TYPE 1 SWALE

Slotted conveyance pipe (optional) connected to stormwater drainage. Refer note 8

Concrete mowing edge

Planted Swale: For landscape planting, channel dimensions and slope. Refer to notes

Setdown to swale: Refer to DS-080

VARIES

ALTERNATIVE TYPE 1 SWALE

Concrete mowing edge

Planted Swale: For landscape planting, channel dimensions and slope. Refer to notes

Setdown to swale: Refer to DS-080

VARIES

Slotted conveyance pipe (optional) connected to stormwater drainage. Refer note 8

NOTES:

1. Channel dimensions: Swale batter slopes shall not be steeper than 1v:4h. Swale is to have a maximum invert depth (depth from invert to top of batter or kerb edge) of 400mm. Swale can be trapezoidal (i.e., with a base width) or 'V'-shaped.

2. Swale longitudinal gradient: Swale gradient must not exceed 5% or be below 1% along any 10m section of the swale. For sections with gradients less than 1%, a bioretention swale is recommended.

3. Maximum flow/depth: velocity depth product for Q2 event must be less than 0.4m²/s (which will typically necessitate the use of field inlets within the swale and conveyance pipes). Maximum depth of flow in Q2 event must be less than 300mm. Consideration must be given to major (e.g., Q100) flows and road capacity. Refer to Queensland Urban Drainage Manual or equivalent for hydraulic and safety requirements.

4. Field inlets: Field inlets to be located within swale channel upstream of road crossings and/or to convey flows above swale capacity to pipe drain. Primary field inlet spacing to be determined based on note 3 requirements, but not to exceed 15m. Landscaping (e.g., dense planting of shrubs) should be provided around field inlets to reduce access to field inlets by public.

5. Type 1 swales to be installed adjacent to open space (Forest, Park) only.

6. Traffic controls: Incorporate features that prevent or discourage the driving or parking of vehicles in the swale.

7. For concrete edge details, refer to DS-080.

8. Slotted conveyance pipe is required when grade is less than 2% or local features such as driveways suggest that ponding will be an issue.

9. All dimensions in millimetres unless specified otherwise.