Amy Harvey

From: Julie McClintock <mcclintock.julie@gmail.com>

Sent: Wednesday, April 18, 2018 5:58 PM

To: Amy Harvey

Cc:Stefan Klakovich; Pamela Schultz; Town CouncilSubject:CHHS Stormwater: Recommendations and AdditionAttachments:Stormwater Recs for CHHS.pdf; ATT00001.htm

Amy

Attached are the February 27th list of recommendations from the Stormwater Advisory Board made to the School Administration and School Board for stormwater improvements for the CHHS renovation project.

Following several meetings, we wrote the letter to memorialize the stormwater features that would be included in the final permit. We understood that the School Administration agreed to them all.

Please be sure these documents are part of the public record for tonight's public hearing.

Thank you!

—julie Julie McClintock 614 Beechtree Ct Chapel Hill, NC 27514 919 967-3661 919 259-0036

Begin forwarded message:

From: Stefan Klakovich <klakovichs@gmail.com>

Subject: Addition to CHHS Stormwater recommendation

Date: April 1, 2018 at 9:21:02 PM EDT **To:** allboardmembers@chccs.k12.nc.us

Cc: Pamela Schultz <<u>pamela.b.schultz@gmail.com</u>>, Julie McClintock <<u>mcclintock.julie@gmail.com</u>>, Sue Burke <<u>sburke@townofchapelhill.org</u>>

Dear School Board Members,

Thank you for considering our stormwater recommendations for the High School Renovation Project. (February letter attached). We are writing to add to our list of recommendations a resolution our Stormwater Advisory Board passed at our last meeting on March 27th.

As stated in our prior recommendations, the feature of greatest concern to our board was the new entrance on Seawell School Road that traverses a healthy creek with a new road with three lanes

and sidewalks. Our prior board discussion lamented that the DOT rules for on-site queuing of cars would appear to trump the consequential environmental damage.

In the attached letter, we recommended that if the final design includes this feature, the Chapel Hill Stormwater Advisory Board highly recommended the following items:

- 1 Widening of the entrance road off of Seawell Drive should be done on the opposite side from Jolly Branch so construction can stay out of the managed watershed area.
- 2 The new road crossing Jolly Branch should have a box culvert.

We understand the project has incorporated both recommendations in the current in the plan. Both of these measures will greatly mitigate the impact of the crossing. However, even with these mitigation measures, a three lane road directly thought the Jordan Lake Buffer zone will have a long-term impact on the stream.

In our March 27th meeting, we discussed the recommendations of the other boards, including the Environmental Stewardship Advisory boards recommendation for an environmental impact statement. One way to significantly reduce the impact of the stream crossing would be to use the crossing for temporary construction access, and to develop a plan to provide on-site queuing without the permanent road crossing Jolly Branch.

If the School Administration deemed it necessary to build the road to facilitate construction, the drive could be narrowed to one lane and later converted for pedestrian use between the schools. This would have an added benefit of connecting the high school and middle school to the Homestead Rd. Multi-Use Path now under construction.

Because of the possible long-term impact on stormwater that the road-crossing poses, the board decided unanimously to amend our present recommendation to add the following recommendation:

3 - "If deemed not permanently needed, it is recommended that the temporary construction access stream crossing be converted for pedestrian or greenway use."

Thank you for considering this additional recommendation.

February letter attached.

Stefan Klakovich Chair, Stormwater Advisory Board

MEMORANDOM

TO: Todd LoFrese and the Chapel Hill Carrboro City Schools School Board

FROM: Stefan Klakovich, Chair, Stormwater Management Utility Advisory Board

CC: Chapel Hill Town Council

SUBJECT: Stormwater Recommendations for new CHHS construction project

DATE: February 27, 2018

The Stormwater Management Utility Advisory Board appreciates the opportunity to collaborate with Chapel Hill Carrboro City Schools on the design of the construction of new buildings at CHHS. After reviewing the latest site design, the Stormwater Board makes the following recommendations:

We highly recommend storm water measures that improve storm water quality and address nutrient reduction which assists in meeting Chapel Hill residents to meet the Jordan Lake Rules.

We also highly recommend stormwater measures that provide educational opportunities. Schools are incredibly efficient places to educate the public. Money spent on education here goes much further than spending on education elsewhere and thus should be considered when weighing the costs.

Given the significant issues with past flooding and the addition of impervious area, a well thought out Stormwater Management Plan is crucial for this site and will help refine the design and selection process for the final stormwater features.

We are pleased to endorse the inclusion of stormwater features currently in the site design. When the plan is brought to the Chapel Hill Town Council for consideration, which elements are required to meet stormwater management regulations, and the school board is committed to constructing.

Bio-retention ponds that drain parking lot water. This is a very cost effective feature that reduces stormwater flow, improves water quality, and due to its visibility and accessibility provides educational opportunities.

Harvest rainwater from the roof of the new building in above ground cisterns. If this collected water is used to irrigate raised beds and other plantings in the courtyard, it will also improve water quality. This reuse of stormwater has high educational value as well as it can be directly used by students. This water should also be allowed to be slowly released to the intermittent stream to maintain base flow and maintain a minimum stormwater capacity for the cistern.

Employ careful re-sloping of the old athletic field east of the new road to slow stormwater flow and reduce erosion in to Jolly Branch. We request the adding native plantings and trees on the slope as a cost effective way of slowing run-off, reducing erosion and increasing wildlife habitat.

Include one-half acre of pervious pavement in the parking lot. This will reduce stormwater and any increased infiltration will enhance water quality. These pervious pavers also showcase a viable alternative to asphalt and its high visibility, a feature with high education value.

Use Native plantings and trees wherever possible.

This is not an expensive addition and adds wildlife value to the site as well as educational opportunities. Once established, native landscapes require less maintenance and save money.

The feature of greatest concern to our board was the new entrance on Seawell School Road that traverses a healthy creek with a new road with three lanes and sidewalks. The Board discussion lamented that the DOT rules for on-site queuing of cars would appear to trump the consequential environmental damage. If the final design includes this feature, the Chapel Hill Stormwater Advisory Board highly recommends the following items that are not included in the current plan when we reviewed it:

- **1 Widening of the entrance road off of Seawell Drive should be done on the opposite side from Jolly Branch so construction can stay out of the managed watershed area.** Presently, the plan calls for expanding the width of the Seawell School Road entrance to accommodate on site cueing of cars. We recommend that the extra width of this road be added to the south side of the present road so as to avoid encroaching on the steep slopes of the creek. We were told by the architect that this should not add cost to the project nor would it change traffic flow or necessitate extra work on Seawell School Road. The creeks on this property have already been severely impacted by the existing school. All reasonable measures should be made to reduce any additional impacts from road construction.
- **2 The new road crossing Jolly Branch should have a box culvert.** Box culverts allow for a more natural flow of water enhancing the riparian habitat of the creek. All reasonable measures should be made to reduce additional negative impacts on the creeks. The additional cost of a box culvert is not unreasonable.

We also highly recommend that the school district maintain contractual services with a sweeping service to maintain the pervious pavement. This is extremely important to maintain this expensive investment and to assure that it operates effectively.

In addition to the above recommendations, the Stormwater board also recommends that the school administration apply for a 319 grant to help finance enhanced educational stormwater features that will be installed in the enclosed courtyard. Highly visible projects that are educational are often given priority so we strongly recommend the district pursue this grant funding.

The board would also recommend the administration consider applying for an **Environmental Education (EE) grant through the U.S. EPA** to create a Stormwater Outdoor Classroom. Proposals are due March 15, 2018. https://www.epa.gov/education/environmental-education-ee-grants