



# BROOKER ENGINEERING, P.L.L.C.

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September 8, 2014

Town of Orangetown Planning Board  
20 Greenbush Road  
Orangeburg, New York 10962

Attn: Cheryl Coopersmith, Chief Clerk

Re: Anellotech Site Plan – Building 123/170A, Pasteur Road  
Planning Board Drainage Review (PB meeting 09/10/2014)  
BBE #OTN0046

Dear Ms. Coopersmith:

As the drainage consultant for the Town of Orangetown Planning Board, we have prepared the following drainage review report in support of the Anellotech Plan application to the Town of Orangetown Planning Board:

### Information Reviewed

- "Site Plan for Anellotech, Inc.", prepared by Civil Tech Engineering and Surveying, PC, signed and sealed by Lawrence E. Torro, PE, Drawing 1 of 1, last revised 8/14/2014
- "Anellotech: Addition to Building 123", prepared by Mathew Oscar Architect, not signed and sealed, Drawing 1 of 1, dated June 19, 2014
- Project Application & narrative dated June 17, 2014
- Hydraflow Hydrograph Calculations dated September 8, 2014

### Project Description

This is our first drainage review report to the Planning Board for this project. The project consists of the construction of a 46' x 49' building extension and paved driveway and loading area. The area slopes downhill in a westerly direction and there is an existing riprap swale along the downhill limit of land disturbance. The applicant is proposing two drywells to provide stormwater mitigation.

### Project Comments

1. The storage volume calculations should use the inside diameter of the drywell when calculating the volume of the drywell. The volume of the stone under the drywell should not be included as part of the available volume calculations.
2. Provide a connector pipe between the drywells.
3. Show the frame and grate on the drywell detail. Remove the overflow pipe from the drywell detail. Note on the plan the runoff pattern of overflows from the drywell.
4. Provide spot grades on the "fork lift and empty palette area" that demonstrate that runoff is directed away from the building.
5. Add a map note that clearly shows which rooftops are to be directed to the drywells; the calculations are based on 0.18 acre of land disturbance. The new driveway and fork lift area appear to bypass the drywells.
6. Add a map note indicating the maintenance plan for the drywells. Include in the plan that the receiving field inlet is to be cleaned as well.
7. Add a map note that a soil test pit should be performed that demonstrates groundwater will not affect the stormwater design.

**Drainage Review Recommendation**

The application shows potential significant impacts with respect to stormwater runoff can be mitigated. We therefore recommend that the Anellotech Site Plan be approved for drainage subject to the above project comments.

Very truly yours,



**BROOKER ENGINEERING, P.L.L.C.**

Kenneth DeGennaro, P.E.

## Planning Board Review Summary

### Project Data

Job Name Anellotech Site Plan	Owners: Pfizer, Inc.	Address Pasteur Rd	Tax Lot Number 68.08-1-1B
Job Description: 46'x49' building addition; 0.12 new impervious area added.		Planning Board No. N/A	BBE Number OTN0046

### Planning Board Data

Date of:				Drainage:		
PB meeting	Site Plans	Drainage Calcs.	BBE Review Letter	Approved	Not Approved	Approved w/ Conditions
09/10/2014	8/14/2014	09/08/2014	09/08/2014			<b>X</b>

### Construction Data

Area of Disturbance:	0.18 acre
Erosion Control Plan Required:	Yes
SWPPP Required:	To be determined
Post Construction Stormwater Quantity Required:	Yes
Post Construction Stormwater Quality Required:	No
Description of Required Stormwater Management:	Two drywells

### Photographs



Description: Looking northeast at location of building addition.

Date: 07/22/2014



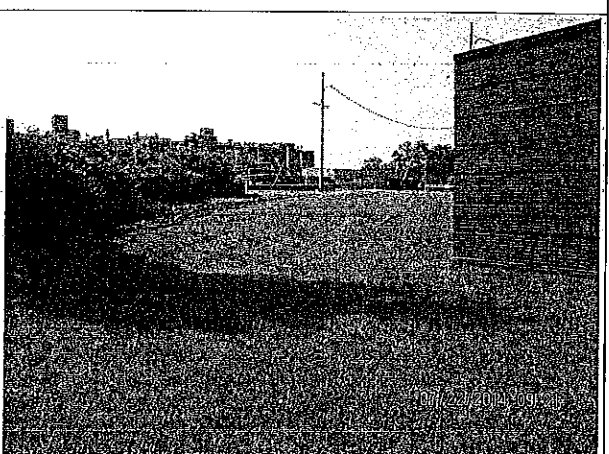
Description: Standing at existing building, looking west at area of building addition.

Date: 07/22/2014



Description: Looking at riprap swale at northwest corner of proposed building addition.

Date: 07/22/2014



Description: Standing at northern end of proposed building addition, looking northeast

Date: 07/22/2014