Coastal dunes are our natural defence against storms and erosion. Healthy dunes protect wildlife, recreational areas, infrastructure and our beaches.

Redhead Beach Dune Management Works

Protecting Our Coast

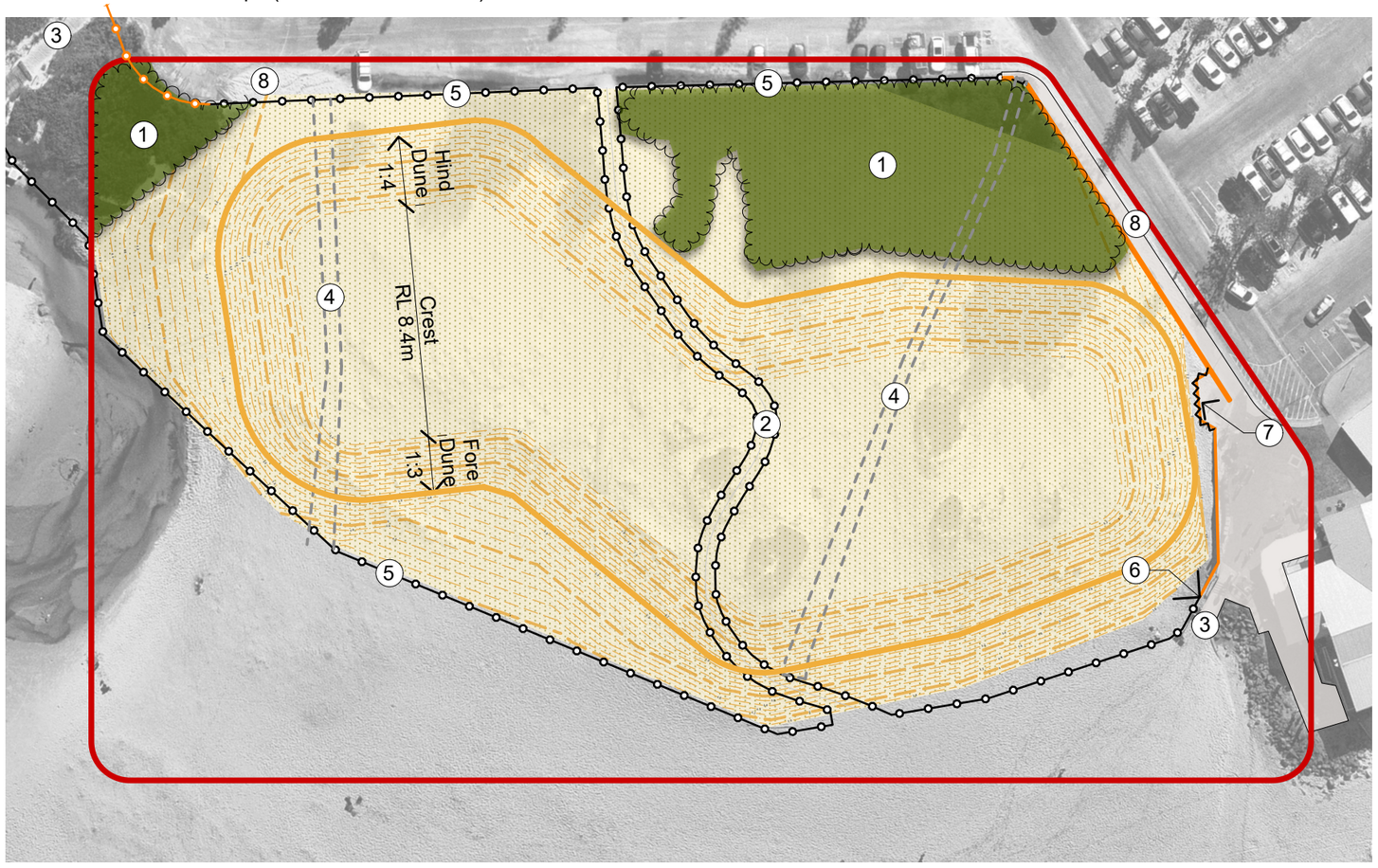
LAKE MACQUARIE CITY

Redhead Beach Dune Management Works

Proposed Dune Reshaping

For nearly 40 years, the dune at Redhead beach was stable and well-vegetated. With the right shape, plant species, protection, and ongoing care, we can restore the dune's stability. This will help stop windblown sand from reaching the carpark and create more habitat for wildlife. The NSW Coastal Dune Management Manual recommends all dune restoration works should try to restore the natural landform that existed before disturbance occurred. Because we have limited detailed dune data from before 2019, the design will use the current healthy north-eastern part of the dune as a guide. The reshaped dune will include:

- A gentle hind dune slope (1 vertical: 4 horizontal)
- A 20-30 m wide flat crest at 8.4 m AHD
- A seaward fore dune slope (1 vertical: 3 horizontal).



Legend

- Project extent
- Extent of dune reshaping works
- Dune footprint
- Approx. extent of existing vegetation to be retained
- Existing fence to be retained
- Existing wall to be retained
- Existing footpath/pavement to be retained
- Proposed dune protection fencing

NORTH

Key

1. Where possible, existing vegetation behind the dunes will be kept. Weed species and dead wood will be removed at the start of works. Any native plants and dead wood that must be cleared will be reused as brush matting to help new dune plantings grow.
2. The beach access mid-way along the car park will stay in place but the path will be re-aligned to fit the new dune shape. Dune protection fencing will mark the path, and existing track matting will be slavaged and reused where suitable to stabilise the base of the track. Signs and bins will be temporarily removed during works and reinstated once complete.
3. The existing beach access will be retained.
4. These existing access points will be closed with fencing and replanted. One designated pathway will remain to provide direct access from the car park to the beach, while reducing trampling and improving dune stability
5. Dune protection fencing will be installed around the reshaped dune to protect it
6. The new dune protection fence will connect to the existing timber retaining wall.
7. The wire and mesh screen on top of the timber wall will be replaced to stop sand blowing into the shower area. Sand that has built up in the shower area will be removed.
8. Sand that has built up on pavements will be cleared.

Sequence of works

Weed species will be removed and dead wood will be stockpiled for re-use as brush matting.

Earthmoving equipment will reshape the dune.

The dune will be covered with jute mesh to prevent wind erosion.

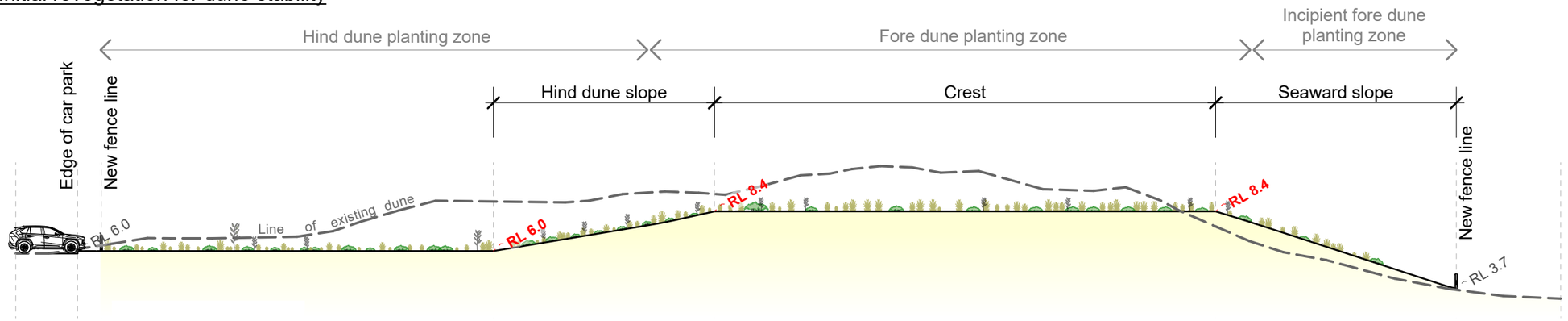
Fences and a designated path will help plants grow and keep the dune stable.

LAKE MACQUARIE CITY

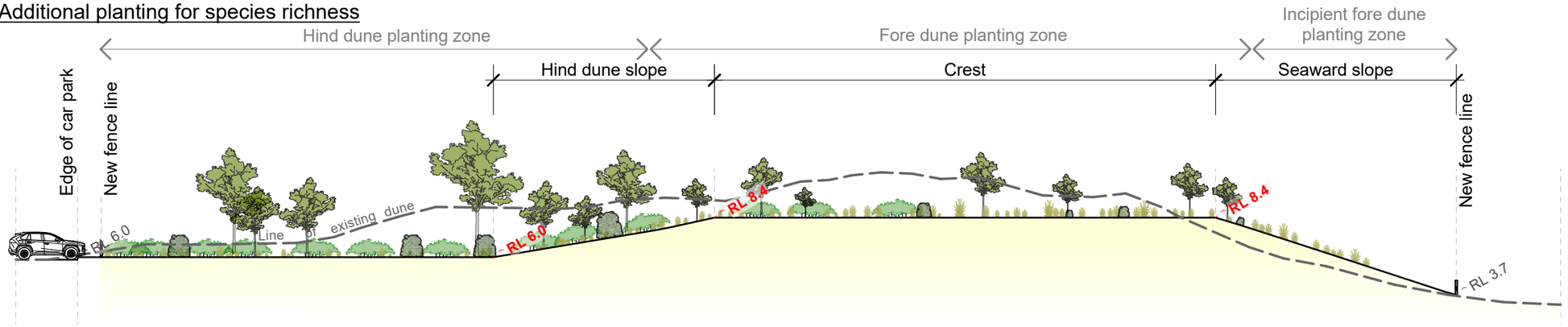
Redhead Beach Dune Management Works

Proposed Revegetation

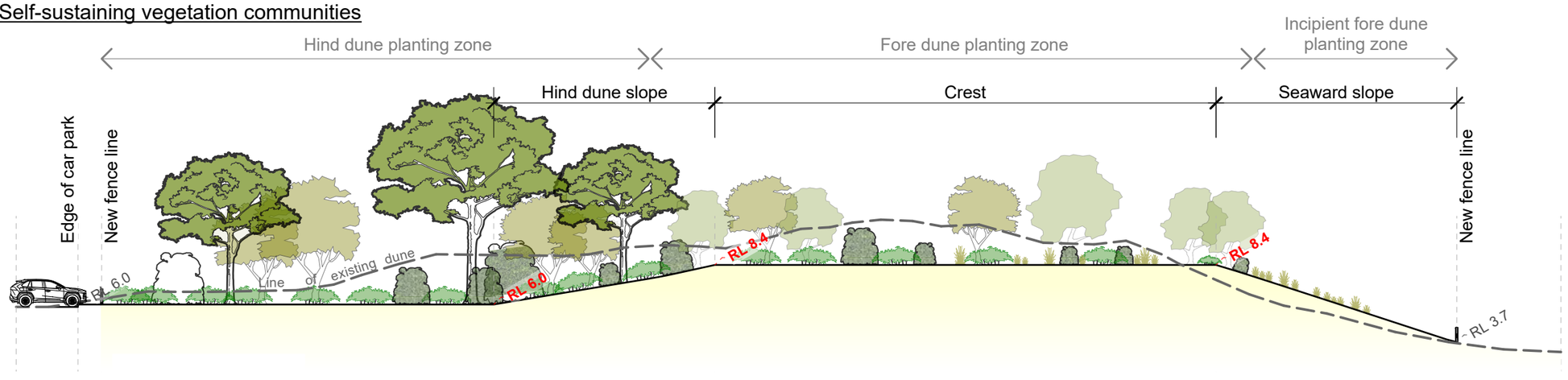
1. Initial revegetation for dune stability



2. Additional planting for species richness

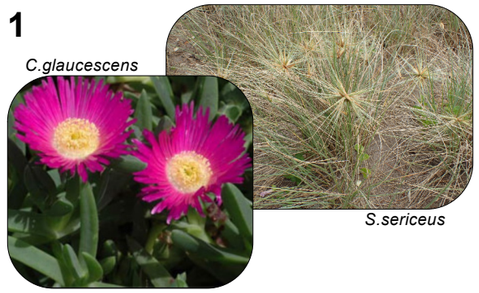


3. Self-sustaining vegetation communities



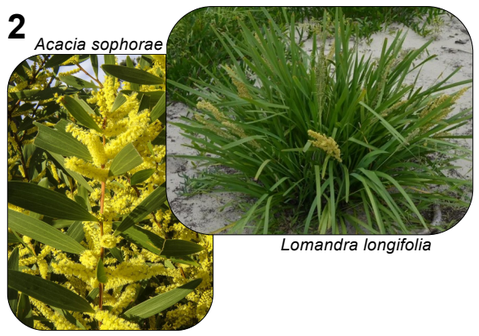
Sequence of plant re-establishment

1



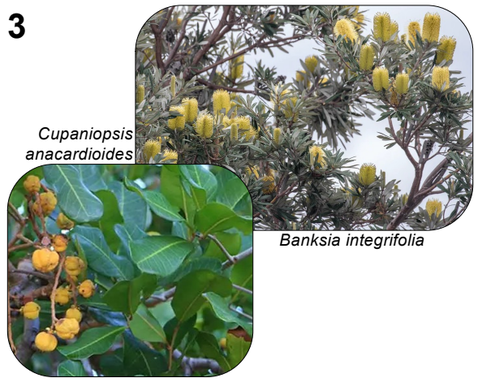
Establishing a solid groundcover to stabilise the dune using mostly *Spinifex* and *Carpobrotus sp.*

2



Introducing more species into the fore dune and hind dune zones to increase species diversity.

3



Maturing vegetation builds soil moisture and nutrients, creating the right conditions for plants to grow and naturally regenerate.

LAKE MACQUARIE CITY