

Stormwater Summary The Shoppes at Concord

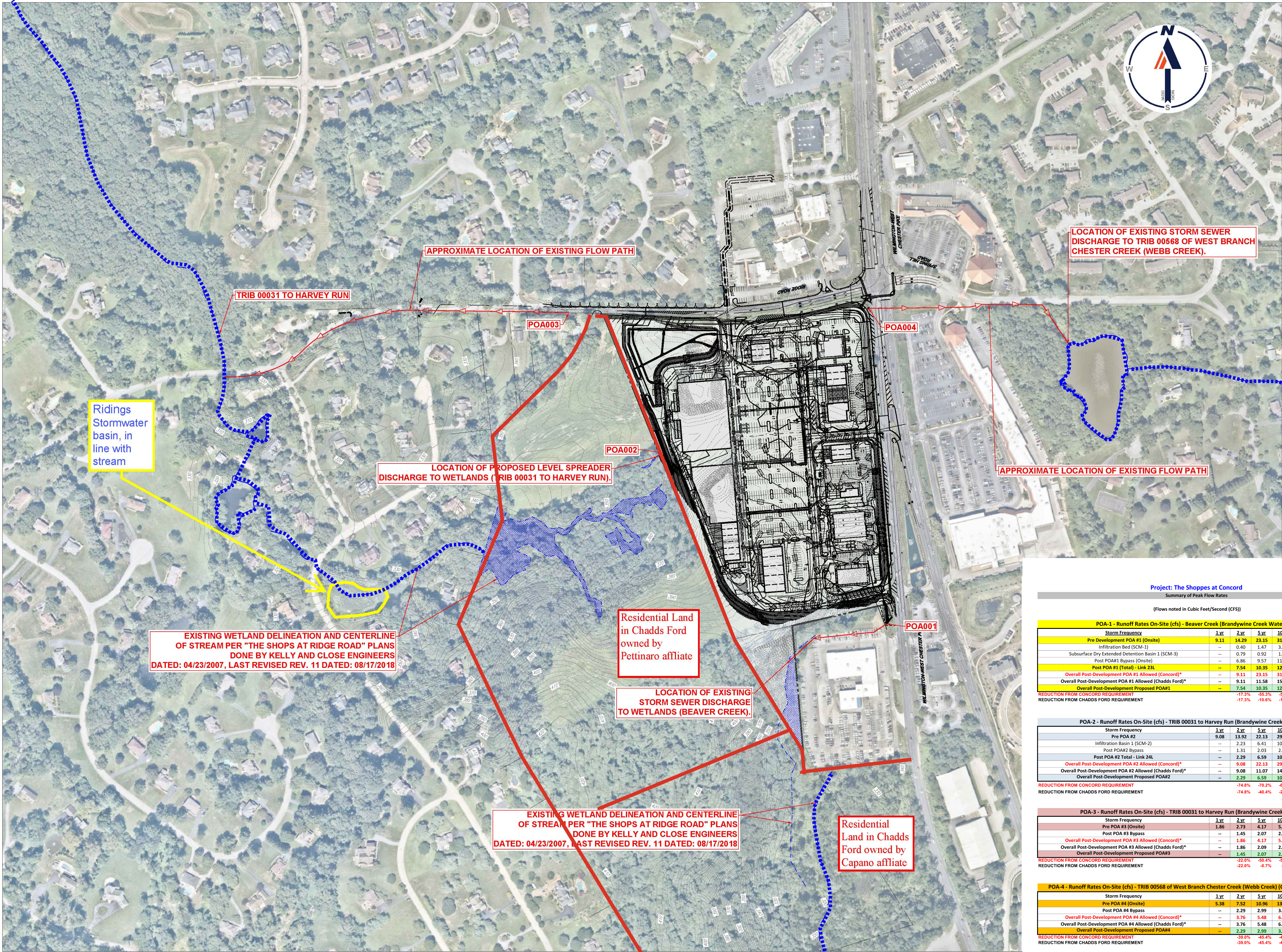
Concord, PA

7.17.2026

BOHLER //

hct design group

 **Retail Sites** LLC



EXISTING WETLAND DELINEATION AND CENTERLINE OF STREAM PER "THE SHOPS AT RIDGE ROAD" PLANS DONE BY KELLY AND CLOSE ENGINEERS DATED: 04/23/2007, LAST REVISED REV. 11 DATED: 08/17/2018

Residential Land in Chadds Ford owned by Pettinaro affiliate

LOCATION OF EXISTING STORM SEWER DISCHARGE TO WETLANDS (BEAVER CREEK).

EXISTING WETLAND DELINEATION AND CENTERLINE OF STREAM PER "THE SHOPS AT RIDGE ROAD" PLANS DONE BY KELLY AND CLOSE ENGINEERS DATED: 04/23/2007, LAST REVISED REV. 11 DATED: 08/17/2018

Residential Land in Chadds Ford owned by Capano affiliate

Project: The Shoppes at Concord

Summary of Peak Flow Rates

(Flows noted in Cubic Feet/Second (CFS))

POA-1 - Runoff Rates On-Site (cfs) - Beaver Creek (Brandywine Creek Watershed)										
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr			
Pre Development POA #1 (Onsite)	9.11	14.29	23.15	31.15	43.31	54.11	66.09			
Infiltration Bed (SCM-1)	--	0.40	1.47	3.48	8.53	10.87	12.61			
Subsurface Dry Extended Detention Basin 1 (SCM-3)	--	0.79	0.92	1.02	1.15	1.26	1.38			
Post POA #1 Bypass	--	6.86	9.57	11.66	15.17	18.01	21.00			
Post POA #1 (Total) - Link 23L	--	7.54	10.35	12.73	19.35	27.01	32.54			
Overall Post-Development POA #1 Allowed (Concord)*	--	9.11	23.15	31.15	43.31	54.11	66.09			
Overall Post-Development POA #1 Allowed (Chadds Ford)*	--	9.11	11.58	15.58	21.66	27.06	33.05			
Overall Post-Development Proposed POA#1	--	7.54	10.35	12.73	19.35	27.01	32.54			
REDUCTION FROM CONCORD REQUIREMENT	--	-17.3%	-50.4%	-59.1%	-55.3%	-48.1%	-50.8%			
REDUCTION FROM CHADDIS FORD REQUIREMENT	--	-17.3%	-10.6%	-18.3%	-10.7%	-0.2%	-1.5%			

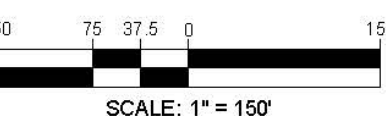
POA-2 - Runoff Rates On-Site (cfs) - TRIB 00031 to Harvey Run (Brandywine Creek Watershed)										
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr			
Pre POA #2	9.08	13.92	22.13	29.46	40.55	50.33	61.17			
Infiltration Basin 1 (SCM-2)	--	2.23	6.41	10.51	14.58	17.29	29.64			
Post POA#2 Bypass	--	1.31	2.03	2.66	3.62	4.45	5.37			
Post POA #2 Total - Link 24L	--	2.29	6.59	10.84	15.06	18.40	30.52			
Overall Post-Development POA #2 Allowed (Concord)*	--	9.08	22.13	29.46	40.55	50.33	61.17			
Overall Post-Development POA #2 Allowed (Chadds Ford)*	--	9.08	11.07	14.73	20.28	25.17	30.58			
Overall Post-Development Proposed POA#2	--	2.29	6.59	10.84	15.06	18.40	30.52			
REDUCTION FROM CONCORD REQUIREMENT	--	-74.8%	-70.2%	-63.2%	-62.9%	-63.4%	-50.1%			
REDUCTION FROM CHADDIS FORD REQUIREMENT	--	-74.8%	-40.4%	-26.4%	-25.7%	-26.9%	-0.2%			

POA-3 - Runoff Rates On-Site (cfs) - TRIB 00031 to Harvey Run (Brandywine Creek Watershed)										
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr			
Pre POA #3 (Onsite)	1.86	2.73	4.17	5.44	7.34	9.00	10.83			
Post POA #3 Bypass	--	1.45	2.07	2.61	3.39	4.06	4.79			
Overall Post-Development POA #3 Allowed (Concord)*	--	1.86	4.17	5.44	7.34	9.00	10.83			
Overall Post-Development POA #3 Allowed (Chadds Ford)*	--	1.86	2.09	2.72	3.67	4.50	5.42			
Overall Post-Development Proposed POA#3	--	1.45	2.07	2.61	3.39	4.06	4.79			
REDUCTION FROM CONCORD REQUIREMENT	--	-22.0%	-50.4%	-52.1%	-53.8%	-54.9%	-55.8%			
REDUCTION FROM CHADDIS FORD REQUIREMENT	--	-22.0%	-0.7%	-4.0%	-7.8%	-8.8%	-11.5%			

POA-4 - Runoff Rates On-Site (cfs) - TRIB 00568 of West Branch Chester Creek (Webb Creek) (Chester Creek Watershed)										
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr			
Pre POA #4 (Onsite)	5.38	7.52	10.96	13.93	18.30	22.07	26.10			
Post POA #4 Bypass	--	2.29	2.99	3.57	4.41	5.11	5.88			
Overall Post-Development POA #4 Allowed (Concord)*	--	3.76	5.48	6.97	9.15	11.04	13.10			
Overall Post-Development POA #4 Allowed (Chadds Ford)*	--	3.76	5.48	6.97	9.15	11.04	13.10			
Overall Post-Development Proposed POA#4	--	2.29	2.99	3.57	4.41	5.11	5.88			
REDUCTION FROM CONCORD REQUIREMENT	--	-58.0%	-45.4%	-48.7%	-51.8%	-53.7%	-55.1%			
REDUCTION FROM CHADDIS FORD REQUIREMENT	--	-58.0%	-45.4%	-48.7%	-51.8%	-53.7%	-55.1%			

CONCORD 2026-07-02_PAA#0126 OVERALL SWM Summary_Rev-5.7-9-2026

Flow Rate Summary



REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY
1	07/02/2026	GENERAL REVISIONS	MCN	EAB



ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT OR A CONTRACT. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.

PROJECT No.: PAA205126 00-1A
DRAWN BY: MCN
CHECKED BY: EAB
DATE: 06/18/2026
CAD L.D.: P-EXHA-DRN2

EXHIBIT

FOR
CONCORD ACQUISITION LLC
PROPOSED DEVELOPMENT
"THE SHOPPES AT CONCORD"
WILMINGTON-WEST CHESTER PIKE
& RIDGE ROAD
GLEN MILLS, PA 19342
CONCORD TOWNSHIP
DELAWARE COUNTY

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 986-9100
Fax: (215) 986-9102
www.BohlerEngineering.com

E.A. BRITZ
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE014943

SHEET TITLE:

OVERALL AERIAL PLAN

SHEET NUMBER:

C-2

REVISION 1 - 07/02/2026

Project: The Shoppes at Concord
Summary of Peak Flow Rates

(Flows noted in Cubic Feet/Second (CFS))

POA-1 - Runoff Rates On-Site (cfs) - Beaver Creek (Brandywine Creek Watershed)									
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr		
Pre Development POA #1 (Onsite)	9.11	14.29	23.15	31.15	43.31	54.11	66.09		
Infiltration Bed (SCM-1)	--	0.40	1.47	3.48	5.53	10.87	12.61		
Subsurface Dry Extended Detention Basin 1 (SCM-3)	--	0.79	0.92	1.02	1.15	1.26	1.38		
Post POA#1 Bypass (Onsite)	--	6.86	9.57	11.86	15.17	18.01	21.08		
Post POA #1 (Total) - Link 23L	--	7.54	10.35	12.73	19.35	27.01	32.54		
Overall Post-Development POA #1 Allowed (Concord)*	--	9.11	23.15	31.15	43.31	54.11	66.09		
Overall Post-Development POA #1 Allowed (Chadds Ford)*	--	9.11	11.58	15.58	21.66	27.06	33.05		
Overall Post-Development Proposed POA#1	--	7.54	10.35	12.73	19.35	27.01	32.54		
REDUCTION FROM CONCORD REQUIREMENT	--	-17.3%	-55.3%	-59.1%	-55.9%	-50.1%	-50.1%		
REDUCTION FROM CHADDS FORD REQUIREMENT	--	-17.3%	-10.6%	-18.3%	-10.7%	-0.2%	-1.8%		

POA-2 - Runoff Rates On-Site (cfs) - TRIB 00031 to Harvey Run (Brandywine Creek Watershed)									
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr		
Pre POA #2	9.08	13.92	22.13	29.46	40.55	50.33	61.17		
Infiltration Basin 1 (SCM-2)	--	2.23	6.41	10.51	14.58	17.29	29.64		
Post POA#2 Bypass	--	1.31	2.03	2.66	3.62	4.45	5.37		
Post POA #2 Total - Link 24L	--	2.29	6.59	10.84	15.06	18.40	30.52		
Overall Post-Development POA #2 Allowed (Concord)*	--	9.08	22.13	29.46	40.55	50.33	61.17		
Overall Post-Development POA #2 Allowed (Chadds Ford)*	--	9.08	11.07	14.73	20.28	25.17	30.58		
Overall Post-Development Proposed POA#2	--	2.29	6.59	10.84	15.06	18.40	30.52		
REDUCTION FROM CONCORD REQUIREMENT	--	-74.8%	-70.2%	-63.2%	-62.9%	-63.4%	-60.1%		
REDUCTION FROM CHADDS FORD REQUIREMENT	--	-74.8%	-40.4%	-26.4%	-25.7%	-26.9%	-0.2%		

POA-3 - Runoff Rates On-Site (cfs) - TRIB 00031 to Harvey Run (Brandywine Creek Watershed)									
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr		
Pre POA #3 (Onsite)	1.86	2.73	4.17	5.44	7.34	9.00	10.83		
Post POA #3 Bypass	--	1.45	2.07	2.61	3.39	4.06	4.79		
Overall Post-Development POA #3 Allowed (Concord)*	--	1.86	4.17	5.44	7.34	9.00	10.83		
Overall Post-Development POA #3 Allowed (Chadds Ford)*	--	1.86	2.09	2.72	3.67	4.50	5.42		
Overall Post-Development Proposed POA#3	--	1.45	2.07	2.61	3.39	4.06	4.79		
REDUCTION FROM CONCORD REQUIREMENT	--	-22.0%	-48.4%	-52.0%	-53.8%	-54.9%	-55.8%		
REDUCTION FROM CHADDS FORD REQUIREMENT	--	-22.0%	-0.7%	-4.0%	-7.8%	-9.8%	-11.5%		

POA-4 - Runoff Rates On-Site (cfs) - TRIB 00568 of West Branch Chester Creek (Webb Creek) [Chester Creek Watershed]									
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr		
Pre POA #4 (Onsite)	5.38	7.52	10.96	13.93	18.30	22.07	26.19		
Post POA #4 Bypass	--	2.29	2.99	3.57	4.41	5.11	5.88		
Overall Post-Development POA #4 Allowed (Concord)*	--	3.76	5.48	6.97	9.15	11.04	13.10		
Overall Post-Development POA #4 Allowed (Chadds Ford)*	--	3.76	5.48	6.97	9.15	11.04	13.10		
Overall Post-Development Proposed POA#4	--	2.29	2.99	3.57	4.41	5.11	5.88		
REDUCTION FROM CONCORD REQUIREMENT	--	-59.0%	-45.4%	-48.7%	-51.8%	-53.7%	-55.1%		
REDUCTION FROM CHADDS FORD REQUIREMENT	--	-59.0%	-45.4%	-48.7%	-51.8%	-53.7%	-55.1%		

POA #2

POA #3

POA #1

POA #4

REVISIONS		
REV	DATE	COMMENT
1	09/08/2025	GENERAL REVISIONS
2	05/08/2026	GENERAL REVISIONS
3	06/17/2026	PER DCCD COMMENTS
4	07/17/2026	GENERAL REVISIONS



ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

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PROJECT No.: PAA250126 00-4A
DRAWN BY: MCM
CHECKED BY: EAB
DATE: 08/22/2025
CAD I.D.: P-CIVL-DRNG

PRELIMINARY / FINAL LAND DEVELOPMENT PLANS FOR

CONCORD ACQUISITION LLC
PROPOSED DEVELOPMENT
"THE SHOPPES AT CONCORD"
WILMINGTON-WEST CHESTER PIKE & RIDGE ROAD
GLEN MILLS, PA 19342
CONCORD TOWNSHIP
DELAWARE COUNTY

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 986-9100
Fax: (215) 986-9102
www.BohlerEngineering.com

E.A. BRITZ
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE070493

SHEET TITLE: PRE DEVELOPMENT DRAINAGE AREA PLAN

SHEET NUMBER: 1 OF 85
REVISION 4 - 07/17/2026

Project: The Shoppes at Concord
Summary of Peak Flow Rates

(Flows noted in Cubic Feet/Second (CFS))

POA-1 - Runoff Rates On-Site (cfs) - Beaver Creek (Brandywine Creek Watershed)									
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr	100 yr	100 yr
Pre Development POA #1 (Onsite)	14.29	23.15	31.15	33.15	43.31	54.11	66.09		
Infiltration Bed (SCM-1)	--	0.40	1.47	3.48	8.53	10.87	12.61		
Subsurface Dry Extended Detention Basin 1 (SCM-3)	--	0.79	0.92	1.02	1.15	1.26	1.38		
Post POA#1 Bypass (Onsite)	--	6.86	9.57	11.86	15.17	18.01	21.08		
Post POA #1 (Total) - Link 23L	--	7.54	10.35	12.73	19.35	27.01	32.54		
Overall Post-Development POA #1 Allowed (Concord)*	--	9.11	23.15	31.15	43.31	54.11	66.09		
Overall Post-Development POA #1 Allowed (Chadds Ford)*	--	9.11	11.58	15.58	21.66	27.06	33.05		
Overall Post-Development Proposed POA#1	--	7.54	10.35	12.73	19.35	27.01	32.54		
REDUCTION FROM CONCORD REQUIREMENT	--	-17.3%	-55.3%	-59.1%	-55.3%	-50.1%	-50.8%		
REDUCTION FROM CHADDS FORD REQUIREMENT	--	-17.3%	-10.6%	-18.3%	-10.7%	-0.2%	-1.5%		

POA-2 - Runoff Rates On-Site (cfs) - TRIB 00031 to Harvey Run (Brandywine Creek Watershed)									
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr	100 yr	100 yr
Pre POA #2	9.08	13.92	22.13	29.46	40.55	50.33	61.17		
Infiltration Basin 1 (SCM-2)	--	2.23	6.41	10.51	14.58	17.29	29.64		
Post POA#2 Bypass	--	1.31	2.03	2.66	3.62	4.45	5.37		
Post POA #2 Total - Link 24L	--	2.29	6.59	10.84	15.06	18.40	30.52		
Overall Post-Development POA #2 Allowed (Concord)*	--	9.08	22.13	29.46	40.55	50.33	61.17		
Overall Post-Development POA #2 Allowed (Chadds Ford)*	--	9.08	11.07	14.73	20.28	25.17	30.58		
Overall Post-Development Proposed POA#2	--	2.29	6.59	10.84	15.06	18.40	30.52		
REDUCTION FROM CONCORD REQUIREMENT	--	-74.8%	-70.2%	-63.2%	-62.9%	-63.4%	-50.1%		
REDUCTION FROM CHADDS FORD REQUIREMENT	--	-74.8%	-40.4%	-26.4%	-25.7%	-26.9%	-26.9%		

POA-3 - Runoff Rates On-Site (cfs) - TRIB 00031 to Harvey Run (Brandywine Creek Watershed)									
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr	100 yr	100 yr
Pre POA #3 (Onsite)	1.86	2.73	4.17	5.44	7.34	9.00	10.83		
Post POA #3 Bypass	--	1.45	2.07	2.61	3.39	4.06	4.79		
Overall Post-Development POA #3 Allowed (Concord)*	--	1.86	4.17	5.44	7.34	9.00	10.83		
Overall Post-Development POA #3 Allowed (Chadds Ford)*	--	1.86	2.09	2.72	3.67	4.50	5.42		
Overall Post-Development Proposed POA#3	--	1.45	2.07	2.61	3.39	4.06	4.79		
REDUCTION FROM CONCORD REQUIREMENT	--	-22.0%	-50.4%	-52.0%	-53.8%	-54.9%	-55.8%		
REDUCTION FROM CHADDS FORD REQUIREMENT	--	-22.0%	-0.7%	-4.0%	-7.6%	-8.8%	-11.5%		

POA-4 - Runoff Rates On-Site (cfs) - TRIB 00568 of West Branch Chester Creek (Webb Creek) (Chester Creek Watershed)									
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr	100 yr	100 yr
Pre POA #4 (Onsite)	5.38	7.52	10.96	13.99	18.30	22.07	26.18		
Post POA #4 Bypass	--	2.29	2.99	3.57	4.41	5.11	5.88		
Overall Post-Development POA #4 Allowed (Concord)*	--	3.76	5.48	6.97	9.15	11.04	13.10		
Overall Post-Development POA #4 Allowed (Chadds Ford)*	--	3.76	5.48	6.97	9.15	11.04	13.10		
Overall Post-Development Proposed POA#4	--	2.29	2.99	3.57	4.41	5.11	5.88		
REDUCTION FROM CONCORD REQUIREMENT	--	-59.0%	-45.4%	-48.7%	-51.8%	-53.7%	-55.1%		
REDUCTION FROM CHADDS FORD REQUIREMENT	--	-59.0%	-45.4%	-48.7%	-51.8%	-53.7%	-55.1%		

ONSITE TO POA002
VIA ABOVEGROUND
INFILTRATION BASIN

ONSITE TO POA001
VIA INFILTRATION
BED

POA #1

OFFSITE DIRECT
TO POA001

ONSITE DIRECT TO
POA001

POA #2

POA #3

POST POA#3 BYPASS
A = 0.655 AC
CN = 83

ONSITE DIRECT TO
POA003

OFFSITE TO
POA002 VIA
ABOVEGROUND
INFILTRATION
BASIN

POST POA#2 TO INF. BASIN (OFFSITE)
A = 0.511 AC
CN = 82

POST POA#3 (MINIMAL DISTURBANCE)
A = 0.04 AC
CN = 98
COVER TYPE TO BE REPLACED IN
KIND.

ONSITE TO POA001
VIA DETENTION
BASIN

ONSITE DIRECT TO
POA004

OFFSITE TO POA001
VIA DET. BASIN

POA #4

WILMINGTON-WEST
CHESTER PIKE

REVISIONS		
REV	DATE	COMMENT
1	09/08/2025	GENERAL REVISIONS
2	05/08/2026	GENERAL REVISIONS
3	06/17/2026	PER DCDD COMMENTS
4	07/17/2026	GENERAL REVISIONS

ATTENTION ALL CONTRACTORS:
LOCATIONS OF ALL EXISTING
UTILITIES SHOWN HEREIN ARE
BASED ON RECORD DRAWINGS AND
FIELD SURVEY. CONTRACTORS MUST
VERIFY LOCATION AND DEPTH OF ALL
UTILITIES PRIOR TO ANY CONSTRUCTION.
UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE
GUARANTEED. PURSUANT TO REQUIREMENTS OF
PENNSYLVANIA LEGISLATIVE ACT NUMBER 88 OF 1984 AS
AMENDED BY ACT 88 OF 2017, CONTRACTORS MUST VERIFY
LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND
FACILITIES PRIOR TO ANY CONSTRUCTION.
WWW.PA.CALCALORS
8000000000

ISSUED FOR MUNICIPAL &
AGENCY REVIEW & APPROVAL

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REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION
DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: PAA250126 00-4A
DRAWN BY: MCM
CHECKED BY: EAB
DATE: 08/22/2025
CAD I.D.: P-CIVL-DRNG

PRELIMINARY /
FINAL LAND
DEVELOPMENT
PLANS
FOR

CONCORD
ACQUISITION
LLC

PROPOSED DEVELOPMENT
"THE SHOPPES AT CONCORD"
WILMINGTON-WEST CHESTER PIKE
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E.A. BRITZ
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE074943

SHEET TITLE:
**POST
DEVELOPMENT
DRAINAGE AREA
PLAN**

SHEET NUMBER:
2
OF 85

REVISION 4 - 07/17/2026

Project: The Shoppes at Concord

Summary of Peak Flow Rates

(Flows noted in Cubic Feet/Second (CFS))

POA-1 - Runoff Rates On-Site (cfs) - Beaver Creek (Brandywine Creek Watershed)							
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
Pre Development POA #1 (Onsite)	9.11	14.29	23.15	31.15	43.31	54.11	66.09
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Subsurface Dry Extended Detention Basin 1 (SCM-3)	--	0.79	0.92	1.02	1.15	1.26	1.38
Post POA#1 Bypass (Onsite)	--	6.86	9.57	11.86	15.17	18.01	21.08
Post POA #1 (Total) - Link 23L	--	7.54	10.35	12.73	19.35	27.01	32.54
Overall Post-Development POA #1 Allowed (Concord)*	--	9.11	23.15	31.15	43.31	54.11	66.09
Overall Post-Development POA #1 Allowed (Chadds Ford)*	--	9.11	11.58	15.58	21.66	27.06	33.05
Overall Post-Development Proposed POA#1	--	7.54	10.35	12.73	19.35	27.01	32.54
REDUCTION FROM CONCORD REQUIREMENT		-17.3%	-55.3%	-59.1%	-55.3%	-50.1%	-50.8%
REDUCTION FROM CHADDS FORD REQUIREMENT		-17.3%	-10.6%	-18.3%	-10.7%	-0.2%	-1.5%

POA-2 - Runoff Rates On-Site (cfs) - TRIB 00031 to Harvey Run (Brandywine Creek Watershed)							
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
Pre POA #2	9.08	13.92	22.13	29.46	40.55	50.33	61.17
Infiltration Basin 1 (SCM-2)	--	2.23	6.41	10.51	14.58	17.29	29.64
Post POA#2 Bypass	--	1.31	2.03	2.66	3.62	4.45	5.37
Post POA #2 Total - Link 24L	--	2.29	6.59	10.84	15.06	18.40	30.52
Overall Post-Development POA #2 Allowed (Concord)*	--	9.08	22.13	29.46	40.55	50.33	61.17
Overall Post-Development POA #2 Allowed (Chadds Ford)*	--	9.08	11.07	14.73	20.28	25.17	30.58
Overall Post-Development Proposed POA#2	--	2.29	6.59	10.84	15.06	18.40	30.52
REDUCTION FROM CONCORD REQUIREMENT		-74.8%	-70.2%	-63.2%	-62.9%	-63.4%	-50.1%
REDUCTION FROM CHADDS FORD REQUIREMENT		-74.8%	-40.4%	-26.4%	-25.7%	-26.9%	-0.2%

POA-3 - Runoff Rates On-Site (cfs) - TRIB 00031 to Harvey Run (Brandywine Creek Watershed)							
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
Pre POA #3 (Onsite)	1.86	2.73	4.17	5.44	7.34	9.00	10.83
Post POA #3 Bypass	--	1.45	2.07	2.61	3.39	4.06	4.79
Overall Post-Development POA #3 Allowed (Concord)*	--	1.86	4.17	5.44	7.34	9.00	10.83
Overall Post-Development POA #3 Allowed (Chadds Ford)*	--	1.86	2.09	2.72	3.67	4.50	5.42
Overall Post-Development Proposed POA#3	--	1.45	2.07	2.61	3.39	4.06	4.79
REDUCTION FROM CONCORD REQUIREMENT		-22.0%	-50.4%	-52.0%	-53.8%	-54.9%	-55.8%
REDUCTION FROM CHADDS FORD REQUIREMENT		-22.0%	-0.7%	-4.0%	-7.6%	-9.8%	-11.5%

POA-4 - Runoff Rates On-Site (cfs) - TRIB 00568 of West Branch Chester Creek (Webb Creek) (Chester Creek Watershed)							
Storm Frequency	1 yr	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
Pre POA #4 (Onsite)	5.38	7.52	10.96	13.93	18.30	22.07	26.19
Post POA #4 Bypass	--	2.29	2.99	3.57	4.41	5.11	5.88
Overall Post-Development POA #4 Allowed (Concord)*	--	3.76	5.48	6.97	9.15	11.04	13.10
Overall Post-Development POA #4 Allowed (Chadds Ford)*	--	3.76	5.48	6.97	9.15	11.04	13.10
Overall Post-Development Proposed POA#4	--	2.29	2.99	3.57	4.41	5.11	5.88
REDUCTION FROM CONCORD REQUIREMENT		-39.0%	-45.4%	-48.7%	-51.8%	-53.7%	-55.1%
REDUCTION FROM CHADDS FORD REQUIREMENT		-39.0%	-45.4%	-48.7%	-51.8%	-53.7%	-55.1%

* - Permitted post-development peak rates are based on the requirements of the Concord Township and Chadds Ford Township Stormwater Management Ordinances.

Peak Rate Reductions shown above are based upon disturbed (onsite) areas only.

Peak Rate Control Requirements in the Brandywine and Chester Creek Watersheds are as follows:

Concord Township Control Criteria

Brandywine Creek Watershed

- 2-yr post-development = 1-yr pre-development
- 5-yr post-development = 5-yr pre-development
- 10-yr post-development = 10-yr pre-development
- 25yr post-development = 25-yr pre-development
- 50yr post-development = 50-yr pre-development
- 100-yr post-development = 100-yr pre-development

Chadds Ford Township Control Criteria

Brandywine Creek Watershed

- 2-yr post-development = 1-yr pre-development
- 5-yr post-development = 50% of the 5-yr pre-development
- 10-yr post-development = 50% of the 10-yr pre-development
- 25yr post-development = 50% of the 25-yr pre-development
- 50yr post-development = 50% of the 50-yr pre-development
- 100-yr post-development = 50% of the 100-yr pre-development

Chester Creek Watershed

- Post-development Peak Discharge for all Design Storms must no greater than 50% of the pre-development Peak Discharges

Chester Creek Watershed

- Post-development Peak Discharge for all Design Storms must no greater than 50% of the pre-development Peak Discharges

Project: The Shoppes at Concord

Summary of Volume Mitigation

POA-1 - Volume Mitigation - Beaver Creek (Brandywine Creek Watershed)

PRE-Development Volume	44,927	CF
Post-Construction Volume (assuming un-managed)	77,123	CF
Change in Volume (required to manage)	32,196	CF
Infiltration & ET Credits for the Project	33,066	CF
Post Construction Volume (including Management)	44,057	CF

IMPROVEMENT FROM EXISTING CONDITION

2%

POA-2 - Volume Mitigation - TRIB 0031 to Harvey Run (Brandywine Creek Watershed)

PRE-Development Volume	39,650	CF
Post-Construction Volume (assuming un-managed)	144,882	CF
Change in Volume (required to manage)	105,232	CF
Infiltration & ET Credits for the Project	106,068	CF
Post Construction Volume (including Management)	38,814	CF

IMPROVEMENT FROM EXISTING CONDITION

2%

POA-3 - Volume Mitigation - TRIB 0031 to Harvey Run (Brandywine Creek Watershed)

PRE-Development Volume	8,163	CF
Post-Construction Volume (assuming un-managed)	4,895	CF
Change in Volume (required to manage)	-3,268	CF
Infiltration & ET Credits for the Project	NA	CF

IMPROVEMENT FROM EXISTING CONDITION

40%

POA-4 - Volume Mitigation - TRIB 00568 OF West Branch Chester Creek (Webb Creek) Watershed

PRE-Development Volume	18,736	CF
Post-Construction Volume (assuming un-managed)	5,208	CF
Change in Volume (required to manage)	-13,528	CF
Infiltration & ET Credits for the Project	NA	CF

IMPROVEMENT FROM EXISTING CONDITION

72%

Notes:

1. Values reference Rev4 of DEP spreadsheet Version 2.2 for the project
2. Volumes reflect the 2-Year / 24-Hour Storm Event

Project: The Shoppes at Concord

Summary of Water Quality Mitigation

POA-1 - Water Quality Mitigation - Beaver Creek (Brandywine Creek Watershed)

Pollutant Categories	TSS	LP
PRE-Development Pollutant Loads (LBS)	143.96	0.64
Post Development Pollutant Loads (LBS) (Areas Treated)	18.67	0.08
Post development Pollutant Loads (LBS) (Areas Un-Treated)	114.06	0.42
Post Development Pollutant Loads (LBS) (Combined)	132.73	0.50
IMPROVEMENT FROM EXISTING CONDITION	8%	22%

POA-2 - Water Quality Mitigation - TRIB 0031 to Harvey Run (Brandywine Creek Watershed)

Pollutant Categories	TSS	LP
PRE-Development Pollutant Loads (LBS)	124.61	0.56
Post Development Pollutant Loads (LBS) (Areas Treated)	19.29	0.46
Post development Pollutant Loads (LBS) (Areas Un-Treated)	20.47	0.09
Post Development Pollutant Loads (LBS) (Combined)	39.76	0.55
IMPROVEMENT FROM EXISTING CONDITION	68%	2%

POA-3 - Water Quality Mitigation - TRIB 0031 to Harvey Run (Brandywine Creek Watershed)

Pollutant Categories	TSS	LP
PRE-Development Pollutant Loads (LBS)	28.62	0.13
Post Development Pollutant Loads (LBS) (Areas Treated)	0.00	0.00
Post development Pollutant Loads (LBS) (Areas Un-Treated)	21.15	0.08
Post Development Pollutant Loads (LBS) (Combined)	21.15	0.08
IMPROVEMENT FROM EXISTING CONDITION	26%	38%

POA-4 - Water Quality Mitigation - TRIB 00568 OF West Branch Chester Creek (Webb Creek) Watershed

Pollutant Categories	TSS	LP
PRE-Development Pollutant Loads (LBS)	62.77	0.28
Post Development Pollutant Loads (LBS) (Areas Treated)	0.00	0.00
Post development Pollutant Loads (LBS) (Areas Un-Treated)	21.51	0.09
Post Development Pollutant Loads (LBS) (Combined)	21.51	0.09
IMPROVEMENT FROM EXISTING CONDITION	66%	68%

Notes:

1. Values reference Rev4 of DEP spreadsheet Version 2.2 for the project