



HUME CITY COUNCIL

LANDSCAPE GUIDELINES

Bridges, boardwalks and culverts

Bridges are required for pedestrian paths, shared trails and/or maintenance vehicle/fire truck access across a creek or other water body. Where bridges will be crossed by maintenance vehicles or fire trucks, they must be rated appropriately to be load-bearing.

Boardwalks may be used only for pedestrian/shared trails to cross unstable terrain, difficult grades, land subject to erosion, areas of significant or protected vegetation, culturally significant sites, wildlife corridors, or flood zones. Boardwalks may also perform the function of a viewing platform.

Culverts are suitable for minor crossings of swales or overland flow paths, where small volumes of ephemeral water are required to be conveyed.

General requirements

- Structures must be designed for long term durability and low maintenance.
- Design must meet current Australian Standards and where applicable, all Melbourne Water requirements.
- Structural Design Certification is required for all bridges and boardwalks and may be required for some culverts. Certification is also required post-construction.
- Structures must be of an appropriate size to support both the intended maximum capacity of users and any selected furniture.
- The structure is to be at least as wide as the connecting path network.
- Where width is restricted, especially for boardwalks, passing places at periodic intervals are to be provided.
- The structure and approaches should meet DDA accessibility requirements.

Note: Melbourne Water approval required for all structures within the 1 in 100 flood level for all Melbourne Water-managed water bodies.



Specific requirements

Boardwalks and bridges

- A bridge or boardwalk is required over swales or flow paths greater than 900mm deep.
- Bridge siting must consider viewing opportunities, accessibility and safety (clear sightlines), and mitigation of any potential user conflicts.
- A balustrade at a minimum of 1.2m high, including a handrail.
- Kick rail where balustrade or handrails are not required

Viewing platform

- Viewing platform siting must consider viewing opportunities, accessibility and safety (clear sightlines), and mitigation of any potential user conflicts.
- A balustrade at a minimum of 1.2m high, including a handrail.
- Kick rail where balustrade or handrail are not required.

Culverts

- Culverts are required where a path (pedestrian, shared trail or vehicle maintenance track) traverses a swale or overland flow path up to 900mm depth.
- Culverts are to be constructed of concrete and may be circular or square form.
- End walls are to be finished so as not to introduce a hazard, i.e. flush with surrounding ground levels with appropriate landscape planting, rockwork and protective barriers.

Materials

- All structural elements are to be concrete or steel.
- All fixtures must be tamper-proof.
- Footings, and inground fixings above the waterline must be concealed under the surface material or flush with the structure.
- Preferred decking materials for bridges and boardwalks are:
 - Wood Plastic Composite (WPC) with slip-resistant finish, with approved fixing method
 - Concrete with slip-resistant finish
 - Fibre reinforced plastic grating, must be heel safe mesh
 - Stainless steel or galvanised steel mesh, must be heel safe mesh
- Kickrails and handrails may be composite, stainless steel, galvanised steel
- Balustrades are to be stainless steel or galvanised steel
- Posts are to be stainless or galvanised steel.

References

**Australian Standard AS1657:2018 for handrails/
guardrails**

**Melbourne Water Constructed Wetlands Design
Manual**

**Victorian Government: Building Regulations
and Codes**

