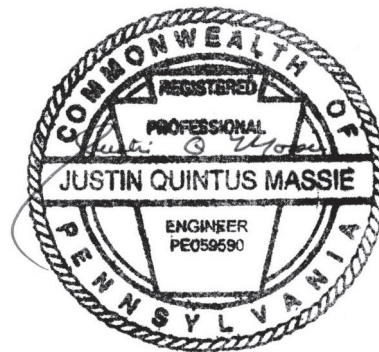


# Offsite Discharge Analysis

For

## Upper Dublin Township Building

Upper Dublin Township, Montgomery County, PA



May 26, 2023

TE # 20033

# **OFFSITE DISCHARGE ANALYSIS**

## **FOR**

### **UPPER DUBLIN TOWNSHIP BUILDING**

Upper Dublin Township, Montgomery County, Pennsylvania

The off-site discharge analysis is provided as a supplement to the stormwater calculations in the Post Construction Storm Water Management Analysis (PCSM Report).

The site has two discharge points where storm runoff leaves the site. However, all stormwater from the site is conveyed to the Unnamed Tributary to the Wissahickon Creek, which is located southwest of the site.

Discharge point 001 is located at a 36" CMP pipe leaving an inlet in the southwest corner of the site. Flows for discharge point 001 are then conveyed via storm sewer to a stormwater basin on the adjacent Upper Dublin School District property and then is discharged via the outlet structure to a pipe system that discharges to a culvert running under Route 309 and then to the unnamed tributary to the Wissahickon Creek. A reduction of impervious area and total drainage area to this discharge point has resulted a reduction of the runoff volume. Specifically in pre-development it was 24,766 CF of runoff. Post-development will only have 23,949 CF of runoff. Therefore, in post development the site will have a 816 CF reduction of runoff volume. Further, the post-development rates to discharge point 001 were reduced as is detailed on the rate summary sheet in the PCSM Report. We would also point out that the discharge point is discharged into an existing underground pipe system.

Also, per the Off-Site Discharges FAQ dated January 2, 2019 (Note 5.A on page 3) when the off-site flow path is to an underground storm sewer system, a demonstration of preventing accelerated erosion is not required to be provided. Therefore, as we are proving in this post construction analysis that we are reducing the 2 year volume of runoff and rates of runoff in all storms and that we are discharging to existing storm networks we believe we have addressed the requirements of the offsite discharge analysis for discharge point 001.

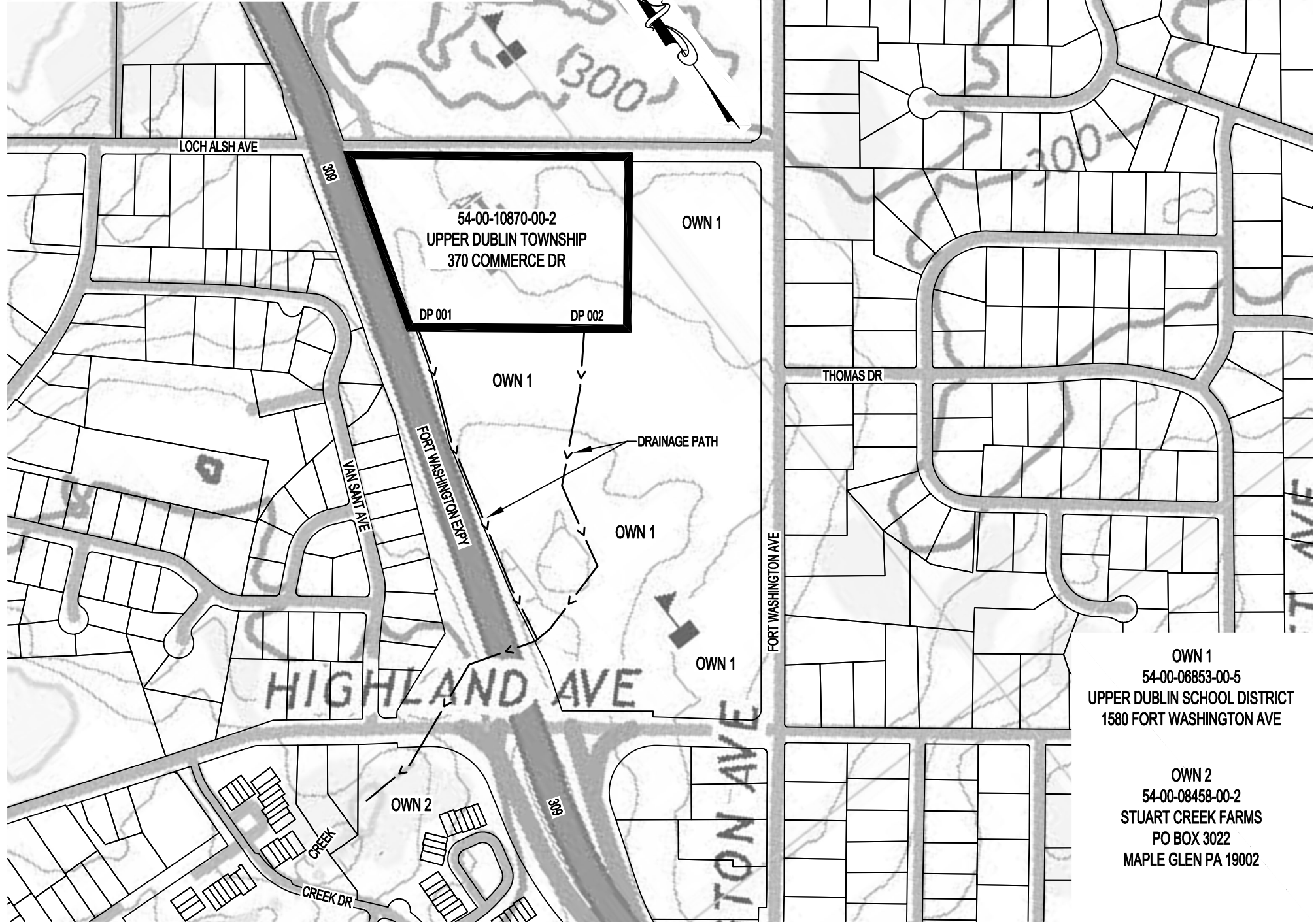
Discharge point 002 is located at an inlet in Upland Avenue located in a 36" RCP leaving the site, near the southeast corner of the site. The flows to discharge point 002 are then conveyed via pipe network to the culvert running under Route 309 and then to the unnamed tributary to the Wissahickon Creek. The storm design for discharge point 002 results in a reduction of the runoff volume leaving the site. Specifically in pre-development 23,442 CF of runoff leaves the site. Post-development would've created 31,090 CF of runoff, but 11,879 CF of that runoff is collected into the detention/infiltration basin (BMP 2) which infiltrates 7,967 CF of the runoff. Therefore, in post development only 23,123 CF of runoff is discharged to discharge point, which is a 319 CF reduction of runoff volume. Further, the

post-development rates to discharge point 002 were reduced as is detailed on the rate summary sheet in the PCSM Report. We would also point out that the discharge point is discharged into an existing underground pipe system.

Also, per the Off-Site Discharges FAQ dated January 2, 2019 (Note 5.A on page 3) when the off-site flow path is to an underground storm sewer system, a demonstration of preventing accelerated erosion is not required to be provided. Therefore, as we are proving in this post construction analysis that we are reducing the 2 year volume of runoff and rates of runoff in all storms and that we are discharging to existing storm networks we believe we have addressed the requirements of the offsite discharge analysis for discharge point 002.

UPPER DUBLIN TOWNSHIP MUNICIPAL BUILDING  
DOWNSTREAM ANALYSIS PLAN

DATE: 5/22/2023 SCALE: 1" = 400'



OWN 1  
54-00-06853-00-5  
UPPER DUBLIN SCHOOL DISTRICT  
1580 FORT WASHINGTON AVE

OWN 2  
54-00-08458-00-2  
STUART CREEK FARMS  
PO BOX 3022  
MAPLE GLEN PA 19002