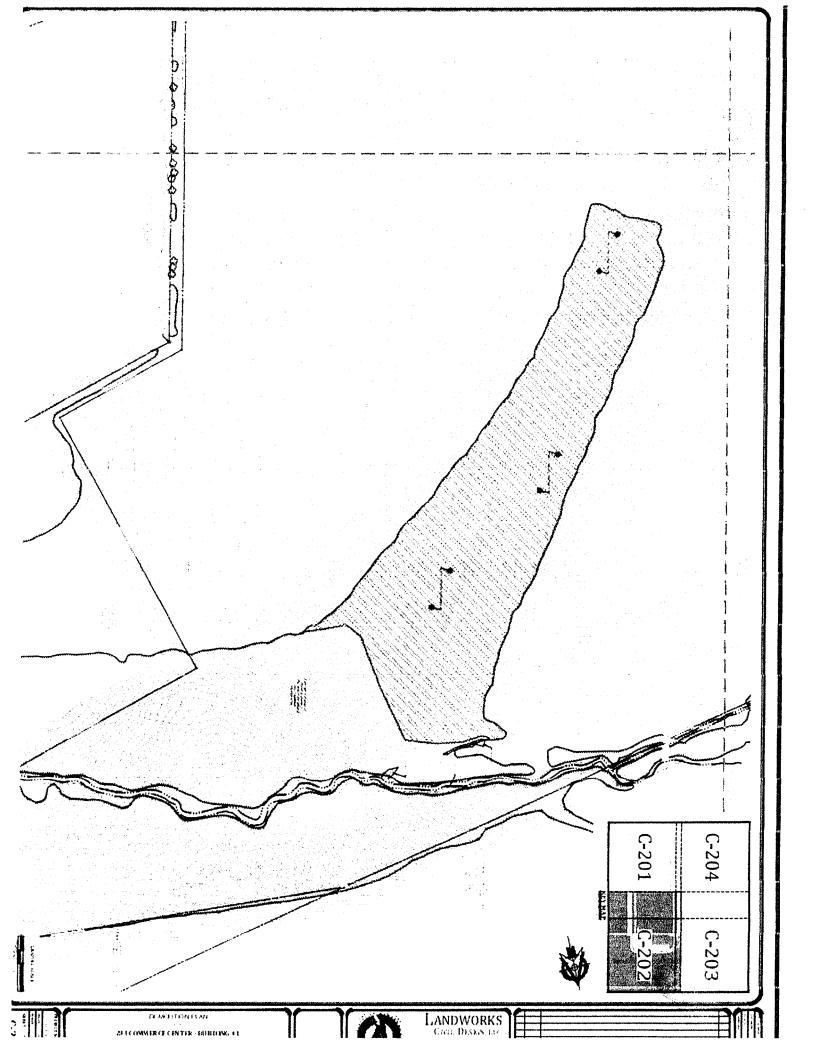
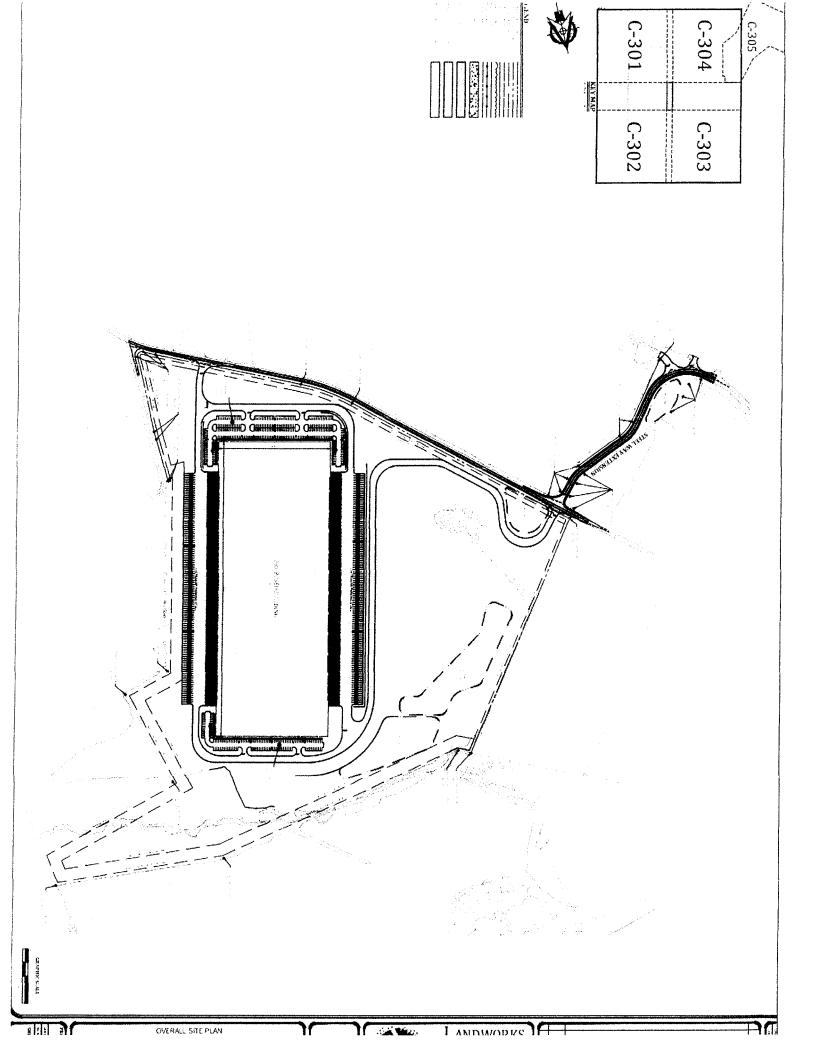
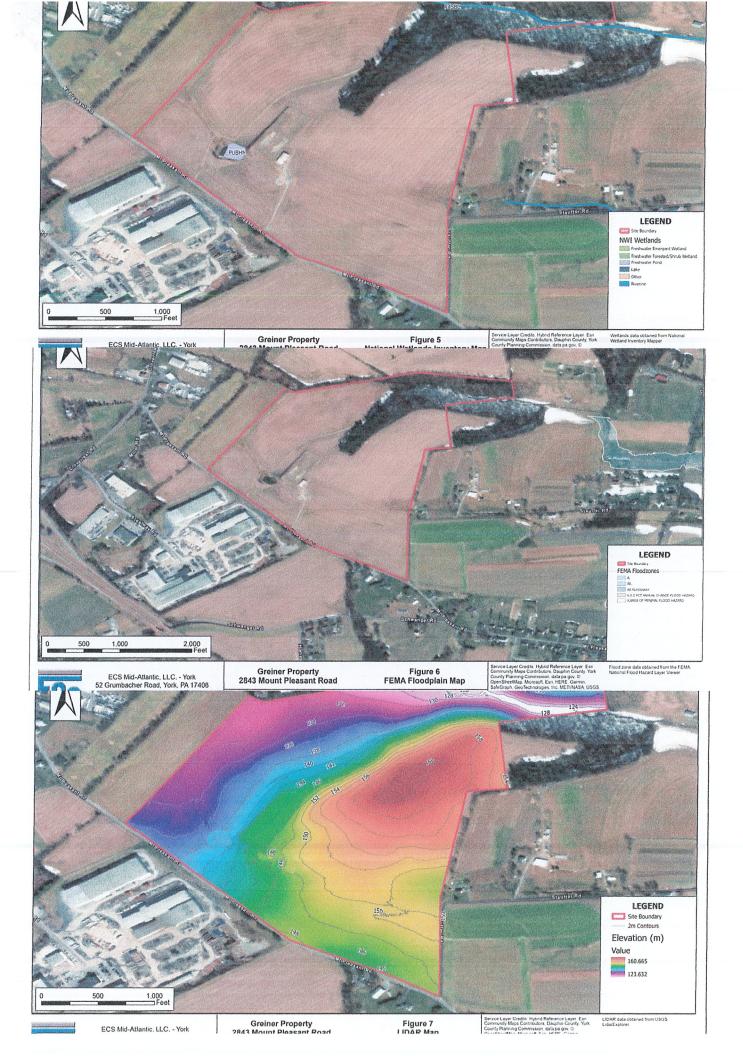


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credit by reducing the volume and improving the quality of stormwater runoff. These areas are identified as "meadow" in all post-development calculations.

## PEAK DISCHARGE RATE

The following tables summarize the pre-development and post-development peak discharge rates within each on-site watershed analyzed as part of the subject project. Given the size of the watershed areas involved, the analysis was conducted using the Soil-Cover-Complex Method (TR-20), the NOAA Type II rainfall distribution, and HydroCAD Version 10.0 methodologies for the 2, 5, 10, 25, 50 & 100-year storm events. The 24-hour storm duration precipitation depths used for stormwater management analysis were obtained from the National Oceanic and Atmospheric Administration (NOAA) website for the Mount Joy Township, PA station. A printout copy of this rainfall data can be found as a reference within Appendix C of this report.

In accordance with Mount Joy Township's Stormwater Management Ordinance for peak discharge rate calculations, all pre-development runoff curve numbers are based on actual land use assuming good land conditions. All offsite post-development runoff curve numbers are based on actual land use assuming poor land conditions.

Peak discharge rates for each watershed are summarized below.

Watershed Area #1 (DP 001)	Design Year Storm Event						
Discharge Rates: cubic feet per second (cfs)	2	5	10	25	50	100	
Pre-Dev. discharge at POI:	11.32	17.41	22.97	31.68	39.49	48.35	
Post-Dev. combined routed discharge at POI:	6.97	14.92	21.05	27.78	31.06	45.60	
Net change in discharge at POI:	-4.35	-2.49	-1.92	-3.90	-8.43	-2.75	

Watershed Area #2 (DP 002)	Design Year Storm Event					
Discharge Rates: cubic feet per second (cfs)	2	5	10	25	50	100
Pre-Dev. discharge at POI:	7.76	11.80	15.46	21.18	26.30	32.15
Post-Dev. combined routed discharge at POI:	2.60	5.28	7.98	12.51	16.81	21.90
Net change in discharge at POI:	-5.16	-6.52	-7.48	-8.67	-9.49	-10.25

Watershed Area #3 (DP 003)	Design Year Storm Event					
Discharge Rates: cubic feet per second (cfs)	2	5	10	25	50	100
Pre-Dev. discharge at POI:	29.53	44.62	58.49	80.44	100.25	122.88
Post-Dev. combined routed discharge at POI:	14.93	25.18	35.09	51.34	66.52	84.31
Net change in discharge at POI:	-14.60	-19.44	-23.40	-29.10	-33.73	-38.57

