

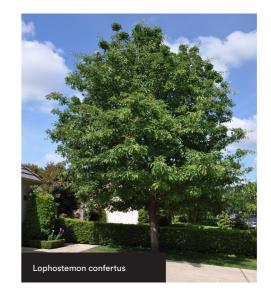
DENMAN STORAGE COMPLEX CLIENT CM+

SUBTITLE SITE PLAN

REVISION / DATE E / 06.07.2022

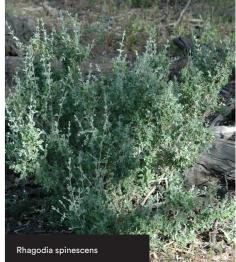
L-001

Planting Schedule					
Code	Botanical Name	Common Name	Quantity	Spacing	Mature Size
Trees +	· Screen Plants	I			
BP	Brachychiton populneus	Kurrajong	4	As shown	12m (h) x 6m (w)
CV	Callistemon viminalis	Weeping Bottlebrush	22	As shown	6m (h) x 4m (w)
EN	Eucalyptus nicholii	Willow Peppermint	6	As shown	12m (h) x 6m (w)
LC	Lophostemon confertus	Brush Box	6	As shown	15m (h) x 8m (w)
PR	Photinia robusta	Red Leaf Photinia	82	1.5m	5m (h) x 2m (w)
Mass P	lanting (Shrubs, Grasses & Groundcov	ers)			L
-	Atriplex nummularia	Old Man Saltbush	-	2/m2	1.2m (h) x 1.2 (w)
-	Callistemon viminalis 'Better John'	Bottlebrush	-	5m/2	1m (h) x 1m (w)
-	Carpobrotus glaucenscens	Pigface	-	2/m2	200 (h) x 2m (w)
-	Correa reflexa	Native Fuchsia	-	5/m2	500 (h) x 1m (w)
-	Dianella revoluta	Blue-flax Lily	-	6/m2	1m (h) x 1m (w)
-	Dietes grandiflora	Wild iris	-	4/m2	1.2m (h) x 1.2m (w)
-	Grevillea junipera 'Gold Cluster'	Juniper	-	2/m2	300 (h) x 1m (w)
-	Hibbertia linearis	Guinea Flower	-	2/m2	1.5m (h) x 2m (w)
-	Liriope muscari	Evergreen Giant	-	6/m2	500 (h) x 500 (w)
-	Lomanra longifolia	Mat-rush	-	4/m2	1.2 (h) x 1.2 (w)
-	Rhagodia spinescens	Spiny Saltbush	-	4/m2	1m (h) x 1.5m (w)
-	Rhaphiolepis indica	Indian Hawthorn	-	4/m2	1m (h) x 1m (w)
-	Themeda australis	Kangaroo Grass	-	6/m2	500 (h) x 500 (w)
-	Westringia 'Grey Box'	Coastal Rosemary	-	4/m2	450 (h) x 450 (w)













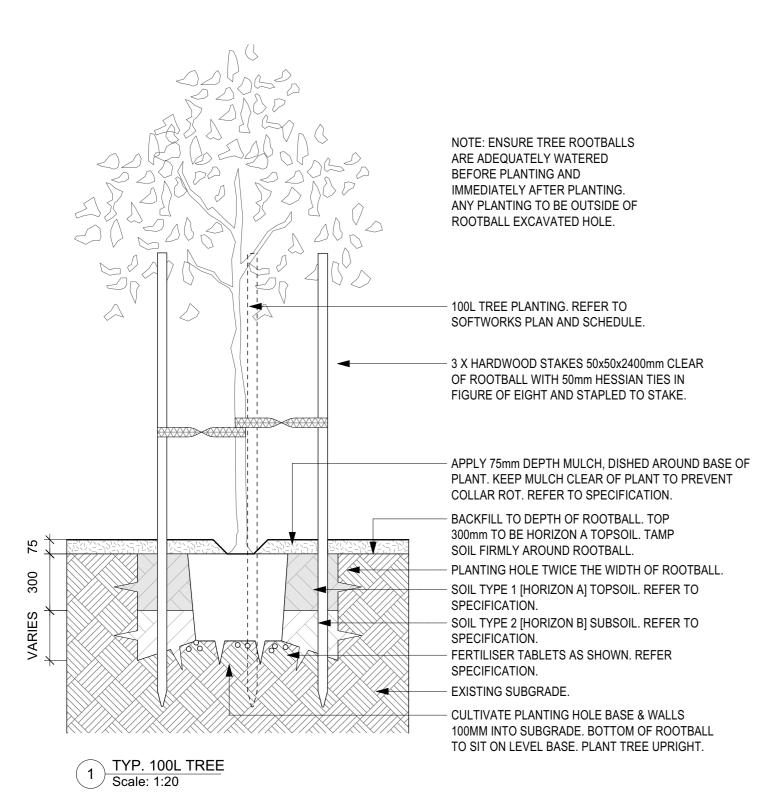


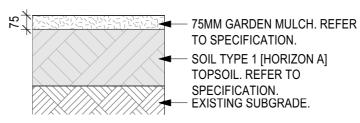


Planting Areas

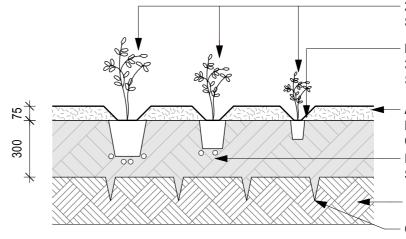
TOTAL AREA: 6432 m2 TOTAL LANDSCAPED AREA: 988.4 M2 TOTAL % LANDSCAPED AREA: 15.3%

L-002





TYP. GARDEN MULCH Scale: 1:20



200MM, 140MM AND 75MM. REFER TO SOFTWORKS PLAN AND SCHEDULE.

BACKFILL TO DEPTH OF ROOTBALL. TOP 300mm TO BE HORIZON A TOPSOIL. TAMP SOIL FIRMLY AROUND ROOTBALL.

APPLY 75mm DEPTH MULCH, DISHED AROUND BASE OF PLANT. KEEP MULCH CLEAR OF PLANT TO PREVENT COLLAR ROT. REFER TO SPECIFICATION. FERTILISER TABLETS AS SHOWN. REFER SPECIFICATION.

EXISTING SUBGRADE.

CULTIVATE PLANTING HOLE 100MM INTO SUBGRADE. BOTTOM OF ROOTBALL TO SIT ON LEVEL BASE. PLANT UPRIGHT.

TYP. 200MM POT, 140MM POT, 75MM TUBE Scale: 1:20

CONTEXT LANDSCAPE ARCHITECTURE

PROJECT DENMAN STORAGE COMPLEX CLIENT

TITLE LANDSCAPE DA PACKAGE

L-003

E / 06.07.2022

Ground Preparation

PREPARATION

Vegetative spoil

Spoil suitable for mulch or spreading for bushland restoration: Spread freshly harvested native plant biomass, free of weed propagules.

Unsuitable material: Remove vegetative spoil from site. Do not burn. Subgrade: Subgrade treatment for landscape areas must be in accordance with the recommendations of an agreed soil laboratory to a minimum depth of 300 mm of ameliorated subgrade atop compacted subgrades.

SUBSTRATE

Consolidation

General: Compact lightly and uniformly in 50 mm layers. Avoid differential subsidence and excess compaction and produce a finished topsoil surface which has the following characteristics:

- Finished to design levels.
- Smooth and free from stones or lumps of soil.
- Graded to drain freely, without ponding, to catchment points.
- Graded evenly into adjoining ground surfaces.
- Ready for planting.

SUBSOIL

General

Excavated: Excavate to bring the subsoil to at least 300 mm below finished design levels. Shape the subsoil to fall to subsoil drains where applicable. Break up the subsoil to a further depth of 100 mm.

Unexcavated: Remove weeds, roots, builder's rubbish and other debris. Bring the planting bed to 75 mm below finished design levels.

Subsoil treatment for all landscape areas must be in accordance with the recommendations of an agreed soil laboratory to a minimum depth of 300mm for all planted, turfed areas and all new tree locations.

Cultivation

Cultivation depths (mm): Refer Planting Details.

Services and roots: Do not disturb services or tree roots. If required cultivate these areas by hand.

Cultivation: Thoroughly mix in materials required to be incorporated into the subsoil. Cultivate manually within 300 mm of paths or structures. Remove stones exceeding 25 mm, clods of earth exceeding 50 mm, and weeds, rubbish or other deleterious material brought to the surface during cultivation. Trim the surface to design levels after cultivation.

Additives

Subsoils shall be tested prior to any cultivation to determine subsoil conditions and formulate appropriate recommendations for their amelioration.

TOPSOIL

Following installation of all garden bed and turf areas, soil compaction to be tested and in the event it is excessively high, to be remediated to the satisfaction of a qualified professional soil scientist and Landscape Architect prior to planting or grassing. Testing to be done with a penetrometer to test soil compaction to a depth of 500mm. If resistance as measured by the penetrometer is greater than 300psi or 2,000kPa, de-compaction of material must be undertaken.

Site topsoil preparation

Screeding: By a power hydraulic screen capable of handling 100 tonne per hour, with sieves grading from 20 mm to 15 mm.

Contamination: If diesel oil, cement or other phytotoxic material has been spilt on the site topsoil, excavate the contaminated soil and dispose of it off

Additives program: 8 weeks before stolonising or turfing.

Placing topsoil

Site topsoil: Do not incorporate site topsoil into the works until soil testing results have been approved. Remove unauthorised material from the site, which includes any soil material not specified in the specification or any alternative material not approved.

Spreading: Spread the topsoil on the prepared subsoil and grade evenly, making allowances, if appropriate, for the following:

- Required finished levels and contours after light compaction.
- Grassed areas finished flush with adjacent hard surfaces such as kerbs, paths and mowing strips.

Finishing: Feather edges into adjoining undisturbed ground.

Consolidation

General: Compact lightly and uniformly in 150 mm layers. Avoid differential subsidence and excess compaction and produce a finished topsoil surface which has the following characteristics:

- Finished to design levels.
- Smooth and free from stones or lumps of soil.
- Graded to drain freely, without ponding, to catchment points.
- Graded evenly into adjoining ground surfaces.
- Ready for planting.

Planting

General

Plant location and spacing: If necessary to vary plant locations and spacings to avoid service lines, or to cover the area uniformly, or for other reasons, give

Planting conditions

Weather: Do not plant in unsuitable weather conditions, including extreme heat, cold, wind or rain. In other than sandy soils, suspend excavation when the soil is wet, or during frost periods.

Watering

Timing: Thoroughly water the plants before planting, immediately after planting, and as required to maintain growth rates free of stress.

Preparation

Individual plantings in grassed areas: Prepare for planting as follows:

- Excavate a hole twice the diameter of the root ball and at least 100 mm deep-
- er than the root ball.
- Break up the base of the hole to a further depth of 100 mm.
- Loosen compacted sides of the hole to prevent confinement of root growth.

Ripline planting: Prepare for planting as follows:

Rip the row and excavate a plant hole for each plant large enough to accept the root ball plus 0.1 m3 of backfilling with topsoil.

- Clear weeds and other vegetative material within 300 mm radius of the plants.
- If planting holes are excavated by mechanical means, increase the hole size by 100 mm and loosen compacted sides to prevent confinement of root growth.

General: Place plants as follows:

- Remove the plant from the container with minimum disturbance to the root ball. Make sure that the root ball is moist.
- If required, root prune to make sure all circling roots have been either severed or aligned radially into the surrounding soil.
- Place the plant in its final position, in the centre of the hole and plumb, and with the topsoil level of the plant, level with the finished surface of the surroundina soil.

Fertilising

Pellets: In planting beds and individual plantings, place fertiliser pellets around the plants at the time of planting

Backfilling

General: Backfill with topsoil mixture. Lightly tamp and water to eliminate air pockets. Make sure that topsoil is not placed over the top of the root ball, so the plant stem remains the same height above ground as it was in the container. Avoid mixing mulch with topsoil

Watering basins for plants in grassed areas

Location: To each individual plant not located in irrigated grassed areas or naturally moist areas

Water basin method: Construct around the base of each individual plant, consisting of a raised ring of soil capable of holding at least 10L

MUI CHING

Placing mulch

General: Place mulch to the required depth and clear of plant stems so that after settling it conforms to the following:

- Smooth and evenly graded between design surface levels.
- Flush with the surrounding finished levels.
- Sloped towards the base of plant stems in plantation bed.

Extent: Provide mulch to 750 mm diameter to surrounds of plants planted in riplines and grassed areas.

Depths:

- Organic mulch: 100 mm.

Installation:

- In ripline and grassed areas: Place mulch to 750 mm diameter around plants.
- In mass planted areas: Place after the preparation of the planting bed but before planting and other work.
- In smaller areas (e.g. planter boxes): Place after the preparation of the planting bed, planting and other work.



CM+

Maintenance

RESPONSIBILITIES

General

Requirement: Provide landscape maintenance of the contract area during the maintenance period.

Performance

Extent of maintenance:

- Weeding of lawn, garden bed areas, and pavement.
- Supply and spreading of fertiliser to lawn, garden bed areas and pots.
- Supply and installation of mulch to existing garden bed areas and pots.
- Pruning, trimming and tree surgery.
- Insect and disease control of lawn, shrubs and trees.
- Mowing and edge trimming to all lawn areas including collection and removal of clippings.
- Replacement of dead or failed plants.
- Maintenance of irrigation systems
- Removal of rubbish and debris in garden areas.
- Keeping of a log book.
- Monthly reports.

EXECUTION

Weeding

Requirement: Remove unwanted broadleaf plants and grasses considered invasive to the locality.

Program:

- Lawns: Quarterly.

- Trees and shrubs: As required for planted, paved and mulched areas to be weed free when observed at fortnightly intervals.

Vigorous ground covers: Keep 200 mm clear from the base of any shrub or tree Remove as follows

- Small areas: By hand.
- Large areas: Proprietary herbicides.

Herbicide application: Apply as follows:

- To the manufacturer's recommendations and the material data and safety data sheets
- When the weather is humid with moderate temperatures and maximum sunlight.
- When the ground has adequate soil moisture.
- Avoid windy days or if rain is likely to follow within 12 hours.

Insect and disease control

Requirement: Control any insects or diseases affecting the lawn and garden bed areas as follows:

- Identify the problem.
- Execute the correct treatment until the problem has been eliminated.
- Apply hazardous material out of normal working hours.
- Protect staff and public.

TREES AND SHRUBS

Pruning and trimming

General: Prune to reflect the natural growth, flowering and regrowth habit of the individual species

Program generally: Spring and Summer and on a spot basis as required. Shrubs: Prune after flowering.

Hedge trimming: Schedule trimming at times that maintains the character and design of hedges. Allow up to three times per season.

Tip pruning:

- Purpose: To encourage development of new shoots during the active growing season.
- Method: Removal of the top 25 mm or growing tip of each branch.
- Restriction: Do not remove buds before the flowering season in those plants that have terminal flowers.

Radical pruning

- Purpose: To maintain a hedge or formal shape or when a particular problem, growth habit, damage, or disease requires branch removal.

Tree pruning:

- Eliminate diseased or damaged growth, avoid inter-branch contact and thin out crowns in a natural manner
- Maintain sight lines to signs and lights
- Maintain visibility for personal security.
- Tree branch removal:
- To AS 4373.
- Give notice and engage a suitably qualified arborist.

Fertilising program: Base the program on soil testing results.

Soil testing: Undertake soil tests as follows:

- At the commencement of the contract.

- Take samples from a cross section of planting beds.

Soil pH adjustment: Apply additional fertilisers and soil conditioners as indicated from soil testing or from the physical soil structure. Maintain a pH range of

Shrubs:

- N:P:K ratio: Balanced 10:4:6.

- Rate: To the manufacturer's recommendation and cultivate two rows into the soil 100 mm deep.
- Regular application: Each September and March.

- Sensitive native species: Apply appropriate dosage.

- Application: Apply pill to the root zone at a distance from the trunk equal to the spread of the foliage. Make holes 400 mm deep to take the pill, equally spaced around the plant and backfill with sand.

Micro nutrients: Apply 1 kg of urea in 20 litres of water per 100 m2, through a hose proportioner every four weeks during Summer.

Generally: If plants are not self-supporting or if stakes are damaged, stake or re-stake the plants as follows:

- Drive three hardwood stakes placed diagonally with the first stake on the opposite side to the prevailing winds.

- Do not single stake large plants

Removal: If plants are robust with well developed systems and no longer require support, remove stakes and ties.

Plant replacements

General: Replace all evergreen plants that have died or lost 50% of their normal foliage cover. Provide replacement plants as follows:

- Of the same species and variety and of the closest commercially available
- With a balanced root system in relation to the size of the plant and conducive to successful transpiration. Inspect the root conditions of plants by knocking plants from their containers.
- Without signs of having been stressed at any stage during their development due to inadequate watering, excessive shade/sunlight, suffered physical damage or have restricted habit due to growth in nursery rows.
- Grown in final containers for not less than twelve (12) weeks.

WATERING

Lawn and planted areas

Generally: Maintain a vigorous healthy appearance.

Application rates: Soak to a depth of 150 mm for lawn and 300 mm for planting. Avoid frequent dampening of the surface. Allow the surface of the soil to partially dry out between waterings. Confirm soaked depth and record in the log book.

Timing: Water at times of day to minimise water evaporation loss. Do not water during the hottest period of Summer days.

Water restrictions: Coordinate the water supply and conform to legislation and restrictions applying at the time.

Hand watering

General: Manually water all lawn and planting areas in the absence of an irrigation system or until the proposed irrigation system is fully operational.

Irrigation Programming

Automated systems: Program to coincide with optimum periods of water pressure and water absorption

Public access: Do not inconvenience persons occupying the site by water spray or block normal pedestrian or traffic flow.

MULCHING

General

Clean up: Remove all mulching materials off lawn or paved areas and maintain a clean and tidy appearance when viewed on a weekly basis.

Requirement: Maintain a minimum depth as follows:

- 75 mm for organic mulch. - 50 mm for gravel mulch.
- Top up: Areas of excessive wear.

Appearance: Maintain to keep clean and tidy with no soil disturbance evident on the surface of the mulch.

INCIDENTAL WORKS

Supplementary works

General: Execute the following:

- Removal of waste from maintenance work

- Removal of leaf litter fortnightly during leaf fall.
- Wash paving on completion of herbicide application.

Signage: Maintain sight line visibility.

General: Inspect and clean all drainage structures and pit covers and make sure they are in proper working order

Frequency: As required so that all overflow drains are cleared when observed at fortnightly intervals

CONTEXT LANDSCAPE ARCHITECTURE

PROJECT CLIENT

DENMAN STORAGE COMPLEX

TITI F

LANDSCAPE DA PACKAGE

DWG NO.

REVISION / DATE

L-005 D / 06.07.2022

SUBTITLE