

# MERIDIAN WATER LAND CHANGES

Existing conditions



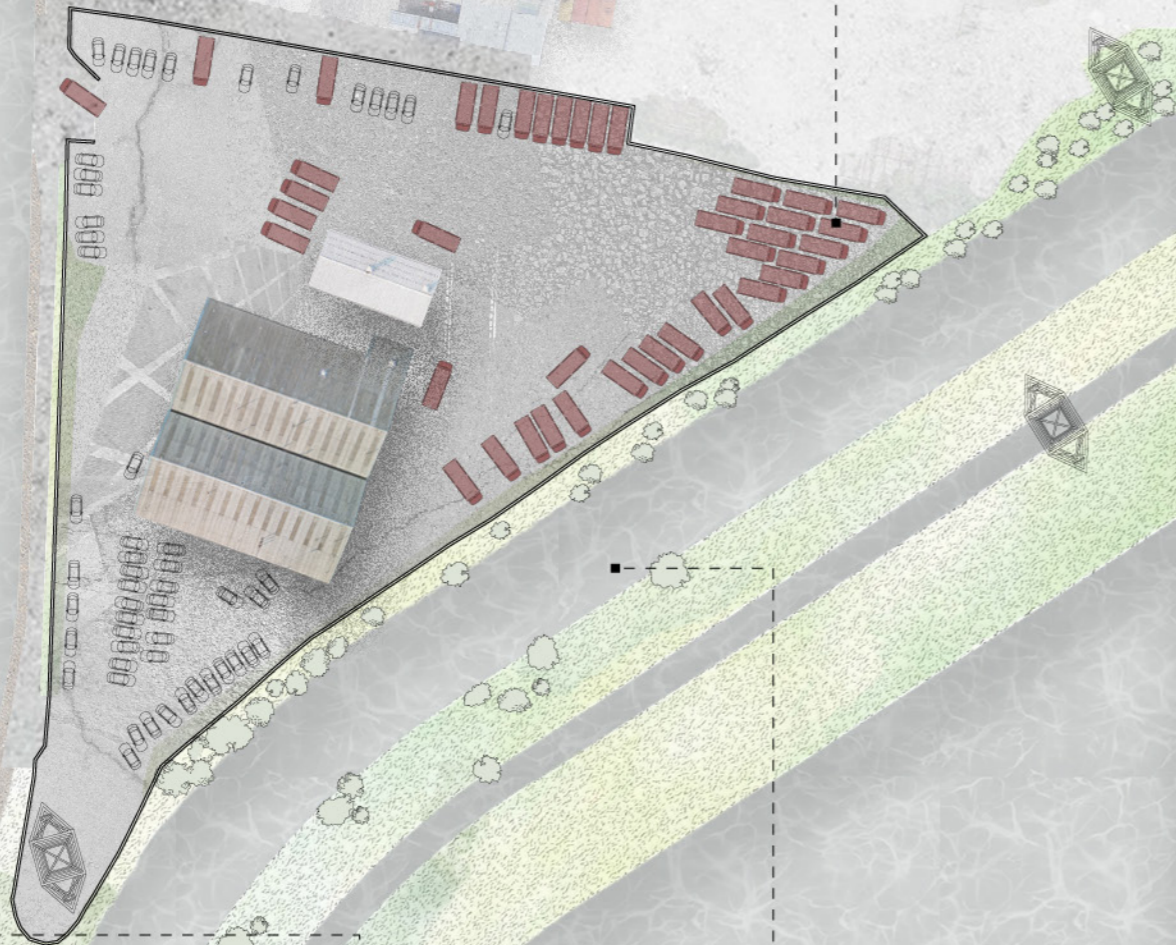
Construction works



Industrial services



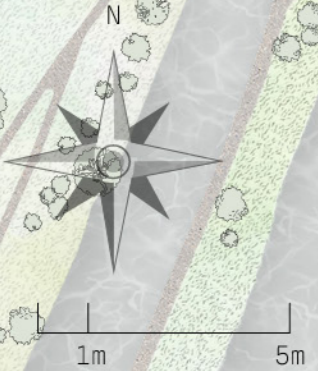
Buses and cars



Green walks



Water bodies



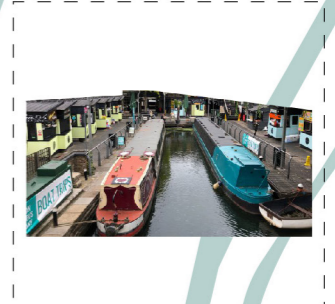
Future masterplan (2027)  
Architects: MAE Architects, Kjellander  
Sjoberg Architects, Periscope



Where has the heritage gone?



Retail spaces



Food markets



Cluster 1  
Research and development

Cluster 3  
The cultural heart

Cluster 2  
Innovative growth sector

Cluster 4  
The flagship of Meridian Water

SITE

Banbury Reservoir

How to connect to the Lee Valley?

Primary school



Residences



Designs provided by MAE Architects, Kjellander  
Sjoberg Architects and Periscope

# HISTORY OF THE LEE VALLEY

## Agriculture in Meridian Water

The record of the name Lea Valley dates back to the Anglo-saxon times in the 9th century. The blocking of the river, cutting supply lines played a key part in the victory for King Alfred

During Elizabethan times, the River Lea was an established trading route and breadbasket for London. Grain for bread, beer was grown alongside hay and agricultural goods

Industrialisation brought heavy canalisation to Lea Valley. Lee Navigation provided transportation of crops and construction materials

The area was attractive for investment due to transport links and ample space, contributing to industrial expansion. Locally produced inventions consisted of the halogen cooler and digital phone equipment



Pastures were used to grow wheat and grains

Animals, cows, sheep and horses grazed throughout the Autumn and Winter, with the land being supplied with nutrients during the winter floods

Hay was grown during the Spring until July



Sluices - water channel containing a sluice gate, a type of lock to manage the water flow and water level

During food shortages during World War 1, potatoes were grown in Tottenham Marshes

# THE MODERN AGRICULTURAL LANDSCAPE

what does agriculture mean?

The agricultural industry is undergoing significant changes, farmers face ongoing struggles regarding food and water insecurity, climate change, and now face political tensions and threat to their land, but are their voices being heard?

Last year alone **8,100 UK farms closed**, the Government's own figures show that farm business income last year was lower for all types of farms

What could the future hold? Could an agricultural intervention in a modern cityscape be a way of educating a greater population on the importance of the agricultural landscape?

what about the farming lifestyle do you wish more people knew about?

The people you meet and the busy life everyone has

Do you wish more people could experience what it is like working in agriculture?

yes, i think people would appreciate the hard work that goes into providing food

Do you feel appreciated and respected as a farmer?

Sometimes, i think people need to remember it is not a 9-5 job, instead a 24 hour job over 7 days a week.



## Farmers protest changes to inheritance tax



how can we  
**TAKE BACK THE LAND?...**

# MATERIAL STRATEGY

## Reusing asphalt

One of the primary material detailing of the proposal consists of recycled asphalt walls, made of stones and asphalt as the binding agent.

### House 1413, HArquitectes

The stone wall marks out the boundaries of the site. The materiality and the irregularity of the geometry of the wall gives the proposal a special character and presence.



Formwork finish (interior side)



Chipped to let stone resurface (exterior side)



Asphalt chunks are mixed into an asphalt recycler along with water and additives



Mixture is tumbled and heated for 20 minutes before ready for use



Asphalt cement retains adhesive capabilities and can be reused as a binding agent



Pouring cold lay asphalt into a formwork frame



Spreading out the asphalt and compounding the mixture together



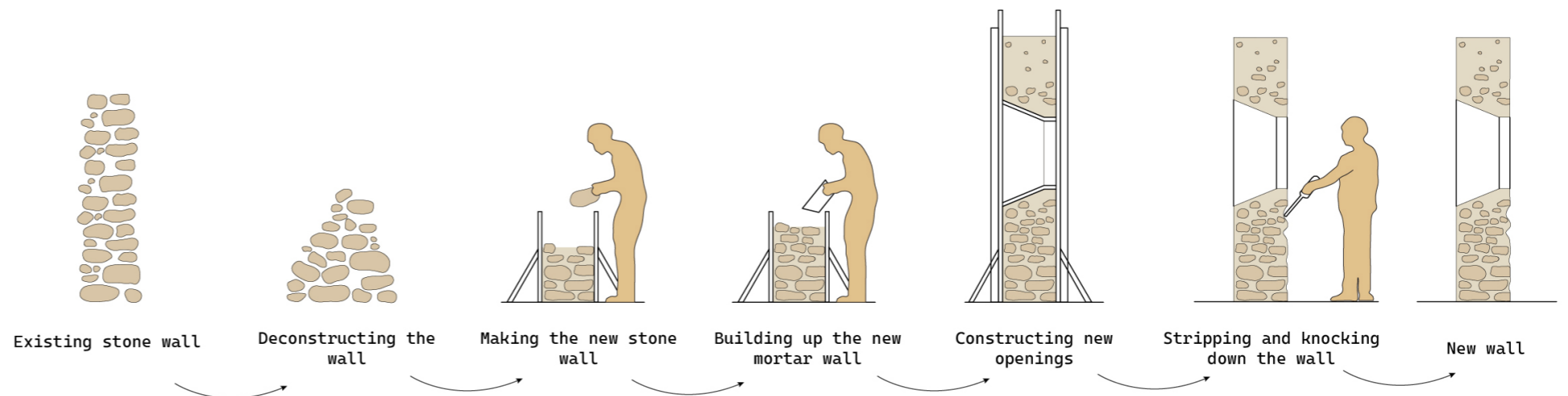
Adding stones and leaving to set for a week



Taking out the formwork, using as a structure



Farmers use recycled asphalt and crushed tarmac for live-stock containment pens, trails and walkways

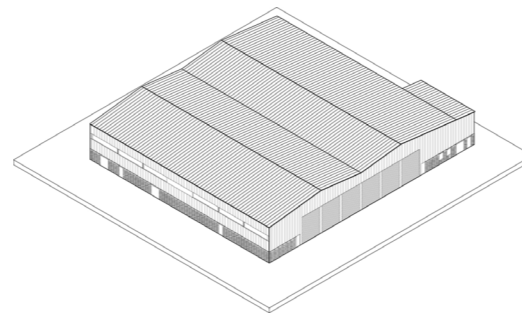


Own material tests using cold-lay asphalt  
Refer to p.79 - p.85 in design journal

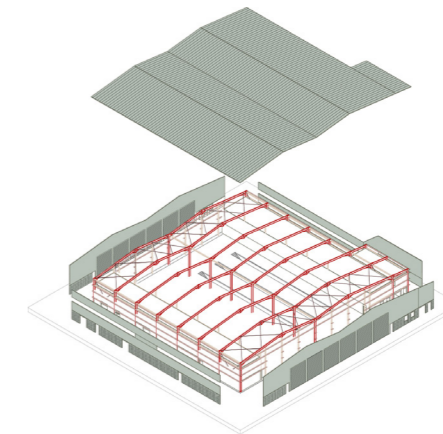
# STRUCTURAL STRATEGY

## Existing materials

Disassembling the existing bus depot.  
Re-arranging and modifying the facade,  
primary and secondary structures.

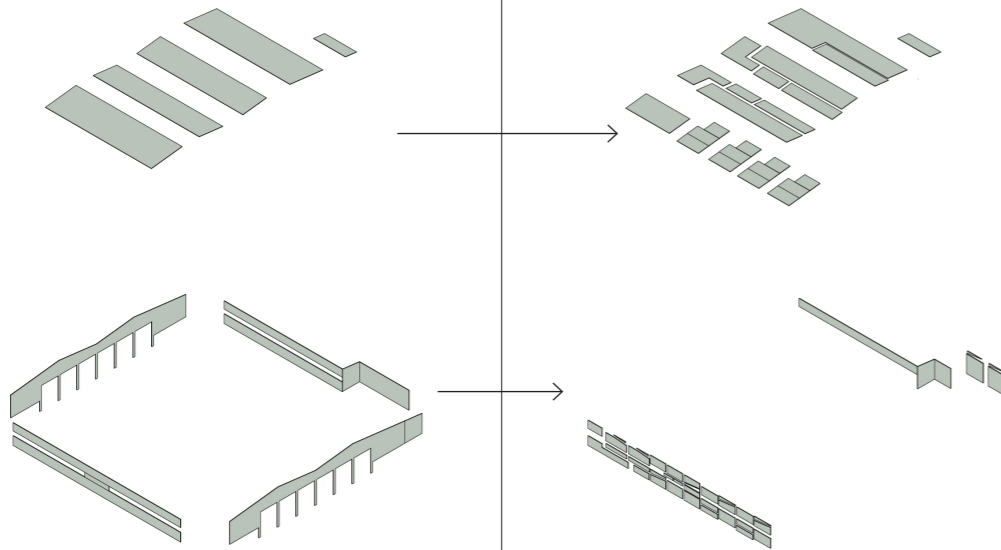


Existing bus depot

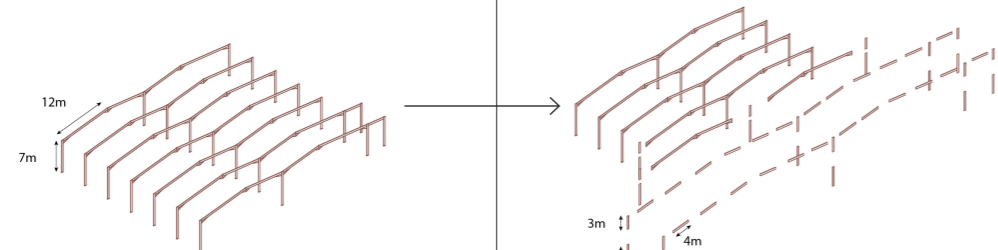


Identifying facade and structures

Existing form



4700 m<sup>2</sup> roofing material  
1600 m<sup>2</sup> facade material

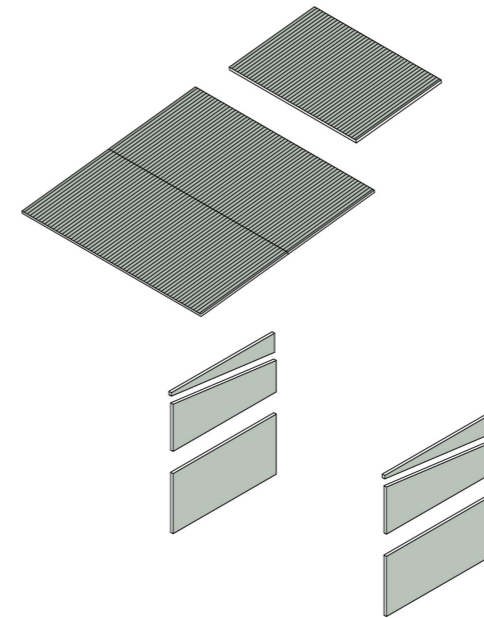


14 rafters  
23 columns

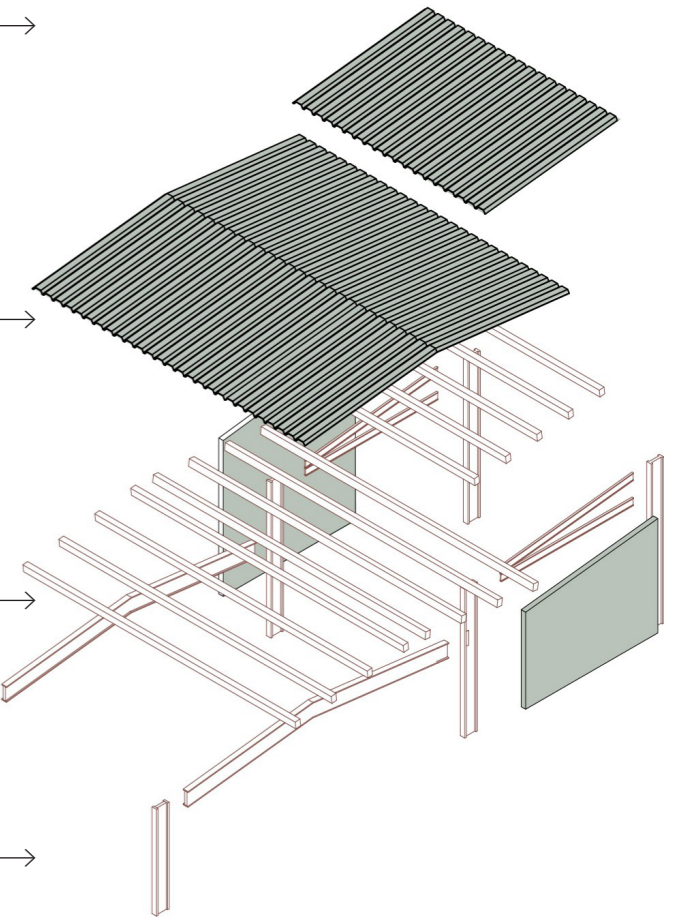
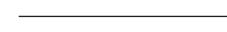
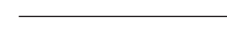
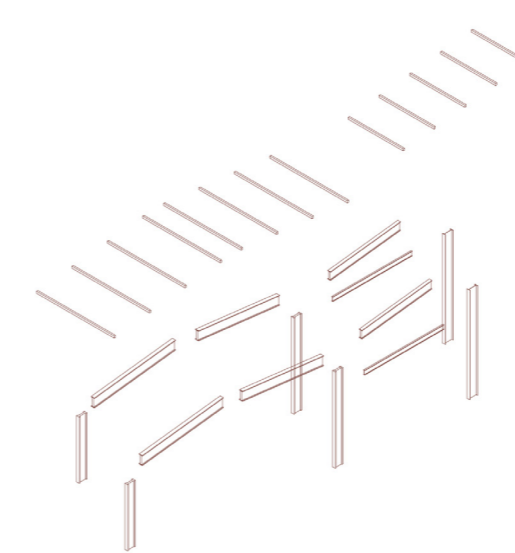


1 rafter  
3 columns

Proposal form



280 m<sup>2</sup> roofing material  
70 m<sup>2</sup> facade material



x 4

1120 m<sup>2</sup> roofing material  
28 m<sup>2</sup> facade material