

BMP Option 3b: Infiltration Trench - Fairview Avenue, Park Avenue and Pine Street

Another option for the Borough, would be to construct stone infiltration trenches. The calculated pollutant load reductions for this BMP are as follows:

Sediment: 9,120 lbs/year  
 Phosphorus: 16 lbs/year  
 Nitrogen: 292 lbs/year

In summary, Langhorne Manor Borough has identified the following stormwater BMPs that could achieve the required 10% minimum sediment reduction if implemented over the next 5-year permit term:

Proposed BMP	Watershed	Calculated Sediment Reduction (lbs/year)	Calculated Phosphorus Reduction (lbs/year)	Calculated Nitrogen Reduction (lbs/year)	
BMP Option 1: Bioswale	Neshaminy Creek	13,903	>10,378	27	494
BMP Option 1a: Vegetated Swale	Neshaminy Creek	12,165	>10,378	16	317
BMP Option 1b: Infiltration Trench	Neshaminy Creek	16,509	>10,378	31	600
BMP Option 2: Bioswale	Neshaminy Creek	3,985	<10,378	7	128
BMP Option 2a: Vegetated Swale	Neshaminy Creek	3,487	<10,378	4	82
BMP Option 2b: Infiltration Trench	Neshaminy Creek	4,732	<10,378	8	156
BMP Option 3: Bioswale	Mill Creek	7,696	>7,326	14	241
BMP Option 3a: Vegetated Swale	Mill Creek	4,810	<7,326	2	34
BMP Option 3b: Infiltration Trench	Mill Creek	9,139	>7,326	16	292

Langhorne Manor will provide updates on the status of BMP implementation in the MS4 Annual Report each year as required.

**Attachments**

- G1: BMP Option 1 Calculations
- G2: BMP Option 2 Calculations
- G2a: BMP Option 3 Calculations
- G3: BMP 6.4.5 Rain Garden and Bioretention
- G4: BMP 6.4.8 Vegetated Swale
- G5: BMP 6.4.4 Infiltration Trench
- G6: PA DEP BMP Effectiveness Values

Station Ave  
(Elm to Prospect)  
1,761 LF

Hill Ave  
(Elm to Prospect)  
1,104 LF

Fairview Ave  
Park Ave  
Pine St  
1,405 LF