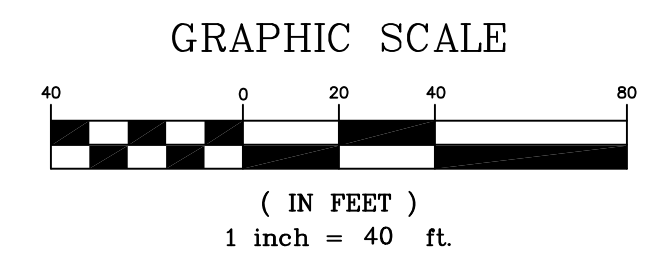


Summary of Water Quality Treatment														
Zone	Inlet ID	Impervious Area (sf)	Pervious Area (sf)	Total Area (sf)	Total Area (Acres) 1	Required Water Quality Volume (CF) 2	Existing Developed Area Mitigation Credits (SF) 3	Treatment Approach 5	Filterra Size Required	Jellyfish Unit Provided 5	1 Yr 24-hr Storm Event Peak Flow Rate (cfs) 6	Required StormTech Isolator Row Chambers (SC-740) 4	Provided Water Quality Volume (CF) 7	StormTech Isolator Row Chambers (SC-740) Provided (EA) 10
Zone D	D-21	15,412.00	6,173.00	21,585.00	0.50	1490.10	-	Filterra	2-(6'x6')	-	0.52	-	-	N/A
	D-20	9,687.00	772.00	10,459.00	0.24	832.98	-	Filterra	2-(4'x6')	-	0.81	NR	-	N/A
	D-18**	6,004.00	7,241.00	13,245.00	0.30	2417.70	-	Filterra	4'x6'	-	0.40	NR	-	N/A
	D-19**	6,430.00	1,873.00	8,303.00	0.19	591.80	-	Filterra	4'x6'	-	0.41	NR	-	N/A
	D-11	17,708.00	4,188.00	21,896.00	0.50	1615.27	-	-	-	-	1.14	5.68	-	-
	D-16	10,139.00	2,880.00	13,019.00	0.30	940.92	-	-	-	-	0.66	3.28	-	-
	D-12	5,082.00	2,803.00	7,885.00	0.18	516.93	-	Contech Jellyfish Unit	-	Jellyfish (F-4-2-1)	0.35	1.73	3,683.00	13
D-13	2,056.00	3,940.00	5,996.00	0.09	236.00	-	-	-	-	0.15	0.75	-	-	
D-14	1,565.00	4,499.00	6,064.00	0.15	311.72	-	-	-	-	0.18	0.89	-	-	
Disturbed Perimeter Area		4,445.00	5,533.00	10,000.00	0.23	-	-	None	-	-	-	-	-	-
Zone D Totals		78,928.00	37,728.00	116,656.00	2.59	7,279.22	-	-	-	-	-	-	-	-
Zone F Developed Area	F-8	2,515.00	808.00	3,323.00	0.08	236.52	-	None	-	-	-	-	-	-
	F-7	13,385.00	3,942.00	17,327.00	0.40	1246.82	-	None	-	-	-	-	-	-
	F-3	186.00	3,362.00	3,548.00	0.08	127.57	-	None	-	-	-	-	-	-
	F-4	256.00	783.00	1,039.00	0.02	47.43	-	None	-	-	-	-	-	-
	F-5	256.00	3,875.00	4,131.00	0.09	150.50	-	None	-	-	-	-	-	-
	F-6	348.00	1,754.00	2,102.00	0.05	87.47	-	None	-	-	-	-	-	-
	Disturbed Perimeter Area		0.00	0.00	0.00	0.00	0.00	-	None	-	-	-	-	-
Zone F Developed Area Subtotals		16,946.00	14,524.00	31,470.00	0.72	1,896.30	-	-	-	-	-	-	-	
Zone F Existing Buildings		BNB-North Side	17,000.00	0.00	0.39	1416.67	10,200.00	Stone Drip Edge	-	-	-	-	1,460.00	-
BNB-South Side		17,000.00	0.00	0.39	1416.67	10,200.00	1,460.00	Stone Drip Edge	-	-	-	-	2,920.00	
Zone F Existing Building Subtotal		34,000.00	0.00	34,000.00	0.78	2,833.33	20,400.00	-	-	-	-	-	-	
Zone F Totals		50,946.00	14,524.00	65,470.00	1.50	4,729.63	20,400.00	-	-	-	-	-	-	
**Previously Approved Filterra Box		-	-	-	-	-	-	-	-	-	-	-	-	
Developed Area Breakdown		103,012.00	-	-	-	-	-	-	-	-	-	-	-	
Treatment Breakdown		-	-	-	-	-	-	-	-	-	-	-	-	
A.) Total New Developed Area Treated (SF)		103,012.00	-	-	-	-	-	-	-	-	-	-	-	
B.) Total New Developed Area Untreated (SF)		41,474.00	-	-	-	-	-	-	-	-	-	-	-	
C.) Total New Developed Area (SF) = A+B		144,486.00	-	-	-	-	-	-	-	-	-	-	-	
D.) Existing Developed Area Treated (SF)		34,000.00	-	-	-	-	-	-	-	-	-	-	-	
E.) Adjusted Existing Developed Area Treated (SF)		20,400.00	-	-	-	-	-	-	-	-	-	-	-	
F.) Total Net Developed Area Treated (SF) = A+E		123,412.00	-	-	-	-	-	-	-	-	-	-	-	
Impervious Area Breakdown		-	-	-	-	-	-	-	-	-	-	-	-	
G.) Total New Impervious Area Treated (SF)		74,483.00	-	-	-	-	-	-	-	-	-	-	-	
H.) Total New Impervious Area Untreated (SF)		21,391.00	-	-	-	-	-	-	-	-	-	-	-	
I.) Total New Impervious Area (SF) = G+H		95,874.00	-	-	-	-	-	-	-	-	-	-	-	
J.) Existing Impervious Area Treated (SF)		34,000.00	-	-	-	-	-	-	-	-	-	-	-	
K.) Adjusted Existing Impervious Area Treated (SF)		20,400.00	-	-	-	-	-	-	-	-	-	-	-	
L.) Total Net Impervious Area Treated (SF) = G+K		94,883.00	-	-	-	-	-	-	-	-	-	-	-	

NOTES AND ASSUMPTIONS:  
 1. All areas are based on the P10 Percent Average Annual Recurrence Interval (P10 ARI) design storm.  
 2. The required water quality credits have been computed based on Section 11.1.3 and 11.1.4 of the Maine DEP Volume 8 BMP Technical Design Manual. The volume is computed for 1" excess above the adjacent pervious area and 0.1" excess above the adjacent impervious area. Existing buildings to remain are not required to be treated.  
 3. The 1" and 0.1" rain fall rates have been computed using the rational method. The rainfall intensities are derived from the Cumberland County DE data.  
 4. Subsurface storage systems using a basement SC-740 chamber system. All isolator rows have been computed per section 7.3.3 of the Maine DEP Volume 8 BMP Technical Design Manual. One chamber is required for each 0.3 AF of the computed 15-minute peak flow rate.  
 5. The required number of 4'x6' filterra tree boxes has been computed based on Section 7.3.3 of the Maine DEP Volume 8 BMP Technical Design Manual. The value is subject to verification by each user's storage system and the current treatment technology as compiled based on current best practices.  
 6. The owner reserves the right to use an alternative to the filterra tree boxes provided they meet or exceed the performance of the Maine DEP Volume 8 BMP Technical Design Manual.  
 7. Resident Water Quality Credits for stormwater storage systems computed using 18 CF of storage per chamber based on Section 7.3.3 of the Maine DEP Volume 8 BMP Technical Design Manual.  
 8. The Stone Drip Edge was based on section 7.3 of the Maine DEP Volume 8 BMP Technical Design Manual. The width of stone is determined from a required 100 lbs/ft<sup>2</sup> of weight and a desired stone retention depth. See design computations on separate sheet.  
 9. According to the Maine DEP Volume 8 BMP Technical Design Manual, the required stone weight is 100 lbs/ft<sup>2</sup> of weight and a desired stone retention depth. See design computations on separate sheet.  
 10. The MEDD will not accept a filterra tree box that is a stand alone treatment unit and does not require an Isolator Row for right-of-way projects. This project meets the slightly criteria noted in a letter dated June 27th, 2014 from the MEDD.

STORMWATER MANAGEMENT ZONE F  
 RAISE RIM 15.4  
 CONTRACTOR TO TRACE LOCATE, JET CLEAN EXISTING LINE - CONFIRM 12" SD TO DAYLIGHT  
 EXISTING DISCHARGE TO REMAIN



PRELIMINARY - NOT FOR CONSTRUCTION

		PROJECT: BRICK NORTH AND SOUTH BUILDINGS AT THE FOREFRONT AT THOMPSON'S POINT SHEET TITLE: STORMWATER MANAGEMENT PLAN CLIENT: FOREFRONT PARTNERS   LP			
DRAWN: DED DESIGNED: BEK CHECKED: SRB FILE NAME: 2982.05-BS GRADING SHEET: C-5.1	DATE: APRIL 2015 SCALE: 1" = 40' JOB NO.: 2982.05				