

REINTEGRATION OF COMPLEX POST-INDUSTRIAL SITES IN DEPRIVED NEIGHBORHOODS IN THE UK:

A CASE STUDY OF LINACRE GASWORKS IN BOOTLE

Group 06, MSc04 Urban Design, Institute of Architecture & Design, Aalborg University

REINTEGRATION OF COMPLEX POST-INDUSTRIAL SITES IN DEPRIVED NEIGHBORHOODS IN THE UK:
A CASE STUDY OF THE LINACRE GASWORKS IN BOOTLE

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ABSTRACT

Gas production used to be of large importance for everyday life in England, which resulted in the construction of many gasworks sites. With technological advancement and the global shift from industrial economy towards a more service and information based economy, the gasworks sites have lost their purpose and are left vacant today. Some of the sites have been transformed, however, brownfield policies in the UK has led to developers cherry-picking the more attractive and less complex brownfield sites, leaving most of the gasworks sites in deprived neighborhoods vacant. The presence of vacant land has shown to affect both housing prices, discourage investment and affect the quality of the neighborhood in a negative way. This thesis therefore concerned with the problem of how to transform these post-industrial gasworks sites into a valuable asset in deprived neighborhoods.

Redevelopment of gasworks sites is complex and associated with stigmatization and risks due to the uncertainties of contamination, dismantling, and backfilling processes. Through literature review, contextual mappings, site visits and semi-structured interviews with local stakeholders, owners of gasworks sites, and demolition contractors, the thesis explores the constraints and opportunities regarding redevelopment of gasworks sites. Through a case study of Bootle, the thesis explores these themes within an existing context. Because this site is unwanted by developers, the thesis proposes a process that initiates a temporary design utilizing local resources. The aim of the temporary design is to transform the site into a local asset and influence the long-term transformation of the gasworks site, preserving the identity and heritage.

PREFACE

When you stumble upon an old brick house amongst the concrete and glass constructions in the city, or you see the rusting beams of an abandoned factory, it tells you a story. Similar to the wrinkles on a human face, time does take its toll on the built environment. It tells us stories through the materiality and texture. The deterioration and patination of materials tells us stories of times long past and fills the urban landscape with the presence of history which our contemporary society is built upon. However, all too often, this value seems to be overlooked, and potentials of these delicate textures and spaces are disregarded in the making of new iconic projects.

When National Grid in collaboration with The Royal Institute of British Architects (RIBA) launched a competition in 2017, to counter an upcoming challenge they are facing. Their many gasworks sites are redundant and left without a purpose or a place in the contemporary society and so they wanted the sites to be put into new use. This is not uncommon to see for old industries, which have been advanced and improved. Their competition mainly focused on concepts for the void gasholder bases leave behind, and how they can be used in new ways instead of filling them up. The proposals were meant as inspiration, as National Grid stated in their competition brief that they were most likely not going to be the developers of their own sites. The purpose of this competition, was meant as inspiration and a sales argument to showcase a number of possible options for these gasworks sites. However, the participants were not given any information about the specfic locations of the sites, and so the proposals were not embedded in their context. We found the proposals rather unrealistic to implement, especially on the gasworks sites situated in less fortunate areas.

This was the main motivation for this thesis. We wanted to look into what could and should happen to the gasworks sites through a contextual approach. We do not believe that these sites will be transformed just because developers saw some nice ideas through a competition. The reality is that developers will not transform a site unless it will become economically beneficial. We believe that it is unreasonable to design a place, without first looking at the context and that a project should not only benefit one's own revenue, but also look into what it can do for society and the surrounding community.

ACKNOWLEDGEMENT

We would like to extend our gratitude to Dr. Michael Martin and Dr. Jes Vollertsen for supervision, critiques, comments and overall helpful engagement and guidance throughout the thesis.

Furthermore, we thank Brian Dawe and SAFE Regeneration for showing us around their premises and providing us with important knowledge about Bootle and an insight into their work.

Moreover, we thank National Grid and The Coleman Group for showing us around two gasworks sites and providing us with a unique insight into the current practice of demolition and remediation of gasholders. The information given both prior to, during and after the site visits, has shown to be crucial to the project, and we truly appreciate the knowledge shared.

Additionally, we thank Russel Thomas for information on the technical aspects of remediation of gasworks.

Last, but not least, we would like to thank the many inhabitants and commuters we have engaged with and interviewed during the fieldwork as these have helped shape the thesis and given the findings a more constructive and relevant output.

READING GUIDE

The presentation of this master thesis has been distributed into a main report containing the important material and an appendix with additional information and in depth descriptions of data. When data in the main booklet is further elaborated on in the appendix, it will be specified as the following example: "*The chart shows how ... See the appendix for additional information.*"

All maps presented in this booklet have true north pointed to the top of the page unless other is specified.

The booklet has further been divided into seven chapters counting the introduction as the first chapter, which outlines the master thesis and the research question.

The second chapter is the methodology chapter, which explains the methods applied through the thesis and during the fieldwork.

The third chapter, literature review, reviews relevant themes and literature for the thesis, in order to position itself within the relevant research already done in the field.

In chapter four, the case is introduced and presented through a historical and contemporary perspective.

Analyses and empirical data is presented in the fifth chapter called "Analysis". Along with this is a section demonstrating the views of locals and moods captured during the fieldwork.

Chapter six presents the design and strategies developed through visualizations and text.

Finally, the thesis is concluded and reflected upon in chapter seven. It is also in this chapter that one is able to find formalities such as the literature referenced and a list of illustrations.

TABLE OF CONTENT

INTRODUCTION 13
- SCOPE OFTHESIS 14
- RESEARCH QUESTION 15

METHODOLOGY 17
- METHODOLOGY 18
- METHODS FOR THE FIELDWORK 21

LITERATURE REVIEW 25
- SELECTED THEMES 27
- GASWORKS AS POST-INDUSTRIAL HERITAGE 28
- POST-INDUSTRIAL LANDSCAPES AS A RESOURCE 30
- DEVELOPING CONTAMINATED LAND 32
- RISKS ASSOCIATED WITH CONTAMINATED LAND 34
- BROWNFIELD POLICIES 36
- IMPACT OF DERELICT LAND ON NEIGHBORHOODS 38
- TEMPORARY USE 42
- CHAPTER DISCUSSION AND CONCLUSION 44

LINACRE GASWORKS 47
- BOOTLE - LIVERPOOL 49
- THE EVOLUTION OF BOOTLE 50
- CONTEMPORARY SITUATION 52
- THE LINACRE GASWORKS 56
- CHAPTER DISCUSSION AND CONCLUSION 58

ANALYSIS **63**
- GREEN AND BLUE INFRASTRUCTURE 65
- CHARACTERISTICS OF THE CANAL 67
- FUNCTIONS 68
- LEGIBILITY 69
- SERIAL VISION 70
- WALK-ALONG ANALYSIS 72
- CONTEXTUAL APPRAISAL 76
- OPPORTUNITIES AND CONSTRAINTS 78
- POTENTIAL STAKEHOLDERS 80
- LOCAL ASSETS 82
- LOCAL PERCEPTION 84
- COLLAGES AND CONVERSATIONS 87
- CHAPTER DISCUSSION AND CONCLUSION 100

TEMPORARY ACTIVATION **103**
- STRATEGY 105
- THE GASWORKS 107
- PHASE 1 117
- PHASE 2 126
- PHASE 3 131

CONCLUSION AND REFLECTION **133**
- CONCLUSION 134
- REFLECTION 136
- REFERENCES 138
- ILLUSTRATIONS 142

INTRODUCTION

In this chapter the scope of the thesis is specified, and the overall research question is defined.

SCOPE OF THESIS

This thesis is written at Urban Design MSc04, Aalborg University from the 1st of February to the 24th of May, 2018. The main purpose of the thesis is, to understand the current practice of redeveloping gasworks sites and, more precisely, look into how they are reintegrated into deprived neighborhoods. The themes covered in this thesis are post-industrial transformation, post-industrial heritage, remediation of brownfields, and the impact of derelict land on deprived neighborhoods. Due to the amount of research on subjects like industrial heritage and transformation, the thesis themes are further narrowed down towards gasworks sites.

The research regarding neighborhood effects is reviewed. The thesis looks into this theme in order to understand the current research on the subject and understand what non-physical barriers that might be present in the redevelopment of gasworks sites. However, this sociological theme is extensive and elaborate, and this thesis does not aim to further add to the existing research about neighborhood effects.

The method utilized in this thesis is divided into a number of phases guiding each step of the process towards the final goal, which is to propose a strategy on how to approach the reintegration of gasworks sites in deprived neighborhoods. This is done with a design proposal and illustrated through renderings and mappings, and finally concluded upon as an answer to the overall research question:

HOW CAN POST-INDUSTRIAL GASWORKS SITES BE TRANFORMED INTO A VALUABLE ASSET FOR THE INHABITANTS IN DEPRIVED NEIGHBORHOODS?

METHODOLOGY

In this chapter the structure of the methods used in the thesis are presented and each phase is explained in the order of occurrence. After this, the methods used during the fieldwork is further elaborated on, and the involved actors are introduced.

METHODOLOGY

The applied method for the process can be divided into six phases; initial phase, desk study, fieldwork, redefine, design and presentation. An integrated design process (IDP) has been used throughout the conduction of the thesis. As the project evolved and new data was collected, reviewed and analysed, new questions and topics of interest emerged and there was a need to redefine previous phases as well as the research question.

In the *initial phase* the group looked for inspiration and brainstormed different topics that could be of interest for the thesis. In this period The Royal Institute of British Architects held a competition for National Grid about generating ideas for transformations of gasholder bases. This is where the idea for the thesis emerged. Unlike the contributions to the competition, the group wanted to make a project with a contextual approach. Because the case site is situated in England and the project is conducted in Denmark, only a small part of the project (fieldwork) was conducted with a direct access to the area of interest.

Through the phace of *desk study* the group was in possession of limited information about the site. With information gathered through literature review and email correspondences the group could define the working problem, project site, and thereby choose methods for the fieldwork.

During the *fieldwork* several mappings, semi-structured interviews and "man on the street" interviews were conducted. For a detailed explanation of the methods utilized during fieldwork see page 23. The empirical data collection, gathered during fieldwork, provided new information and an in depth understanding of the opportunities and challenges that concern transformation of gasworks sites and the context in which most of them are situated.

More desk work needed to be conducted in order for the thesis to evolve. Qualitative and quantitative data from the previous phases entered the later cycles of continuous *redefinement* in order to structure the knowledge into a holistic understanding.

Throughout the conduction of the thesis several *design* workshops were held. These workshops included brainstorming, case studies, sketching and building mockup models. Throughout the workshops several ideas emerged that were reflected upon and altered before the final design was ready for *presentation*.

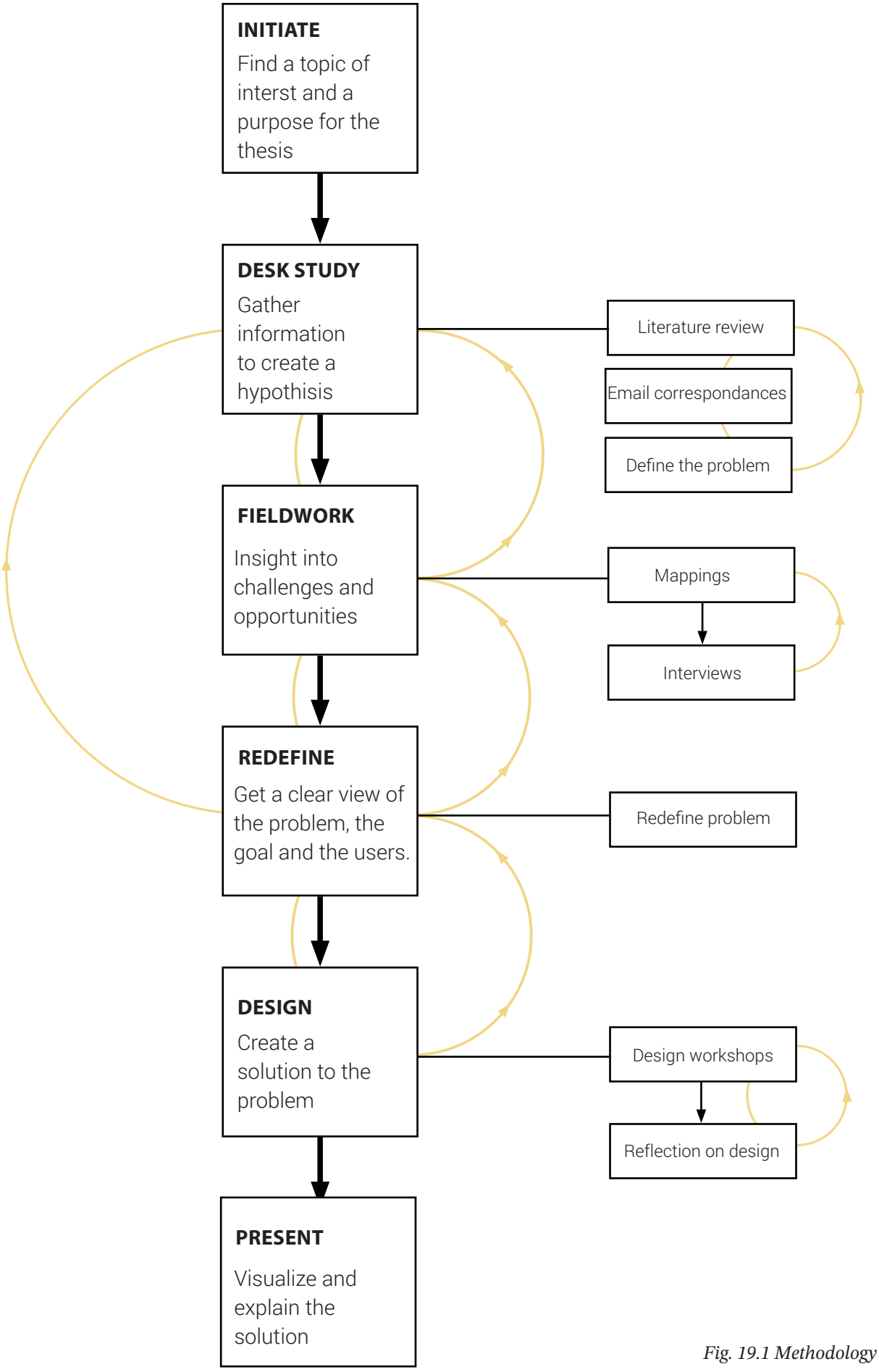


Fig. 19.1 Methodology



Fig. 20.1 Site investigation

METHODS FOR THE FIELDWORK

Mappings were conducted in order to get a better understanding of the contextual environment. The mappings provided different layers to the context that were analyzed. These mapping revealed opportunities and constraints for the development of the case site.

Site investigation took place during the fieldwork phase. Two site visits were conducted. The first visit happened at the case site situated in Bootle, where the group gathered empirical data about the spatial and physical features on the site. The second site visit happened on a gasworks site, in Wavertree, which was in the process of demolition and remediation. This visit gave a holistic understanding of the challenges that come with demolition and remediation.

Semi-structured interviews were chosen as an interview method to allow new topics to arise as a response to what the interviewee said and thought was important. Prepared topics for the interview was grounded in secondary research and was adjusted during the collection of primary research. The group conducted six semi-structured interviews with different actors which can be divided into two groups. The interviews with the first group focused on the context of Bootle. The outcome of these interviews provided empirical data and a more in depth understanding about the social and economical situation in Bootle. The interviews within the second group dealt with gasworks, both in general and within the context of Bootle. These interviews provided empirical data concerning the challenges that start before the demolition and continues until after the site is sold. Themes such as remediation, demolition, risks, market value, policies, and the relationship with the surrounding neighbors were discussed. Although the interviews had different focuses, some of the same topics were brought up, such as the impact vacant gasworks sites have on their surroundings.

"Man on the street" interviews were conducted to get qualitative data from the local context of Bootle to cross examine the research done previously in the thesis. In the 48 interviews that took place people were asked about their preceptions and opinions about the gasworks site, and thoughts about their neighborhood.

The stakeholders that were interviewed represented five different companies and are listed below. Safe regeneration and the real estate agency have offices in Bootle. National Grid is the owner of the gasworks site. The Coleman Group is hired by National grid to undertake demolition and remediation of the gasholders. IPB Communications is hired by The Coleman Group to work with public relations and inform the surrounding neighborhoods.

NAME	PROFESSION	COMPANY
Brian Dawe	*Chief Executive Officer*	*SAFE regeneration*
Anonymous	*Real estate agent*	*Local real estate agency*
Anonymous	*Gasholder Demolition Advisor*	*National Grid*
Sarah Helby	*Land Regeneration Advisor*	*National Grid*
Paul Quance	*Contracts Director*	*The Coleman Group*
Steve Fox	*Director*	*IPB Communications*



Fig. 22.1 Contextual analysis



Fig. 23.1 Workshop

LITERATURE REVIEW

In this chapter the topics of gasworks sites' history and heritage are reviewed. Challenges and risks related to development of contaminated brownfields are covered followed by a review of brownfield policies in the UK. After this, the impact of derelict land is studied along with temporary use and how this can be a tool to activate vacant land. Finally, the themes are discussed in comparison with each other, and in regard to the overall research question.

SELECTED THEMES

The following literature investigates how gasworks sites came to be and their historical role in the local neighborhood in order to discuss their value as post-industrial heritage. A large amount of research exists regarding heritage (Fossa, 2014; Johnson, 2013; Loures, 2008, 2015; Oevermann and Mieg, 2015; Thomas, 2014). However, there is no literature specifically regarding gasworks as post-industrial heritage. To understand the cultural heritage of these sites this thesis reviews cases where the physical features of gasholders have been preserved in the redevelopment.

Gasworks sites are categorized under the larger term, brownfields, but due to their previous use, they are often more complex to develop (CL:AIRE, 2015; Johnson, 2013; Thomas, 2014). In this thesis the term complex post-industrial sites, referes to sites that are known to contain a large amount, and a diverse range of different contaminants, making the sites less attractive on the market. These sites also contain structures that needs to be dismantled or restored before redevelopment. Since complex brownfields are known to be contaminated (Alberini et al, 2005; Bartke, 2011; Gibbons et al, 1998; Loures 2015; McGrath, 2000) literature regarding contaminated land and the challenges with remediation is unfolded (Baylis and Allenby, 2006; CL:AIRE, 2015; Thomas, 2018). This is to understand the many barriers developers see when they are looking towards these complex sites (Bartke, 2011; Dixon et al, 2011; Loures, 2015).

A review of how political initiatives in the UK have affected the development of brownfields is done to understand what is, and has been, the driver for the redevelopment of brownfield sites(Dixon, 2007; Dixon et al, 2010; Dixon et al, 2011; NRTEE, 2003; Schulze Bäing and Wong, 2012). This review will also provide knowledge about why some areas are left vacant for a longer period of time and help locate the more problematic areas.

The impact derelict land and its effects on the local community, especially deprived ones, are looked into (Díaz et al, 2011; Han, 2013; Kivell, 2002; Newman, 2013, 2015, 2018; Schilling and Logan, 2008) and an alternative way of activating these sites in a low-cost way is studied through temporary design (Andres, 2013 ; Desimini, 2015; Lydon et al 2015; Németh and Langhorst, 2013). The positive and negative aspects this approach can have when it comes to influencing a long-term transformation of vacant land is then discussed and concluded upon.



Fig. 28.1 an advert for Gasmantle

GASWORKS AS POST-INDUSTRIAL HERITAGE

The gasworks provided heat and light for the surrounding neighborhoods and with their gasholders they have, for a long time, been a noticeable part of the urban scene. Now, disruptive technologies have left gasworks sites vacant and without purpose (RIBA,2017). Gasworks sites all over England are being transformed, but only on a few sites are the structures of the gasholders preserved and given new value. It is relevant to raise the question about the industrial heritage value of these gasholders, and how this value can be exploited. To elaborate on this theme it is necessary to look into the historical role of gasworks and gasholders in England as well as examples of how and where they have been treated as post-industrial heritage in later years.

EVOLUTION OF THE GAS PRODUCTION

Gasholders emerged together with the expanding demand for town gas in Britain during the Victorian times. They were used to store gas from nearby gasworks (Johnson, 2013; Thomas, 2014). The primary use of gas in the 19th century were lighting in public buildings, hotels and restaurants, and by the 1840s the market also included the private homes of the wealthy people. When other gas driven household products emerged, such as the gas driven cookers which became popular in the 1870´s, the demand for town gas grew even more. This resulted in an acceleration of the innovative technologies related to gasholder structures (Thomas, 2014).

The first telescopic gasholder was invented in 1824 (Nationalgasmuseum.org.uk, 2018; Thomas, 2014). The gas was produced from coal at nearby gasworks and stored during the day in the gasholders. As the tank filled up, the structure would rise



Fig. 29.1 Gasholder in the urban scene

and expand like a telescope in order to hold the gas in their cylindrical vessels (Johnson, 2013; Thomas, 2014). In the evening, when people returned home and used gas for cooking, heating, and lighting, the large cylinders would slowly empty, and the pressure inside the tank would make the structure retract back into the ground (Thomas, 2014). These holders often had decorative column frames, which were highly visible in the urban scene, even when the cylinders were retracted.

The next major development in engineering related to gasholders came in 1890 with the building of the first spiral guided gasholders (Johnson, 2013; Thomas, 2014). These holders used spiral rails instead of column guided frames. In addition to apply gas for local residents it was discovered that byproducts from the manufacturing of gas could be used in other markets like coal tar for the dye industry and coke for burning fires to heat domestic properties (Thomas, 2014).

By 1920 gas was facing competition from other technologies, electricity being the biggest competitor for many domestic purposes (Nationalgasmuseum.org.uk, 2018; Thomas, 2014). The gas industry started to seek alternative gas feedstocks and gas supplies. This transition marked the beginning of the end for the production of gas from coal in Britain. The discovery of offshore gas and the invention of high-pressure gas pipe technology lead to a paradigm shift within the gas industry which over time left the coal gas production and thereby gasholders without purpose (Johnson, 2013; Thomas, 2014). These post-industrial landscapes are now left vacant and the challenge is to reintegrate these sites into the surrounding community (Loures, 2015).

POST-INDUSTRIAL LANDSCAPES AS A RESOURCE

Vacant post-industrial sites are found all over the world as a result of the shift in the global economy going from manufacturing oriented to a service based economy. Disruptive technologies and growth of new service sectors and cultural consumption have had an impact on both the economy and spatial construction of our cities (Gospodini, 2006). Post-industrial landscapes are known to be large assets to the contemporary culture, teaching both about development of society and the collective identity (Office of Environment and Heritage, 2012; TICCIH, 2001). The narrative of the gasworks sites in Britain illustrates how unique a part of the urban landscape these structures were, as well as how important they were for the quality of the surrounding neighborhoods. In addition, it is said that the gasholders are a testimony to Britain´s role in creating the industrial revolution (Ram, 2015), as well as a mark of a transition that introduced warmth and light into peoples homes. In later years several transformations of industrial heritage sites have taken place all over the world, including transformation of gasworks sites and gasholders.



Fig. 30.1 Gasometer City

VIENNA

Gasometer City is a district of Vienna in Austria that was built around four gasholders, located a couple of kilometers from the city centre. These brick structures were classified as heritage buildings due to their unique architecture and were transformed in 2001. Each gasholder has a diameter of 60 metres and today houses apartments, retail, a cinema and an event hall with over a thousand seats. The outside brick facades and metallic roofs are the only remains of the original construction. (Atlas Obscura, 2018)

LONDON

Gasholder no.8, situated in King's cross, London, was a heritage listed structure, originally constructed in the 1850s. In 2017 the transformation of the gasholder was completed and today it serves as a park. The architects maintained the outer structure and guiding columns of the gasholders to create a link between the past and present. The project displays the heritage and combines it with recreational value. In the same area three gasholders have been restored in the same manner where the historical column frames have been re-erected around a series of apartment buildings (Gas Holders London, 2018;Kings Cross, 2018).

DUBLIN

The Alliance building is a similar project where the concept was applied in Dublin in 2005. In this example the preservation of a gasholder structure served as an iconic focal point of transforming a central part of the city by the docks. The frame was incorporated into the design of a 9-story glass facade housing 240 luxury apartments (Weber, 2002).

In these examples parts of the historical structures are preserved and reused as a unique site specific resource to attract and enhance a local identity. It is a common understanding that in a globalized world one should recognize post-industrial heritage as an economical and social resource, and focus on historic identity rather than global icons in urban development (Fossa, 2014; Loures, 2008; Oevermann and Mieg, 2015). In the previous examples the size and form of the gasholder volume, as well as the unique frames and materiality are the qualities that are being preserved. It is important to point to the fact that not only have the sites gone through a physical transformation, but these places have also been given a new purpose. They introduce new value to contemporary society in the form of housing, recreation, leisure and public functions. However, these examples are parts of larger urban development projects and/or are situated on relatively high valuable land, making them the exceptions rather than the common practice. The common practice in the UK is that the owner of these sites demolish the sites before selling them to a developer (RIBA, 2017; National Grid, 2018), removing all traces of the past.

Because the gasworks played such an important role in the local neighborhood, it is important to explore the possibility of changing the current practice in order to exploit the value of industrial heritage on less valuable land. To do this one must understand the different challenges and opportunities related to the redevelopment of gasworks sites.



Fig. 31.1 Alliance Gasholder



Fig. 31.1 Gasholder no. 8

DEVELOPING CONTAMINATED LAND

Gasworks sites, are specified under the wider category of *brownfield*, which in the UK is an interchangable term with *previously developed land* (PDL). Brownfields or PDL are defined as "Land which is or was occupied by a permanent structure, including the curtilage of the developed land and any associated fixed surface infrastructure." (DCLG, 2006; MHCLG, 2012; Schulze Bäing and Wong, 2012).

Brownfield sites are known to contain an uncertain amount of hazardous chemicals that need to be treated before the sites can be developed (Baylis and Allenby, 2006; CL:AIRE, 2015). Multiple studies have been conducted exploring barriers associated with the development of contaminated land (Bartke, 2011; Dixon et al, 2011; Loures, 2015). Among these, practical uncertainties regarding remediation and high redevelopment costs are factors experts often are concerned with (Bartke, 2011; Loures, 2015).

To understand how Gaswork sites can be transformed it is necessary to explore the direct and indirect challanges that come with developing contaminated land.

REMEDIATION

The contaminants on a site depend on the materials that were produced on it and the sites' history. The challenge is that each site is different (Baylis and Allenby, 2006). It is therefore necessary to conduct ground investigations of each site to identify which contaminants that need to be remediated, and which technologies to treat them with. When referring to the remediation process, there are different ways of doing this; *in situ* or *ex situ* (Baylis and Allenby, 2006; CL:AIRE, 2015; Thomas, 2018).

In situ technologies treat contamination without excavation of the contaminated soil or abstraction of contaminated groundwater. Ex situ treatment happens through excavated soil or abstracted groundwater. The timescales for ex situ methods are typically shorter, but conversely excavation is likely to increase the costs and require more space on top of having a greater impact on the ground environment.



Fig. 33.1 Linacre Gasworks

The excavated soil or water can be treated on the site of origin, or it can be transported to off-site treatment facilities for a more effective process. However, the transportation of the excavated soil is often undesirable in a dense neighborhood setting, due to the amount of traffic the procedure generates. (CL:AIRE, 2015; Baylis and Allenby, 2006).

There are also different categories for remediated land. One usually differentiates between *statutory remediated* and *non-statutory remediated.* If a land is statutory remediated it satisfies the legal requirements for the sites current use, and does not pose as a risk to harm human health, controlled waters or the wider environment.

While statutory remediation is concerned with the current use of the site, non-statutory remediatiated sites satisfies the legal requirements for a proposed change of use. These sites have often gone through more work and are of higher standard than statutory remediated sites. (CL:AIRE, 2015)

The different remediation technologies have different timescales. This means that one cannot anticipate the exact time of the whole remediation process for a specific site until the contaminants are identified and the methods for remediation have been chosen. The timespan for different remediation technologies usually utilized on gasworks sites spans from 6 months to 30 years (CL:AIRE, 2015; Thomas, 2018). Most gasworks would look to be completley remediated over a period of 1-2 years. However, sites with groundwater issues may take more years to remediate as groundwater is more difficult to access (Thomas, 2018).

Although the need for remediation is a great barrier, it is far from the only difficulty associated with contaminated land (Bartke, 2011; Dixon et al, 2011; Loures, 2015). These uncertanties with remediation-time and -cost makes gasworks sites risky development projects.

RISKS ASSOCIATED WITH CONTAMINATED LAND

Many of these complex sites do not only have obvious contamination issues (Alberini et al, 2005; Bartke, 2011; Gibbons et al, 1998; Loures, 2015; McGrath, 2000), but risks related to the uncertainty of contamination, are also significant barriers for the development. The risks associated with contaminated land, therefore also gasworks, can be categorized as liability claims, investment, usability or stigmatization (Bartke, 2011). If one is in possession of contaminated land one is responsible for potential wrongs done in the past which might come with uncertain expenses. Even if the owner has no intention of any development on the site, they are still liable and have to pay if the site has any negative impact on the surrounding environment.

The investment into these sites can also come with uncertain expenses. During development one might uncover additional costs when it comes to excavation and remediation. If the remediation costs become too extensive, authorities can impose restrictions to the use of these sites, constraining the developer. Therefore, the redevelopment of these uncertain sites become risky, opposed to brownfields where the state of contamination is already known. (Bartke, 2011)

A certain stigma is associated with contaminated land (Bartke, 2011; Dixon et al, 2011; Loures, 2015). "Even if all authority requirements for use and private claims are met, properties with a history of contamination will still have a battered image."(Bartke, 2011).

This means that potential buyers might fear hidden risks and uncertainties associated with the site, without legal justification. This phenomenon of stigmatization of contaminated sites has a huge impact on the market value of the sites. Studies have shown that properly decontaminated sites on average still have a depressed market value of 12.25% (Bartke, 2011).

The market reduction caused by the irrational fear of risk is referred to as Mercantile value reduction (MVR) (Bartke, 2011). Figure 37.2, shows how MVR decrease over time.

The different risks shrink with time and investment. The cost and usability risks associated with contaminated land are inevitable, but it will shrink to zero as more investigations and remediation are put into the project. The liability risk also shrinks with time and investment, but the owner of the site will always be responsible for the sites impact on the environment. The stigmatization, however, is a psychological effect that also exists after the site is remediated. This is why the MVR never goes down to zero, although it shrinks as the level of information about the sites increase.

Because of the risks associated with contaminated brownfields, they become undesirable land to develop, even after they are properly decontaminated. Some suggest that measures could be taken in order to guide the market in a direction through political initiative (Dixon et al, 2011).

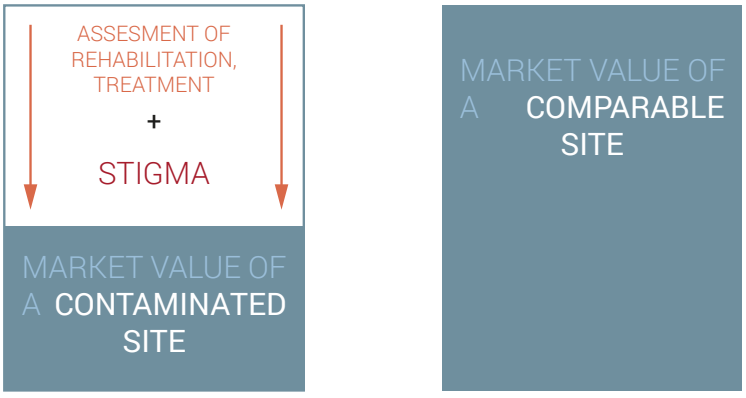


Fig. 35.1 Market value of a contaminated site vs. a comparable site

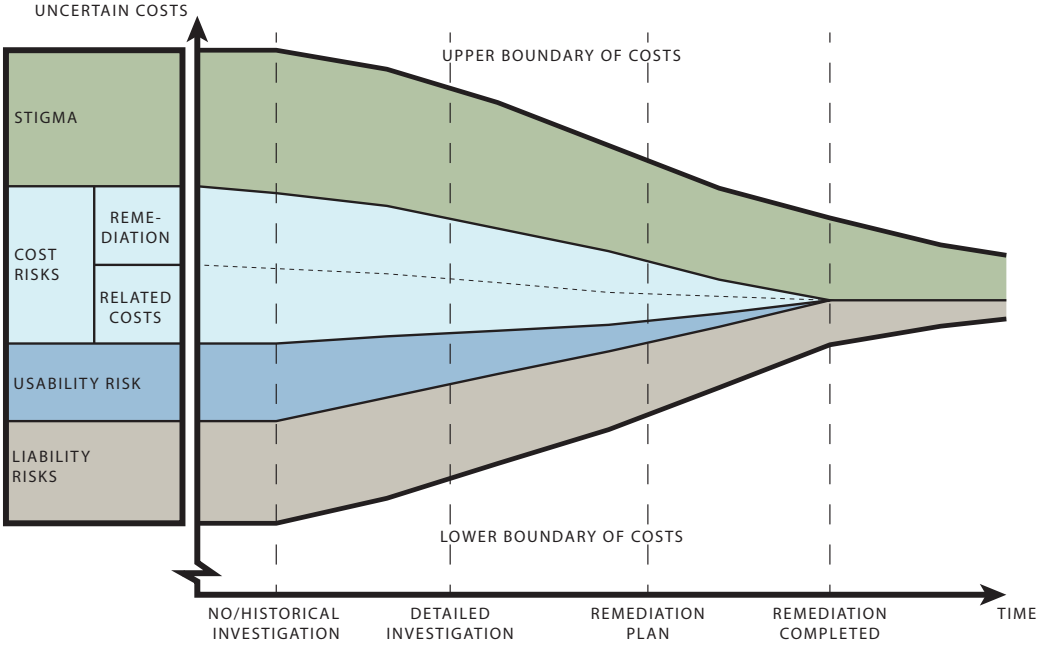


Fig. 35.2 Components and time dependence of Mercantile Value Reduction

BROWNFIELD POLICIES

Many countries have introduced urban regeneration policies, which are based on the reuse and regeneration of vacant and possibly contaminated brownfields (Dixon, 2007; Dixon et al, 2011; NRTEE, 2003). Some of these policies seek to promote economic growth as well as social inclusion (Adams et al, 2010; Dixon, 2007). A review of the UK brownfield policies from the last two decades has been conducted to understand the effect of these policies.

UK POLICY

To provide a focus on the regeneration of vacant, former industrial sites, the UK government announced a national target in 1998 demanding that at least 60% of all new housing should be built on brownfield land by 2008. This goal was achieved 8 years earlier than the target year, and reached 80% in 2008 (Schulze Bäing and Wong, 2012).

When The Great Recession happened, around 2008, the market got largely affected and it took years for the economy to stabilize and return to its former state (Loh and Scruton, 2018) This put policies regarding urban regeneration under threat in the UK, Europe and Southeast Asia (Evans et al, 2009; GLA Economics, 2008; Parkinson et al, 2009; Sato, 2010; Shirley, 2009) During this period the UK experienced a setback in urban development, and especially the development of brownfields (Dixon et al, 2010). The Great Recession made it extremely difficult to loan money for the development of high risk land (Dixon et al, 2010), which made complex and difficult sites with contamination even more marginalized than before (Dixon et al, 2011;).

In 2017 the UK Government forced a regulation for town and country planning that each local planning authority must prepare and maintain a registry of previous developed land. The Brownfield land registry is required to identify suitable brownfield sites available for development. Local planning authorities will be able to trigger a grant of permission in principle for residential development on sites in their registry, which is an alternative simplified way of obtaining planning permission, making this process less expensive and time consuming for the developer. The purpose of this regulation is to encourage investment in local areas (gov.uk, 2017).

The creation of "Housing infrastructure fund" (HIF) is an initiative which releases funding to local authorities who seek to improve infrastructure in local areas, and can demonstrate their ability to spend it before 2021 (Edwards, 2018). HIF will assist in unlocking the development of brownfield sites that are facing great challenges regarding cost of remediation. HIF is separated into a two tier system and the funding will depend on size and location of the local authority which means that its focus is to support development of sites that are close to existing built-up areas experiencing housing demand. (Edwards, 2018) To sum up the brownfield land registers identify non-greenfield sites that might be developed with immediate effect, while HIF is

a fund for local authorities, focusing on tackling long-term growth at a regional scale.

EFFECTS OF POLICIES

It is important to note that redevelopment of brownfields are market driven (Dixon et al, 2010). This means that the market has a significant influence on whether or not these policies are successful.

Even though the target set for housing development on brownfields in 1998 was achieved, the numbers might be misleading as the total amount of land used for residential development declined in this period (Schulze Bäing and Wong, 2012). Furthermore, research shows that in deprived neighborhoods where brownfields were redeveloped, the areas have experienced an increase in housing prices, high density developments, and shown an increase in the deprivation rank (Schulze Bäing and Wong, 2012). However, this could have been a result of the process of "social upgrading" which came with the new residents on the brownfield housing developments (Schulze Bäing and Wong, 2012). The focus on housing development on brownfields has also been criticized, proposing that future targets should adopt a more contextual approach and take into account that other needs could be beneficial for the local residents in the areas (Burroughs, 2015; Schulze Bäing and Wong, 2012.)

An analysis conducted in 2017 reveals that despite the success achieved by the national brownfields policy, the policies have loopholes which limits the brownfields regeneration and allow some sites to be favored over others (Longo and Campbell, 2017). They found that redevelopment happened on "easy brownfields", as more attention and resources are needed to develop "difficult brownfields"(Longo and Campbell, 2017). In this study "difficult brownfields" are explained as large sites, sites that have previously been used for industrial activities, and sites which are located within poorer areas (Longo and Campbell, 2017). This phenomenon has also been recognized by other researches stating that; only after the best properties have been picked, will developers look towards the more complex sites. A tendency that shows developers cherry-picking areas with stronger gentrification potential and profitability (Schulze Bäing and Wong, 2012).

The brownfields, which were not used for development during an up-period in the economy, end up being even more difficult to redevelop after a recession (Dixon et al, 2011) As the process of developing gasworks is rather complex, many of these sites have been amongst the brownfields that have not yet been developed. When these problematic sites are situated in less attractive and deprived neighborhoods, it takes longer time before the issues are addressed. Therefore, it is important to explore how the brownfields affect the neighborhood, and more specifically; the effect they have on deprived neighborhoods.

IMPACT OF DERELICT LAND ON NEIGHBORHOODS

Numerous studies have looked into how an excess of empty urban lots might disconnect the local community, create unsafe conditions, decrease the quality of life, make unsightly aesthetic consequences, damage the surrounding area, discourage future development, and limit economic growth (Díaz et al, 2011; Han, 2013; Kivell, 2002; Newman, 2013, 2015, 2018; Schilling and Logan, 2008). On top of this, several other sources agree that one of the major challenges with vacant and derelict land is that it often discourages new investment in the area, making it less attractive to live in (Kim et al, 2018; Newman et al, 2018; NRTEE, 2003).

A study of the impact of derelict land on local communities, conducted and published by the Groundworks Foundation in 1996, revealed that it is the unattractive blighting of derelict land that affects the local community the most from their own perspective. Sociologists have been trying to understand how people's behavior is affected by the visual or physical environment they are exposed to. Some suggest that if visual stains go unattended in a given environment it sends out certain signals and affect people's attitude towards that environment (Galster, 2012; James and Wilson, 1982; Keizer et al, 2008). This could mean that if one is exposed to an unattractive environment, one cares less to keep it attractive, thereby spreading a negative behavior. However, later research explores how people's actions and attitude towards their local neighborhood might be grounded in more complex issues (Brattbakk, 2017; Galster, 2012).

Empirical studies concerned with these issues often refer to them as "Neighborhood effects "(Brattbakk, 2017; Galster, 2012; Kirkness and Tijé-Dra, 2017; Oberwittler, 2004). A common factor is that research explores the notion of what the neighborhood actually "does" to the people who live there. This includes a variety of geographical, institutional, social, and environmental factors (Galster, 2012). It is often distinguished between the effects that happen internally in the neighborhood and the effects that are influenced by the surrounding community (Galster, 2012). Both the internal and external effects are difficult to counteract because they act as a self-reinforcing effect on the community. (Brattbakk, 2017)



Fig. 39.1 Vacant land

SOCIAL NORMS

Commonly used theories explaining internal effects take point of departure in learning (Brattbakk, 2017; Galster, 2012). It has a close tie to the traditional theories about socializing, explaining that norms, values and behavior are taught through primary and secondary socializing (Brattbakk, 2017; Galster, 2012). Primary socializing, which happens within the home, has the most impact. However, secondary socialization, which happens in social settings outside of the home, becomes increasingly important the more time is spent in the neighborhood (Brattbakk, 2017). Neighborhood effects could lead to the development of a set of social norms that might differ from the wider community (Brattbakk, 2017; Galster, 2012). This effect, as a consequence of internal relations, becomes self-reinforcing as behavior and values are directly influencing and influenced by neighbors, and lack influence from its surroundings (Brattbakk, 2017). This theory is central in the understanding of the effects neighborhoods have on children but could also be applied to adults. Children's behavior and values can easily be changed to the worse through contact with older people in the neighborhood that act as role models (Brattbakk, 2017; Galster, 2012, Oberwittler, 2004).

The groups that are most exposed to the internal neighborhood effects are the ones that spend a significant amount of time in the neighborhood (Brattbakk, 2017). One could argue that deprived areas are especially affected since unemployment is often a major challenge, and people without a job tend to spend more time in the neighborhood. Young and elderly people are also groups that spend more time within the neighborhood since they often do not have the resources to travel far (Brattbakk, 2017).

TERRITORIAL STIGMATIZATION

The external effects are concerned with how the surrounding community could affect the neighborhood (Kirkness and Tijé-Dra, 2017; Wasquant et al, 2014 ; Wessel, 1997). Territorial stigmatization can be explained as a consequential form of action through a collective representation fastened on place (Wasquant et al, 2014). It concerns how areas with poor reputation can influence the residents. Stigmatization can have negative consequences for the inhabitants because public and private sectors, as well as the media and other people, could give the inhabitants negative, stereotypical characteristics (Kirkness and Tijé-Dra, 2017). This has been seen as a problem in the UK because the tabloid press often look to identify the 'worst neighborhoods' in a city or the country (Kearns et al., 2013; Kirkness and Tijé-Dra, 2017). Furthermore, it could have a negative impact on the inhabitants' self-esteem, pride and local identity (Wasquant et al, 2014 ;Wessel, 1997).

A common issue with stigmatized areas is that the market price of housing is reduced (Flynn et al, 2004; Messer et al, 2006). This could lead to a maintenance or reinforcement of segregated areas as low-income families have a tendency to move to areas where housing prices are low while middle class families try to avoid such areas (Brattbakk, 2017; Fry & Taylor, 2012)

The public sector could propose interventions with the intention to contribute to a positive development and strengthen both ownership and pride in the area. But this could have the opposite effect than expected. It could strengthen the stigmatization and make the locals feel pettiness and as if they are being treated differently and their perception might be that they do not need help (Brattbakk, 2017).

The presence of vacant land is known to discourage new investment in the area, limit economic growth and reduce the quality of life. This is especially critical in deprived neighborhoods that already suffer from economic and social problems. Because of the neighborhood effects in these areas, the issues become difficult to counteract and large investments on contaminated vacant sites in deprived neighborhood seem unrealistic. One can either wait for the larger development to start, or seek other low cost solutions that could activate the vacant land. Smaller initiatives to improve deprived neighborhoods could be to highlight good role models, involve the community to create something they are proud of, and emphasize the good things about the neighborhood.



Fig. 41.1 Barbed wire



Fig. 42.1 De Ceuvel

TEMPORARY USE

Temporary design has both been cherished and criticized as a low-cost method for urban development throughout the years. (Andres, 2013 ; Desimini, 2015; Lydon et al 2015; Németh and Langhorst, 2013) Temporary projects can vary widely in duration and purpose and their viability depends on the local market and regulatory conditions (Lydon et. al, 2015).

Temporary projects are spread across diverse occupation types, like guerilla activities, urban gardening, pop-up shops, startups and urban spaces. They have been known to be a low-cost alternative to activate vacant land, when projects that need large investments are either put on hold due to decline in economy or are not profitable. (Andres, 2013; Desimini, 2015) Temporary use also has the potential to catalyze communities around common goals that prioritize the local needs (Lydon et. al 2015; Németh and Langhorst, 2013).

Németh and Langhorst propose certain conditions that are appropriate for temporary use. They argue that the implementation of temporary uses, grounded in the specific context and conditions of the vacant land, are more likely to be successful. Their research suggests that land, which has experienced vacancy for a longer period time and is situated in areas that seek redevelopment are appropriate for temporary use. However, the employment of temporary use as a catalyst for a positive change in places that lack investment has been criticized (Andres, 2013; Desimini, 2015). Temporary projects can be initiated by several different actors. The temporary occupants influence on the final master planning is often dependedt on the collaborative process between them and the long-term developer (Andres, 2013). From the case study done by Andres in 2013 it might seem like the influence temporary design has on the final master plan is dependent on the temporary occupants' ability to demonstrate the relevancy of their temporary initiatives. The danger is that temporary occupants lose their influence as soon as the temporary use shifts towards a more strategic



Fig. 43.1 Institut for (X)

master planning. Then the temporary activity only serves as a tool for economic and cultural development, and the project looses the local grounding in the long-term outcome (Andres, 2013).

An umbrella term, to describe the approach of using low-cost and temporary changes to neighborhood building and activation, is tactical urbanism. The idea of the tactical urbanism movement is that small scale changes done by local citizens can serve a larger purpose (Lydon et al 2015). In this context small scale projects are seen as a tool to widen the sphere of public engagement and test aspects of a plan early and often with the aim of producing the most contextual solution. With other words: test the idea in a small scale and analyze the result before developing it further (Lydon et. al 2015). This so-called learning process can give an understanding on how different communities respond to the changes, to see if the design is sustainable in the context.

If one seeks to use the temporary design model, there are several things that should be considered. Temporary use has proven to be helpful in the means of activating vacant land and has the potential to prioritize locals' needs. The process would benefit from a development where implementations are tested and analyzed in order for the initiatives to be sustainable. However, one should carefully consider the different stakeholders involved and their relationship if the aim of the temporary design is to affect the final master planning, so that the potential local asset is not lost in the transition between temporary and long-term transformation.

DISCUSSION

The first part of the literature review regarding the evolution of gas production and gasworks sites indicates that these sites provided an important resource for the local community and stood out visually in the urban scene. Whether people today perceive it as an eyesore, or if the historical character and memories influence the perception of such places has not been studied in full. The gasholder structures have in later years been treated as post-industrial heritage in certain incidents, and some transformations have utilized the physical features to create unique site-specific identities. However, this is not the case for sites situated on less valuable land, since the transformation of gasworks sites are risky investment projects due to the uncertainty of contamination and stigmatization. It is difficult to argue that these sites only hold a value as post-industrial heritage, when they are situated on valuable land. As with all post-industrial sites, it should be noted that their economic and social resource is important to focus on (Fossa, 2014; Loures, 2008; Oevermann and Mieg, 2015), and that these resources are highly likely to be present in deprived neighborhoods as well. This potential seems to be overlooked in these areas, and the current practice of demolishing and backfilling gasworks sites (RIBA, 2017; National Grid, 2018) makes the possible utilization of this resource difficult to achieve. This current practice is likely to be a product of the stigmatization, the barriers and risks associated with these complex sites, and so the sites are made ready for development before their final use is decided. This results in a redevelopment that leaves no trace of the historical structures. Seeing that the stigmatization of contaminated land is an effect that also exists after a site is properly decontaminated, in order for these complex gasworks to be equally compared with other brownfields, some change in the way brownfields are registered could be suggested. Policies that target all brownfields as the same ends up reinforcement cherry-picking, leaving those sites that are least desired vacant for extended periods if they are not situated in areas with stronger gentrification potential. (Schulze Bäing and Wong, 2012) For the last two decades the brownfield policy in the UK has focused on initiatives that promotes housing development on brownfield land, however, brownfield development is highly affected by the market. Not all studies agree that government support to fund a gap in redevelopment costs will solve this problem during economic recession (Dixon et al, 2011) however, if nothing is done to encourage development of these sites, they will remain vacant and will further affect the neighborhoods in which they are situated. Deprived neighborhoods, where brownfields actually where redeveloped, showed an increase in their deprivation rank. However, some believe that this is a result of social upgrading, as new residents have settled in the area.

When it comes to the presence of vacant land, it discourages the new investments, limits economic growth and reduces the quality of life (Kim et al, 2018; Newman et al, 2018; NRTEE, 2003),which along with policies targeting brownfields equally results in the deprived neighborhoods suffering more, since these are already stigmatized. In areas where gasworks sites are left vacant for a longer period of time, often, the area already suffers from economic and social problems. These areas might suffer from a lack in local pride and self-esteem and the presence of unattractive sites, like vacant gasholder sites, potentially makes inhabitants care less about keeping the rest of the neighborhood attractive. There is a large amount of literature regarding temporary use on vacant land and exploring this method as a tool for activation of land, but less literature investigates the method as a way to exploit the value of post-industrial heritage before any long-term development.

CONCLUSION

Gasworks sites being complex to develop makes them vacant or under remediation processes for long periods of time. This results in the sites affecting their neighborhood negatively by being vacant and derelict and spreading this tendency of not caring. Developing gasworks sites that are contaminated and leave behind large voids is a more complex matter than simply rethinking a flat brownfield. The brownfield policies in the UK has led to developers cherry-picking the most attractive browndfield leaving complex gasworks sites in deprived neighborhoods undeveloped. However, the structures they hold represent a post-industrial recource that could benefit the local community and developers if exploited. Alternative methods to the current practice of exploiting this value are limited, especially in deprived neighborhoods. These neighborhoods are, by definition, already low on resources an could benefit from a transformation prioritizing he preservation of this heritage. This could potentially strengthen the local pride and created something unique and site specific for the surrounding community. However, the market does not afford such developments in these areas with the stigma surrounding both complex contaminated sites and deprived neighborhoods. Since the stigmatization is still present after complete remediation, a countermeasure to this should be investigated to approach this barrier.

A low risk and cost solution could be to propose a temporary use, although the successfulness of such a method is highly dependent on the site and context affordability. Temporary activities could potentially catalyze reuse around local goals and prioritize the local needs, and this could be more beneficial for deprived neighborhoods than doing new residential developments. However, if one seeks to use the temporary activity as a tool to influence the final transformation, the temporary occupants have to be able to demonstrate the relevancy of their initiatives to possibly affect a long-term development.

LINACRE GASWORKS

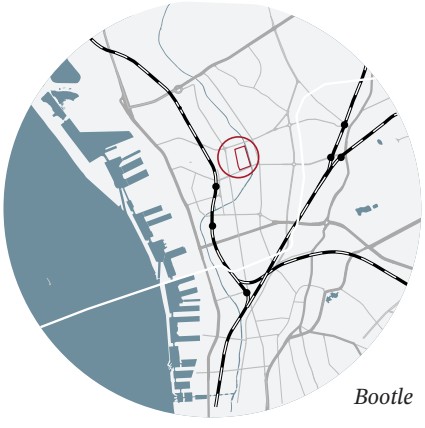
In this chapter the case of the Linacre gasworks site in Bootle is presented. The greater area in which the case site is situated is shortly introduced, followed by a historical evolution of the immediate context of the gasworks and the contemporary situation of Bootle. The neighborhoods surrounding the 6,3-hectare enclosure, are looked into in terms of deprivation, along with the current state of the site. Finally, parallels and connections are drawn to the previous literature to articulate the relevance of this site in the discussion of complex post-industrial sites.



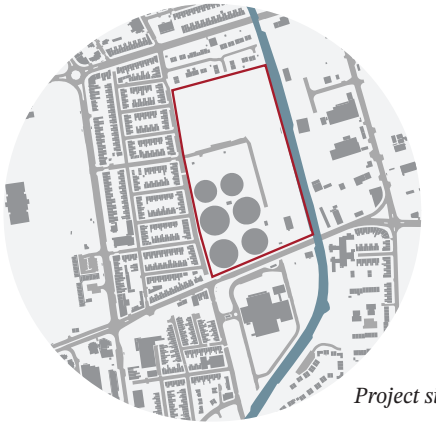
The United Kingdom



Liverpool



Bootle



Project site

Fig. 48.1 Zoom in on case

BOOTLE - LIVERPOOL

The site this thesis aims to propose an intervention for is located in the UK, more precisely, the town of Bootle. Bootle is a town with 25.000 inhabitants and is situated on the north edge of the Liverpool metropolitan. The town is part of the Merseyside county and is one of the main administrative headquarters for the metropolitan borough of Sefton. Sefton is one of the six local government districts in the Liverpool city region.

During the 18th and 19th century Liverpool emerged as a modern global city, based on the new systems of international trade and capital. The growth and wealth was manifested physically in architecture, industrial landscapes, docklands, railways and public housing (Sykes et al, 2013). Today Liverpool is emerging from its experience as a 'shrinking city' of the post-industrial era (Bounds and McClean, 2016: Stykes et al, 2013) and the city has been a test bed for urban policies throughout the 20th century. Liverpool has experienced a shift from planning for growth to managing decline. Numerous initiatives have been implemented to "regenerate" the city's economic, physical and social fabric. Some efforts have been successful, and some have been deeply damaging, making the city something of an "Urban laboratory" (Sykes et al, 2013).

The project site is a vacant gasworks in Bootle. It is located at the corner of March lane and Litherland road and is referred to as the Linacre gasworks. The site is framed by a busy road in the South, the Liverpool Leeds canal in the East, and a residential area in the North and West. The gasworks has good connections to public transportation in the form of busses and trains. The nearest train station is five minutes walk from the gasworks and will take you to Liverpool in 13 minutes.

1850 1890 1900



THE EVOLUTION OF BOOTLE

In order to understand the current situation, it is necessary to look into the historical evolution of Bootle. The diagrams show the development of the built fabric on the gasworks site and its immediate context.

In Liverpool the 19th century is referred to as the "Golden age". Through the 19th century the population of the wider urban area of Merseyside experienced a significant increase. The expanding wealth and population was naturally reflected in the urban development (Sykes et al 2013). The port's location had easy access to Dublin, Glasgow and the New World colonies across the Atlantic Ocean, as well as connections to the rapidly industrializing English north and midlands. The docks were referred to as the Gateway to the Empire and attracted many immigrants from across the British Isles and further out in the continent.

Towards the middle of the 19th century Bootle started experiencing the expansion of Liverpool, which had established itself as an important national trading port (Historic Liverpool, 2018.; Hollinghurst, 2014) Only a few docks stretched from Liverpool to Bootle, but the community was fearful of being absorbed into the governance of Liverpool. Instead of being joined to Liverpool, Bootle extended to the north to the Borough of Sefton, together with Crosby, Southport and parts of Lancashire.

The growing suburbs were filled with places, associated with the influx of people, such as chapels, recreation grounds, theatres and shops in addition to the expanding docks and addition of industrial works serving them (Hollinghurst, 2014). In this period Bootle expanded rapidly. This was mainly because of the growing developments of Liverpool docks (Historic Liverpool, 2018.; Hollinghurst, 2014). As illustrated on figure. 51.1 the gasworks was built between 1850 and 1890, and by the end of the 19th century it was surrounded by residential housing.

Through the 1930s recreational facilities and housing were improved, but the ambitious plans were abruptly cut short by the war. Bootle with its docklands was one of the main targets during World War II due to its shipping functions for the country (Merseyside Fire & Rescue Service, 2011). During the war many gasworks were also damaged through aerial bombing (Thomas, 2014).

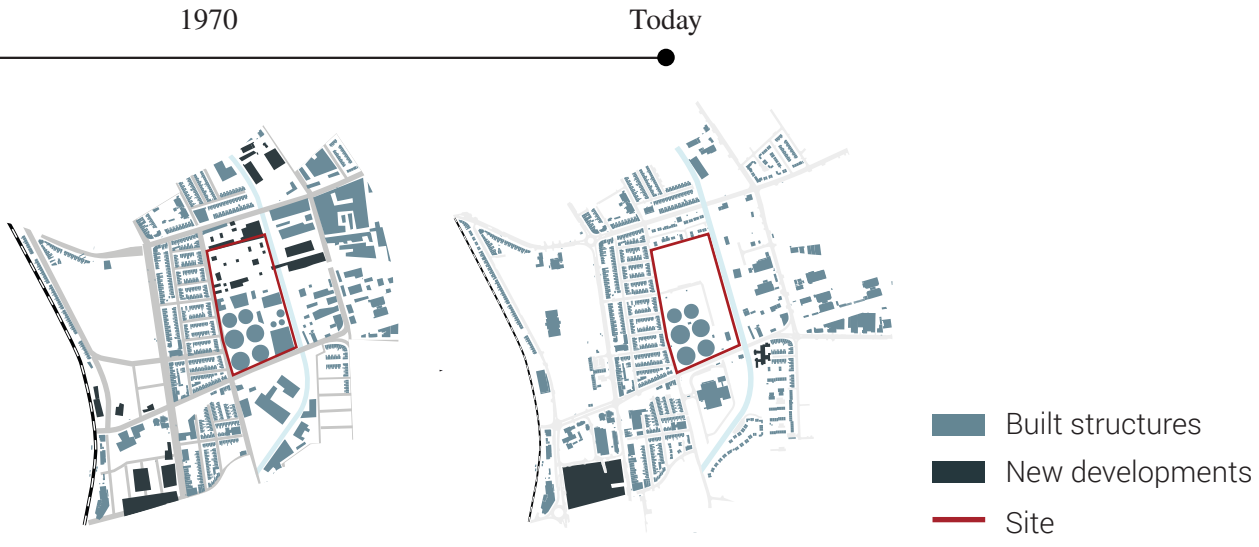


Fig. 51.1 The evolution of Bootle

By the end of the war more than 90% of Bootle´s houses were damaged or destroyed. Space released in the centre, due to the war, was used for regeneration, which resulted in The Strand shopping centre and other superstores being developed in the early 60´s. These had problematic effects on the local retail (Hollinghurst, 2014). At the same time - new offices were built in the town centre and the establishment of office blocks provided employment, but these were mainly filled with middle-class people from outside of Bootle (Hollinghurst, 2014). Bootle suffered from economical and sociological challenges in the late 20th century, both because of the unfavorable external economic condition following the war and major public policy mistakes (Hollinghurst, 2014; Stykes, 2013).

In the 1960 and 1970 the very thing that built Bootle, the docks, lost its importance. This resulted in reduced economy, unemployment and shutdowns of many public and cultural institutions that once thrived in the area (Hollinghurst, 2014). De-industrialization hit the UK in the 1980s In this period Bootle expanded rapidly. This was mainly because of the growing developments of Liverpool docks (Historic Liverpool, 2018.; Hollinghurst, 2014). On figure. 51.1 one can see how the de-industrialization affected Bootle. The industry north on the site and to the northeast of the site has declined.

CONTEMPORARY SITUATION

The history of Bootle has had a big influence on how the situation in the town is today. Bootle was a town built upon the industry which was hit by the global economical restructuring and deindustrialization. The very foundation of the previously thriving society, the docks and the former industrial works that surrounded the canal, left the town with a high amount of vacant land. Sefton council's Brownfield registers, see figure 53.1, mapped the sites that are defined as vacant brownfields in Bootle.

The typology in the town is dominated by terraced housing from different ages. The town has several old parks; North park, South park and derby park. There is a leisure centre situated in the North Park, which includes a swimming pool, and various indoor sports halls. The North park is also an arena for outdoor activities which includes playgrounds, a skate park, urban gardens and sports fields. The Liverpool - Leeds canal is no longer used for transportation of goods, but as a pedestrian path where one can encounter people going for a stroll, walking their dogs, or biking.

The main shopping area of Bootle, located on Stanley Road, contains smaller independent retail options and a larger shopping centre called the Strand. The Triad building, located next to Strand Shopping Center, is the tallest building in Bootle and has 23 stories of offices. The office accomodation in the center of Bootle does not appear to match investor or private sector business requirements in terms of the layout of the floors or the cost of running it (Sefton Council, 2016). As a result of this, a large number of offices are today vacant. Within this year, 3500 jobs will be lost in Bootle when the tax office in the Triad building move their location to Liverpool. The town also has a college - The Hugh Baird College, which attracts over 7000 students. (Sefton Council, 2016) The town has good public transportation connections to the north and south through the Merseyside rail. The different physical features mentioned can be seen on figure 52.1 in relation to the project site.



Fig. 52.1 Bootle

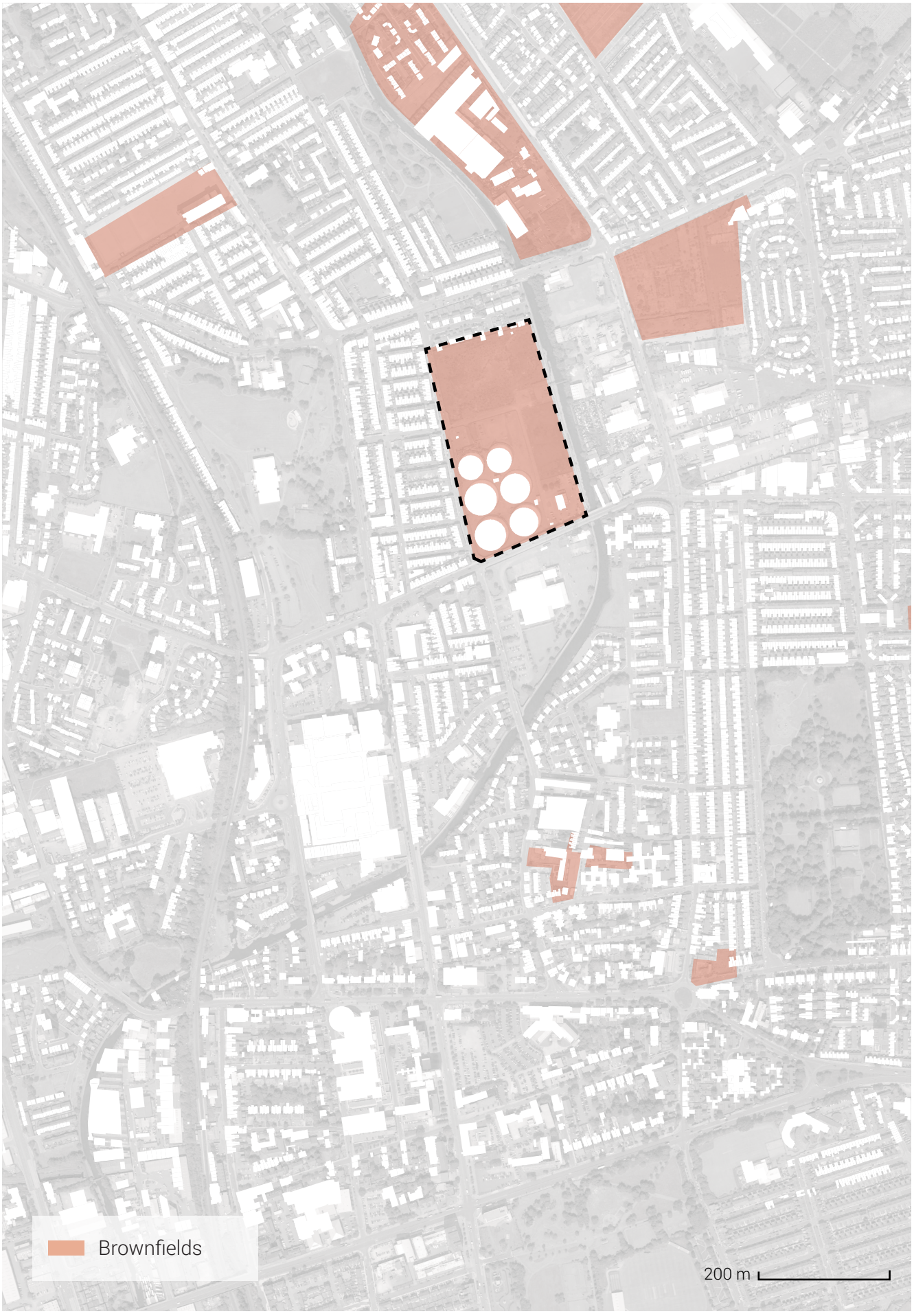


Fig. 53.1 Brownfields in Bootle



Fig. 54.1 Terraced housing

DEPRIVATION

Urban regeneration has been a priority for Sefton the past 30 years (Sefton Council, 2016). Still, the area is one of the most deprived in the UK. The English Index of multiple deprivation (IMD) measures relative deprivation for small areas and neighbourhoods, and in 2015 Bootle were within the lowest 1% in its IMD. Bootle scores especially low in the domains of employment, income and living environment deprivation. These domains are heavily weighted when the overall deprivation is measured (MHCLG, 2015). There are also significant inequalities in relation to skills and jobs within Sefton municipality, where Bootle and Netherton have a much lower level of qualifications and skills (Sefton Council, 2016). The issue with employment in Bootle is a consequence of this. A large part of the people working within the offices in the town are commuters, living outside the borough of Bootle.

In the future Bootle could benefit from the growth of the port and projects currently under development as an expansion of the Liverpool docks (Liverpool2 project) and the available office space in Bootle have been seen as potential as cheap "back offices" for the large companies in the Liverpool region by the council. (Sefton Council, 2016). An investment framework for the town center was released in 2016 with the vision being that Bootle should develop to be a desirable education and business location by 2030. This framework serves as a guide for investors in the area, however, the community has seen little progress since the framework was released (Dawe, 2018).



Fig. 55.1 The Triad building



Fig. 55.2 The Liverpool Leeds Canal



Fig. 55.3. North Park

THE LINACRE GASWORKS

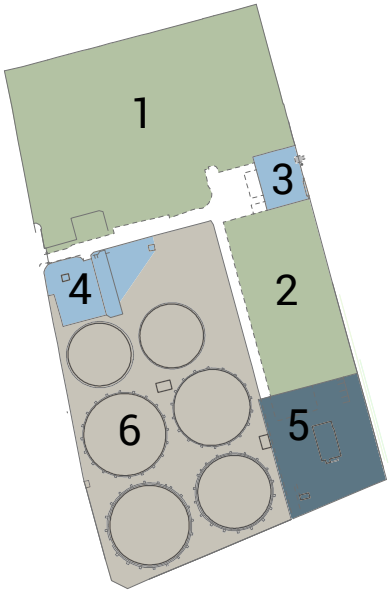
The information in this section is gathered from an interview with employees of National Grid during a site visit.

200 metres away from the central street in Bootle lies the redundant gasworks site on Litherland Road. It is situated next to the Liverpool-Leeds Canal, and measures 195 meters in width and 335 metres in length. The 6,3-hectare area is owned by National Grid Property Ltd,which is part of National Grid - the system operators of the gas and electricity network in Britain. Their primary task is to make sure private and public functions are supplied with the energy they need as efficiently as possible (National Grid, 2018)
The site on Litherland Road can be divided into six smaller areas, see figure 56.1 and 57.1.

Two of the gasholders were originally column guided with the remaining four spiral guided. The columns were dismantled and removed in 2011, so what's left of the unused gasholders are the holders and the below ground voids they are situated in. The only areas still housing operational equipment are those occupied by Cadent. The site as a whole is not categorised as contaminated land under the Environmental Protection Act (1990), however, National Grid says that they "always ensure sites such as this meet all relevant environmental standards so the land can be brought back into beneficial use after the gasholders have been removed." (Taylor, 2018) They are currently undertaking a national programme of dismantling gasholders that are no longer required, and the six gasholders on Litherland Road are planned to be dismantled and the voids in the ground left by the holders filled within the next five years. There is a standard process for obtaining permission from the Local Authority to dismantle the gasholders and undertake any infilling work.

National Grid has commenced this process and are engaging with the Council to share their plans for activities on the site. Any permission granted for the dismantling and/or infilling of the holders last for up to 5 years after the application is approved. In order to ensure the site is suitable for sale, following the removal of the gasholders, additional ground investigation works are required. As described in the theory chapter the remediation time can be anywhere between a few months and many years, which depends on what contamination may be present below the surface

"We want our disused gasworks sites to make a positive contribution for the community, and are happy to explore a range of options from sale to lease to deliver this." –Chris Taylor, Land Regeneration Manager, National Grid



1 & 2	OVERGROWN BROWNFIELDS
3 & 4	ACTIVE GAS PIPE AREAS, RUN BY CADENT.
5	DEPOT, CURRENTLY LEASED BY CADENT
6	AREA WITH SIX INACTIVE GASHOLDERS

Fig. 56.1 Six areas on the site

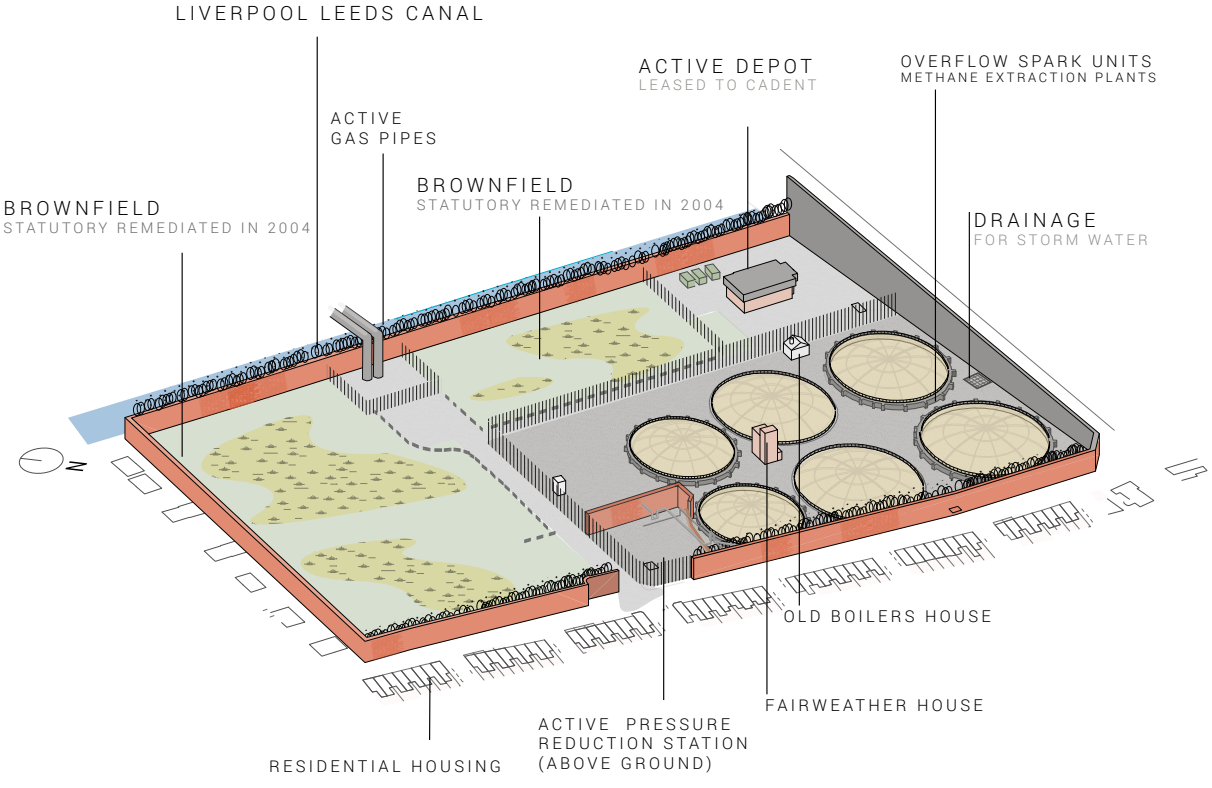


Fig. 57.1 Gasworks situation diagram

DISCUSSION

As a result of global economic restructuring and deindustrialization Bootle has gone from a thriving working class society to a deprived town facing high unemployment rates, low income statistics and poor living environment conditions. The sites that used to afford employment are now left vacant, and the combination of deprivation and the high amount of vacant land could, according to the reviewed literature, be the reason for the lack of investment in the area. There is reason to believe that a large amount of the people living in Bootle are experiencing the neighborhood effects, due to the high unemployment rates, if one connects the literature and case. It might be beneficial for the thesis to investigate local assets in Bootle that are working to improve these conditions in order to discover opportunities.

The Linacre Gasworks, like the literature review indicates, has been vacant for a long time because it is a risky development project in a deprived neighborhood. However, National Grid property, the current owner of the site, has plans to finish the remediation, demolition and backfilling of all their gasworks sites in the near future, making them ready to be sold. This will make these sites more attractive for developers and therefore closer to becoming an asset for the local community. Because the actor who initiates demolition is not the same as the developer, no plans for the site are made before demolition. This eliminated the chances of preserving elements on the site that hold historical value and could have been reused as an asset in future development.

Earlier this year, National Grid, sent a planning application requesting to demolish, remediate and backfill the gasholders on Linacre Gasworks. However, the planning application was rejected because the backfilling of the gasholder bases required more planning as the process generates a lot of traffic in the neighbourhood. Therefore, they will first apply for approval to demolish and remediate.

Due to the uncertainties about the ground contamination the point of time when the site will become non-statutory remediated and ready for long-term development is unknown. However, parts of the site is statutory remediated and could potentially host temporary activity. If one seeks to exploit this land and introduce a temporary activity the design and programming should be in relation to the contextual conditions in Bootle.

The practice of backfilling the voids will erase all trace of the gasworks. Since the Linacre Gasworks is a testimony to the past, there might be some local opinions and memories connected to it. Bootle used to be a thriving society in the time period where the gasworks were active, and therefore it would be interesting to investigate if the site has any heritage value for the local community.

CONCLUSION

The project has to take the present situation of the Linacre Gasworks into consideration. Due to uncertainties with contamination on the site one can not anticipate when the long-term development can take place. Parts of the site is statutory remediated, and could host temporary activity that could be beneficial for the residents in the area. The contextual analysis will therefore focus on obtaining knowledge that will be used to create a successful temporary design proposal for the statutory remediated part of the site. The analysis should also focus on the locals' perceptions towards the site, and investigate if there are any interests in the cultural heritage the site holds. If the historical heritage is important to the local residents, means to preserve and exploit this value should be explored. Because National Grid will apply for remediation and demolition before they apply for backfilling there is an opportunity to spark developers' interest before the backfilling takes place, and reuse the structures of the gasholder bases in a future development project.

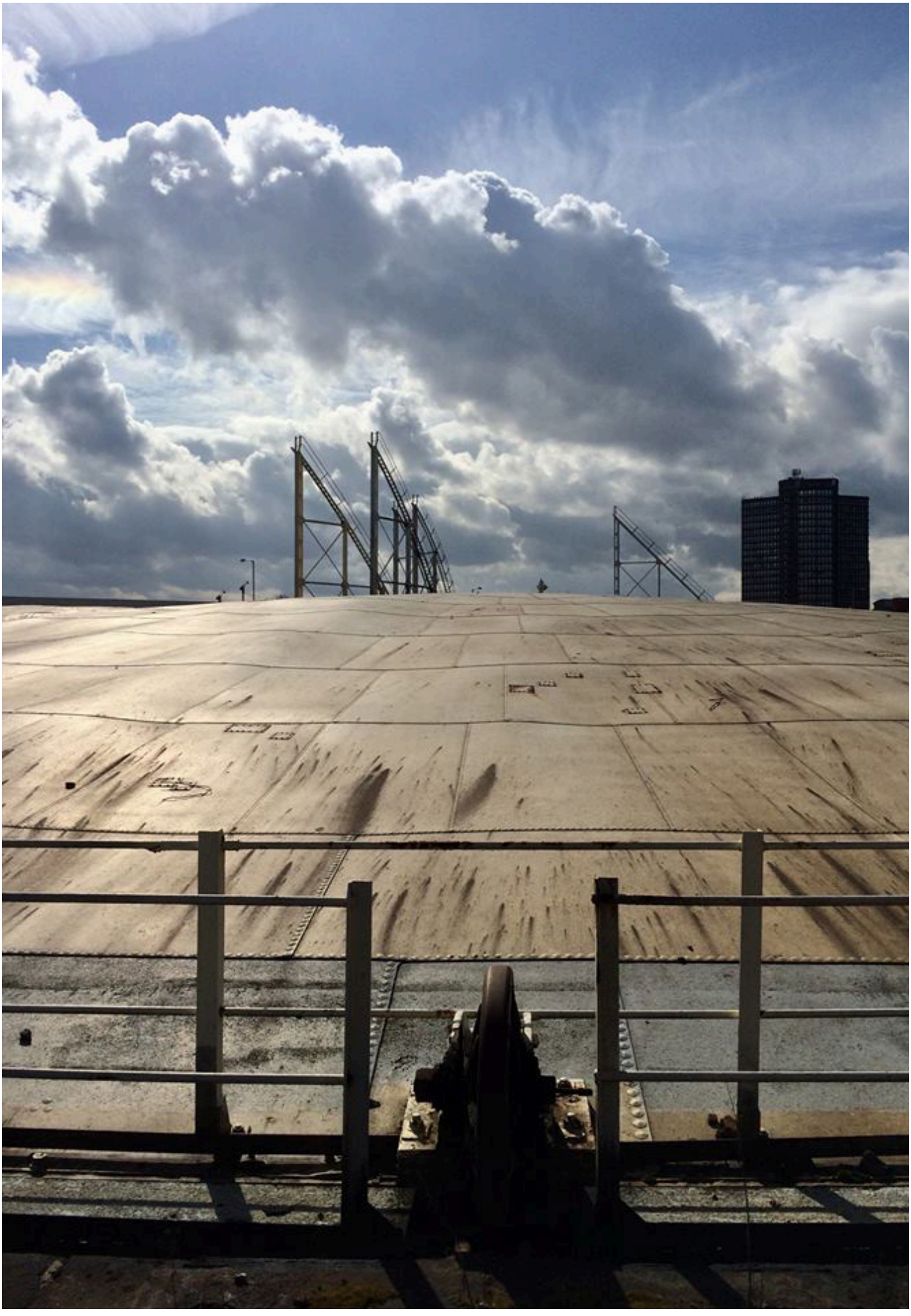


Fig. 60.1 Linacre Gasworks



Fig. 61.1 Brick wall

ANALYSIS

In this chapter the analyses of Bootle and the sites immediate context are presented. The different physical analyses are summarized in a contextual appraisal, and opportunities and constraints are presented. The local perception of the gasworks site is explored in order to understand the sites cultural heritage. The physical and societal opportunities and constraints are presented to support the development of a strategic solution to reintegrate the site into its surrounding neighborhood.

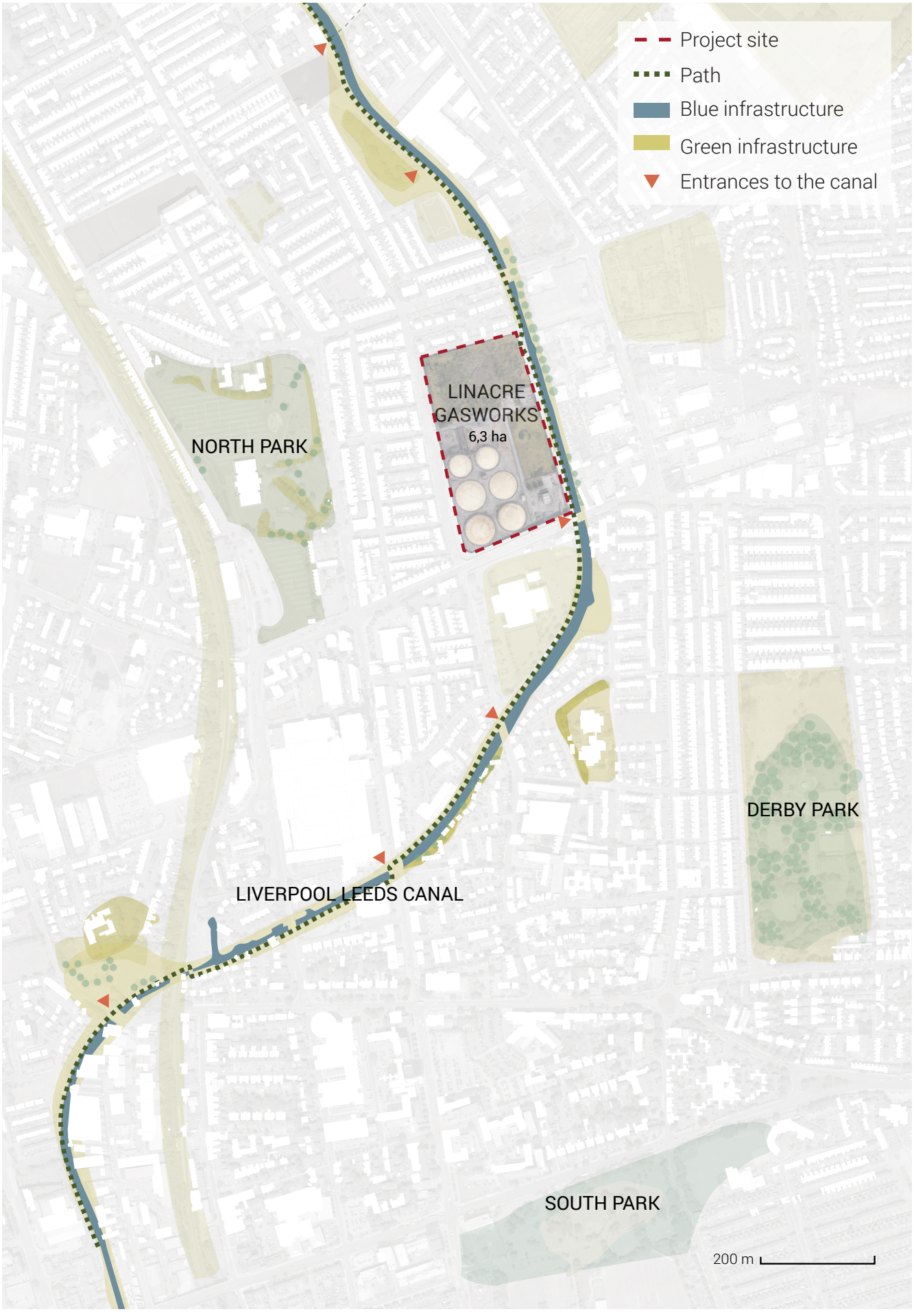


Fig. 64.1 Green and blue infrastructure

GREEN AND BLUE INFRASTRUCTURE

The Liverpool Leeds canal goes through Bootle and is the longest canal in North England. The canal, that was once used for transportation of materials for the industries (LLCS, 2014), is now serving recreational purposes. The past years the residents of Bootle have witnessed a transformation of the canal. The canal used to be heavily polluted (Dawe, 2018), but has now grown to become the home of rich vegetation and wildlife. The path that goes along the canal, is actively used by Bootle's residents. The canal is seen as a great potential in the development of the town centre and as a strategic green connection through the borough (Dawe, 2018; Sefton Council, 2016). The canal is framed by fences and brick walls that only allows the residents to enter the path from a few places on the westside of the canal. There are several actors who want to develop along the canal and create a stronger connection (Dawe, 2018; Sefton Council, 2016).

The analysis of the green and blue infrastructure shows that Bootle has some green patches and big parks; North park, Derby Park and South Park. These parks have some of the same charecteristics of big, open, green fields and connections between these are weak. Because the project site is situated between North Park and the Liverpool Leeds canal there is great potential to strengthen the connection between these two. Because the canal holds such a great potential, thorough analysis of the canal has been conducted. The main characteristic of the canal are shown on the next page.



Fig. 66.1 Linacre gasworks and the Liverpool Leeds Canal



Fig. 67.1 Trash



Fig. 67.2 Couch



Fig. 67.3 Canal wall



Fig. 67.4 Canal vegetation



Fig. 67.5 Canal entrance



Fig. 67.6 Canal art

CHARACTERISTICS OF THE CANAL

The Liverpool Leeds Canal that goes all the way through Bootle is a great contrast to its surroundings. The canal is separated from the east by a 2,5 meter brick wall. Some places the vegetation can be seen growing over the brick wall. On the east side the vegetation is characterized by reed and big weeping willows that provide the residents with a green view during spring and summer. The wildlife is represented in the form of a variety of different birds. There are entrances that allow people to go down to the water and walk along the canal. However, the entrances are few, and there are no recreational places that allows people to stay. This seems to be an element the residentials are missing, as temporary seating elements had been placed along the path. In contrast to the positive elements, the canal had a lot of garbage in the water. It could seem as the residents do not care about the canal. Through an interview, it was mentioned that littering of the canal had been an issue for years, but that this trend has taken a turn and the conditions are getting better (Dawe, 2018). The people are starting to care about the canal and use it more (Dawe, 2018), this could also be seen through pieces of artwork that were created on pipes and under bridges along the canal.

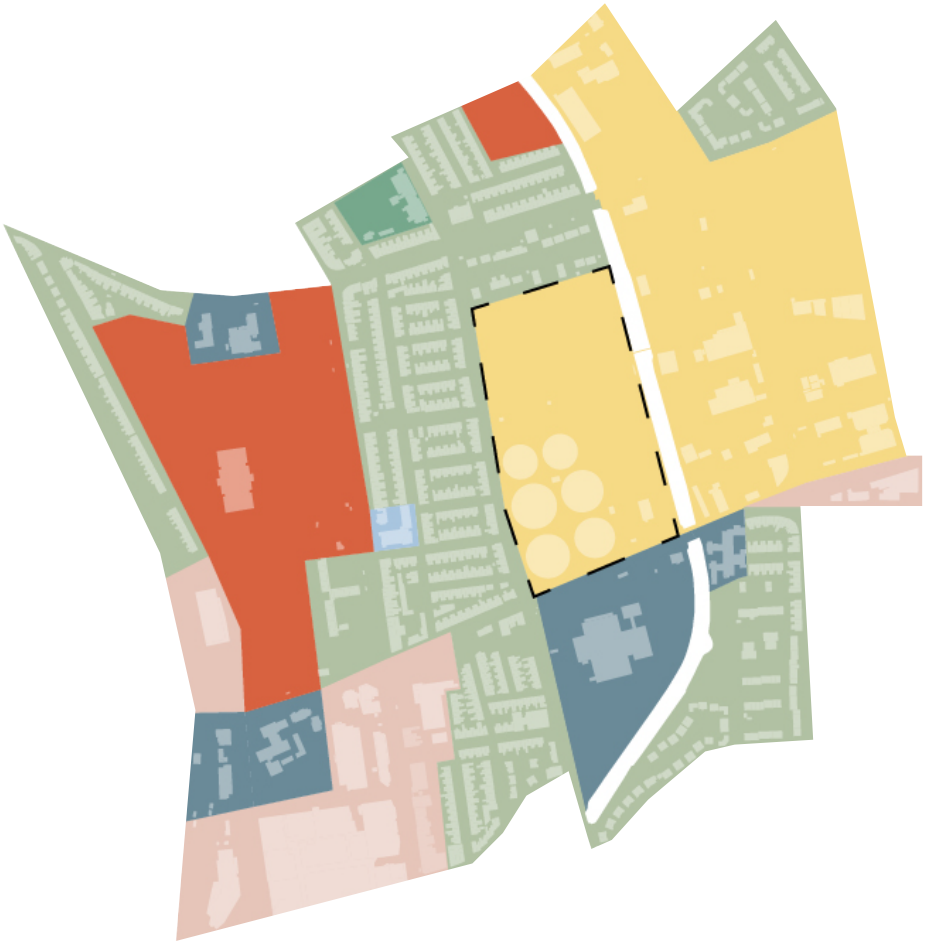


Fig. 68.1 Functions

FUNCTIONS

Figure 68.1 and 69.1 shows relevant analysis of the immediate context that was conducted during field-work. Figure 68.1 shows an analysis of the different functions in the area. The immediate context of the site mainly consists of private housing, industry and brownfield. The retail is concentrated on Stanley road by the Strand shopping centre south east of the site. Recreation opportunities can be found either in North Park or Derby Park. This analysis shows that the different programs in the area are highly clustered and there are no areas of mixed use.

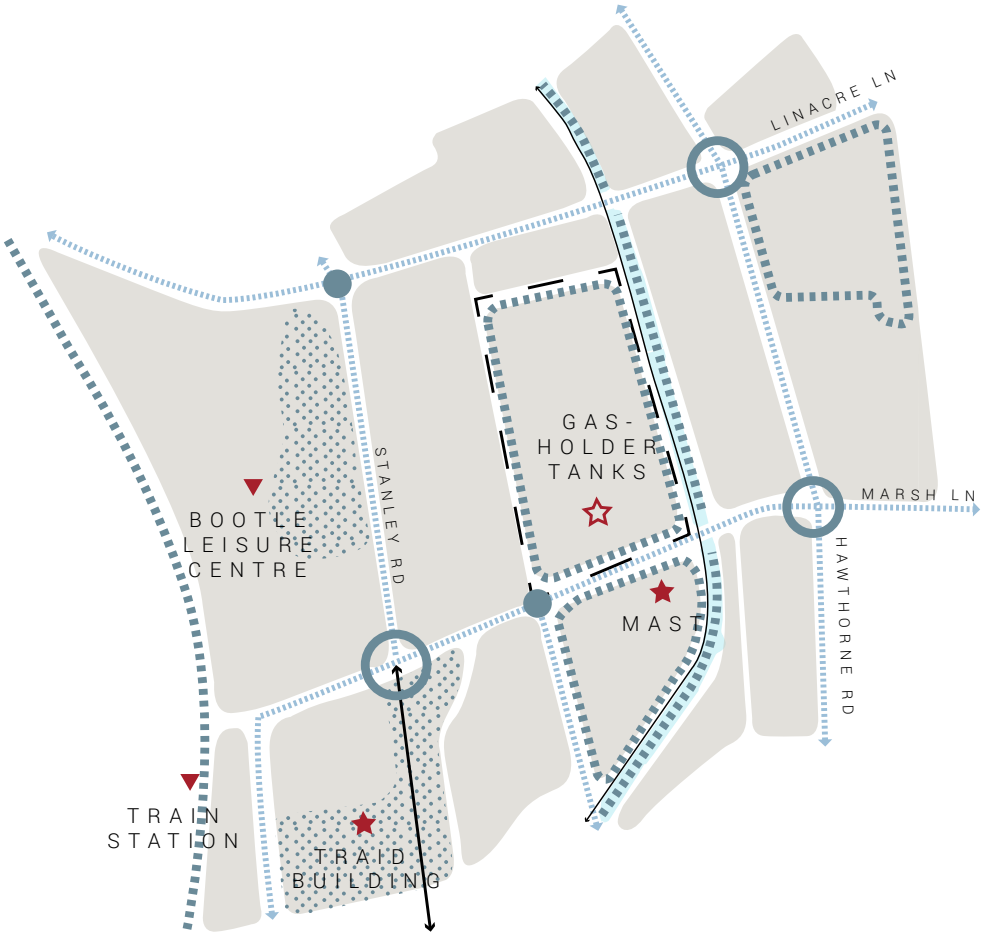


Fig. 69.1 Legibility

LEGIBILITY

The legibility analysis shows how the urban landscape surrounding the project site can be read. The immediate context has areas with more public activity than its surroundings. The areas with activity are the North Park and the shopping area on Stanley road. Barriers are surrounding both the site and met when walking through the urban landscape. These are barriers related to the busy roads and also barriers related to the fences and brick walls. There are five nodes in the immediate context, all surrounding the project site. Because of these, the project site is often passed by people. There are two major landmarks in the area that can be seen from almost everywhere in the neighborhood; the phone mast and the Triad building. There are two primary paths people favor over others; Stanley road and the path along the Liverpool Leeds canal.

- DISTRICTS
- MINOR LANDMARKS
- MAJOR LANDMARKS
- PAST LANDMARKS
- CENTERS OF ACTIVITY
- MINOR EDGES
- MAJOR EDGES
- PRIMARY PATH
- MINOR NODES
- MAJOR NODES

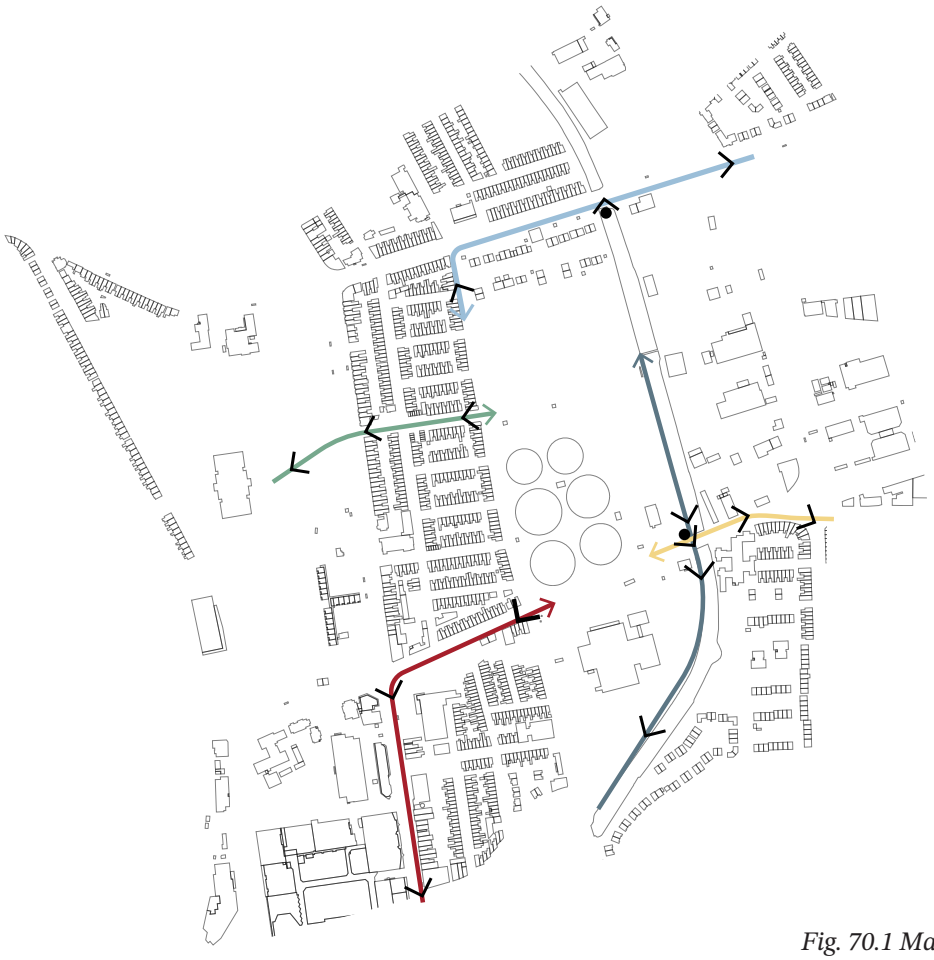


Fig. 70.1 Map - serial vision

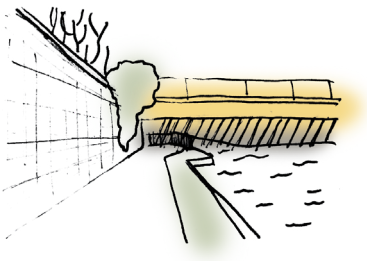
SERIAL VISION

Serial visions were conducted of possible paths and entrances to the project site. Each of the serial visions show how people are met by the urban landscape when approaching the site. The paths were chosen based on the mappings of the immediate context. The serial visions conducted on the red and the green path are taken from the most active areas of the immediate context. The serial visions taken on the light blue, dark blue, and the yellow paths are taken because they are active paths.

There are some impressions from the serial visions that stand out. On the light blue path and the yellow path there are elevated viewpoints which are the only points in the immediate context that provide a view towards the project site behind the wall. The green path that goes from North Park (on Melling Rd.) to the project site reveals that the street has a straight sightline. It also shows that measures have been taken to slow down the cars and make the street more pedestrian friendly. The serial vision show that the path along the canal has a monotone character and gives a straight sightline along the site after passing the bridge on Marsh Lane.



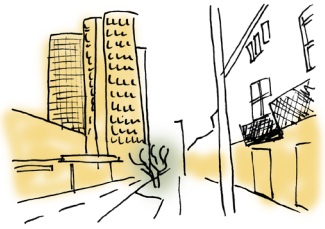
Green growing over wall.



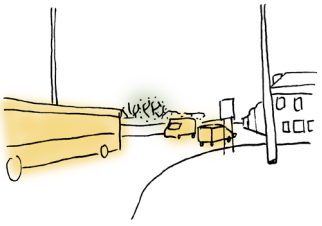
Shadow under bridge.



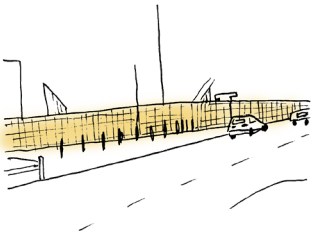
Straight sightline.



Shopping street and office building.



Busy intersection.



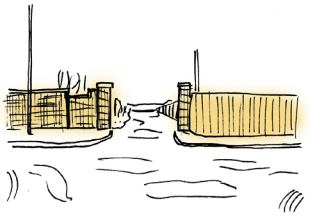
Brick wall surrounding the site.



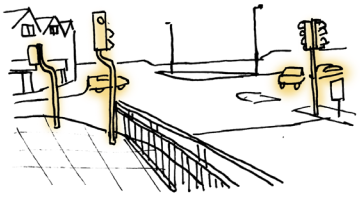
Open park with big trees.



Pedestrian friendly road
through residential area.



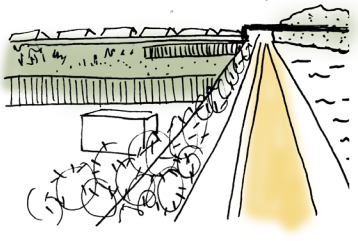
Main gate to the gasworks.



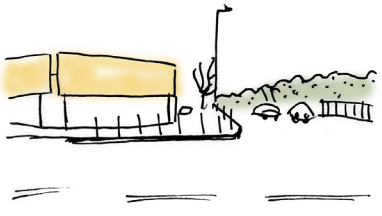
Busy intersection.



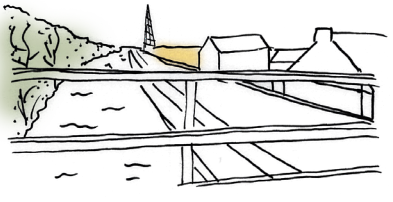
Highly visible mast
from the trafficked road.



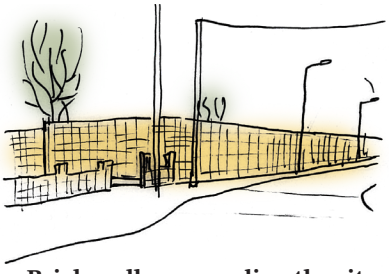
View to the site and the canal.



Large commercial billboards.



View to the site and the canal.



Brick wall surrounding the site

Fig. 71.1 Serial vision

WALK-ALONG ANALYSIS

The section analysis is a supplement to the serial visions. The serial vision gives an understanding of the urban landscape that is met when entering the site, but it does not give the full picture of the atmosphere framing it. Because the site is surrounded by a brick wall that limits the view, extra attention is brought to other elements that are present in the urban landscape. The wall is met by a residential unit in the west and the north, the canal on the east, and a busy road in the south. The walk along analysis has not been conducted on the north side because the residential area is right next to the wall and the street in the north is only used by its residents. As shown on figure 73.3, the walk alongs are taken with the back against the wall, viewing Marsh Lane, the Liverpool Leeds canal and Litherland road.



Fig. 73.1 Marsh Lane - outline



Fig. 73.2 Marsh Lane - collage

MARSH LANE

This analysis shows the section through Marsh Lane. Figure 73.2 is a collage of the pictures taken on Marsh Lane, while figure 73.1 is an outline of volumes in the collage. Marsh Lane is a highly trafficated road that connects the west and east side of the canal. The phone mast is highly visible in this urban landscape.

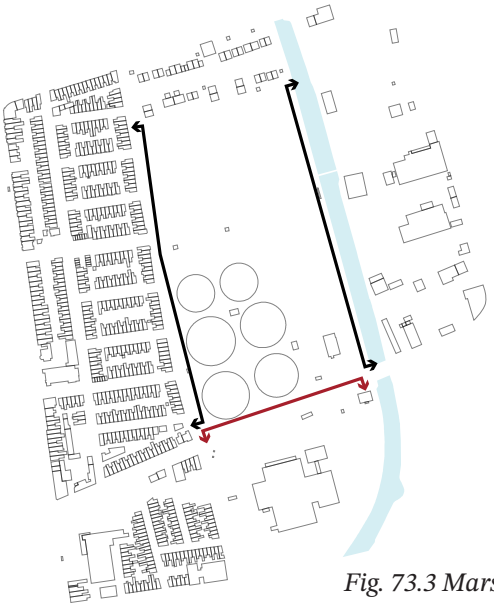


Fig. 73.3 Marsh Lane - section



Fig. 74.1 Litherland Road - outline



Fig. 74.2 Litherland Road - collage

LITERLAND ROAD

The collages on these pages are split into three. Figure 74.1 and 75.1 show the outline of the whole sections and how the collages fit together as continuous section. The brick wall on the west of the project site faces residential housing. As seen on figure 74.2 the neighborhood is built up of terraced housing in a variety of colors. This is also the dominant typology in the immediate context of the project site. There are two houses in this section that stand out; the house on each side of Melling road. These houses are a little taller than the rest, and the roofs are shaped differently.

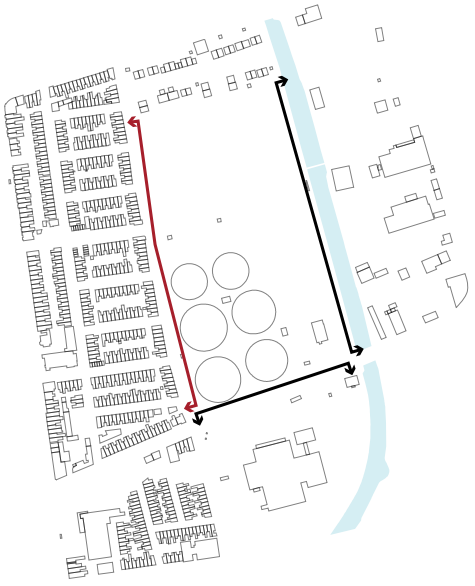


Fig. 74.3 Litherland Road - section



Fig. 75.1 Liverpool Leeds Canal - outline



Fig. 75.2 Liverpool Leeds Canal - collage

LIVERPOOL LEEDS CANAL

The pictures taken on the east side show the view of the Liverpool Leeds canal. On the other side of the canal there is an industrial area, mainly existing of the car dismantle industry. This has been referred to as an eyesore by local residents, but during spring and summer, the vegetation of the trees cover up parts of the view.

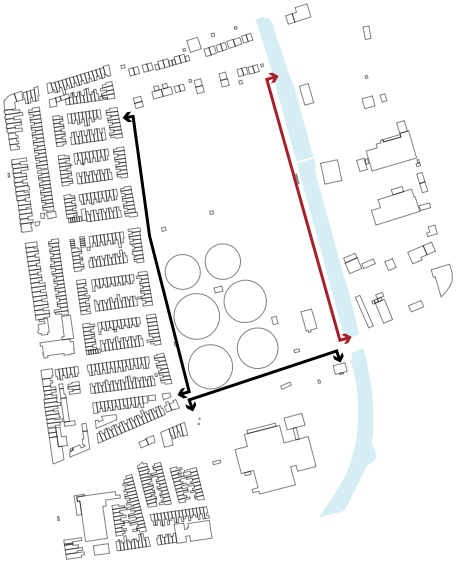


Fig. 75.3 Liverpool Leeds Canal - section

CONTEXTUAL APPRAISAL

The contextual appraisal, figure 77.1, provides a graphical summary of the conditions of the immediate context surrounding the gasworks site in Bootle. There are several key points that should be noted. There are many barriers in the immediate context that decrease the permeability of the area. The brick wall surrounding the gasworks is a major barrier that separates the residential area from the canal. The lack of variation in, and high quality public realm are issues that should be addressed. The area is in need of places where different social groups can meet and interact. Furthermore, there are poor connections between existing public and green spaces. Therefore, breaking down existing barriers and creating connections between exsisting and future public spaces will be key principle in the proposed design.

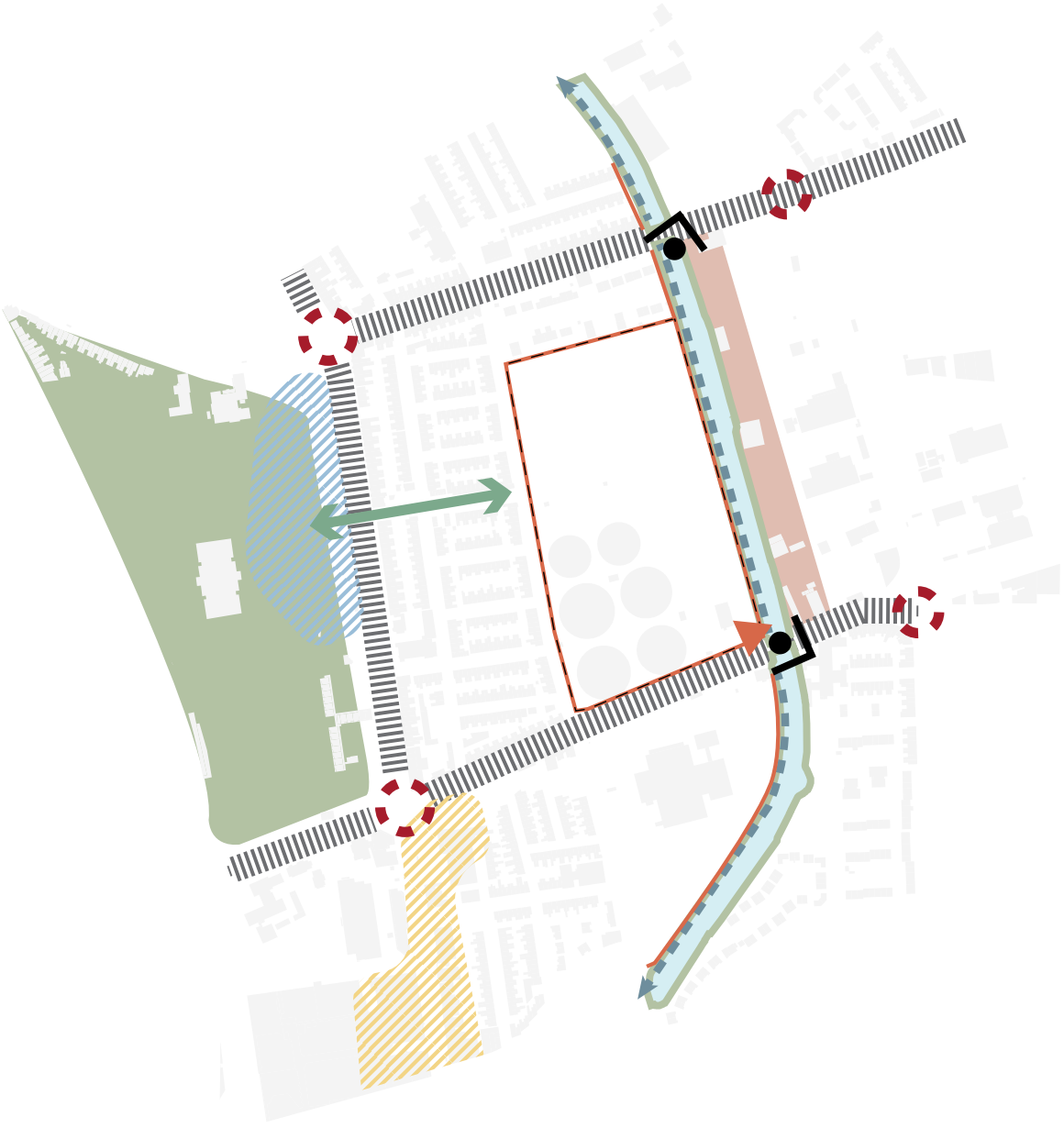


Fig. 77.1 Contextual appraisal

BARRIER (MAIN ROAD)
NODE
BRICK WALL
POTENTIAL CONNECTION
EXISTING GREEN PATH
ELEVATED VIEWPOINT
RECREATION ACTIVITY
RETAIL ACTIVITY
VISUAL UNAPPEALING
STAIRS
VEGETATION

OPPORTUNITIES AND CONSTRAINTS

Figure 79.1 shows both the opportunities and constraints provided by the analyses of the immediate context and the information given about the current condition of the site. There are parts of the site that are statutorily remediated, suitable for temporary activity. The two bridges north and south of the project site that are frequently used by pedestrians and vehicles, and provide the only two elevated viewpoints from which a design on the site would be visible. The brick wall surrounding the project site is a major barrier in the area. There is an opportunity to break the wall down and create a connection from North park, through the project site, to the canal. North Park and the Liverpool Leeds Canal are active areas, therefore this becomes an important connection to take into consideration. The site is situated right next to the canal, the main strategic green infrastructure stretching through the area. There is therefore an opportunity to connect the future design to this existing path. The project site is also surrounded by a dense residential area which a temporary design could serve.

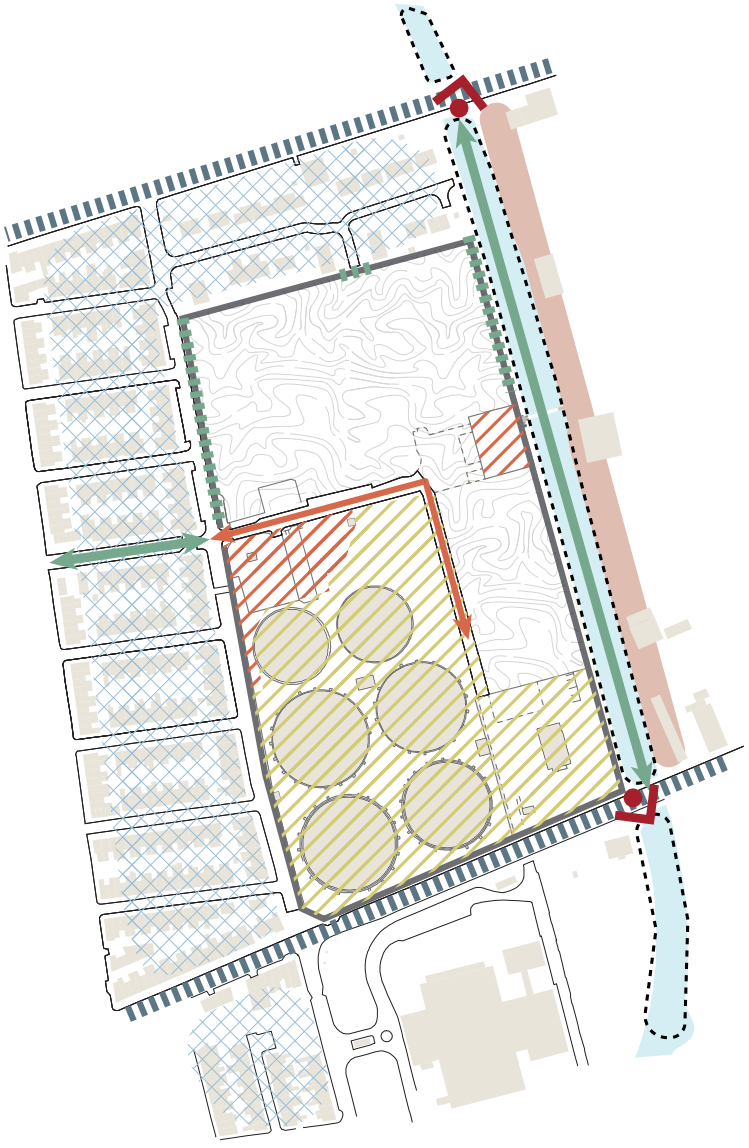


Fig. 79.1 Opportunities and constraints

TRAFFIC
SIGHT LINE
BRICK WALL
TRAFFICATED ROAD
STATUTORY REMEDIATED
DEMOLITION SITE
ACTIVE GASPIPES
RESIDENTIAL AREA
VISUAL UNAPEALING
GREEN AND BLUE ZONE
ELEVATED VIEWPOINT

POTENTIAL STAKEHOLDERS

This analysis shows where the local assets in the area is situated. They are actors that could potentially contribute to a temporary design on the Linacre Gasworks. The analysis revealed that there are no assets of interest on the east side of the project site, therefore the map is oriented more to the west than the other mappings. The companies presented on this page could be potential stakeholders, while the not-for-profit organizations on the next page introduces other assets that could contribute to the temporary design.

SAFE regeneration is a not-for-profit company that works to foster community cohesion, social inclusion and individual well-being whilst contributing to economic and environmental regeneration. For them, this includes delivering business enterprise support, business incubation units, artist studios, participatory art programmes and community based landscape management services. SAFE regeneration has office, studio space and workshops in an old school building situated near the canal that provides space for social enterprises including artists, landscape architects, engineers, boat builders, Tai Chi practitioners, farmers and dressmakers. SAFE regeneration has received good feedback about their work from the local community and are planning on expanding their operations (Dawe, 2018; SAFE regeneration, 2018). Furthermore, their spaces for social enterprises are full and many local entrepreneurs are on their waiting list (Dawe, 2018). Information about SAFE regenerations practice and their future plans were provided through an interview with Brian Dawe, the chief executive officer of SAFE regeneration.

National Grid is a multinational electricity and gas utility company and the owner of the gasworks site in Bootle. They want to see the land serve new purposes and are less concerned with making a profit from selling the site. On some occasions they have rented out parts of their land before it was ready to be sold, and are positive to do the same with the site in Bootle (National Grid, 2018). The information about National Grid as an actor is retrieved through an interview with employees.

Analysis of the interviews revealed an opportunity. In the local community there is one actor that needs space, while another actor is willing to rent out space. As National grid wants to see the land serve a new purpose, and SAFE regeneration needs more space to provide offices, workshops, and studios for the local community, there is an opportunity for collaboration between the two stakeholders.

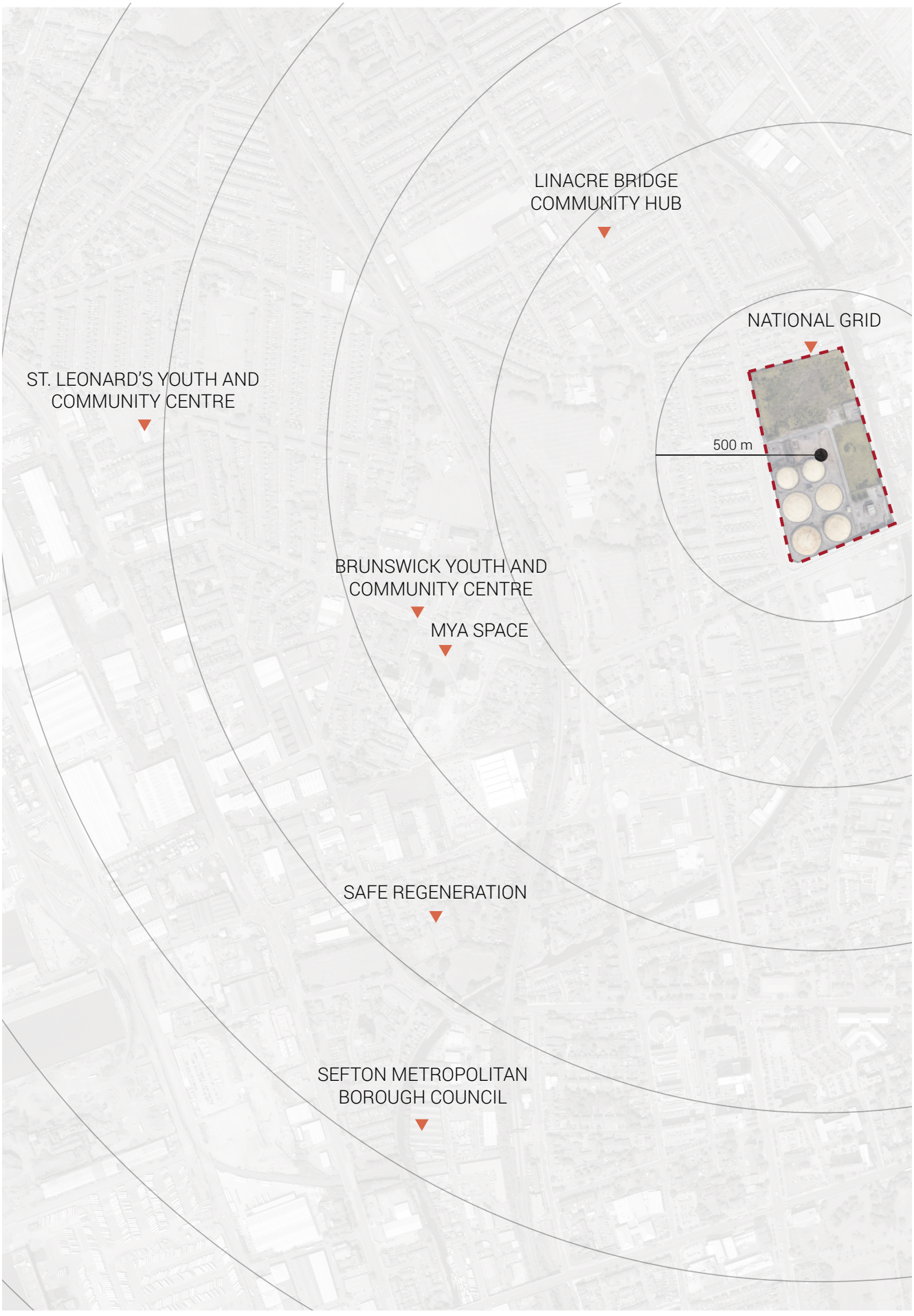


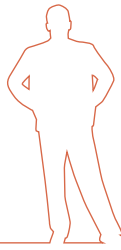
Fig. 81.1 Potential stakeholders and local assets

NATIONAL GRID



"Once the holders are dismantled I think the site can have a positive effect on the surrounding area when it is brought back into beneficial use." (Taylor, 2018)

SAFE REGENERATION



"We have spaces for startup businesses and local artists, but our building is full and we have even more people on the waitlist. We see a great potential in establishing a cultural hub along the canal" (Dawe, 2018)

BRUNWICK YOUTH AND COMMUNITY CENTRE



Urban gardens make land visually appealing and creates a sustainable food growing project. (Brunwick Youth and Community Centre, 2018)

LOCAL ASSETS

There are several community centers located in Bootle that aim to serve its residents. They operate with the same overall vision: to make life better for their local community. However, they use different means to achieve their goals.

Brunwick youth and community centre is a charity organization with purpose to help all residents in Bootle to improve their lives. They aim to break barriers between social groups, preconceptions and contribute to community safety. Amongst other activities they use community gardens to create education opportunities, healthy lifestyles and lead to closer relations between generations. The organization has a garden outside their building and is continuously adopting land to use for their urban garden projects. Among these projects, they have adopted a site next to the Oriental Road Station and in North Park (Brunwick youth and community centre, 2018)

Linacre Bridge Community Hub locally known as The Hub is a community and charity organization that aims to create a place that promotes a friendly, inclusive and welcoming environment for adults and children. They organize events such as get togethers, bingos, table top sales, quiz nights, holiday parties and more. There are also activities at The Hub such as tennis, badminton, croquet, cricket and football and everyone is welcome to participate (Linacre Bridge Community Hub, 2018)

St. Leonard's youth and community centre strive to meet the needs of the local people and work with them to enable them to overcome challenges. They aim to create a resilient community which they achieve through partnerships with stakeholders who provide

LINACRE BRIDGE COMMUNITY HUB

ST. LEONARD'S YOUTH AND COMMUNITY CENTRE

MYA SPACE

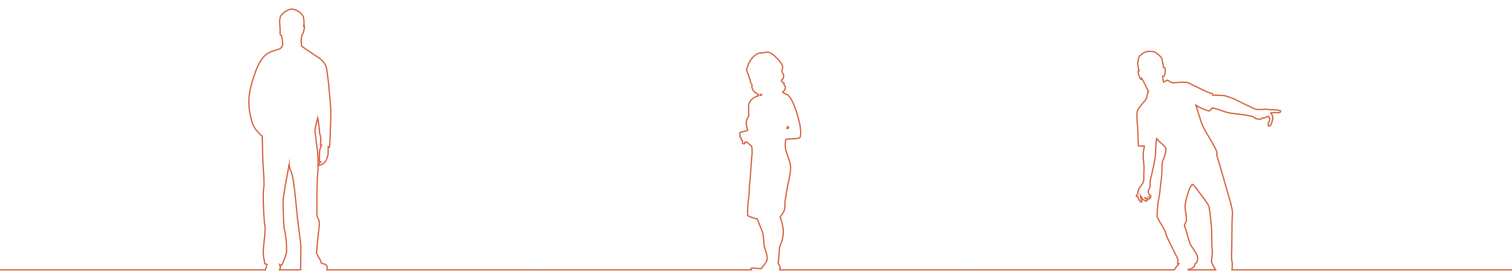


Fig. 83.1 Local assets

The tickets to our events have a symbolic price because we want to make them accessible for everybody (Linacre Bridge Community Hub, 2018).

We want to make the archive of the Bootle expression photo collection available to the community in order to stimulate interest in our local, social and family history (St. Leonard's Youth and Community Centre).

This past year we have put together performances such as Cinderella and her Bootle fella and from Bootle to Broadway (Merseyside Youth Association, 2018).

people with resources. These are resources such as debt and money advice, and housing and homeless support. In 2012 they received a lifelong memorial photo archive from a local resident. This archive is called Bootle Expression and contains over ten thousand pictures taken in Bootle from the period between 1900 to 2012. The community centre is looking to make the picture available to the public (St. Leonard's Youth and Community Centre, 2018).

MYA SPACE (Sefton Performing Arts & Creative Education) is the only Youth Arts Centre in Sefton (Merseyside Youth Association, 2018). They use creative arts and performing as a tool for youth work and find social and emotional well-being and development important. Their vision is to create positive and lasting change in the lives of the young people of Merseyside. Their aim is to build local relationships, using creative initiatives to develop cohesion and to deliver creative and performance opportunities for young people. The creative initiatives include arts such as dancing, singing, band development, writing and recording music and theatre (Merseyside Youth Association, 2018).

LOCAL PERCEPTION

The result of the contextual analysis conducted during the fieldwork reveals the opportunities and constraints for the future development. These are important to take into consideration in order to create a design that is appropriate to its context. Furthermore, investigation and interviews with potential actors were conducted in order to explore the possibilities for programming and ownership. However, there is an important factor that is not considered in these analyses, and is not always included in planning processes. That is the opinion of the residents. Therefore, a survey on the impacts of the Lincare Gasworks was conducted in order to explore the local perception of the site and the neighborhood. The participants were asked if they knew what was behind the brick wall, and their opinion about the Linacre Gasworks. The answers were analyzed and categorized into three polls - positive, negative and neutral preseptions. The result revealed that the elderly people knew what the gasworks site was, and used to be, and therefore had more opinions about it. The younger generation were more uncertain and had fewer opinions. They had in general a more neutral perception toward the site. Furthermore, the results revealed that a majority of people had a negative opinion about the gasworks, especially the elderly.

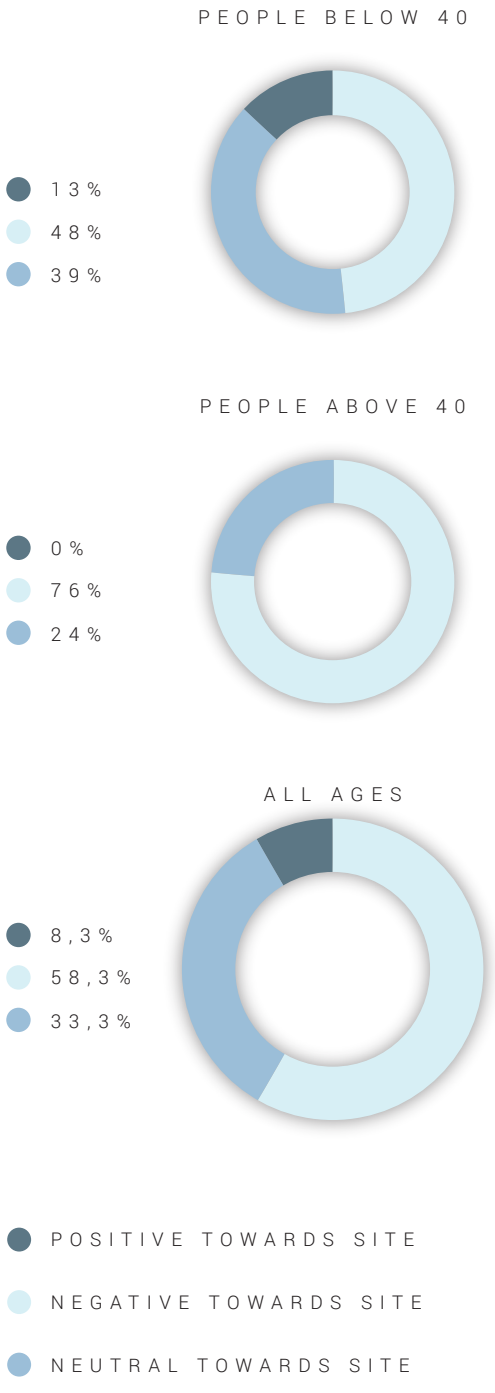


Fig. 85.1 Statistics - local perception

COLLAGES AND CONVERSATIONS

While conducting the questionnaire, the group engaged in longer conversations with the locals about the Linacre Gasworks and their town. Many people shared stories and memories about the old days and wishes for the future. This is important information that is difficult to show through maps, statistics and numbers. It should not be generalized. This section is made to give the people of Bootle a voice and highlight individual opinions. The following images show pictures of the gasworks site merged with old pictures taken in Bootle. The images are supplemented with quotes from the locals. The collection of pictures is meant to highlight the opportunities this site holds.



Fig. 88.1 Neighborhood feast

My nan lived by there in Hawthorne road. When the gas tanks lowered she'd say: "everyone must be baking", and I believed her.



Fig. 89.1 The coke run

I used to go there every saturday morning to get bags of coke for the fire. The coke runs, they made me the man I am today. I still walk from Bootle Strand station to prove my ability.



Fig. 90.1 Christmas party

My dad worked there during the 60's. I remember the great Christmas parties.



Fig. 91.1 Nightlife

The gaswork social club was a lot of fun. I remember going out, dressing up and stuff. The workers form the gas works could come in to the club, all black and dirty you know. But it was fine. It was a funny contrast.



Fig. 92.1 Peoples march for jobs

We need more jobs!



Fig. 93.1 Kids march for childhood

I would like to see something for the kids. More youth centers - something to keep them off the street. Anything would do.



Fig. 94.1 Social gathering

Bootle needs a social scene, places to meet and eat and drink and socialize with family and friends.

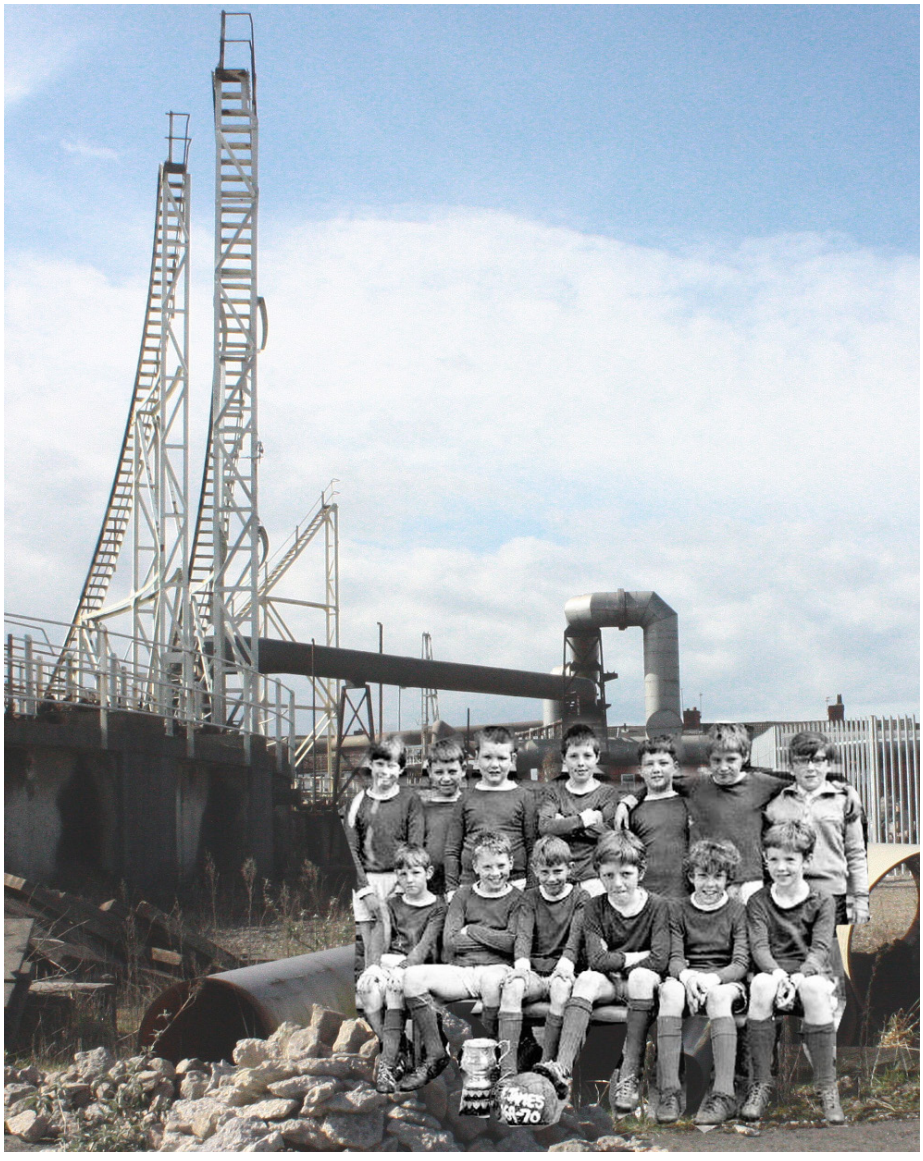


Fig. 95.1 Bootle football team

More football centers and somewhere to fish.



Fig. 96.1 Youth house

It would be fun to have a youth house, or maybe just a really big house!



Fig. 97.1 Entertainment

"Bootle needs something different and more exciting. It would be nice to have entertainment places."



Fig. 98.1 Famliy activites

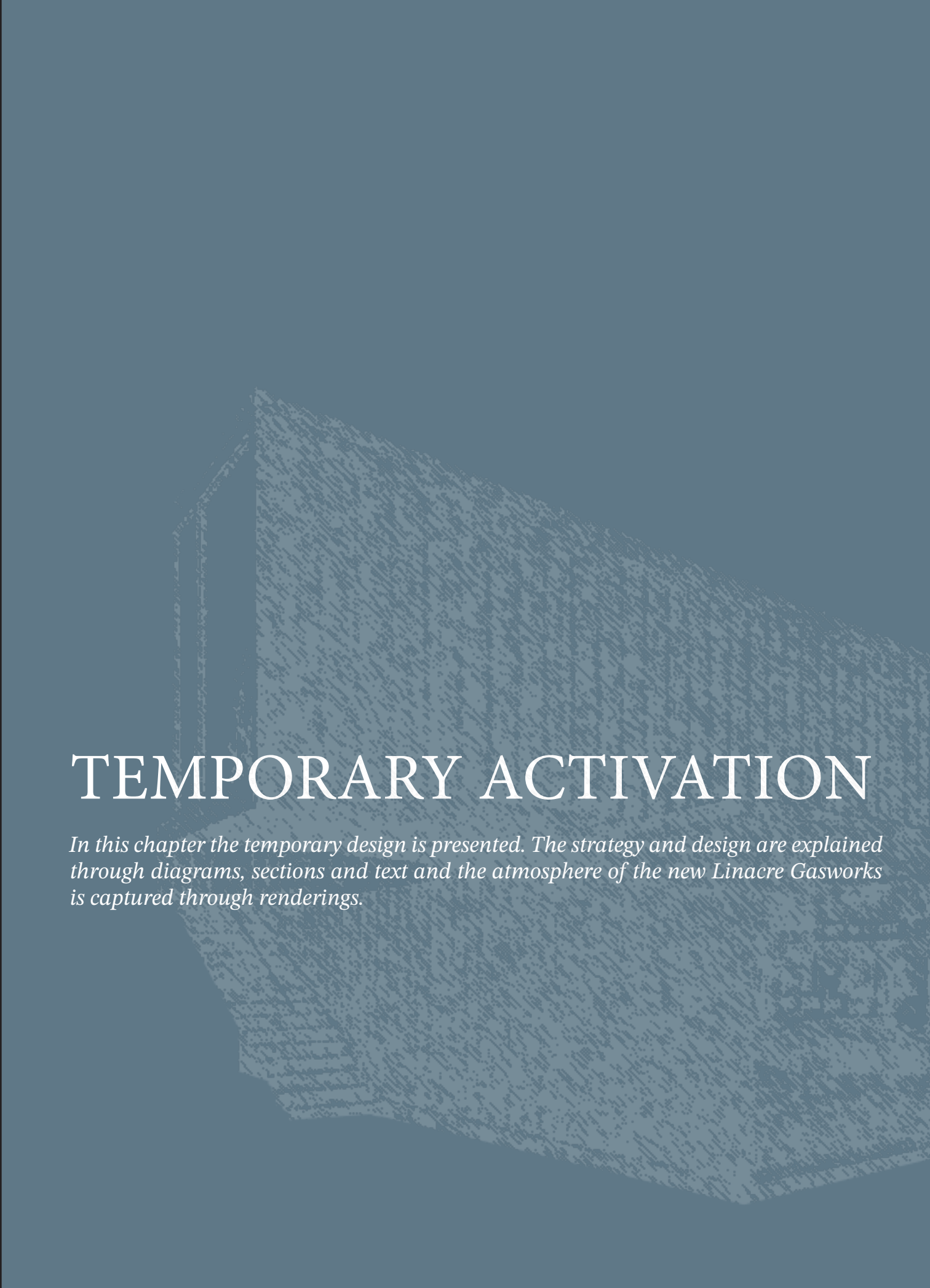
Would like some more family oriented activities.

DISCUSSION

In the profession of urban design it is common to map existing environment and urban characteristics of an area in order to explore potential futures and develop design that fit within the context. For the Linacre Gasworks a main challenge is the lack of interest in developing the site. The analysis chapter therefore focuses on findings that unfold opportunities to guide the development of a temporary design that could be activated by local residents. This includes both mappings and analysis of the physical environment and conversations with local residents. It becomes important for this project to take the opinions of the local residents into consideration, in order to create a design they will engage with. The findings shows that a majority of the locals have a negative perception towards the gasworks site, most noticeable among the elderly people. Activation of a space which people have a negative attitude towards can be challenging. However, people also seems to be positive to reusing the land. While engaging in conversations, with the local residents, stories regarding the site were shared and it became evident that Linacre Gasworks is not only seen as an eyesore, but it is also as a reminder of the past. The local residents had both positive and negative memories associated with the gasworks. If the temporary activity could catalyze more engagement in preserving what is left of the structures, and highlight the sites value, it might influence decisions about future use and design of Linacre Gasworks. The investigation of local assets becomes important for the temporary design as temporary occupants that are organized are more likely to have an influence on the final development of the site. Furthermore, the local assets could contribute to a design that is a response to the needs of the local people in Bootle. However, it is important that the new place does not compete with existing ones. Furthermore, the analyses reveal that there are many actors in the area that have the common goal; to bring value to the local community. This could bring an opportunity for collaboration between several actors in order to reach their goals.

CONCLUSION

The contextual appraisal combined with the information about the current state of the site reveals opportunities and constraints related to the physical transformation of the site. The proposed design should focus on breaking down the barriers surrounding the site and create a connection between North park and the Liverpool Leeds canal. As the site is situated near the canal it has the opportunity to provide a recreational space along the waterfront that would be the first of its kind in Bootle and therefore provide the locals with a new type of recreation. The fact that National grid is open to leasing out parts of the site and that SAFE regeneration needs more space is a potential for collaboration. There is also a potential invite other local assets with similar goals in order to create a diverse and inviting environment. Furthermore, many locals would like to see a transformation of Linacre Gasworks, an opportunity is therefore to gather people around a common goal. The analyses revealed that the locals stands positive to reusing the site and have a lot of memories connected to it. Measures therefore should be taken in order to highlight the gasworks heritage. This is considered as an important resource that should be exploited in order to create a site specific identity.



TEMPORARY ACTIVATION

In this chapter the temporary design is presented. The strategy and design are explained through diagrams, sections and text and the atmosphere of the new Linacre Gasworks is captured through renderings.

STRATEGY

The strategy proposes that National Grid prepares and leases out the part of the site that is statutory remediated for temporary use. A collaboration between National Grid and local actors in Bootle is proposed to activate the space. The temporary activation aims to reintegrate the space as a valuable asset for the local community and enlighten people about the Linacre Gasworks to influence the long term development of the whole site. The design will be realized through a combined top- down and bottom-up approach. Parts of the physical design will be planned top-down and further shaped by its temporary occupants bottom-up. *Five* strategic principles are presented to guide the design to ensure that the goals for the project are reached. The strategies include:

Plan for Self Sustainability
In order for the project to become successful it is important that it becomes self sustainable. The project should provide a space for local actors to ensure that the project can run itself with limited external support. The design should focus on reusing local materials which will bring both economical and environmental benefits and contribute to a design with a local identity. The projects should also be centered around an expanding transformation, where an initial phase will activate the site and afford flexible development. This way the project can slowly adapt to the needs of the local actors and users.

Ensure access and visibility
As the project is aiming to be an asset to the community it is important to secure both access and visibility to the site. The design should connect itself to existing local paths and ensure that the site is visible from existing viewpoints. This will potentially attract more people and ensure that the site can reach a bigger audience.

Include local community
As discussed in the theory chapter secondary socialization becomes increasingly important in deprived neighborhoods. Therefore, the project should create a social arena with flexible spaces that invites a variety of social groups to meet, interact and learn from each other. It is important to think about how to invite good rolemodels. The design should also invite to personalization which will afford the local community to put their own mark on the place. This will make more people feel a sense of belonging and overnship of the place.

Highlight Heritage
England is under a period where many gasworks sites are being demolished and remediated without leaving a historical trace, therefore it becomes important to educate the younger generation about their heritage and history. In order to fulfill this goal the temporary design should include interventions that highlight the heritage, create awareness and awaken curiosity about the local history and post-industrial heritage.

Secure spatial qualities
Guidelines are made to ensure comfortable spatial quality and strengthen the access inside and through the site. These guidelines will secure the spatial qualities as the project evolves.

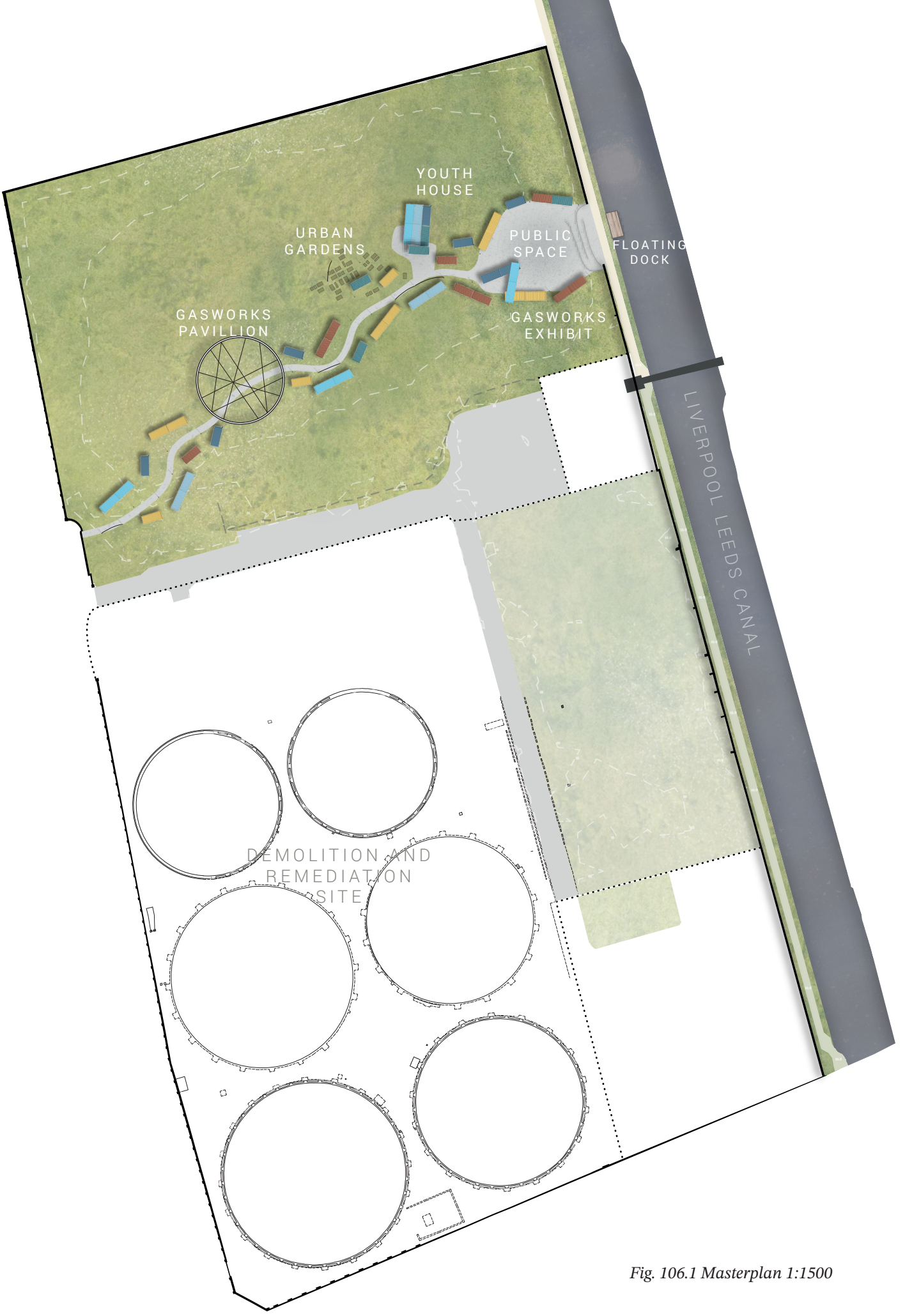


Fig. 106.1 Masterplan 1:1500

THE GASWORKS

The Gasworks is a temporary design that will reclaim space on a site that has been longing for regeneration. It will be located on the north part of the redundant gasworks in Bootle and streches from Litherland Road to the Liverpool Leeds canal.

The space will provide workshops, studio space and offices for social enterprises and be a great environment for start up businesses. The gasworks site, that once provided jobs for the residents of Bootle, will again be serving the same purpose. In adition to this, the site will be transformed into a public realm where different social groups meet and interact.

The visitors will be taken on a journey when walking on the path that goes throught the site. Along the path the visitors will meet container workshops, the gasworks pavilion, urban gardens and a youth house. When entering the public space located by the water, the visitors can enjoy the atmosphere of surrounding workshops, grab a coffee at the café or explore the gasworks exhibition. The visitors can take a stroll out to the floating dock to get closer to the canal. Here they might meet dog walkers alongside the canal or people canoeing on the water.

The Gasworks will be a place that gathers the residents of Bootle. It will be a place where different generations can meet and learn from each other. It will be a place the residents feel ownership of, a place where they can create new projects and engage in new activities. It will be an arena for social events. The Gasworks will be tranformed into a place where there is room for creativity. In order for the The Gasworks to become this place the design is developed in phases.





Fig. 109.1 The public space by the canal

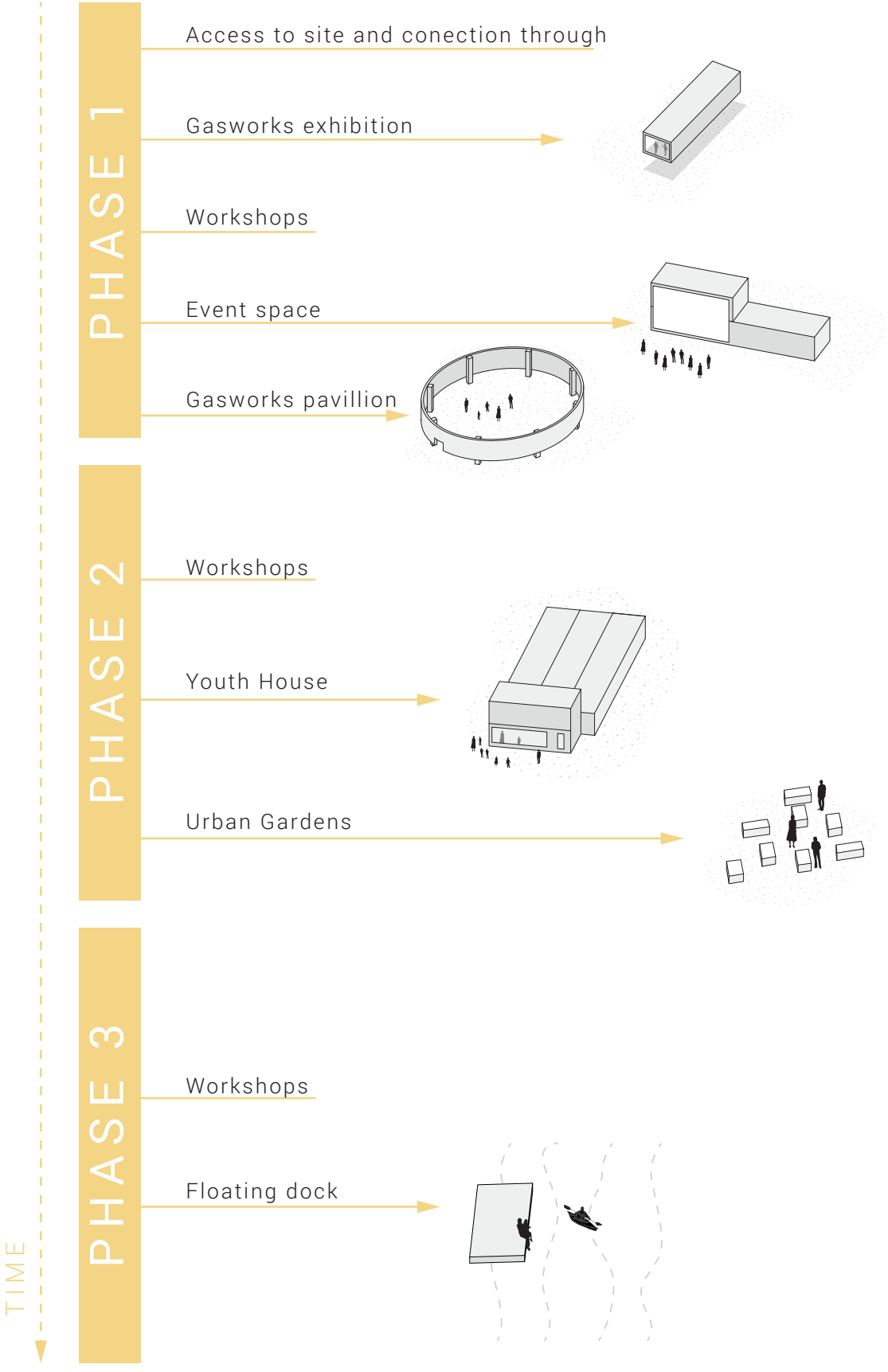


Fig. 110.1 Timeline

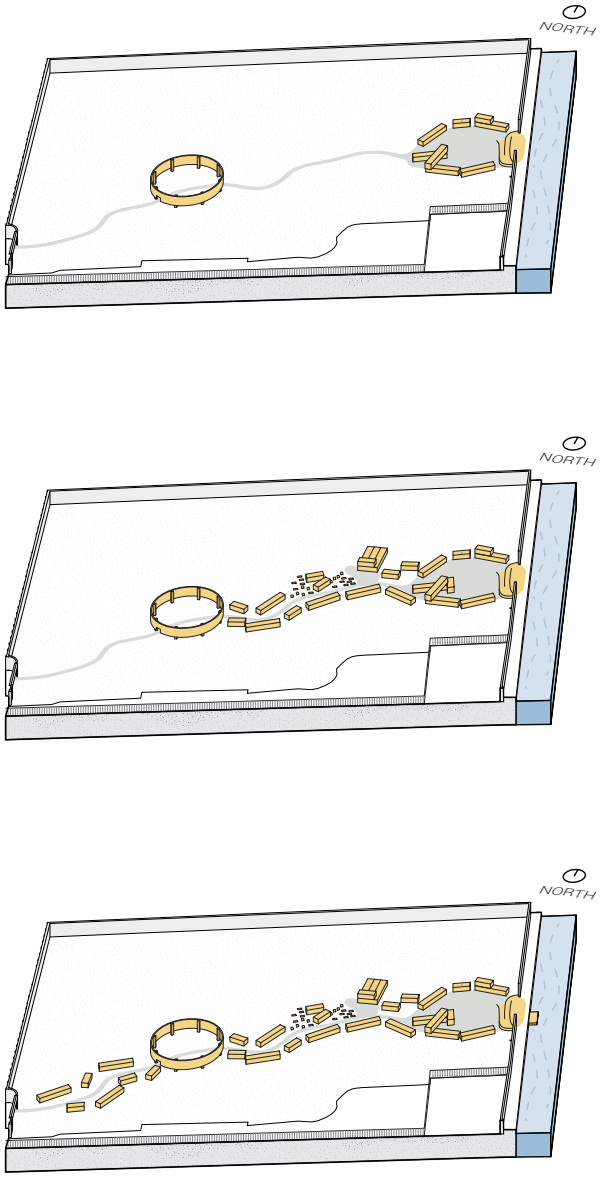


Fig. 111.1 Phases

The project will be developed in three phases. Figure 110.1 presents a timeline that shows which interventions and programs that are introduced, and in which phase they appear. Figure 111.1 shows the physical development of the project stretching along the gravel path, introduced in phase one.

PLAN FOR SELF SUSTAINABILITY

Three principles are made in order to guide the project to become self sustainable. These priciples are important to establish in the first phase.

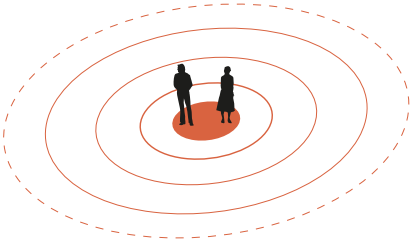
The first principle is to include local actors. The fieldwork was conducted in order to locate potential actors and explore the possibilites for their involvment.

The project sees SAFE regeneration as a key actor because they have experience with providing workspace and business support for people, which has been very successful. Other included actors are; Brunwick community centre, Linacre Bridge Community Hub, St. Leonard's youth and community centre and MYA Space. These actors are already engaged and familiar with the local community, thereby the local visitors will meet familiar faces and people that they trust. The local actors will also serve as good role models for young visitors.

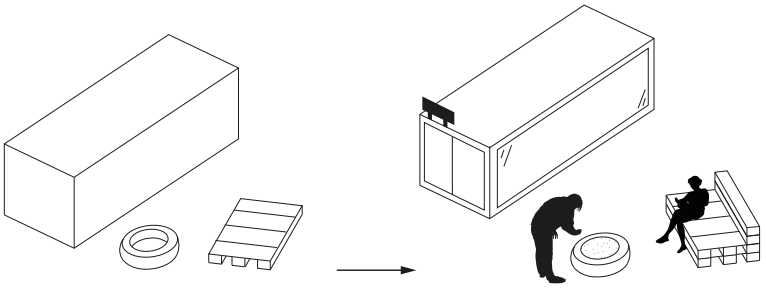
The second principle includes reuse of local materials. This project proposes to reuse containers from Liverpool Dock, which is situated close to Bootle. The containers can provide space for social enterprises and other actors that might need it.

The third principle is made to encourage future development and is grounded in a "test-learn" approach. It encourages people to test their projects in a small scale, learn from the intervention, and further develop it to make it successful. In this way a small event for children could evolve to become a youth house. This is also the reason why the design evolves in phases.

INCLUDE LOCAL ACTORS



REUSE LOCAL MATERIALS



TEST-LEARN

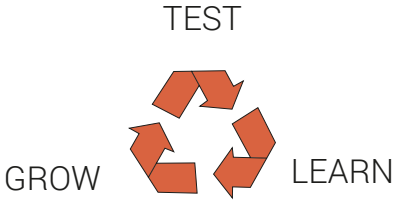
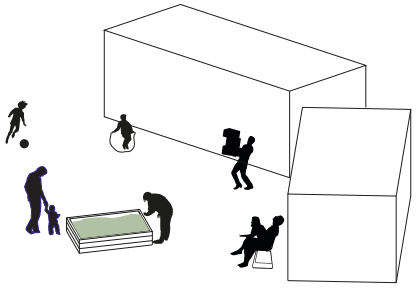


Fig. 113.1 Diagram - Selfsustainability

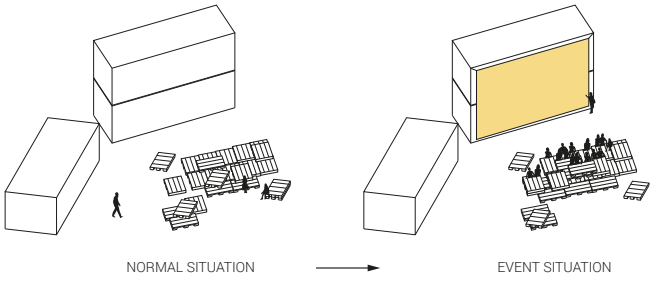
INCLUDE THE LOCAL COMMUNITY

It is important to include the local community in the design from the beginning. The project will therefore invite for public participation and personalization. This will make more people feel a sense of belonging and ovnership for the place. The design will include loose space that can afford a variety of activities at the same time. This includes stacked containers, providing workshop with multiple floors in normal situations. These can then be used as a large canvas for creative projects or the projections of movies in the evening. This allows different people and social groups to meet and interact. The design will also afford a flexible space that is suitable for different types of events. The actors on the site are encouraged to hold events that are open to the public. These principles will make the place a comfortable area to stay in. The idea of mixing a workshop area with a public space will contribute to strengthen and creating new relationships between people in Bootle. It will make the place an area where people can learn from each other.

FLEXIBLE SPACE THAT AFFORDS A VARIETY OF ACTIVITIES



SPACE THAT AFFORDS EVENTS



INVITE TO PERSONALIZATION

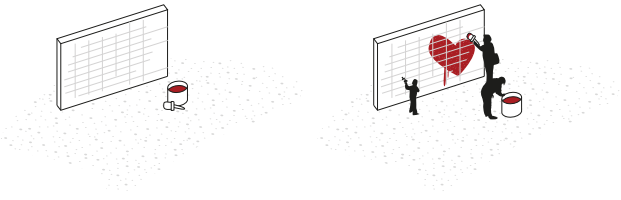


Fig. 115.1 Diagram - social inclusion



Fig. 116.1 Masterplan 1:300

PHASE 1

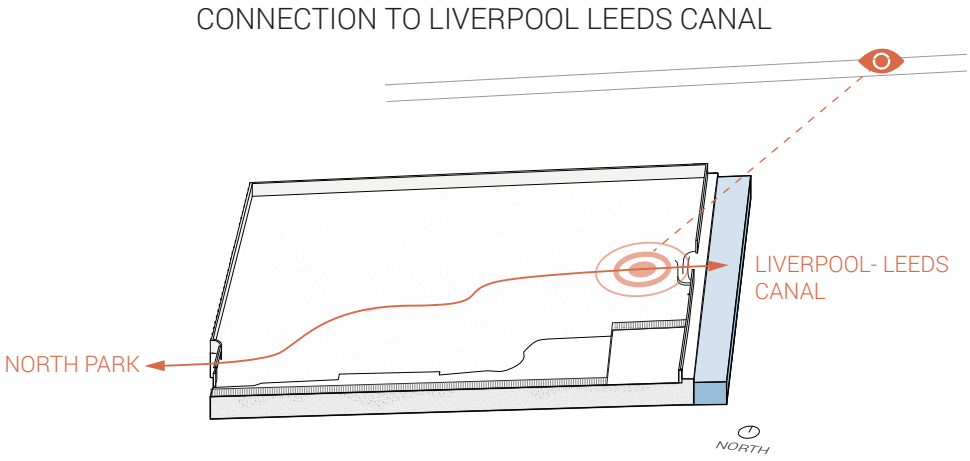


Fig. 117.1 Phase 1 - Placement

In the first phase the connection between North Park and the canal is secured. The wall is broken down on the west and east side and a gravel path is laid out through the site. In this phase the temporary activities will be initiated near the canal. This location is visible from the two bridges crossing the water, and will therefore get more attention and potentially draw more people in. The canal path is also more frequently used by the local residents than Litherland road. The design will provide a public space near the water that is connected to the recreational path. There is a height difference of 1,5 meters between the path by the canal and the site, so a ramp is built to secure comfortable and easy access. The workshops and studios are placed so they surround a public space of 550 square meters. This is programmed as a flexible space and workshops can utilize a scene made of pallets or a projector screen to host different events related to their business and studio.

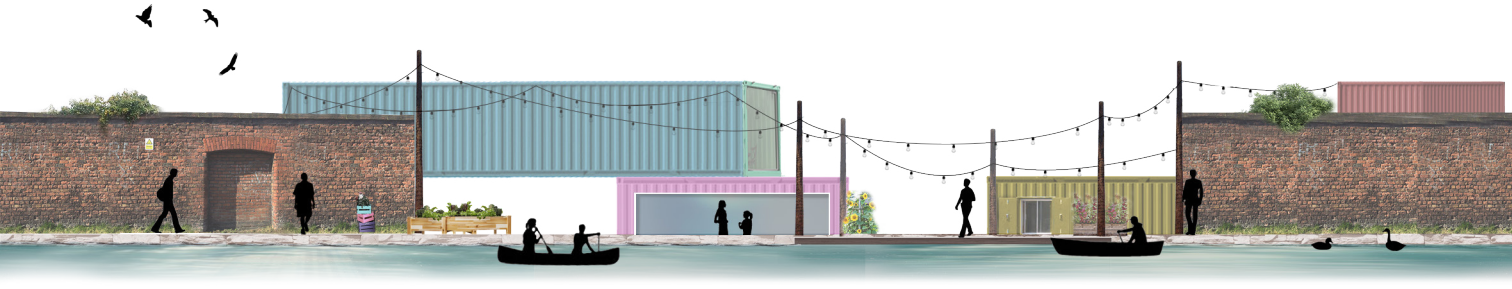
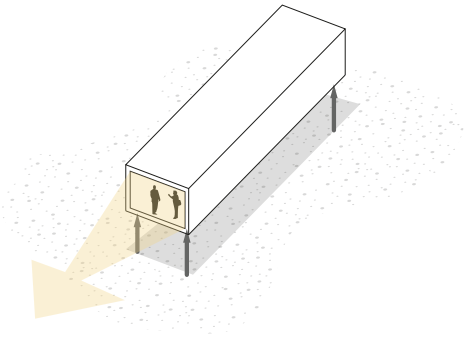
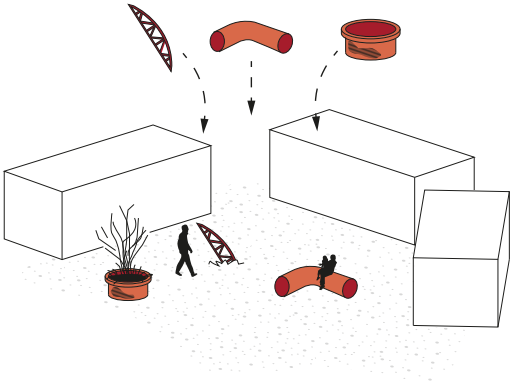


Fig. 117.2 Easterm elevation from canal 1:200

EXHIBITION WITH ELEVATED VIEW TOWARDS THE GASHOLDERS



REUSE DISMANELED ELMENTS



PAVILLION INSPIRED BY THE GASHOLDERS

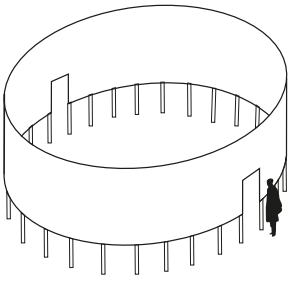


Fig. 118.1 Diagram - Highlight heritage

HIGHLIGHT HERITAGE

To exploit the heritage of the gasworks there will be an exhibition with historic photos of the gasworks and an elevated view to the site (See page 121). Furthermore, as the demolition of the gasworks provides materials that needs to be recycled, the locals can choose to take the materials and use them for creative projects. Lastly, there will be an installation on the site that symbolizes a gasholder. These elements should awaken curiousity and raise awareness about the gasworks. As The Gasworks is a place that invites all generations, it becomes an arena where one easily can ask questions and share knowledge.

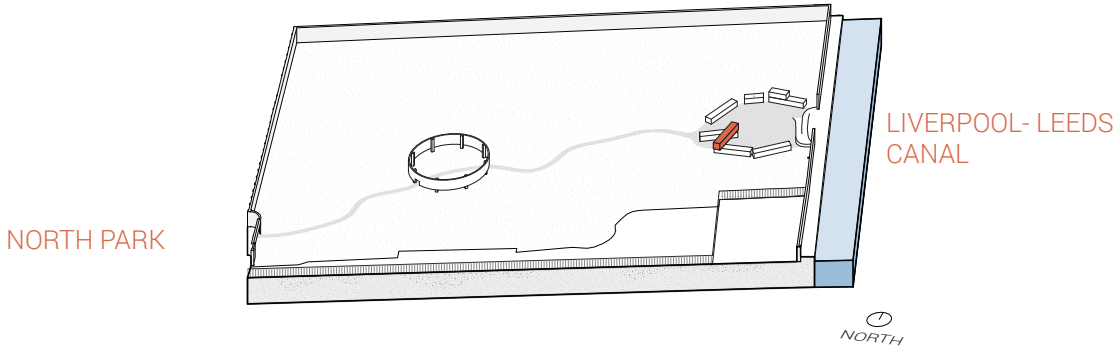


Fig. 119.1 Phase 1 - exhibition

In the first phase, *The Gasworks Exhibition* will be a part of the public space close to the canal. The exhibition is placed inside an elevated container. The container is turned with the short side towards the demolition site. At the end of the container there is a window and a pair of binoculars. In this way people who are curious can visually explore the gasworks that is in the process of being demolished and remidiated. Futhermore, the exhibition contains historical pictures from the photocollection Bootle Expression.

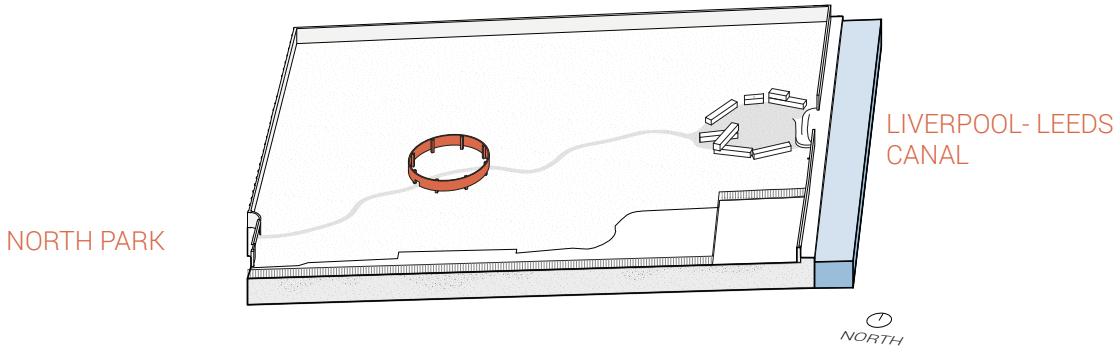


Fig. 119.2 Phase 1 - pavilion

The Gasworks Pavilion has a diameter of 25 meters and a height of 5 meters, which let the visitors explore another spatiality than they experience on the existing brownfield. Furthermore, the pavilion can provide a space for performances or other avtivities, and be a canvas for art or projections.

The pavilion symbolizes a gasholder tank. It is half the size of one of the gasholder bases on the gasworks site, and made out of reused materials. The goal of the pavilion is to demonstrate that such a space can be reused and become an asset for the community.



Fig. 120.1 Boy at demonstration

An example of how the photos from the Bootle Expression can be displayed in the Gasworks exhibition.



Fig. 121.1 Gasworks exhibition



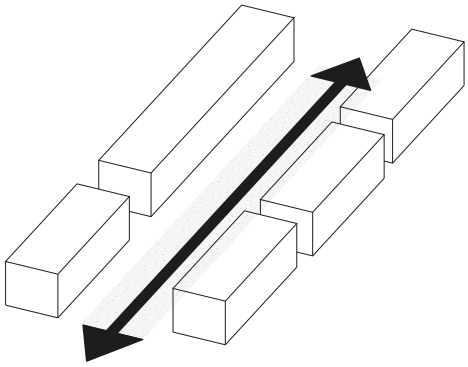
The Gasworks pavilion will provide visitors with a unique spatial experience, which becomes a large contrast when traversing The Gasworks. Within this space, visitors are encouraged to partitake in decorating the walls and put a personal mark on the design. At night, the place will be lit up, making a small accoustic concert venue.



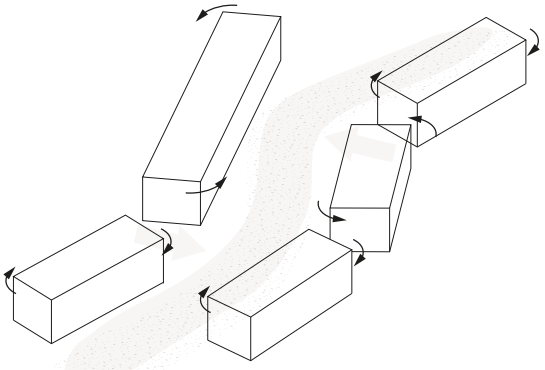
Fig. 123.1 Gasworks pavilion

SECURE SPATIAL QUALITIES

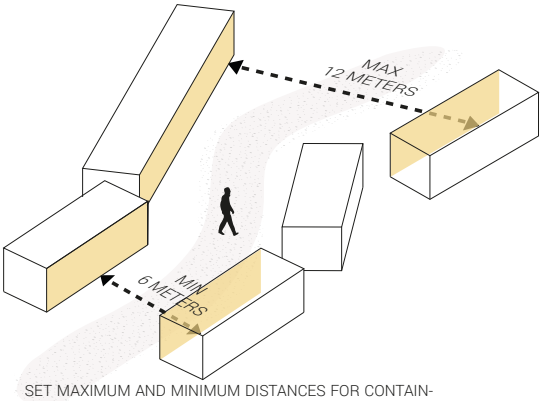
To ensure that the potential expansion of the project has suiting spatial qualities, principles including positioning and distances have been made. It is proposed that the project starts by the canal, and that the expansion happens along the axis to the park, in order to strengthen the connection. The containers should be turned in different directions to create variety along the path. However, the space between the containers framing the path should be a minimum of 6 meters wide and should not be further appart than than 12 meters. This can be altered if more space is needed, although these guidelines are made to ensure space for bottom-up activity, without seperating the individual containers. For a more extensive study on this, see the appendix. The maximum distance between the containers along the same side of the path should not be further than 6 meters. When the distance reaches six meters it allows for new paths to emerge, and these openings should be kept limited.



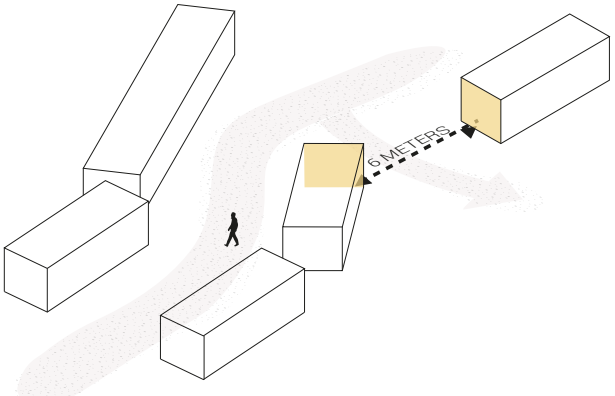
CONCENTRATE NEW BUILDINGS AROUND PATH TO STRENGTHEN THE CONNECTION



CAREFULLY TURN CONTAINERS TO CREATE MORE VARIETY ALONG THE PATH



SET MAXIMUM AND MINIMUM DISTANCES FOR CONTAIN-ERS ALONG THE PATH TO SECURE A COMFORTABLE SPACE



MAXIMUM DISTANCE BETWEEN CONTAINERS TO SECURE CONTINUITY.

Fig. 125.1 Diagram - expansion strategy

PHASE 2

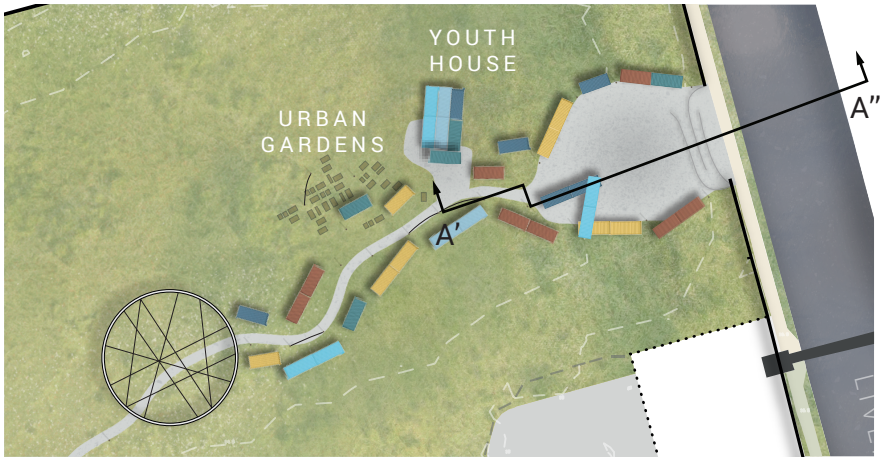


Fig. 126.1 Plan - Phase 2

Phase 2 of the project is taken forward and the design proposal shows addtional container workshops, urban gardens and a youth house. Some of these are programs that the locals in Bootle mentioned when interviewed during the analysis, others are based around the local assets and stakeholders. However, The Gasworks is a place where people can test out ideas and projects. Therefore, new programming might occur through a bottom up approach.



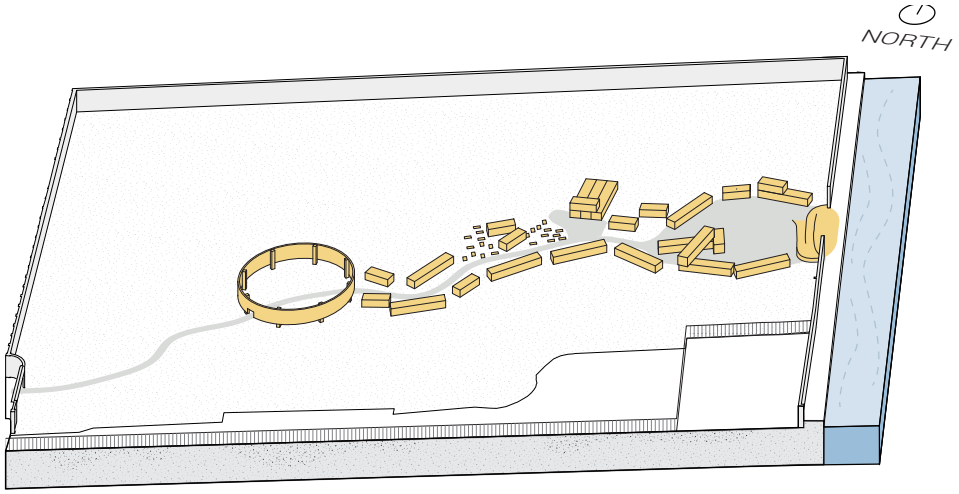


Fig. 127.1 Diagram - Phase 2

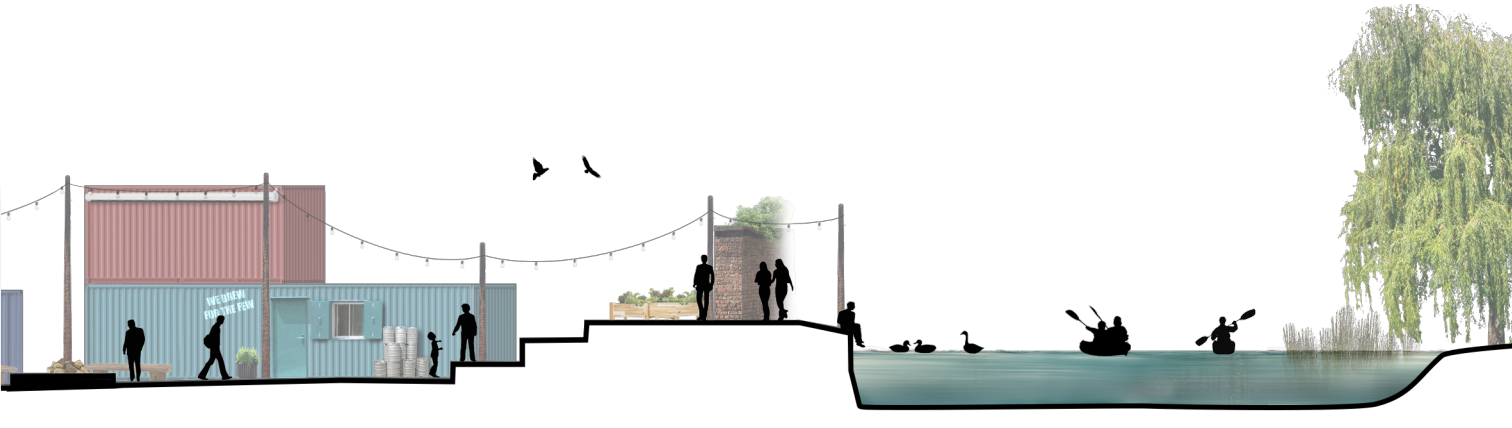


Fig. 127.2 Section A'-A" 1:200

Children playing around with old pipes and elderly women taken care of their sunflowers. The urban gardens are located right next to the youth house, which allows for the youth to more easily engage with a different generation. Stories of mischiefs from the past and present are shared, while the carrots and herbs are watered. These will be fully grown and ready for a hot stew to bring to the monthly meal at the youth house. This event always attracts new faces to the Gasworks community.





Fig. 129.1 A place for everyone



Fig. 130.1 Situation plan - Phase 3 1:7500

PHASE 3

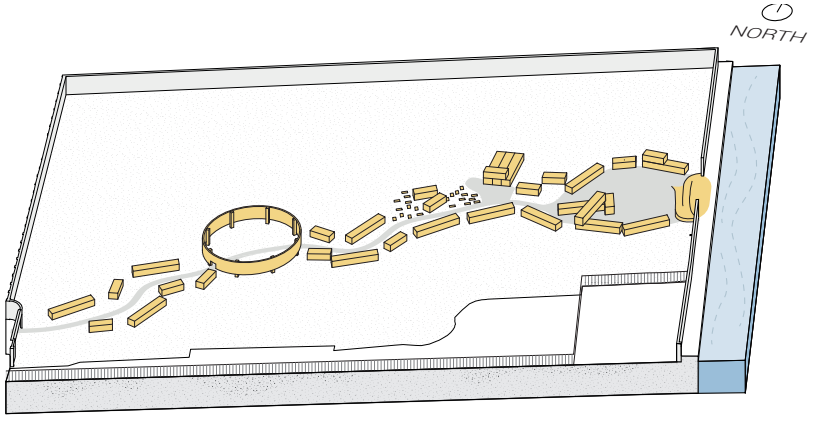


Fig. 131.1 Diagram phase 3

In phase three the containers frame the gravel path through the site. In this phase the new connection between North Park and the Liverpool Leeds canal is fully established and framed by the volumes along the path. Figure 130.1 shows how the site is connected to the green infrastructure and the Liverpool Leeds canal. It situates itself amongst the existing functions connected to this path.

This is the final phase of the proposed design, however, if the temporary activities continue to grow, new paths can potentially stretch into the residential area to the north if necessary.

CONCLUSION AND REFLECTION

In this chapter, the summary of the thesis findings are discussed and concluded upon along with final reflections.

CONCLUSION

The initial idea for the thesis was to create a proposal that would challenge the current practice of redeveloping gasworks and provide clever solutions to how the gasholder bases could be used without the need to backfill the voids. The ambition was to inspire developers to see potential in these structures, so that these sites' heritage value would be preserved and utilized as a valuable asset for the community. Urban designers are committed to trace potentials in the environment and develop solutions which can benefit everyday life of people. To reach this goal the solutions have to be embedded in the contextual realities. As knowledge concerning the complexity of redeveloping gasworks rose, it was found that the lack of design solutions was not the problem with the current practice. The group agreed that simply producing clever design proposals for the gasholder bases would not be a realistic solution, due to the many constraints and challenges with developing gasworks. Therefore the thesis would lose its initial purpose that was to contribute with research that would challenge the current practice of redeveloping gasworks.

The group noticed that reusing the structures of gasworks, exploiting their heritage, was an exception to the common practice and mostly appeared in big cities on valuable land. It is hard to argue that the heritage of these structures only have a value in these big cities when it is said that the gasholders are a testimony to Britain's role in creating the industrial revolution. It became more interesting to investigate why the heritage of gasworks only was exploited on a few location as well as if and how this trend can be changed.

Therefore, the group has been working with the following research question: How can post-industrial gasworks sites be transformed into a valuable asset for the inhabitants in deprived neighborhoods?

To answer this question it was necessary to fully understand the underlying issues that limit the redevelopment. Through a review of secondary literature the group found several conditions that have influenced the contemporary practice of redeveloping gasworks. The gasworks sites are complex and expensive in terms of redevelopment projects and there is a lot of risk associated with them. Furthermore it was found that the UK has had policies with loopholes that allow developers to cherry-pick the most attractive sites. As a result, the most problematic post-industrial sites in unattractive areas are left vacant and without purpose for longer time.
Because the gasworks have been such an important part of the neighborhood the heritage value of these sites should be recognized as a potential local resource to create value in deprived neighborhoods. The thesis explores if there is a potential to exploit this value in deprived neighborhood, this is done through a case study of Linacre Gasworks in Bootle.

Through the case study several opportunities were discovered. National Grid, which is the owner of the majority of Gasworks in the UK is in the process of getting rid of their portfolio of land. The process of reintegrating these sites back into use has begun, however, when the development can start is still unknown due to the uncertainties with remediation time. It is likely that the traces of history will be gone, since developers do seem to favor "easy brownfields", without structures, when developing in less valuable areas. Furthermore it was found that National Grid

had on other occasions leased out parts of their land while conducting remediation and demolition. Another finding revealed that SAFE regeneration needed more space for workshops and studios. This revealed an opportunity for collaboration and a temporary design on parts of the gasworks site.
The thesis suggests that a temporary activation could contribute to solve a number of problems. A strategy was developed in order to create a successful temporary design. The strategies are built up of five principles which include:

Ensure access and visibility
Plan for self sustainability
Include local community
Highlight heritage
Secure spatial qualities

The thesis arrives at a contextual responsive design for the case of Linacre Gasworks which enhances the permeability and existing connections in the area as well as providing a new public realm along strategic paths. The proposal incorporates local assets and residents as temporary occupants to activate the space, and make the place an asset for the local community. The design and programming put emphasis on highlighting the historical role of the gasholders. The goal for the temporary design is to show potentials, create awareness and identity as well as invite to collaboration between stakeholders so that the long-term development will steer towards a master planning more beneficial for the local community.

The utilization of temporary activity is not only applicable to the case in Bootle. Because the research revealed that there is a commonality to the gasworks that has not yet been transformed, findings in this thesis could be applied to other cases. This strategy of activating complex sites could benefit neighborhoods with the same specific characteristics as the ones found in Bootle.

REFLECTION

It is suggested that the strategies developed for the temporary design could be utilized in other cases. However, this should not be done without carefully understanding the context in which the project is situated. The themes investigates, such as local assets, needs, views, potentials and barriers could differ from site to site. It is acknowledged that a temporary design may not be appropriate solution for all of the sites in National Grids portfolio. The solution is highly dependent on the sites size, condition and context. However, it is interesting to investigate this opportunity because of the potential these sites hold as a gathering point were people could meet and be reminded of the local, cultural heritage.

Another important subject to reflect upon is the effect temporary activity can have on the final master planning. Through the literature review it is argued that this is dependent on the collaboration between the temporary occupants and the long term developer of the site. The challenge with this argument is that the long term developer of gasworks sites is unknown, and so it becomes more difficult to propose how this collaboration could be successful. However, the strategy for the temporary design has emphasised the relevance of including local actors that are organized which could have a stronger influence on a potential long-term design. That being said, National Grid property seems to be more concerned with their reputation than making a profit of selling the sites, and would prefer a developer that seeks to develop something that is beneficial for the local community. If the temporary occupants can prove their relevance for the local community, the municipality might become the developer and embrace the value the site has shown to hold. Thereby letting the temporary occupants have an influence on the long-term master planning for the site.

Creating awareness towards the heritage value these gasworks hold could also attract other potential developers and possibility catalyze a collaboration between the developer and National Grid that starts before the remediation, demolition and backfilling is conducted. This could open the possibilities of preserving elements of the gasworks if this is in interest for the developer.

Because of the initial interest in the project, our perception is that the desired outcome for a long-term solution should involve reuse of the gasholder bases. The reason behind this is grounded in the importance of preservation and exploiting the heritage. One could question if keeping the gasholder bases intact would exploit this heritage, thinking about the fact the gasworks were associated with tall structures and the gasholder bases were never visible in the urban scene. The urban environment is always changing and therefore one must acknowledge that it is impossible to preserve all traces of the past.

The subjects presented in this thesis was researched but because of limited time and resources the they were scoped to the relevance of gasworks. We are aware that a large amount of research is conducted on themes such as heritage, neighborhood effects and temporary design, that could provide interesting information and have an influence on the project. Furthermore, it could be interesting to conduct similar case studies of other gasworks within similar contexts to elaborate if this strategy could be applied to similar cases. This could contribute to more knowledge leading to a more holistic strategy with the aim of transforming gasworks

into valuable assets for the local inhabitants.

Lastly, It is important to mention that a temporary design alone cannot be a holistic solution for the complex issues of redevelopment of gasworks. We are aware of that temporary design has both been criticized and chariched, and that further investigation needs to be conducted in order to determine the extent of which a temporary design can influence a future development. However, the aim of the design is not to solve all issues, rather have an influence on the current practice of redeveloping gasworks, create awareness, and provide a strategy that could have an influence on the programming and design of the long term development.

By discovering opportunities through the case study of Bootle, we are hopefully taking the first step towards transforming a complex post-industrial gasworks site into a valuable asset for the local residents in the deprived neighborhood.

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ILLUSTRATIONS

Fig. 19.1. Methodology. Own illustration.
Fig. 20.1. Site investigation. Own illustration.
Fig. 22.1. Contextual analysis. Own illustration.
Fig. 23.1. Workshop
Fig. 28.1. An advert for Gasmantle. CLAI:RE (2014) An advert for a gas mantle from the Gas Engeneer´s texbook and Gas companies Register 1898. Photograph from Gasworks Profile A : The History and Operation of Gasworks (Manufactured Gas Plants) in Britain - A Brief History of the Development of the Gas In Britain.

Fig. 29.1. Gasholder in the urban scene.
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Fig. 30.1. Gasometer city.
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Fig. 31.1. Alliance Gasholder.
Weber, R, 2002, Alliance, photograph from brochure, viewed 2 May 2018. [online] Available at: http://www.savills.ie/documents/alliance-brochure---savills-final.pdf
Fig. 31.2. Gasholder no. 8
Bell Phillips Architects (2017) Gasholder park. [online]. Available at: https://greensavers.sapo.pt/como-londres-transformou-antigo-gasometro-historico-num-parque-verde/
Fig. 33.1. Linacre Gasworks. Own illustration.
Fig. 35.1. Market value of a contaminated site vs. a comparable site. Own illustration.
Fig. 35.2. Components and time dependence of Mercantile Value Reduction.Own illustration.
Fig. 39.1. Vacant land. Own illustration.
Fig. 41.1. Barbed wire. Own illustration.
Fig. 42.1. De Ceuvel.
Fig. 43.1. Institut for (X) Own illustration.
Fig. 48.1. Zoom in on case. Own illustration.
Fig. 51.1. The evolution of Bootle based on maps downloaded from Digimap - maps and geospatial data for UK academia. [online] Available at: http://digimap.edina.ac.uk/ Own illustration.
Fig. 52.1. Bootle. Own illustration.
Fig. 53.1. Brownfields in Bootle. Own illustration.
Fig. 54.1. Terraced housing. Own illustration.
Fig. 55.1. The Triad building. Own illustration.
Fig. 55.2. The Liverpool Leeds Canal. Own illustration.
Fig. 55.3. North Park. Own illustration.
Fig. 56.1. Six areas of the site. Own illustration.
Fig. 57.1. Gasworks situation diagram. Own illustration.
Fig. 60.1. Linacre Gasworks. Own illustration.
Fig. 61.1. Brick wall. Own illustration.
Fig. 64.1. Green and blue infrastructure. Own illustration.
Fig. 66.1. Linacre Gasworks and the Liverpool Leeds Canal. Own illustration.
Fig. 67.1. Trash. Own illustration.
Fig. 67.2. Couch. Own illustration.
Fig. 67.3. Canal wall. Own illustration.
Fig. 67.4. Petterson, T (2018). Bootle and Sefton History. [online] Facebook.com. Available at: https://www.facebook.com/photo.php?fbid=1450773718382404&set=g.1596115757343049&-type=1&theater&ifg=1
Fig. 67.5. Canal entrance. Own illustration.
Fig. 67.6. Canal art. Own illustration.
Fig. 68.1. Functions. Own illustration.
Fig. 69.1. Legibility. Own illustration.
Fig. 70.1. Map – Serial vision. Own illustration.
Fig. 71.1. Serial vision. Own illustration.
Fig. 73.1. Marsh Lane – outline. Own illustration.
Fig. 73.2. Marsh Lane – Collage. Own illustration.
Fig. 73.3. Marsh Lane – section. Own illustration.
Fig. 74.1. Litherland Road – Outline. Own illustration.
Fig. 74.2. Litherland Road – Collage. Own illustration.
Fig. 74.3. Litherland Road – Section. Own illustration.
Fig. 75.1. Liverpool Leeds Canal – Outline. Own illustration.
Fig. 75.2. Liverpool Leeds Canal – Collage. Own illustration.
Fig. 75.3. Liverpool Leeds Canal – Section. Own illustration.
Fig. 77.1. Contextual appraisal. Own illustration.
Fig. 79.1. Opportunities and constraints. Own illustration.
Fig. 81.1. Potential stakeholders and local assets. Own illustration.
Fig. 83.1. Local assets. Own illustration.
Fig. 85.1. Statistics - local perception. Own illustration.
Fig. 88.1. Neighborhood feast. Collage of own illustration and

picture of Lloyd,R. (2018). Bootle and Sefton History. [online] Facebook.com. Available at: https://www.facebook.com/photo.php?fbid=1439996822773876&set=g.1596115757343049&type=1&theater&ifg=1
Fig. 89.1. The coke run. Collage of own illustration and picture of Dolce,W. (1980). Collecting street stuff. Bootle: ART IN ACTION.
Fig. 90.1. Christmas party. Collage of own illustration and picture of Church Street Community Association (1977). Having a good old knees up.. Bootle: ART IN ACTION.
Fig. 91.1. Nightlife. Collage of own illustration and picture of Mansfield, C (2018). Bootle and Sefton History. [online] Facebook.com. Available at: https://www.facebook.com/photo.php?fbid=10153638309525992&set=g.1596115757343049&type=1&theater&ifg=1
Fig. 92.1. Peoples march for jobs. Collage of own illustration and picture of Dolce,W. (1981). The Peoples March for Jobs, May 1981. Bootle: ART IN ACTION.
Fig. 93.1. Kids march for childhood. Collage of own illustration and picture of James, M. (1978). Revolutionary struggle starts at any age!. Bootle: ART IN ACTION.
Fig. 94.1. Social gathering. Collage of own illustration and picture of Brian Caldwell‛, B. (2018). Bootle and Sefton History. [online] Facebook.com. Available at: https://www.facebook.com/groups/1596115757343049/photos/ [Accessed 22 Apr. 2018].
Fig. 95.1. Bootle football team. Collage of own illustration and picture of.
John, J. (2018). Bootle and Sefton History. [online] Facebook.com. Available at: https://www.facebook.com/photo.php?fbid=2053824488196533&set=g.1596115757343049&type=1&theater&ifg=1
Fig. 96.1. Youth house. Collage of own illustration and picture of James, M. (1979). Chopper bike. Bootle: ART IN ACTION.
Fig. 97.1. Entertainment. Collage of own illustration and picture of Dawsom, CP. (2018). Bootle and Sefton History. [online] Facebook.com. Available at: https://www.facebook.com/photo.php?fbid=2049911651891970&set=g.1596115757343049&type=1&theater&ifg=1
Fig. 98.1. Family activities.Collage of own illustration and picture of Church Street Community Association (1977). Summer play-scheme activities.. Bootle: ART IN ACTION. and Hoy, V (1980). Watching the bowls. Bootle: ART IN ACTION.
Fig. 106.1 Masterplan 1:1500 Own illustration.
Fig. 109.1 The public space by the canal Own illustration.
Fig. 110.1 Timeline Own illustration.
Fig. 111.1 Phases Own illustration.
Fig. 113.1 Diagram - Self Sustainability Own illustration.
Fig. 115.1 Diagram - social inclusion Own illustration.
Fig. 116.1 Master Plan 1:300 Own illustration
Fig. 117.1 Phase 1 - placement Own illustration
Fig. 117.2 Eastern elevation from canal 1:200 Own illustration
Fig. 118.1 Diagram -Highlight heritage Own illustration
Fig. 119.1 Phase 1 - exhibition Own illustration
Fig. 119.2 Phase 1 - pavillion Own illustration
Fig. 120.1 Boy at demonstration Own illustration
Fig. 121.1 Gasworks exhibition Own illustration
Fig. 123.1 Gasworks pavilion Own illustration
Fig. 125.1 Diagram - expansion strategy Own illustration
Fig. 126.1 Plan- Phase 2
Fig. 127.1 Diagram- Phase 2 Own illustration
Fig. 127.2 Section A´-A´´1:200 Own illustration
Fig. 129.1 A place for everyone Own illustration
Fig. 130.1 Situation plan phase 3 1:7500 Own illustration
Fig. 131.1 Diagram phase 3 Own illustration
Fig. 147.1 Temporary design, spatial study 1. Own illustrations.
Fig. 148.1 Temporary design, spatial study 2. Own illustrations.
Fig. 149.1 Temporary design, spatial study 3. Own illustrations.
Fig. 151.1. Temporary design, phase 1.
Fig. 153.1. Index of Multiple Deprivation map. Own illustration.
Fig. 154.1. Diagram - Typologies. Own illustration.
Fig. 155.1 Diagram - Active frontage.
Fig. 156.1. Institut for X. Available at: https://www.thinglink.com/scene/912723876595630082
Fig. 156.2 Container house. Andreas Houmann. Available online at: https://www.euroman.dk/livsstil/institut-for-x-i-aarhus-er-en-succes-pa-lant-tid-man-skal-have-ild-i-ojnene-for-at-komme-her
Fig. 157.1. Boxpark event space. Available at: https://thespaces.com/2015/05/11/office-scheme-oust-boxpark-shoreditch/
Fig. 157.2 Boxpark Shoreditch. Available at: https://www.fashercise.com/2014/08/17/fashercise-pops-up-at-boxpark-shoreditch/

APPENDIX

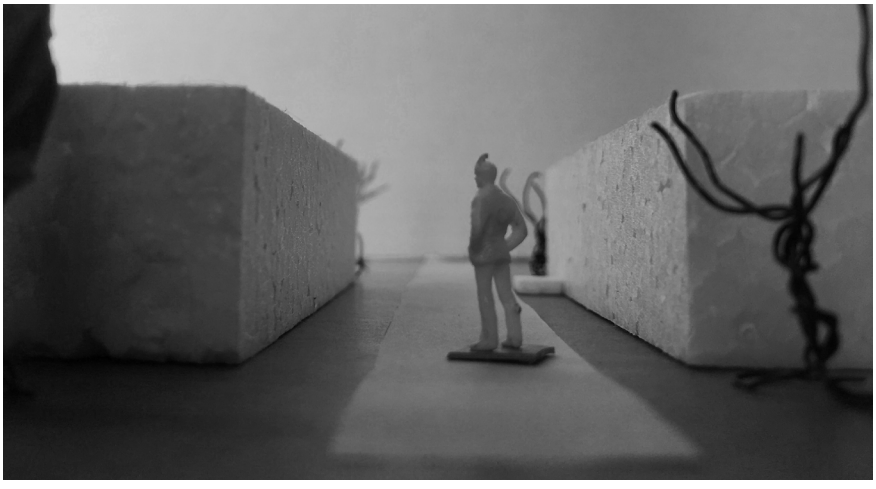
APPENDIX

TEMPORARY DESIGN - SPATIAL WORKSHOP 147
TEMPORARY DESIGN - PHASE 1 150
INDEX OF MULTIPLE DEPRIVATION 152
TYPOLOGIES 154
ACTIVE FRONTAGE 155
CASE STUDY - INSTITUT FOR X 156
CASE STUDY - BOXPARK SHOREDITCH 157
INTERVIEW - NATIONAL GRID 158
INTERVIEW SAFE REGENERATION 162

TEMPORARY DESIGN - SPATIAL WORKSHOP

On these pages is a study of the spatial qualities along the gravel path. This was made to study the distance, which provided a guiding direction as well as determine the maximum distance containers should be separated from each other. By doing so, it could be understood how the relation between containers on The Gasworks is kept, while still allowing enough space for users to unfold their projects. The gravel path used is two meters wide on the examples.

The workshop is displayed in one meter intervals, and the findings were that the minimum space needed between the path and containers were two meters, in order to allow for activity outside of the containers. Activity should both be able to unfold and engage with pedestrians, without becoming obstacles. Around six meters, the desired spatial feeling started to disappear, and containers became more isolated spaces, rather than being interpreted as a collective whole.

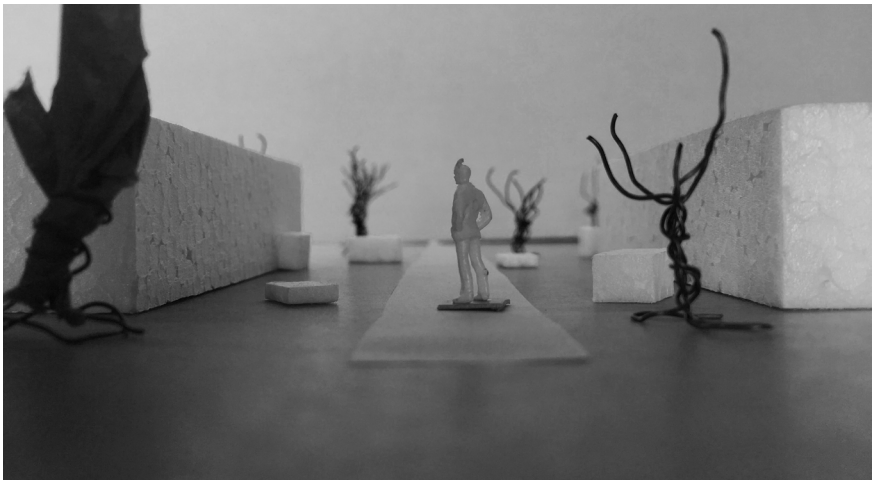


Containers distance from path:
1 meter



Containers distance from path:
2 meters

Fig. 147.1 Temporary design, spatial study 1



Containers distance from path:
3 meters



Containers distance from path:
4 meters



Containers distance from path:
5 meters

Fig. 148.1 Temporary design, spatial study 2



Containers distance from path:
6 meters



Containers distance from path:
7 meters



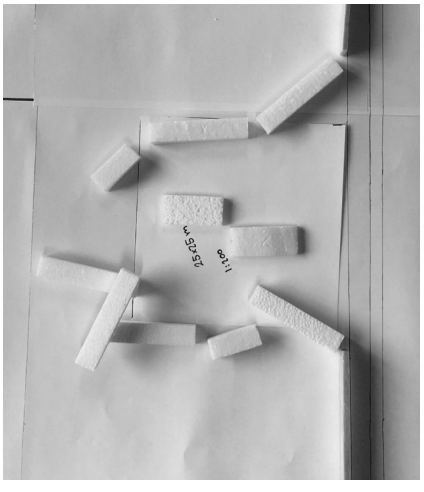
Containers distance from path:
8 meters

Fig. 149.1 Temporary design, spatial study 3

TEMPORARY DESIGN - PHASE 1

These pages show some of the iterations of the first phase in the temporary design seen from above. The pictures show the placement of the event space along the canal, which is on the right in each photo. There is a 25 meter by 25 meter square laid underneath for reference. This was done to study different ways to invite people into the space, and create an atmosphere of community within the space. The first phase is shown because of its importance to the success of the rest of the area.







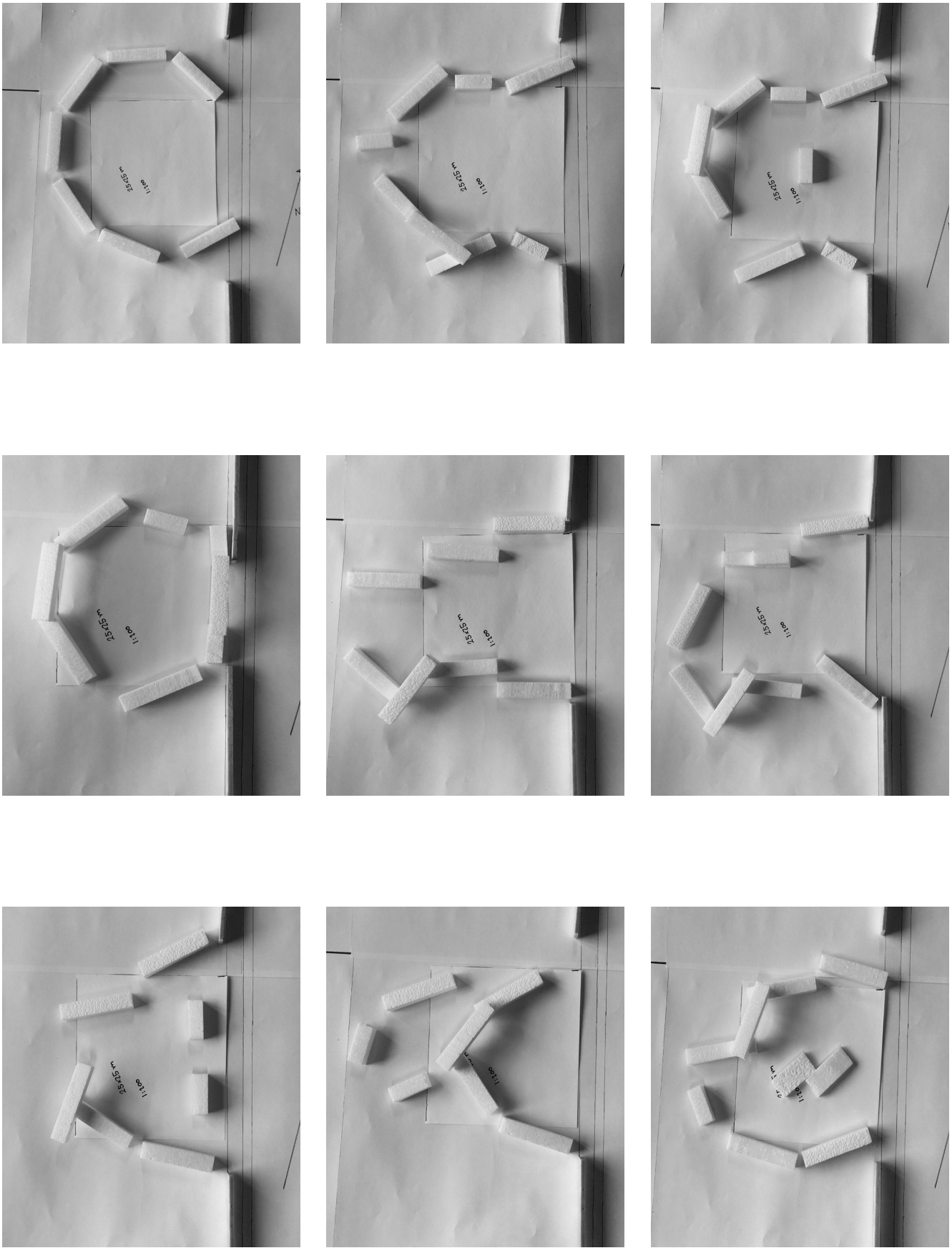


Fig. 151.1 Temporary design, phase 1

INDEX OF MULTIPLE DEPRIVATION

The map on the right shows and overview of the Index of Multiple Deprivation (IMD)for the neighborhood in which the gasworks site is situated and the surrounding areas. The IMD is an overall measure for the deprivation in an area, gained by combining each of the domains in accordance to their respective weight shown after each domain.

Income Deprivation Domain - 22,5 %
Relates to the deprivation of a low income and people who are currently not working.

Employment Deprivation Domain - 22,5 %
Relates to the exclusion of working-age people, who are excluded from working involuntarily. It includes those unable to work because of sickness or disability, unemployment or caring responsibilities.

Education, Skills & Training Domain - 13,5 %
Relates to lack of skills and attainments and falls into two sub-domains: One is the adult skills and the other relates to children and young people.

Health Deprivation & Disability Domain - 13,5 %
Relates to premature death, impairment of quality of life through poor mental and/or physical health, morbidity, and disability.

Crime Domain - 9,3 %
Relates to the risk of becoming the victim of personal and material crimes.

Barriers to Housing & Services Domain - 9,3 %
Relates to the accessibility of housing and local services both physically and financially. In that way it includes the physical proximity of the services within the local area and the affordability of housing.

Living Environment Deprivation Domain - 9,3 %
Relates to the quality of the local environment. This falls into two sub-domains: "indoors" environment, which measures the house quality and the "outdoor" environment, which measures road traffic accidents and air quality.

There are two additional indices which are not calculated into the IMD which are the *Income Deprivation Affecting Children Index (IDACI)* and the *Income Deprivation Affecting Older People Index (IDAOPI)*
(Department for Communities and Local Government (DCLG), 2015).

Bootle is from this statistic a very deprived town, and especially certain areas of the town has large issues with certain types of deprivation (OpenDataCommunities.org, 2015) The central area of Bootle towards the docks has an IMD of 0,3% with the *Employment Deprivation Domain* being within the 0,02% worst in the country. *The Income Deprivation Domain* is also low within Bootle going as low as 0,1% in the same area. These two domains together are weighed as 45% of the total IMD, which is why Bootle is categorized as a very deprived town, even when looking at some of the other domains.

Bootle does not score low in the Barriers to Housing & Services Domain, however, with the low Income Deprivation Domain and Employment Deprivation Domain being so low, it is possible that even though these services are accessible and the housing prices are affordable to the average english citizen, this might not be the case to the unemployed and low-income inhabitants in Bootle.

Two other interesting things to note from the IMD are the Crime Domain, which is not as bad as the stigmatization of Bootle. The Living Environment Deprivation Domain, which is at the 2,3% lowest in the country can be seen in the neighborhood where the gasworks is situated. This is most likely due to both the quality of the housing, but also the busy roads and poor air quality in the area.

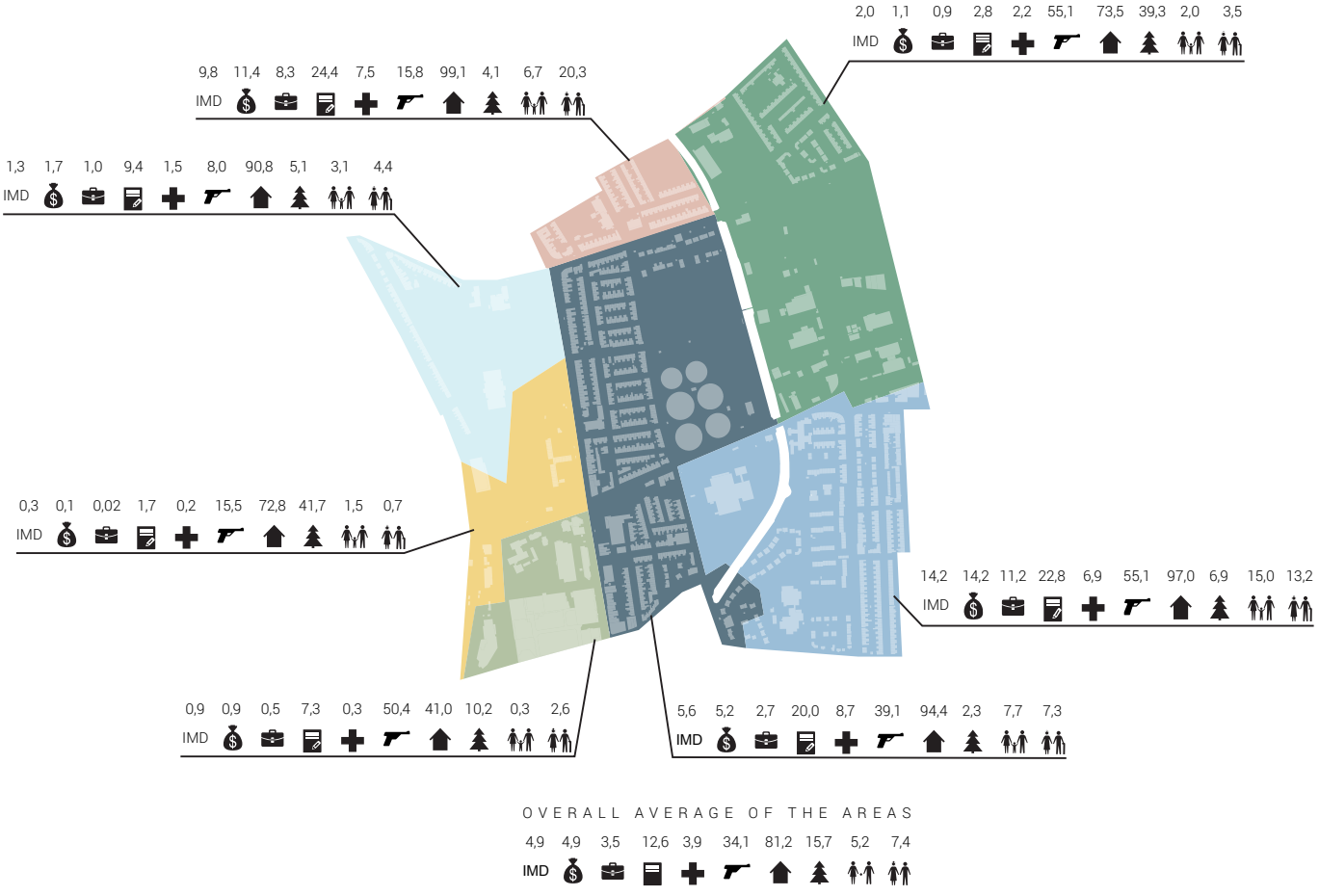


Fig. 153.1 Index of Multiple Deprivation map

IMD Index of Multiple Deprivaton
Income Deprivation Domain
Employment Deprivation Domain
Education, Skills & Training Domain
Health Deprivation & Disability Domain
Crime Domain
Barriers to Housing & Service Domain
Living Environment Deprivation Domain
Income Deprivation Affecting Children Index
Income Deprivation Affecting Older People Index

TYPOLOGIES

This analysis shows that the main typology in the area consist of terraced housing. There is also a large amount of lower storage units located east of the site.



- linear blocks
- Terrace housing
- Semi detached housin
- Detached housing
- Shopping mall
- Churches
- Standalone low rise
- Low rise storage units
- High rise
- industrial
- Vacant industrial

Fig. 154.1 Diagram - Typologies

ACTIVE FRONTAGE

This analysis shows all the active frontages in the area. The analysis shows that they are few and the ones that exists are locaded near stanley road and Bootle Strand.
A number of previously active frontages was also noticed during this mapping, however, these are now boarded up.



Fig. 155.1 Diagram - Active frontage

CASE STUDY - INSTITUT FOR X



Fig. 156.1 Institut for X

WHAT -	Culture, business and education platform
WHERE	Godsbanen, Århus, DK
WHEN	2009
SIZE	Godsbanen: 2,1 HA Institut for X: 2 HA

The former hub for train transport in Jutland, was located at Godbanen until the year 2000, and has since 2009 been the location for the temporary activities of Institut for X in the southern area of the site. (Godsbanen, 2018)

Institut for X is a not-for-profit association, which has created a temporary platform and a comunity of designers, skaters and businesses. More than 250 people, 90 studios & workshops, 50 businesses and 25 associations make up the community and redefines the platform as they grow bigger or change.
(Institutforx.dk, 2018)

The area consist of old traincart, railwaybuildings and shipping containers rebuilt into workshops and smaller studios or cafés. Each thing often built by the community themselves from simple materials and due to the nature of the temporary project, there is a short time from idea into construction of some of the projects at Godsbanen. The projects themselves are a reflection of the needs from the users and businesses, meaning that if they are in need of a space to grow plants, they will most likely built it themselves, or if they need a space to test



Fig. 156.2 Container house

out a structure, they might build a mock up of the structure outside in a 1:1 scale.
In 2012 the architecture company 3XN designed the new large cultural space Godsbanen in the northern area of the site, which has additional workshop and eventspaces, a small cinema, conference rooms and blackboxes. Additionally, there are 10 appartments located there to house visiting artists, while they work at the location on a project.

The project provides rentable test sites for experimental individuals, creatives and smaller businesses to have a more loose environment in which they can perform projects otherwise restrained.

CASE STUDY - BOXPARK SHOREDITCH

WHAT	Pop-up mall
WHERE	Shoreditch, London, England
WHEN	2011
SIZE	0,23 HA



Fig. 157.1 Boxpark event space



Fig. 157.2 Boxpark Shoreditch

Consisting of 61 repurposed shipping containers, boxpark has won multiple awards by combining a mixture of food offers with retail, art and event space. Each container is possible to rent for a period of time, in which you then become a part of the small community of brands gathered on a relatively small amount of space.
The project is situated in shoreditch, which is a creative neighbourhood in London, where visitors can also see Brick Lane, Spitalfields market and Columbia Road. In that sense, the project latches on to an existing popular and buzzing context with new stuff being made and a wide variety of bars, clubs, art galleries and fashin showrooms. (Boxpark, 2018)

The overall park is divided into two storeys where the lower portion facing the street is focused on design and retail, and the upper floor, accessible at each end or by lift, hosts partly covered dining options and event spaces, where local artists come and play. On friday and saturday nights, this can be turned into a club, and
Boxpark Shoreditch hosts accoustic events each sunday on a small green space, adjacent to the containers.

With leases of small spaces ranging from monthly to multiple years, the concept makes it possible for smaller businesses and pop-up stores to commit for a smaller period of time, into a confined space, where other locations might be holding back upcoming artists from comitting to a longer period. The simple structure also allows the project to be situated on a wide variety of urban land..

INTERVIEW - SAFE REGENERATION

Present as interviewee are:
- Eline Øyri
- Lise Sakariassen
- Mikkel T. Jensen

The interviewed is
- Brian Dawe

Summary of interview with Brian Dawe
The location for this interview is SAFE regenerations cultural hub, located in the St. Mary's complex Waverley Street, Bootle, L20 4AP.

So what is it you do here at SAFE regeneration?

We primarily use art as a way to engage with people and a way of enabling people to have a voice. We came here 13 years ago to make some art works on the canal. We were only supposed to be here six months. At that time there were a lot of developers interested in buying this land to build houses in Bootle. We managed to raise enough money to buy this building, so that kind of gave us a stakehold here. Typically artists move to areas that no one else wants to be in. Then it becomes trendy and then they go "okay you little artist, can you just go away? We'll go on with the serious business to regenerate the area." I knew it was important for us to get some stakehold to have some ownership so that we could stay. Today we lead the conversation about what happens here in Bootle. By using creative work we engage with the people and the community. We use artwork, drama performances and festivals and all those kind of things that are nice and enjoyable. Safe is structured so that we have 142 stakeholder members which can guide and direct what happens here. We have a leadership so that we are organized and can have a clear voice. We have a board of trustees that are typically professionals from the area. So there are three tears of governance as its called. The most important thing is that local people can direct what we do. We dont concider them as the problem! We want to organize and empower people so they can take the responsibility themselves to create change. We also find marketing and documenting the things that we are doing. We aim to communicate the nice things in Bootle to change the negative perceptions people have to the area.

We read that you help start up businesses, what kind of businesses are these?

Mainly small startups focusing on creative and community work. We did not really mean to set up this hub. We were only supposed to be here for a short time. But then people come asking us how we we did this and were we got the money from. We started to help people who wanted to do the same. Then we started to help a lot of people and thought we should formalize it. So me and my colleagues went away and became business advisers. We worked with a lot of different locals and those people we felt could continue to work with us we invited to stay with us in this school. We have one filmmaker, some designers, urban gardeners, boat builders and artists. Today my job is bringing in projects, commissions and money. The money goes out to the people in the building. Every time we get a chance to establish or help another organization we do. They are not exclusive to us, we try to help them stand on their own feet. Typically they go out and work with the community, which we support. With this approach we are multiplying ourselves in some ways. Our premises are full, and we got a waiting list for people wanting a space for their projects and startup businesses. We can guide them and provide information to them, but have no more space.

How has the community responded to your work?

In a sense today the community is a part of us. The first year we had lots of break ins. A lot of issues. But one time, I was constantly here on evenings boarding windows up, two kids climbed into the window trying to breaking in. I said "what are you doing? There is nothing here. Look! There are just some artists doing paint. Do you want to get involved in this? Come! Get involved with this. " And it literally, overnight, that was the of it. The break ins stopped. We have not really had any incidents of vandalism for over a decade. We renovated a yacht as an outdoor seating area outside the pub we created. Everyone was saying, that won't last a year. The kids will break it. I said no but didn't sleep for that week. I was only thinking "This will be Ok, trust me, it is going to be fine… oh god, it is probably burning now!" But nothing happened after all, and that was a relief. This proves that people are starting to care about their community and trusts us. That means that they approve, and they don't want to ruin the things that are going on here.

What we really want to do is understand Bootle more, from a local's perspective. Could you tell us a bit about the town?

Well, Bootle is the Docklands area of Liverpool which was just 80 years old and one of biggest ports of the world. The public was employed to the docks. So the last 50 plus years you can imagine that

as the docks became mechanicalized there is not so much demand for people. The docks are still busy. In fact it's still a super terminal. Huge super container ships come in, it almost looks like the town expands. So it's still busy but there is just not the same need for people in the same way that there was 50 years ago. What you have now here, in some cases, are second and third generation of unemployment. So with unemployment comes a whole range of issues: health issues, depression, alcoholism, and obesity. And then you mix that all up and it becomes pretty serious, although to look at it, it doesn't look like a bad place. Although 20 years ago or 30, in the 80s, it was pretty grim. The only reason you'd come here was to buy drugs, really. It was pretty bad. There is still that underlying social issue with unemployment. They have something called Index of Multiple Deprivation when you look at unemployment, health and all those things, Bootle is in the 0.5 most deprived communities in the UK. So it doesn't get much worse than that.You have some big employers like the National Tax Office, the National Health and Safety Office. You have the council offices and a lot of large employers. About nine thousand people come to work within the town every day, but when they finish work they all go. We established a pub in an attempt to retain some of this money within the town. This is a big issue for Bootle. The lack of afternoon and evening activities.

So about the stigmatization of Bootle. Is it as bad as it looks?

The main perception of Bootle is connected to the social issues in the area. Although it is not a bad place, the perception of it, is that it is a really bad place and so you tend not to get people settling if they have the economic position to choose otherwise. And that's reflected in the school situation. When we first came here 12-13 Years ago there were five primary schools. The one we are in now, was one of them, it shows demographics of how the population has grown older and the town has not attracted younger generations. Young professionals and young families don't tend to live here. So that's part of our project to draw in young professionals. I'd say it's not as bad as it looks. Because if you walk around and you'll meet and see good people! Good people that would do you good before they do you any ill. Genuinely.

What do you see as the biggest potential in Bootle?

The canal. Definitely the canal. Everybody likes to be around water. In many cities canals are used as a kind of central point for regeneration. In Liverpool it use to serve as an industrial tool, and were not used for recreational purposes. We have focused our development and project around the canal. We are turning the life back into it. The canal in Bootle is fenced off, that's not normal in other cities. Only eight- ten years ago the canal used to just stop, but now they have opened it up and it goes all the way down to the city centre of liverpool. There used to be a lot for chemicals there. Because of the work that has been done all the wildlife have started to return to the canal in terms of birds. This is giving us the indication that things is going the right way. There used to be a lot of littering, and nobody cared about the canal. People have now begin to love and care for it.

What do you think Bootle really needs?

If you want more people to settle in bootle you have to improve the recreational facilities. We are trying to create reasons for people to come to bootle. The recreational needs to be of quality and it needs to be something different. When you get people coming from the outside telling you what the problem its no good. We now have established a voice and are able to say no. We know the neighborhood and are able to guide the regeneration in the right direction. We've said we don't want to build houses. Building houses is OK but we want to raise the aspirations. We focus on improving Bootle´s reputation and empowering the local residents. It does not help to have a really nice house if the neighbourhood around it is a bad shape. There is also need for places where people can gather together, that is a problem.

What are your thoughts on the framework for the town center done by Sefton council?

A lot of pretty pictures. They have done a lot of Strategies and investments in the new plans but is not realistic. That's why they are so keen on supporting us in what we do, because they see that we can do what we say.