



MINUTES

March 26, 2015

PRESENT: John Hall (Chair), Liz Craig, Tom Burgess, Dan Falta

ALSO PRESENT: Patricia Sesto, Director, Environmental Affairs; Liz Larkin, Recording Secretary; Darin Overton, P.E. Milone & MacBroom; Ed Schenkel, Gregory & Adams; Steve Trinkaus, P.E. Trinkaus Engineering, LLC; Christina Duncan, Resident; Woodson Duncan, Resident; Kate Throckmorton, Environmental Land Solutions; Joe Perugini, Weston & Sampson, Yves LeBel, Haynes Construction; Jennifer Svelnys, Mutual Housing Association of Southwestern Connecticut

ABSENT: Nick Lee, Rick Stow (notified of intended absences)

I. CALL TO ORDER

Mr. Hall called the meeting to order at 7:31 p.m.

II. PUBLIC HEARINGS

A. WET#2295(S) – WILTON YOUTH FOOTBALL – 131 School Road – renovation of existing grass field to an artificial turf field at Middlebrook School (cont.)

Ms. Sesto read the new documents into the record including the request from Gregory & Adams to continue the hearing to provide time for a response to the commission's consultant's report. Ms. Sesto confirmed that the applicant is aware the commission's consultant will provide his findings at this meeting.

Mr. Overton stated his firm was hired to provide a third party opinion on the viability of the applicant's engineering measures for the artificial turf field at Middlebrook School. He noted that he visited the site while there was still some snow cover but saw the outlet and the evident erosion. He explained the focus of his review was to confirm if the applicant's stormwater management design is an improvement to the area's current erosion issues.

The new configuration of the outfall with a preformed scour hole was evaluated and the proposed design will be an improvement to current conditions and the proposal is a DOT approved method to alleviate erosion. Some discrepancies in the inverts and cover issues were noted, so Mr. Overton recommended a profile be completed to see the vertical orientation of the improvement and verify there is sufficient cover.

Mr. Overton stated he expects some sedimentation on the turf field that is tracked by pedestrian and player traffic. He recommends slight changes in the grading north of the field to avoid debris and sediment migrating onto the field and clogging the turf.

Mr. Overton explained his understanding of the runoff from the turf mat. The mat and stone layers underneath will infiltrate the water quickly and will leave no standing water. The interface at the ground surface slows the water down with the filter fabric in place. The runoff coefficient for the field should be 86 to reflect the bare soil conditions onto which runoff will accumulate below the field. The applicant used a coefficient of 82 and substantiate this. Mr. Overton acknowledged Mr. Trinkaus' recommendation to use a 98 RCN, equating the field to pavement.

Mr. Overton stated the sub soil is not compacted in the stormwater management detention area as established by infiltrometer percolation testing. The testing showed the exfiltration numbers were appropriate at 3 inches per hour. In order to avoid disturbing the existing field, testing was not completed by the applicant directly in the infiltration area. Accordingly, more test holes would be appropriate prior to construction to ensure the installers have the best data to create a sound system.

Mr. Hall asked if the soils are more compacted on the field than on the edges and commented that the runoff must be poor with a muddy field. Mr. Overton confirmed the calculations the applicant used are based on surface conditions which could be different throughout the site. There can be varying runoff throughout the year so variations are expected.

Mr. Overton stated that the synthetic turf is porous but NRCS (Natural Resources Conservation Service) did not have any data on turf fields at the time they completed the hydrology manual. Currently, the industry considers it bare soil. He explained the range of soils as "A" being the higher permeability to "D" with the lowest permeability. The soils found at the site are natural so they fall under the "B" category. He added that frost restores permeability and foot traffic does not affect permeability for the infiltrators as it is so far under the surface.

Ms. Sesto questioned the impacts of having the current sheet flow change to be more of an overflow to a point discharge. This is not an improvement. Mr. Overton stated they may simply need to adjust the curve number. Mr. Hall asked if a series of discharges are possible. A level spreader was included as an alternative to mirror the current conditions. The disadvantage is the work would require removing more trees in an upland review area. Due to elevation constraints, options to move the level spreader out of the woods are not feasible. Mr. Overton did conclude the scour hole is designed properly and will alleviate the current erosion problems.

Ms. Craig raised concerns that the crumb infill gets picked up by the surface water and then gets into the wetlands. Mr. Overton confirmed that many items such as tire pieces and various pollutants deposit over time. He added that many companies are getting into the business of artificial turf removal and green options. Mr. Falta asked of the risk to neighbors. Mr. Overton replied that he did not complete any reporting on adjacent properties but noted there is less potential for impact as you move further away.

Mr. Overton stated that the native soil has a higher infiltration rate. He confirmed the detention basin and infiltration are placed in fill a couple feet away from the test pits. He confirmed the

biofilter is deep enough which allows the water to get into the sub soil which is good. Ms. Craig asked if fill is an issue on the turf field. Mr. Overton responded that this is not an issue unless the subsoil did not drain. He went on to say that any soils during excavation that are not good should be replaced.

Mr. Trinkaus stated that the erosion problem occurred when the pipe was put in with a 10% slope. He recommended modifying the existing underground detention to reduce the runoff. Regarding the proposed infiltration system, he maintained the runoff curve number should be 98. The runoff curve number relates to land cover and rainfall and using 82 or 86 is underestimating the amount of water. Mr. Falta asked if the proposal is an improvement from current conditions. Mr. Trinkaus stated it is an improvement but erosion will continue. Mr. Falta asked what the state recommended curve number would be for artificial turf. Mr. Trinkaus responded that there are not enough studies to determine this number.

Ms. Sesto expressed her support in using an 86 curb number as the runoff is getting to bare soil, it is not collecting on pavement and discharging to a collection system for discharge. Mr. Trinkaus stated he uses a 98 curve number for the artificial turf field he designs. He also noted the TR55 is based on the surface condition and not 1 foot down. The applicant should take a conservative approach in this project as there is not enough data to know it will work. The applicant only dug four test holes where protocol states that there should be eight, using four on each side.

Ms. Sesto asked about the separating distance to the restrictive layer. Mr. Trinkaus responded that this is variable and needs more testing. He also stated that there are too many assumptions in the plan to ensure the project will work.

Mrs. Christina Duncan spoke to the rainfall data she provided to the commission at a previous hearing. The data from the state is not current but Cornell is currently investigating. She expressed concern about the lead and toxins that could end up in wells. She asked that the town take a long careful look at fixing the existing field with natural grass. She noted that Mr. Healy testified that the youth teams tear up the field and asked why these groups are not paying to maintain the field. The turf was being gifted now but that taxpayers will need to pay for replacement and/or repairs in the future. It is not a gift without cost and she does not want it here.

Mr. Woodson Duncan disagreed with the idea of allowing the contractors to complete the testing once construction begins. He stated that he understands that it is good to recycle tires but they will resurface as they are very durable. His issue is that the compounds are concentrated and do not go away. He noted a UCONN study that showed these crumbs leeches out with the water. He expressed that he wants real information and that the assumptions made can create significant exposure.

Ms. Craig MOVED to EXTEND the public hearing, SECONDED by Mr. Burgess and CARRIED 4-0-0.

B. WET#2305(S) – WILTON COMMONS – 21 Station Road – Phase II affordable elderly housing development (cont.)

Mr. Perugini confirmed he was asked to review the existing drainage and underground detention

system to ensure the water quality structure was functioning as it should. He noted there was a storm just after the last meeting so he went to the site to collect samples and there was no discharge observed. He found the outlet but as the chamber is underlaid by 6 inches of crushed stone, he expected the runoff to infiltrate down. He stated he would wait until the next big storm and try again.

Mr. Perugini stated he looked into the condition of the existing drainage structures and confirmed that Haynes Construction had recently cleaned the lines. There is about 6 inches of sediment in the catch basins so cleaning is not necessary at this time.

Ms. Throckmorton met with Ms. Sesto to determine the best solution for the plantings during this phase of construction. The original wetland scientist had reported a low survival rate of 50% due to deer browse. Ms. Throckmorton proposed a more comprehensive plant list with what needs to be replaced and what will be planted for this new phase of construction. More trees than shrubs are proposed as they are more resistant to browse.

With no further questions or comments from the public, the hearing was closed.

III. APPLICATIONS READY TO BE REVIEWED

A. WET#2305(S) – WILTON COMMONS – 21 Station Road – Phase II affordable elderly housing development (cont.)

The commission discussed the special conditions that should be included.

Mr. Falta MOVED to APPROVE WET#2305 with the General and normal Special Conditions and the additional Special Conditions that a revised planting plan will be created and a new bond will be deposited for the plantings that did not survive; one tree may be substituted for 3-5 shrubs originally installed; weekly monitoring shall continue with Phase II; the applicant shall provide the town with an as-built for the infiltrator; there will be a site meeting with staff to verify the plantings and re-work; and there shall also be water quality testing during discharge post-construction to assure compliance with expected renovation, SECONDED by Ms. Craig and CARRIED 4-0-0.

IV. APPLICATIONS TO BE ACCEPTED - None

V. APPROVED MINOR ACTIVITIES - None

VI. CORRESPONDENCE

A. WET#2166(S) – ASML – 77 Danbury Road – proposed field change to existing permit to increase the width of the driveway

Ms. Sesto explained the applicant has requested a field change to increase the width of the driveway approved under WET#2166. Seven parking spaces were removed close to the river to compensate for the additional driveway coverage.

The commissioners agreed this is approved as a field change.

VII. OTHER APPROPRIATE BUSINESS

A. VIOLATIONS

- 1. DeVito – 40 Honey Hill**

- 2. English – 189 Westport Road**

- 3. Leska – 50 Sunset Pass**

Ms. Sesto stated there are no updates.

B. APPROVAL OF MINUTES – March 12, 2015

Mr. Burgess MOVED to add the approval of the February 26th meeting minutes to the agenda, SECONDED by Ms. Craig.

Ms. Craig MOVED to APPROVE minutes for February 26 and March 12, SECONDED by Mr. Falta, and CARRIED 4-0-0.

VIII. ADJOURN

Mr. Burgess MOVED to ADJOURN at 9:35 pm, SECONDED by Mr. Falta and CARRIED 4-0-0.

Respectfully Submitted,
Liz Larkin
Recording Secretary, Environmental Affairs