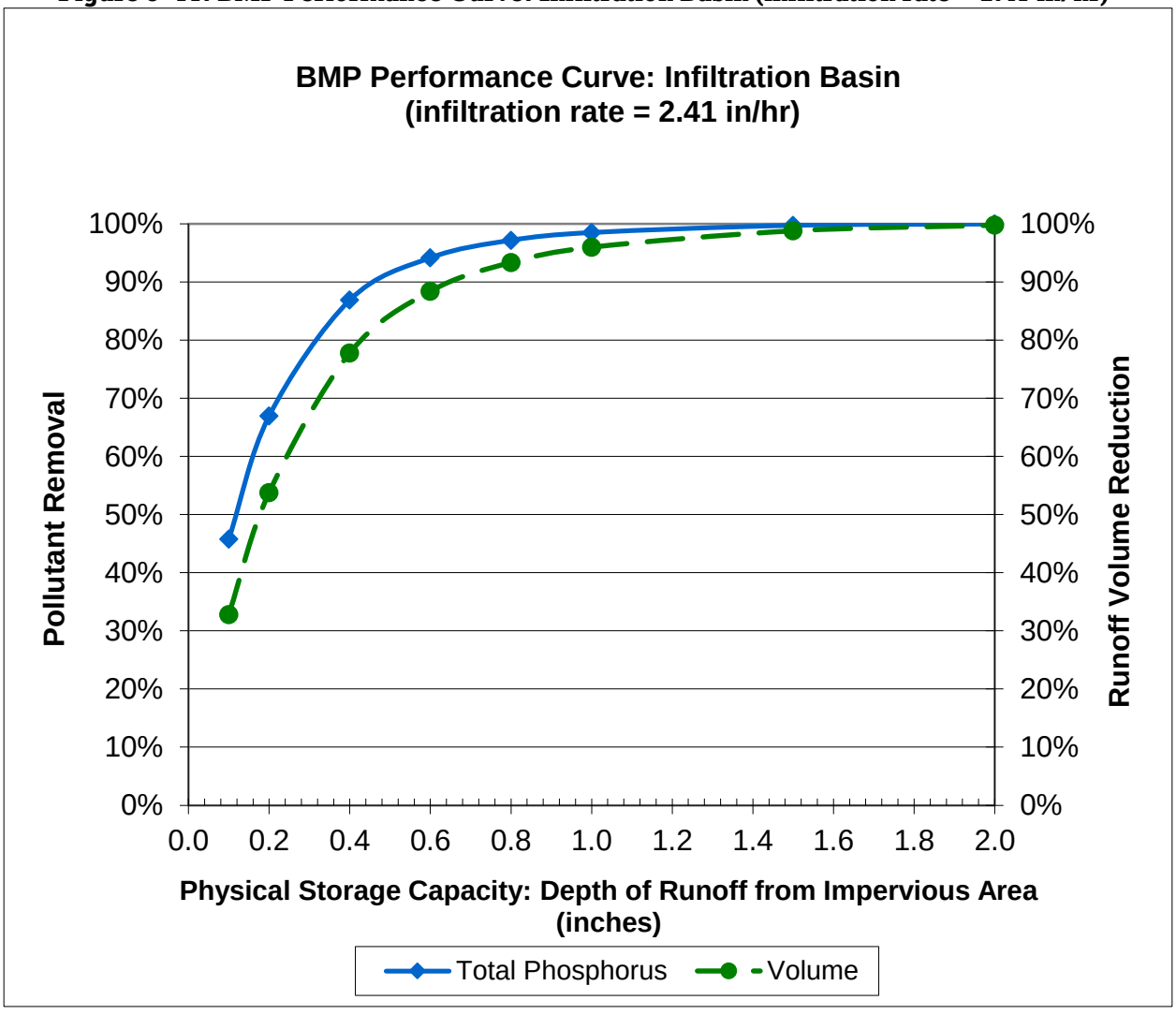
Table 3- 14: Infiltration Basin (2.41 in/hr) BMP Performance Table

Infiltration Basin (2.41 in/hr) BMP Performance Table: Long-Term Phosphorus Load Reduction								
BMP Capacity: Depth of Runoff Treated from Impervious Area (inches)	0.1	0.2	0.4	0.6	0.8	1.0	1.5	2.0
Runoff Volume Reduction	32.8%	53.8%	77.8%	88.4%	93.4%	96.0%	98.8%	99.8%
Cumulative Phosphorus Load Reduction	46%	67%	87%	94%	97%	98%	100%	100%

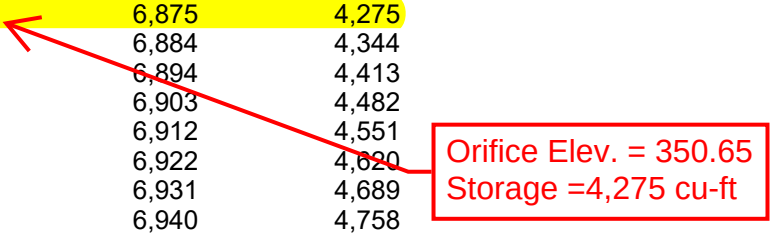
Figure 3- 11: BMP Performance Curve: Infiltration Basin (infiltration rate = 2.41 in/hr)



Stage-Area-Storage for Pond SW-1:

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
350.00	6,283	0
350.01	6,292	63
350.02	6,301	126
350.03	6,310	189
350.04	6,319	252
350.05	6,328	315
350.06	6,337	379
350.07	6,345	442
350.08	6,354	505
350.09	6,363	569
350.10	6,372	633
350.11	6,381	697
350.12	6,390	760
350.13	6,399	824
350.14	6,408	888
350.15	6,417	953
350.16	6,426	1,017
350.17	6,435	1,081
350.18	6,444	1,145
350.19	6,453	1,210
350.20	6,462	1,274
350.21	6,471	1,339
350.22	6,480	1,404
350.23	6,489	1,469
350.24	6,499	1,534
350.25	6,508	1,599
350.26	6,517	1,664
350.27	6,526	1,729
350.28	6,535	1,794
350.29	6,544	1,860
350.30	6,553	1,925
350.31	6,562	1,991
350.32	6,571	2,056
350.33	6,580	2,122
350.34	6,589	2,188
350.35	6,599	2,254
350.36	6,608	2,320
350.37	6,617	2,386
350.38	6,626	2,452
350.39	6,635	2,519
350.40	6,644	2,585
350.41	6,653	2,652
350.42	6,663	2,718
350.43	6,672	2,785
350.44	6,681	2,852
350.45	6,690	2,918
350.46	6,699	2,985
350.47	6,708	3,052
350.48	6,718	3,120
350.49	6,727	3,187
350.50	6,736	3,254
350.51	6,745	3,322

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
350.52	6,755	3,389
350.53	6,764	3,457
350.54	6,773	3,524
350.55	6,782	3,592
350.56	6,792	3,660
350.57	6,801	3,728
350.58	6,810	3,796
350.59	6,819	3,864
350.60	6,829	3,932
350.61	6,838	4,001
350.62	6,847	4,069
350.63	6,856	4,138
350.64	6,866	4,206
350.65	6,875	4,275
350.66	6,884	4,344
350.67	6,894	4,413
350.68	6,903	4,482
350.69	6,912	4,551
350.70	6,922	4,620
350.71	6,931	4,689
350.72	6,940	4,758
350.73	6,950	4,828
350.74	6,959	4,897
350.75	6,969	4,967
350.76	6,978	5,037
350.77	6,987	5,107
350.78	6,997	5,177
350.79	7,006	5,247
350.80	7,016	5,317
350.81	7,025	5,387
350.82	7,034	5,457
350.83	7,044	5,528
350.84	7,053	5,598
350.85	7,063	5,669
350.86	7,072	5,739
350.87	7,082	5,810
350.88	7,091	5,881
350.89	7,100	5,952
350.90	7,110	6,023
350.91	7,119	6,094
350.92	7,129	6,165
350.93	7,138	6,237
350.94	7,148	6,308
350.95	7,157	6,380
350.96	7,167	6,451
350.97	7,176	6,523
350.98	7,186	6,595
350.99	7,195	6,667
351.00	7,205	6,739
351.01	7,214	6,811
351.02	7,224	6,883
351.03	7,234	6,955



McGovern Boulevard Extension
McGovern Boulevard
Lancaster, MA
Bohler Job Number: W181228
July 27, 2023

MA DEP Standard 4: Water Quality Volume Calculations

Water Quality Volume Required	
Water Quality Volume runoff (in.)*	1.0
Total Post Development Impervious Area (sf)	47,916
Required Water Quality Volume (cf)	**3,993**
*Water Quality volume runoff is equal to 1.0 inches of runoff times the total impervious area of the post development project site.	

Water Quality Volume Provided*	
SW-1	4,275
Total Provided Water Quality Volume (cf)	**4,275**

Required Recharge Provided

*Volume provided below lowest outlet pipe in cubic feet (cf)

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