



CHAPTER SIX

Development of the Sketch Plan

Introduction

The sketch plan has a very specific focus on smellscape design and the making of essential oils. The sketch plan is grounded in a resolved master plan and urban framework. The objective of this dissertation could be explored fully in this chapter.

As the concept explains in the previous chapter, the design was driven by specific “moments” of fragrance in the landscape tied together by the journey of smell ending in a tangible product namely essential oil and various other fragrant by-products there off.

In this chapter the intention on the sketch plan will be explained, an overview on the design process will be given ending in the final sketch plan. The final sketch plan will then be explained in detail.

The sketch plan area focused on a heightened experience of the landscape through the sense of smell.

Sketch Plan Design Intention

The main intention of this chapter would be to illustrate how there can be designed with smell in mind as well as the various benefits urban spaces can gain from designing with fragrance as mentioned in chapter two.

A few main components of the design will be an olfactory route on which different pleasant fragrances can be experienced, an urban balcony overlooking the city skyline and an essential oil factory as well as restaurants, coffee shops and retail shops.

A multidisciplinary perspective is crucial for the understanding of the contemporary landscape phenomenon, not least because the shifting of ideas across disciplines has traditionally affected design practice, modes of representation and the way the built environment looks (Corner 1999:9). We need to adopt a way of systems thinking in all that we do so that we can be aware of the potential in all that we do. Landscape design has to assume deeper roles of contextualization, heightening experiences and embedding time and nature in the built world. It is increasingly recognized that landscape design harbours a profound environmental and existential promise for architecture and urbanism, provoking new forms of experience, meaning and value (Corner 1999:16).

The author has tried to get input from as many different disciplines as possible, constantly speaking to architects, horticulturist, essential oil farming and essential oil distillation machine specialists.

Development of the Sketch Plan

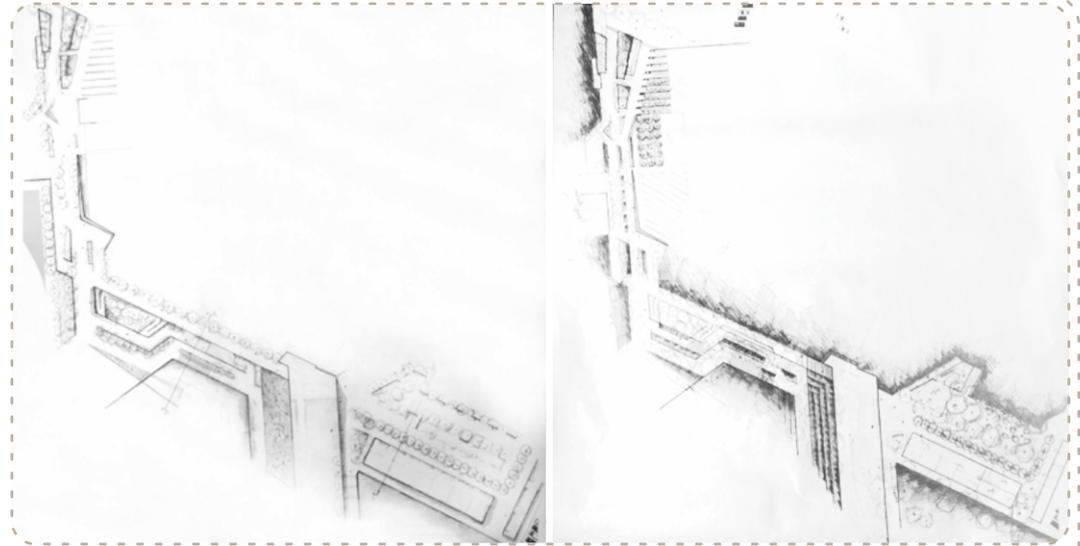


Figure 6.1: Development of the sketch plan through iteration (Author 2106)

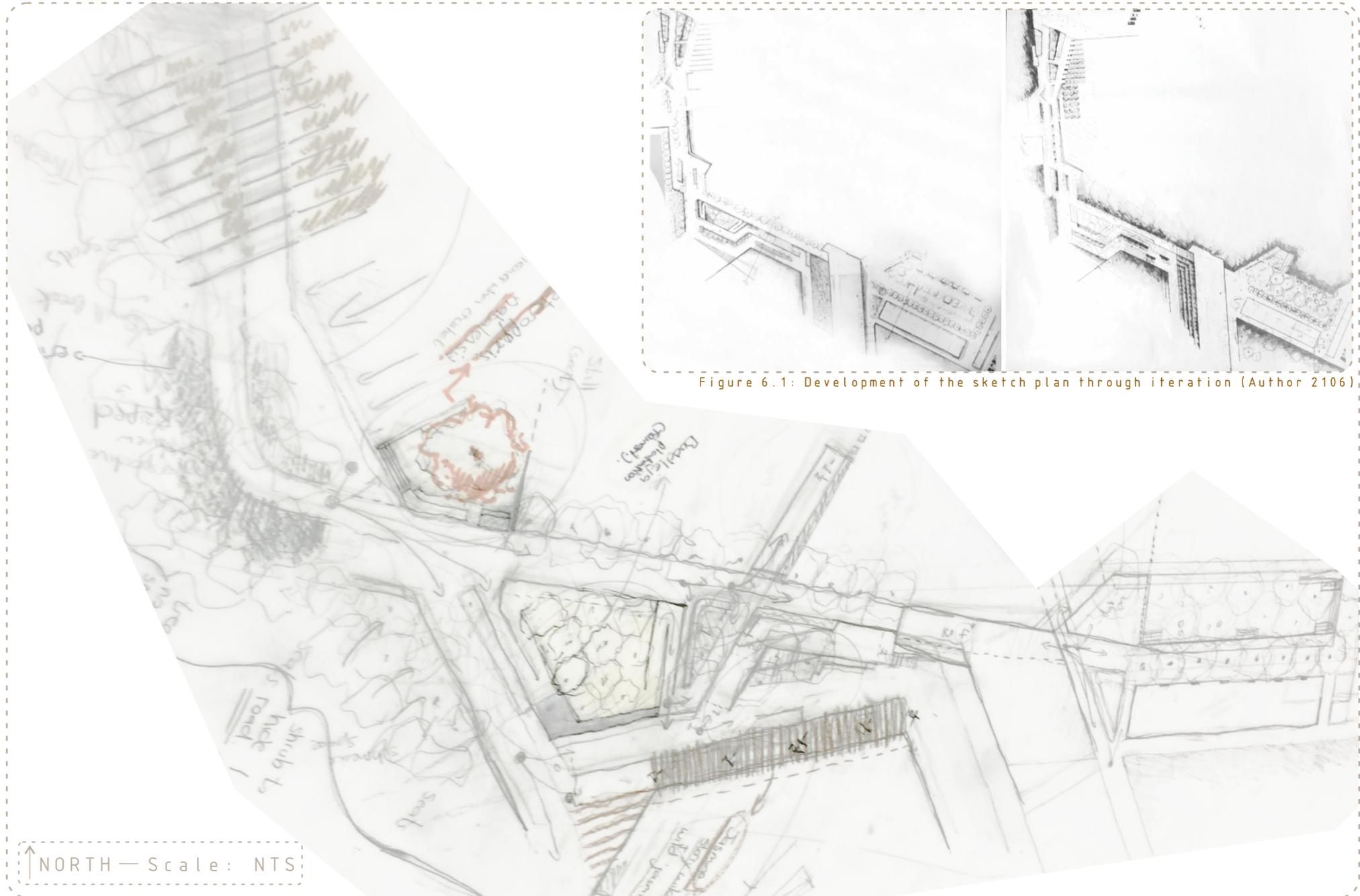
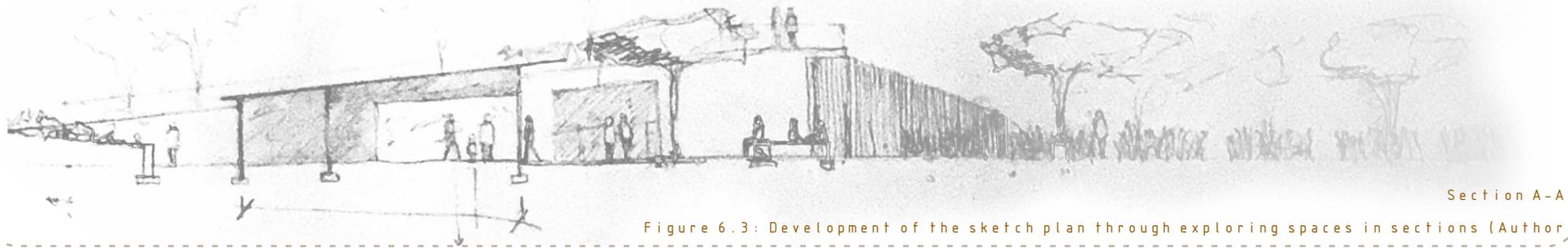


Figure 6.2: Development of the sketch plan through iteration (Author 2016)

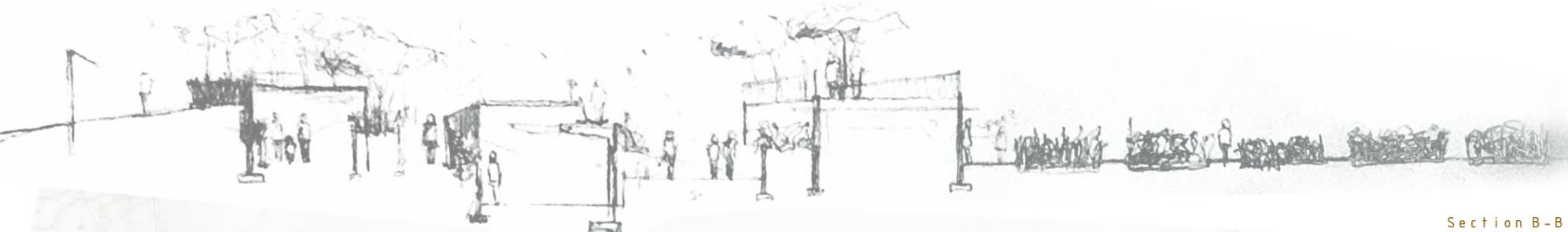
Development of the Sketch Plan



Section A-A

Figure 6.3: Development of the sketch plan through exploring spaces in sections (Author

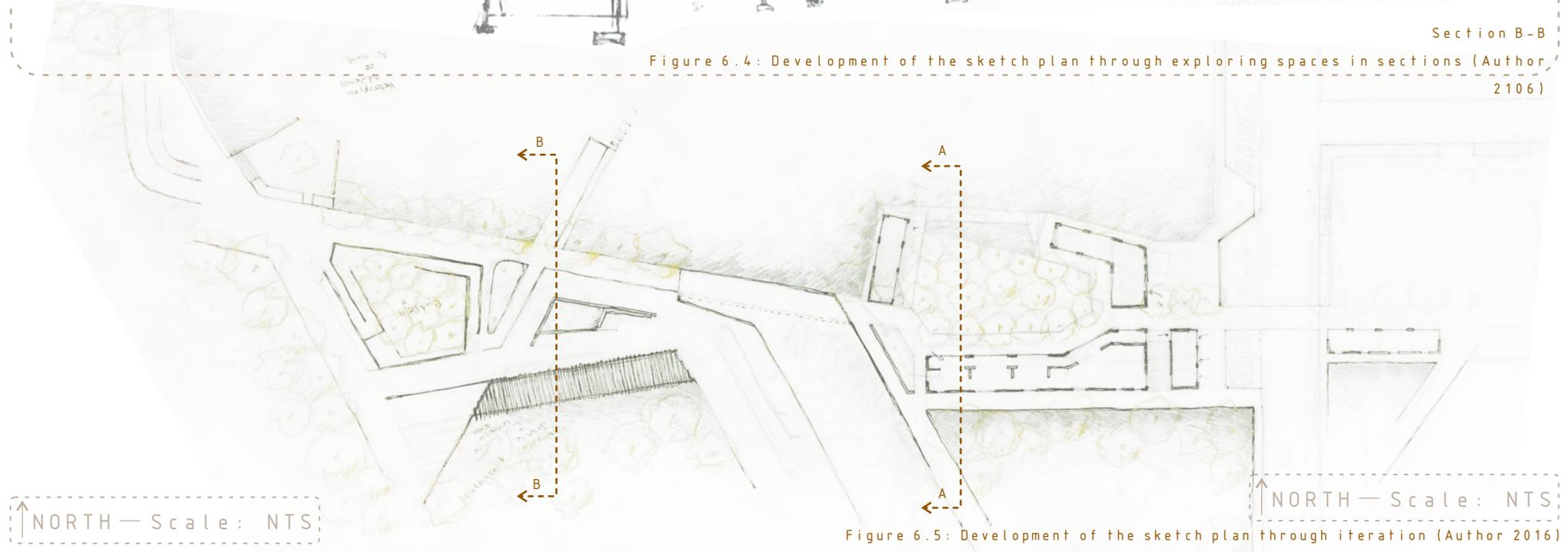
2106)



Section B-B

Figure 6.4: Development of the sketch plan through exploring spaces in sections (Author

2106)



NORTH — Scale: NTS

NORTH — Scale: NTS

Figure 6.5: Development of the sketch plan through iteration (Author 2016)

Development of the Sketch Plan

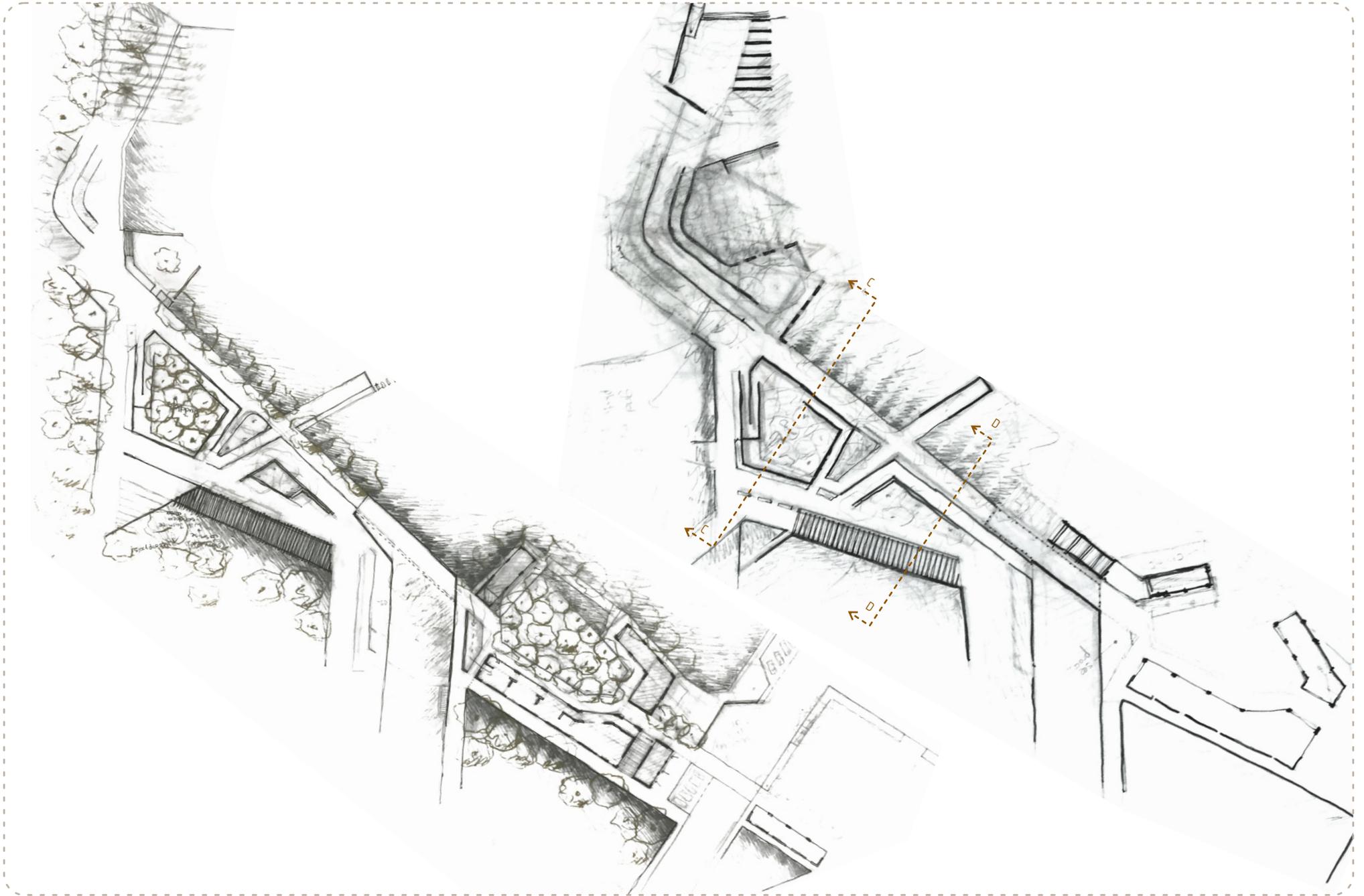
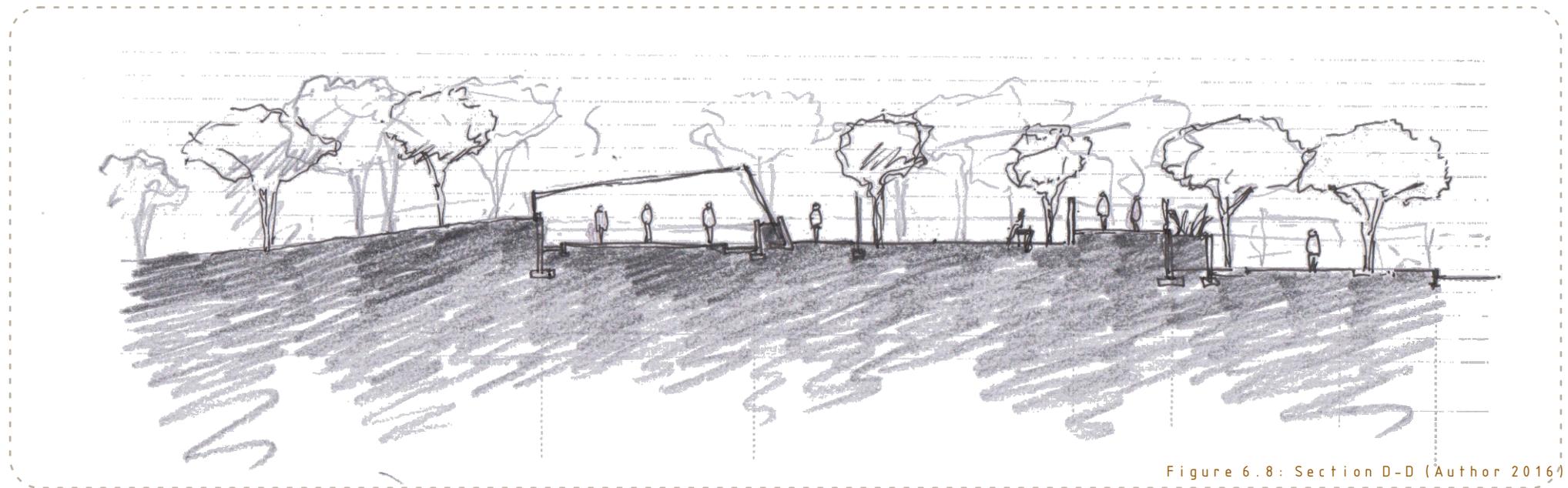
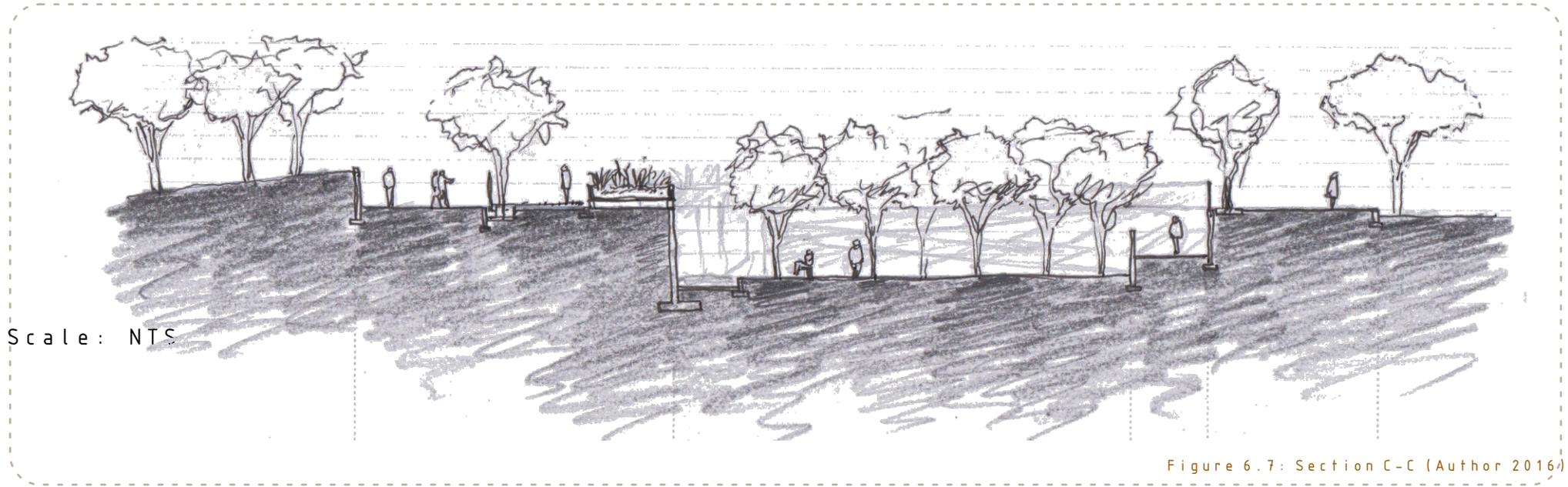
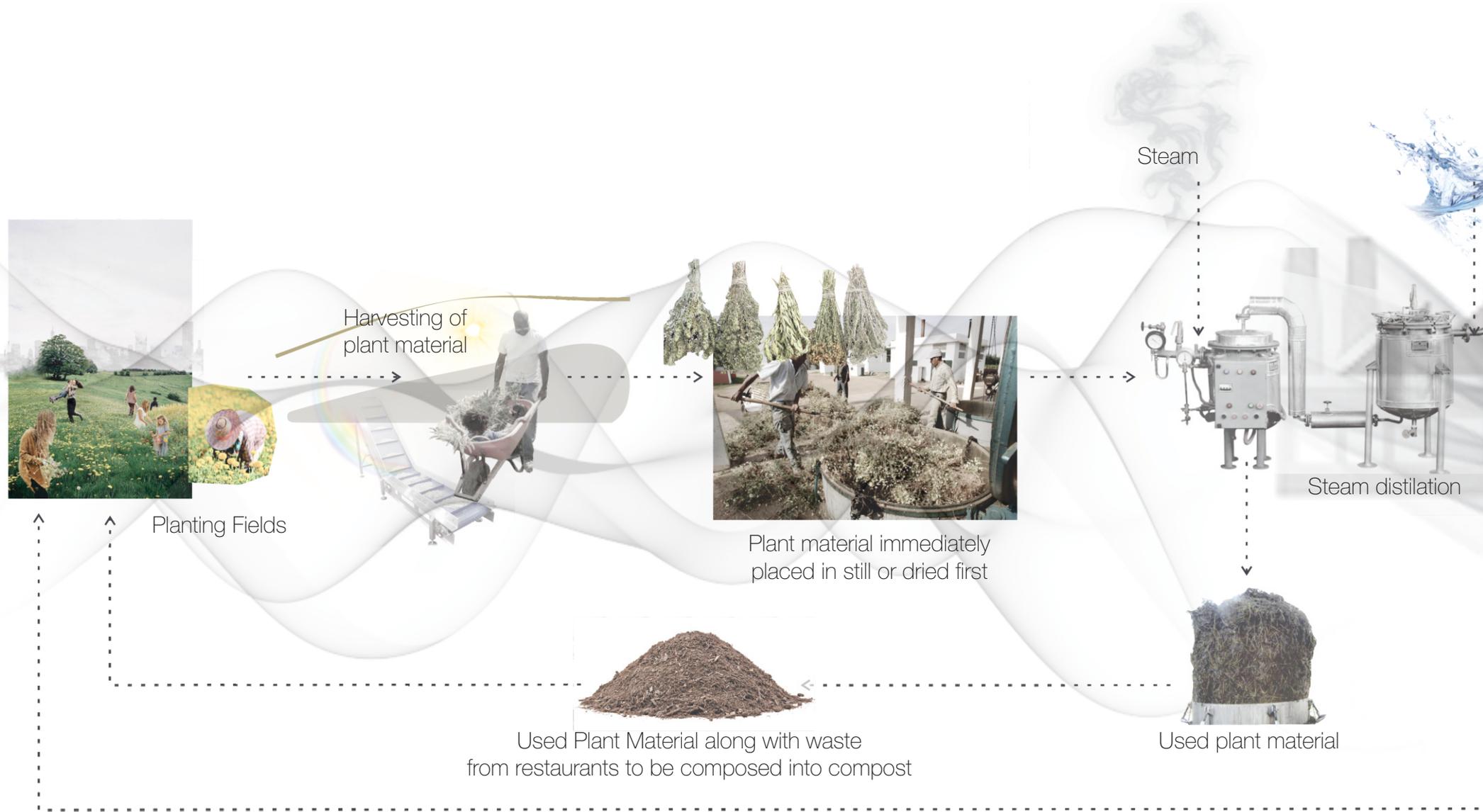


Figure 6.6: Development of the sketch plan through iteration (Author 2016)

Spatial Exploration - Sections



The Essential Oil Process



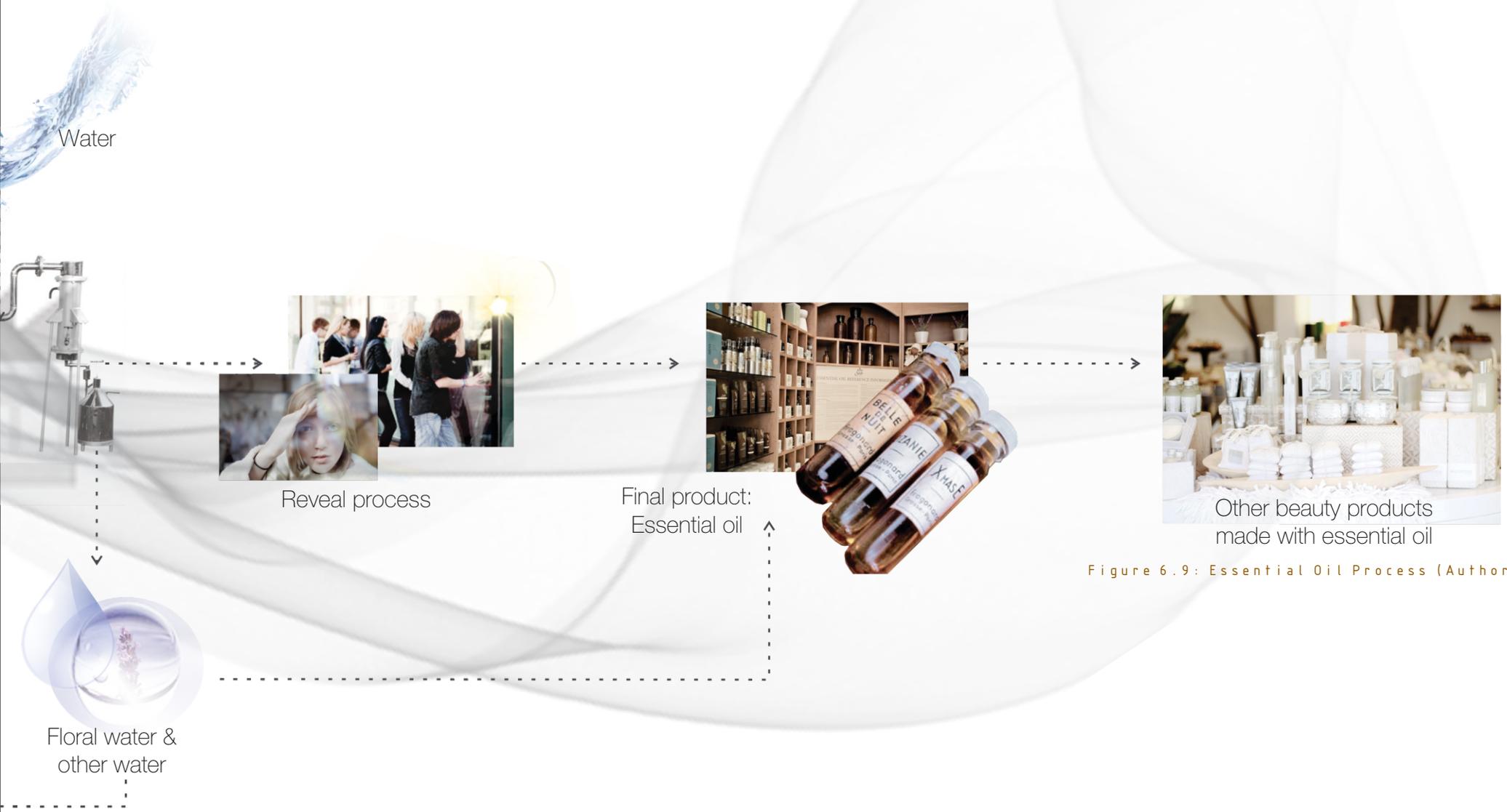


Figure 6.9: Essential Oil Process (Author 2016)

The process of the making of essential oil is revealed through the design and the outputs are recycled back into the system.

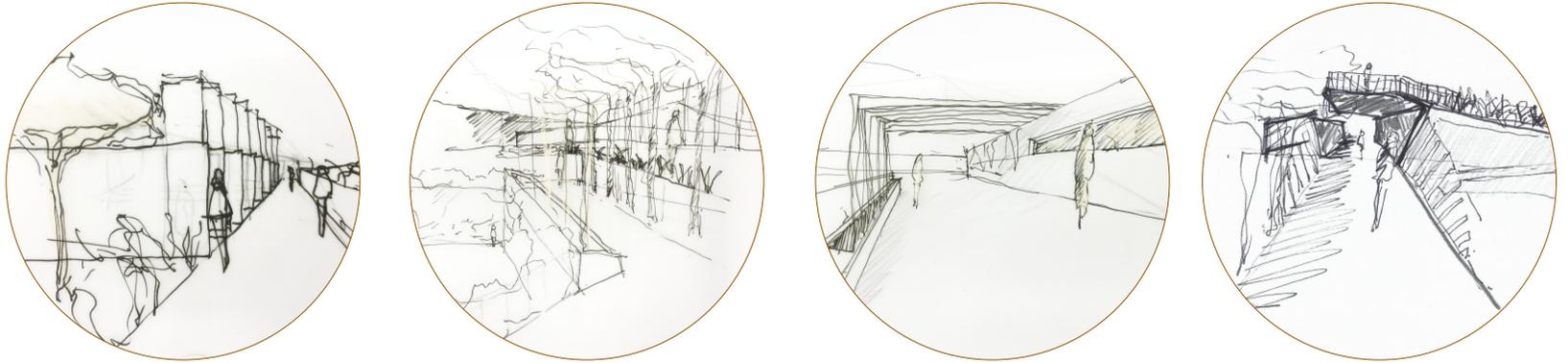


Figure 6.10: Sketches of spaces and moments in design (Author 2016)

Final Sketch Plan

The final sketch plan is an accumulation of an in depth understanding of the seven factors that influence smellscape design discussed in chapter two, the plant palette and the site.

The sketch plan will be discussed in detail on the following pages.

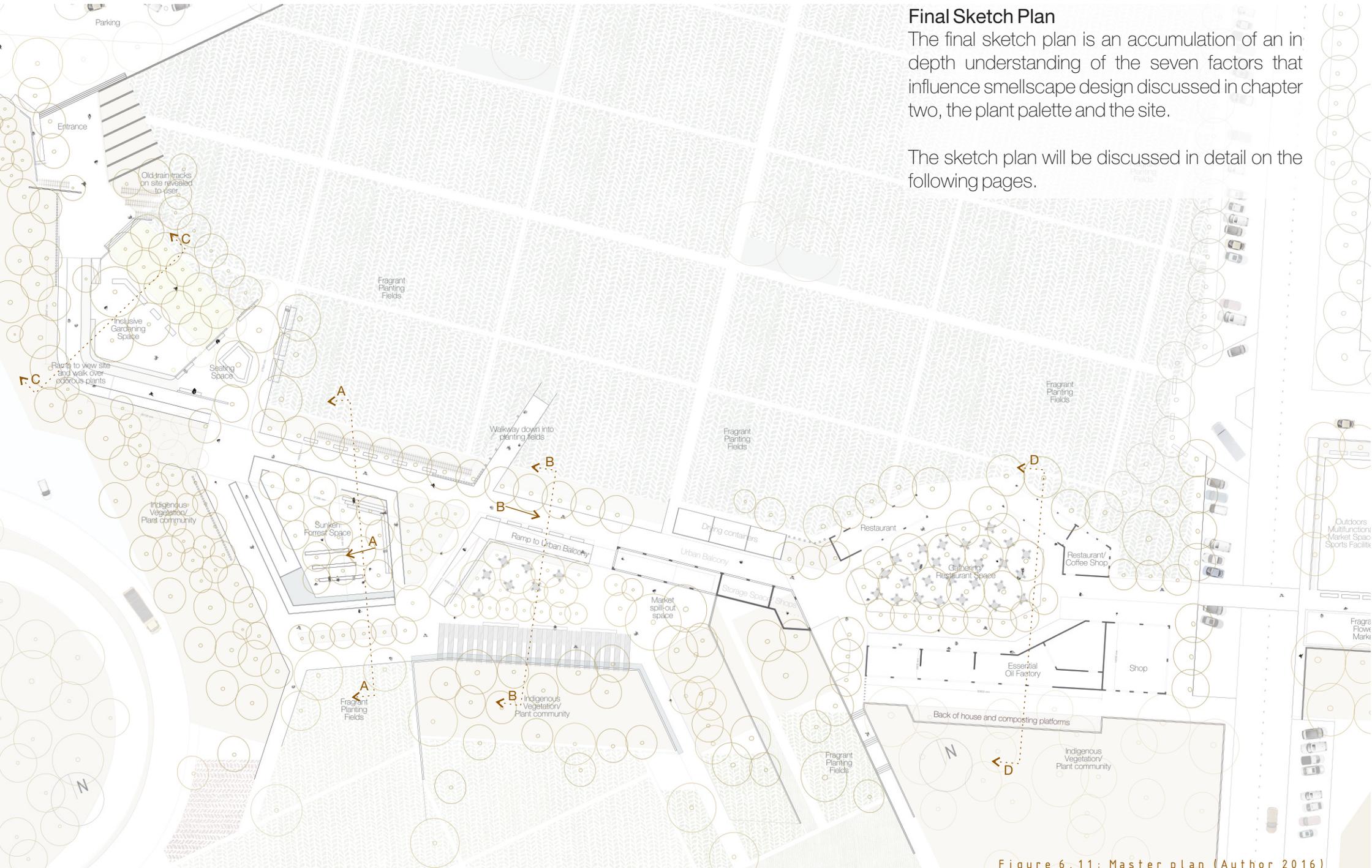
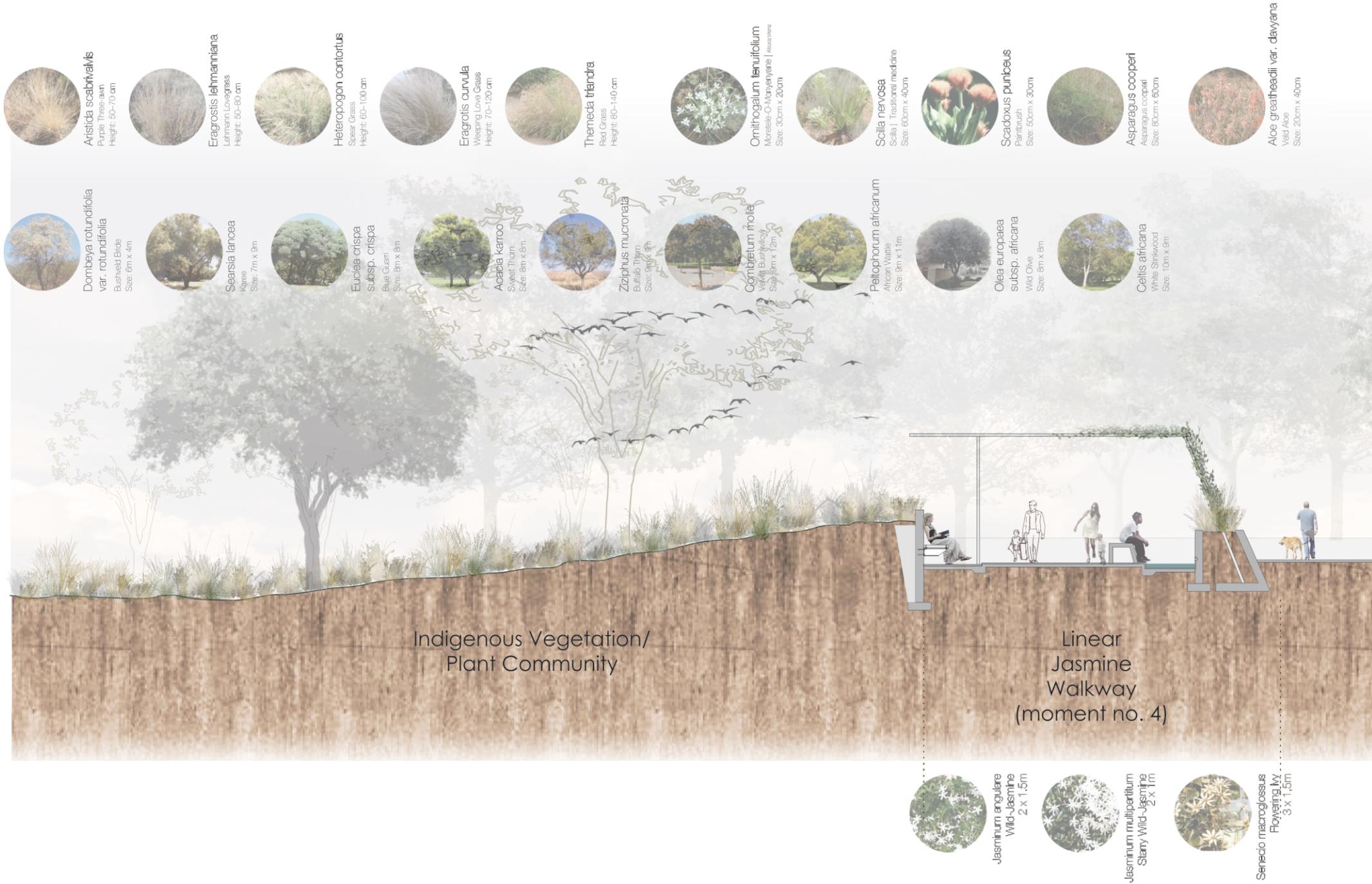


Figure 6.11: Master plan (Author 2016)

Section A - A



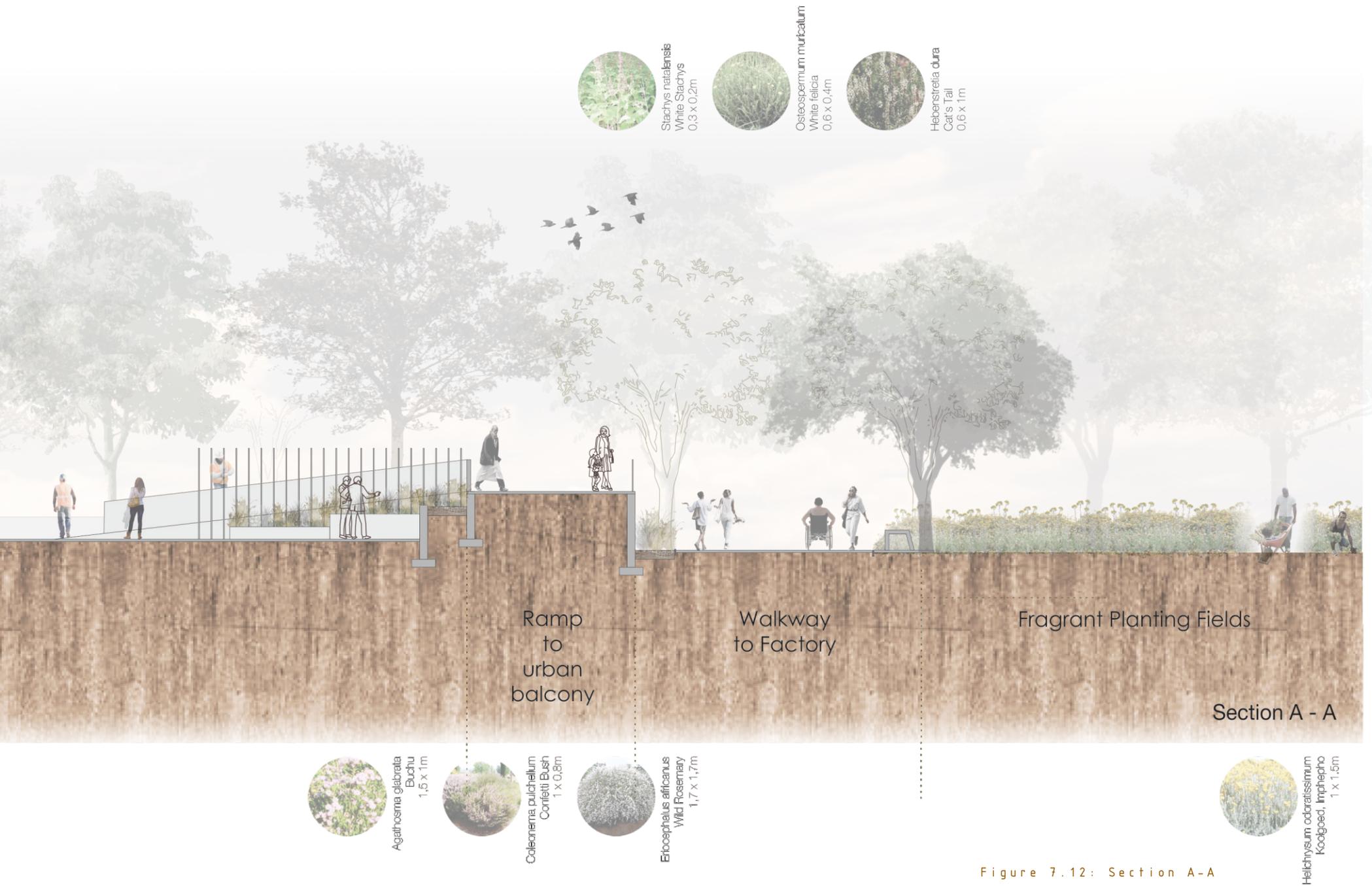


Figure 7.12: Section A-A

Section B - B



Pelargonium graveolens
Rose-scented Pelargonium
1,3 x 1m



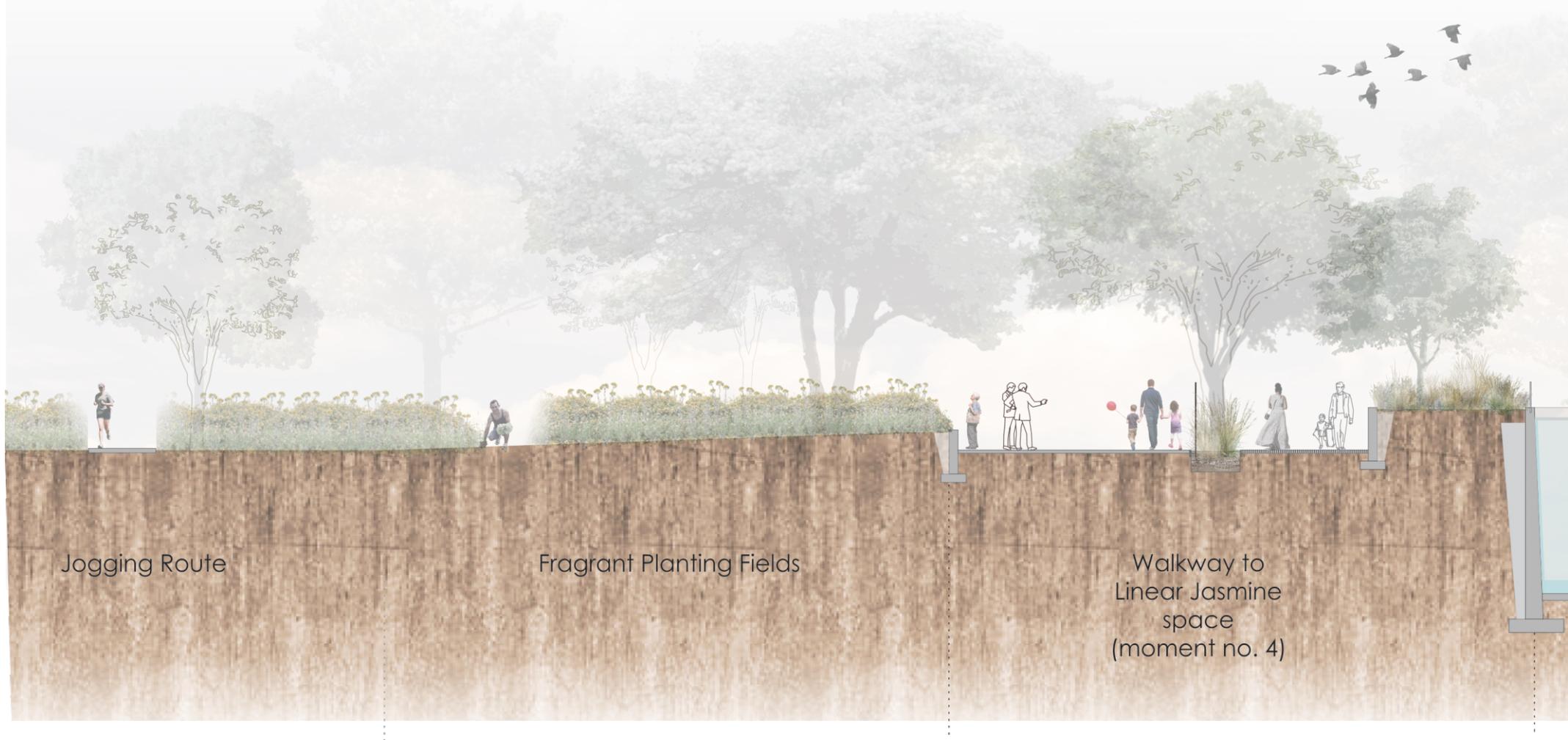
Helichysum odoratissimum
Kooigoed, Imphepho
1 x 1,5m



Artemisia afra
Wild Wormwood
1,5 x 1,5m



Eriosephalus africanus
Wild Rosemary
1,7 x 1,7m



Jogging Route

Fragrant Planting Fields

Walkway to
Linear Jasmine
space
(moment no. 4)



Buddleja auriculata
Weeping Sage
4 x 4m



Buddleja salviifolia
Sage
5 x 4m



Buddleja saligna
False-olive
4 x 3m



Osteospermum muricatum
White Felicia
0,6 x 0,4m



Hebenstretia dura
Cat's Tail
0,6 x 1m



Helichysum petiolare
Everlasting
1 x 2m



Helichysum odoratissimum
Kooigoee, Imphepho
1 x 1,5m



Buddleja Forrest
(moment no. 3)

Walkway to
Factory and
restaurant
area

Fragrant
Planting Fields

Section B - B

Figure 7.13: Section B-B

Perspective A



Figure 6.14: Perspective A (Author 2016)
The Sunken Buddleja Forrest

Perspective B



Figure 6.15: Perspective B (Author 2016)
Perspective looking towards the urban balcony,
drying boxes on the left and multifunctional storage
or market/shop space on the right underneath the
urban balcony

The Olfactory Route

The Olfactory route is a specific route in the park designed to reveal the beauty of specifically pleasant fragrance to the user. Fragrance will be revealed in two ways:

Firstly, through process; the process of making essential oil. As the visitor to the site strolls along the olfactory route indicated on this plan he/she will be overwhelmed by the vast fragrant planting fields (1), the user will then start to see field workers plucking vegetation (2) and smell the result of this specific action as the plant material gets bruised by the workers cutting it off and collecting it. The workers will then take the plant material to drying containers or directly to the factory (3), depending on the specific plant, the user will then see as the plant material is taken to these points and be able to stroll past these containers and smell the piles of plant material. Lastly the user will be allowed to experience the process taking place within the essential oil factory (4) and then ultimately be lead into a shop where they can smell and see the final product - the essential oil - in its raw form as well in various other products (5) (process seen in figure 6.17).

Secondly through experience - the user will experience moments of intense fragrance in its natural form throughout the olfactory route explained in detail in the next few pages.



Figure 6.16: The olfactory route presented on sketch plan to show the process of making essential oil (Author 2016)

Figure 6.17: Photo presentation of steps indicated on plan (Author 2016)



Figure 6.18: An overview of the moments of smell (Author 2016)

Moments of Smell Overview

Along the Olfactory Route there are strong moments of smell/fragrance. These are specific spaces and places where vegetation will be used in mass along with topography and space defining elements.

These moments of fragrance will be very specific where one plant with a very strong fragrance will be used in mass or two plants with the same kind of fragrance or two plants which flower in different seasons to assure pleasant fragrance in a space throughout the year.

Too many fragrant plants could not be used at the same time in one area or space as it could become overpowering. The intention of the project is also to focus the visitor to the site on one specific smell at a time for it to be captured in their memory and processed through an experience.

The design and placement of these moments along the olfactory route has been part of the design process from the beginning, taking into account the plant palette along with the properties of each individual plant: What time of the year their fragrance is released; What part of the plant smells good; and whether the plant needs to be crushed for its pleasant fragrance to be released. The scale of all of the plants were also taken into account to define spaces.

Fragrant plants are not the only source of fragrance that will be experienced in the design; the smell of water, the smell of wet soil, the smell of fresh air and the smell of coffee and food have also been exploited.

As ones nose can be overwhelmed by too much smell 'palette cleansers' are provided throughout the design.

Moment of Smell Along the Olfactory Route there are strong moments of fragrance. These are specific spaces and places where vegetation will be used in mass along with topography, micro-climates and space defining elements. These moments of fragrance will be very specific where one plant with a very strong fragrance will be used in mass or two plants with the same kind of fragrance or two plants which flower in different seasons.

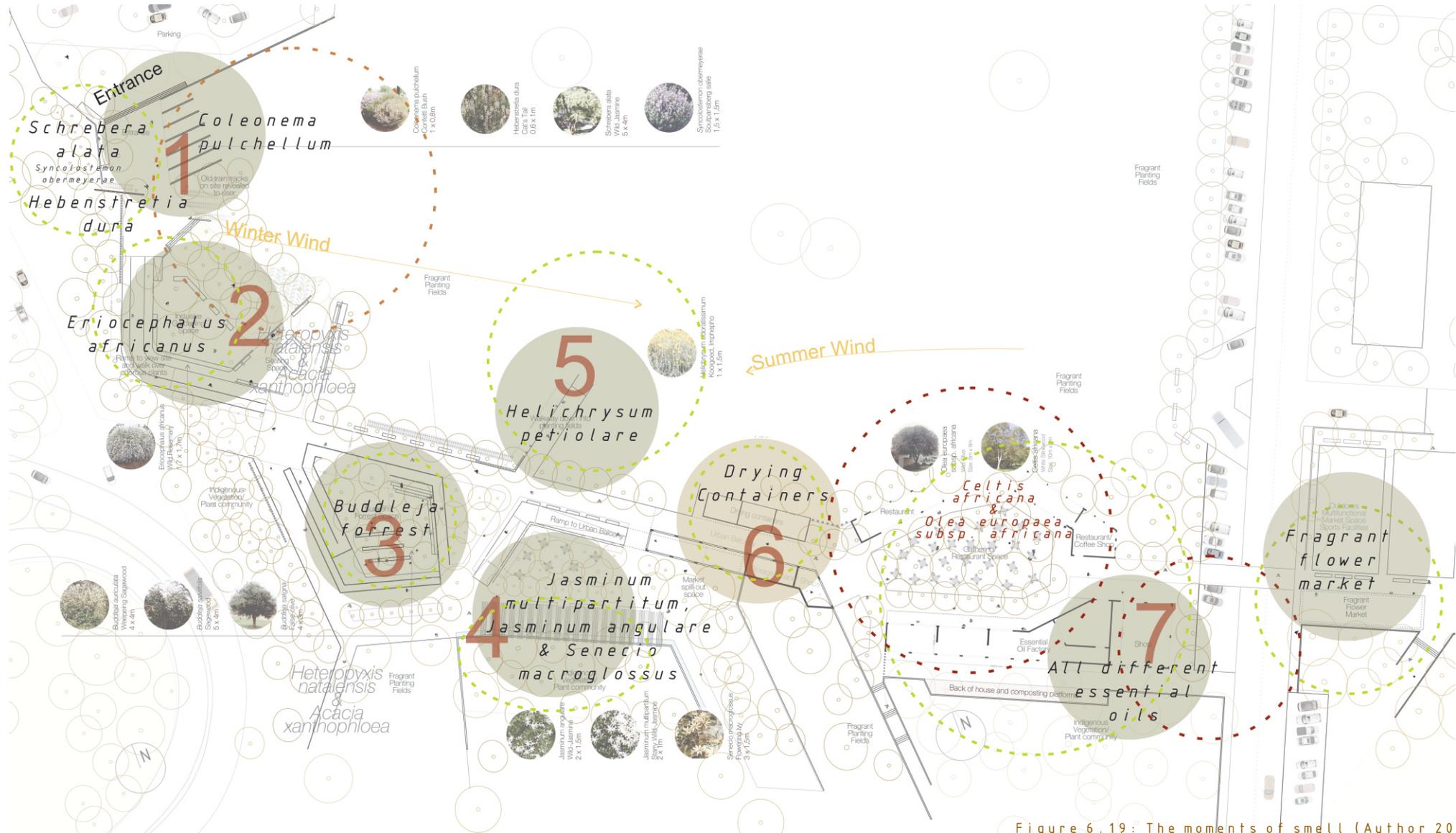
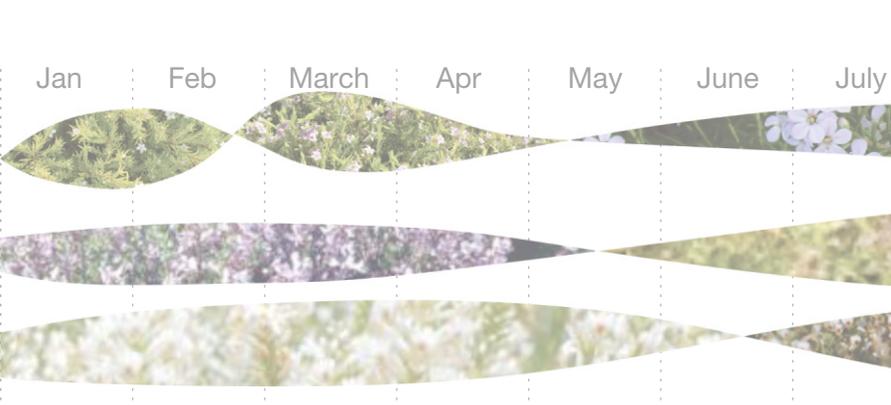


Figure 6.19: The moments of smell (Author 2016)

The numbers indicating the different moments of fragrance will be used to explain these specific moments in detail on the following pages.

The Moments of Fragrance



Moment 1: Threshold - Reception to Park

Serving as a threshold as one enters the urban park, large vertical structures guide the smell molecules of masses of fragrant planting to the visitor of the site. Introducing the smell experience that is about to be undertaken.

Due to the position of this space almost perpendicular to the wind direction in summer and winter (see figure 6.20), the plant selection in this space has to reflect an understanding of wind. *Coleonema pulchellum* is planted on the eastern side of this space as it flowers in the summer and the predominant summer wind direction is western. Plants that bloom in the winter and plants whose leaves are aromatic will be planted on the western side as the opposite then counts.

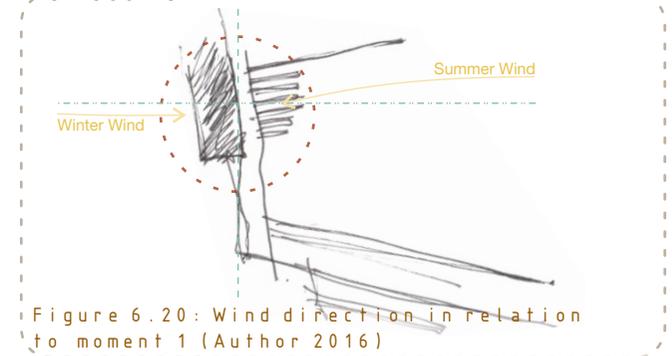


Figure 6.20: Wind direction in relation to moment 1 (Author 2016)

Figure 6.21: Plant palette for moment 1 (Author 2016)

Moment 2: Releasing the smells of aromatic leaves

Before entering moment number 2 there are two options, the user either take a ramp leading up into tree canopies and then revealing a view over the whole site or the user can move through the planting fields.

The ramp is made out of galvanized steel grating and *Eriocephalus africanus* is planted just underneath the ramp in some areas thus it will grow through the ramp and be crushed by users walking on the ramp releasing its smell.

The second option to walk through the fragrance planting fields in a specific portion of the plantation is where *Heteropyxis natalensis* would be growing. This is a production space after experiencing it the user is guided into another space where seating is provided. In this space focus is placed on *Heteropyxis natalensis* (flowering in late summer to autumn) and *Acacia xanthophloea* (flowering from spring to summer) giving a visual impression of a yellow canopy.

This is a space where focus through the use of



man-made elements will emphasize the beautiful detail and seasonal variations these trees provide, as an extra to the pleasant fragrance that they emit into the air. Through the use of vertical and horizontal elements the fragrant blooms will be brought to the attention of the visitor of the space.



Eriocephalus africanus
Wild Rosemary
1,7 x 1,7m

Plant Palette for Moment 2

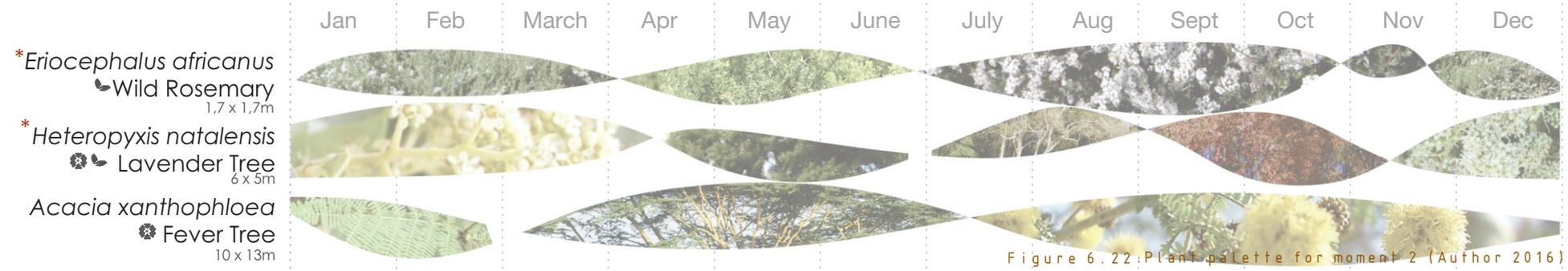


Figure 6.22: Plant palette for moment 2 (Author 2016)



Moment 3: The Buddleja Forrest - humid microclimate

In this space the visitor to the site is taken into a submerged space with a slight ramp taking the user from above the Buddleja tree canopies to inside a forest-like space underneath the sweet smell of *Buddleja salviifolia* (blooming from middle winter to early summer) and *Buddleja saligna* (blooming from summer to autumn) will be intensified through the use of a water feature creating a humid environment thus extenuating the odorous molecules in the air (as mentioned in chapter 2).

This is a tranquil space in which the visitor would be allowed to meditate, fully benefiting from the serene space and the many health benefits that the pleasant fragrance has to offer.

Plant Palette for Moment 3

- **Buddleja auriculata*
- ☼ Weeping Sagewood
4 x 4m
- **Buddleja salviifolia*
- ☼ Sagewood
5 x 4m
- Buddleja saligna*
- ☼ False-olive
4 x 3m

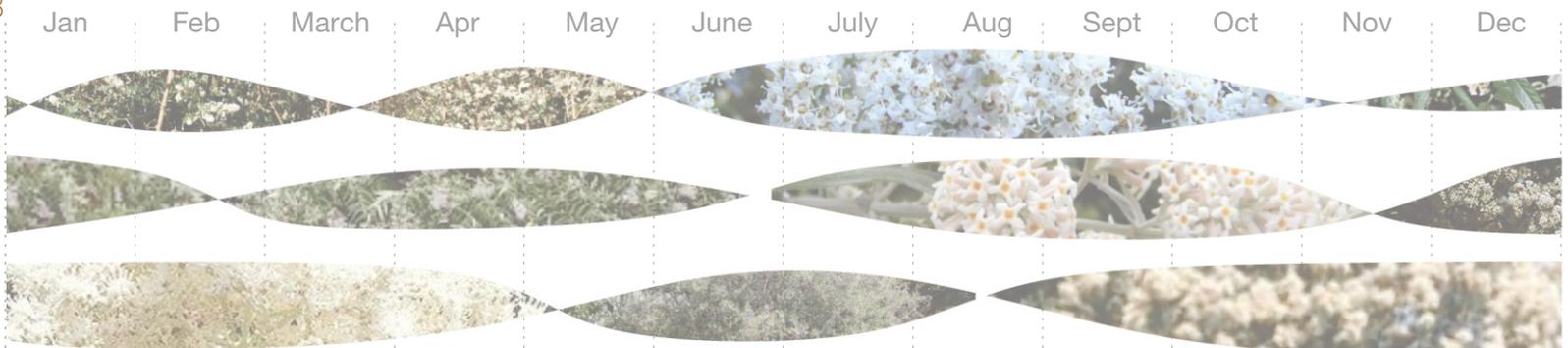


Figure 6.23: Plant palette for moment 3 (Author 2016)



Buddleja auriculata
Weeping Sagewood
4 x 4m



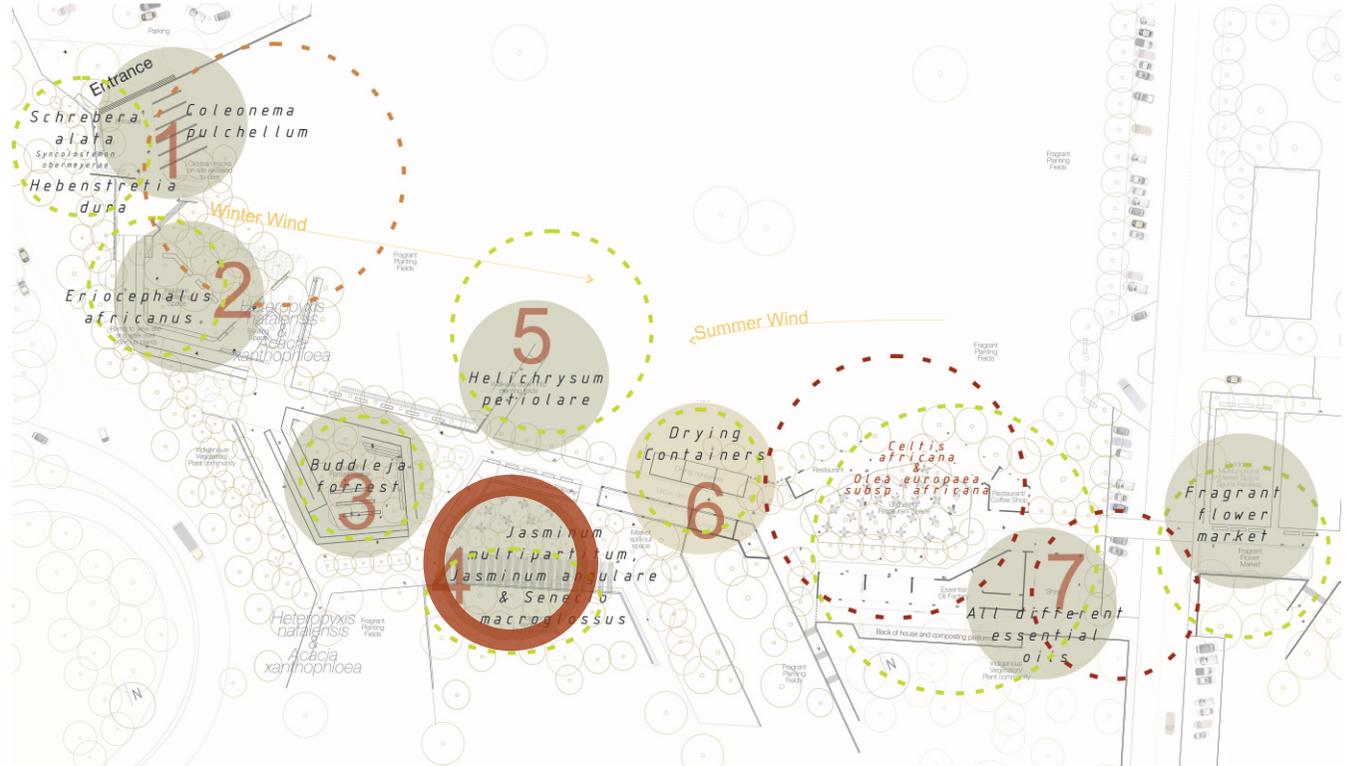
Buddleja salviifolia
Sagewood
5 x 4m



Buddleja saligna
False-olive
4 x 3m

Moment 4: Cool microclimate, water in shade - linear experience

There is something magical about walking under a pergola that has been taken over by flora. The author wants to translate this experience that she knows and remembers into a space combining it with the pleasant fragrance of *Jasminum multipartitum* (flowering from spring to autumn), *Senecio macroglossus* (with fragrant leaves the whole year through) & *Jasminum angulare* (flowering in summer). This will create a linear spatial experience and define and translate the specific linear character of the space. The designer also uses 'palette cleansers' in the landscape to make this a pleasant experience for the user with moments of rest.



Plant Palette for Moment 4

- * *Jasminum multipartitum*
 Starry Wild-Jasmine
 2 x 1m
- Senecio macroglossus*
 Flowering Ivy
 3 x 1,5m
- Schreberia alata*
 Wild Jasmine
 5 x 4m

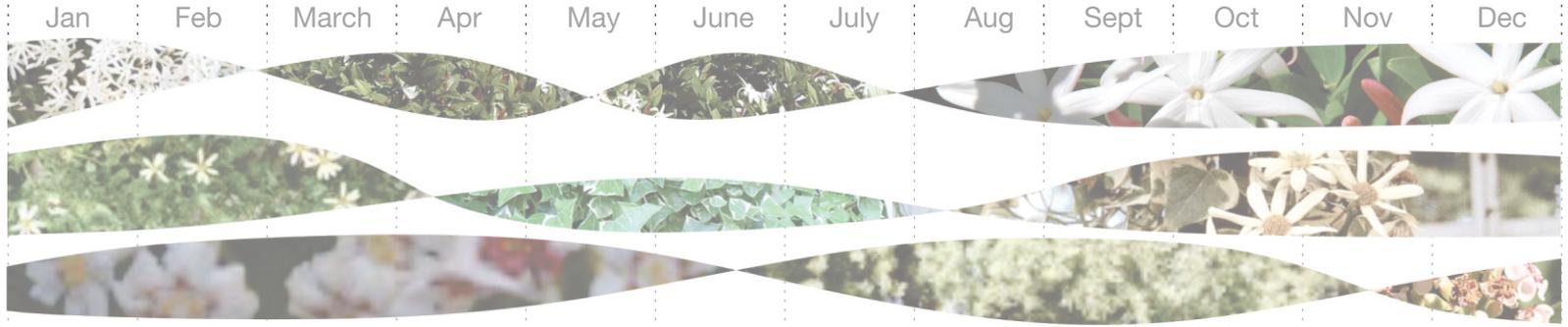


Figure 6.24: Plant palette for moment 4 (Author 2016)



Figure 6.18: Climbers



Moment 5: Submersion into Fragrance Planting Fields

The visitor to the site is allowed to enter the vast fragrant planting fields in a specific area to arrive at a place where the user would feel totally overwhelmed by the masses of fragrant planting surrounding them. This is also a controlled way to allow the visitor to engage with the planting field without harming the plants that will be used to make essential oil. The purpose of this space is to expose the users to the natural form of the flora before experiencing it as an essential oil.

The plants that will be experience in this area could be between the different plants seen in figure 6, as this is a productive area different plants might be planted in this area on different occasions.

Plant Palette for Moment 5:

- **Helichrysum petiolare*
Everlasting
1 x 2m
- **Helichrysum splendidum*
Cape Gold
1 x 2m
- **Agathosma lanceolata*
Honey Buchu
1 x 0,6m
- **Artemisia afra*
Wild Wormwood
1,5 x 1,5m

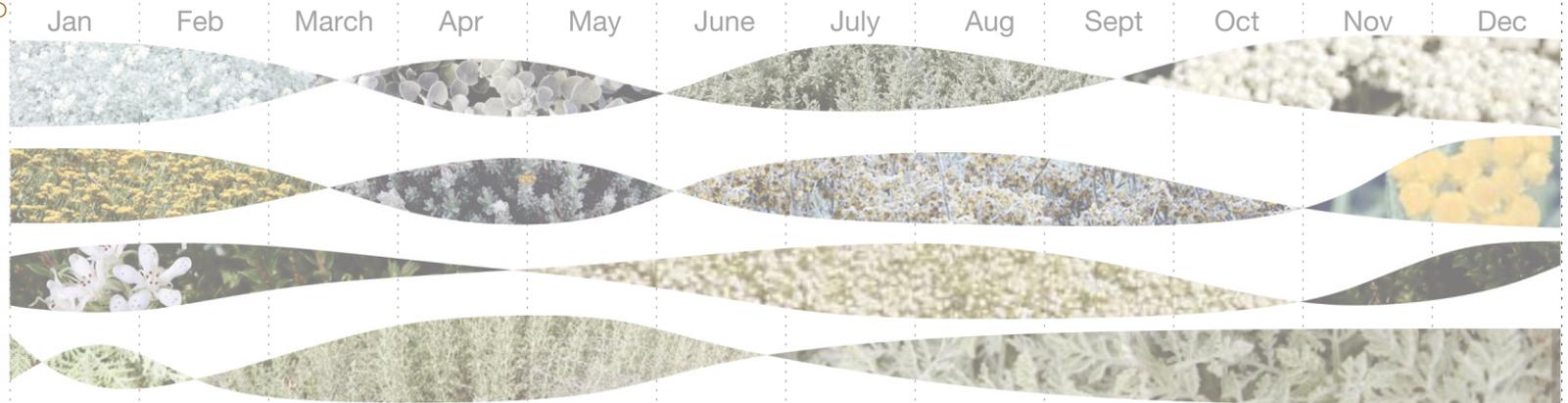
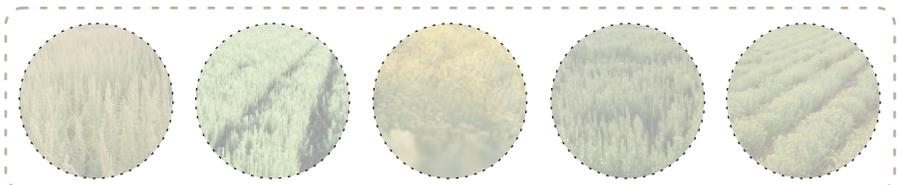


Figure 6.25: Plant palette for moment 5 (Author 2016)

Figure 6.26:
Essential oil
planting fields



Moment 6: Fragrant planting drying containers

Some of the plants need to be dried before it can be used to make essential oil. These drying containers are placed near the factory for convenience but along the olfactory route to expose this important step in the making of essential oil to the visitor of the site. As some of the plant material starts to dry it releases its unique pleasant smell acting as a massive heap of pot-pourri to the by-passes with pleasant fragrances filling the air.



Plant Palette for Moment 6

Helichrysum petiolare
Everlasting *
1 x 2m



Figure 6.27:
Helichrysum petiolare
(Olivier 2014)

Helichrysum splendidum
Cape Gold *
1 x 2m



Figure 6.28:
Helichrysum splendidum (Shoot 2004)

Pelargonium cordifolium
Heart-leaved Pelargonium
1 x 1m *



Figure 6.29: *Pelargonium cordifolium* (Staudenfuehrer)

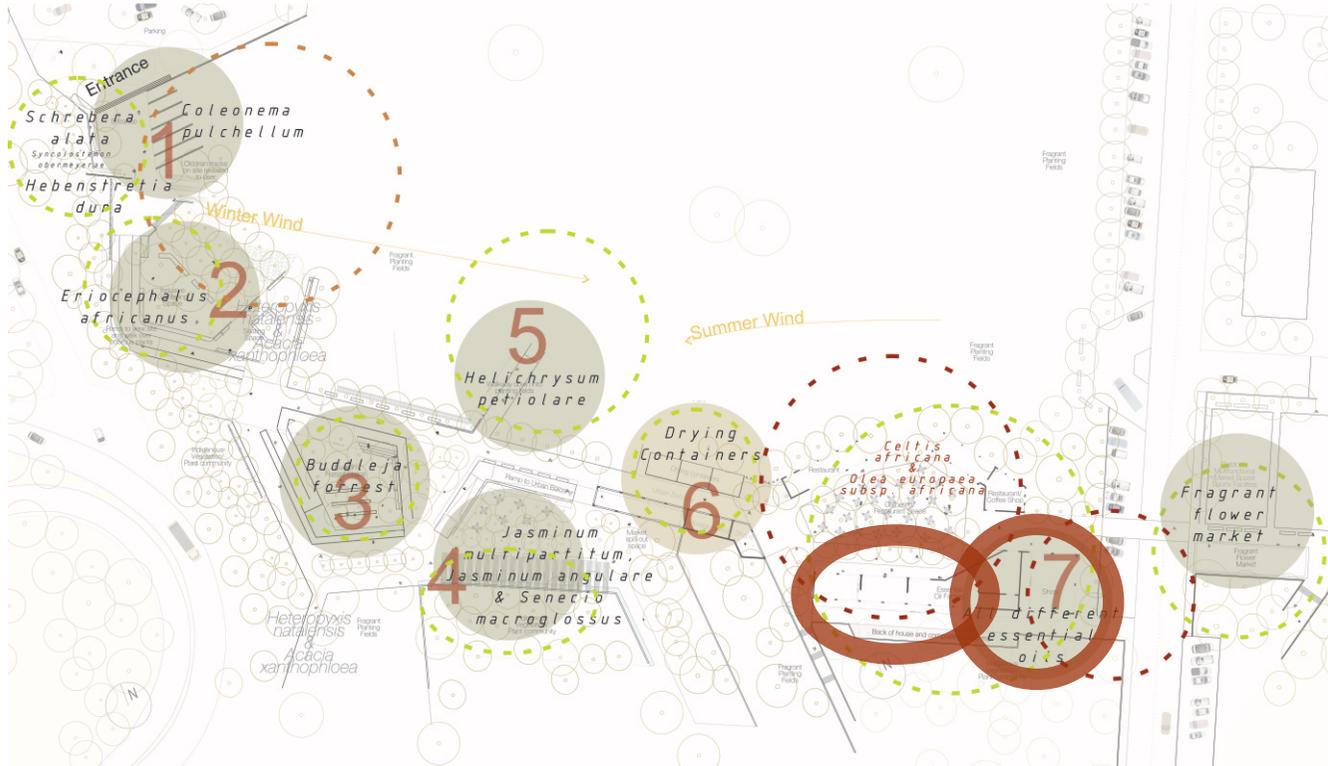
Pelargonium graviolens
Rose-scented Pelargonium
1,3 x 1m *



Figure 6.30:
Pelargonium graviolens
(NetPS Finder)



Figure 6.31:
Dried plants
(Adobe 2016)



Moment 7: Journey through essential oil factory

The visitor to the site will be allowed to walk through a public space in the factory which will be designed to reveal the beautiful proses of making essential oils. An essential oil factory smells lovely and this smell will be revealed at just the right frequency making use of popper ventilation in the process to make sure it does not overpower the user.

The Final Product

After the user has moved through the factory he/she ends up in the factory shop where the different oils can be smelled in its pure oil form or in the form of other products like cream, soap and sprays.

Enter factory and see how the plant material is placed throught distillery process smell aroma in factory

See workers taking plant material to factory from planting fie;d or from drying boxes

End up in Shop where essential oil is sold in its most pure form and in the form of other products



Figure 6.32: The essential oil process

Restaurants and coffee shops

In the space indicated in this figure a few different restaurants and coffee shops exist.

The plants planted in this area will specifically not have any fragrance as to emphasize the smell of the food that will dominate these spaces.

The essential oil plants that are planted in the field right behind the restaurant will not have fragrant flowers but leaves that cannot be smelled unless crushed so floral fragrance does not overpower the smell in this area where food is served.

Plants of the Open Woodland community of the Svcb 6 Marikana Thornveld that should exist within Salvokop will be planted in this area (the full planting palette is discussed in the following chapter.



	Olea europaea subsp. africana Wild Olive Size: 8m x 8m		Celtis africana White Stinkwood Size: 10m x 9m		Aristida scabrivalvis Purple Three-awn Height: 50-70 cm		Eragrostis lehmanniana Lehmann Lovegrass Height: 50-60 cm		Eragrostis curvula Weeping Love Grass Height: 70-120 cm		Themeda triandra Red Grass Height: 80-140 cm		Ornithogalum tenuifolium Moretele-Monyenyane <i>Albuca vires</i> Size: 30cm x 20cm		Scilla nerosa Scilla Traditional medicine Size: 60cm x 40cm		Scadoxus puniceus Paintbrush Size: 50cm x 30cm		Asparagus cooperi Asparagus cooperi Size: 80cm x 60cm
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Figure 6.33: Plant not containing any strong fragrance (Author 2016)

User (Pedestrian) Movement

This graphic illustrates the many different routes a user can take on site. The different routes may be destination orientated to get to a specific space or to get to the factory or restaurant area or the user can wander taking his/her time in the landscape to truly experience the smell in the landscape.

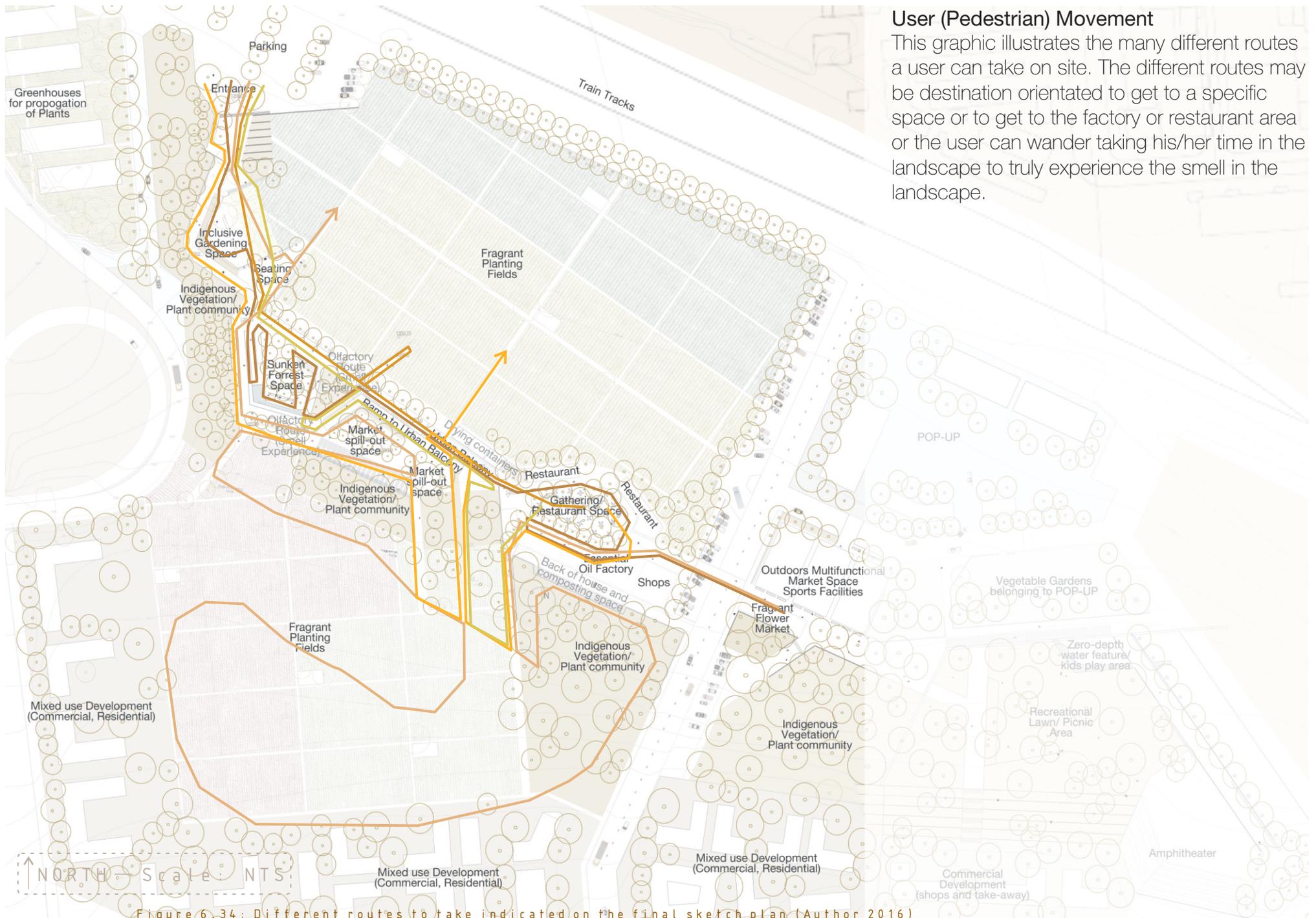


Figure 6.34: Different routes to take indicated on the final sketch plan (Author 2016)



Experience and Choice

Throughout the Olfactory Route different options are presented to the user. These choices are presented in the design as indicated in figure 2.35.

The users then have more control over the journey that they take through the landscape. As mentioned in Chapter 2 for a visitor of the site to have control over choices has therapeutic benefits.

Figure 2.35: Moments of choice indicated on the final sketch plan (Author 2016)

Spatial Exploration - Model

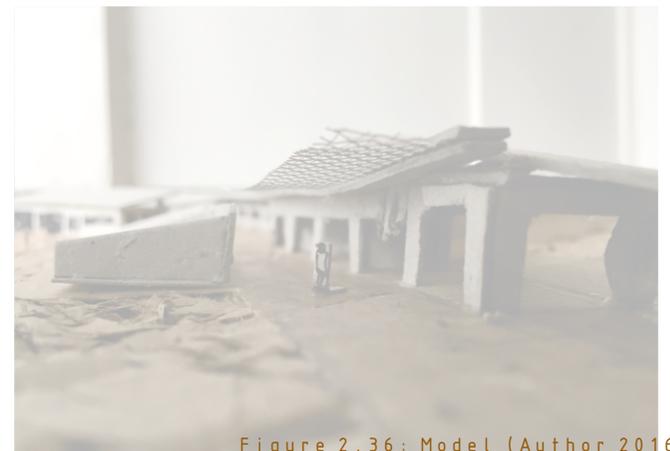
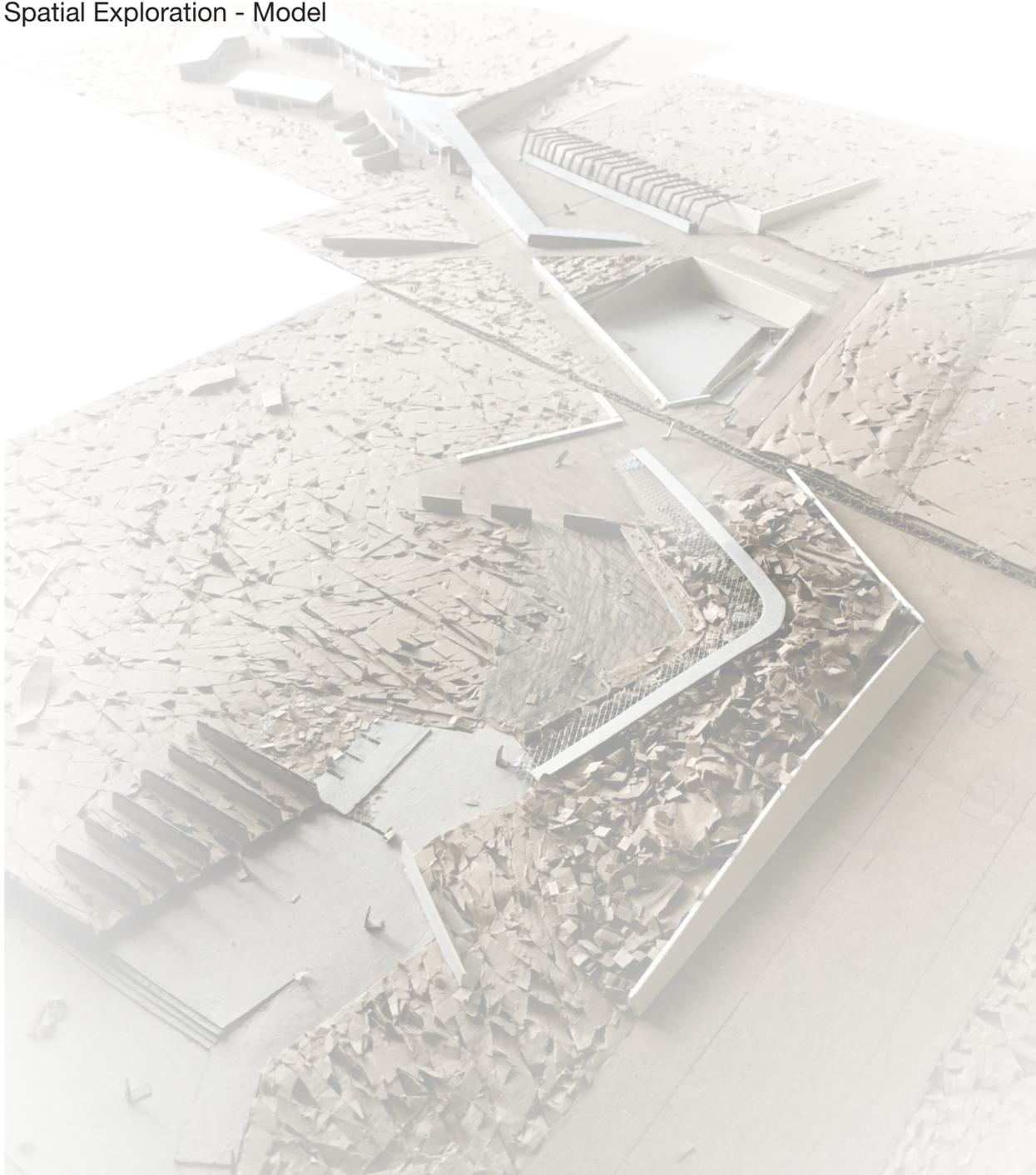


Figure 2.36: Model (Author 2016)