

October 12, 2011

MINUTES: THE INLAND WETLANDS COMMISSION, Town of Hamden, held a Public Hearing & Regular Meeting on Wednesday, October 5, 2011 at 7:00 p.m. in Thornton Wilder Hall, Miller Memorial Library Complex, 2901 Dixwell Avenue, Hamden, CT and the following items were reviewed:

Commissioners in attendance:

Nancy Rosenbaum, Chairperson
 Mike Montgomery
 Andrew Brand
 Eric Annes, arrived at 7:10 p.m.
 Joan Lakin
 Kirk Shadle
 Mike Stone arrived at 8:09 p.m.
 Bob Gnida, sitting for vacancy

Staff in attendance:

Dan Kops, Assistant Town Planner
 Tim Lee, Assistant Town Attorney
 Tom Vocelli, IW Enforcement Officer
 Stacy Shellard, Commission Clerk
 Lisa Raccio, Stenographer

Ms. Rosenbaum called the meeting to order at 7:06. Mr. Montgomery called the roll and there was a quorum. Ms. Rosenbaum introduced the Commission and staff.

Ms. Rosenbaum explained the Public Hearing process. A copy of the plans was placed on a table for the public to view. She said that the initial presentation would be done by the Applicant and then the Commission would be allowed to ask questions. The public would then have the opportunity to speak and she asked that they state their name and address. Ms. Rosenbaum said after the public speaks the applicant would have the opportunity for rebuttal and then the Commissioners would be able to ask questions.

Ms. Rosenbaum stated that the purpose of this Commission is the regulation and protection of inland wetlands and watercourses and the comments should be related to wetlands and watercourses.

I. Public Hearing

- a. 11-1171** 170 Birchwood Drive - driveway culvert-crossing
 Alberto DiChello, Applicant
Public Hearing continued from 7-6-2011 meeting

Mr. James R. Strub, Attorney, addressed the Commission and submitted for the record: Authorization for representation (exhibit #7), a letter that clarifies the need for additional time to prepare for the public hearing that was originally scheduled to be heard on September 7, 2011 until the October 5, 2011 meeting (exhibit 8), a sub-division map that created the lot and a copy of the assessor's map(exhibits 9a and 9b, 10a and 10b-total of 4 pages). Mr. Strub confirmed that he had received the comments from the RWA dated October 4, 2011 which includes three comments and he stipulated that they would comply with the three items. Mr.

Strub said that a letter from the Town Engineer dated October 3, 2011 was received from Mr. Vocelli via email on October 4, 2011. He submitted revised site plans and cross-sections and profile (exhibit #11) that were done by Frank Donofrio, Professional Engineer and David Lord, Soil Scientist that incorporates several of the Town Engineer's comments. The revisions were made to the maps that had been submitted several weeks ago and include an overlay. Mr. Strub said that anything not on the maps can be made a condition of approval. (Note: During the Public Hearing the exhibits were verbally enumerated as 6 thru 10 rather than as 7 thru 11)

Mr. Francis Donofrio, Professional Engineer and Surveyor, addressed the Commission and stated that he received less than 24 hours ago a list of changes that the Town Engineer had requested. He was unable to include them all, but would do so as a condition of approval. Mr. Donofrio stated that item 1 and 2 on the Town Engineer comments were not completed. He said that item 3 for the construction sequence is shown on plan. He reviewed with the Commission where the details of the flared ends are shown and how they are incorporated into the crossing and bridge. He was going to make a full scale map for item 4 showing how the flared end and rip rap would be incorporated with the stream crossing, 24 inch pipe, and additional changes are needed before it could be submitted. Item 5 for a silt fence is shown as to how it goes around the flared end. There is a construction access already built in from Birchwood Road and Mr. Donofrio stated that a 50 foot long by 12 feet wide construction access will be built at the start of the new crossing. Mr. Donofrio said that the width of the road and that the width of total fill area was cut down a total of 3 feet on all sides which amounts to a total of 918 square feet of non impacted area. Mr. Donofrio explained that the fill area was cut down from 6,600 square feet to 5,700 square feet. The proposed pipe sizes have been changed to 18 inches except for the existing pipe. Mr. Donofrio feels that the proposed changes will support the system that already exists. They are not trying to drain the entire system, but fit pipes to the existing conditions so that water will pass through them.

Mr. David Lord, Soil Scientist, addressed the Commission and stated that he had no additional information to present but will be available for questions from the Commission.

Mr. Strub stated that the RWA and Town Engineer's comments can be made conditions of approval.

Ms. Lakin asked if reducing the culvert pipes from 24 inches to 18 inches had flow data to support this decision that the 18 inch pipes will be adequate. Mr. Donofrio stated that he did not have any computations nor the computations that the Town made in 1956 to support the 18 inch pipe. He stated if he were to do a drainage analysis he would have to go back to 1956 when it was a farm and that with all the development that came after the farm the 18 inch pipe was never changed or improved. He feels that he can leave the pipes at 18 inches or make it 24 inches. Ms. Lakin asked if he was guessing what would work because Mr. Donofrio had no data. Mr. Donofrio stated that he was asked by the IWC to make the pipes 18 inches and he is trying to make a decision based on the existing conditions and allow the water to pass through.

Mr. Montgomery stated that he did not ask to reduce the pipes to 18 inches, but had asked why the pipes would be so big. Mr. Donofrio stated he did not do flow calculations because he has no data to support 18 inch pipes nor to support information with regard to the flow pipe on Still Hill Road that is 18 inches and that the Town should have it in its records. Mr. Montgomery referred to the 18 inch pipe on Still Hill Road and the plan calls for five 18 inch pipes. Mr. Donofrio said there will be four 18 inch pipes installed and one existing 12 inch pipe. Mr. Montgomery asked if the 12 inch pipe would be replaced if it becomes necessary. Mr. Donofrio said that if the system were to be drained a line channel would need to be put in that would fit the total pipes passing through the location and it would carry to Willow Brook. This would be a big project for the Town because they would have to pick up all the houses on the back side on the way down with some sort of weep holes in the walls to catch any runoff. Mr. Montgomery asked why so many big pipes are needed. Mr. Donofrio said that the terrain has drainage channels cut through by nature and this is why it was decided five was needed. Mr. Montgomery asked why four 18 inch pipes and the one existing 12 inch pipe. Mr. Donofrio stated that the 12 inch pipe could be replaced or left in place. Mr. Montgomery asked if the 12 inch pipe needs to be extended. Mr. Donofrio said it could be extended, but it was decided it fits the crossing and he referred to the location on the map.

Ms. Rosenbaum clarified that Mr. Donofrio had said that Mr. Montgomery had asked that the pipes be reduced from 24 inches to 18 inches and Mr. Montgomery said he did not. Mr. Donofrio noted Mr. Montgomery had asked for the reduction to the size of the pipes at the first meeting. Mr. Montgomery replied that he was asking if the size of the pipes could be reduced and Mr. Donofrio reduced the size of the pipes and now there are more pipes. Mr. Donofrio said the size of the pipe that is up on Still Hill. Mr. Montgomery said that now the plan has four 18 inch pipes and one 12 inch pipe. Mr. Donofrio said four 18 inch pipes and one 12 inch pipe because half the property is water and it is not like going down a 30 foot wide drainage channel. Mr. Montgomery asked if the water draining from the property is not coming from the pipe on Still Hill Road. Mr. Donofrio replied that the water is coming from the Still Hill Road pipe because it is the low point in the area and all the sub-division built since 1956 are draining to the one spot. Mr. Montgomery asked if what Mr. Donofrio is stating that the flow from a single 18 inch pipe now requires four times the number of pipes to convey the water. Mr. Donofrio said that the water spreads out and the water must be carried or should he let it drop into one spot and let it coagulate into one area. Mr. Donofrio added that the water must go through. Mr. Montgomery asked why he chose the size pipes that he did. Mr. Donofrio said that he did not want to go smaller than the size of the pipe at the top of the hill.

Ms. Lakin stated that she does not understand why with one 18 inch pipe that is divided into 4 or 5 different channels that each of the channels has to be that big. She continued by saying that is why she asked if there were flow calculations to help determine if an 18 inch pipe was needed. She said that one 18 inch pipe is divided into 4 possibly 5 channels and she is guessing each of the channels will not need an 18 inch pipe. Ms. Lakin asked Mr. Donofrio if there are calculations to back up what is being proposed. Mr. Donofrio replied no and stated that he does not have the calculations that the Town did and if the Town did calculations they should be presented. Ms. Lakin stated that she is asking for the calculations for the 2011 situation. Mr. Donofrio said that the 18 inch pipe at the top of the hill may have to be bigger than it is. Ms. Lakin asked Mr. Donofrio on what he based that information. Mr. Donofrio replied that his information is based on all the developments that have occurred since 1956. This would include new houses, sidewalks and roads and water that comes down from one spot. This means that the water is not being absorbed by the ground and this is why some property owners are getting flooded.

Mr. Montgomery said that in the calculations Mr. Donofrio said that the width of fill would be 3 feet less than what is shown on the plans and the 3 feet is basically the difference between the former 15 foot driveway and the present 12 foot driveway and Mr. Donofrio agreed. Mr. Montgomery stated that in the plan it indicates 2 feet of fill is needed above the pipe and Mr. Donofrio replied that this is what usually is done for cover. Mr. Montgomery asked if the size of the dike should be lower. Mr. Donofrio replied that he does not want the proposed dike to be placed any lower because he is trying to make a straight grade from the existing driveway that leads in from Birchwood Drive to the existing ground beyond. Mr. Montgomery asked why Mr. Donofrio is maintaining grade level and straight grade. Mr. Donofrio stated that he is trying to maintain a straight grade but not steep which is like a dike that is very flat because he does not want it to drain back into the pond. Mr. Montgomery stated that it is high and level and thinks if the fill is reduced the roadway would be lower than the dike and Mr. Donofrio replied that this would cause all the water to then concentrate in the middle of the dike and dump back into the pond. Mr. Montgomery asked if the road would be pervious and Mr. Donofrio replied yes.

Mr. Gnida reviewed his resume and stated that he used to delineate watersheds by using perpendicular lines with a topographic graph. He said that the flow of the water would go towards the pipes including a 50 and 100 year storm event. The fill that is proposed to be added over the pipes will act like a dike and the pipes will concentrate flow over the poorly drained soil and create a greater velocity of discharge outside each of the pipes. He asked Mr. Donofrio if he agreed. Mr. Donofrio said he did not agree because he is keeping the pipes flat and there is not a steep grade proposed. Mr. Gnida said that during a major rain event there is a lot of sheet flow coming through the area and looking at the topographic map it appears to be level and in the wetland crossing area where the pipes are located it would concentrate the flow. Mr. Gnida is concerned that where Mr. Strampach's property is located there might be gallying to recreate a natural drainage system into something that is not natural and created by the four pipes that are being proposed and the one existing pipe. Mr. Donofrio said that he does not know that there would be flooding or an impact on anyone downstream. He further stated that if there is a 50 or 100 year storm he believes that the extra 18 inch pipes will handle it, not just one and it will not be going full flow through the 18 inch pipes more than a normal rain storm. Mr. Gnida asked if reducing the width of the driveway by 3 feet would it be a foot in a half on each side.

Mr. Donofrio said it was suggested to go from 15 to 12 feet and it would be 6 feet from the center line to each edge rather than 7 ½ feet.

Mr. Gnida said that it was asked at the last hearing to renumber or reflag the wetlands because there were two number 14 wetland flags and this was not done, and Mr. Lord's report was not edited.

Mr. Lord stated that flag 14 that is being questioned is to the north or above the flag 14 which is in sequence with the locations of the flags shown along the wetland boundary. The flag 14 closest to the intermittent watercourse channel that runs through the wetland needs to be removed. The flag numbers are still the same and were established in the field prior to the last site walk. It is a chronographic change to remove flag 14 which is just shown and does not have any reference to a specific point.

Mr. Lord noted that in addition to the quantitative reason for the pipes there is a qualitative reason for of the pipes. The 5 proposed culvert pipes are to spread out the flow across the width of the wetland as much as possible to try to mimic existing conditions. At the last public hearing it was said that the driveway base will be of a clean permeable stone composition which allows water to flow through and under the driveway surface. All of these measures are designed to enhance the flow through and the hydrology of the wetland above the roadway and below the roadway. It is not to concentrate the flow that comes across this site and the property to the east into a single location which was seen at the site walk the existing conditions concentrate flow where the western most pipes are proposed. It is indicative that there are sheet flow conditions and there is also a concentration of flow based on the existing roadway/driveway and the existing contours that tend to move water in a northwesterly and northeasterly direction to center low lying point which is approximately where the two closest pipes are together. These factors all went into the qualitative decision made on how the proposed culverts are to be reconfigured, in addition to the engineering decisions which are the quantitative reasons.

Mr. Brand asked for clarification if the driveway is currently pervious. Mr. Lord said that it has been gravel surface since before the last session. Mr. Lord said the proposed plan is to have larger stone that will not have fines in it that will allow water to move through sections of the roadway proper without having to flow through the culvert and the road surface will be processed stone gravel surface. The driveway width was changed on drawings the Commission have before them but not the latest revisions brought in this evening. The drawings submitted two weeks ago show the reduction in the width of the driveway.

Mr. Shadle asked Mr. Lord if he agreed with the Town Engineer, that when the sheet water flow comes down will the access way act as a dike and as a result if the sheet flow water will concentrate, and pool on the southern section of the access way, in particular where the culvert pipes are proposed. Mr. Lord said that the height of the driveway does not have any effect on the condition that Mr. Shadle described as pooling water. The reason the locations were chosen for the cross culverts is that there is natural existing channelization of surface water in these areas presently. Mr. Lord stated that the Commissioners who were present at the site walk saw the locations where there were non-sheet flow conditions in the area where the proposed driveway is to go. There is a channel in between the second from the western most proposed culvert and the western most proposed culvert, specifically there is channelization of flow and this is why the culvert pipes are proposed to keep the concentration of flow on the south side of the driveway and under and through the driveway. Mr. Lord does not feel that there will be significant water or damming effect because there are five pipes, one of which currently exists, and the construction of the driveway will allow the water to move under and through the driveway cross section. There should be no significant pooling of water above the driveway.

Mr. Shadle asked Mr. Lord if based on what is being described does he disagree with the Town Engineer that fill does not need to be as thick and does not need to have the grade and to reduce the amount of fill. Mr. Lord responded that the question should be addressed by an engineer. Mr. Lord said that Mr. Shadle is talking about a vertical curvature of the driveway and the Town Engineer wants it to be flatter and more level across the wetland system. The leveling effect will have the benefit of not allowing water to move parallel to the driveway surface, because the gravel driveways does not infiltrate 100 percent of the water. Level surfaces will minimize because water will not flow in the same direction of the driveway and will sheet flow off the sides of the driveway. Mr. Shadle asked if the objective is to minimize the impact of sheet flow over the area if it is Mr. Lord's opinion that the slope would naturalize the flow of water occurring on site. Mr. Lord asked Mr. Shadle if he was asking that to mimic the existing conditions with the

driveway there should be a dip in the road. Mr. Shadle said that he understands Mr. Lord to be saying the water would follow the surface of the driveway and would do so based on the contours and how it flows on the site without any access way being present. Mr. Lord said that surface flow patterns are not the same as the driveway configuration locations so it flows in the same direction of orientation and that the driveway does not 100 percent mimic the existing surface flows over the wetland surfaces. The engineer's intention is to make the driveway level so that he does not have the potential for increase of water to flow along the orientation of the driveway and to increase and enhance the ability of the water to flow off of the sides and sheet flow rather than the potential to infiltrate, because of ruts in the center of driveway that occur with a dip in the road. Mr. Lord said that this was the alternative that was made to make the driveway surface level rather than have a dip in it. Mr. Shadle asked that when water sheet flowing over area does not go into the culvert, will the water concentrate into a given diameter and will the velocity increase. Mr. Lord said that this is not his area of expertise. Mr. Shadle asked if the northern wetland and the northwestern portion of the wetland at flags 1,2,3,4 and 5 are primarily connected from a soil water point of view with the 18 inch discharge pipe, and if the water is supplied by the same area. Mr. Lord said the wetland defined by flags 1 through 5 is a side hill discharge of ground water to surface flow from generally a westerly to easterly direction which is north of the non influence area affected by the proposed driveway. The flow from the 18 inch pipe to the south of the site which enters through the easement at the south eastern portion of the site winds itself through the on site wetland area and the majority of the flow goes to one of the proposed culvert locations with channelized flow.

Mr. Shadle asked Mr. Donofrio if the contour of the driveway follows the land instead of creating an elevated area. He asked Mr. Donofrio to discuss the possibility of not creating fill in the driveway and following the topography of the land or will the driveway be elevated to create an area where it will pool. Mr. Donofrio said it will not pool and will pass through the driveway by voids created by three kinds of rip rap. There will be modified, intermediate and special so that the water will pass through the whole system. If it were to concentrate in one spot the pipe would need to be made bigger. The difference is only two feet from 1 end to the other. Mr. Donofrio said that there would be a 1 percent grade in pitch from one end to the other and there is no impact. He said that the road has a one percent pitch which is 288 feet and it is about .67 and he reviewed the site plan with the Commission. Mr. Donofrio said that the property owner only wanted to bring in a load of fill. Mr. Shadle asked Mr. Donofrio if he was speaking about the upper right profile of the driveway. Mr. Donofrio referred to the site plan and said that the full length of the driveway will be 288 feet long. Mr. Shadle asked with water flowing through the pipes if the sheet flow in certain surface areas would reduce or increase the velocity of the water with an 18 inch pipe. Mr. Donofrio said that the water would be concentrated and water that passes through the pipes will also pass through the dike. During a 100 year storm the storm water will not sit behind the roadway and will pass through it. Mr. Shadle asked if this would be water that enters the access way and underneath from the southern portion. Mr. Donofrio said the water will flow from the south to the north and pass through the structure. Mr. Shadle asked about the placement of the two inch rock. Mr. Donofrio said that the top portion is ballast and the bottom portion shown in the sequence explains the 3 different types of rip rap which goes from 36 inches, 18-36, 12-24 and goes to 2 inch ballast which is stone the same as used for railroads.

Mr. Shadle reviewed the construction sequence and asked if there is a narrative which explains stopping of siltation debris. Mr. Donofrio said there will be a layer of silt fence or fabric underneath each layer of riprap that will stop fines from going through. Mr. Shadle asked what happens if the fine sits on the fabric and builds up, also, what is the life span of the fabric. Mr. Donofrio stated that it is 20 years. Mr. Shadle asked what happens at 25 years and Mr. Donofrio was unable to answer. Mr. Shadle asked if there was a maintenance plan and Mr. Donofrio reviewed the maintenance plan to clean out the pipes.

Mr. Shadle asked if there is a tremendous amount of siltation that has been happening. Mr. Donofrio stated that he has not seen any. Mr. Shadle asked Mr. Lord if he has found evidence of ponding and Mr. Lord replied that the sedimentation that is occurring on the property is flowing down the drainage easement from the south and is depositing at the southeast corner which has changed the flow pattern on site and he reviewed the sedimentation buildup. Mr. Lord said that the wetland system is very densely vegetated and any siltation of coarse material is being deposited in the southeast corner. Mr. Shadle asked that when an area of 80 x 80 square feet is clear cut to expose raw soil for the farming will it produce fines and sedimentation into the area. Mr. Lord noted that a comment by the RWA that there will be siltation around the low edges of the farm field and a long term silt sock will be placed along the outer edge of the garden area to prevent any migration of sedimentation off site. Mr. Lord said it is his recommendation that the farming practices mirror the existing contours and the garden then run down gradient. Mr. Shadle asked if there was

any intent to put up a structure. Mr. Lord said that it is an agricultural operation and nothing is being proposed for a structure.

Mr. Shadle asked Mr. Donofrio about the justification for a 12 foot driveway because traditional farming equipment is not more than 8 foot wide. Mr. Donofrio said that the revised plan has shortened the width of the driveway and fill area. Mr. Shadle asked if it could be shortened to 10 feet and Mr. Donofrio said he would have to ask his client.

Mr. Shadle asked Mr. Strub what the legal justification was for a 12 foot driveway and Mr. Strub replied he did not know. Mr. Shadle asked if there are no prudent alternatives associated with this plan. Mr. Strub asked if the Commission would like 10 feet for a driveway. Mr. Shadle stated that he would like the record to reflect that he did not imply that he wanted a 10 foot driveway. Mr. Strub said that Mr. Shadle's comments implied a 10 foot driveway. Mr. Shadle said that he justified an 8 foot driveway. Mr. Strub said it was made in a previous statement. Mr. Strub stated that a 12 foot driveway is what is proposed and the Town Engineer is satisfied and if the Commission would like them to consider a shorter driveway he would need to discuss it with his client. He said that this is the most prudent alternative to access the site and the only point at which to access the site. If the Commission feels that there are other feasible and prudent alternatives then they will vote accordingly.

Mr. Montgomery is concerned that page 2 of the revised plans that were given to the Commission at this meeting does not have a revision date. The previous plan submitted to the Commission had a revision date back in June. Mr. Montgomery said that the plan before him shows an 18 inch pipe down below and 18 inches on the schematic and Mr. Donofrio had said that the width of the driveway was reduced by 3 feet, but the length of the pipes still shows 30 feet. Mr. Donofrio said that he did not have time to change them. Mr. Donofrio said that the pipes would be at least 3 feet shorter and the inverses and dimensions will change. Mr. Montgomery said that the height of the soil above the pipe will stay the same and Mr. Donofrio replied yes. Mr. Montgomery asked for clarification of the plan received on 10/5/2011. Mr. Donofrio said that page one was changed today. On page 2 it was changed to 3 inches of gravel and it is not 2. Mr. Montgomery said that the pipe size changed from 24 inches to 18 inches and Mr. Donofrio said he had changed it on the previous plan. Mr. Montgomery said it is not changed in both places on the plan. Mr. Donofrio said he will change the revised date on both pages 1 and 2 to show 10/5/11.

Mr. Montgomery said that the construction sequence needs to be corrected and reviewed the construction sequence with Mr. Donofrio. Mr. Montgomery stated that the construction sequence is missing steps and needs to be clarified.

Mr. Montgomery asked where the top soil being removed will be placed. Mr. Donofrio said that a site will need to be designated. Mr. Montgomery said that the plan shows 2 to 1 slopes and they are steep. If gravel is placed on the slopes it will not be stable. Mr. Donofrio said that the gravel will be placed on the top surface and the side slopes will be rip rap. Mr. Montgomery said that needs to be clarified on the plans.

Mr. Strub said that he has spoken with Mr. DiChello's daughter and her sense is that the existing driveway is approximately 15 feet wide and from a safety prospective to bring the equipment in and out it is her opinion that 12 foot wide access is necessary for safety.

Ms. Rosenbaum asked for comments in favor of the application. There were none.

Ms. Rosenbaum asked for comments against the application:

Dr. Richard Orson, 70 Waverly Park Road, Branford Ct., addressed the Commission and stated that the plan submitted at this meeting is a change from what he had viewed previously. Mr. Orson reviewed his comments made on June 1, 2011. The applicant has attempted to simulate sheet flow conditions by increasing the number of culverts and states that a rock roadway is being installed. It was addressed by Mr. Shadle that the system is a screen that will function early on but over time it will act as a screen and then become a dike that will push the water back to the culverts. The pipes were changed to 18 inches from 24 inches and every time the size of the pipe is decreased the amount of flow is decreased and the potential for infilling is increased. Dr. Orson said that the need to clean the pipes is noted but there no note about the screen being maintained. He said that the maintenance for the structures is important because it needs to function to simulate the sheet flow conditions. The maintenance needs to be a long term function and the

Commission needs to make note when and how it will be maintained and possibly have a bond requirement to make sure it is maintained. Dr. Orson said that Mr. Lord had alluded to the fact that a stone driveway is not completely pervious even without infilling of material and applies both vertically and horizontally. The possibility of seeping will not be as great as implied with the weight of compaction of soil. The road will not have work underneath it and will be laid on top of wetland soils and there will be impact. It is unknown what it will do to the condition of the access road six years hence if the roadway does not compact consistently. There will be areas of compaction greater than other areas and generally those off the channel will have greater compaction. The areas off the channel cannot be controlled as far as compaction and will require additional maintenance to maintain the integrity. Mr. Orson did not see alternatives proposed, including the size of the road and asked why the road needs to be 15, or 12 feet wide. He said that there is a note about 12 foot in width and what he reviewed showed 15 feet. The Town Engineer's comments said there are inconsistencies in the plans and Dr. Orson reviewed the plans and the notes on the plans. Dr Orson said that he does not understand that an access road to a farming operation needs to be wider than the equipment needed on the site. He does not understand what emergency could come up in a garden for ingress/egress for access when an 8 foot road can work. Dr. Orson feels that there are feasible and prudent alternatives but has not seen them posed by the applicant. When this type of process or activity is being done the activity needs to be looked at to see what will minimize the impact to the wetlands. He feels that the applicant is trying to simulate the sheet flow by simulating the proposed activity. Mr. Orson said that existing culvert that is 20 plus .75 on the notes is a 12 inch culvert subject to closure or inclusion and a culvert does not have to be closed to change its diameter. The culvert can be filled half way with sand, silt or leaves which then would become a 6 inch culvert that acts as a nozzles so that the water will concentrate through it. There is an existing culvert downstream where there is a 3 foot drop from the end of the pipe to grade and Dr. Orson said that the present 12 inch culvert conditions will not stay the same because there is flow that goes around it where the culvert exists. The culvert that has a 3 foot drop to grade is not showing erosion at this time but it will change when the dike is put in and pushes the water through the culvert. Dr. Orson does not feel there is adequate information with regard to the rip rap, the construction detail, and he asked if the equipment being used will impact the soils outside the area. He said that it is difficult to review something that has been submitted late in the day and is different than what was on file earlier in the day and warrants further review.

Mr. Fred D'Ambrose, 41 Post Falls Lane, addressed the Commission and stated he had trouble hearing what was being presented and the late submissions of revised plans has him confused. He said that the garden is an as of right use but not the driveway. Mr. D'Amrose stated that the applicant was asked to provide hydrology and flow calculations and this has not been done. He feels that because of the size of the project and the amount of water that will flow over the property they should have rate calculations. Mr. D'Ambrose said that Mr. Lord had stated that the amount of impact on the wetlands would be impossible to measure, but to approve the project would be to approve the death of the wetland. He understands the IWC job is to protect the wetlands and hopes that the application will be denied. Mr. D'Ambrose said no one has spoken in favor of the project and this would seem to be that no one wants the project. He asked the Commission to deny the application.

Ms. Marilyn D'Ambrose, 41 Post Falls Lane addressed the Commission and stated that her property is adjacent to Mr. DiChello's property. Mr. DiChello purchased the property in 2004 and paid \$20,000 for 2 ½ acres of land. Ms. D'Ambrose stated that Mr. DiChello knew this land and knew there was a drainage ditch from Still Hill Road and sixteen years ago Post Falls Lane was built. All the properties on Post Falls Lane flow into Mr. DiChello's property and this also includes the properties on Still Hill Road and Birchwood Drive. This property is a swamp and the only place that anything could be built is where he is proposing the garden. She said that Mr. DiChello tried to receive an approval for a roadway to build a house and the drainage was too wet. She does feel that the proposed road is excessive and will ruin the wetlands and will disturb the sheet flow. Ms. D'Ambrose thanked the Commission and stated she hopes that they reject the application.

Mr. George Coutts, 31 Post Falls Lane, addressed the Commission and stated that the revised plans had stayed the same as those submitted in June and July. He feels that there will be a six foot high dam that will cross over 300 feet of linear wetlands. Mr. Coutts read the 1st paragraph of Dr Orson's report dated June 1, 2011. Mr. Coutts ask that the application be rejected.

Mr. Annes reviewed Mr. Lord's letter dated 5/30/2011 and asked Dr. Orson if he agreed that there would be no short or long term effect on the wetlands. Dr. Orson said that he disagrees with Mr. Lord because anytime you go into a

wetland area there is an impact and to say there would be impact has been shown in past on other projects. The wetlands have been impacted by work done around them and to put in a road would change the hydrology system. Dr. Orson said that taking the trees down will create additional light that will create new species of vegetation that would also cause impact. He said that it is recognized that activity in the wetlands is sometimes required but he asked if the impact is balanced by the changes that will be seen in the wetland system and outside the wetland area.

Mr. Strub stated that the safety implication had nothing to do with emergency vehicles accessing the site but it had to do with the safety of the ingress/egress of the equipment and use of the property.

Mr. Lord said his response concerns the response by Dr. Orson with regard to the compaction of the top soil and reviewed the note on the revised plan. Mr. Lord said that the proposal is to remove the topsoil layer down to the subsoil layer and then it will be field determined to how to prevent compaction of the topsoil layer. Mr. Lord said it was stated that this application is a moving target and that the plans had been revised over two weeks ago and that the only changes made were to the direct responses to the RWA and Town Engineer's comments over the last 48 hours. Mr. Lord referred to his report of 5/30/2011 and stated that a reference had been made to the short/long term impacts to the wetlands. He read page four of his report dated 5/30/2011 and he stated there will be an impact in the footprint of the driveway, but in his opinion the wetland or wetland function would not be adversely affected.

Mr. Strub feels that the changes that have been discussed and incorporated into the revised plans are due to the comments made by the RWA and the Town Engineer. He feels that this is the most reasonable and feasible and prudent alternative for access to the site. The owner of the property is trying to access an upland review area of the site and it is the IWC that needs to determine if it is a reasonable and prudent alternative. Both he and Mr. Lord have acknowledged that it is a regulated activity and an impact to the wetland but the effort is of the right for the applicant to access his property.

Ms. Rosenbaum closed the Public Hearing.

II. Regular Meeting

1. Pending applications

- a. 11-1171** 170 Birchwood Drive - driveway culvert-crossing
Alberto DiChello, Applicant

Mr. Montgomery made the motion to table this item until the November 2, 2011 meeting to allow the Commission to review the new material submitted. Ms. Lakin seconded the motion.

Mr. Lee stated that he has spoken with the applicant's attorney and there is no objection to a 35 day extension for a decision to be made. Mr. Strub stated for the record that he has no objection to the extension.

The motion passed unanimously.

- b. 11-1174** 235b Johnson Road (aka-0 Johnson Road)
Construction of a single family home
Corey Johnson, Applicant

Mr. Robert Pryor, Professional Engineer, addressed the Commission and stated that a prior approval had been received in September 2005 and the foundation for a single family house was constructed. Subsequently the property was sold in 2007 and the IWC permit expired. The current owner would like to develop the property for a single family house. He reviewed the site plan and the proposed expansion on the existing foundation. The proposed plan has the discharge from the roof drains and footing drains discharge towards the rear of the property. There will be a sump pump installed because of the grade of the property. There will be a 25 foot wide conservation area to the rear of the property. There is an existing wetland

located to the east of the property and the closest point of disturbance to will be 90 feet. The disturbance will be comprised of a small amount of fill to level an area in the back yard and will consist of 3 feet or less over the existing grade. A silt fence will be placed and there will be a 50 foot construction entrance. Mr. Pryor reviewed the Town Engineer and RWA's comments which is acceptable as a condition of approval.

Ms. Rosebaum asked if the drywell will be covered and filled. Mr. Pryor said that the existing drywell will not be used and it will be opened and filled to prevent future hazards.

Mr. Pryor reviewed the roof drains and sump pump. Mr. Montgomery said that the roof drains being directed to daylight gets more oxygen and that he was concerned with the water table because the drywell may not be draining. Mr. Pryor stated that his observation was that there was no water in what will be the basement and this indicates that the groundwater table is down. In the riser there is a cover on the drywell and it is sealed. Mr. Pryor said that the Town Engineer has requested rip rap be used.

Mr. Montgomery made the motion to approve Application 11-1174 subject to the conditions that the comments dated October 3, 2011 from the Town Engineer, and the RWA be incorporated into the plan. Ms. Lakin seconded the motion. The motion passed unanimously.

- c. 11-1175 715 Gaylord Mt. Road – Replacement of culvert pipes &
reconstruction of the crossing
Ryan Salisbury, Applicant

Mr. Brand recused himself from this application.

Mr. Ryan Salisbury, Applicant, addressed the Commission and reviewed the application. He stated that he has no issues with the comments made by the RWA and the Town Engineer.

Ms. Rosenbaum reviewed the IW regulations 7.5f and 7.5g.

The Commission expressed their concerns about the amount of work that will need to be done within the area of the stream without a plan submitted from a professional engineer. There was a great deal of discussion with the applicant with regard to the need for a professional engineer. Mr. Salisbury said that he has met all the requests being made by the Town Engineer and he would be doing the work himself. Mr. Salisbury stated that the problems that have caused the deterioration of the crossing had been caused by water coming from Town property. He is concerned for the safety of his family and visitors to his property and the need to complete the work as soon as possible. Mr. Salisbury explained that he has already put a great deal of money into remedying the situation and does not have the funding to hire a professional engineer.

The Commission had a lengthy discussion and Mr. Tim Lee, Assistant Town Attorney suggested that the motion be made as follows: Approve the application subject to the applicant submit revised plans which satisfy any concerns of the Town Engineer. The Applicant also is instructed to meet with the Town Engineer, Wetlands Enforcement Officer, Assistant Town Planner and the Assistant Town Attorney to discuss these plans together.

Mr. Annes made the motion to approve the motion as suggested by Mr. Lee, Assistant Town Attorney, Mr. Stone seconded the motion. Mr. Stone, Mr. Annes, Ms. Lakin and Mr. Shadle voted in favor of the motion. Mr. Gnida voted against the motion. Mr. Montgomery abstained. The motion passed 4-1-1

2. Notices-of-Violation, Cease & Desist & Restore Orders, Notices-to-Appear

- a. **N.O.V.** 64 Rocky Top Road – clearing of trees & removal of vegetation

Ms. Rosenbaum stated that this item remains tabled.

- b. **N.O.V.** 790 Main Street – wetland conservation area encroachments
(ref IWC #06-1095)

Mr. Steve Danzer, Professional Wetlands and Soil Scientist, addressed the Commission and reviewed the site walk. Mr. Danzer reviewed the history of the property and the original site plan. Field measurements were taken and it was discovered that the original house was not built according to the original site plan as proposed. The original driveway was not placed as proposed on the original site plan and was placed into the conservation easement. After a discussion with Attorney Woodward and Mr. Dawson, property Owner it was determined that it was done before Mr. Dawson purchased the property.

Mr. Danzer said that the practicable solution is to shift the fence to maintain an adequate easement and change the conservation easement to 50 feet. There is an existing row of trees at the corner of the house and the conservation easement would bow and be short of 50 feet. Along the 50 foot easement line is where the fence would be placed. Mr. Danzer reviewed the wetland mitigation that is being proposed.

Mr. Annes asked what impact the proposal would have on the wetlands. Mr. Danzer said that the fence would not impact the existing functions of the wetlands.

Mr. Danzer discussed the proposed planting plan. Mr. Brand feels that the selection of shrubs proposed is a good selection.

Mr. Montgomery asked if work would be done between the existing fence and the proposed conservation line. Mr. Danzer reviewed the existing conditions and that it is not being mowed. Mr. Danzer reviewed the existing vegetation and stated that the invasive species are being kept in check.

Mr. Montgomery reviewed the proposed conservation easement with Mr. Danzer. Mr. Montgomery said he is concerned with location of the dog kennels.

Mr. Herman Woodward, Attorney, stated that the dogs may be removed from the property according to the owner.

Mr. Montgomery made the motion to lift the Notice of Violation at 790 Main Street after the Enforcement Officer verifies the following conditions have been met:

1. ***The owner shall relocate the existing vinyl stockade fence in accordance with the “Site Plan-Property of Chad Dawson” dated September 27, 2011.***
2. ***The Owner shall install Inland Wetland Conservation Area medallions in order to clearly define the boundary of the modified Conservation Area; the medallions shall be placed at intervals not to exceed 35 feet.***
3. ***The Owner shall file on the Town of Hamden land records a Notice that the Inland Wetlands Commission has modified IWC Permit #06-1095 and the boundary of the 790 Main Street Conservation Area in accordance with the “Site Plan-Property of Chad Dawson” dated September 27, 2011 subject to approval by the Town Attorney.***

Ms. Lakin seconded the motion. The motion passed unanimously.

Mr. Montgomery made the motion to add Application 06-1095 to the agenda. Mr. Gnida seconded the motion. The motion passed unanimously.

Mr. Montgomery made the motion to amend the conditions of approval amending the conservation easement as shown on the "Site Plan-Property of Chad Dawson" dated September 27, 2001, subject to all other existing conditions.

Ms. Lakin seconded the motion. The motion passed unanimously.

- c. N.O.V. 251 Welton Street – oil spill or discharge

Ms. Rosenbaum stated that there is an update included in the Commissioners packet and that this item remains tabled.

- d. C & D 114 Colony Street & 125 Thompson Street-retaining wall

Ms. Linda Raccio, 114 Colony Street, addressed the Commission and reviewed the work and plantings that has been done. She said that one small area still needs to be completed.

Ms. Rosenbaum stated that the order will remain in effect until to all the work has been completed.

4. Review Site Inspection Schedule

Ms. Rosenbaum stated there are none to be scheduled.

5. Review of September 7, 2011 meeting minutes

Ms. Rosenbaum said that on page 2 line 11 "bent knife" should read "bentonite".

Mr. Annes made the motion to approve the minutes as amended. Mr. Gnida seconded the motion. The motion passed unanimously.

6. Other Business

Ms. Rosenbaum said that there is a 2011 Municipal Inland Wetland Commissioners Training Program being presented by the DEEP. The Commissioners were emailed the information.

7. Adjournment

A motion to adjourn was made by Ms. Lakin and seconded by Mr. Shadle. It passed with no dissenting votes. The meeting ended at 10:23 p.m

Submitted by: _____
Stacy Shellard, Clerk of the Commission