In this **example**, there are 2 BMP's proposed that require infiltration in order to function properly. These two systems are known as Infiltration Basin #1 and Recharge Basin #8.

EXAMPLE
Infiltration Feasibility Report

[Project Title]
[Project Location]
[Date of Report]

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I. Location of the practice

II. Existing topography at the location of the practice

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VII. Summary of [Default, Field Testing, or Lab Testing] data used to determine the infiltration rate

The project proposes two systems that require infiltration to function properly. These two systems are identified on the plans as Infiltration Basin #1 and Recharge Basin #8.

I. Location of the practice

Infiltration Basin #1 – this basin is located on the west side of the property, near the back corner of the building.

Recharge Basin #8 – this basin is located on the east side of the property near road station 6+00.

II. Existing topography at the location of the practice

Infiltration Basin #1 - the existing topography within the area of the infiltration basin is relatively flat with a forested cover.

Recharge Basin #8 – the existing topography within the area of the recharge basin is sloped at about 5% with a combination of disturbed soils and paved surfaces.

III. Test pit or boring locations

In accordance with Env-Wq 1504.12(c), NHDES requires that a minimum number of test pits or borings be dug or drilled in the location of the system, depending on the size of the proposed system.

Infiltration Basin #1 – this basin is 8,000 square feet in area and therefore 2 test pits were dug in the location of the proposed practice. These pits are identified as TP#7 and TP#12 and are shown on the attached plan.

Recharge Basin #8 – this basin is 2,000 square feet in area and therefore 1 test pit was dug in the location of the proposed practice. These pits are identified as TP#3 and TP#5 and are shown on the attached plan.

[Insert a grading plan for each of these basins. The grading plan should be CROPPED to show each basin *clearly*. The grading plan should fit on an **8 ½" by 11"** sheet of paper with the test pit locations labeled.].

IV. Seasonal high water table (SHWT) and bedrock elevations

The following test pit data was collected on April 3, 2010.

Infiltration Basin # 1 –
Bottom of Pond Elevation = 145.0'

TP#7: Existing Surface Elevation of TP = 144.5'
SHWT = 141.2'
BEDROCK = not found
Deepest Elevation of TP = 140.5'

TP#12: Existing Surface Elevation of TP = 144.5'
SHWT = 141.7'
BEDROCK = not found
Deepest Elevation of TP = 138.5'

Recharge Basin #8 –
Bottom of Pond Elevation = 130.5'

TP#3: Existing Surface Elevation of TP = 134.0'
SHWT = 129.5'
BEDROCK = not found
Deepest Elevation of TP = 128.0'
TP#5: Existing Surface Elevation of TP = 134.5'
SHWT = 129.4'
BEDROCK = not found
Deepest Elevation of TP = 128.5'

NOTE: Do not include all test pit information. Include only those test pits needed to design the BMPs identified in the Infiltration Feasibility Report.

V. Profile descriptions

[Insert profile description written in accordance with the descriptive procedures, terminology and interpretations found in the Field Book for Describing and Sampling Soils, Version 2.0, USDA, NRCS, 2002]

NOTE: Do not include all test pit descriptions. Include only those descriptions needed to describe the BMPs identified in the Infiltration Feasibility Report.

VI. Soil plan in the area of the proposed practice(s)

[Insert a grading plan for each of these basins. The grading plan should be CROPPED to show each basin *clearly*. The grading plan for each of these basins should be on an **8 ½" by 11"** sheet of paper with a clear delineation of soil series from the Site Specific Soils Survey.

VII. Summary of [Default, Field Testing, or Lab Testing] data used to determine the infiltration rate

Infiltration Basin #1 – the infiltration rate was determined using the Default Values method described in Env-Wq 1504.13.

The basin is located within native material identified in the Soil Series survey as Windsor soils.

Using Ksat Values for New Hampshire Soils, Society of Soil Scientist of Northern New England, Special Publication No.5, September 2009, the lowest value under the basin floor elevation is: 6 inches per hour.

After applying a factor of safety, the design rate used in the drainage analysis is 3 inches per hour.

Recharge Basin #8 – the infiltration rate was determined using the Field Measurement method described in Env-Wq 1504.13.

The Ksat was measured with a Double Ring Infiltrometer.

The average Ksat of the tests was 30 inches per hour.

After applying a factor of safety, the design rate used in the drainage analysis is 15 inches per hour.

[attach data sheets to support these findings, which should include at a *minimum*: date of testing, number of test, number of repetitions, field data sheets, and the name of the person who performed the test and his or her qualifications (e.g., professional geologist)].