MINUTES
GREENWICH INLAND WETLANDS AND WATERCOURSES AGENCY
January 4, 2016

Members present: Chairman Brian Harris, Vice Chairman Elliot Benton, Secretary Stephan Skoufalos, Jim Carr, Bill Galvin, Norma Kerlin

Alternates present: Jay Schondorf, Steven Fong

Staff present: Patricia Sesto, Director, Robert Clausi, Senior Inland Wetlands Analyst

Others present: Bruce Cohen, Craig Flaherty, Frank Napolitano, Tony D’Andrea, Michael Klein, Brad Aldinger, Michael Manolakas, Moya Duffy, David Nichols, Peter Quigley, Lin Lavery, Joe Melendes, Leslie Yeager

I. Call To Order

Chair Brian Harris called the Public Hearing to order at 7:04 p.m. in the Town Hall Meeting Room on the first floor of Greenwich Town Hall.

II. Seating of Alternates

Jay Schondorf was seated.

III. Public Hearing

APPLICATION #2015-176 – 47 Valley Drive – 47 Valley Drive LLC – Tax #07-2135
Construction of two multi-family buildings with parking underneath 60’ from wetlands, with walkways 25’ from wetlands and a rain garden 45’ from wetlands

Patricia Sesto read the list of documents into the record.
Members Norma Kerlin, Bill Galvin, Steven Fong, Brian Harris, and Elliott Benton indicated they visited the site.

Agent for the applicant, Atty. Frank Napolitano of Frank Napolitano, LLC provided a brief overview of the project before introducing Anthony D’Andrea, P.E. L.S. of Rocco V. D’Andrea, Inc.

Mr. D’Andrea began by stating his expectation the public hearing will not close in order to provide him the opportunity to review comments submitted by Rediness & Mead on behalf of the neighbors.

In describing the process of developing the plan, Mr. D’Andrea stated he met with Scott Marucci, P.E. of DPW’s Engineering Division to assure the plan would be in conformance with Greenwich’s Drainage Manual. Also, a round table meeting was held in October 2015 with relevant departments to introduce the project and receive comments from them.
Ms. Sesto’s staff report called for trees 6-10 inch dbh and the 100 foot boundary of the regulated upland review area be shown on the plans in accordance with the regulations. Trees 8+ inches and the boundary are now on the plan.

In describing the property, Mr. D’Andrea stated the site is in an R12 zone and at one time had a single family residence, with a driveway, stairs and residential landscaping. The house has been removed, although some portions of the drive remain.

The site has a ledge outcropping/knoll in the southern half of the property that rises 40 feet above the low spot on-site. The wetland/pond on-site is in the northwest corner is 1,750 s.f. and extends onto the Georgetown North property. Georgetown North is a condominium development that was built in wetlands years ago and has sustained intermittent problems with sinking. Beyond this multifamily development, single family houses and offices are nearby.

The property fronts on Valley Drive, a busy collector street. The road is subject to a lot of winter sanding, which contributes to the sedimentation of the wetland. A portion of the stormwater ditch leading to the wetland has been previously piped.

The development proposal consists of one 111-car, subterranean parking structure with two separate apartment structures set on it. The garage will have three levels, accessed by one driveway along the southern property boundary. The driveway at its intersection with Valley Drive will be at elevation 99 feet and at the entrance to the garage it will be elevation 120 feet. The lowest floor of the garage will be set one foot above the elevation of the wetland and test hole #4 shows groundwater will be two feet below this floor. To accommodate the construction, the knoll will be eliminated. With the exception of the southern property boundary, the perimeter of the property will not be altered.

Mr. D’Andrea explained the drainage system. The proposed system was reviewed by DPW to establish the plan will handle a 25 year storm event. The bio basin proposed north of the apartments can store the peak flow for the 25 year storm, which is equivalent to 6,000 c.f. of stormwater. The outflow of the basin is controlled via a weir. For the 1-5 year storm events, the volume reaching Georgetown North will decrease.

In addition to the bio basin, green roofs are proposed to manage stormwater. The planting medium is 12 inches deep, with the roofs of the western building, central space, and eastern building being covered by 90%, 80%, and 75%, respectively. As indicated on page 8 of the drainage report, Points of Concern A and B balance.

To address feasible and prudent alternatives, Mr. D’Andrea referenced IWWA application 05-127, which was a four unit development previously approved. This permit included a detention basin and retaining walls 12 feet from the wetland boundary and unit #2 was 32 feet from the wetland. Mr. D’Andrea made the point that the Agency’s approval substantiates that development represented the most feasible and prudent alternative and the currently proposed development is further from the wetland and otherwise very similar.
Mr. Stephan Skoufalos asked if IWWA 05-127 received a public hearing due to the potential for significant impacts. Only this scenario would necessitate a finding of no feasible and prudent alternatives. Mr. D’Andrea was not able to answer the question with documentation on hand.

Mr. Elliot Benton expressed concern regarding groundwater and the impacts of the extensive excavation. While the floor elevation of the lowest garage level is above the elevation of the wetland, this doesn’t account for the excavation for footings. Mr. D’Andrea responded the excavation will go down to elevation 97 feet, but will not interrupt flow paths.

Mr. Jim Carr asked how the excavation would be dewatered if needed. Mr. D’Andrea stated no plans for this have been submitted, however his expectation is the groundwater would be pumped to the stormdrains that drain to the biobasin. In lieu of foundation drains, the foundation will be constructed to be watertight to minimize alterations to groundwater flow.

Ms. Norma Kerlin acknowledged Mr. D’Andrea’s testimony addressed some of staff’s questions; however she would like a point by point summary response. Additionally, members requested a dewatering plan, details regarding sanitary sewage disposal, potential improvements to the ditch to localize sediment accumulation, and pond bathymetry. Obtaining pond bottom elevations will require permission to enter the Georgetown North property from their association.

Michael Klein addressed the Agency to speak to the biological elements. His report includes several recommendations, including a planting plan.

The site was described as having been developed prior to the 1950’s and the house being razed in the mid 1990’s. Based on an examination of historic aerial photographs, there is evidence the wetland system, being the body of wetlands on the subject property and Georgetown North, were being ditched at least back to the 1930’s. The wetland system was further impacted with the Georgetown North development in the wetlands and the remaining wetlands having been excavated to create ponds.

Mr. Klein presented a series of photographs, both on and off-site to the north. The photos show the very shallow nature of the pond, grass up to the ponds’ edges, and the persistent use of the pond buffer on 47 Valley Drive to dump landscaping debris and other waste. The culvert discharging at the south end of the wetland/pond adds to the degradation of the resource.

When the property is examined in a landscape context, it is surrounded by developed land. This point was reiterated via a land use – land cover map showing extensive red coloring, indicating the extent of developed land in association with West Putnam Ave.

The wetland on-site is small, fed by groundwater, and an impacted channel conveys stormwater to the pond. The herbaceous growth in proximity to the pond has been suppressed by leaf dumping. The woody vegetation is dominated by invasive species.

In order to evaluate the wetland values and functions in a consistent manner, Mr. Klein used the “Highway Method” developed by the DOT and ACOE. This method recognizes thirteen functions attributed to wetlands. The qualitative assessment looks at the landscape position of the resources, its
surroundings, and size. The result of the assessment concluded the wetland/pond is not of high quality, but still warrants protection. The small size of the wetland was identified as the consistent detraction from functional value.

Recommendations to improve protection over the originally proposed plan were included in the report. These measures include placing natural fiber erosion and sedimentation control blankets on slopes of 3:1 or greater; adding “wings” to long runs of silt fence; excluding peat moss from the bio basin specifications as peat moss can be a source of invasive species and the moss is harvested from bogs to their detriment; plantings in the buffer of the wetland; and removal of sand and installation of a plunge pool at the ditched channel.

With regards to wildlife, Mr. Klein testified the site currently supports urban tolerant species and it will continue to do so after the site is developed. The plantings proposed around the wetland and in association with the bio-basin will add to wildlife support. Lawn previously proposed on the regraded slopes and within the basin will instead be low maintenance, low growing fescue. This will reduce or eliminate the need for fertilizers and irrigation.

The proposed green roofs will not only manage pollutants during storm events, they also help with dry “fallout.” Ninety nine percent of the hydrocarbon load is bound by thatch and within the top six inches of soil. Details of the green roof design are forthcoming.

Mr. Klein revisited the development proposal approved by the Agency in 2005. While that proposal did have a smaller footprint, there was just a ¼ acre more greenspace than what is currently proposed. Further, the current proposal does not present any adverse impact to the wetland and as such, there is no need to pursue alternatives.

Jim Carr asked Mr. Klein how many times he has been to the site and when. Mr. Klein responded he visited the site twice, once on December 18, 2015 and earlier today, prior to the hearing. Mr. Carr stated the limited inspections mean an accurate assessment of fauna is lacking and even though Mr. Klein used his professional judgment to predict what species would be on-site, it has been Mr. Carr’s experience some sites which don’t appear to be able to support more desirable species actually do. There is no substitution for a multi season, on-site investigation.

Elliot Benton pursued questions relative to groundwater movement. If the wetland is controlled by groundwater, how does the configuration of the ledge influence the groundwater contribution to the wetland? If the ledge which directs groundwater towards the wetland were fractured, would the wetland be deprived of groundwater? Mr. Klein noted discussions of geology and hydrogeology are best directed to those professionals; however he opined the groundwater is likely in equilibrium across the site and the wetland will not be altered due to bedrock excavation. The data to substantiate conditions is being collected currently.

Norma Kerlin questioned the use of an assessment methodology that dates back to 1999 and was seemingly developed for highway construction. Mr. Klein responded the Highway Methodology was intended to create an assessment technique that was rapid and reproducible. The method was developed
principally by the Army Corps of Engineers, and despite its age, it remains as the prevailing system of assessment.

Patricia Sesto expressed concern regarding the late stage of design when Mr. Klein became involved with the project. It is likely the plan would be different if his perspective were incorporated earlier. At this point, he is responding to a firm plan rather than helping to shape it.

Ms. Sesto went on to challenge the conclusion that removal of 80% of the expected sediment load is sufficient. This number is set as a minimum target and considering how much testimony has been presented identifying existing sediment load as a source of wetland/pond impact, this proposal should work harder to reduce their impact. Ms. Sesto also contested the loss of 65% of the remaining wetland buffer. Past development has stripped the wetland of a majority of its protective buffer, which enhances the value of what remains.

Elliot Benton contended the site plan effectively eliminates all of the trees on-site: a statement refuted by the applicant. Accordingly, Mr. Benton requested a tree loss plan to specify which trees are going to be cut. He also requested a comparison of benefits to the wetland between the current forest condition and the proposed conditions.

Steven Fong reiterated the value of examining the site over multiple seasons, including the period of migration. He questioned the impact to the bird community due to tree loss. Mr. Klein responded the weak understory is unlikely to support migratory birds.

Bob Clausi suggested deer protection be incorporated into the plan.

Brad Aldinger, P.E. of Haley & Aldrich Geotechnical Engineers spoke to the Agency regarding his role in assessing groundwater and bedrock. Presently, data is being collected regarding these features for the benefit of the structural engineer and the hydrogeologists. The data is collected by coring the bedrock to examine various quality parameters. This information will also be used to draw up the specifications for the blasting contract and a geotechnical engineer will be on-site to ensure these specifications are adhered to.

Mr. Aldinger identified the planned locations for borings; one in the proposed northwest corner of the western building and a second in the footprint of that same building. In addition to examining the characteristics of the bedrock, groundwater flow will be observed.

Piezometers will also be placed in three wells in each the overburden and bedrock to measure the depth and pressure of groundwater. The current elevation of groundwater is thought to be close to seasonal high.

Michael Manolakas, Senior Vice President with Leggette, Brashears, and Graham responded to questions by Mr. Carr regarding the impact new bedrock fractures could have on the groundwater flowing towards the wetland. Mr. Manolakas described his experience with Connecticut bedrock and his expectation the bedrock on-site is competent and will not produce the scenario Mr. Carr referenced where a fracture is created and the groundwater drains away. The more pertinent potential impact comes
from groundwater flow being blocked once the foundation is introduced. For this particular development, this is unlikely. The size of the structure is too small and the groundwater, as it is currently understood, is lower than the foundation. The piezometer testing will provide the additional information to confirm or refute this working hypothesis and the expectations of the other professional disciplines involved.

With the conclusion of the applicant’s presentation, Atty. Bruce Cohen, of Fogarty Cohen Selby & Nemiroff, LLC addressed the Agency. Mr. Cohen represents the Georgetown North Owner’s Association (GNOA). He described the Georgetown North development and its connection to the subject property. The gaps of information in the application have made it impossible to evaluate likely impacts.

Mr. Cohen entered a title report into the record. The report indicates the applicant is not the owner as indicated on the application form. The land is instead owned by the Estate of Johnson Lee. As there is no authorization from the owner, the application is defective.

The 2005 four-lot conservation subdivision approval was again raised for discussion. This development would have protected 40% of the parcel and makes for an illustrative comparison to the current proposal. Mr. Cohen then referenced a 2004 wetlands application for a six lot subdivision. This application was withdrawn due to a poor reception by the Agency.

Next, Craig Flaherty, P.E. of Redniss & Mead, Inc. presented to the Agency on behalf of GNOA. The watershed of the wetland on 47 Valley Drive and the adjacent Georgetown North development, with its four ponds, is 50 acre in size, with Georgetown North being in the lowest part of it. This location within the watershed makes it susceptible to stormwater impacts.

Mr. Flaherty distributed an excerpt from the Town’s Tom’s Brook Study, describing issues within the watershed and directed the Agency’s attention to the body of improvements recommended within the report.

Mr. Flaherty outlined the major points in his report; deficiencies and inaccuracies pertaining to the requirements of Greenwich’s Drainage Manual; lack of logistical details regarding what it takes to implement this plan and address the fluid conditions of a constrained site under construction: and, questioned if the plan is complete.

He identified factors within the drainage plan regarding proposed and existing conditions which skew the calculations. Some assumptions used existing condition elevations and proposed elevations that are inaccurate. The net result is the delta between existing and proposed is smaller than what will actually be built. Second, the existing impervious coverage figure is based on a 2001 aerial photo, which results in a greater than actual calculation of impervious coverage. This likewise, has the effect of reducing the delta between existing and proposed conditions, and produces a time of concentration estimate that is too long.

Green roofs are a key element in the stormwater management plan. Despite this pivotal role, there is insufficient information provided to understand the design and likelihood for success. Potential problems
can come from the selected curve number, which Mr. Flaherty stated is too low, and the growing medium can potentially contribute nutrient loading depending on what it is. Given the green roofs are necessary to make the drainage plan operate as proposed, more information is needed. Consequences of the green roofs failing include increased volume at a higher velocity being discharged from this drainage feature.

The biobasin lacks details regarding proposed spot elevations and information pertaining to the point source discharge.

Mr. Flaherty proceeded to question if the development proposal is complete. Logistical details are largely absent, the proposed sight line does not meet the town’s requirement, the slope on the plan view and profile view of the driveway are inconsistent, the 38 inch maple proposed for removal on the southern property line may be partially or completely off-site, and how is a 14 foot excavation going to take place at the neighbor’s property line adjacent to the cul-de-sac. These deficiencies may be mostly outside of the regulated buffer, however if adjustments are needed to cure the problem, the development may shift north, closer to the wetland. It comes down to a question of feasibility and the ability of the Agency to make a fair and informed decision as accommodated in the Regulations.

Other issues raised included the 30,000 c.y. of rock and soil to be removed from the site. The erosion and sedimentation control plan does not reflect the dynamics of this undertaking, nor does the plan in the absence of a description of logistics. It will take 3,000 truckloads, which equates to 6,000 trips to haul away the excavated material.

The applicant has stated groundwater is at elevation 96-98, however the elevation of groundwater fed wetland is 101.

The eastern walkways and lower drive account for 3,500 s.f. of imperviousness without the benefit of any Best Management Practices.

No monitoring well is proposed in the bio basin and one is needed.

The garage drains directly to the bio basin and while it is not subject to precipitation, garages are periodically powerwashed. The maintenance protocol of the garage needs to be provided.

With the conclusion of this presentation Chairman Harris invited additional public comment.

Moya Duffy of Georgetown North was recognized. She stated GNOA has worked hard to enhance the buffers surrounding their ponds and there is an abundance of wildlife on-site. Concern for contamination of the wetlands and ponds was stated and substantiated by photographs of sedimentation within the Georgetown North ponds from a comparatively small tree clearing activity. Presently, street drainage
brings oil and sediment and this should not be made worse. Flooding is more than a concern; it is a reality for Georgetown North as the condos were built in wetlands prior to wetland regulations.

Joe Melendez spoke, introducing himself with his credentials as a builder in town. He listed several logistical factors not addressed by the applicant. This is tight site with a lot of regrading. Where are blasting mats going to be unloaded from the tractor trailers, where will they be staged? How will the site accommodate excavators, tri axels, and backfill stockpiles? Valley Drive is a busy street which will hinder this development and this development will impact traffic. No dewatering plan is provided. Green roofs are not easy to sustain and if they fail, how does that impact the stormwater management plan? How will snow be handled after construction is complete? There does not appear to be any room for it. With this extent and intensity of development, the site will be subject to compaction and erosion, and this will compromise the post-development expectations.

Lin Lavery, of Alden Drive spoke. She took issue with the characterization of the development surrounding the subject parcel as being urban. A good portion is residential, with single family homes. She concurred Valley Drive receives a good deal of sand and salt due to its lower position in the landscape. Lastly, Valley Drive also has had many trees fall onto it. Ms. Lavery has observed higher water levels as a result of development in the area.

David Nichols, of Upland Road and representing the Upland Road Association stated the association is opposed to the development due to its scale.

Peter Quigley stated he is a three-term member of the Representative Town Meeting and its Land Use Committee and has a passion for gaining knowledge of groundwater processes. The subject wetland is part of the Tom’s Brook watershed. This watershed already has too much imperviousness and the impacts to water quality that come with it. Tom’s Brook drains to Byram Beach, a beach that has been identified as one of the top three polluted beaches in Connecticut. It is not enough to limit impacts, the Agency must exercise its charge to improve, preserve, and restore wetlands.

Anthony D’Andrea offered a rebuttal to some of the statements made. Yes, Georgetown North has stormwater problems because the area has always functioned to store stormwater. This will not change. Yes, a logistics plan is warranted but should not be a concern of this Agency since it is not a wetlands issue. Part of the problems cited by the public are a result of leaves being repeatedly blown into the wetland from Georgetown North. This practice needs to stop. The green roof design is flexible at this stage of the process and this is why the CN value is presented as a range in the Drainage Manual. This application has presented all of the elements necessary to protect the wetland and others who are negatively impacting it should address their own practices.

Stephan Skoufalos requested the applicant specifically respond to concerns regarding erosion controls, rain gardens, green roofs, maintenance, and points raised by Mr. Flaherty.

Elliot Benton asked Mr. D’Andrea how would fire access be gained on the north and east sides of the structure. Mr. D’Andrea responded by stated this was discussed with the fire department and they raised no issues. Mr. D’Andrea added this consideration is outside of the purview of the Agency.
Frank Napolitano followed up by stating a number of good issues were raised and the applicant’s team will be responding to them, including a point by point response to Mr. Flaherty’s report. As a volunteer fire fighter for 30-35 years, 10 years of that as a Captain, Mr. Napolitano stated the fire apparatus would approach the building via the driveway. If access to the north or east side was needed, firefighters would reach the roof via the mid mount aerial. Hydrants will be available on-site.

Bill Galvin challenged the statements of Mr. D’Andrea that logistics and the like are not a concern to the Agency. These considerations can alter the project layout and this Agency needs to be assured they are reviewing all the conditions that could affect this.

With no further questions from the Agency or public, Chairman Harris continued the hearing to the next regularly scheduled meeting of the Agency on January 25, 2016.

IV. Other Business

   a. General Procedural Discussion
      Citing the late hour, Elliot Benton made a Motion to take up the procedures discussion at a future meeting, Seconded by Bill Galvin, and passed 7-0-0.

V. Adjourn

With no further business, the meeting adjourned at 10:35p.m.

Patricia Sesto
Agency Director