



**Ridgefield Conservation Commission
Town Hall Annex
66 Prospect Street
Ridgefield, CT 06877
(203) 431-2713**

July 11, 2017

Ms. Rebecca Mucchetti, Chairman
Planning & Zoning/IWB
Town Hall Annex, 66 Prospect Street
Ridgefield, CT 0687

**RE: Proposed Site Modifications at Schlumberger Property
36 Quarry Road (Lot: E14-0162)**

Dear Ms. Mucchetti:

Project Recommendations:

- 1) The Conservation Commission recommends amending the drainage plan to capture and treat the water quality volume from: (a) the semi-circular access road from the driveway to the existing parking area to the north of the Philip Johnson Building to the driveway access to the new 64 space parking area to serve the theater building use, (b) the 90 parking spaces located to the north and west of the Philip Johnson Building to serve that building, and (c) the 50 space parking area to serve the theater use building.**
- 2) Although we agree that the use of hydrodynamic separators to remove coarse sediment and hydrocarbons from stormwater runoff is beneficial, we strongly recommend that the hydrodynamic separators be used as a pre-treatment facility prior to biological treatment (such as bioretention or other appropriate practices) which will also remove excessive nutrients found in runoff from being discharged from this redevelopment project to the nearby Great Swamp.**

Project Summary:

The project involves the construction of a new road (replacing an existing gravel road), the addition of 64 new parking spaces (50 in a new lot to be constructed and 14 added to an existing lot), walks, new lighting and landscaping. The Town of Ridgefield is the applicant.

According to the engineer's report, prior to the demolition of buildings in 2015, the property contained 4.38 acres of impervious surfaces. Under the current plan, the property will contain 3.05 acres. This is the rationale the applicant's engineer is using to conclude that no stormwater detention is needed. To protect downgradient water resources, the plan includes the installation of two hydrodynamic separators and two bioretention areas.

COMMENTS:

1. Runoff from the Parking Area Pavement Surfaces - With the close proximity of the largest wetland in town, the Great Swamp, to the immediate east of the property, we recommend that the grading and drainage plan be amended to provide for treatment of the water quality volume from all of the two parking areas (to serve the Philip Johnson Building and the theater building) and a portion of the road that connects the two. The Great Swamp receives flows from Ridgefield Brook and the center of town. In that the Brook does not meet its designated use classifications according to the DEEP due to polluted point and other stormwater discharges, and groundwater contamination, (*2014 CT DEEP Integrated Water Quality Report*), we recommend this as a reasonable step to improve the water quality of the discharges into the Brook and the Great Swamp.
2. Delineate the Drainage Areas to the Treatment Facilities - In reviewing the plans, it appears that the runoff from only a portion of the new impervious areas to be created in expanding the parking area to the west of the existing Philip Johnson building will be directed into the proposed bioretention facility to the east of the Philip Johnson building.

Recommendation: The applicant's engineer needs to depict the boundary of the drainage area to the bioretention facility on a site plan. Calculate the impervious and pervious contributing areas.

Provision for an appropriately sized pre-treatment facility for the runoff being directed to the bioretention facility needs to be depicted on the plans.

3. Delineate the Drainage Areas to the Other Treatment Facilities - As for the second bioretention facility shown to the east of the Philip Johnson building, it is unclear from the grading plan how runoff is proposed to be directed into that facility.

Recommendation: As with the other bioretention facility, the applicant's engineer needs to depict the boundary of the drainage area to the bioretention facility. In addition, also calculate the impervious and pervious contributing areas to the bioretention facility.

4. Paved Surface from Handicapped Parking Spots - A paved surface should be provided from the handicapped parking spots (parking lot) directly to the front door of the theater with no interruption. Note that the front door of the theater is not the original front door to the building.

Respectfully Submitted:

Alan L. Pilch, PE, RLA, on behalf of the Ridgefield Conservation Commission