|  |  |  |  |
| --- | --- | --- | --- |
| **Table B.16 Design assessment checklist: pervious pavement** | | | |
| **General information** |  | | |
| Site ID |  | | |
| Asset ID(s) |  | | |
| Pavement Location(s) and co-ordinates |  | Drawing reference(s) |  |
| Date of assessment |  | Specification reference(s) |  |
| Primary function of pavement | Attenuation/infiltration/water quality | | |

| **Check** | **Summary details1** | **Acceptable (Y/N)** | **Comments/ remedial actions** |
| --- | --- | --- | --- |
| **Surfacing (Section 20.1 and 20.2)** | | | |
| Type of surfacing (block paving, porous asphalt or plastic reinforced gravel/grass) |  |  |  |
| Confirm surfacing is suitable for the location and will withstand likely forces (eg turning forces from HGVs) |  |  |  |
| Confirm that all shallow services are located within service corridors beneath impermeable surface, as far as possible |  |  |  |
| Permeability of surface layer |  |  |  |
| Specified joint infill or grid infill |  |  |  |
| Specified binder for porous asphalt (to ensure maximum adhesion to aggregate) |  |  |  |
| Specified filler for porous asphalt (to ensure maximum adhesion to aggregate) |  |  |  |
| **Dimensions (Section 20.9)** | | | |
| Length (m) |  |  |  |
| Width (m) |  |  |  |
| Depth of capping layer (m) |  |  |  |
| Depth of sub-base (m) |  |  |  |
| Depth of laying course or regulating layer (m) |  |  |  |
| Maximum longitudinal or cross gradient (1 in ?) |  |  |  |
| Distance between check dams in sub-base (if provided) (m) |  |  |  |
| **Inflows (Section 20.10.1)** | | | |
| Provide a description of the contributing catchment land use (ie overlying surface only or additional inflows) and its size (m2) |  |  |  |
| Where the pavement accepts point source inflows, does the design include suitable energy diffusers? |  |  |  |
| **Outfall arrangements (Section 20.10.2)** | | | |
| Is the pavement designed to allow infiltration into the subgrade? If yes, attach infiltration assessment |  |  |  |
| Provide details of any flow control systems, overflow arrangements and limiting discharge rate from pavement |  |  |  |
| Is a geomembrane required to prevent infiltration or protect foundations? If yes, give reason |  |  |  |
| Depth to maximum likely groundwater level (m) |  |  |  |
| **Attenuation (Section 20.5)** | | | |
| Confirm voids ratio of sub-base material |  |  |  |
| Demonstrate collection pipework is of sufficient capacity? |  |  |  |
| Demonstrate that if the sub-base is used to convey water, the flow capacity will be sufficient? |  |  |  |
| Provide calculations for maximum water depth and return period for the design event |  |  |  |
| Check dams required because of sloping subgrade? If yes, provide details |  |  |  |
| **Structural pavement design (Section 20.9)** | | | |
| CBR\* used in design and confirm it is appropriate to the soils below the site when wetted |  |  |  |
| Assumed traffic loads used in design |  |  |  |
| Design method used for structural design and  provide calculations |  |  |  |
| **Landscape (Sections 20.7 and 20.12)** | | | |
| Is the proposed planting adjacent to the pavement appropriate to the location? |  |  |  |
| Is pavement protected from silt wash off from adjacent planting areas? |  |  |  |
| **Critical materials and product specifi ations (Section 20.11)** | | | |
| Geomembrane |  |  |  |
| Geotextile (non-woven) |  |  |  |
| Geogrids |  |  |  |
| Blocks/asphalt/plastic grids |  |  |  |
| Block jointing or grid infill material |  |  |  |
| Laying course |  |  |  |
| Base course (Note: where this is to be used as a temporary running course during construction, demonstrate that the puncture frequency is sufficient to support the design hydraulic performance of the system) |  |  |  |
| Sub-base |  |  |  |
| Capping layer |  |  |  |
| Topsoil |  |  |  |
| Other (including proprietary systems) |  |  |  |
| **Constructability (Section 20.13)** | | | |
| Are there any identifiable construction risks? If yes, state and confirm acceptable risk management measures are proposed. (Note: key requirement to protect permeable surface during construction.) |  |  |  |
| **Maintainability (Section 20.14)** | | | |
| 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 |  |  |  |

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

**Note**

1 CBR = California bearing ratio. This is a penetration test for evaluation of the mechanical strength of subgrades and basecourses.