

S **M** **O** **F**
M **I** **F** **O**
I **N** **O** **O**
T **I** **D** **D**
H **N** **S**
F **I** **T**
I **R**
E **Y**
L
D
'
S

“Food is the driver for the restructuring of employment, education, transport, health, communities and the justice system, re-evaluating how the city functions as a political and spatial sustainable entity”,

CJ Lim, Food City.



SMITHFIELD MINISTRY OF FOOD
Smithfield Market, West Smithfield, London EC1A 9LY



A project which attempts to revive part of the existing Smithfield Market in London and particularly the General Market which was initially constructed in 1883. It constitutes an attempt of preserving historical fabric as well as redefining the meaning and role of markets in peoples lives as well as UK's food culture through education, and direct contact with the food process. By understanding the power of markets as a place where the political sphere may be revealed I want to create a new place where politics of food can be "served on plate" and debate between interested parties can be generated. The scheme comprises of debating/dining halls, market stalls, kitchens, restaurants etc.

01

INTRODUCTION

Unit's Themes

Preliminary Work

Project Aim

02

AMBITION - PROBLEMS & SOLUTIONS

Belo Horizonte

Existing Conditions

Food Issues

03

SITE INVESTIGATION

Wider Context of Smithfield

Specific sites exploration

Chose site analysis

Precedent Studies

04

PROGRAMME

Food Markets as Houses of Politics

Democratic Architecture

Table

Room-Book

05

CRITICAL REFLECTION

06

REFERENCES

01 INTRODUCTION

UNIT'S THEMES

“Once you start to see the world through food, everything changes. Seemingly unconnected things turn out to be closely linked; apparently confusing relationships spring into relief. Food, as we know, is one of the greatest forces shaping the world. So how might we use food to shape it better?”

Carolyn Steel, - Hungry City – How Food Shapes Our Lives

“History has never copied earlier history and if it ever had done so that would not matter in history; in a certain sense history would come to a halt with that act. The only act that qualifies as historical is that which in some way introduces something additional, a new element, in the world, from which a new story can be generated and the thread taken up anew.”

Barry Bergdoll, - Karl Friedrich Schinkel, An Architecture for Prussia

Working in the area of London’s Smithfield Market, the unit attempts to investigate the possible connections between food, with everything that this may entail (production, waste, distribution etc.), and the broader sense of a City and thus society. Understanding the significance of “Intangible Cultural Heritage” and at the same time raising awareness on sustainable new architecture.

Our challenge as students, therefore, is to find a “viable” use for the abandoned market buildings by assessing the importance of Horace Jones’s Victorian buildings, respecting and maintaining key characteristics and introducing new elements that comply with the current needs of the City.

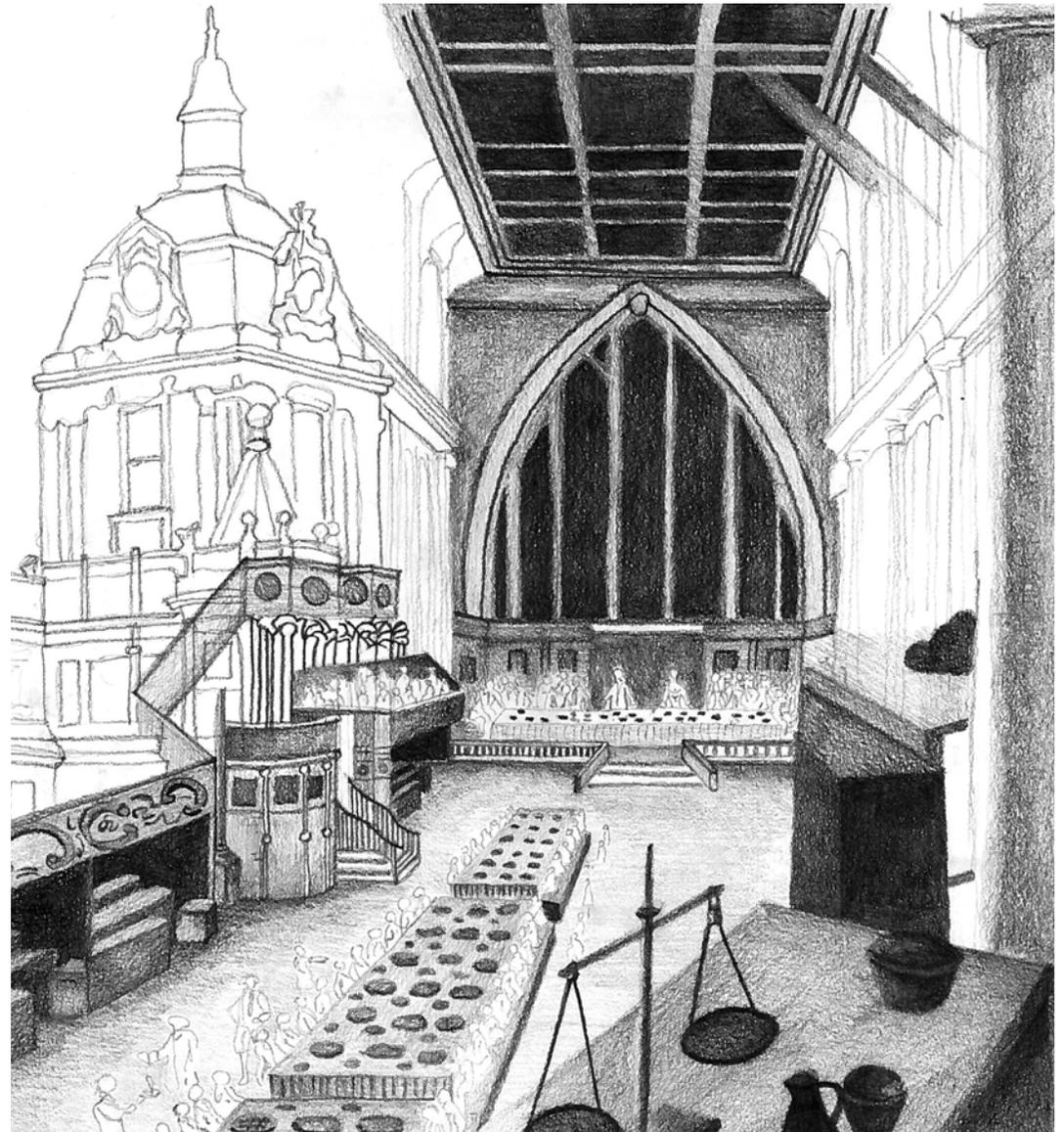
PROJECT AIM

More specifically, the aim of my project is to create a New Ministry of Food that will be formed along three axis: politics, education and sociocultural activity. I want create a place where food issues will be debated on a public level by interested bodies, where the government will provide education to people about relevant food issues highlighting food security and food process, and finally a place where food will be the driver for social interaction. Food will be the force to shape relationships of any kind.

In order to do so I am proposing the separation of Food from the current governmental Department of Environment, Food and Rural Affairs, so as to give to the Food issues the attention they actually require and at the same time acknowledge the importance of Food in every aspect of our lives today.

The new Ministry of food will be independent from any other governmental organization and it will use government repre-

sentatives for governance and not for the expression of authority. For strategic oversight and coordination and it will allow different people from different communities, with different social statuses to participate actively in the discussions around food issues and thus it will provide the means to resolve the current food issues in London. They will be able to propose solutions, to express themselves freely and unbiased, and consequently revive the principles of the [Athenian] democracy that have been lost throughout the centuries as a result of globalization, misuse of governmental power and personal incentives. It is a “revolutionary” idea which however may lead to the radical changes that need to be implemented.





“The systemization of food production would sustain the birth and maturation of the city and its importance was such that it would shape the GOVERNANCE, religion, education, transport, health foreign affairs of urban existence.”

Food city, CJ Lim

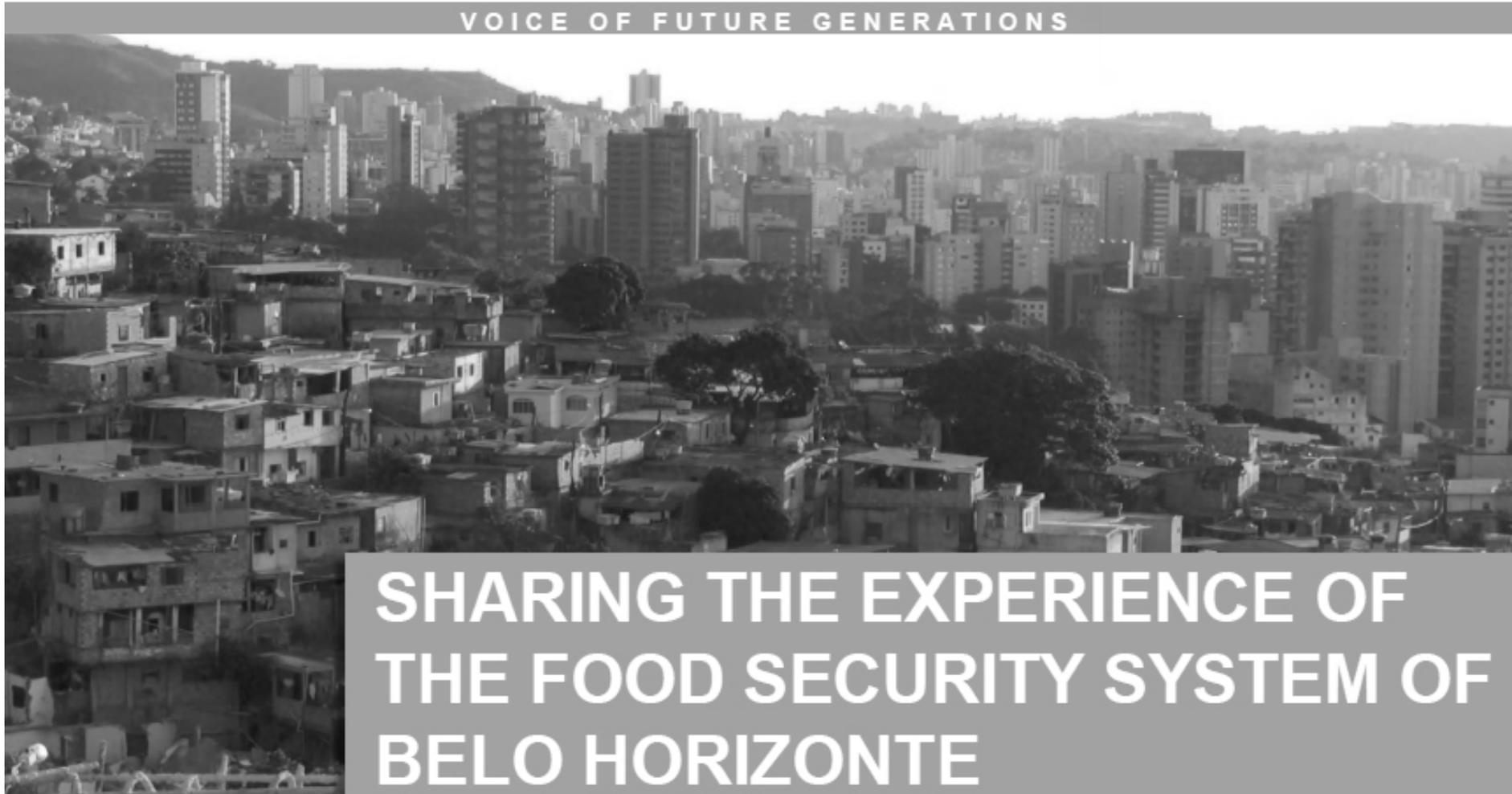
“The pivotal role played by markets in urban life made them inherently political.”

Hungry City, Carolyn Steel

“Everything will be for sale together in the same place at Athens: figs, summoners, bunched of grapes, turnips, pears, apples, witnesses, roses, meddlers, haggis, honeycombs, chickpeas, lawsuits, bee-stings – pudding, myrtle berries, allotments machines, irises, lamps, water clocks, laws, indictments.”

Extract from Euboulos

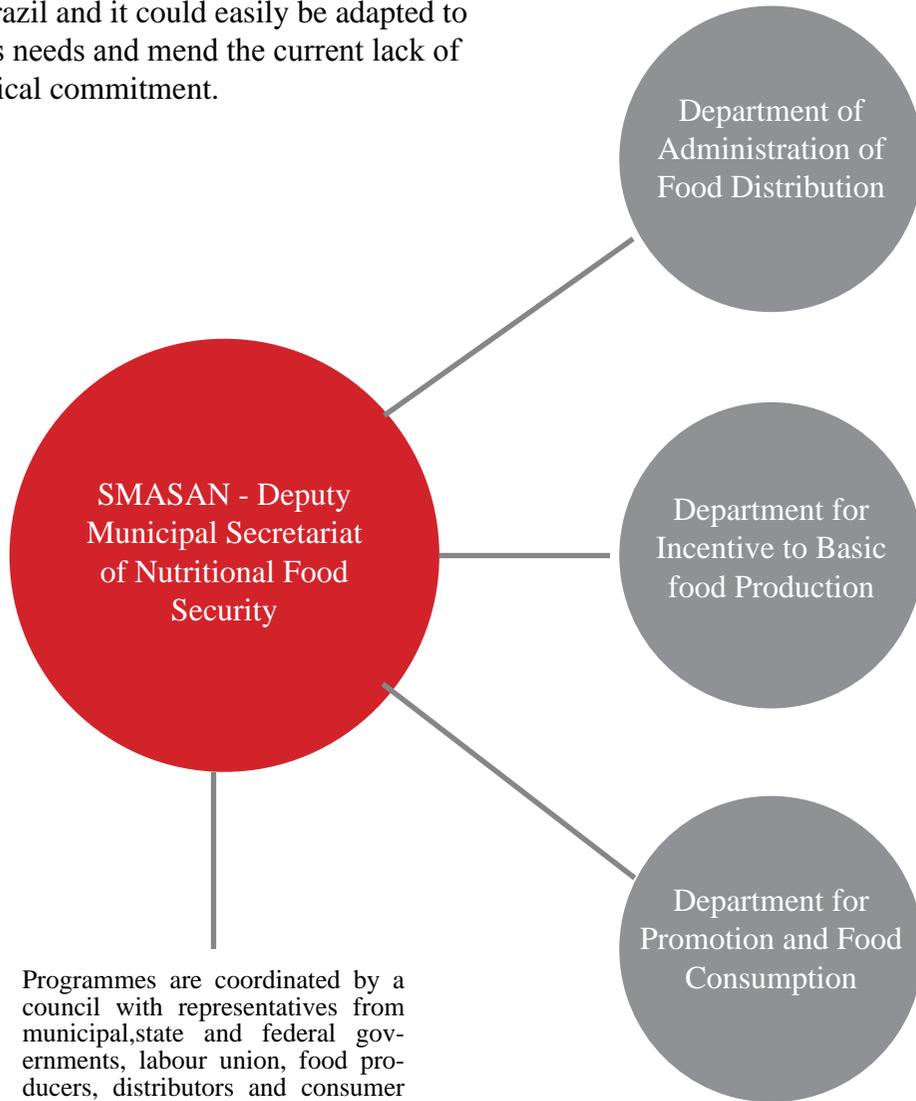
02 **AMBITION**



**SHARING THE EXPERIENCE OF
THE FOOD SECURITY SYSTEM OF
BELO HORIZONTE**

BELO HORIZONTE - BRAZIL

A great example of a government's prioritization of food issues is Belo Horizonte in Brazil and it could easily be adapted to UK's needs and mend the current lack of political commitment.



Programmes are coordinated by a council with representatives from municipal, state and federal governments, labour union, food producers, distributors and consumer groups.

Provides mechanisms to control prices, regulates the quality of food products and attempts to increase the availability of quality food products in marginalized areas of the city.

Provides small producers with technical and financial incentives, establishes link between consumers and producers and promotes urban agriculture.

Tackles malnutrition and promotes healthy eating habits.

GOVERNMENT'S CURRENT APPROACH

The current government is lacking leadership skills and determination if not willingness in terms of food issues. This in my opinion is due to the fact that food government policies are part of the Department of Environment, Food & Rural Affairs. Food issues do not get the attention required in order to be resolved it constitute part of a bigger department which at the same time needs to face Environmental problems which are more evident than ever before.

Particularly, the component of Food from DEFRA is working along with 35 independent organizations both statutory and non-statutory. Furthermore, in terms of food agencies that are dealing solely with London and its 33 boroughs there is the London Food Board. Those agencies are under the authority of the Mayor of London and are being supported by other emergency food aid organizations in the area.

At the moment the London Food Board is organising collective debates three times per year where simple citizens have the right to observe but not the right to intervene. Even that suggests how far ahead the formation of the ancient Greek society was and how important is to bring back those qualities in the 21st century. Three meeting per year are obviously not enough to consider such issues, especially not those that suffer the most are not even part of the debate.

One on hand the DEFRA is evidently reluctant due to the fact that all these agencies exist and since food as it was mentioned before is only part of each responsibilities and the smaller agencies and organizations are hiding behind the government resulting to simply insufficient action against food issues.

But even if the action or intention of the government was to something more it is rather obvious that the real masters of

food governance as well as the food processing industry in UK are large corporations such as Gilde, Nestle, Krafts, Unilever etc. and retailers such as Carrefour, Tesco, Ahold etc. Everything is controlled by personal incentives. The government works simply as a pawn for those corporations and does not provide solutions to tackle the powerful tool of advertising that those corporations use so easily to manipulate people and under those circumstances there is no way that the current situation can change. I am not suggesting that these people should not have the right to express their opinion in the decision making rather that the government should intervene in order to allow other people as well to participate in this process particularly when they suffer from the decisions that those corporations make.

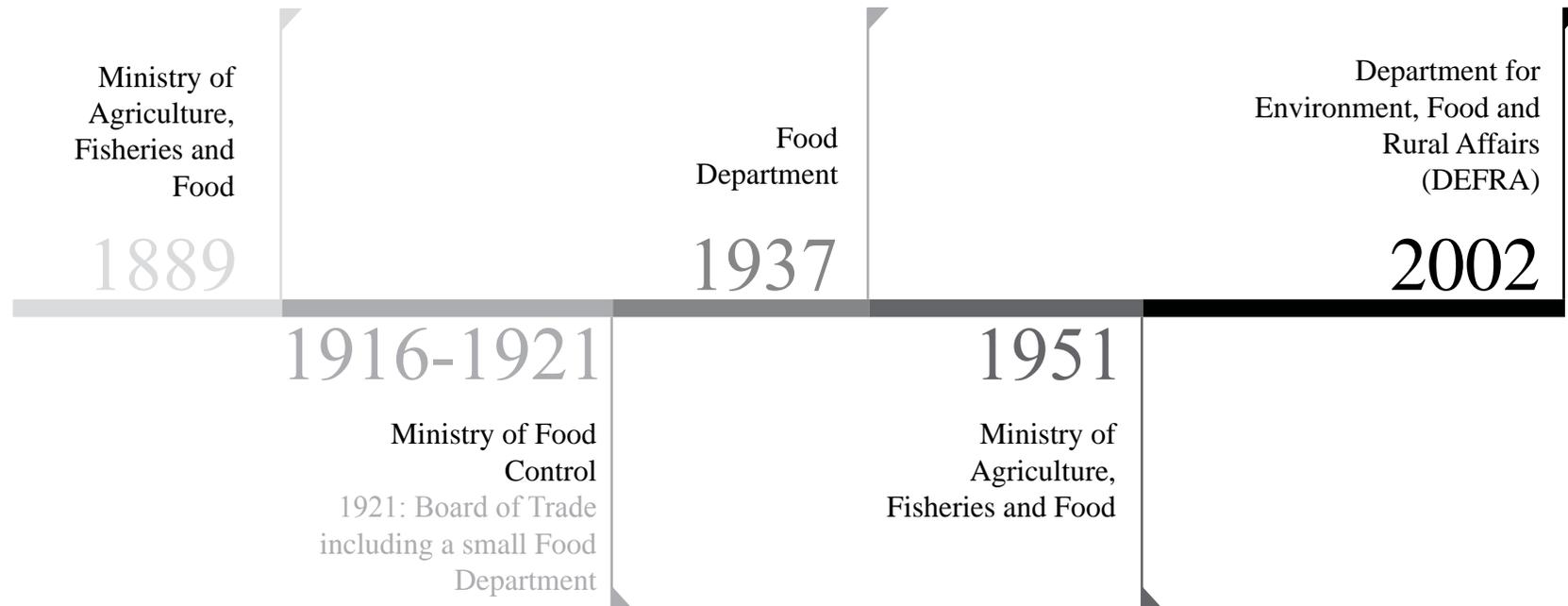


Department for Environment Food & Rural Affairs



Department for Environment Food and Rural Affairs (DEFRA)

HISTORICAL BACKGROUND



Thus, it is observed that Food Issues as well as Food governmental Departments were the centre of attention during unstable periods like World War I and World War II. On the contrary, during unstressed periods food was given less attention than required and evidently it became a small part of the current Department. The truth is though, that the beginning of the 21st century is equally important and unstable as a war-period and therefore it is essential for the Ministry of Food to be separated and revived.

FOOD 2030

An existing government policy that will be finally realized through The New Ministry of Food.

Since 2010 the UK government is considered to have implemented this policy, FOOD 2030, in order to deal with the current problems regarding food. However from the following statistics it is obvious that the government is failing to put forward what it claimed in the FOOD 2030 document, denoting that the situation has worsened. The government is unwilling to proceed to revolutionary action and only cares about the “efficiency” of its systems. The important thing though is that this particular document is based on a Food Sovereignty manifesto that is my ambition for the New Ministry of Food to implement. Therefore, it is evident that everything that is needed in terms of the governments responsibility is already there, it is acknowledged but the current governmental institutions and evidently all the other related agencies due to the lack of coordination and determination, do not adapt it. I strongly suggest that a new Ministry of Food, with the proper facilities, organization and participation can finally materialize the Food 2030 document.

FOOD 2030 CONTENTS:

The government needs to:

- Lead the change by bringing people together to *act in partnership*.
- Fund *research* and campaigning for change both in Europe and Internationally.
- Organize *public debate* about Food.
- Foster *cultural and behavioural change*.
- Place research into *practice*.
- Improve *access* to healthy and sustainable food.
- Enhance public confidence regarding food *security*.
- *Educate* people.

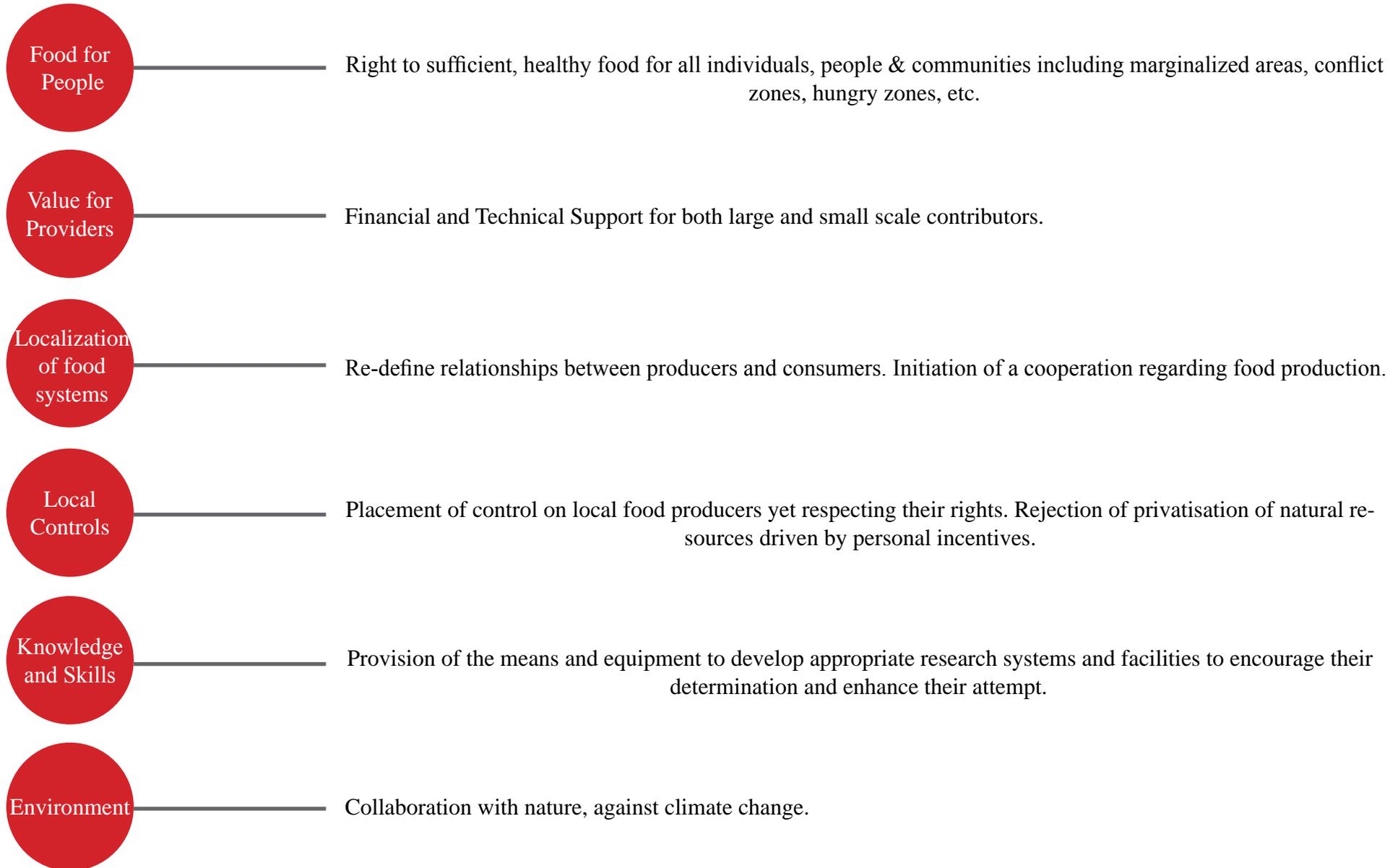
 HM Government



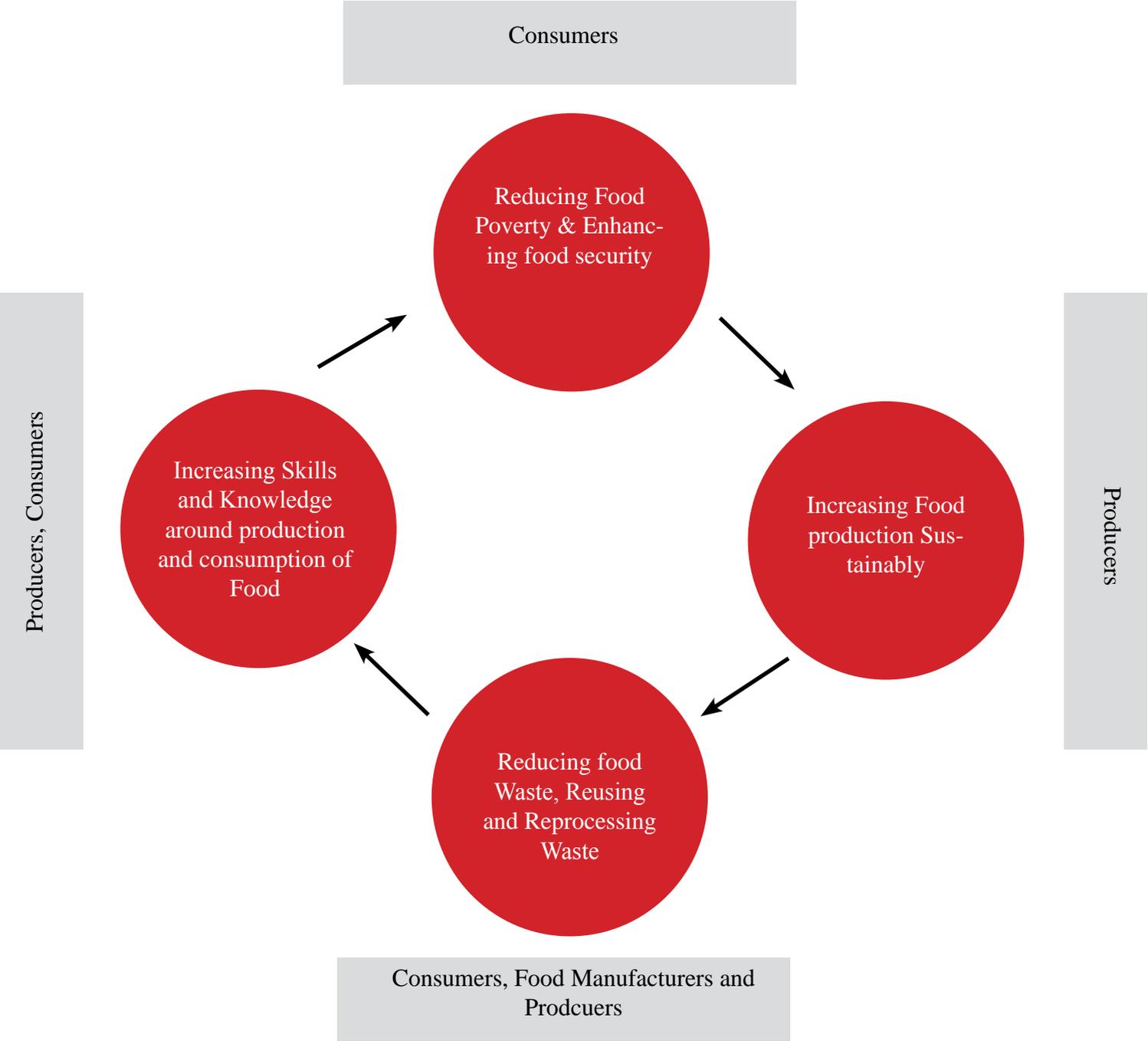
Food 2030



FOOD SOVEREIGNTY MANIFESTO



FOOD ISSUES TO FOCUS ON PRIMARILY:



02

PROBLEMS & SOLUTIONS

FOOD POVERTY

The number of Londoner's who are having difficulties to afford a sufficient amount of food are constantly increasing are expected to increase dramatically in the following years.

This is also evident from the increase in Food banks, which constitute a visible manifestation of the growing crisis. Food Banks should be consider as a temporary solution to the problem and not as a long run solution which implies the need of further action that has not be seen yet.

Particularly, Trussel Trust, which is responsible for the largest chain of Food Banks in UK, had 6 Food Banks until 2009 and during the next three years (2012) it expanded to 40. It is important to note that these Food Banks do not offer food only to unemployed or homeless people as many of us would like to think but also to a huge number of Londoners who are working either part-time of full-time but earn wages below the London Living Wage.

-During 2012-2013 Trussel Trust served **346.992** people.

"... we anticipate demand for our services will increase significantly with the forthcoming changes to the Social Fund in April 2013."

Trussell Trust

"Food banks illustrate how community-based responses can both target those living in food poverty and draw in the goodwill of the local community. The dedication of volunteers and staff is to be applauded. However, food banks in London should retain a role only as providers of emergency food aid; they must look to work more formally with government to help identify the causes behind the rise in demand and to provide signposts to other agencies, particularly statutory ones, to support those in or at risk of food poverty."



<http://www.freegive.co.uk/londonfreegive.htm>

Some Statistics

112,000 people are paid at or below the National Minimum Wage

465,000 people are living in London households where gross income does not exceed state benefit income levels.

700,000 people in work in London earn less than the London Living Wage.

10% of full time workers.

44 % of part-time workers.

44 % poverty rate for children in Inner London [higher than in any other part of the country].

+95% of teacher said their children went regularly without eating breakfast

50% said families could not afford it

It is really remarkable to see different kinds of people dedicated to help their fellowmen such as teachers buying food to their pupils, business people establishing Food Banks, Local authorities to organize charity events or to offer free school meals but it is obvious that the government needs to become more active, to work with those people, to identify the causes and to coordinate them in the implementation of immediate measures.

There needs to be **STRATEGIC OVERSIGHT FOR MONITORING BOTH THE PREVALENCE OF AND THE RESPONSE TO FOOD POVERTY!**





Business blog

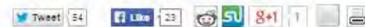
Other people's [business](#)

RSS

It's time to act on food poverty

Our aim must be to make the UK a Zero Hunger Country, writes Fiona Twycross AM.

BY FIONA TWYXCROSS | PUBLISHED 23 APRIL 2015 17:20



Photograph: Getty Images

The latest figures released by the Trussell Trust showing yet another dramatic rise in the number of people forced to rely on [food banks](#) in Britain are both shameful and deeply concerning.

What is most shocking is that the number of people fed by food banks has tripled before the added pressure put on people already struggling to make ends meet by recent welfare changes. All [emergency food](#) aid charities contributing to a recent investigation I led for the London Assembly anticipate the welfare cuts and changes, which will affect 2.6 million families in the UK, will further increase demand on their services. My report into [food poverty](#) has one simple aim, to make London a Zero Hunger City.

Given that [Britain](#) ranks as the seventh richest country in the world, our aim

Most read

- As a Muslim, I'm fed up with the hypocrisy of the free speech fundamentalists
[MEHDI HASAN](#)
- Slavoj Žižek on the Charlie Hebdo massacre: Are the worst really full of passionate intensity?
[SLAVOJ ŽIŽEK](#)
- "Err... Socrates didn't write anything": Mary Beard burns Culture Secretary Sajid Javid
[MIRIAM FRANCOIS-CERRAH](#)
- On Nerd Entitlement
[LAURIE PENNY](#)
- From Marilyn Monroe to Audrey Hepburn: why dead women make the ideal brand ambassadors
[KAREN VOSSMAN](#)
- Julie Girling: "I have robustly defended the interests of Gibraltar in Europe"
Special Feature

Advertising

Why leaving an e-cigarette unattended is a BIG mistake
Promoted by Electrical Safe First

About Fiona Twycross



From the magazine



Life > Health & Families > Health News

Look back in hunger: Britain's silent, scandalous epidemic



Evidence is mounting that thousands of children in the UK are not getting enough food to eat – and that, as financial hardship spreads, their numbers are increasing rapidly

CHARLIE COOPER | Friday 06 April 2012



Chris is 10. He and his brother are so malnourished that their skins are pale and they have rings under their eyes. Their older brothers have such an unhealthy diet that they have lost their adult teeth. They live in the sixth-richest city in the world – London. The boys are just four among thousands of Britain's hungry children – victims of a ["silent epidemic"](#) of malnutrition in the capital and beyond.



Ruth Rendell 'in critical condition' after stroke

NEGATIVE CIRCLE OF FOOD INSECURITY

“Food security is not simply about becoming more self-sufficient in food production. A diversity of supply is an important safeguard against diseases, severe weather or other domestic supply disruptions. There are opportunities to extend the seasonal production of non-tree crop fresh fruits and vegetable products.”

Food security Second Report of Session 2014–15 - DEFRA

In order to do that government needs to intervene and coordinate debate and action in order to encourage producers and protect consumers.



Additional Statistics

Food prices have risen by **6.6%** in UK during 2011.

further increase by **4.5%** was observed during 2013.

“Furthermore from the Sustainable development commission (SDC) should be seen as a wake up call for minister, warning that “policy development within government still remains inadequate”
www.theguardian.com

It is thus mandatory for the government to take action and increase food production sustainably in order to reverse the negative cycle, enhance food security and protect both consumers and producers. And in order to address the beginning of the problem there needs to be an open discussion on those issues involving all available parties. In addition to new ways of producing food reducing food waste and reprocessing waste is a step towards increasing the available supply.

The screenshot shows the front page of The Telegraph website. The main article is titled "Rising food prices will reap a bitter harvest" by Liam Halligan. The article text states: "British shoppers should brace themselves for 'massive' food price rises in 2013, says the aptly named Mark Price, managing director of Waitrose. Is he correct, or is this just another retailer trying to soften up public opinion before imposing price hikes?". Below the article is a photo of a grocery store aisle with various fruits and vegetables. To the right of the article is a "Market Data" section with a line graph showing the FTSE 100 index. Below the article is a "Comments" section with one comment from Liam Halligan. To the right of the article is a "Most Viewed" section with five items, including "Is Airbus A380 a superjumbo with a future, or an aerospace white elephant?".

SUSTAINABLE INCREASE OF FOOD PRODUCTION

There have been several steps towards a more sustainable food production yet important issues are still there waiting for solutions. One the primary issues of public debate will be on those matters mainly concerning farmers, grocers etc.



Soil erosion in England costs agriculture approximately

£45 million a year,



Over **60% of nitrates**, and around **40% of phosphorus** and the majority of silt in clean waterways comes from agriculture.



Agriculture contributes around **13.5 per cent of global greenhouse gas emissions** as a result of cultivation practices and the expansion of agricultural land into forest areas, releasing stored carbon from above and below ground.



potato yields have increased by

18%



fertilisers have decreased

by **52%**



sugar beet by

45%

CO₂
in agriculture by **20%**



wheat yields by

8%

barley by

6%



Meat and dairy products are responsible for approximately a quarter of the environmental impact of human activity in EU. Meat production makes much more use of water than the production of vegetables do.

1kg of wheat - 500-4,000 L of water

1 kg of meat - 5,000-100,000 L of water

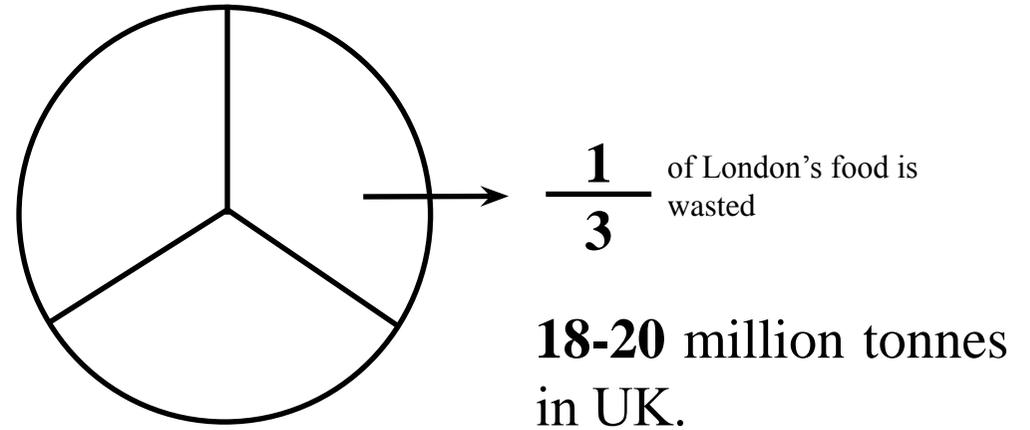


Additionally, producing fertiliser for crops to feed animals, oil for transporting them to the slaughterhouses and electricity to freeze their carcasses all required significant amounts of fossil fuels, which corresponds to high amounts of carbon dioxide released into our atmosphere.

Yet, different types of livestock are responsible for different amounts of GHG emissions and it depends on the way they are grown, housed, fed etc. Consequently, different methods would be applied for red meat producers and chicken producers.

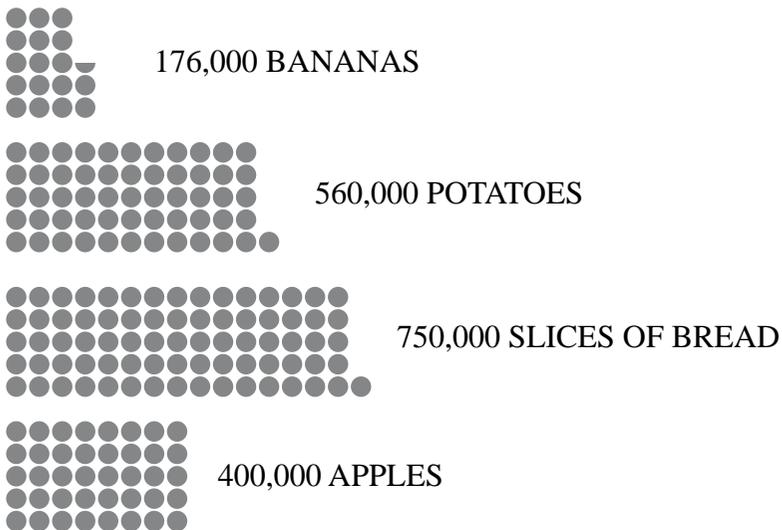
FOOD WASTE - REUSE AND REPROCESSING

Another way of increasing available food supply and reduce the impact of natural resources is to control food waste and reuse or reprocess it to acquire healthy food. This issue of the food industry affects everyone involved from consumers and household waste to waste coming from retail units.



ANNUAL ESTIMATION OF WASTE

● = 10,000 units



5% corresponds to agriculture

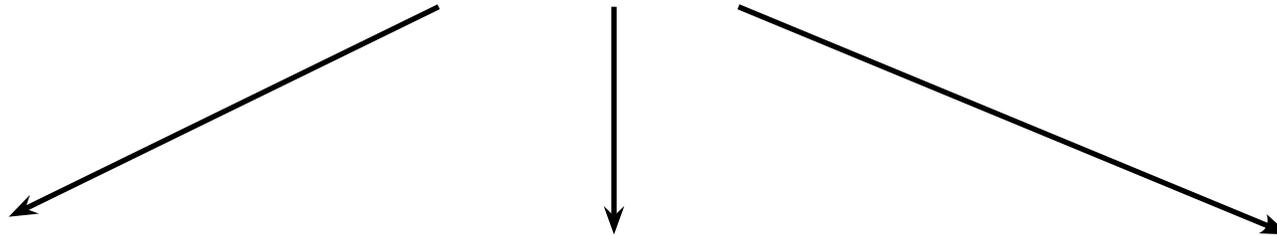
10% to retail

33% to household waste

+50% wasted in the supply chain.

It is thus observed that the current situation in London, is contradictory. Millions of people are hungry at the same time when millions of food, of actually healthy food becomes wasted food for no particular reason apart from the lack of respect and education and information. The government thus in order to resolve the issues of food poverty and insecurity and provide the means for the required available supply needs to take severe measures against food waste. The food that is waste annually could be used to feed people in need. It is also fair to say that educating is absolutely essential.

WASTE FOOD



increase available food supply

CONSUMERS

++++



feed livestock

PRODUCERS

++++

FUEL

Composting: reduces landfill and use of fossil fuels

ENVIRONMENT

++++

In terms of the governments contribution it should be investigating and discussing new ways of collecting food ways, developing supportive infrastructure as well as providing incentives for reprocessing waste instead of disposing it. This thus, would involve direct contact and collaboration with the responsible parties.

KNOWLEDGE AND SKILLS

Requirement for education involve both consumers,producers and food manufacturers.

Involving public into the decision making around the issues of food industry will automatically raise their awareness and influence their attitude towards sustainable and healthy food.

By understanding and appreciating food people we need to learn how to process food in order to be able to provide themselves with healthy food. Thus cooking classes, in order to improve skills, recipe advice will further improve the current situation and enhance food security.

Furthermore, through this process producers and food manufactures as well as the government can provide consumers with appropriate information in order to reduce waste. This may involve ways of meal planning, storing of food, determining portion sizes, better understanding of date labelling as well as processing techniques for increasing life cycle.

Influencing and changing people's perception will result to altering demand signals. Demand signals for healthy and sustainable food will drive producers towards that direction.



<http://www.dailymail.co.uk/news/article-2098177/River-Cottage-Hugh-Fearnley-Whittingstalls-cookery-school>

“Our vision for a sustainable and secure • food system can only be achieved through a strong contribution from research and innovation”

HM Government, Food 2030

RESEARCH

Simultaneously, it is important for the government to fund research on new techniques that could help producers to improve their techniques and processes.

Furthermore, the translation of that research into practice will also need to be part of the Government's responsibility particularly for the farming and fishing sector. Still however, in order for an effective research close communication between the research community and the food industry enables researchers to identify the challenges facing the food system, and help them develop complementary research programmes. Thus making the research sector part of the new ministry will allow direct influence between the two sides. People need to be informed about new technologies and the need for debate on the risk or opportunities that they have to offer is mandatory.

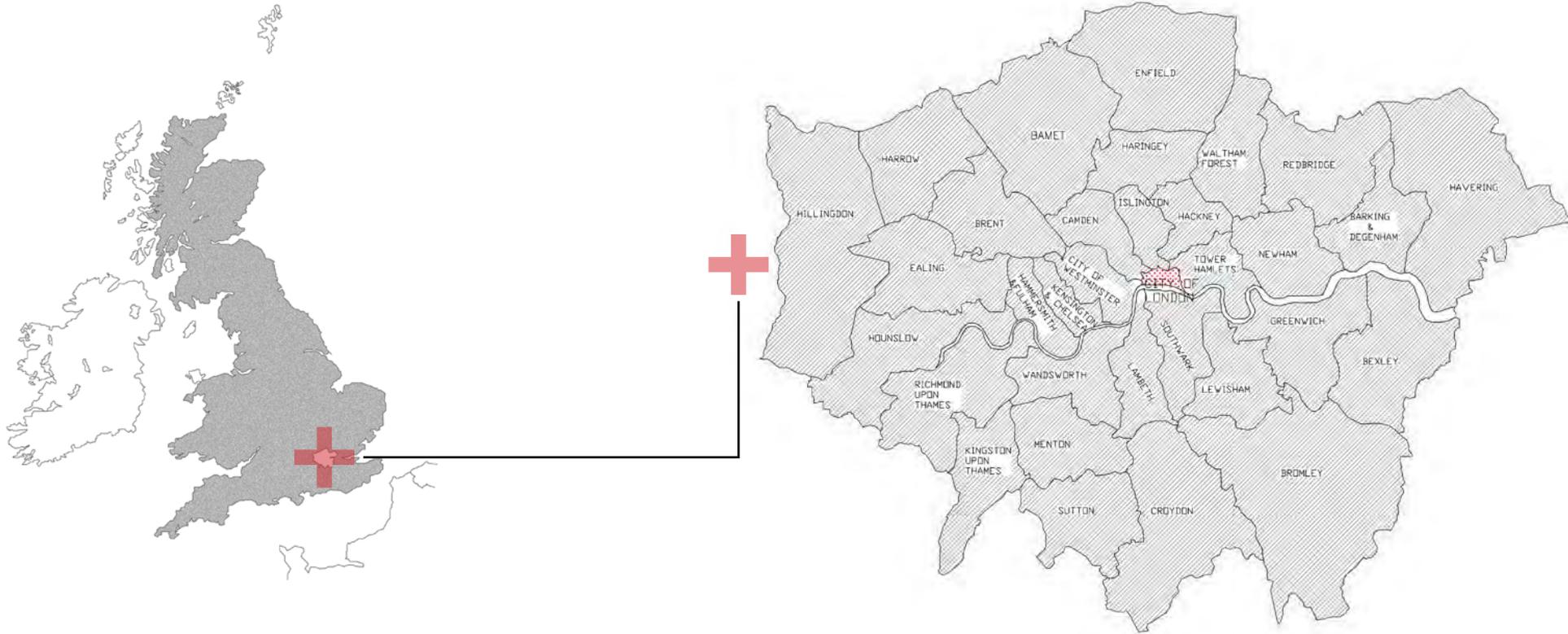


<http://hollandfoodpartner.com/data-mining/>



03

SITE INVESTIGATION

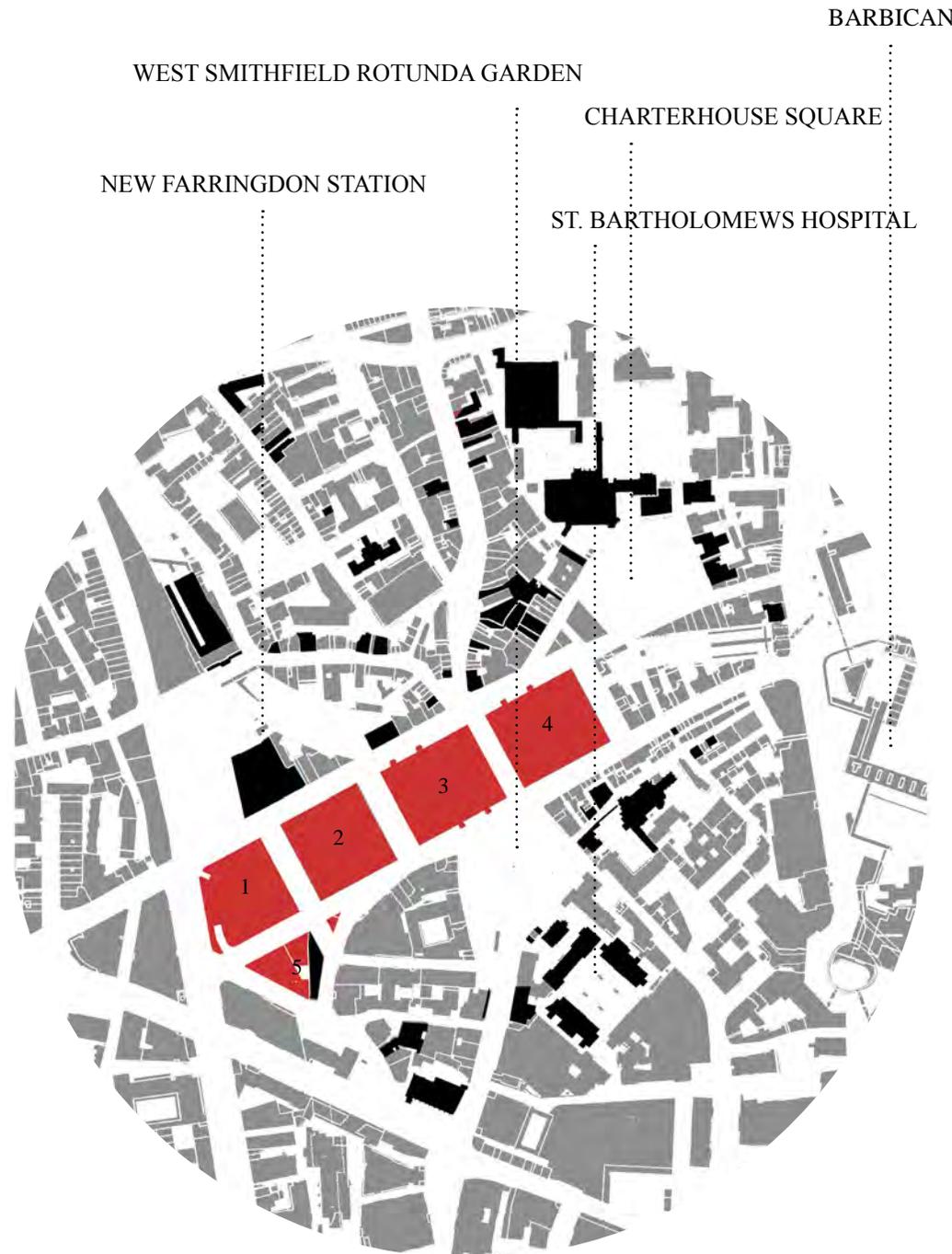


As it was understood from the previous chapters of this briefing document, the city that I am interested in is London, United Kingdom. It is evident that London is a small part of the equation in order for the United Kingdom to change its state of mind regarding food issues but it is a part of the country that faces dramatic changes in the 21st century and has the means to begin such “revolutionary” actions that other parts of United Kingdom could then adopt. London is divided into 33 boroughs,

evidently, the new Ministry of Food that I am proposing will have representatives of those 33 boroughs in order to reflect a more collective image about the issues that London is currently facing in terms of food. All the different boroughs independently of their standards of living or their housing rent prices will be equally valued. As a result, the city of London borough which constitutes the heart of London is in my opinion the ideal location for the new Ministry.



BROADER CONTEXT



Zooming in, the area that I am most interested in, in the city of London is Smithfield. Smithfield is undoubtedly one of London's most unique and vibrant urban neighbourhoods, located to the North of the City adjacent to the Boroughs of Islington and Camden. It is an area dominated by its history but continues to develop since places are adapted to the new needs and requirements of the era. The challenge however is to respond to the present needs and at the same time preserving the historical identity of the site both notionally and architecturally.



1. General Market 1883
2. Poultry Market 1875
3. Meat Market West 1868
4. Meat Market East 1868
5. Annexe Building

HISTORICAL BACKGROUND

Smithfield area is ideal because of the existing livestock Smithfield Market. The whole area as it was mentioned before has a tremendous historical background which in my opinion is ideal for the aim of my proposal.

Smithfield Market's current position was initiated in 1860, after an initiation of the government through The Metropolitan Meat & Poultry Market Act of 1860.

The Victorian design proposal came by Horace Jones. Initially it included only the two main sections of the market, the east and west buildings of the meat market. What was important even from that time - and still constitutes a key aspect of the area - is that the market buildings were constructed above the railway lines, connecting the market to every part of the city.



CONSERVATION AREAS



SMITHFIELD CONSERVATION AREA

Apart from the existing market though another thing that attracted me about the area was the fact that it always - throughout the history of London - it was part of the political affairs. There were many cases that people or revolts tried to act against the authority and chose Smithfield as their primary location but also a place where the authority revealed its power against the throng.

Many of the Kings & Queens of the 12th and 13th century used Smithfield as an execution site.

Particularly, in the 13th century, William Wallace, captured by the English, was taken to Westminster Hall, where he was tried for treason and for atrocities against civilians in war,

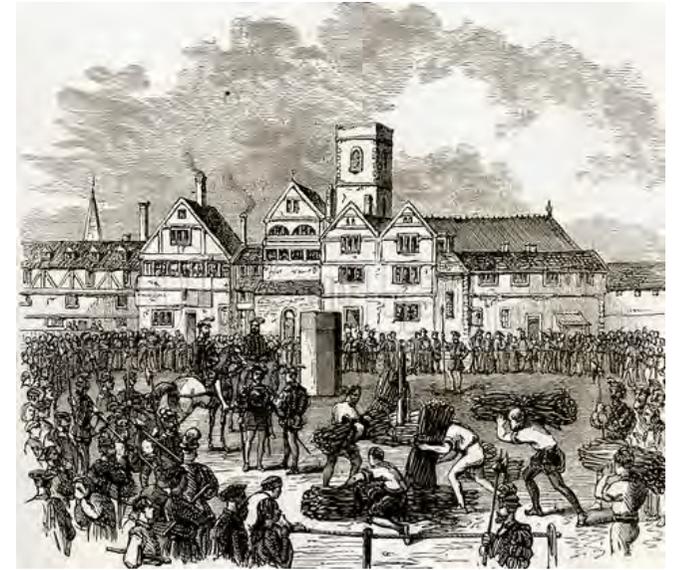
After the trial, on 23 August 1305, Wallace was taken from the hall to the Tower of London, then stripped naked and dragged through the city at the heels of a horse to the Elms at Smithfield. Then, he was hanged, drawn and quartered. A plaque stands even today, in a wall of St. Bartholomew's Hospital near the site of Wallace's execution, opposite to the Rotunda.

In 1381 Wat Tyler, leader of the Peasants' revolt, gathered his army in Smithfield and was stabbed by the Lord Mayor of London. The injured Tyler was taken to hospital at St. Bartholomew's Church, but he was dragged out again and beheaded.

More recently, during 2011-2012, a group of activists called "Occupy London", carried out a

nonviolent protest and demonstration against economic inequality outside St Paul's Cathedral.

Therefore, why not bring to Smithfield the means of democratic "protest" against food inequality.



Elms - Smithfield

William Wollace's Plaque

"Occupy London"



SITE CONTEXT - PHOTOGRAPIC DATA



MARKET BUILDINGS - PHOTOGRAPIC DATA



Meat Market



General Market

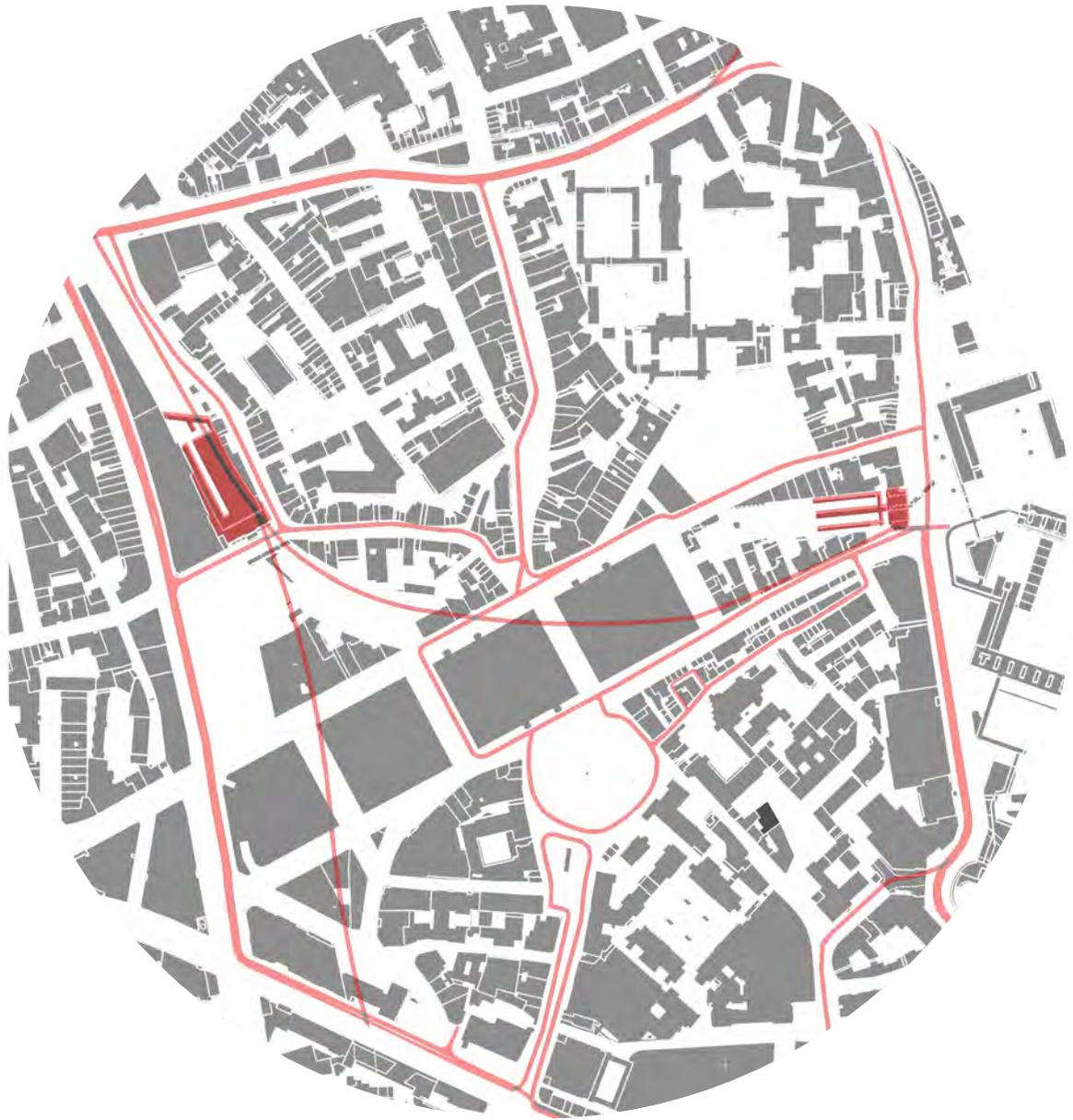


Poultry Market



Annexe Building





-  BUS & CYCLE ROUTE
-  TRAIN STATIONS / ROUTES

FUTURE OF SMITHFIELD -RAILWAY NETWORK

Equally important for the relocation of the Ministry of Food in the area of Smithfield is its railway network.

Smithfield Market is surrounded by five underground station with a radius of 10 minutes walk and a total of eleven underground stations in a radius of 20 minutes walk.

Particularly important though is the New Farringdon station. Its construction will change radically the current situation in the area.

According to the current data it is stated that over 140 trains per hour will flow through the Farringdon interchange. It will be the only station that it will create direct links with four International airports. It will become one of Britain's busiest train stations and will be a key link between passengers from the outer London to the business hubs of the city. It is also believed that the new crossrail development will help to re-energise the surrounding area and revive the "traditional industries" such as the Smithfield market. Evidently, this raises the question how those thousands of people that will pass through or stay to the surrounding area will be fed?

By bringing thus a department of the government that works along with citizens in an area that automatically raises issues regarding food distribution etc. there is a greater chance of fighting and resolving those issues. By making it part of the problem there is a greater chance of mobilizing both the local communities and the current government.

New Farringdon Station Development



CURRENT LOCATION OF DEPARTMENT OF ENVIRONMENT, FOOD & RURAL AFFAIRS HEADQUARTERS

Another important reason, why I believe it is essential for the new Ministry of Food to be located in the Smithfield area, is its current location. The Department of Environment, Food & Rural Affairs' headquarters are placed in the borough of City of Westminster, along with the Parliament, the houses of Lords and other departments of the UK government where citizens have limited access. Whereas in the area of Smithfield Londoners will have the advantage of an open governmental department.

In addition, instead of being isolated from any livestock or vegetable markets and surrounded by supermarkets, the department would be able to use Smithfield market as a tool to observe directly the multiple issues that come with food, its distribution, quality and prices.

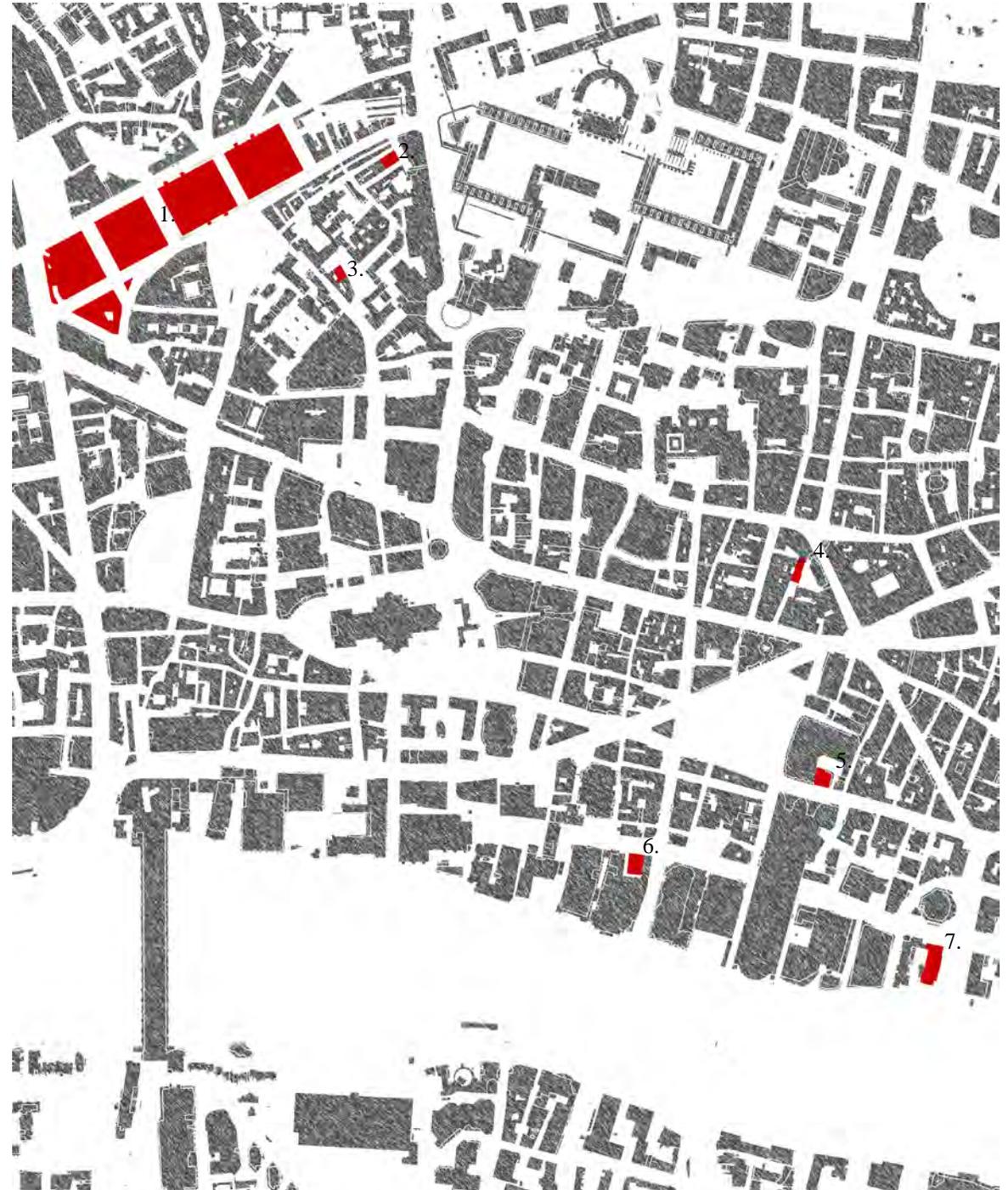
Furthermore, it would be easier to establish relations with other markets as well such as Borough Market, Leadenhall and Spitefield Markets which are closer to the Smithfield Market than the current Department of Food.



Actual Distance
Department of Environment, Food & Rural
Affairs - Smithfield market = 3.08 km
Department of Environment, Food & Rural
Affairs - Borough market = 3.70 km

LIVERY HALLS

Given the fact that the aim of my proposal is to redefine the relationship between the government and the citizens, the authority and those directly involved with food issues, I strongly believe that the food related livery halls should be part of the new Ministry. It is evident that these people along with representatives from other communities can define problems and propose solutions subjectively, based on actual needs, on the contrary to the government, which has proven to be shallow and uninterested on reformations many times. Those livery halls therefore are in close proximity to Smithfield area - greater distance 1.8 km - with the Butcher's Hall being just opposite to the Market.



- Distance
1. Smithfield Market
 2. Butcher's Hall - 205 m
 3. Farmer's Hall - 330 m
 4. Grocer's Hall - 1 km
 5. Salter's Hall - 1.2km
 6. Vinter's Hall - 1.10 km
 7. Fishmonger's Hall- 1.52 km
 - [8.] Baker's Hall - 1.8 km



SPECIFIC SITE EXPLORATION

1. Charterhouse St. - Farringdon Rd Corner
2. General Market
3. Annexe Building -Part of Smithfield's market
4. West Smithfield Rotunda Garden



Option 1



Option 2



Option 3



Option 4

OPTION 1 : CHARTERHOUSE ST. CORNER

On the contrary to the previous sites, this site is open to any kind of architectural approaches in terms of the overall fabric. Yet, even in this particular case, there needs to be consideration about its relation and power relative to the opposite Victorian buildings of the market. The site is located next to the new Farringdon development which directly implies easy access from north-east-south both for pedestrians but also through the train lines. The only shading comes from the west side, from the Port of London Authority building, which however is not operative since it has been moved at London River House and Royal Terrace Pier in Gravesend. Currently the site is under construction for the new train station development and more specifically it is dominated by two Crossrail Tunnel Boring machines, Elizabeth and Victoria. The only drawback that this site may entail is the fact that it is located in the other side of the market than the previous two and Charterhouse St. houses the “crazy” nightlife of the area. It is full of pubs and clubs therefore there may be inappropriate for the typology of my proposal.



OPTION 3 : ANNEXE BUILDING

The Annexe Building was constructed later than the main parts of the market, in 1888. It is comprised by three different areas, the Red house - West side -, the former fish market - Middle - and the Iron mountain - east side - . As a result, it can be partially used and not as a whole however this implies serious implications in terms of how it will be used, what happens with the rest of it etc. Another controversial issue that comes with the Annexe building is its Victorian architecture and its important cultural significance which directly entails design limitations. It is essential to consider the preservation of the old as well as the connection with the new fabric. The exterior is relatively well preserved compared to the interior which requires complete renovation. A key advantage of the building is the fact that it is easily accessible via both North-South and East-West. However, the surrounding buildings from the east and southeast side overshadow the respective sides of the building implying the need of careful consideration and allocation of spaces in terms of light requirements. Moreover, particularly important is the fact that the Annexe building is directly connected with the rest of the market via underground tunnels which may prove to be a key aspect of the design. The total area of the building is 2460.5 m².



OPTION 4 : WEST SMITHFIELD ROTUNDA GARDEN

The Rotunda Garden constitutes a symbol of Smithfield's past therefore there is one issue derived from in case of choosing it as a site for my proposal. Its cultural and historical significance cannot be disregarded and most importantly it cannot be destroyed rather it needs to be implemented in the design of the new Ministry. In addition to that it is one of the few areas of Smithfield with greenery and thought of a more sustainable environment and plans for biodiversity which again need to be expressed and resolved in the design of my building. Other than that the site entails many important advantages. First of all, through the existing ramp, there is a connection with Smithfield Markets both for pedestrians and cars. However, it is also used by the butcher's and other producers who sell their products in the market therefore it needs careful consideration in order not to override such activities. It is also easily accessible and the surrounding area could be pedestrianized since there is limited traffic. It is also linked with Glitspur Street which constitutes a reflection of Smithfield's history. Furthermore, shadow is limited and not important to imply limitations rather the need of shading mechanisms in areas where direct light is not desired. Last but not least, it is opposite to the only parts of the Market which are still operative. What concerns me the most regarding this site, denoting design limitations, is its current circular shape. The total area of the site is 4363 m².



**CHOSEN SITE :
GENERAL MARKET**



1.



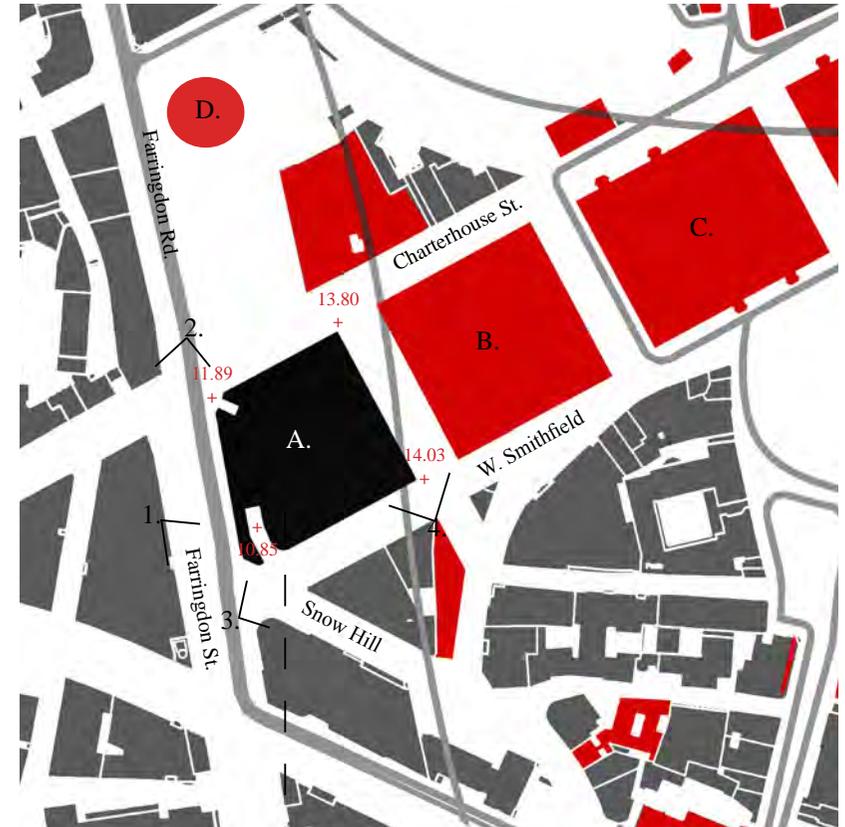
2.



3.



4.



- Site — — — A. General Market 1883
- B. Poultry Market 1875
- C. Meat Market West 1868
- D. New Farringdon Station

GENERAL MARKET EXTERIOR CONDITIONS

Shop fronts covered with boarding



Broken windows and rotten window frame



Only actual use of the building



GENERAL MARKET - INTERIOR CONDITIONS

Limited access due to possible failure of structure



Rotten timber flooring and wall cladding



Corroded cast iron columns



Complete wall failure

HISTORICAL BACKGROUND AND CURRENT CONDITION

Horace Jones' market complex modernised the area when it was originally constructed, by transforming the livestock market with the new Meat market in 1868. It is a large scale Victorian complex who attempted to exploit the new railway network so as to provide an industrial solution to the supply of fresh food. The market has been a destination for people for centuries now. Particularly General Market was initiated as a fruit and vegetable market and then consequently transformed into a Fish Market from 1883. It was built in a similar style to the Central Market but it was obviously modernised. One of the main challenges of the design was that the building had to respond to the complex topography of the area. Internally, the same floor area is maintained while the change in level is evident at the edges of the building, along the streets, where shops are located. In 1889, the market was converted to part of the central meat market.

During the second World War the building was severely affected when a V2 rocket hit it. As a result the Hart's Corner (Corner between Charterhouse Street and Farringdon Street, as well as the central dome, were damaged.

1895



1941



Today, General Market constitutes one of the buildings of Smithfield Market that have been abandoned and left to despair.

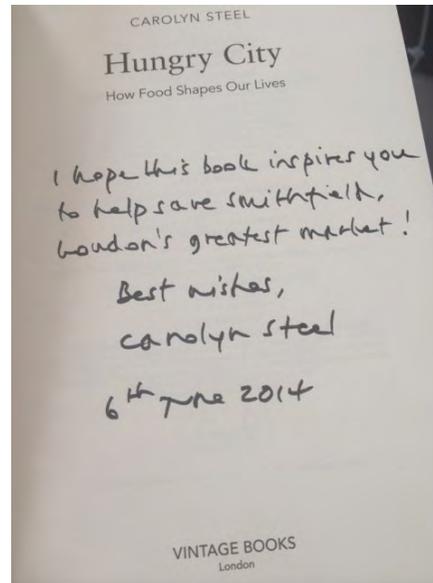
It is a rather squared shape site with various floors and mezzanines that create a really complicated interior space with a significant portion of it being circulation spaces. In terms of the interior, the core of the building constitutes of multiple open plan arcades surrounded by offices whereas the perimeter of the building sheltered various shops. A particularly important aspect of the site is the fact the the perimeter accommodates the fall in ground level to the Fleet Valley.

The exterior compared to other parts of the market is well preserved. The areas that suffer the greatest damage are the roof both along the perimeter and the core of the building and the various floor levels above ground floor. More specifically, slates are missing, much of the boarding is rotten and a significant number of the lead flashings have been stolen or replaced by concrete ones. As a result use of such elements in the design will imply the need of extensive repair.

The main scheme will be situated along the north and west wing of the General Market as well as the main core of the building whereas a general master-plan will be developed for the whole building and surrounding street-scape.



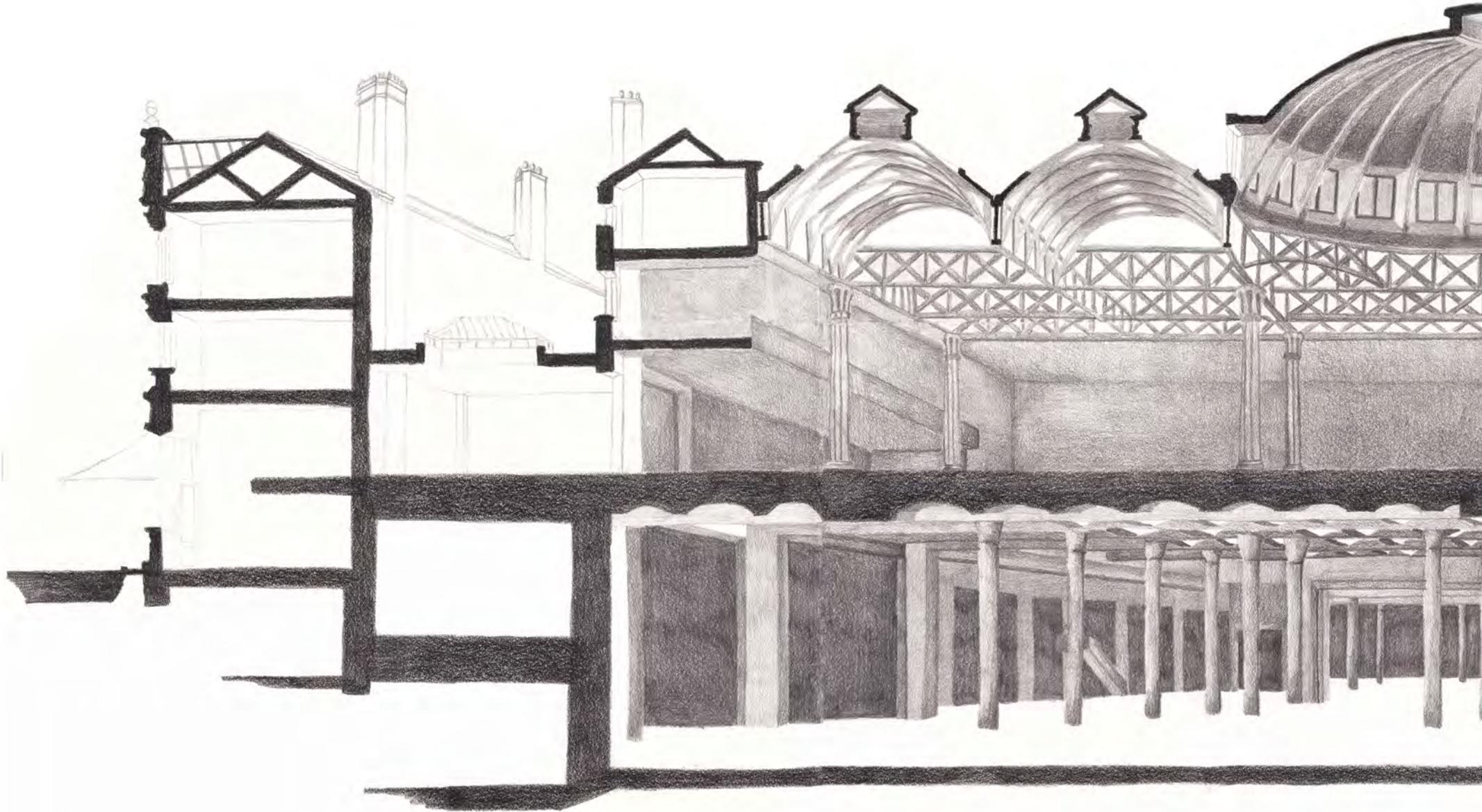
www.savesmithfieldmarket.com

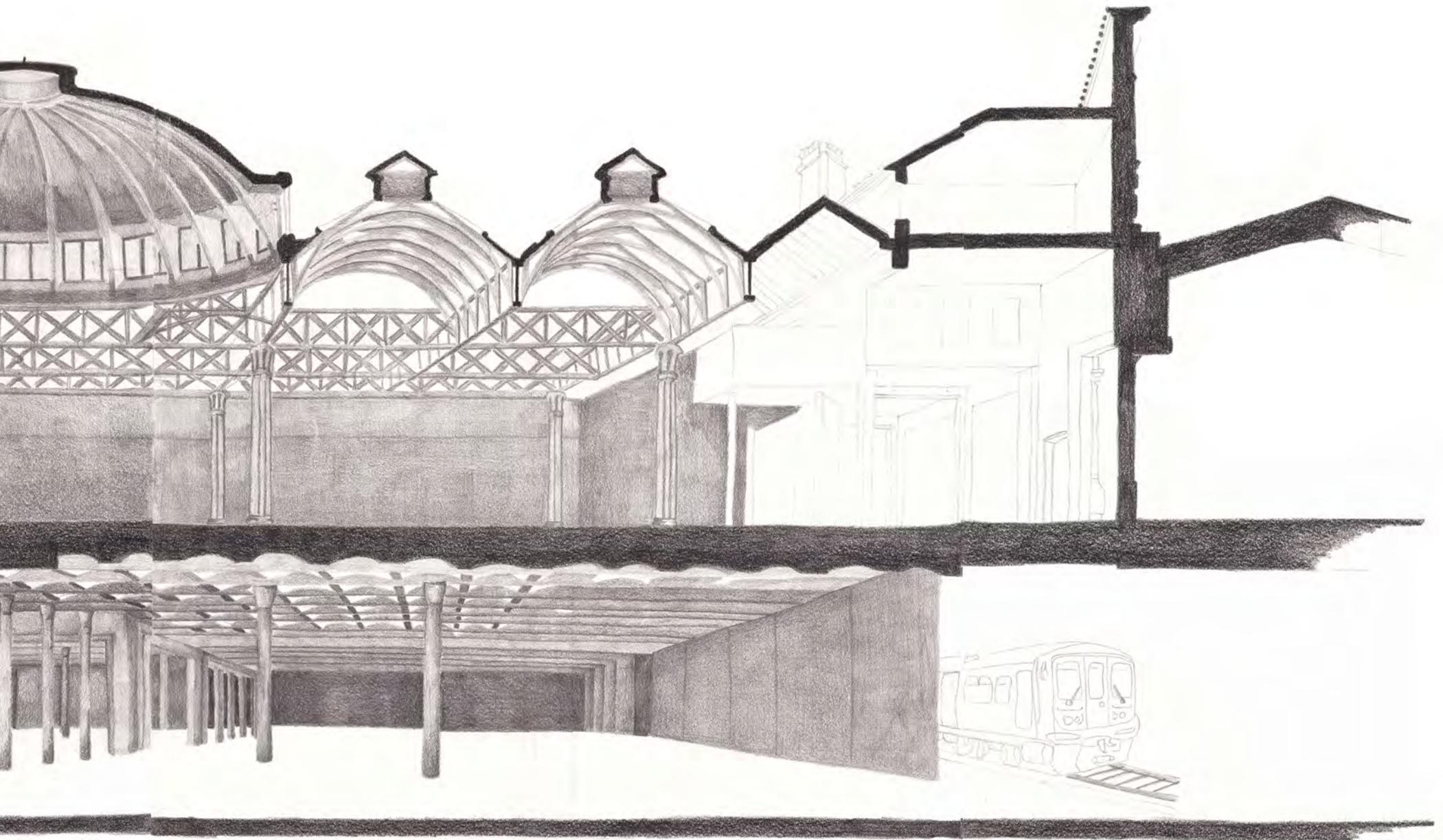


The need of refurbishment of the building is well known. Various architects like KPF and McAslan and partners have submitted their proposal but failed to convince the various political and cultural parties that are involved in the decision making. The latest news seem to favour the re-location of the Museum of London into the Victorian buildings.

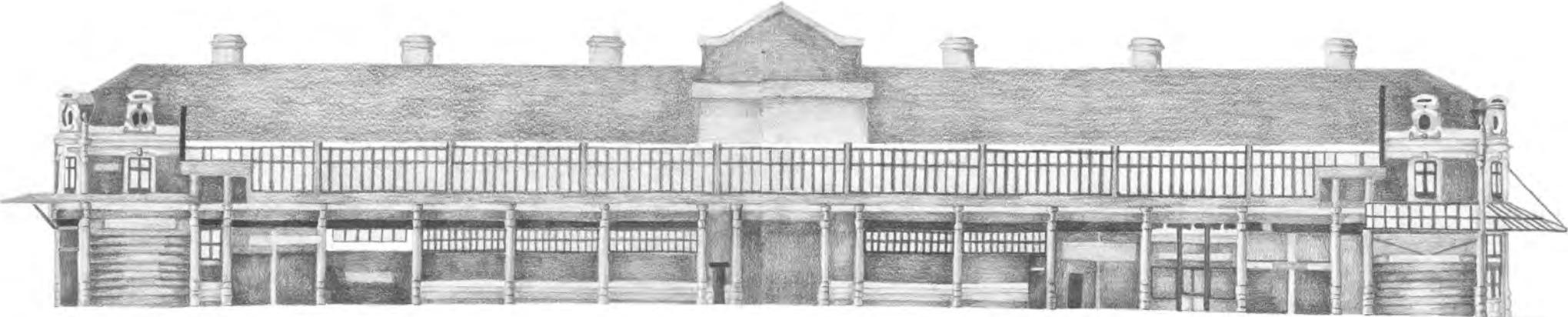
The key for the a viable proposal for the regeneration of the market building will come from a balance between retaining and respecting the existing structure, financial prospect and a use that will comply with the needs of a rapidly evolving city centre. Thus the new Ministry of Food even if it is revolutionary based on current policies is a proposal that stands along those lines.

SECTION OF GENERAL MARKET





KEY ELEVATIONS OF GENERAL MARKET

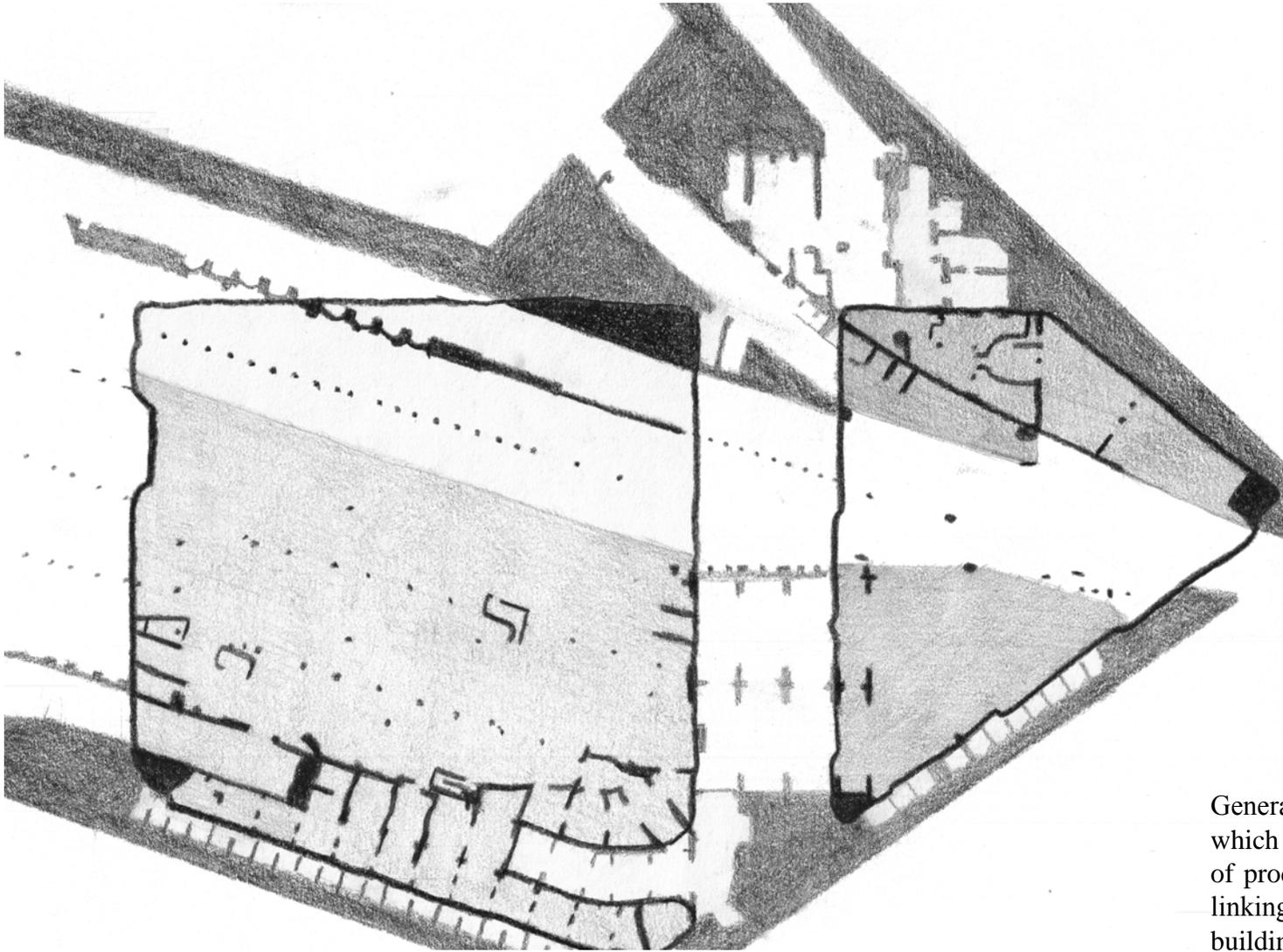


EAST ELEVATION



WEST ELEVATION

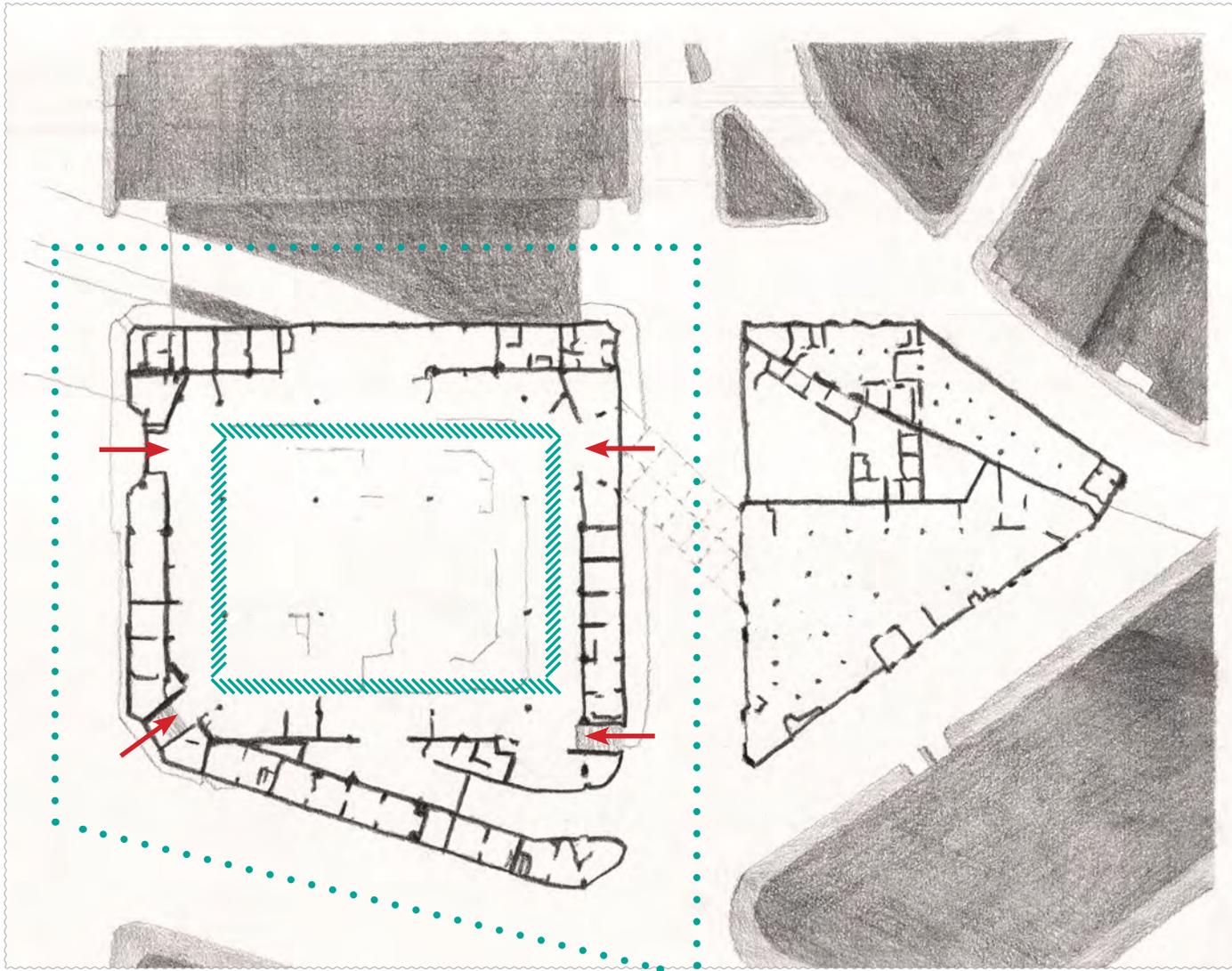
GENERAL MARKET - BASEMENT PLAN



General Market has a enormous basement from which can be used for storage space, loading base of produce through the ramp which already exists linking the building with the surrounding market buildings.



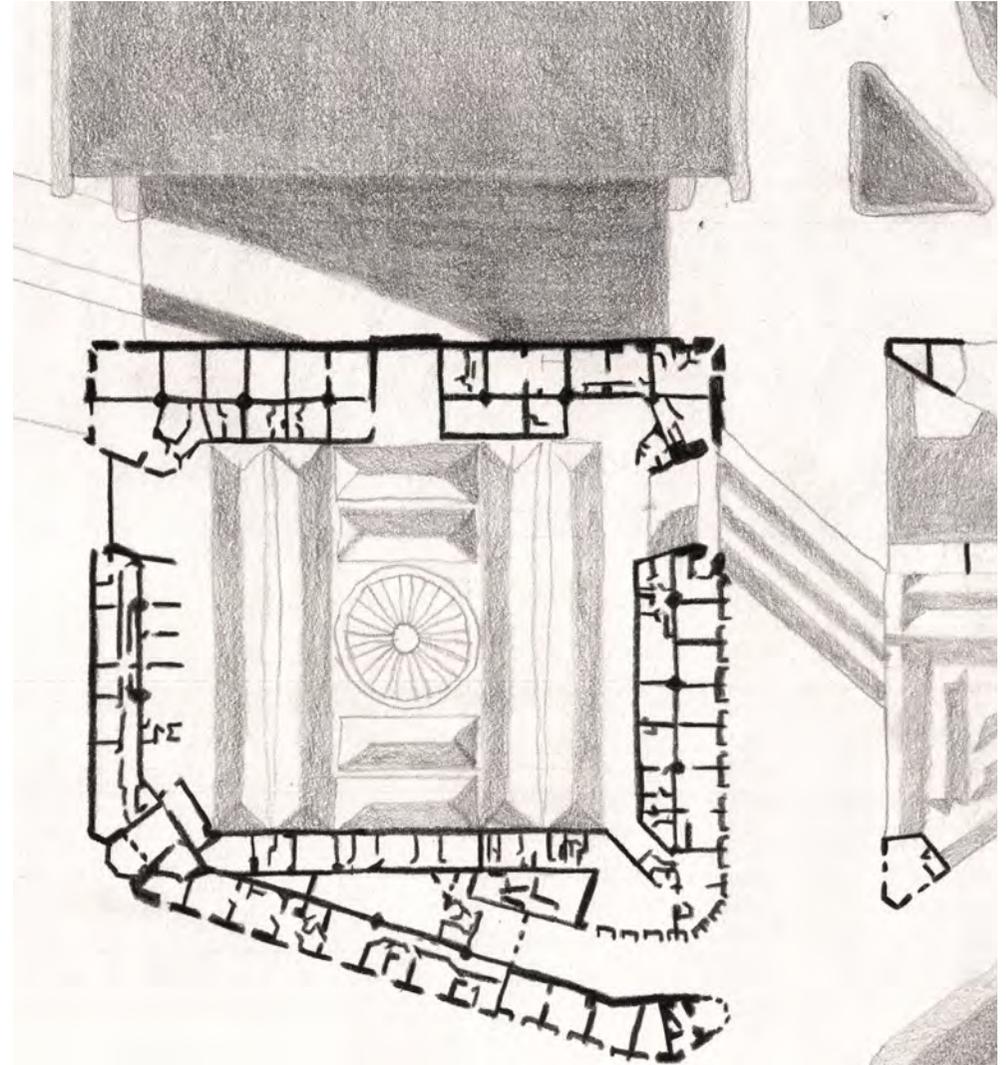
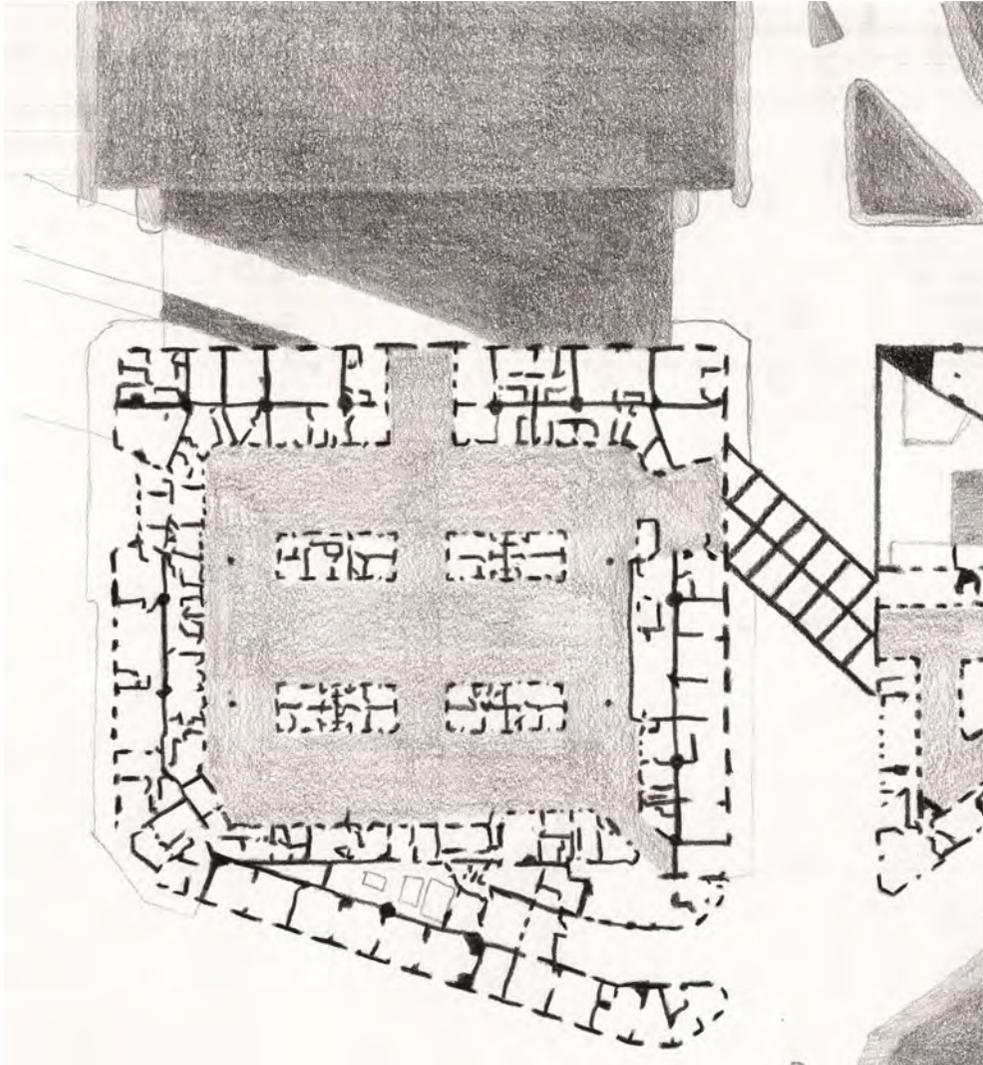
GENERAL MARKET - GROUND FLOOR PLAN



On ground level, which is the main reason that this building was chosen as the site for this project, General market offers a unique relationship with the surrounding streetscape. It is accessible and directly connected with the four elevations and more importantly Charterhouse St. and Farringdon Rd. allowing a decisive development of the areas permeability. In addition it provides a direct link with the new Farringdon station opposite to the north elevation and could be use so as to transfer the crowd safely to different directions through a unique environment.. Currently it has four main entrances, creating an interior square for public circulations.



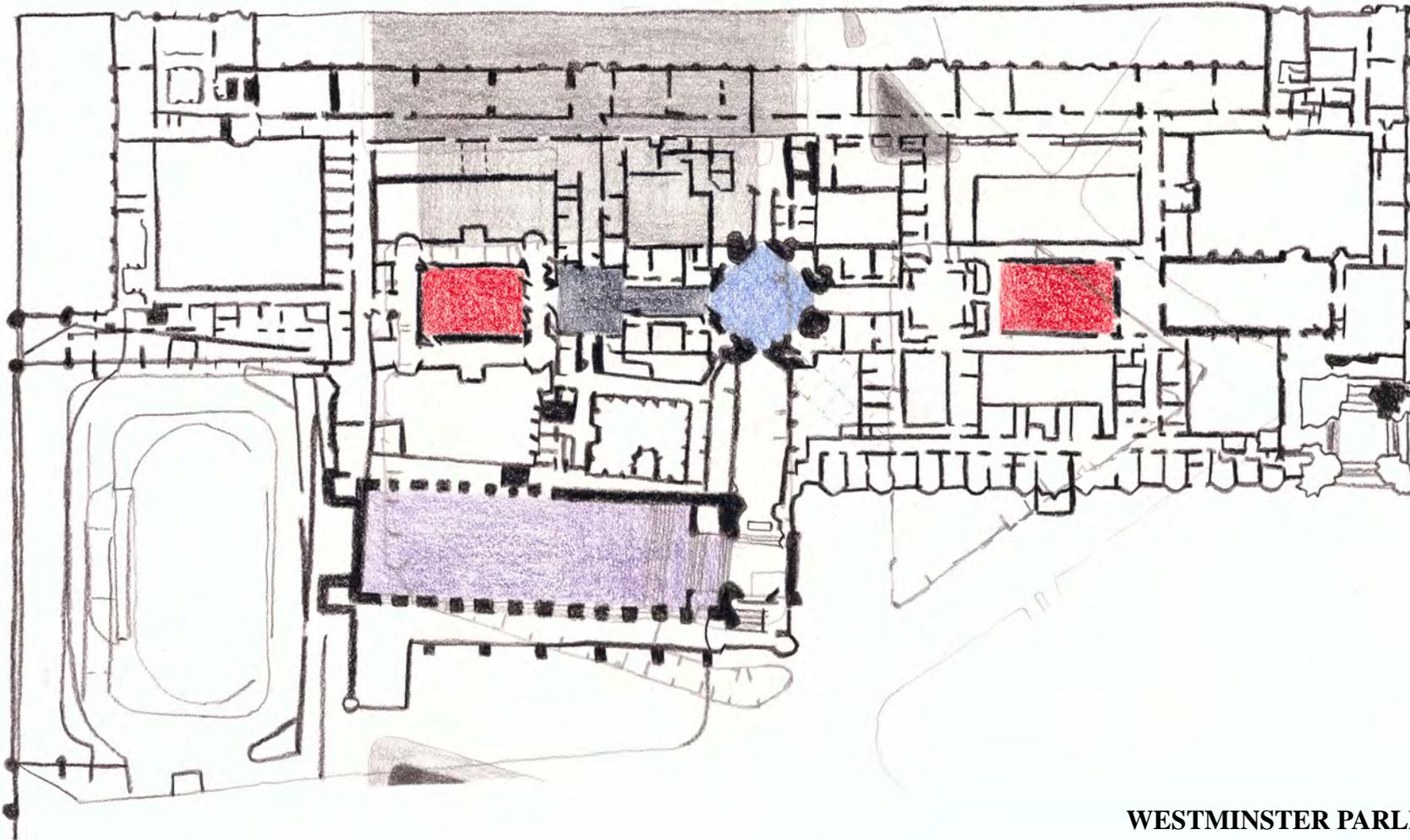
GENERAL MARKET - FIRST & SECOND FLOOR PLAN



The above variety of levels offers an opportunity and challenge for a combination of different spaces and uses that provide direct views to the main, core space of the ground floor.

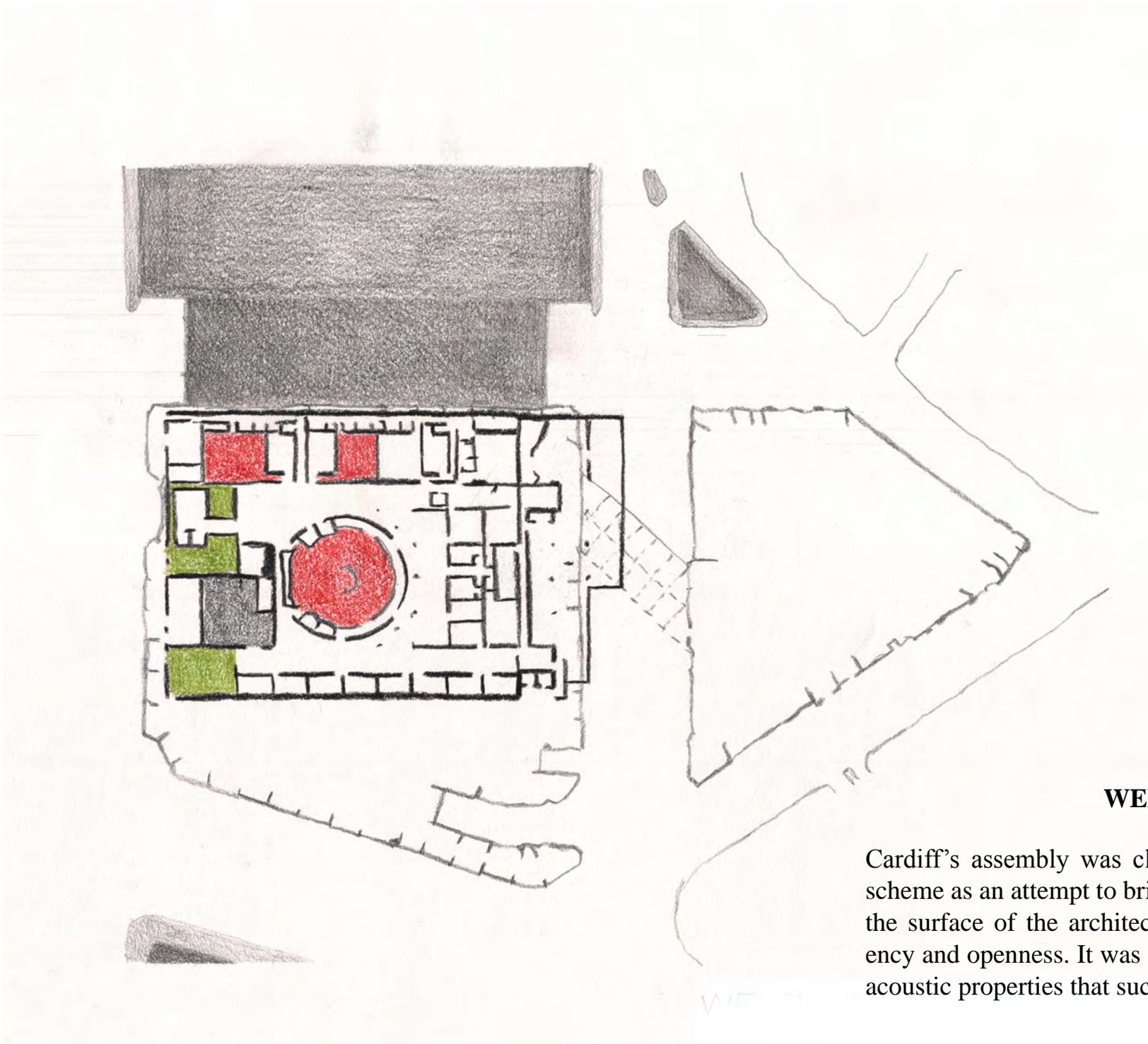
PRECEDENTS STUDY OF GOVERNMENTAL BUILDINGS

Before the beginning of the design stages I decided to conduct an exploration of governmental buildings with different scales in order to understand better the spatial requirements of such projects, and the variety of spaces and thresholds that they may be required. Moreover, it was a chance to test the degree to which the site is appropriate after all, apart from its profound characteristics.



WESTMINSTER PARLIAMENT, LONDON

Perhaps the greatest manifestation of the UK's political architectural representation. This example was used mostly in order to understand the things since the whole philosophy of the project is against its most characteristics.

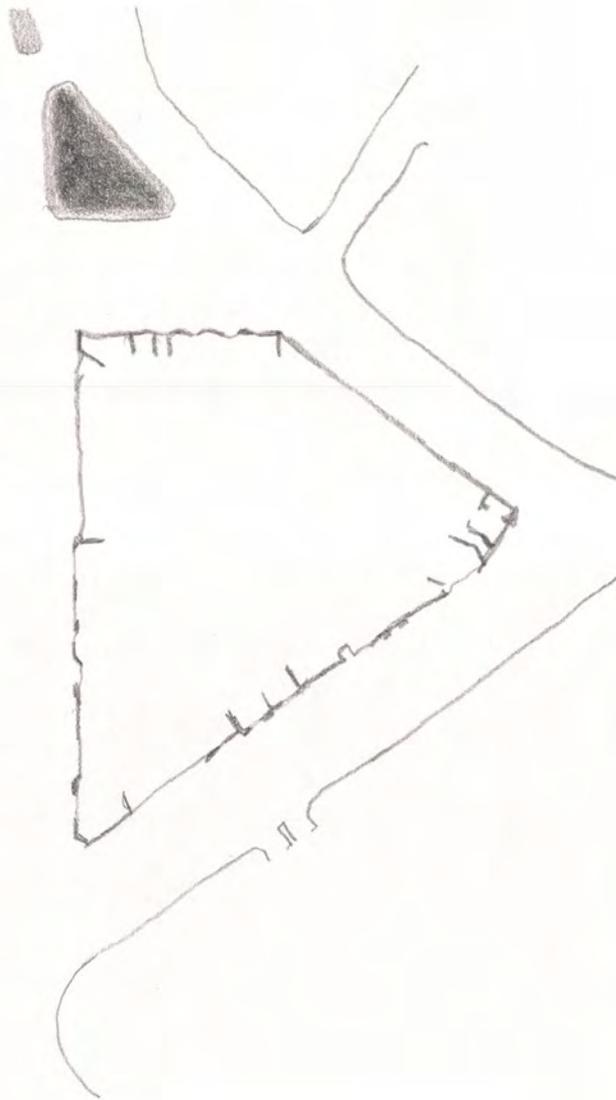
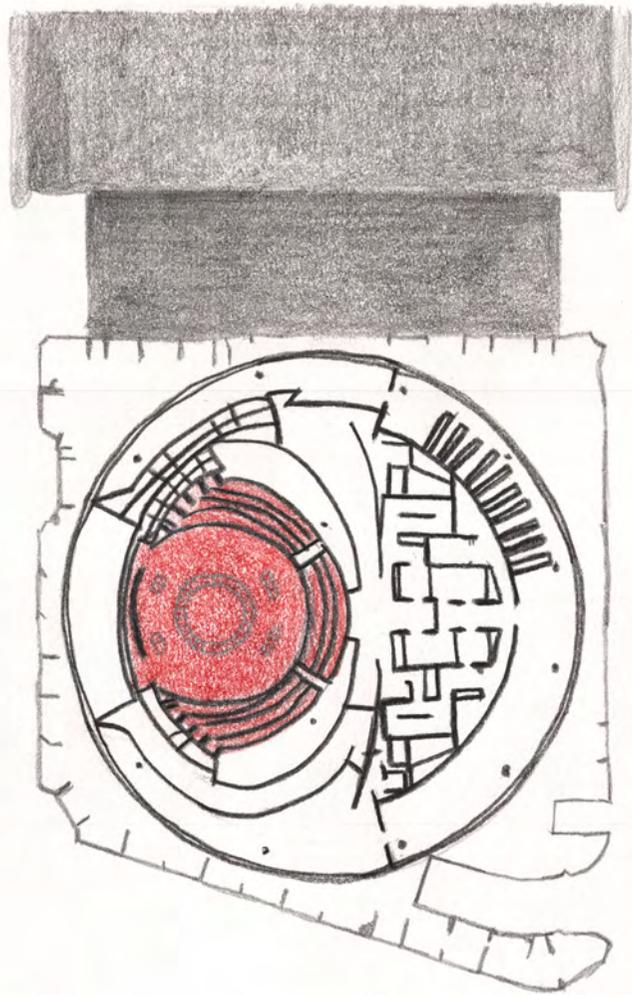


WELSH ASSEMBLY, CARDIFF

Cardiff's assembly was closer to the philosophy of the scheme as an attempt to bring more democratic values on the surface of the architecture and increase its transparency and openness. It was also very useful in terms of the acoustic properties that such projects require.



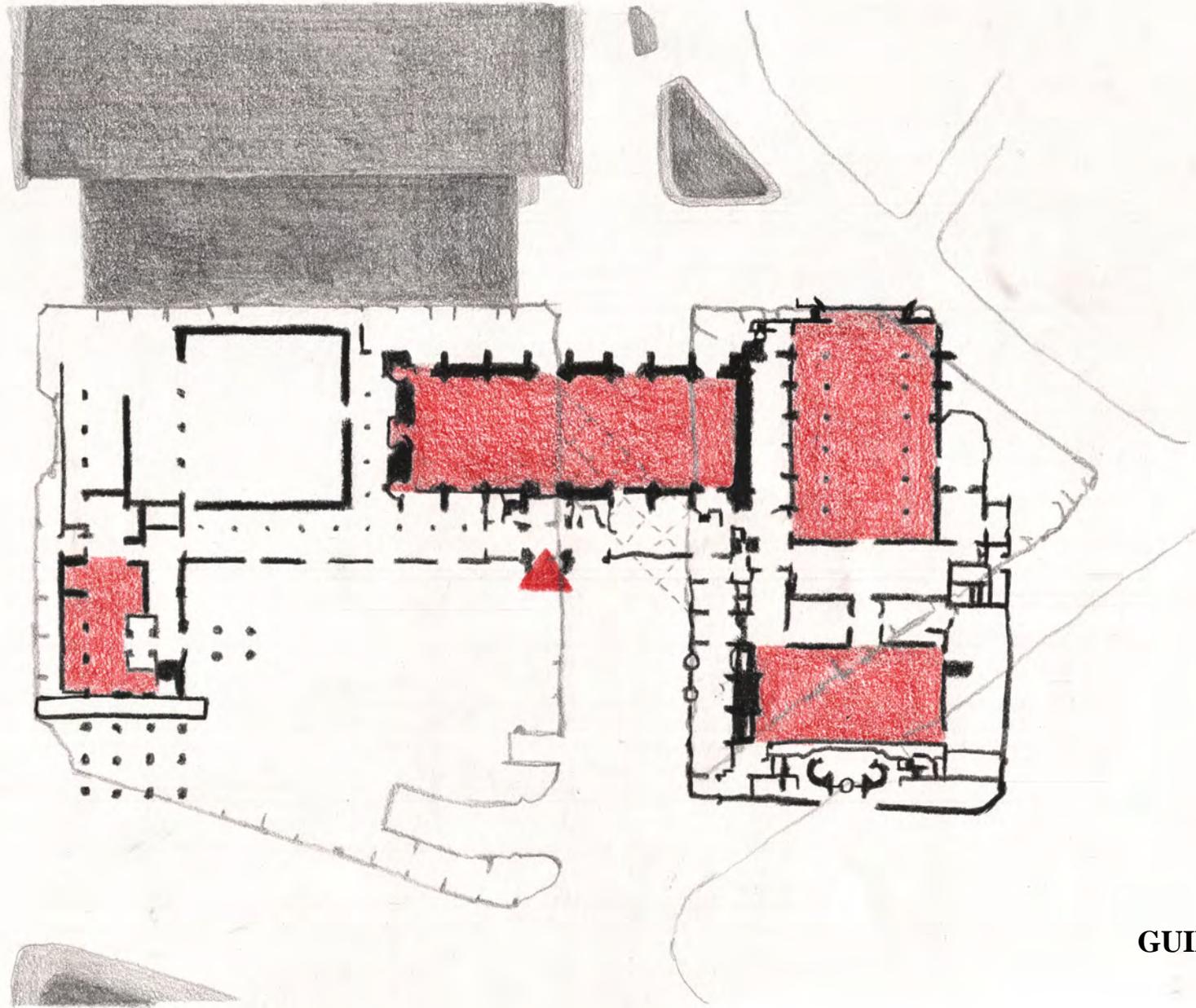
The Welsh National Assembly by Richard Rogers



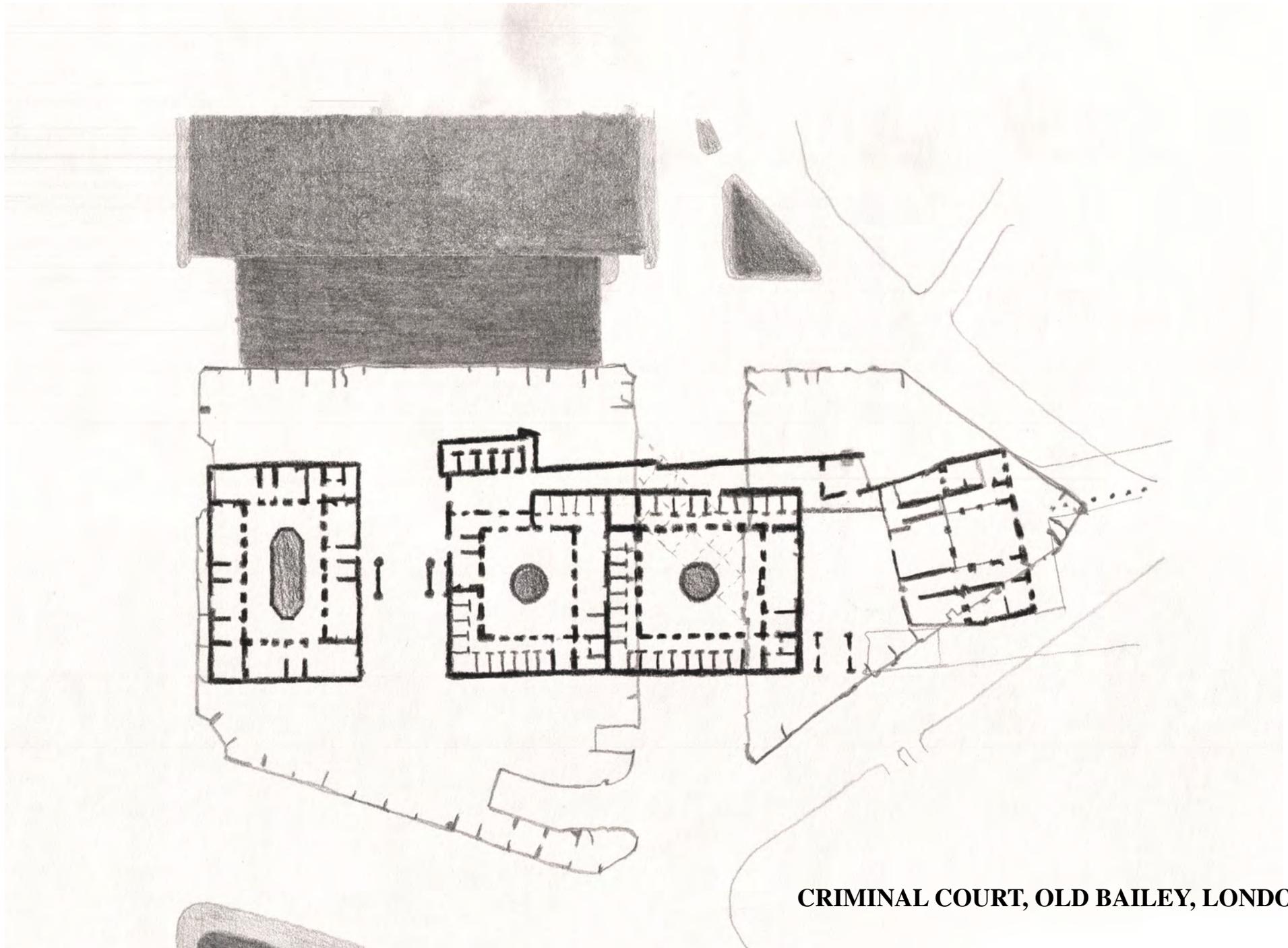
CITY HALL, LONDON

London City Hall by Norman Foster





GUILD HALL, LONDON



CRIMINAL COURT, OLD BAILEY, LONDON

04 PROGRAMME

FOOD MARKETS AS HOUSES OF POLITICS

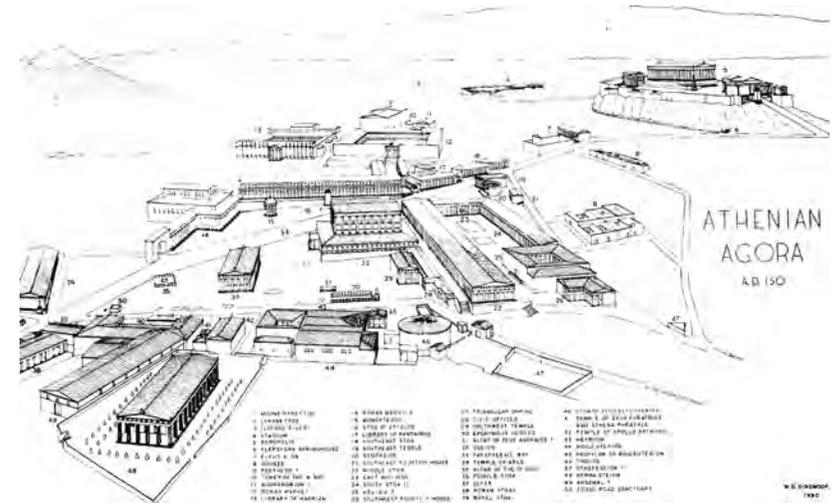
POLITICS

Food Markets seem to be connected with the political life of a city more than any other place. The social activity that takes place in those markets allows politics to be revealed and political issues to be openly debated. Throughout the history perhaps the most prominent examples are those of the Ancient Greek Agora and Roman Forum.

ANCIENT GREEK AGORA - Ah-go-RAH -

Almost every city of the ancient Greece had an Agora. Particularly the Athenian Agora, was originally an ordinary food market like which however gradually acquired a political use as a result of the expansion of the city. The Athenian agora was a public meeting place that was accessible to every citizen without any kind of discrimination. The political aspect of the market transformed it to the centre of the Athenian government. The market was dominated by public institutions like law courts, amphitheatres etc. It provided a seat for the Athenian democracy. Citizens were gathered together, willingly, to debate on matters of state and to make important political decisions.

Particularly, there were 4 meetings per month to enact legislation. The whole arrangement of the market constituted a perfect reflection of the urban hierarchy: politics were supported by commerce and vice versa. It demonstrated an open, egalitarian nature of life and provided the basis of the post-modern systems of governance that developed in Europe. In my opinion though, a lot of those elements of the Athenian democracy were lost on the way, and it is time to bring them back.



http://www.thomasgransow.de/Athen/Staetten_der_Attischen_Demokratie/Agora.html



http://commons.wikimedia.org/wiki/File:Athens_Roman_Agora_4-2004_1.JPG

By investigating the structure of the Athenian Agora, I came across with a particular building called *Tholos*.

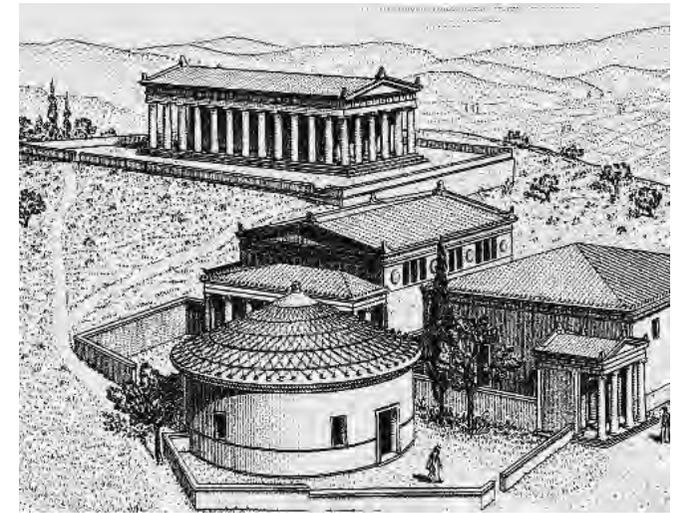
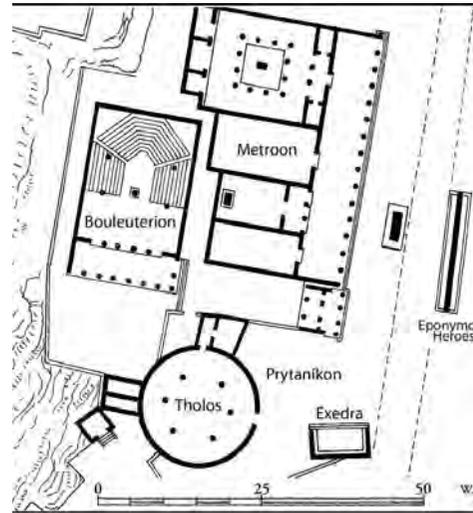
Tholos in ancient Greek architecture was a circular building (gathered circle implied equality and friendship) with a conical or vaulted roof and with or without a peristyle, or surrounding colonnade. The tholos in the Ancient Greek Agora in Athens was functioning as a dining hall for the Athenian Senate where Prytaneis would occupy during meals in order to deal with any potential emergencies and had no outside columns. That kind of building was situated next to the Bouleuterion or in other words to main debating chamber.

It was Solon, the lawmaker, who first thought of using the table as a tool with which to shape the Athenian democracy. Particularly, he made the standing committee to dine together in public in order to express equality. As a result it is obvious that food has power over people and it can be used as a tool to bring people together, to shape relationships around food and to use food to form a debate even more when the subject is about food.

Definitions:

Agora: ἀγείρω (*ageiro*), ἀγοράζειν (*agorazein*)
“to gather”, “to frequent the agora”, “to buy in the market place”

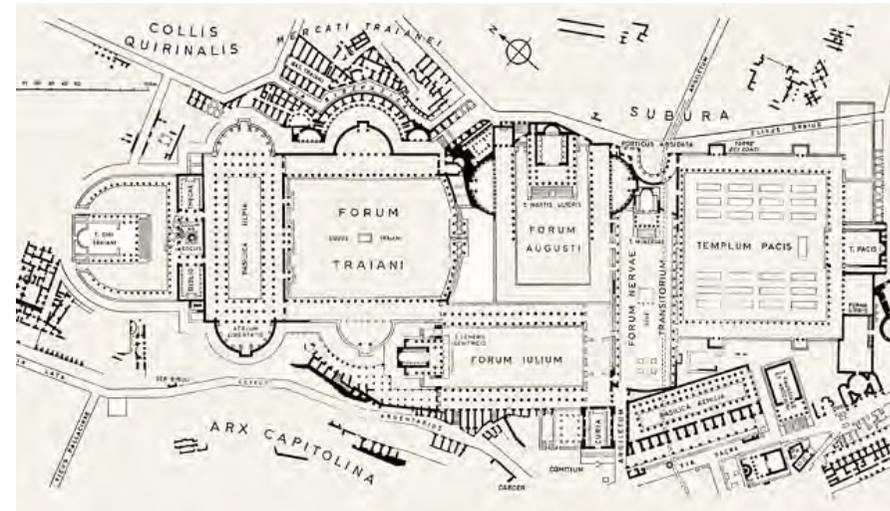
Tholos: plural *tholoi*, Latin *tholus*, plural *tholi*, also called *beehive tomb*.



ROMAN FORUM



http://shocksvideos.blogspot.co.uk/2014_11_01_archive.html



<http://www.italian-architecture.info/ROME/RO-029.htm>

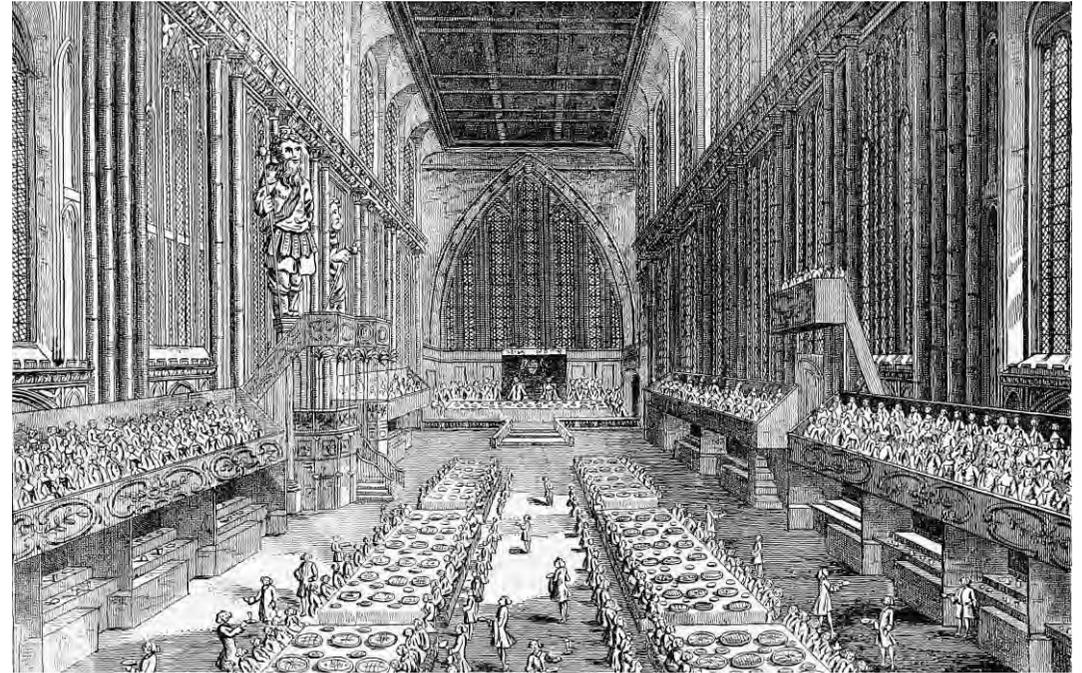
Similarly, even though in a less democratic environment Roman Forum was divided into two key areas. The Forum, which was the market square and the Comitium which became the area for all political activity.

UK's HISTORICAL TRADITION

Looking back to the Ancient Greece and Rome was insightful however seemed very distant from UK where the project will be located therefore I decided to look more into UK's tradition around similar events and places. In order to do that I looked deeper into Caroly Steel's book, *Hungry City* and particular Chapter "*Table*". By doing that I came across with Lord Mayor's Banquet which was originally initiated in 1761. It was an annual feast at the Guildhall and even today it remains an important political event and even though it is not located in a food market it shares some principles. What was important with that feast for me was the fact that it constitutes a physical representation of the power that shared meals have over people so as to make bonds. People are gathered, like in the case of the Agora and the Roman forum around food and talk. Something which reflects more than anything my intention for the New Ministry of Food.

"Read the historians, from Herodotus down to our own day, and you will see that there has never been a great event, not even excepting conspiracies, which was not conceived, worked out and organised over a meal"

Jean Anthelme Brillat-Savarin



<http://www.british-history.ac.uk/old-new-london/vol1/pp315-332>

SMITHFIELD MARKET AND NEW MINISTRY OF FOOD

By investigating into the past of food markets and the their relation to politics it is evident that the decision of locating the New Ministry of Food in the area of Smithfield where the Smithfield Market is located for centuries will create a fruitful environment for discussions around food issues and both places will benefit. The new ministry will become part of the existing market. It is important though to underline at this point that my intention is not make a comparison between the Ancient Agora or Roman forum rather than to explore and use their potential as food markets to reveal politics and generate debate in such close proximity with food. Smithfield's food market as a market has the same potential but it is not used and thus it has become a rather anti-social environment. By locating the New Ministry of Food that I am proposing there, Smithfield market will acquire this social and political identity that most successful markets have had and which in fact it used to have in the past. The New Ministry on the other hand will have that direct connection with a food market, food and people and thus it will acquire the means and power that is needed to change the current situation and notion of people and thus to tackle food problems which is my intention with this project.



DEMOCRATIC ARCHITECTURE

In terms of architectural approach, I want the design of my Ministry of Food, to reflect with its allocation of spaces, circulation, seating as well as the materials used for the external and internal fabric the democratic philosophy behind the initiation of the department as well as its goals. The priority will be the hierarchy of spaces rather than the occupant of the spaces. Political divisions and social groups need to be blurred in order to avoid the usual lack of focus on the actual issues, on the contrary to the current arrangement of the Westminster Parliament, where there are different entrances for people

with different social status, the House of Commons is opposite to the House of Lords and its auditorium is divided in two sides, between the government members and the opposition members.

Furthermore, as Michel Mossessian has claimed, I want my architecture to be defined by democracy which can be referred to as complexity and by that I do not mean to be complicated as many people often misunderstood rather that it will be orchestrated by social, political and environmental aspects that will enhance and elevate its inhabitation. All those elements need to reflect the locality of the city of

London and particularly Smithfield's area.

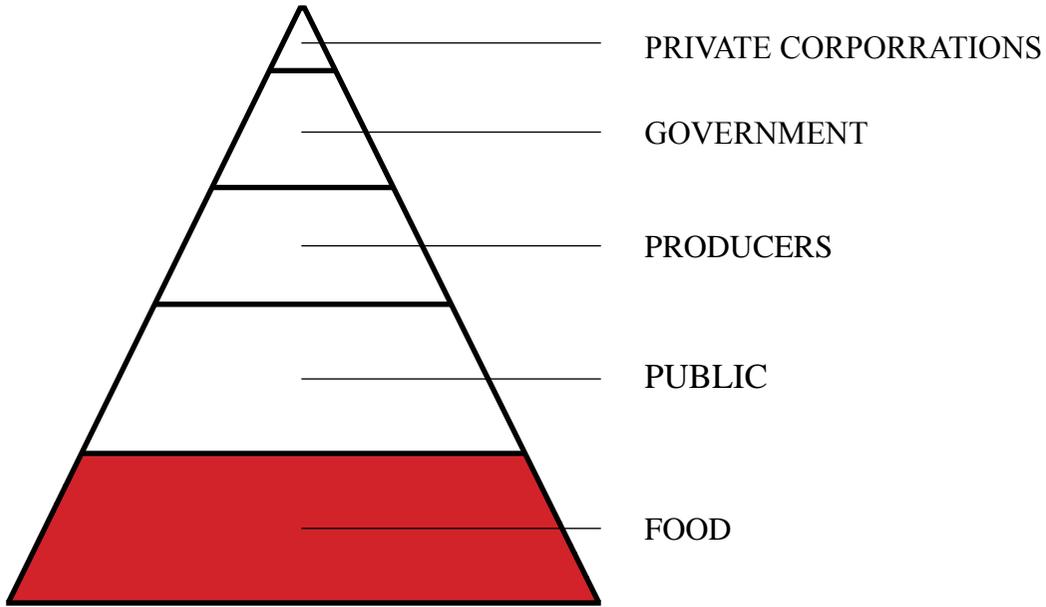
Evidently, the historical background and the combination of the old and the new [existing market buildings] offer generously the base for such a development.

The whole structure and arrangement should be based on its openness to the public as well as the interaction of the public with the governmental representatives at all times, both formally and informally. It should be accessible and transparent so that people can see what is going on inside the discussion chambers as well as the

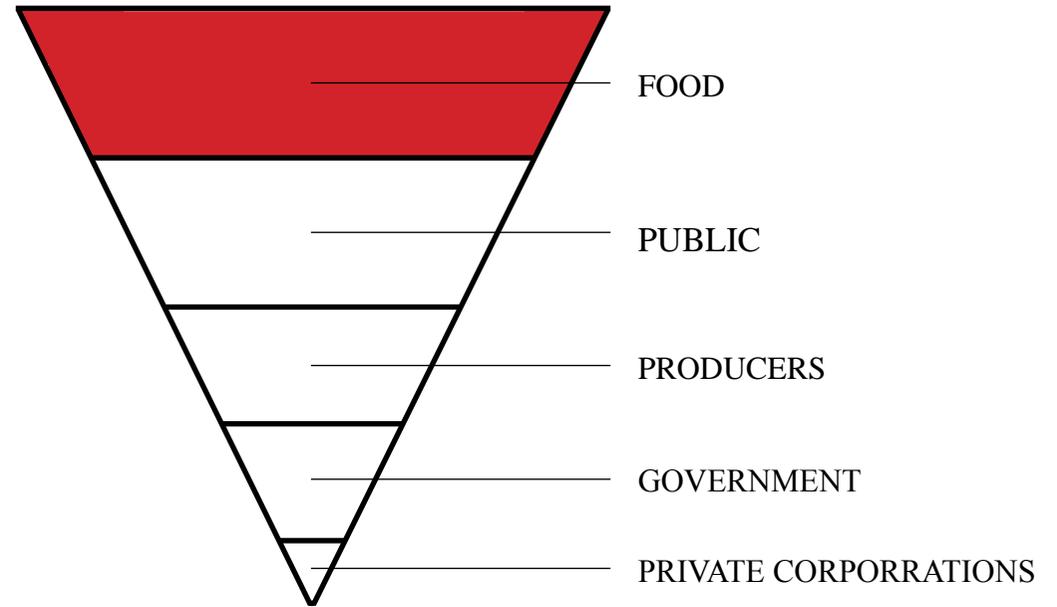
offices of the ministry members. At the same time those who occupy the building will be able to see outside and be constantly reminded that they need to be efficient and active. A real overview of the city in terms of old and new.

The whole scheme will be welcoming and not authoritarian like most of the governmental departments in UK at the moment.

WHO IS OCCUPYING THE SPACE?

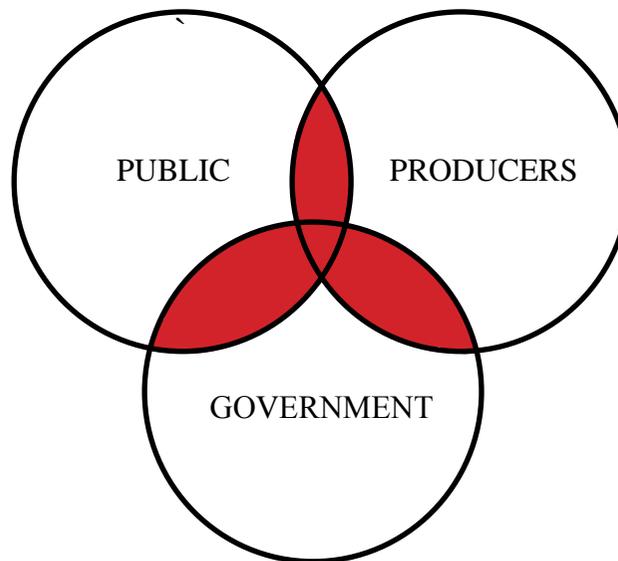


Current notion



Ambition

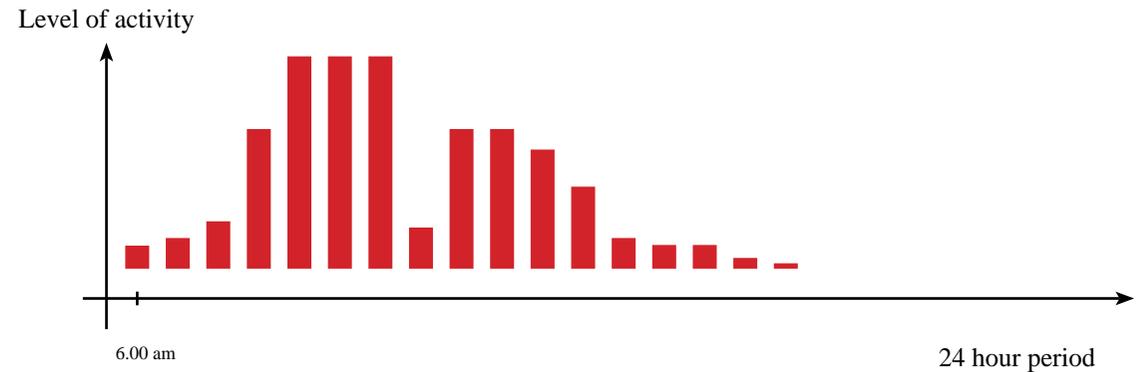
Project Driver - Equal Participation from all sides



ACTIVITY OF DIFFERENT USERS

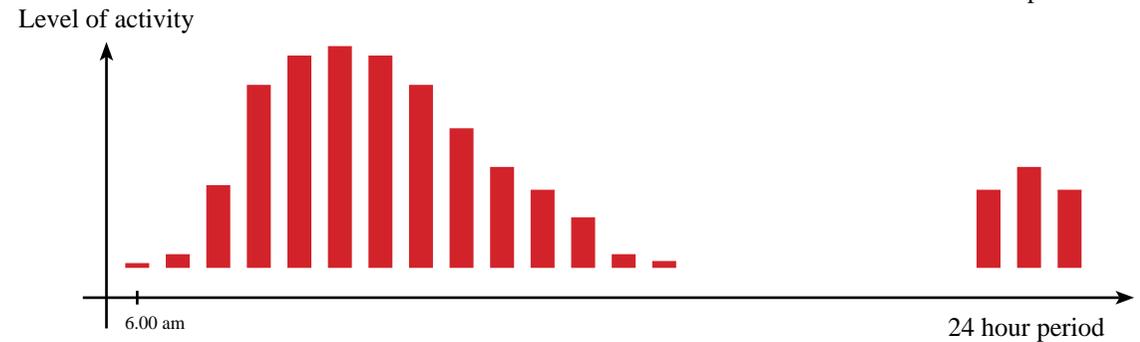
GOVERNMENT REPRESENTATIVES

Government representatives will have their offices in the new ministry and they will participate along with others to the discussions in the debating chambers. Their role is to govern and coordinate discussions and actions.



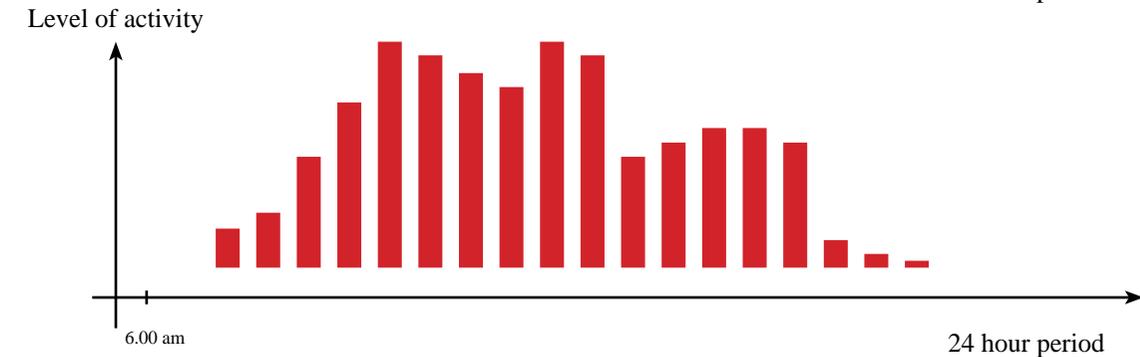
FOOD MANUFACTURERS AND PRODUCERS

Food manufacturers and producers will also have the ability to participate in the discussions, express their problems around the different sectors, Butchers, Farmers, Bakers, Fishmongers, Dairy Producers, Grocers etc. all representing the closest lively halls.



PUBLIC - CONSUMERS

People will be exposed to all stages of production of food. They will be able to participate in discussion around food issues. They will have access to a range of restaurants where they can come closer to range of food options. The productions of such food will be exposed to their eyes so as to familiarize themselves with the whole process and sustainable food. Finally, seminars and cooking workshops will take place so as to educate people and enhance food culture in UK.



FOOD BUSINESSES

A number of retail units will be part of the broader masterplan of the scheme thus allowing a greater variety of processed food for the consumers and visitors of the parliament. Similarly to the other clients, owners will be part of the discussions and monitoring of the ministry in terms of consumption of energy, waste disposal etc.

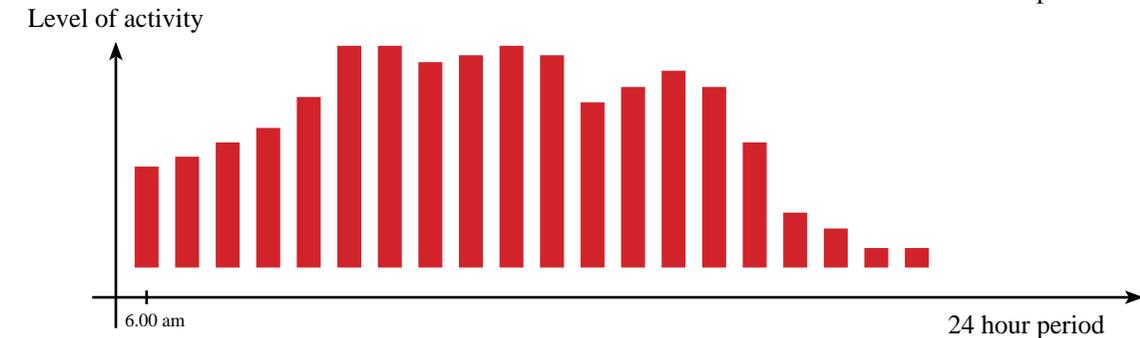


TABLE - A NEW KIND OF DEBATING CHAMBER

As it was explained earlier in this briefing document the idea of exploring a new way of public debate came from the exploration of the Ancient Greek Agora and the Lord Mayor's Banquet.

Similarly to the layout of the Guildhall's annual feast, interested parties in food issues will be required to sit along with people that they have never seen or talked to before, they will have a designated company for their dinner and this will be the biggest challenge they will have to face in order to form a debate. But it is that process that will reduce their boundaries in terms of power and social status. Power undoubtedly always had a large part of contribution in determining what, when and how much or with who one can share food and inside the debating chamber that power is diminished and the whole debate becomes part of forming table manners.

The meal acquires purpose other than feeding but at the same time underlines the importance of all people having the same right to food, same quality and quantity of food.

The role of the government inside that table is to act as the "Senior Barrister" to start up, lead and control the conversation, thus the power becomes a matter of experience instead of actual power.

"Above all table is a social space and learning to behave there, is as much an exercise in communication as anything else"

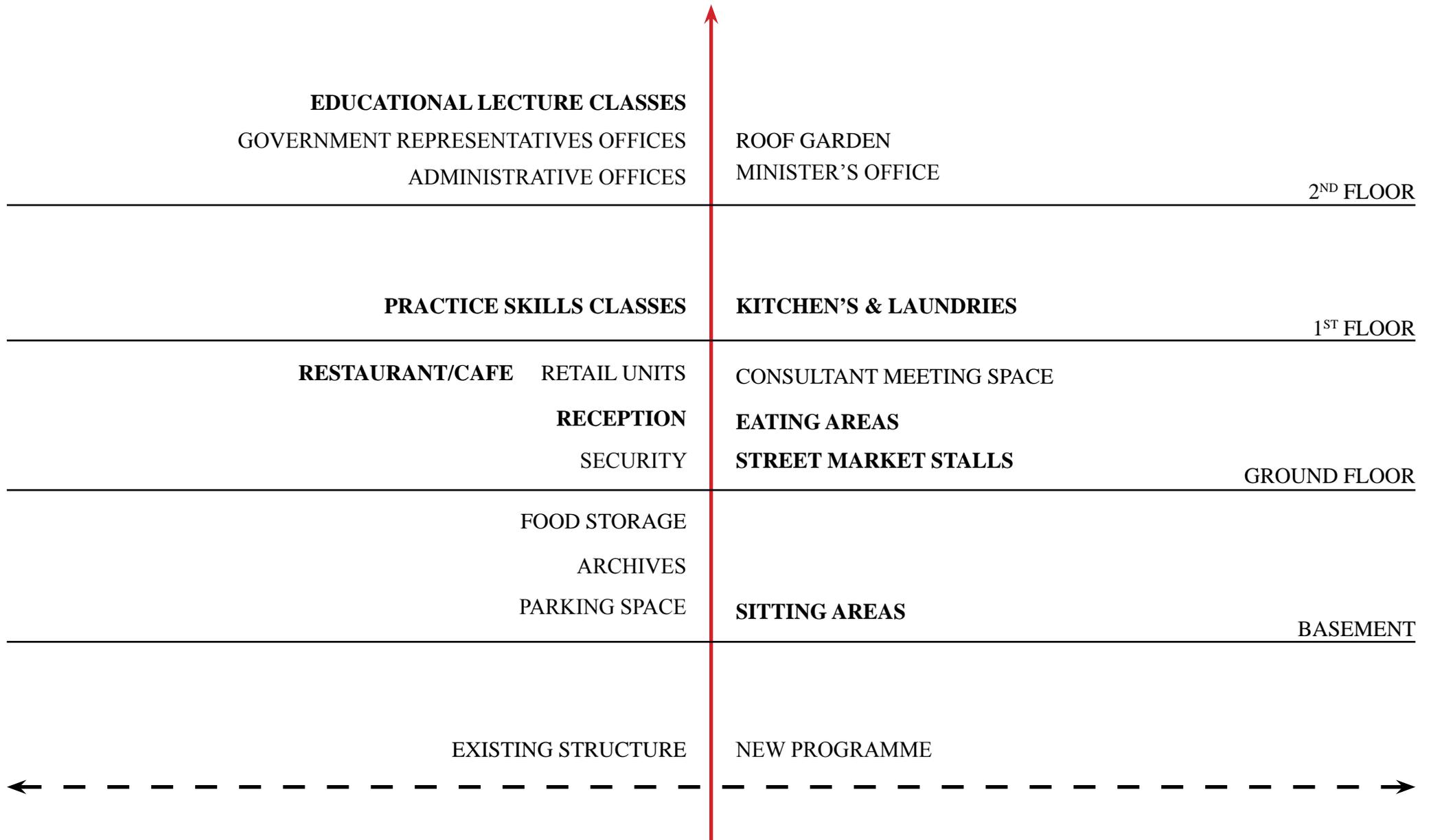
"Table is where the politics of food are their most explicit"
Carolyn Steel, Hungry City





The plate forms natural barriers between each member of the chamber. A natural barrier between each member without any kind of political or social discrimination.

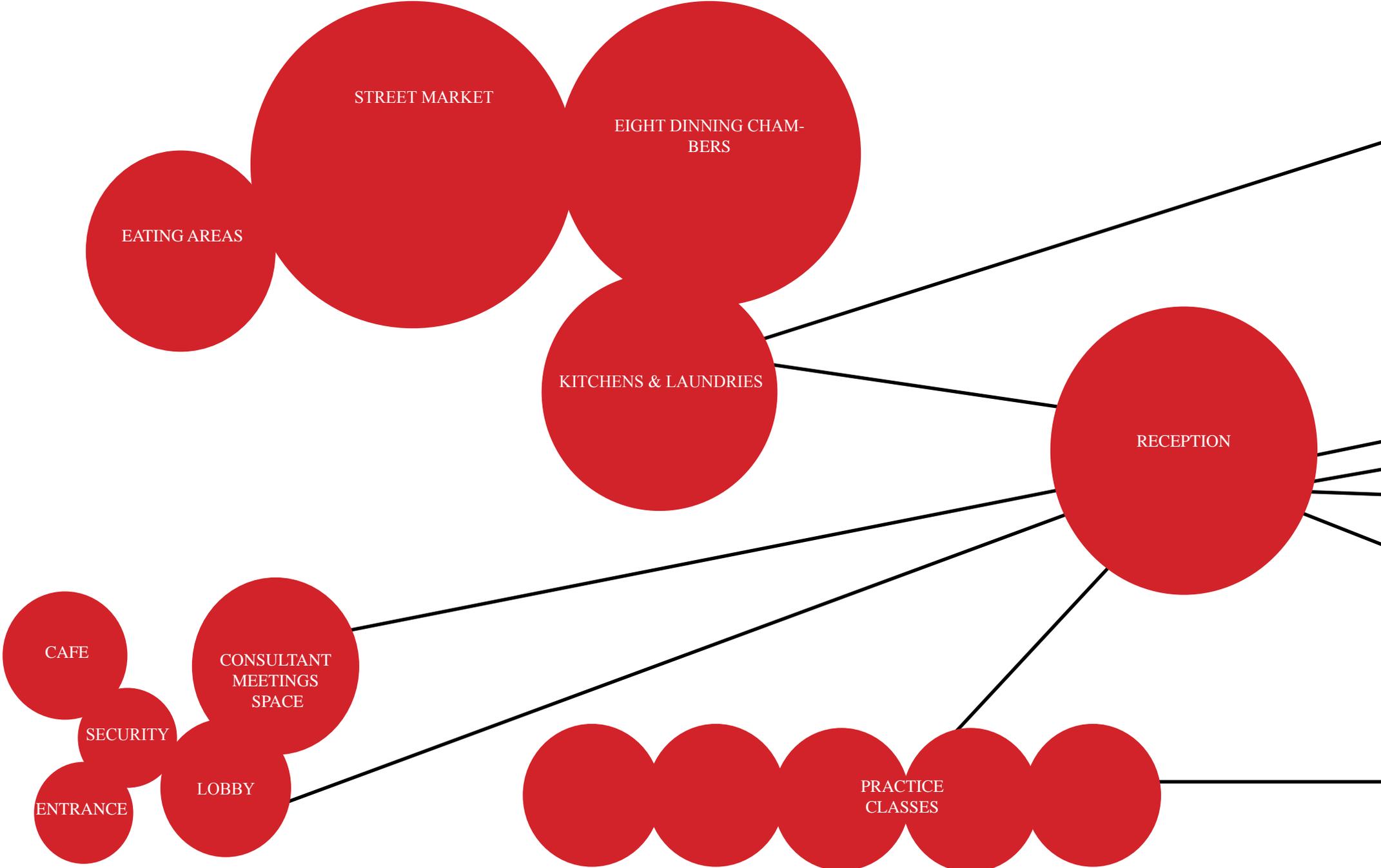
GENERAL ARRANGEMENT PRINCIPAL HIERARCHIES

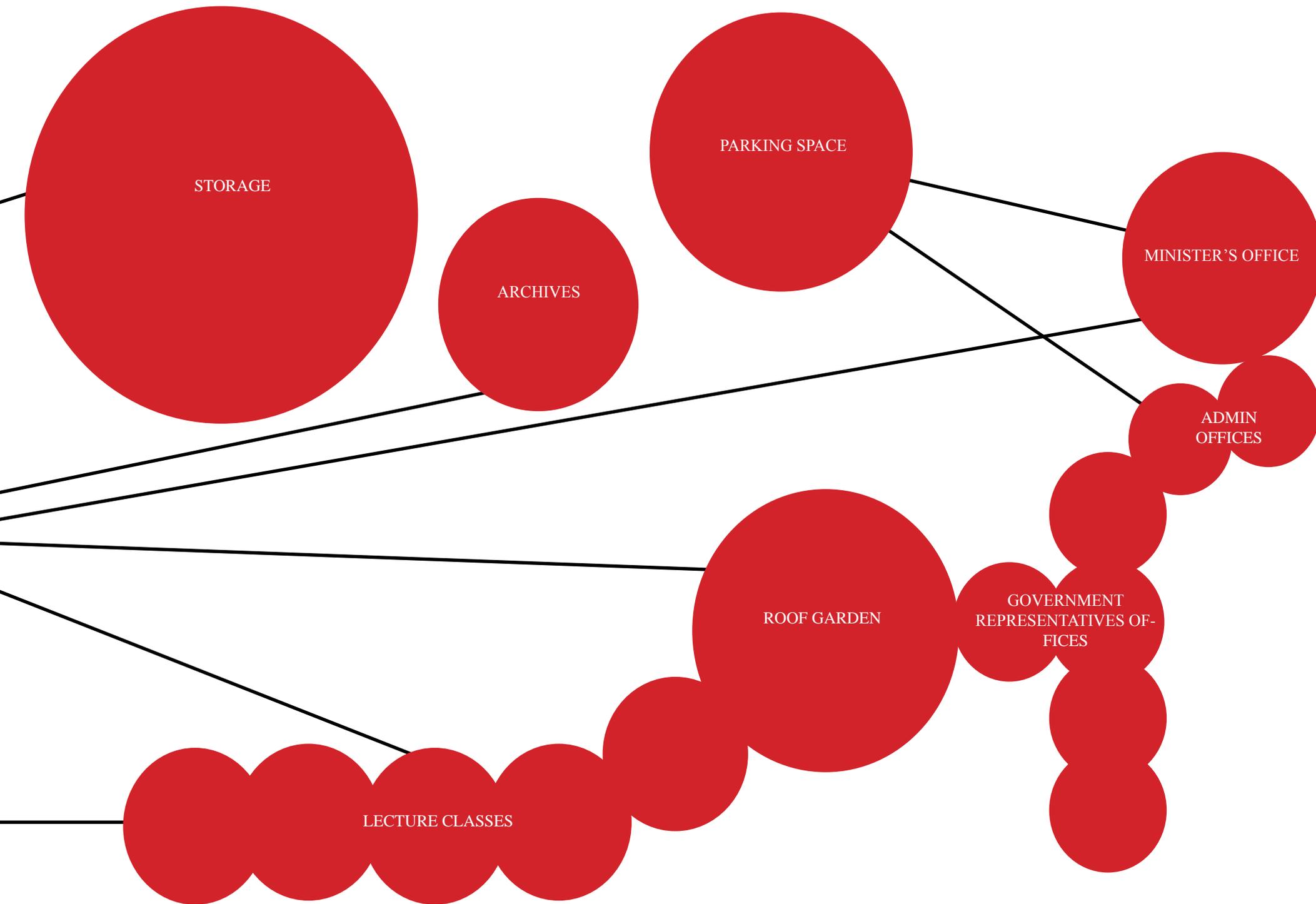


SPATIAL QUALITIES

TYPE OF SPACE	AREA m ²	LIGHT	ACOUSTICS & NOISE	ACTIVITY	MATERIALS
DINING HALLS/ DEBATING CHAMBERS	36	Good illumination/ Not glare	Good Acoustics Blocking sound from surrounding spaces - Box inside a box	Discussions - Debates with govern- ment representatives, organizations, producers, public, around a dining table.	timber flooring and roof (reflec- tive surfaces) transparent walls
GOVERNMENT REPRESENTATIVES OFFICES	10	Natural light cre- ates a more pleas- ing environment + Artificial light	Quiet	Working space for government representatives. Private meetings	Transparent
PRACTICE SKILLS CLASSES	20	Natural light not essential	-	Practice lessons to educate consum- ers on food processes and sustain- able health diet	Light colour surfaces
KITCHEN'S & LAUNDRIES	65	Natural light not essential. Opening used to increase transparency and reveal process	Noisy	Food preparation for dinning cham- bers and other eating areas, research and lessons	Aluminium kitchen equip- ment
RESTAURANT	150	Natural light cre- ates a more pleasing environment + Artificial light	Noisy	Main restaurant of the scheme	-
RECEPTION	50	Natural light cre- ates a more pleasing environment + Artificial light	Noisy	Information desk	Existing struc- ture
STORAGE	380	-	-	-	Existing struc- ture

ADJACENCIES





EDUCATIONAL SECTOR

Basque Culinary School, by VAUMM, Spain



Chefs feeding debating chambers



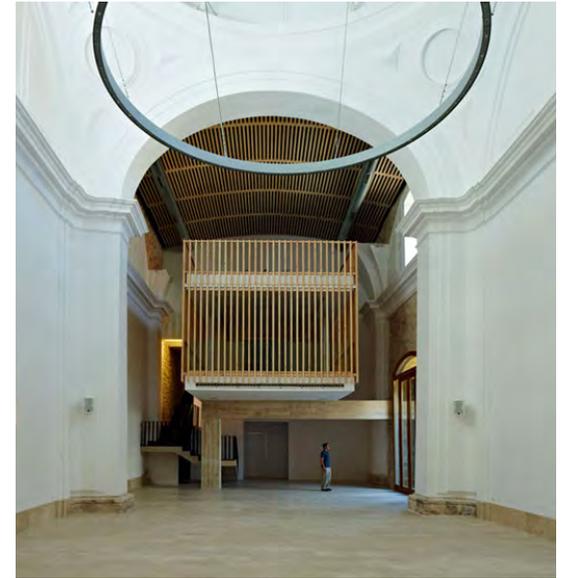
Practical Lesson for Public



Theoretical Lessons on sustainable healthy diet

GOVERNMENTAL AND PUBLIC SECTOR

Historic Spanish chapel by Adam Bresnick Architects, 2014



Restaurant Extension in Olot, By RCR Architects



Zamora Offices by Alberto Campo Baeza, 2012



05

CRITICAL REFLECTION

“Wherever food markets survive, they bring a quality to urban life that is all too rare in the West: a sense of belonging, engagement, character. They connect us to an ancient sort of public life.”

Carolyn Steel, Hungry City

Overall, I feel very confident about the above proposal, it is something that really expresses my personal opinion on the current situation regarding food issues and the way the government should respond to those issues. It is obviously politically driven but I would like to believe, not in terms of political parties, rather in terms of a political approach that all parties should follow. It is definitely a “revolutionary” idea which however has been implemented in other countries around the world like Brazil, Spain, Estonia etc. therefore why not in UK?! I want this project to be seen both as a realistic manifesto but also in a more abstract way which underlines the need of changing people’s state of mind regarding such issues where all people regarding their origins and social status have the same rights and thus they should receive the same benefits.

In terms of the approach, there are certain issues that I would like to investigate more. At this point it is evident that further consideration needs to be given on the how the new scheme will engage with the old Victorian fabric. The limitations and opportunities that it has to offer. Additionally, certain parts of the scheme like research units etc. and various retailers will be left aside as part of a bigger masterplan. The main proposal will include the public, governmental and educational sector and the ways these interact with each other to serve the needs of all the occupants.

Last but not least, there is the issue of security, which is crucial for such a proposal, needs to be further considered. Their goal is provide security without compromising one of the most important principles of the brief which is that the building should be welcoming and open to anyone interesting in participating in the decision making on food related matters.



REFERENCES

Web Resources

- <http://www.smithfieldmarket.com/the-market/history-of-the-area/>, accessed 12.12.2014
- <http://archive.defra.gov.uk/foodfarm/food/pdf/food2030strategy.pdf>, accessed 16.01.2015
- <http://www.history.ac.uk/ihr/Focus/War/londonRation.html>, accessed 20.01.2015
- http://www.ted.com/talks/carolyn_steel_how_food_shapes_our_cities?language=en, accessed 12.12.2014
- <http://www.telegraph.co.uk/comment/telegraph-view/10089413/The-politics-of-food.html>, accessed 10.01.2015
- <https://www.london.gov.uk/sites/default/files/food2030strategy.pdf>, accessed 12.01.2015
- http://www.worldfuturecouncil.org/fileadmin/user_upload/Food_Security/Urban_governance_for_food_security__Belo_Horizonte.pdf, accessed 11.12.2014
- <http://ancient-greece.org/archaeology/agora.html>, accessed 15.02.2015
- http://www.sifo.no/files/file72270_forelesning_ern4322_-_27._mars_2007.pdf, accessed 13.01.2015
- <http://foodgovernance.com/2013/10/08/right-to-food-journal/>, accessed 13.01.2015
- <http://www.newstatesman.com/2013/04/its-time-act-food-poverty>, accessed 13.01.2015
- <https://www.london.gov.uk/priorities/business-economy/working-in-partnership/london-food-board/london-boroughs>, accessed 15.01.2015
- <http://www.independent.co.uk/life-style/health-and-families/health-news/look-back-in-hunger-britains-silent-scandalous-epidemic-7622363.html>, accessed 16.01.2015
- <http://democraticarchitecture.tumblr.com/DA>, accessed 20.01.2015
- <http://www.theguardian.com/environment/2011/mar/25/food-political-leadership>, accessed 15.01.2015
- <https://www.cityoflondon.gov.uk/services/environment-and-planning/planning/heritage-and-design/conservation-areas/Documents/Smithfield%20OLD%20Character%20Summary.pdf>, accessed 25.02.2015

Books

- Bradley S. & Pevsner N., *“The buildings of England, London 1: The City of London”*, Corporation of London, Published 2012
- Adler, D., *“Metric Handbook: Planning and Design Data”*, Architectural Press, Published 2012
- Bollack F., *“Old Buildings - New Forms : New Directions in Architectural Transformations”*, The Monacelli Press, Published 2013
- Lim, CJ, *“Food City”*, Routledge , Published 2014
- Steel, C. *“Hungry City: How food Shapes our Lives”*, Vintage, Published 2013
- Tristram S., *“Waste: uncovering the global food scandal”*, Penguin Press, Published 2009

Past Proposals

- McAslan 2012 Smithfield Proposal
- Farringdon East Over development Proposal
- Farrels Smithfield Farringdon survey
- KPF Proposal

Thanks to

Warren McFadden, Unit Head