### 3.3. Landscaping

#### 3.3.1. Approval Sheet

<table>
<thead>
<tr>
<th>TITLE:</th>
<th>Landscaping</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERSION NUMBER:</td>
<td>3</td>
</tr>
<tr>
<td>REVISION NUMBER:</td>
<td>1</td>
</tr>
</tbody>
</table>
| APPROVED BY:    | SIGNED: David Corry  
                 | DATED: 30th April 2004 |
|                 | MANAGER  
                 | ENVIRONMENTAL TECHNOLOGY |

© 2005 Roads & Traffic Authority

For further information, contact:
CADD Policy Officer  
RTA CADD Advisory Group  
Telephone: (02) 8837 0522
3.3.2. Table of Contents

3.3. Landscaping ..................................................................................................................................................3.3-1

3.3.1. Approval Sheet...........................................................................................................................................3.3-1
3.3.2. Table of Contents....................................................................................................................................3.3-2
3.3.3. Organisation of CADD Data.........................................................................................................................3.3-3
3.3.3.1. Data Groups...........................................................................................................................................3.3-3
3.3.3.1.1. Definitions...........................................................................................................................................3.3-3
3.3.3.1.2. Data Groupings.................................................................................................................................3.3-3
3.3.4. Preparation of CADD Drawings..................................................................................................................3.3-4
3.3.4.1. Presentation............................................................................................................................................3.3-4
3.3.4.1.1. Plan Size............................................................................................................................................3.3-4
3.3.4.1.2. Plan Borders.......................................................................................................................................3.3-4
3.3.4.1.3. Scales..................................................................................................................................................3.3-4
3.3.4.1.4. Line Thickness...................................................................................................................................3.3-4
3.3.4.1.5. Symbols..............................................................................................................................................3.3-4
3.3.4.1.6. Plan Orientation..............................................................................................................................3.3-4
3.3.4.1.7. Title Blocks.......................................................................................................................................3.3-4
3.3.4.1.8. Standard Notes on Drawings...........................................................................................................3.3-5
3.3.4.1.9. Plan Registration.............................................................................................................................3.3-5
3.3.4.1.10. Hatching and Shading Standards....................................................................................................3.3-5
3.3.4.2. Plan Groups............................................................................................................................................3.3-5
3.3.4.2.1. Drawing Groups.............................................................................................................................3.3-5
3.3.4.3. Compilation............................................................................................................................................3.3-6
3.3.4.3.1. Order of Drawings........................................................................................................................3.3-6
3.3.5. Sheet Composition.......................................................................................................................................3.3-7
3.3.5.1. Cover......................................................................................................................................................3.3-7
3.3.5.2. Landscape Details...............................................................................................................................3.3-7
3.3.5.3. Landscape Procedures........................................................................................................................3.3-7
3.3.5.4. Landscape Schedule...........................................................................................................................3.3-8
3.3.5.5. Landscape Design...............................................................................................................................3.3-8
3.3.5.6. Revegetation Plan...............................................................................................................................3.3-9
3.3.5.6.1. Revegetation Schedule..................................................................................................................3.3-9
3.3.5.7. Landscape Management Plan................................................................................................................3.3-9
3.3.5.7.1. Landscape Management Objectives..............................................................................................3.3-9
3.3.5.7.2. Landscape Management Outcomes...............................................................................................3.3-9
3.3.5.7.3. Landscape Management Content................................................................................................3.3-10
3.3.6. Appendix A Standard RTA Border Sheets.................................................................................................3.3-11
3.3.6.1. Typical Cover Sheet..........................................................................................................................3.3-11
3.3.6.2. Typical Presentation Sheet................................................................................................................3.3-13
3.3.7. Appendix B Standard Symbols..................................................................................................................3.3-15
3.3.7.1. Standard Survey Features................................................................................................................3.3-15
3.3.8. Appendix C Schedule of Typical Notes......................................................................................................3.3-17
3.3.8.1. Detail Sheets.........................................................................................................................................3.3-17
3.3.8.2. Plan Sheets.........................................................................................................................................3.3-17
3.3.8.2.1. Notes...............................................................................................................................................3.3-17
3.3.9. Appendix D Standard Hatching and Shading Symbols................................................................................3.3-18
3.3.10. Appendix E Typical Landscape Design Drawings......................................................................................3.3-19
3.3.3. **Organisation of CADD Data**

3.3.3.1. **Data Groups**

3.3.3.1.1. **Definitions**

- **Features** represent the grouping of a number of related points of the same type into a discrete unit (e.g., a number of related fence points or kerb and gutter points).

- **Data Groups** represent the grouping of a number of similar related features into a discrete unit. (e.g., all survey ground features)

3.3.3.1.2. **Data Groupings**

Following is a list of common Data Groups and associated features that shall be used.

<table>
<thead>
<tr>
<th>Group</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Design</td>
<td>Road Design and Existing Ground as a merged model.</td>
</tr>
<tr>
<td>Landscape</td>
<td>All Tree, Shrubs, &amp; Ground Covers</td>
</tr>
<tr>
<td>Revegetation</td>
<td>Grass and Native Seeding</td>
</tr>
<tr>
<td>Drainage</td>
<td>Drainage features as well as Irrigation lines and head positions.</td>
</tr>
<tr>
<td>Trimerge</td>
<td>Merged Design and Ground triangulation features</td>
</tr>
<tr>
<td>Boundaries</td>
<td>Current cadastre.</td>
</tr>
</tbody>
</table>

Groupings shown must be used with additional Groups added for complex design situations. Not all of the preceding Groups will need to be used. Groupings shown must be used with additional Groups added for complex situations. A report is to be provided to the RTA’s representative, prior to the commencement of design, indicating Group names and the features shown in each Group.
3.3.4. Preparation of CADD Drawings

3.3.4.1. Presentation

3.3.4.1.1. Plan Size

Generally, the RTA prefers its standard presentation sheet to be A3 format. A1 format is accepted, however should only be used if requested by client. All plain paper sheets must conform to ISO guidelines - however, concept design may conform to “A0” for height, and width may vary.

3.3.4.1.2. Plan Borders

Plan borders are to be in accordance with Australian Standard AS1100, or as supplied by the RTA. Refer to 3.3.6 Appendix A – Standard RTA Border Sheets, which gives examples of standard A3 borders, which are supplied by the RTA. A1 standard borders are available on request.

3.3.4.1.3. Scales

Drawings are to be presented in either A3 or A1 format, utilising the following preferred scales. Use the most appropriate scale to allow the detail to be clearly shown.

- Plan 1:250, 1:500, 1:1000
- Cross Section 1:50, 1:100, 1:200, or not to scale
- Typical cross section 1:100, or not to scale

3.3.4.1.4. Line Thickness

Refer to Section 2.1 of this Manual - CADD Data Exchange Policy.

3.3.4.1.5. Symbols

Standard symbols are to be used on all plan sheets to identify utilities, drainage pits, batters, boundary lines, guardfence and existing vegetation. Refer to 3.3.7 Appendix B – Standard Symbols for examples of standard symbols. Electronic copies of Standard Symbols are available if required.

3.3.4.1.6. Plan Orientation

Plan orientation and direction of stations, should be in accordance with the RTA’s Linear Referencing System “ROADLOC” (For obtaining ROADLOC values, contact the RTA’s RAMS System Administrator in Centennial Plaza, or your local Assets Officer). Stations should also be shown in ascending order from left to right across the sheet.

3.3.4.1.7. Title Blocks

Details such as the project name, design/reviewed/recommendation/approval signatures, plan registration number, file number, amendment details, sheet number and total number of sheets, should be shown. The title block may be altered to show the consultant’s name. A typical plan title block layout is given in 3.3.6 Appendix A – Standard RTA Border Sheets.
3.3.4.1.8. **Standard Notes on Drawings**

Appropriate standard notes are to be selected and are to be repeated on all similar sheets. Refer to 3.3.8 Appendix C - Schedule of Typical Notes for a typical example of what should be shown. Any additional project specific notes to be included are to be brought to the attention of the RTA.

3.3.4.1.9. **Plan Registration**

The RTA will supply plan registration number/s.

3.3.4.1.10. **Hatching and Shading Standards**

Refer to 3.3.9 Appendix D – Standard Hatching and Shading Symbols, for accepted RTA hatching and shading standards. These are to be adopted for various types of surface finish.

3.3.4.2. **Plan Groups**

3.3.4.2.1. **Drawing Groups**

There are to be a minimum of three drawing groups:

<table>
<thead>
<tr>
<th>Group</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border</td>
<td>Border and Title block</td>
</tr>
<tr>
<td>Existing</td>
<td>Existing detail that would remain after construction.</td>
</tr>
<tr>
<td>Road Design</td>
<td>Design detail</td>
</tr>
<tr>
<td>Soft Landscape</td>
<td>Planting and Seeding</td>
</tr>
<tr>
<td>Hard Landscape</td>
<td>Paving, edging, gravels etc</td>
</tr>
<tr>
<td>Drainage</td>
<td>Drainage features as well as Irrigation lines and head positions.</td>
</tr>
<tr>
<td>Boundaries</td>
<td>Existing and final cadastre</td>
</tr>
</tbody>
</table>

Not all of the preceding groups will need to be used. Additional groups may be added for complex design situations. A report is to be provided to the RTA’s representative, prior to the commencement of design, indicating group names and the content shown in each group.
3.3.4.3. Compilation

3.3.4.3.1. Order of Drawings

Drawings, depending on their intended purpose, will vary in sheet content plus the detail that is given on each of those sheets. The following is a comprehensive listing of the sheets that are likely to be applied for Landscape Design, Revegetation Plans and Landscape Management Plan, and can be assembled consisting of a combination of sheets, compiled from the following:

3.3.4.3.1.1. Landscape Design Plan

- Cover Sheet
- Landscape Details
- Landscape Procedures
- Landscape Schedule
- Landscape Design

3.3.4.3.1.2. Revegetation Plan

- Cover Sheet
- Revegetation Schedule
- Revegetation Design

Plans may be assembled in discrete 500m lengths, ie plan, guardfencing, batters etc. all together as one group covering 500m at a time.

3.3.4.3.1.3. Landscape Management Plan

- Cover Sheet
- Landscape Management Objectives
- Landscape Management Outcomes
- Landscape Management Content
3.3.5. **Sheet Composition**

Sheet composition considers the overall presentation of detail and associated support documentation in accordance with the design brief. Drawings should clearly present the information required in an orderly format.

The final product is to be fully prepared using electronic means without manual enhancement. Sheet content will vary depending on the scope and complexity of the project. Refer to 3.3.10 Appendix E - Typical Landscape Design Drawings for examples of detailed drawings that may act as a guide when preparing the following sheets.

3.3.5.1. **Cover**

This sheet should show the overall project description and includes:

- Sheet number and the total number of sheets
- Locality sketch for the project
- Signature boxes for design, reviewed, recommendation, acceptance and approval

The preferred font is Arial.

3.3.5.2. **Landscape Details**

This sheet may show typical planting detail (cross-sections) for different container size plants, and typical plan views of the planting layout. It should also show detailed cross-sections or plan views of landscape structures and elements. Each detail may be numbered for easy reference.

The preferred font is Arial.

3.3.5.3. **Landscape Procedures**

This sheet is a summary of landscape procedures under the headings of Site Preparation, Planting Procedures and Maintenance. This summary is for field use and a note must be inserted at the beginning of the document to read as follows:

‘These Landscape Procedures are a summary only and should be read in conjunction with RTA Specification QA 179 ‘Landscape Planting’.

The preferred font is Arial.
3.3.5.4. **Landscape Schedule**

This sheet should provide various tables of materials to be used in the works. These will include a table for plant species and should include column headings such as:

- Species (botanical name)
- Common name (optional)
- Plant numbers
- Container size

and whether a tree guard or tree stake is to be used. It should also include a separate table indicating the container sizes to be used (e.g., go-tube size, advanced size etc.), container dimensions and approved plant heights for those particular containers.

Another table that may be required is a Landscape Materials table which would include items such as mulch, soil, timber edging etc. This table will have columns headed: Item, Unit and Quantity Required.

3.3.5.5. **Landscape Design**

These sheets will show surface treatment for the areas to be landscaped, together with planting layout and descriptions. The graphics should be clearly defined with a distinct landscape free-hand appearance. Line styles, line thickness, hatching types and colour may be varied to suit each set of drawing, however the selections must remain constant throughout that set of drawings.

Drawing sheets should not be so cluttered, lacking clarity nor contrast that they are difficult to read.

Descriptions of each planting area shall briefly describe the plant layout, species (complete botanical names) and number required and linked to the particular graphic by an indicator line at 90° and 180°. Abbreviation of botanical names nor graphic symbols should not be used in the drawings. Use of full botanical name and the number for each species shall be clearly specified in the drawing.

A General note may be placed on each drawing sheet, this should provide information that is constant throughout the set of drawings and may refer to clear zones, setbacks, public utilities and drainage.

Each drawing sheet shall indicate the locations of existing areas of vegetation and land use outside the road boundary eg. Bushland, farmland, residential areas etc. Existing individual trees within the road reserve should also be shown. Locations of desirable views may also be identified in the drawings. All intersections and access roads shall display sight clearance arrows.

Sheets that are not final copies shall be labelled as either PRELIMINARY DRAWING or ADVANCED COPY and must be displayed in red on each individual sheet.

The preferred font is Arial.
3.3.5.6. **Revegetation Plan**

These sheets will show surface treatment for disturbed areas to be treated by seeding techniques.

The graphics should be clearly defined for each type of treatment and an associated legend describing the different treatment types should be included on each sheet.

Each drawing sheet shall indicate the locations of existing areas of vegetation inside and outside the road boundary. Existing individual trees within the road reserve should also be shown. Arrows showing locations of desirable views may also be used. All intersections and access roads shall display sight clearance arrows.

Sheets that are not final copies shall be labelled as either PRELIMINARY DRAWING or ADVANCED COPY and must be displayed in red on each individual sheet.

The preferred font is Arial.

3.3.5.6.1. **Revegetation Schedule**

This sheet will include separate tables for various native seeding mixes.

Each of these tables shall be titled with the appropriate Seed Type Mix (eg Type ‘A’), together with the approximate area to be treated. Each table shall be headed with columns titled:

- Species (botanical or common name)
- Rate (kg/ha)
- Total Seed (kg) Required (minimum 8 kg/ha)

The preferred font is Arial.

3.3.5.7. **Landscape Management Plan**

This plan shall include the combined Landscape and Revegetation Plans developed outlining the intended landscape management objectives, outcomes and content for the entire project using approved landscape management techniques. The management techniques shall include weed control, general pruning, fertilising, mulch replenishment, plant replacements and view retention in tabulated format (guideline) developed by the RTA. More to come………

3.3.5.7.1. **Landscape Management Objectives**

This shall outline consistent and agreed objectives for the function and performance of roadside vegetation on each site.

3.3.5.7.2. **Landscape Management Outcomes**

This shall outline more strategic and cost effective implementation of maintenance practices and specifications on a roadside site; greater ability to increase sustainability of roadside vegetation; measure performance of maintenance works against established objectives.
3.3.5.7.3. **Landscape Management Content**

This shall include:

- A detailed description of the site location and history;

- Descriptions of the different landscape types present on the site including plans outlining the extent of different landscape types.

- Clear statements on management objectives for each landscape type. The management objectives clearly establish the performance parameters for the landscape and assist in determining the appropriate application of management actions.

- A list of site issues that is likely to need specific attention in the management of the site. (Issue identification is particularly relevant for established landscapes). The extent (based on landscape types), frequency (within the landscape) and significance of these issues should be identified and documented. Photographs of issues can be used as a guide.

- A comprehensive list of maintenance / management actions required to maintain the landscape types present to the objectives identified.

- A matrix / table summarising the management actions (identified previously), their frequency (treatment frequency), and priority for implementation.

- Clear procedures for monitoring and recording performance / compliance with specified management actions. Specify the frequency of monitoring, format of records to be collected and procedure for handling reports.

- Appendices containing any support materials.
3.3.6. Appendix A  Standard RTA Border Sheets

3.3.6.1. Typical Cover Sheet
3.3.6.2. Typical Presentation Sheet
3.3.7. Appendix B  Standard Symbols

3.3.7.1. Standard Survey Features
3.3.8. **Appendix C Schedule of Typical Notes**

### 3.3.8.1. Detail Sheets

Incorporate a summary of the procedures for landscape works, under the standard heading of ‘Landscape Procedures’ and including sub headings of ‘Site preparation’, ‘Planting Procedures’ and ‘Maintenance and Watering’.

These procedures shall be written as site specific procedures for each set of drawings and preceded with the note: -

‘These Landscape Procedures are a summary only and should be read in conjunction with RTA Specification QA 179 ‘Landscape Planting’.

### 3.3.8.2. Plan Sheets

#### 3.3.8.2.1. Notes

1. All tree and shrub planting shall be kept clear of all overhead power lines, drainage lines and all other public utilities above and below ground.

2. Provide adequate sight clearances at all intersections; ‘U’ turn bays and all access roads.

3. Maintain a minimum 2.0m wide mowing strip along all median and roadside verges.

4. All tree planting shall not be located within 11.0m of the pavement edge and within 5.0m of a guard fence.

*Additional site specific notes that may be required shall be incorporated into the ‘Standard notes’*
3.3.9. Appendix D  Standard Hatching and Shading Symbols

HATCHING TYPES FOR REVEGETATION DRAWINGS TO SHOW VARIOUS SURFACE TREATMENTS AND SEED MIXES

HATCHING TYPES FOR LANDSCAPE DRAWINGS

Vegetation
Grassground cover
Grassground cover
Mass single planting
Mass single planting
Mass tree planting
Mass tree planting
Mulch
Brick Paving
3.3.10. Appendix E  Typical Landscape Design Drawings
SHIRE OF GREAT LAKES
SH 10 PACIFIC HIGHWAY
CONSTRUCTION OF DUAL CARRIAGeways
82KM 00 TO 94KM 500 NORTH OF NEWCASTLE
LANDSCAPE PLAN
PLANTING DETAIL FOR GRO-TUBE SIZE PLANTS

- Soil topsoil backfill
- Soil moisturiser premixed with water and incorporated into topsoil backfill
- One 20gm slow release fertiliser tablet placed beneath rootball

PLANTING DETAIL FOR ADVANCED SIZE TREES

- Soil moisturiser premixed with water and incorporated into topsoil backfill
- Four 20gm slow release fertiliser tablets placed beneath rootball of palm

PLANTING DETAIL FOR SUPER ADVANCED SIZE PALMS

- Circumference of excavated hole to be 250mm larger than rootball of palm tree
- 75mm deep woodchip mulch placed over 600mm x 600mm organic fibre type weedmat secured at each corner with steel pegs
- 200mm x 200mm x 200mm deep planting hole for gro-tube size plants
- Extruded polyethylene treeguard sleeve (450mm high x 350mm wide x 100mm thick) secured with three 750mm x 10mm dia. bamboo stakes

- 200mm deep cultivation
- 75mm deep woodchip mulch placed over 900mm x 900mm organic fibre type weedmat secured at each corner with steel pegs
- 25mm x 25mm x 2000mm long timber stake
- 900mm x 900mm sq. organic fibre weedmat secured at each corner with steel pegs
- Hessian tie to secure tree to stake
### SCHEDULE FOR NATIVE SEEDING TYPES (cont)

#### TYPE 'A' Seeding Schedule

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>KG/HA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acacia falcata</td>
<td>1.0</td>
</tr>
<tr>
<td>Acacia myrtifolia</td>
<td>1.0</td>
</tr>
<tr>
<td>Lomandra longifolia</td>
<td>1.0</td>
</tr>
<tr>
<td>Acacia longifolia</td>
<td>0.5</td>
</tr>
<tr>
<td>Banksia spinulosa</td>
<td>0.3</td>
</tr>
<tr>
<td>Helianthus tuberosus</td>
<td>0.2</td>
</tr>
<tr>
<td>Dodonaea triquetra</td>
<td>0.3</td>
</tr>
<tr>
<td>Lomandra longifolia</td>
<td>0.2</td>
</tr>
<tr>
<td>Daviesia genistifolia</td>
<td>0.1</td>
</tr>
</tbody>
</table>

#### TYPE 'B' Seeding Schedule

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>KG/HA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daviesia genistifolia</td>
<td>0.2</td>
</tr>
<tr>
<td>Pultenaea retusa</td>
<td>0.2</td>
</tr>
<tr>
<td>Pultenaea microphylla</td>
<td>0.2</td>
</tr>
<tr>
<td>Danthonia linkii</td>
<td>0.2</td>
</tr>
<tr>
<td>Themeda australis</td>
<td>0.3</td>
</tr>
<tr>
<td>Danthonia genistifolia</td>
<td>0.2</td>
</tr>
</tbody>
</table>

#### TYPE 'C' Seeding Schedule

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>KG/HA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperata cylindrica</td>
<td>0.3</td>
</tr>
<tr>
<td>Danthonia linkii</td>
<td>0.2</td>
</tr>
<tr>
<td>Themeda australis</td>
<td>0.3</td>
</tr>
<tr>
<td>Danthonia genistifolia</td>
<td>0.2</td>
</tr>
</tbody>
</table>

#### Cover Crop - to be included into each seed mix at the rates specified

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>KG/HA</th>
</tr>
</thead>
<tbody>
<tr>
<td>April to August (Winter)</td>
<td></td>
</tr>
<tr>
<td>Rye Corn</td>
<td>10.0</td>
</tr>
<tr>
<td>Japanese Millet</td>
<td>10.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>KG/HA</th>
</tr>
</thead>
<tbody>
<tr>
<td>September to March (Summer)</td>
<td></td>
</tr>
<tr>
<td>Japanese Millet</td>
<td>10.0</td>
</tr>
<tr>
<td>Rye Corn</td>
<td>10.0</td>
</tr>
</tbody>
</table>

**Notes on Native Seeding.**

The nominated locations for the different seeding types are approximate, and site adjustments will be required to ensure that the correct distances for sight clearances and clear zones are maintained. These clearances may be influenced by existing vegetation and landfall.

As a general rule those areas that require sight clearance, clear zone areas and median areas shall be seeded with the Type 'A' or Type 'B' seed mix. All other seed mixes shall be set back approximately 14.5m from the edge of pavement.

All seeding mixes shall include a cover crop, Japanese Millet (Summer) and Rye Corn (Winter), and shall be added at the rates specified, to ensure the rapid stabilisation of topsoil and to inhibit weed growth.

The disturbed areas around the inside and outside formations of the sediment basins shall be seeded with Type 'B' Seed mix.
LANDSCAPE PROCEDURES

NOTE - The following is to be read in conjunction with the landscape tender documents

A  SITE PREPARATION

For all proposed planting locations slash existing grass and weed growth followed with an application of a glyphosate based herbicide at the rates recommended by the manufacturer. A minimum two applications will be required at fourteen day intervals.

All spent weed growth shall be removed.

For planting areas flatter than 1:3 do to a depth of 200mm with tractor mounted tynes. Several passes in opposite direction, will be required until the soil structure is suitable for planting.

B  PLANTING PROCEDURES

Planting layout and details shall be according to the landscape plans.

Prepare:

- Gro-tube size plants
- advanced size plants
- Super-advanced size palms

Plant the trees and shrubs and bacchus with site weed free topsoil, incorporated with a soil moisturiser at 5gms per plant, pre-routed with one litre of water, and 20gms slow release fertiliser tablets at the following rates:

- Gro-tube - one tablet
- Advanced - two tablets
- Super-advanced - four tablets

Uniformly compact the backfill around each plant and finish flush with the natural surface level.

Water each plant immediately after the planting operation is complete, thereafter, at regular intervals so that a discernible moisture level is maintained until the practical completion of an area of planting.

For all Gro-tube size planting's provide a level surface around the base of each plant, and install a 600mm x 600mm x 600mm square organic fibre type weedmat around the base of each plant, secured at each corner with steel pegs.

Spread 75mm deep woodchip mulch around the base of the tree ensuring that the mulch is kept clear of the base of the plant.

C MAINTENANCE

Each plant shall receive water at a minimum five (5) day intervals for a period of six (6) weeks following planting, then at ten (10) day intervals for the following eighteen (18) weeks.

The frequency of watering can be varied in accordance with the Superintendent's direction during periods of drought or adequate rainfall.

Remove weed and grass infestations from around the base of each individual plant over a month until the end of the maintenance period.

Tree guards shall be inspected once a month and damaged and missing guards shall be replaced.

All turfed areas shall be mown at regular intervals during the maintenance service period at a height not less than 75mm.

Adequate sight clearances of 300.0m will be required for all vehicular traffic at all intersections and access roads.

Locations for planting copses may require on site adjustments, and will require approval from the Superintendent prior to implementation.

Note:

All tree planting shall be kept clear of all overhead wires and all other public utilities. For overhead powerlines a 15.0m clear zone on both sides is required.

A 14.5m clear zone along both sides of the carriageway shall be provided for all tree planting except behind guardrails where a 3.5m setback is required.

Adequate sight clearances of 300.0m will be required for all vehicular traffic at all intersections and access roads.

Locations for planting copses may require on site adjustments, and will require approval from the Superintendent prior to implementation.

For Super-advanced size palms and advanced size trees install a 900mm x 900mm square organic fibre type weedmat around the base of each plant secured at each corner with steel pegs. Stake advanced size trees as indicated.

For Super-advanced size palms (refer to detail)

All tree planting shall be kept clear of all overhead wires and all other public utilities. For overhead powerlines a 15.0m clear zone on both sides is required.

A 14.5m clear zone along both sides of the carriageway shall be provided for all tree planting except behind guardrails where a 3.5m setback is required.

Adequate sight clearances of 300.0m will be required for all vehicular traffic at all intersections and access roads.

Locations for planting copses may require on site adjustments, and will require approval from the Superintendent prior to implementation.

For Super-advanced size palms (refer to detail)
To Buladelah

Sight Clearance

ADJOINS SHEET No 6

ADJOINS SHEET No 8

Existing vegetation

From Karuah

TYPE 'B' Seeding Schedule

TYPE 'A' Seeding Schedule

TYPE '1' Seeding Schedule

Refer to Landscape Design plan for median treatment

(Refer to Seeding Schedule)

(Refer to Seeding Schedule)

(Refer to Seeding Schedule)
From Karuah To Buladelah

Sight Clearance

Individually mulched tree and shrub planting

Plant in rows 2.5m apart at 2.5m spacings in random groups of five to twenty five similar species

Existing vegetation

Plant in two to three rows
35  Eucalyptus maculata
25  Angophora costata
6  Eucalyptus microcorys
6  Eucalyptus propinqua
6  Eucalyptus globidea

4.0m wide clear zone area to be turfed with Nioka native grass

Plant in two to three rows
15  Eucalyptus maculata
10  Angophora costata
5  Eucalyptus microcorys
5  Eucalyptus propinqua
5  Eucalyptus globidea

4.0m wide clear zone area to be turfed with Nioka native grass

Planting in woodchip mulch
4.0m from pavement edge at nine plants per square metre

8000  Poa 'Eskdale'

Individually mulched shrub planting along centre of median

Plant in two rows 2.0m apart at 1.5m spacings
270  Callistemon 'Endeavour'

Adequate sight clearances of 300.0m will be required for all vehicular traffic at all intersections and access roads.

Locations for planting copses may require on site adjustments, and will require approval from the Superintendent prior to implementation.

Note:

All tree planting shall be kept clear of all overhead wires and all other public utilities. For overhead powerlines a 15.0m clearance on both sides is required.

A 14.0m clear zone along both sides of the carriageway shall be provided for all tree planting except behind guardrails where a 3.5m setback is required.

Adequate sight clearances of 300.0m will be required for all vehicular traffic at all intersections and access roads.

This sheet may be prepared using colour and may be incomplete if copied.