

**CHESHIRE INLAND WETLANDS AND WATERCOURSES COMMISSION
PUBLIC HEARING
TUESDAY, MARCH 3, 2015
TOWN HALL 84 SOUTH MAIN STREET
COUNCIL CHAMBERS AT 7:30 P.M.
AMENDED**

Members present: Robert de Jongh, Dave Brzozowski, Kerrie Dunne, Charles Dimmick and Earl Kurtz.

Members Absent: Will McPhee and Thom Norback.

Staff: Suzanne Simone.

I. CALL TO ORDER

Chairman de Jongh called the public hearing to order at 7:30 pm.

II. PLEDGE OF ALLEGIANCE

All present recited the pledge of allegiance.

III. ROLL CALL

Ms. Dunne called the roll.

Members in attendance were Robert de Jongh, Dave Brzozowski, Kerrie Dunne, Charles Dimmick and Earl Kurtz.

IV. DETERMINATION OF QUORUM

Chairman de Jongh determined there were enough members present for a quorum.

V. BUSINESS

1. Permit Application	APP	2015-001
Apex Developers, LLC	DOR	01/20/15
Jarvis Street	PH	02/17/15
		POSTPONED
	PH	03/03/15
Resubdivision	MAD	04/07/15

Ms. Dunne called the legal notice to open the public hearing on the following item:

Chairman de Jongh explained to those present how the public hearing would take place – allowing the applicant to make their presentation then opening the hearing up for questions and comments from Commission members, staff and members of the public.

Attorney Anthony Fazzone was present. Ryan McEvoy, PE and Bill Root, Soil Scientist of Milone and MacBroom were also present on behalf of the applicant.

Attorney Fazzone stated that Ryan would pass out the plan that was requested by Commission when were at the meeting several weeks ago.

Attorney Fazzone stated that the applicant is proposing a subdivision and is pursuant to section 44 of the Town of Cheshire Zoning Regulations.

Attorney Fazzone said just by way of background in respect to this regulation - it is the exact same regulation that the subdivision that would be generally to the east – the Moss Farms subdivision – that regulation was promulgated actually around that subdivision and if you were to look at a language of that regulation itself you'll see that there were two purposes to the regulation – one which was to provide some affordable housing and the other was to allow smaller lots with greater density and I'll quote from the regulation “to provide more efficient allocation and maintenance of common useable open space for recreation and or conservation.”

Attorney Fazzone said if you looked at the overall subdivision on Moss Farms you'll see that there's significant open space and this evening you'll see that the applicant here is also proposing some significant open space which would be a continuation of that town owned open space and the open space that's owned by the Cheshire Land Trust and it's pretty much the balance of the river corridor from Jarvis Street down to the town owns river front.

Mr. McEvoy addressed the Commission.

Mr. McEvoy explained he was going to briefly go over the location of the property then turn it over to Bill Root, certified soil scientist, to discuss the delineation of the wetland on this site

Mr. McEvoy explained this property is on the north side of Jarvis Street – Dundee Drive, a residential roadway located to the east; Maple Hurst Court, a small cul-de-sac off of Dundee Drive and Orlenton Court to the north again all part of the subdivision adjacent to the site.

Mr. McEvoy stated the property is 22 acres in size and it is also known as 920 Jarvis Street. He explained that part of this application involves construction activities on two of the frontage lots adjacent to 920 Jarvis Street but first being the 986 Jarvis Street which is nearest to the wetlands and floodplain and Ten Mile River and the second is 966 Jarvis Street.

Mr. McEvoy explained the site is an irregular in shape and is bounded by a residential subdivision to the east and the north and the western boundary is the Ten Mile River - the Ten Mile River being shown in blue on the map - the center line of the river represents the property line.

Mr. McEvoy said the wetlands are shown on the map in the beige color.

Mr. McEvoy said the site is generally steep in grade for the most part with a high elevation on the eastern side at elevation 220 with a low at the river of the northern most edge at approximately 132; there are some relatively moderate slopes throughout the center of the site and is currently occupied by a single family house that is currently served by subsurface sewer disposal system.

Mr. McEvoy said with that he would turn it over to Bill Root before he gets too far so he can discuss his investigation of the property.

William Root, certified soil scientist with Milone and MacBroom addressed the Commission.

Mr. Root stated he flagged the wetlands on the site and submitted a report dated December 21, 2014 “Inland Wetlands Delineation Report”.

Mr. Root said the wetlands were flagged in September 2014. He said there’s a fairly sharp demarcation between the uplands and the wetlands on the site and Ten Mile River flows northward.

Mr. Root said there’s a fairly broad flood plain forest on both sides of the river and as you get to the more upland soils there is a rather

steep 6' to 8' to 10' embankment at the edge of the river near where the normal floodplain would be.

Mr. Root said the inland wetland delineation you can on the map. He said the floodplain forest provides a good amount of flood control to a very broad flat area and would seasonally flood so a floodplain like that is a very broad vegetated and provides very good pollutant renovation and provides trapping of sediment.

Mr. Root stated the underlying soils are sand gravel based and have a very strong connection to the aquifer for recharging and discharge - the Ten Mile River flowing through this part of Cheshire is well known to be a very significant wildlife habitat and generally supports the turtles that are State listed species of special concern Wood turtle and Box turtles that are found fairly routinely up and down the corridor.

Mr. Root said there are high functions and values along the river with a sharp demarcation between the uplands which are also sand and gravel based soils and the sort of mucky floodplain forest in this area.

Mr. Root said the common species that you find down here are Red Maple and Elm and Pin Oak and there's a very strong developed understory of shrubs and Winter Berries and Spice Bush and Sweet Pepper Bush and there's also the herbaceous layers that are well developed too with a number of ferns and sedges.

Mr. Root said so there's a very nice and diverse habitat along the Ten Mile River and a floodplain forest is on both sides.

Mr. Root said another area that he flagged is slightly off the property behind the house on Orlenton Court - there may have been some filling in this area and there is a slight trough behind the homes - there's a number of pipes that discharge into it - you can see the shading (on the plans) and there's a depression about 4' or 5' deep which is conveyed - northward there is a culvert cross pipe and then going into the flood plain forest that's north of Orlenton Court so there's a big broad floodplain forest - well developed and good flood control and wildlife habitat with a very sharp demarcation and upland setting very suitable soils for development and sort of mucky floodplain forest along the river.

Mr. McEvoy said he wanted to expand on one of the items that Mr. Root raised is the small watercourse that's off the property - there is a minor area of upland review - 50 foot off set of that wetland that

falls on this property with an exception of a small area on the north east corner of the site - the remainder of the site drains directly towards the Ten Mile River and this particular area does drain underneath the road and then eventually to the Ten Mile River on the north side Orlenton Court.

Mr. McEvoy said what they are proposing on this site is a 15 lot residential subdivision under the planned residential subdivision regulations in section 44 of the zoning regulations in which allow for an increased density on properties such as this - very similar to the adjacent subdivision next door.

Mr. McEvoy said the subdivision will consist of 14 new lots with the existing house on 920 Jarvis Street to remain as part of the subdivision which would be the fifteenth lot itself.

Mr. McEvoy said all of these proposed houses and the existing house will take access off in a new town road built to town standards with the standard roadway width and a cul-de-sac, etc.

Mr. McEvoy said the road begins between 986 and 966 Jarvis Street and that's approximately 10,050 linear feet towards the cul-de-sac.

Mr. McEvoy stated these lots are smaller in size then the typical lot in an R-40 with minimum lots of 10,000 square feet - it does allow for a tighter more compact development was smaller side and front yard setbacks so what you see on this particular plan is a more condensed and more efficient layout then a more traditional are R-40 development.

Mr. McEvoy explained as part of this they are treating storm water management from both of the proposed roadways and the individual houses and driveways themselves through two storm water management basins shown on the plans.

Mr. McEvoy said the larger one located behind 986 Jarvis Street will handle almost the entire roadway system along with all the proposed houses on the east side of the road and the small basin to the rear of some houses on the west side of the road with handle simply the roof runoff.

Mr. McEvoy said the design of the storm water management system with both of these basins with result in a net decrease in flow off the site under the 10, 25, 50 and 100 year storm in accordance with the town zoning regulations and engineering requirements.

Mr. McEvoy said at the previous meeting it was requested by Dr. Dimmick to investigate whether it is in fact appropriate to detention given the proximity to the river.

Mr. McEvoy said they did look at the overall watershed of the Ten Mile River and the placement of this property in that watershed area – he said he had a graphic for the Commission to consider.

Mr. McEvoy handed out a graphic to Commission members.

Mr. McEvoy explained the graphic shows the overall watershed of the Ten Mile River which is approximately 20 square miles in size and our site is located roughly at the half way point of the watershed itself.

Mr. McEvoy stated there are about 9 square miles upstream of the site and about 11 square miles downstream of the site.

Mr. McEvoy said the typical protocol with respect to detention in a watershed such as this which is a relatively small river system that feeds into the Quinnipiac is you would have detention unless; they also did look at previous analysis of the river that were done by their firm in the early 1990s and the timed peak of the river in this particular area for the 100 year storm is approximately 2 hours after the start of a storm so he testified earlier without having the facts that is was several hours or almost a day in order of magnitude when in fact it's a little more flashy then what he had originally estimated.

Mr. McEvoy talked about the hydrology model that shows how our site will interact when the peak discharge will occur from the basins – and that will occur at approximately .55 hours – just over a half hour after the start of the storm.

Mr. McEvoy explained that they looked back at the model done in the early 1990s and the small storm event that was analyzed as part of the Ten Mile River system was the 10 year storm event which had a time to peak of an hour and a half; so the 10 year storm event maximum flow will occur an hour after our basin is already starting to recede and the peak flow is starting to fall back; he said it is reasonable and it is appropriate and in fact he had discussions with the town engineer and he agrees that on this particular site that detention is appropriate to handle increases in runoff.

Mr. McEvoy said as part of the basin design it's not just a means of retaining or holding back water it's also provides for water quality renovation from proposed impervious surfaces.

Mr. McEvoy talked about including a sediment chamber and basin; he explained the process in which it would work and that the bottom of the basin is over excavated to allow for water quality volume which is recommended in the 2004 Water Quality Manual.

Mr. McEvoy explained the process to follow as recommended in the 2004 Water Quality Manual.

Mr. McEvoy also spoke about the outflow from the basin which is designed as a level spreader outlet rather than a traditional point discharge or flared end section we have an excavated, small depression that will allow for runoff exiting the basin to enter into this minor depression and sheet flow exiting as opposed to a point discharge which could cause erosion downstream- this will sheet flow into the wetlands and the watercourses and will mimic the existing condition without any erosive velocities coming out of the outlet structure itself.

Mr. McEvoy is they are before the Commission to seek approval for the regulated activities and although they don't have any direct wetland impacts associated with this development they do have three proposed activities within the upland review area.

Mr. McEvoy said the first being a discharge from the detention basin which is the largest activity within the upland review area.

Mr. McEvoy said the second is a minor amount of grading behind one of the first properties on the west side of the road and that's because they are upgrading an existing drainage outfall that is located on the front portion of 986 Jarvis Street which collects some of the runoff from the developed areas of the lots along Jarvis along with the existing lot and also some of the areas from the upslope development off Orlenton Court and we are proposing to upgrade that to handle the ten year storm event which is the design standard for town drainage systems.

Mr. McEvoy said they also have a detailed set of erosion control plans for the site.

Mr. McEvoy said they have significant amounts of grading in order to create the houses on the eastside of the road so they want to provide for adequate protection measures so that there is no runoff from the construction into the wetlands and they have accomplished that by providing for two sediment traps – one located on the east side of the road – one located on the west side of the road in a different

location then the proposed basins – they reason for that is the collection of silt and runoff during construction won't in anyway damage the construction of the basin itself – you have a separate place where the undesirable siltation will occur during construction can be collected and removed from the site without compromising the volume of the detention basin itself.

Mr. McEvoy said they also have silt fence and hay bales located downslope of any of the proposed disturbances on the west side – they also have a detailed narrative and a constructive sequencing of the site.

Mr. McEvoy said there are a few areas where they have steep slopes – the steep slopes will protected with erosion control blankets which will prevent any excessive runoff on those steep slopes after the slopes have been established and until such time vegetation takes hold in the mat itself.

Mr. McEvoy said that is a brief description of the proposed activities for the site – as part of the subdivision and one of the more important components for both Zoning and Wetlands is the dedication of open space as part of it.

Mr. McEvoy said the parcel is 22 acres in size and what they are proposing with the development is a total of just under 12 acres of space to be dedicated to open space or preservation with almost 8 of it is going to be dedicated to the town – the 8 acres to the town will include the entire wetland corridor with the exception of a small area that's going to be deeded to the front property owner and the remaining acreage is going to be dedicated to the homeowners association.

Mr. McEvoy explained Mr. Fazzone had some meetings with Planning staff and it was indicated that the wetland areas would possible more appropriate to be dedicated to town open space where as the open space on the surrounding the proposed lots would perhaps be more appropriate under the ownership of a homeowners association as opposed to the town itself.

Mr. McEvoy said so given that over 50% of the site will be dedicated to open space – we think this has a very strong potential to increase the value of the open space that the town already controls which is substantial in this area.

Mr. McEvoy showed on the plans the area of the existing open space the town controls either through the town directly or through the

Cheshire Land Trust and currently there is approximately 187 acres of open space that is in control and preserved and protected land and with our proposed development we'll add an additional 12 acres to that – again greater than 50% of our site to preservation and one of the items that was noted during the initial hearing with respect to vernal pools was that there is a significant amount of vernal pools in the adjacent subdivision to the north.

Mr. McEvoy said one thing they did do and he may have Bill Root speak on this a little bit – he said he looked at the town topography in the area and in the area of the Ten Mile Lowlands there are dozens of small – some manmade pockets – others it's hard to determine from the topography – but dozens of pockets that may or may not act as vernal pool type habitats.

Mr. McEvoy said he wanted to bring that to the Commission's attention that they did look at the history of this area and it is apparent that there is a large amount of natural resources well to the north of our site but there are no such pools in our particular area.

Mr. McEvoy said he wanted to show the Commission this graphic to let them know they were interested in the environmental aspects of the surrounding areas.

Chairman de Jongh asked about the calculations that he was utilizing earlier regarding the runoff from the site where he was calculating the various degrees of flooding – were the calculations taken into the consideration the rains in 1982-3 where we had pretty severe flooding – was that type of situation calculated or did they use that as part of the calculations.

Mr. McEvoy stated they did a master drainage study for the town in 1993 and part of that used available regression models that were done in the 70s of all the flood prone rivers in town – he said he didn't know if they took into account of any specific flooding events from the 80s but he did know that it was in an effort to analysis the various culverts and bridges in town so in respect to any particular flooding he was not sure.

Chairman de Jongh said he remembers the severity of that particular event and there were a number of streets in town that were absolutely flood – it was a disaster and he would imagine that low area there on Jarvis Street would too have been impacted as on as well.

Mr. McEvoy said he can say the 100 year flood elevation based on the FEMA model is this particular area – at the bridge crossing at Jarvis Street – the 100 year flood is at approximately 138 and descends to about 136 in the northern portion of the site and the lowest floor elevation in our building is at about 145 so we are significantly higher than even the 100 year flood elevation by some 7’.

Mr. McEvoy said the discharge out of our basin in this area is slightly above the 100 year flood elevation itself – they are discharging about 137.5 in this particular area and we are at 137 and change so our basin is above the 100 year flood elevation – all the houses are significantly above the 100 year flood elevation so we certainly feel that we’ve provided for adequate safety measures with respect to the flooding of the Ten Mile River.

Dr. Dimmick asked about the grading on lots 5, 6 and 7 just above one of the detention basins.

Dr. Dimmick said you have a lot of regrading that is going on immediately adjacent to the detention basin He said he particularly concerned about the stability of the erosion controls that you put in there because you talk about other places making sure you are were not going to get silt into the detention basins as the result of the regrading that’s spot seems to be particularly sensitive.

Mr. McEvoy said the important thing to note and the intent is having a temporary sediments basin trap as they are referred is that we are directing runoff away from those areas during construction until vegetation takes hold so that we aren’t going to be essentially filling them with construction sediment.

Dr. Dimmick said that you can’t do that with that particular slope and the one directly above the basin there.

Mr. McEvoy said it is why it’s important and critical that we have the erosion control blankets in place in this particular area - those blankets are generally considered very effective even at slopes at 1:1 grade and we are proposing the rear of these lots to be 1:3 so it’s a much more gentle slope then even the manufacturers claim that their products can adequately handle.

Dr. Dimmick said this application in front of us is primarily for subdivision and road construction - does it also include all the regrading.

Mr. McEvoy replied yes he said the important thing to know about a development like this that not unlike the traditional R40 or R 80 residential subdivision is that all the activity has to occur as part of the road construction for the purpose of that construction – for the basins and features of that nature - there are really very little areas particularly on the west side of the road where we are not going to have to clear in order to build the development – it’s important to note that particularly on these first three houses on the west side of the road - we actually direct the back yards of those houses into the basin itself so in order to construct the drainage swale – it’s a gentle swale to more than 3% in grade but we still have the goal of directing all of that runoff even from the back yards into this basin so the development of these lots don’t really happened in a box; in this case it happens generally together.

Mr. McEvoy said he wanted to speak about some of the regulated impacts themselves associated with and the total square footage is approximately 3500 square feet and there are three areas in total but the actual earth work and the actual site disturbance required to construct these is really and essentially limited to very minor amount grading behind the second house on the western side of the property – excavation of about 2 feet with the creation of a level spreader outlet in the detention basin - and the installation just inside the 50 foot upland review area for a 24 inch culvert which conveys some of the overland flow from the properties east – including some of the properties on the adjacent subdivision.

Mr. McEvoy said the actual amount of earthwork required within the upland review area itself is very limited to and essentially is only a couple feet of excavation for the basin outlet and a little bit of grading behind one of the houses in one small discharge into the upland areas so he understand there is a large amount of activity proposed on this site but certainly the regulated activities themselves are relatively minor in nature.

Chairman asked who is going to be responsible for cleaning out the sediment chambers.

Mr. McEvoy stated the town he believed takes that responsibility for that – he said there is an easement over the discharge from the town drainage into the basin – the actual maintenance of the basins themselves are typically handled by the homeowners association – that is something we are discussing with Planning and Zoning - from the perspective of history and every subdivision he has worked on in recent past has required the homeowners association maintain the basins themselves since the sediment chambers actually collect

town road drainage or will collect town road drainage - he believes those are maintained periodically or checked by public works staff .

Chairman de Jongh said the reason why he asked the question is because although we talk very highly of homeowners associations the reality is after a while they become inept and fail to do the things the homeowners association are initially charged to do and he'd hate to see those chambers all of sudden not get not get maintained.

Mr. McEvoy said that is certainly a concern for every subdivision - he said it's his understanding that public works typically handles these basins and if they notice a deficiency for there is some sort of problem and the homeowners association isn't maintaining then - they will actually do the work or contract it out and back bill the association or properties part of the association; he said that was his understanding from public works staff but he didn't know if that's how they handle it every time.

Ms. Dunne said just to follow up – you were talking about the vernal pools - she had wondered if they had actually done an inspection of the property for vernal pools and aren't they in the surrounding areas.

Mr. Root said they flagged wetlands in September but didn't do a search for vernal pools – he said he and Ryan had talked about it and he thought the best desktop study and that they could do was what Ryan already explained to you was to take a look at the general topography in the area and the town's website has a layer and pools and when you look at the topo here you see these depressions all throughout the site. He's said he had discussion with John Milone about this site - and it was the first time he heard of vernal pools had to do with well this development here; he noted the site is well known for supporting vernal pool activity.

Mr. Root said what he can say is that the type of map and that type of topography does not exist on this site which is what Ryan explained to you – the second thing he'll say - in general these floodplain forests that are very flat and do flood fairly frequently – every year – every two years or five years generally don't support a lot of vernal pool habitat because they are relatively short lived creatures - salamanders and frogs and things like that and they don't put their breeding effort into something that's going to get washed or be underwater every year or two years or three years – it's generally not going to be productive for them which is the reason why most vernal pools are in upland habitats where they are not going to be flooded like that; so in general an active flood plain like this part of the Ten

Mile you don't get a lot of vernal pool development; so those are the facts to support a conclusion –so to say we didn't do a survey for them because it wasn't the best season to do it – we actually didn't do a survey.

Dr. Dimmick asked Mr. Root to talk about turtles.

Mr. Root explained up and down the Ten Mile corridor there are Wood turtles and are active up and down the Ten Mile corridor; Box turtles are an upland species and generally aren't often associated with a forested floodplain Wood turtles however are – they are very aquatic and over winter in the river– and forage in the upland areas during the active time of the year.

Mr. Root said the river is about 200' away - but there is no reason you wouldn't expect to find wood turtles and the floodplain forest - he said he didn't think there was Box turtle activity on this site because it is so heavily wooded and they often prefer more open county power lines and other areas where they can get berries.

Mr. Root stated they contacted DEEP Natural Diversity Database because there are hits as his report showed and the Natural Diversity Database maps and there are circled all over the site and the DEEP reported back that there were indeed turtles reported in the corridor and their letter we have and he though was part of the application and they didn't object to the application or the development and they recommended what they used as standard protocol for turtle protection which they list and we generally put on our site plans when we get around to doing specifications for the project which they consists of silt fencing which is considered perimeter silt fencing.

Mr. Root said then during the time of year when turtles are active - after April they would have a few people qualified to have a sweep done on the development side of the silt fence and if any turtles were encountered you gently collected and placed them on riverside – the outside of the development.

Mr. Root explained a couple of those sweeps are conducted and they generally require you to notify the contractors and sit down with the contractor and show the pictures of the turtles and encourage them if they see turtles in the area they do the same as the sweeps would do.

Mr. Root said in general you find turtles along the silt fence trying to get out or trying to get in - the idea is to try to relocate them into an

area of the corridor along the river where they're going to be protected from the site development.

Mr. Root said there is no argument that there's upland habitat loss in any development like this along there. He said he thinks as Ryan stated there is really a significant amount of open space area along the river which hopefully provides some support for the population.

Ms. Dunne said what about their last recommendation in their report that no vehicles or heavy machinery shall be parked in any habitat – how are you addressing that having to do with the installation of the drainage pipe and storm water basin.

Mr. Root said he thinks that all occurs - before the sweeps are done or in season when they might be hibernating so to speak but once the perimeter fence is set up and you are able to do the sweeps you are guaranteeing as best you can there are no turtles within the area you've developed he thought heavy equipment was allowed in that work area.

Ms. Dunne asked if we addressed the lawn clearing – she said she thought there was something about creating a lawn and how much clearing was there.

Mr. McEvoy stated as part of this site plan - and the nature of the existing property there is a fair amount of earthwork proposed on the easterly side of the property as you look of the nature of the development particularly along Maplehurst and Orleton Court – in a very similar manner and in some cases there is up to 20 feet 30 feet or 40 feet of grade change between the property line where the backyards of the houses are located.

Mr. McEvoy said we're going to have to essentially mirror that condition on our site and that will involve earthwork activities to remove a lot of material and create a stable engineered slope on our site.

Mr. McEvoy said presently the ridgeline on the site and the neighboring properties is the property line so in other words water flows away from the Maplehurst properties away from the Orleton properties with an exception of a small area that does drain to a little watercourse and basin near Orleton.

Mr. McEvoy said what we're looking to do is excavate out material to create pads for the building sites themselves. The slopes themselves will be 3:1 in grade. The slopes will have verse benches meaning for

every 14' vertical grade change you have a flat area to prevent runoff from gaining ahead of steam.

Mr. McEvoy said the slopes will also have permanent erosion control blankets installed which again will assist in preventing the soils from eroding down into our site from the adjacent properties.

Mr. McEvoy said so as part of that we are going to be clearing some the vegetation along the eastern property line in order to do that grading.

Mr. McEvoy said we have provided for a notation for a specific seed mix and New England conservation mix which will allow for additional protection of that slope.

Mr. McEvoy said it will be owned by the homeowners association so it is not something that's going to be maintained in the sense that it's going to be lawn area that's going to be putting greens.

Mr. McEvoy said there is going to be a buffer between the neighboring properties and our site – it will be cleared and it will be graded – but over time it will eventually it will mimic natural conditions.

Mr. McEvoy said between our engineered slope protection measures and the temporary nature of it – it will really mimic what is on the opposite side of the property line with the houses on Maple Hurst and Orlenton Court but in fact will be a safer way to construct such a slope.

Dr. Dimmick asked if that material is sand and gravel which is marketable.

Mr. McEvoy said yes - we did some test pits in the area and he's supposed it was marketable sand and when the construction begins and who is interested in having it.

Dr. Dimmick stated that is between you and P&Z if you need an additional permit on it.

Mr. McEvoy said there is an earth excavation permit associated with the development and is currently in front of P&Z.

Chairman de Jongh asked about the markers along the westerly property lines to note the open space - so that the homeowners do

not have a convenient lapse of memory and move into areas that they are not permitted to.

Mr. McEvoy said yes they did propose to open space markers and wetland markers - your standard medallions along the westerly properties and also along the northern most properties adjacent to the small watercourse on Orleton.

Mr. McEvoy said he noticed in Suzanne's staff memo that she is requesting additional medallions at each property corner which we would be happy to agree to – that's certainly not a problem, so yes there are going to be markers in place.

Chairman de Jongh said he remembered running into issues in other areas of town – on Dundee and Amherst – they had issues with the homeowners - it was that the posts were not put in and they found out that the grass went farther beyond that and when the posts were installed the homeowner were a gassed that now they had posts in the middle of the yard.

Chairman de Jongh stated he just wants to prevent this so up front people know what the property lines are and what they can and can't do.

Mr. McEvoy said at least lately that is something that Suzanne and Dave Kehoss, the Zoning Enforcement Officer are requiring prior to any site clearing along with the installation of any sedimentation and erosion controls. He said he thought everyone was on board with that.

Chairman de Jongh asked if there were any more questions from Commission members -no other questions were asked.

Chairman de Jongh opened up the hearing for audience questions for the applicant.

Paul Gleason of 49 Maplehurst Court addressed the Commission. He explained he is the adjacent property.

Mr. Gleason said he's nearly a 20 year resident of Maplehurst Court. He said he is curious about the berm creation – he said it seems like a catoptric loss of trees – he said those trees are very mature and it would seem that the effort to put the erosion control blanket and to regrade the land immediately behind his property would have a very adverse effect on the very mature trees that he would continue to

have on his property line. He showed on the plan the location of his property line.

Dr. Dimmick said he shared his concern but he didn't think our Wetlands Commission has any jurisdiction what so ever on that.

Mr. Gleason said the area conveys quite a bit of different kinds of wildlife – deer, fox, turkey – he said he knows Box turtles species and the other turtle species get a lot of attention because of their status.

Mr. Gleason asked if the Commission considered their status of all the wildlife on the property itself.

Dr. Dimmick said we have limited jurisdiction over that – the courts in the states have ruled that we only have jurisdiction over that wildlife and such which is at least partly dependent on the adjacent wetlands and obviously the trees and anything that is up there on the ridge line although most of us have conservation interest and like to preserve its outside our legal jurisdiction is defined by the courts.

Mr. Gleason said his concluding comment is about homeowners associations – he said great care was taken to explain the similarity between the neighborhood he lives in and the proposed development. He said homeowners associations don't work – nobody pays dues anymore – sidewalks don't go cleaned and in the common areas lawns don't get mowed – abject neglect in some areas of Dundee and the question about the filter system. He said he'd hate to see a 15 house development to be a ward of the state when it comes to cleaning the soil from those filters that were referenced.

Mr. Gleason said 20 years there – he said he has a neighbor who is here tonight who can attest to that our homeowners association is not very useful. He said phone calls to the attorney who presented over the closing of his property – Kevin Hecht went unanswered – it's our problem.

Mr. Gleason said people's lives are busy – he is working 12-13 hours a day and he thinks a lot of his neighbors are in the same boat and we'd ask that you consider that in your contemplation of this.

Chairman de Jongh said that was his reason for raising that question because we have had experience with homeowners associations – that at best have been inept in many cases and that is why he raised

the question as to who's responsibility it was to clean out those sediment chambers.

Chairman de Jongh said while the intentions are initially well intended – but sometimes it fails to continue.

Lisa Grande of 75 Orleton Court which is the property behind the proposed development and right next to the trough and discharge area they spoke of.

Ms. Grande said she just wanted to reiterate what the gentleman just said – she said they bought into this area 6.5 years ago and we were actually lied to that was open space behind us and there was no homeowners association so we are just finding this out as we are looking into this.

Ms. Grande said they are concerned about the minimum – they are kind of glossing over this discharge that's going to the back area. She said they are going to allow a 50' open space behind our property but currently that's a steep slope that's actually part of the steepest slope of the backside and from looking at the development proposal it looks – and maybe they can address how much the tree clearing is going to happen but if all those trees are taken off that slope she was not quite sure what was going to happen to prevent to the drainage and the excess flow from coming being worse than it is.

Ms. Gandy said currently where that sedimentary – the conservation trough that they spoke of and right now it doesn't drain and go under Orleton Court it just comes off the hill on the existing property collects in that area – she said they know from being there several seasons that it must be a habitat for animals – we have frogs, turtles and everything there but it doesn't drain cleanly and it just sits there so they are just very concerned that because there are no catch basins or any other kind of mitigating factors being proposed on our side of the hill that we are just going to get flooded there and it's just going to be a bigger mess for us.

Ms. Grande said maybe Mr. Root can speak to what he found in that area in that specific spot to maybe address our concerns about that but when they presented to the Zoning committee they said well we don't know who is going to take care of that so that is the reason why we are raising it here.

Chairman de Jongh asked Ryan if he wanted to address that erosion blanket on that slope – the effectiveness of that.

Mr. McEvoy explained in that particular area we are not proposing any excessive grading or any other proposed improvements – all the houses and driveways in that particular corner of the site – he referred to the area on the plans – are to be connected into the drainage system and discharged to this larger basin to the south.

Mr. McEvoy said in fact they are actually taking some of the watershed that drains into this trough and directing it again towards our basin so the net effect of all of our development is that there is no change in the characteristics of the runoff going into that small trough over there.

Mr. McEvoy explained it is quite steep in the 50' upland review area but as she noted (Ms. Grande) but again this area is not something they are looking to any activity in and all the impervious surfaces are going to be directed away from that area.

Scott Blois of 47 Maplehurst Court addressed the Commission. He said it just looks like in the drawings he's seen is that there are going to be no trees left and there are just tons of trees back there now so he doesn't know how far his property line goes back and how many trees would be protected that way but if the gentleman can just talk about – are we talking about taking all the trees down – right up to the edge of this property line (shown on the plans) or less than that or something in between.

Mr. McEvoy said in that particular area because of the grading efforts to establish the building footprints for those lots along with the measures that we have put in place particularly reverse benches and things of that nature we will be clearing essentially right up to the property line in order to grade it out.

Mr. McEvoy said they will establish vegetation upon the establishment of the slopes and this area will be maintained by a homeowners association so again it's not going to be a lawn area – it's just going to sort of grow on its own but they will be clearing.

Ms. Dunne asked it that was the grass area that you are putting in and you are cutting down trees.

Mr. McEvoy stated correct.

Ms. Dunne asked what were we talking about – how many trees.

Mr. McEvoy said he could tell her how many trees.

Ms. Dunne said are we talking about three trees or are we talking about thirty trees – she said she didn't know what that area looked like.

Mr. McEvoy said it's about 7.5 acres that we are going to be clearing of wooded area so however many trees that is.

Mr. McEvoy stated again for 50% of the site is going to be dedicated open space so while there is going to be activity certainly where we are proposing the houses a significant portion of the site will be dedicated to open space.

Chairman de Jongh said he wanted to ask a clarifying question on that section that we are talking about now so basically that's going to be clear cut and that might be an incorrect term but basically the trees are going to be removed from the site and it's going to be grassed but then it's going to be allowed to grow back to a natural state.

Mr. McEvoy said yes once the grades are established it will be stabilized and it will be vegetated and it will just grow on its own.

Mr. McEvoy said what its worth from a wetlands perspective we are talking about several hundred feet away from the wetland and upland review area so he just wanted to make sure we are clear on that – it's not an upland review area per se but certainly we are going to be clearing in that area.

Sigrun Gadwa of 183 Guinevere Ridge addressed the Commission.

Ms. Gadwa said this is just a very specific question – have you considered the effects on hydrology of the wetlands from the loss of transpiration of all these trees – are they Oaks with very long tap roots that are actually going down to the ground water table that is over the clays that are underneath the sand that's on top so that there's a lot of transpiration – because in that case there could be a significant change to the wetland hydrology if you are cutting down all those trees.

Ms. Gadwa said certainly the wildlife especially the raptors – the barn owls they have behavioral requirements for larger areas of forest – they hunt for the mice in people's backyards that carry the Lyme ticks.

Ms. Gadwa said there is an interaction – there is a flux between the upland forest habitat and the riparian habitat when you have such a very extensive system has you do here.

Ms. Gadwa said the wetland corridor extends almost three quarters of a mile further to the north and there's wildlife in there - birds, raptors and Wood turtles which have a very large requirement for their upland foraging during the summertime.

Ms. Gadwa said there are very few Wood turtles in most of the rivers in Connecticut and when you look at the ones where there are found they are usually in these really wide wetland systems - in wetland or uplands - they really don't care whether they're wetlands or upland for the foraging.

Ms. Gadwa said she is digressing into comments here - but the question really was have you done a hydrologic analysis of the effect of the loss of tree aspiration - she said she didn't understand with these wonderful pervious sands and gravel soils why we are not doing LID - it just seems like an absolutely ideal site for extensive infiltration and not just the partial treatments that even the best designed storm water basin is able to accomplish in its first flush pool. She said 80% is best and there are toxins - metal and assorted pesticides that have much longer half-life.

Ms. Gadwa asked if they considered using infiltration basins or elongated infiltration trenches, rain gardens and are we absolutely sure this type of subdivision is the best for this site - maybe just a regular one with larger lots that can easily accommodate rain gardens and wouldn't require so much grading and tree removal would make more sense.

Ms. Gadwa said usually when you have really demanding challenging topography larger lots allow one to fit the houses into the topography - so that's a question and their a relevance -have you told the Commission how many frequency of truck loads per day during the excavation process - there is relevance to that there is always some sediment that's on the tires and falls off the pickup trucks - she said she knows that from driving behind them and we all know that so if you have hundreds and hundreds of trucks going back and forth on Jarvis Street removing the valuable sand from the site that's a consideration for the Wetland Commission because the sediment washes into the catch basins and into the river.

Ms. Gadwa said also another consideration for the Commission is the pollutant loading which is function of the number of car trips and if you have six houses there - a conventional subdivision there are half the car trip that there are with the proposal before you.

Ms. Gadwa said she just heard about this today so she didn't have a chance to get her tables together but the loading of metals and hydro gardens, PHs, nitrogen and phosphorus - all of those things are of course a function of how many cars, how many people are living there.

Ms. Gadwa said traffic is a zoning issue but loading of traffic related pollutants on to a road by a river that is still healthy and sensitive to tiny amounts of metals is relative to you guys. She said you think about the alternative with fewer homes.

Ms. Gadwa said the question is why not LID and what about the infiltration.

Chairman de Jongh asked if Bill or Ryan wanted to address the two major points - one was he thought the effect of moving those trees - what hydrology impact it is going to have.

Mr. McEvoy said with respect to the site hydrology - naturally any vegetated or any wooded area has a lower rate of discharge or run off from the site than a grass condition or partially impervious - that results in the biggest change for the point discharge of runoff for a storm event.

Mr. McEvoy said in this case we followed every standard guideline - Tier 20 methodology used by the Army Corp of Engineers, the Department of Transportation - in fact the town requirements themselves.

Mr. McEvoy explained our methodology has been tested and approved and utilized for all applicable regulatory bodies that review any sort of developments so he can assure you that as part of our hydrology analysis the removal of wooded area and replacement with roadways and houses was taken into consideration with respect to our runoff calculations.

Dr. Dimmick said he thought part of the question had to do with general water balance- they were talking about transpiration and the amount of water going in and the amount of water going out not just during the storm but between storms - he thinks that was the intent of the question.

Mr. McEvoy said he is not an expert on transpiration of water through vegetation but again he just wanted to reiterate that what we used is the accepted mythology for all sorts of hydrology scenarios including this one.

Mr. McEvoy said with respect to LID – we are bounded in this particular case by town regulations standards for subdivision roadways – one of the requirements is a 30' wide road – he said he would guarantee you if he presented to the applicants that it would be a great idea to have a 20' road with gravel shoulders and no concrete curbing and no sidewalks that they'd be alighted but unfortunately that is not something that's practical to be approvable by the Zoning Commission and in this case the town standards are the town standards and we have to abide by them with the respect to a proposed roadway.

Mr. McEvoy said with respect to the soil testing that we did and he should have added – that part of our testing was naturally on a hillside where we are going to be conducting the excavation but we also did test pits in the area where we are proposing the storm water basins and the material as you get down there had a more silky component to it that we did not feel that accounting for infiltration would even be useful from a hydrology prospective nor would it be practical in a real life situation that the amount of water coming in versus the amount of water that we'd be exfiltrating in a silty soil would be negotiable for a larger storm event.

Mr. McEvoy said so they calculated there would be no infiltration during storm events so it actually it's a conservative approach but we did do testing and it's not the same quality material as the hillside is with respect to its infiltrative capacity.

Mr. McEvoy said what he was referring to earlier was the testing in the excavation area which Dr. Dimmick was asking about the export nature of it – but the basins are not quite the same material as you get closer towards the river system.

Chairman de Jongh asked if there were any other questions or comments from the audience.

Mr. McEvoy said he wanted to mention one item about the traditional subdivision – one of the things he mentioned was with the nature of this type application that's in front of the zoning commission does allow for denser configuration of units – one of the things in particular would be required if you had a conventional subdivision would be larger lots of course but also increased setbacks – so all the houses where you see in the roadway would have to be a minimum of 15' further back from where we show them now further into that slope, closer to unit on Maplehurst – closer to the wetlands so the nature of this style of development which is allowed by

special permit which is allowed by special permit in the zoning regulations does allow for a more compact – even though there is a slight density bonus we could still get some ten or eleven units in a conventional development would it would be much more challenging with respect to the topography – with respect to pushing units a little bit further back towards the wetlands and closer towards the slope on the east side of the site.

Mr. Gleason thanked the Commission for allowing him to weigh in on this tonight – he said he found out about this very recently himself in the classified in the Cheshire Herald that alerted him to this hearing and he is grateful for the opportunity. He said he is very concerned about the impact not just to the wetlands but to the surrounding community and he sees it all the time – it's all connected – from people who live around the area to the wildlife within the area to the very keen comments made about the transpirations of the trees – he said he sees this as being a very adverse impact on the entire community – he looks at it as a square peg in a round hole; the idea of few units seems much more interesting to him for its impact or less impact on the ecosystem there but he is happy to live in this community for twenty years and he hopes to live there another twenty years. He said he hopes the decisions that are made are based on data – that's all he asks and take it from there.

Chairman de Jongh said it's probably important to note that the existing or adjacent property had the same issues and concerns when this came before the Commission twenty years ago – so it's almost Déjà vu all over again in terms of the same concerns and situations that came up before – the places where you folks live was developed so we are revisiting the site all over again and here we are two decades later.

Chairman de Jongh said we are not immune or unable to hear the concerns – he said we talked about this when the other development was presented to us.

Chairman de Jongh asked if there were any other comments or questions from the audience or commission members.

Chairman de Jongh asked staff if they received all the information that we were waiting for.

Ms. Simone stated yes.

Dr. Dimmick said he would like to get in writing from the applicant the information that was given verbally in terms the timing of the

detention versus the timing of the watershed – we did get a verbal presentation but he presumed that was in writing somewhere and he wanted it included in the record.

Chairman de Jongh said if we are open to receiving additional information either clarifying comments in writing or what have you – but additional information that needs to be receive – it would be improper to close this public hearing because we would not be able to receive that information at the close of the hearing so if there are details that the commission needs to receive he would recommend that they keep this public hearing open pending the receipt of that information and that way we can add that to the record and have that as part of our deliberations – if the rest of the Commission members are in agreement with that.

Chairman de Jongh recommended that they leave this public hearing open to our next meeting pending the receipt of the information that Dr. Dimmick has requested.

VI. ADJOURNMENT

The public hearing was adjourned at 8:40 p.m. by the consensus of Commission members present.

Respectfully submitted:

**Carla Mills
Recording Secretary
Cheshire Inland Wetland and
Watercourse Commission**