DISTRICT COUNCIL OF LOWER EYRE PENINSULA

Vegetation management – Unsealed Rural Roads

“Working with our Rural & Coastal Communities”
OVERVIEW

The Local Government Act 1999 establishes the Council responsibilities in respect of the provision and maintenance of roads, for example:

- s4 (1) - Interpretation – public road; road; and roadwork
- s208 - Ownership of public roads
- s212 - Power to carry out roadwork
- s221 - Alteration of road

The Native Vegetation Act (NVA) sets a number of significant responsibilities in respect of the protection of native vegetation on road reserves.

The Guidelines for the Management of Roadside Vegetation (November 2012) provide some clarification of permitted versus approval required maintenance practices. However the manner in which regrowth is defined and protected in addition to the definition of low impact clearance impacts on the ability to maintain adequate road drainage systems.

SCOPE

This policy only applies to unsealed rural roads. The Policy is aimed to provide guidance to staff on the appropriate management practices for vegetation management as it impacts on road maintenance practices.

POLICY

Clearance of native vegetation from road reserves within the District Council of Lower Eyre Peninsula will be conducted within the constraints of the Native Vegetation Act 1991 and Regulations.

Management of native vegetation on the unsealed rural road network will occur for the following:

a) To undertake road works maintenance;
b) To undertake minor road works construction (re-sheeting);
c) To maintain road safety (sight distance and clearance envelopes); or
d) To provide access for utilities and services.

This policy does apply to Authorisations to Alter the Road Reserve.

Where major road construction is to be undertaken, consultation will occur with the Native Vegetation Council.

POLICY cont'd:
Unsealed Rural Road Cross Sections

In order to establish the basis of what constitutes a standard road carriageway and formation widths, the following are considered to be the required elements to determine the width requirements for unsealed roads:

<table>
<thead>
<tr>
<th>Element</th>
<th>Width</th>
<th>Comment/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carriageway</td>
<td>8 metres</td>
<td>The width of the pavement (no shoulder or verge)</td>
</tr>
<tr>
<td>Batter</td>
<td>1 metre (each side)</td>
<td>The transition from the carriageway to the invert of a drain or to intersect with the natural surface level. For unsealed roads (no shoulder or verge) the slope of the batter should be no steeper than 1:4.</td>
</tr>
<tr>
<td>Table Drain</td>
<td>1.5 metres (each side)</td>
<td>Not required where the natural surface level does not intersect the road cross section. Where the natural surface level intersects the road cross section (e.g. a road through a cutting), the width may need to be greater to permit the maintenance of stable batters.</td>
</tr>
</tbody>
</table>

Examples of road cross-sections are shown as follows:

a) Natural surface level below road cross section

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  BATTER  CARRIAGEWAY  BATTER

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  EARTHWORKS
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b) Natural surface level intersects road cross section

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CARRIAGEWAY

BATTER

TABLE
DRAIN
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EARTHWORKS
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c) Natural surface level above road cross section

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CARRIAGEWAY

TABLE
DRAIN

TABLE
DRAIN
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EARTHWORKS
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NOTE:
The terms used in the diagrams above and the terms used in the Guidelines for the Management of Roadside Vegetation are used in marginally different ways. On an unsealed road the ability to differentiate between a shoulder and verge is extremely difficult as they are typically non-existent. For the purposes of this Policy, the terms Batter, Carriageway and Table Drain are treated as follows:

i. Batter - incorporates the terms shoulder and verge where no table drain is required; and

ii. Carriageway – incorporates the terms carriageway and pavement.

iii. Operations involved in the loosening, removing, depositing, shaping and compacting soil or rock. 2. The structure resulting from this operation.

NOTE: Formation – describes the extent of earthworks required to maintain the integrity of the built road.

iv. Table drain – incorporates the terms shoulder, verge and table drain. A table drain comprises the down slope which is the battered section from the edge of carriageway to the invert of the drain, and the back slope is the battered section of the formation that intersects with the natural surface level.

The Glossary in the Guidelines for the Management of Roadside Vegetation includes definitions of the following relevant terms:

a) Carriageway – that portion of a road or bridge devoted particularly to the use of vehicles, inclusive of the shoulders and auxiliary lanes.

b) Clearance envelope – the area where vegetation clearance is required to allow for the passage legal right height vehicles across the full width of the carriageway. Secondary clearance envelope includes the outer edges of the road formation – shoulders, road verge, drains and around roadside furniture and signs.

c) Formation – the surface of the finished earthworks, excluding cut or fill batters

d) Secondary clearance envelope – are areas required to be kept clear of vegetation adjacent to the carriageway for adequate visibility of other traffic, signs and other roadside furniture.

e) Table drain – the side of a road adjacent to the shoulder, having its invert lower than the pavement base and being part of the formation

Clearance Envelopes

A. Side and Vertical Clearances
Clearance envelopes are established to ensure the safe passage of registered vehicles. The size and diversity of agricultural equipment that is permitted on public roads has increased over the years.
The Clearance envelope is deemed to be an area that is the width of the carriageway, and to a clear height of 5 metres.

This is shown in the following sketch for a typical 20 metre wide road reserve:

NOTES:

i. The clearance height is measured from the road surface level at the centreline of the road.

ii. The Clearance Envelope is to be to the extent of the carriageway. The height (A) will be 5 metres.

iii. The Secondary Clearance Envelope will be a minimum of 3 metres from the edge of carriageway where no table drain is located. Where a table drain exists, the secondary envelope width will extend to the top of the backslope batter (where it intersects with the natural surface level). The height (B) will be 3 metres.

iv. Directional and advisory signs where practical will be located within the nominated Secondary Clearance Envelope. Where that is not practical to do so safely, a clearance of 0.5 metres each side of the sign, and above the top of the sign will be used.

The secondary envelope incorporates drains, road signage, and provides sightlines around curves or at intersections with property access (crossovers) or other roads.
Vegetation will be kept clear within the Clearance and Secondary Clearance Envelopes. A program to remove regrowth within both Envelopes will be undertaken involving all unsealed rural roads on a cycle not exceeding 4 years.

B. Road Intersection Sightline Clearance
The provision of sightlines at road intersections and property access locations differ in respect to those stated within the Guidelines for the Management of Roadside Vegetation and those set out in Austroads publications.

The following illustrates the permitted (NVC approval not required) clearance zones at an intersection:

Where sight line requirements exceeding the above distances are considered necessary due to a combination of traffic volumes, school bus routes and heavy vehicle movements increased sight lines will be sought. Where NVC approval can not be obtained or where an environmental benefit offset payment is requested staff will submit a report to Council.

Maintenance Practices
The maintenance practices to be used to undertake activities and maintain the standards set out in this policy are outlined in this section.

Clearance Envelope Maintenance
A Pruning Equipment
Where practical and subject to budget constraints the pruning will be undertaken with hydro-axe, chainsaw or hand saw.

B Re-growth Control
Generally rolling or flail mowing.
POLICY cont’d:

Drainage maintenance
Unless required for soil stability, table drains will be kept free of vegetation and may involve flail mowing or non-residual chemical control.

Inlet and outlet structures will be kept free of vegetation for efficiency of flow and to minimise root damage to concrete structures or pipe alignments.

Where silt from the road surface or adjoining land has caused a build up of silt or sediment, the material is to be graded or excavated from the drain and removed.

SIGNED: ................................................................. .................................................................

CEO .......................................................................................................................... Mayor, DCLEP

Date: 17 / 07 / 2015 Date: 17 / 07 / 2015