



Only about 20% of plastics are currently recycled

MOVING WITH THE FLOW

RECOVERING BRANTHAM PLASTICS LANDSCAPE



Plastics as Art and Agriculture

Country / City United Kingdom / London
University / School Writtle University College
Academic year 2016 – 2017
Title of the project Moving with the Flow / Recovering Brantham Plastics Landscape
Authors Kieran Linale





PERFORMATIVE NATURE

Barcelona International Landscape Architecture Biennial

September 2018 **Barcelona**

SCHOOL PRIZE

X International Landscape Architecture Biennial

Máster d'Arquitectura del Paisatge -DUOT - UPC

ETSAB- Escola Tècnica Superior

d'Arquitectura de Barcelona

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TECHNICAL DOSSIER

Title of the project **Moving with the Flow / Recovering Brantham Plastics Landscape**
Authors **Kieran Linale**
Title of the course **MA Landscape Architecture**
Academic year **2016 -2017**
Teaching Staff **Saruhan Mosler**
Department/Section/Program of belonging **Landscape Architecture**
University/School **Writtle University College**

Written statement, short description of the project in English, no more than 250 words

The design aims to portray a "re-birth" of the site by providing the site with new functions, both ecological and economic, whilst incorporating features that act as monuments to the site's previous condition.

Ecology is an important element of the concept, with sustainable living in mind. Drawing links to the site's history not only creates a strong narrative, but also guides the choice of ecological approach. The design aims to address both the contamination on the site and flooding, and to create more effective wildlife habitats that support the more critical species. At the same time, the landscape will serve as infrastructure to support a large SuDS system.

The design incorporates agriculture drawing on the history of the site, aiming to employ the sustainable living approach to provide a new, strong economic source for the community. Tourism is another major source of economic benefit to the site.

Plastic manufacturing was one of the previous uses of the site. The merging of this history with present function takes into account the environmental importance of re-use and recycling of plastics. The post-industrial site itself can serve as an example of the re-use of plastics within agriculture. In addition, there is a plastics art gallery, allowing artists to express the environmental importance of re-use and recycling through their art.

For further information

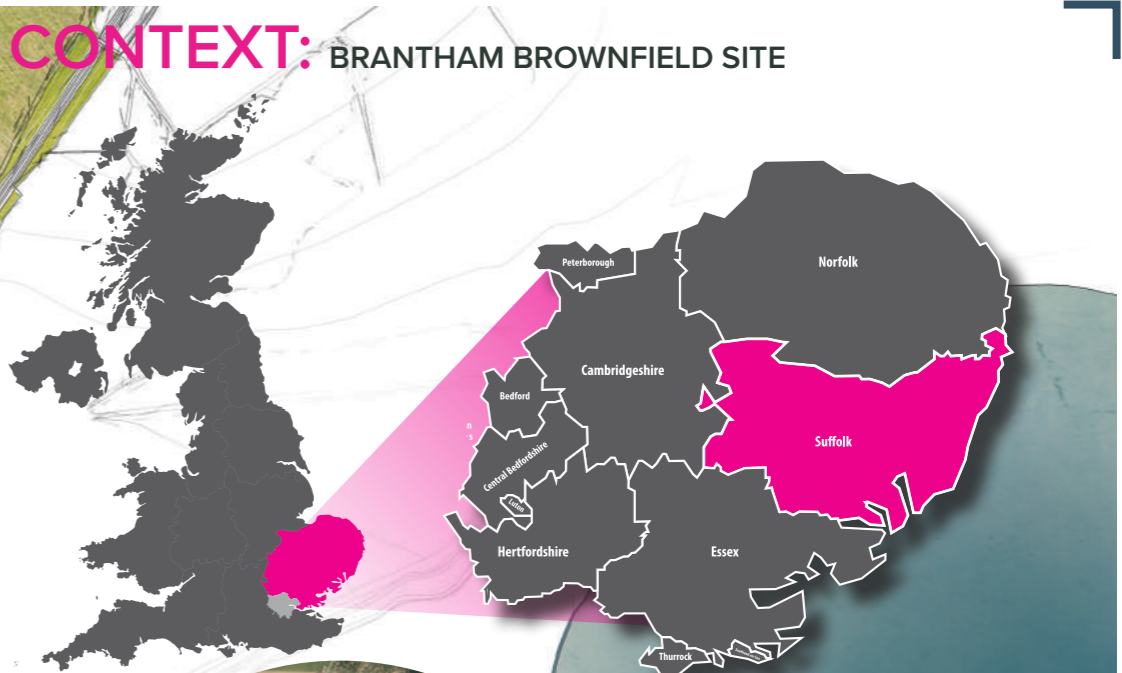
Máster d'Arquitectura del Paisatge -DUOT - UPC

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Consult the web page <http://landscape.coac.net/>

CONTEXT: BRANTHAM BROWNFIELD SITE



- Key**
1. Elevated Kitchen Gardens
 2. Art / Exhibition Building
 3. Wetlands
 4. Edible Corridors
 5. Office Buildings
 6. Wet Meadows / SuDS System
 7. Main Entrance Area and Information Building
 8. Tramway Route
 9. Boating & Canoeing Training, Ride and Hire
 10. Beehives
 11. Flood Barrier Climb
 12. Swimming Ocean Pool / Decked Barrier
 13. Outside Cinema
 14. Flood Barrier / Route to Coastline
 15. The Kitchen (Restaurant)
 16. School
 17. Housing with Private Gardens
 18. Restored Wetlands
 19. Saltings
 20. The Coal Cafe
 21. Woodland
 22. Boat Slipway
 23. Edible Fields
 24. Knightingale Nests (Viewing Platforms)
 25. Market Space / Events

STRATEGY: MOVING WITH THE FLOW



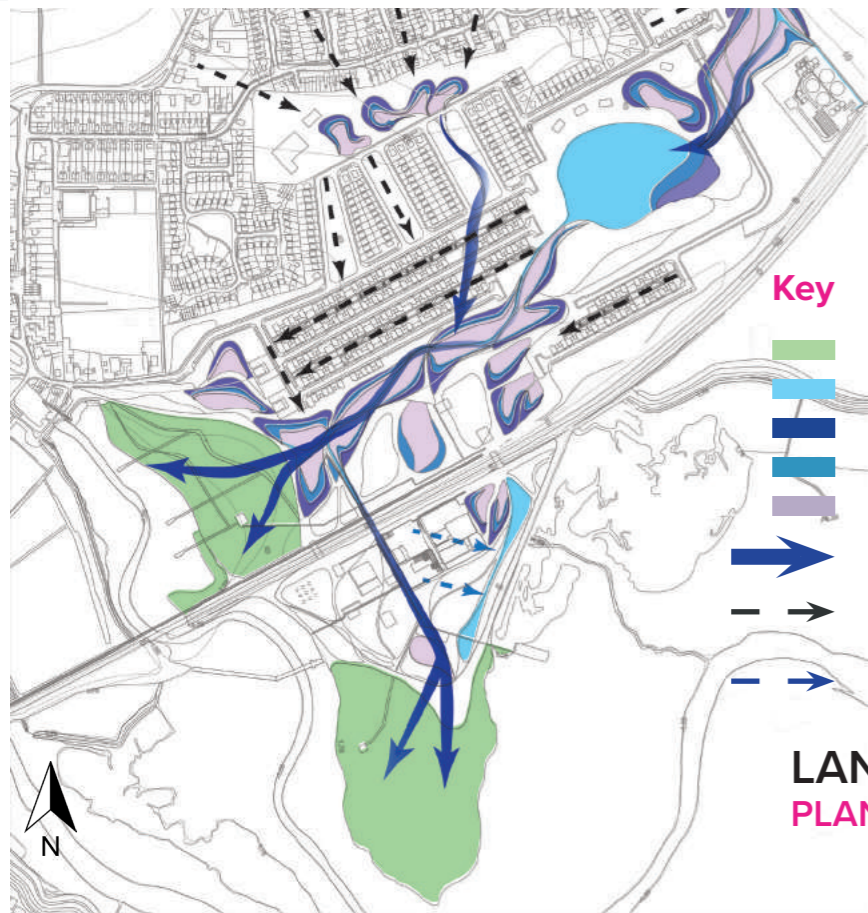
ISSUES ON SITE



STRATEGY MOVING FORWARD



LANDSCAPE AS SuDS: PLASTICS AS A SYSTEM



PLASTICS AS FORM: PLASTICS AND ART

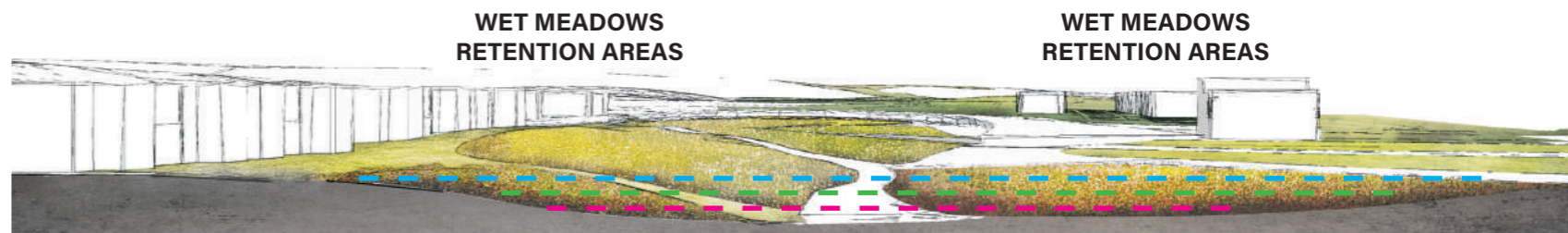
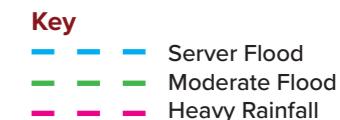
The form has derived from the plastic landscape theme. Plastics can be moulded and re-moulded into drastically different forms; by re-working the plastic, the artist can give the old plastic a new character: the versatility of the plastic allows the object to be reborn, the pre-existing material moulded in to something new.

The image shows the process of creating divots and impressions in the plastic. By shaping the landscape in a similar fashion - a landscape of "divots and impressions" - a SuDS system on the landscape surface can be created. One of the artists shown to the left; Vilde Rolfsen calls her art piece plastic bag landscapes.



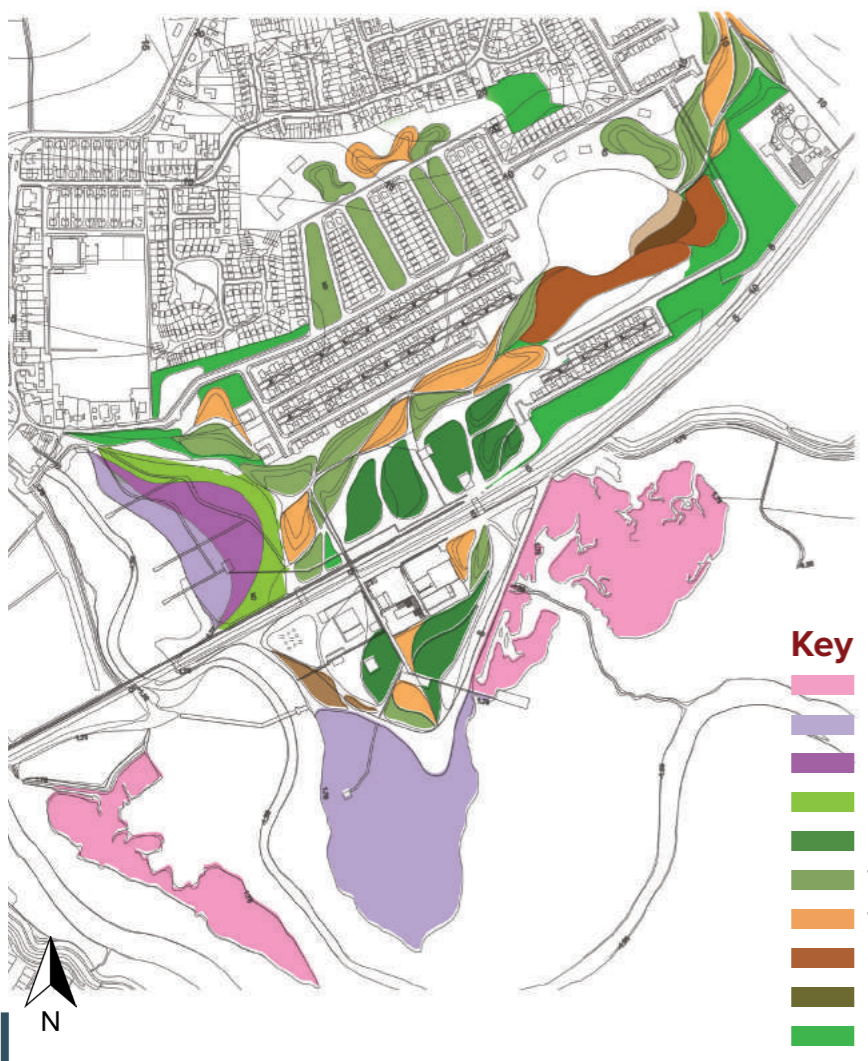
Programming the landscape

In "Programming the Urban Surface", Alex Wall argues that the landscape surface can be shaped and programmed in such a way as to function as an ecological and social agent, and, further, can be designed in such a way to facilitate its remoulding to meet future demands. He also goes on to write about how through thickening and folding the surface you can mould it to solve problems on the site, such as drainage (Corner. 1999).



LANDSCAPE AS ECOLOGICAL RECOVERY

PLANTING STRATEGY: MOVING WITH THE FLOW



Key



Calluna vulgaris



Ulex gallii



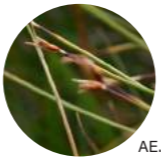
Salix viminalis



Festuca ovina



Agrostis curtisii



Scirpus cespitosus



Helianthus annuus



Sorghastrum nutans



Small Heath *Coenonympha pamphilus*
Priority Species



Norfolk hawker *Aeshna isosceles*
Protected in the UK



Achillea millefolium



Primula veris



Sanguisorba officinalis



Centaurea nigra



Harvest Mouse *Micromys minutus*
Critical



Water Vole *Arvicola amphibius*
Critical



Pinus sylvestris



Quercus robur



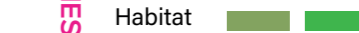
Juglans regia



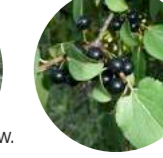
Acer campestre



Nightingale *Luscinia megarhynchos*
Red Status



Betula pubescens



Rhamnus cathartica



Rosa canina



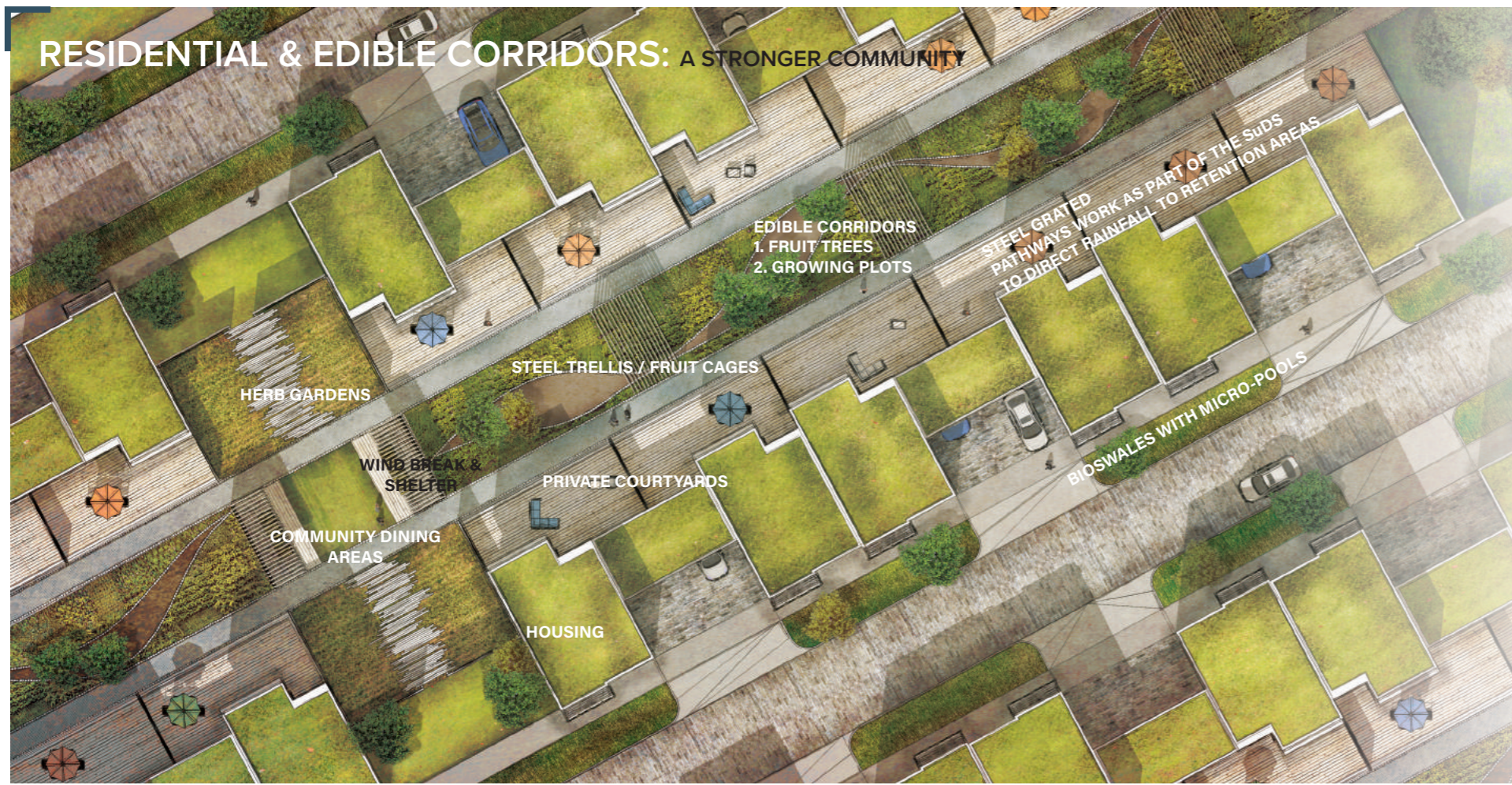
Alnus glutinosa



Ringed plover *Charadrius hiaticula*
Red Status



RESIDENTIAL & EDIBLE CORRIDORS: A STRONGER COMMUNITY



HERB GARDENS

WIND BREAK & SHELTER

COMMUNITY DINING AREAS

HOUSING

STEEL TRELLIS / FRUIT CAGES

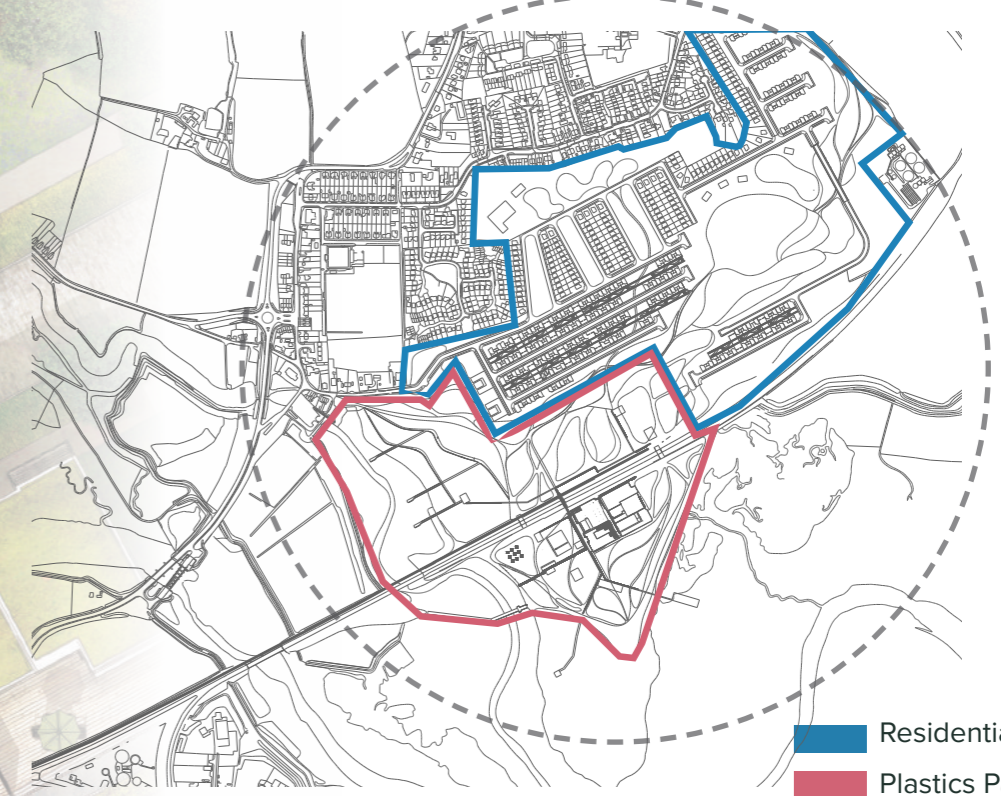
PRIVATE COURTYARDS

EDIBLE CORRIDORS
1. FRUIT TREES
2. GROWING PLOTS

STEEL GRATED PATHWAYS WORK AS PART OF THE SuDS TO DIRECT RAINFALL TO RETENTION AREAS

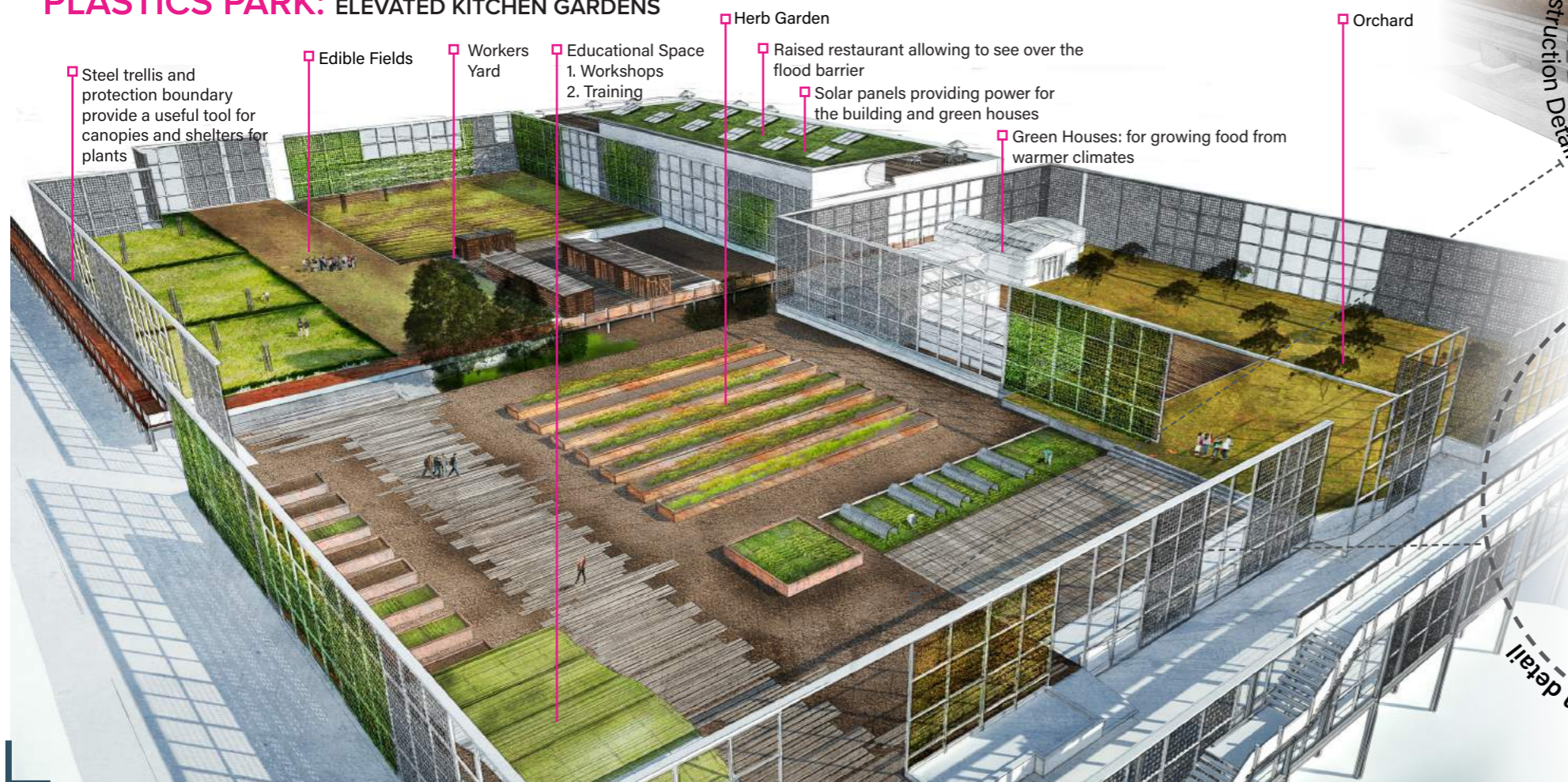
BIOSWALES WITH MICRO-POOLS

ZONES: MOVING WITH THE FLOW



- █ Residential Space
- █ Plastics Park

PLASTICS PARK: ELEVATED KITCHEN GARDENS



Steel trellis and protection boundary provide a useful tool for canopies and shelters for plants

Edible Fields

Workers Yard

Educational Space
1. Workshops
2. Training

Herb Garden

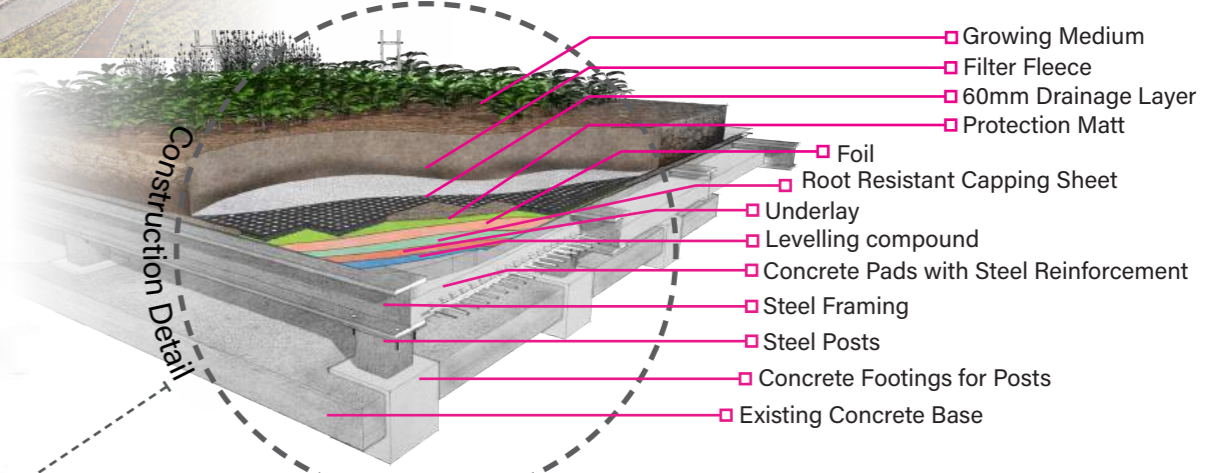
Raised restaurant allowing to see over the flood barrier

Solar panels providing power for the building and green houses

Green Houses: for growing food from warmer climates

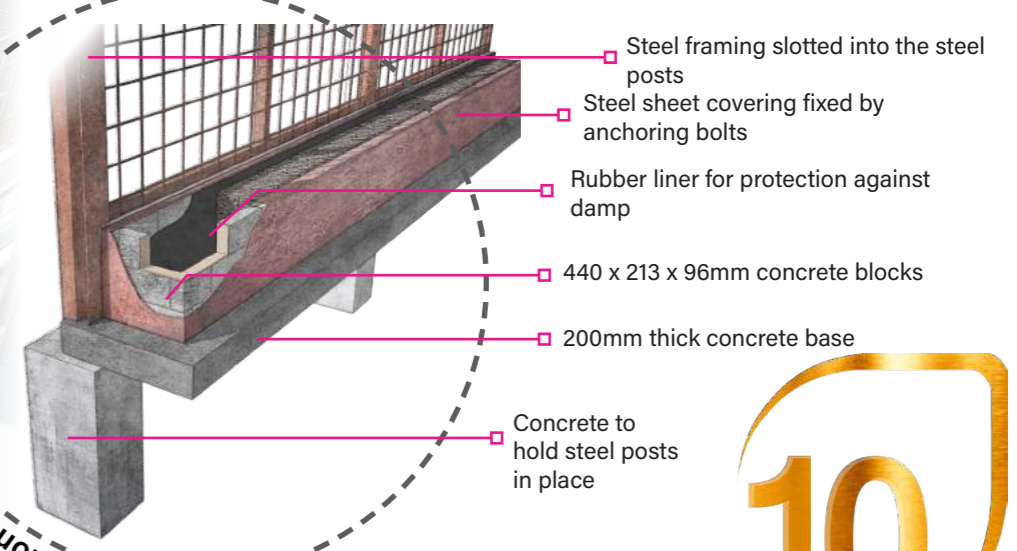
Orchard

GREEN ROOF SYSTEM



- █ Growing Medium
- █ Filter Fleece
- █ 60mm Drainage Layer
- █ Protection Matt
- █ Foil
- █ Root Resistant Capping Sheet
- █ Underlay
- █ Levelling compound
- █ Concrete Pads with Steel Reinforcement
- █ Steel Framing
- █ Steel Posts
- █ Concrete Footings for Posts
- █ Existing Concrete Base

STEEL FRAMING & PLANTER



- █ Steel framing slotted into the steel posts
- █ Steel sheet covering fixed by anchoring bolts
- █ Rubber liner for protection against damp
- █ 440 x 213 x 96mm concrete blocks
- █ 200mm thick concrete base
- █ Concrete to hold steel posts in place