|  |  |  |  |
| --- | --- | --- | --- |
| **Table B.9 Design assessment checklist: filter strip** | | | |
| **General information** |  | | |
| Site ID |  | | |
| Asset ID(s) |  | | |
| Filter strip location(s) and co-ordinates |  | Drawing reference(s) |  |
| Date of assessment |  | Specification reference(s) |  |
| Primary function(s) of filter strip | Conveyance/treatment | | |

| **Check** | **MDR** | **Summary details1** | **Acceptable (Y/N)** | **Comments/ remedial actions** |
| --- | --- | --- | --- | --- |
| **Dimensions (Section 15.2)** | | | | |
| Length of contributing drainage area (in direction of flow), L (m) |  |  |  |  |
| Length of filter strip (in direction of flow), f (m) |  |  |  |  |
| Width (m) |  |  |  |  |
| Longitudinal slope (1 in ?) |  |  |  |  |
| **Inflows (Section 15.8.1)** | | | | |
| Provide a description of the contributing  catchment land use and its size (m2) |  |  |  |  |
| Does the design include:   * a suitable flow spreading device? * appropriate drops from the adjacent surface into the filter strip? |  |  |  |  |
| **Outfall arrangements (Section 15.8.2)** | | | | |
| Provide details of discharge arrangements from filter strip |  |  |  |  |
| Is the filter strip designed to allow infiltration? If yes, attach the infiltration assessment |  |  |  |  |
| Is a geomembrane required to prevent infiltration? If yes, give reason and reference specification or drawing |  |  |  |  |
| Depth to maximum likely groundwater level (m) |  |  |  |  |
| **Conveyance (Section 15.4)** | | | | |
| Proposed vegetation, and assumed roughness criteria (Manning’s “n”) |  |  |  |  |
| Maximum velocity across filter strip at full flow conditions (m/s) |  |  |  |  |
| Maximum water depth at full flow conditions (m) |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Water quality treatment (Section 15.5)** | | | | |
| For the 1 year 30 minute event confirm: |  |  |  |  |
| Flow height is acceptable for effective |
| treatment |  |
| Or |  |
| Maximum velocity is acceptable for |  |
| effective treatment |
| **Critical materials and product specifications (Section 15.9)** | | | | |
| Geomembrane |  |  |  |  |
| Geotextile (non-woven) |  |  |  |  |
| Topsoil |  |  |  |  |
| Other (including proprietary systems): |  |  |  |  |
| **Landscape/biodiversity (Sections 15.6, 15.7 and 15.10)** | | | | |
| Does the proposed planting have potential to create biodiverse habitats? |  |  |  |  |
| Have native plant species been used? (Note if ornamental species are proposed, give reasons and describe measures that prevent their migration to natural water bodies.) |  |  |  |  |
| Is the proposed planting appropriate to the location, visually, relative to gradient, water depths etc and with respect to access and maintenance? |  |  |  |  |
| Where relevant, confirm planting design does not adversely impact highway visibility and safety requirements (check with highway authority) |  |  |  |  |
| Is the proposed topsoil profile suitable to sustain the proposed plant species and is it sufficiently permeable? |  |  |  |  |
| **Constructability (Section 15.11)** | | | | |
| Are there any identifiable construction risks? If yes, state and confirm acceptable risk management measures are proposed |  |  |  |  |
| **Maintainability (Section 15.12)** | | | | |
| Confirm that access for maintenance is  acceptable and summarise details |  |  |  |  |
| Are there specific features that are likely to pose maintenance difficulties? If yes, identify mitigation measures required |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Filter strip design acceptability** | **Summary details including any changes required** | **Acceptable (Y/N)** | **Date changes made** |
| Acceptable:  Minor changes required:  Major changes required/redesign: |  |  |  |

**Note**

1 If there is an MDR (as indicated) confirm whether or not this is met and provide details of any variations.