



## LANDSCAPE MANAGEMENT PLAN

For



## BISHOPS PARK RETIREMENT VILLAGE

Park Terrace, Christchurch

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Prepared by

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## **MANAGEMENT PLAN OUTLINE:**

This management plan outlines the maintenance and management for the proposed Landscape Plans for two sites forming Ryman Healthcare's Bishops Park Retirement Village.

The management plan below covers the retention of existing planting on site and the establishment of new plantings in accordance with the Landscape Concept and Planting Plans submitted with the Resource Consent Application. The plan also outlines the general implementation and maintenance of gardens for the site.

### **1.0 Existing Planting**

An existing protected tree on the Apartments Site has been identified to be retained. This is a *Tilia x europaea* (Common Lime).

One existing beech tree on the Main Facility site has been identified to be relocated to the dementia courtyard. To ensure successful transplanting, the tree shall be relocated by an accredited Arboricultural specialist.

### **2.0 Proposed Planting**

The specified new plantings to be established on site are to be installed at the sizes identified on the Resource Consent Plans. The specified sizes are to be the minimum size that the trees stand out of the ground **AFTER** planting and exclude the bag/root ball.

All new planting shall be planted in the next planting season (April to October) that follows the completion of that stage of the project.

Planting that will not be affected by development construction and is important for visual amenity and mitigation shall be planted as soon as possible to ensure early establishment. All new planting shall be installed in accordance with the planting specification.

### **3.0 Tree and Hedge Maintenance**

The proposed trees are important in helping to achieve the overall amenity of the site. Therefore, it is important to ensure that all trees are monitored and maintained to ensure they establish and achieve the desired amenity. Trees shall be trimmed annually to ensure good shape and to encourage growth. Trees shall be checked annually for damage by cars. If any are identified to be damaged in anyway, they should be assessed by the Landscape Architect or Arborist and replaced if deemed unable to achieve full size.

The Resource Consent Planting Plans identify estimated 10-year heights for all specified tree species. These heights shall be maintained as a **minimum height**. Trees **must not be topped** unless they exceed the specified minimum height, and there is a desire to maintain the minimum height by the client.

The Resource Consent Planting Plans identify estimated 10-year heights for all specified hedging species. These heights shall be maintained as a **minimum height**. Annual tipping and shaping of hedges can be undertaken to encourage growth, but hedges **must not** be topped unless they

exceed the specified minimum height, and there is a desire to maintain the minimum height by the client.

All landscaping as a part of this consent shall be maintained in perpetuity. Any dead, diseased, or damaged planting shall be replaced within the next planting season. Replacement specimens must be of the same or similar species that can achieve the specified mature height and desired amenity as the specimen which it is intended to replace.

#### **4.0 General Landscape Implementation & Maintenance**

The purpose of this Landscape Maintenance Plan is to guide the management of landscape and garden areas during both the implementation and establishment phase and the ongoing landscape management of all garden areas. In establishing plant and tree species onsite, the intent is to minimize plant loss and achieve optimal plant health and growth.

##### **4.1 Over-Podium Tree Planting**

For all trees of a grade 1.8 metres high or more, planted on a podium slab will be installed into a raised tree planter with a minimum size of 800x800x1000 deep. The base of all tree planters will have 30mm Versicell drainage grid with bidim filter cloth laid on top. This grid will be connected into the drainage system to ensure the planters do not flood. The planter mix will be a 3:1:2 mix of clean loamy topsoil, river sand and soil conditioner (e.g. Zoom Grow). Lightly compact the soil mix by treading in 150mm layers during back filling to ensure no future slumping of the pit occurs.

##### **4.2 In-Ground Tree Planting**

For all trees at a grade of 1.8 metres high, planted in-ground will be installed into a tree pit with a minimum size of 1000x1000x1000 deep. The tree pit mix will be a 3:1:1 mix of clean loamy topsoil, river sand and soil conditioner (e.g. Zoom Grow). Lightly compact soil mix by treading in 150mm layers during back filling to ensure no future slumping of the pit occurs.

##### **4.3 Over-Podium General Planting**

All general shrub, hedging and groundcover planting, planted on a podium slab, will be installed into a raised planter with a minimum depth of 400mm. The planter mix will be with a 3:1:2 mix of clean loamy topsoil, river sand and soil conditioner (e.g. Zoom Grow). Lightly compact soil mix by treading in 150mm layers during back filling.

##### **4.4 In-Ground General Planting**

All general shrub, hedging and groundcover planting, planted in-ground, will be installed into a garden bed with a minimum bed depth of 400mm. The base of the garden bed shall be cultivated with a fork to a further depth of 150mm. Backfill the garden bed with a 3:1:1 mix of clean loamy topsoil, river sand and soil conditioner (e.g. Zoom Grow). Lightly compact soil mix by treading in 150mm layers during back filling.

##### **4.5 Mulching**

Supply and place a 75mm layer of organic compost over all garden beds and to specimen trees as mulch. Compost sample to be supplied to Landscape Architect prior to laying for approval.

Consistently maintain mulch levels to 75mm as shown on planting details through establishment phase.

#### 4.6 Watering

Soil moisture levels will be monitored by the full-time gardening team to ensure watering takes place when required. All plants shall be watered thoroughly at the time of planting, and continue to be watered at periodic intervals, as required to prevent drying out, till the completion of the maintenance period. All tree and planter beds will have automated irrigation system installed into them, the irrigation system will run a seasonal and moisture monitor.

#### 4.7 Tree Staking

Supply and install specimen trees with 2x 50x50 H5 radiata stakes. Stakes shall be driven 700mm into the ground on opposite sides of the tree and tied with HDPE woven tree webbing. This shall secure the tree in such a manner that it is unable to come into contact with the stake. Stakes shall be stained charcoal. All stakes shall be vertical and to uniform heights.

#### 4.8 Fertiliser

Slow release fertiliser shall be applied at the time of planting to each planting hole in accordance with manufacturer's recommendations. Apply a dressing of 'Nitrophoska Blue' fertiliser at a rate of 30 grams per square metre over all garden beds and tree pits.

#### 4.9 Weed Control

Weed garden beds as required to ensure they have a very high standard of appearance at all times. Weed growth should be spot sprayed or removed by hand within one week of appearance.

#### 4.10 Rubbish Removal

Any rubbish items found in garden beds, or other landscape zones to be removed immediately.

#### 4.11 Site Inspections

Site inspections shall be undertaken at 6 monthly intervals during the establishment phase. These inspections shall identify any management issues as they arise and shall include an appraisal of:

- Weed and pest management issues including identification of appropriate control and removal methodology.
- weed releasing requirements; and,
- replacement planting and tree requirements.

### **5.0 Maintenance Summary**

| Frequency | Establishment Phase | Post-Handover (Terminology) |
|-----------|---------------------|-----------------------------|
|-----------|---------------------|-----------------------------|

|                          |  |   |
|--------------------------|--|---|
| Ongoing                  | <ul style="list-style-type: none"> <li>• Replenish Mulch</li> <li>• Watering (refer to specific maintenance requirements).</li> <li>• Rubbish Removal</li> </ul> | <ul style="list-style-type: none"> <li>• Watering (refer to specific maintenance requirements).</li> <li>• Rubbish Removal</li> </ul>     |
| Monthly                  | <ul style="list-style-type: none"> <li>• Inspect plant health and replace any plant losses. Treat any diseases</li> </ul>  |   |
| Bi-annually              | <ul style="list-style-type: none"> <li>• Fertiliser application</li> </ul>   | <ul style="list-style-type: none"> <li>• Fertiliser application</li> <li>• Trim climbing species to train to climbing systems.</li> </ul> |
| Annually and bi-annually | Prune trees & hedging when required (refer to specific maintenance requirements)   |   |