

# STRATEGY MAP



## Green network connectivity

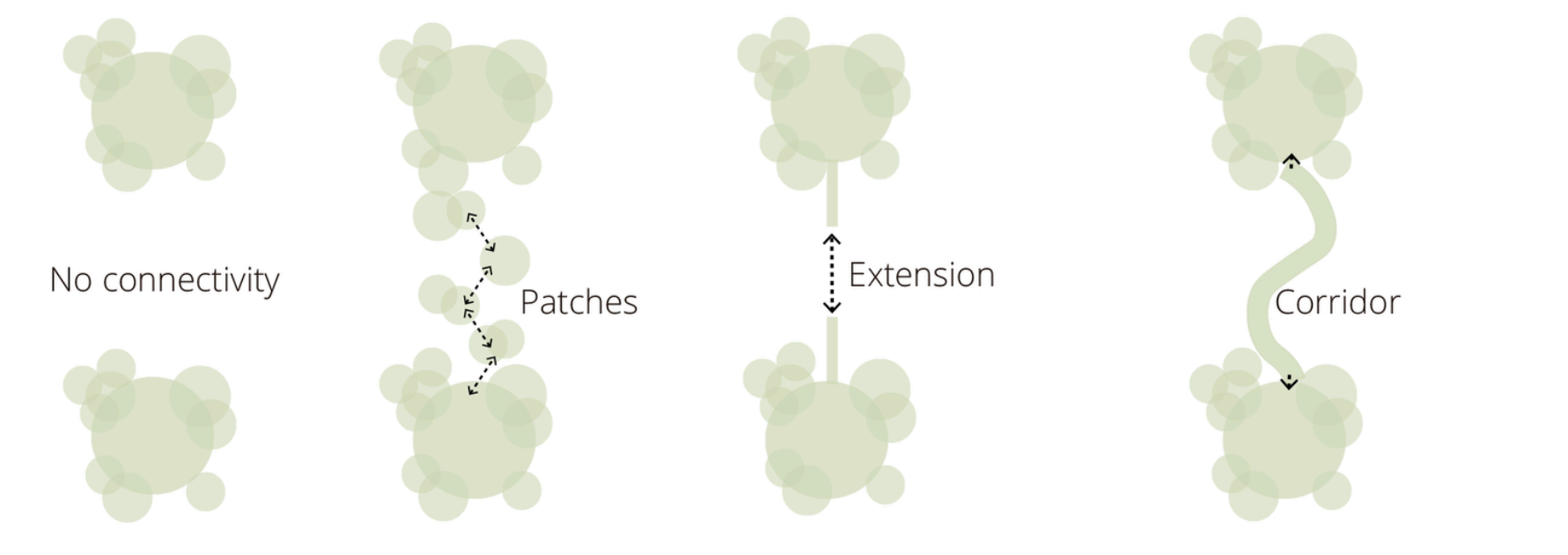


**Legend**

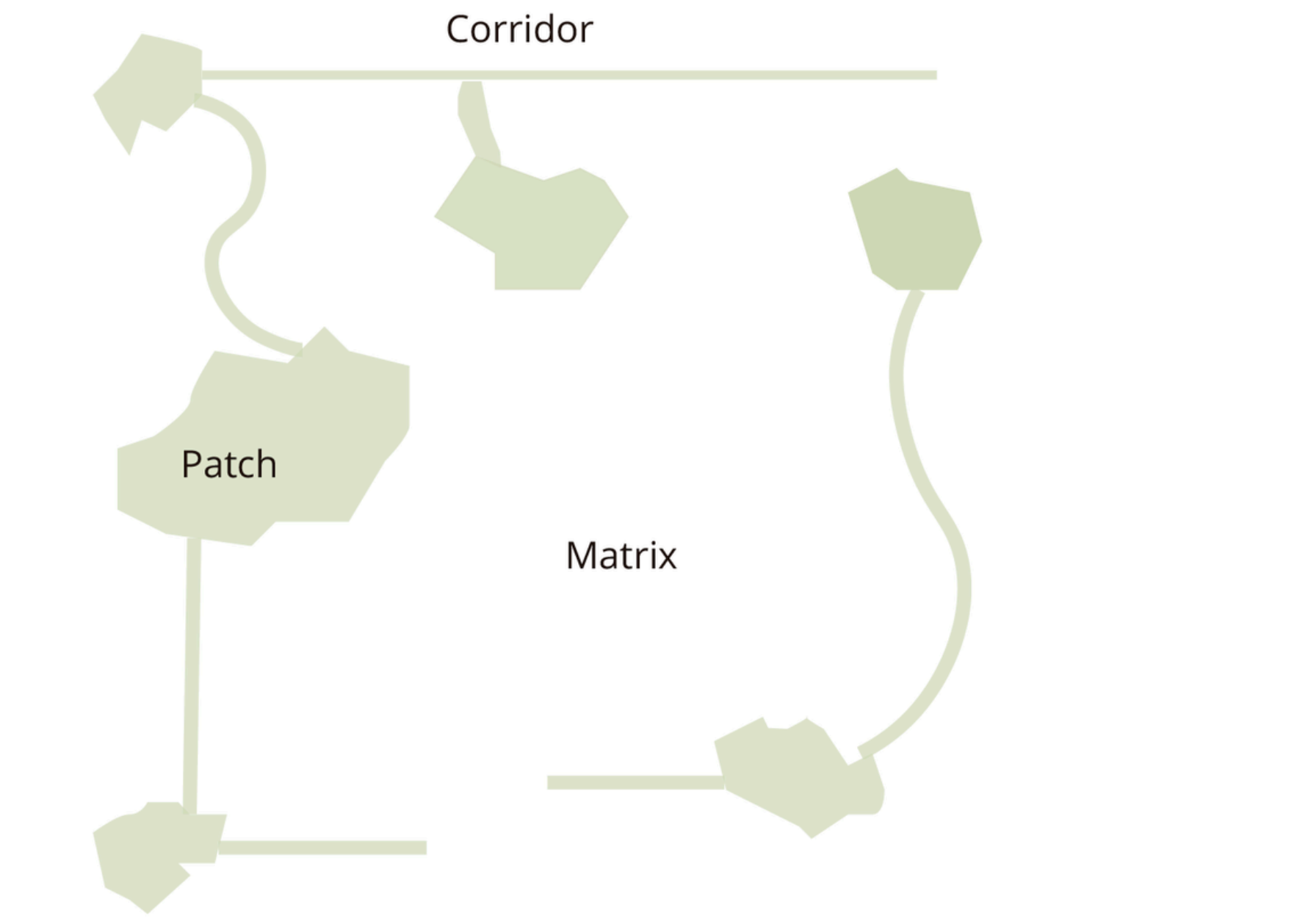
- Tree lines
- Patches
- Green areas
- Node connectivity
- Nodes

The main focus is to create a connection between the existing green areas in the neighborhood, and also creating stepping stones to create extensions for enhancing a green network within the area.

## Ecological Strategies



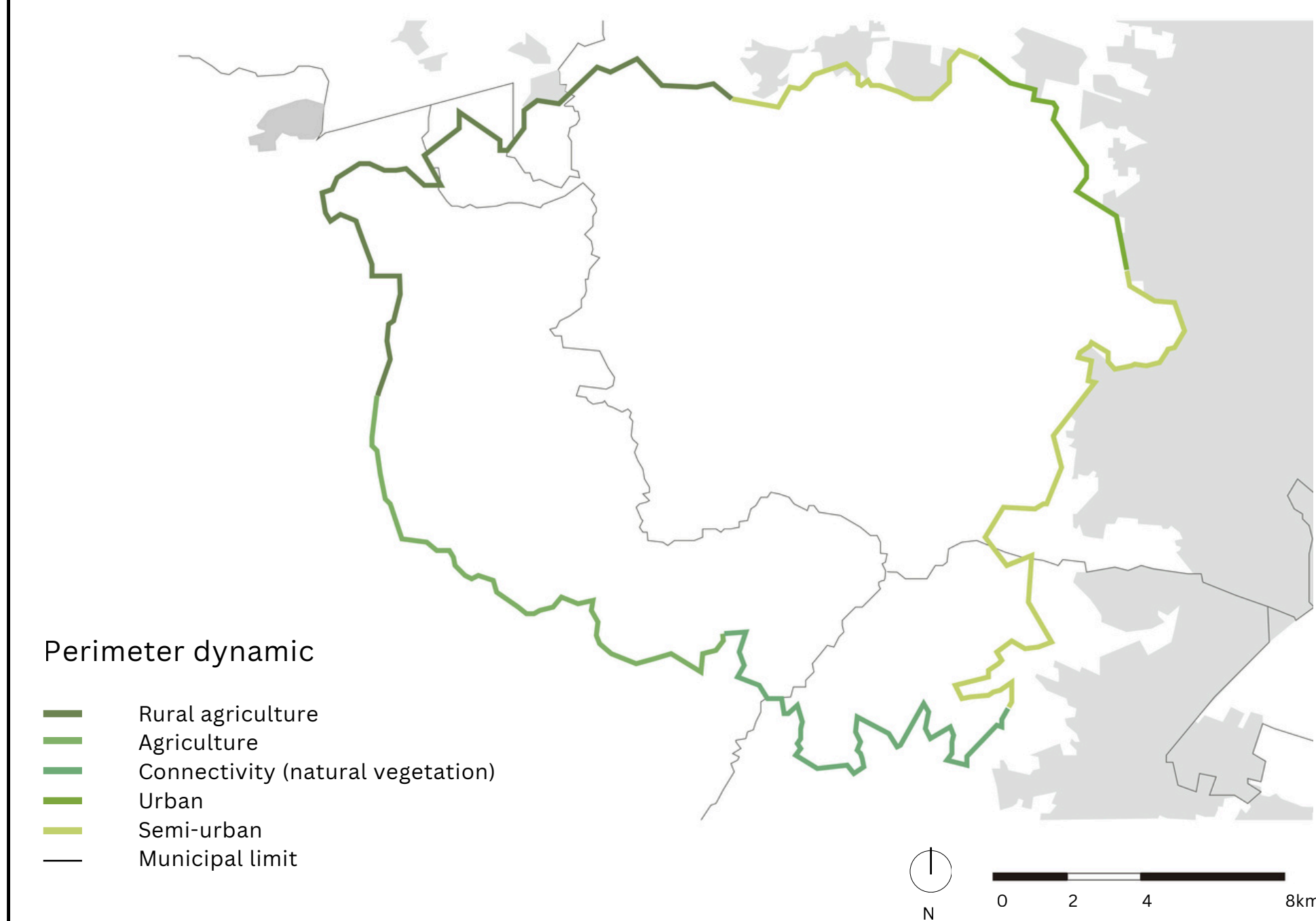
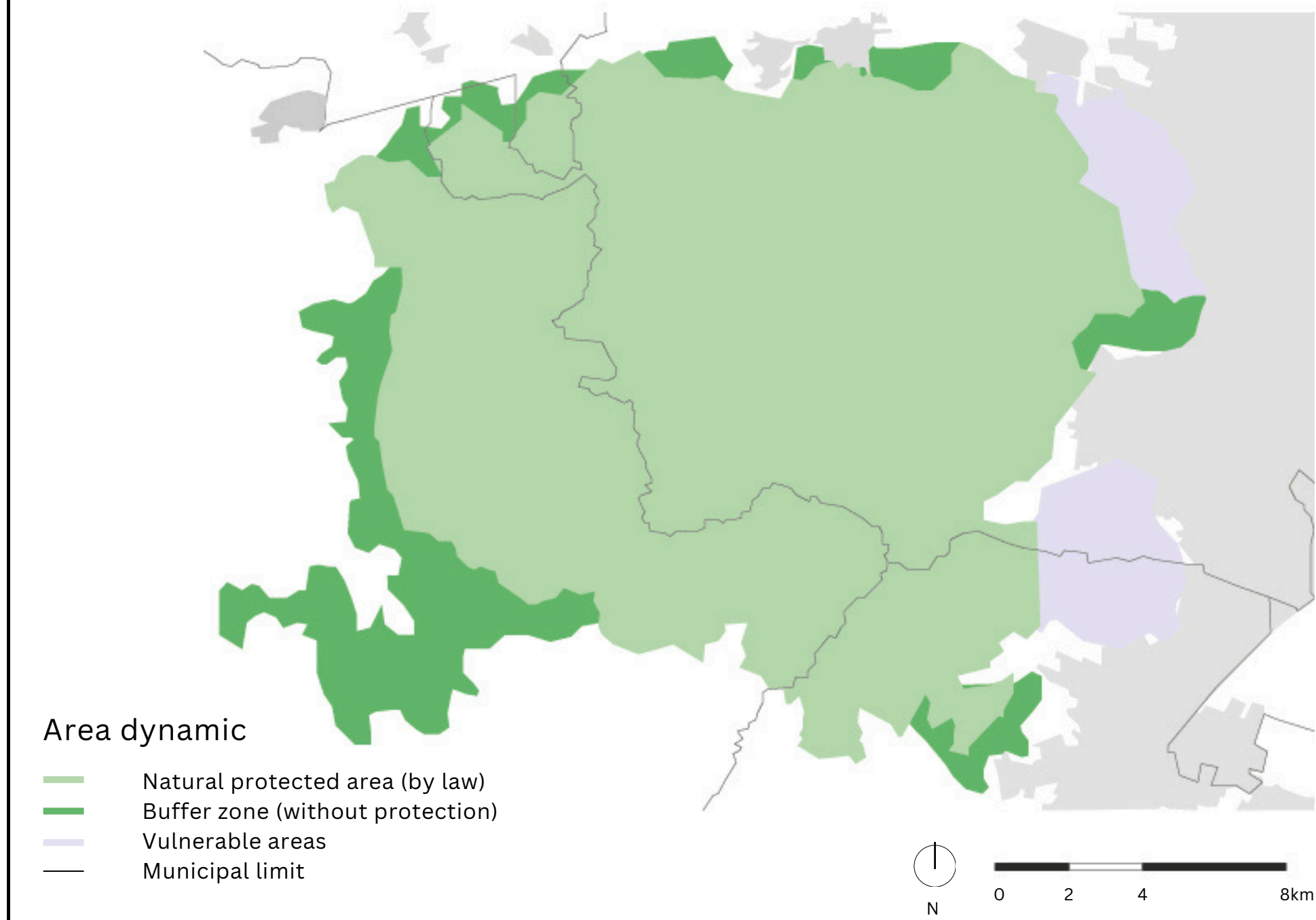
## Patch-corridor-matrix connectivity



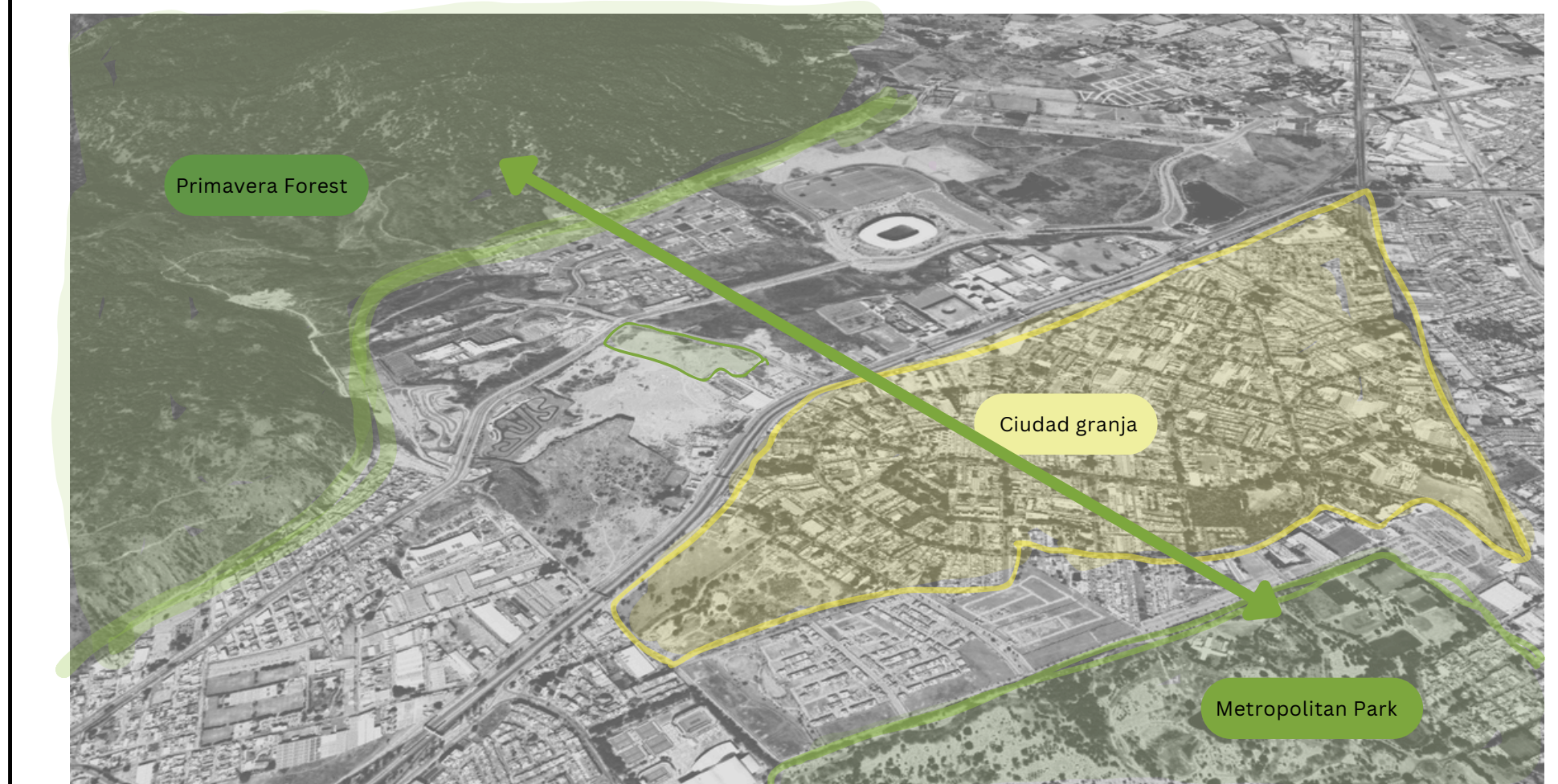
# DESIGN PROPOSAL



## Dynamics of the Primavera Forest

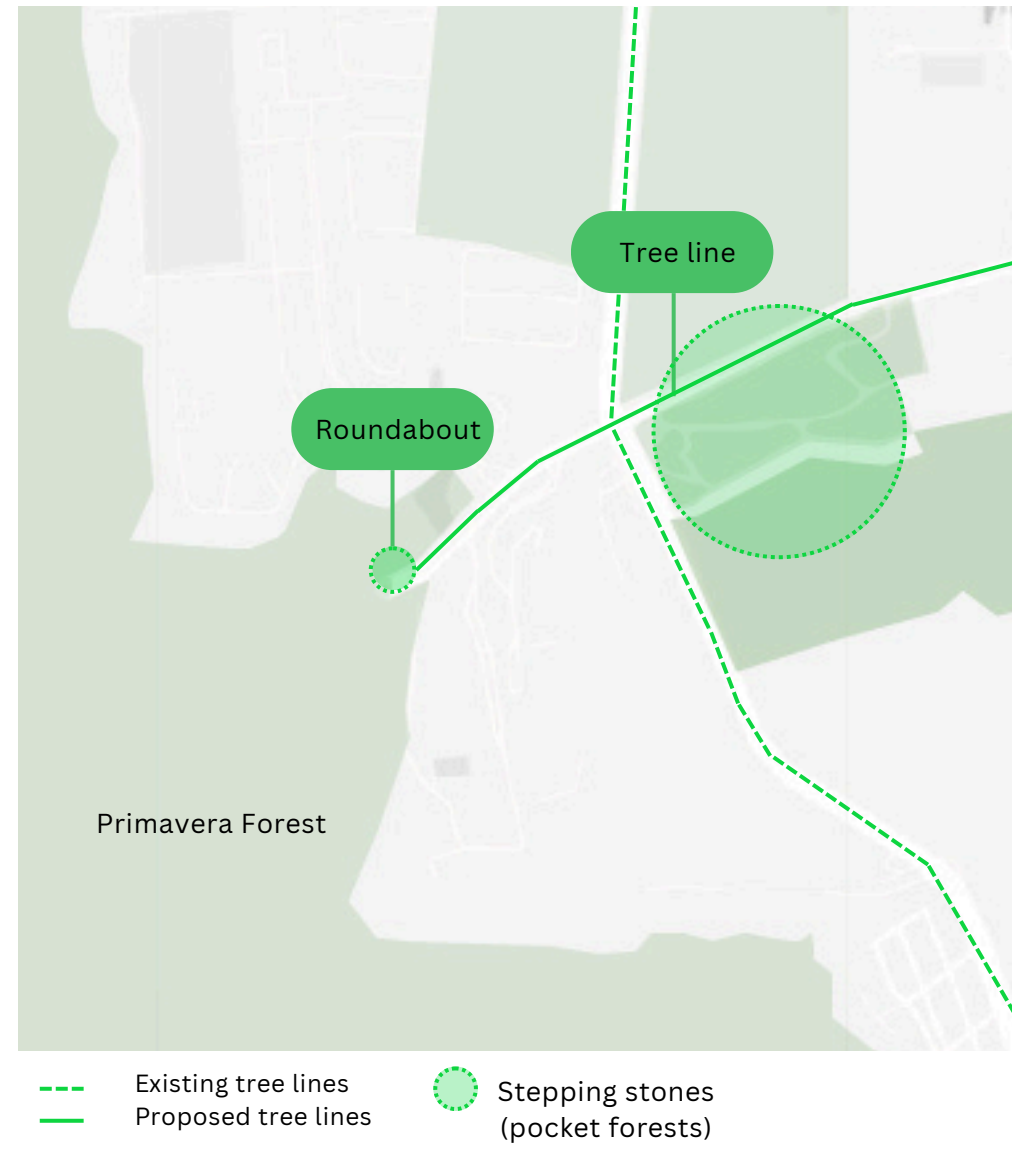


## Connectivity



# POCKET FORESTS

## POCKET FORESTS CASE 01

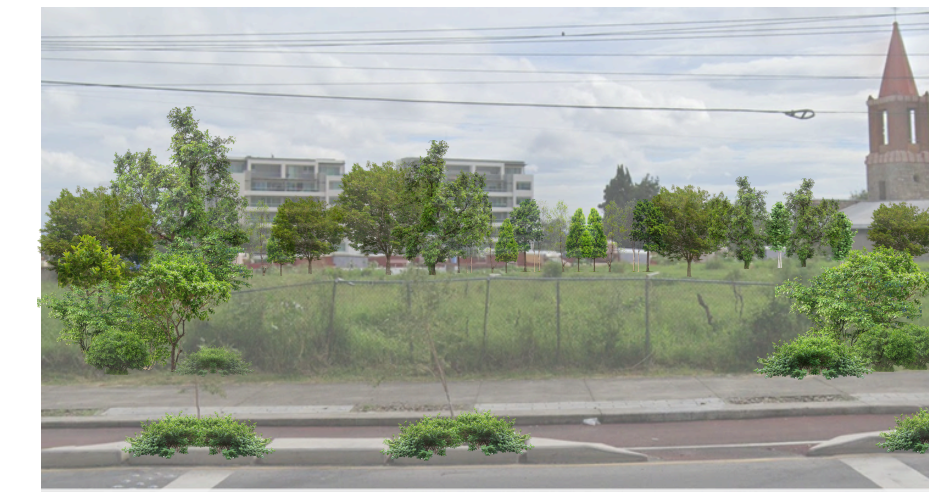
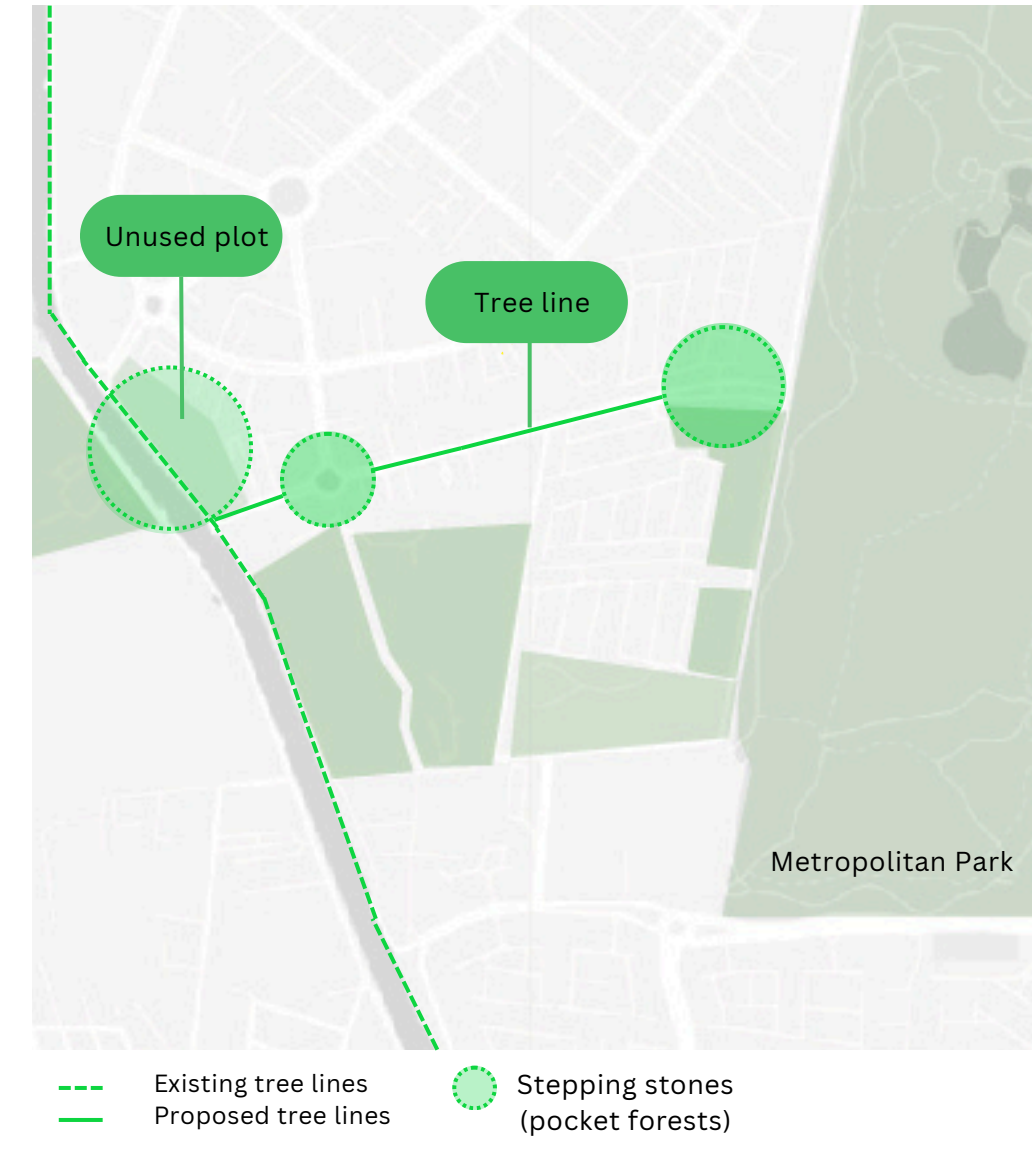


Collage roundabout pocket forest



Floor Plan pocket forest and tree line

## POCKET FORESTS CASE 02



Collage underused plot pocket forest



Floor Plan pocket forest

## POCKET FORESTS CASE 03



Collage roundabout pocket forest



Floor Plan pocket forest and tree line

## POCKET FORESTS CASE 04

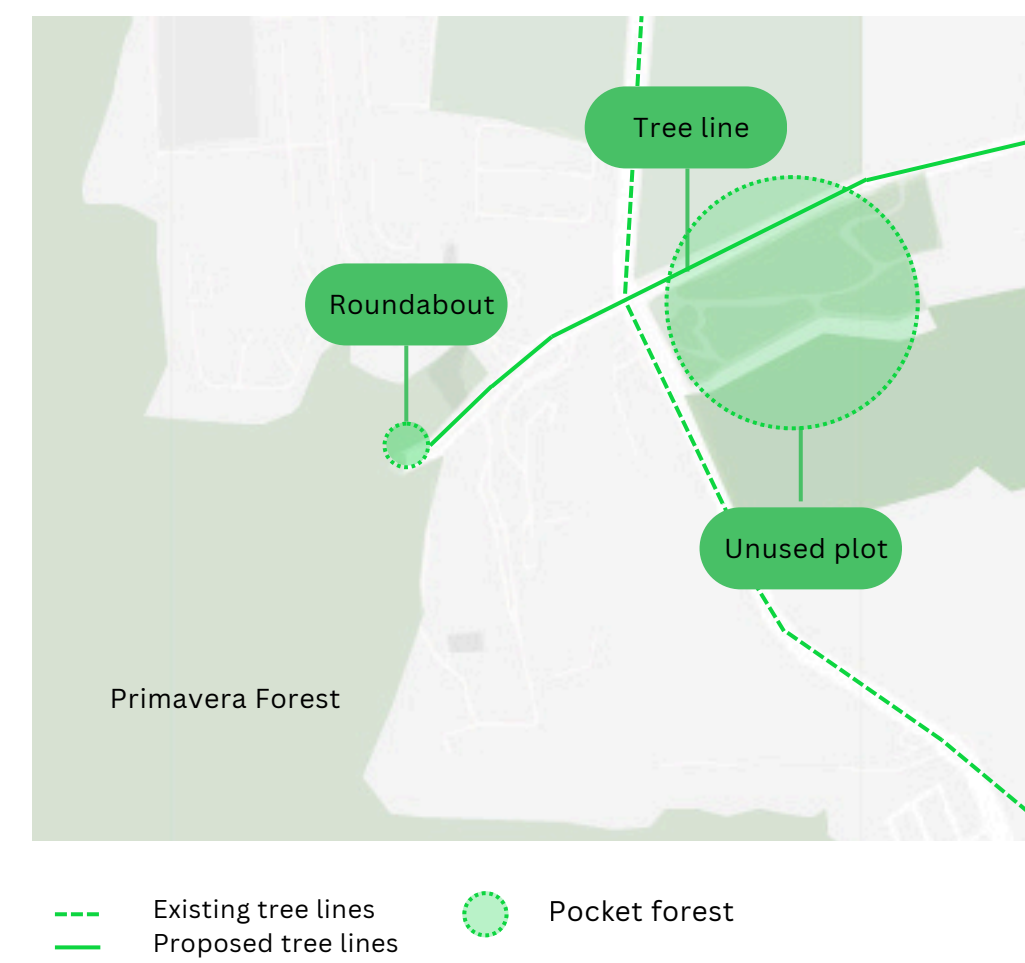


Collage green area pocket forest



Floor Plan pocket forest

## URBAN PARK



Collage Urban park view



Floor Plan urban park

## Possible scenarios

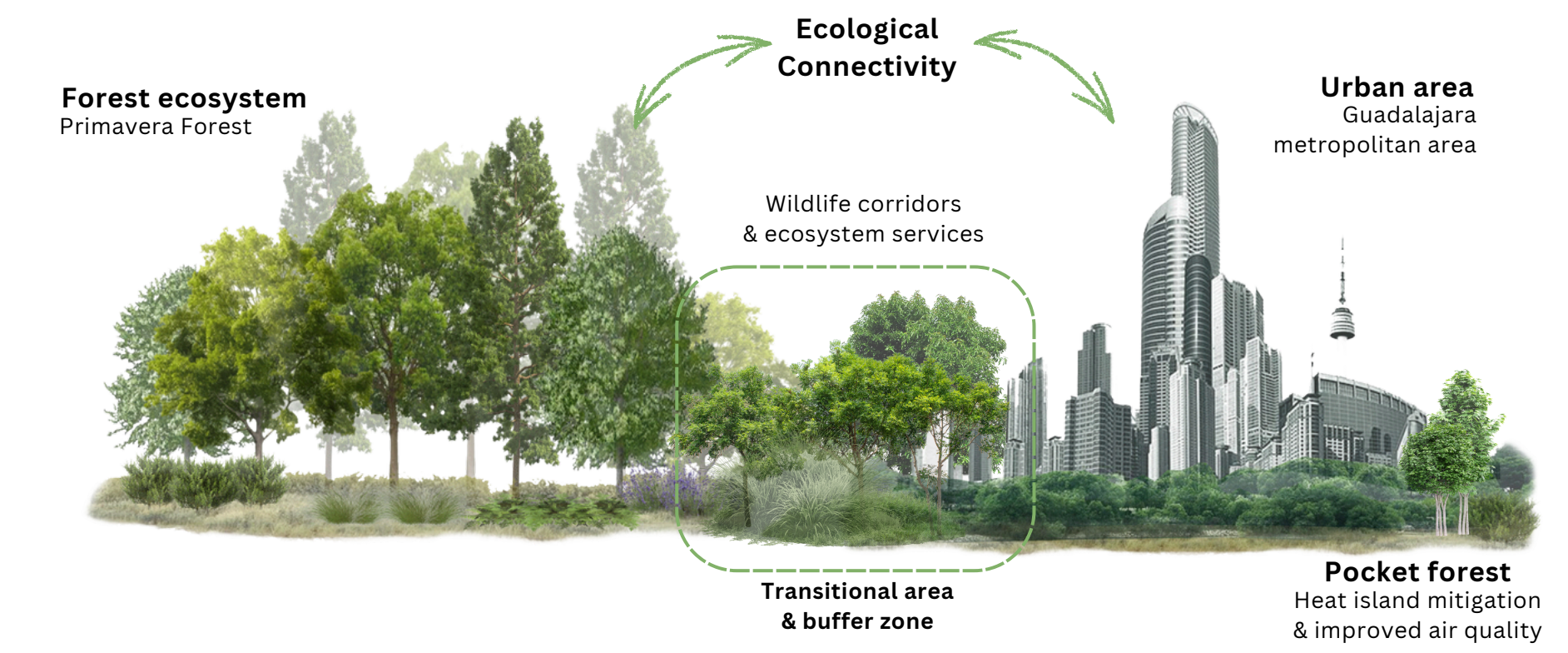


Public spaces



Underused areas

## Forest dynamic and the city



## Vegetation choice

### Canopy layer

- Resinous oak- *Quercus resinosa*
- Mexican red oak- *Quercus castanea*
- Mexican yellow pine- *Pinus oocarpa*

### Sub-canopy / small trees

- Strawberry tree- *Arbutus xalapensis*
- Tepame- *Lysiloma acapulcense*
- Mexican hawthorn- *Crataegus mexicana*

### Shrub layer

- Mexican salvia- *Salvia leucantha*
- Hopseed Bush- *Dodonaea viscosa*
- Sensitive plant- *Mimosa pudica*

### Groundcover / herbaceous

- Sideoats grama- *Bouteloua curtipendula*
- Needlegrass- *Aristida barbata*
- Bracken fern- *Pteridium aquilinum*

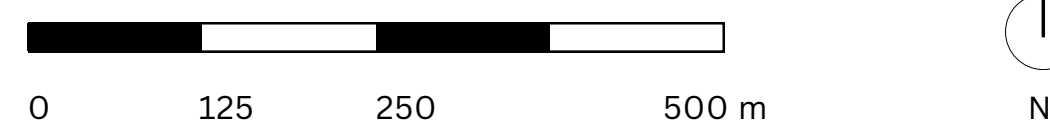
This vegetation was chosen because its low maintenance, tolerance to urban stressors, and high ecological value.



# URBAN PARK



General floor plan



The dynamic interaction between endemic vegetation and environmental processes in the Primavera Forest highlights the importance of integrating ecological knowledge into urban planning. By maintaining functional vegetation systems at both local and regional scales, cities like Guadalajara can enhance resilience to climate change, reduce environmental risks, and support long-term biodiversity conservation.

### Main points of Pocket Forests

- **High-Density Planting:** Saplings are planted very closely together, typically 3 to 5 plants per square meter which causes them to compete for sunlight and grow upwards rapidly, rather than outwards.
- **Native Species Selection:** The technique relies exclusively on species that are native and endemic to the area, this ensures that the plants are already adapted to local climate conditions and other stressor factors.
- **High Biodiversity:** A successful pocket forest includes a diverse mix of trees, shrubs, and understory plants, taking into consideration the different vegetation layers to create a more resilient, multi-layered ecosystem.
- **Soil Preparation:** Before planting, the soil needs to be prepared often with compost and other organic materials to improve its fertility and water retention, which is crucial for quick establishment and growth.

### Forest ecosystem layers

#### Canopy

The canopy layer regulates microclimate, provides shade, and supports carbon sequestration, forming the structural foundation of the pocket forest.

#### Sub-canopy

The sub-canopy layer enhances vertical diversity, supports regeneration, and provides habitat for birds and insects.

#### Shrubs

The shrub layer increases biodiversity, protects the soil, and creates shelter while buffering the forest from surrounding urban activity.

#### Soil

This layer drives nutrient cycling, enhances soil fertility, and provides habitat essential for long-term forest resilience.

#### Groundcover

The groundcover layer reduces erosion, improves water infiltration, and supports soil health through organic matter accumulation.



### Vegetation layer for pocket forests



Pollinator Garden



Biome Garden



Pollinator garden view



Biome garden view

### Primavera Forest biome

