resolution.
6. The electric revenues generated by the City's current retail rates are more than sufficient to fulfill the debt service coverage requirement defined in Section 502(c) of the Resolution.

APPENDIX A



Photo 1 - Cartanza Substation


Photo 2 - Cartanza Substation



Photo 3 – Danner Farm Substation



Photo 4 – Division Street Substation



Photo 5 – Division Street Substation



Photo 6 – Division Street Substation



Photo 7 – Division Street Substation



Photo 8 – Dover Downs Substation



Photo 9 – General Scott Substation



Photo 10 – General Scott Substation



Photo 11 – General Scott Substation



Photo 12 – Horsepond Substation



Photo 13 – Horsepond Substation



Photo 14 – Horsepond Substation



Photo 15 – Lebanon Substation



Photo 16 – Lebanon Substation



Photo 17 – Mayfair Substation


Photo 18 – Mayfair Substation



Photo 19 – Mayfair Substation



Photo 20 – Mid-City Substation



Photo 21 – Mid-City Substation



Photo 22 – Mid-City Substation



Photo 23 – Mid-City Substation



Photo 24 – St. Joan's Substation

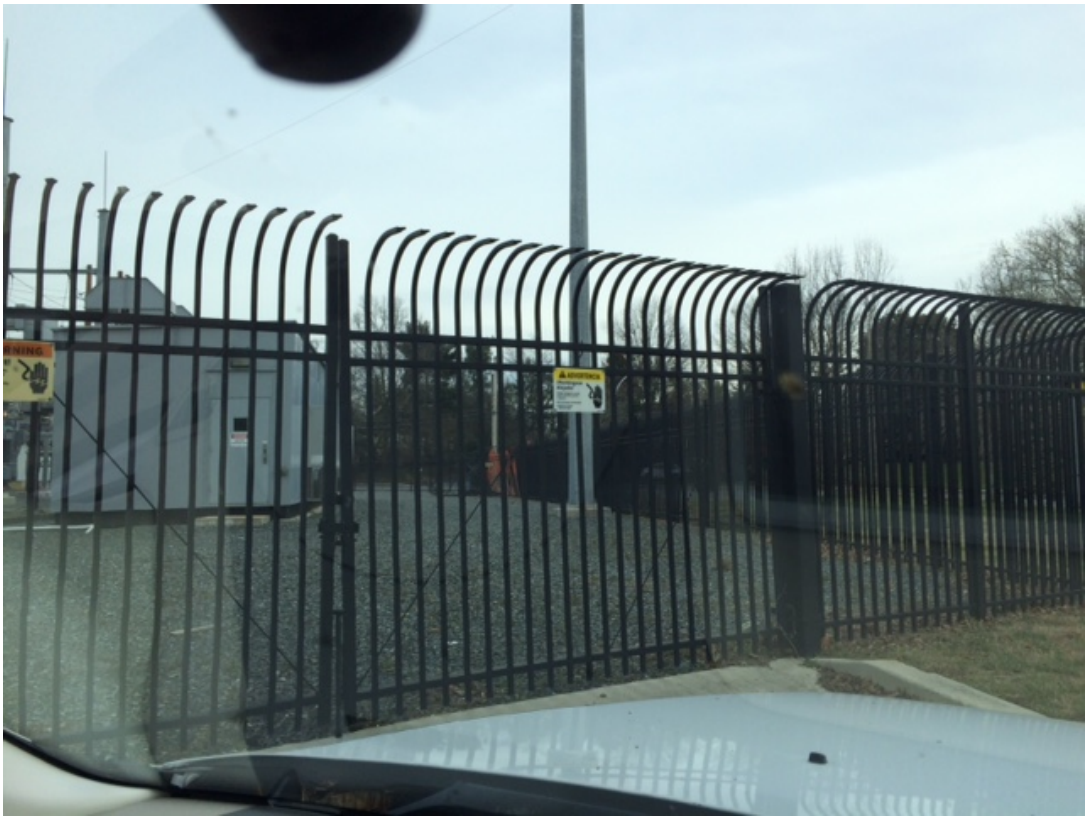


Photo 25 – St. Joan's Substation



Photo 26 – VanSant Substation



Photo 27 – VanSant Substation



Photo 28 – VanSant Substation



Photo 29 – VanSant Plant



Photo 30 – VanSant Plant



Photo 31 – VanSant Plant

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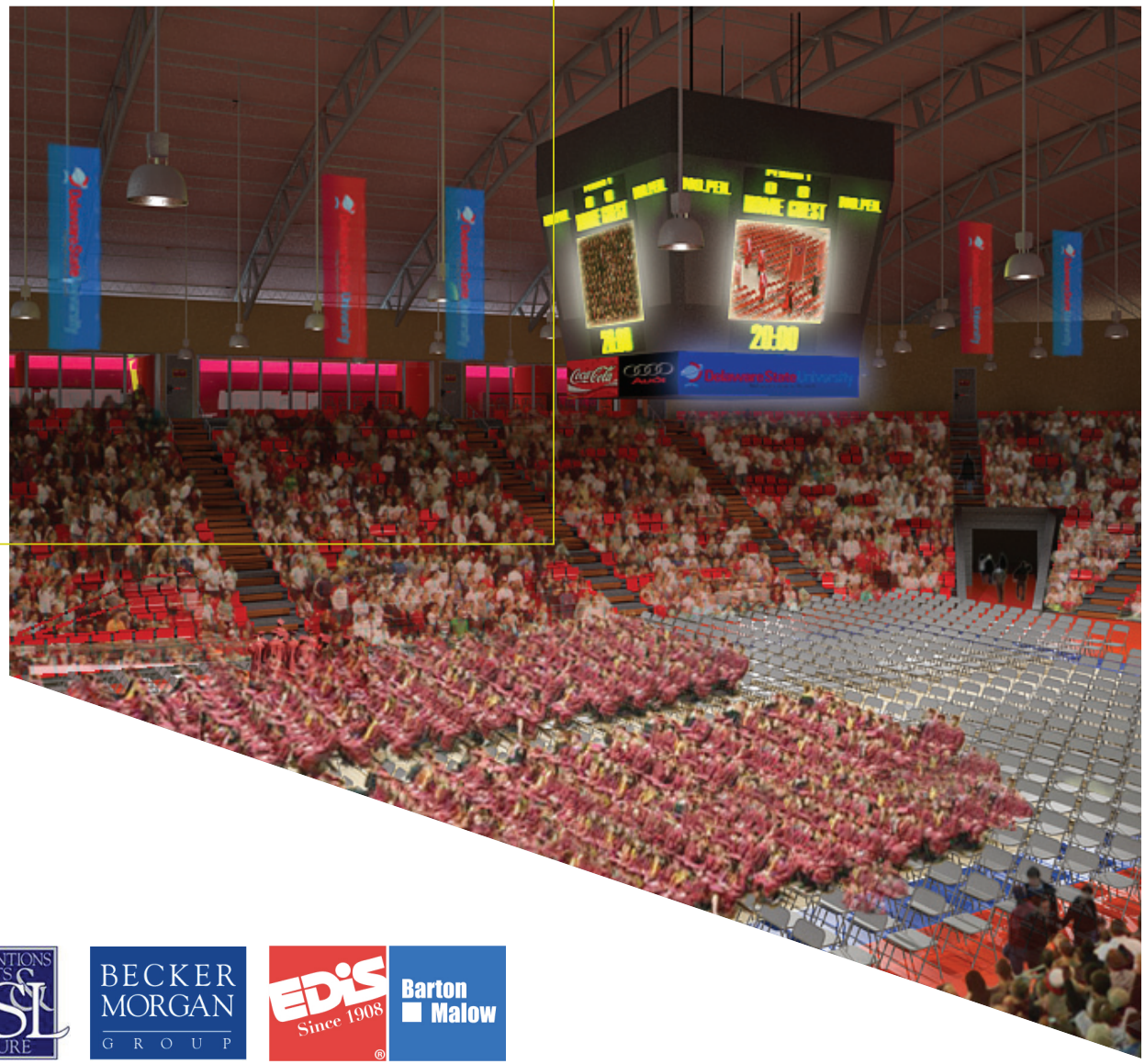
ATTACHMENT #4
Council Committee of the Whole
Meeting of 04/26/2016

Delaware State University Convocation Center

Final Report

Delaware State University
Dover, Delaware

May 2014



HOLZMAN MOSS BOTTINO ARCHITECTURE
ForeSite
CONVENTIONS SPORTS & LEISURE
BECKER MORGAN GROUP
EDIS Since 1908
Barton Malow

Participants

Representatives from Delaware State University (DSU), the State of Delaware, Kent County, the City of Dover and the Greater Kent Committee, came together to participate in a series of workshops and conference calls to brainstorm and provide feedback on the Delaware Convocation Center project. We thank all participants for their assistance with furthering the project.

Steering Committee

Senator Colin Bonini, State Senator, 16th District
Senator Brian Bushweller, State Senator, 17th District
Rep. Darryl Scott, State Representative, 31st District
Mayor Carleton Carey, Mayor, City of Dover
Mr. Bill Neaton, Economic Development Manager, City of Dover
Mr. James Waddington, Director – Economic Partnership, Kent County Levy Court
Ms. Judy Diogo, President, Central Delaware Chamber of Commerce
Ms. Shelly Cecchett, Executive Director, Greater Kent Committee
Mr. Bill Strickland, Past President, Greater Kent Committee
Mr. Stuart Outten, Former Chair, Delaware Civic Center Corporation
Ms. Carolyn Curry*, Chief of Staff and VP for Institutional Advancement, DSU
Dr. Amir Mohammadi*, University Treasurer, DSU
Dr. Alton Thompson, Provost & VP for Academic Affairs, DSU
Dr. Teresa Hardee, VP for Finance, DSU
Mr. Victor Santos, Government Relations, DSU

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EDIS

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*Committee Co-Chair

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- Economic Impacts
- Funding Analysis
- Management Options



Project Objectives

Through visioning sessions with the Steering Committee, the following list of priorities for the project was established:

- *Create an academic building that supports DSU's pedagogical mission*
- *Envision DSU facility for shared use by the entire state of Delaware*
- *Establish indoor venue for DSU convocation and graduation*
- *Develop premier facility for men's and women's NCAA basketball*
- *Create multi-use facility for large assemblies, conferences, trade shows, entertainment and athletic events*
- *Assess market to estimate users, uses and financial viability*
- *Establish strategies to achieve annual financial break-even*
- *Create engine to enhance economic development (job creation and tourism)*
- *Promote active partnerships with DSU, State of Delaware, Kent County, City of Dover, and school districts*
- *Provide a premier facility through design excellence*

Introduction



Project Overview

The desire to embark on a feasibility study for the Delaware Convocation Center arises from the myriad needs of Delaware State University, the City of Dover, Kent County and the state of Delaware for an assembly and event space. The convocation center, a place to hold graduation ceremonies on a twice yearly basis, is a much-needed gathering space for the university and the residents of the surrounding region.

Capitalizing upon the potential synergies of a joint project between town and gown, the study investigates the viability of a convocation center and its impact upon the region. Reviewing current market conditions and trends, existing facilities, surveys and interviews with prospective stakeholders and users, the study presents a holistic and conservative assessment of the project's feasibility.

In conjunction with the data and information compiled, the study also takes a preliminary look into the size and usage of a facility that would be suitable for the Dover area market. The hypothetical facility allows the team to get further feedback about its appropriateness to the community, usability, cost and economic impact on the region, in addition to exploring ways of accommodating both the university's and community's programming and space needs.

Existing Conditions and Needs

It is vital for DSU to have a convocation center. The lack of an appropriate large-scale indoor location for commencement activities has resulted in the implementation of last-minute alternative arrangements due to inclement weather. In 2009, attendees sat in the rain throughout the graduation ceremony with many having to leave due to the downpour. In 2010 and 2011, the graduating class was split into three smaller groups and separate ceremonies were carried out indoors. Neither option is an ideal way to celebrate the graduates and their families on the day that caps the students' college career, a day which should be the source of many proud, happy memories.



In 2009, rain impeded the commencement ceremony, dampening the spirits of the graduates and their families. The lack of an indoor venue that could accommodate all the participants was sorely felt.

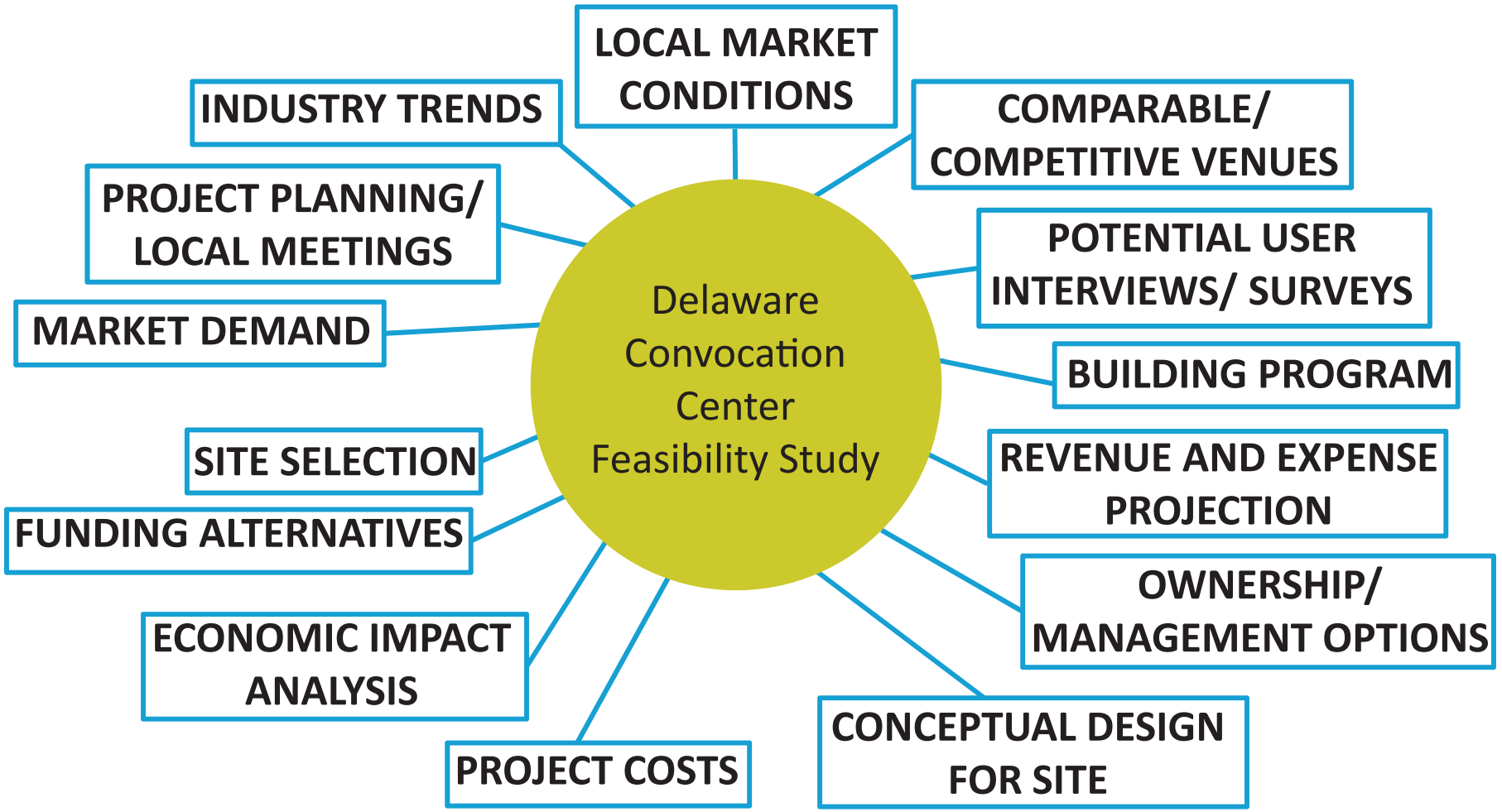


Process

Bringing together a multi-disciplinary team, Holzman Moss Bottino Architecture was commissioned to undertake this study in April 2013. The scope of work included assessment of the market conditions, investigating potential sites, establishing a preliminary program and construction cost, analysis of financial and economic operations, examination of funding options and assessment of ownership and management options.

To address the range of issues, the team includes experts from fields such as market and financial planning (CSL International), space planning (ForeSite Facility Planners), civil/ traffic/ site analysis (Becker Morgan Group) and cost estimating/ scheduling (EDIS-Barton Malow joint venture).

Over a period of nine months, the team undertook numerous surveys and interviews with members of the community, key potential stakeholders and users, in addition to market research. The team made periodic presentations to the Steering Committee to keep them apprised of our findings, while providing various options for the proposed facility in order to fine-tune our recommendations. Members of the committee included state senators, state representatives, representatives from the City of Dover, representatives from Delaware State University, members of the Greater Kent Committee, Central Delaware Chamber of Commerce and many others.



To achieve an in-depth understanding of the multiple factors affecting the viability of the proposed convocation center, the team embarked on a scope of work, as represented in the diagram above, to look at the project in a holistic and comprehensive manner. The methodology allowed the team and the Steering Committee to analyze the social, financial and economic impacts related to the project throughout its life.

Understanding the Market

"This area needs a large arena to attract big name, revenue-generating events and entertainment. Currently residents have to travel 1½ hours in any direction to get access to cultural and entertainment events of significant caliber. This is long overdue." - comment by survey respondent

Methodology

In planning the development of the proposed Delaware Convocation Center, it is important to solicit feedback from potential facility patrons and stakeholders. Interviews were conducted with more than160 organizations and stakeholders including Delaware State University; City, County and State officials; local/regional business community; spectator event promoters; state/regional convention planners; other higher education campuses; regional K-12 schools; and regional hospitality industry leaders.

A comprehensive survey was also distributed via email to the Dover/Kent County-area business community as well as university students, faculty/staff, alumni and donors and other area residents. More than 300 surveys were completed, providing important insight into the following:

- History of attendance at other event and assembly facilities in Dover and the surrounding region;
- Interest level in attending various types of events/programming at the proposed Delaware Convocation Center;
- Current relationship with Delaware State University and the local/regional community;
- Opinions on the convocation center's potential impact on the community and its residents;
- Level of support for and overall attitude toward the convocation center project;
- Level of support for various potential project funding sources;
- Local meeting and event/meeting space needs;
- Interest in using event/meeting space at the proposed Delaware Convocation Center; and,
- Interest in priority/premium seating options and potential naming and sponsorship opportunities that could be offered at the proposed Delaware Convocation Center.

The interviews and surveys identified a variety of needs not met by existing event venues, ascertained moderate demand for concerts, family and sporting events, determined a strong level of interest from state organizations, and brought to light robust support for a public-private partnership. Of vital importance, more than 90% of the survey respondents exhibited a positive attitude towards the project.

Market Characteristics

Market attributes such as local and regional market demographic characteristics, transportation access and competitive entertainment establishments in the local and regional market provide key indicators of the potential demand for the proposed Delaware Convocation Center.

The following is a summary of the key findings of the analysis of market characteristics.

- The Dover metropolitan area is home to approximately 168,000 residents. (Fig. 1) The proposed Delaware Convocation Center will have the potential to draw attendees from throughout the Delmarva region, which has a population of approximately 1.4 million, and on a more limited basis from the western shore of Maryland, southern New Jersey and southeastern Pennsylvania.

- Dover's lack of commercial air service or proximity to the I-95 corridor may impact the proposed Delaware Convocation Center's ability to attract regional conventions and certain touring entertainment events. However, the Dover market's strong highway linkages to points throughout the Delmarva Peninsula, along with its relatively central location within that region, make Dover well positioned to capture event delegates and attendees from throughout the immediate region. (Fig. 2)

- The availability of abundant, moderately priced hotel rooms in Dover could be a significant advantage in drawing conferences, sports tournaments and other such events to the proposed Delaware Convocation Center. The ability to attract these events could help increase demand for hotels, providing a needed boost to the local hotel industry.

MARKET DEMOGRAPHICS

	Dover CBSA/ Kent County [1]	State of Delaware	Delmarva Peninsula	U.S. Totals
Population				
1990	110,993	666,168	1,054,701	281,421,900
2000	126,698	783,598	1,230,899	308,745,500
2013	167,786	917,761	1,416,519	314,861,800
2018	176,439	951,813	1,459,893	325,322,300
CAGR 1990-2013	1.8%	1.4%	1.3%	0.5%
CAGR 2013-2018	1.0%	0.7%	0.6%	0.7%
Age				
Median age	36.7	39.0	39.8	37.5
Under 18	25%	23%	22%	24%
18 to 34	23%	22%	22%	23%
35 to 54	26%	27%	26%	27%
55 & Over	26%	28%	29%	26%
Household Income				
Average HH Income	$64,987	$74,471	$73,306	$49,300
Less than $25,000	21%	20%	21%	25%
$25,000 to $50,000	25%	24%	24%	25%
$50,000 to $75,000	22%	20%	20%	18%
$75,000 to $100,000	16%	13%	13%	12%
$100,000+	17%	23%	22%	19%
Corporate Inventory				
Total Corporate Base	6,276	39,064	62,961	17,186,500
By Number of Employees:				
20+ Employees	708	4,345	6,735	16,108,600
50+ Employees	318	2,003	2,988	571,100
100+ Employees	138	1,004	1,432	221,800

(1) The Dover CBSA (metro area) is defined as Kent County.
Note: CAGR = Compound Annual Growth Rate
Source: Claritas; Hoovers.

Fig. 1 This table provides some statistics about the population in the Delmarva region with regard to size, age and income.

DRIVING DISTANCE FROM REGIONAL MARKETS

CBSA	Distance (miles)	Drive Time	Market Population
Delmarva Markets [1]			
Dover, DE	N/A	N/A	167,786
Philadelphia et al, PA-NJ-DE-MD [2]	35	40 min	6,022,170
Sussex County, DE	37	49 min	204,064
Easton, MD	47	1.2 hrs	38,299
Salisbury, MD	57	1.3 hrs	125,862
Cambridge, MD	63	1.4 hrs	32,655
Ocean Pines, MD	63	1.3 hrs	51,560
Markets Beyond Delmarva within 4-Hour Drive [3]			
Vineland-Millville-Bridgeton, NJ	88	1.7 hrs	157,262
Pottsville, PA	90	2.0 hrs	146,513
Washington et al, DC-VA-MD-WV	96	2.0 hrs	5,828,935
Lancaster, PA	100	2.0 hrs	528,329
Baltimore-Towson, MD	106	1.8 hrs	2,750,201
Reading, PA	106	2.0 hrs	414,193
Trenton-Ewing, NJ	112	2.0 hrs	367,555
York-Hanover, PA	119	2.5 hrs	438,713
Lexington Park, MD	127	2.8 hrs	110,231
Harrisburg-Carlisle, PA	128	2.7 hrs	556,770
Allentown-Bethlehem et al, PA-NJ	129	1.2 hrs	829,018
Atlantic City-Hammonton, NJ	131	2.2 hrs	273,951
Lebanon, PA	131	2.5 hrs	135,132
Ocean City, NJ	133	2.3 hrs	95,762
Hagerstown-Martinsburg, MD-WV	157	2.8 hrs	274,182
Gettysburg, PA	157	2.8 hrs	101,422
New York et al, NY-NJ-PA	165	2.8 hrs	19,149,591
East Stroudsburg, PA	170	3.0 hrs	169,846
Winchester, VA-WV	171	3.3 hrs	130,915
Scranton--Wilkes-Barre, PA	176	3.0 hrs	562,468
Chambersburg, PA	185	3.3 hrs	152,179
Virginia Beach et al, VA-NC	192	4.0 hrs	1,695,181
Bridgeport-Stamford-Norwalk, CT	204	3.3 hrs	936,341
Richmond, VA	204	3.5 hrs	1,284,147
Cumberland, MD-WV	221	3.8 hrs	102,346
Harrisonburg, VA	228	4.0 hrs	128,939

(1) Includes all CBSA's located on the Delmarva Peninsula
(2) The Philadelphia CBSA includes New Castle County, which is located on the Delmarva Peninsula.
(3) Includes CBSA's with a population of at least 100,000 within a 4-hour drive of Dover.
Source: Google Maps, Claritas.

Fig. 2 This table shows the distance and length of time it would take to drive to Dover from surrounding cities.

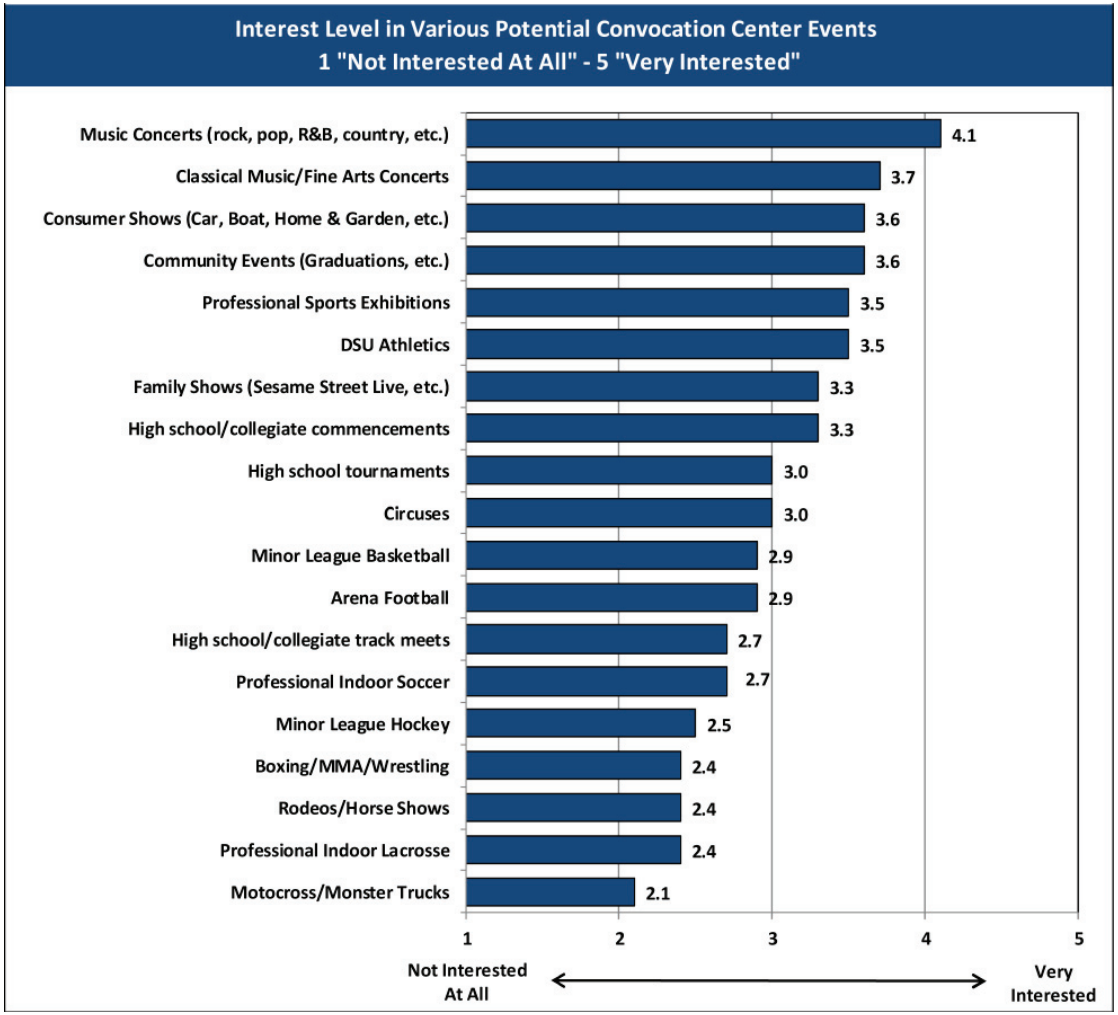


Fig. 3. This chart summarizes the levels of interest from survey respondents for various events that could occur in the proposed convocation center

- The City of Dover is not home to an indoor entertainment venue with a seating capacity greater than 2,500 seats and offers limited exhibition space, providing the proposed Delaware Convocation Center with potential untapped event opportunities. However, the facility could face competition from regional facilities such as the Chase Center in Wilmington, the Bob Carpenter Center at the University of Delaware in Newark for certain regional events.



Conceptual Rendering of Graduation Ceremony

The architect's conceptual rendering for the convocation center (a specific design has not been created) shows the arena accommodating a graduation ceremony with 1,200 graduates on the event floor and an audience of 3,600 people in the seating bowl. The arena's seating configuration is flexible, allowing it to be used for a variety of events such as concerts, trade shows, sporting events, and many others.

Recommendations

"This project would be great for Delaware State University. We will have revenues for the University and the city of Dover." - comment by survey respondent

Public-Private Partnership

Many facilities around the country that are similar to the Delaware Convocation Center are based on public-private partnerships. Not surprisingly, survey results show that approximately 88% of the respondents support a public-private partnership for the Delaware Convocation Center. This strategy ensures that the convocation center can become an asset to the university, central and southern Delaware, and the city, providing much-needed event space for various constituents, maximizing the building's utilization rate and enhancing the relationship between the academic and civic communities.

As a DSU facility with an interest in varied community and regional uses, the building program reflects the needs of diverse constituents in its listing of spaces. Anticipated activities include a mix of academic, spectator, athletic convention, conference and meeting events. The program provides the opportunity for multiple uses of the same space.

Consideration has been given to zoning the building to ensure ease of access by both the public and university students, faculty and staff. Much thought has also been given to the successful sharing of multipurpose spaces between the various entities. Conscientious scheduling of spaces will be critical to maintaining the smooth operations of the building.

Building Program

The key components of the program consist of the academic spaces of the Health and Wellness Institute, the event floor of the arena, fixed and flexible bowl seating, visitor support spaces, support spaces for the athletic teams, administration spaces and building support spaces.

The arena's event floor accommodates a variety of fields-of-play and retractable seats allow for greater flexibility. In convocation or commencement settings, an additional 1,200 loose seats can be placed on the event floor.

Academic Program

The Academic Health and Wellness Institute is a fast-growing academic program at DSU, which is sorely in need of additional space. Classroom spaces can double as meeting and ballroom spaces, and can cater to the convention and conferencing events that the facility hopes to attract.

Phasing

"Right-sizing" the facility is critical to ensuring its success. Currently, there are no facilities in Dover that seat more than 2,500 patrons for events. Based on industry trends, analysis of market characteristics and responses from stakeholder interviews, a facility with a capacity ranging from 4,300 to 6,000 would be ideal to meet the concert, family show, sport event and convocation needs of the city and university.

Keeping in mind the twin considerations of what the market can support and budget constraints, which influence the size of the proposed project, the proposal puts forth the idea of a phased project. The first phase would allow for the development of a 3,600 seat facility (4,800 seats at graduation) with the possibility of expansion to meet increased market demand, if funding permits it. All the academic, meeting and breakout spaces will be built in Phase 1 to allow the Health and Wellness Institute to be fully functional from the first day. It is also vital to note that some of these spaces provide opportunities for rental income.

Phase 2 represents an increase in the number of seats in the bowl, resulting in a total of 4,800 seats (6,000 seats at graduation), a proportional increase in visitor support spaces, and some building support and storage spaces. The enlarged seating bowl presents the ability to attract larger roadshows, better publicized concerts and more tradeshows.

Retractable Seating

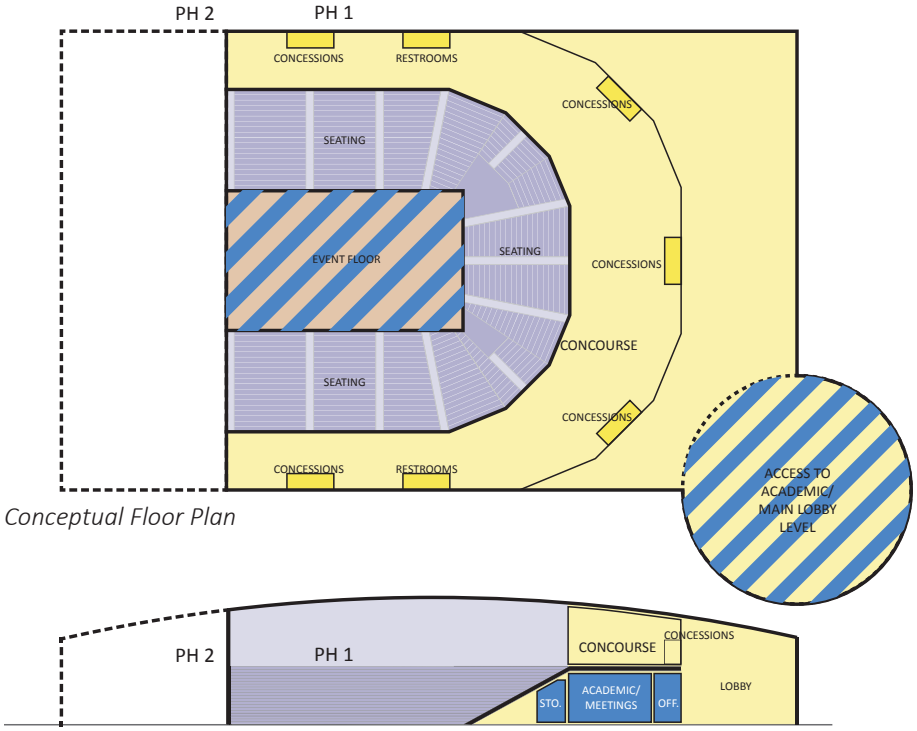
Planning for a portion of the seating bowl to be retractable allows for greater flexibility. When all the seats are pulled out, the event floor is at its smallest, accommodating activities that fit within a basketball court. When rows of seats are retracted, the event floor expands, permitting activities that require more space, such as trade shows, concerts, the circus etc, to occur, an invaluable feature given the lack of indoor exhibition space in Dover.

SUMMARY OF RECOMMENDED BUILDING PROGRAM

	Phase I	Full Build-Out
Gross Square Feet	144,408	169,135
Seating Capacity	3,682 seating bowl 1,200 temporary floor 4,882 total	4,800 seating bowl 1,200 temporary floor 6,000 total
Event Floor Square Footage	10,300 s.f. (minimum) 17,150 s.f. (maximum)	10,300 s.f. (minimum) 17,150 s.f. (maximum)
Dedicated Ballroom Space	5,400 s.f.	5,400 s.f.
Breakout Meeting Space	3,300 s.f.	3,300 s.f.
Academic Space	20,000 s.f.	20,000 s.f.

Fig. 4. The facility will meet all the needs expressed by DSU and the City of Dover from Day 1, providing all the required gathering, meeting and academic spaces. Planning for a second phase, provides the opportunity for the facility to respond to increased demand for seating in the arena.

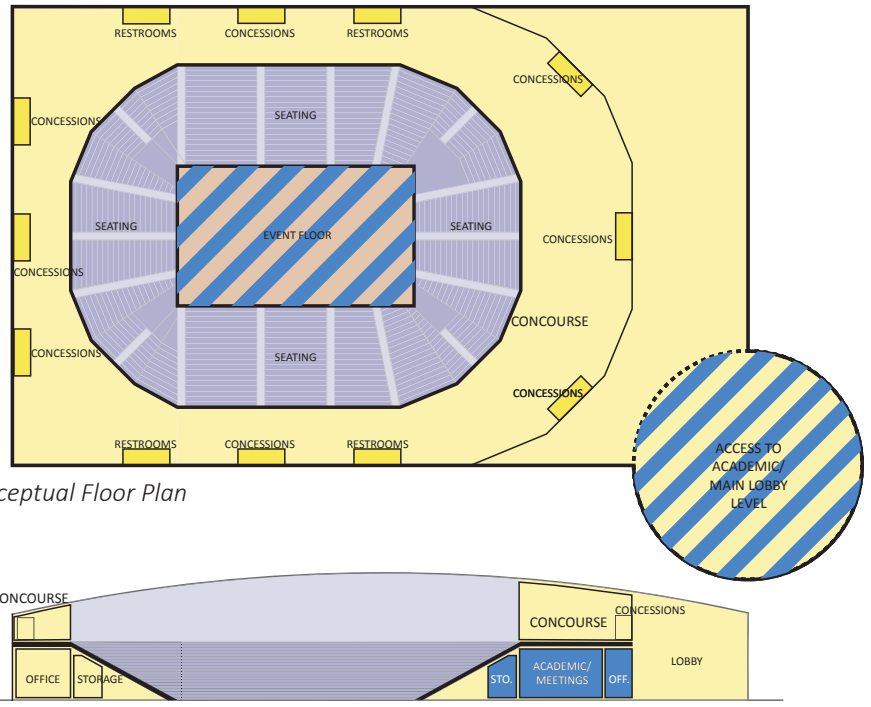
Phase 1



Conceptual Floor Plan

Conceptual Building Section

Phase 1 and 2

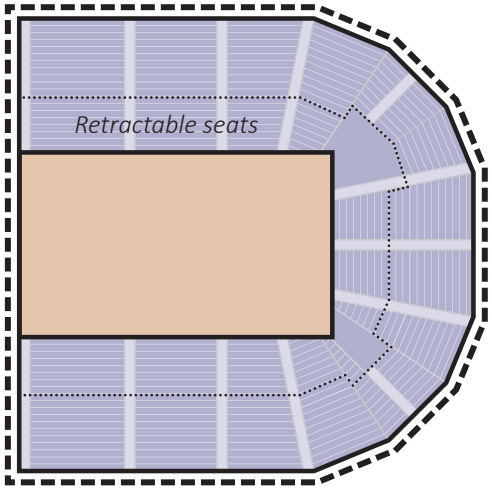


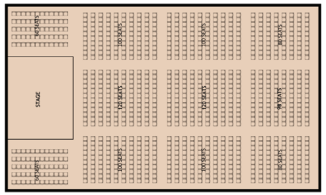
Conceptual Floor Plan

Conceptual Building Section

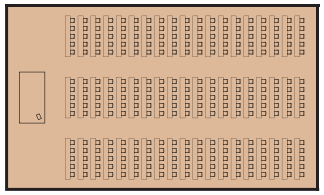
Academic *Public* *Seating* *Event Floor*

In Phase 1, the seating will form a horse-shoe shape surrounding the event floor, accommodating approximately 3,600 people in the bowl seating. Phase 2 allows for an increase of about 1,200 seats. With a total of 4,800 seats, the Delaware Convocation Center will become an ever more attractive event arena for concert organizers and roadshows.





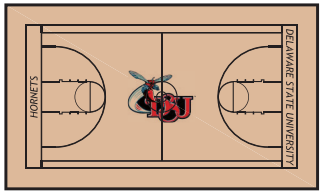
COMMENCEMENT
(additional 1,200 seats)



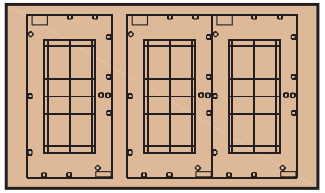
CLASSROOM/
LECTURE



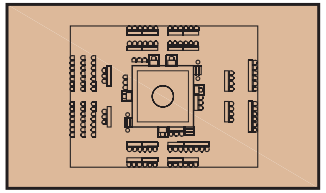
EXERCISE
PHYSIOLOGY LAB



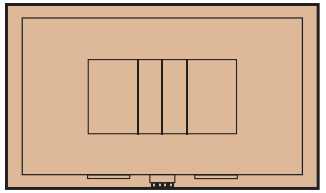
BASKETBALL



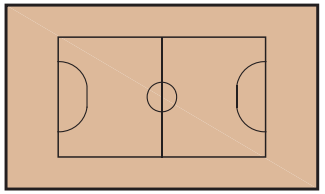
BADMINTON



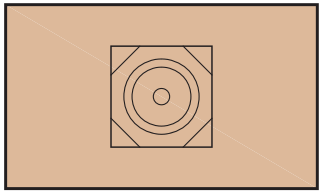
BOXING



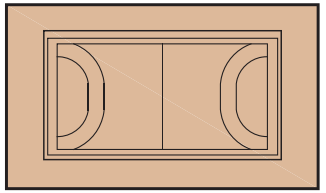
VOLLEYBALL



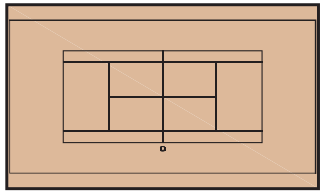
INDOOR SOCCER



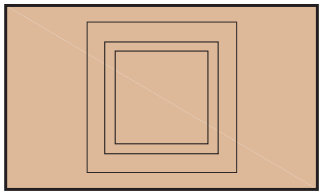
WRESTLING



HANDBALL



TENNIS



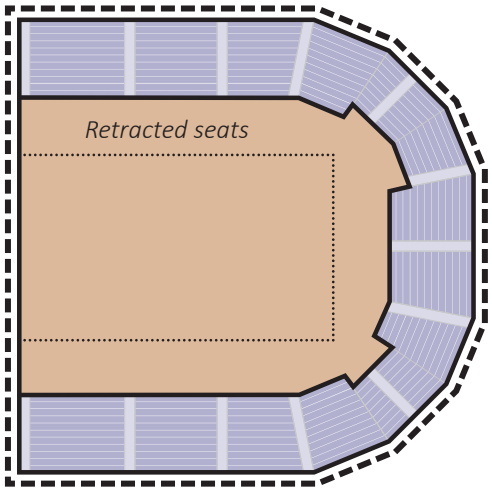
TAEKWONDO

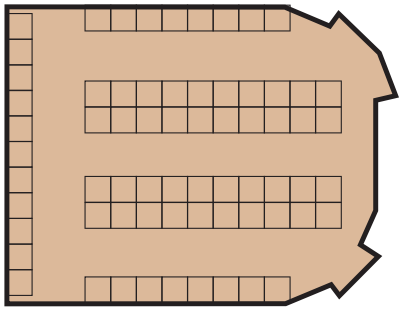
Maximum Seating Configuration

This is a plan diagram of the seating bowl and event floor. Events such as convocations and basketball games will be accommodated in the maximum seating configuration. The diagrams show additional activities that could occur on the event floor.

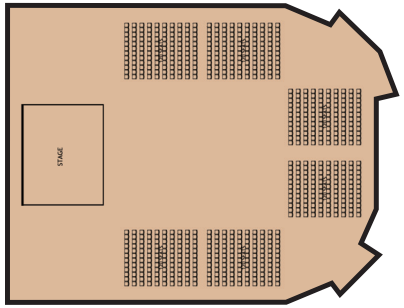
Full Seating Bowl: 3,680 seats

Event Floor: 10,300 s.f.

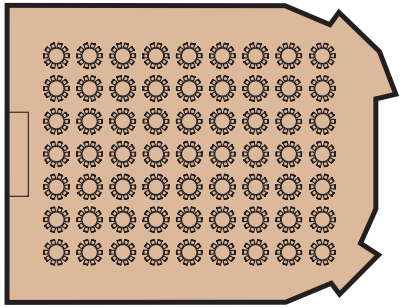




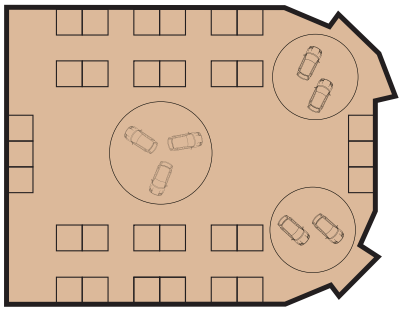
JOB FAIR



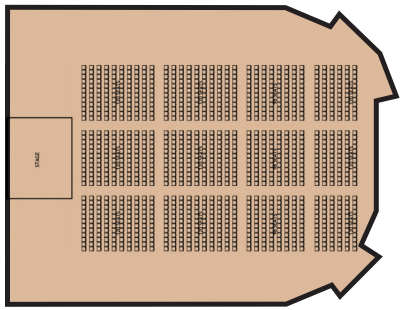
MUSIC FESTIVAL



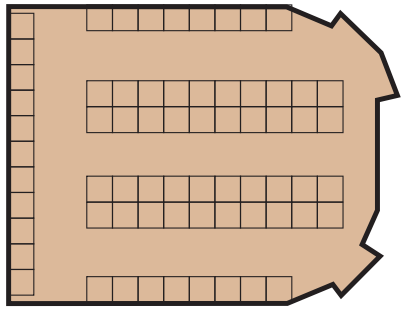
BANQUET
(630 seats)



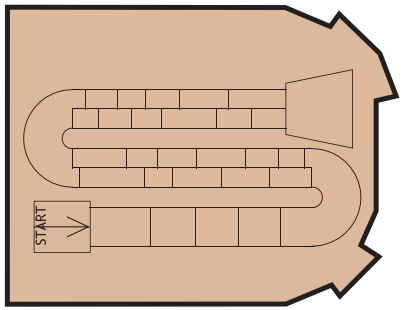
CAR SHOW



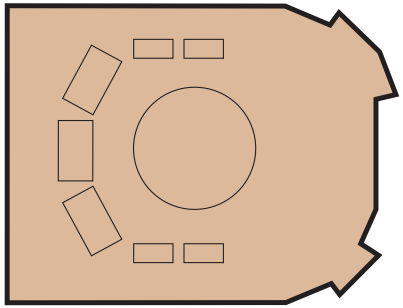
CONCERT



TRADE SHOW



BMX



CIRCUS

Retracted Bowl Configuration

This plan diagram provides maximum event floor space by retracting rows of seating. In the retracted bowl scenario, the event floor will be able to accommodate larger-scale events such as consumer shows, concerts, and many others.
Retracted Seating Bowl: 2,730 seats
Event Floor: 15,050 s.f.

Site Options

The team started by investigating 12 potential sites in and around the DSU campus, before focusing on three preferred sites. In exploring site options for the facility, we took into account issues such as:

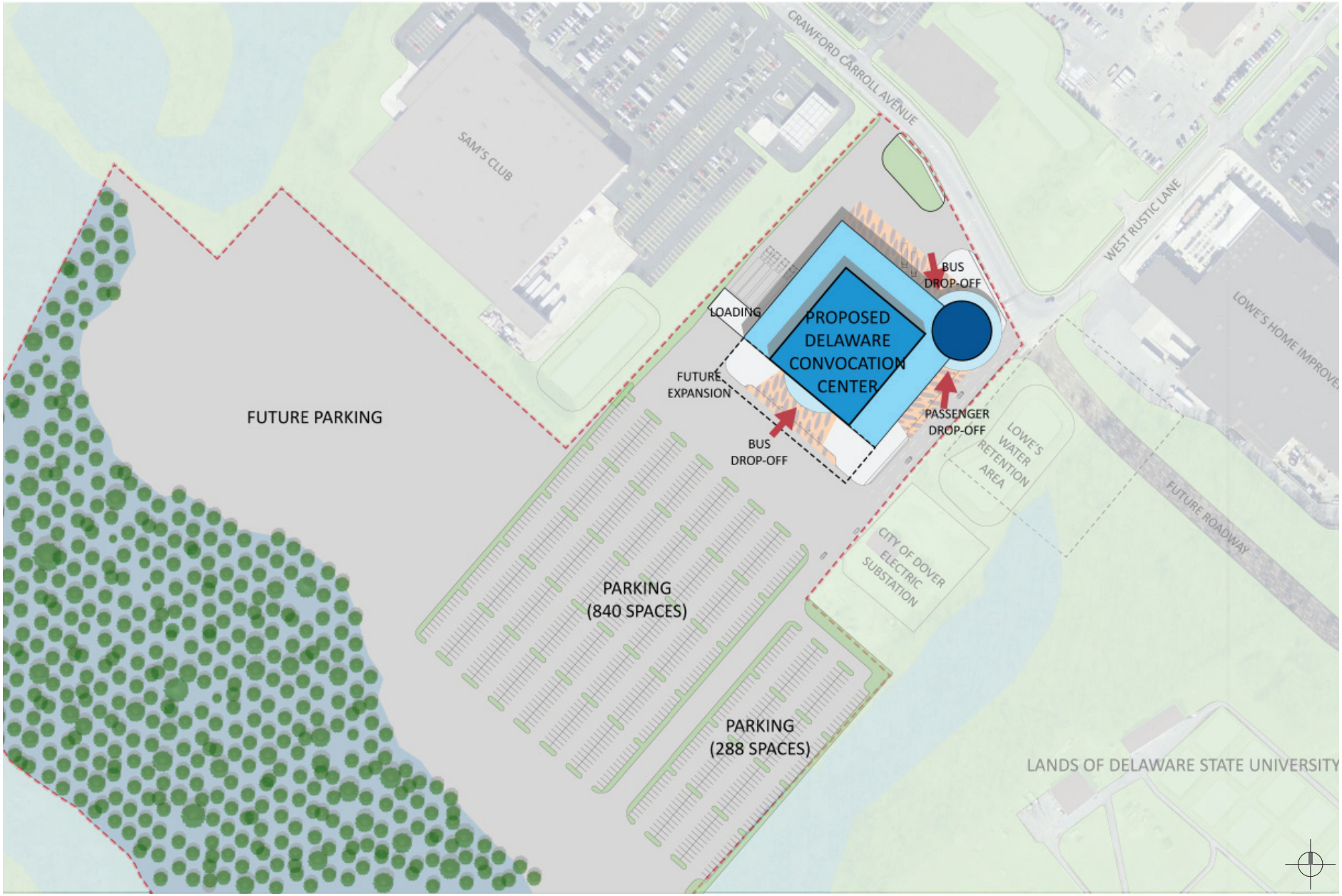
- Visibility from vehicular traffic on Route 13
- Proximity to DSU campus
- Pedestrian and bike access to DSU campus
- Traffic accessibility from Route 1 and Route 13
- Adequate space for new facility, parking, etc.
- Potential for shared parking with neighbors
- Land ownership
- Environmental conditions
- Utility infrastructure
- Relocation of existing site infrastructure

In evaluating the sites against the criteria listed above, the site highlighted in blue emerged as the favored option (refer to adjacent diagram). As the former Delaware Civic Center Site, it is currently owned by the Delaware Civic Center Association. A transfer of ownership would need to be discussed. Some of the advantages of the recommended site include:

- Adjacency to DSU campus
- Ease of access
- Adequate parking
- Reduced cost of land acquisition



The proximity of Site 2 to the DSU main campus, as well as the Commons, is a critical asset. It only takes a short walk for students to get to the Health and Wellness Institute.



Conceptual Site Plan

The proposed convocation center will be served by a primary public entrance that faces the parking lot, a secondary public entrance off Crawford Carroll Avenue, which is mainly for bus drop-offs, and an entrance for the Academic Health and Wellness Institute. Service and loading access to the building will be separate from the public entrances. Based on the City of Dover's requirements, a 4,800 seat facility requires approximately 1,600 spaces.



Conceptual Rendering of NCAA Basketball Game

As a basketball arena, the convocation center will provide the facilities needed by the DSU Hornets to hone their skills, display their talent and further their game. While the arena has not yet been designed, this architect's conceptual rendering of the space shows a long span open room without columns, which is ideal for athletic events. This illustration shows the seating bowl at the maximum seating configuration with all the seats pulled out. The estimated number of sporting events such as men's and women's basketball and women's volleyball is approximately 35 per year.



Conceptual Rendering of Academic Space

The architect's depiction of a classroom shows a space that can be used for a variety of functions, serving academic, as well as community activities. Partitions in the room allow it to be sub-divided into three smaller classrooms, accommodating DSU's academic programs and providing much needed academic space.



Conceptual Rendering of Academic Space/ Multi-use Ballroom

In addition to serving as a classroom, the room is designed to be flexible in use and accommodates a variety of activities such as community meetings, banquets and more. Equipped with audiovisual equipment, Wi-Fi capabilities, and furniture storage, this multipurpose room will be actively used throughout the day and night.

Phase I Cost

In order to accurately assess the convocation center's viability, it is vital to establish an estimate for the cost of designing and building the facility. The cost estimate below put together by EDIS and Barton Malow reflects EDIS' knowledge of local construction conditions and standards in Dover, as well as Barton Malow's experience with convocation centers. These figures are based upon the team's recommendations in terms of facility size and preliminary concept designs.

Construction Costs (includes contingency, general conditions, insurance and bonds etc.)	$46.0 M
Other Project Costs (professional fees, furniture, equipment, contingency etc.)	$8.4 M
Anticipated Cost Escalation (2017)	$3.1 M
Grand Total Project Cost	$57.5 M

"The cost model used for this study allows for a building design that provides extraordinary low cost pricing value while maintaining a high quality, functional building that meets the program needs of the university " - EDiS Company, Wilmington, DE



Conceptual Rendering of Entry Lobby

With multiple entry points, the lobby serves the patrons attending events at the arena, as well as students and faculty heading to the Health and Wellness Institute. The concourse on the upper level provides a variety of patron amenities such as the ticket office, concessions, restrooms and more.

Projected Impact

Job Creation

The construction and on-going operations of the Delaware Convocation Center will create much-needed jobs in the local economy. These jobs will include not only direct full and part-time jobs created temporarily during construction of the facility spanning jobs such as construction workers, tradesmen and manufacturers of raw materials and building supplies, but also more permanent full- and part-time jobs during the on-going annual operations of the facility including jobs such as facility operations personnel (i.e. management, marketing, finance, human resources, maintenance, event services, administration, etc.), event-day staff (i.e. box office attendances, ticket takers, ushers, security, concession workers, parking attendants, traffic control personnel, etc.) and community support personnel in areas such as hotel, restaurant, entertainment, retail, transportation and other such industries. The full-effect of employment impacts in the local economy will be further realized as initial construction and operations spending are re-spent within the community, supporting the creation of additional indirect and induced job impacts.

Overall, the Delaware Convocation Center is estimated to temporarily generate a total of 760 full and part-time jobs (stated in full-time equivalents) during construction. Of this amount, 510 construction-period FTEs are estimated to be new jobs in the State of Delaware and 230 are estimated to be new jobs in the City of Dover.

The total long-term, permanent jobs created from the on-going operations of the Delaware Convocation Center are estimated to range from 130 to 180 full and part-time jobs (stated in FTEs), depending on the level of operations achieved by the venue. Approximately three-quarters of the jobs created during the venue's operations are anticipated new jobs created in the City of Dover and about one-third would be considered new jobs in the State of Delaware.

Events and Attendance

Based on extensive market research, annual event and attendance levels were estimated for the proposed Delaware Convocation Center. Two sets of estimates were developed: a "base case" scenario representing the event and attendance levels that are estimated to be reasonably achievable on an annual basis, and "best case" scenario representing an operating level that reflects successful, aggressive facility management that results in above-peer venue operations.

"Great way to build revenue and bring people here to the middle of the state." - comment by survey respondent

The table (Fig. 5) summarizes the event and attendance estimates for the proposed Delaware Convocation Center under the Phase I building program scenario. It should be noted that these event and attendance totals do not include use of classrooms or athletic and academic offices, athletic practices, student recreational activities or other such day-to-day use of the facility that would take place in addition to the specific event types included in the estimates.

The proposed Delaware Convocation Center is estimated to host 144 to 176 annual events with annual attendance of approximately 116,250 to 153,350. Approximately 60 percent of convocation center events and attendance are estimated to be derived from non-DSU community events. In the event that Phase II of the project is completed in the future, annual attendance levels are estimated to increase by approximately 15 percent, due primarily to the facility's ability to attract additional concert, family show and sporting event activity assuming a larger seating capacity.

Financial Operations

The table (Fig. 6) presents the estimated operating revenues and expenses estimated to result from convocation center operations during a normalized year of operations. As shown, it is anticipated that Delaware State University would likely need to make

ANNUAL EVENT AND ATTENDANCE ESTIMATES
(Assumes Phase I Building Program)

	Base Case			Best Case		
Event	Annual Events	Average Attendance	Total Attendance	Annual Events	Average Attendance	Total Attendance
University Events:						
Men's Basketball	5	700	3,500	5	700	3,500
Women's Basketball	5	250	1,250	5	250	1,250
Basketball Doubleheaders	10	1,100	11,000	10	1,100	11,000
Women's Volleyball	15	250	3,750	15	250	3,750
Athletic Camps	10	50	500	10	50	500
Other University Events	19	1,500	28,500	25	1,500	37,500
Subtotal	64		48,500	70		57,500
Community Events:						
Concerts	2	3,500	7,000	3	3,500	10,500
Family Shows	3	2,000	6,000	6	2,000	12,000
Other Sporting Events	7	2,500	17,500	10	2,500	25,000
Graduations	3	4,500	13,500	4	4,500	18,000
Consumer/Trade Shows	8	1,500	12,000	10	1,500	15,000
Conventions/Conferences	12	500	6,000	16	500	8,000
Banquets	35	150	5,250	45	150	6,750
Meetings/Miscellaneous	10	50	500	12	50	600
Subtotal	80		67,750	106		95,850
Total	144		116,250	176		153,350

Fig. 5 forecasts the number of events and potential attendance.

ESTIMATED OPERATING REVENUES AND EXPENSES
Stabilized Year of Operations

	Base Case	Best Case
OPERATING REVENUES		
Rent	$206,000	$279,000
Premium Seating	66,000	83,000
Food and Beverage	148,000	198,000
Advertising and Sponsorships	135,000	158,000
Naming Rights	270,000	338,000
Merchandise, net	10,000	16,000
Parking, net	137,000	183,000
Ticket rebates/facility fees	50,000	134,000
Other	50,000	75,000
TOTAL REVENUES	$1,072,000	$1,464,000
OPERATING EXPENSES		
Salaries, wages & benefits	$453,000	$505,000
Utilities	217,000	249,000
General & administrative	150,500	176,000
Operations	315,000	362,000
Insurance	72,000	83,000
Professional Fees/Services	14,000	16,000
Management Fee	75,000	100,000
TOTAL EXPENSES	$1,296,500	$1,491,000
UNIVERSITY CONTRIBUTION	$224,500	$27,000

Fig. 6 illustrates the best and worst case scenarios with regard to operating revenues and expenses.

an annual operating contribution of $27,000 under the best case to $224,500 under the base case.

Reflective of a true town-and-gown partnership, a multi-purpose, community-oriented convocation center will benefit the central and southern Delaware region through the creation of spending, jobs, tax revenues and hotel rooms and enhancement in the quality of life for local residents, while Delaware State University benefits from facility revenues generated from non-university events which will serve to significantly reduce the required annual university contributions which could approach upwards of $700,000 as a DSU-only venue.

If Phase II of the building program is constructed, operating revenues are estimated to increase by approximately 10 percent due to increased attendance and event activity. However, operating expenses are estimated to increase by approximately eight percent due to the increased size and volume of the facility, additional staffing needs, increased maintenance costs and other such considerations. Therefore, the net financial operations following the completion of Phase II are estimated to be largely similar to those presented for Phase I in the table to the right.

These financial operating estimates do not include capital reserve funding or potential debt service payments associated with facility funding.

Economic Impacts

The operations of the proposed Delaware Convocation Center would generate economic impacts to the City, County and State on an annual basis as a result of visitation and expenditures associated with Delaware Convocation Center operations and events. The table (Fig. 7) presents a summary of the gross economic impact and fiscal revenues estimated to be generated by the proposed Delaware Convocation Center during a normalized year of operations.

Facility operations are estimated to generate approximately $5.4 to $7.2 million per year in direct spending. Counting this initial direct spending and the subsequent rounds of re-spending that would impact the local economy through a multiplier effect, the total economic activity (output) generated by Delaware Convocation Center operations is estimated to range from $7.0 to $9.4 million per year, supporting 130 to 180 jobs with $2.5 to $3.4 million in annual earnings. Over a 30-year period, the net present value ("NPV") of total output generated by the Delaware Convocation Center is estimated to range from $135 million to $183 million.

Should full build-out of Phase II of the building program be completed, the economic impacts associated with the proposed Delaware Convocation Center are estimated to increase by approximately 15 to 20 percent, due primarily to an assumed increase in

the number of events such as concerts, family shows and sporting events that could draw additional non-local attendees to the Dover area.

Hotel Room Demand

By drawing out-of-town visitors to the area, the Delaware Convocation Center will generate room nights to benefit local hotel operations. Overall, it is estimated that demand for approximately 11,000 to 14,500 new hotel room nights will be created annually in the Dover area from visiting event personnel, out-of-town patrons, business suppliers and others in connection with the on-going operations of the Delaware Convocation Center.

Funding Analysis

It is estimated that Phase I of the proposed Delaware Convocation Center could cost approximately $57.5 million to develop. Assuming an interest rate of 5.0 percent and 30-year bonds, annual debt service payments could approximate $3.7 million annually if the entire amount is financed.

Historically, the development of convocation centers, arenas, conference centers and other similar venues often involve varying degrees of partnerships between the public and private sectors. For facilities that are utilized for colleges and universities for their assembly and athletic events, the college or university typically also participates in the funding of those facilities.

Based on discussions with project stakeholders, a review of past efforts regarding potential public assembly funding in Dover, an assessment of potential taxes and other public revenue streams, and other such considerations, it is likely that the majority of funding for the proposed Delaware Convocation Center will be derived from state funding and potentially be supplemented by a number of other community funding sources.

It appears the most reasonable funding approach would include State of Delaware general fund contributions, DSU general fund contributions, private and other possible community funding sources.

Management Options

The Delaware Convocation Center will be owned by DSU. However, given the likelihood that multiple parties will likely be required to fund the construction of the facility, it is recommended that an entity such as an authority, board or commission be established to provide overall governance of the proposed Delaware Convocation Center.

This governance entity should include representation from various stakeholders to ensure that all relevant parties are included in key decisions pertaining to the respective facilities they oversee. The appropriate composition of the governing entity will ultimately depend largely on the funding partners involved with

Summary of Annually-Recurring Economic Impacts from Delaware Convocation Center Operations

Annual Impacts			
Gross Direct Spending	$5,412,000	-	$7,245,000
Total Output	$6,965,000	-	$9,442,000
Jobs Supported	130	-	180
Annual Earnings	$2,477,000	-	$3,375,000

30-Year NPV [1]			
Gross Direct Spending	$104,800,000	-	$140,300,000
Total Output	$134,900,000	-	$182,800,000
Jobs Supported	n/a	-	n/a
Annual Earnings	$48,000,000	-	$65,400,000

(1) NPV calculations assume 2.0 percent annual inflation and a 5.0 percent discount rate.

Fig. 7 shows the economic impact resulting from the Delaware Convocation Center



facility development. The governing entity should have representation from each project stakeholder, which may include, but are not necessarily limited to DSU, the State of Delaware, Kent County, the City of Dover and potentially representatives of the local and regional corporate community, hospitality industry, the Delaware Sports Commission and other relevant entities. This will ensure that the needs and expectations of each stakeholder are considered when setting policies and making decisions.

While there may be several entities that participate in funding the construction of the venue, DSU should be responsible for the venue's daily operations and provide any necessary contributions to support its daily operations. To effectively operate the venue, DSU will need to directly hire a staff with significant previous convocation center operating experience or consider outsourcing the management of the venue to a private management company with the requisite expertise. Third party management would likely represent the most efficient and effective means of operating the facility. The event estimates and financial projections presented herein assume that the proposed Delaware Convocation Center is managed by a competent and experienced arena management company.



Conceptual Rendering of Trade Show Event

By retracting the first eight rows of seats, the event floor is enlarged and accommodates events such as concerts, trade shows and consumer shows. The estimated number of non-athletic community events per year range from 86-113, attracting between 135,000-178,000 visitors.

Conclusion

"Is it feasible for DSU and the City of Dover to have a convocation center?"

Having completed:

- More than 10 months of research, analysis, workshops, presentations and feedback
- Surveys of more than 300 people including University students, faculty, staff, alumni, donors, members of the Dover/Kent County-area business community, and residents of the surrounding area
- Extensive interviews with more than 150 groups such as DSU, surrounding school districts, business and professional associations, state agencies and many more

The study finds that a convocation center is:

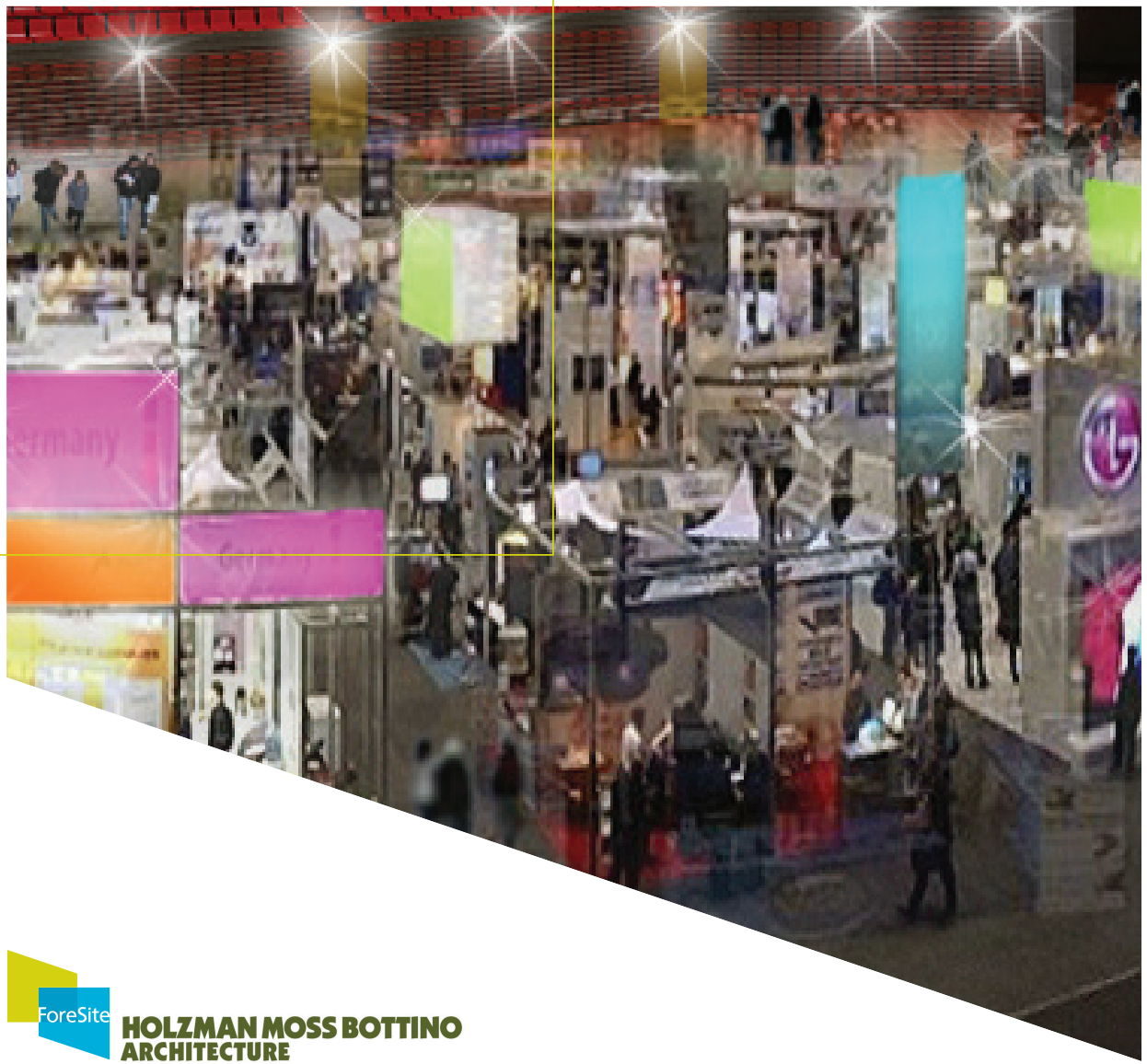
- Feasible and should be pursued
- DSU has a significant need for the educational facilities provided in the convocation center
- Growth in the number of students and educational programs demand facilities like the convocation center to allow DSU to be a world-class state educational facility
- Benefits the central and southern Delaware community from joint-use of the convocation center due to the size and design of the facility for public gatherings
- Has the potential to boost the economic development of central and southern Delaware and the City of Dover
- Funding for capital costs of the project will be augmented by income-generating community events such as concerts, trade shows, conventions, sporting events etc
- Operating costs to DSU and the State can be significantly reduced by bringing in revenues from public, community-use events

"Let's get moving on this great idea for Dover!" - comment by survey respondent

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