

Memorandum

To: David Gleassey
Secaucus Office

From: Gregory J. Sullivan, P.E., P.P., C.M.E.

Date: 4/29/2016

Re: Dumont D'Angelo Farm Project

Our office has reviewed the submitted documents, evaluated the assumptions in the report, performed independent calculations and performed selected field survey of existing conditions.

The documents reviewed were the following:

1. Sanitary Analysis Memorandum dated April 20, 2016 prepared by Stonefield Engineering and Design
2. Revised Flow Analysis Spreadsheet dated April 28, 2016
3. Revised Tributary Sanitary Sewer Analysis Exhibit Dated 3/24/2016 revision 3 4/27/2016
4. Cad Files for Revised Tributary Sanitary Sewer Exhibit dated April 28, 2016

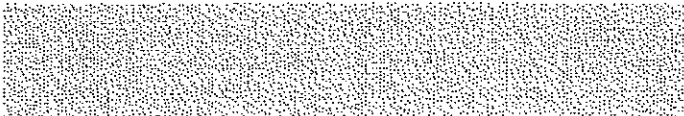
The base assumptions for this analysis were that all homes are 300 gallons per day, Inflow and Infiltration is not part of the analysis and that commercial and residential flow rates are consistent with NJDEP rule and regulations. The linear footage of pipe was assumed as per Northwest BCUA televising and the pipe diameter is as per Northwest BCUA or as field verified. Pipe slopes were based upon existing Dumont Sanitary Sewer Mapping and not field verified.

The proposed facility was analyzed to contribute 22,875 gallons per day to the beginning of the analyzed collection system. We disagree with the analysis of splitting the flow at Manhole 423A into 50% each way. Our review of the flow requires an independent analysis of each leg downstream of Manhole 423A at 100% of the flow.

The criteria evaluated was consistent with NJDEP rules and regulations requiring flow to be evaluated at twice the average flowrate at 50 % pipe diameter.

The pipe criteria failed at the following segments

1. Segment 27 from Manhole 410B to Manhole 400B



June 10, 2016

This segment is proposed to be improved by pipe bursting the 8 inch diameter to a 12 inch diameter.

2. Following group of Segments

- a. Segment 41A MH 422A to MH 421A
- b. Segment 43A MH 420A to MH 410A
- c. Segment 44A MH 410A to 360A
- d. Segment 40 MH 423A to MH 403A
- e. Segment 41 MH 403A to MH 402A
- f. Segment 42 MH 402A to MH 401A

The above segments under 2 are proposed to be remediated by the installation of a 12 inch diameter sanitary sewer pipe from MH 423A to MH 390A down Hickory Street. The proposed 12 pipe would redirect flow down Hickory and weir the existing pipes to act as emergency only.

By making the above improvements the existing system will conform to NJDEP rules and regulations and be capable of accepting the proposed flow of 22, 875 GPD.