

ABSTRACT

Title: RECONNECTING CASTELLAMARE DI STABIA WITH ITS AMENITIES.

Sofya Smolyar, Master of Architecture, 2005

Directed By: Professor Roger Lewis, FAIA, School of Architecture, Planning, & Preservation

The city of Castellamare di Stabia is a stunningly beautiful town on the Bay of Naples with many opportunities for making it into a real pearl, like Pompei and Herculaneum. It has many assets, from the bay and the mountains to the amazing archeological park of Roman villas and a beautiful complex of thermal spas. Yet the town is not making the best of its abundant amenities.

The main vehicular entrance point into the city is located in a gorge between two hills – one the archeological park, the other the Thermal Spa, facing the sea on the north. Today it is a chaotic intersection with no identity as the entrance into the city or recognition of the park and spa.

The main goal of this thesis is reconnecting the city with its amenities and making the entrance to the city a gateway, that would make visitors immediately aware of the treasures of this town, currently hidden and almost unreachable. As part of the project, I am proposing the placement of a Welcome Center/Archeological Museum on the site, possibly on the place of a currently deteriorated sports center..

RECONNECTING CASTELLAMARE DI STABIA WITH ITS AMENITIES.

By

Sofya Smolyar

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Advisory Committee:
Professor Roger Lewis, Chair
Assoc. Professor Matthew Bell
Assoc. Dean Steven Sachs
Professor Lindley Vann
Architect Leonardo Varrone

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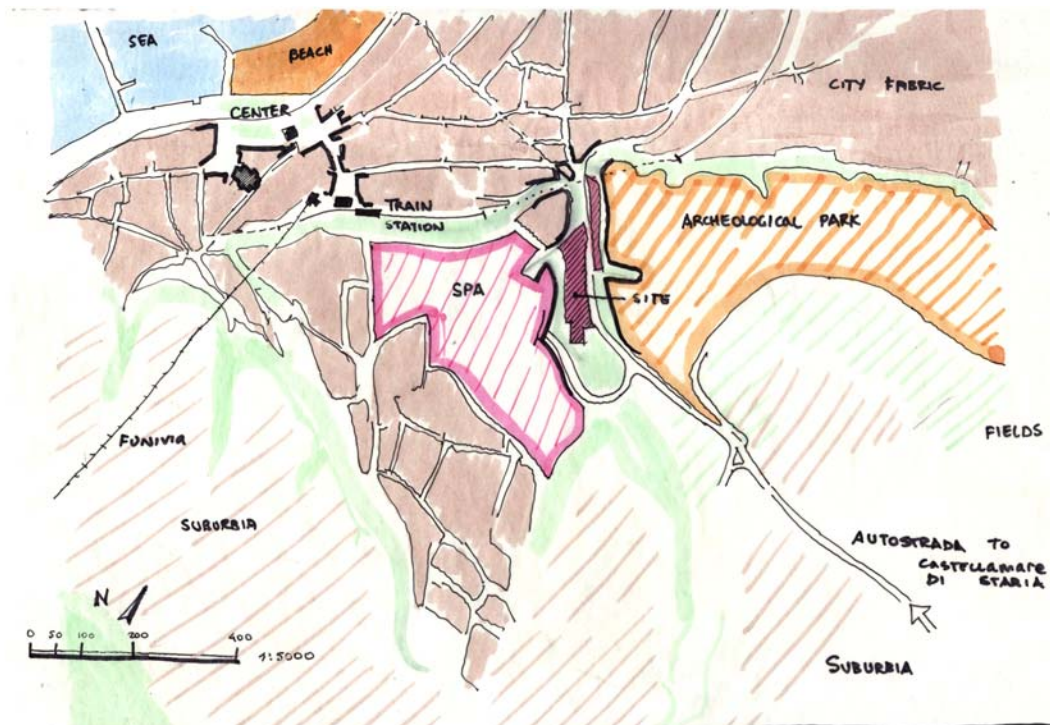
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Chapter 1: Thesis Research Data and Analysis

Site Analysis

Location and landscape characteristics of the site



Creating a gateway to Castellamare di Stabia. Context diagram. Location of the site

ill. 3 Note that the site is located between the two big amenities of city – the Spa and the Archeological park – at the entry point into the city

The main part of Castellamare di Stabia lies in a plain facing the Bay of Naples. A bluff about 30 meters high surrounds this plain. This is the bell'ètagè of Castellamare, a step of a large, low plateau between the sea and the mountains. The site is located in a ravine of a bluff. The bluff on the west of the site is occupied by the thermal spa, on the east by the archeological park. (ill. 3) The central part of the site is mainly flat, sloping slightly towards the sea. The east and west parts are very steep hill slopes, 25 to 30 meters high, covered with wild vegetation. (ill. 4, 5)



Site slope diagrams

ill.4



ill.5

The site is located at the main vehicular entry point into the city. The road that goes through the site is actually the exit off the regional highway that runs along the coastline on the bluff and connects all the towns and villages of the province of Campania. At the end of the ravine the road branches into three major city streets. That point is currently a very problematic intersection. It may be compared to a narrow bottleneck, constantly creating traffic jams and dangerous situations. (ill. 6)



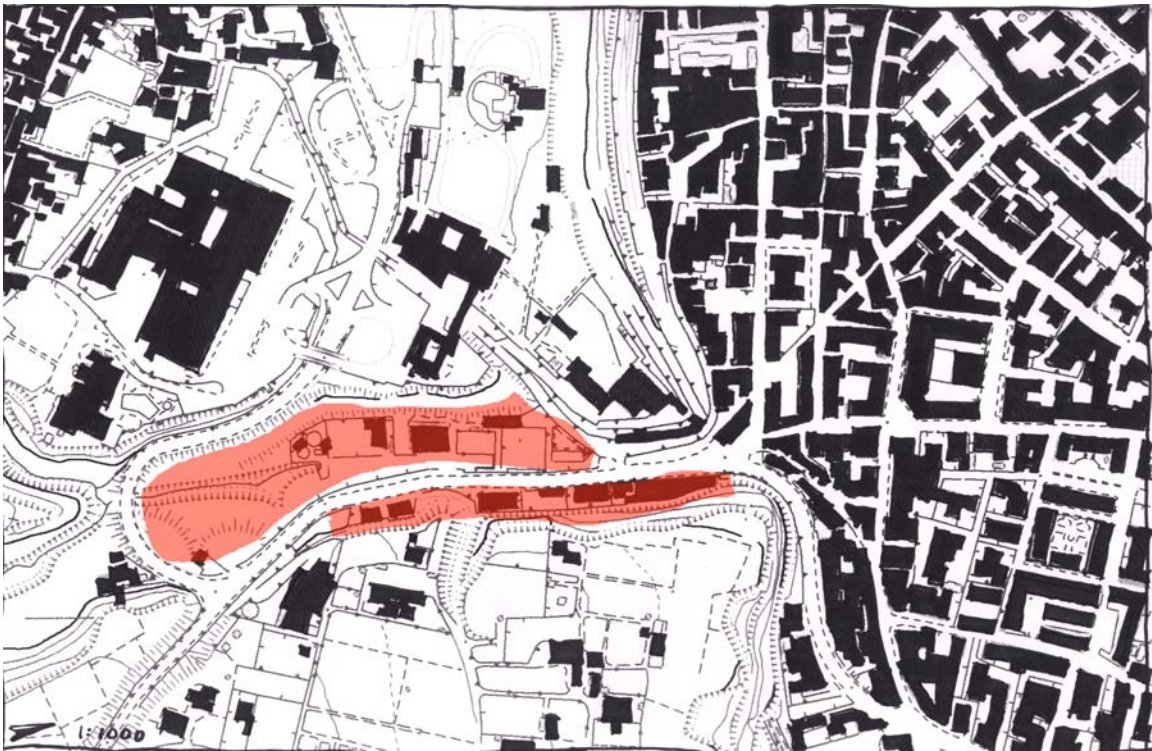
Historic context of the site

The site faces the newest part of the city, built mainly in the 1960s and 1970s. On the west side of site, however, is a private villa complex dating from 1812. It is located on top of the bluff and has a very beautiful, fortress-like appearance. A sports complex built in the late 1970's, which is basically a large asphalted area with a tent structure in the middle, currently occupies the central part of the site. The east side of the site at the foot of the bluff is occupied by two 6-story apartment buildings, both built in the 1970's, some warehouses from the 1980's and one structure dating back to the 19th century. The top of the east bluff is occupied mainly by light service structures of the Archeological Park, mostly from the 1980's and 1990's. This part is separated from the main site by a highway. This could be an opportunity for bridging between the two parts of the site, creating a literal gateway into the city. (ill. 7)

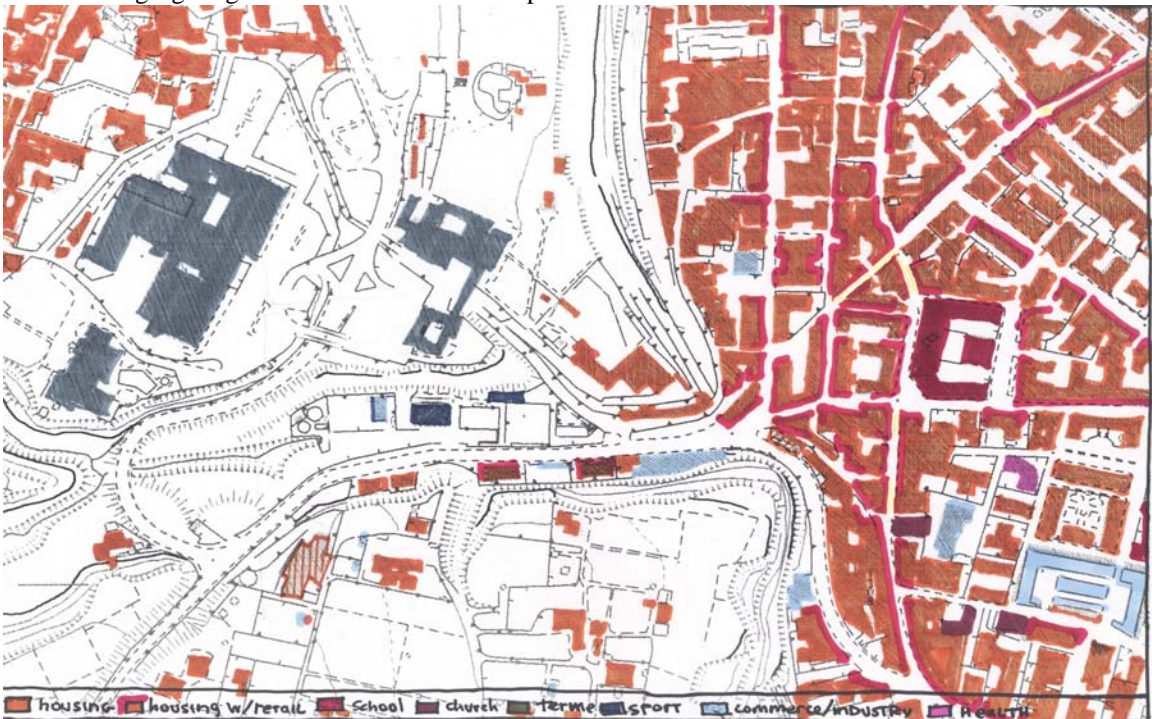
ill. 7 Diagram of the historic context



Current land use patterns and figure ground condition



ill. 8 Existing figure ground. Red color indicates potential site



Creating a gateway to Castellamare di Stabia. Landuse diagram. Existing condition

ill.9 Note that the site is located at the threshold between dense residential area and rural condition of the bluff. Buildings that are currently on the site are a deteriorated sports complex, two warehouses and two 6-story apartment buildings

Graphic documentation on the site



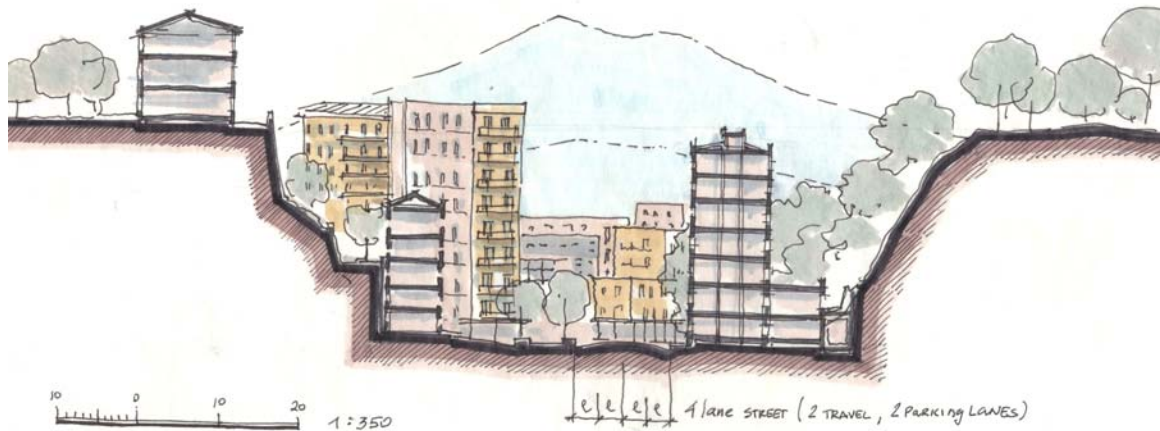
Creating a gateway to Castellamare di Stabia. Axonometric view of the site. Existing condition

ill. 10



Creating a gateway to Castellamare di Stabia. Plan view of the site. Existing condition

ill. 11



Creating a gateway to Castellamare di Stabia. North Section near the site. Existing condition
ill.12



Creating a gateway to Castellamare di Stabia. North Section thru the site. Existing condition.

Creating a gateway to Castellammare di Stabia. West section thru the site. Existing condition

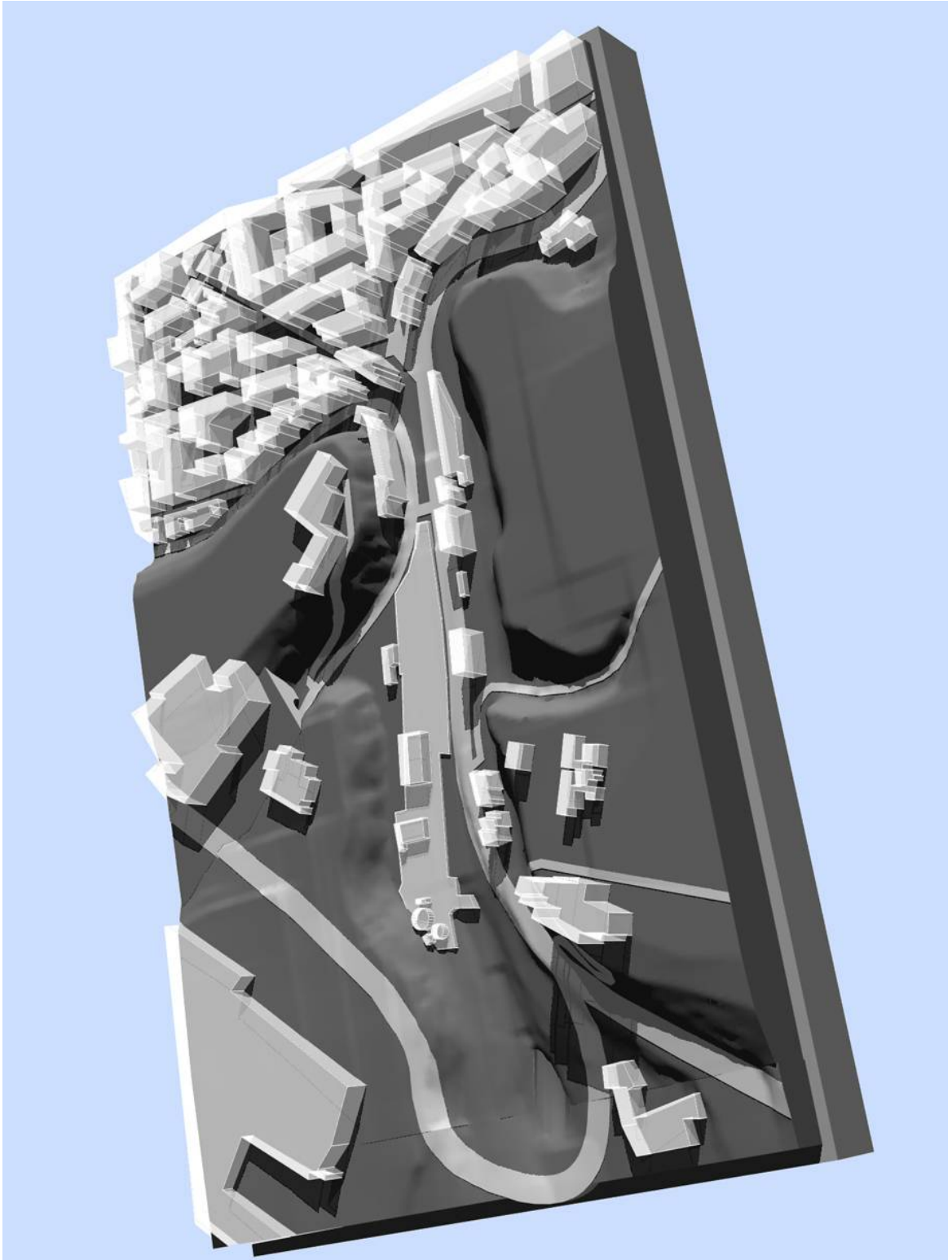


ill.13

Creating a gateway to Castellammare di Stabia. East section thru the site. Existing condition



ill.14



ill. 15 Existing condition. Digital model of the site, ill. 16 section thru the site

Density and edge condition study

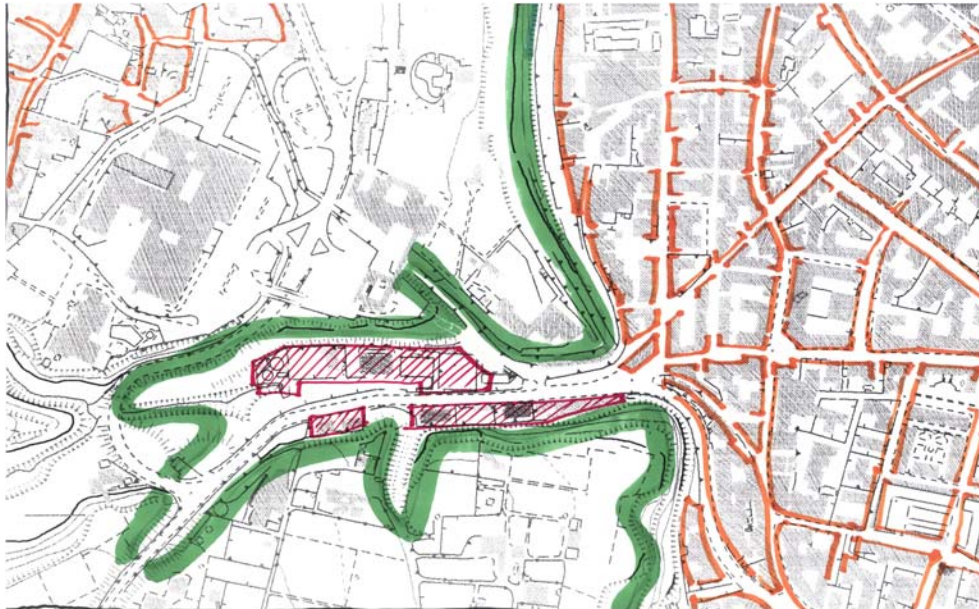
The site is located at the threshold between two distinct realities:

- Dense urban condition and rural condition
- Plain and bluff
- A meeting point of urban and natural edge



Creating a gateway to Castellamare di Stabia. Density diagram. Existing condition

ill. 17 The site is located at the threshold condition of an entry point into the city, between the dense urban and rural conditions

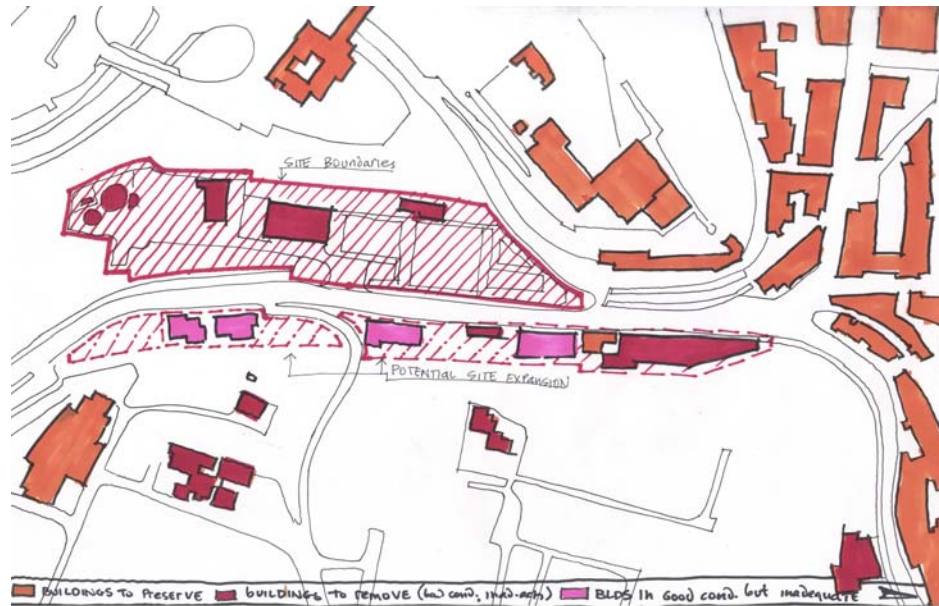


Creating a gateway to Castellamare di Stabia. Meeting point of urban and natural edge

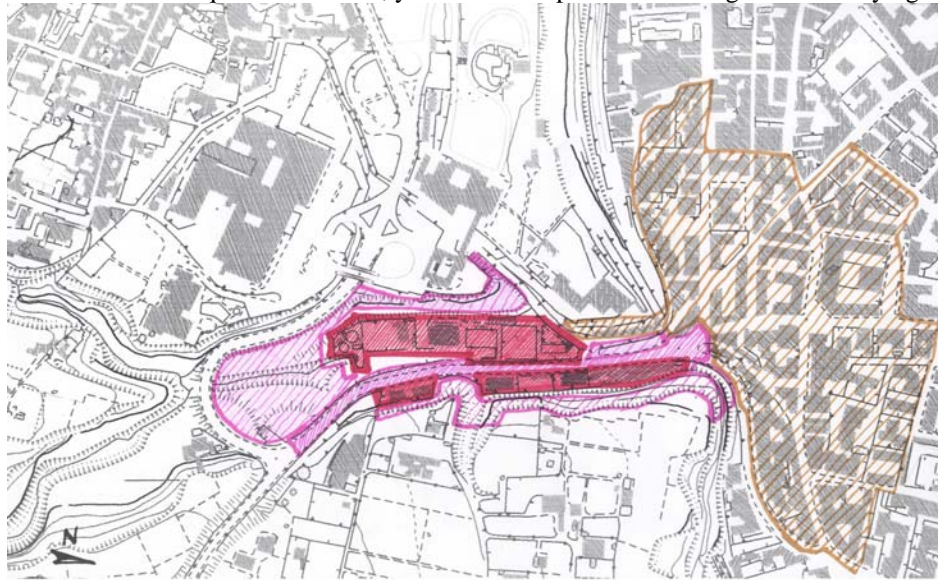
ill. 18 At the meeting point of urban and natural edge, the site is located in a ravine between the bluff and the plain

Defining the site boundaries

Following diagrams illustrate hard and soft boundaries of the site, areas that are influenced by the site and buildings to preserve or to remove (based on their quality and historic significance).



Creating a gateway to Castellamare di Stabia. Buildings quality / site boundaries diagram
ill. 19 Red color indicates buildings to be removed, pink color – buildings in fair condition but inadequate for the site, yellow color represents buildings that are staying



Creating a gateway to Castellamare di Stabia. Hard site, soft site boundaries, areas of influence
ill. 20 The hard boundaries of the site are shown in red, the immediately adjacent areas that will be developed into parks are shown in purple. The city fabric that will be affected by the vicinity of the site is shown in yellow

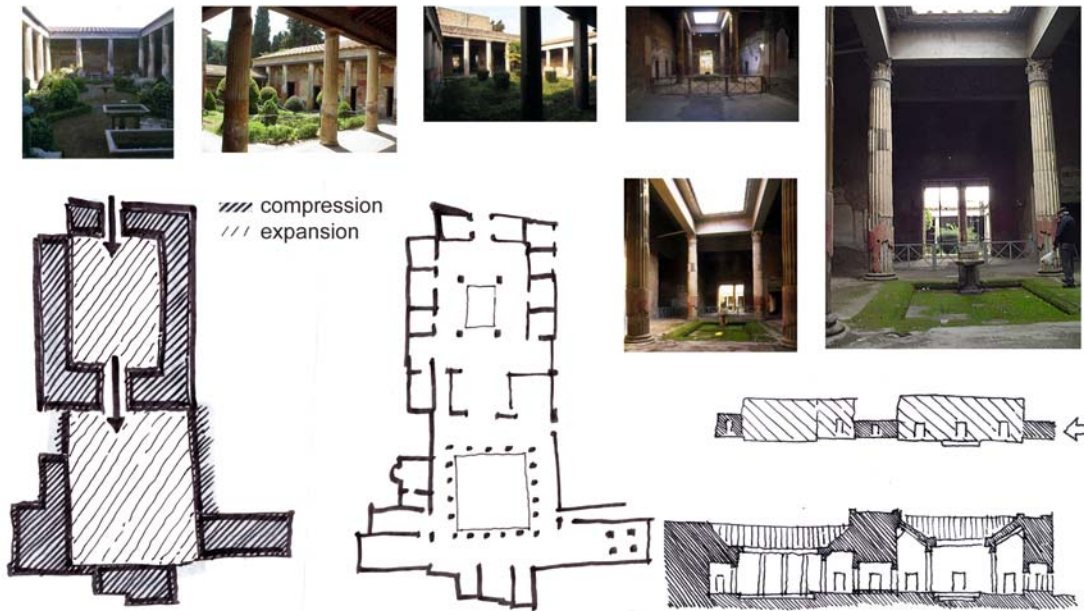
Chapter 2: Precedent Analysis

Pompeii. 79 AD. Villa Nozze D'Argento

Axial Procession, Compression vs Expansion, Culture of Atrium and Peristyle, Structural system

Villa di Nozze d'Argento represents the cultural heritage of ancient Roman architecture typical of this region of Italy. It introduces a notion of axial procession via experience of compression and expansion, sequences of small, narrow, shady corridors and enfilades followed by large open atriums and peristyles. This is an important feature in local Italian architecture, extremely pertinent climatically and culturally. Most importantly the notion of movement and procession towards a goal is the key element in a design of a Gateway Complex into the city.

Interestingly enough, this ancient example provides us with a structural system that is most adequate and economical for this region: it combines the use of masonry concrete structure for walls and wood frame for roofs and light partitions.



Castellamare di Stabia. Precedent Study, Villa di Nozze d'Argento. Pompei
Cultural continuum. Copression and expansion. Procession

Sonia Smoliar

ill. 21 ¹

Glencoe Welcome Center, Highlands of Scotland

Axial Procession, Covered Walkway/Spine, Programmatic Organization, Use of Wooden Spine as a Connector between the Elements

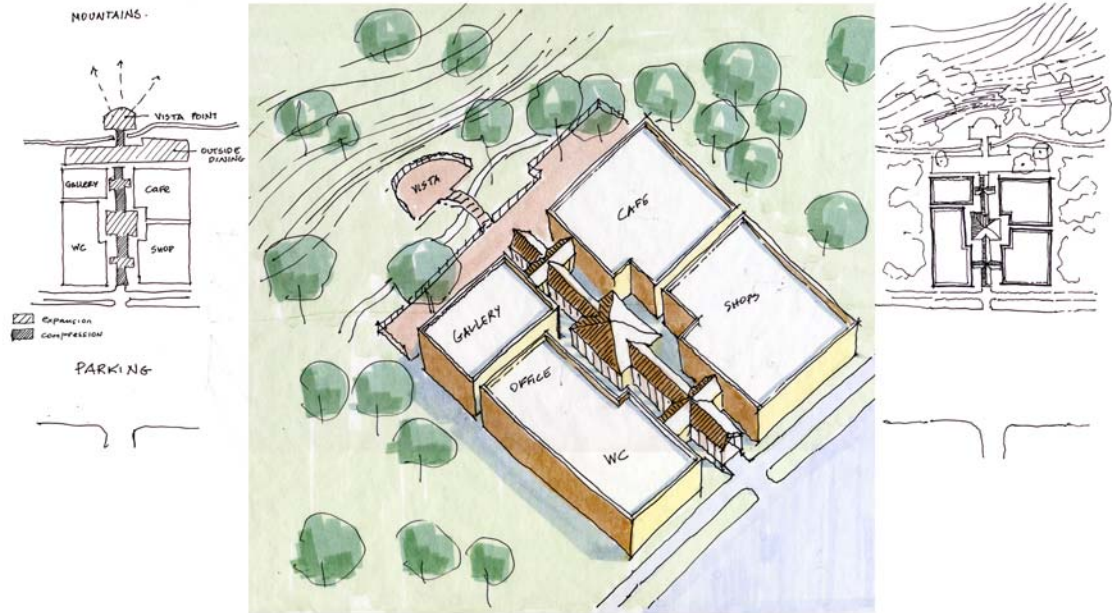
Glencoe Welcome Center is characterized by the same notion of axial procession toward a certain goal. In this case the goal is a spectacular viewpoint of the Glencoe Mountain. Spatial organization follows the same principle of compression and expansion. The main walkway between the elements of the center widens in the center, narrows and then opens into the open terrace overlooking the mountain. Programmatic elements of the center are:

- Gift shop
- Art Gallery
- Café/Restaurant
- Considerable number of toilets
- Service space

¹ Diagrams by Sofya Smolyar ©, photos from website www.archart.it ©

All elements are organized along the central spine of the covered wooden structure of the walkway.

III.22



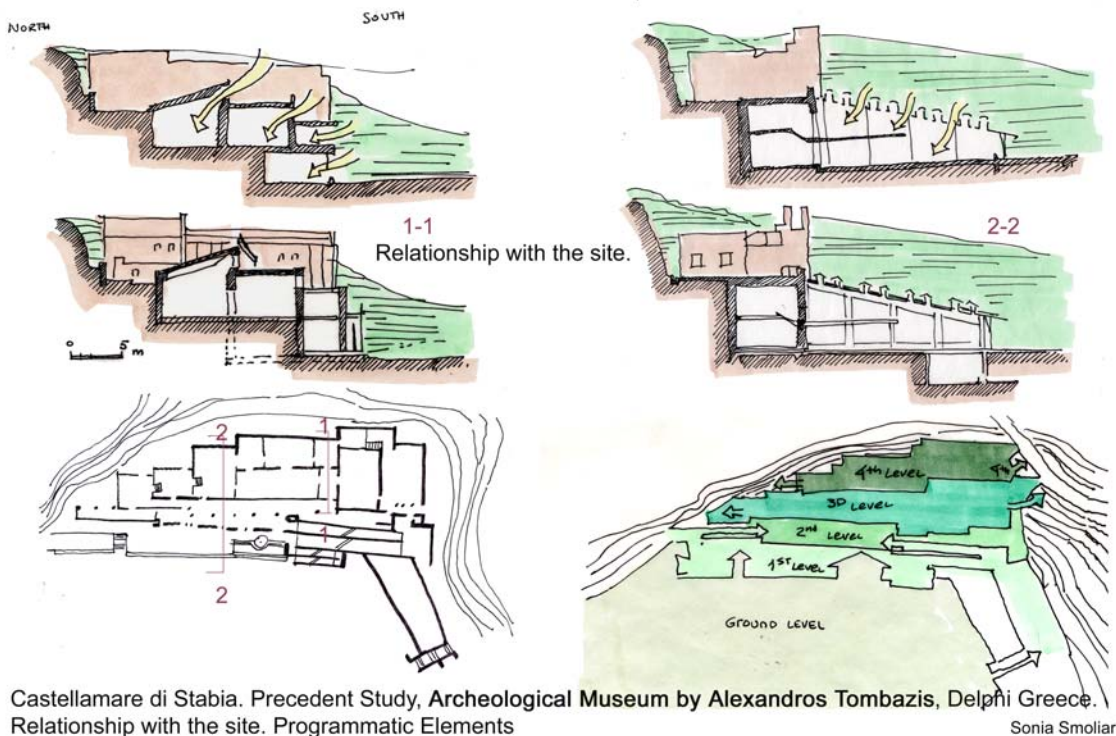
Castellamare di Stabia. Precedent Study, **Glencoe Visitor's Center, Scotland**,
Notion of Axial Procession to Vista Point. Programmatic Elements

Sonia Smoliar

Delphi Archeological Museum, Greece, by Alexandros Tombazis

Relationship With Landscape, Solar Orientation, Structural System, Programmatic Organization

The Delphi Archeological Museum is an elegant, stepped structure on the slope of a hill. Each level of the building has open terraces and ramps connecting it to the slope, thus creating an active interaction with the landscape. The museum is located on the south-facing slope. It is making the best use of natural lighting thru a combination of light wells, sloped glass roofs and shading devices.



ill.23²

² Diagrams by Sofya Smolyar© based on plans and sections from “Less is Beautiful”© by Alexandros Tombazis, pages 57-59

Main programmatic elements are:

Open public entrance space

Inside lobby

Exhibition space, organized as a series of ascending levels

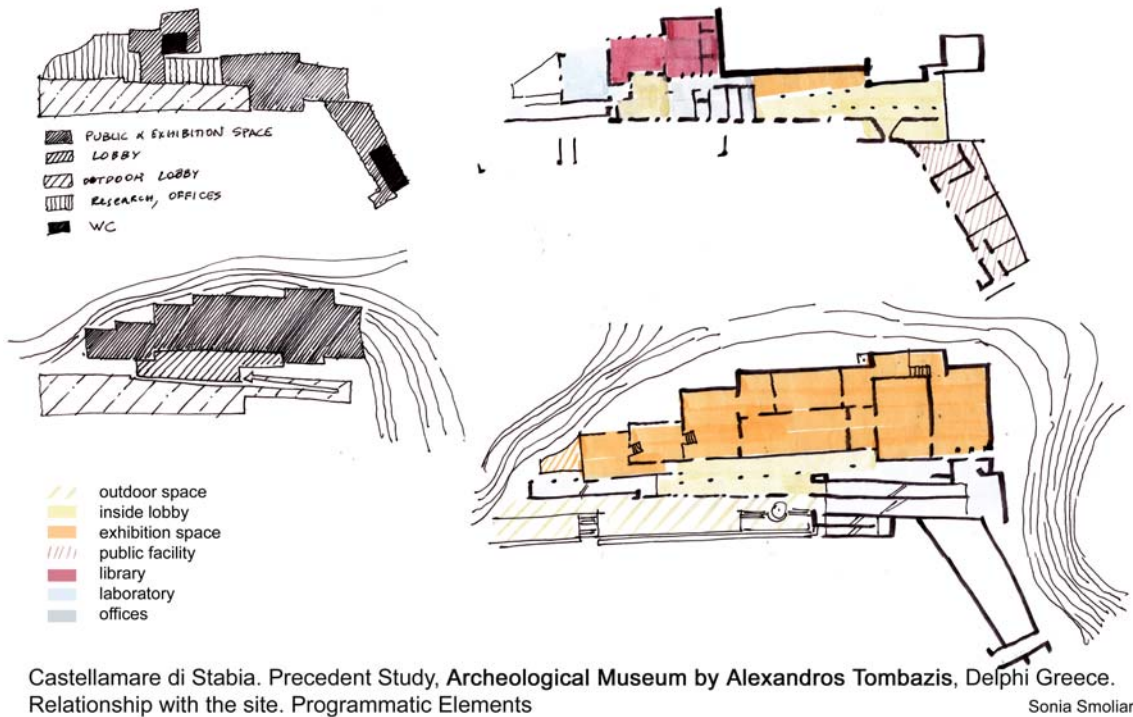
Library

WCs

Laboratory

Offices

The structural system of masonry bearing walls with light wooden structural elements is similar to systems related to climatic and resource conditions found in Castellamare, also a Mediterranean region



ill. 24³

Rock Art Center, Deer Valley, Phoenix, Arizona by William Bruder

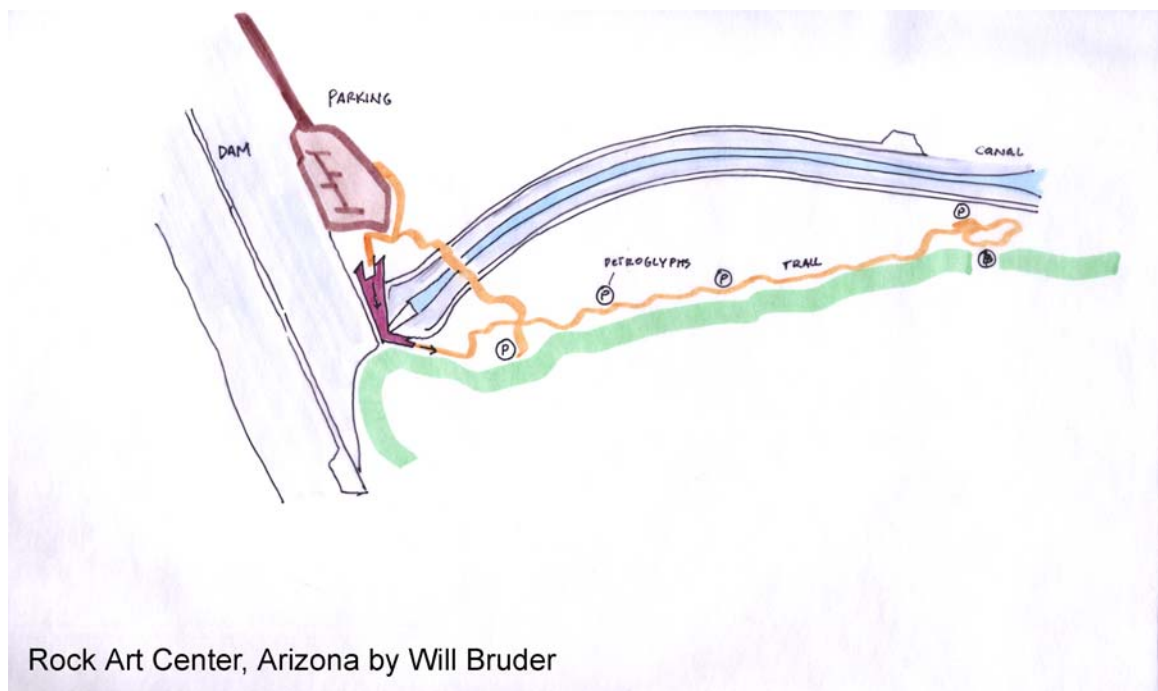
Relationship With the Site, Programmatic Organization, Formal Architectural Language

The Rock Art Center is a visitor and research center of the petroglyphs made by the ancient people in the Arizona desert. The tiny building of the center is strongly connected to its site. Its longitudinal form, geometry, structure and programmatic elements are driven by the presence of a huge dam built in the 1980s that runs right by the site, and the excavated rocks with petroglyphs were found during construction of the dam.

³ Ibid.

The language Bruder uses is laconic yet very telling of the ugly scar of the dam in the desert land. The building curves so as to enclose the rock paintings and protect them from vandalism. The reflective fluid interiors of the building resemble the water running thru the dam. The materials of the center “tell stories about Arizona” as Barbara Lanprecht points out in her article published in Architectural Review 6’96.⁴

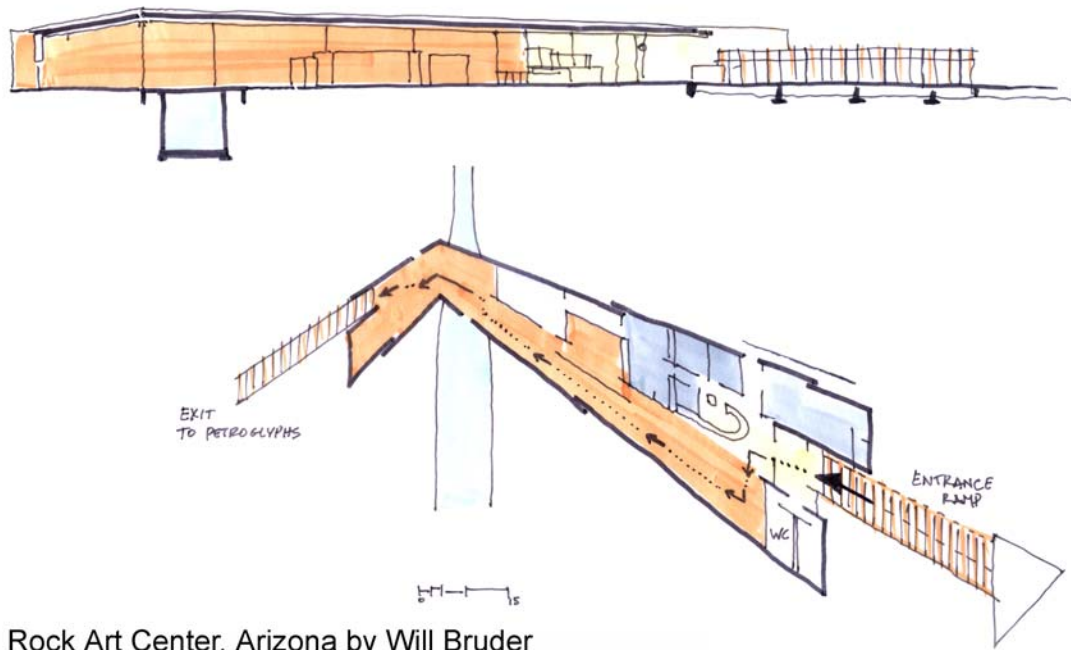
This approach strives to embrace the problems of the site and modify them for the good instead of turning away from them. It is very appropriate and adequate for Castellamare, with all its multiple problems and yet with all the infinite possibilities and beauty that lies within the site.



ill. 25 Site plan⁵

⁴ Architectural Review 06’1996, pages 78 - 79

⁵ Diagrams by Sofya Smolyar© based on the plans and sections from Architectural Review 06’96



Rock Art Center, Arizona by Will Bruder
 ill.26. Section and plan⁶

⁶ Ibid.

Triton Hotel, Sri Lanka, by Geoffrey Bawa
Orchestrated Procession towards Water, Use of Local Materials, Self Sustaining Principle

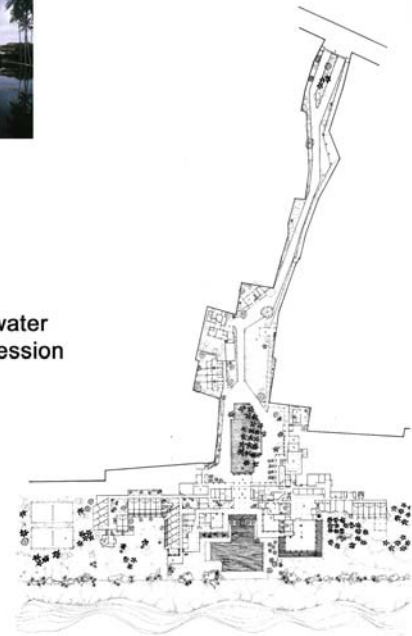
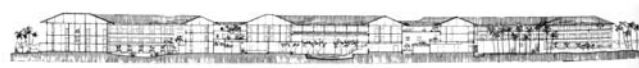
The Triton Hotel is an outstanding example of an orchestrated procession towards water. Beautifully arranged inner and outer pools bring about the anticipation of encountering the ocean. When on axis, one gets an impression of a continuous body of water that starts with the inner pool, goes on to the shining stone floor of the lobby and then extends into the outer pool and ultimately into the ocean.

The water theme is very important as an element of the Gateway Complex to Castellamare di Stabia. The site faces the bay hidden behind the city fabric. Thus the theme of accessing the water is very important though allegorical. The complex can potentially become a model representing in a way the entire city.

The Triton Hotel also represents use of local materials and structural system suited to climatic and natural conditions. Through sensitive, intelligent design, Bawa made his building completely self-sustaining. The hotel is not dependent on air conditioning and is also very economical through use of local materials, building traditions and environmental control systems that work extremely well with the local setting. This principle is one of the goals for the Castellamare Gateway Center.



Relationship with water
Orchestrated Procession
towards the Sea



Castellamare di Stabia. Precedent Study, Triton Hotel by Geoffrey Bawa, Sri Lanka

Sonia Smoliar

ill. 27⁷

⁷ Illustrations from "Geoffrey Bawa. The Complete Works" © by David Robson. Pages 164 - 167

Nariwa Museum, Okayama, Japan, by Tadao Ando
Landscape and Water Theme, Formal Architectural Language

The Nariwa Museum is found in a location very similar to Castellamare. It is placed in a Valley surrounded by low mountains. An important part of the museum's conceptual organization is the relationship between water, landscape and the simple and elegant language of architectural form.



Relationship with Water
Formal Architectural Language
Simplicity and Poetry of Space
Location of the Site in a Valley

Castellamare di Stabia. Precedent Study, Nariwa Museum by Tadao Ando, Okayama, Japan

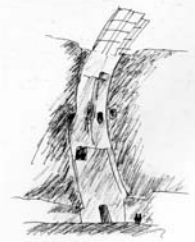
Sonia Smoliar

ill. 28⁸

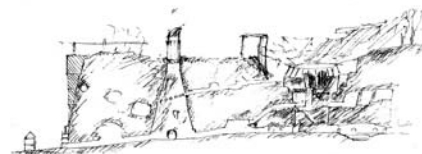
⁸ Illustrations from "Museum Architecture" by Justin Henderson, chapter "The poetry of empty space"
p.164 - 165

Guggenheim Museum, Salzburg, Austria, by Hans Hollein
Placement of the Museum in a Gorge, Inner Courtyard

The Guggenheim Museum in Salzburg is located in a gorge very similar to the ravine in Castellamare. Hill slopes on three sides surround it! The museum structure creates an inner courtyard that resembles a well with fortress walls. This feature has a striking similarity to the fortress walls of the private, 19th century villa on the Castellamare site. This can produce an interesting cultural connection between the new center and the existing villa.



Relationship with the Site
Building in a Gorge



Castellamare di Stabia. Precedent Study, Guggenheim Museum by Hans Hollein, Salzburg, Austria Sonia Smoliar

ill. 29⁹

⁹ Illustrations from "Museum Builders" by James Steele, page 95

Diamond Ranch High School by MorphOsis, Venice Biennale 2004

Relationship With The Site, Formal Architectural Language

The Diamond Ranch High School project is interesting for the relationship that it establishes between the building and the site. Distinction between buildings and the landscape is blurred. The design aims to transcend the traditional figure/ground relationship of a passive site and an active building by introducing a strategy of manipulated landscape, as structure and ground become progressively interchangeable.

Formal language used by Morphosis is highly dynamic, a quality necessary to reflect the energies of movement thru the future welcome center to the city.



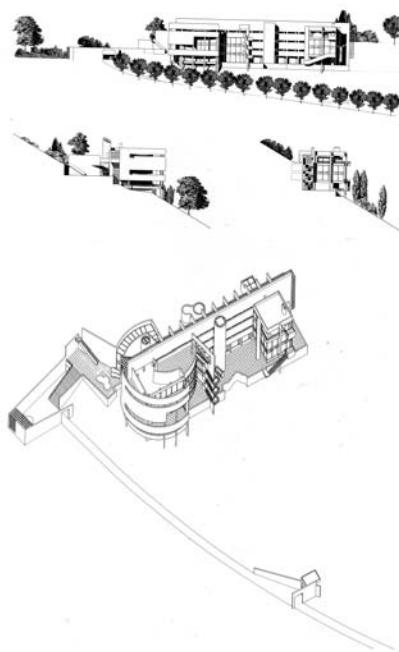
ill. 30¹⁰

¹⁰ Illustrations from website <http://archinect.com/gallery/thumbnails.php?album=22>

Arp Museum by Richard Meier, Rolandwerth, Germany
Signature Architecture

The Arp Museum is one of many masterpieces created by one of the great architects of our time, Richard Meier. It is a perfect example of signature architecture, a building that proclaims “I am Meier’s work!”

The museum is located on the slope of a hill, and it blends beautifully with the natural landscape. It demonstrates how working with the site can become a subtle feature when the overall design goal is to create a building using the formal language of a master architect.



Relationship with the Slope
Formal Architectural Language

Castellamare di Stabia. Precedent Study, Arp Museum by Richard Meier, Rolandwerth, Germany Sonia Smoliar
ill. 31¹¹

¹¹ “Museum Builders” by James Steele, page 135

Getty Center, Los Angeles, by Richard Meier
Formal Language, Materials, Orchestration of Exterior Space, Vistas

The Getty center is located in climatic conditions very similar to Castellamare. It is a beautiful example of how architecture interacts with nature, heat, sun and amazingly blue skies thru combinations of form, materials and exterior and landscape design.

A theme in use of materials is the combination of natural stone, ceramic tile, blue glass, and white crisp tiles balanced by the warm surfaces of stonewalls and accentuated by glass surfaces, whose color recalls blue lakes.

Formal elements, such as trellised overhangs, balconies, ramps and walkways, create visual excitement for visitors and museum workers walking around the center.

The center creates extremely attractive public gathering spaces, such as the main museum courtyard, thru a combination of water, vegetation, sculpture and architecture. A prominent feature of the entire design is splendid views, a natural gift of this site on the hilltop.



Castellamare di Stabia. Precedent Study, Getty Center by Richard Meier.,
Formal Architectural Language: Modern Form with respect to local context, culture, materials

Sonia Smoliar

ill. 32¹²

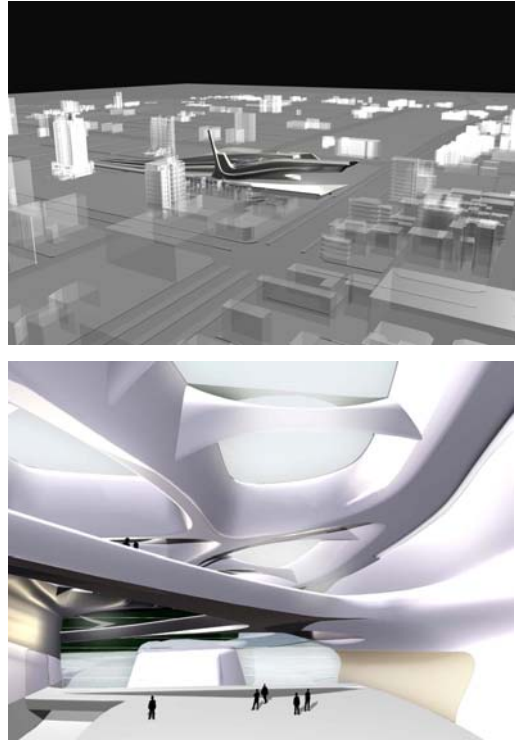
¹² Illustrations from the website <http://academic.reed.edu/getty>

Guggenheim Museum in Taichung, Taiwan, by Zaha Hadid, Venice Biennale 2004
Reflection of an Urban Setting, Notion of Movement, a Gateway

The building serves as a gateway to downtown Taichung. The overall dynamism and fluidity of the elongated form suggest an emphasis of movement through and around the building, a feature that is very important to the design idea of a gateway in general, and to Castellamare center in particular.

The 50-meter overhang of the main entrance of Hadid's museum provides an unusual spatial experience for visitors.

Internal organization of the building is motivated by the urban configuration of the city and follows the initial move thru the building to the city center. III. 33¹³



¹³ Venice Biennale 2004 featured on website: <http://archinect.com/gallery/thumbnails.php?album=22>

Sage Gateshead by Sir Norman Foster, Venice Biennale 2004
Creating a Landmark, Architecture of a Bridge

The music complex by Sir Norman Foster creates a landmark on Tyneside, as part of the gentrification and regeneration project of the river frontage.

A beautifully arched pedestrian bridge is part of the design. It can serve as a precedent for Castellamare's project, where a pedestrian bridge would connect the Spa Hill and the Roman Villas Hill. There is also a possibility for connecting the two sides of the autostrada on the site proper, in which case some form of a pedestrian bridge would be employed as well.

The formal language that Foster uses for both the building and the bridge is very dynamic, elegant and compelling.



III. 34¹⁴

¹⁴ Venice Biennale 2004 featured on website: <http://archinect.com/gallery/thumbnails.php?album=22>

Chapter 3: Design Approach

Design Goals

- Create a gateway to Castellamare di Stabia (ill 34)
- Make visitors aware of the city's amenities (ill 39-40) thru
 - Welcome center
 - Archeological museum
 - City museum
 - Volcanology Science center

Architecture

- Orchestrate architecturally, urbanistically and through landscape design the transition and the threshold “bridging” condition between two realities: urban and suburban; valley / bluff; ancient and modern

Land use

- Create a coherent complex that is a continuation of the city and results in a wholesome, exciting experience

Connections

- Improve traffic patterns
- Turn the road into a boulevard
- Resolve the difficult intersection at the entrance into the city

Sustainability

- Maximize tree cover/ minimize building coverage
- Maximize pervious surfaces
- Implement grey water treatment
- Use solar arrays for energy accumulation

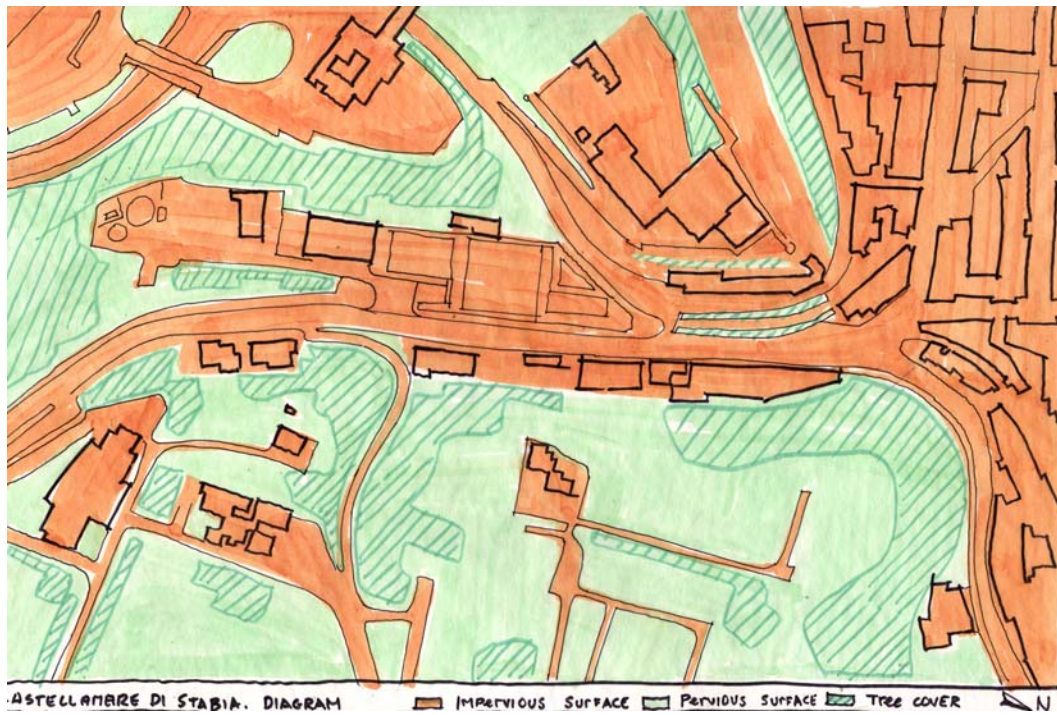
Problems and issues

City scale

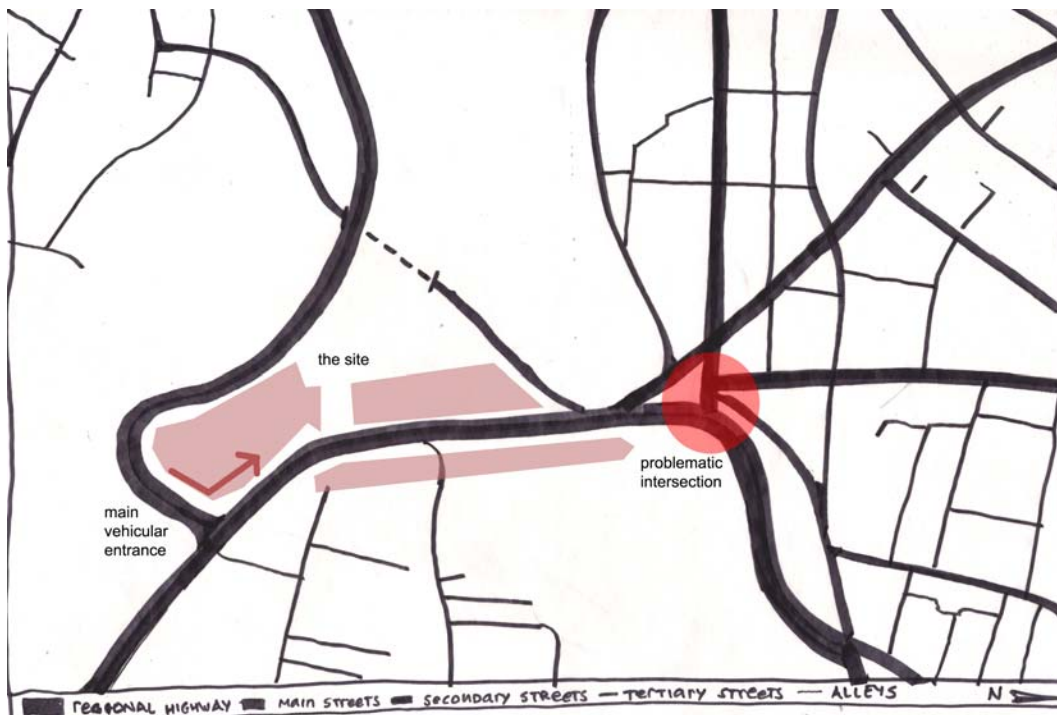
- Abundance of amenities with no good use
- Great architecture in terrible condition (ill 36)
- Spa in bad condition
- Archeological park with no tourists
- Funicular road (ill 34)
- Traffic problems (ill 38)
- Poor pedestrian network (ill 38)

Site scale

- Disconnectedness from the city
- Inappropriate architecture for a threshold condition – where the plain and city becomes suburban bluff (ill 36)
- No sidewalks (ill 36)
- Mostly impervious surfaces (ill 37)
- No awareness of Spa and Archeological park (ill 36)
- Bad traffic conditions at the entrance into the city (ill 38)



ill. 38 Pervious and impervious surfaces



ill. 39 Street networks

Program proposal (ill 40, 41)

Archeological museum (east hillside):

• Lobby	60 m2
• Gift shop	50 m2
• Exposition	600 m2
• Auditorium	300 m2
• Conference room	150 m2
• Laboratory	200 m2
• Reading room	100 m2
• WC	20 m2
• Café	200 m2
• Offices, administration	90 m2
• Service parking	20 spaces (600 m2)
Total:	2166 m2

Welcome Center / Museum of the City (central site):

• Entry court	300 m2
• Café	100 m2
• Gift shop	50 m2
• Exhibition – 4 galleries	1000 m2
• Meeting/ presentation center	200 m2
• Pool Courtyard	500 m2
• WC	40 m2
	100 m2

- Offices 20 spaces (600 m2)
- Service parking 2917 m2

Total:

Hotel / Bed and Breakfast (existing villa northwest hillside):

- Rooms (100 rooms) @ 20m2 2000 m2
- Services 400 m2
- Lobby 50 m2
- WC 30 m2
- Dining area/café 150 m2
- Hall for special events 200 m2
- Meeting room 100 m2
- Small backyards 300 m2
- Service parking 20 spaces
(600 m2)

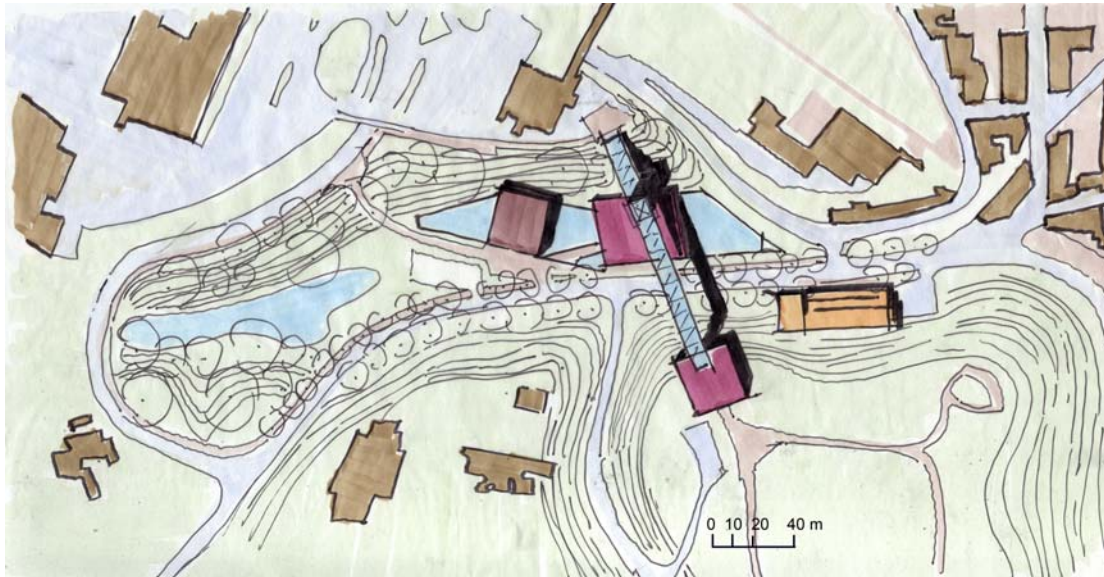
Total: 4109 m2

Volcanology Science Center

- Laboratories 350 m2
- Library 50 m2
- Exhibition space 100 m2
- Gift shop 100 m2
- Conference room 50 m2
- 300 m2

• Science theatre auditorium	40 m2
• Offices and administration	20 m2
• WCs	20 spaces (600m2)
• Service parking	1208 m2
Total:	

Example of program distribution is shown in the two following drawings that illustrate one of the parts that will be discussed fully in the next chapter.



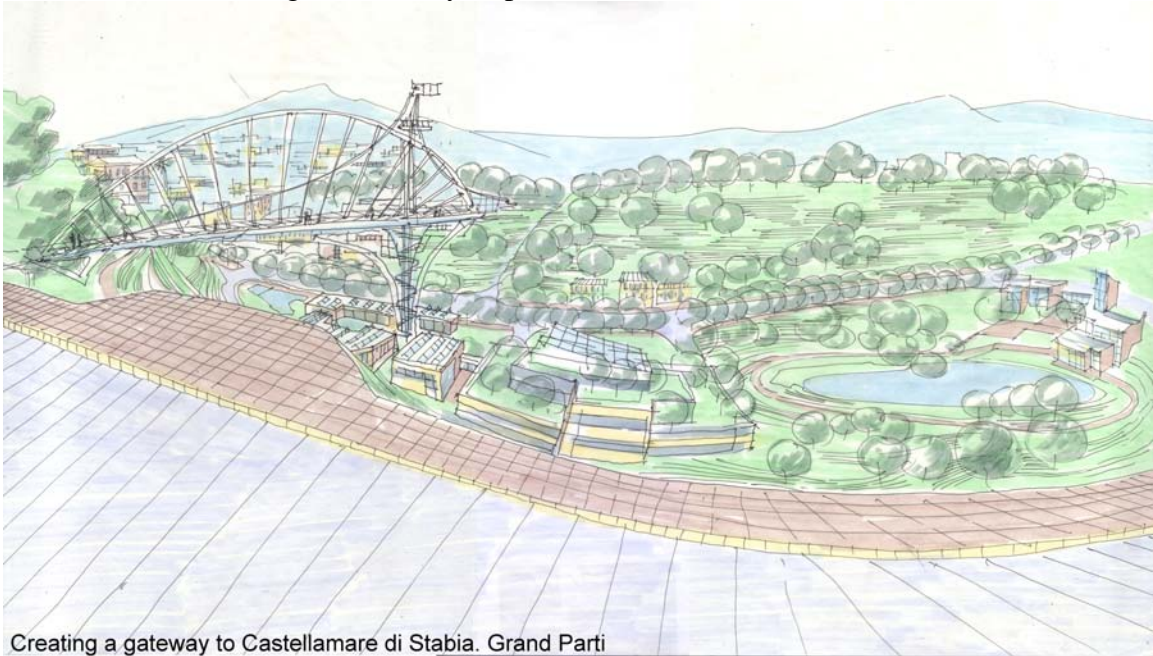
ill. 40 Site plan. Boxes Strategy



ill. 41 Plan Boxes Strategy

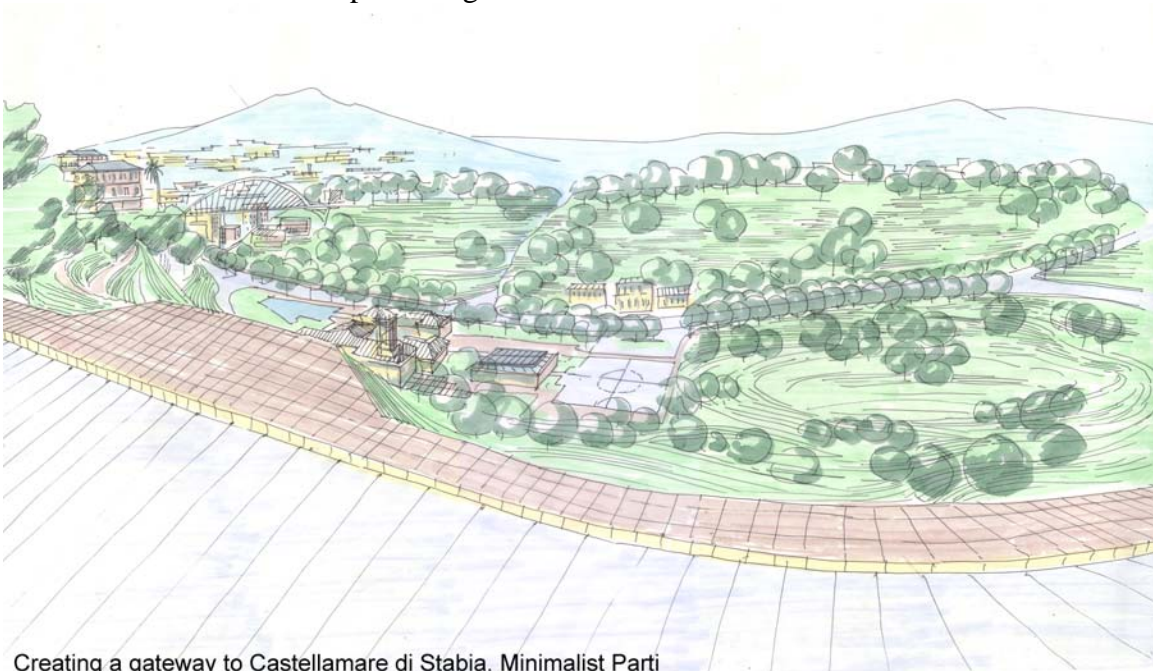
Design strategies. Alternative Parti Analysis Part I

Grand design – diversity of possible land uses



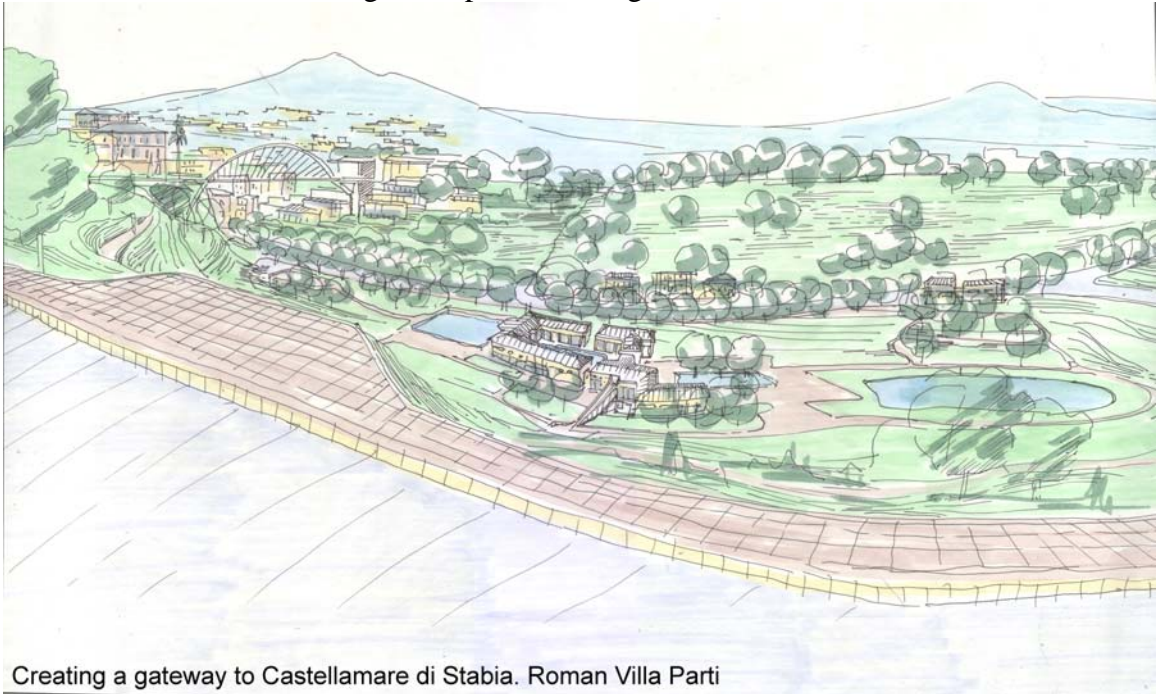
Creating a gateway to Castellamare di Stabia. Grand Parti
ill. 42

Minimalist compact design – “castle” solution



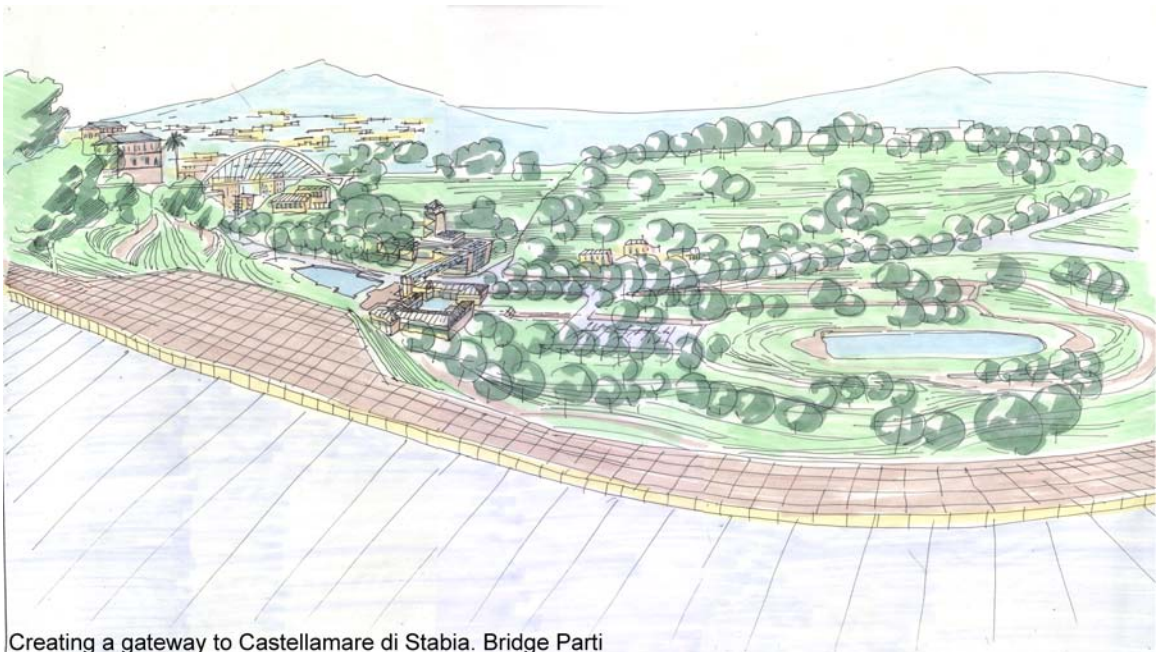
Creating a gateway to Castellamare di Stabia. Minimalist Parti
ill. 43

Roman villa design – dispersed “village solution



ill. 44

Bridge-museum design – connecting welcome center and archeological
museum across the road

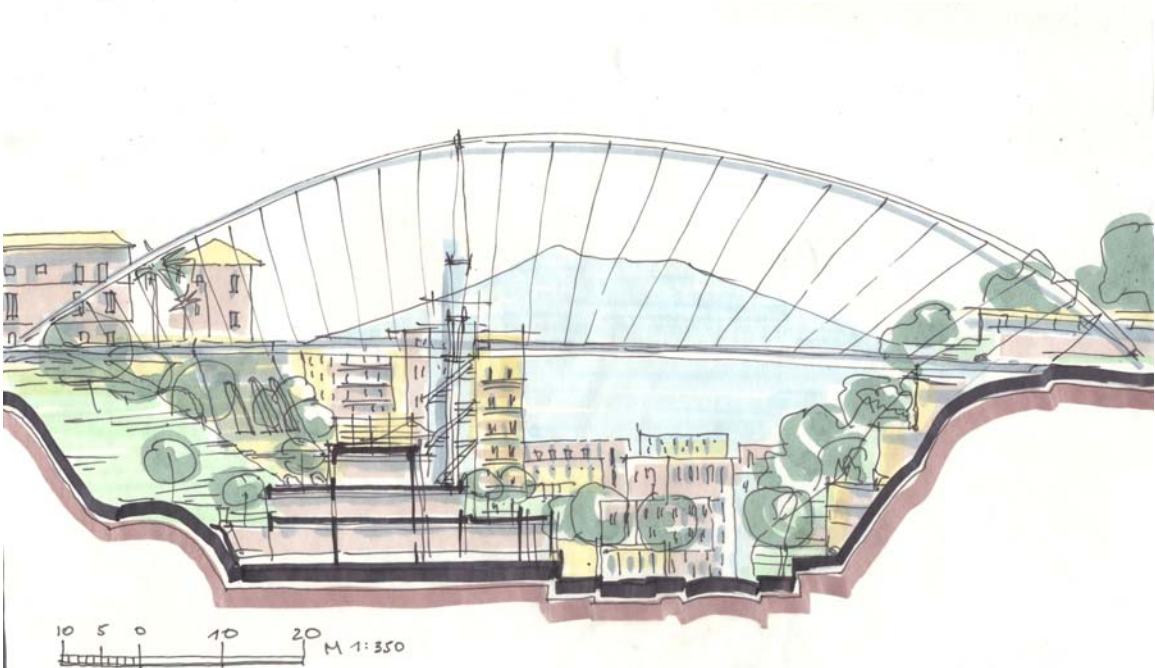


ill.45

Grand Parti



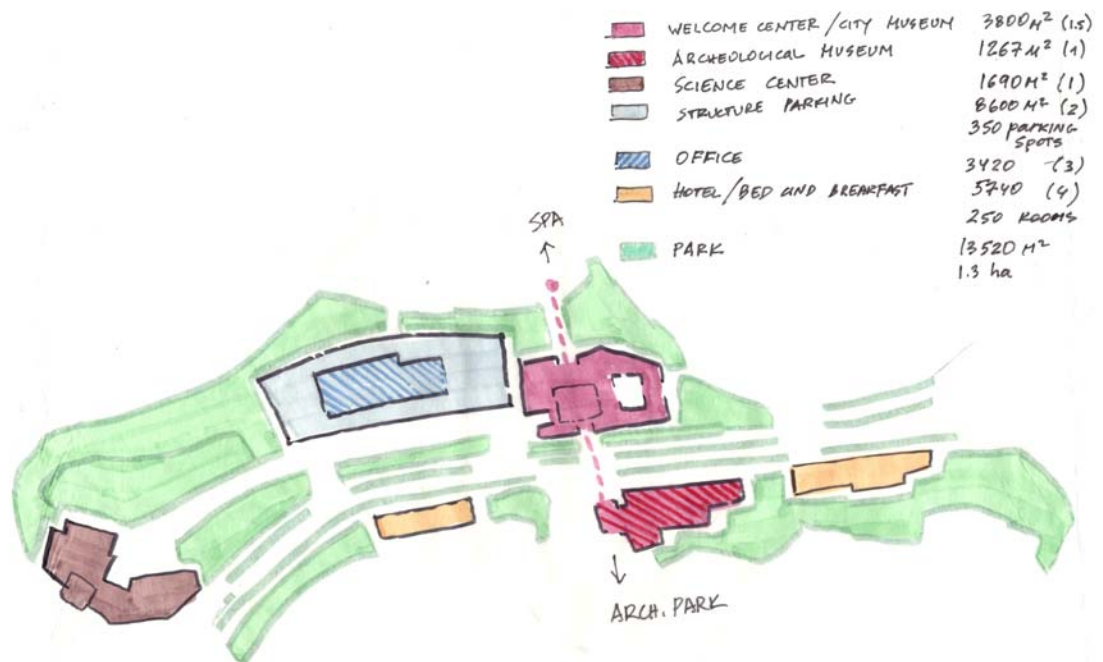
Creating a gateway to Castellamare di Stabia. Plan view of the site. Grand Parti



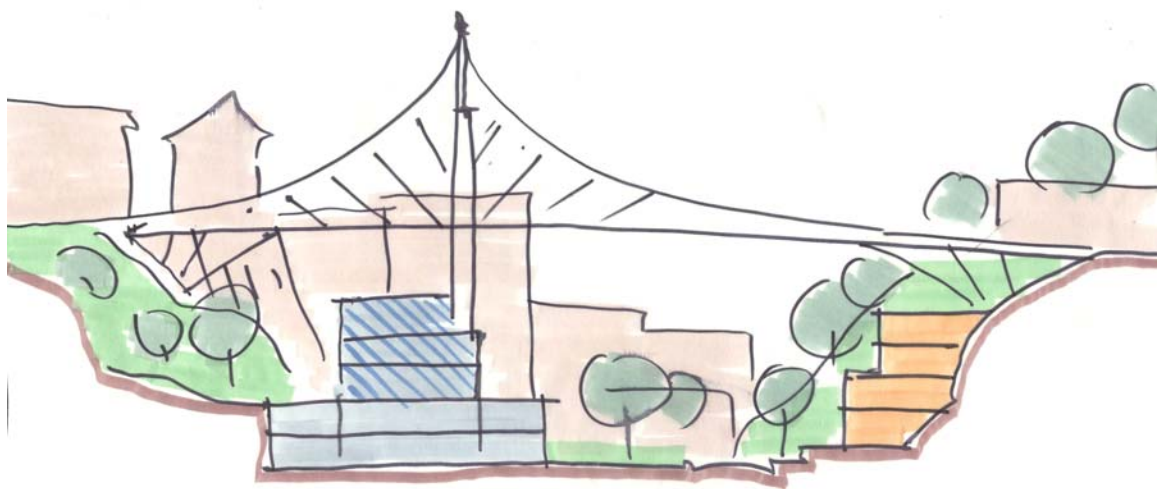
Creating a gateway to Castellamare di Stabia. Section thru the site. Grand Parti

ill. 46, 47

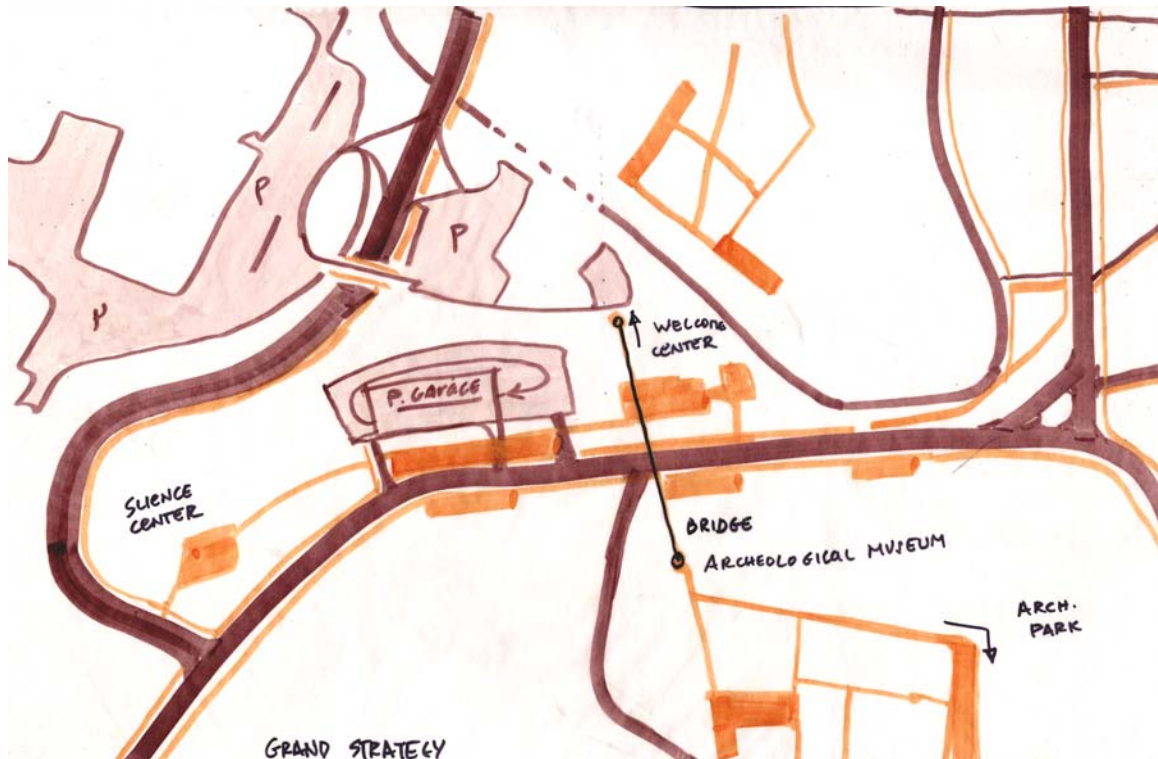
Grand parti represents an idea of employing maximum possibilities that the site can offer. This solution places a welcome center, archeological museum, science center for volcanic studies, a parking garage and an office building, and two hotels. A big bridge connects the two bluffs and welcome center with archeological museum



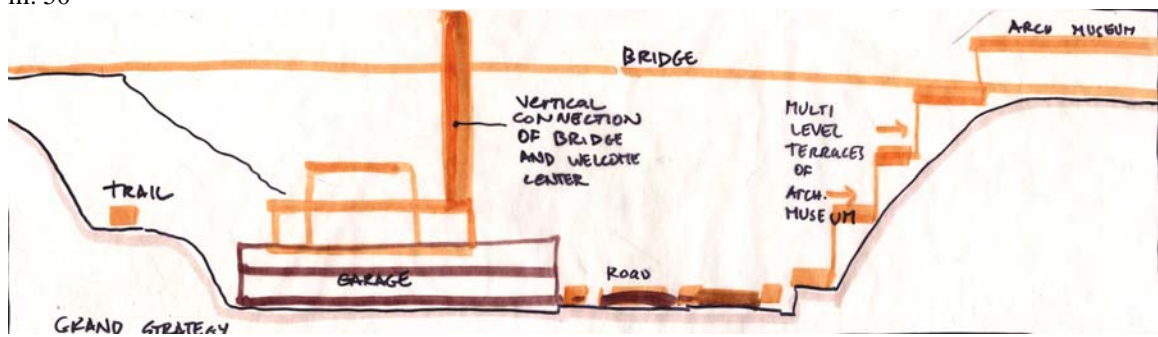
Creating a gateway to Castellamare di Stabia. Grand parti



Creating a gateway to Castellamare di Stabia. Section thru the site. Grand Parti Diagram
ill. 48, 49



ill. 50



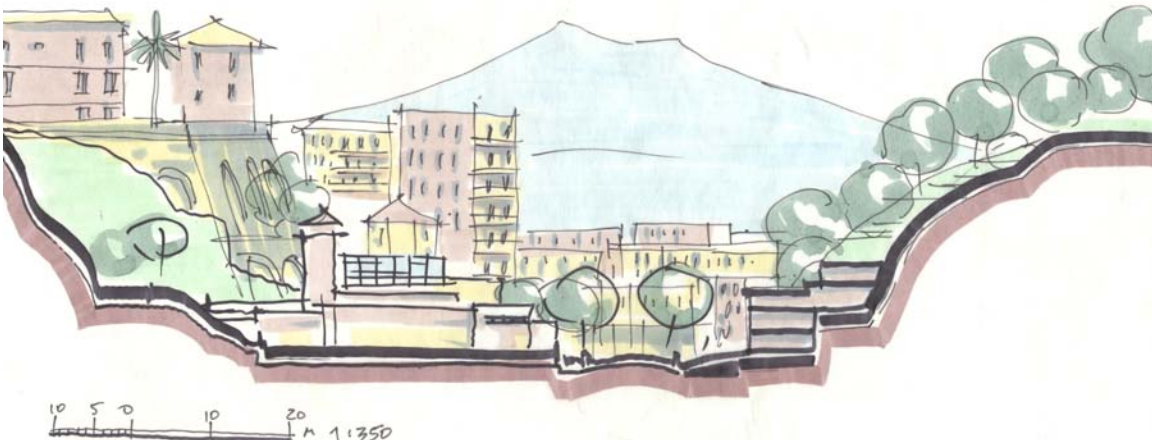
ill. 51

These diagrams show traffic and pedestrian patterns for Grand Parti

Minimalist Parti



Creating a gateway to Castellamare di Stabia. Plan view of the site. Minimalist parti

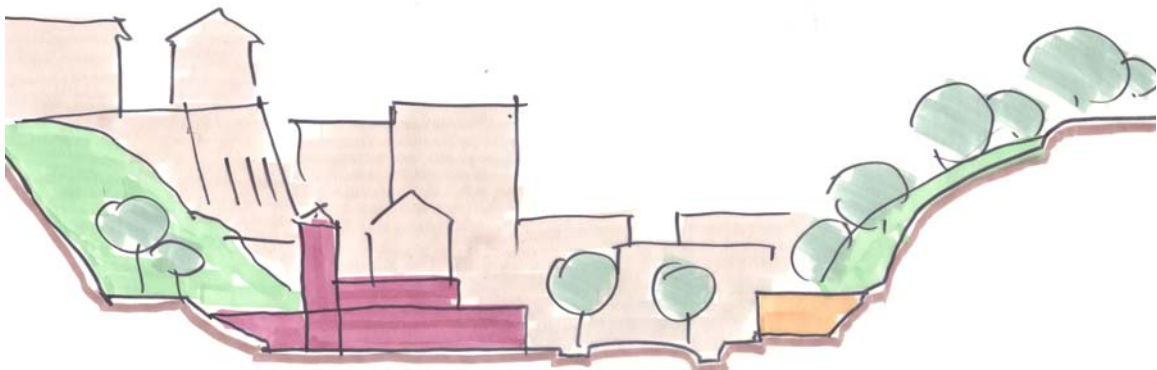


Creating a gateway to Castellamare di Stabia. Section thru the site. Minimalist Parti
ill. 52. 53

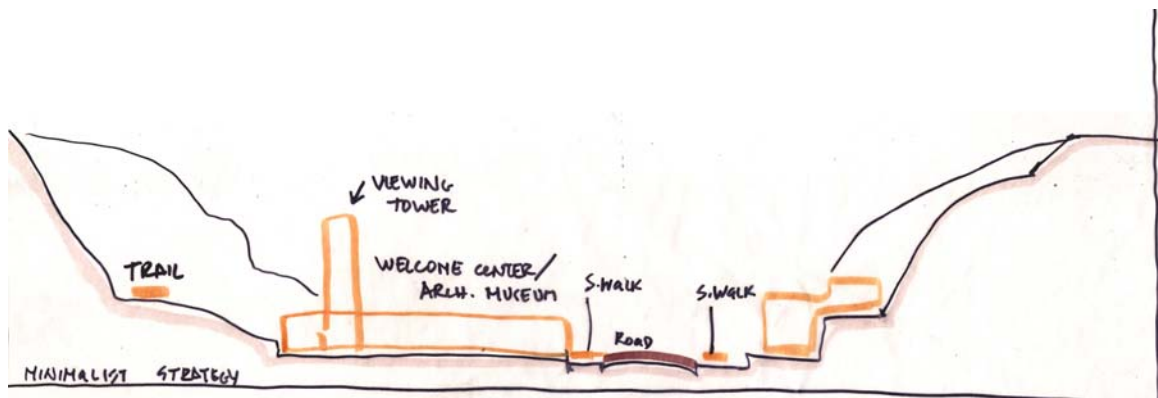
Minimalist Parti aims at minimizing building coverage of the site and narrows the program. This solution places a welcome center, archeological museum, science center for volcanic studies and two hotels.



Creating a gateway to Castellamare di Stabia. Minimalist parti



Creating a gateway to Castellamare di Stabia. Section thru the site. Minimalist Parti Diagram
ill. 54, 55



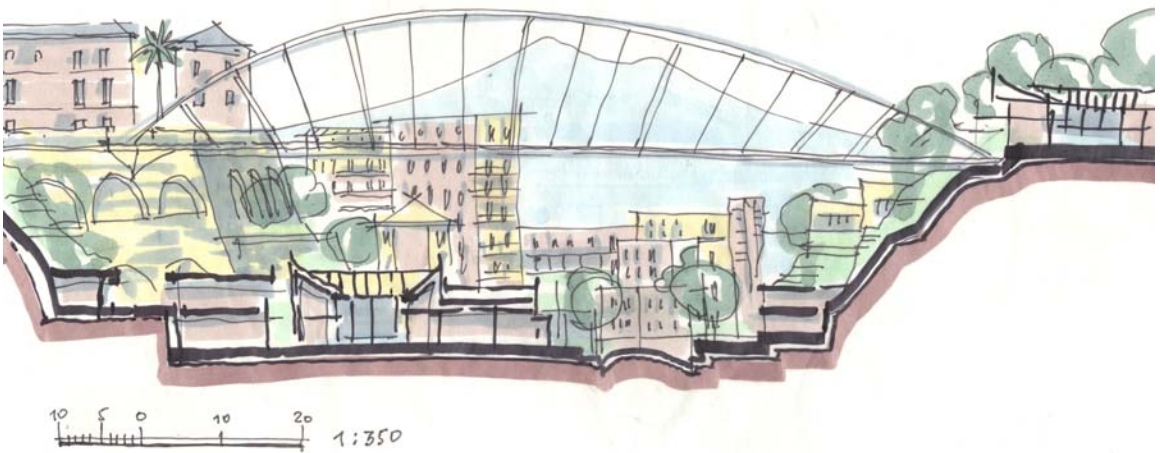
ill. 56, 57

These diagrams show traffic and pedestrian patterns for Minimalist Parti

Roman Villa Parti

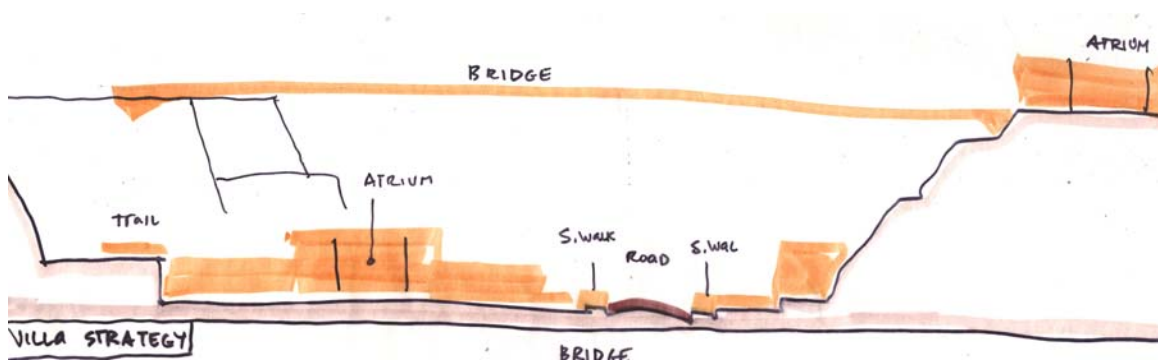


Creating a gateway to Castellamare di Stabia. Plan view. Roman Villa Parti



Creating a gateway to Castellamare di Stabia. Section thru the site. Roman Villa Parti
ill. 58, 59

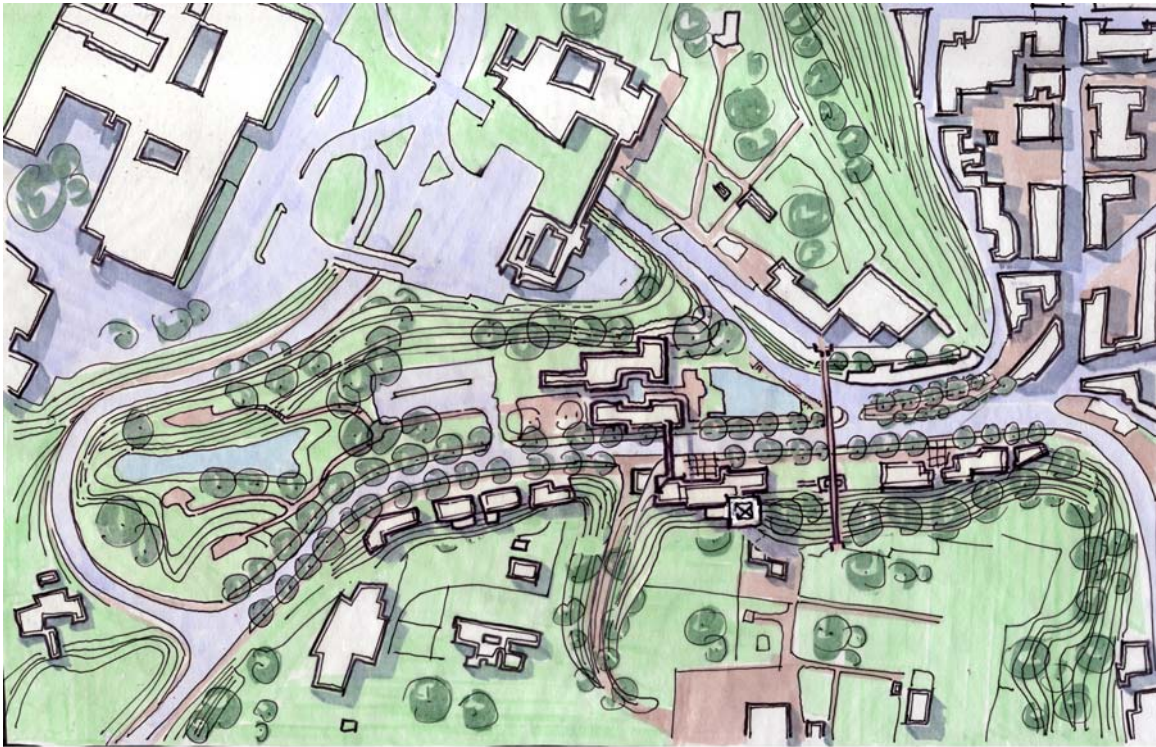
Roman Villa Parti employs traditional roman layout for buildings – courtyard/atrium type. This creates a “village” complex of welcome center and archeological museum. This solution places a welcome center, archeological museum, science center for volcanic studies, and two hotels. A bridge connects the two bluffs



ill. 60, 61

These diagrams show traffic and pedestrian patterns for Roman villa Parti

Bridge Parti

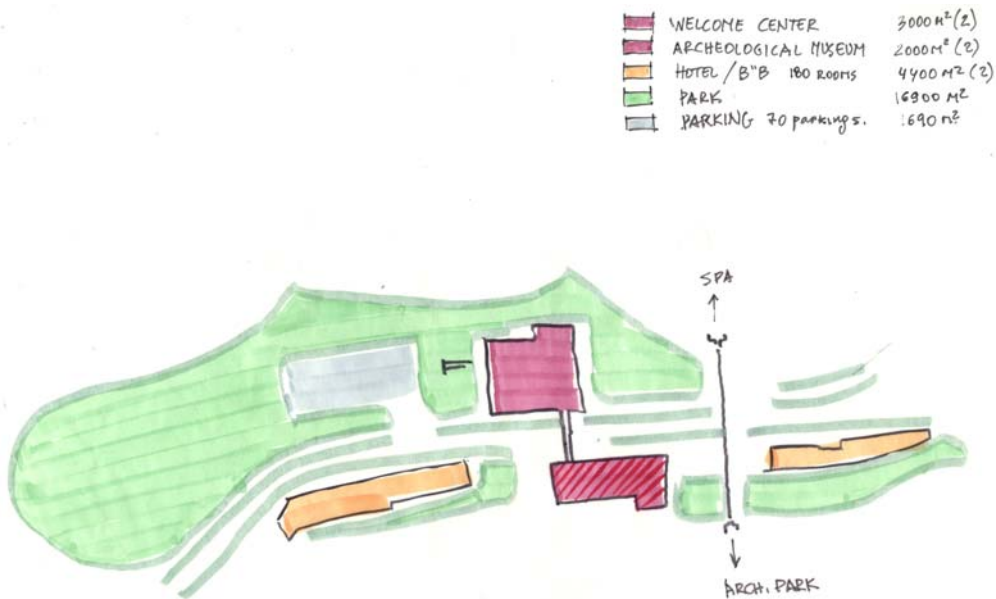


Creating a gateway to Castellamare di Stabia. Plan view of the site. Bridge parti



Creating a gateway to Castellamare di Stabia. Section thru the site. Bridge Parti
ill. 62, 63

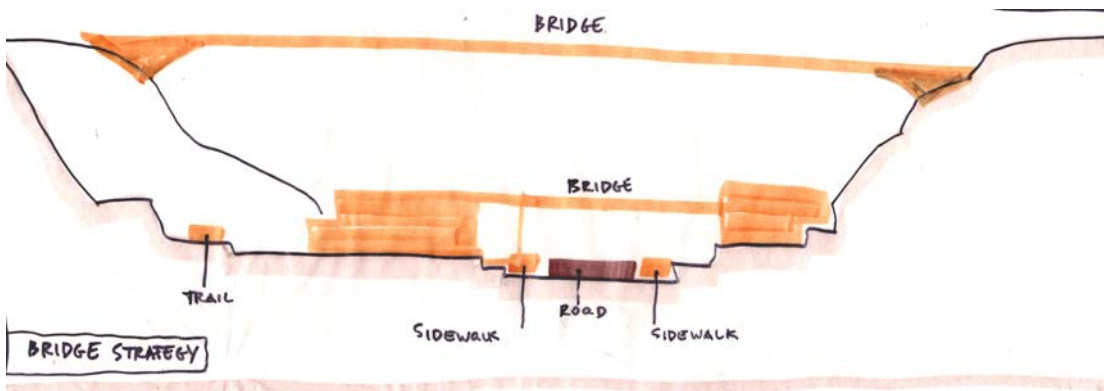
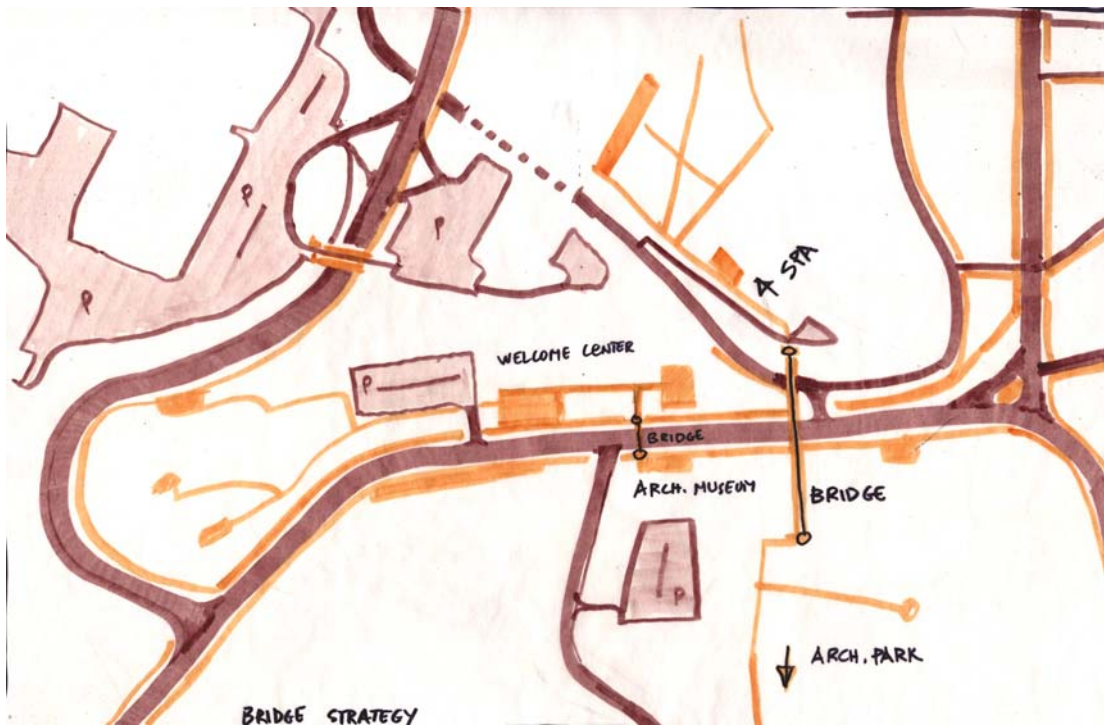
Bridge Parti derives its name from a second bridge that connects welcome center with archeological museum. This solution places a welcome center, archeological museum, science center for volcanic studies, and two hotels. A bridge connects the two bluffs, the second bridge connects the museums



Creating a gateway to Castellamare di Stabia. Bridge parti



Creating a gateway to Castellamare di Stabia. Section thru the site. Bridge Parti Diagram



Design Strategies: Alternative Design Proposals, Part II

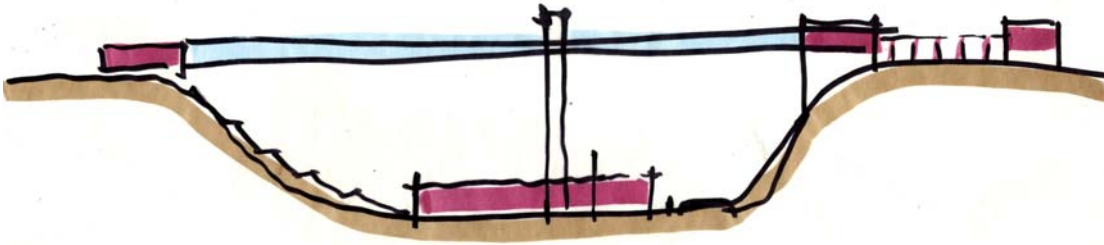
Three final conceptual design partis are the Courtyard Parti, the Linear Parti and the Box Parti.

Courtyard Parti

Main theme of this design proposal is creation of internal outdoor spaces – courtyards, peristiles, atriums, and organizing the elements of the project around those spaces.

Courtyards are typical of this region of Italy, they represent the cultural heritage of ancient roman architecture, from the most luxury villas – like those found in the archeological park to the most humble peasant houses. Courtyards are also crucial in the Mediterranean climate.

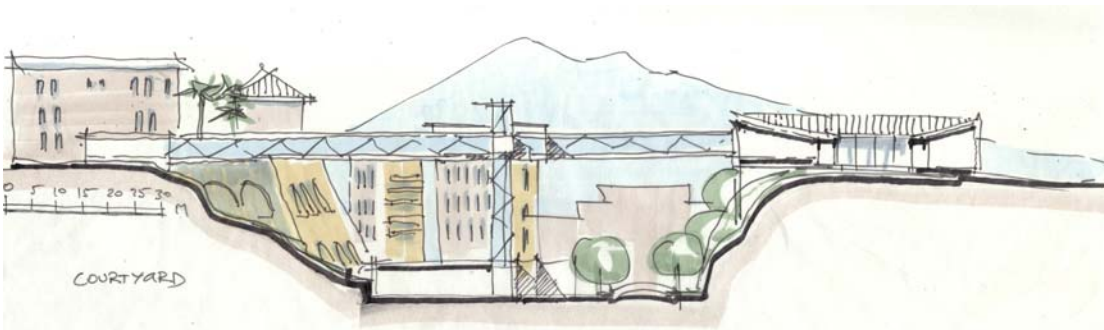




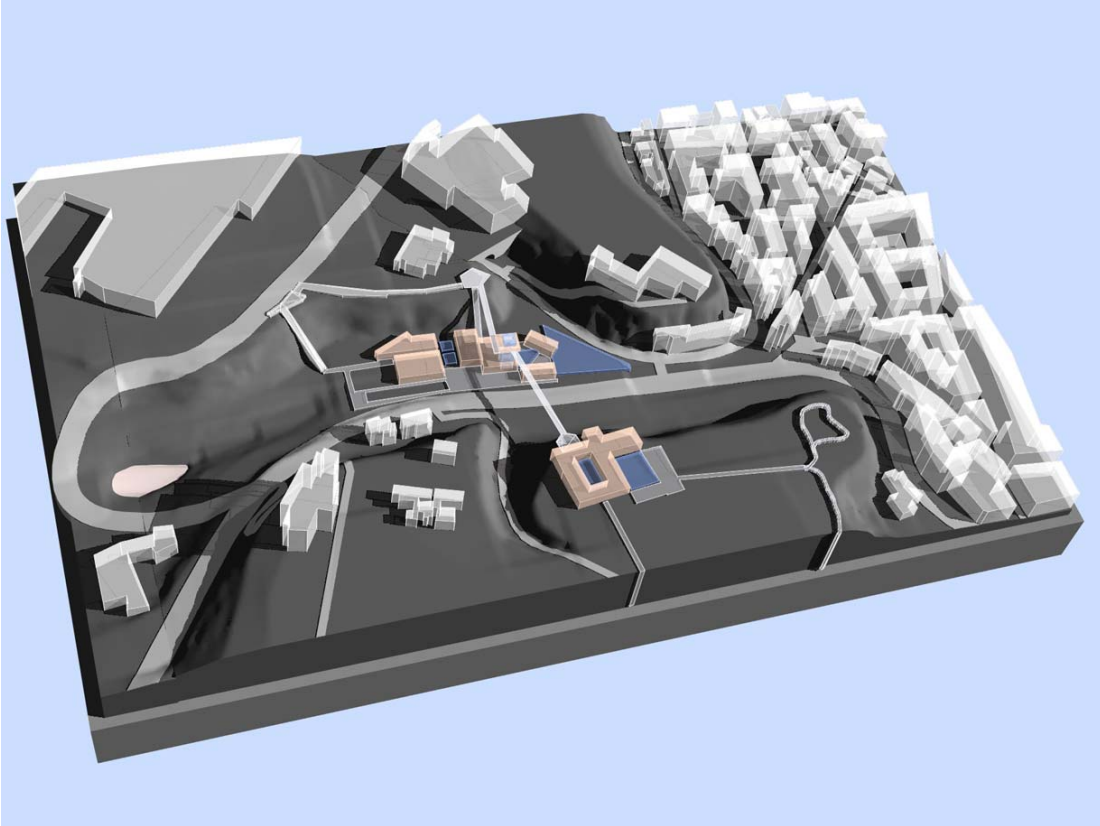
ill. 68, 69



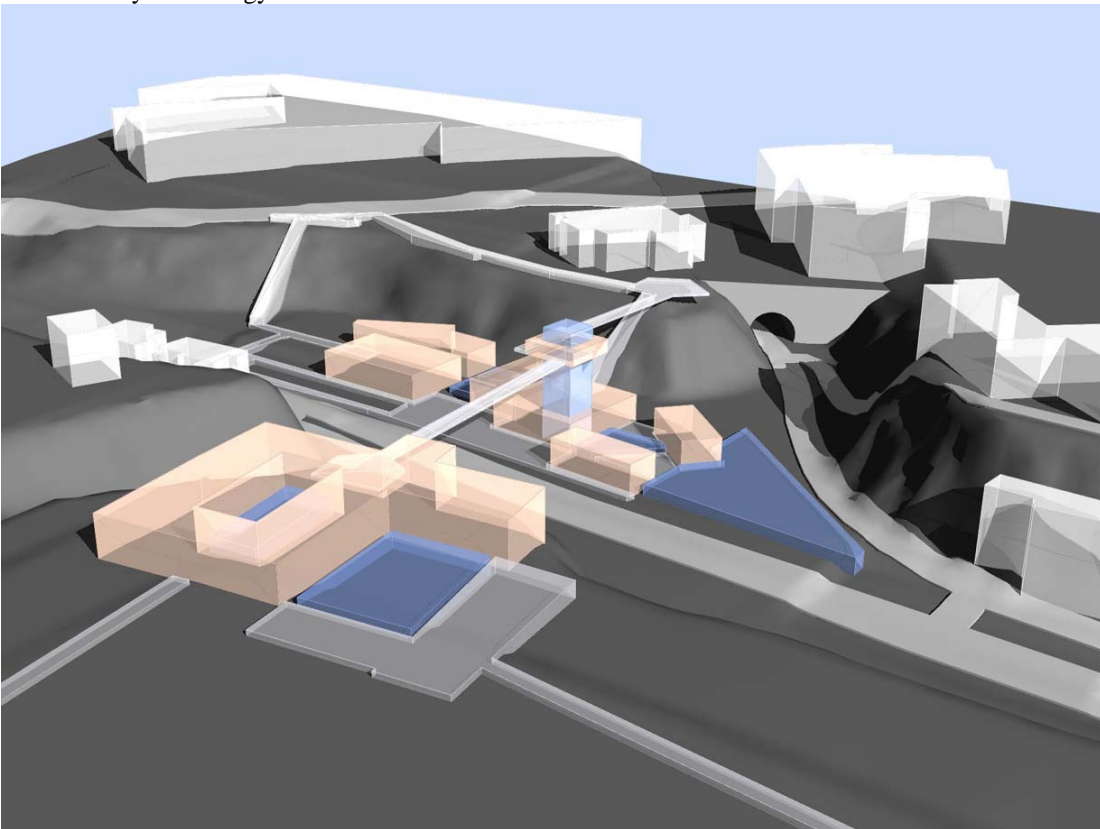
ill. 70



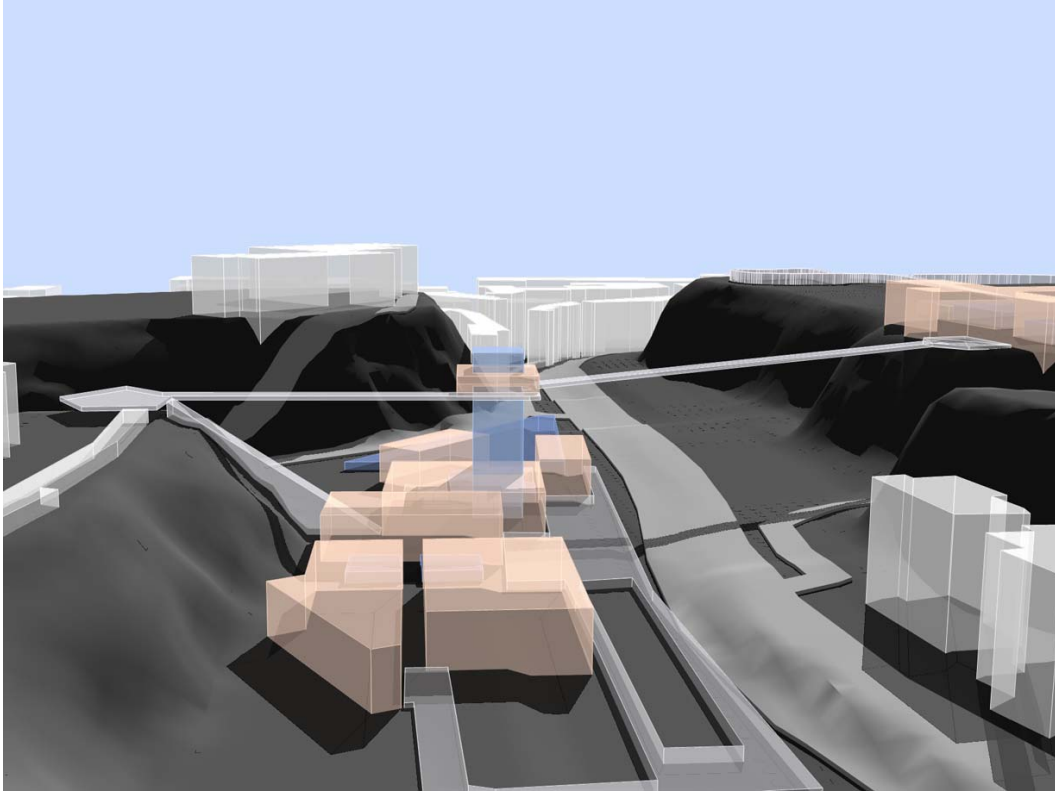
ill. 71



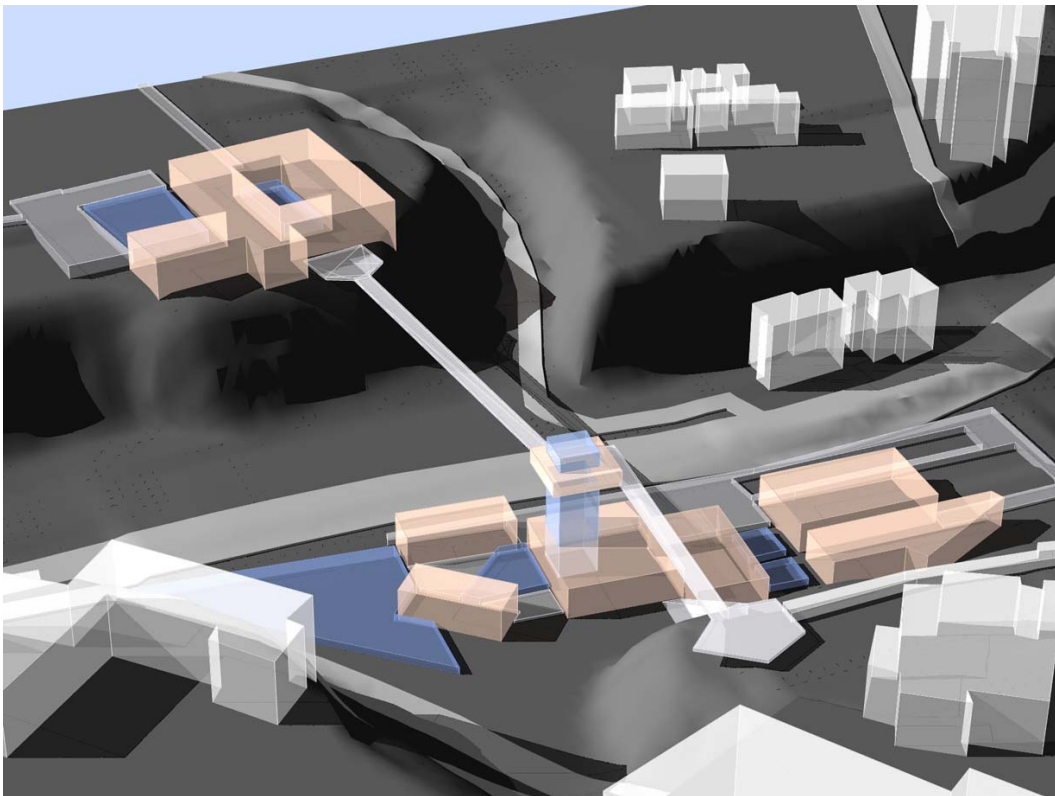
ill. 72 Courtyard strategy.



ill. 73 View from the Archeological Park



ill. 74 View from Autostrada



ill. 75 View from the Spa

Precedent that inspired Courtyard Parti: Pompei. 79 AD. Villa Nozze D'Argento

Axial Procession, Compression vs Expansion, Culture of Atrium and Peristyle, Structural system

Villa di Nozze d'Argento represents the cultural heritage of ancient Roman architecture typical of this region of Italy. It introduces a notion of axial procession via experience of compression and expansion, sequences of small, narrow, shady corridors and enfilades followed by large open atriums and peristyles. This is an important feature in local Italian architecture, extremely pertinent climatically and culturally. Most importantly the notion of movement and procession towards a goal is the key element in a design of a Gateway Complex into the city.

Interestingly enough, this ancient example provides us with a structural system that is most adequate and economical for this region: it combines the use of masonry concrete structure for walls and wood frame for roofs and light partitions.

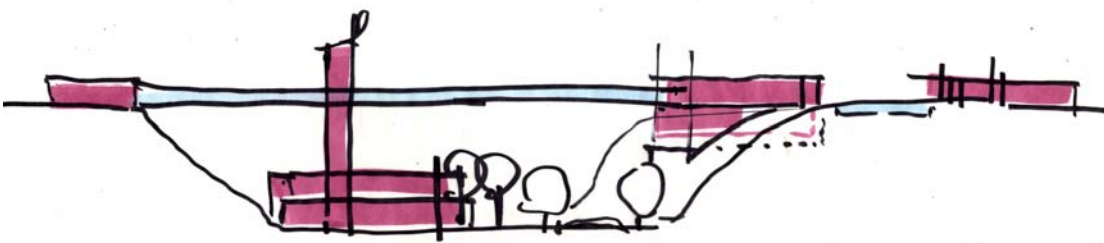
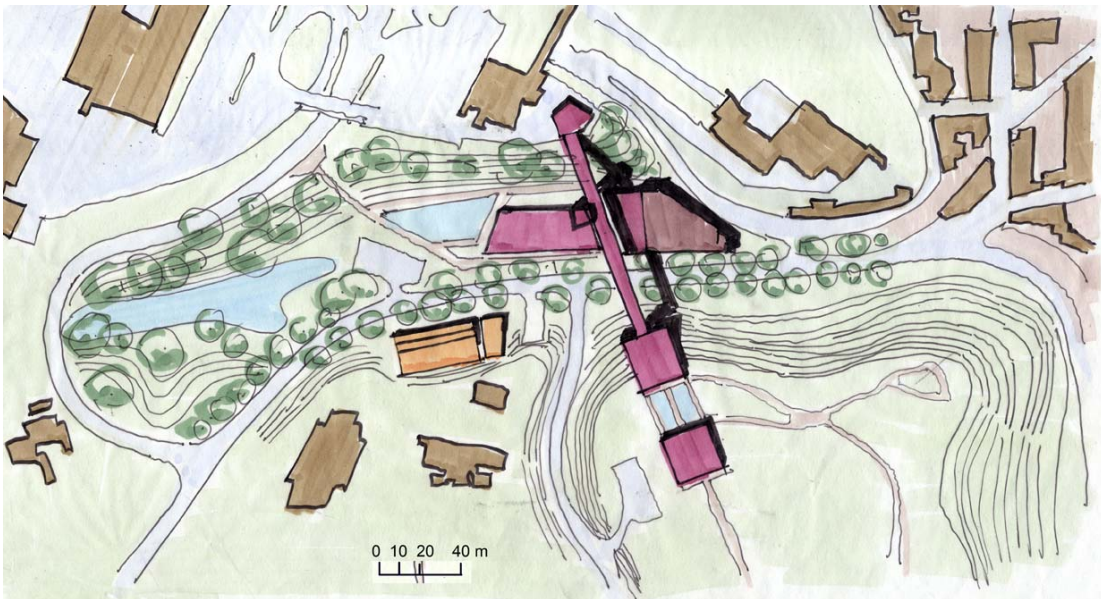


Castellamare di Stabia. Precedent Study, Villa di Nozze d'Argento. Pompei
Cultural continuum. Copression and expansion. Procession

Sonia Smoliar

Linear Parti

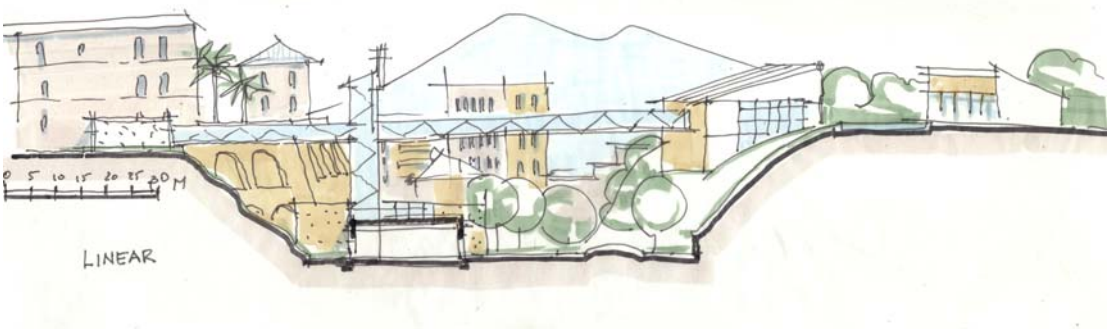
The site lies at the intersection of two important axes of movement: the axis of entrance into the city along the autostrada and the axis of the bridge connecting the two bluffs – that of the Spa and the Archeological park. This introduces an important notion of axial procession. Interestingly, it is typical of ancient roman architecture. Linear Parti explores the possibilities of procession along the axis, and relationships of compression and expansion, also frequently employed in Roman Architecture.



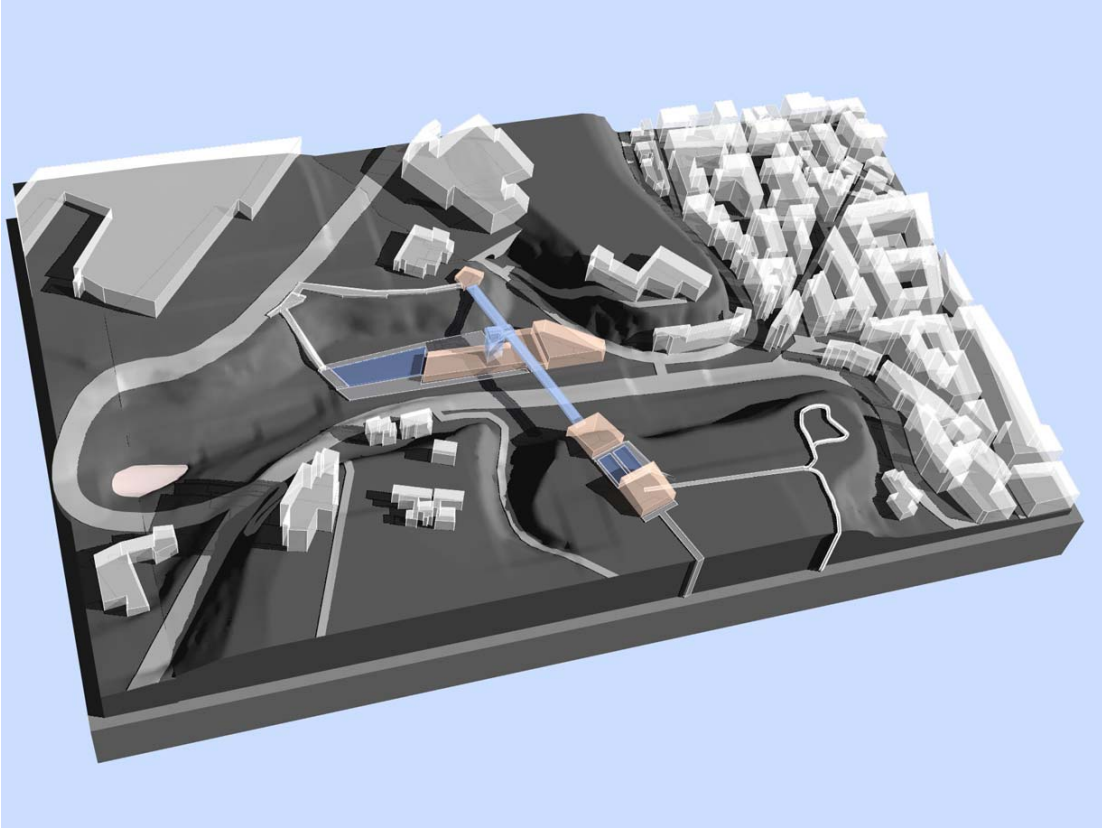
ill. 76, 77



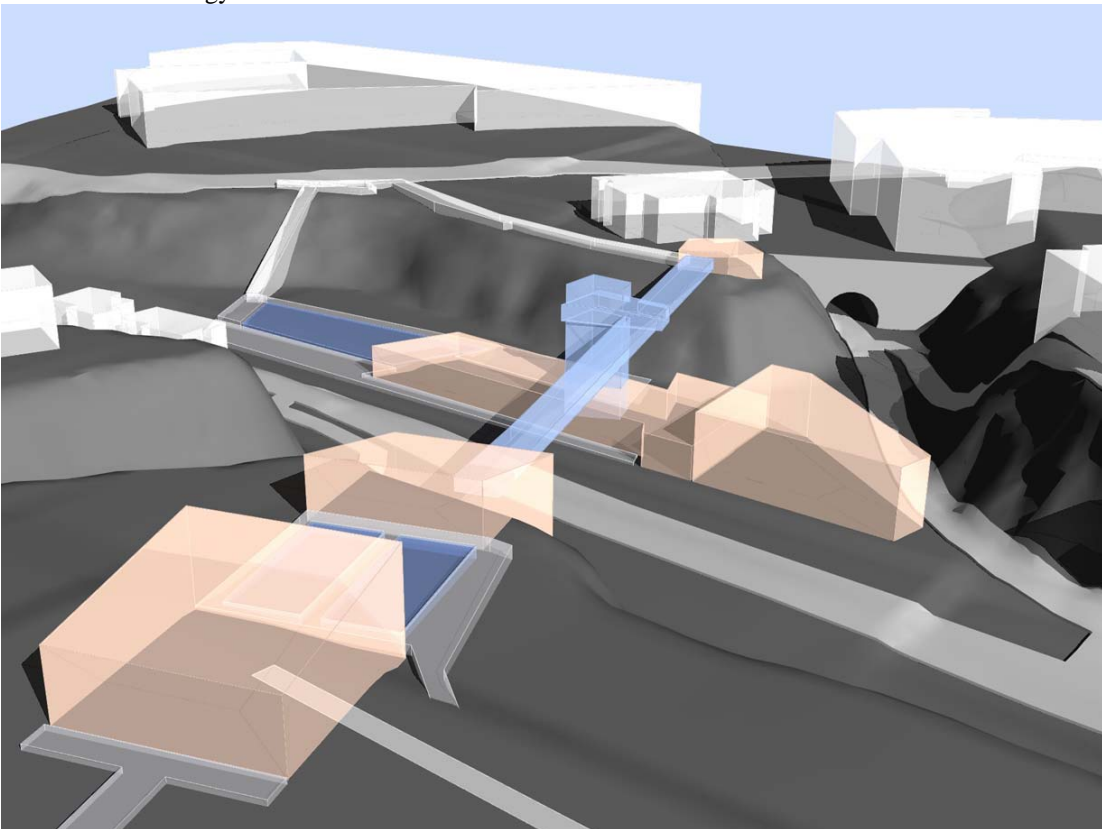
ill. 78



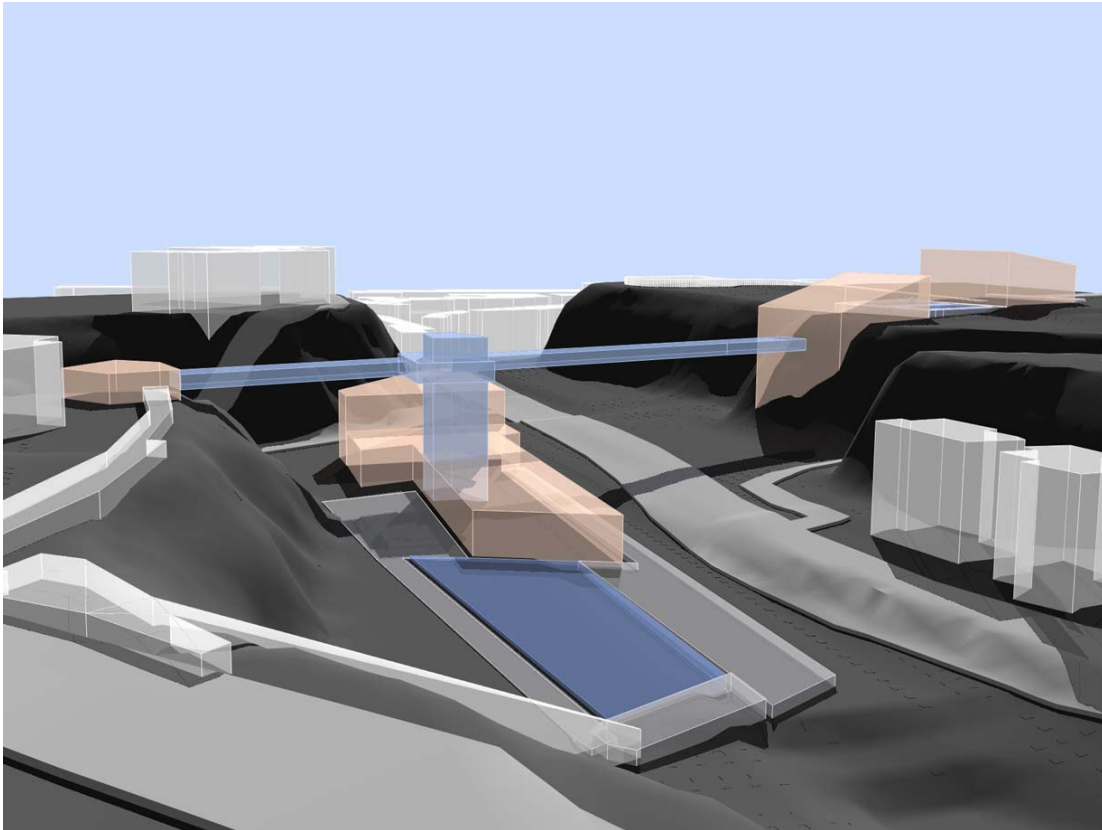
ill. 79



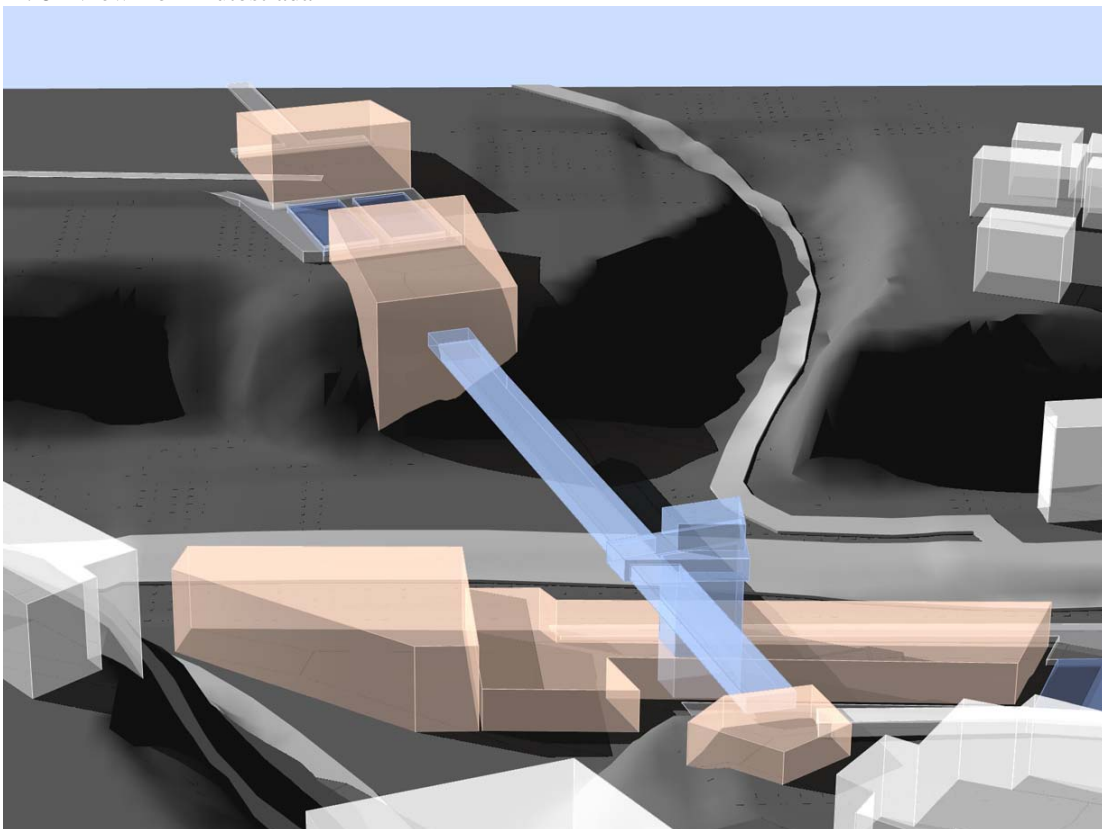
ill. 80 Linear strategy



ill. 81 View from the Archeological Park



ill. 82 View from Autostrada



ill. 83 View from the Spa

Precedent that inspired linear strategy

HILL HOUSE by Brian MacKay-Lyons. Nova Scotia



ill. 84¹⁵

Hill House by Brian MacKay-Lyons in Nova Scotia

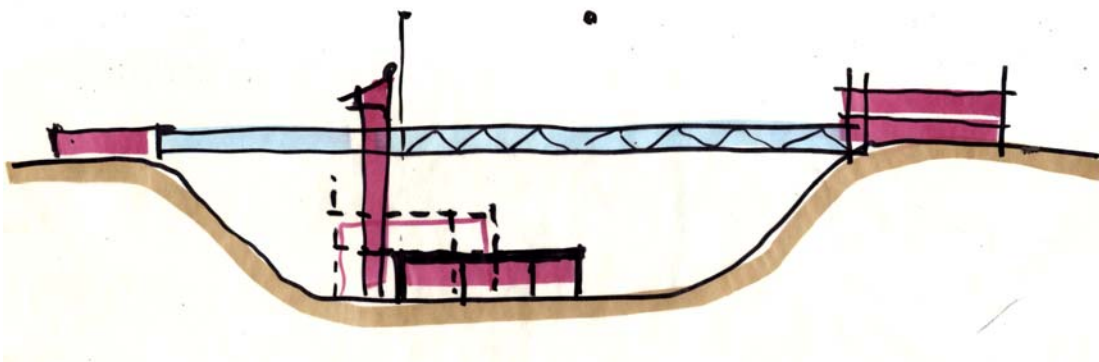
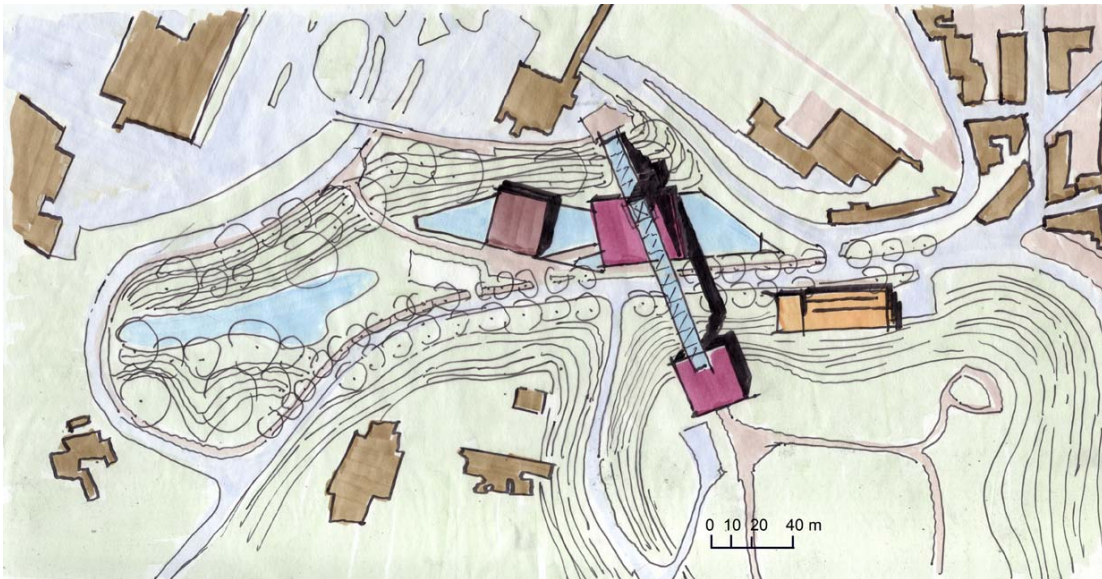
- Relationship with landscape
- Linear organization
- Porch/courtyard motif
- Simplicity of form/compactness

Also see Will Bruder's museum in the Precedents Chapter (page...)

¹⁵ Sofya Smolyar sketches based on graphics from Architectural Record 04'2005, Article "Hill House" by Jane Kolleeny

Boxes Strategy

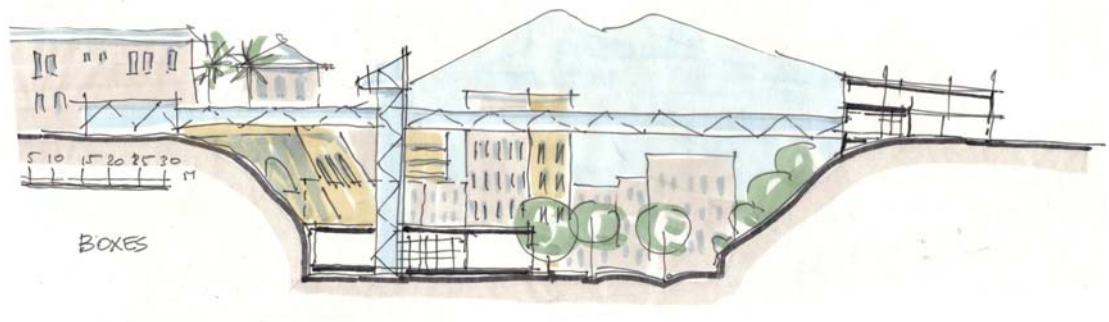
One of the important aspects of the design agenda is sustainability. Boxes strategy represents the most compact solution, that allows for maximum tree cover, energy efficiency and also simplicity and clarity in architectural form.



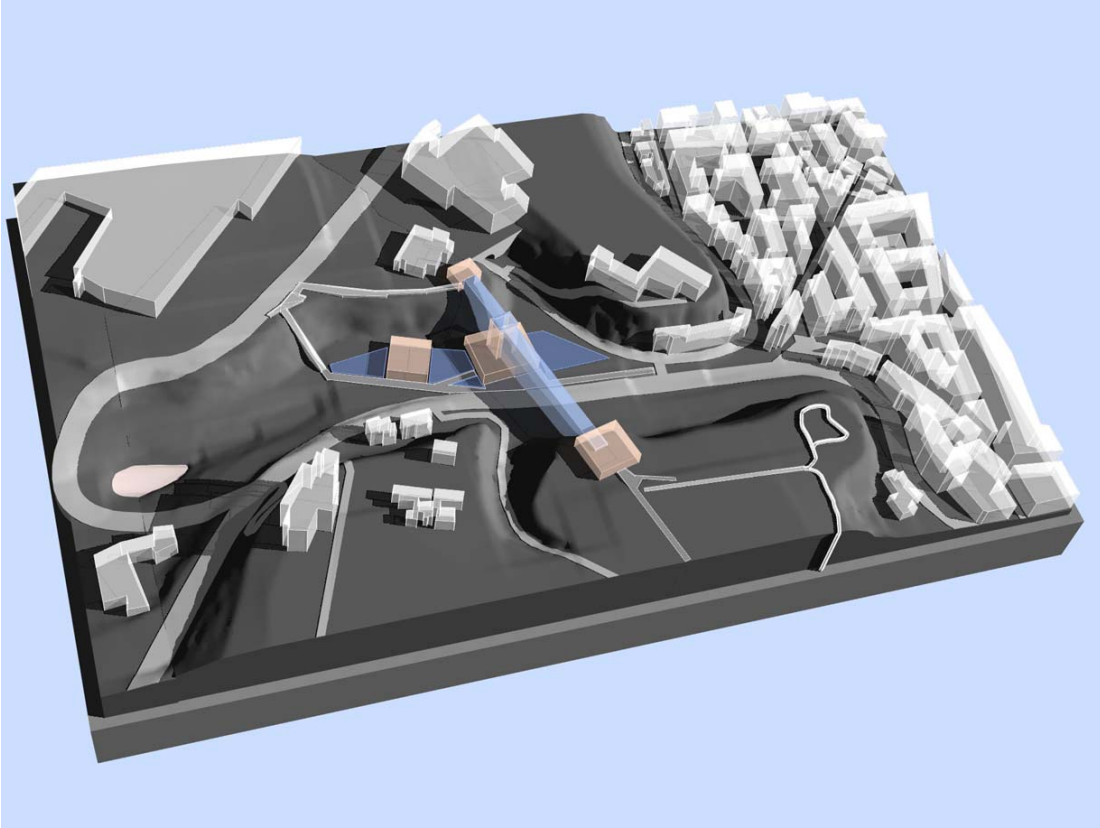
ill. 85, 86



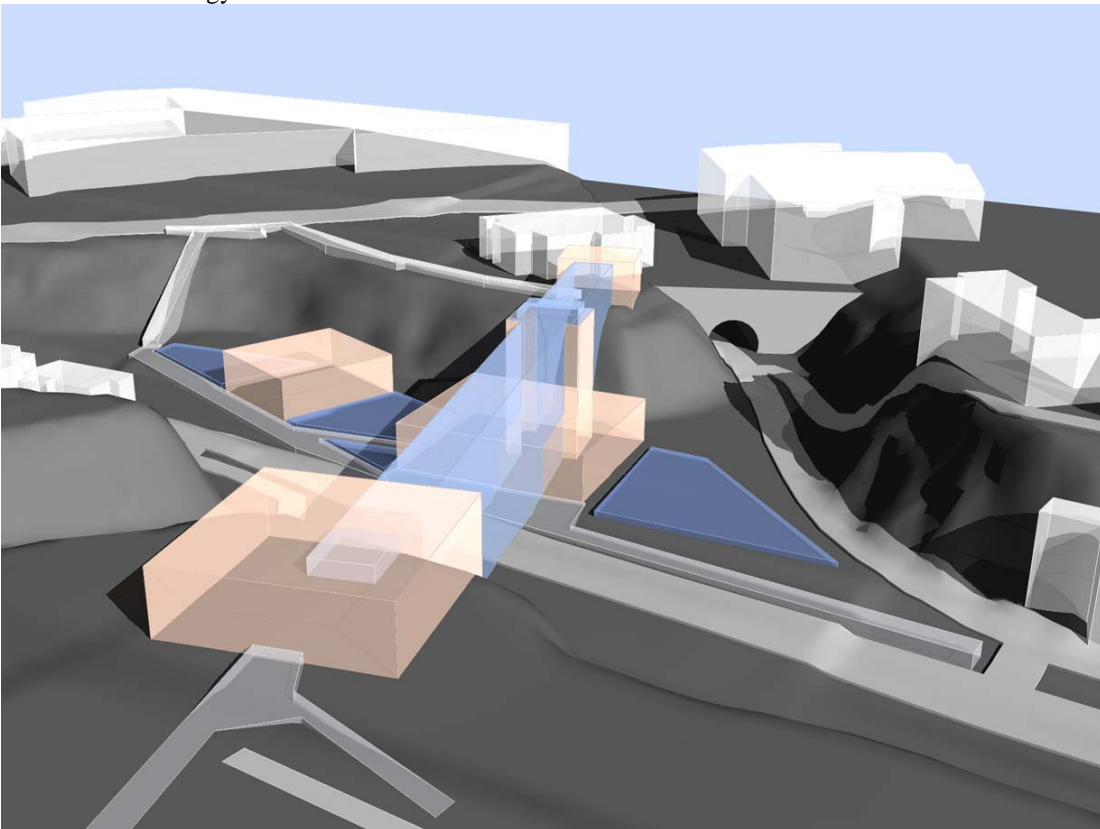
ill. 87



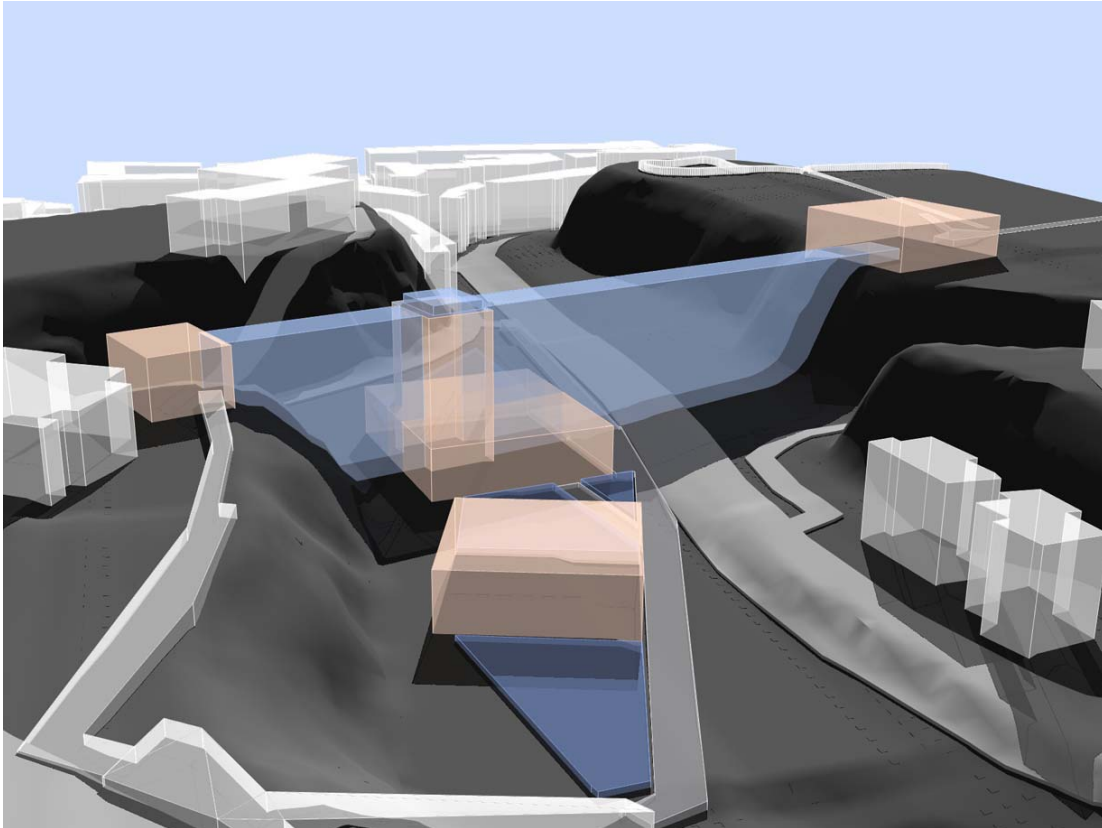
ill. 88



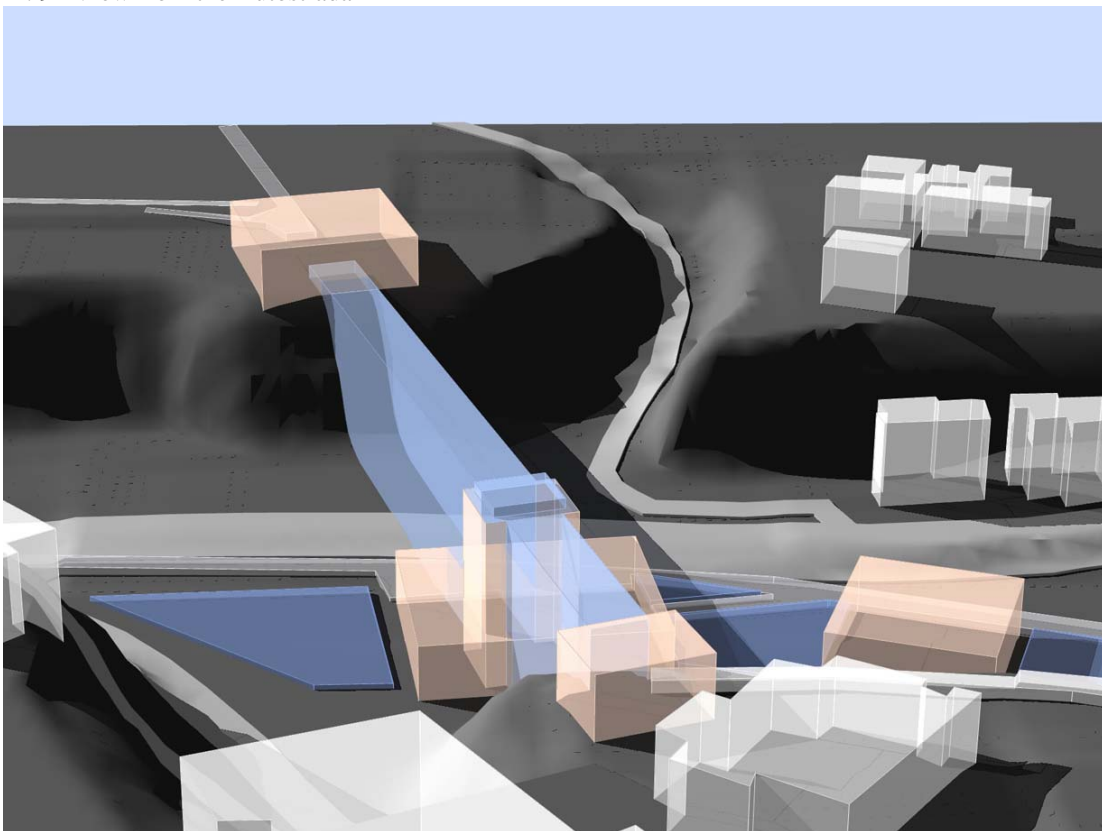
ill. 89 Boxes Strategy



ill. 90 View from the Archeological Park

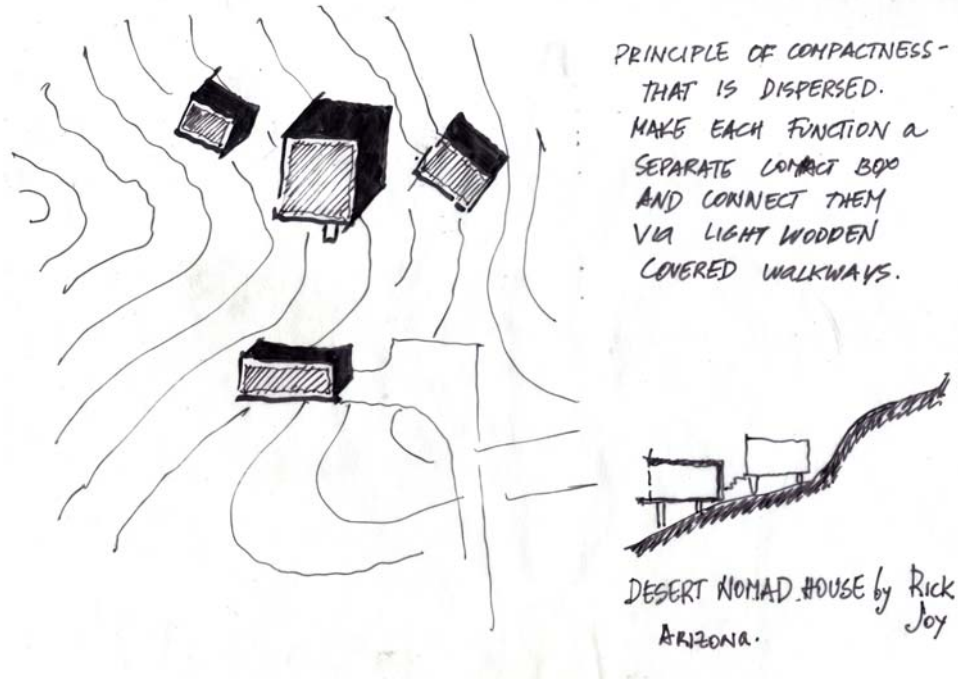


ill. 91 View from the Autostrada

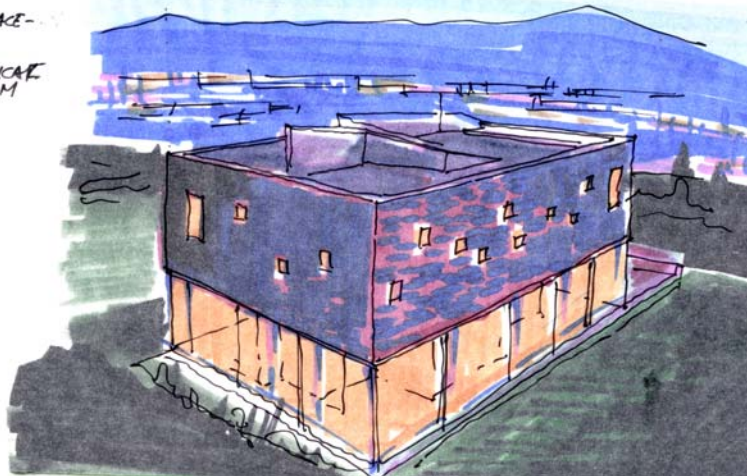
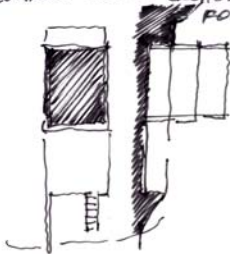


ill. 92 View from the Spa

Precedents that inspired Boxes strategy



SOLID BOX ON A GLASS BASE
MODERN INTERPRETATION
OF A PORTICO
2 STORY STRATEGY
POSITIONING ON TOP
OF A HILL OR FLAT SURFACE -
NOT ON A SLOPE
COMPACT SIMPLE GEOMETRIC
FORM



ill. 93 Architect Rick Joy, Ill. 94 Architect Aldo Celoria¹⁶

¹⁶ Sketches by Sofya Smolyar based on graphics from Architectural Record 04'2005, Articles "Second Plate" by Naomi Pollock, "Desert Nomad House" by Clifford Pearson

Chapter 4: Reconnecting Castellamare di Stabia with its Amenities.

This chapter is dedicated to the actual thesis design that followed the completion of this document. Initially the main focus of my thesis had been creating a gateway to Castellamare. However, the scope of the thesis became broader, as I started working on the actual design. Creating a gateway remained an important element of my thesis, and became part of a bigger idea – reconnecting the city with its amenities.

For several years now there has been an ongoing effort by the University of Maryland and the city of Castellamare di Stabia to improve conditions of the city. My thesis became part of the joint project by the students of Graduate Urban Studio (Arch 700) lead by Professor Bell. The focus of the project has become improving and creating new connections:

- Pedestrian, both vertical and horizontal
- By train
- By bus
- By car
- By boat

Studio 700 Team developed pedestrian network within the city and the train system. They proposed:

- Gentrification and extension of the waterfront
- Pedestrianization of two main streets within the medieval city
- Creation of a “Passegiata” (a walkway) along the edge of the plateau that would connect the Spa, the Archeological Park and the Castle.

Within the train network they proposed

- new train station on the Circumvesuviana line right next to the Archeological Park, this station would be connected to the park by funicular
- new train station near the waterfront and the castle
- improvement of the existing central station

Since my site is the main vehicular entrance into the city and lies in a gorge between the Archeological Park and the Spa, I focused on improving pedestrian connections between the Spa the Park and the city and the plato, and connections by bus and by car.

My goals became:

- Creating a gateway to the city
- Connecting the Spa and the Park
- Making a celebrated procession form the city to the Spa and the Park
- Creating an arrival point for tourist buses and cars
- Making this site as green as possible

Elements of my project:

- The tower and the bridge that became the gateway landmark, the horizontal connection between the Spa and the Park and the vertical connection between the city and the plato.
- Tourist bus drop-off
- Terraced gardens inspired by the Generalife Palace in Alhambra
- Archeological museum and research institute integrated into the terraces
- Parking for 200 cars integrated into the terraces

The tower and the bridge became the Gateway Landmark, the horizontal connection between the Spa and the Park and the vertical connection between the city and the plato.

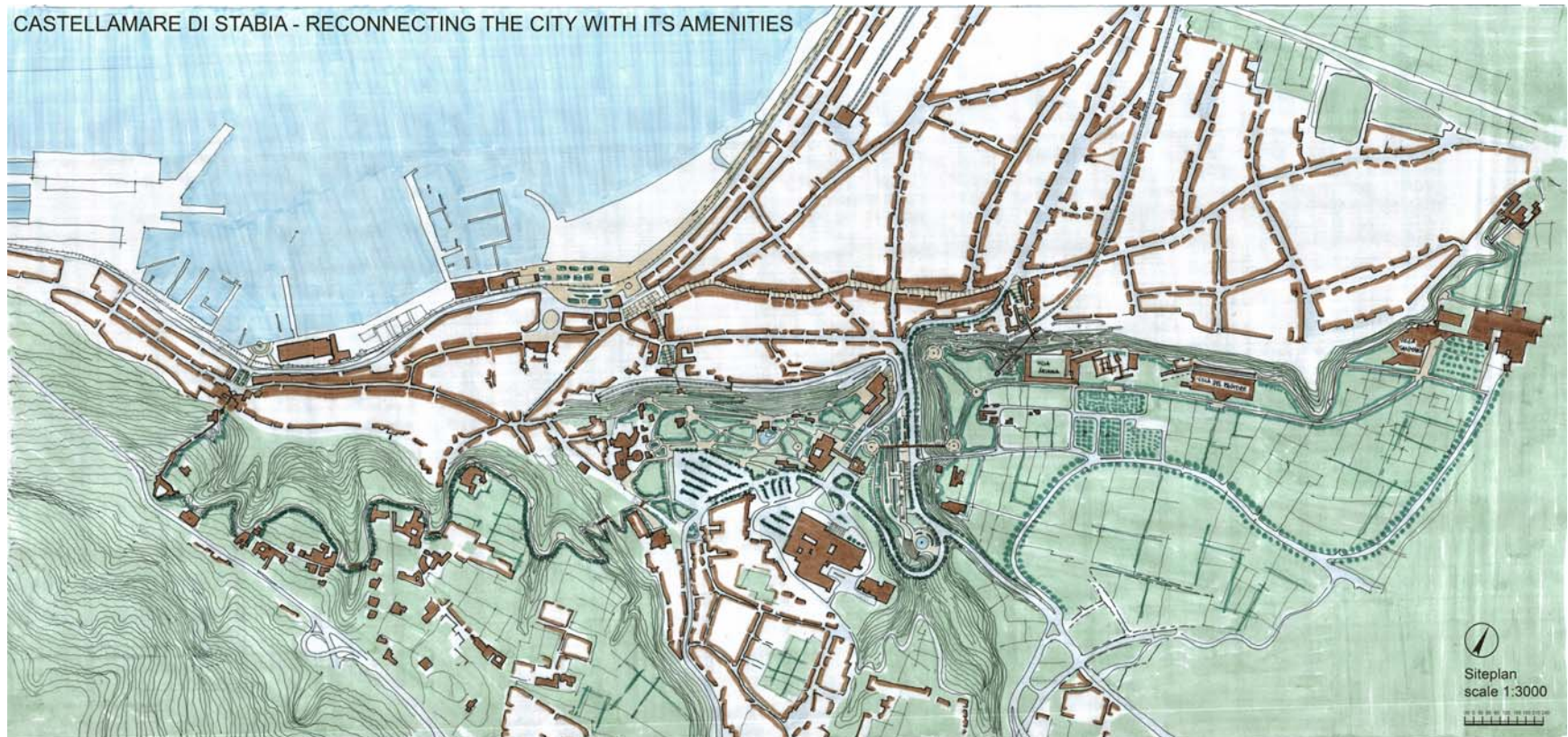
Terraced gardens, inspired by the Generalife Palace in Alhambra, became a celebrated connection between the city and the plato. Their axial arrangement was based upon the urban fabric and the topography, stressing the direction of entry into the city.

Series of pools that act also as skylights allude to the Bay of Naples the lies to the north of the site.

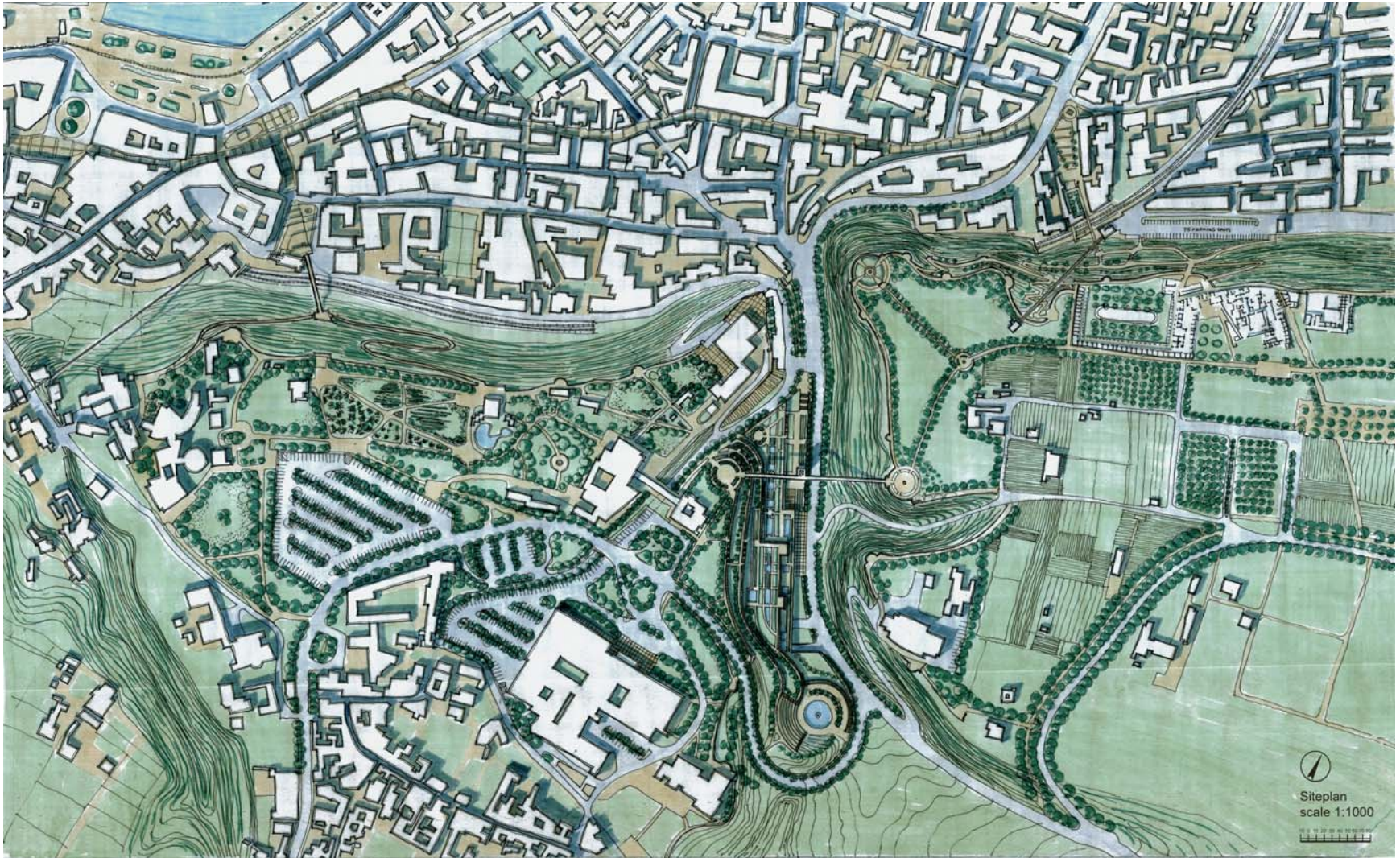
Vertical surfaces of the terraces are treated as buttress walls with niches that pick up the theme of the existing buttress walls of the historic villa north of the site.

Villa Medici in Fiesole inspired internal organization of the museum and the research center. Interior and exterior are treated as part of one whole.

The following pages contain complete set of the design drawings, which illustrate all of the above.

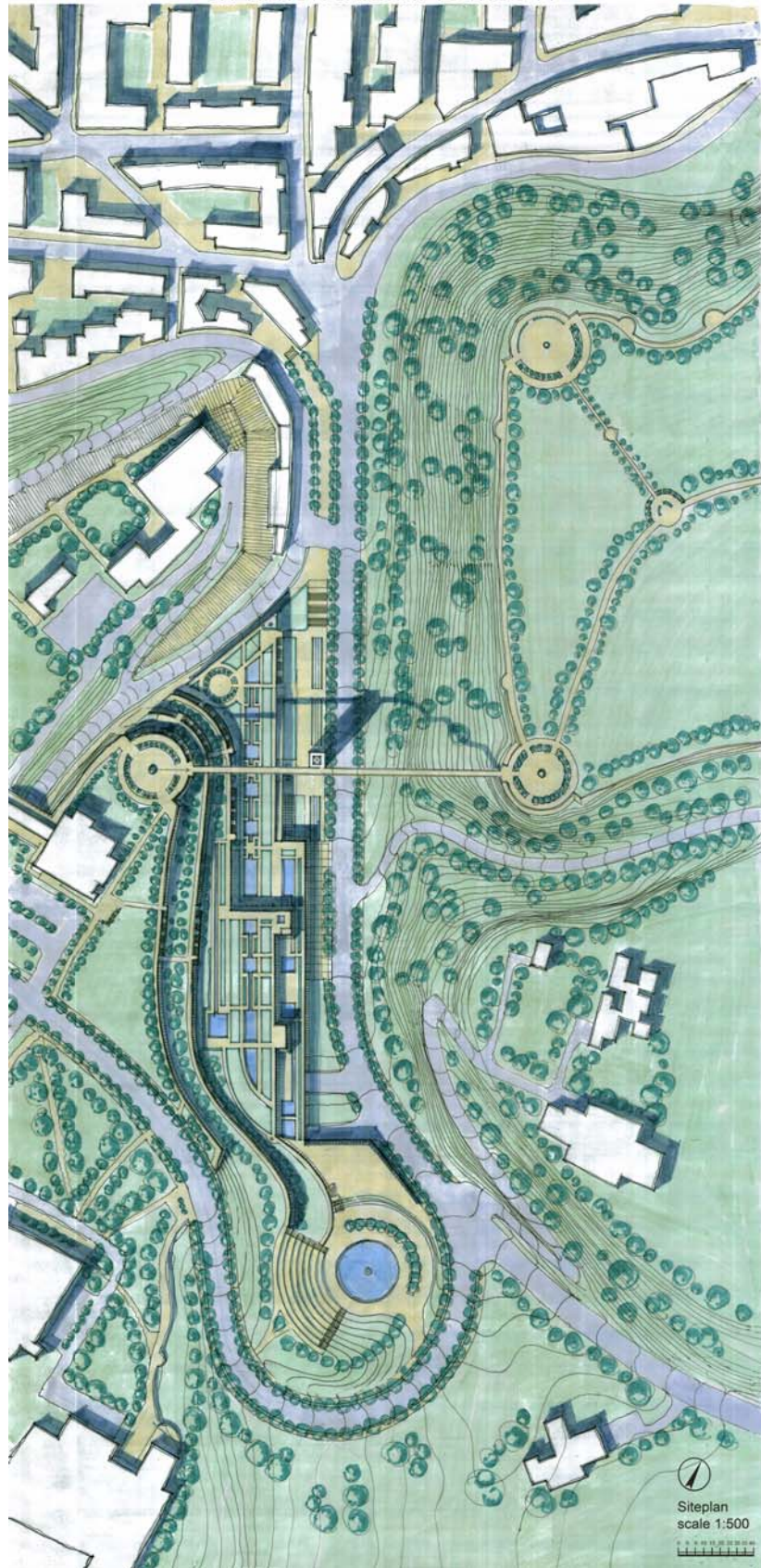


ill. 95



ill.96

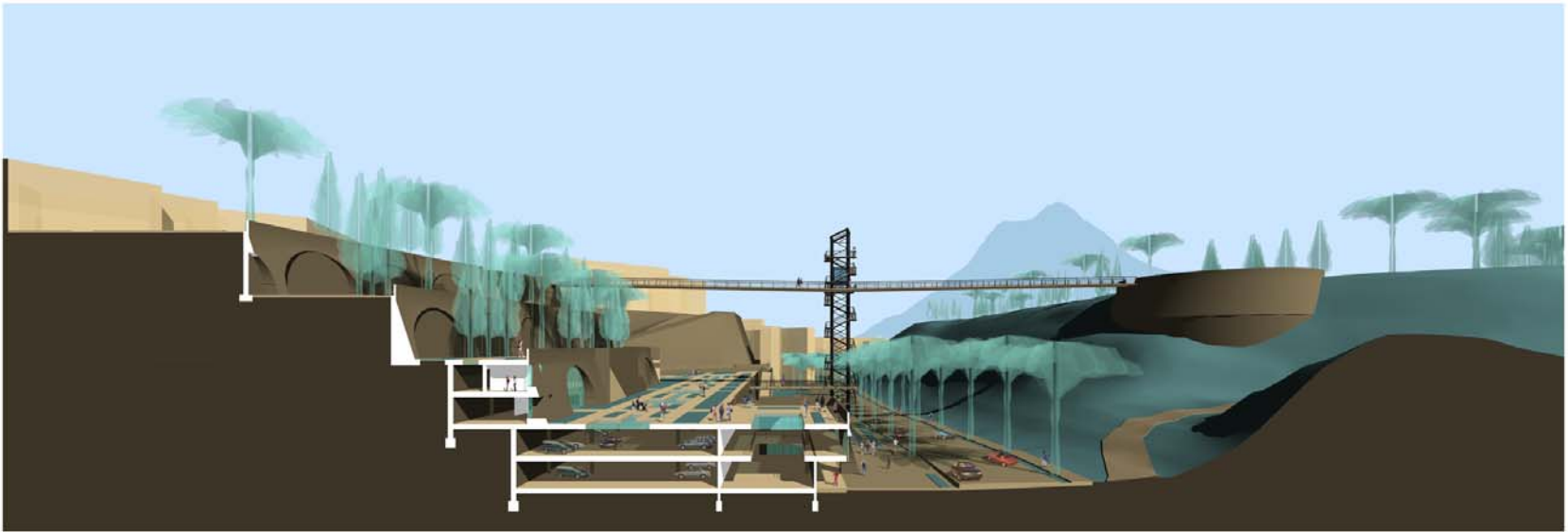
CREATING A GATEWAY TO THE CITY



ill.97

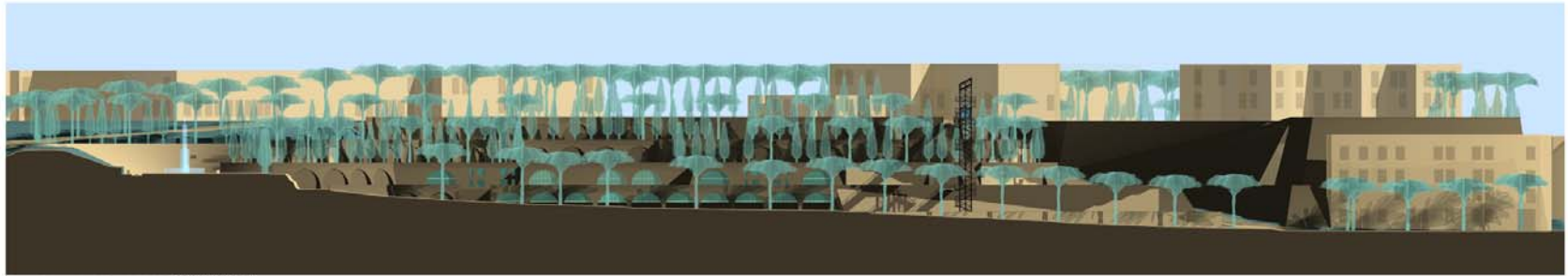


ill.98



Section 3-3 Scale 1:75

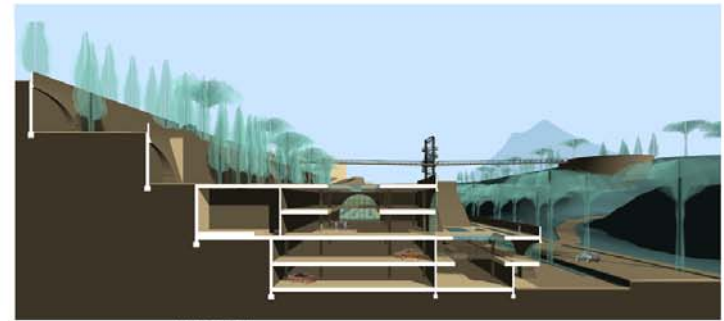
ill.99



East Elevation. Scale 1:200

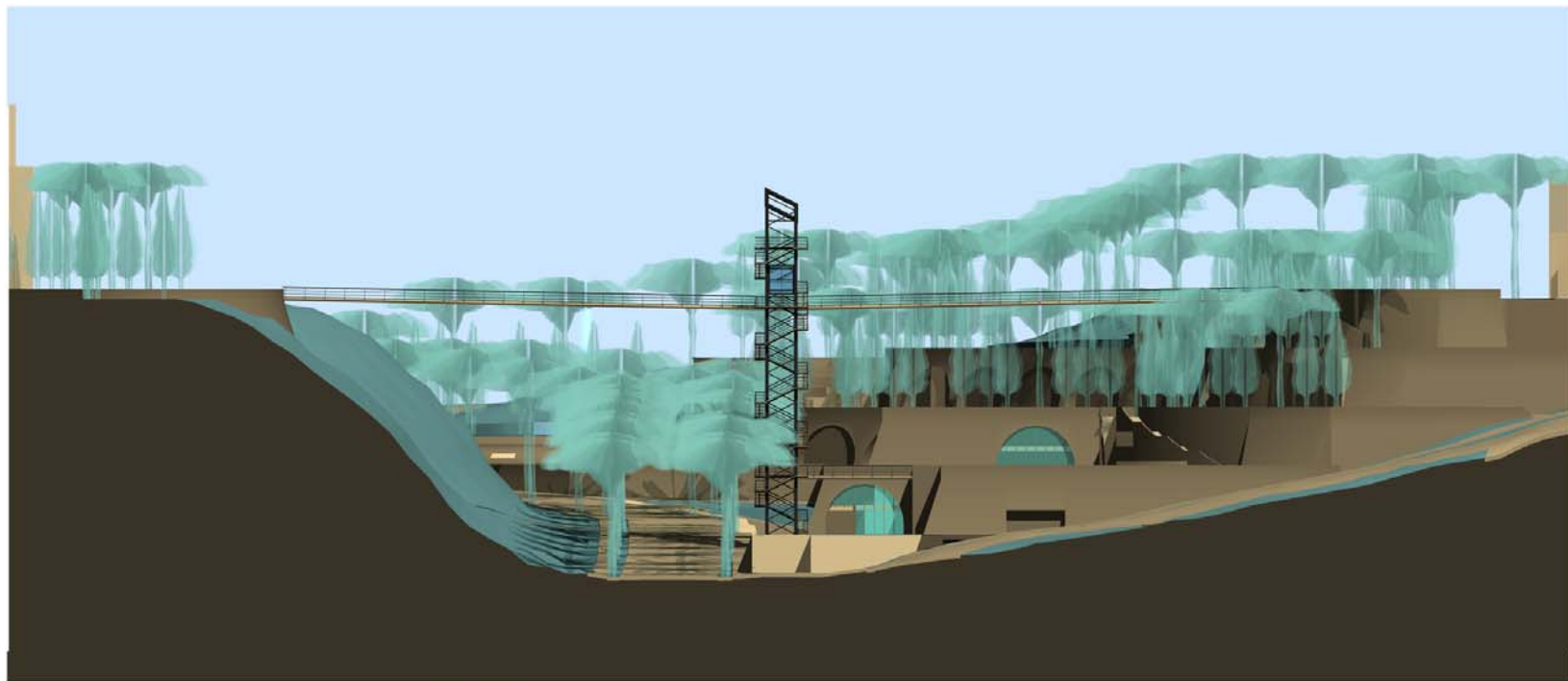


Section 1-1 Scale 1:100

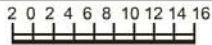


Section 2-2 Scale 1:100

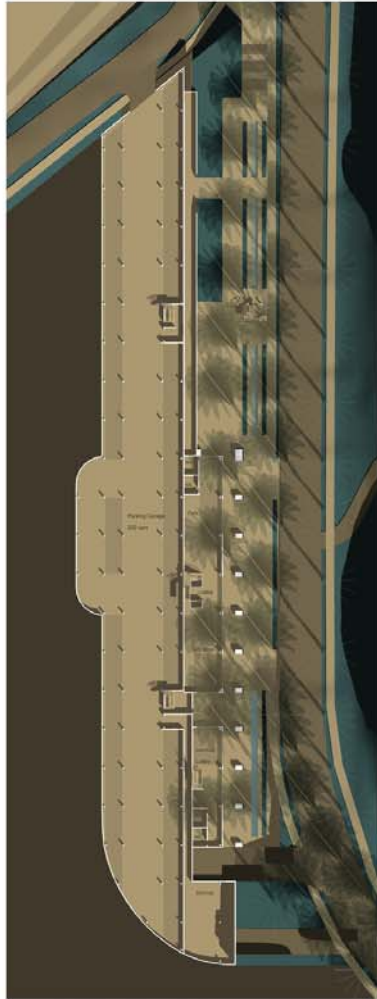
ill.100



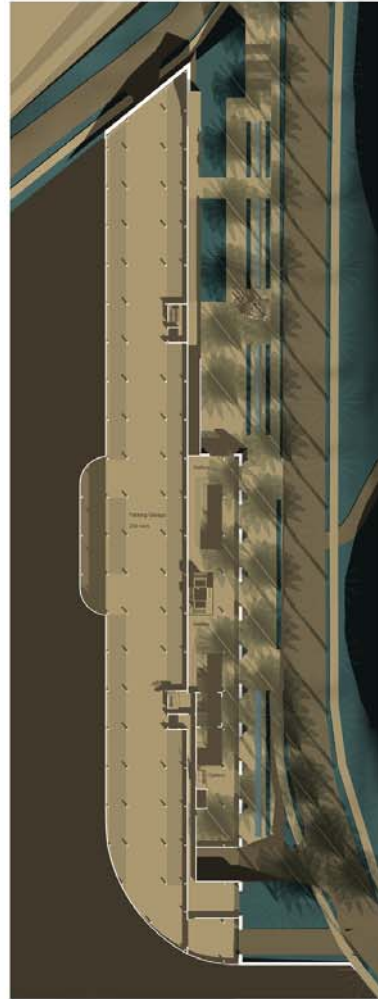
North Elevation. Scale 1:200



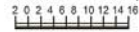
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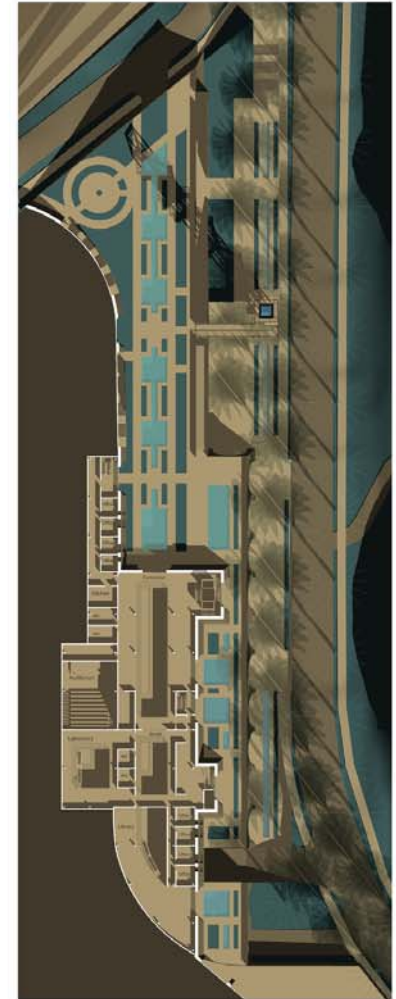
First floor plan. Scale 1:200



Second floor plan. Scale 1:200



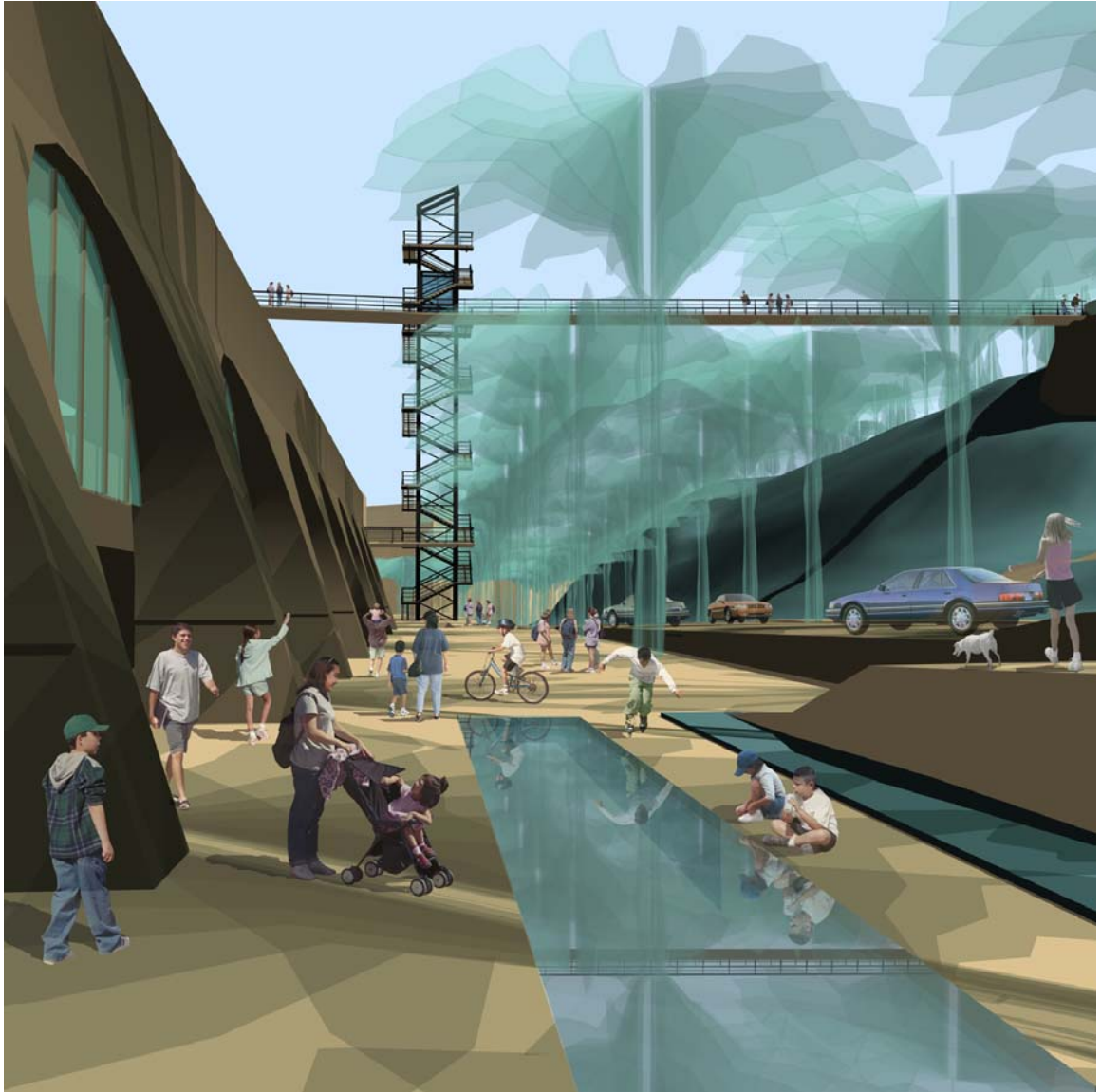
Third floor plan. Scale 1:200



Fourth floor plan. Scale 1:200



ill.102



ill.103



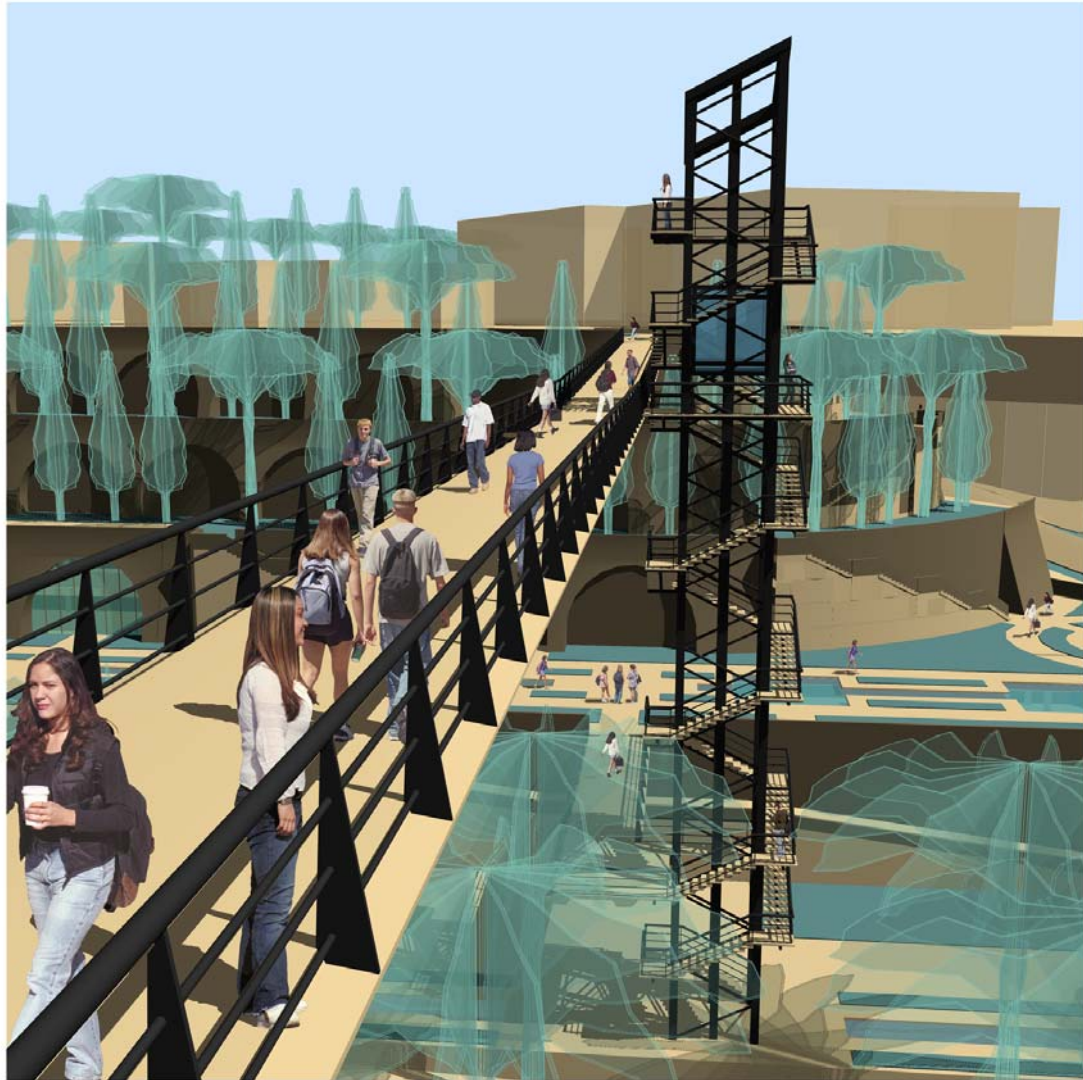
View from the Villa Buttresses

ill.104



View toward the city

ill.105



View towards the Thermal Spa

ill.106



View towards the Archeological Park

ill.107



Main Exhibition Space

ill.108



Parking Garage

ill.109

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