BORDER CONDITIONS
ALONG THE NEW SILK ROAD
GRADUDATION STUDIO

BORDERS
&TERRITORIES

TUTORS
Nishat Awan
Pierre Jennen
Oscar Rommens

This booklet represents the
collects of work created as
part of the 2021-2022 Bor-
ders and Territories gradu-
ation studio for the project
titled: Water as a catalyst:
The opportunities of salvage
re-imagining abandoned
industrial equiptment for
resource regeneration and
community building.
This project was structured
by two interrelated phases.
Firstly a research project
which then was compliment-
ed by the design project

RESEARCH PROJECT
The research phase of the
project was based around
exploring the contemporary
and histrorical conditions
of the city. during this we
looked into the mechanisms
behind the inner workings of
the city's social, economic,
and spatial systems.

DESIGN PROJECT
derrived from the research,
the design project was aimed
at highlighting a quality of
workings of Thessaloniki.
the built product worked
to exemplify, amplify, and
adress the existing context
to provide a platform for
dealing with the nature of the
urban conditions of the city.

INTRODUCTION

GENERAL INTRODUCTION

The 'Transient Liquidities along the New Silk Road' graduation studio, organized by the BORDERS & TERRITORIES (B&T) group, will offer an architectural research and design studio that investigates contemporary border conditions within the larger urban and territorial scale(s). The studio focusses on urban and territorial sites where 'other' spatial conditions have emerged, ones that are 'teeming with suggestive meanings and unexpected potential' but which have hardly been analyzed and discussed within the contemporary architectural discourse.

In our day and age, it seems no longer possible to investigate space without taking global political developments into consideration, nor to ignore ecological anxieties, pressured coexistences or even economically driven migratory movements. Therefore, special attention should be given to the critical relationship between architecture and its environmental context, as well as its more general socio-political contexts. The studio centers on the investigation into the specific characteristics of contemporary border conditions and the larger, urban and territorial scale, with a special emphasis on the socio-political context(s) of architecture. The spatial analyses initiated in the studio are intended to give an insight into how contemporary spatial practices are inscribing themselves into the urban fabric while simultaneously providing tools to question the position of the discipline. In our view, architecture is not only dealing with social and technological issues (which anyway should not be presented as merely functional solutions), but also and especially with its intrinsic capability of creating a place that does justice to the depth and richness of human culture.
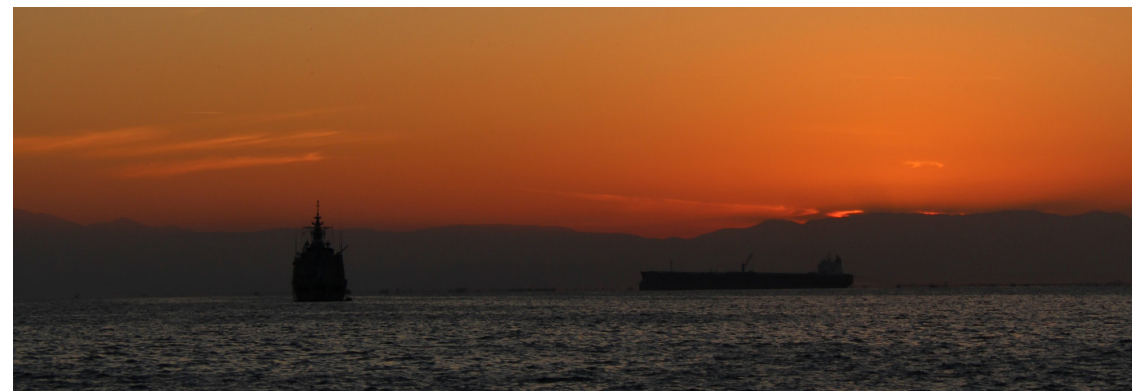
THESSALONIKI

Situated on the Aegean Sea, the city of Thessaloniki, also known as Salonika, Salonik or Solun, questions the very notion of a homogenous European identity and the borders of what might be considered a fictitious continent. Nicknamed 'la madre de Israel' (mother of Israel) it was home to a majority Sephardic Jewish population, as well as Turks, Bulgarians and Roma. Following the fall of the Ottoman Empire and the events of the twentieth century the population of Thessaloniki was made almost entirely Greek through expulsions, population exchanges, and extermination in the case of Jews and Roma.

Yet Greeks call their city 'Mother of migration', alluding to their earlier history but also to more recent migrations caused by the Syrian uprising and war in the first instance. Since then many have arrived and passed through Thessaloniki from countries across Asia and Africa, having had to move due to conflict, the climate crisis and structural conditions.

Greece's second largest city is a key economic and cultural hub as well as an important commercial port. It is surrounded by very diverse landscape types, ranging from sea over polder and agricultural production landscape in the southwest to a mountain range in the northeast. In addition to the port and historic city, Thessaloniki therefore has a particularly rich and bio-diverse periphery and the associated biotopes, each with their specific relationship to the city itself. Axios Delta National Park is one of the most important wetland systems in Europe and hub in the annual continental bird migration. Mount Chortiatis, on the other hand, plays a crucial role in the city's water supply. Taking the city's heterogenous history and current conditions as markers of a transient, multiple and contradictory character, we invite you to investigate Thessaloniki through its non-fixity, a place that transposes across cultures, ideas and climates. How to think of an architectural and urban response in the face of raging fires, polluted air and a transient population? What new design approaches do we need for such moments of protracted crisis where critical responses can no longer be cynical but must also remain radical?

COLLECTIVE RESEARCH

INTRODUCTION

Thessaloniki demonstrates a sprawling case study for the diverse domains of contemporary life. In the face of complete economic integration, the city's roles, images, and relationships extend far beyond its administrative boundaries. Thessaloniki presents many subjects concerning contemporary urban dynamics such as the redefinition of economic sectors, spatial politics, population displacement, and resource management.

The morphing values of modern agglomeration intersect with the rich history of many cultures, nationalities, languages, and roles. In our collective research, we examine these modern and historical forces that have shaped Thessaloniki through the lens of border and territorial conditions.

Our research into the transient nature of the city led us to the key themes of 'Ecologies' and 'Control' which were then explored through our cartographic investigations.

TERRITORIES

For the territorial analysis we were exploring the concept of how control is exercised on the city level. The egalitarian democratic nature of the city (Kokkinidis, G, 2014) forms a complex entanglement of control mechanisms.

By unravelling these unofficial emerging relations, we wanted to construct a spatial representation of the tensions between the components and the assembly. For our exploration, we created a conceptual framework that intended to encompass the non-territorial multivariate nature of the city directed by control. Our investigation can be broken down into 3 main phases where we defined, refined, and reconstructed our synthesised information.

Define

From our initial research we understood Thessaloniki to be a uniquely organised and arranged city. We found a great similarity between the organisation of the city and the tradition of the Greek mosaic, where each individual part has its unique characteristics but together form an autonomous whole. By doing a micro scale analysis we were more easily able to visualise the spatial dynamics of the city. We defined 9 categories; Agriculture, transport, formal settlement, institutions, informal settlement, industry, military, public space, and monuments, which served as classifications for the spatial occupation of the city. These 9 categories were projected onto a triangular grid to map this out visually. This presented an incredibly diverse and overlapping agglomeration of occupied functions which on a microscale seem almost random but, on a macroscale, presented clear trends.

Refine

The power dynamics of the city exist as a dichotomy of the bodies which control and are controlled, which in the spatial language occupy and are occupied. These intertwining relations were identified based on the historical, socio-political, and spatial study of Thessaloniki. Subsequently, following their argumentation a second characteristic is imposed over the triangulated areas: the controlling forces, corresponding to the 9 categories from before. Through this act we refined the information exclusively of spatial conflict.

Reconstruct

Nine categories of controlling force were spatially pinpointed on the map as a power centre toward which the characterized areas gravitate. Thus, the fragmented map is reorganized following the logic of the new controlling agency. As a result of the reconstruction, new territorial microstates emerge, conditioned by their systems of control.

The argumentation derived from the extensive research used to assign the governing category is symbolically represented through radially distributed imagery which at the same time communicate the quality and character of those newly created microstates.

Fragmentation and reconstruction of the map conveys the idea of control as a borderless mechanism to mediate the collective social behaviour of the occupants. The representation breaks the geographical relation of the reality while projecting a systematic understanding of the control dynamics between the owner and occupants via the traces.

BORDERS

The primary tool of reference in situating Thessaloniki within its geographical context is the gulf and its characteristic outline, separating water and non-water. Our interest in this collective mapping exercise thus focused into this border through an investigation of the coastline and the border conditions related to water systems. As a result, a collection of border conditions was mapped ranging from groundwater systems to the coastal evolution of the bay. The different sets of borders were then overlaid on top of each other generating an assemblage that could then be read and interpreted as a heterogeneous connected system that shifts the gaze away from the city of Thessaloniki towards a larger holistic perspective of the gulf's borders and its interrelationships.

The coastline along the gulf is identified as the primary border condition, becoming a line that transitions between water and non-water. The method we employ aims to find an alternative projection system, to rethink the common ways of understanding borders. As the first step we unfold the coastline, to approach the enclosed gulf in a linear sequence that can be read by following the line. The operation of unfolding was an iterative process, which began with manual experiments where we cut the coastline into strips and re-stitched them in a linear sequence. We also tested different ways of unfolding by cutting out the gulf from a Mercator projected map and attempting to straighten by manual folding.

Through weekly iterative reflections on the experimentational mapping, we systematically developed a critical analysis of the intentions and tectonics of the method. The final version of the unfolding reflects the fragmentation of the coastline as the slices produce an aggregation that is inherent to the multiplicities of an assemblage. The fragmentation of the coastline emphasizes the borders that exist both along the water and also throughout the territory, highlighting the disconnection and interrelations across different fragments. The final unfolding reveals a critical shift of the gaze from one centred on the city to a perspective focusing more on peripheral borders that are fundamental to the continuity of the city.

In order to visualize the data in the borders map we used representational practices that visually respond to the fragmentation. The strips are positioned with a gap in between so that the map is read as a collection of frames, instead of a uniform sequence. The removal of a background is created by printing on tracing paper, which draws attention to the fragments. Colour and varying line weights are employed to mark border conditions. The density in which they appear on the map reveals intensities embedded on the borders. When viewed from afar the fragments melt into an understanding of the ecology as a whole, while from up close the connotations of the different lines are discerned using the legend.

CONCLUSION

Through the collective mapping exercises, we aimed to understand and read Thessaloniki through multiple lenses, experimenting with methodology, representation, and technique to reveal underlying forces, and intensities. The iterative process of redrawing and rethinking led us to see through initial suppositions, undercovering underlying systems and connections.

By placing the central gaze on water ecologies, the Borders map reveals the infrastructural, socio-economic, and natural systems that construct and support the territories of Thessaloniki. The importance of the Delta ecosystem and areas of transition are brought into relevancy for observing the coastline's shifting pressures and underlying forces, creating a different and new visual storyline.

Shifting to the territorial map, the focus remained around urban dynamics, emphasising the levels of control as a system of occupation and use, thus exposing the underlying tensions between authoritarian control and civic liberties. To summarise, mapping both territorial and border conditions within the greater context of Thessaloniki introduced a new way of comprehending and visualising spatial concepts from both quantitative and qualitative perspectives. Revealing, to us, a fragment of the complex, entangled mechanisms embedded in the urban structure and helping us to understand the city not as one, univocal form, but rather a discontinuous array of relational layers.

RESEARCH PROJECT

WHERE THE WALL LIES

URBAN BARRIERS AND EDGE CONDITIONS

Peter Gill

A wall is both a barrier and an opportunity.

The ancient walls of Thessaloniki stands as a monument to this. Since their establishment in the 4th century their status and significance in the city has only grown. Thessaloniki was a trading town strategically placed on a hill overlooking the bay. As it grew, so did the walls with them eventually spanning from the old town down to the bay. The significance of these walls may seem obvious; they protected against military attacks, but this was a rare exception. The true significance of the walls was more related to micro-control; regulating ingress and egress. In its modern context Thessaloniki is no longer a walled city yet the wall has and still plays a significant in the spatial development of the city. The co-existence of the concept of a historic wall, which was treated as a monument and to be untouched, and the ruin of the wall, which stood as an obstacle to the development of the city, has resulted in a conflict between preservation, presentation, or development provides a rich diversity in spatial outcomes in Thessaloniki. In this investigation, the dynamic spectrum of spatial outcomes surrounding the city's historic boundary are explored revealing the changing cultural views on heritage and borders.

KEYWORDS

INTRODUCTION

Since the conceptualisation of a globalised borderless future, popularised in the late 1980s, the field of research into borders and their conditions has grown significantly. In contradiction to earlier predictions, the world has become a more divided and polarised place than could have ever been predicted. With this, the definition of borders and boundaries grew to the current context where the field is "concerned with the widely different, sometimes incompatible, and constantly changing definitions of the border" (Schimanski & Wolfe, 2018).

The concept of a border as a simple line dividing two halves is no longer compatible with the modern theory and as such borders exist as a meta-physical assemblage of functions, mechanisms, and actors (Rumford, 2008).
In order to be able to accurately represent the dynamic assemblage of Thessaloniki's historic wall, multiple methods of analysis will have to be conducted. A qualitative approach is necessary as many of the functions, mechanisms and

actors which contribute to the spatial characteristic of the wall are not represented through official channels and statistics. This being said, this does not mean that this information will be ignored, it means that this information will only every be used in conjunction with a series of other sources to ensure reliable and multivariate conclusions are drawn. In combination with practical fieldwork and previous research, a series of explorative drawings will be made which connect data, information, and experience into visual media. These drawings will serve as both responses to lines of inquiry but will also work together to form conclusions on the historical and contemporary position of the city's wall.

In relation to the topic of the Studio, Transient Liquidities along the New Silk Road, Walled cities have played a crucial role in controlling and protecting trade. In his book "The Travels of Marco Polo", all but few of the cities visited named by Marco Polo during his 1275-95 expedition from Italy to China were walled. From Jerusalem, to Tabriz, to Kashgar, to Beijing, these walls were necessary infrastructure for a proto-globalised world. (Polo &

Latham, 1958)

Due to the scale and the quality of preservation of Thessaloniki's historic wall, it presents itself as a unique case study for the analysis of the spatial consequences of such a monument. Many European city's walls were entirely demolished during the industrial revolution (Kostof, 2015) and as such only exist through obscure references in street names and roads. Thessaloniki's wall, on the other hand, exists in various states of (dis) repair which lead to a variety of different architectural and urban outcomes.

Embedded in each of these outcomes is a rich variety of attitudes towards a boundary. As such, a lot can be learnt about the mechanisms of constructing and deconstructing urban boundaries.

Depending on the scale and time period of the encounter between the wall and those seeking to occupy it, 3 types of approaches emerged: disassociation, transgression, and appropriation (Figures 1, 2, 3). Each of these 3 approaches have unique architectural and spatial typologies which strongly contradict each other and

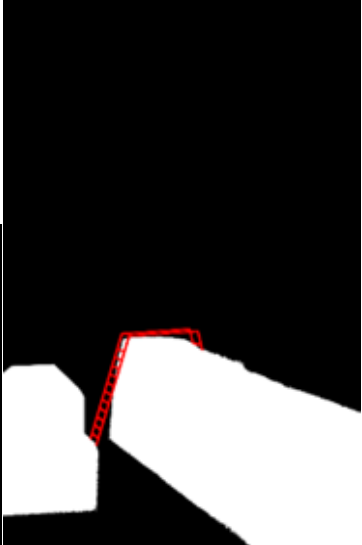Fig. 1 - Transgression   Fig. 2 – Appropriation   Fig. 3 - Disassociation
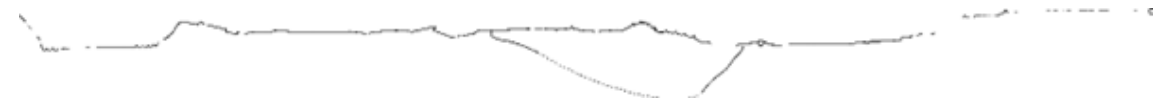
Figure 4 – Visible sections of Thessaloniki's Historic wall (straightened)

contain within them different strong cultural attitudes toward heritage. These structures also call into question our understanding of a boundary as a static urban element, instead presenting it as a dynamic artefact with its own spatial autonomy.

Thessaloniki no longer exists as a walled city in the same sense that it did in the 18th century and has since gown far beyond its historic boundary. Despite the fact that for large portions of its length, the wall is no exists above ground (Figure 4), its legacy still plays a large role in the spatial, cultural, and architectural division of the city. As both the concept of the historic wall, which is treated as a monument and is to be untouched, and the ruin of the wall, which stands as an obstacle to the development of the city, exist in parallel a conflict exists between the official and cultural image of the wall as an urban artefact. Due to the dichotomous urban relationship the historic wall has with the built environment, it has left a void in the city fabric where it is not reaching its full potential as an instrument that could activate the spatial integration of the past and the present. Through its unpacking, the wall's role as a controlling artefact can shed light on the power dynamics and politics of the city. This will not only reveal the significance of this cultural artefact as a boundary element but also elaborate the spectrum of spatial territory this artefact occupies within the city.

THEMATIC DEFINITION
In the following chapters the main themes of this investigation will be elaborated on. These themes provide the main structure of the city and site investigations. Starting on the city scale, these themes capture a particular aspect of Thessaloniki's historic wall. With each iteration of the investigation, these will be reintroduced and evaluated against one another to provide visually tangible insights about the spatial impact of the wall.
Four themes have been defined in order to provide structure to this investigation and to support findings. Firstly, by exploring the cultural attitiudes to the wall as an urban artifact the concepts of Intra Muros/ Extra Muros will be used to define the historical and contemporary attitudes.

THEME 1 : INTRA MUROS/EXTRA MUROS
Intra Muros/ Extra Muros is a set of terms used to describe two spatial locations relating to walls and boundaries. Intra Muros explores the internal condition; to be within the confines of the wall. Spatially this means being surrounded by or being located within an area. It is an exclusive term which connotes feelings of inclusion, separation, and authority. On the other hand, Extra Muros is a much broader term which describes all that is not contained within a separated area. Through its scale and inherent vagueness, it is used to suggest that which is foreign, unknown, and ultimately 'other'.
Historically, the mentality of Intra Muros/ Extra Muros presented itself through a mentality. The mentality that by being on the inside of the wall you are protected, living withing a defined area, ruled by law and that by being outside the wall that the inverse applies. To some extent this still applies to the current context of Thessaloniki, but this mentality is unevenly distributed

throughout the previously walled areas of the city. In the lower town, which has seen significant redevelopment in the 19th and 20th century with large portions of the wall being demolished, a modern city grid being applied over the rectilinear Hellenistic city structure, and densely developed with 5-10 storey buildings this mentality has nearly disappeared, only being post-partum reintroduced by the forced excavation of the remaining parts of the wall. This rigid system never existed in the upper town, and partially due to the topography of the upper town being steeper, retaining a large portion of its historic buildings, and retaining much of the city wall, an informal culture of development remained where due to historical tenancy, residents felt the right to claim and occupy space.

The phenomena of Intra/Extra Muros is one which now transcends the walls of Thessaloniki and exists beyond the Euclidian geometry of naturalised space. Its literal translation of "inside/outside the wall" points towards a fixed cartographic method of territorialisation but this bears almost no resemblance to its applied meaning which deals with nuanced identity politics codified and materialised through volumetric elements and spatial performance.
The contemporary Intra Muros mentality is now in contention with the volumetric elements which previously defined their spatial autonomy. The evolution of heritage and its value as a cultural artefact has now reached the point where Intra/Extra Muros has become Intra/Omni/Extra Muros where the definition of the divide also has its own associated mentality and spatial praxis.

THEME 2 : AUTONOMY OF MONUMENTS
When looking at the resulting spatial outcomes surrounding the historic wall of Thessaloniki it appears that, due to a number of factors, it has its own spatial autonomy within the urban fabric. Karen Barard's concept of Agential Realism provides some innovative insights on this phenomenon. Despite being based in the field of physic-philosophy, Agential Realism discusses the sociomateriality of entanglement and the inseparability of social with materiality. She states:

"Crucially, agency is a matter of intra-acting; it is an enactment, not something that someone or something has. Agency is doing/being in its intra-activity. It is the enactment of iterative changes to particular practices-iterative reconfigurings of topological manifolds of spacetimematter relations through the dynamics of intra-activity. Agency is about changing possibilities of change entailed in reconfiguring material-discursive apparatuses of bodily production, including the boundary articulations and exclusions that are marked by those practices in the enactment of a causal structure" (Barad, 2003, p.235).

To argue that the city wall, as an artefact, has its own distinct spatial agency simply by existing is therefore no longer valid, its agency must be derived from its intra-activity. Through the lenses of heritage and social value, many of these intra actions have come to light, but as Barad points out, the frame of observation defines the result of the observations. The quantum state of observations applies in full force to the wall and this project. By focusing on one particular area, this investigation is only able to derive the intra-actions of the frame, severing ties with larger scale systems. Therefore, to be

able to draw larger conclusions about the autonomy and agency of the wall within the broader scale of the city, this analysis must be performed iteratively on varying scales.

THEME 3 : HERITAGE & PRESERVATION
As alluded to before, the scope of heritage in the contemporary context is broader than ever before. Cultural heritage has grown to include both the natural and the manmade. It is no longer as black and white and old vs. new or ancient vs modern as now both can be valued equally. It is in that process, of valuation, where the properties of an object are supposed to be evaluated to derive cultural property, historical conditions, and the relationship with philosophical and behavioural concepts and also the socio-economic role of such objects in their broader context.

Contemporary conservation theory evaluates these subjects under two main categories: Cultural-historical values, and socio-economic values (Appendix 1). The following table combines the two categories with subcategories to propose a multifaceted system of evaluation (I. Szmelter, 2016). Of these categories the historic, identity, documentary, and economic value are best represented along with values of culture in space, and value as a cultural product. The value of the city wall, when assessed through the cultural-historic and socio-economic value system aligns very strongly to the outlined points of the table. Where the wall of the city has played a large role in the development of it culture and stands as a physical representation of the city. When you learn that tourism is the third largest contributor to the Greek economy representing 25% of the country's GDP in 2019 (Marketing Greece S.A., 2019) it is not surprising that the city is heavily investing in

restoring and beautifying the wall as its main touristic attraction.

In Thessaloniki, it can be said that an approach is being implemented negotiates with contemporary heritage assessment but is much more in line with enlightenment concepts of conservation. Reminiscent of Manuel Le-Duc's conception of historical purity. The wall of Thessaloniki is actively being stripped of all later additions to create a fictitious buffer zone.

THEME 4: VERTICAL HISTORIES
In her 2003 works titled "Posthumansist Performativity", Barad reconceptualises the concept of performativity. She describes performativity though material-semiotic actors which entails that object are defined through relational understandings (intra-actions) and are not composed of "things in themselves" or "things behind phenomena" but are instead "things in phenomena".
To build on this theory, I propose that historical material-semiotic actors can be derived from material practises presented on and within the materiality of the wall. As such, the evolution of Thessaloniki's historical wall can be seen through its materiality. It exists as a spolia, built up out of remnants of the city's past and thereby exists as a cultural archive expressed through materiality. This elevates the properties of the materials of the wall such that they are no longer "either given or a mere effect of human agency," and now exist as "active factor[s] in processes of materialization" (Barad, 2003, p. 827).
Through the iteration of construction, demolition, reconstruction, and adaptation which have happened multiple times throughout its history, the wall has become a multifaceted account of spatial practise in Thessaloniki. This applies not only to the areas where the wall is still visible above ground but also to the areas where the wall has been removed.

CONCLUSION
The spatial autonomy afforded to the city's historic wall through its historical value, role in the cultural development of the city, and its intra-activity initially communicates a wicked system, but through an iterative process of Baradian analysis and heritage valuation, the underlying networks and spatial relationships present themselves as tangible and representable information. The literature studies gave form to apply and give guidance to the types and topics which were developed in a series of explorative exercises, elaborating the spatial characteristics of the wall as a spatial modifier. By being composed of multi-medium explorations including photography, 2D and 3D drawing, abstract model making and systems tracings, these exercises provided an inventory of conditions and mechanisms which were refined through Agiential Realism, developing an understanding of the socio-cultural attitudes towards bordering elements and heritage in the city. This understanding was derived from a number of sources ranging from literature and news articles to legislation and personal interviews. The visual language of the analysis of the wall as a boundary condition was expanded on to include these views. Thus, through the thematic and theoretical underpinning of this investigation allowed for a cross examination of these spatial and cultural characteristics of the wall such that valid and grounded conclusions could be synthesised.

BIBLIOGRAPHY

Boer, I. E. (2006). Uncertain Territories: Boundaries in Cultural Analysis. Brill/Rodopi.

Cheah, P., & Robbins, B. (1998). Cosmopolitics: Thinking and Feeling Beyond the Nation (Cultural Politics) (First edition). Univ Of Minnesota Press.

Hauge A. (2007) "Identity and Place: A Critical Comparison of Three Identity Theories[1]," Architectural Science Review, 50(1), pp. 44–51. doi: 10.3763/asre.2007.5007.

Houtum, H. V., & Kramsch, O. (2004). B/ordering Space (Border Regions Series). Routledge. Joint Programming Innitiative- Cultural Heritage-EU.Cf (2015). Retrieved: http://heritageportal.eu/Browse-Topics/GUIDELINES-STANDARDS/Factsheet-7–SMARTValue-Values-and-valuation-as-key-factors-in-protection-conservation-and-contemporary-use-of-heritage.pdf.

Kostof, S. (2015). A History of Architecture: Settings and Rituals by Spiro Kostof(2015–08-04). Oxford University Press. MARKETING GREECE S.A. (2019, February 7). Ο τουρισμός είναι υπόθεση όλων μας. Marketing Greece. https://www.marketinggreece.com/blog/o-toyrismos-einai-ypothesi-olon-mas

Newman, D. (2006). The Lines that Continue to Separate Us: Borders in a Borderless World. Progress in Human Geography 30(2).

Newman, O. (1966). Creating defensible space. Diane Publishing.

Polo, M., & Latham, R. (1958). The Travels of Marco Polo (Reissue ed.). Penguin Classics.

Rumford, C. (2008). Introduction: Citizens and borderwork in Europe. Space and Polity.

Sennett, R. (1998). The spaces of democracy. [Ann Arbor]: University of Michigan, College of Architecture + Urban Planning.

Schimanski, J., & Wolfe, S. F. (2018). Border Aesthetics: Concepts and Intersections (Time and the World: Interdisciplinary Studies in Cultural Transformations, 3) (1st ed.). Berghahn Books.

Wilson, T. M., & Donnan, H. (2012). A Companion to Border Studies (1st ed.). Wiley-Blackwell.

DESIGN PROJECT

# WATER AS A CATALYST: THE OPPORTUNITIES OF SALVAGE

RE-IMAGINING ABANDONED INDUSTRIAL EQUIPTMENT FOR RESOURCE REGENERATION AND COMMUNITY BUILDING

Peter Gill

Nikopolis

Nikopolis was a small farming town on the northern fringe of Thessaloniki. This was up until the mass rural urban migration which started in the 1950s. During this period a small number of Greeks, but a large number of migrants from the former Soviet Union settled here through the informal settlement and inhabitation practices which were tolerated here through the municipality of the city. Due to the informal nature of the settlement and development of this area, Nikopolis has remained largely disconnected from the formal infrastructure and planning which is seen throughout the rest of the city. this is due to a number of factors but mainly due to its location existing between municipal areas and it's disconnected from the heart city through the bordering motorways
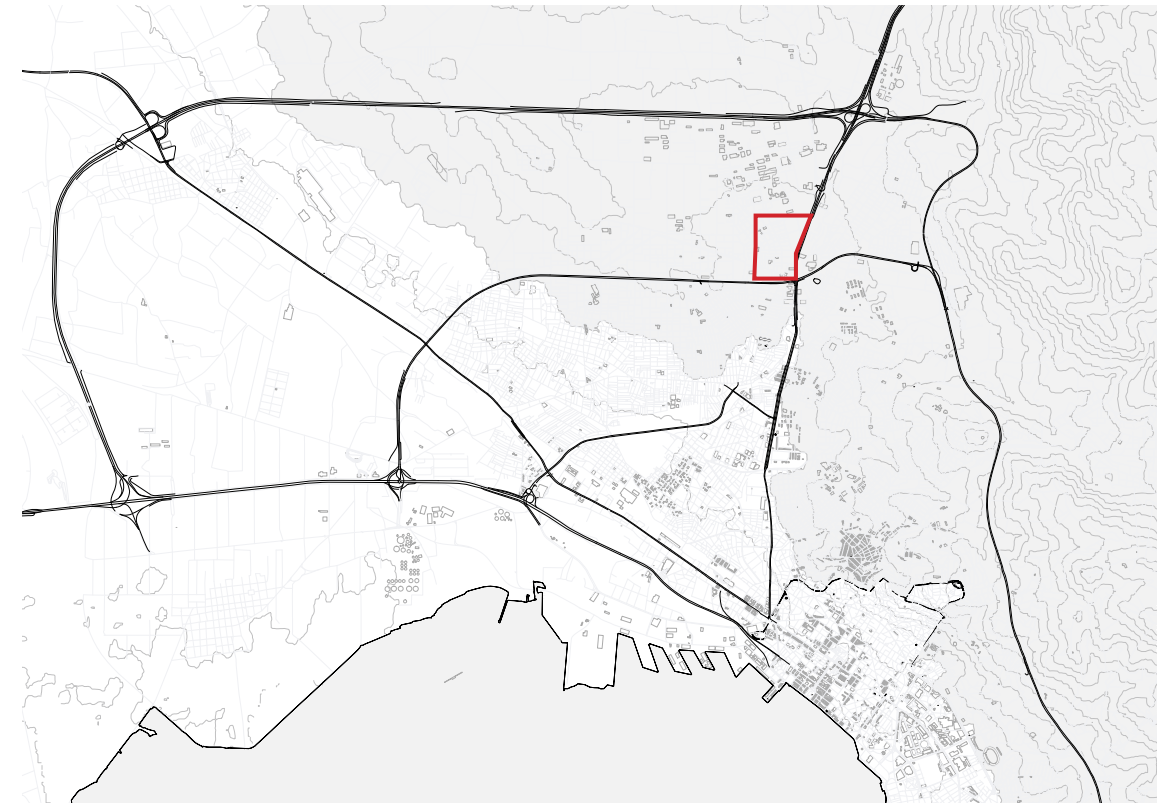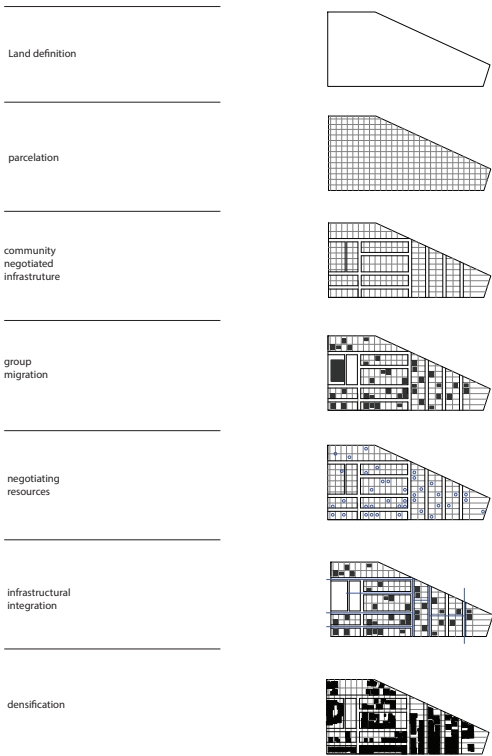
The developments which occurred here had to largely be self-organized and self-sufficient and as a result the urban settlement practices and typologies of development are unique in the city's context. they had to provide their own sources of drinking water, their own electricity, grow their own food, and negotiate the land on which they built. although this is most evident in the historical developments along the river which runs through the community, it is still evident in the more contemporary developments as well.

As a side effect of the grey planning and zoning of this area, many industrial sites developed simultaneously to the housing of these migrant communities.
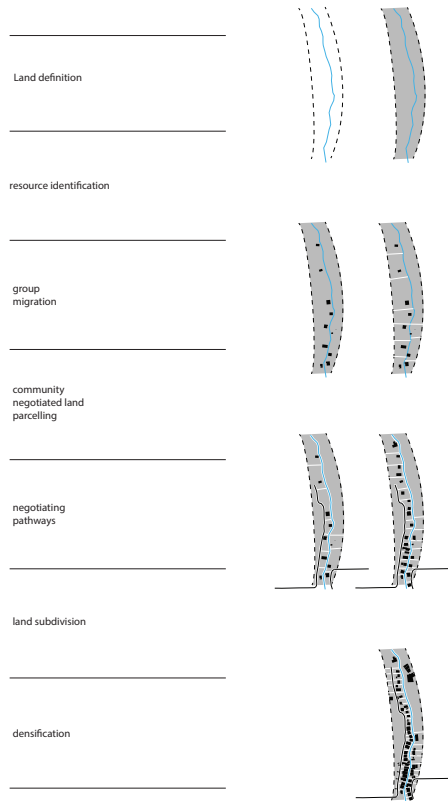
Due to the relaxed regulation and control of these industries when they became abandoned in the 1980s waste products which were abandoned on the sites we left and infiltrated the groundwater. contaminating Nikopolis main source of water as it was still disconnected from the city's water network. As such residents still rely on imported water brought through trucks and many, despite the pollution, still consume the groundwater.

Land definition

resource identification

group migration

community negotiated land parcelling

negotiating pathways

land subdivision

densification

Land definition

parcelation

community negotiated infrastruture

group migration

negotiating resources

infrastructural integration

densification

residential divides

infrastructure divides

municipal divides

The underlying thought behind my project is to use the remnants of abandoned industry as a means of providing clean drinking water to a community. exploiting the same mechanisms which brought economic prosperity to the city as a means of providing opportunity for new migrant communities.

Historically Thessaloniki's wealth originated in its position as a trading post between Europe and Asia. in the contemporary context this is evolved and is manifested through Greece's large shipping fleet which contributes €11 billion to Greece's economy every year.

A continual side effect of this the ships used eventually become economically unviable to repair and oh exported two countries such as Bangladesh Pakistan Turkey and China. my proposal is that this process becomes internalized through the existing ship breaking and maintenance yards as a source of new materials for potential developments. this circular strategy would enable cheap and abundant building materials which could incrementally be collected and applied by the community.
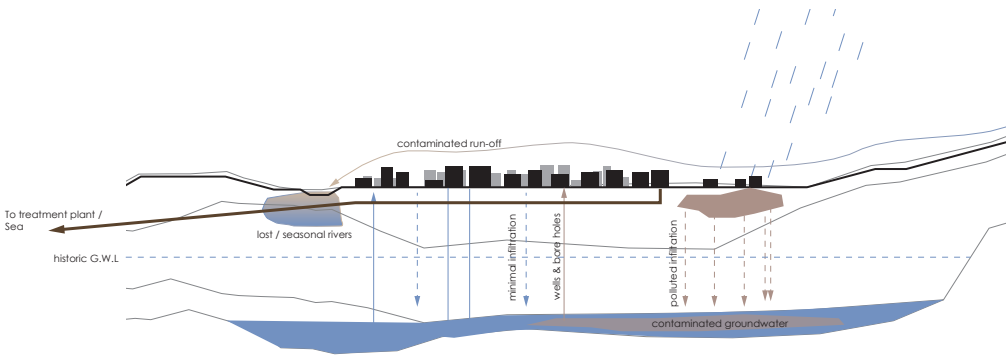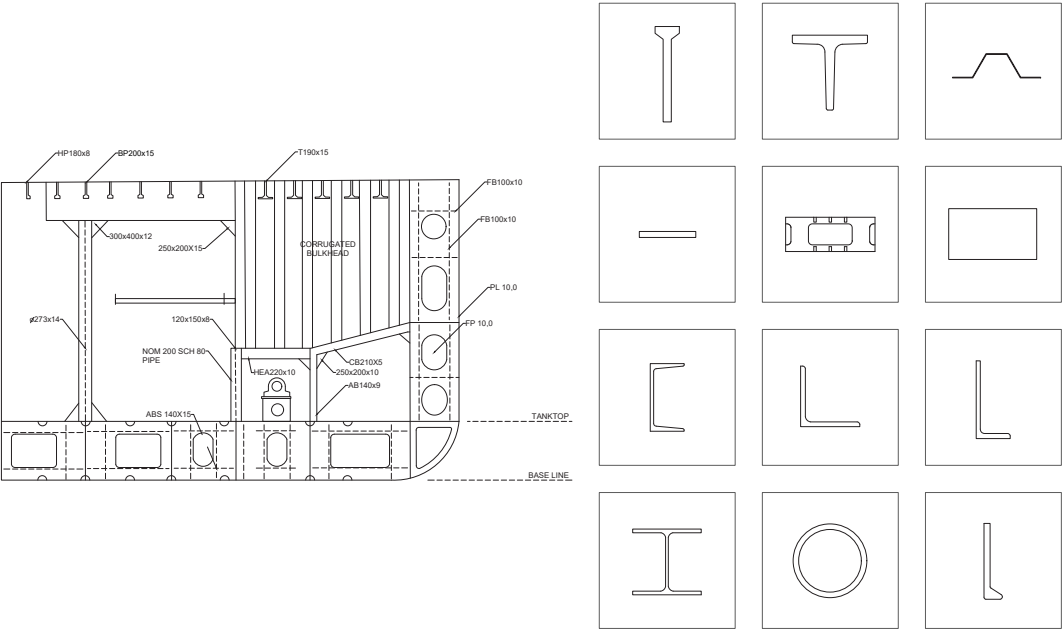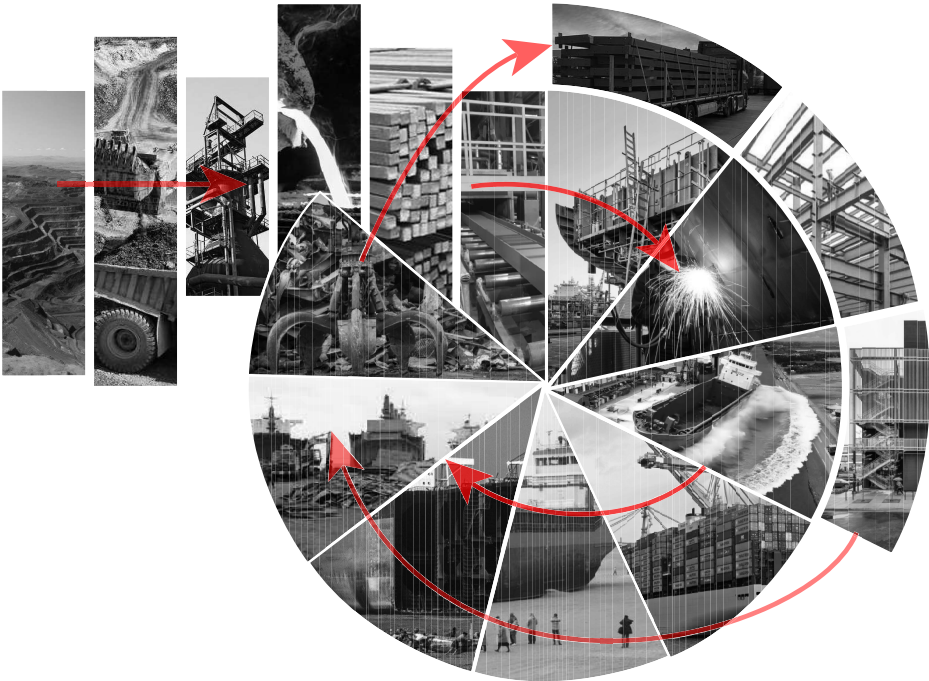
Figure 4

Ships are made out of a large variety of steel sections but in general these are the typical materials which are used. there are sections which are used for more specific scenarios such as boiler rooms navigation bridges and docking infrastructure. and there are more typical sections which are applied through the modular construction logic of ships and make up the majority of material used.
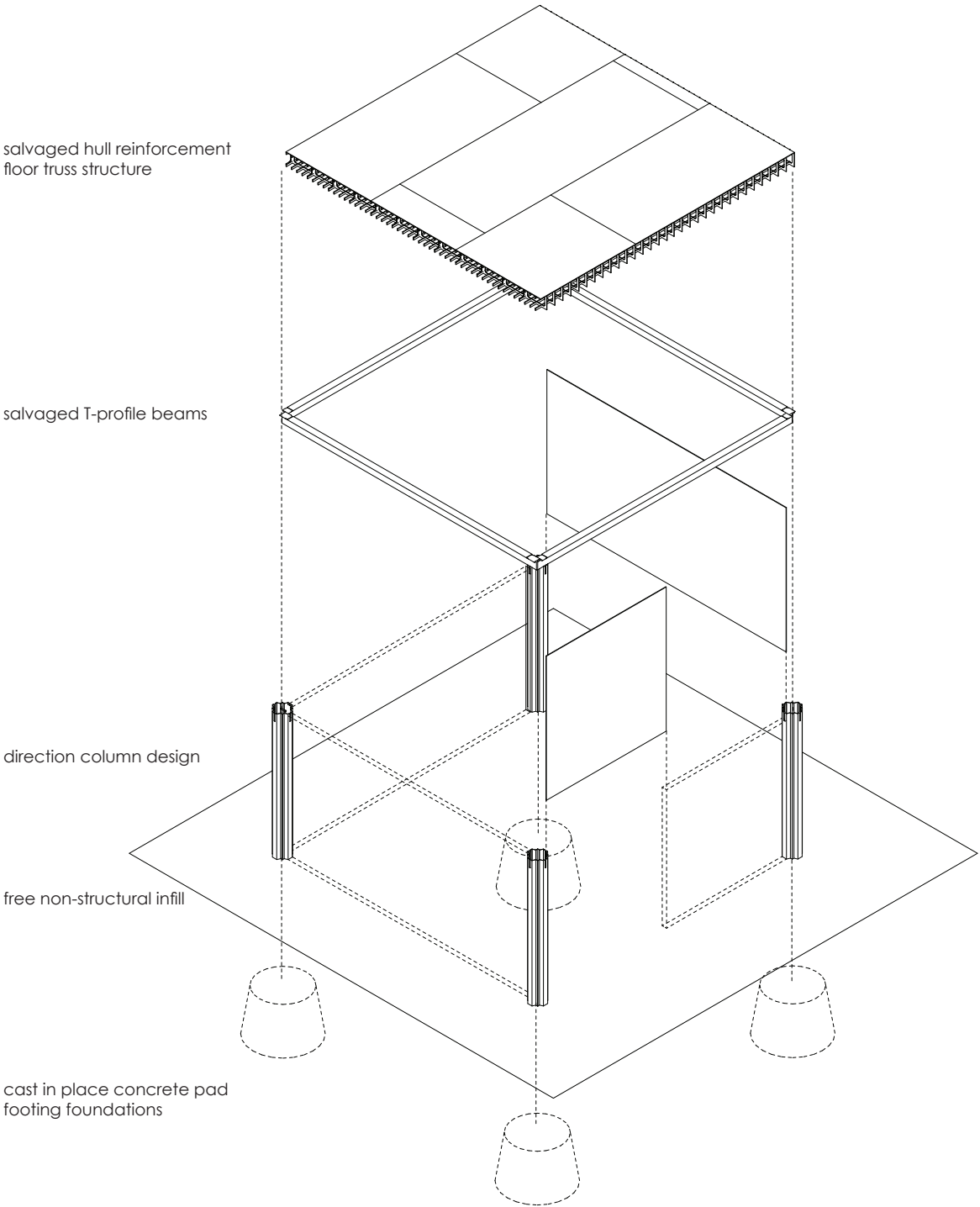
I sought to use these more frequently used materials in conceptualizing a construction logic which could be applied to these new communities.
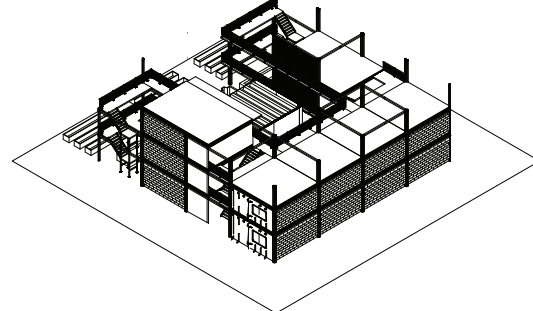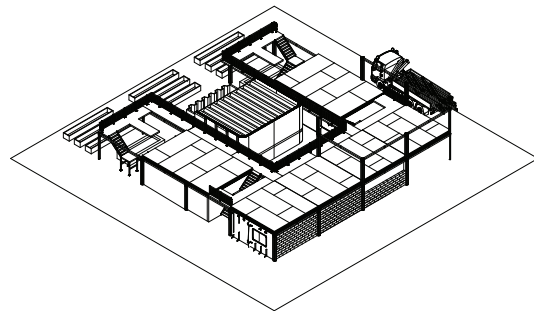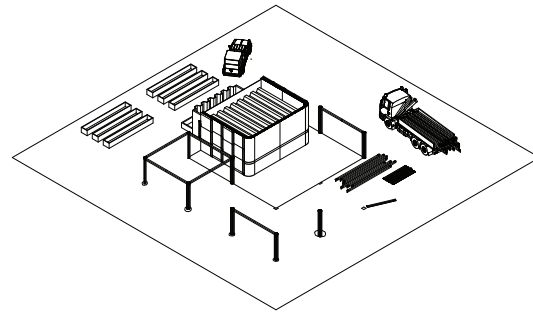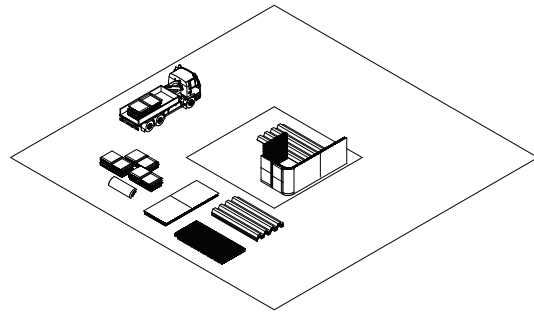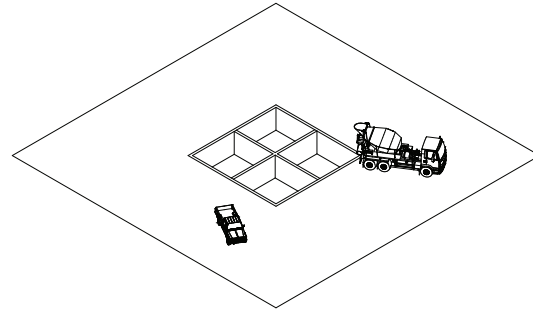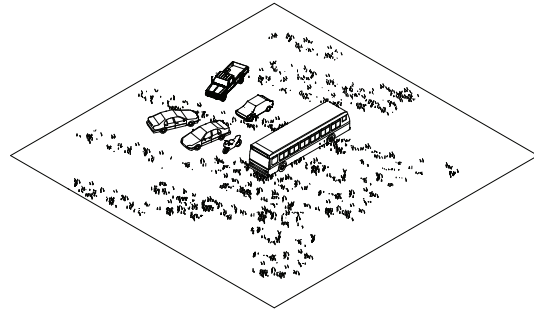
I designed construction joints which would both allow 4 the use of these materials and an incremental direction free method of building. this evolved out of the building logic of the historical developments in the area but also through the logic that when members of these communities are able to afford new building materials or need to expand their dwellings, they are freely able to do so.

Together this joint forms a part of a larger structural system which is based on a 6 by 6 grid.
The columns are assembled on cast in place
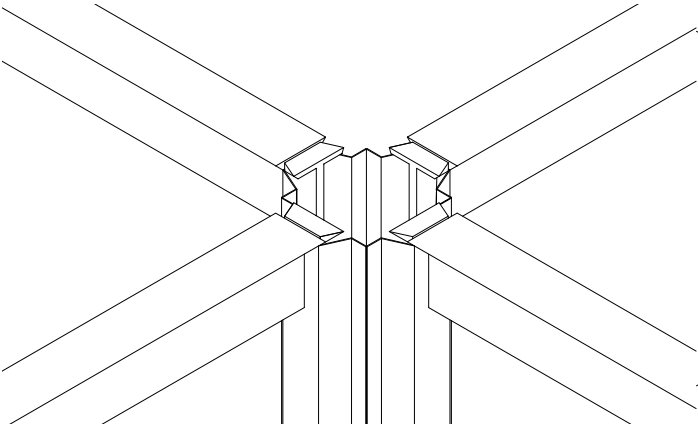
foundations onto which the columns can be inserted
Between these, steel shear walls are bolted which are minimized to allow for an open structure which can freely been filled in by those who occupy it.
On top of this, a section taken from the ships hull is used to make up the floor structure. Its truss like make up which makes it so resilient to the pressures of sea conditions make it ideal for the 2 way span of this loadbearing structure.

salvaged hull reinforcement
floor truss structure

salvaged T-profile beams

direction column design

free non-structural infill

cast in place concrete pad
footing foundations

My project not only focuses on a single site and development but exists as a model which can be applied to any area facing similar stresses.

There are many abandoned plots throughout the area and they are often taken over for parking so these are the ground conditions that are frequently encountered.

the basis and the fundamental role of this development is embedded in its, the foundation here though is a cistern designed to store both fresh and grey water with capacity to overcome seasonal drought and variances in water availability.

a collective washing and cleaning area is built using larger raw sections of ship which would be the first sections produced during the process of shipbreaking.
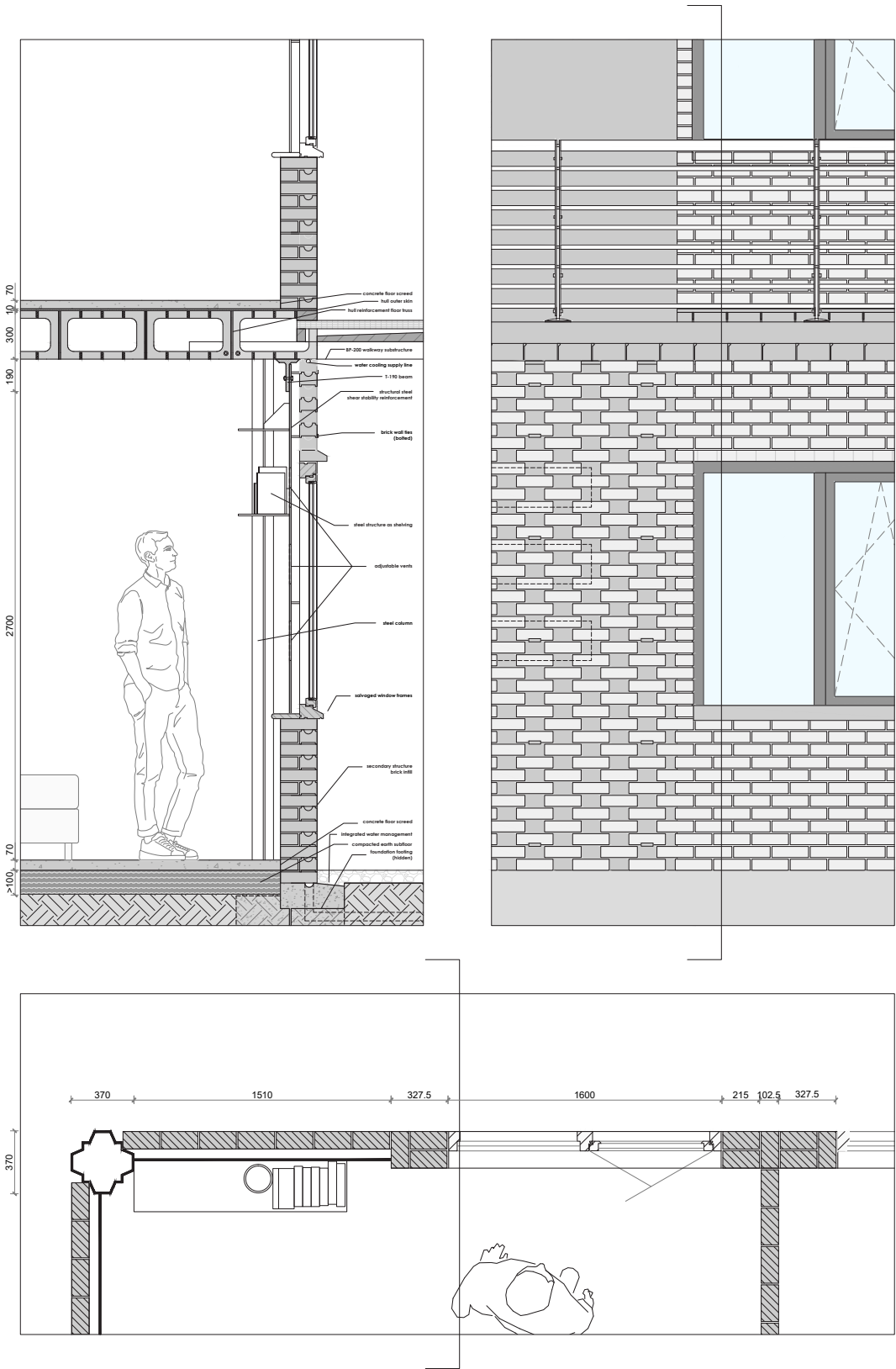
In this the water filtration infrastructure which exists in these ships is taken and installed to pump and purify the groundwater providing a fresh water source for the community furthermore the communal placement of the shower and baths reduces the per person water demand by up to 40 litres a day saving the initial residence multiple trips back and forth.
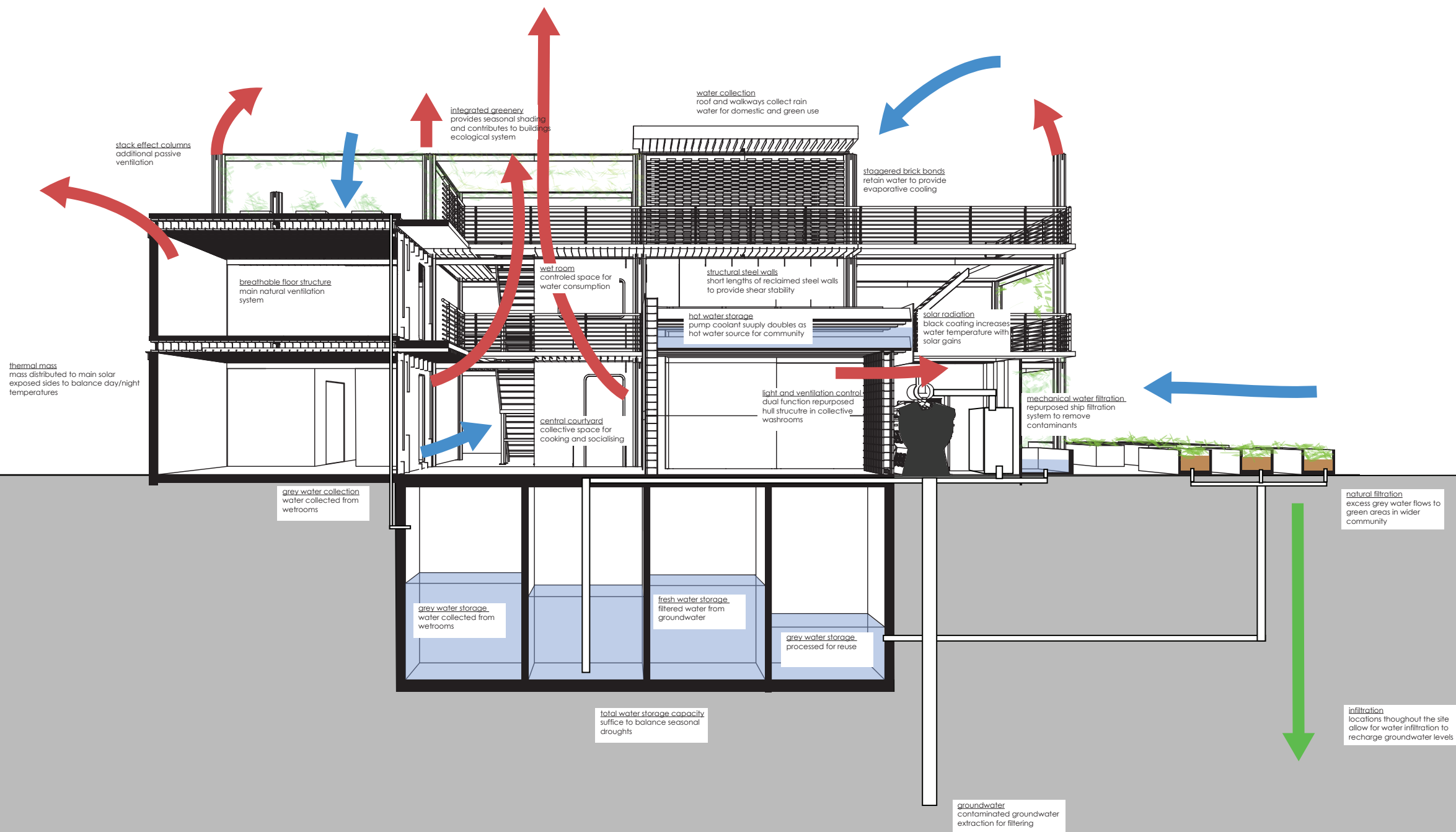
using this water as a catalyst more processed elements retrieved from the decommissioned ships can be applied to create dwellings and community spaces around this source. these elements provide the main stability of the structure, and the rest is left for the community to fill in. this can be with it wide variety of materials from low impact materials such as rammed earth retrieved during the excavation process of the foundation two more typical building materials which are applied throughout the rest of the community such as brick.

This is then allowed to grow and develop in an incremental and organic way as the community around it grows.

The assembly of the building and the tectonic qualities of the elements work together to create a unique and interesting architectural quality to the space. furthermore the combination of steel and brick and integrated water Provide unique solutions to combat the local climatic conditions.

stack effect columns
additional passive
ventilation

integrated greenery
provides seasonal shading
and contributes to buildings
ecological system

water collection
roof and walkways collect rain
water for domestic and green use

staggered brick bonds
retain water to provide
evaporative cooling

breathable floor structure
main natural ventilation
system

wet room
controled space for
water consumption

structural steel walls
short lengths of reclaimed steel walls
to provide shear stability

solar radiation
black coating increases
water temperature with
solar gains

thermal mass
mass distributed to main solar
exposed sides to balance day/night
temperatures

hot water storage
pump coolant suuply doubles as
hot water source for community

central courtyard
collective space for
cooking and socialising

light and ventilation control
dual function repurposed
hull strucutre in collective
washrooms

mechanical water filtration
repurposed ship filtration
system to remove
contaminants

grey water collection
water collected from
wetrooms

natural filtration
excess grey water flows to
green areas in wider
community

grey water storage
water collected from
wetrooms

fresh water storage
filtered water from
groundwater

grey water storage
processed for reuse

total water storage capacity
suffice to balance seasonal
droughts

infiltration
locations throughout the site
allow for water infiltration to
recharge groundwater levels

groundwater
contaminated groundwater
extraction for filtering

sediment filtering

natural infiltration sites

ground water extraction

This logic of water processing is not isolated to the site either, by taking advantage of the surroundings this practice can be scaled to the level of the wider community and take advantage of other green sites and the river for natural infiltration and pollutant processing.

aquifer replenishment

grey water irrigation

mechanical filtering
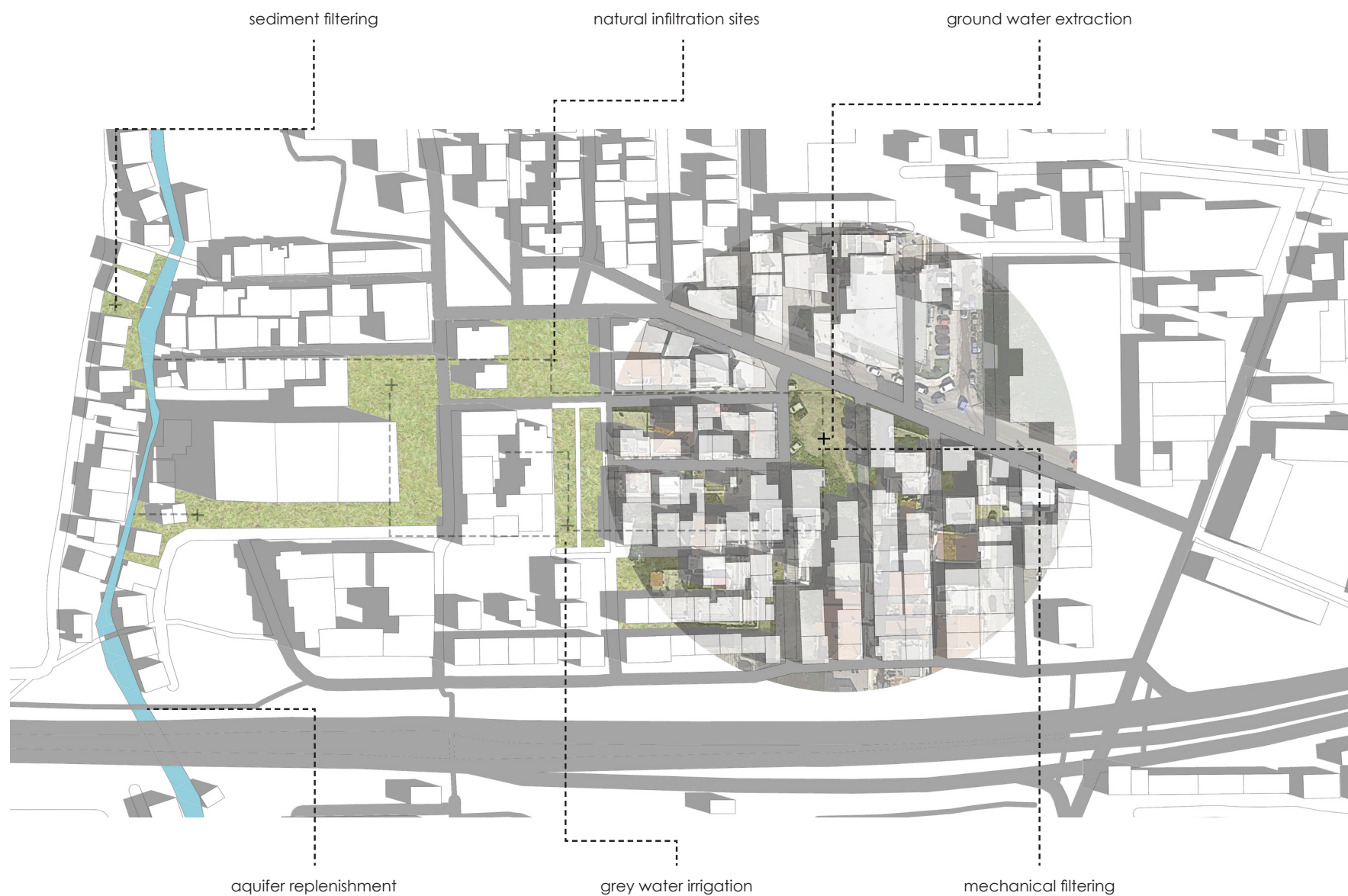
Spatially this development can be divided into three parts:

firstly the public aspect this is based around the open source of water and the community gardens which are allowed to exist through the re processed greywater which feeds them. this is a space which borders one of the main roads running through the community and one of the few bus stops making this a highly visible and engaging part of this development.

Secondly is the semipublic core of the development, the washing space, and the community courtyard with spaces for sitting and socializing and cooking.

And thirdly the private aspects, the dwellings, the walkways, and the rooftop spaces.

An additional organizational layer which is underlying to this all is the and the use and application of water.

Around the central water source are the wet rooms, this historical typology of space which is revived in this plan to allow for the centralized collection and reuse of grey water. As was shown in the section before.

To highlight the flexibility of the system each dwelling shown here takes a different form creating a community for 25 people in single, 2 over 1, 3 over 2, 4 over 3 and 5 over 4 dwellings. In single floor and duplex style apartments.
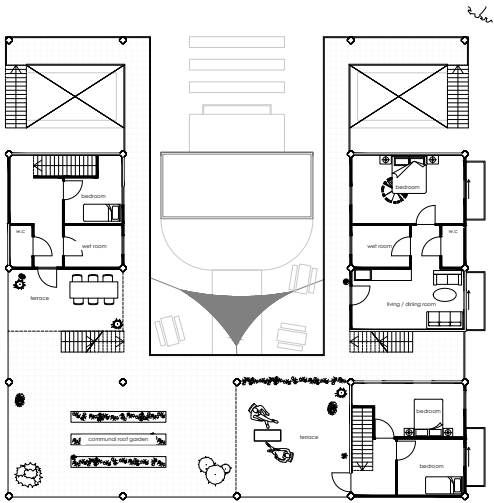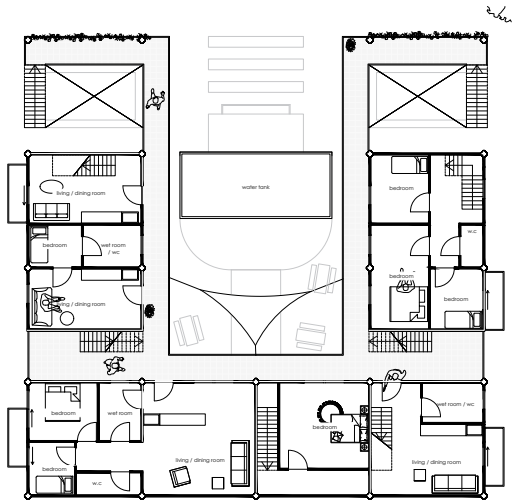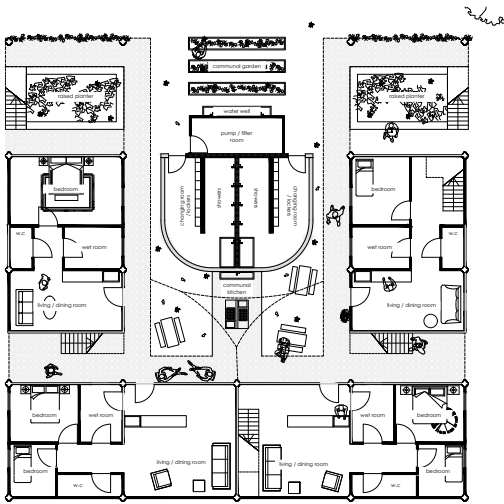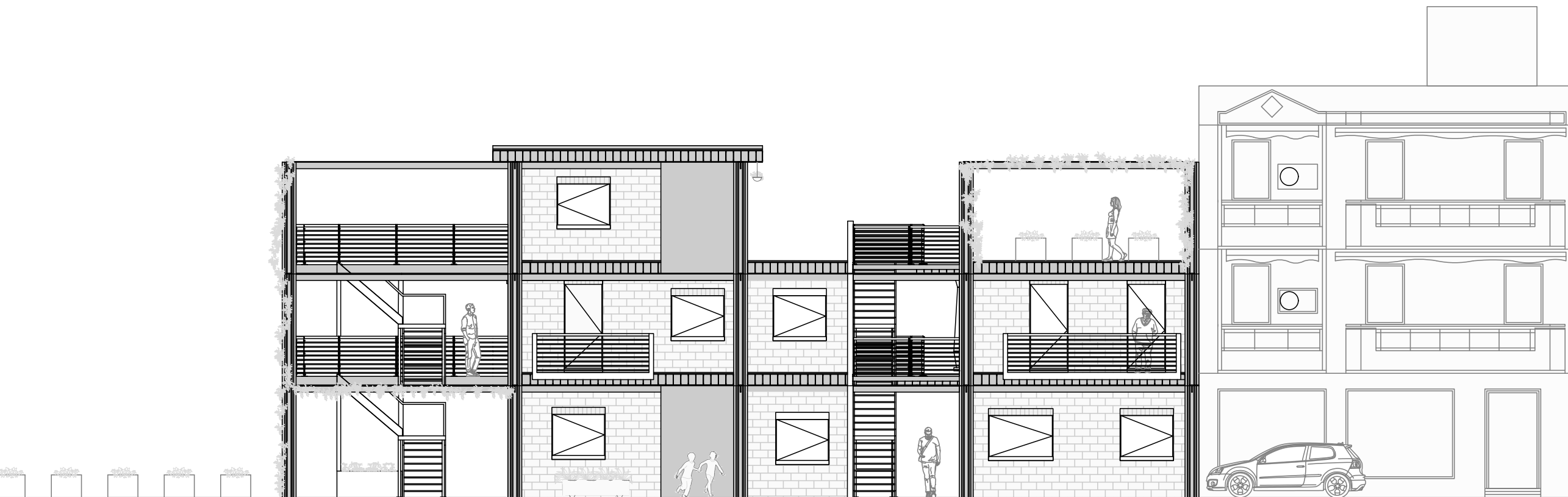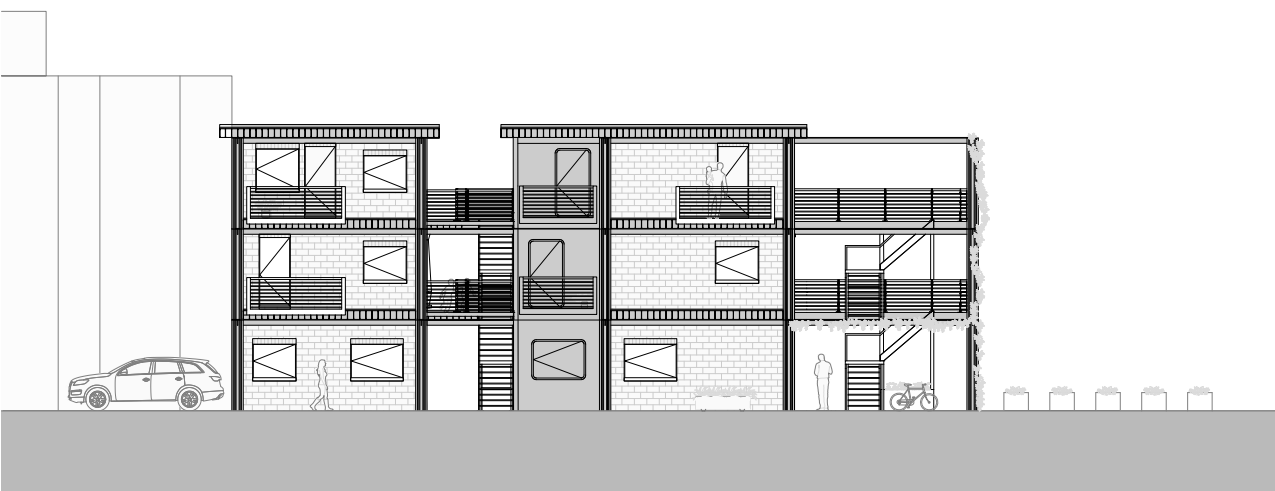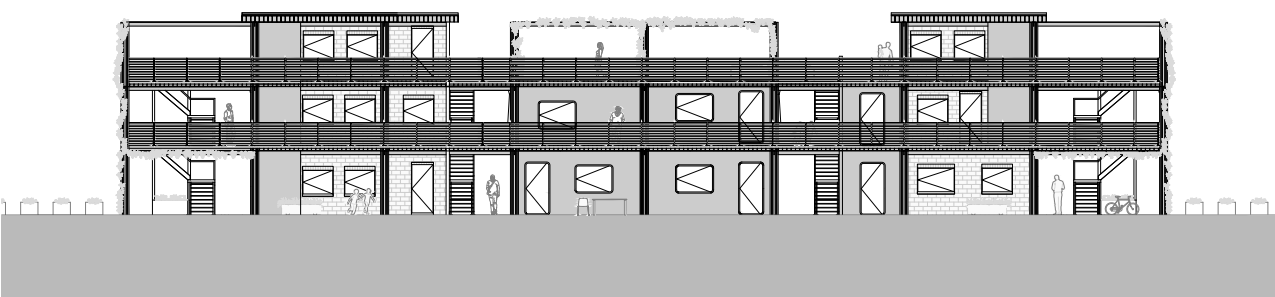
The graduation studio 'Border Conditions along the New Silk Road' focusses on sites where spatial conditions have emerged that are 'teeming with suggestive meanings and unexpected potential' but are hardly analysed within contemporary architectural discourse. The studio investigates contemporary border conditions within the larger urban and territorial scale, with a special emphasis on the relationship between architecture and its socio-political context(s). B&T views the contemporary city as an 'urban universe' of spatial conditions, which consists of constellations of elements seemingly without any relative weight. To think of an 'architectural project' in such a context means to engage in a speculative approach directed to alternative formulations of architecture, all based on a fundamental understanding of fragmentation and complexity. In the graduation studio, these new reformulations are instigated by, and at the same time applied to the controversial 'New Silk Road'.

BORDERS
&TERRITORIES