

| Factor of Safety and Design Infiltration Rate Worksheet | | | Form I-6 | | |
|---|------------------------|--|---------------------|------------------|---------------------------------|
| Factor Category | | Factor Description | Assigned Weight (w) | Factor Value (v) | Product (p) $p = w \times v$ |
| A | Suitability Assessment | Soil assessment methods | 0.25 | | |
| | | Predominant soil texture | 0.25 | | |
| | | Site soil variability | 0.25 | | |
| | | Depth to groundwater / impervious layer | 0.25 | | |
| | | Suitability Assessment Safety Factor, $S_A = \Sigma p$ | | | |
| B | Design | Level of pretreatment/ expected sediment loads | 0.5 | | |
| | | Redundancy/resiliency | 0.25 | | |
| | | Compaction during construction | 0.25 | | |
| | | Design Safety Factor, $S_B = \Sigma p$ | | | |
| Combined Safety Factor, $S_{total} = S_A \times S_B$ | | | | | |
| Observed Infiltration Rate, inch/hr, $K_{observed}$ (corrected for test-specific bias) | | | | | |
| Design Infiltration Rate, in/hr, $K_{design} = K_{observed} / S_{total}$ | | | | | |
| Supporting Data | | | | | |
| Briefly describe infiltration test and provide reference to test forms: | | | | | |