

**Borough of Ho-Ho-Kus
Bergen County, New Jersey
Planning Board Minutes
June 12, 2014
Work Session/Public Session**

Meeting Called to Order at: 7:30PM

Open Public Meetings Statement: Read into the record by the Board Secretary.

Roll Call: Messrs. Berardo, Corriston (absent), Pierson, Reade, Cirulli, Newman, Iannelli (absent), Councilman Rorty (absent), Chairman Hanlon, Mayor Randall (absent/arrived at 9:37PM)

Also in Attendance: Mr. Richard Allen, Board Attorney (stand in for Mr. Cucchiara); Mr. David Hals, Borough/ Board Engineer; Mr. Ed Snieckus, Borough Planner; Ms. JoAnn Carroll, Board Secretary.

Chairman Hanlon: informed the Board and the public that Mr. Cucchiara was injured and would not be able to attend the meeting this evening; Mr. Richard Allen would be assisting the Board this evening; reminded the Board to continue to review the minutes from May 8, 2014; they will be voted on at the next meeting.

New Business:

Mr. Vincent Torre, Beautiful Bodies Boot Camp, 217 First Street, Block 1016, Lot 5: new business application; fitness boot camp/ personal training business.

Chairman Hanlon: asked the applicant to come forward; briefly described the application; fairly large sized building; asked the applicant to explain his application and business.

Mr. Torre: stated he has an existing business; has been in business 4 years; plans on moving the business to Ho-Ho-Kus; business includes fitness for all ages; approximately 6 employees; landlord has explained the parking situation.

Mr. Cirulli: asked where the existing business was located.

Mr. Torre: stated Route 17 in Paramus.

Mr. Pierson: asked what the hours would be.

Mr. Torre: stated he currently runs classes as 5:30AM to 6:30AM; 6AM-7AM; then no classes until 9:30AM-10:30AM; in the evenings from 6PM-8PM; weekend hours are Saturday 8AM-9AM and Sunday 8:30AM and 9:30AM; not there in the afternoon unless for a special event or individualized training.

Chairman Hanlon: asked if there were special night occasions.

Mr. Torre: stated usually his clients come for an hour and work out in the class then they go home; there is no hanging around; has fundraisers which is usually done on a Sunday around noon or 1PM.

Mr. Reade: asked what the maximum capacity of a class was.

Mr. Torre: stated he only allows 25 people per class; average class size is between 16 and 22 people; the classes are approximately 50 minutes long which gives 10 minutes for people to leave and the next class to arrive.

Mr. Reade: asked if there would be lockers.

Mr. Torre: stated there are no lockers but there will be cubbies.

Mr. Berardo: asked if there will be weight training equipment on the premises.

Mr. Torre: stated there will be a few machines; 2-3 at the most; generally there are free weights, medicine balls, etc.; not a gym in the sense of a Gold's type gym.

Mr. Berardo: asked about the proposed signage for the business.

Mr. Torre: stated there is an existing sign at the premises; will use that; does not intend on erecting any elaborate signs; basic white plastic with lettering on it to fit in the space that is provided; aluminum box with lights behind it.

Chairman Hanlon: stated Mr. Torre should coordinate with Mr. Berardo on signage.

Mr. Newman: asked what would be the maximum number of people in the building at any one time, including employees.

Mr. Torre: stated the maximum would be 35; the only time it would be larger would be during a fundraiser.

Chairman Hanlon: stated, for the record, the applicant's landlord has provided a letter identifying the situation which is required; there were no further questions of the applicant; this evening's meeting was a work session so there will not be any voting; the application will be voted on at next week's meeting.

Discussion:

Miller Subdivision, 118 Blauvelt Avenue, Block 601, Lots 4 & 5: Grant of Conservation Restriction/Easement filing; deeds.

Chairman Hanlon: confirmed that Mr. Hals had received the documents from Dwyer, Dwyer and Welch; not voting but wants to make sure all is been done on the property but wants confirmation from Mr. Hals.

Mr. Hals: stated the house has been removed and all the conditions of the subdivision where taken care of.

Chairman Hanlon: asked for a note to be sent from Mr. Hals for next week's meeting.

Mr. Hals: agreed to provide the Board with a note.

Completeness Review:

Hollows at Ho-Ho-Kus, Chamberlain Developers, W. Saddle River Road/Van Dyke Drive, Block 802, Lots 1, 2, 3, 4 and 10: major soil movement application.

Mr. Whitaker: stated that he was in receipt of Mr. Hals' report.

Chairman Hanlon: stated, for the record, Mr. Hals has seen the soil movement application and has declared it complete; at this time the Board members may ask the attorney any particular questions but they must be limited because this is not a public hearing; a date has to be set for the hearing process.

Mr. Whitaker: stated he would like to have the public hearing held on the 26th.

Brief discussion occurred regarding scheduling.

Mr. Whitaker: asked for confirmation that the soil movement application would be trailing the pending subdivision application so if it is not reached that evening it will be carried on the record to another date; asked the Board if notices had been properly published for the 19th and the 26th.

Chairman Hanlon: confirmed the notices had been properly published; asked Mr. Whitaker to consider merging the two documents going forward.

No questions from the Board at this time.

Mr. Inglima: asked if the determination was made that this was a major soil moving application.

Mr. Hals: stated “Yes.”

Mr. Inglima: asked if the Board, in its work session, is considering scheduling a hearing for the major soil moving permit application.

Chairman Hanlon: stated yes, for the public to be noticed; this issue cannot be discussed any further.

Mr. Inglima: asked if the major soil movement would not be considered at the same time as the subdivision.

Chairman Hanlon: stated he has only asked the applicant to discuss this next week; Mr. Inglima can speak at the public session next week.

Chairman Hanlon: stated, at this time, the public hearing for the Hollows at Ho-Ho-Kus major subdivision will begin.

Ongoing Business:

Hollows at Ho-Ho-Kus, Chamberlain Developers, W. Saddle River Road/Van Dyke Drive, Block 802, Lots 1, 2, 3, 4 and 10: major subdivision application; the applicant proposes to construct and market single family dwelling units on each of the properties; completeness review.

Mr. Whitaker: stated this is a continuation of the public hearing of the major subdivision of the Hollows at Ho-Ho-Kus application.

Chairman Hanlon: stated Mr. Cucchiara has sustained an injury and will not be in attendance this evening; Mr. Allen will be taking his place this evening; Mr. Whitaker and Mr. Inglima have been made aware of this situation and both have been in communication with Mr. Cucchiara; the May 29th meeting was postponed due to the holiday schedule and the notice only being published in one paper; the June 5th meeting was cancelled due to concern over the year of the meeting; technical issue; decided the meeting would be cancelled due to this issue; asked the Board to open up their plans at this time; discussed evacuation

procedures in case of an emergency; named the Borough's employees and volunteers who were on hand this evening to help in that event; stated the Planning Board has a very strict set of guidelines which they work with through the courts and the State; the Planning Board members are made up of residents with the exception of Mr. David Hals who is the Borough Engineer, Mr. Ed Snieckus who is the Borough Planner; neither of which vote on the Board; the Borough Administrator, Mr. Don Cirulli, is on the Board and does vote; the rest of the members are fully employed; not retired and donate their time; the Board normally meets on the second and third Thursday of the month; the Board tries to protect the Borough the residents and Board; reviewed the meeting process for the audience; all cell phones should be shut off; no video recording devices or recording devices are allowed; there is one stenographer taking notes and the Board Secretary makes an audio tape of the meeting as well as types minutes for the meeting; the Bergen County Bar Association states the Board can ask the audience to shut off all devices; this is a public meeting; meeting will end at 11PM tonight; will not go beyond this time regardless of where the testimony is at the time; all discussions take place in front of the microphone to keep a legal record of the proceedings; if someone is not able to approach the dais, arrangements will be made to have the microphone brought to their seat; 200' list residents are given first priority to speak; residents need to be truthful in their testimony; they will be sworn in; perjury if false information is given to the Board; there are special guidelines and rules that are followed by the Board; explained voting procedure and resolution.

Mr. Frank Berardo has signed the absent certification document stating he has listened to the audio of the May 22nd meeting.

Mr. Peter Newman has signed the absent certification document stating he has listened to the audio of the May 22nd meeting.

Mr. Allen: stated that both documents have been signed and given to the Board Secretary.

Chairman Hanlon: stated there was an error made during the segment on the soil movement application; instructed the Board Secretary to send the documents and the drawings to the DPW, Water Department, Shade Tree Commission, Mr. Inglima, Planner and a copy to the public file; at the last meeting, Mr. Whitaker was asked to have his engineer return; the public comment was regarding Mr. Inglima's cross examination of Mr. Palus; there was very limited time left for the public to ask questions; Ms. Kim Mitchell and Mr. James Albes both raised their hands to ask questions; Mr. Hanlon apologized to Ms. Mitchell for her not having enough time to ask her questions.

Mr. Whitaker: stated this is the continuation of the public hearing; correctly stated that this continuation begins tonight for purposes of other members of the public to ask questions; an issue was raised during Mr. Palus' testimony; it was brought to the Board's attention that the drainage plans that were marked as A3 in the presentation were shown to be prepared by HydroCAD sampler; Mr. Palus testified although that was the sampler, he could put it on the system and the results would be the same; it was represented to the Board that a report would be submitted that did not have the word "sampler" attached to it and that was identical to the report which used the HydroCAD sampler; marked A5; copy given to Mr. Inglema and the Board Secretary.

Chairman Hanlon: stated he would like to open the public portion for questions only based on Mr. Inglema's 3.5 hour testimony of Mr. Palus; asked Ms. Mitchell to come forward first; the time frame for questioning is approximately five minutes.

Ms. Kim Mitchell, 934 Washington Avenue: spoke regarding the tree protection detail; orange fencing underneath the drip line.

Mr. Palus: stated this is a standard tree protection detail required by the Bergen County Soil Conservation District and to protect the tree.

Ms. Mitchell: asked why the fencing is to the drip line.

Mr. Palus: stated that is a question for the Soil Conservation District; that is their detail.

Ms. Mitchell: asked if Mr. Palus had any background in regards to trees.

Mr. Palus: stated no; he did not locate the trees on the survey.

Ms. Mitchell: asked if consideration was taken in doing the grading plan to preserve any existing trees.

Mr. Palus: stated the drawings are done on a computer screen; all of the information is on one screen; different pieces of information are picked out and printed onto different pages; what is shown is separation materials broken up into 11 different sheets on a plan; on the computer screen all the information is visible at one time; if printed that way it would be illegible.

Ms. Mitchell: asked if any consideration was given to preserving the trees.

Mr. Palus: stated “Yes.”

Mr. Steve Reilly, 26 Sleepy Hollow Drive: spoke regarding the current off ramp from Route 17; if happen, would there be consideration for placing the driveway into the development.

Mr. Palus: stated if the County were to make modifications at the intersection it is something that would need to be looked at on a global level, not just specifically to the access point; coming off a County road the access would still be better on one of the side streets; it would be better for vehicle traffic, speed; even if the County were to modify that intersection that is still a high traffic intersection; to propose another street in close proximity to it would not have a positive result; they would still be better off where they are.

Mr. Reilly: asked about run off and if there were any other drainage solutions considered for the SE corner of the property.

Mr. Palus: stated there are two distinct drainage areas; Hollywood Avenue running down Van Dyke the water continues down Van Dyke and ends up generally in the area of the Cleverdon intersection; on the other side of WSRR, there are inlets at the intersection of Hollywood Avenue and WSRR; considered a recharge or infiltration basin; above ground stormwater detention system; underground storage pipes which is the option that they went with; went with this option because there was a concern of an above ground storage pond would be a larger volume of water directly next some of the adjacent residents; same concerns with ground water recharge.

Mr. Reilly: asked what the phases of the construction process were.

Mr. Palus: stated there is a sequence of construction provided on the plans which is a requirement; it is an extensive operation; soil erosion; construction access pads; tree protection; remove trees; rough grading; installing utilities/curbing; drainage; pave the road then begin construction of the homes; that is a very simplified breakdown.

Mr. Reilly: asked when the major soil movement would occur.

Mr. Palus: stated that would be up to the contractor and his speed of work; can't say.

Chairman Hanlon: opened up the public portion to people beyond the 200' list.

Mr. Stanley Kober, 910 Washington Avenue: spoke regarding depth of the detention system and it being covered by 1-2 ft. of soil; how far from the edge of the road is the piping that Mr. Palus discussed.

Mr. Palus: stated that portion of the road will be widened so there will be two answers; the existing edge of road to the closest section of pipe is approximately 9 ft.; once the road is widened it would be at approximately 5 ft.

Mr. Kober: asked how much does the pipe width change.

Mr. Palus: stated it does angle away from the road roughly to the existing road you are about 22 ft. away from the pavement.

Mr. Kober: asked if 1-2 ft. deep enough so that someone doesn't place a road sign or a fence post.

Mr. Palus: stated there will be a drainage easement on the private property portion.

Mr. Kober: asked if Mr. Palus' wanted to capture as much water from the site into the detention basin.

Mr. Palus: stated that is the general goal of the stormwater management plan; the drainage calculations were done based on the RSIS and JRSIS standards; there are certain reductions that must be met; as much water as possible needs to be collected.

Mr. Kober: asked if the well being 350 ft. away impinge upon the calculations.

Mr. Palus: stated the runoff calculations are separate from an aquifer recharge; each of the homes will have 2-1,000 gallon seepage pits that will collect all of the roof runoff for each of the homes and from four of the driveways and that water will be recharged back into the ground.

Mr. Kober: asked about capturing the run off water on site and recharging the water table.

Mr. Palus: stated as he testified earlier one of the concerns was the proximity of the low point on the site in relationship to some of the adjacent homes; there is a large area of roadway surface that will be created the standards require they provide a water quality measure; understands the concerns and point, but at the end of the day, the RSIS dictate what is required.

Mr. Kober: asked about trench drains and seepage pits installed in the driveways.

Mr. Palus: stated they will be on four of the lots on Van Dyke.

Mr. James Albes, 31 Valley Forge Way: asked if the application and calculations for run off where all done in conformity with the law and regulations.

Mr. Palus: stated he specifically mentioned the RSIS.

Mr. Albes: asked questions regarding if models are mentioned in the RSIS; treatment to be given to the land area regarding percolation seepage; soil type; Conservation District recognize variability within a particular area of land; within the lot itself; particular percolation and run off characteristics should be looked at; accumulation and seepage of water into the aquifer, does it seem correct to take the water and run it off downstream and not put it in recharge; reasonable for buyers of the proposed properties to have access to the aquifer and the well when as a result of construction their particular land will be contributing less to the recharge of the aquifer; spoke regarding lot coverage; how much of the land area will be impervious in the developed state;

Mr. Palus: stated the RSIS gives multiple options; factored in depending on ground coverings; soil types are mentioned under some methodology; SCSTR55 method; there is different soil classifications for different regions throughout the State; under some of the methodology those soil classifications are factored into the drainage calculations; discussed the sub-soils in terms of the sandy conditions which are identified in the Bergen County Soil Conservation District; any County soil survey has a fairly detailed breakdown of different regions of soils; varies from place to place; there is some variability within the lot; Modified Rational Method is used which is permitted for land masses/areas which are less than 320 acres of which they are well under; there is not a general average; it is part of the approved methodology; not a formula that he came up with; they are State standard methodology; the stormwater system is tailored to this property; not a general design; the drainage is two fold; collected, retained, released; working on both ends; the design is reasonable; disagrees with the last comment; there is an existing amount of existing impervious coverage on the property now; they are proposing additional impervious, they are also proposing additional recharge; providing recharge to offset the additional impervious; the additional stormwater collection and detention is a requirement that they reduce the rate of runoff below what is being discharged on the property today; not accurate to say that the individual homeowners aren't doing their part to recharge; the new homes will be better suited to recharging the aquifer

than a strong majority of the surrounding neighborhood; there is currently 15,548 sq. ft. of impervious coverage on the property which is approximately 9.75% of the land area; 90% of the land does not have an impervious surface on it; there is a large area of grass; the maximum improved lot coverage is 35%; each one of the individual homes will have a plot plan associated with it for a building permit; when those plot plans are prepared, the stormwater runoff for each one will be assessed individually and if additional seepage pits are required they will be provided.

Mr. Whitaker: stated 35% is per the zoning code which is compliant.

Mr. Albes: spoke regarding detention wells which will capture the rainwater from the street; large objects which are buried; water that falls on top of them doesn't have direct access to seepage.

Mr. Palus: stated the correct term is underground pipes; stated the pipes are buried; there is soil above them and there will be stone placed in between the pipes when they are built; those pipes will have no impact on stormwater recharge.

Mr. Stanley Kober, 919 Washington Avenue: asked about Mr. Palus' recommendation of the 2-1,000 seepage pits on each property in the Shade Tree Commission report.

Mr. Whitaker: objected; the concept of the Shade Tree Commission report pertaining to drainage would be irrelevant and a comment beyond the scope of what their authority and review encompasses.

Mr. Allen: stated if the witness has the knowledge of the reference that questioner is making and it is within his competence and expertise, then it is not an unfair question to ask him; the Board can give whatever weight it wishes to give to the answer and to the question; the objection is noted for the record.

Mr. Palus: stated he respectively disagrees with the engineering premise and methodology used in the Shade Tree Commission report; the drainage calculations provided specifically regarding the seepage pits where based on standard engineering practices.

Mr. Kober: asked if the Shade Tree Commission report was not based on standard engineering practices.

Mr. Palus: stated he respectively disagrees with the methodology and the premises used in that report.

Mr. Kober: spoke regarding the possibility of seepage pits placed in the driveway of the homes with a grate to allow roof run off to be collected.

Mr. Palus: stated it is possible to collect stormwater from the driveway; however what they are trying to do is collect as much of it and pipe it through the detention system in order to meet the RSIS requirements for reduction in run off; they do have the extra seepage pit on the upper lots; there is the potential that that run off could be collected as well and connect it to the on site seepage pits for each additional lot; it could be explored at the time of development of each individual lot; it wouldn't change the system proposed, but it would be an option.

Mr. Kober: spoke regarding using the HDPE pipe for the detention system; asked if it is less expensive than concrete; showed a picture of an example of a "land saver" and could this device be used; wet pond in the SE corner of proposed lot 5.

Mr. Palus: stated yes, that is what the underground pipes are proposed to be constructed of; it is more expensive than concrete; "land saver" is a specific brand; that is a standard underground storage chamber; there are numerous different manufacturers that make them; a land saver is generally not bigger than a seepage pit; you would need more than one; there are different recharge options; they function under the same premise; the product serves the same function as a seepage pit; they would still have to do a volume calculation; a land saver is smaller in volume than seepage pits; a wet pond is a standard stormwater detention options for just about any site.

Mr. Kober: asked how seriously a wet pond was considered.

Mr. Whitaker: objected to the form of question.

Mr. Allen: asked for a better definition of "how seriously."

Mr. Kober: asked how much time was taken in the consideration of a wet pond; asked about fencing around the pond; 5-6 ft. depression on the SE corner of sheet 5; referenced zoning ordinance 85.22; detention piping along road; 11 more homes with lawn irrigation.

Mr. Palus: stated it went through a conceptual consideration; it never went as far as doing a full blown design; stated there are two different types of ponds, wet or dry; never mentioned an open pond before; a dry pond collects water during a brief period of time during a heavy rain, detain it then release it; it would ultimately be designed to be dry during non rain events; there is still a potential for some safety concerns; water stagnation will be alleviated; by regrading the water will no longer be in

that area; there will be a positive pitch either into an inlet in the rear of lot 5 or an inlet that will be constructed at WSRR; the grades will be changed; the hole referred to will be filled in and the trench will be there; the water usage has already been addressed by the DPW; DPW concludes this development will have minimum impact in the Town's capacity at this time.

Mr. Whitaker: stated that if Ho-Ho-Kus wants to install a rule that says no irrigation systems on anyone's property in town, then that would not have an adverse affect on the water system.

Mr. Whitaker: stated, so the record is clear, the applicant is not in anyway suggesting that any members of the public asking questions should or can be restricted; Mr. Inglima had the opportunity to ask questions for hours; if there is a member of the public not represented by Mr. Inglima that wishes to ask questions without the benefit of an attorney, they should have that right.

Mr. Kober: asked about a possible non-conforming lot, lot 3; discussed lot width; and asked what that is based on; repeated his question.

Mr. Palus: stated it is his position that each of the proposed lots are conforming.

Mr. Whitaker: stated the question was asked and answered.

Mr. Kober: asked about other dimensions on the zoning table.

Mr. Palus: stated he was not present for that testimony so he wouldn't be able to say what questions were asked of Mr. Smith.

Mr. Palus reviewed the plans with Mr. Kober and explained the lot widths to him.

Mr. Kober: asked why the width is taken at the front of the lot and not the entire lot.

Mr. Palus: stated most municipalities will pick a certain point on a lot to make that measurement and the intent is to provide a lot that permits a viable home construction on it; described this statement.

Mr. Jim Albes, 131 Valley Forge Way: asked questions regarding drainage; 6 inch and 8 inch pipes and their origins; purpose of lots; AT&T easement from 1923 with conduits running through the lane; prospective owners; rights of easement

Mr. Palus: stated he was not familiar with 6 inch and 8 inch pipes; he did discuss 2- 12 inch pipes that came from an inlet across the street on WSRR; did not testify to a 6 inch or an 8 inch pipe that ran through the lot; aware of the easement; the pipes are in place in WSRR and the easement surrounds the pipes that are in the road; it does not traverse this property; those pipes are in the municipal right of way based on the information he has seen.

Mr. Whitaker: stated a buyer would have a right to a title search at that time.

Mr. Allen: stated the question was beyond the scope of an engineer; it is going to the job of a lawyer at the time of a real estate closing; outside the scope of the expertise of this witness to determine what a buyer might do at the time a buyer might buy a piece of property.

Ms. Kim Mitchell, 934 Washington Avenue: asked regarding the possibility of houses facing Hollywood and the driveways accessed from the cul-de-sac; applicant opposed to this idea.

Mr. Palus: stated there is nothing in the Ho-Ho-Kus ordinance that would dictate where a front door has to be on a piece of property; the decision is not up to him.

Mr. Inglima: stated Mr. Palus did give additional testimony and did produce additional evidence; asked for an opportunity to ask additional questions.

Mr. Whitaker: stated no additional testimony was given; it was answers to questions; objecting to a second round of questioning.

Chairman Hanlon: stated Mr. Whitaker has brought his engineer back; it was clearly stated this was for the public based on Mr. Inglima's interview and testimony with this particular engineer for 3.5 hours.

Mr. Inglima: asked if it was the position of the Board that the new report that was marked in evidence tonight should be disregarded.

Mr. Allen: regarding the issue of the document; his understanding of exhibit A5 is that there is one change between A5 and A3; the change may have been in more than one location but the only change was the word "sampler" has been deleted; asked if that is correct.

Mr. Whitaker: stated that was correct.

Mr. Inglima: stated the witness should be asked that question.

Mr. Allen: stated that if the witness is asked this question and the answer is yes, then does that require an additional round of cross examination.

Mr. Inglima: stated it requires several questions; questions raised to the type of program; the version of the program/sampler program; A5 has been submitted in response to his cross examination; he would like to ask the witness questions in regards to A5.

Mr. Allen: stated that based on Mr. Inglima's point, which is well taken, the document is new; if he has questions that relate to the new exhibit A5, that would be appropriate to the extent that he would repeating questions that substantively have been addressed already, the Board would ask that he refrain from that in order to give everyone else as much of a chance of participating.

Mr. Inglima: asked if Mr. Palus' testimony is that A5 is identical in all respects to A3 with the exception of the deletion of the words that are related to the use of a sampler program.

Mr. Palus: gave a brief recap of the original drainage calculations and how they were done; issue raised during cross examination, Mr. Palus stated he would get these reports done without the sampler notification; though it is the exact same program; contacted HydroCAD stating he needed another copy of his license; used the same data files and reproduced the same reports that were printed on June 4, 2014; when the reports are printed, boxes need to be checked regarding the different information that is to be shown; the underlying critical information is identical to the original report; may be a page or two that has different formatting or printed with additional information compared to the original report; 99% of the information is identical; 100% of the pertinent information is identical.

Mr. Inglima: asked if A5 had been submitted to Mr. Hals for his review.

Mr. Palus: stated he had multiple copies of A5 with him this evening.

Mr. Inglima: asked if the report was delivered to Mr. Hals this evening.

Mr. Palus: stated that was correct.

Mr. Inglima: asked if Mr. Hals' review of the applicant's subdivision was not based on a review of A5, but on a review of A3.

Mr. Whitaker: stated that would be stipulated.

Mr. Inglima: confirmed that Mr. Palus said 99% of the material is the same; asked if Mr. Palus was referring to the input data or the output data.

Mr. Palus: stated both.

Mr. Inglima: asked in what respect did Mr. Palus make changes to the input data.

Mr. Palus: stated none.

Mr. Inglima: asked if the program used was HydroCAD 8.50 with a serial number of 005731.

Mr. Palus: stated he also has serial number 005731; the report puts this number on there.

Mr. Inglima: asked if this was used for the entire report.

Mr. Palus: stated yes.

Mr. Inglima: asked in what respects, if any, are the results of the report that has been marked as A5 different from the report that was previously marked as A3.

Mr. Palus: stated none that he is aware of.

Mr. Inglima: asked if any specific pages are different.

Mr. Palus: stated no.

Mr. Inglima: asked if there are pages that are different.

Mr. Palus: stated there is a potential when you choose to print out each report if you click an extra button it may print out something regarding hydrograph timing, etc.; supplemental information; the intent was to mimic the initial report; did not go page by page to produce the same information.

Mr. Inglima: asked if A5 included any areas outside of the boundaries of the site.

Mr. Palus: stated it is consistent with the original report; it does not include areas outside of the boundaries of the site.

Mr. Inglima: asked if the topography used for A5 was based upon the most recent version of the applicant's subdivision plan.

Mr. Palus: stated it was based on the original calculations that were provided; the whole intent was to provide the calculations that omitted the sampler concern that was raised; it was not an intent to redo the calculations.

Mr. Inglima: asked if it is based on the most recent version of the applicant's subdivision and grading plans for the site.

Mr. Palus: stated it is based upon the same assumptions that were made at the time of the original drainage calculations.

Mr. Inglima: stated Mr. Palus had produced a plan prior to the version that is before the Board this evening which was withdrawn; asked if there was a plan with a different detention structure.

Mr. Palus: stated there was a plan where the detention structure was entirely located on the applicant's property and based on discussions with the Borough professionals that system was rotated towards WSRR.

Mr. Inglima: asked if A3 or A5 based on the original design before the detention system was rotated or was it based on the design afterwards.

Mr. Palus: stated it was based on the original design before the orientation of the basin was rotated.

Mr. Inglima: asked if changes had been made to the design of the site that are not set forth in data that is reflected in a report that is now printed as of June 4, 2014.

Mr. Palus: stated the report is dated November 7, 2013 and it was reprinted June 4, 2014 solely for the purpose to eliminate the sampler comments.

Mr. Inglima: asked why the current design was not used for his report.

Mr. Palus: stated the data was already inputted; he reused the original data; the intent was not to redo the drainage calculations; the intent was to provide them in the format without the sampler notation.

Mr. Inglima: asked if the intent should be to make them match the plan.

Mr. Palus: stated the orientation of the system has no impact on the calculations; rotating the proposed underground pipes 5 degrees so as to

allow maintenance access for the Borough DPW trucks doesn't change the numbers.

Mr. Inglima: asked if the topography was changed around the pipe system.

Mr. Palus: stated very minimally.

Mr. Inglima: asked if he could question the witness regarding the soil movement application which was submitted to the Borough.

Mr. Whitaker: objected; stated it was not part of the presentation this evening.

Mr. Inglima: referred to the plan; stated many sheets contain information that is the subject of a soil movement application.

Mr. Whitaker: objected: not a soil movement application public hearing this evening.

Mr. Inglima: asked if soil moving plans had been filed with the Board.

Mr. Palus: stated he provided them to the applicant's attorney.

Mr. Whitaker: objected to line of questioning; the applicant has not noticed for a major soil movement application; this is merely the subdivision application this evening.

Chairman Hanlon: stated the public has not been notified regarding the soil movement application.

Mr. Inglima: disagreed; referred to the Borough's ordinances regarding major subdivision applications and a new street to be created; spoke regarding the inclusion of soil movement activities that are required with respect to the creation of a new public street when it is part of a subdivision application.

Chairman Hanlon: stated the major soil movement application discussion is set for June 26, 2014.

Mr. Inglima: stated he wanted to ask the witness a simple question about the soil movement application.

Chairman Hanlon: stated the Board is in receipt of the soil movement application; it was mailed to the Board as part of normal procedure.

Mr. Inglima: asked Mr. Palus if the soil moving application plans match the contours and proposed topographic details that are shown on the subdivision plan.

Mr. Whitaker: objected on the record because it deals with the soil movement aspect which has not been noticed for.

Mr. Allen: asked Mr. Inglima why that is a question of relevance for the purposes of cross examination on the differences between A3 and A5 that he began his process with; there will be a full hearing on the soil movement application; it would appear that any deficiencies that he sees can be pointed out during that full hearing; from the standpoint of an orderly presentation, this is a cross examination; this is not his case; not sure where those issues become relevant to this witnesses testimony on this application, not the soil movement application; the applicant has not put on his case for the soil movement application.

Mr. Inglima: asked what process would be followed; would the soil movement application be conducted as a separate hearing that does not related to the subdivision application or will it be conducted as a part of these proceedings at a later date.

Mr. Allen: stated, as he understood, the Chairman of the Board has given the applicant until the next meeting to determine whether or not they will proceed along the lines of a consolidated application or they would request it to be dealt with in a different way; the applicant at the time accepted that; at this time the Board is obligated to give the applicant the time to do that; the question is fair; it won't be known under the current set of rules until next Thursday or if Mr. Whitaker makes a decision before that time.

Mr. Whitaker: stated he believes Mr. Inglima was not present in the courtroom at the time of the work session.

Mr. Allen: stated a question was asked of the applicant and it was determined by the Chairman, and the Board did not object, that the applicant should report to the Board by the next meeting since they cannot hold the hearing this evening anyway, as to the applicant's preference to continue it as part of the hearing on this or make it as a separate application; stated he doesn't know who the witnesses are going to be, doesn't know whether he will proceed in one direction or another because the question was just asked this evening; Mr. Inglima is entitled to attack it, entitled to challenge it, entitled to try and disrupt it, but in a sense of order.

Mr. Inglima: stated his clients do not have a commercial stake in the outcome of this process other than possibly if it is approved it may be a diminution in value.

Mr. Whitaker: objected; asked where these comments are going to now.

Mr. Inglima: stated his clients are present as abutting land owners; payment to Mr. Inglima and their professionals; consider having the applications tied together.

Mr. Allen: stated his point is well taken, but the decision needs to be made at next week's meeting while the hearings are still alive.

Mr. Whitaker: stated Mr. Inglima has just given an example of a waste of time; at the beginning of the meeting the Board said it would be discussed and reviewed next week and so that is when it will be done; already decided; move on to the merits of the matter.

Mr. Allen: asked Mr. Inglima if his cross examination was complete.

Mr. Inglima: started to ask Mr. Palus about the AT&T easement.

Mr. Whitaker: objected; Mr. Inglima was allowed to ask questions pertaining to A5.

Mr. Inglima: stated the AT&T easement was only on WSRR and did not affect the property.

Mr. Palus: stated that was the information he saw.

Mr. Inglima: started to ask about adjustments.

Mr. Whitaker: objected; the question he raised earlier is on the record again; Mr. Inglima was given the latitude to ask questions about A5; Mr. Inglima is trying to ask additional questions about items that were discussed; Mr. Palus has already been cross examined by Mr. Inglima for 3 hours.

Chairman Hanlon: stated Mr. Whitaker was correct; Mr. Inglima had 3.5 hours to thoroughly cross examine Mr. Palus.

Mr. Inglima: started to ask if Mr. Palus located the easement on the plan.

Mr. Whitaker: objected.

Mr. Allen: stated the Chairman has indicated that he would not permit this line of questioning to continue.

Mr. Inglima: stated a female resident asked a question regarding the easement on the plan; answer given by Mr. Palus; asked if he indicated the easement on the plan.

Mr. Whitaker: objected again.

Mr. Allen: asked if Mr. Inglima is asking Mr. Palus if he drew the easement on the plan.

Mr. Inglima: stated yes; by location he means place it by some depiction.

Mr. Allen: stated other than the conceptual objection that has been made that the line of questioning has gone beyond the scope of A3 and A5, is there an objection to the specifics of the question.

Mr. Whitaker: stated he doesn't know that the engineer prepared the plan.

Mr. Allen: asked the engineer directly if he prepared or located the easement.

Mr. Palus: stated as an engineer they do not locate improvements; they are shown by a surveyor; the location of an easement would be done by a surveyor.

Mr. Inglima: asked if the response to the resident was based upon an assumption.

Mr. Palus: stated it was based on information he was shown by the surveyor.

Mr. Inglima: stated, for the record, he made for the Board and for counsel, copies of exhibits O10, O14 and O15; he also delivered to the Board Secretary a number of additional copies of the plan drawing for the Board.

**Please note: a 10 minute recess was taken at this time: 9:20PM
Meeting called to order at 9:35PM**

Roll Call Taken:

Present: Berardo, Pierson, Reade, Cirulli, Newman, Chairman Hanlon

Absent: Corriston, Iannelli, Councilman Rorty, Mayor Randall

Chairman Hanlon: asked for the audience to please refrain from making comments; it interferes with the ability to make a clear recording of the proceedings; interferes with the hearing device for certain Board members.

Mr. Inglima: formally entered his appearance on the record; stated his clients by name and address as follows:

Clifford and Silvia Bone, 49 Brandywine Road, Block 802, Lot 7
Mark and Neyda Dabbagh, 55 Brandywine Road, Block 802, Lot 8
Anthony and Laurie DiGiacomo, 65 Brandywine Road, Block 802, Lot 9
John and Mary Hayes, 35 Brandywine Road, Block 802, Lot 6
Matthew and Allison Westfall, 789 W. Saddle River Road, Block 809, Lot 4
Russell and Emmy Lou Borgman, 752 W. Saddle River Road, Block 805, Lot 21
Edward and Randi DeBruyn, 801 W. Saddle River Road, Block 809, Lot 3
Paul and Robyn Erickson, 815 W. Saddle River Road, Block 809, Lot 2
Kenneth and Leah Malley, 764 W. Saddle River Road, Block 805, Lot 22

Stated these homeowners either live along the border of the site or very close to it; they have all been represented by Mr. Inglima throughout these proceedings; there are no new clients.

Please Note: Mayor Randall has arrived at the meeting at this time: 9:37PM.

Mr. Inglima: clarified that Mr. Emerson is not his only witness; he is being offered because of scheduling issues created over the past several weeks; will produce testimony from individual homeowners who are represented by him, as well as, a professional planner; intends to ask questions of Borough professionals; specifically Mr. Hals and Mr. Snieckus.

Chairman Hanlon: stated Mr. Hals and Mr. Snieckus will be reporting to the Board on all the information that has been provided already.

Mr. Clay Emerson, Princeton Hydro, 1200 Liberty Place, Sicklerville, NJ, sworn in by Mr. Allen.

Exhibit O18: Mr. Clay Emerson, Princeton Hydro, qualifications/ education information marked June 12, 2014.

Mr. Inglima: provided a copy of O18 to Mr. Whitaker and to the Board.

Mr. Emerson: stated his educational and professional background; has worked for Princeton Hydro for six years.

Mr. Inglima: offered Mr. Emerson as an expert witness in the area of professional engineering particularly with respect to the design and analysis of stormwater and drainage structures; stormwater management and similar issues.

Mr. Whitaker: asked if Mr. Emerson held a license as a licensed engineer in the State of NJ.

Mr. Emerson: stated no.

Mr. Whitaker: asked, in his capacity as a consultant for various townships in NJ, would it be correct to say that Mr. Emerson is not serving in the capacity as a licensed engineer in the State of NJ in any of those towns.

Mr. Emerson: stated that was correct.

No questions from the Board.

Chairman Hanlon: asked if Mr. Emerson appeared before the HHK ZBA approximately two years ago.

Mr. Emerson: stated no, but a colleague of his was.

Mr. Allen: stated, at this time, the Board should determine if Mr. Emerson can be qualified as an expert witness.

Mr. Whitaker: stated the stipulation he wants to put to this is that although he has particular degrees, the Board has to take into account that he is not licensed as an engineer in the State of NJ.

Mr. Allen: stated from the standpoint of a qualification of an expert, an expert is someone who can help the Board, as fact finders, to deal with issues the Board must find out about; experts have knowledge, experience outside the course of the typical Board member; the Board retains the power to accept or reject for reasonable reasons, whatever the testimony of the witness may be; Mr. Whitakers' objection is a fact and it should be taken into account as the Board makes its deliberations and determines how much weight to give the testimony.

Mayor Randall: stated subject to the fact how the questions might bear on the relevance of having a NJ license; based on the qualifications Mr. Emerson should be accepted as an expert witness.

Board members unanimously agreed.

Mr. Inglima: stated Mr. Emerson is not being asked to sign any plans that are to be used for construction or submission to the Board; would normally require a NJ license; he is licensed in the State of PA; his application for licensing in the State of NJ is pending; not sought previously for internal reasons at Princeton Hydro.

Mr. Whitaker: stated overall he has the background that he has testified to that particular field, but he is not licensed, he hasn't passed the test for licensing purposes in NJ; for purposes of rules, regulations, intricacies of stormwater management that may be involved with some of the licensing process; he may have been a "consultant" but he has not served in the capacity of a licensed professional in any township in NJ.

Mr. Allen: reiterated Mayor Randall's comment; the Board should affirmatively determine or not that Mr. Emerson is an expert witness.

Chairman Hanlon: stated the Board members have already indicated that they will go forward.

Mr. Inglima: asked Mr. Emerson as to the status of his NJ engineering license.

Mr. Emerson: stated he needs to pass a single 8 hour exam to become an engineer in training; work for 4 years under a professional engineer before a second test can be taken for a professional engineering license; no additional technical exam that deals with any of the content of his testimony tonight that would prevent him from getting his license in NJ.

Mr. Whitaker: asked if an ethics exam needed to be taken.

Mr. Emerson: stated yes and he has not taken it yet.

Mr. Allen: asked if either proponent or adversary had additional questions for Mr. Emerson regarding his expertise or qualifications.

Mr. Whitaker/Mr. Inglima: both stated no.

Mr. Inglima: asked Mr. Emerson to briefly describe the issues that he analyzed when he reviewed the applicant's plans.

Mr. Emerson: stated he reviewed both the plans and the supporting calculations that justify the design plans themselves.

Mr. Inglima: asked if Mr. Emerson reviewed the subdivision plan marked as A1.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson reviewed A3 and a supplemental report submitted.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had reviewed A5.

Mr. Emerson: stated no; he has yet to review or see this document.

Mr. Inglima: asked if Mr. Emerson was provided by Mr. Inglima two discs of information that were supplied to him by Mr. Whitaker with respect to the engineering design and the drainage calculations that were the subject of the reports marked as A3 and the supplemental report.

Mr. Emerson: stated yes; additional information, including two discs mentioned.

Mr. Inglima: asked if Mr. Emerson reviewed exhibits that were marked as a control survey prepared by Mr. Smith and the boundary and topographic survey prepared by Boswell Engineering.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had reviewed the municipal stormwater management ordinance of Ho-Ho-Kus.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had copies of the three reports that were issued by Mr. Hals.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had familiarized himself with the area of the site; the streets and the lots that are located near the applicant's site.

Mr. Emerson: stated yes; he had not gone on the actual site, he inspected the perimeter of the site from the road.

Mr. Inglima: asked if Mr. Emerson had reviewed the site and the conditions affecting several of the properties abutting the site to the south.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had reviewed the application forms and the observations by Mr. Inglima's clients with respect to drainage conditions in the area of the site.

Mr. Emerson: stated yes.

Mr. Inglima: asked Mr. Emerson to describe the character of the proposed project.

Mr. Emerson: stated the proposed project consists of 11 residential dwellings; a single new proposed road; it contains a number of stormwater management features.

Mr. Inglima: asked for a characterization in terms of applicable regulations; particular term applied.

Mr. Emerson: stated this would be considered a major development.

Mr. Inglima: asked if the conclusion in respect to a major development also influenced by the fact a new street is being constructed and that there is a certain area of disturbance associated with the new street.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had reviewed the details of the detention system proposed.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson was familiar with the location and design of the detention system and the 48 inch pipes that are being proposed in the SE corner of the site.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had reviewed the location of the pipes in relation to the right of way line of WSRR.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had reviewed the conditions being proposed by the applicant with respect to the installation of those pipes as they relate to existing conditions of the site from a topographic standpoint.

Mr. Emerson: stated yes; he noted a significant difference between existing and proposed conditions in that portion of the site specifically.

Mr. Inglima: spoke regarding jurisdiction in regards to drainage approval/permits; asked Mr. Emerson to advise the Board with who has jurisdiction over the design of the proposed detention structures and the approval of the storm management system the applicant is proposing.

Mr. Whitaker: objected; calls for a legal conclusion.

Mr. Allen: stated to the extent it does, as a legal answer, it would be sustained; to the extent Mr. Emerson is being asked as a professional engineer as to what he understands the regulatory agencies that are involved in the process are, then it would be allowed; he can be asked his understanding but not a legal conclusion.

Mr. Inglima: asked if Mr. Emerson was familiar with the permitting process that is ordinarily required with respect to the design and installation of a stormwater management system.

Mr. Emerson: stated yes he was; the proposed stormwater management system must meet the requirements of the municipal ordinance and as a major development, it must also meet the requirements contained in NJC7:8 the RSIS references 7:8 throughout.

Mr. Inglima: asked if the RSIS refers applicants back to the section Mr. Emerson cited.

Mr. Emerson: stated yes.

Mr. Inglima: asked if the section Mr. Emerson cited, is the applicable set of standards for the design of these structures.

Mr. Emerson: stated yes.

Mr. Inglima: asked if the municipality is deprived of its own jurisdiction/review of the proposed design.

Mr. Emerson: stated no they are not.

Mr. Inglima: asked if this is a matter of concurrent jurisdiction.

Mr. Emerson: stated that was a fair statement.

Mr. Inglima: asked what the objectives would be and requirements of a drainage design for a residential subdivision that constitutes a major project.

Mr. Emerson: stated the objectives and requirements of the drainage design are multiple; there is compliance with peak flow rate control; water quality regulations and ground water recharge; primary three.

Mr. Inglima: asked if it is an objective of the design of these types of systems to recharge groundwater rather than to move the water from one point to another via pipes.

Mr. Emerson: stated yes; the engineer needs to document that the groundwater recharge is maintained from existing conditions to post conditions.

Mr. Inglima: stated there are a number of objectives listed in the municipal stormwater management ordinance.

Mr. Emerson: stated yes.

Mr. Inglima: asked if those objectives are consistent with the standards that Mr. Emerson referred to in his prior testimony.

Mr. Emerson: stated yes.

Mr. Inglima: stated there are references in the Ho-Ho-Kus stormwater management ordinance to the objectives of using non-structural techniques; asked if this is also an objective of the administrative regulations to which Mr. Emerson referred.

Mr. Emerson: stated it was.

Mr. Inglima: asked what types of non-structural techniques would be contemplated by those types of regulations.

Mr. Emerson: stated the types usually selected aim to encourage infiltration; goal to direct run off onto pervious areas; other types of structural approaches discussed.

Mr. Inglima: asked if the use of non-structural techniques helps advance the objective mentioned earlier with respect to recharging ground water.

Mr. Emerson: stated absolutely; primary goal.

Mr. Inglima: asked if it has a con-commitment benefit.

Mr. Emerson: stated many of the maintenance costs are very design specific; in many applications the type of approaches can achieve various cost savings.

Mr. Inglima: asked if non-structural techniques that he described also result in benefits of water quality.

Mr. Emerson: stated yes; the primary reason is they encourage the disconnection of impervious surface and the treatment of run off by both the vegetation and soil.

Mr. Inglima: stated there was previous testimony that there was a water quality structure that was being proposed as part of the applicant's stormwater management design; asked if that would be superior to the type of non-structural water quality facility that Mr. Emerson discussed.

Mr. Emerson: stated no because that type of system relies entirely on frequent maintenance activities.

Mr. Inglima: asked if the effluence finds its way into an open basin; the effluence that comes off of the paved surfaces run through the pipes and goes into the basin can be "grabbed" by the vegetative surfaces in the natural basin.

Mr. Emerson: stated that was correct; the vegetation itself and the soil.

Mr. Inglima: asked if it actually promotes the biodegradation of those particular substances.

Mr. Emerson: stated yes, absolutely.

Mr. Inglima: spoke in respect to a water quality structure, such as the one proposed, would it function as designed if it was operating at or near its peak flow.

Mr. Emerson: stated the performance of MTD (manufactured treatment devices) are contingent upon the inflow rate; each manufacturer has a different rating; they will provide a certain removal of total suspended solids in the run off itself; they do have a flow limitation at which point they typically bypass additional incoming flow without treatment.

Mr. Inglima: asked if the materials taken off the paved surfaces during a strong storm and which enter the closed system would pass right through the water quality structure.

Mr. Emerson: stated yes if the treatment flow is exceeded.

Mr. Inglima: asked if it would be fair to say that in an area where there is sensitivity to impact on existing water sheds or natural areas, that a non-structural type of facility would be preferred.

Mr. Emerson: stated yes.

Mr. Inglima: asked if that would advance environmental objectives as well.

Mr. Emerson: stated that was correct.

Mr. Inglima: stated in analyzing the applicant's stormwater system design, did Mr. Emerson also consider whether or not the facility would provide adequate storage for the run off that would be created by the development.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had considered in his analysis whether or not the design of the system and its function under various storm events would create adverse impacts on neighboring properties.

Mr. Emerson: stated yes he did.

Mr. Inglima: asked if Mr. Emerson had taken into account the design of the system where it has its outlet to an existing drainage system that is in the bed of both WSRR and Brandywine.

Mr. Emerson: stated yes; he observed both of the existing inlets.

Mr. Inglima: asked, based on Mr. Emerson's review of all the conditions in the applicant's drainage design, did Mr. Emerson come to any conclusions if there would be an adverse impact on the area.

Mr. Emerson: stated yes, the most notable impact is that the basis of the design of the structures is based on the analysis of the existing conditions of the site; from that analysis the engineer arrives at target flow rates for existing conditions; they apply a reduction factor per the Ho-Ho-Kus ordinance consistent with the NJC 7:8; then they size the system to meet the maximum allowable discharge rates; if there is an error in the analysis of the existing conditions the goal of their design is inherently flawed; that is what he observed with this application.

Mr. Inglima: asked if Mr. Emerson found that the applicant's calculations did not properly reflect the existing conditions of the site.

Mr. Emerson: stated yes indeed.

Mr. Inglima: asked if Mr. Emerson found that the applicant's submission did not properly quantify the amount of runoff that exists on adjacent roadways that enters the applicant's site and that is retained there.

Mr. Emerson: stated that was true.

Mr. Inglima: asked if Mr. Emerson found if the data presented by the applicant with respect to existing conditions did not properly reflect the conditions of the SE corner of the property where there is water retained.

Mr. Emerson: stated that was correct; that area appears to be a closed depression based on both the existing topography contained in exhibit A1 and also based on his personal observation of the area.

Mr. Inglima: asked if it was Mr. Emerson's opinion that the applicant's calculations of the pre-development conditions of the site did not properly account for that closed depression.

Mr. Whitaker: objected; the request is for an opinion without a basis or foundation.

Mr. Inglima: stated the witness would elaborate on all of the issues; question withdrew with the extent that it asks for a formal opinion; is it Mr. Emerson's finding that the applicant's calculations and data did not properly account for the existing closed depression in the SE corner of the property.

Mr. Emerson: stated yes; this is an important distinction and the language to that effect is included in both the ordinance and from the NJ administrative code which was referenced previously.

Mr. Inglima: asked if this is part of a before and after analysis.

Mr. Emerson: stated yes; usually referred to as existing and proposed.

Mr. Inglima: asked if Mr. Emerson has to account for the water that is accumulating on the site and not leaving the property and also the water that is entering the site from other areas.

Mr. Emerson: stated that is true.

Mr. Inglima: asked if Mr. Emerson had found that the Board had enough information upon which to conclude as to whether or not water is entering the property from other locations.

Mr. Emerson: stated he did not find any documentation that delineated off-site contributory drainage area to the site.

Mr. Inglima: stated the application filed requests a waiver from item 19 on the subdivision application checklist; asked if Mr. Emerson had found any data in the applicant's submissions that provided the information Mr. Inglima described.

Mr. Emerson: stated no; in his review he also noted the ordinance requires that a topographic survey of all water sheds tributary to and including the site be provided; these were not found.

Mr. Inglima: stated that even though the applicant noted that this information was provided, Mr. Emerson did not find it.

Mr. Emerson: stated that was correct.

Mr. Inglima: asked if the applicant's review of existing topographic contours and conditions limited to the cartway of the streets that abut the applicant's site.

Mr. Emerson: stated generally it was, as well as the applicant's site itself.

Mr. Inglima: asked if there was any topographic detail provided with respect to the conditions on his client's properties to the south along Brandywine.

Mr. Emerson: stated no; that includes from exhibit A4, six lots to the south.

Mr. Inglima: asked if any of the clients' properties were considered for purposes of determining whether water that runs off of their land is entering the applicant's site under current conditions.

Mr. Emerson: stated this was correct.

Mr. Inglima: asked if Mr. Emerson felt if it was important for the Board's consideration of this application and for the Municipal Engineer's review of the drainage design and plans for soil moving activities, for that information to be provided.

Mr. Emerson: stated absolutely because changes in topography are what dictate what run off reports to what location.

Mr. Inglima: asked if Mr. Emerson inspected WSRR along the applicant's site frontage.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson had come to any conclusions with respect to the existing conditions of run off on the portion of the roadway that directly abuts the applicant's site.

Mr. Emerson: stated yes, the southbound direction of WSRR has a crown approximately center between the two edges of pavements; flows south but slightly in a westerly direction and enters the existing driveway where it then enters the SE portion of the property thereby diverting the runoff from the existing stormwater inlet system that currently exists on the east side of WSRR.

Mr. Inglima: referred to Exhibit A2; sheet 2 of 11; when referring to the area of pavement on the westerly side of the center line, Mr. Emerson was referring to a point that Mr. Inglima was showing on the plan.

Mr. Emerson: stated yes.

Mr. Inglima: asked if there was a barrier or curb that prevents water from entering the site along that edge.

Mr. Emerson: stated at the northern portion near the intersection of Hollywood Avenue there is an asphalt curb that terminates prior to the existing driveway.

Mr. Inglima: asked if Mr. Emerson was referring to the first 100ft. or so of WSRR south from the Hollywood Avenue intersection.

Mr. Emerson: stated that was correct.

Mr. Inglima: asked if Mr. Emerson was referring to a rolled asphalt curb.

Mr. Emerson: stated yes; not a formed concrete curb.

Mr. Inglima: asked if the rolled curb is a relatively recent structure.

Mr. Emerson: stated it appears to have been installed at the same time the south bound lane was repaved.

Mr. Inglima: asked if there was a curb at the driveway.

Mr. Emerson: stated there was no curb at the driveway.

Mr. Inglima: referred to where the triangle was indicated and driveway for the existing home on the site meets WSRR; asked if that was the area that Mr. Emerson was discussing.

Mr. Emerson: stated yes.

Mr. Inglima: asked if there were other areas farther to the south along WSRR where the conditions of the pavement along the roadway as well as the adjacent topography, would result in the water leaving the existing street.

Mr. Emerson: stated yes; it is apparent on the exhibit; there is a general down slope from WSRR down in a southwesterly direction to the southeastern corner of the property.

Mr. Inglima: asked if this condition consistent with his observations during an inspection of the site.

Mr. Emerson: stated yes.

Mr. Inglima: asked if it would be fair to say that Mr. Emerson concluded from those findings that during various rain events water leaves the paved surface of WSRR and enters the dirt area that is located along the frontage of the applicant's site.

Mr. Emerson: stated yes.

Mr. Inglima: asked if there were any existing structures that collect stormwater in the area where Mr. Emerson is describing.

Mr. Emerson: stated there is no infrastructure that is shown on the exhibit between Hollywood Avenue and the existing driveway.

Mr. Inglima: asked if there is a continuation downhill from the intersection towards the site through the site driveway.

Mr. Emerson: stated that was correct.

Mr. Inglima: asked if a low point is reached near the SE corner of the applicant's site.

Mr. Emerson: stated yes; WSRR is crowned but in the direction of traffic there is a subtle low point.

Mr. Inglima: asked if there were any stormwater collection facilities in the low point of the roadway.

Mr. Emerson: stated that on the east side of the road there is an existing inlet with an 18 inch pipe; he observed the inlet himself but did not pull the grate or get in the structure.

Mr. Inglima: asked if he could determine from his inspection if any water was entering the catch basin through any other below grade improvements.

Mr. Emerson: stated on one of the discs provided, and photographs of the interior of the inlet, there are 2 12 inch pipes coming from a westerly direction that appear not to be functional in any capacity; full of sediment; and a single functional pipe leaving the structure.

Mr. Inglima: asked if the pipe leaving the structure was the subject of photography and videography performed on behalf of the applicant.

Mr. Emerson: stated it was; that information is contained on the disc which he reviewed.

Mr. Inglima: in regards to the westerly side of the site, asked if Mr. Emerson made any observations with respect to the conditions of the property in that location.

Mr. Emerson: stated yes he observed the western portion of the site as well; there is a portion of the site that drains off in a westerly direction along the edge of pavement of Van Dyke; there is a subtle high point that serves as an existing drainage divide between run off that flows generally in a southwesterly direction and run off that flows in an easterly direction.

Mr. Inglima: asked if drainage divide is at the intersection of Wayne Court.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson observed water that returns to Van Dyke from Wayne Court.

Mr. Emerson: stated a portion of run off from the property flows along the edge of pavement in a southwesterly direction and then east of that

there is also, within the property itself, a somewhat poorly defined drainage channel that conveys runoff in a southerly direction to the adjacent lot that is off the property in question.

Mr. Inglima: asked if Mr. Emerson was describing run off that he observed based on his own inspection of topography in the area that is marked on the second sheet as being Lot 1, 2, 3 and 4.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson was referring to the White property.

Mr. Emerson: stated that was what he was referring to.

Mr. Inglima: asked if there were improvements constructed between the house and the street that has a tendency to direct the flow of water by the northwesterly boundary of the White property.

Mr. Emerson: stated yes; there appears to be along the northwesterly edge of pavement a Belgian block curb and associated landscaping that could function in that manner.

Mr. Inglima: asked if water that could leave the site is being hemmed in by the Belgian block curb and landscaping improvements.

Mr. Emerson: stated yes.

Mr. Inglima: asked if Mr. Emerson could determine from a review of the conditions out by the point where the street cartway meets the White property driveway, anything about the quantity of the water that was passing into the street at that point.

Mr. Emerson: stated there was some erosional features that indicated that during periods of intense rainfall there was a notable amount of flow enough to move soil and erode soil in a concentrated manner.

Mr. Inglima: asked if the amount could be quantified.

Mr. Emerson: stated no.

Mr. Inglima: asked if it would be possible to differentiate that flow along the roadway from other rainwater that is hitting the surface of Van Dyke and is passing along the easterly side of the road.

Mr. Emerson: stated yes, it could be quantified through hydrologic calculations and modeling.

Mr. Inglima: asked if a determination has been made about the water falling on Van Dyke east of the center line of the road as to where that water ultimately leads if it continues to flow along the surface.

Mr. Emerson: stated it flows along the eastern side of Van Dyke and then eventually there are two inlets on either side of Brandywine where that run off flows to.

Mr. Inglima: referred to Exhibit A4; placed on easel; when the water running down Van Dyke reaches Brandywine, asked what direction the water takes at that point.

Mr. Emerson: stated it takes a south then easterly direction.

Mr. Inglima: asked if the water passes onto Brandywine in an easterly direction on the east side of the crown of Van Dyke.

Mr. Emerson: stated that was correct.

Mr. Inglima: asked if Mr. Emerson noted any conditions of topography along Brandywine Road.

Mr. Emerson: stated similar to WSRR, there is a local low point in the vertical curve on Brandywine on either side of which are similar type B inlets.

Mr. Inglima: asked if it were a fair statement that somewhere near the dividing line between the DiGiacomo and the Dabbagh properties, there are catch basins that serve the street.

Mr. Emerson: stated yes; they are located at a low point in the street.

Mr. Inglima: asked if Mr. Emerson determined if water flows into that area from not only Van Dyke but from WSRR.

Mr. Emerson: stated yes the western portion of WSRR flows toward the same low point that was discussed previously on WSRR but a portion coming from SE of where the Valley Forge Way intersection is enters Brandywine and ultimately reports to the same inlets that were just discussed.

Mr. Inglima: referred to previous testimony, and supplementary data which was submitted by the applicant's engineer, there was an insertion that there was no water on WSRR finding its way to the existing inlet on the east side of the street, from areas lying south of that inlet.

Mr. Emerson: stated that was his understanding but based on his observations, as well as the topography, that could not be the case.

Mr. Inglima: asked if that was based on an observation Mr. Emerson made.

Mr. Emerson: stated yes.

Mr. Inglima: asked if that was based on an inspection of WSRR in the area of the site.

Mr. Emerson: stated yes.

Mr. Inglima: asked Mr. Emerson to do describe to the Board what he believes is the case with respect to the generation of any water that finds that catch basin from areas to the south on WSRR.

Mr. Emerson: stated simply the inlet is at a low point; flow from either direction converges towards that inlet; not all inlets are located at low points; this one is at a low point therefore it has drainage both from the north and the south directions.

Mr. Inglima: asked if Mr. Emerson disagrees with the applicant's engineer to the extent that he contends there is little or no water entering that catch basin from areas to the south.

Mr. Emerson: stated he disagreed.

Mr. Inglima: asked if there were any other factors regarding the conditions of the property that he feels should be taken into account by the Board in establishing the existing conditions of drainage at the site.

Mr. Emerson: stated yes; the main point to revisit is the importance of the topographical feature on the SE portion of the site; fairly unusual characteristic to have on a site; fairly important for the context of this application; the reason is that area essentially functions as a de facto stormwater management facility for this property; as such it should be considered in the applicant's existing conditions calculations; (read from the Borough ordinance); both the ordinance and the State stormwater requirements recognize the importance of such features; reiterated this is quite a unique feature to be contained on an existing property; there is no pipe conveyance from that area into the existing stormwater system; his inspection of the property occurred on a day when there had been some rainfall in weeks prior; did not observe any standing water there;

indicates to him that the water is likely infiltrating into the natural soil there providing groundwater recharge.

Mr. Inglima: referred to the closed depression; asked how it related in terms of its elevation, topographic contours, to the adjacent roadway, the cartway of WSRR.

Mr. Emerson: referred to Exhibit A2; sheet 5 of 11; the existing contours in the area he is describing are as low as 102 and possibly 101 in one section and the lowest point in WSRR has an elevation which is just below 108; 6-7 ft. at a maximum.

Mr. Inglima: asked if the depression is 6-7 ft. below the surface of the roadway.

Mr. Emerson: stated that was correct.

Mr. Inglima: asked if the application contemplates significant changes in that area.

Mr. Emerson: stated it does.

Mr. Inglima: asked if Mr. Emerson found that the conditions being proposed in regards to the addition of structures and regrading, would result in a benefit or whether they would not assist the municipality in meeting the objectives of the stormwater management ordinance and the other regulations described.

Mr. Emerson: stated he sees no benefit of the proposed system vs. what exists under current conditions.

Mr. Inglima: asked if an engineer consider all of the areas that contribute runoff to the proposed structure and to other outlets into which that structure will empty.

Mr. Emerson: stated they should.

Mr. Inglima: asked, if in his opinion, would it be required for the engineering review of this particular application for the Board or its engineer to consider the impact of additional impervious surfaces along WSRR near the site.

Mr. Emerson: stated yes, believes it is critical in this application.

Mr. Inglima: asked if Mr. Emerson could determine whether or not the additional right of way width that is indicated on the plan was included

in the calculations of increased run off that would be associated with the project.

Mr. Emerson: stated no it wasn't nor was the sizing of the detention basin portions of impervious improvements proposed on the site itself.

Mr. Inglima: asked what the portions of the improvements on the site were.

Mr. Emerson: stated specifically the contributory drainage area to the proposed seepage pits were excluded from the analysis.

Mr. Inglima: asked why that would need to be included.

Mr. Emerson: stated it depends on how they were sized; in his opinion they were not sized correctly.

Mr. Inglima: referred to the previous discussion regarding the applicant taking into account the additional pavement width that is being added to the west side of WSRR; asked if that run off would go into an off-site catch basin to be created on the west side of WSRR.

Mr. Emerson: stated yes, there is an additional inlet opposite that was referred to before at the low point in WSRR and an additional drainage area and impervious cover contained within it will go into the existing system without any peak flow control, volume control, groundwater recharge, water quality treatment, etc.

Mr. Inglima: referred to the proposed inlet on the plans; along the edge of the pavement directly between the proposed water quality structure and the edge of pavement of WSRR.

Mr. Emerson: stated yes, that is the proposed inlet to which he was referring.

Mr. Inglima: stated the additional pavement is indicated with cross hatching along the westerly edge of the existing pavement of WSRR.

Mr. Emerson: stated yes it was.

Mr. Inglima: asked if all of which would go into the catch basin.

Mr. Emerson: stated it would.

Mr. Inglima: asked why it wouldn't go into the applicant's system through the catch basins being created near the terminus of the cul-de-sac.

Mr. Emerson: stated that he had reviewed the profiles for the proposed stormwater system and the grate elevations of the two inlets are above the proposed elevations along the edge of pavement for flow traveling in a southerly direction, therefore the water will flow downhill and not work its way up into those two inlets.

Mr. Inglima: asked if it was Mr. Emerson's position that the water will not go into the new catch basin serving the cul-de-sac, but will continue south into the new catch basin near the water quality structure.

Mr. Emerson: stated that is correct; appears to be the intent of the design.

Mr. Inglima: asked why that should be considered by the Board.

Mr. Emerson: stated because that is additional flow to an existing system that may or may not have the capacity to contain it; speaking regarding the entire drain system downstream.

Mr. Inglima: asked if Mr. Emerson had reviewed the plan that the applicant has submitted in order to determine exactly where the pipe system and various structures serving it will be in relation to existing grade; asked what Mr. Emerson had found based on his review of the existing closed depression and the N chamber that connects the pipes.

Mr. Emerson: stated yes he had reviewed the plan; according to the plan and the supporting calculations he found the N sections will have a top elevation of approximately 110 feet in comparison to some of the existing grades in that area in the order of 101/102.

Mr. Inglima: asked if Mr. Emerson was stating that the N chamber is 8 ft. above the existing closed depression.

Mr. Emerson: stated yes, approximately.

Mr. Inglima: asked if the 110 elevation is going to continue across the whole top of the structure.

Mr. Emerson: stated yes it is supposed to be set level.

Mr. Inglima: asked if it goes across the right of way line.

Mr. Emerson: stated it does.

Mr. Inglima: stated the structure is in the right of way of WSRR, at an elevation of 100 ft.; asked how high it will be in relation to the cartway of WSRR.

Mr. Emerson: stated more than 2 ft. above the highest point at the crown of the road at the low point.

Mr. Inglima: asked if it will all stick up above the roadway.

Mr. Emerson: stated yes, in addition to the fill placed on top of it.

Mr. Inglima: asked how much fill would have to be on top of it.

Mr. Emerson: stated the proposal was 1-2 ft. of fill.

Mr. Inglima: asked if at different points the elevation would be at 112 ft.

Mr. Emerson: stated yes.

Mr. Inglima: stated the roadway would be between 107-108 ft.

Mr. Emerson: stated about 4-5 ft. above.

Mr. Inglima: asked if the street would be true with respect to the control structure at the south end of the south chamber.

Mr. Emerson: stated yes.

Mr. Inglima: asked if it would also be true for the water quality structure.

Mr. Emerson: stated yes; the top of the water quality treatment system is slightly lower than 110, but it is attached to the same structure.

Mr. Inglima: stated he views contours of 109 and 108 on the applicant's plan passing through those structures.

Mr. Emerson: stated that is true and it implies that portions of those structures won't have any coverage; they will be sticking out of the ground.

Mr. Inglima: asked if this is true for just this southerly end.

Mr. Emerson: stated he believes it extends up a portion of the most easterly proposed storage pipe on that system.

Mr. Inglima: asked if it would be fair to say that in order to bury the structures, more soil would need to be added.

Mr. Emerson: stated yes.

Mr. Inglima: asked if there were any structures along WSRR in a southerly direction.

Mr. Emerson: stated he say none; might have been a mailbox and some trees.

Mr. Inglima: asked that if all the structures are constructed, all of the elements that are shown on sheet 5 on A2, and he is driving along the new section of WSRR, how close he will pass to the concrete structures.

Mr. Emerson: stated he believed there was testimony on the order of 5 ft. under proposed conditions but he believes it is 3 ft.

Mr. Inglima: asked if there would be concrete boxes sticking up out of the ground 3ft. from the pavement of WSRR.

Mr. Emerson: stated yes, according to the proposed plan.

Mr. Inglima: asked if there is a guardrail shown on the plan.

Mr. Emerson: stated not that he is aware of.

Mr. Inglima: stated other changes are being proposed along the SE corner of the applicant's site that alter the existing topography.

Mr. Emerson: stated yes.

Mr. Inglima: stated there are retaining walls, earthen walls, increase in the amount of fill; some associated with the pipes.

Mr. Emerson: stated yes; there are a series of two retaining walls proposed; there is some grading associated with an inlet that is proposed immediately adjacent to the retaining wall and there is also a stone trench of sorts.

Mr. Inglima: asked if the retaining walls are some distance away from the structures that they were just reviewing.

Mr. Emerson: stated that was true.

Mr. Inglima: stated down by the south property line of the site.

Mr. Emerson: stated they are very near the south property border.

Mr. Inglima: asked if it would be fair to say that there is an area of the site in the SE corner where the elevation is being raised up by 6-8 ft.

Mr. Emerson: stated yes, in excess of 6 ft.

Mr. Inglima: asked if Mr. Emerson had prepared an exhibit that shows, using a cross section, a comparison between existing conditions and proposed conditions.

Mr. Emerson: stated yes. **Exhibit Marked O19;** explained the exhibit; two sample cross sections through the portion of the site discussed and each cross section displays both the existing contours and the proposed contours and the proposed structures; the data was estimated directly from scaled off of the same exhibit which was just referred to which is sheet 5 of A2.

Mr. Inglima: asked if that was a scaled representation of the information that is found on the applicant's own plans.

Mr. Emerson: stated yes and the existing topography is shown with a dash line and the proposed topography structures are shown with a solid line.

Mr. Inglima: stated that Mr. Emerson had indicated that there are two different locations where those cross sections were drawn.

Mr. Emerson: stated yes.

Mr. Inglima: asked Mr. Emerson to describe the location of the top panel of the plan.

Mr. Whitaker: asked if this exhibit had been prepared by the witness.

Mr. Emerson: stated it was prepared by other members of his firm under direct supervision with data contained on sheet 5 of exhibit A2.

Mr. Whitaker: asked for confirmation that Mr. Emerson did not prepare the exhibit himself.

Mr. Emerson: stated that is correct.

Mr. Whitaker: stated, that with that understanding, it can be evaluated by the Board as was done earlier.

Copies of the exhibit were handed out to the Board at this time.

Mr. Inglima: stated obviously to the extent that Mr. Whitaker or his engineer note any differences between the exhibit and the plans.

Mr. Emerson: spoke regarding the top panel; it extends through both retaining walls through a section of the detention structure as well as the inlets and it extends through WSRR to the existing inlet on the east side.

Mr. Inglima: stated that is a straight line that is drawn on top of the proposed pipe that will connect the two inlets.

Mr. Emerson: stated that was correct.

Mr. Inglima: asked if that was approximately where he was showing on the plans.

Mr. Emerson: stated it was.

Mr. Inglima: asked if the line goes from the east side of the cartway all the way to the south boundary line.

Mr. Emerson: stated yes.

Mr. Inglima: asked if it cuts through the new embankment around the detention structure/pipes; it cuts through the two retaining walls; cuts through the stone trench.

Mr. Emerson: stated it does.

Mr. Inglima: asked for Mr. Emerson to describe the location of the cross section which is indicated in the bottom panel of the exhibit.

Mr. Emerson: stated this cross section is cut in a similar direction; slightly offset from the upper quadrant.

Mr. Inglima: asked if it is at the south edge of the detention structure.

Mr. Emerson: stated that was correct.

Mr. Inglima: asked if he was referring to the end of the pipes or the end of the N chamber.

Mr. Emerson: stated the end of the N chamber.

Mr. Inglima: asked if it would be in a location that he is referring to on the plan.

Mr. Emerson: stated that was correct.

Mr. Inglima: asked if it was prepared in the same basic way as the top panel in respect to the cross section that is drawn through the connected pipe between the two catch basins.

Mr. Emerson: stated yes; there is no difference.

Mr. Inglima: asked if this exhibit depict the conditions that Mr. Emerson was describing a few minutes ago with respect to structures that will extend above the location of the proposed grade on the site.

Mr. Emerson: stated yes it does; it depicts the same features that were referred to and it also compares them in a manner that is a little easier to follow.

Mr. Inglima: referred to the top panel, asked what the boxes were that are indicated at the various points on the cross section drawing.

Mr. Emerson: stated they're referenced to the actual proposed elevations that were pulled from the same exhibit.

Mr. Inglima: referred to the large box which is indicated on the east side of the slope that starts down from the top of the embankment to the street; asked what that was.

Mr. Emerson: stated that is the proposed water quality unit.

Mr. Inglima: stated there is a box that appears to have a little higher section on it along the west edge of the pavement; asked if that was a proposed catch basin.

Mr. Emerson: stated that was the proposed type B inlet on the western side of WSRR and the next box is the existing inlet on the east side of WSRR.

Mr. Inglima: asked if the drawing indicated the location of the pipe that connects the two.

Mr. Emerson: stated yes.

Mr. Inglima: asked if all the elevations are consistent with the plan and the markings that are indicated along the right edge of the upper panel.

Mr. Emerson: stated yes and that is what was used to create the exhibit.

Mr. Inglima: asked if the elevations were very close to being to the foot.

Mr. Emerson: stated that was correct; they are scaled from plans that have 1 ft. contours.

Mr. Inglima: asked if the existing topography is shown at the dash line.

Mr. Emerson: stated yes.

Mr. Inglima: asked if the upper dash line would reflect the existing condition.

Mr. Emerson: stated that was correct; along that cross section and on the lower diagram the dash line would reflect the existing topographic condition in the second cross section which was discussed.

Mr. Inglima: asked if the proposed detention chamber is labeled on the lower panel; asked if that is a view of the end of the southern most portion of the chamber.

Mr. Emerson: stated that was correct; with its top elevation roughly consistent with the elevation 110.

Mr. Inglima: asked if it showed the areas that extend beyond the topography, the corners of the boxes that are sticking out into the areas adjacent to the roadway.

Mr. Emerson: stated that was correct.

Mr. Inglima: stated it was now 11PM and thought it would be a time to break.

Chairman Hanlon: asked how much longer Mr. Inglima felt he needed this evening.

Mr. Inglima: stated 45 minutes on direct.

Chairman Hanlon: stated he wasn't sure if the Board wanted to extend the meeting to midnight.

Mr. Whitaker: stated that he typically finds that after 11PM things slow down.

Mr. Allen: asked if the 45 minutes for Mr. Emerson on direct, would then be followed by cross examination, etc., then other witnesses as well and the public; rather than open new areas it might be best for the Board to digest what has been put into the record already and recognize the comments that comments are less absorbed after 11PM; discretion of the Board.

A brief discussion regarding scheduling ensued.

Please Note: Mayor Randall signed his Absentee Certification.

Mr. Whitaker: asked, as a courtesy, to know of the witnesses before the next meeting; ongoing approach that if there is any other documentation that either Mr. Steck or tonight's witness has, including the exhibit marked this evening, they can be presented in advance to Mr. Whitaker.

Mr. Inglima: stated he assumed the applicant is extending the time, whatever time period that is applicable to this matter.

Mr. Allen: stated, as of now, the applicant has filed a written consent extending the time to June 27, 2014.

Motion to Adjourn: Reade, Cirulli

All Board Members present approve Motion to Adjourn.

Meeting adjourned at 11:05PM

Respectfully submitted by:

JoAnn Carroll
Planning Board Secretary
August 14, 2014