

# ad hoc architecture

*exploring the preservation and activation of a site's identity in  
a degrowth scenario*

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Department of Architecture and Civil Engineering

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Supervisor: Naima Callenberg



**CHALMERS**

**ad hoc architecture**

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Master's Thesis Spring 2022

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Architecture and Urban Design  
Matter Space Structure

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**Introduction**  
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## abstract, main questions and objectives

### abstract:

While facing an urgent climate crisis, the idea of degrowth as an economic strategy for reduction of both production and consumption has once again been presented as an alternative possible solution. With the proposal *Ducklands* (1989-1991) of Cedric Price as a starting point in terms of dismantling a site, the project seeks to explore how identities of a site can be preserved and activated in a degrowth scenario.

The thesis is set within a speculative future, in which the extraction of new materials is forbidden. Reused materials stated as the only sustainable option for development in the city has resulted in a shift in material production. Rather than looking for possible sites to build on, extracting inherent materials and components of already existing sites has become an essential part of urban planning.

The site of Gamlestaden slaughterhouse area, Gothenburg, is characterized by its former function: meat production, and a quality of both aesthetics and processes at the site: ad hoc. By transforming the site into a material resource, the preservation of the two identities can be explored. The historical narratives of the site, former industrial processes, are translated as a design tool for the conversion of the site into another type of industry: from slaughter of animals to slaughter of materials.

Ad hoc, *for this*, is found as separate objects as well as linked to situations and processes at the site. The situations consist of numerous traces of ad hoc activities, whereas the objects are derelict artefacts isolated from their contextual connection. By extracting design principles from the situations, implementing them in relation to the objects, ad hoc as part of the site's identity will be related to from two different perspectives: through the objects and as a method for transformation.

The outcome of the project is a speculation on how the site transforms, including smaller design projects related to industrial functions. By exploring a possible future scenario, the thesis aims to offer another perspective on how to relate to a site and its identity, as well as commenting on future challenges and potentials linked to the climate crisis.

### keywords:

degrowth, ad hoc, reuse, transformation, slaughterhouse area

### thesis question:

How can identities of a site be preserved and activated in a degrowth scenario using ad hoc as a method for design?

### intention:

The aim of the project is to find alternative ways of relating to a site's history and identity in a speculative future scenario of degrowth, as well as commenting on future challenges and potentials linked to the climate crisis.

### delimitations:

The thesis is set within a speculative scenario and does not consider aspects of building permits and restrictions at the site.



**Background**

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context:

Simultaneously with facing an urgent climate crisis, the city of Gothenburg is going through massive changes. These fast paced transitions risk neglecting identities and histories of the city. What stories are hidden beneath the surface?

In the proposal *Ducklands* (1989-1991) by Cedric Price Architects, CPA, an alternative to the conventional development of the dockland area of Hamburg was presented. The proposal did not only shift perspective to the ducks' but, as described in below quote, suggested that the entire area would disappear.

*Instead of urban regeneration, which would have resulted in new constructions, CPA proposed to make the development area disappear—literally—by converting it into wetlands. Rather than promising growth, CPA's proposal, if realized, would have instead given the city of Hamburg some "relief from development" (Doucet, 2019).*

The idea of degrowth has lately been brought attention to once again as a response to climate

challenges (Frearson, 2019). Being constantly in the hands of a capitalist system, another perspective, even if radical, could open up for an alternative future. By using the approach of Cedric Price's *Ducklands* in the setting of Gothenburg, another narrative of development can be explored.

The thesis investigates a speculative scenario, which enables exploring a possible future without the limitations and conventions of reality today. However, already existing processes and functions can still be part of the speculation, but applied at a different scale or type of setting.

There is a constant search for potential sites to build on or transform, either by demolition, relating to existing structures or by expanding the footprint. What would happen if we tried to find sites to remove instead? What role do layers and context have in a degrowth scenario? Could a site re-emerge?

### degrowth:

The idea of degrowth, initially introduced by André Gorz in 1972 followed by the book *The Limits to Growth* in the same year (degrowth.info, n.d.), has not solely been praised but rather criticized for presenting a naive and unrealistic view of the world. In 2019 however, Oslo Architecture Triennale *Enough: The Architecture of Degrowth*, focused on what architecture can do to support degrowth, as an economical strategy for reduction of both production and consumption rather than complete elimination of development (Frearson, 2019).

*Degrowth is a designed reduction of total energy and material use to realign society with planetary limits, while improving people's lives and distributing resources fairly. It is an economic model that recognises that the route to greater welfare for all is not one of more extraction and expansion, but of more sharing and co-operation.*  
(Harper, 2019)

In line with the definition of degrowth of Oslo Architecture Triennale 2019, this thesis aims to relate to degrowth both as a future state in society but more importantly as an approach for design implementations. A degrowth approach could then support and drive the project towards reuse of materials and a shift in order on how to work with materials, for example sourcing material first and designing second.

Degrowth.info (n.d.) describes one essential part of degrowth as *social changes and an orientation towards sufficiency instead of purely technological changes and improvements in efficiency in order to solve ecological problems*. This rather suggests a change in the perception of growth and success than massive technological improvements, which could be applied in this thesis as a reuse-rebuild strategy of already existing technology and industrial components.

Additionally, any design implementations of the thesis links to degrowth as *relief from development*, meaning a focus that shifts from development in the traditional sense of growth and rather responds to necessary changes at the site, driven by the city as a whole.

### ad hoc:

Ad hoc  
*made or happening only for a particular purpose or need, not planned before it happens*  
(Cambridge University Press, n.d.)

In latin, ad hoc literally means *for this* (Merriam-Webster, n.d.). Ad hoc could also be described as solving a problem or need as fast as possible with little consideration of how it affects existing conditions, especially in terms of aesthetics. Ad hoc is rather the opposite of design, where the lack of aesthetic consideration has almost formed a type of aesthetics in itself.

Ad hoc often holds a negative connotation and should not be mistaken for custom-made or site specific design. However, ad hoc often showcase creative solutions, using materials at hand. This could in the thesis connect to reuse of materials found at the site and offer another perspective on the design process.



site of resurrection:

Resurrection

*the act of bringing something that had disappeared or ended back into use or existence*

(Cambridge University Press, n.d.)

A site where hidden layers from the past re-emerge could be referred to as a *site of resurrection*. Hidden layers could for example consist of information discovered through old maps that take new material form.

The re-emerged layers could however transform in different ways, both in appearance as in presence and expression, driven by a force disconnected from the specific material layer and its original function.

In this thesis, the term *site of resurrection* could include former industrial processes that transform with a connection to degrowth. In relation to this, objects or parts of the site linked to the former function of the site could resurrect but transformed both in function and appearance.

urban fossil:

Fossil

*the shape of a bone, a shell, or a plant or animal that has been preserved in rock for a very long period*

or

*an old person, especially one who will not accept new ideas*  
(Cambridge University Press, n.d.)

The definition of *fossil* could be used to investigate and define the term urban fossil. In a more literary sense, urban fossils can be seen as remains of urban life, preserved in ground layers. The project *Urban Fossils (2006-2015)* by Francesca Cirilli shows examples of this. The project consist partly of a series of photographs showing traces of urban life, where urban fossils are described as per below quote.

*Every product coming from human activity in contemporary cities, rests or traces of production and consumption, which remains "entrapped" in the asphalt, the "soil" of cities.*  
(Cirilli, n.d.)

Does one however, depart from the definition of fossil as an old person not willing to accept new

ideas, parallels to non sustainable ways of living can be drawn. In a future of degrowth, urban fossils implies objects or elements linked to e.g. over consumption, large scale meat production or long transportation routes and heavy infrastructure.

Fossils, in their original definition as preserved shapes, are often viewed as valuable traces of the past. Even common objects or shapes are considered valuable, more or less regardless of the influence the object or shape in question had under its lifetime. One could argue that passed time increases the value of the remains, regardless of the level of ordinariness.

With this in mind, ordinary elements of the site could be seen as potential urban fossils. In a future degrowth scenario, within this project, such elements could for example include pipelines, loading docks and containers. By transforming ordinary elements of the site, hidden potentials in usage could possibly unfold, as well as contributing to a change in attitude towards how such elements are valued today.

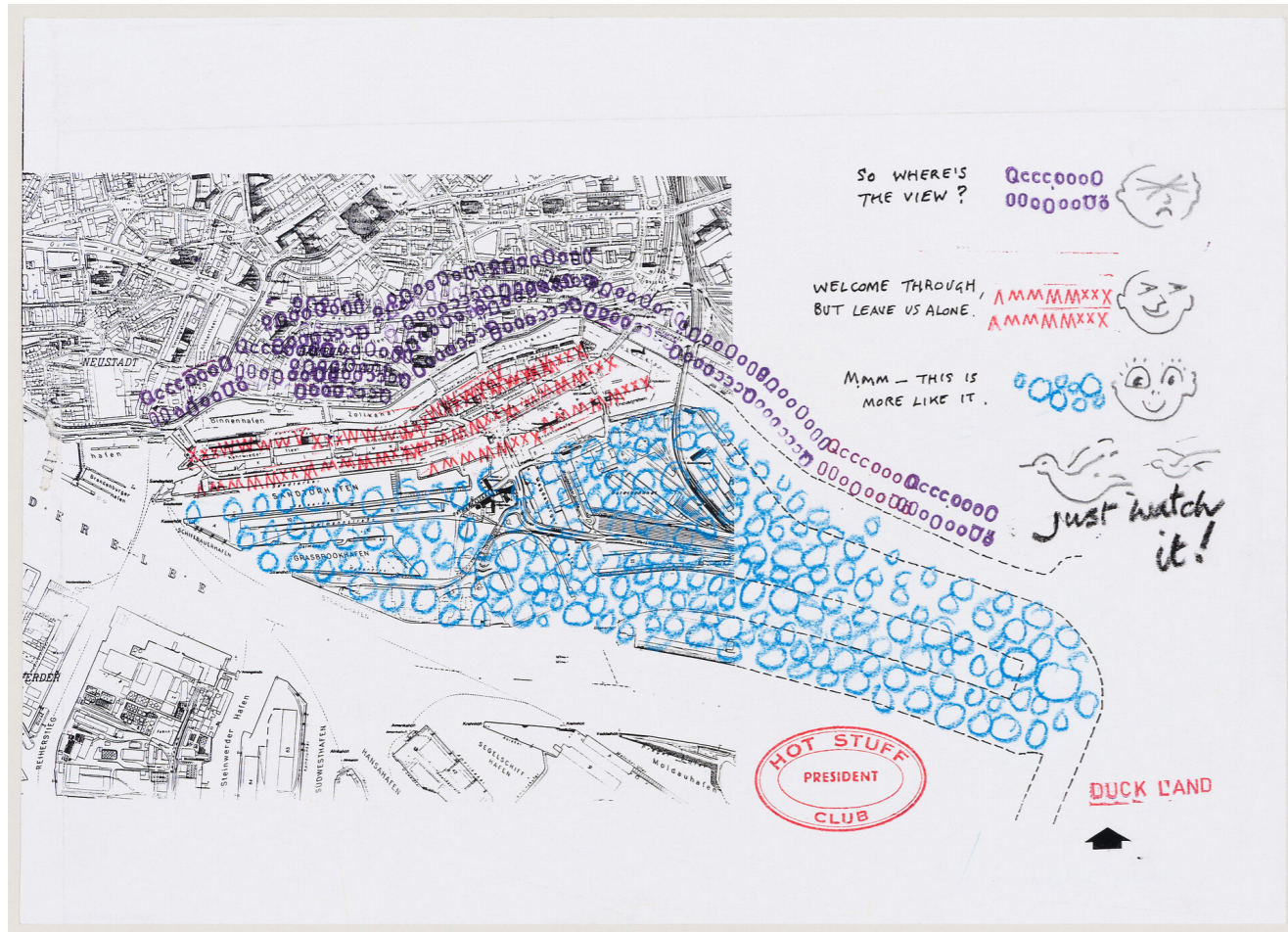


Figure 1: Cedric Price, *Ducklands proposal* (1989-1991).  
 (image: Courtesy Cedric Price fonds, Canadian Centre for Architecture).

The proposal *Ducklands* (1989-1991) of Cedric Price functions as an important influence of the thesis. By suggesting something unexpected and unconventional, ideas and scenarios of another possible future can be explored.

In the article *Anticipating Fabulous Futures*, Doucet (2019) describes the project. In 1989, an architectural masterclass was hosted by the city of Hamburg, named *Port City / Hafencity*. The intention was to find new opportunities for the inner-city harbour in the historical area of Speicherstadt. Cedric Price represented one of sixteen teams formed by both students and a local partner, each led by renowned architects. Instead of suggesting urban development in the traditional sense, Cedric Price questioned the idea of growth early on in the project.

The team of Cedric Price proposed a different kind of narrative for the site, suggesting that the entire area would disappear by transforming it into a nature reserve, or wetlands, focusing on the ducks' perspective. The proposal consisted of drawings and sketches on how the site would be dismantled, including elements such as moving bridges and a "mud-mobile".

The project might seem radical, perhaps in particular the change of perspective to the ducks', but the project still remains realistic in terms of the dismantling of the site and its process.

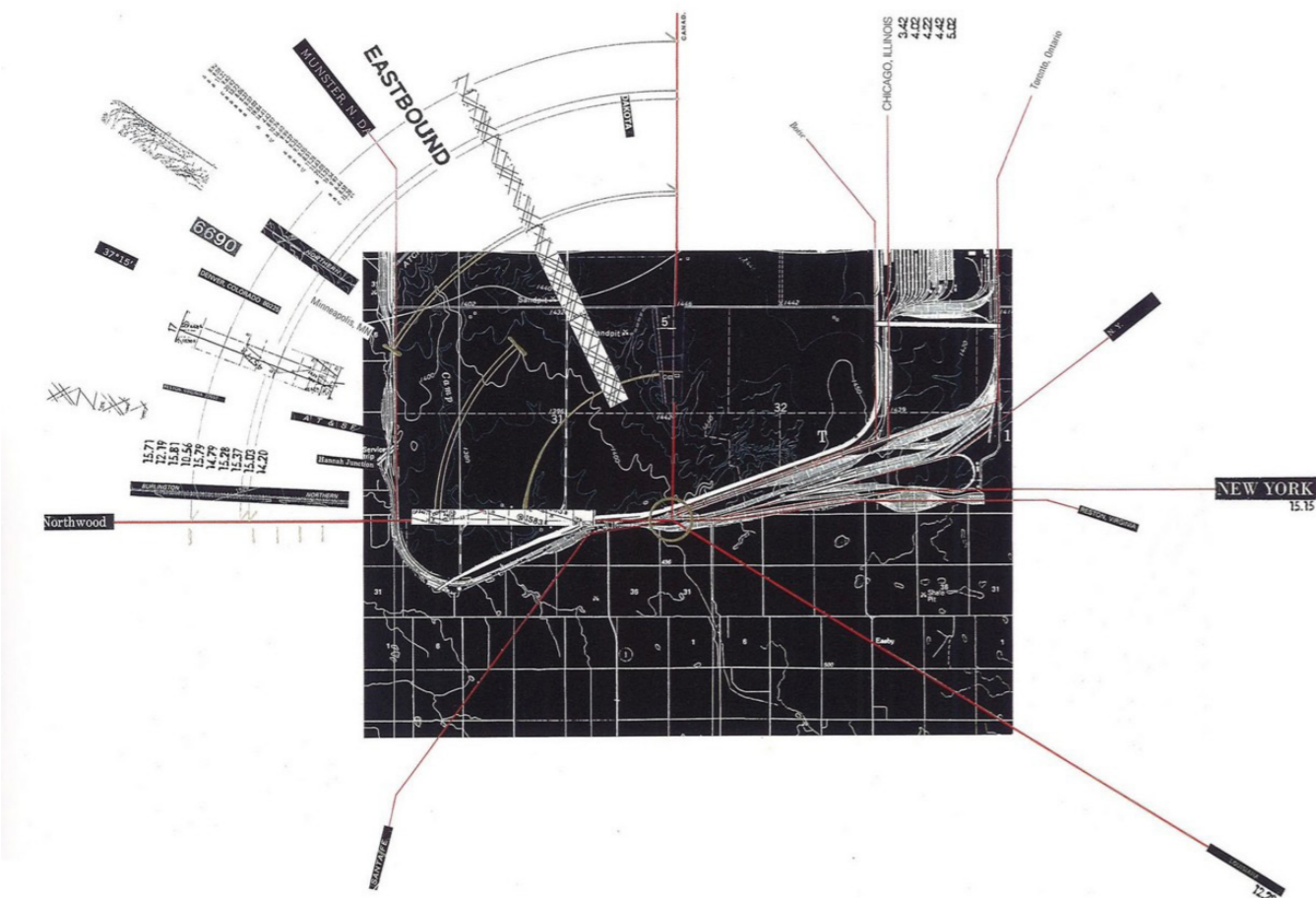


Figure 2: James Corner & Alex S. MacLean, *Taking Measures Across the American Landscape* (1996).  
 (image: representation3).

The work of James Corner, with focus on the book *Taking Measures Across the American Landscape* (1996), put traces of human activity and our use of the landscape into focus. By combining aerial photographs with collages as a representational tool, hidden narratives and underlying phenomena are discovered. The way Corner uses traces of human activities influences how the narrative of the site is formed in this thesis project.

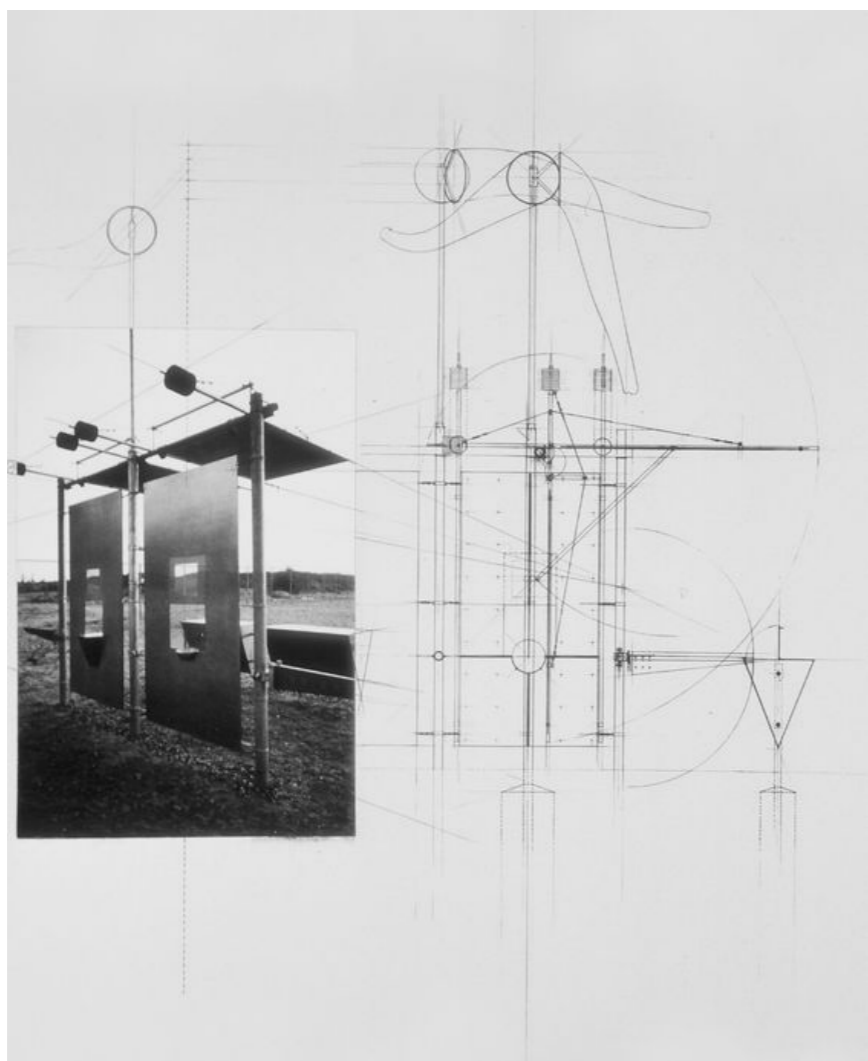
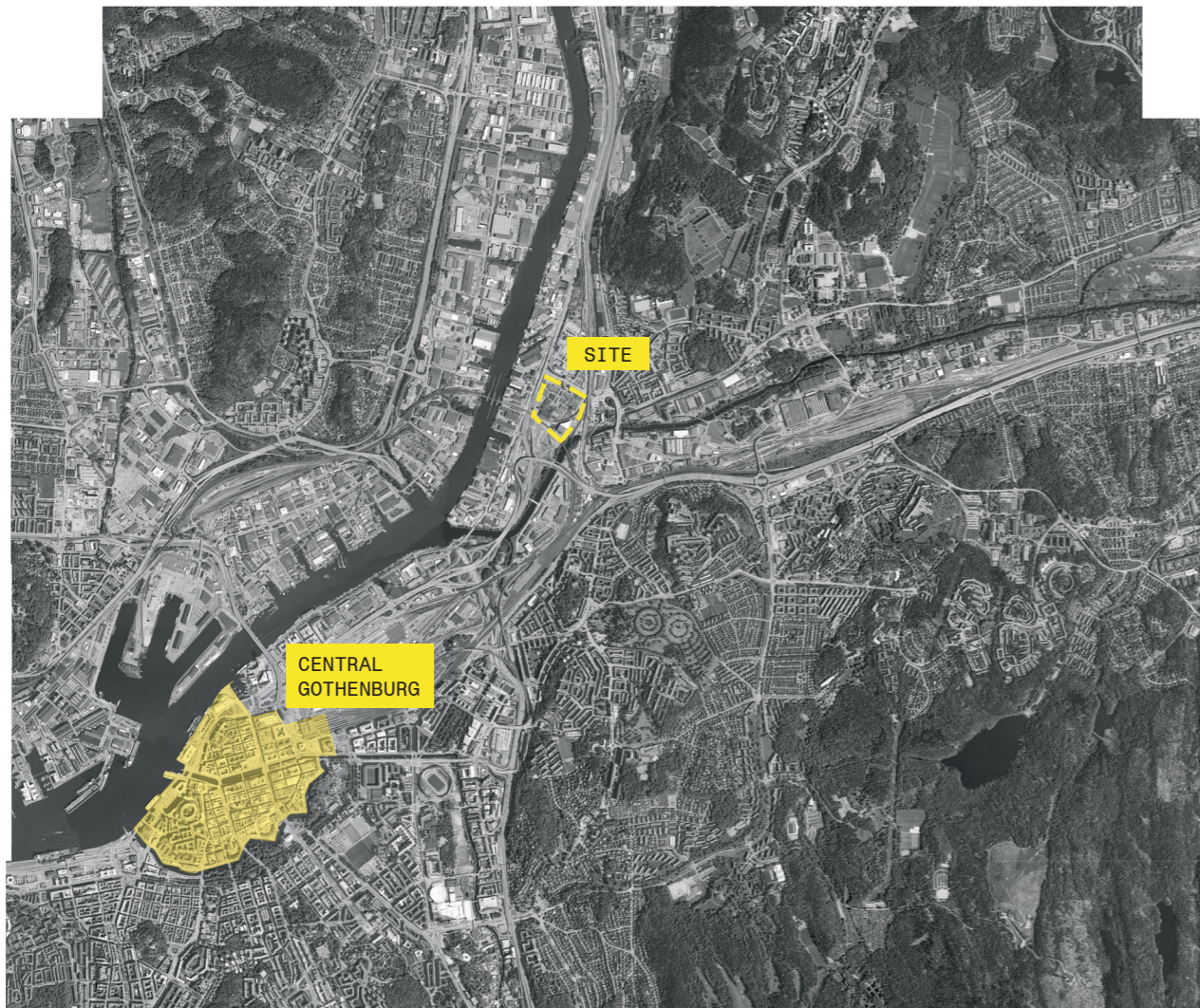


Figure 3: Diller Scofidio + Renfro, *Gate, Art on the Beach* (1984).  
(image: Diller Scofidio + Renfro).

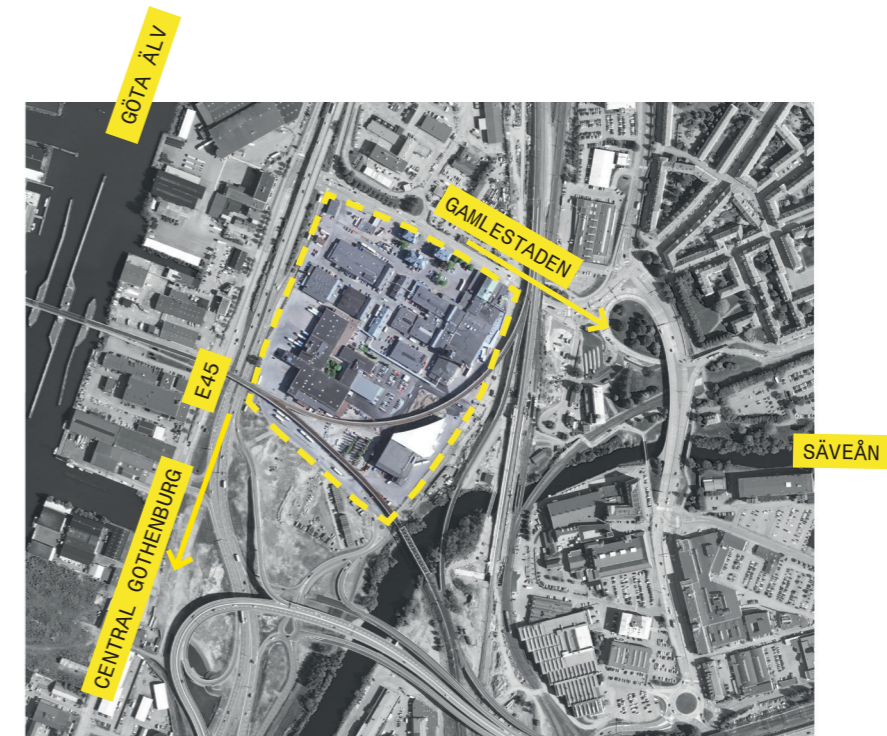
The drawing from the project *Gate, Art on the Beach* (1984) by Diller Scofidio + Renfro inspires the thesis in terms of representing movement and overlaps rather than presenting a static drawing.

**Situation**

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Location in relation to the city



Gamlestaden slaughterhouse area

The site of Gamlestaden slaughterhouse area is situated northeast of central Gothenburg. Heavy infrastructure surrounds the site, including railway tracks, in addition to water on two sides: Göta Älv and Sæveån. This contributes to the site being experienced as somewhat cut off from the rest of the city.

As a former location for meat production, the traces of the previous function are still visible. This both in terms of material remains of the past but also by the functions of the site today having a connection to food to some extent. Such connections includes for example an urban winery: Wine Mechanics, a bakery: Jerkstrands bageri, a cheese shop and producer: Cityysteriet, as well as the historical link to meat: Jakobsdals charkuteri.

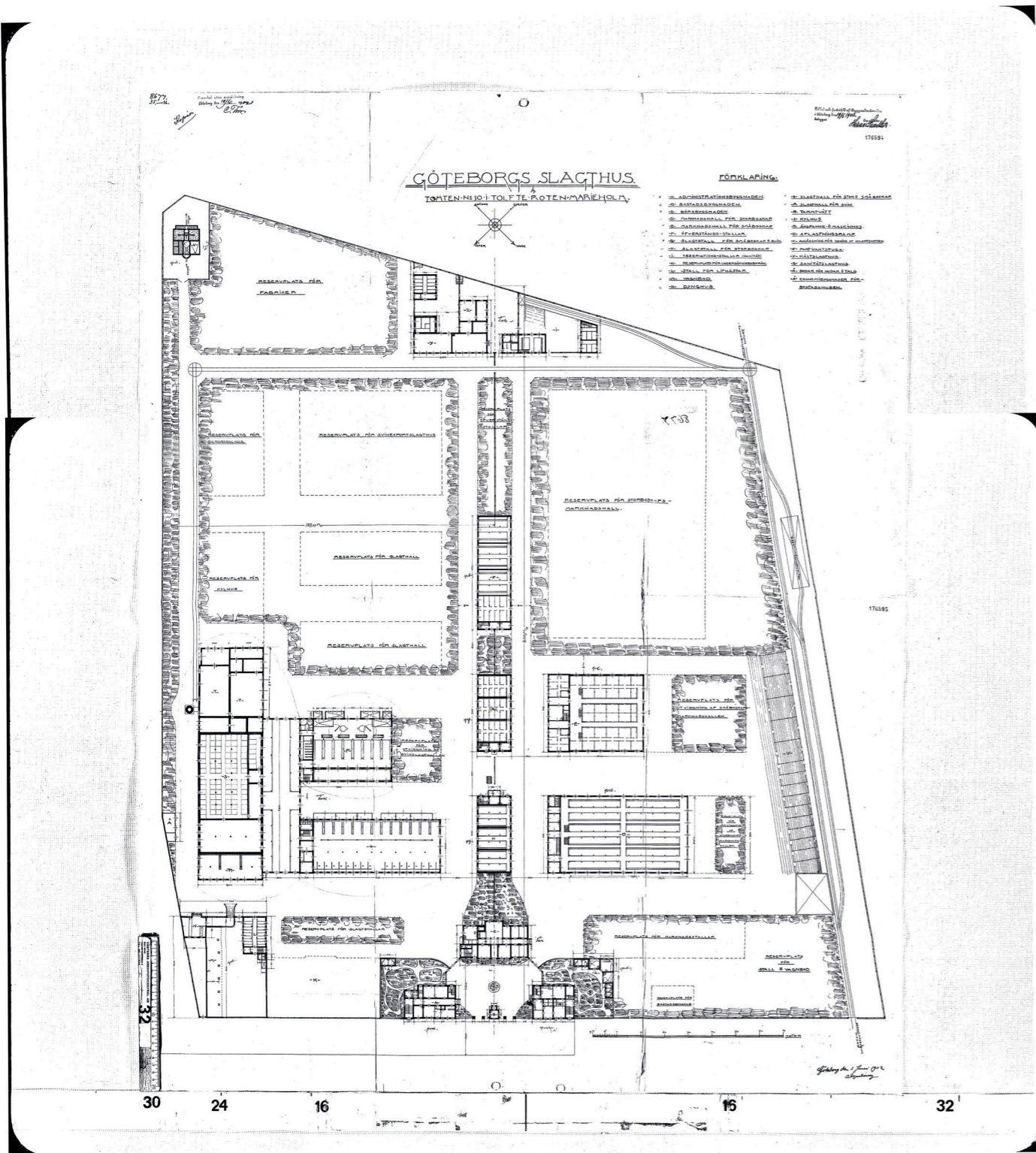


Figure 4: Plan of the slaughterhouse area (1902)  
(image: Stadsbyggnadskontoret).

Processes of the time are manifested in the architecture  
and used as a tool for design in the thesis

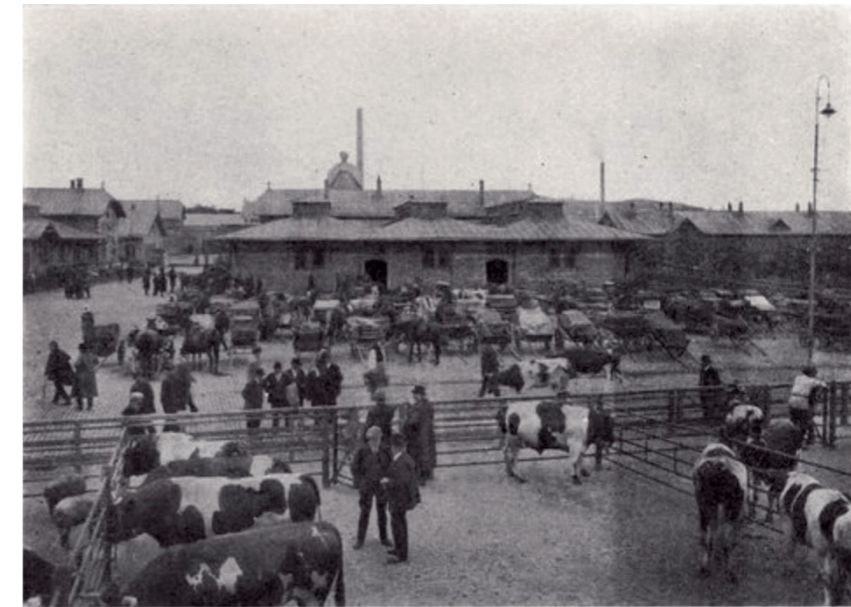


Fig. 119. Marknadsavdelningen sedd från avlastningsramperna.  
I bakgrunden parti av slakthallarna.

Figure 5: Photo of the slaughterhouse area (1923)  
(image: Det gamla Göteborg).

In 1901, the architect Otto Dymling's proposal for the new slaughterhouse area in Gothenburg was accepted (Svensson, 2019). The cost of the new slaughterhouse represented almost one fourth of the city budget but meant a giant step in terms of hygiene in relation to the new national rules of animal slaughter. The slaughter halls were equipped with rails to provide a more efficient process, which can be discerned in the original map (left).

In contrast to the situation as of today, the slaughterhouse area existed of larger green areas for enclosed pasture functioning as a reserve for possible future development. Parts of the original buildings and structures have been demolished whereas many of centrally located brick buildings are still standing.



The maps show the development of the site as well as which of the original buildings that still remain today. There is an ongoing process of cleansing at the site, where later additions connected to former industrial needs are dismantled. Many of the additions share a connection with *ad hoc*, and are not viewed as a valuable part of the site's history. The elimination process of this type is common, especially in relation to gentrification processes. There is however, in my opinion, a value in keeping such elements of a site's history. What is being erased from the site today is mainly based on the general opinion of what is beautiful and not. These types of cleansing processes only reflects what is acceptable today, but what we view as valuable as of now will most likely change with time.



- 1902-1920
- 1950-60
- 1970-1980
- 1990-

Development of the buildings at the site based on material from Tyréns (2019).

left: site plan 1:2000  
 overlap of site today (black) and map from 1923 (red)



**Method**

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## process and method

### method:

The thesis is set within a speculative future scenario, in order to enable a different perspective free from regular conventions of reality today. Such a perspective could, even if radical, open up for an alternative future. The scenario relates to a future of degrowth, in which the extraction of new materials is forbidden. As a result of the new state in society, the process of material production has shifted. Instead of extracting raw materials, already existing sites and their inherent materials and components are put into use as producers of material. With this as a foundation, the thesis seeks to explore the question of *How can identities of a site be preserved and activated in a degrowth scenario using ad hoc as a method for design?* as well as commenting on future challenges and potentials linked to the climate crisis.

With the conclusion of two main characteristics of the site, the former function: meat production, and a quality of both aesthetics and processes at the site: ad hoc, the preservation and activation of the site's identity can be explored. By transforming the site into a material resource, a narrative of a degrowth scenario can take form. The historical narratives of the site, the former industrial processes, are translated and used as a design tool for the conversion of the site into another type of industry: from slaughter of animals to slaughter of materials.

Ad hoc, literally meaning *for this*, is found as separate objects as well as linked to situations and processes at the site. The situations consist of numerous traces of ad hoc activities, whereas the objects are derelict artefacts isolated from their contextual connection. By extracting design principles from the situations, implementing them on or in relation to the objects, ad hoc as part of the site's identity will be related to both as a method and as part of the design itself. The design related to the objects works as facilitating structures supporting the overall scenario. Additionally, certain principles are applied at the site as a whole, which results in ad hoc being related to on different scales.

The speculative scenario is explored and investigated through physical but mainly digital modelling with elements of photogrammetry and sketches both digitally and by hand. In addition to research on reuse, scrapyards and recycling centres as well as the container terminal in Gothenburg has influenced the design of the scenario and its facilitating structures.

### scenario statements:

no extraction of new materials

existing sites shall be used for material production

production sites should as far as reasonable use inherent components and materials in relation to the production process

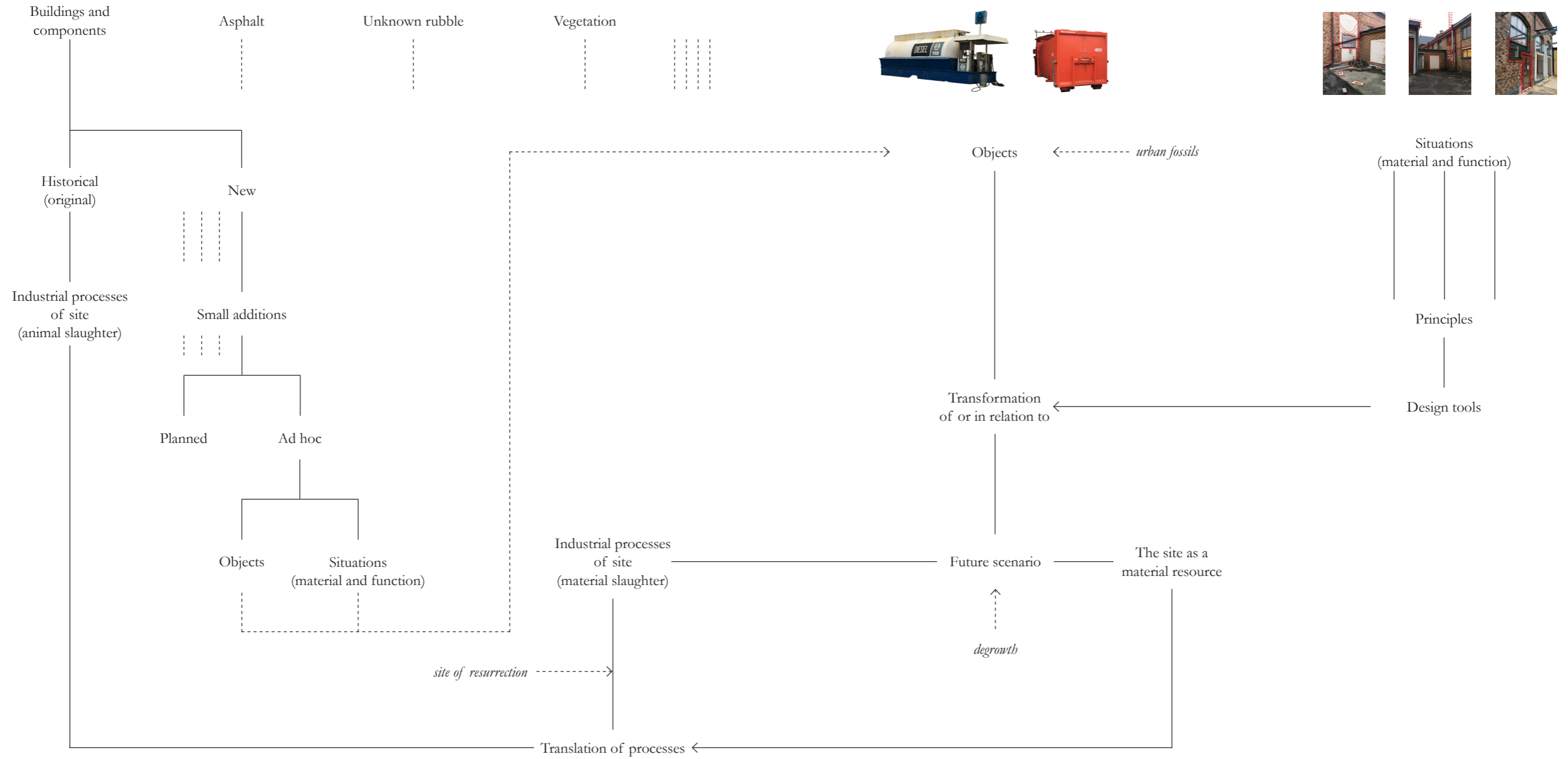
production sites should not be completely eliminated but connect to history and identity

*right:* scenario statements

# method connections

site today:

ad hoc:



## ad hoc: objects and situations

objects:



1. loading dock



2. compaction container



3. portsystem 2000



4. reefer container



5. whole cluster conveyor



6. diesel tank



7. platform



8. pipeline



9. fire escape

The ad hoc *objects* at the site can be described as derelict artefacts lacking their contextual connection. In relation to their surroundings they are experienced as more or less misplaced. Some of the objects, in particular the whole cluster conveyor, are mainly experienced as misplaced due to a lack of understanding of their function. This also applies for the diesel tank, even though the function of it rather is uncertain in terms of usage frequency today.

Misplacement also occurs in relation to the object's surroundings where the object is a latter addition not planned beforehand. Portsystem 2000 is one example of such an object where the standardized gate is way too large in relation to the existing building, resulting in a steep roof to connect the two. The fire escape is another, although not as solid, example of when a standardized element clashes with the historical environment.

situations: material and function



situation 1



situation 2



situation 3



situation 4

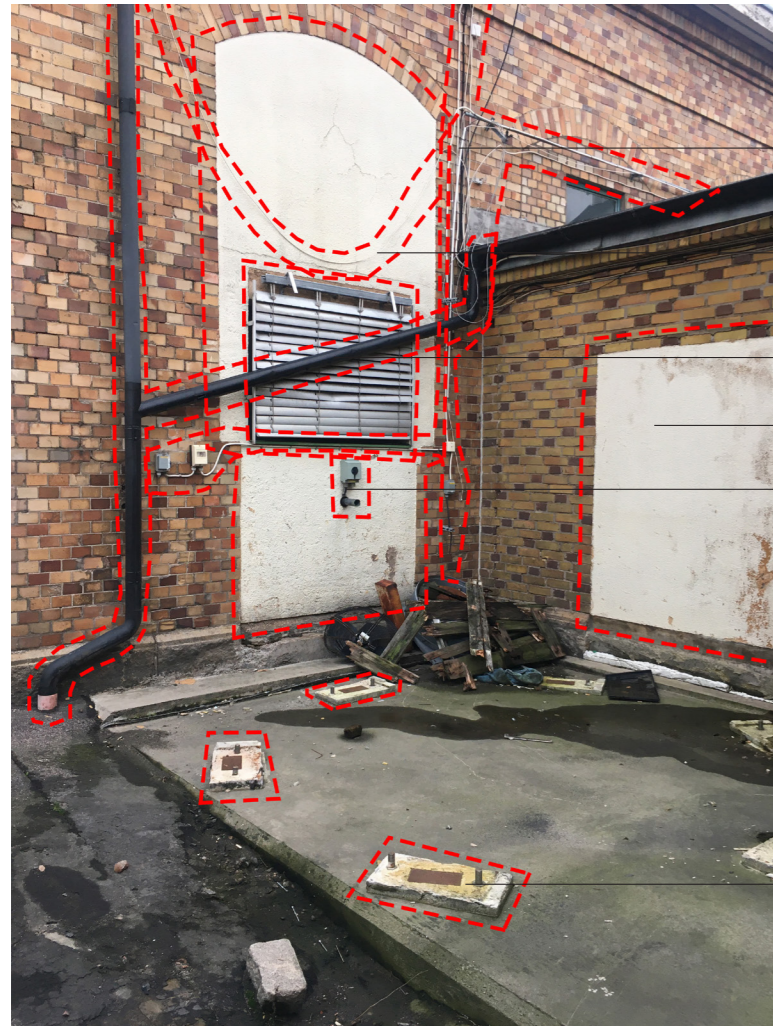
The ad hoc *situations* are compared to the *objects* more dependent of their immediate surroundings in order to be experienced as ad hoc, hence not as easily isolated as single elements.

One of the main characteristics of the situations is the mentality of prioritizing function above all, with little or no consideration of how it affects the existing environment. There is also a time hierarchy where the most recent need is prioritized. One example of this is visible in situation 1 where the downpipe is placed right in front of what appears to be a window, eliminating the possibility to open the window outwards.

The situations show numerous layers of activities, processes and needs at the site, developed organically. By extracting design principles from the ad hoc situations, ad hoc as part of the site's identity can take new form isolated from the specific situations.

# ad hoc: principles

situation 1:



Overlapping

Lack of support

Function over function

Erasing

Erasing and adding

Erasing

time hierarchy

color marks

material remains

overlapping - numerous electrical wires externally

lack of support - electrical wire with no apparent support

function over function - downpipe placed in front of a window

erasing - the color marks and material remains suggest a quick elimination of elements with no intention of taking care of what is left behind

situation 2:



Erasing

Erasing and adding

Erasing and adding

Standardized for non-standard

compensating addition

clash of measurements

erasing + standardized for non-standard - part of the original window has been erased and replaced with a compensating window in order to match the door of standardized measurements

situation 3:



Erasing and adding

Erasing and adding

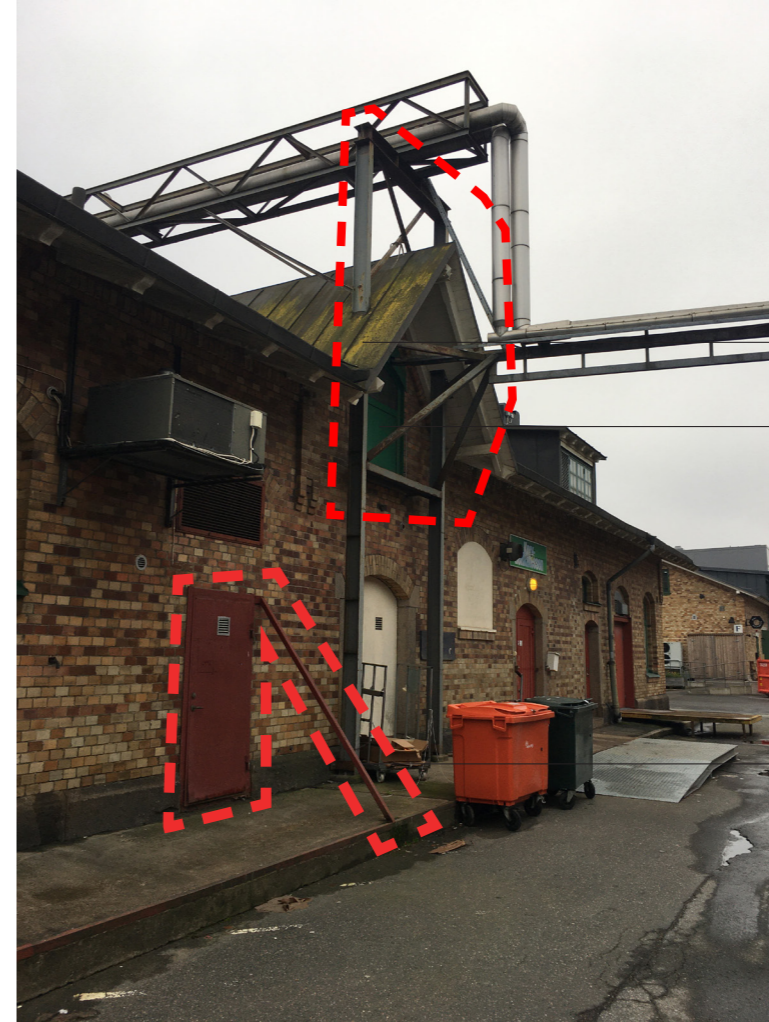
Standardized for non-standard

clash of measurements

erasing and adding - parts of the original building is erased and replaced with specific doors

standardized for non-standard - the original window is partly replaced by a standard door and stair

situation 4:



Cutting through

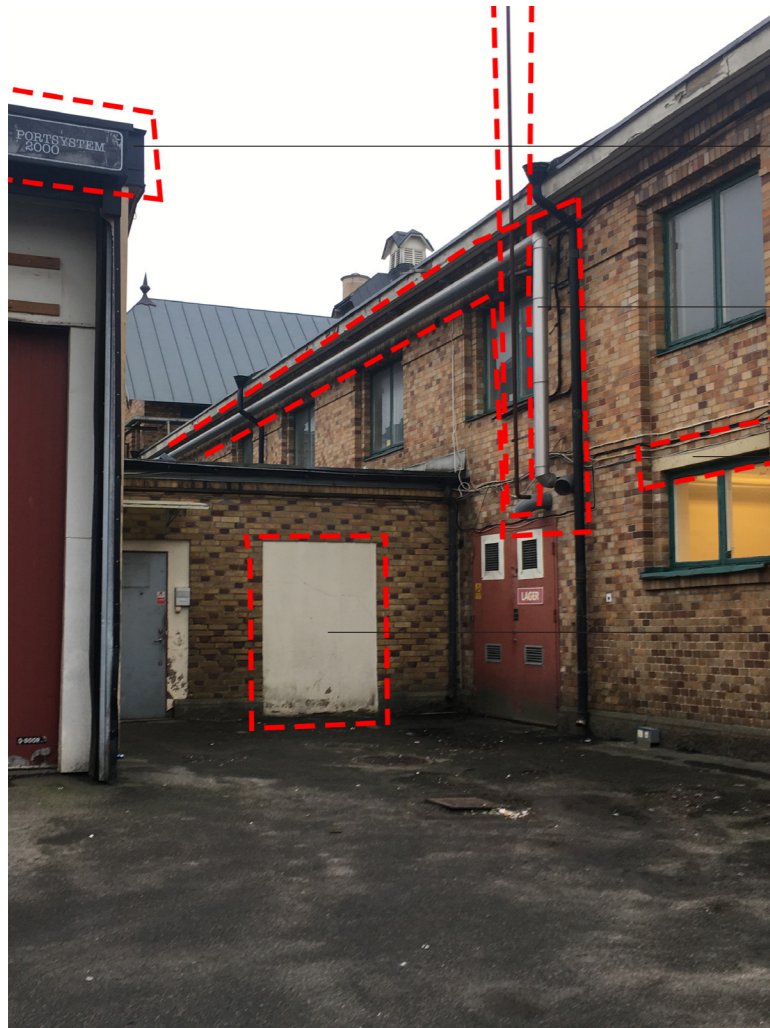
Function over function

Erasing and adding

cutting through - the pipeline cuts through the existing roof in order to attach to the ground

function over function - the pipeline attaches the facade in front of the small door

situation 5:



- Standardized for non-standard      clash of measurement
- Surface-mounted function              time hierarchy
- Temporary repair
- Erasing                                      color marks

standardized for non-standard - the gate shows a clash of measurement in height in relation to the existing building

surface-mounted function - externally drawn pipeline

temporary repair - a wooden plank temporarily functioning as a beam above the window

situation 6:



- Lost function                              material remains
- Form isolation                              remains of erased element

The situation is not necessarily linked to ad hoc, but rather suggests other possible directions for categories.



**ad hoc principles:**

overlapping

lack of support

function over function

erasing

erasing and adding

standardized for  
non-standard

cutting through

surface-mounted  
function

temporary repair

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**supporting  
descriptions:**

time hierarchy

color marks

material remains

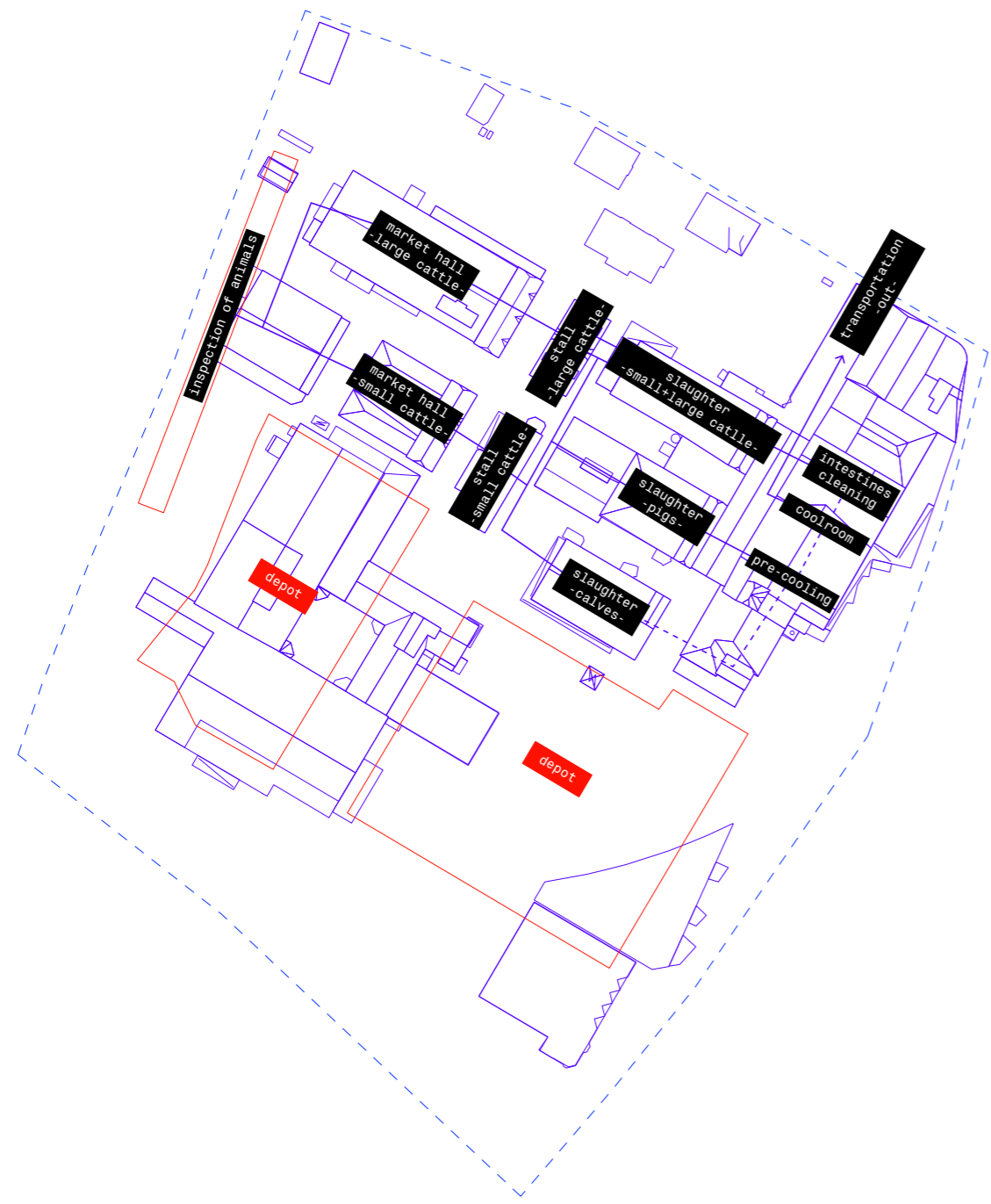
compensating addition

clash of measurements

extracted ad hoc principles:

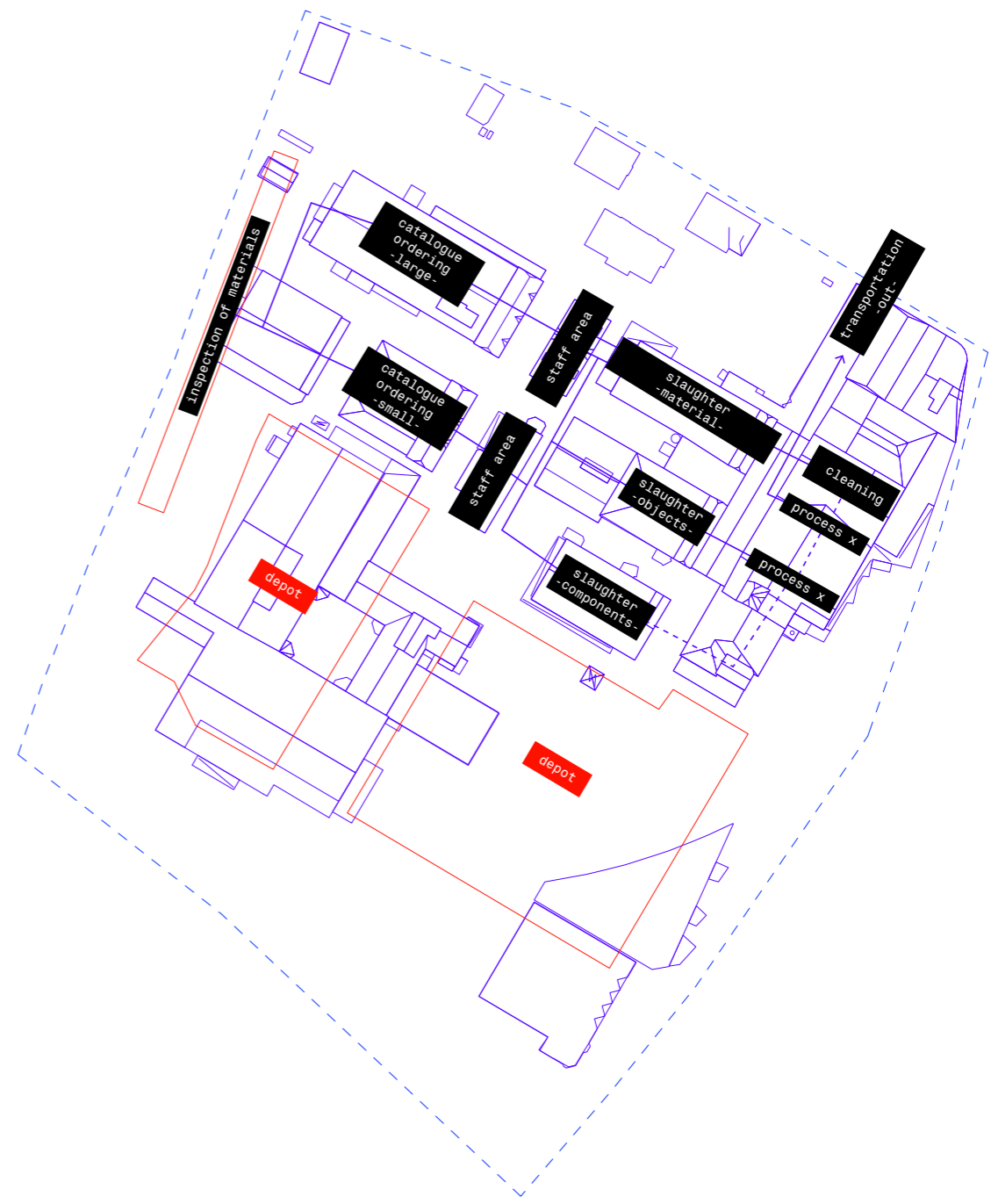
The list of ad hoc principles summarizes the extracted principles of the ad hoc situations. These function as tools for design for both the scenario and the facilitating structures. The supporting descriptions are rather a result or clarifications of some of the principles than for further use.

process  
-animal slaughter-



The former industrial processes of animal slaughter connected to the actual buildings.

process  
-material slaughter-



Translation of the former process of animal slaughter into material slaughter. Some processes will however not connect to the same physical buildings since parts of the process, such as dismantling the site, need to be flexible in terms of location. Nor does such connection work in a larger sense as it conflicts with the scenario itself: the site being dismantled.

## Design explorations

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## object components



### material components:

The ad hoc objects at the site are disassembled and used in a material archive of components. As previously mentioned, the objects can be viewed upon as urban fossils, or potential urban fossils. By dismantling and transforming the objects, parts of them can resurrect on other locations at the site.

The method is based on photographs where 2d elements are isolated and detached from the image, but could be expanded to transforming the objects into 3d elements, possibly using photogrammetry. The exercise is first and foremost visual, not taking joints, difference in depth and other practicalities into consideration.



material archive

A collection of dismantled urban fossils for potential further use as part of the design.

## assembled objects



## assembled objects

Test of assembling parts using the material archive without particular consideration of scale and function. The objects could be described as being put together in an ad hoc manner, where the connection to ad hoc rather is based on form, material and composition.



**Scenario**  
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## reuse

Current reuse processes and aspects influence the speculative future scenario in terms of dismantling processes and their linked functions at the site. The cooperative design practice Rotor divides reusable materials and objects into three categories: high value materials, stable materials on the market and less stable materials on the market (Rotor, 2022).

The high value materials can for example be modern materials created by famous designers or craftsmen, lightning fixtures or chandeliers, rare stones or elaborate hardware. The second category, stable materials on the market, refers to materials that have an established reuse market. This could include brick, marble, timber flooring and parquets, tiles, slates and ceramic wall copings. The last category is called less stable materials on the market. Materials that fall into this category could be new materials with cheap equivalents existing on the regular market. Generic materials, connected to category of stable materials on the market, could belong to this category due to small quantities at the site. (Rotor, 2022).

The manual *Alternate Endings - A User's Manual for Unbuilding* (Northeastern University School of Architecture, 2017) describes several aspects of the dismantling process and reuse of materials. Each material has its own path and process, more or less suitable for reuse. The table (right) is based on information of the manual, indicating whether a material is reusable or not as well as machines and products connected to the process.

material	typical lifespan	durability	recyclability	machines	recycled products
brick	5	4	3	jaw crusher cone crusher impact crusher grinding mill for powder	whole bricks course aggregate crushed brick brick powder
concrete	5	5	4	jaw crusher cone crusher impact crusher concrete batch plant	aggregate rebar recycled concrete
wood	2	3	2	chipper mechanism biomass facility	whole boards wood chips biomass energy
gypsum wallboard	-	-	-	jaw crusher cone crusher impact crusher grinding mill for powder paper screening wallboard plant	paper screws gypsum pellets gypsum powder gypsum wallboard
aluminium	5	4	5	-	-
steel	5	5	5	-	-
glass	2	3	5	-	-
rigid insulation	5	4	1	-	-
concrete masonry unit	5	5	3	-	-

Table based on material from the manual of Northeastern University School of Architecture (2017).

The numbers are represented on a scale from low (1) to high (5)

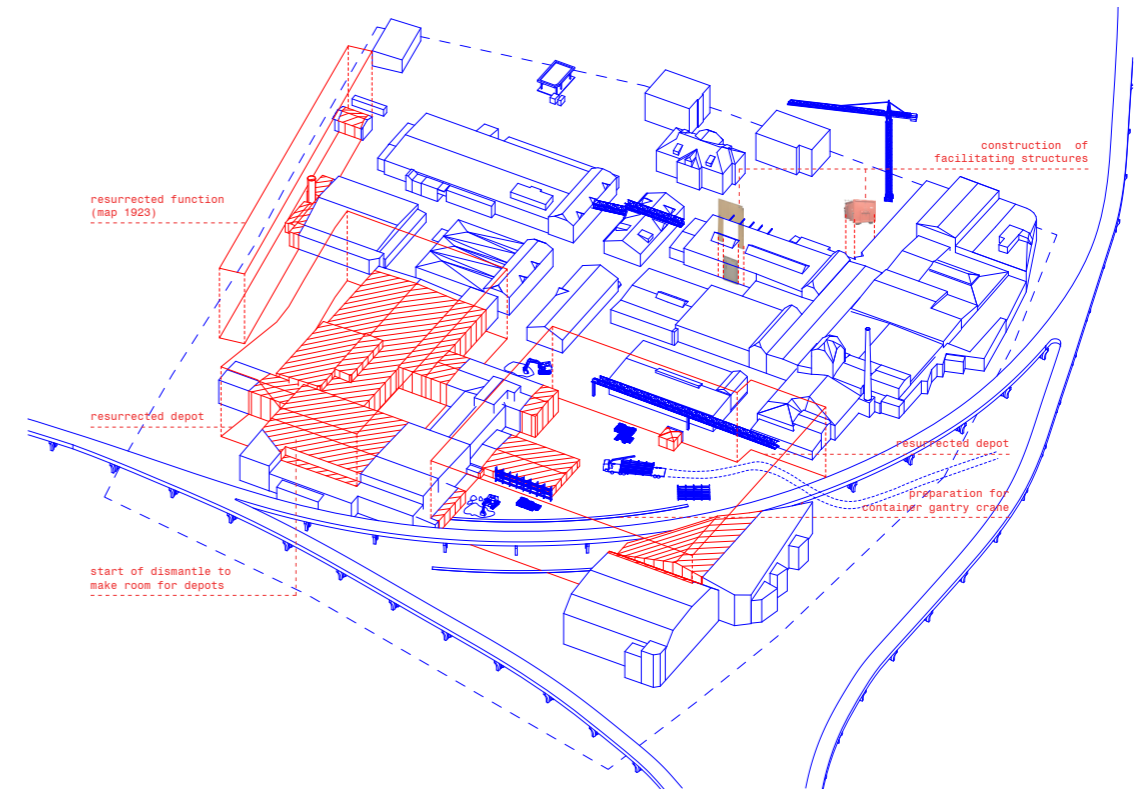


## scenario: timeline

transformation of the site:

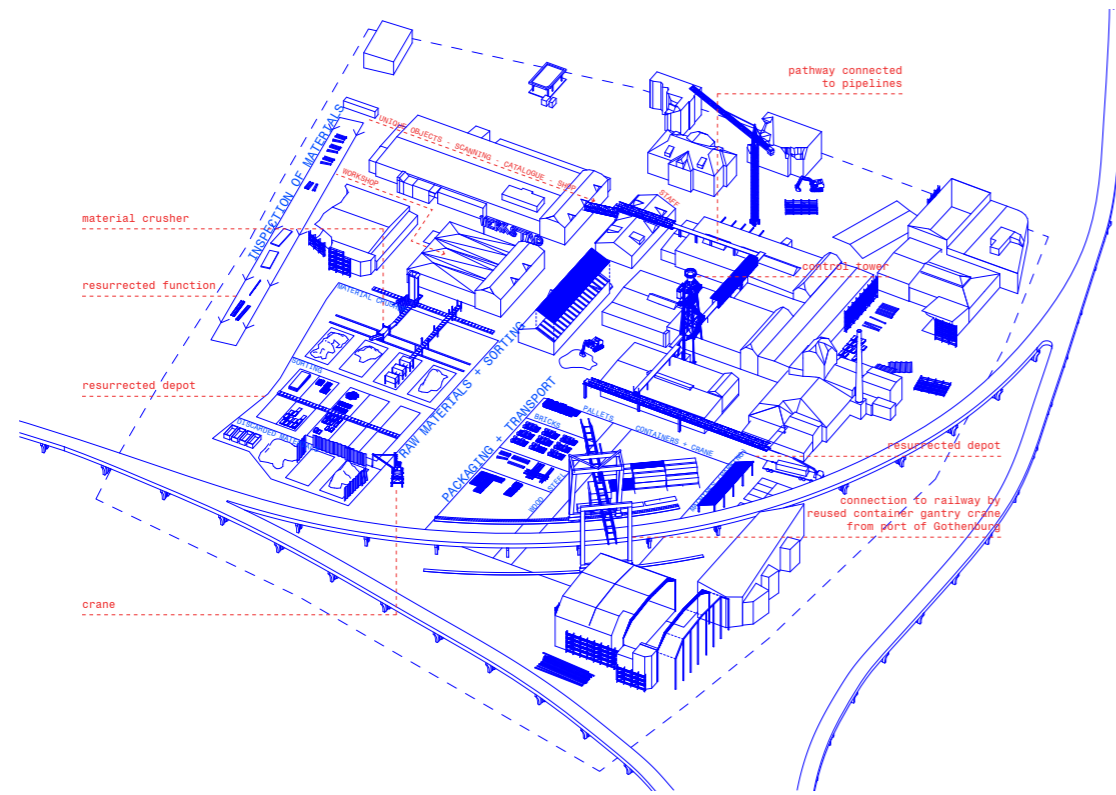
The speculative future scenario takes place ten years from now, starting 2032. Gamlestaden slaughterhouse area is one of the first sites in the city that is being dismantled and transformed into a producer of materials. The production is driven by orders and demand of the city, as well as in relation to the layout and logistics of the site. Existing material and ad hoc objects are used and rebuilt in order to support necessary processes at the site, functioning as facilitating structures.

The development of the site can be divided into three phases: conversion, production and closed production.



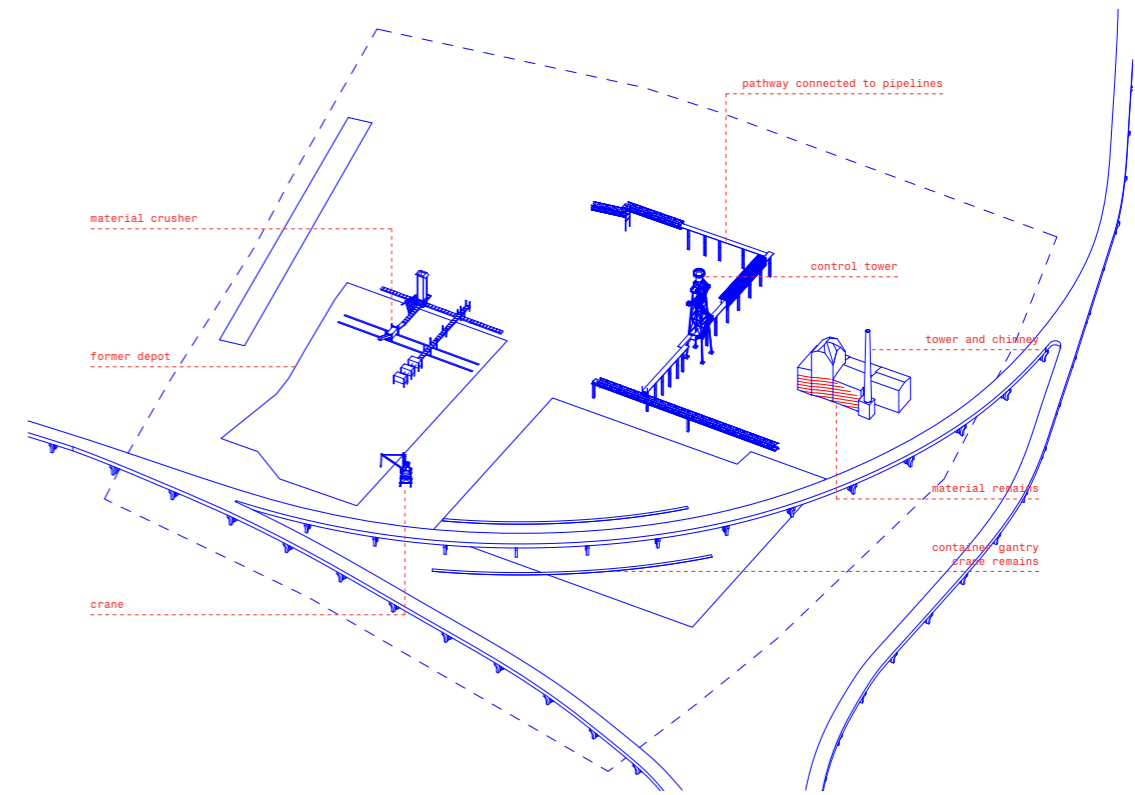
### 1. conversion

The conversion phase is the first step in transforming the site into a material producer. Construction of the facilitating structures are prioritized together with dismantling parts of the site in order to make room for necessary functions.



## 2. production

The production phase is mid-process where necessary facilitating structures have been built and the site produces materials to the city.



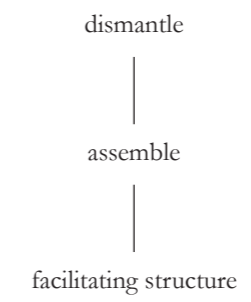
## 3. closed production

The closed production phase is the end of the material production where almost the entire site has been dismantled. In order to preserve the site's identity, the facilitating structures remain as a connection to the past, together with a symbol for the site: the characteristic tower and chimney. What the future holds for the site is uncertain, but referring to its state as *relief from development* could indicate a future possible use.

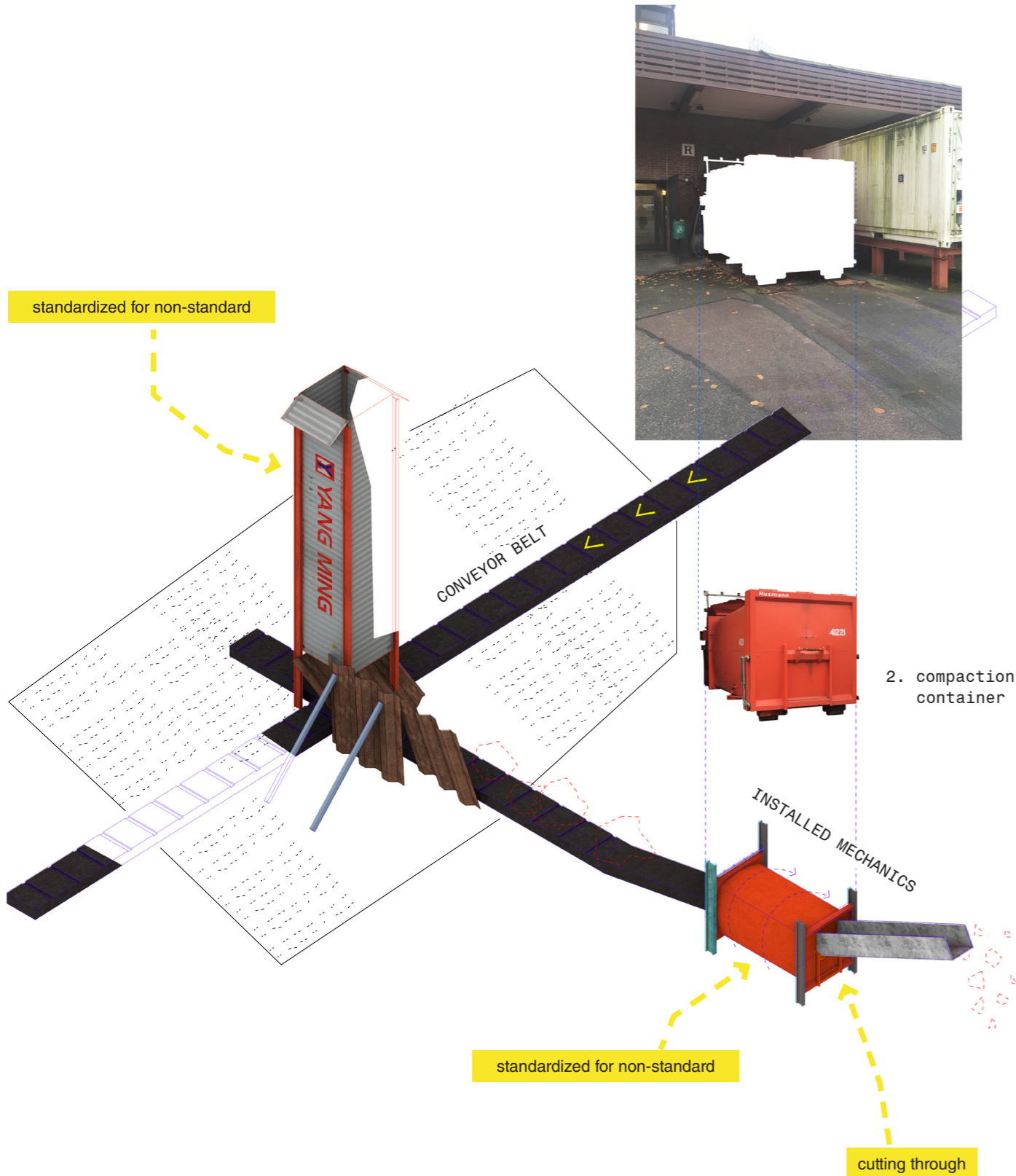
## facilitating structures

facilitating structures:

To support the dismantling process at the site, the ad hoc objects, are rebuilt and transformed into facilitating structures together with materials at the site. With the intention of preserving and activating the site's identity of ad hoc, the ad hoc principles are applied in different ways in the design. The focus lies on three facilitating structures: the material crusher, the control tower and the crane.



## dismantle + assemble: material crusher



### Function:

The material crusher functions as the name implies, by crushing materials for reuse purpose. Depending on the mechanics installed, the reuse product varies from coarse aggregate to powder. The crusher is part of the reuse process of both brick, concrete and gypsum boarder. Containers at the site are used for storing material in the initial phase of the crushing process. The standardized container measurements enables a process where the container is loaded at one or several places at the site and later transported to the material crusher station, replacing the emptied container.

### Site components:

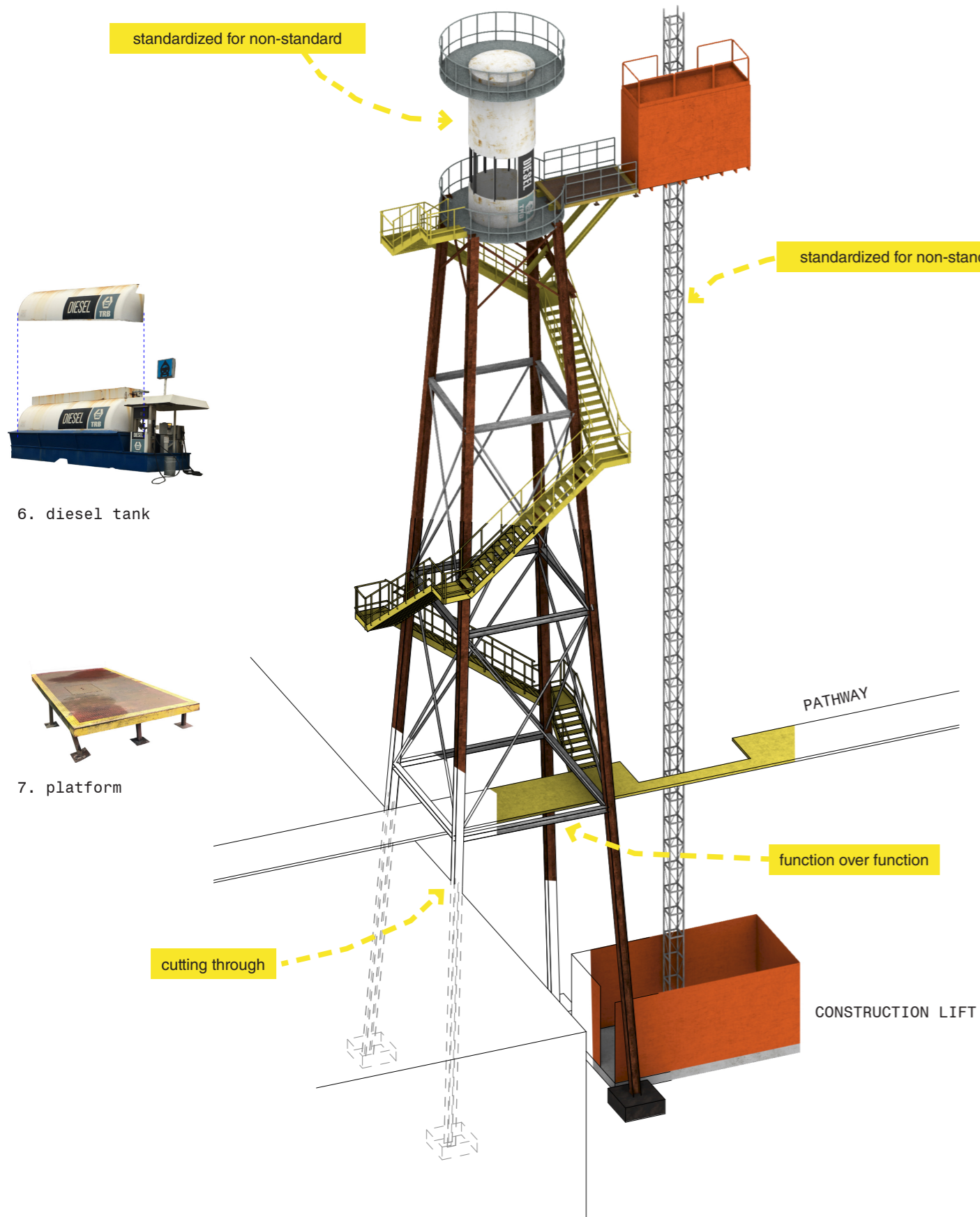
2. compaction container  
(4. reefer container)

beams  
sheet metal elements

### Additional components:

conveyor belt  
mechanics

## dismantle + assemble: control tower



### Function:

By getting an overall view of the site, the control tower keeps track of the processes at the site. Which order the site is being dismantled is decided at the control tower, in relation to demands of the city and in agreement with inspections on ground level. The diesel tank forms the main part of the control tower with access to two platforms of different height. In addition to the stairs, a regular construction lift is used during phase one and two, connecting to the platform.

### Site components:

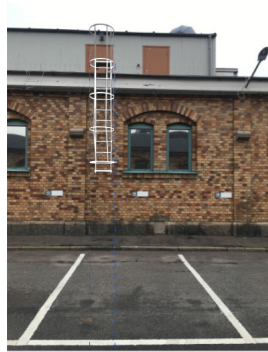
- 6. diesel tank
- 7. platform

beams  
glass

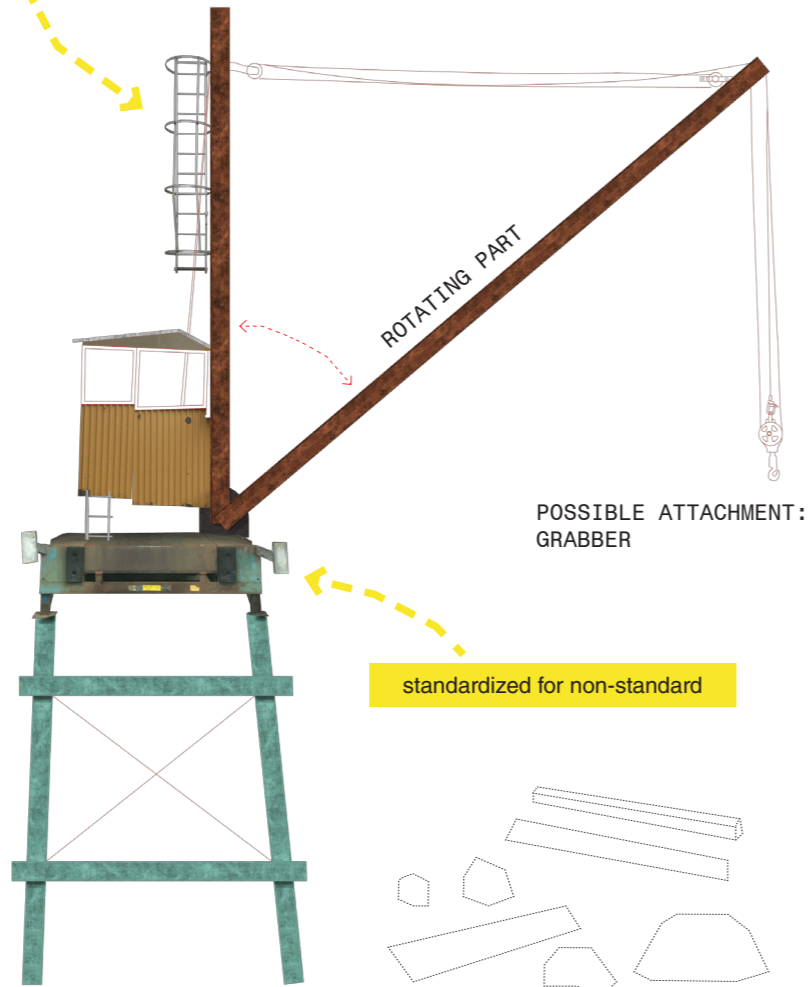
### Additional components:

mechanics and electronic equipment

# dismantle + assemble: crane



surface-mounted function



POSSIBLE ATTACHMENT:  
GRABBER

standardized for non-standard

## Function:

The crane supports the process in terms of relocating material at the site by lifting material and heavier objects. Sheet metal from the site is used as walls for the crane cabin, where the loading dock functions as a base.

## Site components:

1. loading dock

fire escape  
sheet metal  
beams  
glass

## Additional components:

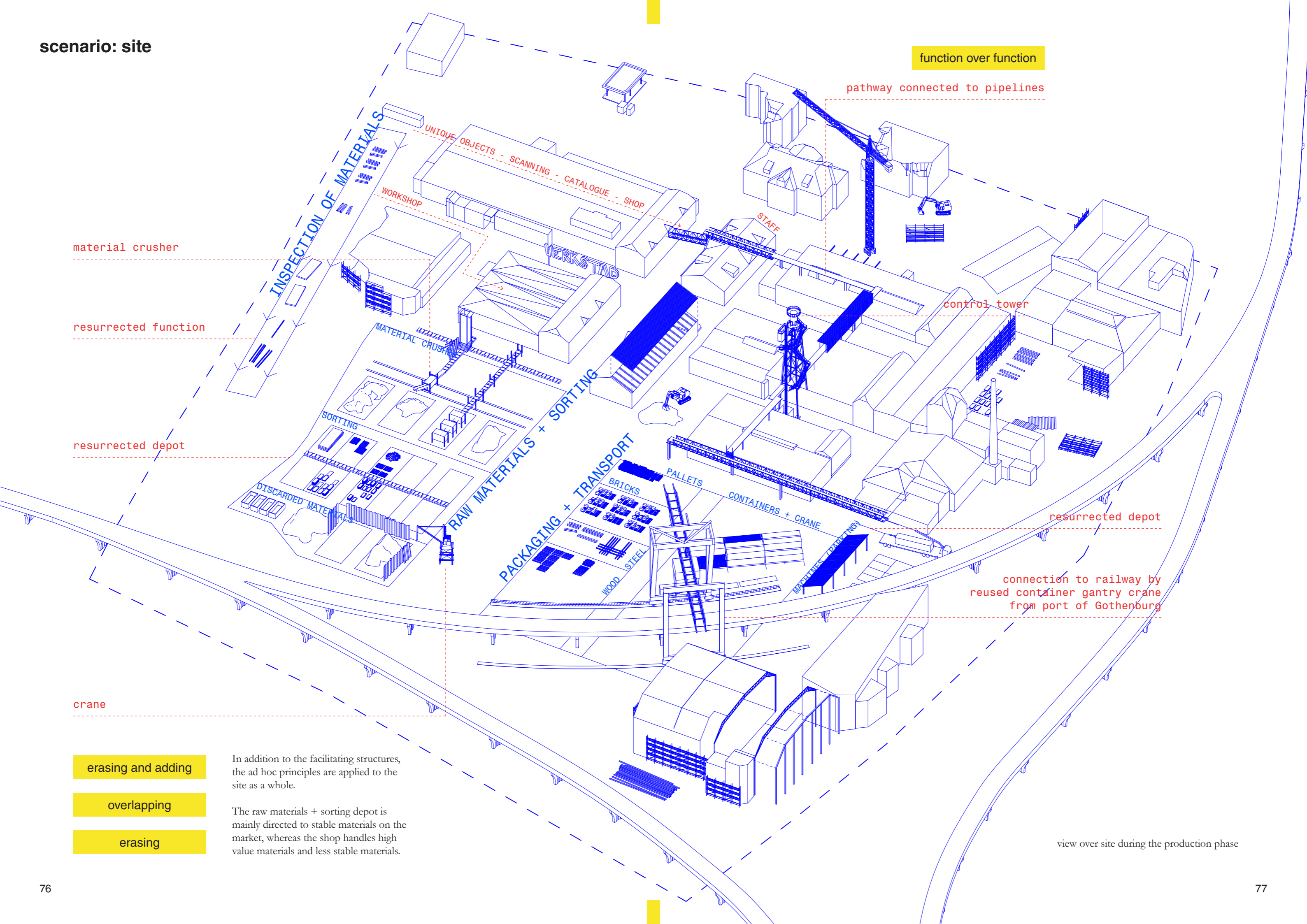
wire and hook  
attachments (e.g. grabber)  
mechanics



1. loading dock



scenario: site



function over function

pathway connected to pipelines

material crusher

resurrected function

resurrected depot

control tower

resurrected depot

connection to railway by reused container gantry crane from port of Gothenburg

crane

erasing and adding

overlapping

erasing

In addition to the facilitating structures, the ad hoc principles are applied to the site as a whole.

The raw materials + sorting depot is mainly directed to stable materials on the market, whereas the shop handles high value materials and less stable materials.

view over site during the production phase

## Discussion

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## discussion

### reflection

The thesis started with the intention of finding ways to preserve identities of a site in a degrowth scenario. The project *Ducklands* (1989-1991) of Cedric Price has in many ways been an inspiration for the thesis, but more specifically in the dismantling of a site and by suggesting something unexpected. Rather than relating to a site and its history in a traditional sense, I wanted to find alternative ways of preserving a site's identity.

The site of Gamlestaden slaughterhouse area was chosen early on as it contains many layers of history as well as being surrounded by heavy infrastructure. In addition to heavy infrastructure, the site is still today formed by its previous function of meat production, which can be viewed upon as contradicting aspects to degrowth. While visiting the site, I found the ongoing processes and traces of human activities fascinating. A large amount of these processes responded to immediate needs and could be described as ad hoc. This resulted in ad hoc being the aspect of the site's identity that I wanted to work with, forming the thesis question of *How can identities of a site be preserved and activated in a degrowth scenario using ad hoc as a method for design?*

I believe that the *activation* part of ad hoc has been an important aspect in order to relate to a site's identity in an alternative way. By extracting design principles of ad hoc from situations at the site, the site's identity can take new form independently of its origin. One large part of the process has been to develop what a degrowth scenario means for this thesis, resulting in a speculative future scenario in which the extraction of new materials is forbidden. The outcome is a speculation of how the site transform as a whole, as well as smaller design additions, facilitating structures, that support processes of the scenario. By using the ad hoc objects as parts of the facilitating structures, ad hoc is related to both in terms of components of the design as well as a method. The ad hoc principles are not only applied at the facilitating structures, but also at the site as a whole linked to the development and timeline of the site. This results in ad hoc as part of the site's identity being preserved and activated on different scales.

How well the ad hoc identity of the site is preserved varies in relation to time. During the beginning of phase 2: the production phase, one could argue that the ad hoc identity is present at its highest level. This since both the facilitating structures and the ad hoc situations and objects exist at the site simultaneously. When the material production of the site has ended, the facilitating structures function as the identity of ad hoc in concentrated form. For reuse purpose, the facilitating structures should naturally be dismantled too, alternatively reused at a different location, leaving an empty site. However, the site would then lack any connection to its former identity, which contradicts the intention with the thesis.

Another part of the site's identity is the historical narratives of the site, former industrial processes connected to meat production. The

intention has been to translate these processes, from slaughter of animals to slaughter of materials. The historical information on the former processes has mainly functioned as a tool for how parts of the site is transformed. The former depots do for example resurrect in new form, as depots for dismantled materials at the site. With the historical narrative orchestrating the material slaughter process, it has not been possible to translate it completely, especially with a physical connection to the original buildings as it clashes with the scenario itself: the site being dismantled.

By setting the thesis in a speculative scenario, the aim has been to explore another possible future as well as commenting on future challenges and potentials linked to the climate crisis. The thesis could be seen as one perspective in the climate crisis debate, suggesting alternative ways of working for architects which do not necessarily mean more growth or use of materials. The architecture profession is today in many ways dependent on expansion or transformation which usually means more materials and a negative impact on the environment. By changing the way we design, a shift towards a more sustainable practice of the profession and building industry can hopefully arise.

A speculative scenario does in many ways open up for more freedom, detaching old habits and ways of thinking. One of the main struggles during the process has however been finding the balance between reality and fiction. I have found myself getting stuck between the scenario and the reality of the site and reuse process, focusing too much on certain details. A large part of the process has been to construct the scenario and understand the reuse process, but also to connect the different conceptual layers. In a speculative scenario, there is always room for development and detailing, including in this project.

The thesis explores a method for an alternative way of relating to a site and its identities rather than presenting a single solution. Ad hoc is just one of numerous identities that can be extracted from the site today, which means there are multiple outcomes of how one can preserve and activate identities of a site. The method is not limited to this site only but could possibly be applied on any site for further use, nor is it limited to a speculative scenario. Further application might be other architectural projects with focus on strengthening a contextual connection or looking into alternative use of sites, specifically in a degrowth scenario of the future.

In addition to the scenario, reuse as an overall theme for the thesis can be linked to reusing ideas, or part of ideas, such as *Ducklands* of Cedric Price. The thesis has inspired me to continue looking back at unconventional projects and ideas as well as finding and developing alternative methods for design.

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## images:

Figure 1. Cedric Price, *Ducklands proposal* (1989-1991). Image: courtesy Cedric Price fonds, Canadian Centre for Architecture. Copyright CCA. [Drawing]. Retrieved from: <https://www.cca.qc.ca/en/search/details/collection/object/444115>

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Figure 3. Diller Scofidio + Renfro, Gate, *Art on the Beach* (1984). Image: Diller Scofidio + Renfro. Copyright Diller Scofidio + Renfro. [Drawing]. Retrieved from: <https://dsrny.com/project/gate?section=projects&index=false>

Figure 4. Stadsbyggnadskontoret, Plan of the slaughterhouse area (1902). Image: Stadsbyggnadskontoret. [Drawing]. <https://goteborg.se/wps/portal/start/byggande--lantmaterie-och-planarbete/stadsbyggnadskontorets-kundservice>

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