

Ruins in the Landscape: The Blue Hospital of Bugojno

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Master of Landscape Architecture

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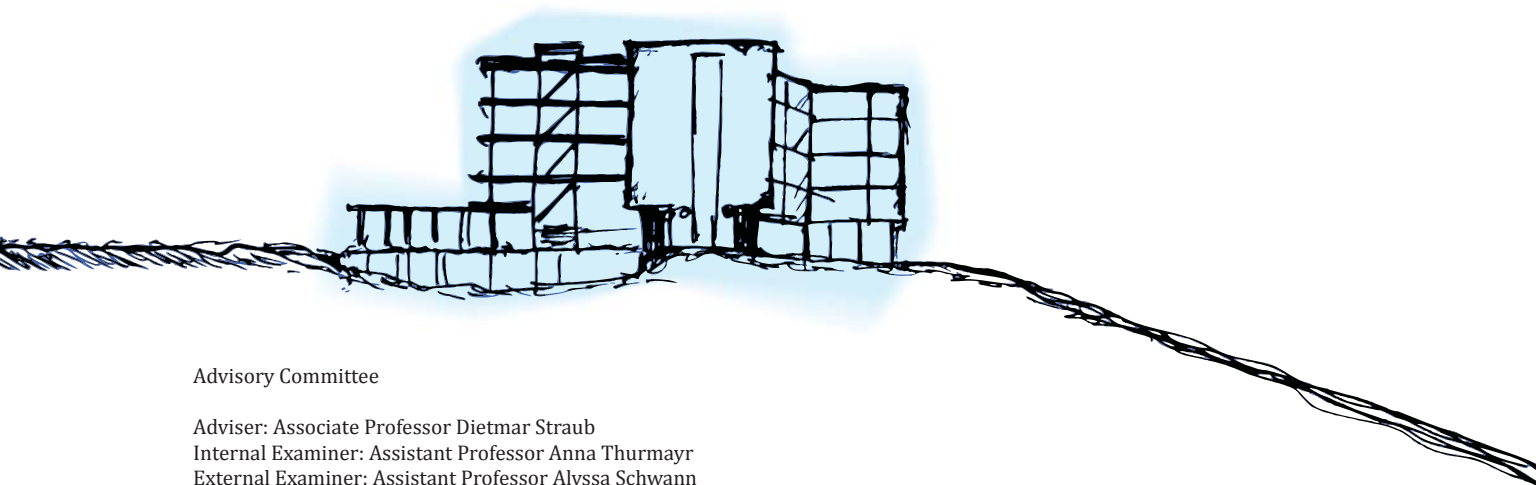
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Ruins in the Landscape: The Blue Hospital of Bugojno

Ruševine u pejzažu: Plava Bolnica u Bugojnu

A practicum

James W. Frank



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Dedication

For my mother and father – Sandra and Jim Frank – for everything you have done to help me get here.

Words cannot express my gratitude.

For Vesna and Mersihe, and all the employees at the CGABH
You've taught me so much more than you can imagine.

Abstract

Nearly two decades after the cessation of hostilities, traces of the war in Bosnia and Herzegovina (1992-1995) are still present throughout the landscape. Ruins resulting both directly and indirectly from the military actions remain scattered throughout urban and rural landscapes. Above the city of Bugojno, stands the shell of a hospital that was never completed and never opened. It is a visceral image full of unfulfilled hope and promise, and a reminder of the catastrophic events of the Bosnian Conflict. With unused and derelict infrastructure of that magnitude, loaded with symbolic meaning, it begs the question, how can it come to be used for the benefit of the local residents? The purpose of this practicum is to effectively design a redevelopment plan for the site of this former regional hospital, producing community space that promotes peace and reconciliation between the ethnic groups affected by conflict utilizing landscape processes and a program of socially based activities such as community gardening and food production. It will explore alternative uses and understanding of ruined infrastructure through investigation of traditional and contemporary landscape design theory pertaining to the picturesque, the aesthetic understanding of ruins in the landscape and the aesthetics of decay.

Section 1:

Contextual Discussion and Situation

1.1 Introduction – A First Encounter With The Site

Landscapes have a way of embedding themselves within our imagination and memories. Physical and ethereal elements combine to create a mental fingerprint of the place, creating a matrix on which our relationship with place is constructed. I'll never forget my first encounter with the Blue Hospital above Bugojno Bosnia. We had finished work for a hot, August day, at the garden we were constructing for the Leptir organization in Bugojno. The volunteers had gone, and the others in our group had headed home to the little apartment in which we lodged in the neighbourhood on the hill above the town. My classmate, M., and I were charged with supper that day so set out to buy some ingredients. After a lengthy conversations consisting of hand gestures and our limited Bosnian vocabulary we managed to purchase some mesom (meat), and passing the small corner shop, some Sarajevsko Pivos. M, in a particularly poetic mood, was describing his desire to enjoy the cold cans of Bosnian beer on a roof terrace before heading to the apartment, describing the scene he was after in detail. Informing him the obvious, that we had no roof terrace to access, his desire changed to an open meadow to sit down in and enjoy the sun and sky. My response was unconvinced. We had not been warned about a land mine situation in the immediate area so it was likely fine, but didn't seem like it was a chance to take. When questioned what I thought as we crossed a street, I responded, "What about up there?" to the north, on a hill above the highway sat the shell of the hospital: never completed, never opened, silent and crumbling. In agreement we crossed the highway, crossed the meadow and bramble clad hill, feeling the sting of thorns on our legs as we followed the small trail up the hill.

The hulking structure had been noted on many occasions since our arrival to Bugojno, but to stand directly below its concrete bulk, hollow, with wind rushing through, was truly overpowering. We passed through the main floor of the south west wing, made up of irregular and cubic volumes defined by solid concrete wall segments, its surface a mix of dust, dirt, concrete, and plant life. At the centre of the building sat the vacant elevator cores and an immense colonnade. Adjacent to the elevator core was a concrete staircase, open on one side to the south. We climbed to the top of the building and were met by sweeping vistas – the verdant hills mountains that line the edges of the lower Vrbas Valley and the town below, with its minarets and church steeple, communist era housing blocks and small houses. From this vantage all seemed so peaceful, so calm. It was hard to believe the events of 1992-95 could have ever taken place here, yet there we stood upon the abandoned Blue Hospital. It was an experience engrained in my memory. This had clearly been what Christophe Girot (1999, pp. 61-62) describes as "landing" – the first of the trace elements of Landscape Architecture. For Girot, landing is a first encounter in which the designer is immersed in experiencing the site. It is an important series of first impressions in which potentials identified, and that will shape the approach to the site throughout the design process (p. 62). It was an experience that would lead



Figure 1.1
Southeast wing of the hospital.
July 2009





Figure 1.2
Southeast wing of the hospital.
July 2009

to many more visits to explore the looming shell, and would become the starting point for inquiry into the significance of ruins, landscape architecture, decay and landscape processes in Bugojno, Bosnia.

Understanding the allure of the site

Understanding the site was more than knowing about its physical dimensions, biophysical data, and material qualities and states. It was about disseminating how (hi)story, experience and aesthetics come together to create the essence of place. In *Beauty and Decay*, a collection of photos and discourses on urban exploration of abandoned and decaying locations, is written the following description:

A hospital is a building and an institution heavy under the weight of its own symbolism. It is the triumph of science and reason over centuries of quackery. It is a cornerstone of a functioning society, visibly and physically raising the standards of living for all. Hospitals are furious hives of activity, always busy, always lit up like electric beacons through the night. They are symbolic of hope for recovery, care, help and all the good things about being human.

However the hospital is also a feared place. It is a gateway between this world and the next. It is where the new generation comes in and often where the old generation leaves[...]

There is something terribly sad about a derelict hospital
Once the lights have gone out in a building in which so many pivotal moments of many lives have occurred, the old life continues to resonate in the imagination of the explorer. Full of intimate mementos and intriguing details, it's easy for the witness to become absorbed into visions and reverie. (Potter, 2010, p. 38)

But what about a hospital that never opened – was never finished – that never got to host these pivotal moments? Of all building projects, what could bring more hope, pride and optimism to a community than a hospital? The ruin seems doubly burdened as physical reminder of not only another time and social dynamic, but of lost prosperity and optimism. Yet its silent brooding mass still held some sort of magic or magnetism:



Figure 1.3
A sapling take root.
July 2009





Figure 1.4
West colonnade.
July 2009

The dead hospital cannot help but be doubly symbolic of death. And the explorer takes it upon him or herself to 'revive' the spirit of the location as part of their 'work.' It's as if by investing their imagination into the practice of exploring space, they are performing some important ritual, the results of which maybe invisible, but perhaps are essential to all of us nonetheless. (Potter, 2010, p. 38)

With every visit to the site, we were drawn deeper in to the structure; yet always there was a sense that site was as much about directing our gaze out over the city and upwards, towards the mountains. It became a site both introspective, concerned with its own conditions, forms, materials and story, but also extroverted in the way it allowed for us to take in its surroundings. The vantages offered by the structure, and the contrast between the material conditions and social dynamics of the surrounding environs acted as a gateway into considering so much more of the landscape beyond the concrete shell.



Figure 1.5
Lower level.
July 2009





Figure 1.6
View north from the
southeast slope.
December 2011

Seasonally, the atmosphere of the place also changed. Walking the site during a December visit, it was apparent that like many landscapes in winter, the building seemed at its most abandoned and dormant. Foot prints in the snow, though indicators that someone or something has passed, made the place seem much more alone. Sounds within the structure seemed to be heightened as they travelled through the cold, crisp air. The sharp ping of picks on concrete – the sound of the harvest of steel rebar from its concrete confines – wafted out from the shell. From the upper levels to the bowels of the building, a new economy of reclamation had emerged as people collected the metal reinforcement to sell for scrap. This action accelerated the process of decay. Now, it was not only physical processes of decay such as erosion, expansion and contraction, and chemical processes such as oxidation and dissolving, in the environment acting on the structure as agents for change. Sections of the building were completely missing or left as rubble having collapsed under their own weight from this salvage. Visible changes became an important part of the experience highlighting the processes of decay from one state to the next at several scales of time.

The combination of the aesthetics of ruin and decay of the hospital, the beauty of the surrounding natural landscape, the social context in which the site was situated, and the condition of change became a source of great interest and the starting point for this project.

Figure 1.7
Icicles forming from the ceiling
of the west colonnade.
December 2011





Figure 1.8
View west towards the
circulation core from the east
wing.
December 2011



1.2 The University of Washington Design-build Projects 2009

I arrived to Bosnia the first time at the end of June, 2009. During the spring of that year I had begun the application process into an International Landscape Design Build, led by Professor Daniel Winterbottom of the University of Washington, Seattle. I was very interested in the course's core studio which was to design and build two gardens for children with disabilities, in the cities of Tuzla, in the Tuzla Canton in northeastern Bosnia, and Bugojno, in the Central Bosnian Canton. The projects were done in conjunction with a Bosnian NGO, the Community Gardens Association of Bosnia and Herzegovina (CGABH), as well as local organizations supporting children with disabilities and their families. Funding was provided by the American Friends Service Committee (AFSC), a Quaker Organization working in the United States and internationally on projects pertaining to peace, reconciliation, and social justice. The local Bosnian partner organizations were Association Ogdovor, a government supported organization in the city of Tuzla, and Leptir, a grassroots, family run organization in Bugojno. Initially, a project in the Herzegovinian city of Mostar, but a difficult political climate meant that it could not move forward. Professor Winterbottom described that "the Croatian mayor declared that unless the Bosniak organization director stepped down, the project could not proceed. If the director remained, only Croats would be allowed into the facility" (2010, p. 97). A project in the city of Tuzla was chosen as the replacement. This change prior to the start of the course was the first encounter with the difficult road to recovery that Bosnia was on, and the delicate nature of its politics.

Myself and four other students from three other universities, including the University of Toronto, Harvard University and the University of Washington, had an intensive schedule of design charrette and building. We spent three weeks on the design and construction for the garden in Tuzla, and two weeks on the design and construction in Bugojno. We had been provided with information about what each organization was wanting in terms of programmatic elements, and how they envisioned using the spaces that would be built. This had all been gathered during the project planning that occurred prior to the course. Through a process of site visit, charrette and consultation we produced designs and began construction, aided by volunteers from the community.

In Tuzla, we lived on site in dormitories in the building occupied by Association Ogdovor and several other organizations. Young volunteers from the community – many who had relatives, or were themselves, receiving services from Association Ogdovor – joined us to help in the construction. The overall site was 1858 m² to the south of the building, backing onto the Jala River. Association Ogdovor already had several phases proposed for development. We worked on the initial phase, a 380 m² garden on the southwest side of the building. Prior to our group's arrival, the CGABH worked with staff and parents establish to what was

Figure 1.9
A view north towards the
Assoication Ogdovor site from
the Jala River bank.



Figure 1.10
The group surveys the site.



Figure 1.11
Construction in the Association
Ogdovor garden.



desired and required to be in the project to be developed. After the group produced three schemes for this first phase garden area, one was selected by the director and staff for refinement and construction (see Figure 1.6, p. 30). The design consisted of zones for active play and quiet activities. The active zone, nearest to the building consisted of planting beds at varying heights for horticulture therapy; a stage capped by an arbour for lessons and performance; play structures consisting of rope climbing, monkey bars, and a balance course; and a grass mounds for play and to act as seating for the stage.

Within the quiet zone, at the far side of the site, a bench swing topped by an arbour sits upon a second grassy mound. It is adjacent to a sensory garden of aromatic plants and two more benches. A layout was also provided for a fence. Our team worked on the construction of the built elements with the community volunteers, but the plantings were left for the organization to complete with children in the fall.

During the construction we became close with several of our regular volunteers and they gave us insight into their lives and what it was like to live in Bosnia. Tuzla is home to one of Bosnia's universities, which several volunteers were attending. Gaining understanding of the challenges facing our peers internationally was an important aspect of our experience, as well as the chance to share approaches and knowledge that would affect the designs with students from a variety of back grounds, including engineering and health care. The process of construction and discussing design was an interesting way to bridge cultures, and gain insight into the lived experience of people whose country's recent history varied so much from the life I lead in Canada.

In Bugojno, we worked with a grassroots organization called Leptir, that had been founded by the parents of children with a variety of disabilities to provide physical, occupational and speech therapy to 80 to 90 children. For 19 years they have also been raising awareness about disability, which has led to the town making improvements in many public spaces to provide access for all residents. Leptir's facility is located in an old school building, and their space had direct access to a private front yard of 182 m². This yard was the site for the garden design. Like the Tuzla project, CGABH had worked with therapists and parents to develop a programmatic wish list, and there was a lot they wanted for the site. Within the design was incorporated an active play area with monkey bars, tree house, sandbox, balance structures and a bench swing. Three horticultural therapy planting beds are found along the walkway, including one with a wheelchair accessible table. A grassy mound for play and seating was located at the centre. Access to the building was difficult for children with limited mobility as it was built, so a curving ramp which

Figure 1.12
View west over the Association Ogdovor garden showing the bench swing and arbour, centre mound, and active play structures.

Figure 1.13
View east over the Association Ogdovor garden showing central mound, horticultural therapy planters, stage and play structures.



was incorporated into a stage was added to provide access to a concrete porch. A ramp was also added to provide access from the porch to the main entry. Planning was done for planting sensory plants such as lavender, rosemary, sage and others, but as with the Tuzla project, plantings were left for Leptir to finalize with their participants (see Figure 1.7, p. 31).

An important aspect of the project in Bugojno was the interaction with the families who would use the space – especially the children who would directly be benefiting from the garden. Our interactions in Tuzla had been far more limited as programs were seasonally scheduled and fewer participants were around. At Leptir, many of the family members and children participated in the construction with us. It was exciting to see the pride, excitement and ownership that was taken in the work, and people would often stop by to talk, and take coffee with us. Another aspect was the building of confidence. One of the children, a boy who had vision and hearing impairments worked with me on building a bench swing, and under my guidance and supervision used a power drill for the first time. This was a skill building moment for both of us. For him it was gaining a new skill and confidence. For me, practicing cross cultural and cross lingual communication were a significant part of the experience. It not only required communication accross cultural and language differences, but I also had to approach problems with him in a way that was inclusive of his particular needs and ability. I was able to gain insight into the challenges he faced as a special needs citizen of a country that was not yet built for inclusion. Our working together was also a postive demonstration of the many abilities people with disabilities have and the integral part they can play within our communities - a value that is not often aknowledged in Bosnia (Winterbottom, 2010, p. 96).

Gaining the first hand knowledge of how design can, and does impact the lives of vulnerable people was another important aspect of the program. Mundane elements of design such as stairs had made the simple act of entering a challenge for many of the children so working with them and their families through the design and construction, taught valuable lessons about forethought and inclusive consideration in the design process - how the simplest detail can make things easier for someone . This collaborative process showed the benefit of working directly with those who in the end use the space.

Touring other cities in Bosnia and Croatia allowed for us to see the wide variety of planning and design in terms of regions, eras, and rebuilding. Beyond Bugojno and Tuzla, visits took us to cities such as Dubrovnik, Korchula, Split, and Zagreb in Croatia, and Travnik and Sarajevo in Bosnia.



Figure 1.14
First visit to the Leptir site.



Figure 1.15
Construction of the curving
ramp.

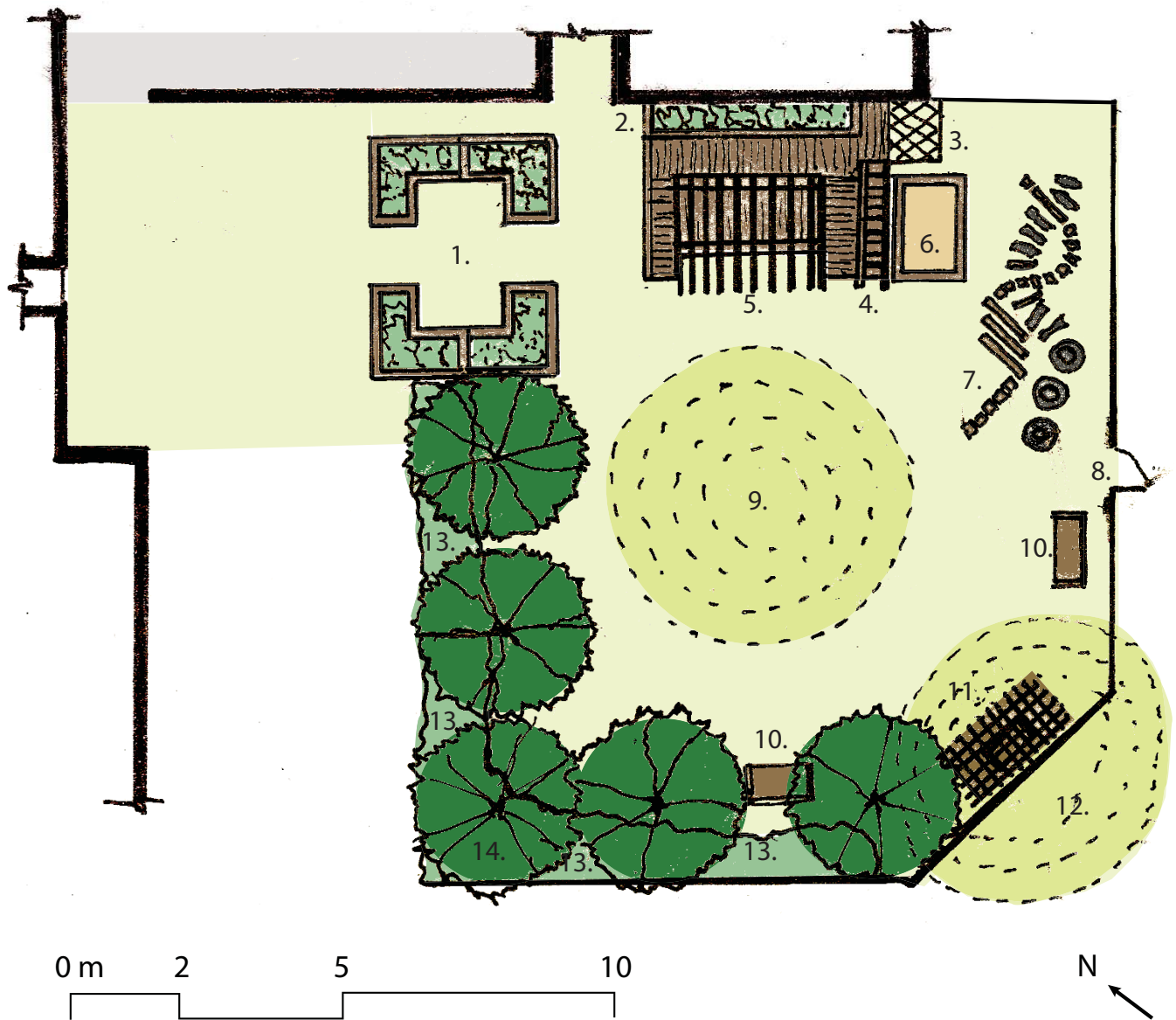


Figure 1. 16
Association Ogdovor
Therapeutic Garden Plan,
Tuzla.

1. Horticultural therapy planters
2. Planted backdrop for stage
3. Rope climbing structure
4. Monkey bars
5. Stage and arbour
6. Sandbox
7. Play/balance course
8. Gate and fence
9. Grassy mound and stage seating
10. Bench
11. Arbour and swing
12. Grassy mound
13. Sensory garden
14. Existing trees

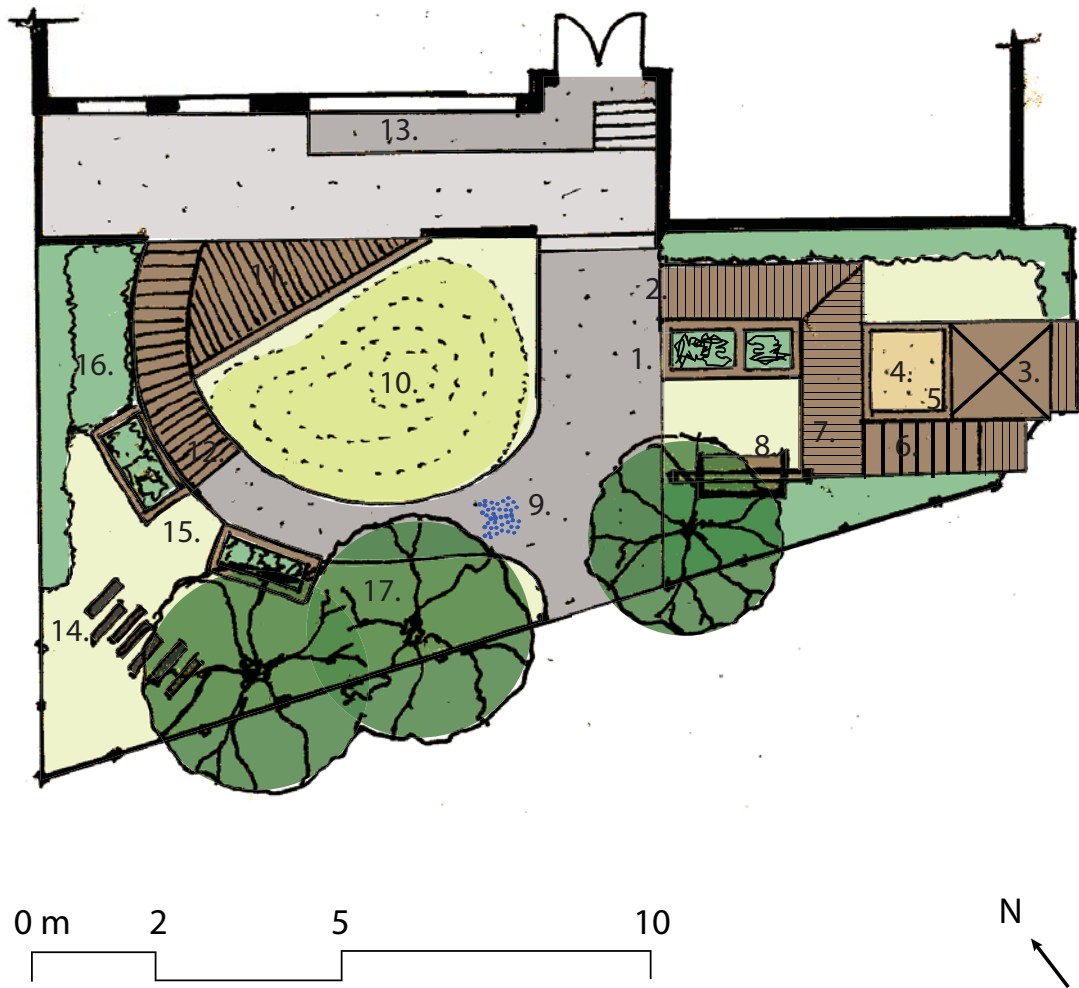


Figure 1.17
Leptir Therapeutic Garden Plan,
Bugojno.

1. Accessible horticultural therapy table
2. Monkey bars
3. Tree house
4. Sandbox
5. Climbing wall
6. Stairs
7. Boardwalk
8. Arbour and swing
9. Butterfly mosaic
10. Grassy mound and stage seating
11. Stage.
12. Access ramp - wood
13. Access ramp - concrete
14. Play/balance course
15. Horticultural therapy planters
16. Sensory garden
17. Existing trees

Through these projects I gained greater understanding of the potential of landscape architecture as a catalyst for change and improvement to quality of life for people in developing or recovering nations. Design in action allowed for the sharing of knowledge, and meeting the needs and wants of people who previously may not have had access to design services. The collaborative nature of these projects - especially at Leptir in Bugojno - and touring the community gardens of the CGABH were examples of how landscape architecture can engage in capacity building and grassroots initiatives.

The University of Washington, Seattle's International Landscape Design-build is part of a continuum of servicing learning projects I have worked on throughout my university studies. These include the University of Manitoba's Service Learning in the Global Community interdisciplinary program in which students travel abroad and participate in the building of community initiative. I participated as a student in Katebo Uganda building a multipurpose school building at a primary school. As a teaching assistant I was involved with a project in Sri Lanka and Ghana in which a community resource centre and primary school building were built. These types of projects have revealed the true potential for design to provide a major impact on quality of life for people in developing nations and post conflict regions. These lessons are just as true for working to improve the quality of life of Canadians who are economically and/or socially disadvantaged.



Figure 1.18
A view of the mound, stage,
ramp and horticultural therapy
planter at the Leptir garden.



Figure 1.19
The tree house and play
structures in the east end of
the Leptir garden.



Figure 1.20
View northwest of ramp,
horticultural therapy beds and
stage.

Figures 1.20 - 1.22.
Winter views of the site. The
Children of Leptir painted
the structures and began
the planting following our
departure.



Figure 1.21
View of approach to site
showing playstructure and
bench swing.



Figure 1.22
View south showing
playstructures, accessible
horticultural planting table
and bed, and bench swing.

1.3 Bosnia: The Geographical Positioning – Physical and Human

Located in Southeastern Europe on the Balkan Peninsula, Bosnia and Herzegovina was the heartland of Yugoslavia. It is bordered to the north and west by Croatia, to the east by Serbia, and to the south by Montenegro. It is almost completely landlocked other than a 20 km stretch of Adriatic coastline at Neum.

Variations in relief and formation of mountain ranges, proximity to the Adriatic and Mediterranean Seas, produce a variety of climatic conditions (Trbic & Vojinovic, 2011, p. 25). The climate within the country is generally divided into three basic regions (Figure 1.27, p. 40): the Northern region, the Hilly Mountain region, and the Southern region (Custovic, 2005, p. 73). The northern region experiences a temperate continental climate and sees average temperatures between 0.2°C to 2.0°C in January and 20°C to 22°C in July. The Hilly-mountain region has a climatic range varying from continental, high-mountainous and alpine climates with January temperatures averaging between -0.3°C to 7.4°C and July averages between 10.2°C to 21.2°C. The southern region is typified by a Mediterranean climate with its January average temperatures at 2.3°C and July's averages between 22.°C to 25.7°C. Average annual precipitation for the Northern region is 800mm, in the Hilly Mountain region, 1000mm, with the Southern region averaging 1500-2000mm (Custovic, 2005, pp. 73-74).

The majority of Bosnia is either hilly or mountain covered, sitting on average at an altitude of 500m above sea level. 42 percent of the entire country is covered in mountains – chiefly the Dinaric Alps - while 24 percent is hills, and 29 percent is karst formations, found in Herzegovina in the south. Lowlands and valleys account for only 5% of the total area. An important consideration is that of the country's total area inclusive of all land types, 49% - approximately 2.5 million ha – is forest, which makes it one of the highest rates of coverage found in Europe. (Trbic & Vojinovic, 2011, p. 25)

Over 75% of Bosnia is drained by the Sava River water shed to the Black Sea via the Danube. The rest flows southwest via the Neretva River to Adriatic Sea (Custovic, 2005, p. 74). See Figure 1.28 (p. 40).

The country is made up of three entities divided by Inter-Entity Boundary Line: The Federation of Bosnia and Herzegovina (FBiH) and the Republika Srpska formed through the Dayton Accord which ended ethnic hostilities in 1995, and the small Brčko district in the north, formed in 1999 (Figure 1.26, p. 39).

Figure 1.23
Bosnia and Herzegovina in
Europe.

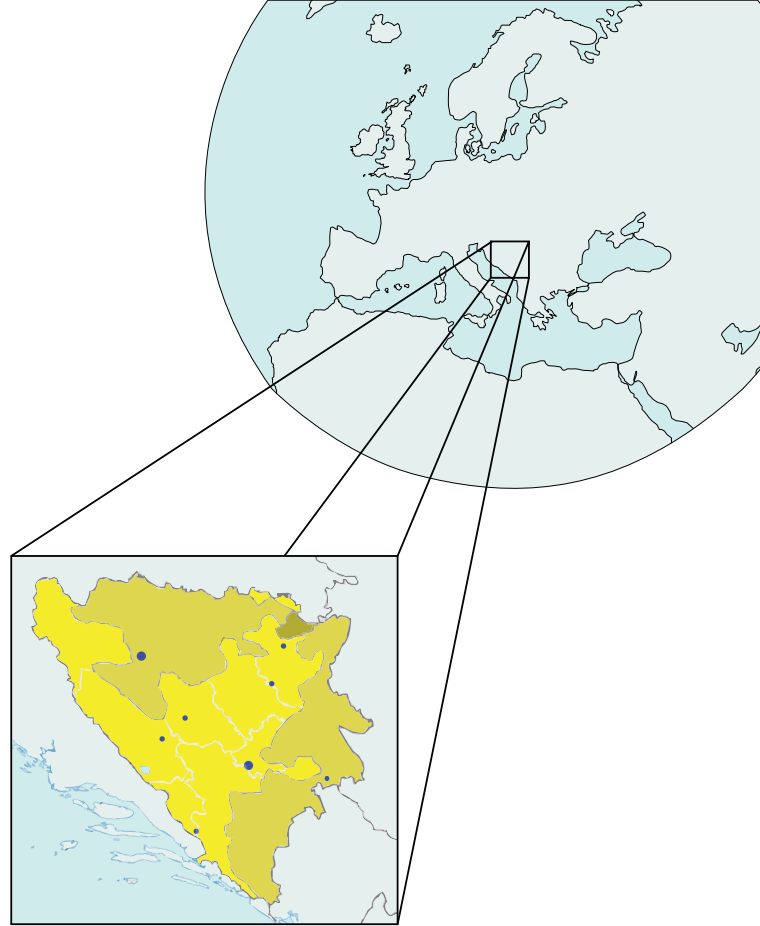


Figure 1.24
The Current Independent
Nations of the Former
Yugoslavia.





Figure 1.25***
Landmine locations in Bosnia,
2008.

Figure 1.26
Bosnia and Herzegovina,
showing the three entities:

The Federation of Bosnia and
Herzegovina

The Republika Srpska

The District of Brčko

Croatia
(Dalmatia)

Adriatic Sea



Croatia

Banja Luka

Republika Srpska

Brcko & the
District of Brcko

Tuzla

Serbia

Travnik

Bugojno

Republika Srpska

The Federation of Bosnia and Herzegovina

Sarajevo

Visegrad

Mostar

Montenegro

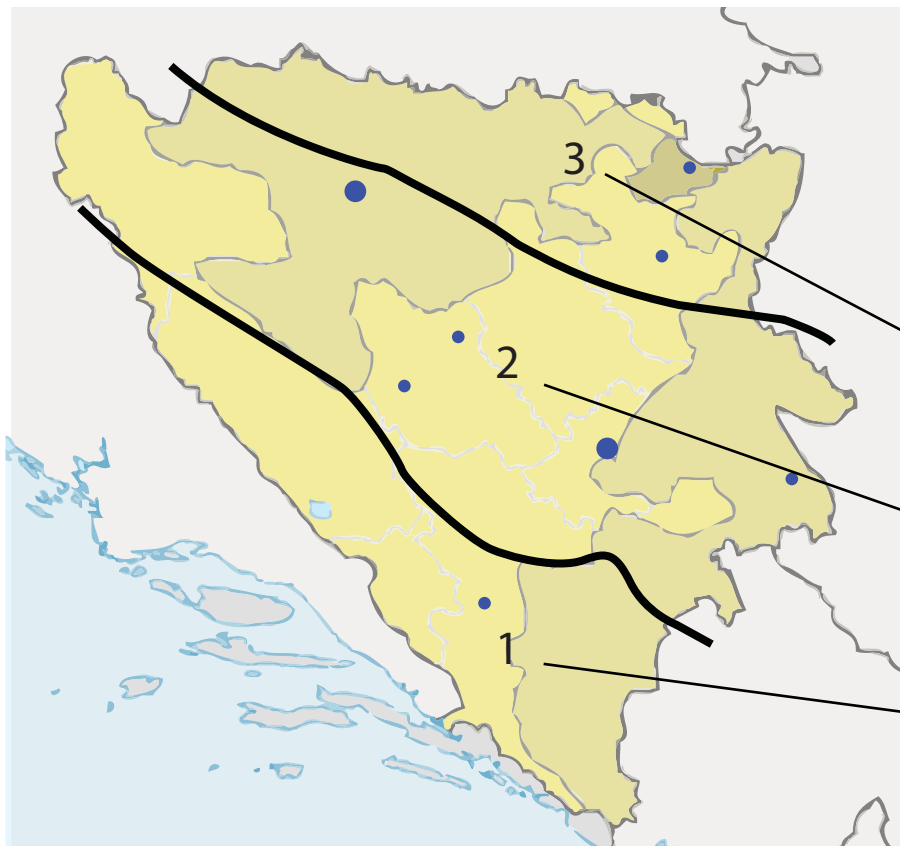


Figure 1.27
Climatic zones of Bosnia and Herzegovina: Average January and July temperatures and average annual precipitation.

1. Southern Region
2. Hilly-mountain Region
3. Northern Region



Figure 1.28
Watersheds of Bosnia and Herzegovina.

Major Rivers Draining to the Danube and Black Sea via the Sava:

1. Sava River
2. Una River
3. Sana River
4. Vrbas River
5. Bosna River
6. Drina River

Major Rivers Draining to the Adriatic via the Neretva River

7. Neretva River

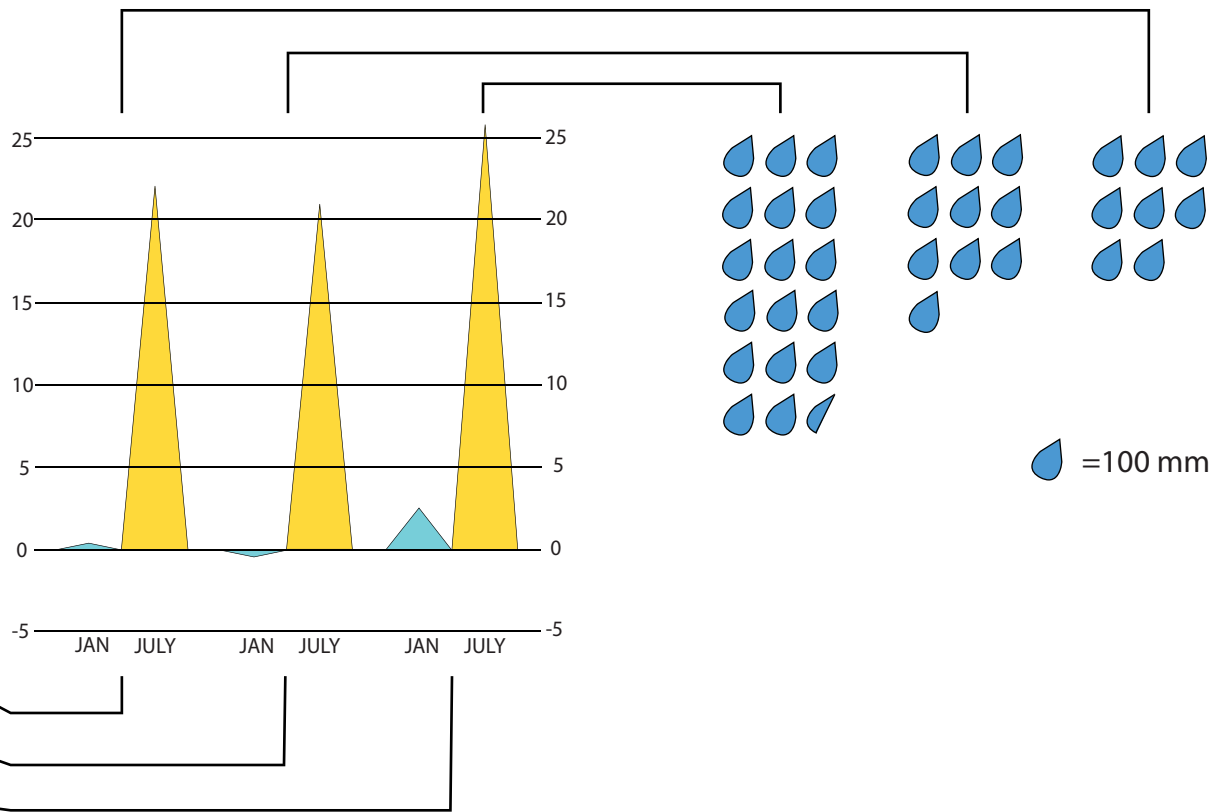
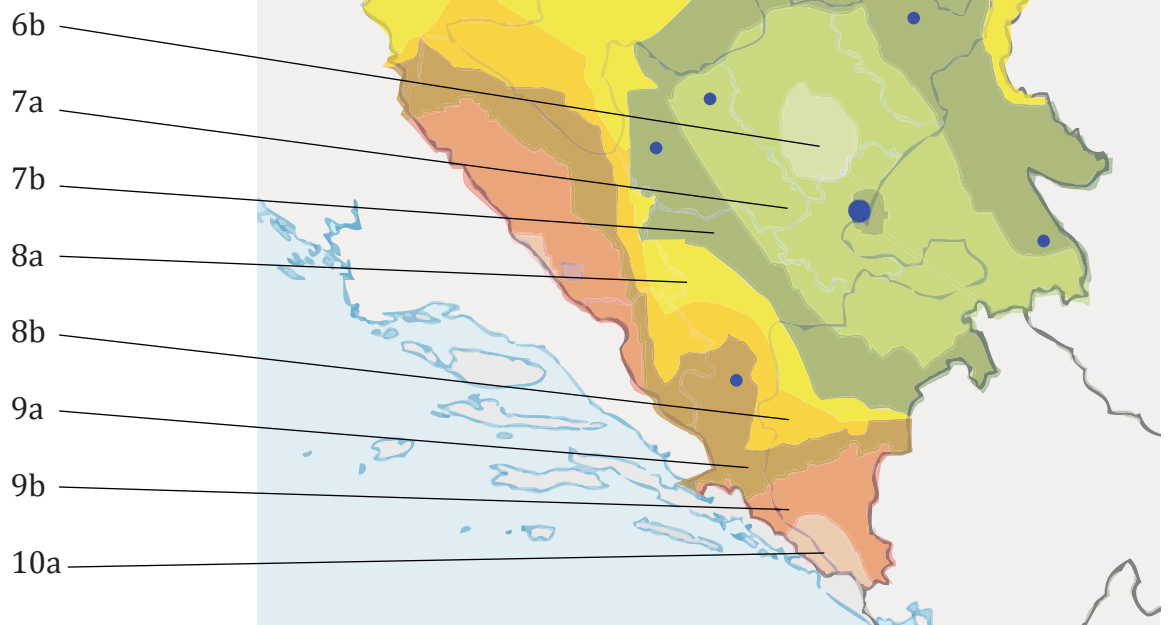


Figure 1.29
 USDA Hardiness zones.
 Data from: <http://www.plantmaps.com/interactive-bosnia-and-herzegovina-plant-hardiness-zone-map-celsius.php>



1.4 Recent Bosnian History: The Bosnian Conflict

Bosnia's history is divided into several eras, but four recent eras have heavily shaped Bosnia today in terms of the built fabric, culture, and politics: the era of Ottoman Rule, 1463-1878; the era of Austro-Hungarian Rule, 1878-1918; and the eras of the two (divided by World War 2) incarnations of Yugoslavia – Kingdom 1918-1941; and Socialist Federal Republic, 1945-1991. The Bosnian Conflict, 1992-1995, and the ongoing reconstruction and recovery of contemporary Bosnia are discussed here as the main influences on the Blue Hospital project.

The Bosnian Conflict

It is impossible to understand today's landscapes of Bosnia without the mention of the Bosnian Conflict, which in itself is a great challenge due to the nuances and complex history that brought it about.

Yugoslavia existed in two forms between 1919 and 1991. The Kingdom of Yugoslavia was a product of the treaty of Versailles which united the former Austro-Hungarian territories known as the State of Slovenes, Croats and Serbs with the Kingdom of Serbia (which included Montenegro and Macedonia), under the rule of the Serbian King. The Socialist Federal Republic of Yugoslavia formed in 1945 after the abolition of the Yugoslav monarchy after the Second World War. As the communist republic, it was led by Marshall Josip Broz Tito, who promoted "bratstvo i jedinstvo" - brotherhood and unity - within the nation. His dictatorship lasted until his death in 1980 (Bose, 2007, pp. 107-108). In the broadest of terms, the Bosnian war was the result of the break up of the Former Yugoslavia. Especially in the decade following Tito, Sumantra Bose identifies three main legacies of the communist regime that led to the dissolving of Yugoslavia:

- the extreme decentralization of power and complicated Government structures;
- inordinate emphasis on recognition and institutionalization of ethnonational identities as a substitute for pluralism of ideas, which could not be supported by a single party system;
- an entrenched ethos of authoritarian, manipulative politics practiced by unelected cabals (Bose, 2007, pp. 115-117)

Slovenia and Croatia declared their independence in 1991, which was followed by violent clashes between the forces of the Croatian majority and Serb minorities backed by the remaining Yugoslav government (Bose, 2007, pp. 121-122).

In the fall and winter of 1991 - 1992 the question of independence was debated in the Bosnian Parliament. A referendum was planned by the government

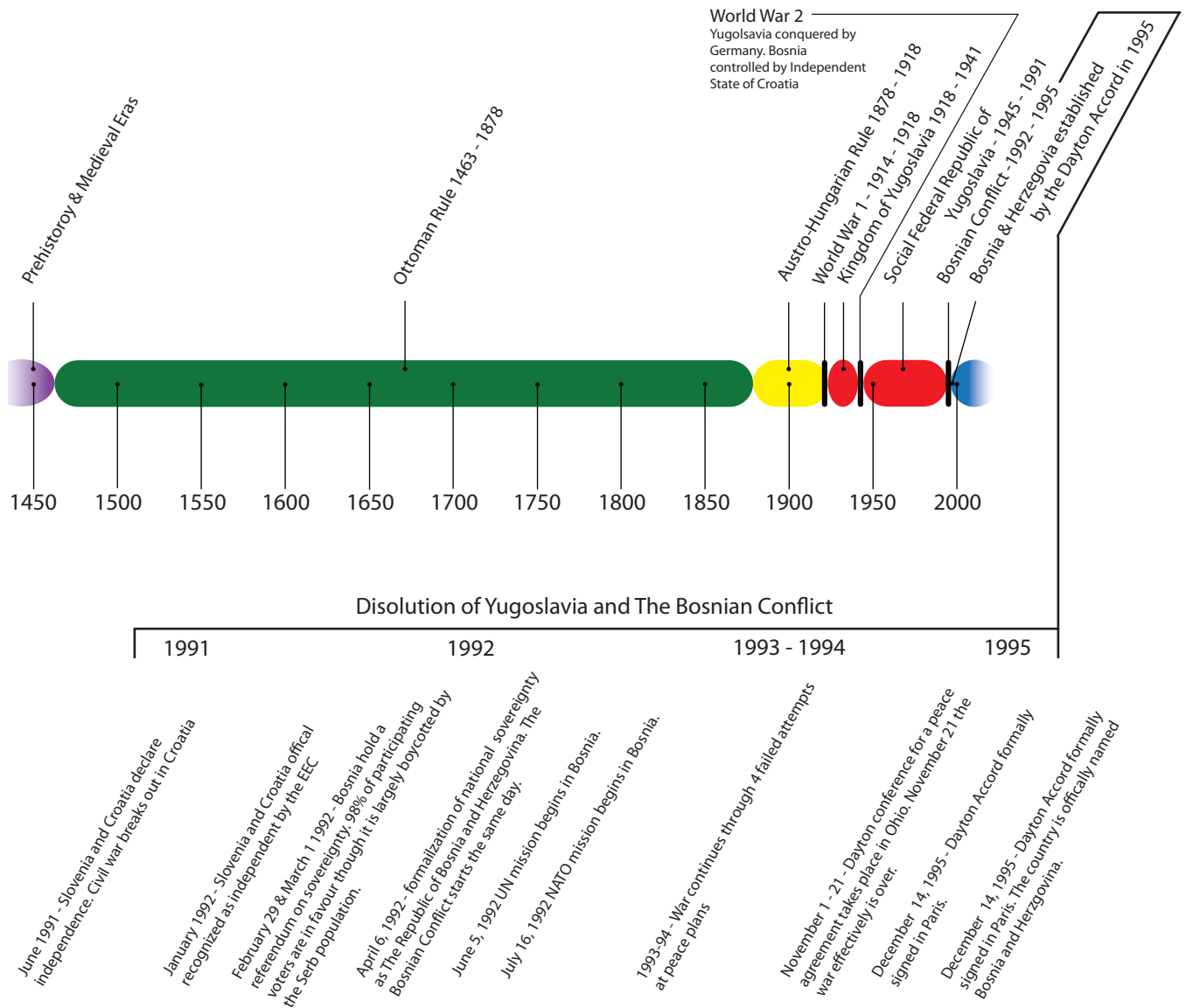


Figure 1.30
Timeline:
Historical eras and the
Bosnian Conflict.

in Sarajevo for February 29, 1992 which was opposed and boycotted by the Serb population. It resulted in a 98 percent vote for independence with voters who actually participated. In turn, counter referendums in Serb majority areas resulted in a rejection of independence. April 6 saw the official recognition by the international community of the outcome of the government's official referendum in favour of independence. The violence began the very next day (Bose, 2007, pp. 122-124).

The violent conflict which lasted from 1992 to 1995 was ended by the Dayton Peace Accord. Negotiated in Dayton Ohio, the accord divided Bosnia into two 'entities' along what it is known as the Inter-Entity Line. In the west is the Federation of Bosnia and Herzegovina with large Croat and Bosniac populations. In the east is the Republika Srpska, predominantly inhabited by Serbs. The Inter-Entity Line roughly denotes where the front lines fell during the later stages of the conflict. It also brought in a complex governance structure that includes three presidencies and cabinets (Bose, 2007, pp. 130-134). The enormity that conflict obviously changed demographic of regions cannot be underestimated – during the violence in 1992 over 50 percent of the population were displaced internally or international refugees (Kaiser, 2006, p. 28). This amounted to 2.3 million people total – 1.2 million internationally, and 1.1 million internally. The Dayton Accord granted the unconditional right of return to all persons who had been displaced. By 2007, recorded amongst those who returned, were 451 564 'minority returns'. Minority returns were people returning to place that had they left in which they were minorities, rather than returning to a new area in which one's ethnic group is the majority. At that time the total population had dropped to approximately 3.5 million due to mass emigration of refugees who would not return and wartime casualties (Bose, 2007, pp. 136, 146). This has significant affects on the landscape as it determines what will be rebuilt or developed, affects the question of ownership of land and structures, and affects the amount of land under any sort of production or human use.

Figure 1.31
The war damaged
house containing
the museum for the
Sarajevo Tunnel.

Figure 1.32
Ruined home in
Bugojno, north of the
Blue Hospital.



1.5 Encountering the Bosnian Landscape

The arrival to Bosnia was revelation. I had never been to a place in which so much evidence of war still filled the landscape. But despite the number of buildings still pockmarked with bullet holes and mortar rounds, there was much evidence of rebuilding in the cities, towns and country sides. Slowly, piece by piece, things were being put back together. Our work with the partner organizations – especially CGABH and Leptir - was an insight into the grassroots movements that were re-shaping Bosnia at the community level.

The first encounters with the landscapes of Bosnia were long van rides between the cities. Winding through valleys and verdant mountains, rocky places, forests, plains, along rivers and through small cities, towns and villages. Certain things began to immediately identify the places – the typical haystacks built on stakes, the ancient clock towers situated in many towns, minarets, and steeples, and of course, sporadic stands of trees surrounded by high barbed fences, hung with signs warning of mine fields. That was a sight that is hard to forget. Urban landscapes soon began to present several recognizable patterns of development as well. Within Sarajevo, Tuzla, and Travnik, the interface of old and new cities explained the story of land use and planning development over several eras – clearly defined by scale and material, indicating cultural shifts. Smaller scale, densely built stone and timber Ottoman era constructions gave way to larger brightly coloured plaster buildings of the Austro-Hungarians, decorated in an array of imaginative internationally influenced styles. On an even larger scale were the modern constructions of the Yugoslav period – high density housing complexes, government buildings, stadiums and plazas. These arrangements often occurred in a linear development, being side by side, rather than one being completely built over the previous approach. Besides these three distinctive building types, contemporary buildings and renovations appeared to be an odd blend of influences that related very little to the previous building projects or their surroundings.

Significant features were the ruins and abandonment prevalent throughout the countryside, reflecting the mass migration through early 1990s and the challenges that presented to redevelopment during the post Bosnian Conflict period up until now. It was to say the least confusing to observe. The process of building in Bosnia, as in many recovering and developing nations also works at a variety of time scales due to the economic situation - many projects are worked on as their owners are financially able. Thus, at times it was hard to tell if we were seeing was abandoned and in ruin, or a long term construction site. Why one place would be left ruined, and adjacent something new would be in the process of being built is something that is still a challenge to fully understand. The significance to what was observed was clarified by Collin Kaiser's 2006 paper, *Contentious Landscapes in Bosnia and Herzegovina*. In it, Kaiser describes a process in which multi-cultural





Figure 1.33
View from the hills
surrounding Sarajevo.

landscapes - that is landscapes containing human intervention that identify which groups are sharing a given territory - were changed and affirmed through various decades where ethnically distinct building campaigns would occur. He notes that in the 1930s, and again on a larger scale in the 1970s and 1980s, mosques and churches were erected during periods of “national affirmation.” These structures related who was living in a given landscape, and described the influence of each group had over that landscape. Houses also traditionally could inform which group was in a given territory, such as hipped roof homes for Bosniaks, Hungarian roof lines for Serbs, but fluidity in housing type preference makes this a less certain indicator of ethnicity. The socialist regime also used landscapes to build a common Yugoslav narrative; museums, memorials and memorial parks were constructed and even included ruins of ethnically specific buildings destroyed in the Second World War (Kaiser, 2006, pp. 27-28).

During war, ethnic cleansing was directed to the landscape as well as the inhabitants. Structures – especially large and/or historic sacral buildings - were destroyed, thereby removing a particular group from a landscape narrative. The destruction of these buildings removed visual cues to the people who inhabited a given landscape both historically and contemporarily, creating a form of visual legitimization of who was supposed to be there, and who was not. Visually, groups could be written out of the history and development of a place as if they had not contributed to it at all. As well, many of the socialist memorials were defaced, as these would be ethnically specific, or potentially describe negative associations with a given group with former enemies in past wars. It should be noted that cemeteries were typically left untouched unless very near to a structure that was destroyed, which, as Kaiser describes, “[groups], though present, as attested to by their cemeteries, had left nothing of particular value during their passage in the area.” He continues, “...it could be said that landscapes were profoundly remolded by ethnic cleansing. Vast ideal landscapes, devoid of the others and diminishing the values associated with these others, came into being” (Kaiser, 2006, p. 29).

In this context, the reading of the landscape goes beyond ruins as simply objects with certain aesthetic laden values left over from a tragic war, but they are now read as absences and processes of violent social upheaval between specific groups in nationalistic narrative creation.

New constructions can also be confusing, as they may be expressions of displaced peoples settling and ‘appropriating’ landscapes in which they had not previously dwelt. Further the restoration of a sacral building where it once stood, but no one now lives who would use it, “may correct a reading of history [but] it is not the reconstruction of a society” (2006, p. 29).





Figure 1.34
Ruined Orthodox
Church seen along the
highway.





Figure 1.35
View northeast over
Bugojno from the roof
of the Blue Hospital.

1.6 Bugojno Overview – A Brief History and Inventory

One of the most comprehensive descriptions of Bugojno produced can be found in a 2010 document entitled, *Potential tourism development sites in Bugojno, Donji Vakuf, Gornji Vakuf-Uskoplje*. Produced by the Joint Tourism Development of the Vrbas Valley Project, it describes a wide range of regional information for the area of the Upper Vrbas River valley, or Gornjeverbaska region, including geological and hydrological features, sites of cultural and historic significance by historical eras, tourist infrastructure and recreation, and urban and rural centres.

According to the document, Bugojno significantly began to develop after the establishment of Austro-Hungarian rule, and as such lacks the denser urban fabric of cities which were established during the Ottoman era (p. 42). The post World War 2 era saw the greatest expansion driven by several industries including material processing (metal, wood, leather, textiles), manufacturing, construction, transport, commerce, and tourism (p. 42). Since the war these industries have never fully recovered.

The city is laid out in a series of varying irregular grids. These run roughly parallel to the Vrbas River, the small creeks that run into it, as well as areas of topographic change, with grid lines of the road conforming to these features. The winding street pattern for the most part follows the general form of the topography, which in the city centre is relatively low, with gradual change out towards the edge. To the north of the centre, the land begins to rise out of the valley floor to a plateau north of the highway. Throughout the city, sets of city steps aid in pedestrian movement long areas of more rapid relief change. The downtown area includes high density housing blocks, commercial spaces of varying sizes, and larger scale municipal, cultural and recreational complexes. Lower density neighbourhoods of single family homes are built to the northeast, south and west. This pattern of development is quite recognizable to as having a 'suburban' character similar. These neighbourhoods start with more modestly sized lots nearer to the centre, which increase in size moving out from the city. Many of the larger lots, towards the outer edges of the city include large gardens, tended both for aesthetic and productive purposes. Some include small pastures in which sheep were noted during visits. The roads leading in and out of Bugojno are lined with linear settlements which back onto productive plots and farmland, many of which run perpendicular to the roads similar to the river lot system of the Red River valley in Manitoba.

Along the streets of Bugojno, buildings from several eras of architecture are found, and urban renewal projects are addressing the decline that can be traced to war. These renewals consist of building repairs, infill projects and larger urban streetscape designs. The renovations of pedestrian streets in Bugojno have consisted of new paving block in coloured patterning, as well as contemporary lighting, and

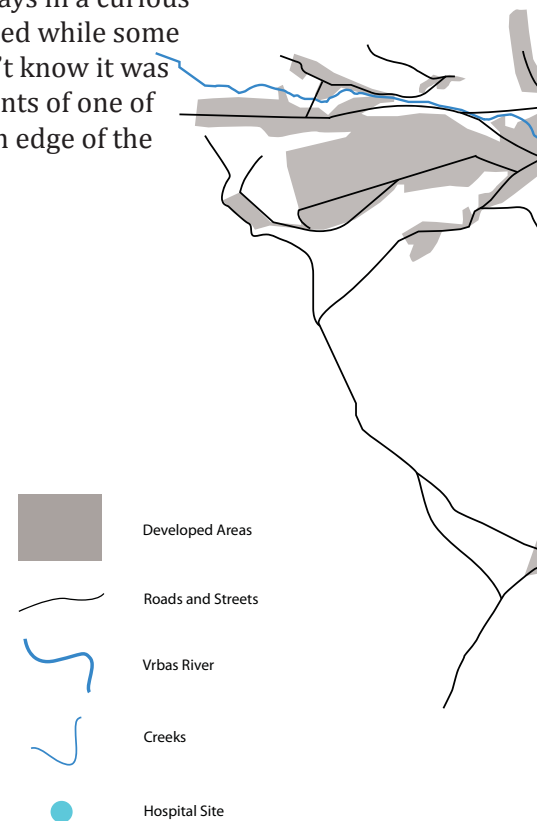


Figure 1.36
Satellite image of
Bugojno.
Map Imagery: ©2014
Google, CNES/Astrium,
DigitalGlobe



seating. Many buildings have had their plaster renewed. This mixture is a curious assemblage of Austro-Hungarian buildings, buildings of the Yugoslavian period in modern and post modern forms, and a relatively new type of architecture referred to by architectural theorists as “Turbo Architecture.” Turbo Architecture, as described by Srdjan Janovic Weiss, is found throughout the Balkans and is a combination of historical styles from elsewhere, rejecting local traditions in favour of the guise of internationalism (Vöckler, 2010, pp. 224-227). Public outdoor space can be found throughout the city as formal green spaces, modernist plazas, such as that found at the Cultural and Sports Centre, and sports fields on school grounds. Street life in Bugjono, as in other Bosnian cities, is an important part of life. Many cafes have outdoor seating that livens the streets. There is an area designated for a marketplace with permanent stalls, and a regular market occurs at the Iskra Soccer Stadium.

Besides the Blue Hospital, other ruins are found in Bugojno. Numerous ruined houses are scattered throughout the town, and several former industrial site that have never reopened. There is also a two level strip mall which lays in a curious intermediate state of completion. Some units are finished and occupied while some are empty concrete shells. From much of the upper level you wouldn't know it was occupiable. One of the most significant ruins in Bugojno is the remnants of one of Marshal Tito's hunting lodges. It stands on a wooded hill on the south edge of the town.



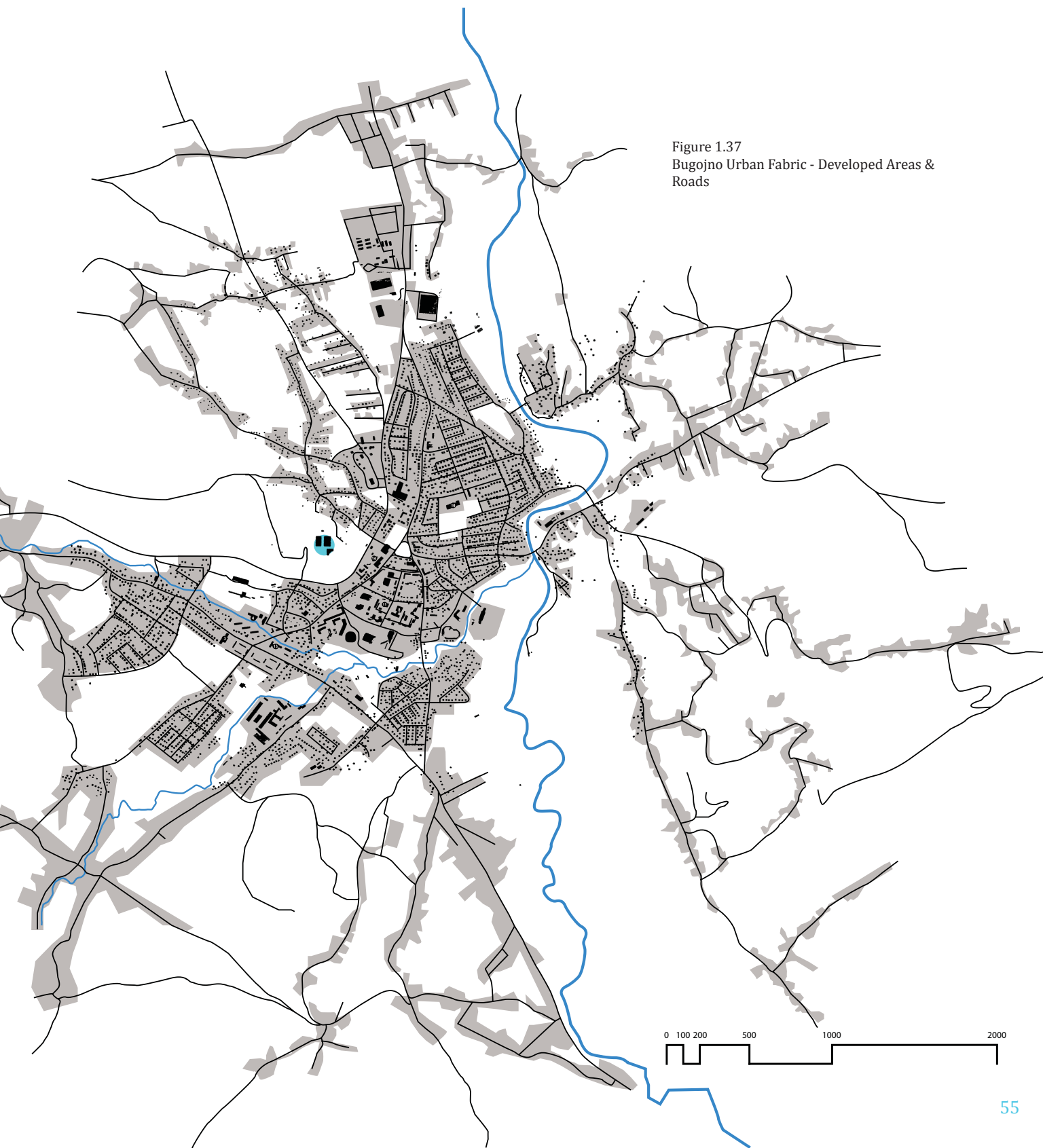


Figure 1.37
Bugojno Urban Fabric - Developed Areas &
Roads

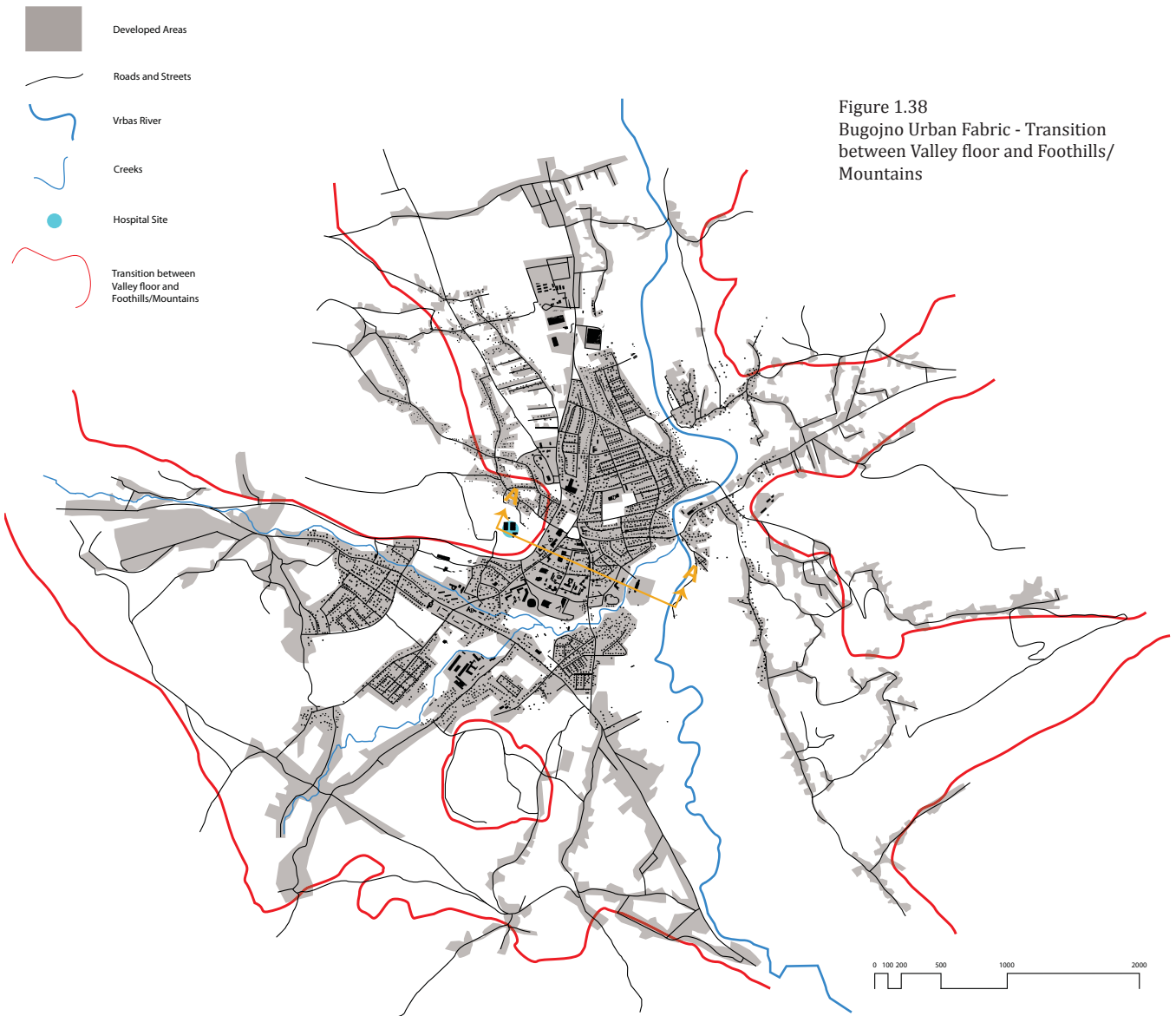
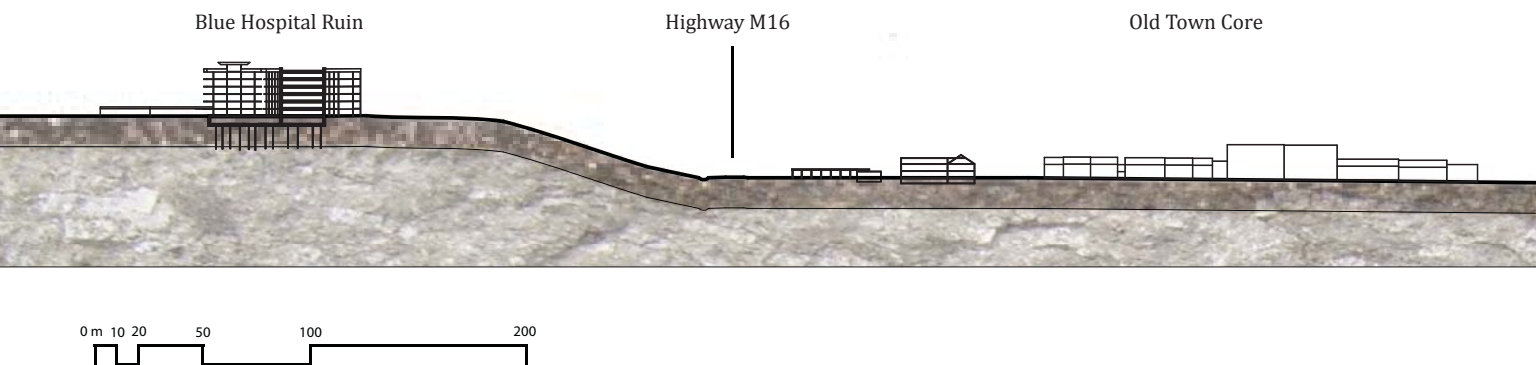


Figure 1.40
Section AA
Through Bugojno from Blue
Hospital to Vrbas River.



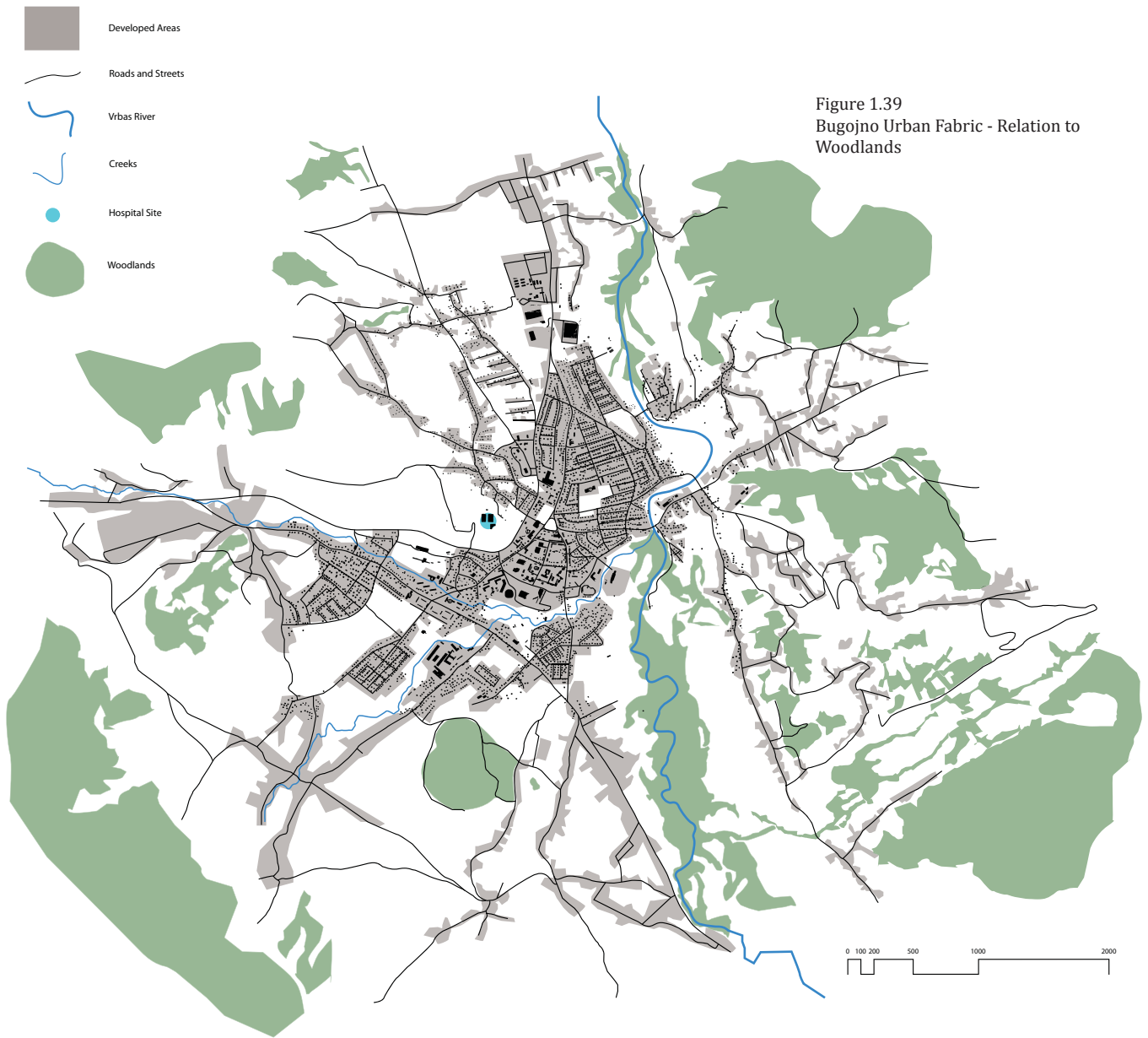


Figure 1.39
Bugojno Urban Fabric - Relation to
Woodlands

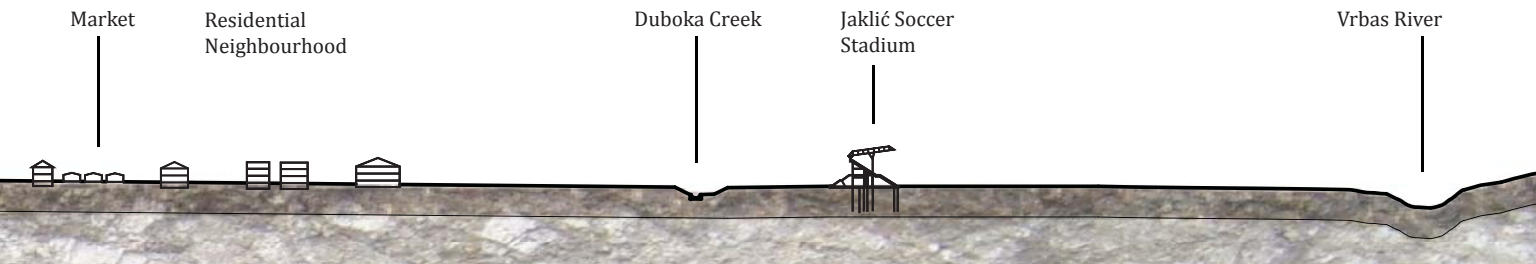




Figure 1.41 Bugojno: Streets Views

1, 2, 3. Pedestrian Street Renovation.

4. Socialist Era street - parking and pedestrians compete.

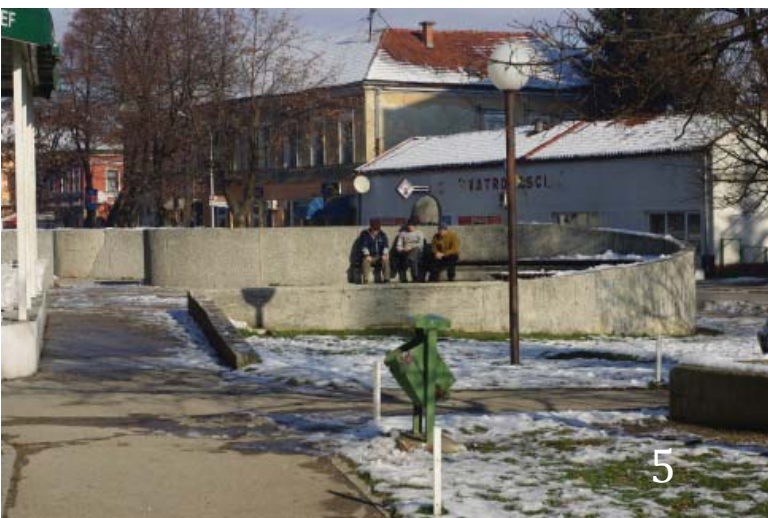


Figure 1.42 Bugojno: Parks, Plazas & Playgrounds

5. Socialist Modern Plaza - concrete wall with incorporated bench.

6. Socialist Modern Housing block with playground.



Figure 1.43 Bugojno: Parks, Plazas & Playgrounds

9. Combined parking and amphitheatre seating at the Culture and Sports Centre.

10. Contemporary memorial park at the police station.



3



4



7



8

7. Socialist Modern Park - concrete fountain, planters and benches.

8. Socialist Modern Plaza at the Culture and Sports Centre.



11



12

11. Contemporary plaza near the old highschool - bench, wall and fountain clad in stone and wood.

12. Addition of accessibility ramp at the Culture and Sports Centre plaza.



1



2

Figure 1.44 Bugojno: Distinctive Architecture

1. St. Antoine of Padua Roman Catholic Church - 19th Century.
2. Austro-Hungarian Era 'Gymnasium' (secondary school).



6



7

Figure 1.45 Bugojno: Distinctive Architecture

6. Socialist Era Post office and plaza.
7. Former Socialist Era hotel with post war repairs and paint scheme.



3, 4. Socialist Modern Era mixed-use developments.

5. Contemporary Sacral - Princess Dzevhera Islamic Center, 2000.



8. Partially completed two level 'strip mall' some interior spaces are completed and occupied, others are concrete shells.

9. Varying post war conditions: New construction, (left), Restoration (centre) and ruin (right).



1



2

Figure 1.46 Bugojno: Residential Types

1, 2. Medium density detached housing north of city centre.



5



6

Figure 1.47 Bugojno: Residential Types

5, 6. Contemporary infill projects: low and midrise mixed-use development.



3, 4. Low density detached housing north of Blue Hospital ruin featuring small pastures (3) and large gardens (4).



7, 8. Socialist Era multi-family housing block near city centre (7) and Duboka Creek and Jaklić Soccer Stadium (8).

Section 2:

Theoretical Underpinnings

An understanding of the environmental, cultural, historical, and political context that has shaped, and is shaped by Bosnia's landscape was the first step towards a redevelopment plan for the site of Bugojno's ruined Blue Hospital. Experiences in the community combined with the reading of academic accounts of the recent history of the region revealed potentials and limitations for the site design concept, both socially and physically. Beyond this, an understanding of the historic theoretical and aesthetic applications of ruins in landscape architecture is crucial in developing a robust design concept for what the shell of the hospital could be within the landscape. Exploring the theoretical implications of current ruins in Bosnia and their potential use, and a continuum of artworks and landscape designs that engage ruins and the aesthetics of decay through history, is the focus of Section 2.

Figure 2.1
Relics of steel, concrete and brick emerge from vegetation in Landschaftspark Duisburg-Nord. It is an intersection of the aesthetics of the post-industrial and the natural.





2.1 Ruins in Landscape Architecture - Initial Observations

In landscape architecture, ruins were historically used as objects, and embedded with meaning - morals, nostalgia, narratives, etc. - to be viewed. This was not only for existing ruins as many were constructed or moved to be part of compositions. In this context, the view of the ruin was the most important source of experience. Procession, conceal, and reveal were important aspects of their use within the landscape, and great attention was paid to how this would occur within a given composition.

In contemporary landscape architecture, experience and interaction, memorial, and reflection on collective changes - societal, cultural and economic/ industrial - are important purposes of ruins in landscapes. Ruins addressed by landscape architecture today are always in situ and preexisting. The surrounding physical context is an important aspect of understanding and responding to the ruins emotive appeal, as it helps express the (hi)story of a specific site. Often the development of such sites represent the opening of territories that were once forbidden, unappealing, avoided or generally cut off from the general public. This is in contrast to the historic treatment of ruins in landscape architecture, in which they were built where they did not preexist, as required for a given design. The emotive response elicited from their viewing aesthetic qualities was of equal or greater importance to structure's actual history (Dixon, 1997, pp. 2-3; Herrington, 2009, pp. 76-77). These spaces are almost otherworldly compared with everyday experience. Such sites and ruins are often brought to the attention of public consciousness through the artful composition of the photographs taken by urban explorers, posted in online forums, shown in exhibitions, and in a variety of publications.

We can also consider sites that are ruinous, but may not actually have a ruined structure. Former landfills, industrial site, and areas of environmental degradation can be considered in the contemporary scenario of landscape and ruins, as the response to their condition may include capping or removal of materials which potentially can result in striking earth works and topographic features. They can be embedded with meaning or memory that is expressed in the design response - interventions occurring in response to a specific use or environmental restrictions create spaces that are reminders of previous human uses.

Industrial ruins fascinate us. They are a reconciliation, or reconnection of nature with the industrial complex which produced the materials and products characterizing our modern architecture and era. This reconciliation or reconnection occurs through the appreciation of decay, and the aesthetic that these process produce. All returns to the dust it was formed from. They are then symbolic of the waning/sweeping away of an era or economy. With the disappearance of production/refinement of materials and the production of products of our age, so goes the age with it - it ceases to reproduce itself and allows for the entry of nostalgia into spaces of production and work. No longer are these sites places of active production of product, but of imagination and nostalgia.





Figure 2.2
Aesthetics of decay and nature:
industrial relics in a forest in
Landschaftspark Duisburg-
Nord.

2.2 Ruins and Ruinous Sites in Bosnia

Discussions of contemporary approaches to ruins in landscape architecture typically deal with post-industrial sites in a generally stable, western context. These places are considered the “other” in terms of public and private spaces people occupy because even when active, those who occupied them were typically limited to individuals who worked there. When industrial sites become disused, even fewer people are permitted to be there, further alienating them from the acceptable spaces of the everyday. The context for discussing the abandoned blue hospital in Bugojno is quite different. The hospital site is at the crossroads of many physical, social, cultural and aesthetic conditions: changes in social structure, completion/in-completion, occupation/abandonment, industrial, ecological and cultural practices, ruins... Because of the industrial material palette, the lack of completion, and therefore lack of human(e) occupation, the shell of the blue hospital is best discussed in terms of the industrial aesthetics; its massive scale over the city best aligns the site’s potential with discussions of post-industrial reclamation. Yet, due to the country’s recent history it is not possible to view this site as solely an industrial ruin.

After conflict and disaster, ruins become the everyday lived experience rather than the “other.” Within Bosnia, there are countless high profile ruins beyond the industrial. Many have been or are in the process of being restored such as the National Library in Sarajevo or the Stari Most in Mostar, which was completed in 2004. The Olympic venues for the 1984 Sarajevo Winter Olympics have become highly photographed and can be found in online photo galleries devoted to abandoned places. A small surviving section of the infamous Sarajevo Tunnel, which ran under the Sarajevo airport, survives and is kept as memorial and museum to the siege. Ruinous sites such as mine fields abound in the country. Minefields were laid during the war over a suspected 1218.5 square kilometers in 9400 individual sites, making up 2.4 percent of nation’s total area (BHMAL, 2013). These minefields are becoming even more dangerous because of the migration of mines due to erosion and landslides during recent major flood events. For many minefields, even when mines have not moved, the warning signage has been washed away (Winn, 2014, paras 6-9).

Memory is connected to ruinous sites and landscapes – though no damage may be apparent to a landscape, or no ruined object may be visible on the land, the knowledge of specific events can make locations seem ruined. Ad hoc cemeteries in fields and sports pitches have been moved, and most of the mass graves disinterred, and replaced by formalized cemeteries and memorials. Despite the work to formally address these places, the knowledge of where incidents occurred, or wartime uses of specific sites are ingrained in the memory of the local people (Kaiser, 2006, p. 30). This means expressly that caution must be taken when dealing with ruins, and ruinous site. As Kaiser (2006) states:

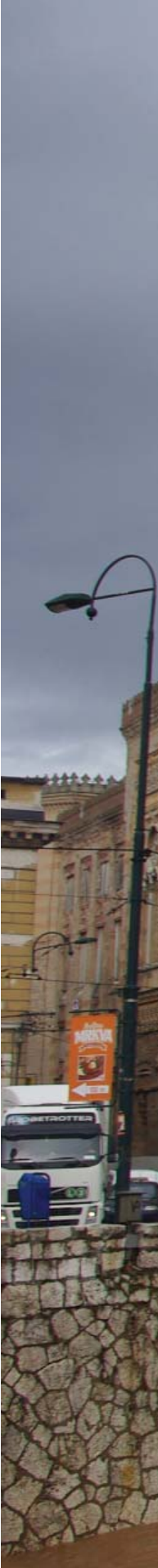




Figure 2.3
Under Restoration: The Ruined
National and University
Library of Bosnia and
Herzegovina, Sarajevo.

The reading of history, and not just the recent history, [...] is one key to the pacification, and re-integration into a shared vision, of rural and urban landscapes. But recent history weighs heavily: 'ethnic cleansing' has left too many memories, in destroyed buildings, and monuments, in the places of killing, and in the removal and only partial return of Bosnian citizens. It is partly for this reason that international interest in the restoration of individual monuments must broaden to take into consideration the different elements of history in the landscape, if it is to make useful contribution to the restoration of life together in the country. (2006, p. 31)

This focus of international support for restoration of monuments is also described by Bose (2007) in reports surrounding the rebuilding of the Mostar bridge. The international community heralded its reconstruction as an event to rally around, and reunite in multicultural harmony. This view was taken by citizens as being "too much reconciliation for one bridge" (p. 111). From this it is important to note that care must be taken in how ruins are to be addressed in design. What is rebuilt, restored, preserved in ruins, or is simply let go of, is a complicated discussion that involves the consideration of: the value of recent events and past history, of current and future inhabitants of an area, and of social justice as expressed in design.





Figure 2.4
Ruined house in Sarajevo near
the CGABH community garden.

2.3 Ruins in Landscape Architecture - An Historical Overview of an Aesthetic in Art and Landscape Architecture

Ruins in the Landscape: from paintings to gardens

The term landscape as used in landscape architecture was borrowed from the world of fine arts. It described a genre of painting of Romantic subject matter often representing idealized views of nature. These paintings began to inspire the design of landscapes for the great country homes of many of the progressive thinkers of the enlightenment, particularly in Britain in the 18th century. Paintings by the 17th century French artists Claude Gellée, known as Claude Lorrain, and Nicholas Poussin, were particularly influential. Both were painting in Rome and around the Italian country side, and their work was as much about composition as accurate observation. The subjects of their landscapes included ruins in the region, and content often referenced biblical scenes, classical Greek and Roman literature and mythology. Rogers states that their works, “exude the atmosphere of Arcadia” (2001, p. 235). These images fed the aesthetic tastes of the thinkers, poets and the wealthy of the enlightenment. They captured a bucolic nature and referenced a glorious past civilization. These art works would influence gardens that were seen as lacking stylistic elements seen as representing autocratic rule (Rogers, 2001, pp. 234 – 237).

The context in which much of Claude Lorrain and Nicholas Poussin’s work was done – the Roman Campagna – provided the inspiration for elements that depict the emotion and aesthetic experiences of Rome encountered by artists and travellers. As Kitson (1990) states, “large parts of Rome were still not built over... the country invaded the city to create a literal *rus in urbe*.” The combination of ruins and idealized nature becomes a dialogue on time – the ruins time’s passage, and the idealized nature, cycles of eternal renewal (pp. 19 - 20).

Claude, born in Lorraine at the beginning of the 17th century, began painting in Rome in 1626-27 (Kitson, 1990, p. 30; Wine, 1994, p. 63). His works were heavily based on observation, working throughout the region to make studies of what he found. Panoramic views, topographic features, atmospheric effects and details of ruins and vegetation were executed in ink washes and chalk. Subsequently, elements would be selected, modified, and even reversed in final painted compositions (Wine, 1994, pp. 63-70) meaning that “...even though most of Claude’s painted landscapes were imaginary in that they did not present an actual place, they were made up of elements of reality” (Wine, 1994, p. 63).

Poussin, born at the end of the 16th century, was a native of Les Andelys Normandy. He also worked in Rome beginning in 1624 (Kitson, 1990, pp. 21, 50). Much of Poussin’s study of nature, is described as taking place in the the Campagna surrounding Rome, where he is popularly reported to have gone seeking inspiration



Please see: [www. artstor.org](http://www.artstor.org), “Claude Lorrain,
View of Tivoli at Sunset, 1644”

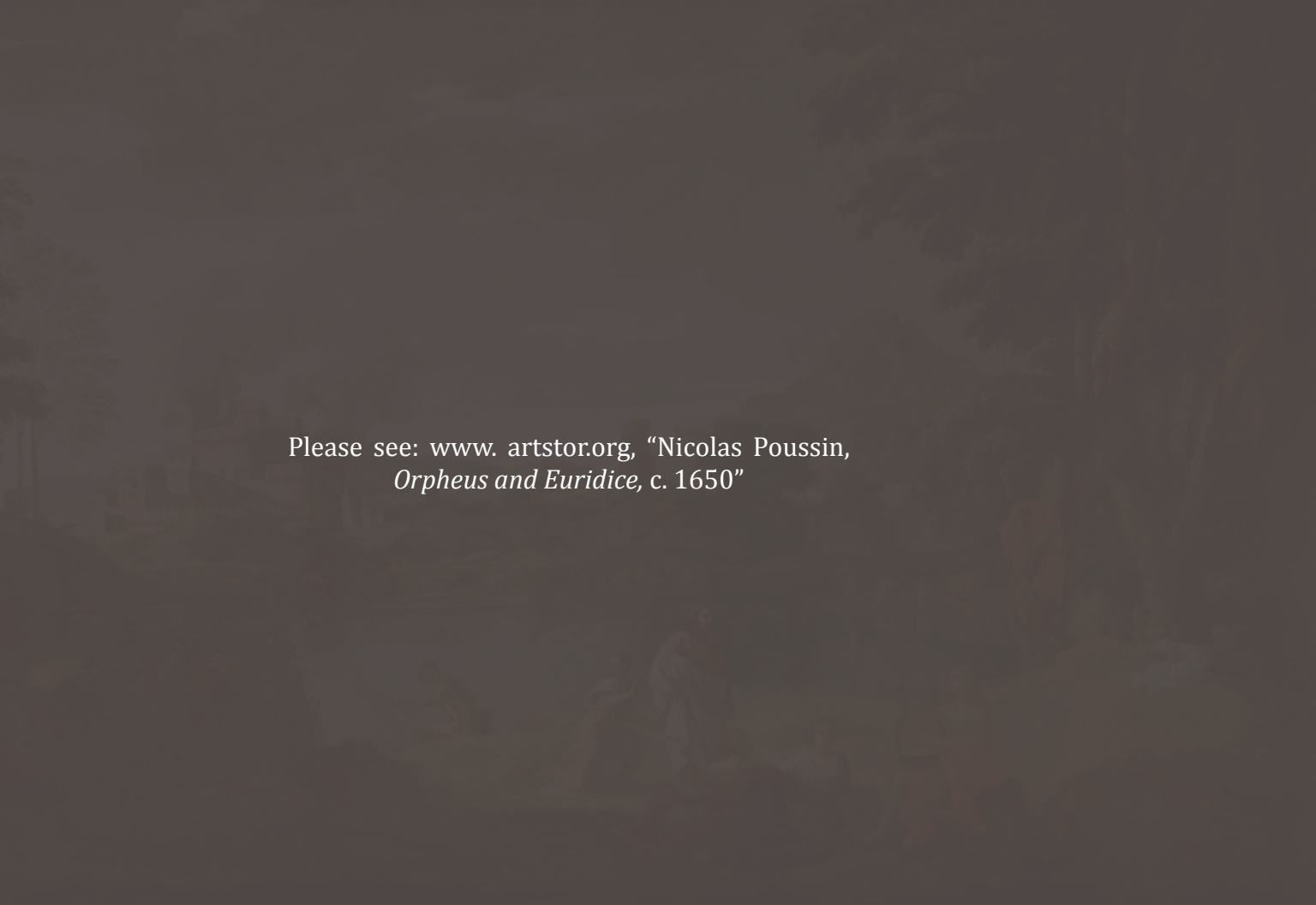
Figure 2.5
Claude Lorrain, View of Tivoli at Sunset, 1644
Oil on canvas, 100.3 x 135.9 cm
Fine Arts Museums of San Francisco, San Francisco, CA

in nature, travelling the banks of the Tiber, alone or with groups of artists, along a route known later as the Promenade du Poussin (Cavina, 2008, pp. 39-41). In reality, Poussin's paintings were quite different than the landscape of the Campagna ecologically. Within his paintings, landscapes are often populated by *Quercus*. This use of *Quercus* ignores the "vareiet[ies] actually found in the Roman Camagna" as a way to support the scene and meaning within the subject matter. Structures were also treated in this way (pp. 41-45). Poussin organized his paintings according to studied perspective to achieve what he experienced, rather than replicate it directly. Trees and architectural elements are treated as one and the same – functioning to anchor compositions harmoniously (pp. 47-48). This is reflective of the design of the English landscape gardens inspired by such paintings, in which the construction of naturalized topography and water bodies supported the scenes and content found throughout the garden circulation.

Born in the early 18th century, in Venice, Giovanni Battista Piranesi was an architect, artist and designer best known for his engravings of Rome. Piranesi's work captured the awe and melodrama of the ruined splendours of Rome, and provided some early documentation of the fascination with decay. In his day, Rome still consisted of a dense network of medieval streets, grand processional routes terminating at a variety of monumental structures and objects from all eras of the city's past giving it a theatrical quality (Wilton-Ely, 1978, p. 11). These qualities were enhanced by the context in which the ruins were found:

The remains of the classical past, where they were not isolated like the Colosseum or half buried as the Arch of Septimius Severus, were surrounded by a conglomeration of modest structures, as in the case of the Pantheon, or transformed almost beyond recognition like the theatre of Marcellus. [...] a wealth of new experience arose from the contrasts between the monumental the modest structures fortuitously juxtaposed as well as from the constant reminder of the relentless passage of time – the rhythm of growth and decay producing and architectural palimpsest. (Wilton-Ely, 1978, p. 11)

Significant to this discussion is the often overgrown state the structures were in, and the reuse of space in contemporary ways. In his engraving, *Internal View of the Atrium of the Portico of Octavia* from 1760, Piranesi documents the contemporary use of the space – a fish market since the middle ages - and the additions that were added to the building such as an awning by those who would inhabit it (Leggio, 2010, para 4). Within many of the images, detritus is strewn around the structures, and ancient monuments are not fully exposed, but emerging from the earth. This component of emergence is important as it shows the rediscovery of past glory.

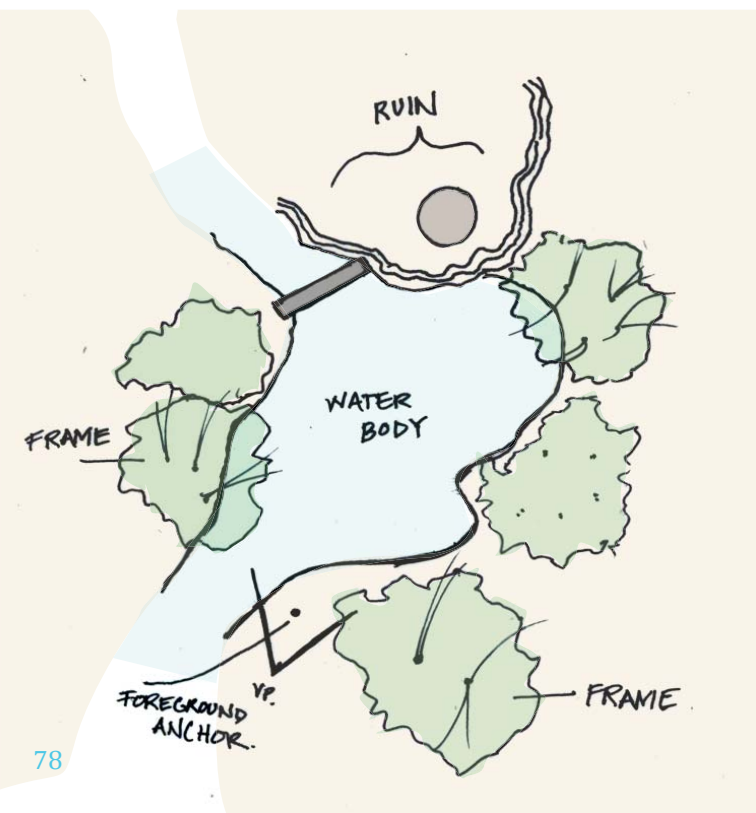


Please see: www.artstor.org, “Nicolas Poussin,
Orpheus and Euridice, c. 1650”

Figure 2.6
Nicolas Poussin, *Orpheus and Euridice*, c. 1650
oil on canvas, 124 x 200 cm
Musée du Louvre, Paris



Figure 2.7
Compositional Analysis of
Claude Lorrain's *View of Tivoli
at Sunset, 1644*

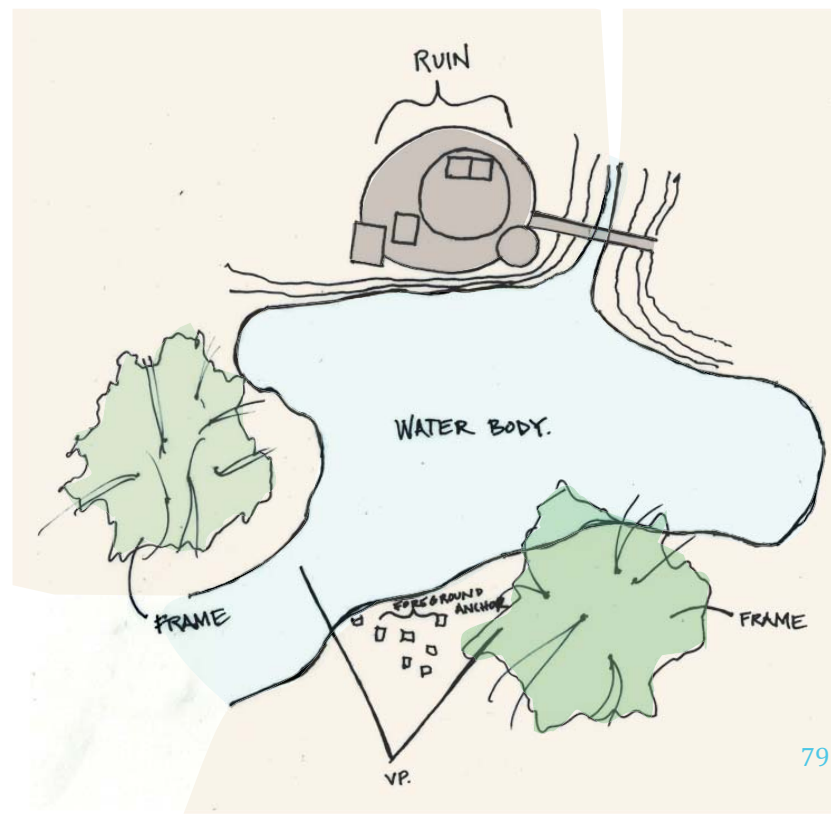


- Ruin
- Frame
- Foreground Anchor
- Waterbody or Plain
- Vista



Figure 2.8
Compostional Analysis of
Nicolas Poussin's *Orpheus and
Euridice*, c. 1650

In the compostional analysis of Lorrain's *View of Tivoli at Sunset*, 1644 and Poussin's *Orpheus and Euridice*, c. 1650, a clear translation of their two dimensional ideal views can be inferred based on the use of framing devices and focal points can be made in plan. Their aesthetic ideals can then be reproduced in the real world by dissecting their painting to understand the three dimensional relation between the components.



Other images show the incorporation of ancient structures into the every day buildings of contemporary Rome. In many engravings we can see figures – explorers, tourists taking the Grand Tour, and local people – interacting in various ways with the ancient spaces. In this sense it can be seen that the ruins of Rome were a part of everyday life. It is reflective of the aesthetic appreciation of today’s urban explorers who are documenting the decay of many cities in a similar way with cameras, as well as parallel to the appreciation of natural processes and succession exhibited in the design of many post-industrial landscape projects. Like Poussain and Lorrain, some liberties were taken with views – some were impossible, but were used to evoke the emotion of the place in a theatrical manner (Leggio, 2010, paras 6-8).

Significant to the influence on landscape design at the time were the painters’ compositions. Though at times painting actual places, the compositions were idealized in their final forms from initial sketches – aesthetically pleasing scenes were key over being purely representational, as this furthered the meanings of their content. European landscape designers began to mimic the compositional ideals of painted works in their spatial designs. Much in the same way that Chinese and Japanese gardens were designed considering two dimensional scenes, composition, and borrowed landscape, so too were the English landscape gardens (Rogers, 2001, p. 281), as well as later continental works. A key difference between these eastern and western gardens based on creating views, was the scale of movement. Where Chinese and Japanese gardens focused on framing views, and the sensory experience of smaller details (p. 281), English landscape gardens were based on changing views along a large scale circulation path. Rather than being concerned with one spatial experience, the gardens and estates were laid out as collections of perfect views.

Landscape compositions placed ruins – both genuine and built – temples and other follies at prominent views, often framing the vistas with trees, and water bodies. Circuitous paths led from one scene to another, often enabling the telling of stories and myths, or allegories, the views always changing. Influential practitioners included Kent, Bridgeman, Brown and others - professionals and amateurs alike, with some of the most influential gardens being Stowe, Castle Howard, Studley Royal and Stourhead. Each is carefully planned to move the viewer through successive views from sweeping vistas to tightly framed scenes. This is what Henry Hoare II did at Stourhead (see Figure 2.10 & 2.11, pp. 83, 85) in the 18th century. The design involved flooding a river to create a lake, around which a circuit carried viewers to various scenes of constructed ruins, describing both the stories of Virgil’s hero, Aeneas who was founder of Rome, and King Alfred, founder of the Kingdom of England (Herrington, 2009, pp. 72-74).





Figure 2.9**
 Giovanni Battista Piranesi, *The Arch of Titus with the
 Casino Farnese on the Left*, 18 century
 Etching
 Dallas Museum of Art

The picturesque, romantic pastoral landscapes are as powerful today as they were when they were constructed due to the highly successful design strategies – we may not generally be well enough versed in the classics to pick up on the symbolic nature of the elements, but the aesthetics of the compositions still stimulate the imagination – which is why the style continued as the principal aesthetic strategy for public park design into the 20th century throughout Europe and North America.

By the early 19th century scenes of industry – which ironically transformed the economies of the west and allowed these naturalistic landscapes to be designed – were beginning to appear in painting. J. M. W. Turner, a romantic landscape painter in the late 18th and early 19th centuries, began to include the wonders of modern technology – steamships and trains. In the 1844 painting, *Rain, Steam, Speed, The Great Western Railway*, (see Figure 2.12, p. 87) we see the first glimpses of the artistic expression of the industrial aesthetic. Though the painting deals mainly with light and atmosphere, these conditions are resulting from industrial processes – soot, pollution, and infrastructure. His works began to demonstrate that “viewers should now appreciate the darkness and triumph of the constantly changing, even the fleeing and barely ascertainable” (Büttner, 2006, p. 254). The painting speaks to the picturesque aesthetic of the industrial, and by extension the postindustrial in terms of the way our imaginations interpret the image through understanding of the atmospheric qualities. Images such as this were early examples of an obsession with progress and the modern machine that would for better or worse influence design – and be the generator of (post)industrial landscapes – up to and including the current era. 120 years later we begin to see the aesthetics of the picturesque as Turner depicted them, utilized in industrial relics in landscapes.

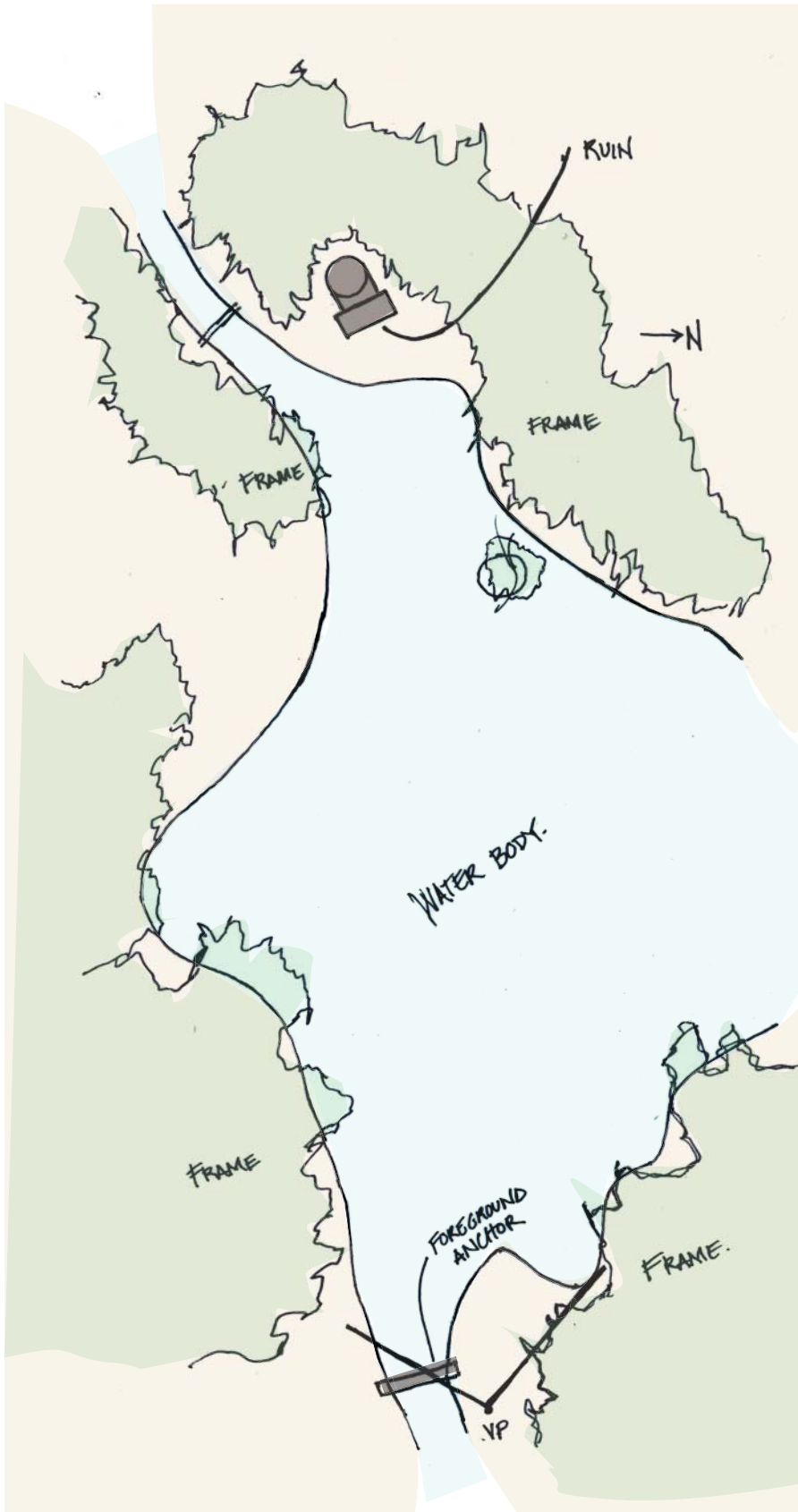
Seattle’s Gasworks Park by Richard Haag was one of the first to preserve the relics of the industrial in North America, much in the same way that existing ruins were preserved at Studley Royal. The great mound, though functional as a repository of contaminated soils under remediation, is also much like the sculpted landscape of the early picturesque landscapes. Its sculpted top contains a folly in the form of a giant sundial much in the way earlier picturesque landscapes used topographic construction to situated ruins and follies in their composition.

Figure 2.10**
Henry Hoare & Henry Flitcroft.
Stourhead, Wiltshire. 1753-56.

View towards Pantheon,
including Palladian Bridge







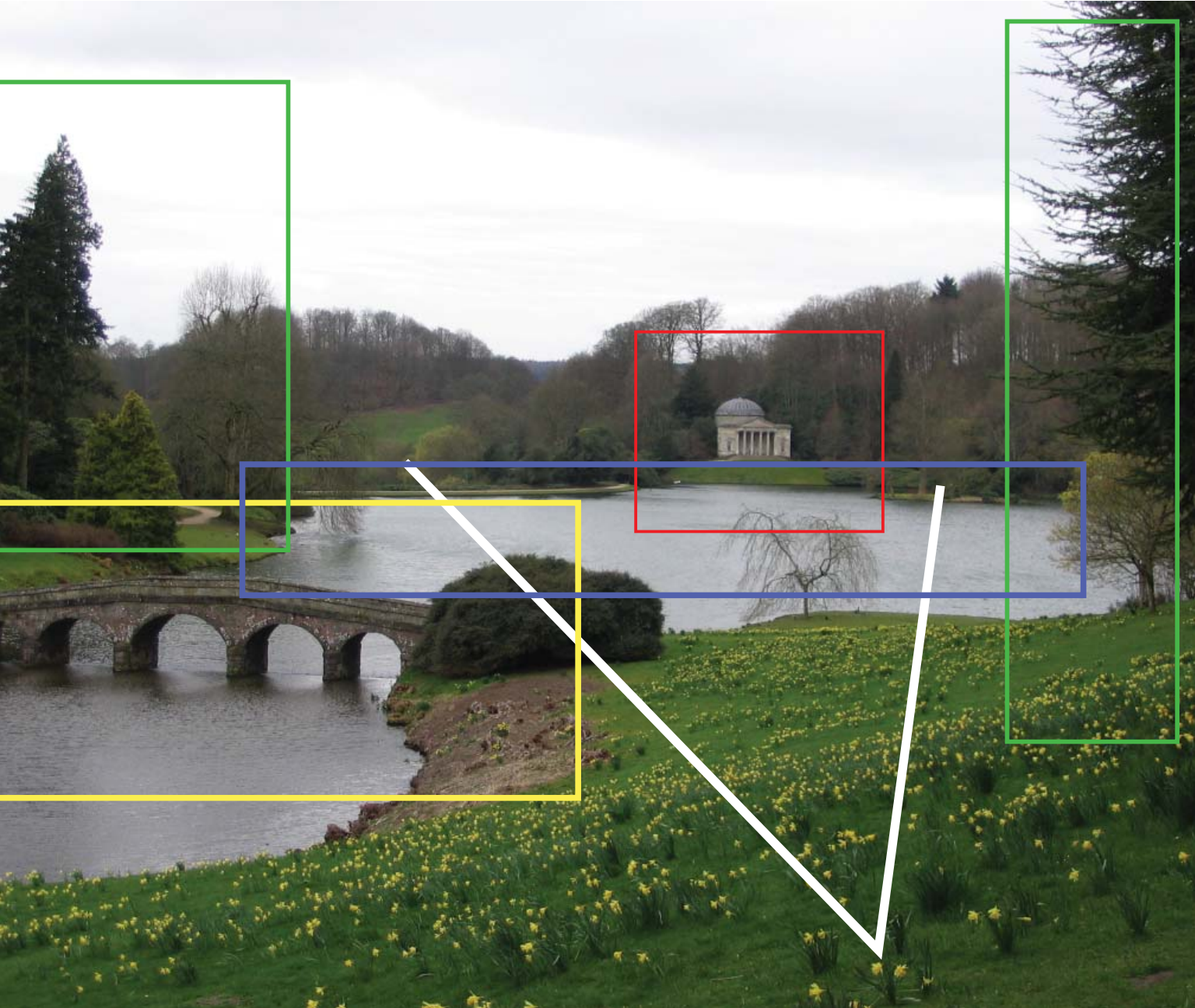


Figure 2.11**
Compositional analysis of
a View towards Pantheon,
including Palladian Bridge
at Stourhead. This method
reveals how closely the design
elements that produce the view
conform to the compositional
constructions of Lorraine and
Poussin.



Ruin



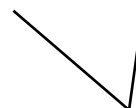
Frame



Foreground Anchor



Waterbody or Plain



Vista

2.4 Ruins in the Landscape: Contemporary Scenarios

In my experience traveling, the majority of contemporary designed landscapes involving ruins from the recent past are of two types: war ruins and post-industrial ruins. Approaches to these two types of ruins have specific implications to how the viewer or user experiences them. War ruins are often preserved in a state of stasis as memorial sites. They serve an important purpose in reminding people the terrible consequences of war. These sites are more akin to museum pieces to be viewed and teach through visual cues. Preservation of this manner fits within a continuum of historical ruins in landscape architecture where structures were built in a state of ruin, or constructed in a particular period design where they did not previously exist. These were placed deliberately to be viewed, and embedded with meaning. Both the constructed garden ruin and the preserved war ruin, involve the viewer understanding them in terms of visual aesthetics and symbolism, as well as their context.

Conversely, contemporary use of industrial ruins in the landscape have moved towards engaging the individual's experience, rather than only the visual. Awe and the impression of the sublime are evoked through engagement with, rather than primarily looking at an object. People are taken to places that they feel they shouldn't be or would not be allowed. These sites provoke contemplation about change and process and thereby less reflect a single moment in time or event.

A major theme in landscape architecture in the last thirty years has been the reclamation of post-industrial sites, and the remediation lands contaminated by human activity for the greater benefit of local populations. Projects have reclaimed infrastructure reusing, and to an extent preserving relics of former processes – as both historical curiosities and memorials to a different time and cultural function of the land. As Herrington (2006) suggests, what was once seen as an eyesore, is understood as today's version of the romantic ruin in the garden through the lens of picturesque aesthetics. In projects such as Latz and Partners' Landschaftspark Duisburg Nord, the aesthetic ties directly into contemporary concepts in ecology, and natural systems are encouraged to take over the abandoned and defunct industrial sites, creating new opportunities for 'nature' in contexts it was previously excluded from (Weilacher, 2008, pp. 122-126). It would seem ideas about nature and industry are reconciled in ruined sites. Specifically in terms of design, this breaks with the English Landscape tradition in which the landscape, though naturalistic in aesthetic, was a composition in stasis – a human created scene to be maintained and viewed from specific prospects - artificial and 'ideal'.

Gasworks Park in Seattle, designed by Richard Haag Associates between 1969 and 1971, reflects the early picturesque landscapes in that its ruins act as narrative pieces, and its land forms and great lawns, though somewhat naturalistic,

Please see: www.artstor.org, "Joseph Mallord William Turner, *Rain, Steam and Speed - The Great Western Railway*, 1844"

The aesthetic appreciation of the industrial invoked by Turner's paintings would not emerge in landscape architecture until the second half of the 20th century, in works such as Haag's Gasworks Park.

Figure 2.13**
Concrete Tressle, Gasworks Park, Seattle.



Figure 2.12
Joseph Mallord William Turner, *Rain, Steam and Speed - The Great Western Railway*, 1844
oil on canvas, 91 x 121.8 cm
National Gallery, London

Figure 2.14**
View of gassometer and Lake Union.



are completely human made. The departure between the traditional picturesque and Gasworks is in the narrative of the landscape. Here we find an early example of the story of the industrial (Way, 2013, p. 31) opposed to classics, allegories, or heroic histories. Our affects on the environment and the obsolescence of massive industrial relics is the focus. Further to this, Gasworks tells the story of the landscape in transition - both at the site level through on site experimental bioremediation, and in its sculpted form which reflects the broader landscape in which Seattle is situated (Way, 2013, pp. 34-38). Conversely, the human made landforms of the traditional picturesque landscape served an aesthetic purpose expressing ideal form in landscape, and assisting to drive the visual of the design's given narrative.

At Landschaftspark Duisburg Nord, designed by Latz & Partners, the picturesque transforms further under the industrial. It is apparent as one walks through the landscape that "nature" here is not constructed to resemble an ideal or express a narrative, but a process of succession. The vegetation, though carefully planned and planted, seems in a sense to be taking over the site emphasizing the industrial relics as ruins, and providing stimulation for the imagination. Planting that has taken place enhances the relics by contrasting the industrial scale and materials, by framing views, and providing shape to the spaces surrounding the defunct infrastructure. Other plantings such as the parterres in the old ore bunkers, seem to resemble the ruins of a castle garden through their formal geometry and courtyard-like settings. The overall site is congruent with picturesque landscapes as the steelworks are a destination in the centre of a parkland of meadows, lawns and forests, and other programming, including a demonstration farm, and traversed by a circuit of converted rail lines, industrial roads and paths.

At Gasworks Park and Landschaftspark Duisburg Nord, an important aspect of the relics is their ability to incite memory, and stimulate the imagination and fascinate us by their decay and new life – they connect us with a form of nature that is ever-present but neglected, remind us of another time, and tell the stories of those whose lives they directly affected. Interaction with the ruins becomes the source of the experience opposed to merely the view.

Contemporary sites such as the High Line designed by the team of James Corner and Field Operations, Diller Scofidio + Renfro, and Piet Oudolf, work in much the same way as Duisburg, but the elements of the composition relate differently to the components of the English picturesque landscape. In this case, the structure of the industrial relic itself – the elevated rail line – becomes both a focal element and circulation. The experience one has is of linear movement along the industrial relic rather than the view of it - it is to move where once only trains travelled. Vegetation also becomes more specifically a focal point rather than the scene frame. The





Figure 2.15
Industrial relics of Landschaftspark
Duisburg-Nord.

surrounding buildings which form of the urban canyon along which the rail runs become the framing device for views of the linear plantings along the structure, as well as views up perpendicular streets.

As Herrington points out, the passage of time is a crucial element in these projects. She states:

Duisburg North was critical in demonstrating that the remnant structures of the industrial age were not distant enough in time and space to trigger memories. Indeed, to encounter Duisburg North Park is to encounter some forgotten land. Yet, it is pleasurable because the park's desolation is experienced through its art - its specific design - the way the industrial structures are maintained in a ruinous state, the intricate pathways, and the improbable activities that are boldly intervened into the site - and our interpretations of it. (Herrington, 2009, p. 78)

In discussing how to approach the ruin of the Blue Hospital in terms of contemporary landscape architecture and ruins from recent history, it is important to note that it is not easily categorized as strictly a war or post-industrial ruin. Some signs of damage resulting from the Bosnian Conflict were apparent, but the bulk of the condition appears to be from neglect, the elements and a variety of human activities. The hospital site in Bugojno is at the crossroads of many physical, social and aesthetic conditions. It reflects changes in social structure and industrial, and cultural practices. It is between physical states of completion/incompletion, and social actions of occupation/abandonment. Its massive presence and industrial material palette best align the site's potential with discussions of post-industrial reclamation. The Bugojno site may be considered as a 'post-institutional reclamation', as both the institution that was intended to occupy the site and the government system that initiated it have ceased to exist. As a former public space and facility designed and constructed under a communist regime, it faces similar challenges of use, legibility and meaning as other post-socialist public spaces throughout Central and Eastern Europe (Czepczyński, 2010, pp. 17-33).

Four basic approaches to ruins in the landscape

Through site visits, local and international observations, and literature reviews of a variety of contemporary built works, four general approaches to the use of ruins in the landscape when considering a site became apparent. These approaches range between action and inaction, but all have implications for experience and aesthetic appreciation.



Figure 2.16
An unexpected play: Former
ore bunkers are transformed in
to new occupiable territories
though imaginative reuses at
Landschaftspark Duisburg-Nord.



The first is to do nothing – to let nature, and the wilful actions of people, take their course. This approach in terms of a design decision, becomes a dialogue between change and time as the materials decays in a variety of ways at a variety of time scales.

The second approach is to restore the structure. Many times after wars, fires, or natural disasters this is the path taken, and examples can be seen globally. In some cases, this could be also described as completion rather than purely restoration as would be the case at the Blue Hospital site in Bugojno. The structure could be restored to an original use - functioning or as a museum - or re-purposed for a new program. This is not economically or structurally feasible at the Blue Hospital.

The third approach is to re-purpose or reuse the structure in its ruined state. This may involve some degree of specialized preservation or maintenance which prevent further decay and hold the ruin in a form of stasis. This is the case for memorialized ruins. They are typically kept as relics and no longer function as they were initially intended. Memorial preservation becomes their purpose. Change is in terms of use, not in terms of condition aside from addressing safety. This seems to be the most common approach.

The fourth approach is to demolish the structure. The site is a clean slate and nothing of its previous life left. This may give opportunities for new directions in the design and use for space as the designer is not burdened with the past context but begs the question of what of value has been lost.

The re-purpose approach was chosen for the Blue Hospital as value and potential were found in its story and aesthetic. Throughout the structure, the light conditions, views outward, striking material presence/structural form and the interaction between structural decay and natural succession created unique atmosphere. These are the qualities that provide unique opportunity for the designer in the production of new public space.

Figure 2.17
A local man describes the Blue Hospital when it was under construction, after a day of salvaging rebar.







Figure 2.17
The Highline reconsiders how vegetation, circulation, and industrial relics are experienced in landscape architecture. The park does not just contain circulation, but becomes it. The ruin becomes the viewing station for its surroundings, reframing its context.

Section 3:

Precedents: Designs and Approaches

Initial investigations of ruins in landscape architecture reveal how the aesthetic, cultural and symbolic meanings of ruins, and the emotive responses these evoke are integral their use and understanding in design. A precedent study is integral to the understanding of how this theoretical discussion is put into practice.

Due to experiences working with the Community Gardens Association of Bosnia and Herzegovina and their partners, the benefits of both community engagement in design, and the potentials of landscape architecture in community rebuilding, lead to the decision for community garden space to be included in the plan for the Blue Hospital Design. As such, projects that are strong examples of community building through community gardening, the reclamation of ruined sites, or a combination thereof, have been chosen for precedent study. The projects include mid-century and contemporary projects such as the Community Gardens Association of Bosnia and Herzegovina gardens, The Loisaída Gardens in Manhattan, the Naerum Allotment Gardens, in Copenhagen, the Evergreen Brick Works in Toronto, and Landschaftspark Duisburg-Nord in Duisburg.

Enquiry into these built works gives insight into successful strategies and design intentions that can be adapted and applied within the Blue Hospital landscape.





Figure 3.1
Imaginative reuse of an
ore bunker for play at
Landschaftspark Duisburg-
Nord by Latz + Partner.

3.1 Community Gardens Association of Bosnia and Herzegovina

Community Gardens Association of Bosnia-Herzegovina (CGABH)
2000

Formally established by Davorin Brdanovic with the American Friends Service Committee (AFSC) in 2000 following years of post war urban gardening to fill the need for food, the Community Gardens Association of Bosnia-Herzegovina (CGABH) has supported up to 20 gardens per year - depending on land availabilities - across Bosnia (Campbell, 2009, pp. 257-258; Winterbottom, 2010, pp. 94-96). Its two main gardens from which administration and education are centred, are located in Stup on the west edge of Sarajevo, and in Kula, East Sarajevo (Campbell, 2009, p. 257). It is a innovative model that provides garden space to people and families in need as well the seeds and training to be able to successfully produce food for their families.

The initiative has expanded beyond just filling the need for affordable food but also has a focus on the therapeutic aspects of the gardening process. Davorin Brdanovic, executive director of the CGABH, states: "We have desperate people, destitute from the war - unemployed, at home, listening to politics, watching television - who need work therapy to feel they can work productively again" (Campbell, 2009, p. 250). The gardening process allowed for people to work through their trauma, as well as the wider aspects of reconciliation which is facilitated by a multi-ethnic approach to plot allotment in which the demographics of the garden are meant to reflect the prewar demographics of a given area. It is seen as a way to build understanding, reintegrate the population, and assist returnees in their transition home (Campbell, 2009, pp. 254-256). Further, their work with participants with post-traumatic stress disorder and mental health issues, (Babbs, 2011; Campbell, 2009, p. 257) and people with disabilities (Campbell, 2009, p. 253; Winterbottom, 2010, pp. 96-104) in many of their vegetable and therapeutic gardens helps combat stigma and marginalization of vulnerable people.

The majority of the community gardens are divided into allotments of 50 square meters per family member. Within these allotment parameters, growing 25 varieties of vegetables has been determined to support a family's needs for a year (Campbell, 2009, p. 258). This is a significant detail for the potential design of the Blue Hospital. Typically the gardens are laid out in spatially efficient rectilinear grids. Beyond the garden plots, the spaces for interactions between the gardeners and rest and relaxation are important to the sites.

It should be noted that after the recent recession, the CGABH's founding and funding partner, AFSC was left with limited funds and unable to continue financing the projects. The CGABH was then set up as an independent non-governmental organization and as such they had no immediate funding base (Babbs, 2011). Currently, the status of their gardens is unknown.

Figure 3.2



Figure 3.2 - 3.4
View of the CGABH
garden in Stup, Sarajevo.

Figure 3.3



Figure 3.4



3.2 Loisaida Gardens

The Loisaida Gardens
Lower East Side, Manhattan, New York
1970 - Present

The Loisaida Gardens are a series of sixty-five gardens that engage aesthetics of ruin and absence, decay and urban renewal through gardening at a grassroots and multicultural level. They were born out of the environmentalist movement and recession of the 1970s as a way to address the vacant lots left over from widespread abandonment (Pasquali, 2006, pp. 18-23). The first garden began as a guerrilla gardening exercise on a vacant lot on the corner of Houston and Bowery Streets. This initial garden – known now as the Liz Christy Garden – gained authorization and was the inspiration for many more lots to be cleaned up and planted. The group that planted it formed the Green Guerrillas organization in order to support locals wanting to do the same (pp. 40-42). Loisaida is now considered a garden district due to the density with which the gardens are found throughout the neighbourhood. This density surpasses not only the other boroughs of the city, but the overall density of gardens in other major urban gardening centres such as Philadelphia, Boston and Berlin (p. 48).

These gardens are significant as they demonstrate the power of grassroots organizations that have provided important amenities and function within a community with great challenges. Loisaida has always been home to immigrant enclaves – Irish and German communities in the 19th century, followed by Italian and Eastern European, and later in the 1950s and 60s, Puerto Ricans. At the end of the 1960s it also became home to counter culture and bohemian groups. Multiplicity of ethnic groups and social classes have contributed to the cultural and physical vibrancy of the neighbourhood through all economic cycles, and much of this can be seen in the gardens (pp. 30-35). They are a model of long term success through civic engagement in municipal politics and the public realm, and collaboration between different groups of people.

Their wildly varying designs – from the aesthetic to sensory to productive – are reflections of the makers. Many include found objects and artwork, and are blends of human improvisation and decisive planning, and the spontaneity and opportunism of nature. The only true limits are the creativity of the participants and the actual dimensions of the lot.

Figure 3.5
Signage designating
the 9th Street Loisda
Garden.

figure 3.6
9th Street Community
Garden.



The vacant lots that make up the gardens are where ruin, absence and decay are engaged. Rubble from previous buildings can be found in the matrix of the gardens and the jagged, often decaying look of the brick of remaining party walls offer a third contrasting element to the dichotomy of busy street life and the quiet oasis of the garden. The contrast between the stark brick walls framing a finite space, and the imaginative content of the individual gardens, suggest that in a site where defined boundaries and forms are significant elements of design, there is room for individual content and uncertainty. This makes the Loisaída Gardens strong examples of community gardening that engage ruins. The shell of the Blue Hospital could be considered like edges defined by the remaining buildings. Each area within it can be considered for its own unique potential, based on the physical space, and the users' desire in the same way the vacant lots are treated in the Loisaída Gardens.



Figure 3.7
9th Street Community Garden
showing the framing walls of
the surrounding buildings.



3.3 Naerum Allotment Gardens

The Naerum Allotment Gardens
Naerum, Copenhagen, Denmark
1948, Carl Theodor Sørensen

Carl Theodor Sørensen designed the seminal Naerum Allotment Gardens in 1948 for a housing development located in Naerumvaenge, a suburb north of Copenhagen. It is an excellent and uncommon example where a high level of design has added to the quality of an allotment garden. The garden consists of 40 oval gardens, surrounded by hedges of varying heights and plantings - mainly privet and hawthorns (Taylor, 2006, p. 321).

The Naerum Allotments demonstrated the role of the designer in adding value to an allotment in terms of both visual aesthetics and experience, while remaining functionally useable and open to individual use. Sørensen's is an approach that allows for interpretation and individuality in use and levels of privacy, as well as adaptability within the wider design; a way in which individual gardens can be varied but seen as a cohesive whole within a greater landscape. The design responds to the specific topography of the site, using it in such a way that the flow of space, and views of individual spaces are maximized by the orientation of the long axis of each oval running perpendicularly across the contours of the land (Andersson & Høyer, 2001, pp. 138-140).

This project blends the design of cohesive public areas that have heightened sense of formal structure and spaces that can vary with the tastes of individual gardeners. The design is not the product of two distinct ideas or programs – the public and the private - but one is the result of the other. The form and aesthetic of the public areas are the result of the repeating oval garden hedges that partition each garden. Variation is produced from the orientation of each garden in response to the slope of the land. This results in unique relationships between the orientation of individual neighbouring gardens, creating the variety of spaces between them. This is instructive in looking at how programmatic elements at the Blue Hospital site may relate with each other formally, and the relationship between public and private use of space in an overall design.



Figure 3.8
Aerial photo of the Naerum
Allotment Gardens.
Map Imagery ©2014 Google

Figure 3.9
Naerum Allotment Gardens,
by C. Th. Sørensen, Denmark,
1952.
View of the public space
framed by ovoid garden hedges.

Please see Naerum Allotment Gardens, by C. Th. Sørensen, Denmark, 1952:
https://www.flickr.com/photos/de_ijssel/13991617949/in/photolist-i1U2no-i1TT1W-i1U3aA-nAAvBM-njoJ6H-njoGye-njoV2D-7a22sQ-jn5WbS-mJgPdk-5w3eF9-bWerPR-gWffDk-ndMZRk-hoZGoX-nFPrTs-bu8p5g-93Prda-bWerkR-7zBX4J-bmyQVZ-9sXC26-ayWDHz-bsw2E6-hz4WBY-7wFnMW-bjBaTo-95CJxY-5vXUPa-P7MPS-bu8ise-car64L-aL8t84-ayWDcD-ayWDtT-93Pr5X-7fbHUU-aHzBQ6-7f7QYF-7fbHSS-bxw3Q6-7sFHxW-6uqQpb-7zBX2j-fALfSJ-6HYTen-bu8hQa-nW2mTA-9SZYs3-bkr6B5

3.4 Evergreen Brick Works

Evergreen Brick Works

Toronto, Ontario

Du Toit Allsop Hillier, Claude Cormier Architectes Paysagistes,
Diamond+Schmitt, ERA Architects

Situated in a ravine of the Don Valley, Evergreen Brick Works is a former industrial site consisting of a clay quarry and brick manufacturing operation dating back to the late 19th century. It is now home to a restored wetland ravine system, a 10 200 square meter demonstration garden for urban agriculture, and space for a variety of programming including farmers market and cultural and educational organizations within a collection of new and re-purposed buildings. The approach to the site design was a playful combination of new, existing and reconfigured. Buildings that could not be re-purposed were carefully dismantled and their constituent parts were reused within new elements of the design (Gorgolewski, Komisar & Nasr, 2011, pp. 78-79). Structures on the site were also opened to the exterior and planted. This produces a unique aesthetic – having succession-like qualities created in an artificial way similar to picturesque landscapes - and opportunity for imaginative uses. Seasonally, it doubles as a garden and a skating rink. Courtyards between the structures were designed to use edible plantings and remnant building materials (p. 80-83) producing an interesting dialogue between sustenance and decay.



Figure 3.10*
Repurposed brick works buildings
create new public spaces.

Figure 3.11*
Boardwalks and wetlands occupy
the former quarry.



3.5 Landschaftspark Duisburg-Nord

Landschaftspark Duisburg-Nord
Duisburg, North Rhine-Westphalia, Germany
1991, Latz + Partner

Latz + Partner's seminal Landschaftspark Duisburg-Nord is one of the best known and most successful post-industrial landscape projects. Latz + Partner's winning design for 230 hectare site of the formal industrial complex which closed in 1985 (Weilacher, 2008, p. 105) was selected for its attention to the unique history and qualities of the site, and its subsequent engagement with, and revealing of them through minimal interventions (pp. 116, 120-22). The design strategy does not treat the site as a blank slate to redevelop, but celebrates the potentials of the existing.

Design strategies use existing structures and infrastructure as organizing principles, and landmarks. This approach ensure that there is engagement and access to the majority of the abandoned industrial infrastructure where safe. The high levels of interaction have people climbing structures, arriving at places that would normally be forbidden. Beyond merely allowing access to the relics, design interventions imagine what the possibility of existing structures are – bunker gardens, climbing areas and slides, circulation following old rail lines, scubadiving in old gasometers etc. It is a process based approach: how can people use and interact with the structures and spaces? What are the ecological processes currently on the site, how can they be supported and strengthened? Discussions of the relationships between natural processes and industrial processes are expressed through a careful material pallet of reuse. In the "Piazza Metallica" - a plaza surrounded by industrial remnants – 49 huge steel slabs used within the pig casting beds are used as paving material. This reflects the intense forces of heat and erosion. This becomes a visual analogy of the formation of the earth from geological and hydrological forces (pp. 126-128).

Plantings do not use naturalistic clichés to cover the industrial nature of the site. Plantings reflect the regularity of original site function as well the process of succession, and site potentials. They are at times ecologically informed and at times formal. Because so many colonizing species were from around the world were found on site – over 200 - special management practices and training was developed for the gardeners (pp. 124-126). A blue sage was able to be introduced because of the remaining rubble of deteriorated structures. Peter Latz points out that this would not have been possible without the presence of the rubble, but the rubble would have had little value with out its new relationship to the blue sage (p. 124). This attention to the existing condition, and what possibilities those conditions hold is an important lesson – smaller scale interventions provide large impact when backed by strong concepts.





Figure 3.12
Exposed channel of the
Emscher River and industrial
relics.



Figure 3.13



Figure 3.14

Vegetation and ruins at Landschafts
Duisburg-Nord:

Figure 3.13
Modern parterres in former ore
bunkers.

Figure 3.14
Allée of cherry trees leading
through the site.

Figure 3.15
Rusting steel encased in vines.



Figure 3.15

Section 4:

Site Survey and Design Concept

In developing the concept for the design of the Blue Hospital landscape, a site survey was critical in understanding the physical aspects of the land and ruin. Appropriateness of programmatic and design intentions for the Blue Hospital Landscape were evaluated against the information compiled in the survey, which was based on observations made during site visits in the summer of 2009 and winter of 2011. The survey allowed for the understanding of the physical conditions on site, as well as gave an indication the effectiveness of programmatic intentions through the observation of adjacent activities and uses.

4.1 Site Survey

In surveying the site and its surroundings, six main land use types were noted: brownfield sites, brushland, pastures, mixed urban development, residential lots, and gardens/orchards. The adjacent brownfield sites appeared to have had industrial uses, but are now neglected, and have little or no structure to indicate what had been their function. The brushlands were distinct from the grassy pastures. They were wild, and in some places filled with shrubs, brambles and thorns as a result of natural succession on the former construction site. These were untended areas. In contrast, the pastures were quite lush and growth was kept quite low due to the grazing of sheep. Larger residential lots with private gardens – some of which backed on to larger plots with orchards, pastures and extensive gardens – were found to the north east of the site. Denser neighbourhoods and mixed urban developments occurred to the south and the east on the south side of the highway that faces the large sloping hill leading up to the hospital. It is important to note that some pastures and garden plots that surround the hospital site seemed to be informally used, and are expanded onto the site when the need arises.

The soils of the Bugojno region are typified by Dystric Cambisols. This soil type occurs throughout Mediterranean, and Southeast Europe in the Balkan Peninsula (Jones, A., Jones, R., & Montanarella, 2005 p. 89). The area has a rootable soil depth that is considered medium deep to deep, with a range of 60 – 140 cm (Witmer & O'Loughlin, p. 1039). Cambisols with moderate to deep soil profiles are among the most productive soil of southern Europe, when occurring in wetter climates they support typical Mediterranean indigenous agro-ecosystems such as carobs, figs, olives, and grapes (Jones, A., Jones, R., & Montanarella, 2005 p. 89). With 1000mm of precipitation annually in the region, there is ability to produce a wide variety of food products in the area.

The land uses adjacent to the site are predominantly different forms of agriculture and gardening indicating its potential suitability for production. Despite the likelihood of having been disturbed during the construction of the hospital,





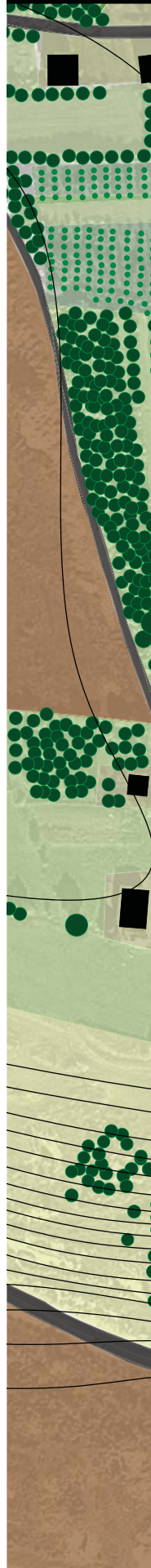
Figure 4.1 - Location
of Blue Hospital site in
Bugojno.
Map Imagery ©2014
Google, CNES/Astrium

indications are that the soils of northern portions of the site have remained relatively undisturbed for the past 22 years, accumulating organic material during the process of ecological colonization and succession. Intermittent cutting and grazing won't have diminished this process, though adhoc garbage dumping may leave isolated quality issues to address. The southern slope on the site is partially maintained due to its proximity to the highway, suggesting it will not have had the same potential for accumulating organic material due to cutting. Because the south slope, averages 10 to 13 percent incline, and the higher levels of run off, should be given to specific programming and planting on these different conditions.

An earthen mound at the crest of the south slope has a cover of colonizing shrubs and trees that suggest it was heavily disturbed. This disturbance possibly results from the construction processes when the land form was being shaped, or as an accumulation of excavated materials from the basement of the hospital. It provides a different spatial experience from the rest of the site. It contrasts the low, flat northern portion of the site through its changing elevations, and the south slope's uniformity through irregular shape and varying slopes. It would be useful to keep the mound for development of a separate spatial element within the design.

For any project to proceed on the site, a full environmental analysis is needed. As the site was last functioning as a construction site, it needs to be established if there was any contamination from materials and waste products during that process. There is also evidence of wide-scale informal garbage disposal on the site as well as throughout the lower level of the ruined hospital. This material will need to be properly disposed of, and the extent of it's contamination identified. With information a plan for remediation can be made that may include, capping, or disposal of contaminated soil, phytoremediation etc., or any combination thereof. The site should also be swept for mines and left over unexploded ordinances due to their extensive use during the war.

Figure 4.2 - Land use surrounding the Blue Hospital.





4.2 Design Conceptual Framework

Through investigating site potentials during site visits, programmatic possibilities, historical developments and precedent research pertaining to ruins and landscapes, three main elements were identified to make up the design: The Ruin, the Garden, and the Meadow. The ruin of the Blue Hospital has the potential for useable and poetic spaces within; to be experienced as both productive and pleasureable. The Garden will provide productive space for the community member to produce food, and to socialize. It will be a tool for self-sufficiency. The Meadow is similar to the traditional great lawns found in traditional parks and picturesque landscapes. A blend of endemic species will replace the typical monoculture.

In composing the landscape with the three main elements, three scenarios, or models were established:

1) A ruin, a garden and a meadow (Figure 4.3, p. 121).

Arranged in a generally linear manner, the elements move from one to the next, each acting as individual entities rather than being incorporated into a single overall composition. There is less of sense of hierarchy or destination within this scenario. The advantage is that several areas of distinct character are produced and there is potential to exploit strong transitions and procession. The drawback is a reduced sense of wholeness; each part is too separate.

2) A ruin, in a garden, in a meadow (Figure 4.4, p. 121).

In this scenario, the ruin sits within the heavily cultivated garden space. This area of intensively cultivated and managed land gives way into an area that, while extensively used, is of minimal maintenance. Intensive use and human intervention gives way to a more 'wild' landscape as you move outward from the central ruin element. The advantage to this scenario is the concentration of the heavily cultivated areas and areas of intensively used program within close proximity. The drawback is that it focuses the majority of the activity in a single area of the site.

3) A ruin and a garden in a meadow (Figure 4.5, p. 121).

The ruin and garden become separate entities in the landscape; they become reflective of one another, and separate destinations – a dialogue forms between perspectives (looking up at versus looking down at). The meadow acts as the unifying element in which they sit. The advantage to this scenario is the broader use of the site and the creation of several 'destinations.'

The third scenario was chosen for exploration as it allowed for experimentation with making individual spaces and destinations with the framework elements, while still blending the spatial qualities. It is neither three separate spaces nor a single progression of spaces based around a central focal point.

Figure 4.3
A Ruin, and a garden and a meadow.

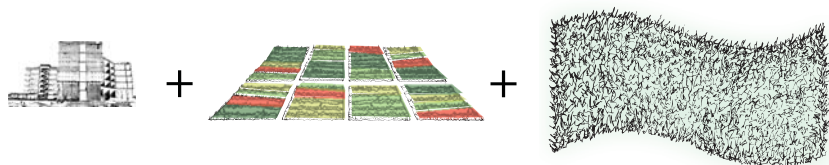


Figure 4.3 - 4.5
The Three Conceptual
Framework Models.

Figure 4.4
A Ruin, in a garden, in a
meadow.

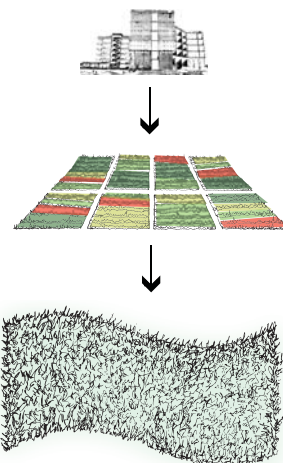
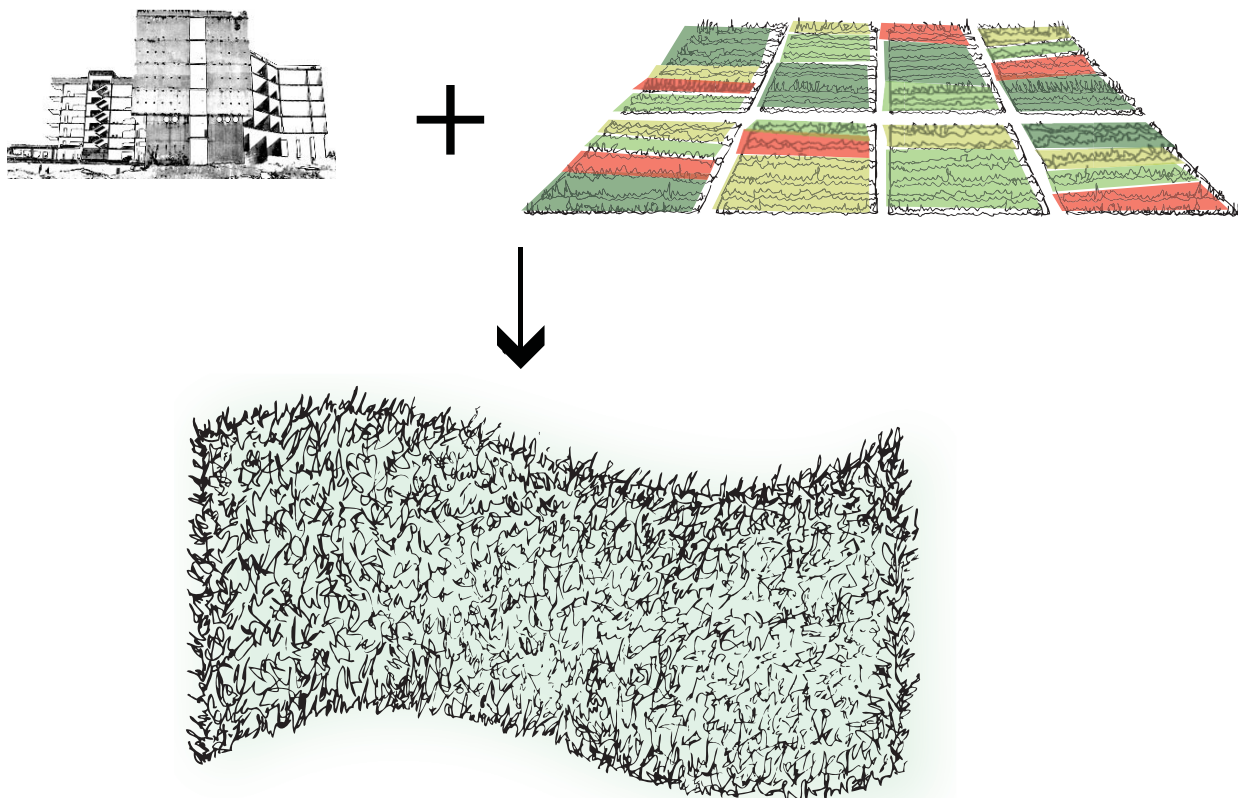


Figure 4.5
A Ruin and a garden, in a
meadow.



Section 5:

Synthesis: The Blue Hospital Landscape Design

In designing the Blue Hospital landscape, the conceptual framework of “a ruin and garden in a meadow” was chosen. These three spatial elements were derived from programmatic exploration, experience on site, and literature reviews. During the design process, functional needs, assessment of the potentials of existing site features, and the importance of design unity led to the development of two more spatial elements - the Fruit Belt and the Paulownia Mound. Further, spatial intentions for specific portions of the three initial elements were proposed.

5.1 The Blue Hospital Design

In the final design for the Blue Hospital landscape, the ruin of the Blue Hospital and a series of community garden plots, are set within a meadow containing endemic species that have been identified as having medicinal properties in ethnopharmacology.

Both the garden and ruin in the northern portion of the site, contain areas of production, and space for gathering. The meadow, the common matrix in which the other elements are set, unifies the site, and stretches southward down a slope towards the rest of Bugojno. It is much like a great lawn in a picturesque landscape. Variation is found throughout based on the variety of plants, and process of succession that take place as the meadow community establishes itself in a variety of site specific locations.

The site is given a strong sense of boundary consisting of the orchard called the Fruit Belt. It frames the site, defining the designed landscape spatially, yet remains permeable to movement views. Finally, the Paulownia Mound, a grove of *Paulownia tomentosa* situated on remnant mound of construction excavate, provides a unique yearly event in which it blooms in a lavender-blue. It establishes a colour theme which reflects the colloquial name with which local people refer to the site, “plava bolnica” - the blue hospital. Further plantings of *Paulownia tomentosa* within the site draw the colour through and lead people towards the activities that take place there from the city below.

The following is a discussion of specific aspects of the spatial elements .

Figure 5.1
Plan of the Blue
Hospital Landscape.



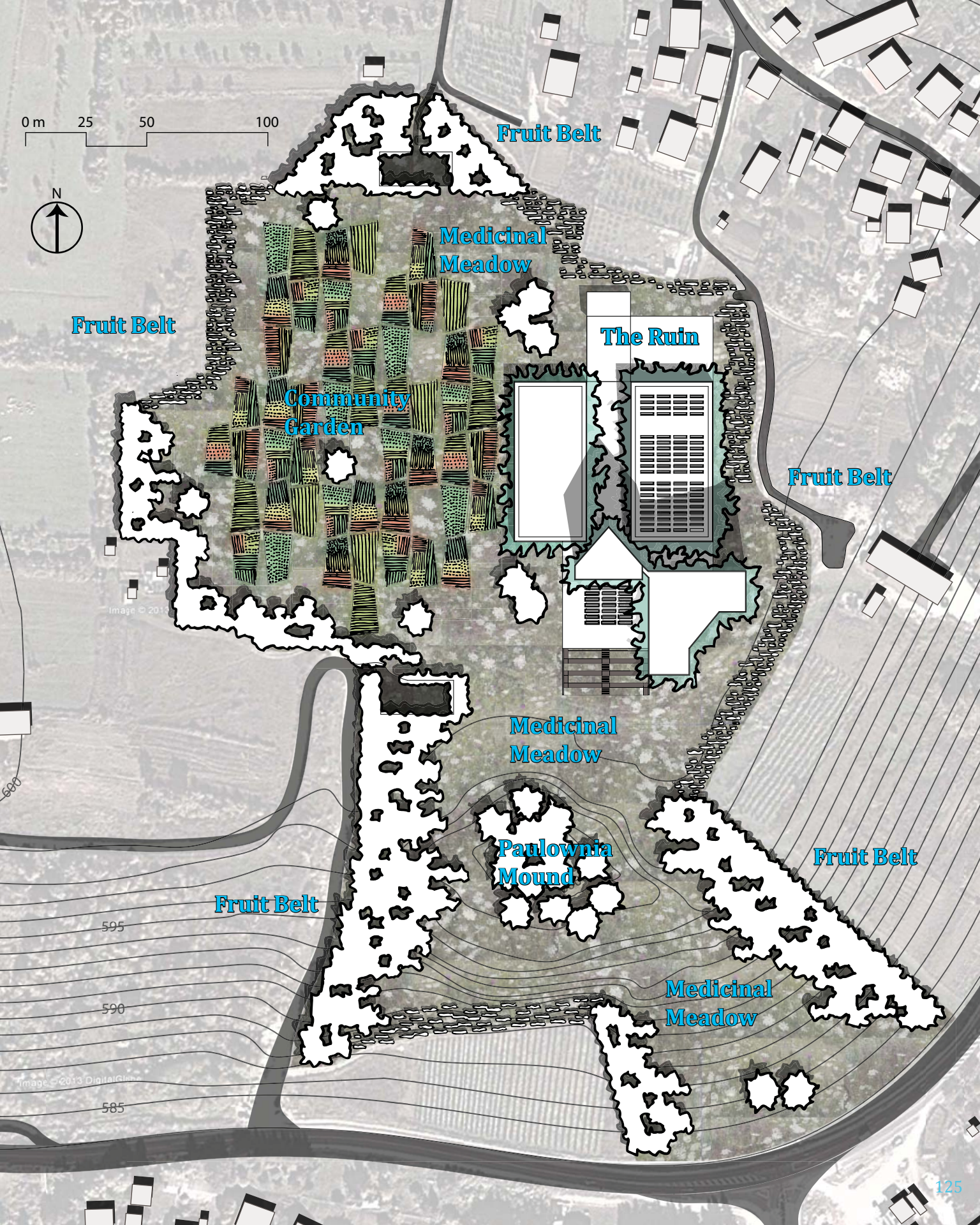


Image © 2013

0 m 25 50 100



Fruit Belt

Medicinal Meadow

Fruit Belt

Community Garden

The Ruin

Fruit Belt

Medicinal Meadow

Paulownia Mound

Fruit Belt

Fruit Belt

Medicinal Meadow

595

590

585

Image © 2013 DigitalGlobe

0 m 25 50 100



1. The Ruin – The Blue Hospital
 - 1a. The Mushroom Wards
 - 1b. Greenhouse Wards
 - 1c. The Living Facade
 - 1d. The Blue Cascade – Accessible Entry Ramp to Lower Level
2. The Community Garden Plots
3. The Medicinal Meadow
4. *Paulownia tomentosa*
 - 4a The Paulownia Mound
 - 4b Paulownia - individual and group plantings
5. The Fruit Belt
 - 5a. Raspberry & Blackberry Hedges
 - 5b. Plum, Apple and Cherry Trees
6. Entries & Parking
 - 6a. Entries
 - 6b. Parking

(see p. 130)



(see p. 130)

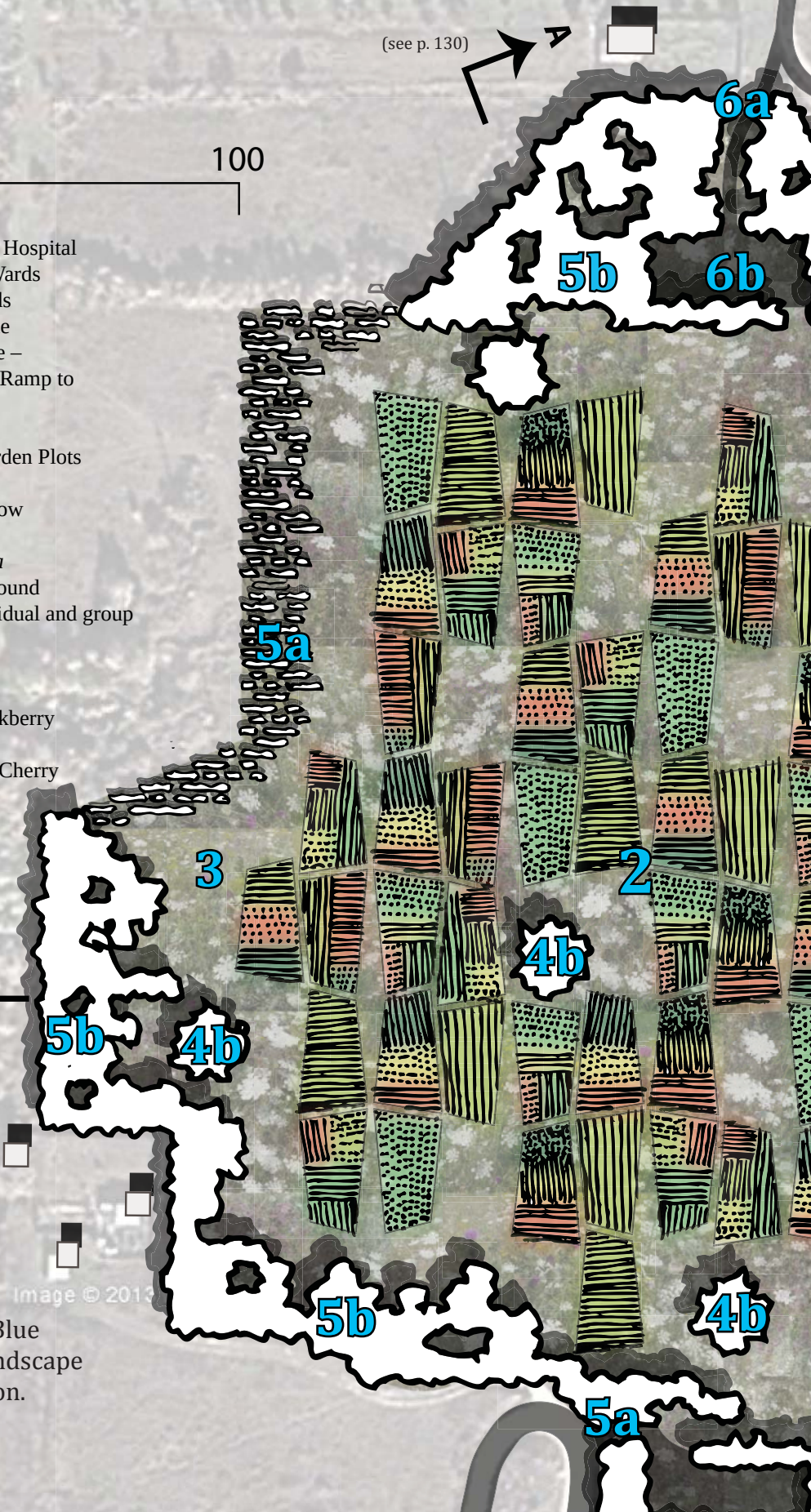
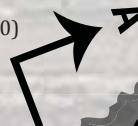


Figure 5.2 Image © 2013
Plan of the Blue
Hospital Landscape
North Portion.

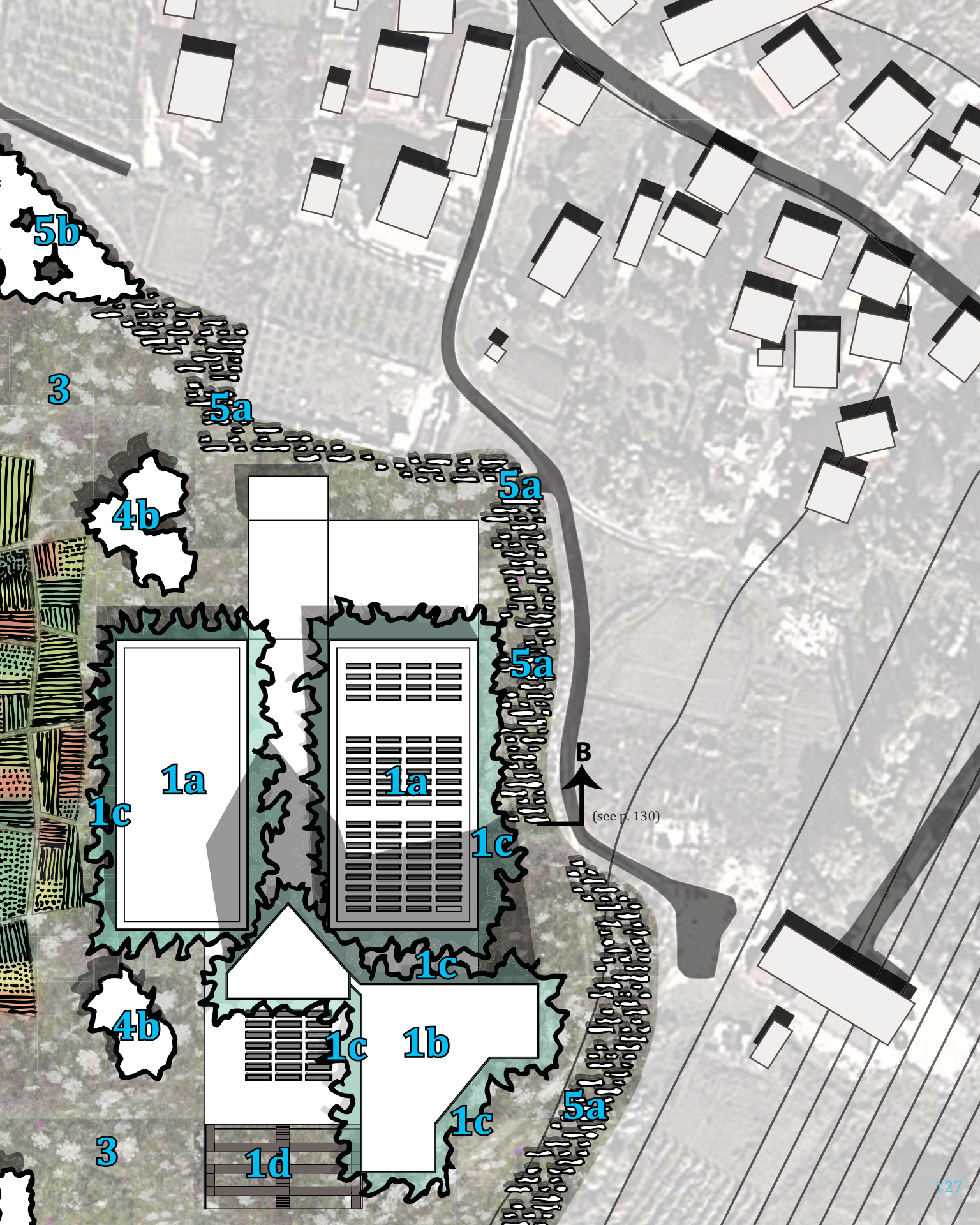
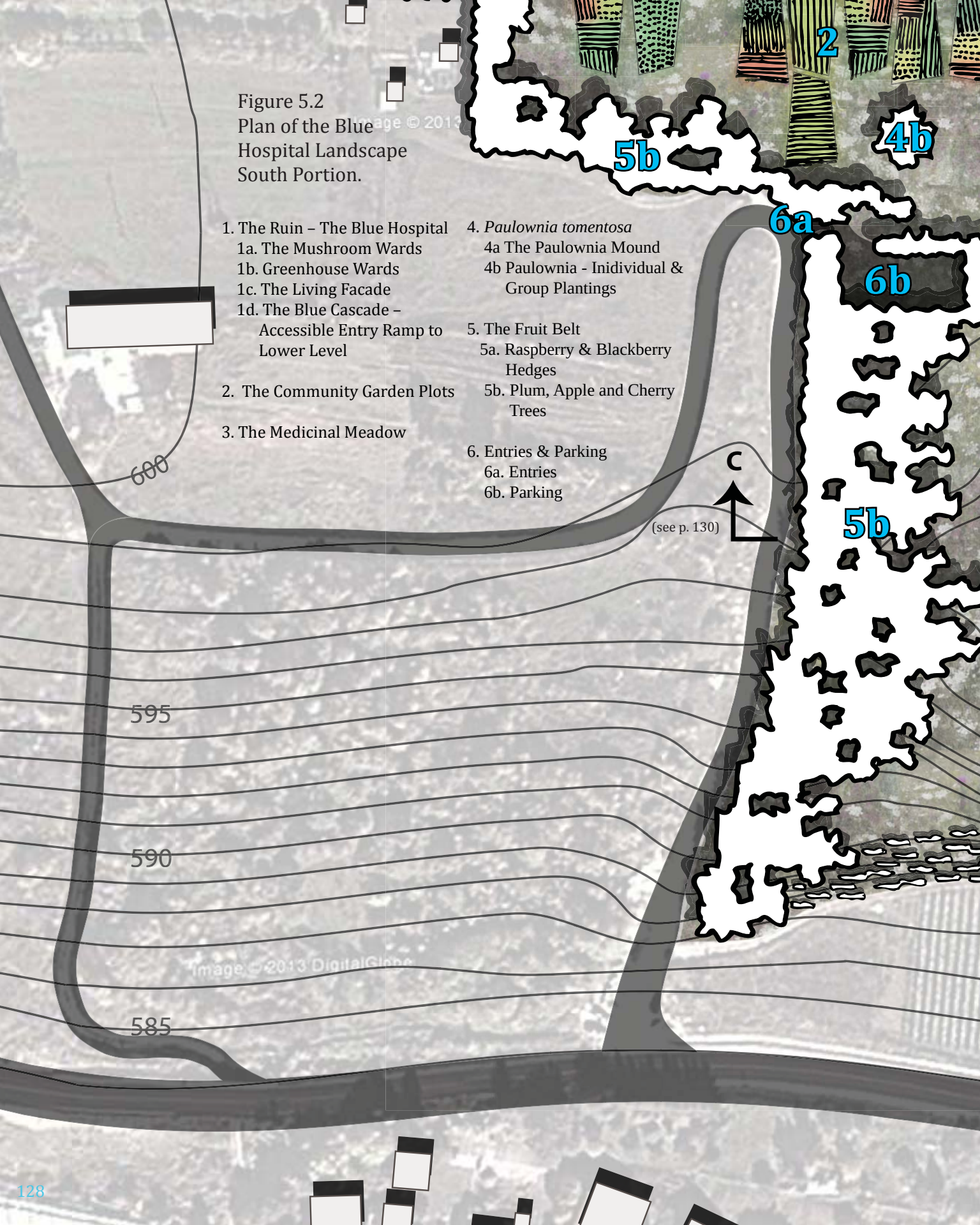
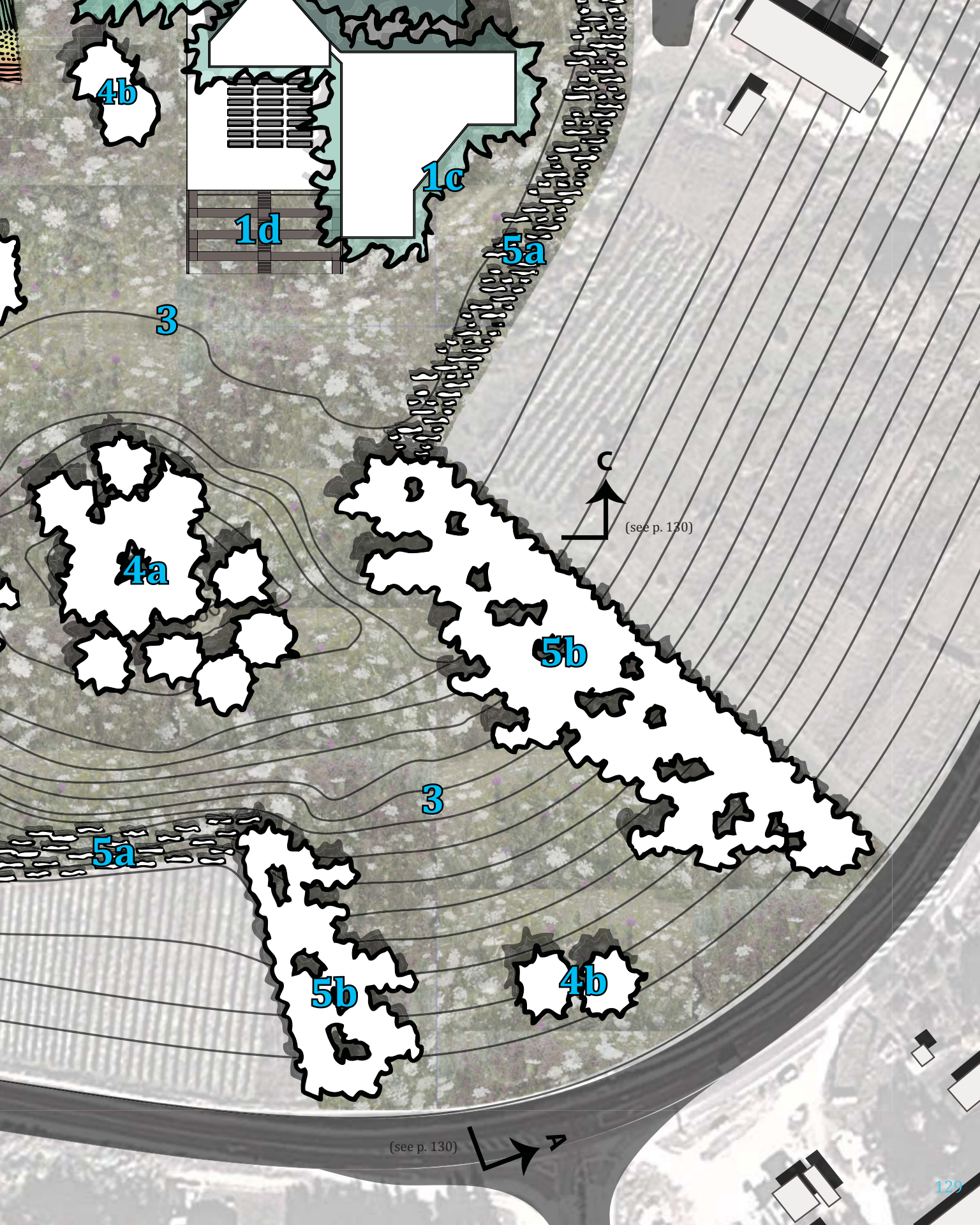


Figure 5.2
Plan of the Blue
Hospital Landscape
South Portion.

1. The Ruin – The Blue Hospital
 - 1a. The Mushroom Wards
 - 1b. Greenhouse Wards
 - 1c. The Living Facade
 - 1d. The Blue Cascade – Accessible Entry Ramp to Lower Level
2. The Community Garden Plots
3. The Medicinal Meadow
4. *Paulownia tomentosa*
 - 4a The Paulownia Mound
 - 4b Paulownia - Individual & Group Plantings
5. The Fruit Belt
 - 5a. Raspberry & Blackberry Hedges
 - 5b. Plum, Apple and Cherry Trees
6. Entries & Parking
 - 6a. Entries
 - 6b. Parking





4b

1d

1c

5a

3

4a

(see p. 130)

5b

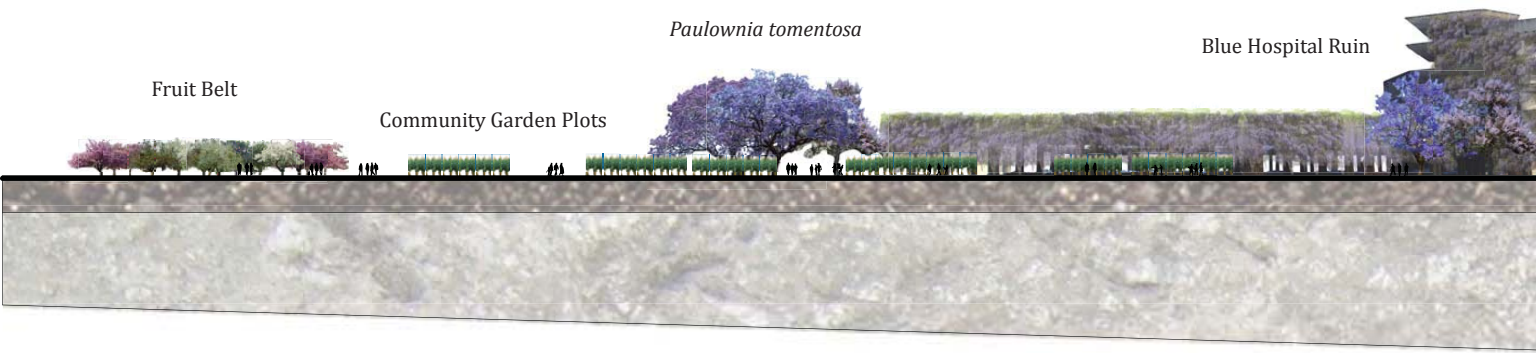
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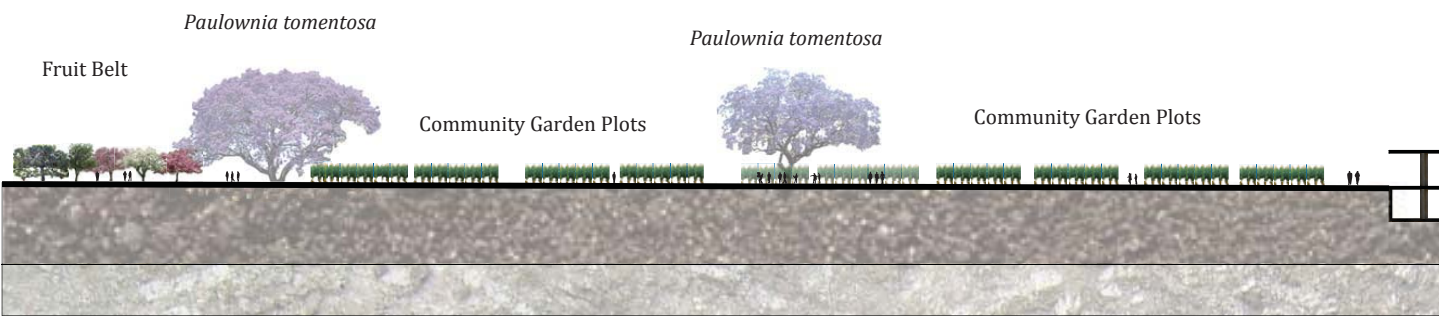
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4b

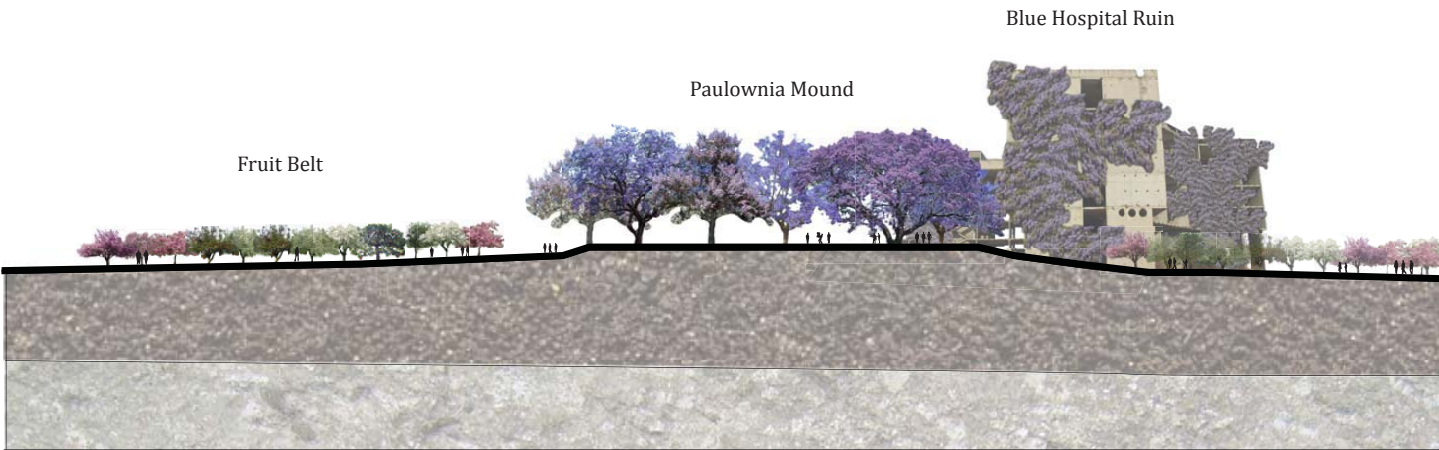
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SECTION 'AA'



SECTION 'BB'



SECTION 'CC'

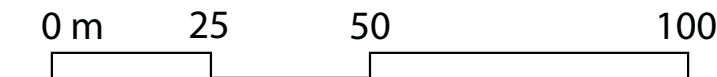
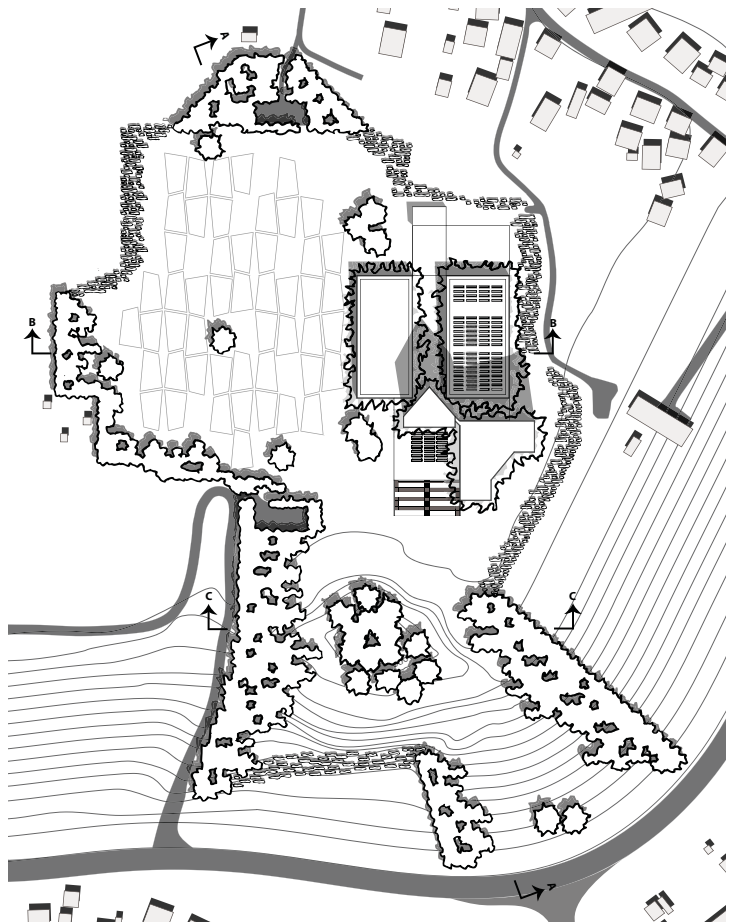
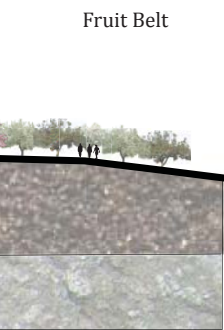
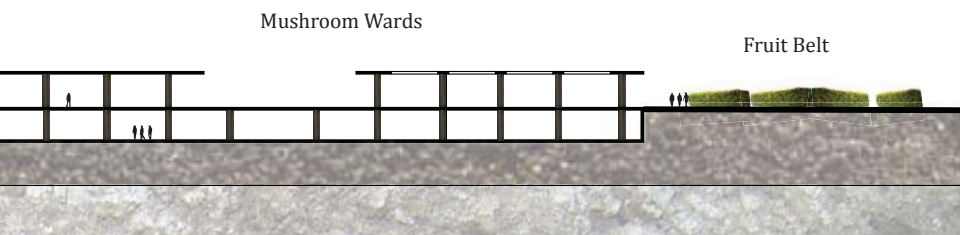


Figure 5.3
Sections through
the Blue Hospital
Landscape.



5.2 The Ruin

The ruined concrete shell of the hospital is treated as both an object in the landscape to be viewed, as in traditional picturesque landscapes, as well as a place to be experienced, as in contemporary landscape projects of post industrial sites. Its situation on the hill above Bugojno makes it at once a visual focal point and destination. It is a reflective site looking back on Bugojno, providing vistas of the town and the surrounding verdant landscape. Beyond the vantage point provided by the structure, the empty spaces within the concrete shell have the potential to become a variety of occupiable and functional spaces. Expanses of roofs can be used to collect water and areas within the structure can be used to store it. Places for growing edible fungi will occur throughout the lower levels. Spaces intended for hospital rooms will become greenhouses with the addition of walls of recycled windows. The sides of the building will be planted with a variety of climbing species, all flowering or fruiting blue, to invoke the original colour of glass facade, and to mediate conditions within the structure for their desired functions.

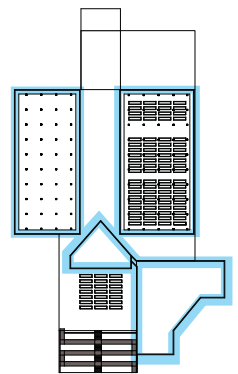
As the hospital has long sat neglected, with sections of its steel reinforcement having been 'harvested' for scrap, a structural survey will be required to see what areas are viable to reuse, and what areas will need to be restricted for safety. This will be an ongoing process to monitor the deterioration of the structure. Throughout the building, railing and safety barriers will be added as required by use, and in some cases bridging structures may need to be added to replace where corridors have since between the two south wings. The variety of internal spaces provide different microclimatic conditions through varying levels of enclosure which allow for a variety of development opportunities.

As with external landscape elements, development in the various parts of the ruins can be phased in as desired and needed.

Living Facades

Reminiscent of the romantic view of overgrown ruins seen in the etchings of Piranesi (see Figure 2.9, p 81), and introducing the prominent blue colour of the original glass facade, blue flowering and fruiting species will be planted around the perimeter and encouraged to over take the structure. It is a dialogue between the built world and feral world - decay aesthetics and ecological potentials of ruins. Wisteria, clematis and grapes will be planted. The living facade will also help to maintain a preferable environment for the mushroom production by controlling light penetration, and mediating temperature and winds. Simple steel cables will help train the plant material across the structure, securing it in place.

Figure 5.4
The Living
facade seen from
a Greenhouse
Ward window.





The 'Mushroom Wards'

Areas of the hospital will be set up for the growth of mushrooms. Cool dark areas abound in the structure from the basement to the upper levels that would be suited for the production of a wide variety of domesticated mushrooms. A study by Redzic, Barudanovic, and Pilipovic (2010, p. 178) in Zepa in eastern Bosnia describes that during the conflict in areas hard hit by food shortages, there was reemergence of knowledge pertaining to wild edible food, including mushrooms and lichen. The study compiled lists of the edible species used and how they were consumed. The interior of the hospital has the potential to become an experimental ground for cultivation techniques for such types of endemic species. This study, as well as Redzic's 2006 investigations into traditional use of wild plants as a source of nutrition can be employed within the site - both in the ruin and in the landscape - to create a diverse ecological community, that provide an important benefit to the town. To prepare the spaces for the production of mushrooms, planters and growth medium will be added. This will include wire steel mesh boxes, containing appropriate growth mediums, around columns and on wall sections to allow for vertical growth. Horizontal planters and logs can also be used as appropriate.

The 'Greenhouse Wards'

In the upper floors of the east wing, spaces that would originally been intended for patient rooms have large floor to ceiling openings where glazed facades were to be. They now have the potential to become greenhouse spaces. Re-purposed windows will seal off the former glazed walls of some of the hospital rooms. Due to the large area of roof, water can be channeled from the roof to be stored on various levels in tanks. Projects such as the Lowline Park concept being developed for an abandoned underground trolley terminal in New York plan to flood the underground with natural light using technology developed by James Ramsey of Raad Studio. Parabolic collectors on the surface focus light to a focal point which transmits the light below using fiber optics (Lowline, 2014, Technology). Many deeper sections of the ruin can be lit using this technology, increasing the amount greenhouse space as development phases progress (see Figure 5.7, p. 135).

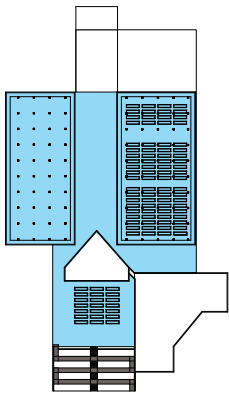


Figure 5.5
A view within the
Mushroom Ward.

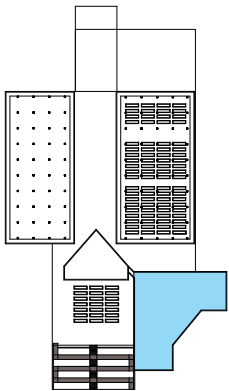


Figure 5.6
A view within the
Greenhouse Ward.

The 'Blue Cascade'

At the south west corner of the hospital a slope leads down to the lower levels to where a glazed wall would have illuminated the interior. In this area, an accessible entryway - the Blue Cascade - will lead users with mobility restrictions to the basement level mushroom wards. A switch back ramp with 4 percent slope will wind down between plantings of horizontally trained wisteria supported on cables. A stair case will lead directly down the centre between the plantings.

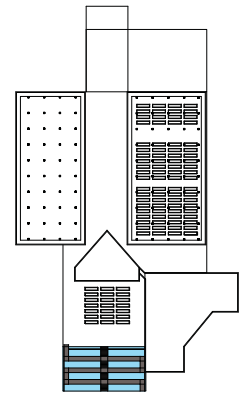


Figure 5.9
Elevation of the
Blue Cascade.

Figure 5.7
Diagram showing the application of fiberoptic lighting technology by James Ramsey of Raad Studio to increase the depth of light penetration with in the hospital Greenhouse Ward.

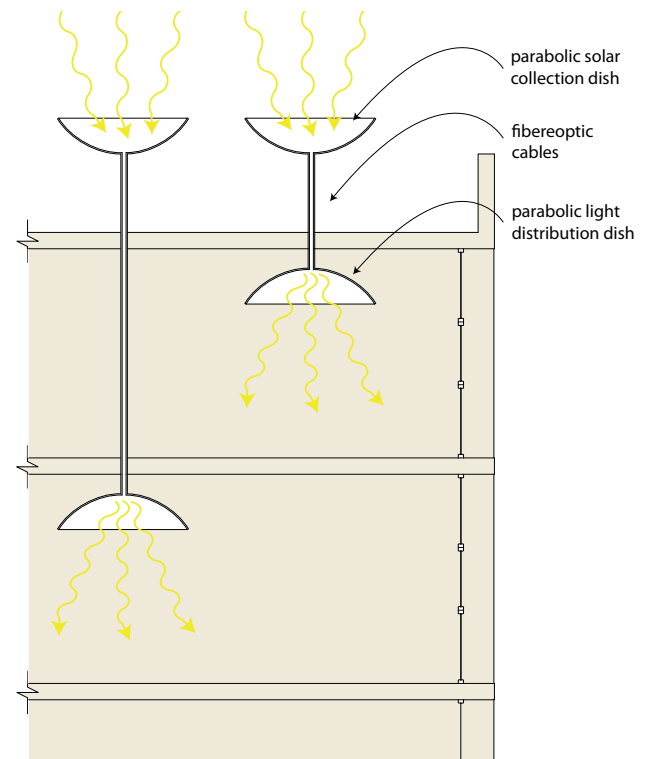
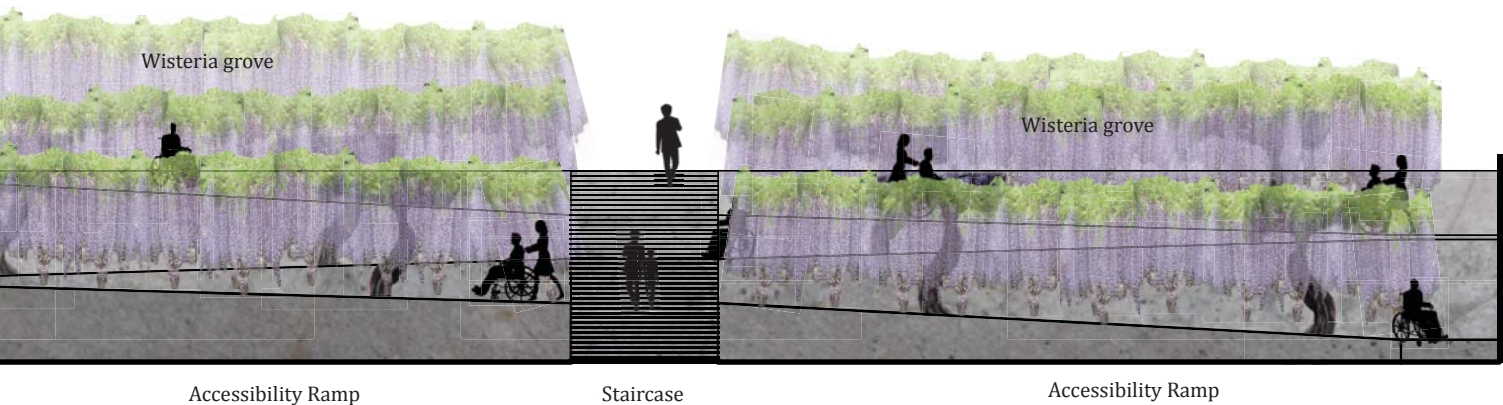
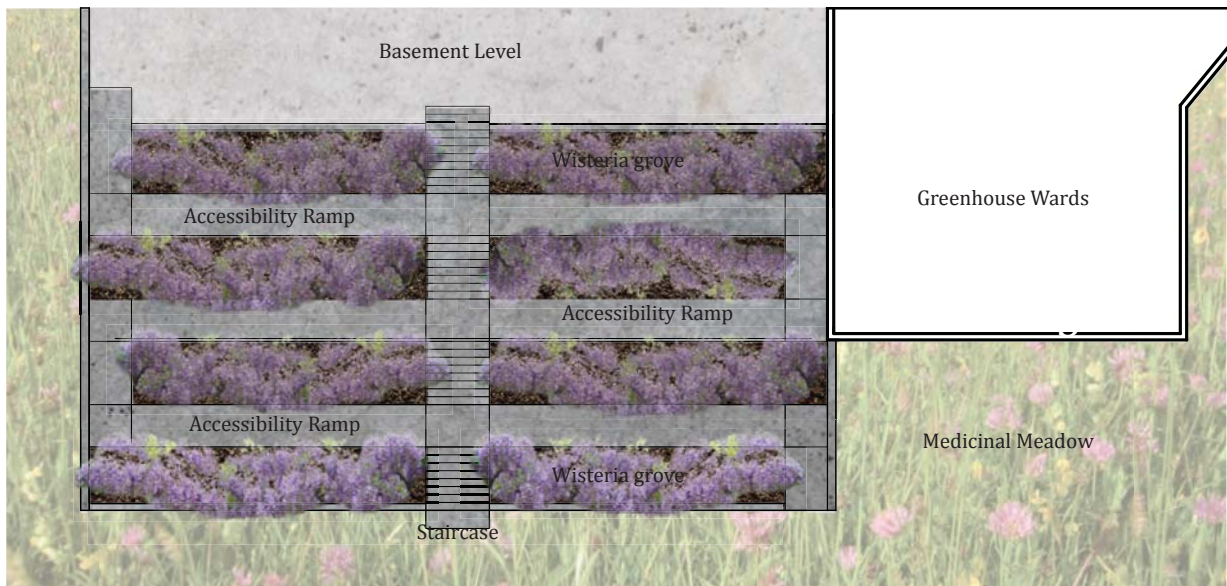


Figure 5.8
Plan of the Blue Cascade.



Accessibility Ramp

Staircase

Accessibility Ramp

5.3 The Community Gardens

Spaces for 50 families are laid out to the west of the hospital ruin. Based on allotments used by the Community gardens Association of Bosnia and Herzegovina, each family of 4 is allotted a 200 square meter plot for production – 50 square meters per family member. As per the successful strategy used by the CGABH, growing 25 varieties of vegetables on these plots should provide for each family's vegetable needs for the year.

Plot layout

Each individual garden consists of an identically shaped plot, and variation within the overall design of the community garden is produced by alternating the orientation of the plots, and by the planting approach used by individual gardeners. The alternating orientation of the single plot shape form a variety of interstitial spaces, and clearings allow for gathering and to plant *Paulownia tomentosa* trees to provide shade. The plot shape is reminiscent of irregular land divisions that can be found within the region, and reflects the strong geometry that is found within the concrete structure - especially in the south wings. Despite the alternating orientations, and varying spaces between each plot, the organization of the plots is essentially a grid, reflective of the ruin's structural design. Variation is added based on what the users grow, producing a modern take on the parterre when viewed from upper floors. Paths of flagstones separate the plots, and dissipate into the open spaces. Meadow species that can colonize the spaces between the stones, forming a dialogue between wild and domesticated.

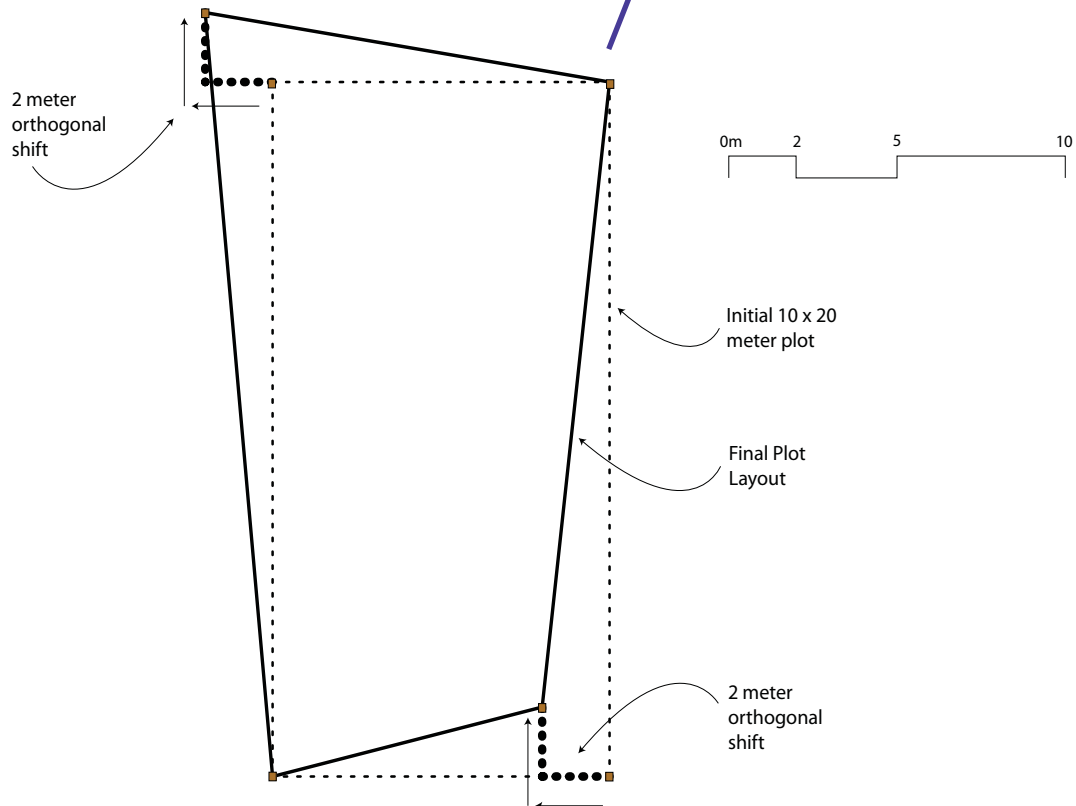
As the plot form is a deconstruction of a 10 m by 20 m rectangle, they can be quite easily laid out using stakes and string lines, using the 3-4-5 triangle method to accurately measure out the position of the corners. Like other parts of the design, they can be constructed in phases as desired.

Plot Operation

The Blue Hospital Landscape is to be operated as a community resource and public space, but the plots themselves are meant for the use of families and individuals who have a need for space to grow food. The land would be held as municipal property as a park, with the garden plots, or section thereof, loaned to specific families.

The CGABH provides a useable model for accessing the use of plots. Under or unemployed people make up the majority of the gardeners in the CGBAH gardens. Candidates are identified by a variety of community, NGO and social organizations and selected from applications based on need and suitability for the garden program

Figure 5.10
Community Garden plot
layout method using the
3-4-5 triangle method
to reform an initial
10 meter by 20 meter
rectangular plot.



via a brief interview. The use of the garden plot can be set to specific numbers of seasons per family, but the CGABH had a 20 percent turnover rate indicating there would be a certain number of new gardeners per year without setting limits (Campbell, 2009, pp. 254-257). Each plot can be divided between users as necessary, based on spatial requirements and demand.

Plot Infrastructure

Required infrastructure for the community gardens plots include, water access, compost bins, tool storage and preparation space, washrooms, site furnishing, and plot delineation/pathways.

Essential water access will be provided from taps at regular intervals through out the garden. These are laid out so that each plot can be serviced using a 30 meter garden hose. There are three sourcing options for the water. The first is from wells – many of the yards in the surrounding neighbourhood have pumps indicating a viable water table runs through the vicinity. The second option is from service lines owned by the municipality. The hospital was in the late stages of construction so waterlines to the structure would have been previously laid to the site. If these are still viable, town water could be used if desired. The third option is the collection of water using the roof of the hospital. Water collected and stored in tanks throughout the structure will provide necessary supplies for a variety of spaces. Collection tanks in upper levels can use gravity feed to distribute water to various areas of the site. Options one and two can be explored independently or in combination. It would be recommended to supplement these with the third option of roof top collection and storage, as a matter of resource conservation and economy.

Where the chief water sources for the garden cannot be guaranteed potable – such as wells which are fit for landscape use but not human consumption – an on-site filtration system and clearly marked potable water stations will be provided.

The colonnade of the northwest wing of the building will contain space for tool storage, processing and preparation of garden products for transport, and washroom facilities for the gardeners. These spaces can be constructed easily by framing in areas defined by the structural columns. The spaces will be secure with access keys provided to individuals with garden plots. Storage for public and personal tools will be provided. Washroom facilities will use composting methods.

The social nature of this type of gardening requires areas for gathering. Within the open meadows framed by the garden plots, moveable tables, chairs and benches will be provided to support this aspect of the site activity.

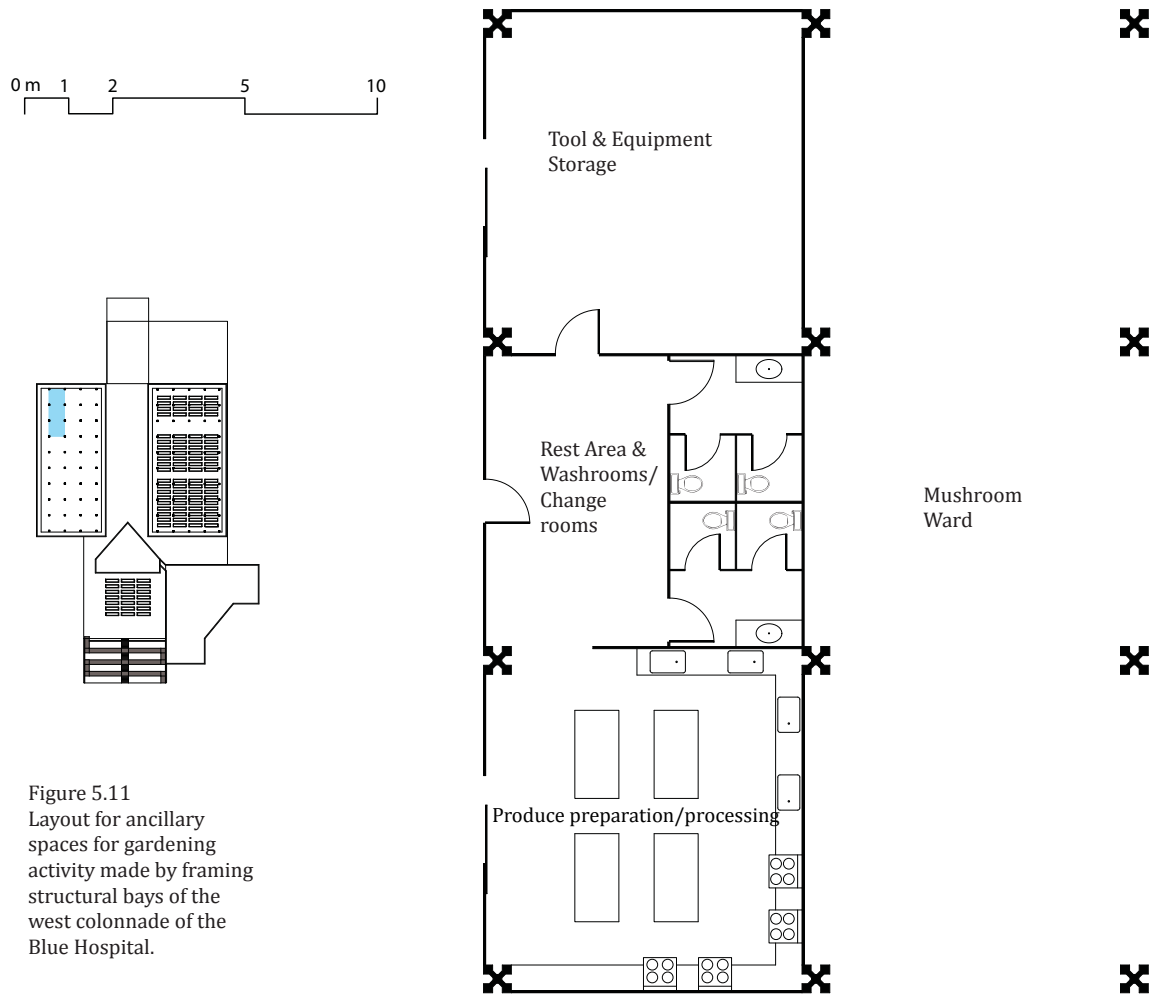
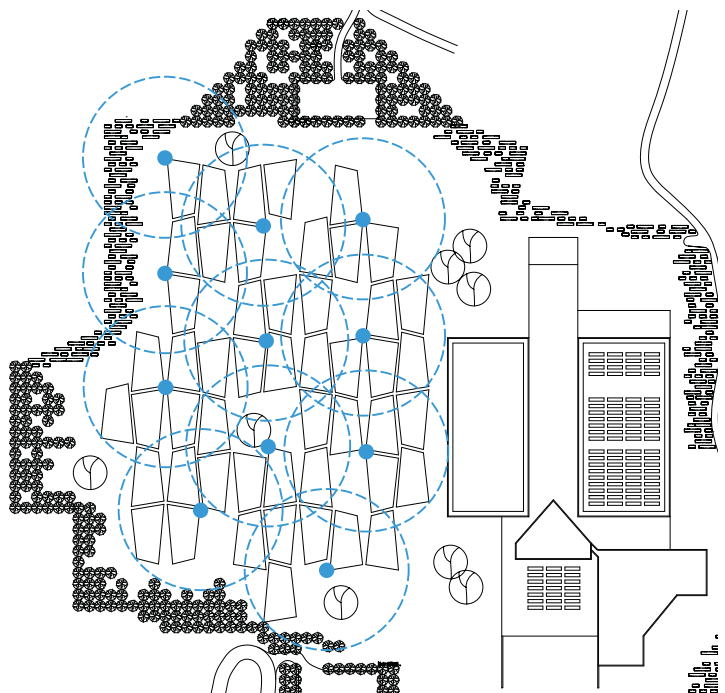


Figure 5.11
Layout for ancillary spaces for gardening activity made by framing structural bays of the west colonnade of the Blue Hospital.

Figure 5.12
Layout for water access ensuring all plots can be serviced by a 30 m hose.



Between the Gardens and Meadow

Pathways of local limestone flags, and pieces of recycled concrete will both frame the individual plots, and provide a more formalized circulation for the gardeners. Limestone is locally available, and is seen in landscape uses throughout Bugojno, such as the channelization of streams and for the construction of city steps. Recycled building materials such as concrete and brick from other derelict sites could also be laid out with the stone, giving it a new use and preventing additional waste from entering the landfill. Between the stones, the meadow species would be seeded. After the initial planting, certain species will dominate areas of the paths based on the usage of each section and the competitiveness and hardiness of individual species. This will create variation over time dependent on changing use of the space. Plants such as sages and mints will produce as sensory experience as users move through the space as scents are released.

Figure 5.13
Material plan of Garden
Plots, Medicinal
Meadow, and flagstone
paths and edges.



Figure 5.14
A Bosnian
meadow between
Bugojno and
Travnik.



5.4 The Medicinal Meadow

The Medicinal meadow is a large green expanse seeded with endemic species that are used for traditional medicines. As an element of the design, it is meant to visually unite the distant green slopes of the valley to the town, and connect all other elements within the Blue Hospital Landscape. Informed by ethnobotanical studies of Bosnian regions by faculty in the Department of Pharmacology at the University of Vienna, (Saric-Kundalic, Dobes, Klatte-Asselmeyer & Saukel, 2010), the Medicinal Meadow has the potential to act as teaching tool, a storehouse of local knowledge, and a resource for usable traditional medicinal plant materials, and edible plants. The Medicinal Meadow will add a high level of biodiversity within the design.

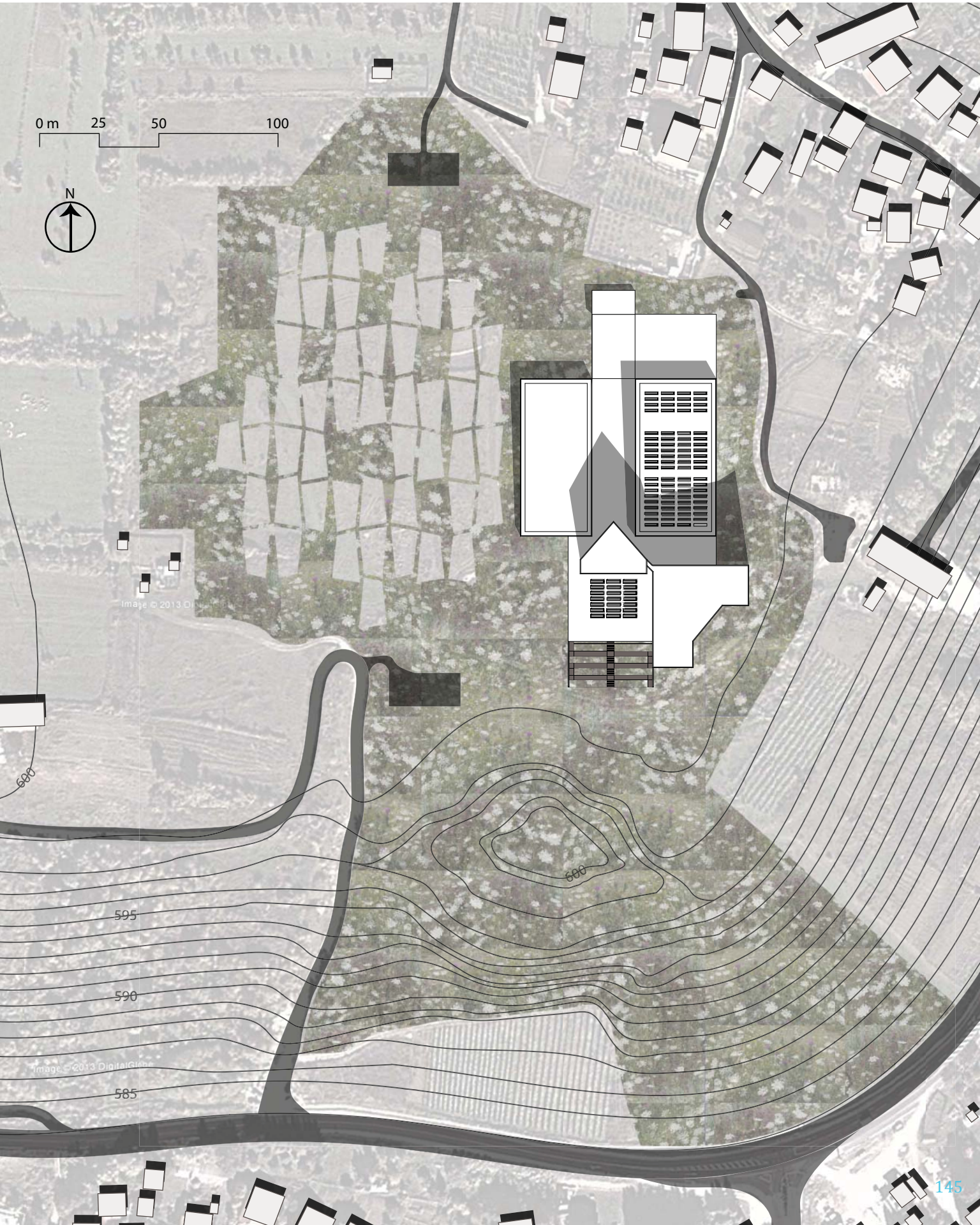
Topography, Soils, and Plants

The site is divided into two sections by topographic characteristics. The north portion of the site surrounding the hospital and adjacent to low density housing and farm fields is generally flat, with low variation. Here, the land makes up the south edge of a wide plateau between the mountains on the valley's edge, and the lower river valley bottom. Water will be slower to drain from this area after rain and during the spring thaw. The south portion of the site is made of the slope facing the high way and the city itself. It is of a generally uniform slope and ranges from 10 percent to 13percent. Major variation occurs near the crest where there is a large mound probably containing excavate from the hospital's basement. Here the slope can be as much as 26 percent or more. The area along the slopes will be better drained than the northern section of the site, and will probably have soils that are somewhat more leached of nutrients due to this heavier drainage. This is an important factor in determining what species will be appropriate for planting in this area of the site as they will need to tolerate dryer conditions and direct sun exposure.

The meadow ties all elements in the design together. It provides common ground cover between the trees and hedges of the orchard and surrounds the gardens and ruin. Variations in species will occur within the meadow, due areas of shade, slope, and compaction of soils due to use. Partially this will be the result of planning – the appropriate species for the appropriate condition – but overtime change will occur due species competition and differences in the intensity of use of certain areas.

Figure 5.15
Extent of the Medicinal
Meadow planting.





0 m 25 50 100



Image © 2013 DigitalGlobe

595

590

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The Medicinal Meadow community would be developed in consultation with community members and botanists to ensure a culturally appropriate and ecologically viable outcome. Endemic species with medicinal uses identified regionally in a study by Saric-Kundalic, Dobes, Klatte-Asselmeyer & Sauke (2010). Some examples with potential for use in the meadow include:

Centaurea erythraea Rafn or Common Centaury
Filipendula vulgaris Moench. or Dropwort
Fragaria vesca L. or wild strawberry
Geum montanum L. or Alpine avens
Glechoma hederacea L. or ground ivy
Linaria vulgaris Mill. or common toadflax
Malva moschata L. or Musk-mallow
Salvia pratensis L. or Meadow Sage
Solidago virgaurea L. or European Goldenrod
Stachys officinalis (L.) Trev. or Purple Betony
Symphytum officinale L. or Comfrey
Vaccinium myrtillus L. (*Ericaceae*) or Bilberry
and others.

Seeding and Maintenance

The Medicinal meadow is an intervention that can be constructed by community members, and can be maintained with minimal effort. The seeding of the meadow will be a community effort. This will begin with community consultations on what species will be grown. Once the species are selected, people can participate in the gathering of seeds. The meadow can be constructed with local farm equipment for site preparation - cultivating and disking - prior to seeding. For seeding, broadcast methods should be employed. Alternately, where meadow communities exist which are desired for seeding, a technique in which the meadow is cut after seed maturation, and the material spread over the prepared seeding site can be used. The Meadow will be primarily maintained by the grazing of local sheep. Mechanical cutting can be employed as needed in the fall, with material mulched on site.

Figure 5.16*
Potential Medicinal Meadow
Species based on the study by
Saric-Kundalic, Dobes, Klatte-
Asselmeyer & Sauke (2010).



Centaurium erythraea Rafn*



Filipendula vulgaris Moench.*



Fragaria verca L.*



Geum montanum L.*



Glechoma hederacea L.*



Linaria vulgaris Mill.*



Malva moschata L.*



Salvia pratensis L.*



Solidago virgaurea L.*



Stachys officinalis (L.) Trev.*



Symphytum officinale L.*



Vaccinium myrtillus L.*

5. 5 The Paulownia Mound

During the spring blooming, a grove of *Paulownia tomentosa* trees throughout the site will reflect the blue theme of the planting derived from the colloquial name of the hospital.

Paulownia tomentosa planting occur from long the north-south axis of the site, introducing a striking burst of blue seasonally, recalling the original blue glass that was intended to clad the hospital, and gave the site its name. The Paulownia Mound is in liekly excavate left over from the basement excavation and will be suited to the fast growing species which is tolerant of a variety of soil conditions. It becomes a special event when the trees are in bloom. Further plantings of *Paulownia tomentosa* lead from the bottom of the hill facing Bugojno and extend through the site providing intermittent shade in the garden and meadow areas.

Species and Topography

Paulownia tomentosa, or Princess Trees, originate in China, but are grown around the world as street trees and as ornamentals in group and individual plantings in gardens and parks. Known for having have a rapid growth rate, they can reach a mature height of about 15 meters and mature canopy spread of about 15 meters. During the spring they produce foxglove-like blooms in a deep lavender-blue colour. They are hardy through USDA zones 5B to 9 and can tolerate a wide range of soil types including clay, loam, sand, slightly alkaline, and acidic soils. They prefer well-drained soils but will tolerate occasionally wet and moderate draught conditions (Gilman & Watson, 1994, pp. 1-3).

The mound of earth to the southwest of the hospital which will be planted with the grove of *Paulownia tomentosa* rises approximately 3 meters above the crest of the hill with irregularly sloping sides. Beyond the aesthetic value of the *Paulownia tomentosa*'s blue flower and it's hardy characteristics, growing it could also improve the overall health of the site. Due to the potential contamination from the construction period in the mound, there are added benefits to selecting *Paulownia tomentosa* for planting this location as it is highly tolerant of atmospheric pollutants and difficult soil conditions (Gilman & Watson, 1994, p. 1). In a study, by Doumet et al. (2008), great potential was found for the use of *Paulownia tomentosa* for phytoremediation of soils contaminated by heavy metals due to their extremely high biomass production (p. 1489).

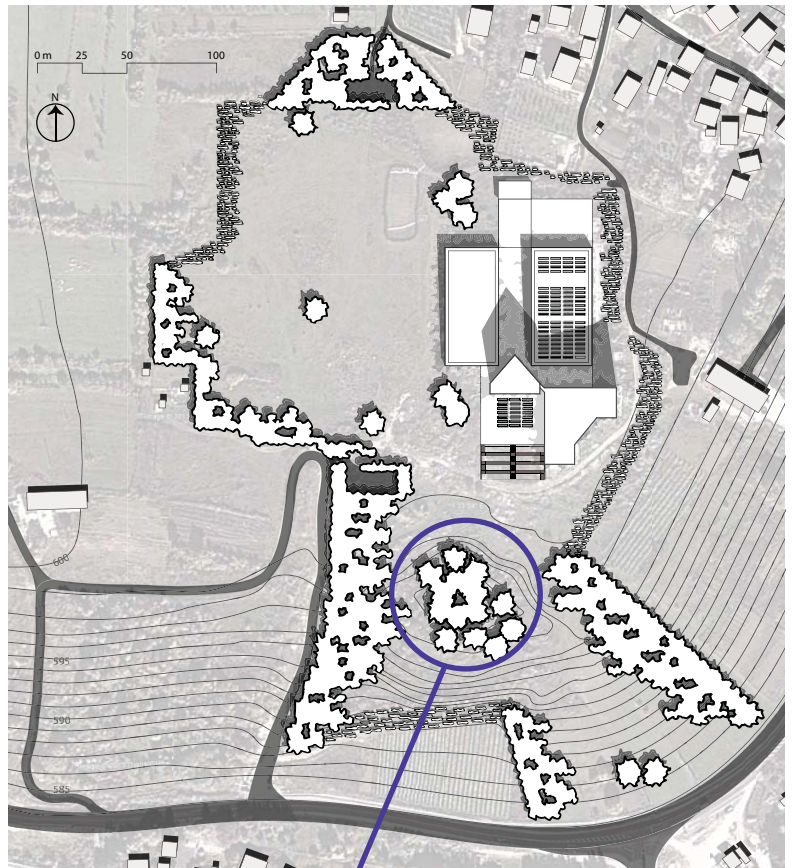
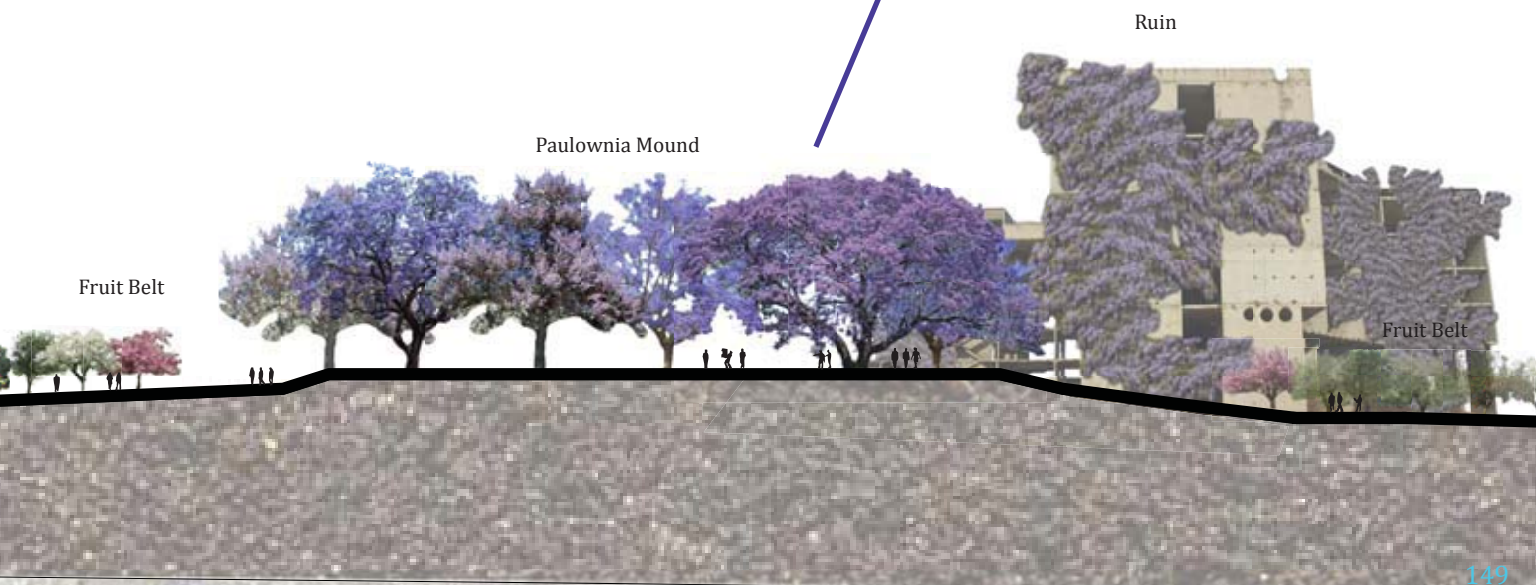


Figure 5.17
The Paulownia Mound.



Spatial Qualities

The use of *Paulownia tomentosa* as individual plantings throughout the site will provide shade near the garden plots for gardeners taking a break from the work. These planting will create contrast to the open meadow through the addition of a wide, high canopy. The Paulownia Mound will create a vantage point to view the Ruin, the Garden, the Medicinal Meadow and the surrounding landscape of Bugojno.



Figure 5.17
Paulownia tomentosa in the garden.
View west showing Community Garden
plots, Medicinal Meadow, and *Paulownia*
tomentosa, and the Fruit Belt.



5.6 The Fruit Belt

Edge conditions and spaces within the site are defined by hedges of fruiting shrubs and trees. This approach will provide a visual connection and smooth transitions between the site and surrounding plots of land. A wide, linear orchard planting, the Fruit Belt consists of berry hedges and rows of fruit trees. It is both visually and physically permeable and will provide a visual connection and smooth transitions between the site and surrounding plots of land, while providing a substantial presence on site. The planting of this orchard edge is orthogonally oriented creating strong lines on the site that reflect the nature of the hospital's construction.

A boundary, a frame, a threshold

The idea delineating boundaries to the site is important to understanding the relationship between the elements of the Blue Hospital landscape. Without a strong edge definition to strengthen the relationship of the elements, each would seem to be floating within the greater array of small plots that make up the surrounding landscape. The Fruit Belt is used as a device to both frame the content of the landscape design, as well as reinforce concepts of food production through the chosen plantings. Typically, hedges are similar to walls and fence creating a solid, continuous boundary between two spaces. By planting the rows of berry hedges perpendicular to the site edge, visual and physical corridors are formed. These hedge groupings become a transition zone, or threshold between the activities and spatial conditions of the Blue Hospital site, and the surrounding landscape. Hedges in the southwest and northeast corners of the site, though planted in a parallel orientation to the edge, act in a similar manner, but their staggered arrangements of varying lengths produce passageways and frame smaller spaces. The fruit trees are planted in a regular grid of 5 meters on centre in an orthogonal layout. This layout reflects the rigid regularity of structural columns of the hospital, as well as the strong axial relations withing the overall layout of the ruined structure. As with the planting of the hedges, corridors are created that allow for movement and views. Openings created by omitting individual or groups of trees from the grid, and the varying lengths of the rows create spatial variety.

Arrival and Departure - Parking

Situated in the Fruit Belt plantings at the north and west entries to the site, are two parking lots holding up to 20 cars each. The placement of the parking in the orchard creates an usual setting of parking in an edible forest, introducing the visitor to an important aspect of the landscape upon arrival. One can also grab a snack for the road when leaving.

Figure 5.18
Planting diagram for
fruit trees and berry
hedges of the Fruit
Belt.

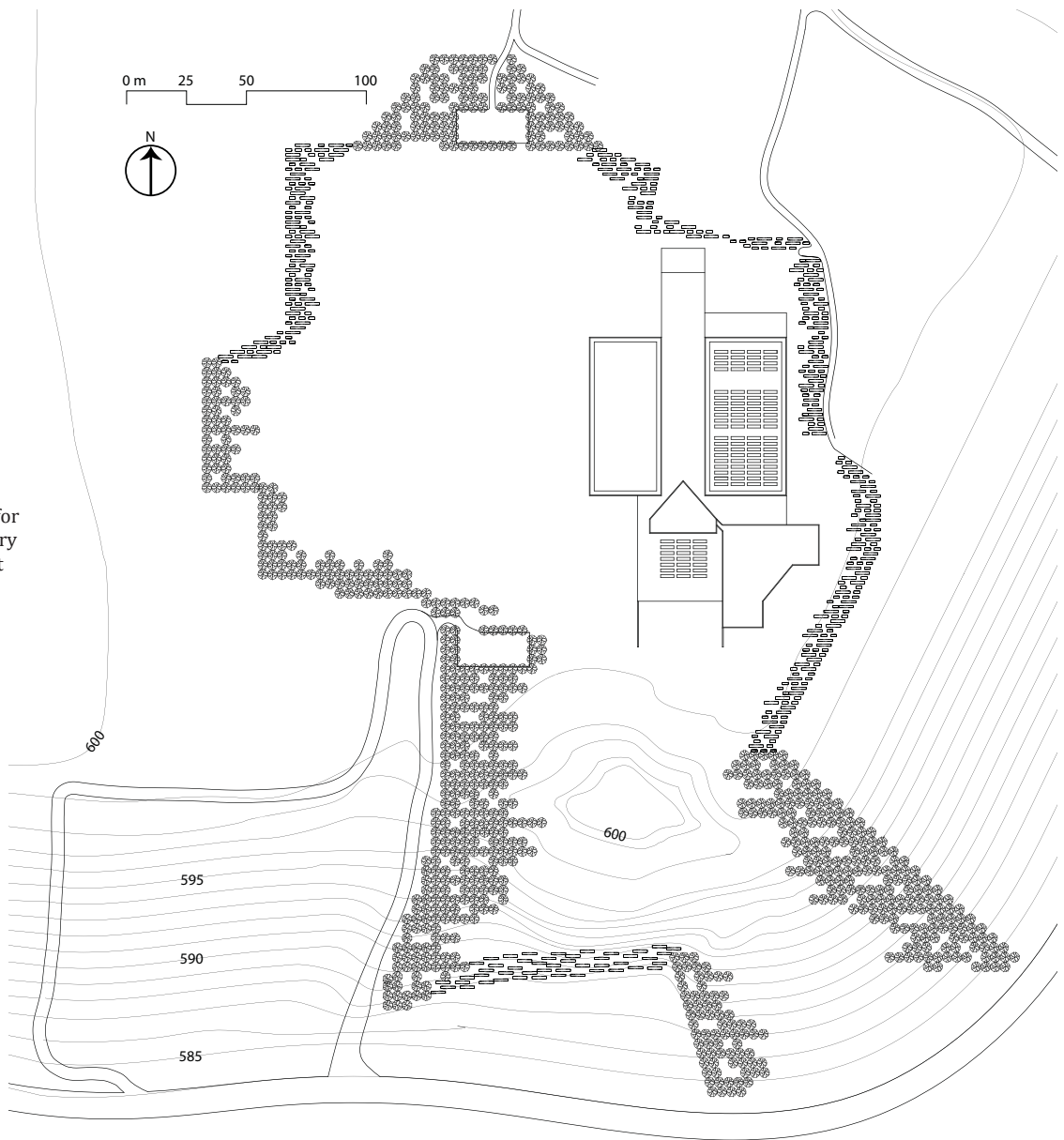
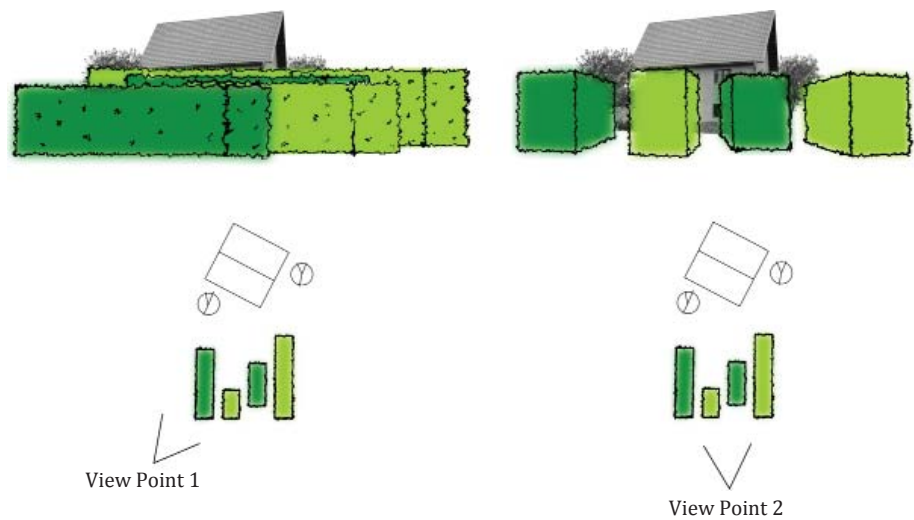


Figure 5.19
Conceptual
diagram for hedges
as a permeable
boundary.



Fruits, Berries, and Food For Free

The fruit varieties that will be grown in the Fruit Belt include varieties of apple, cherry, and plum trees, as well as hedges of blackberries and raspberries. These fruits and berries are commonly grown throughout the region and country, and used in a variety of traditional food and beverages, so varieties that are suited to the local climate and soils are readily available. This planting scheme can be developed over time, with a few hedges and trees planted each year. The trees and shrubs can all be sourced locally from suppliers such as H&H (Heko) Nursery in Bugojno, and other regional producers, and there is potential for the propagation of planting materials overtime from the previously developed areas of the Fruit Belt.

Where the garden plots are for the use of individual families, the fruit belt is a shared amenity available to all. As the design does has opted for not including fencing for separation of the the gardens and other elements of the landscape from the surrounding area, a pragmatic concern of the theft of produce from the garden plots may be offset with with availability this shared fruit.

5.7 Project Phasing

In implementing the five spatial elements of the design for the Blue Hospital, not everything is required to be built in its entirety at once. Each are large ideas that can be developed in segments, though there are important construction sequence that will need to be followed in phasing in the design.

The Community Garden and Garden Infrastructure

The first phase of construction will be to provide water access to the gardens. All other plumbing requirements such as for restroom facilities are to be completed concurrently. The garden plots can be constructed a few at time, as demand dictates.

The Ruin

The mushroom and greenhouse wards will be set up overtime as desired and required by the gardeners. Toolstorage, restrooms, and preparation areas will be constructed concurrently with the initial garden plots. The Blue Cascade ramp will be constructed concurrently with the expansion of programming in the lower levels of the hospital.

The Fruit Belt

The berry hedges and fruit trees of the Fruit Belt can be planted over several years, and eventually some of the trees and bushes can be propagated on site. The Fruit Belt planting should begin in the north portions of the site to provide the neighbouring properties with a transition zone from the new public space.

The Medicinal Meadow

Prior to seeding, a phase of plant selection and seed gathering will take place. Seeding of the Medicinal Meadow should begin in the north portion of the site to coincide with the garden plot construction.

The Paulownia tomentosa

Plantings will begin on the Paulownia Mound, and the interstitial spaces between the garden plots, as these locations will provide the most visual impact and functional benefits.

In many ways, phasing in the project is a conceptual reflection of how the site is used in an informal way at present: people decide how the site should function and occupy it. In this way, the design becomes a process of development, that will realize a full composition over time. This leaves the potential for new design directions discovered through the process of development by the people who will actually occupy the spaces.

Section 6:

Reflection and Summation

6 Reflection and Summation

Dixon (1997) states, “Ruins are incomplete architecture. In this respect, they can be compared to any incomplete work. Whether something is finished or is partly destroyed, or is purposely exhibiting qualities of either, it remains incomplete and conveys a certain vulnerability” (p. 26). This must be why they elicit such strong responses from people. Ideas about decay, morality, mortality, change - and often our resistance to it, - memory, fear, and nostalgia are all common reactions elicited by ruins, giving them a unique place in the discussion of landscape. Landscapes are discussed as being made up of layers to which meaning and value is assigned. The assigned meaning and value in turn defining the given landscape. Ruins seem to cut through all layers as measures of time on a variety of scales, as measures of environmental and ecological processes through decay and succession, and as measures of cultural and economic change. Perhaps in this way they are the best reflection of the times – they can represent nostalgia, and reflect what society rejects and how it changes. This is why the way in which ruins and ruinous sites are dealt with by landscape architecture is so important.

Limiting Factors

The greatest limitations to this process was accessing site maps and plans. Attempts were made to obtain relevant site and hospital plans through the city of Bugojno, but when inquiries were made, none were available for use. Drawings and design was therefore based on notes and observations from site visits in 2009 and 2011 and therefore are more conceptual than representing exact space. As such the design is meant to be represented and understood as a concept and character. For this project to progress a more detailed survey would be required to ensure that spatial concepts of the design could be accurately detailed.

Other limiting factors included the inability to monitor the deterioration of the ruin, and lack of community involvement in the conceptual development. Between the visits to Bugojno, the ruin changed dramatically, with one section previously observed, completely disappearing. This meant a change in approach where the types of spaces to be designed took precedent over designing specific spaces. The overall concept for the ruin became more like a menu, in which the spatial types and uses were explored, and presented to be chosen from, with the idea that their exact location would be determined by the community as the site was developed. This was a lesson in letting go of preconceived ideas and demonstrated the importance for the designer to be able to embrace uncertainty and change in the design. In this case, process became equally as important as an overall finalized design product.

If this project were to be realized, the inclusion of community input would be necessary for its successful design and implementation, but for the purposes of this practicum, it was decided that it would not be sought. As this project is an academic exercise, the decision was made to gain perspective on ruins in Bosnia from existing

general literature rather than seeking that from individuals in Bugojno. This was to avoid undue distress related to wartime memories that could potentially occur. As many ruins and landmarks were sites of violence within communities, it's hard to predict what discussions could be potential triggers. It should be noted no significant mention of the hospital ruin was found in any reports on the conflict that were found. In terms of design, the benefit of this course of action was that, it allowed for the pursuit of concepts based on physical, environmental, and atmospheric characteristics, and their associated experiences. In Dixon's view, "too much knowledge about a ruin's history, [...] adds implications, and removes mystery" (1997, p. 7). In this way, the outsider's perspective may in turn provide a new direction for discussing the Blue Hospital site's future.

With this in mind I think of the design of the Blue Hospital Landscape not as a design solution to be given over to the community for direct implementation, but as a piece of a dialogue. As an outsider, I come to the site without the long term connection or personal memories of its demise, and undoubtedly view the ruin with different eyes than a citizen who has lived with the hospital's presence over their city for years. I see it in the immediacy of an emotive response, and atmospheric qualities of the materials, the decay, and the environment in which it exists; it is the excitement of discovery, and the excitement of the unfamiliar other. Where I may see potential someone else sees an eyesore, a painful memory, or something that should be left as it is. This is why it is necessary to gain further understanding of as many viewpoints as possible to carry such a project further. The design concept put forward is meant to be an idea which a community can dissect, and take from what they want. By placing the site in the context of contemporary and historic works that involve ruins in the landscape, and an understanding of the potential benefits of landscape architecture and process to Bosnian communities gained through my experiences, I believe that this design response successfully contributes to a dialogue on community rebuilding. This design is merely one step in such a project - for any project of this nature to venture forward, community involvement is a necessity for a rich and viable outcome.

Bosnian Noble Prize winner and author Ivo Andrić described a village called Osatica, situated on a plateau surrounded by high karst peaks. Of the villagers he says, "both parties [Muslims and Christians] are right: those Osaticans who claim that their town is on a hill and those who say that it is in hole" (2009, p. 131). The divergence in how the villagers view their shared landscape is an important aspect of the discussion of all landscapes – they are defined constructed based on our backgrounds, culture, experience, perceptions and biases. This difference can both be a dividing mechanism that separates people, or an opportunity to see the world in new ways. The alternate reading of ruins in the landscape presented by the Blue Hospital Landscape design is intended to provide a common ground which supports community and inclusive, engaging public space through landscape processes.

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Figures 1.26, 1.27, 1.28, 1.29 Adapted from: Bk-map.png Bosnian and Herzegovina map from CIA Fact book

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