

ENTERING THE INTERSPACE

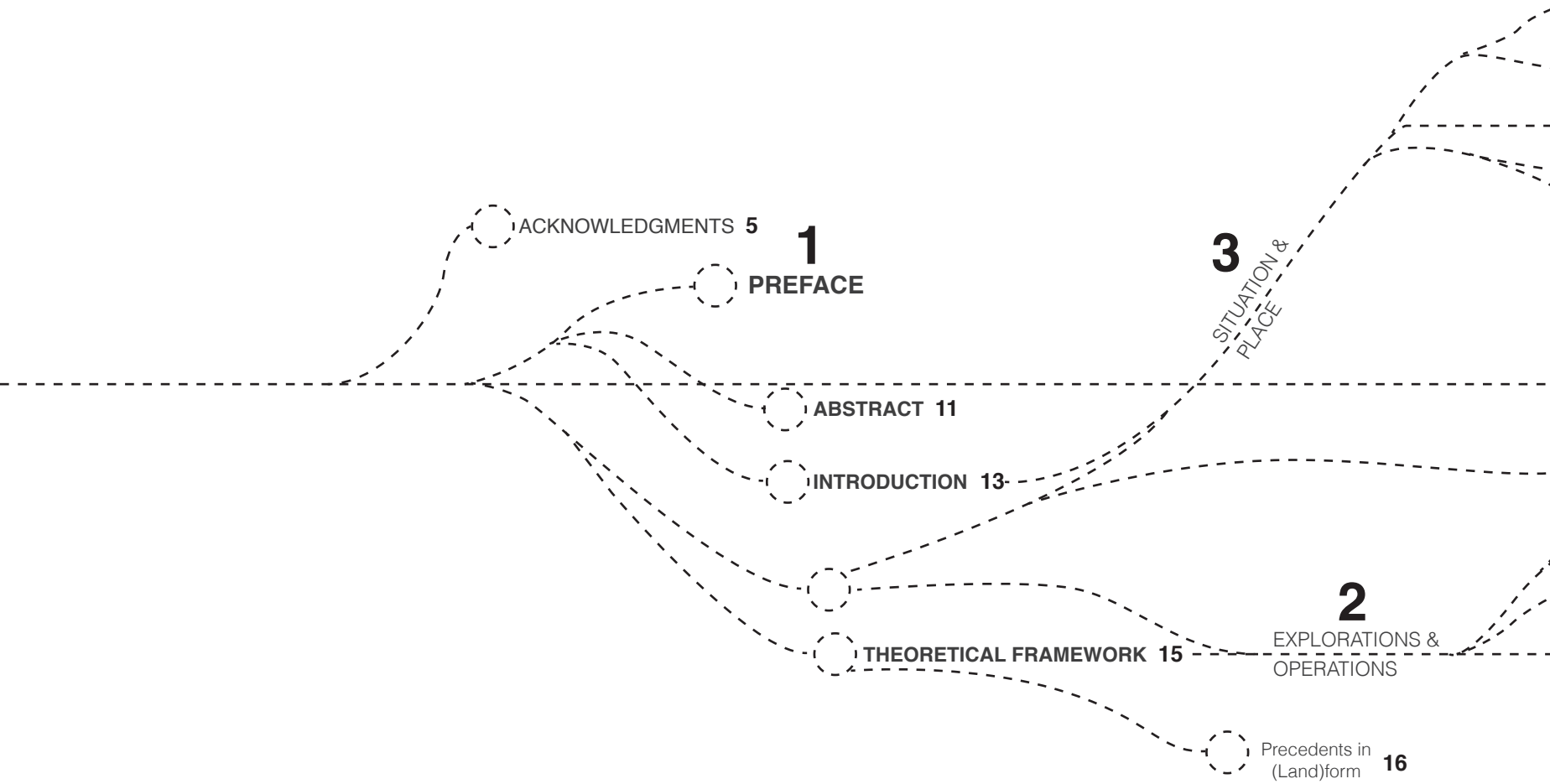
To all those who have influenced me along the way,
thank you for your support and encouragement.

I would like to especially acknowledge Rod Barnett for his direction
and presence of mind throughout this daunting, yet cultivating process.

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ACKNOWLEDGMENTS 5

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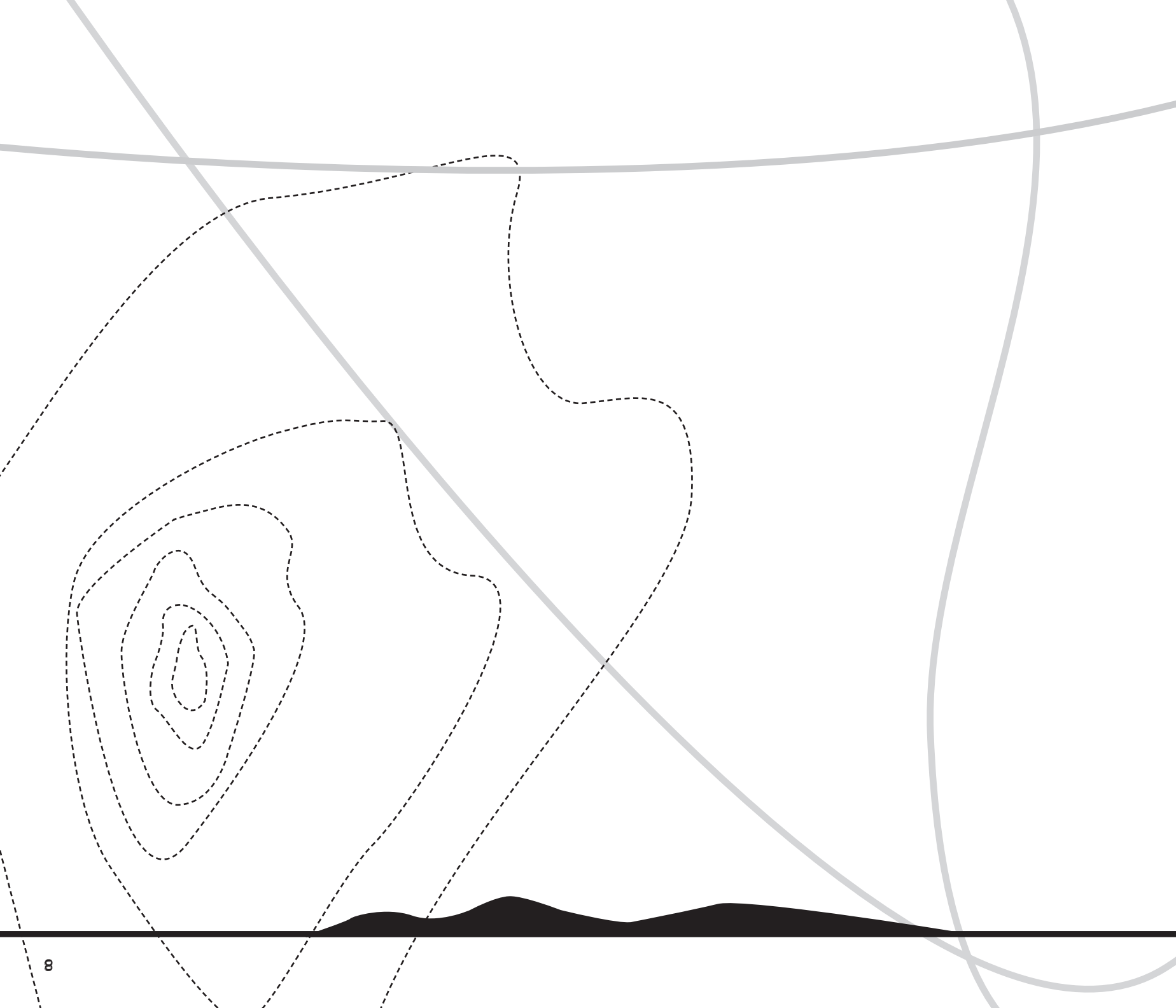
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PREFACE

1

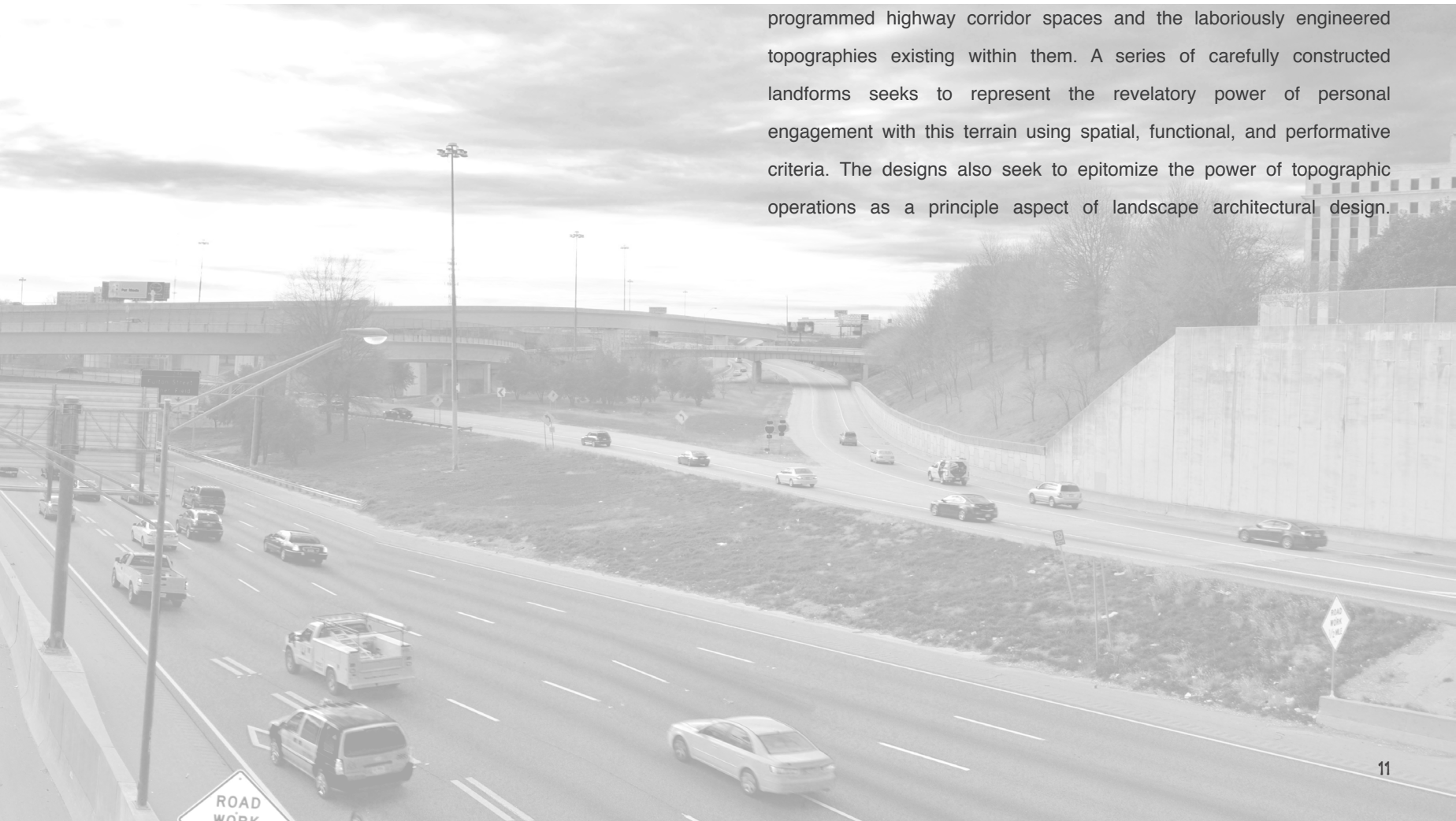
“The speed that gives freedom to man causes him to lose a sense of spaciousness.”

- Yi-Fu Tuan, *Space and Place: The Perspective of Experience*



abstract

This thesis document explores the relationships between topography, transportation infrastructure, and the experiential self within the urban context of **Atlanta, Georgia**. The site undergoing exploration exists at the crossroads of two major interstates, I-85 and I-20, and is composed of the disparate pieces of terrain situated between heavily programmed highway corridor spaces and the laboriously engineered topographies existing within them. A series of carefully constructed landforms seeks to represent the revelatory power of personal engagement with this terrain using spatial, functional, and performative criteria. The designs also seek to epitomize the power of topographic operations as a principle aspect of landscape architectural design.



rationale

We, as human beings, have the ability to experience our surroundings in a relatively infinite number of ways due to our mental capacity. While our mental experiences are infinite, they originate from our physical experiences, which exist on spectrums. For example, while we may be able to imagine what infrared light looks like, we cannot physically see it through our eyes. Our perceptive abilities are dependent on the physical constraints of our body, and indeed our mental abilities originate and evolve based on physical engagements to our surroundings.

Some environments limit the spectrum of experiences and encounters we are likely to have, while others increase the likelihood of diverse encounters with the physical world. When there is a higher degree of spatial possibilities, human experience is more likely to expand, both physically and mentally across the perceptual spectrum. By engaging our physical, spatial surroundings in new ways, we are engaging with our own adaptability to new encounters. It is important that we continue to expand our spatial perceptions of the urban condition, so that we may better engage with ourselves.

introduction

Comprehending the urban environment can be approached from a variety of different perspectives. Understanding how a city has developed spatially reveals a great deal about its inherent nature, not only as a physical arrangement of streets, structures, and people, but as an abstract arrangement of ideas, cultural values, and relentless encounters. Each city develops its own spatial identity based on factors relating to functionality, aesthetics, and technological capabilities.

In the evolution of the contemporary urban environment, terrains of infrastructure have emerged to cope with the growing demands of more complex circumstances and increased population rates. They have subsequently changed the spatial relationships presented in the urban context, and led to the conceptualization of the city in a spatially variable way. In many examples of cities throughout the developed world, the binding element of a human scaled urban environment has been overshadowed by the implementation of technological innovations of the past century.

For the burgeoning metropolis of Atlanta, Georgia, operating as the largest economic driving force in the Southeastern United States, the interstate system is a definitive illustration of how infrastructure has reshaped the organization of the urban environment. Atlanta, as a major hub of commerce, business, and conveyance, defines itself in its ability to bring together people, goods, and ideas from around the globe, and the interstate system occupies a principal role in accomplishing these ambitions.

While its reason and purpose is clear, its consequential nature is vague and indeterminate. The sheer spatial, material force of such a politically motivated landscape imposition is almost preposterous in its enormity, yet the reality of its built form influences the daily lives of millions. It now seems understood globally that a major city should have a large scale system of roadways as an obligatory facet of infrastructure if it wishes to progress to greater levels of civic responsibility.

The dubious nature of the system of interstates that cuts through Atlanta does not rest in its existence as a connective force in the region, but in its proximity, scale, and impression on the general density of the city's metropolitan condition. These terrains of infrastructure present a vast difference of spatial organization to their surroundings. Everything about their identity and association within the urban condition marks them as a necessary iniquity in which the possibilities of engagement are limited to visualization through a glass window moving at a rate of 80 miles per hour. This is a set of circumstances that arises in most American cities, and one that has had far-reaching consequences on the way spatial relationships are perceived in the city. Turning a blind eye to the stigma associated with these terrains, possibilities open up to re-organize spatial arrangements in new ways that could not be possible elsewhere in the city. Their dissimilarity from the rest of the urban environment is what permits new possibilities of experience and encounter.



theoretical framework

Ground plane is defined in architectural terms as the horizontal plane of projection upon which the object rests. The built forms composing the physical aspects of a city tend to alleviate the ground plane and flatten slopes. It is through the process of constructing built form that we can observe the diminishment of the ground plane to the horizon and the designation of the built form to the vertical. As David Leatherbarrow articulates in *Topographical Stories*, “Topography so conceived is never in front of but always behind the things on which attention focuses, not a tableau targeted by perceptual interest but the noiseless and remote background from which these interests emerge.” (Leatherbarrow, 2004: 248) It is the focus on topography as an immaterial, “manifestly latent” force, as opposed to our phenomenological engagement with terrain, that drives the built environment. Given that view, we limit the possibilities of spatial experience within the urban condition. To highlight the form(s) and draw them into focus would broaden our creative consciousness to ideas about space, place, landform, and topography as they relate to how we define the urban and how we create space.

Landform offers an infinite variety of spatial arrangements that humans can experience. In occupying spaces composed of diverse landforms, we have the capacity to directly engage with a given terrain through a mode of perceptual and sensorial relationships. While we familiarize and further our understanding of a terrain based on our own spatial relationship to it, so too do other elements of life respond to a range of factors that shape spatial identity and performance. Dynamic conditions of topography directly affect a terrain's hydrological conditions and thereby dictate subsequent factors of an environment, essentially shaping the nature of microclimates and potential establishments of plant and animal communities. The forming of contour lines and the building up of form to the land becomes the catalytic force by which all other aspects of the terrain derive their characteristics. By molding terrain into various forms, I am seeking to find out which types of terrain offer the highest degrees of variance in regards to spatial experience. An increased awareness or spatial comprehension of the landform one moves through, on, around, or within allows the individual a dynamic engagement in which perceptions are constantly changing from high to low, diminutive to vast, massive to miniscule, and everywhere in between.

precedents in (land)form

Monk's Mound Cahokia, Illinois

Fig. 1



Fig. 2

Moundville, Alabama

Fig. 3



Fig. 4

Mounds built all across the America's, and over multiple time periods, represent a wide variety of human cultures that developed methods of molding landform, usually for sacred or ritualistic purposes. The Mississippian culture, which lasted from roughly 900-1450 CE, accounts for most monumental earthworks of the southeastern United States, including Moundville seen here.

Holocaust Memorial

Berlin, Germany

Fig. 5



Fig. 6

Charles Jencks' Landform

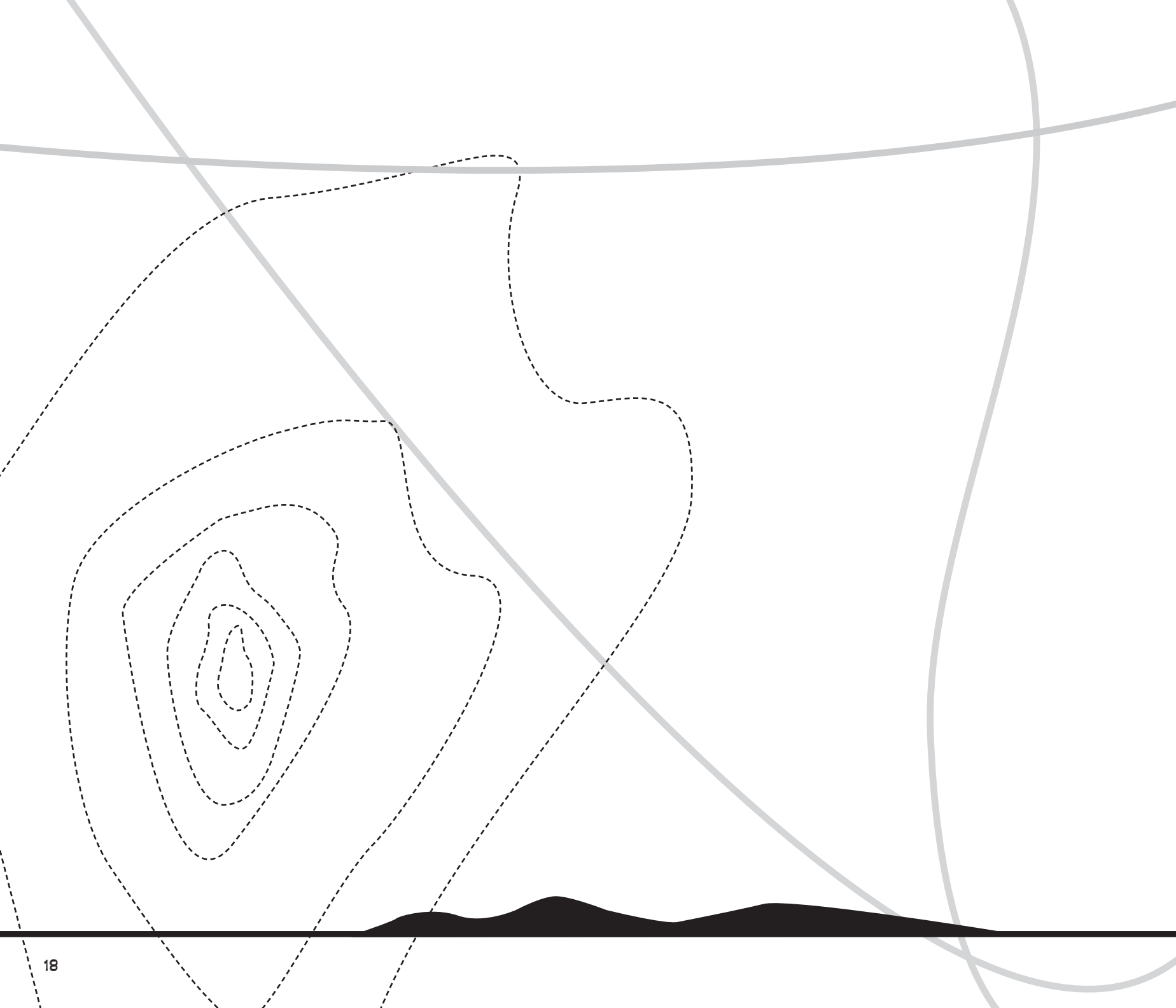
Scotland

Fig. 7



Fig. 8

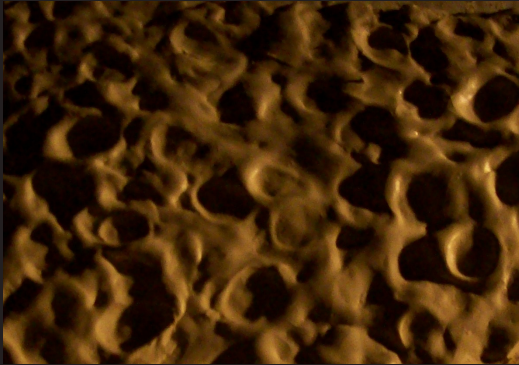
Contemporary examples include the Holocaust Memorial and Charles Jencks' Landform at the Scottish Museum of Modern Art. The memorial uses a variance in topography and the disorienting aspect of uniformly placed tomb-like blocks to metaphorically simulate an event, attempting to provoke an emotional response through sensorial experience. For Landform, "the formal context to the grand classical building is eroded, lost... fractalized." (Jencks, 2004) He has created an interesting contrast to the classical style of the museums architecture through the use of landform.



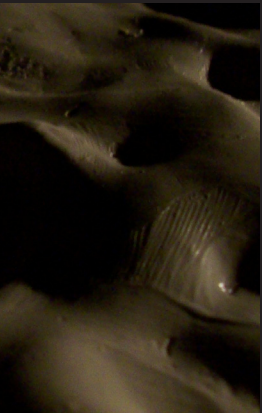
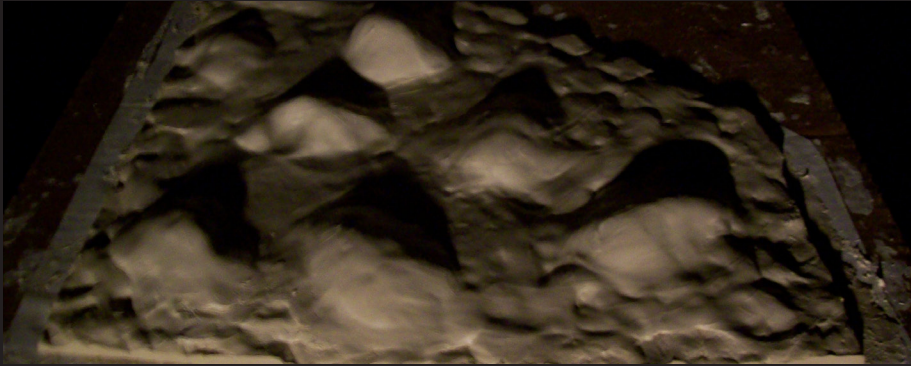
EXPLORATIONS AND OPERATIONS

2

clay models



Clay models represent some of the initial investigations into the creation of form within a 3 dimensional landscape. From these models emerged the idea of topography as the primary condition of site, constituting and/or influencing all other characteristics of that site. Using an organic material like clay was in a practical sense easily shaped and molded, and in a phenomenological sense a direct engagement with earthen material. By configuring this malleable material into a variety of forms, many discoveries were made about identifying landform as a maker of both space and place.



Uniformly Pressed

Something that is quite malleable and fluid can appear to be rigid. By pressing large plotter paper rolls into the clay, a hard lined arrangement of forms was created, appearing canal-like or industrial in structure.

An intensity of the edge condition reveals itself. As the planar movement stays flat in a northeastern direction, it experiences dramatic shifts that fall and rise to meet the original horizontal plane in the northwestern direction. The envisioning of teetering over the brink of a dramatic edge comes to mind.



Crater Field

A field condition as it relates to topographical variance offers a high degree of minute difference. It leads to the creation of an infinite plethora of microclimates and a continuously changing engagement with water.

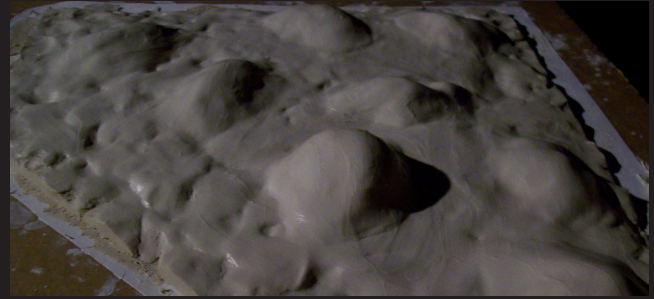
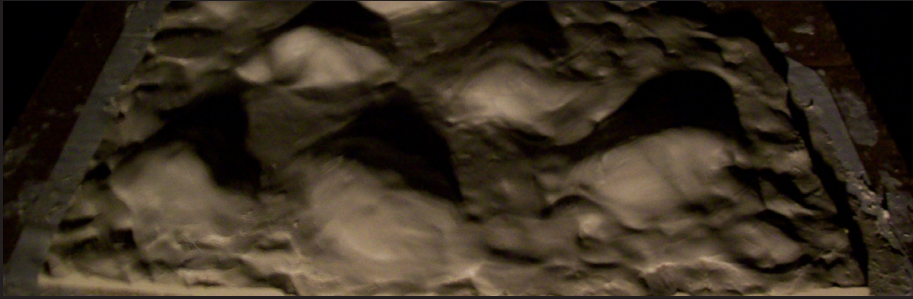
How would one choose to move through this landscape? Progression of movement is a key aspect of any site, and the field operates as an extensive series of choices that one makes in their movements across space. Undirected flows have the ability to emerge through time as opposed to being fixed impositions at the onset.



Mound Field

In pushing these forms to be flush with the horizontal ground plane, the critical nature of a connective boundary between horizontal and vertical emerged. At what point does the surrounding space become the object?

This line of difference distinguishes a boundary by which space has the ability of becoming place. Slope acts as the integral mechanism in the recognition of a discernibly contrasting arrangement of form. The validity of form (the object) surfaces to distinguish and help define what is space and what is place at the smallest of human experiential scales.



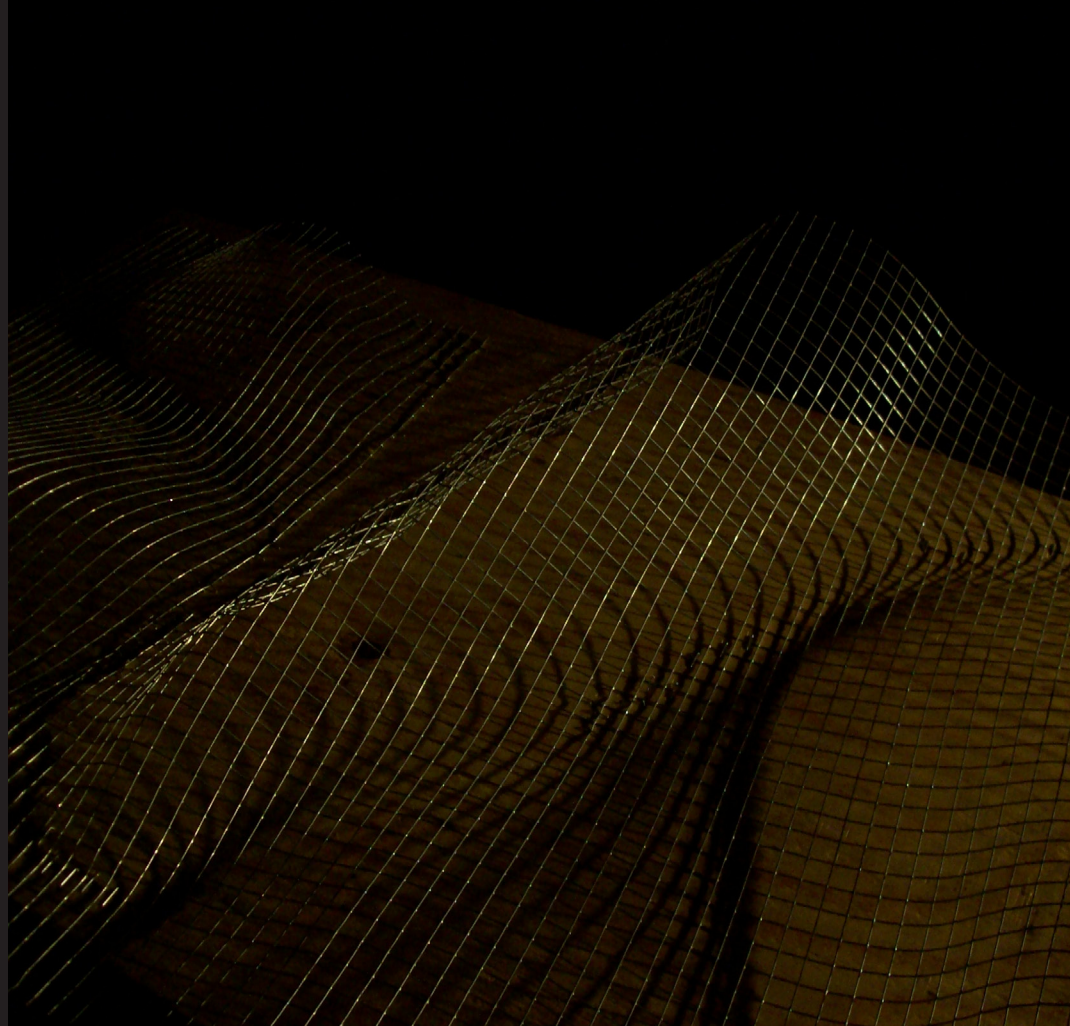
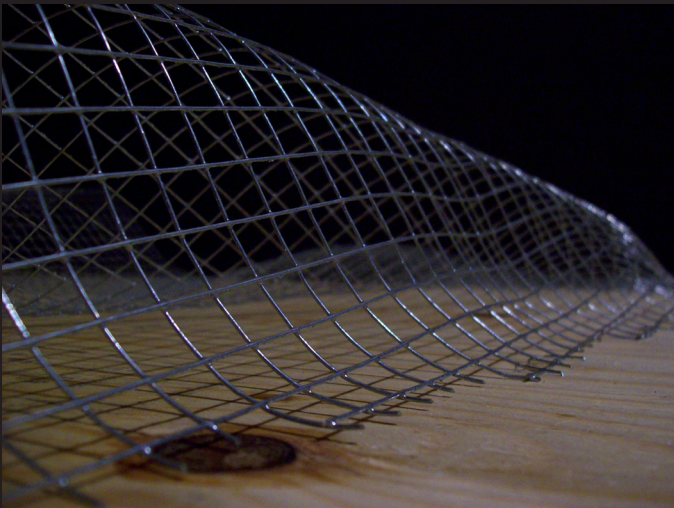
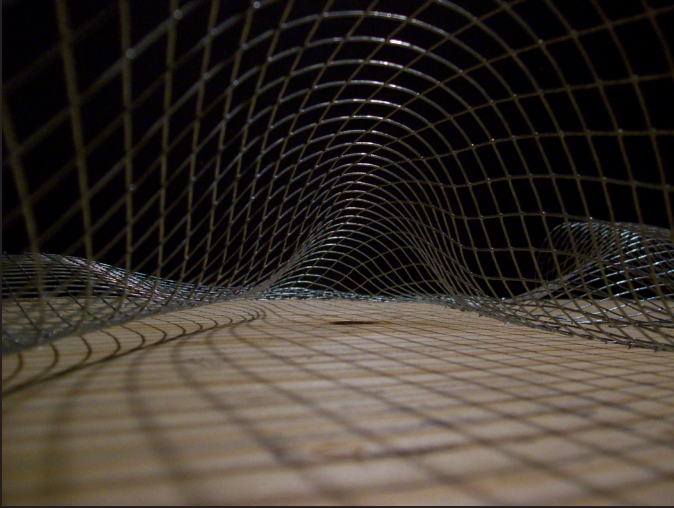
Emergent Object

A singular object becomes an external reference point within the landscape. A form becomes THE form, and an immediate identification of difference to the surrounding environment draws one's curiosity.

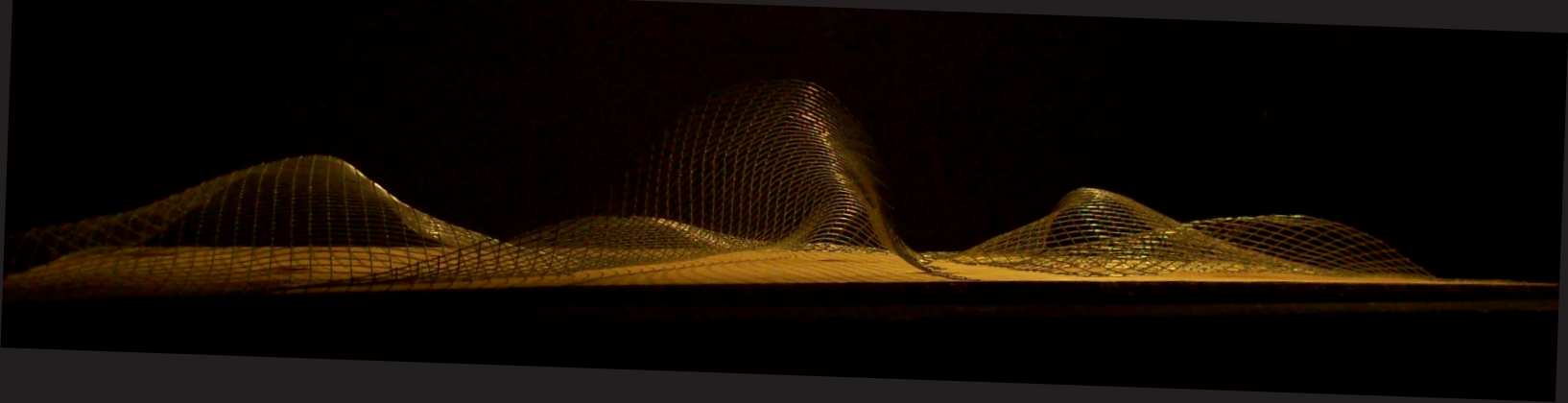
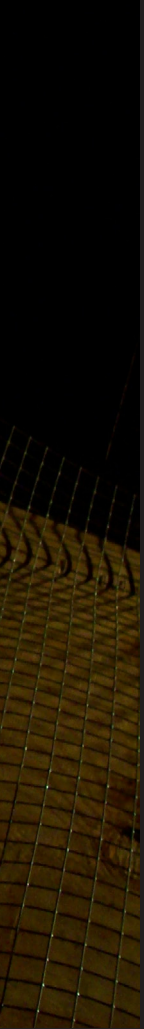
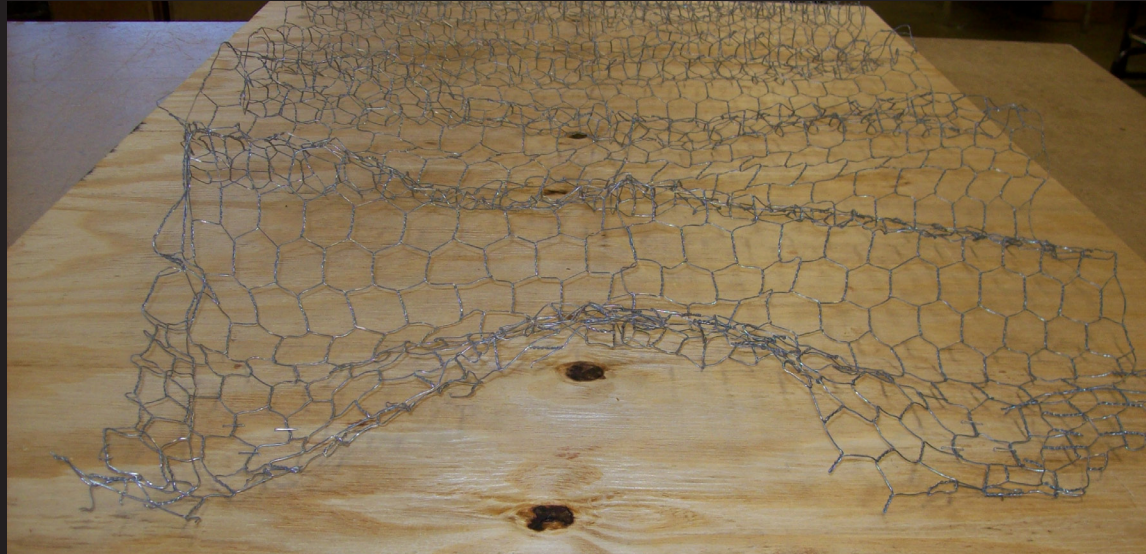
The importance of the vantage becomes apparent as the ability to comprehend a wider realm of space is activated at this point. Combined with the navigation of small intimate spaces, the journey from low to high, and field to object accommodates an extraordinarily high degree of perceptive spatial qualities.



wire mesh/papier maché models

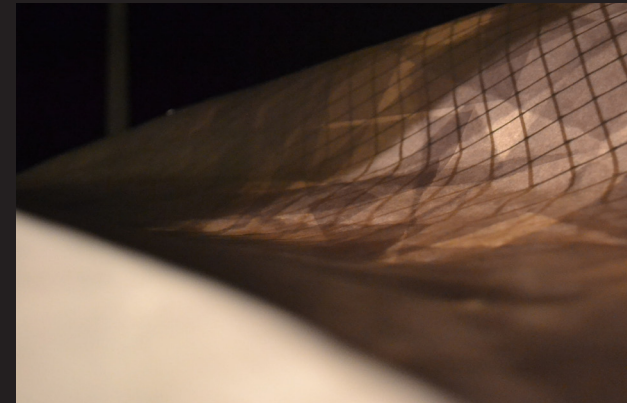
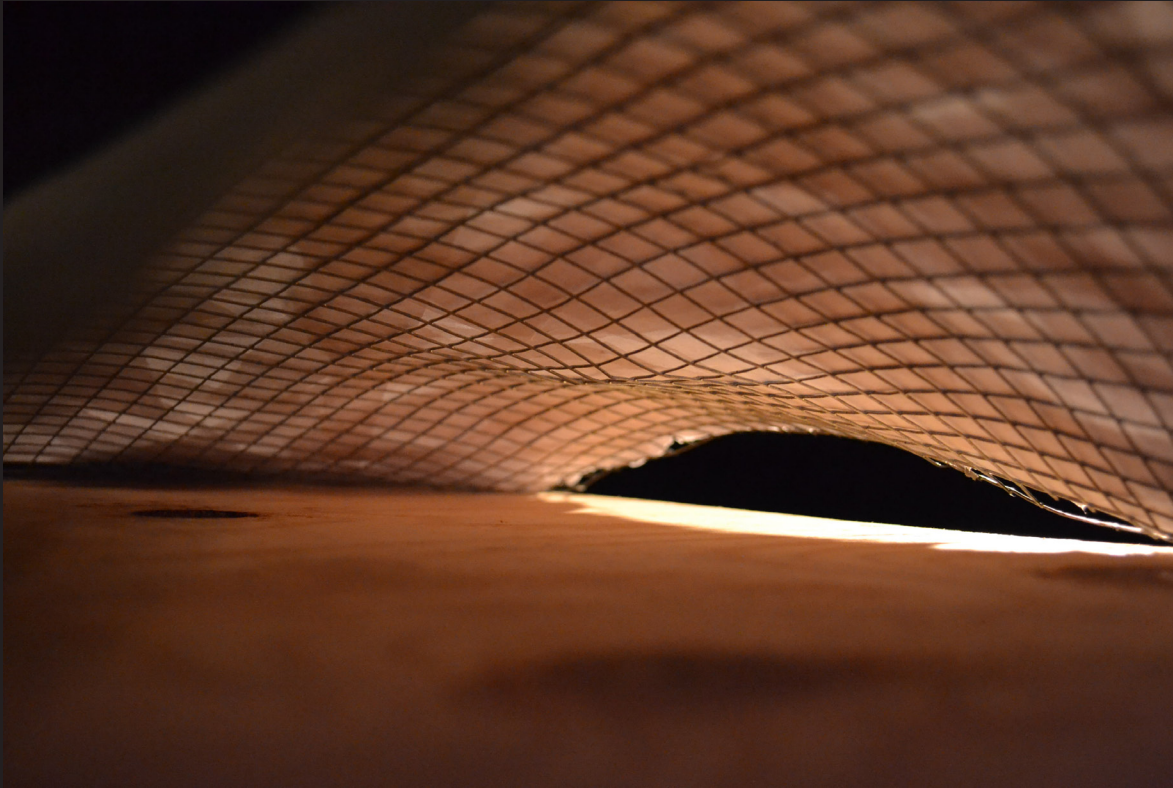


These models began as a bottom up design and throughout the process retained an element of emergent form not based on a preconceived idea of topography. Their form was in a very minor way predetermined in my head, but it was the materiality and process of constructing them that highly influenced the final forms produced.

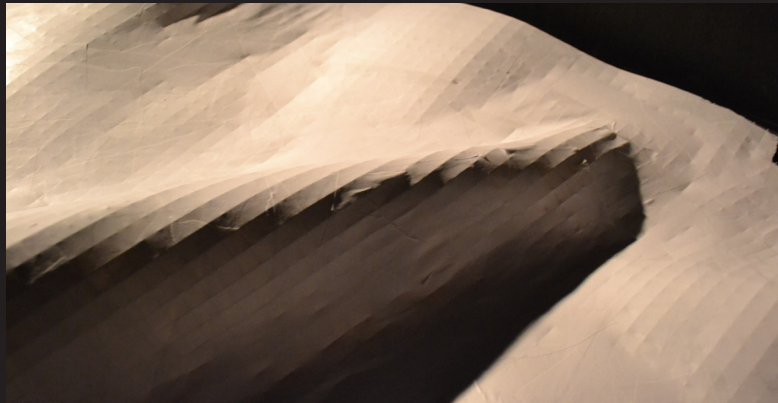
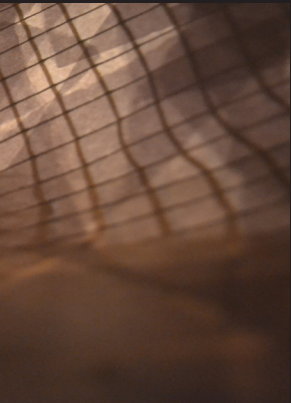
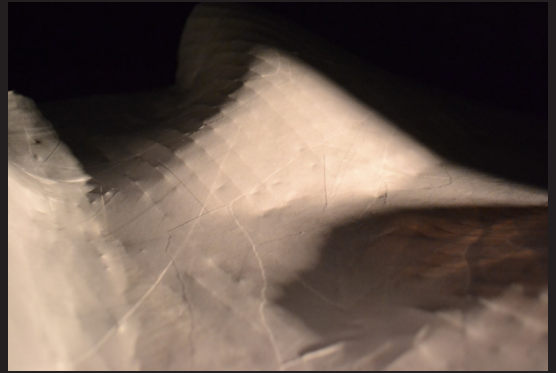
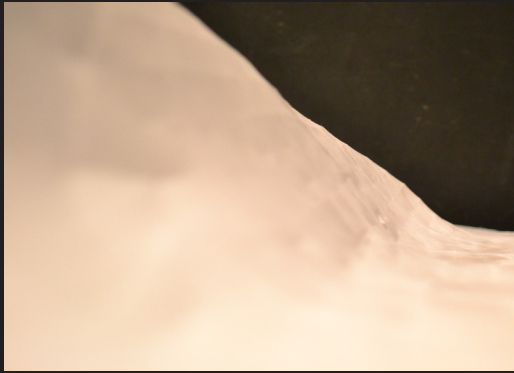
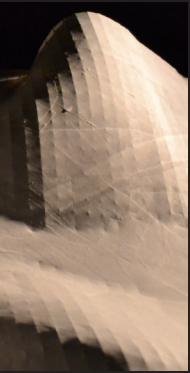


The materials used and the limits as well as potentiality of their molding would dictate the forms created. The only true premise that was introduced to the process was the idea of having a variegated landscape in respect to slope; high and low conditions and different steepness of slope.

smooth space



The first 2 models were made by covering objects in a wire mesh (I used a jar of jam, a small plastic container and a pair of pliers for the first, and a french curve for the second), pushing up and down and squeezing the mesh to make varied topographic mounds. Once a certain quality of landforms were created, I used a staple gun to nail down the forms into place. At this stage there were rigid shapes that had been created using found and present objects as well as some of my own intuition as to the placement of these objects. I then covered each piece of wire mesh in white paper that had been covered in a water/glue mixture.

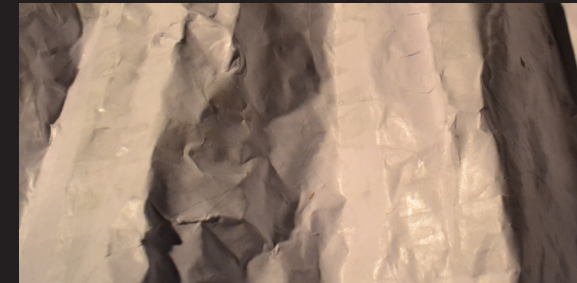
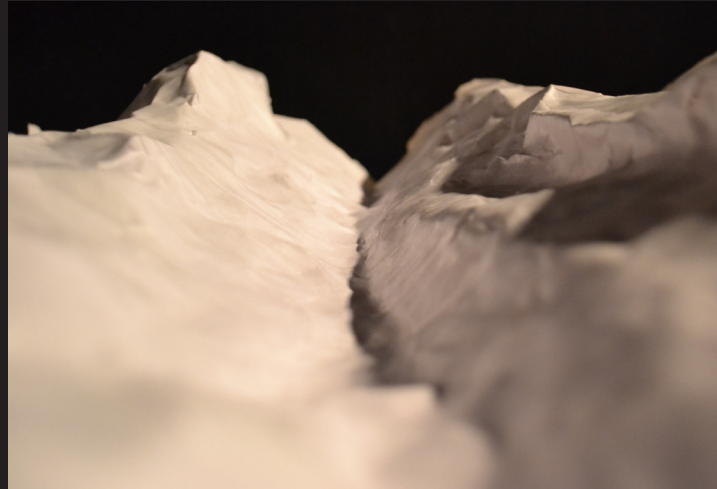


curved space

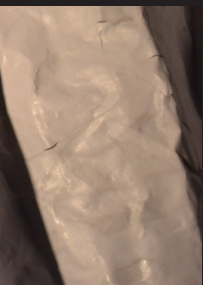




crumpled space

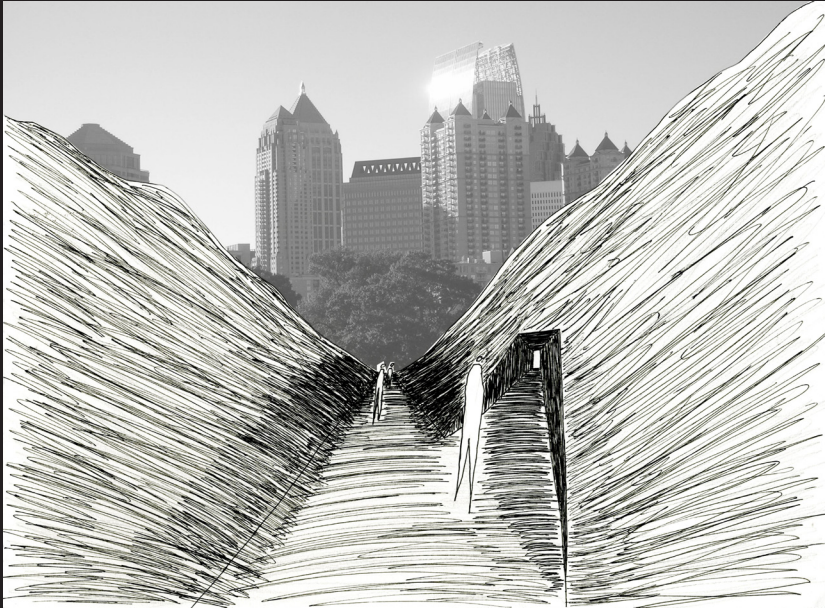


The 3rd paper/ wire mesh model was created by first stapling a long flat piece of mesh on one end to a piece of plywood. I then crudely folded the mesh until it was crunched together into strips that I pushed down on. Once I had put as much pressure down on the mesh to flatten each stack or fold, I grabbed the end on top and stretched it out to the other end of the plywood. Very pointy ridge and valley topography resulted. The end not yet stapled was done so, and the model was covered in glue saturated paper.

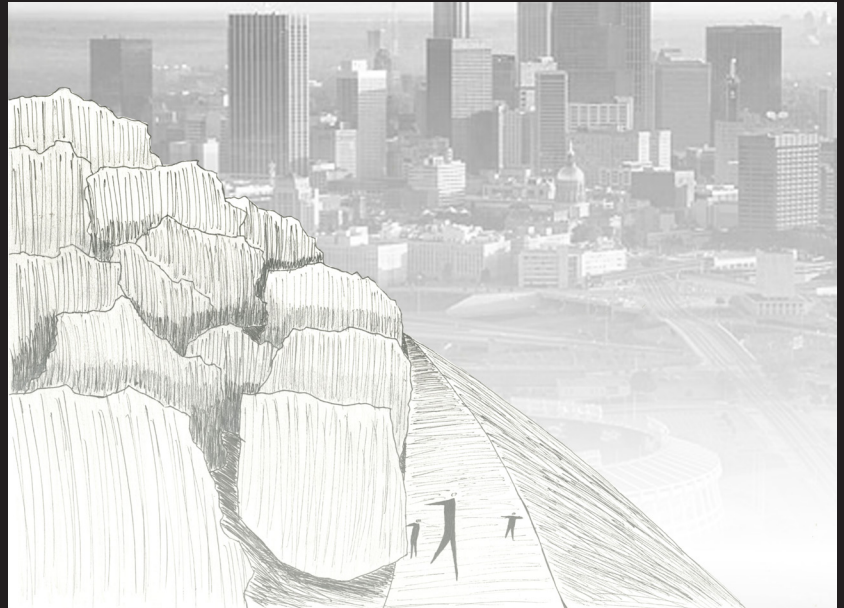


descriptive forms

Valley

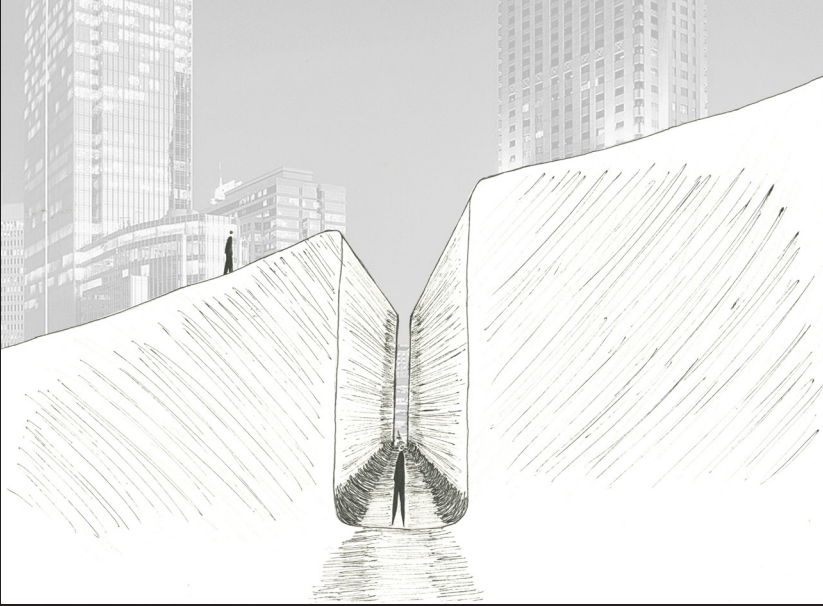


Edge

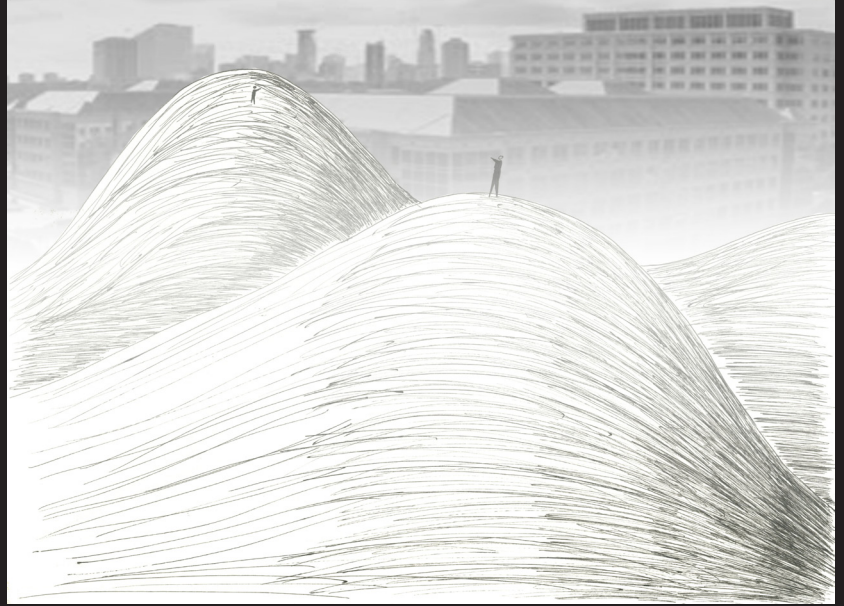


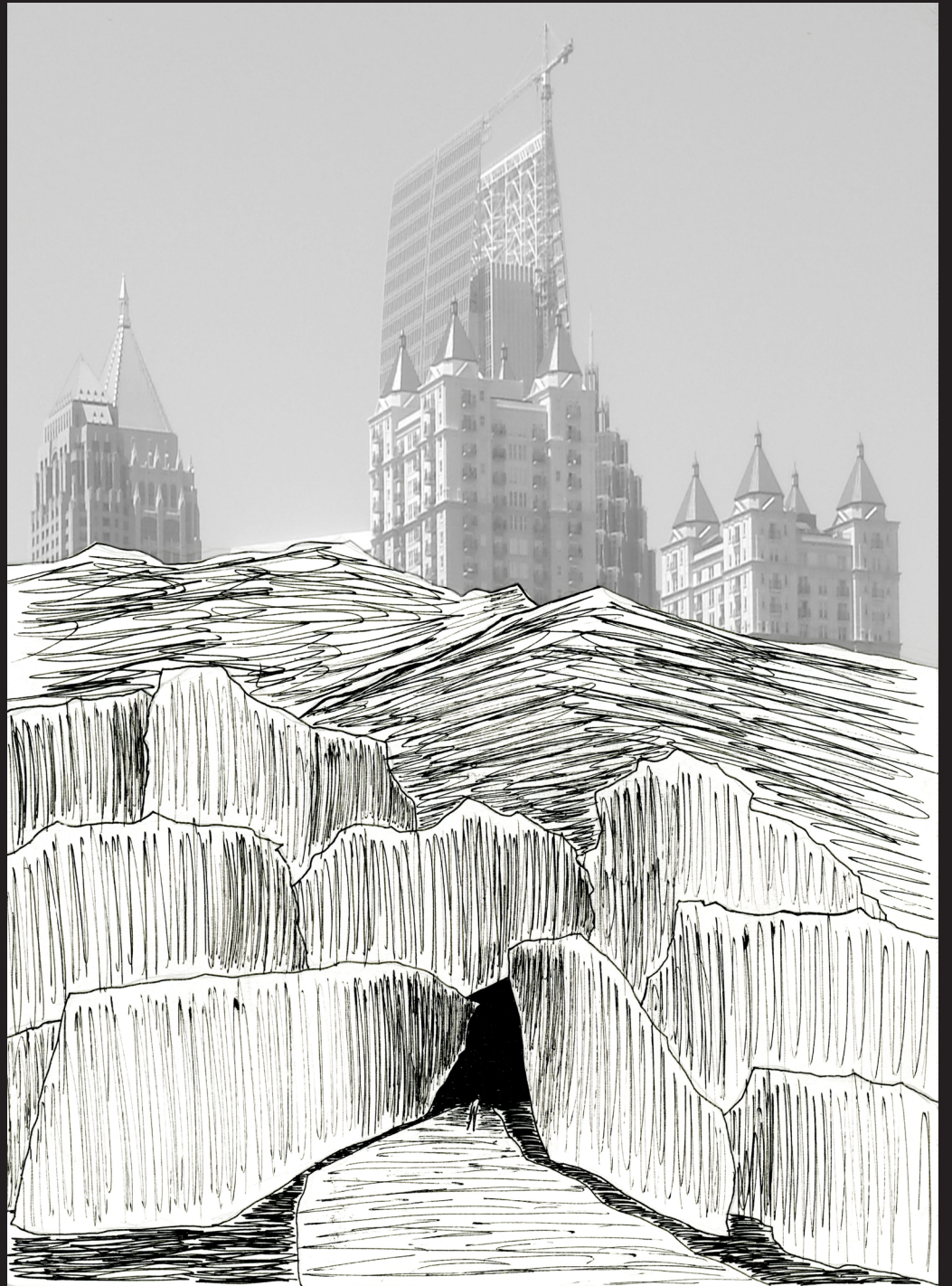
This series of drawings depicts a variety of encounters with distinct landforms. We bestow certain arrangements of form with their own titles and terms and can thereby associate qualities of each arrangement as particular to themselves. Cave and Mound are two words we use to describe very different aspects of terrain, and each has their own set of unique qualities that help to define what is a cave from what is a mound. While different categories of terrain are made to describe certain characteristics of that terrain, the differentiation in their terminology draws us away from the intrinsic associations between all forms. The creation of a mound can make way for the cave, and vice versa; And when the city enters into the equation, a building can become a cave, a rooftop can become a mound, and a street can become a valley. It is only through our associations of differentiation in terminology that we prevent these associations of connection to occur.

Cut

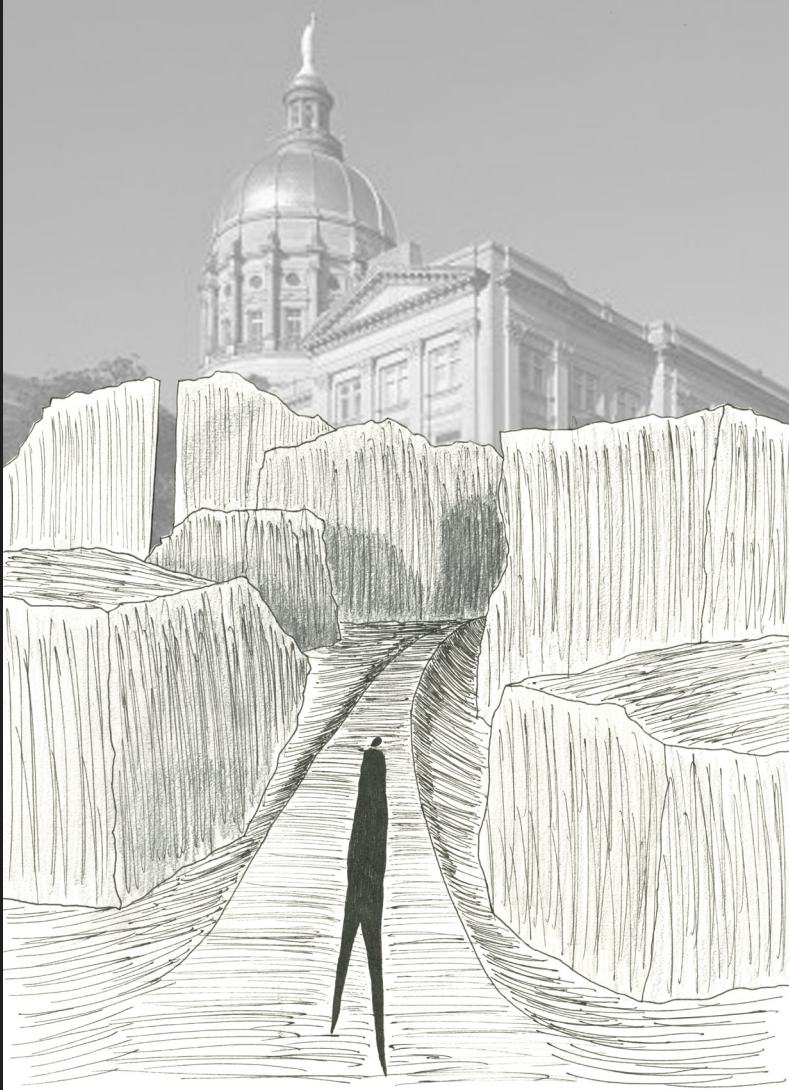


Mound

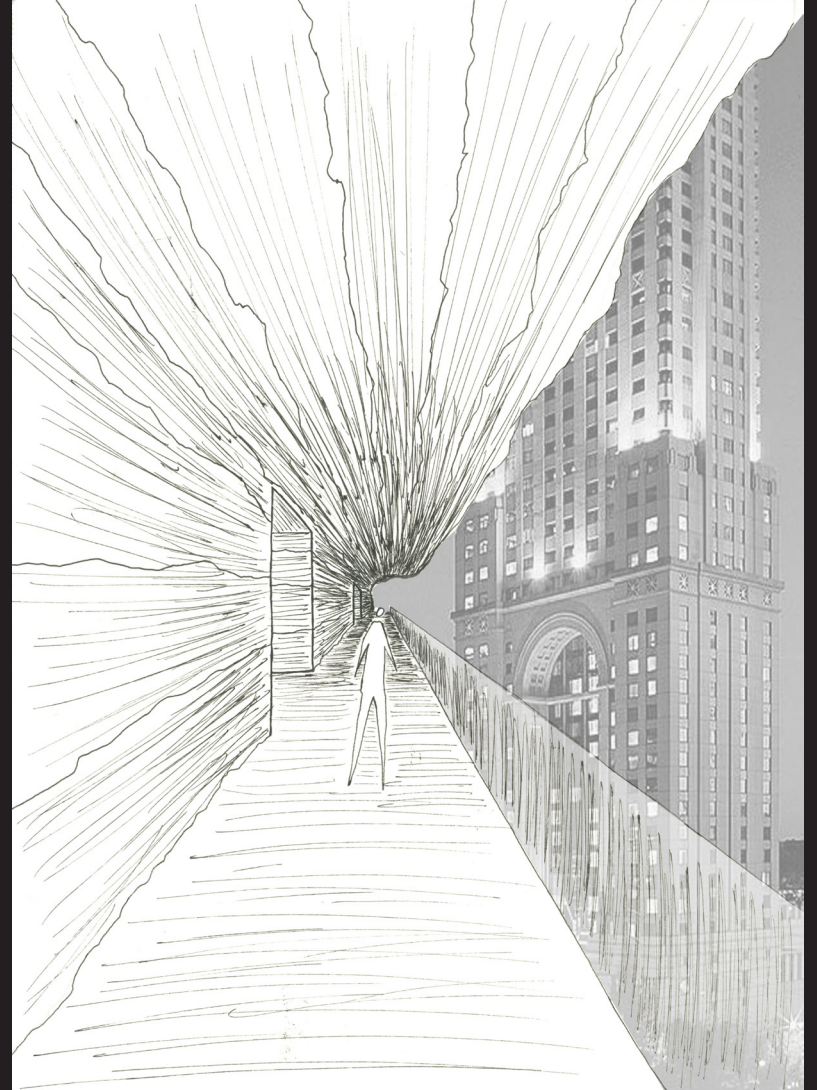




Field



Ledge



deposition

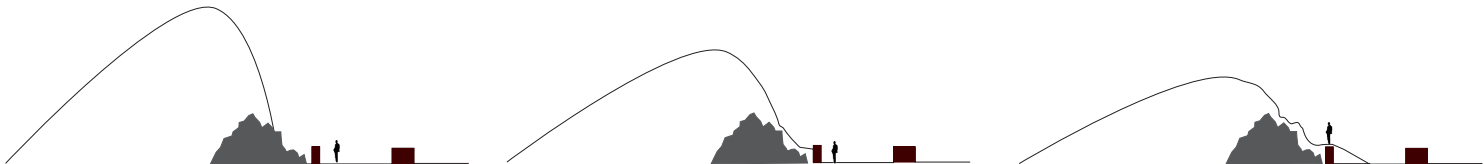
Geologic processes operate at a snail's pace in relation to human beings. Uplift, the process of tectonic collision, is responsible for the immense diversity of mountainous terrains across the world, and takes millions of years to arise to the points of height we observe today. In attempting to re-enact the processes of extended time, the aspects of hiding and revealing certain physical features of landform emerges.



PHASE 1

PHASE 2

PHASE 3



erosion

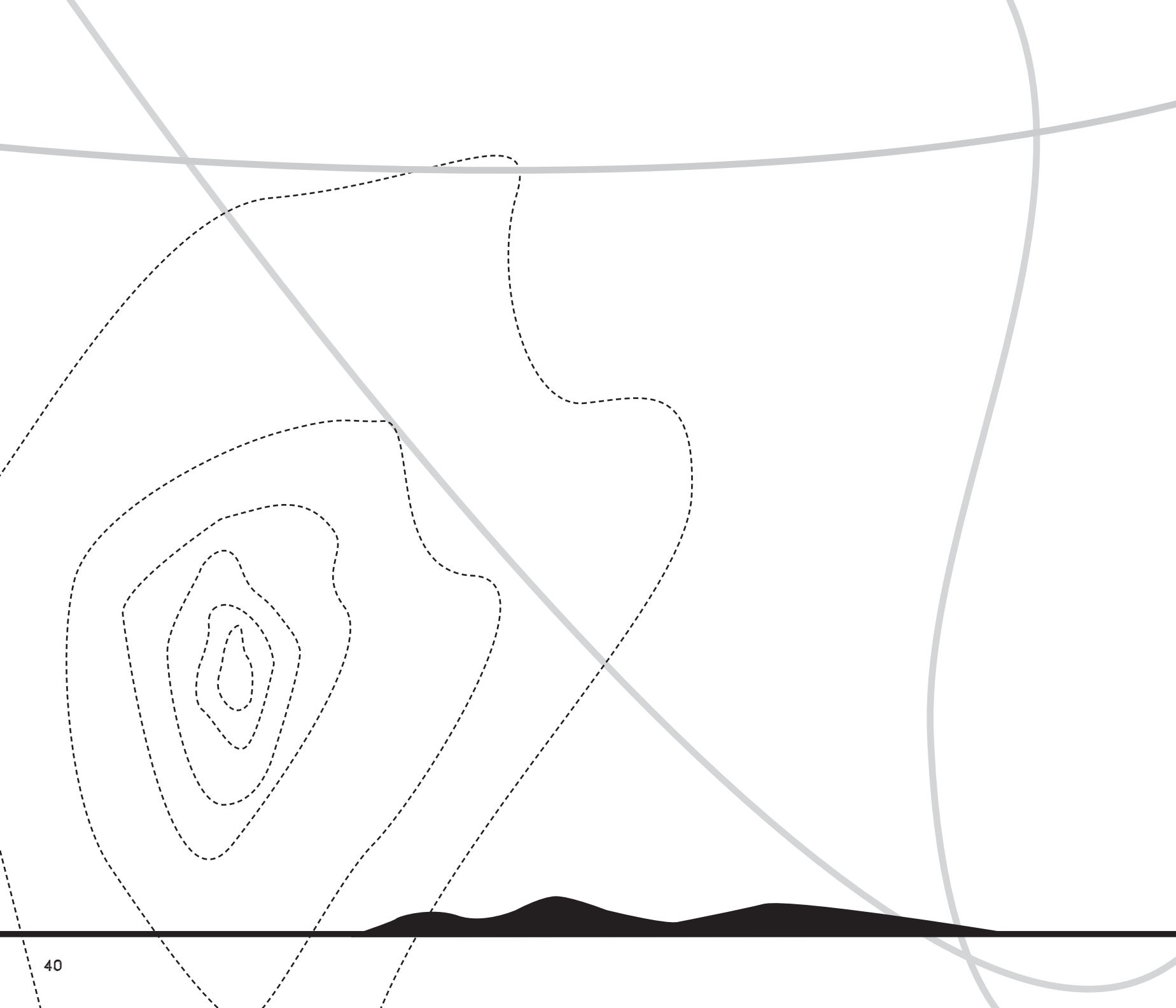
Erosive forces like wind, and primarily water, maintain an extraordinary power to shape and mold the environments in which we exist. Spatial arrangements constituting a variety of hard and soft organic material can be revealed through these erosive forces. In phase 1 below, a rocky substructure becomes hidden over time, only to reveal itself once again by phase 5. Landform, often considered fixed, is a dynamically transformational process.



PHASE 4

PHASE 5





SITUATION AND PLACE

3

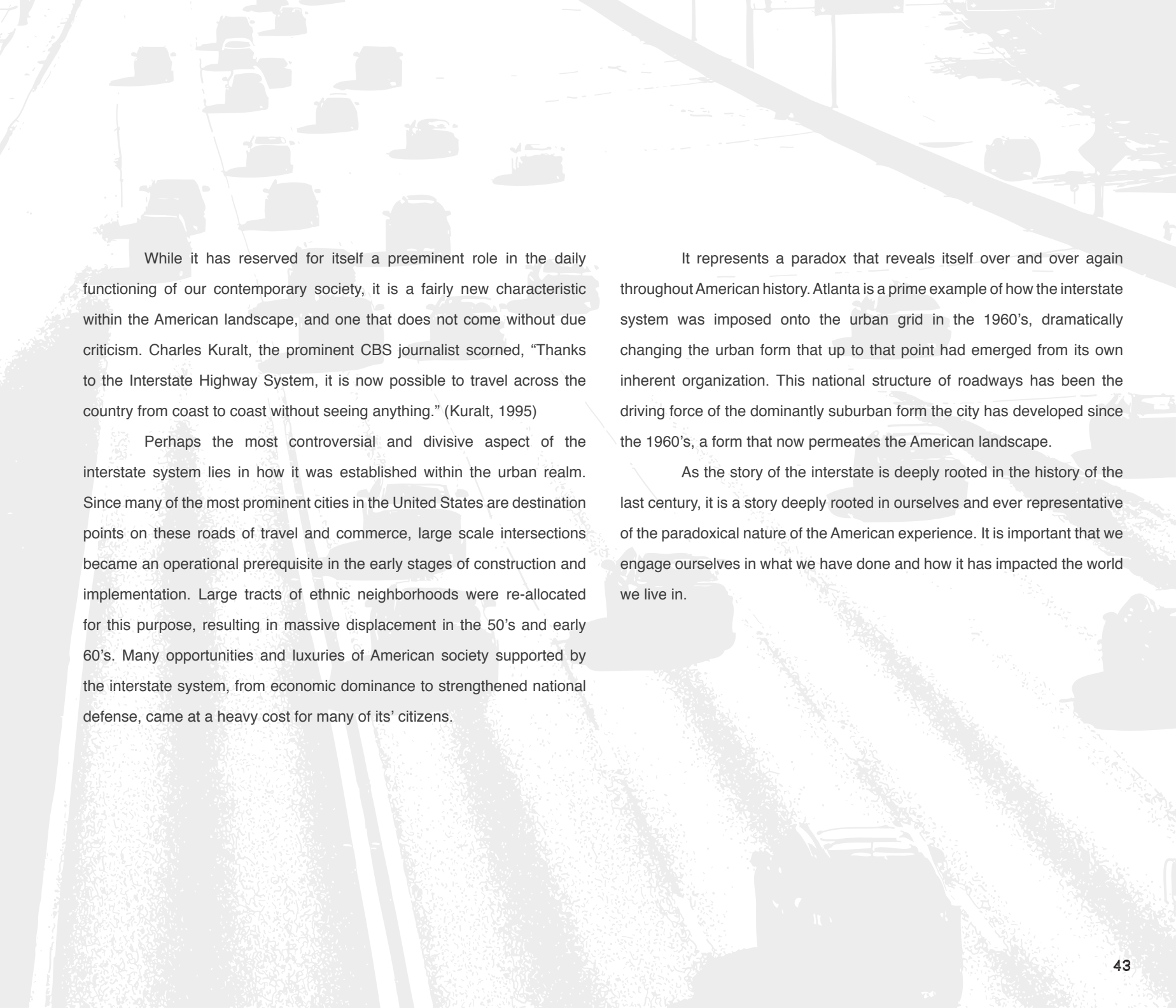
the auto-centric world we live in



An idea had been growing in the first half of the 20th Century; an idea based around the machine as the central connective force for the progression of society. Since Henry Ford's first model T came off the assembly line, people around the world dreamt of the potentials of the automobile and how it would shape the coming future. The car became the machine that would capture the hearts and minds of the people. The concept of large scale roadways gained universal popularity in the first half of the century as modern society made the transition from horse buggies to fords, cadillacs, and chevroleets.

In a period marred by such tragic events as the Great Depression and two world wars, the personal automobile came to symbolize American values of an independent productive democracy; one markedly moving forward at a rapid pace. The end of World War II presented an opportunity to strengthen the growing idea into a reality with the construction of the Dwight D. Eisenhower National System of Interstate and Defense Highways. This significant thrust towards a post-industrial future began shaping the world we see today.

For anyone who has grown up in the United States in recent decades, the seemingly ubiquitous restless spirit of the interstate system occupies a conveniently (or inconveniently) obligatory role as infrastructure within the American landscape. One would be extremely hard pressed to find an individual that has not used, or been influenced in some way by this extensive system of roadways. As David LaGessee forthrightly stated in 2003, "The world's largest public-works project has left us with 47,000 miles of remarkably uniform roads that have reshaped the American landscape and way of life." (LaGessee, 2003) To voyage the unbounded measures of these roadways as they stretch through some of the most diverse terrains in the world is not only a physical journey, filled with the excitement of leading oneself into unfamiliar territory, but a tangible manifestation of the dreams of previous generations of Americans.

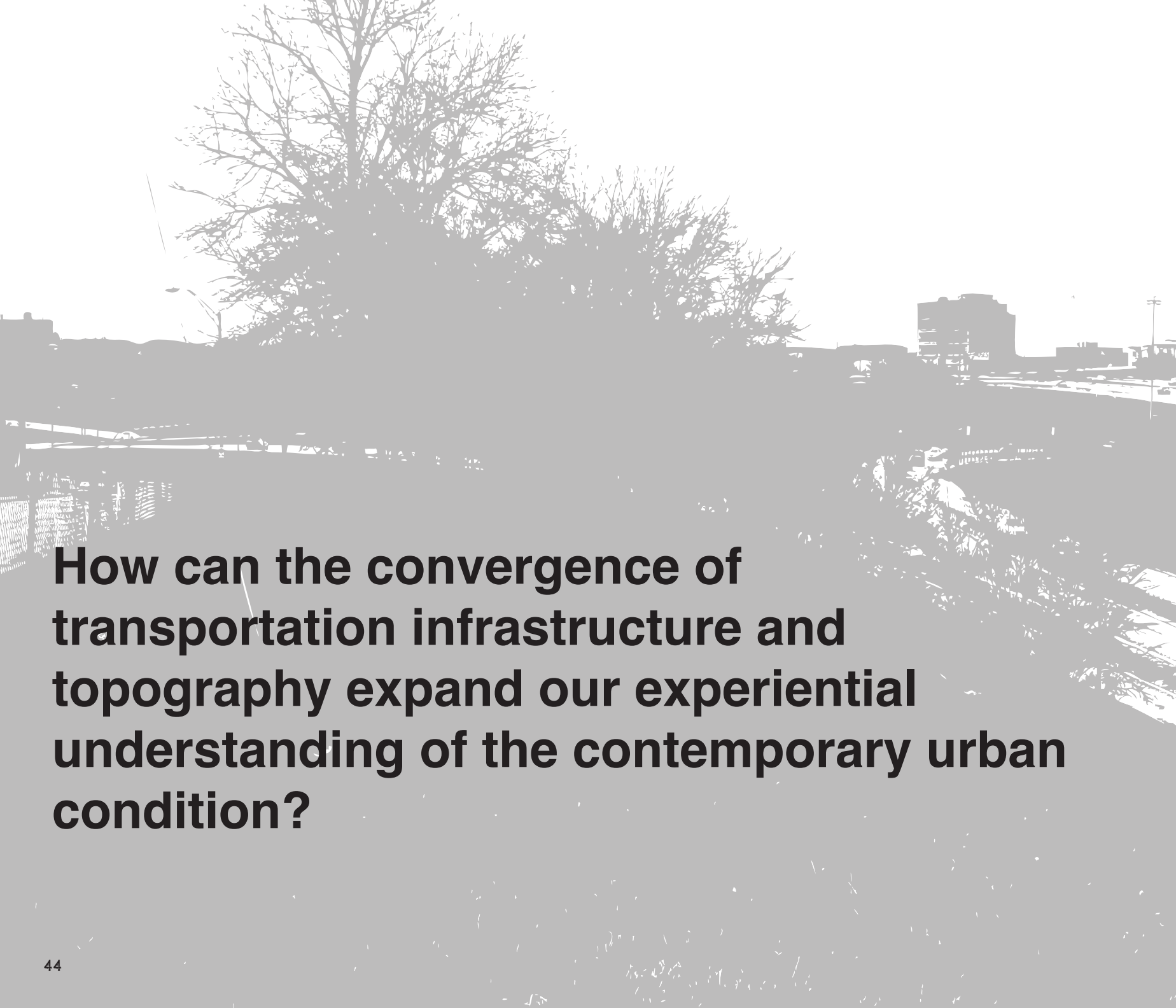


While it has reserved for itself a preeminent role in the daily functioning of our contemporary society, it is a fairly new characteristic within the American landscape, and one that does not come without due criticism. Charles Kuralt, the prominent CBS journalist scorned, “Thanks to the Interstate Highway System, it is now possible to travel across the country from coast to coast without seeing anything.” (Kuralt, 1995)

Perhaps the most controversial and divisive aspect of the interstate system lies in how it was established within the urban realm. Since many of the most prominent cities in the United States are destination points on these roads of travel and commerce, large scale intersections became an operational prerequisite in the early stages of construction and implementation. Large tracts of ethnic neighborhoods were re-allocated for this purpose, resulting in massive displacement in the 50’s and early 60’s. Many opportunities and luxuries of American society supported by the interstate system, from economic dominance to strengthened national defense, came at a heavy cost for many of its’ citizens.

It represents a paradox that reveals itself over and over again throughout American history. Atlanta is a prime example of how the interstate system was imposed onto the urban grid in the 1960’s, dramatically changing the urban form that up to that point had emerged from its own inherent organization. This national structure of roadways has been the driving force of the dominantly suburban form the city has developed since the 1960’s, a form that now permeates the American landscape.

As the story of the interstate is deeply rooted in the history of the last century, it is a story deeply rooted in ourselves and ever representative of the paradoxical nature of the American experience. It is important that we engage ourselves in what we have done and how it has impacted the world we live in.



How can the convergence of transportation infrastructure and topography expand our experiential understanding of the contemporary urban condition?

research question



global impact of the automobile



This map clearly depicts the impact automobiles have made on our lives and our planet. Where there are cars, there are roads, big roads; And while the positive impact of these vein-like connective pieces of infrastructure are unquestionable, the broader consequences of their construction and maintenance are uncertain. Where roadways have been built, mountains have been moved, carbon emissions have soared, and the very nature

of societies organizing principles are changing. In order for us to better understand the impact of large-scale roadway infrastructure, it is important for us to understand its origins and its purpose. In the hopes of building a future more adaptable, sustainable, and responsive to the growing problems our society presents to us, a truly humbling engagement with these systems of infrastructure needs to occur.



Fig. 9



Fig. 10



Fig. 11

Norman Bel Geddes captures the hearts and minds of the American public with his 1939 World's Fair Exhibit titled "Futurama". One of the most popular world's fairs to date, and held in the financial world capital of New York City, the idea of an auto-centric streamlined future took hold and spread with growing enthusiasm throughout the country. The underlaid 1955 map of

the United States shows the cross state roadways people used before the interstate was built. The "Futurama" model below was scaled to represent the way future cities could potentially develop with the car as the central representation of progress. This model is a clear parallel to the Dwight D. Eisenhower National System of Interstate and Defense Highways.

1955



Special Collections Department, Pullen Library, Georgia State University
Fig. 13

2004



Fig. 14

BEFORE

1960's



Fig. 15

AFTER

2007



Fig. 16

50 years of development reveals just how much the city of Atlanta has invested in it's identity as a center of conveyance and movement. The role of the pedestrian is eclipsed by the functionality of the personal automobile.

The 1980's envisaged a doubling of lanes for the downtown connector. Subsequent to popular belief at the time, when lanes are increased, traffic eventually increases to previous densities.

Rivers

Interstate Highways

Geophysical Regions



atlanta, georgia

Moving in from state to city scale, the size and pervasively broad nature of the Atlanta metropolitan area becomes apparent. The broader context of the interstate system is juxtaposed with waterways of Georgia to acknowledge their distinct influences on the urban condition. Roadways have come to define the city and its spatial hierarchy, while the waterways have been concealed by the urban form. The city is located at the southern edge of the Appalachian Ridge and Valley Region, and is considered part of the Piedmont Region.

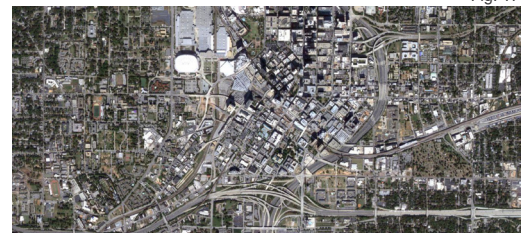
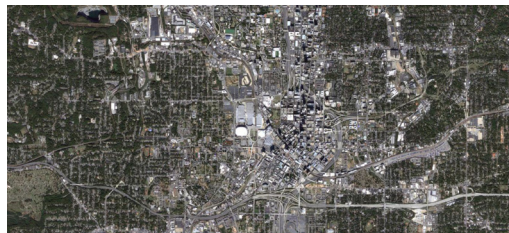
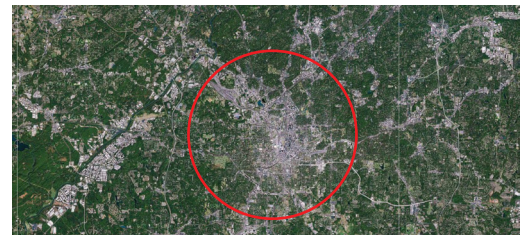
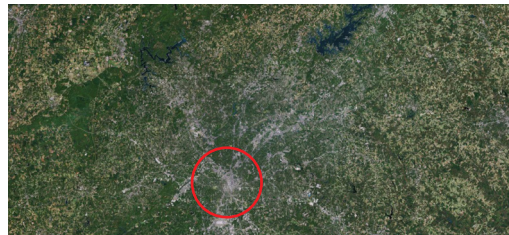
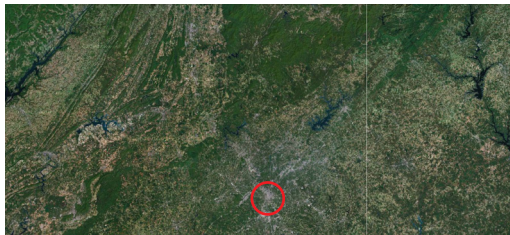
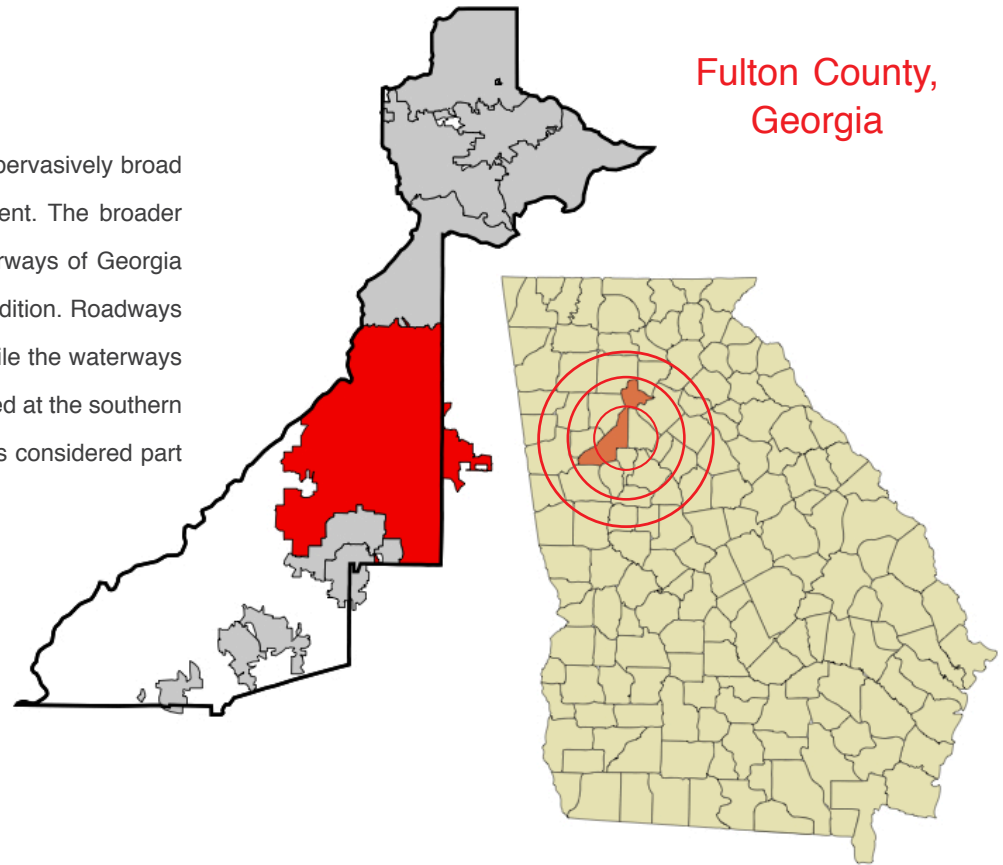


Fig. 17

mapping the synthesis of roadways

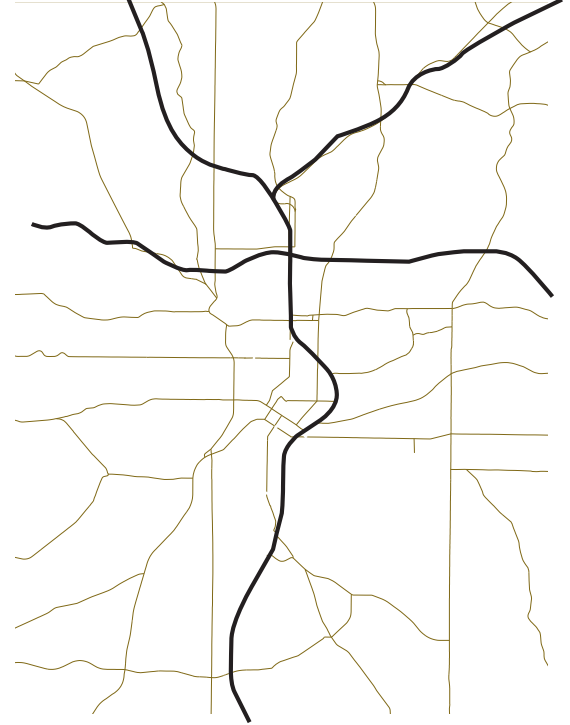
Railroads



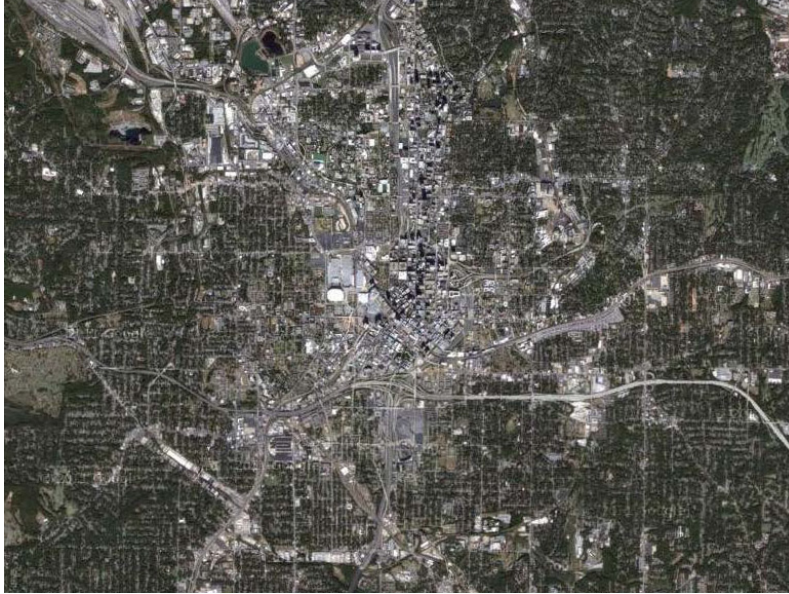
Roadways



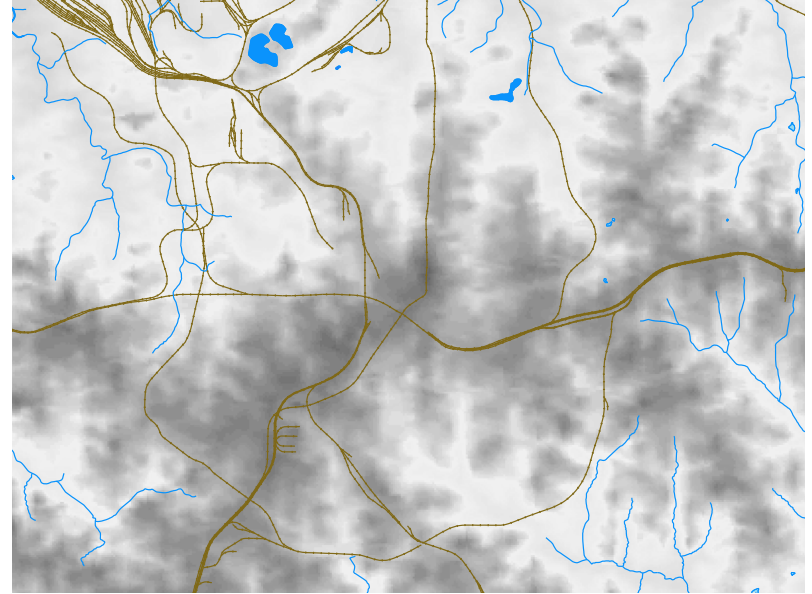
Major Roads + Interstate Highways



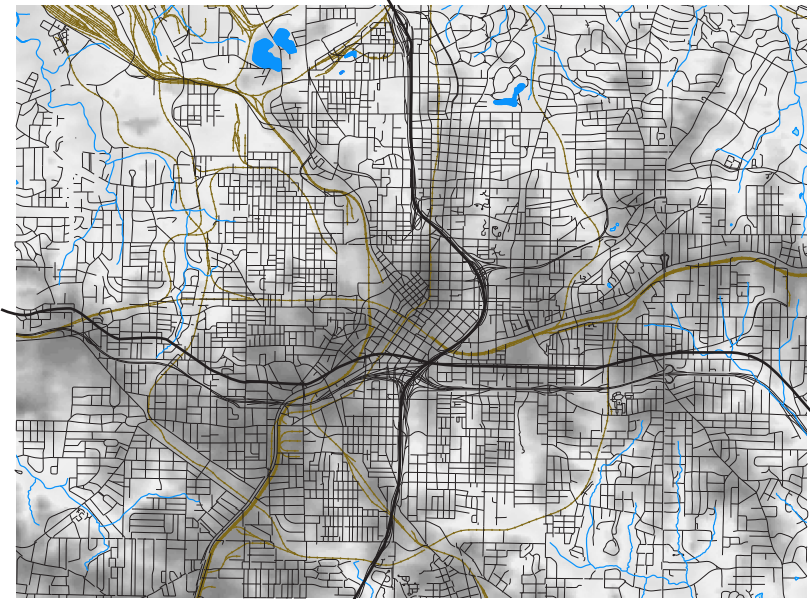
Satellite Image



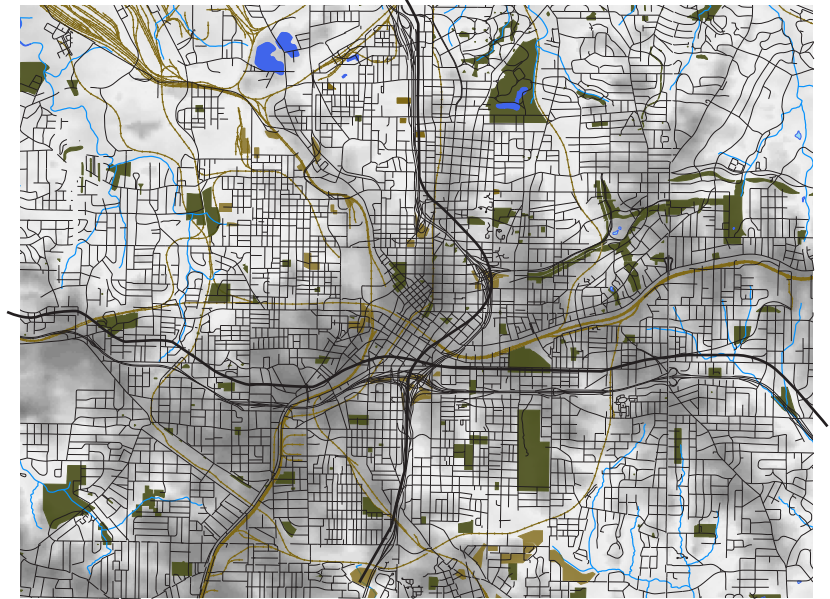
Railroad, Elevation, and Waterways



+ Roadways and Interstate Highways

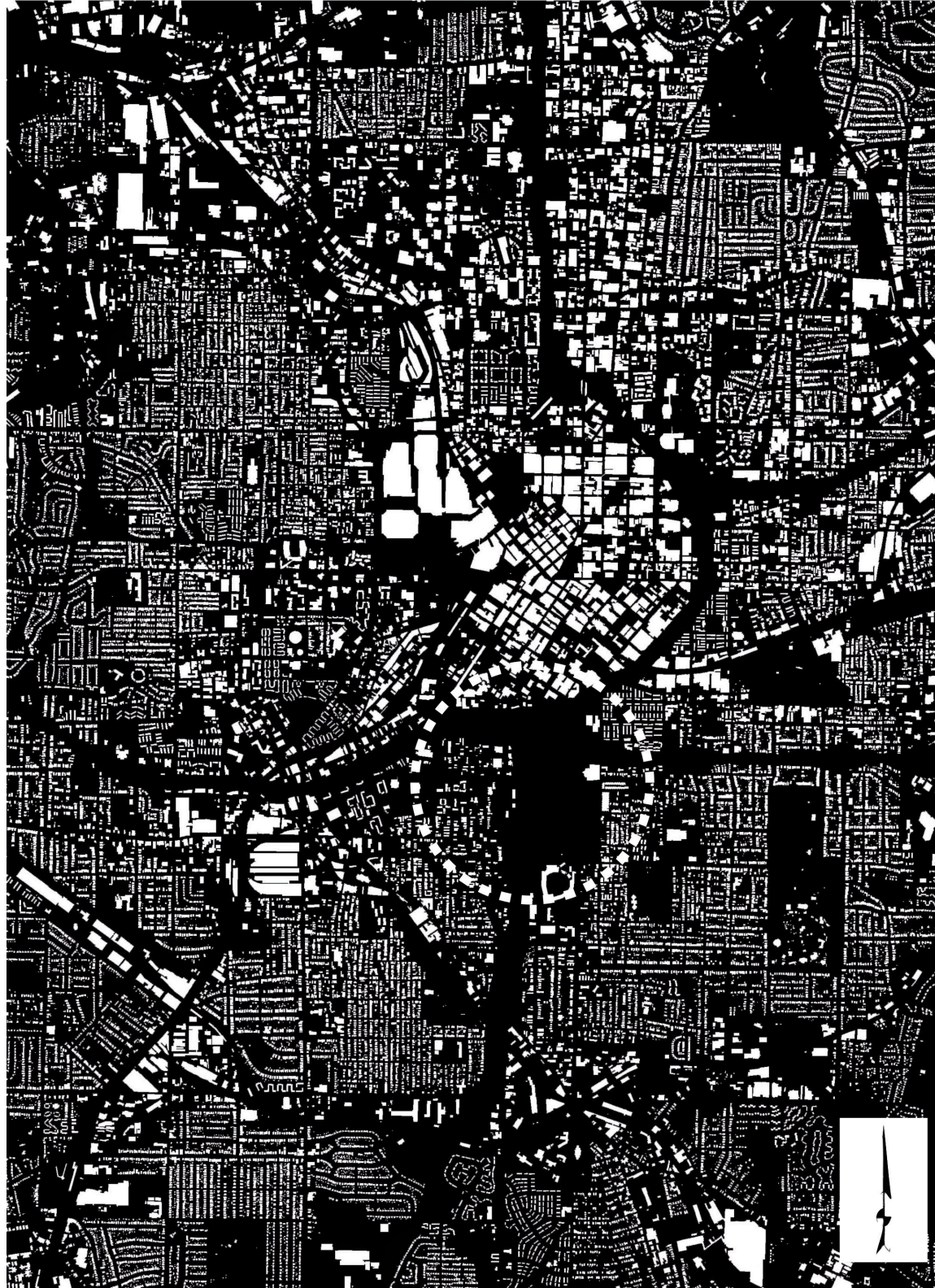


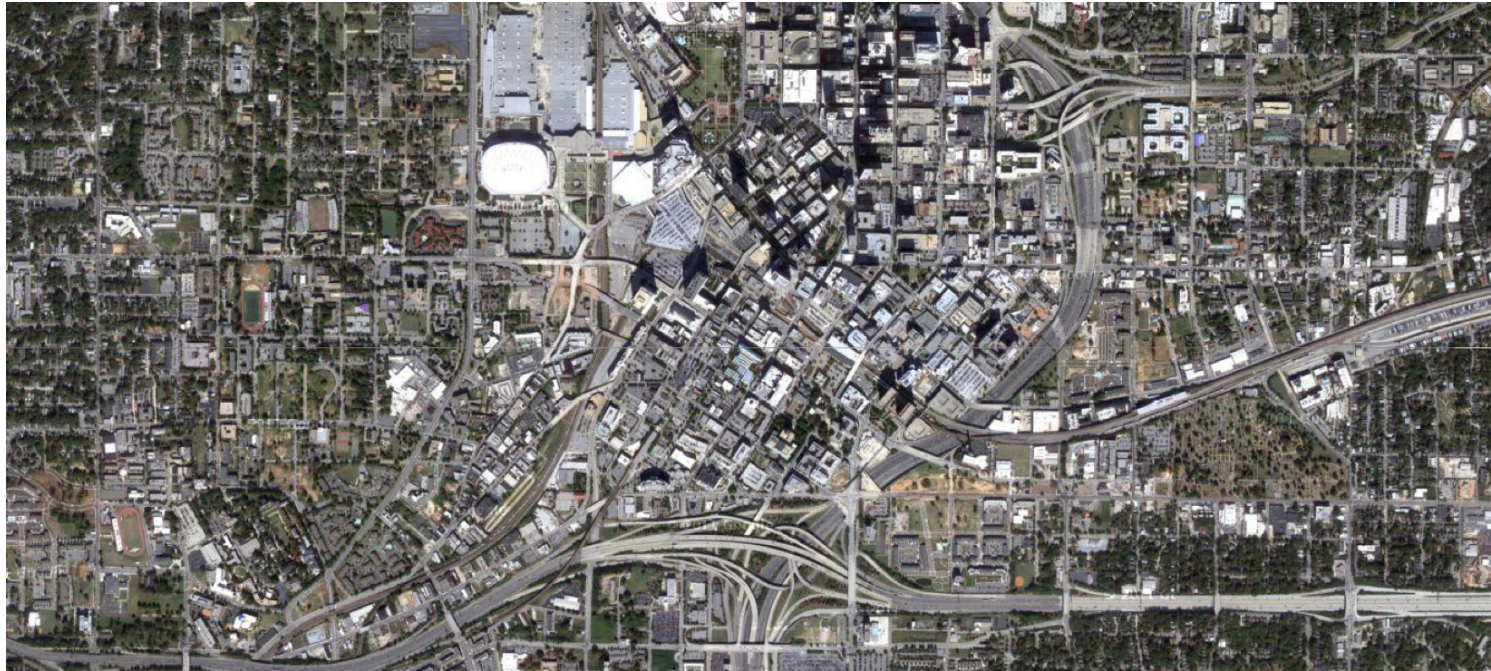
+ Parks and Terrain Vague



discovery of site

A contrasting figure ground of Atlanta reveals the spatial impact of the interstate system on the urban environment. As the largest piece of infrastructure in the city, its functional role dominates most other functional components in the network of the city. Massive spatial impressions denote extreme spatial difference in the landscape.

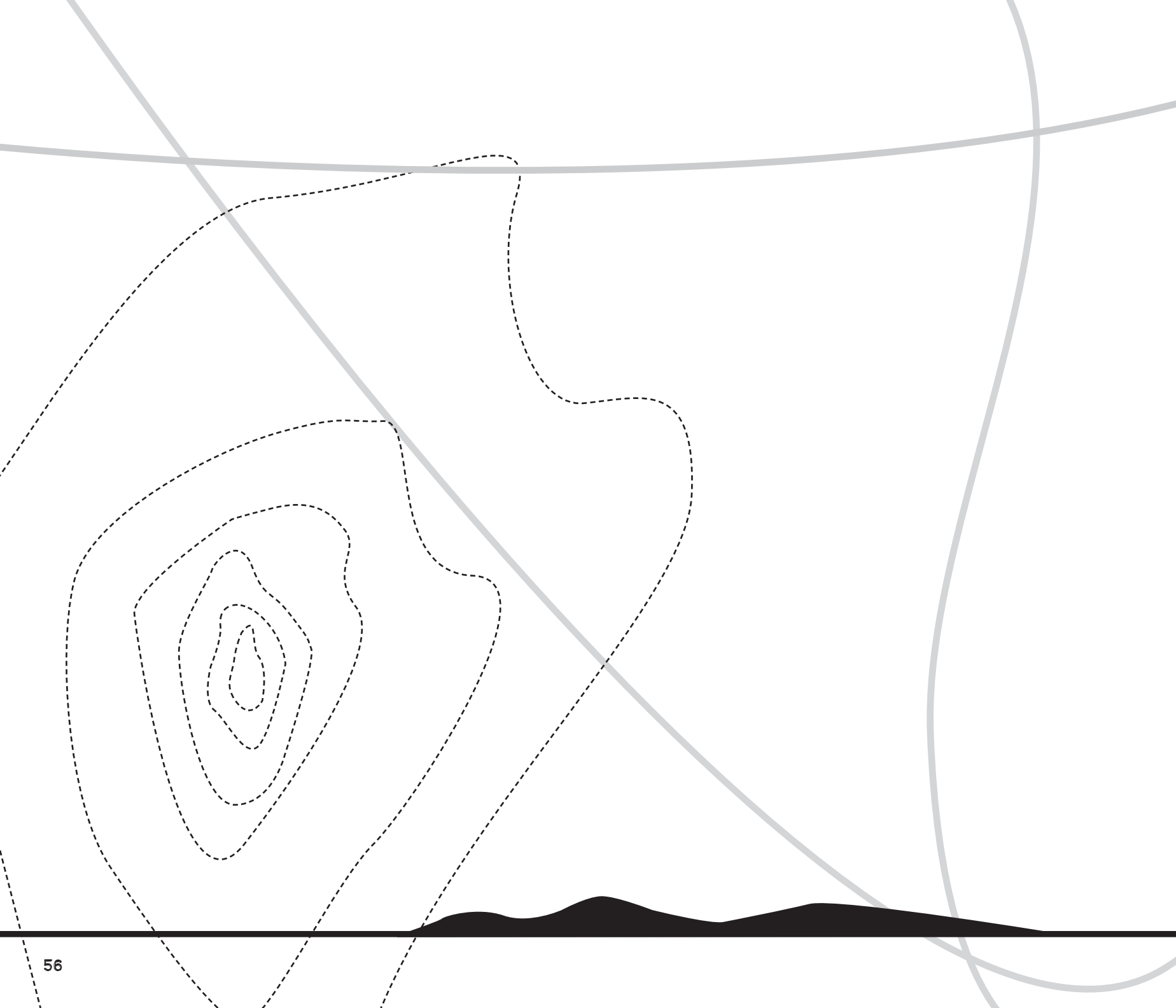




The Intersection of I-20 and I-75/85 is the largest interchange in Atlanta



Fig. 18



SITE INVESTIGATIONS


4

terrain vague



As the modern American city of Atlanta, Georgia has developed over the last century, a landscape driven by economic growth and spatial hierarchies based on principles of property, exclusion, and the dominion of the automobile has emerged. Within and amongst the patterns of formalized urban organization, there also exist what Ignaci de Solà-Morales referred to as Terrain Vague; the interstitial urban spaces that occupy an anonymous reality in contrast to the productive logic of the city. (Solà Morales, 1996) The cultural implications of these mainly boundary conditions are viewed as divisive elements within the landscape, catalyzed by infrastructure, yet there remains an abundance of thickened ecological and social flows existing throughout these territories.

By framing the city as a metaphorical rhizosphere, the often obscured unprogrammed spaces begin to connect to each other around a broader ecological context, as well as what is thought to be a secondary social context; a kind of subculture beholden unto itself. These spaces have become increasingly prevalent in landscape architectural discourse, notably among landscape urbanist and those working with brownfield remediation. "The concept of terrain (as opposed to the concept of land) is more expansive, including more spatial connotations." (Davidson, 2007) They often coincide with transgressive, blighted forms of infrastructure whose primary functions no longer apply or have been exhausted. In this context, a new cultural understanding of cities as open systems, beholden to the ecological and social flows of all life sits dormant, waiting to blossom amidst a wasteland.



There is a deep potentiality of these spaces to foster an idiosyncratic connection between the natural and social processes of the city. The interspace already denotes intrinsic relationships between social, cultural, and ecologically interactive forces. The variegated field of processes takes higher precedent over the managing constraints that the majority of the city must deal with. It is important that the interspace, as a kind of sub-category between that of terrain vague and semi-incorporated, singularly functioning public terrain, be approached so as to not “shatter the elements that maintain its continuity in time and space.” (Solà Morales, 1996: 123).

Whatever designs that do emerge from these spaces must possess the kinds of unincorporated elements of vague and indeterminate direction that constitute their difference to the formal composition of the city. There must be room to breath, room to grow if any design is to maintain the inherent characteristics of it's terrain. Once the initial condition has been prescribed, a continuum of flexible shifts becomes the directive force of the surrounding environment. Control is something that the city must cope with. This new condition becomes something wholly differentiated from the urban context.

appropriation of site over time

Georgia's Historic Statehouse



1938



1940



1960

Large scale displacement and demolition of numerous neighborhoods surrounding the Central Business District of Atlanta.

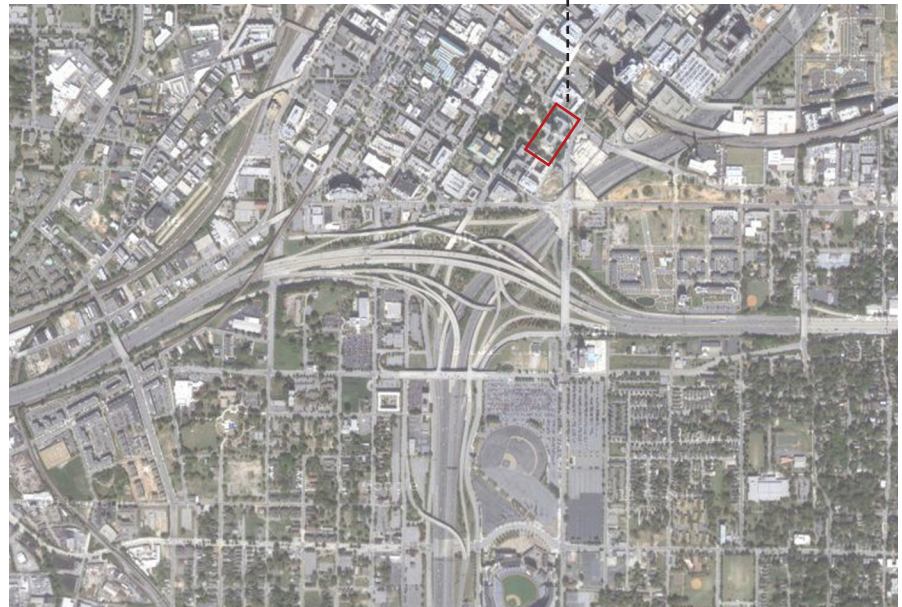
While the statehouse remains, immense changes to the built environment have taken place over the past 70 years, reflecting a rapidly growing urban and suburban environment. The impact of transportation infrastructure on the landscape is unmistakable.



Fig. 19

1972

Interstate corridor now cuts directly through the heart of the city, imposing large spatial divisions between urban core.



Current

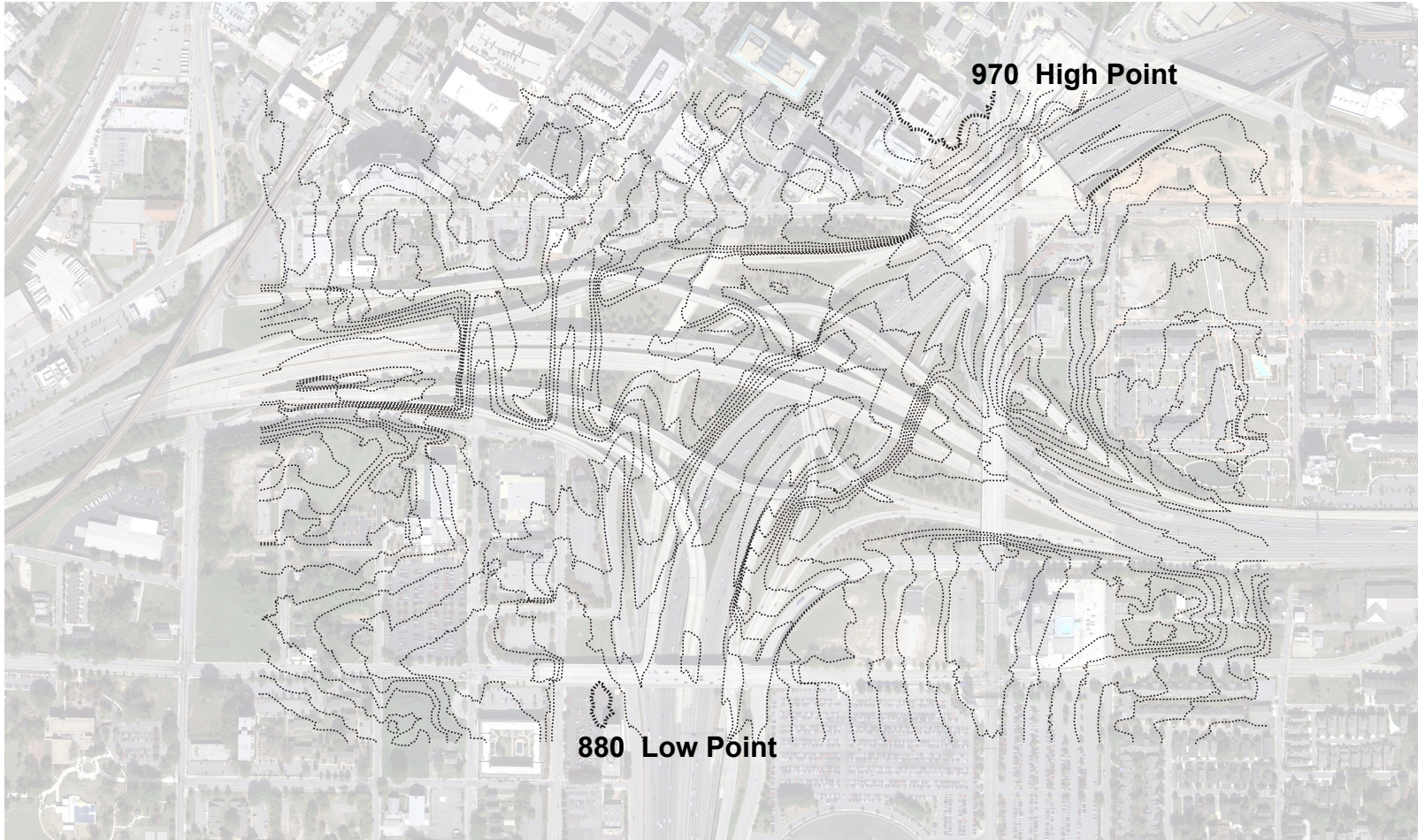
satellite image

400 feet
200 feet 1/4 Mile



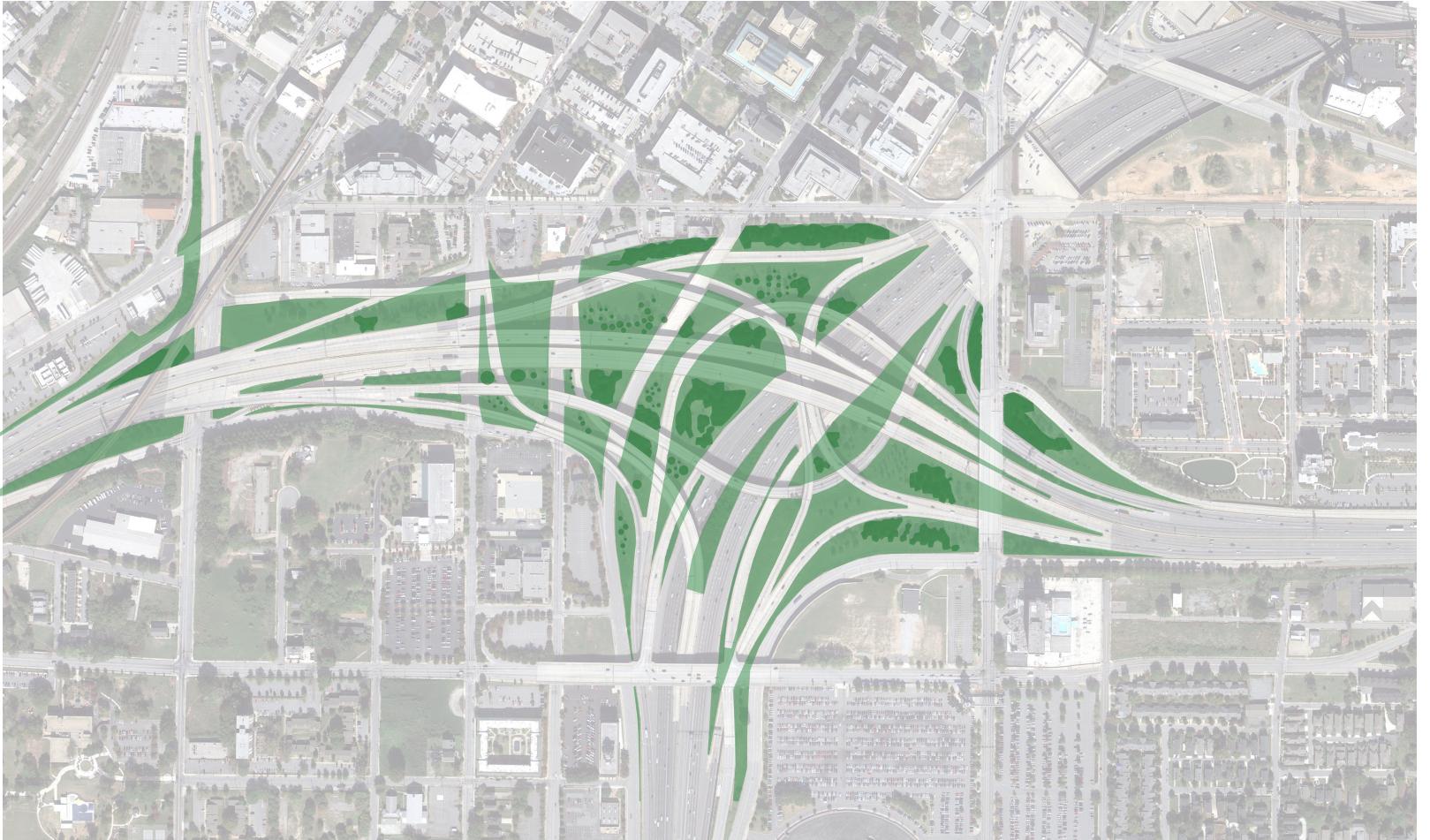
Fig. 20

6' contour lines



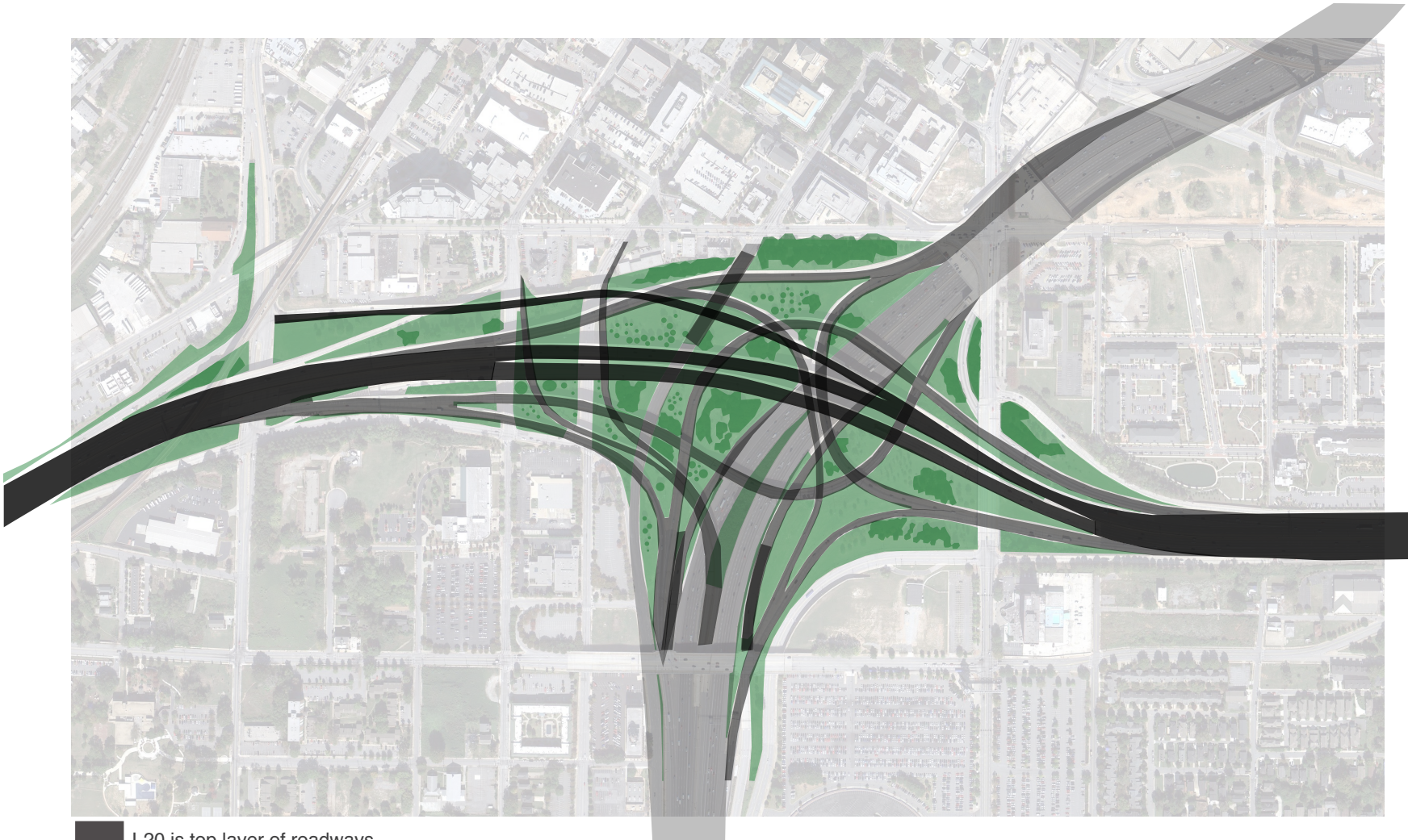
interspaces and tree canopies

400 feet
200 feet 1/4 Mile



I-20 moves east/west

I-75/85 moves north/south



I-20 is top layer of roadways



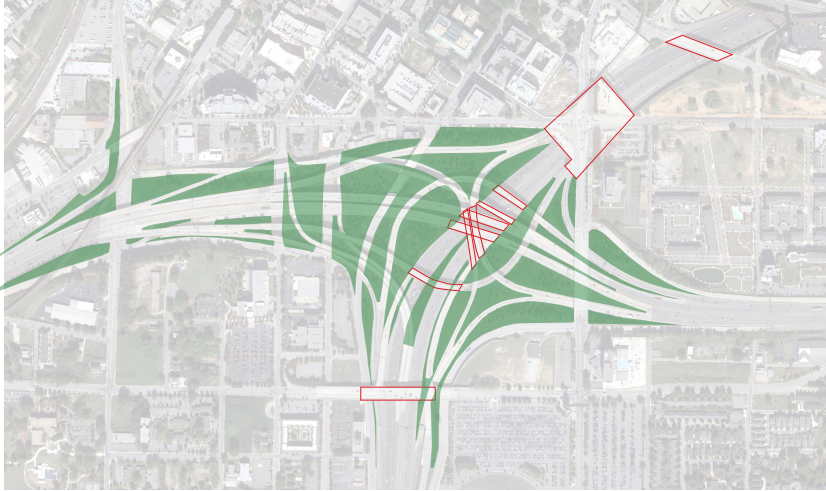
Interchanges are middle layer of roadways



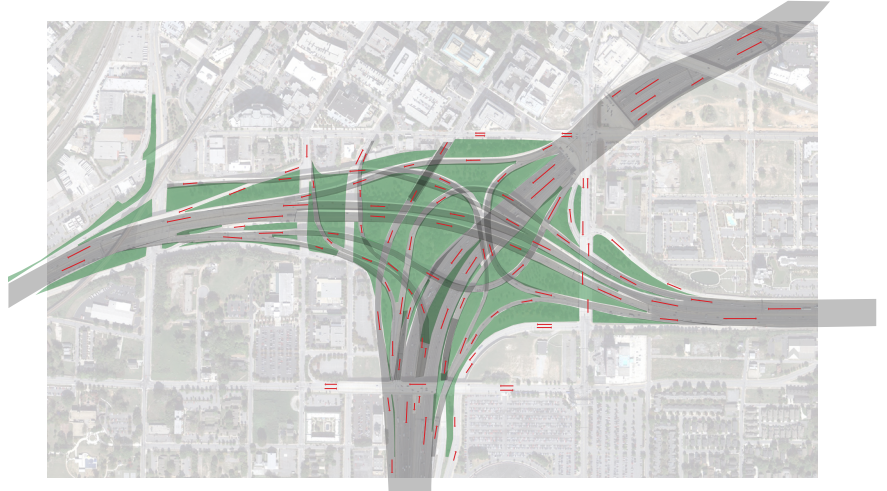
I-75/85 is bottom layer of roadways

further site analysis - unveiling the layers

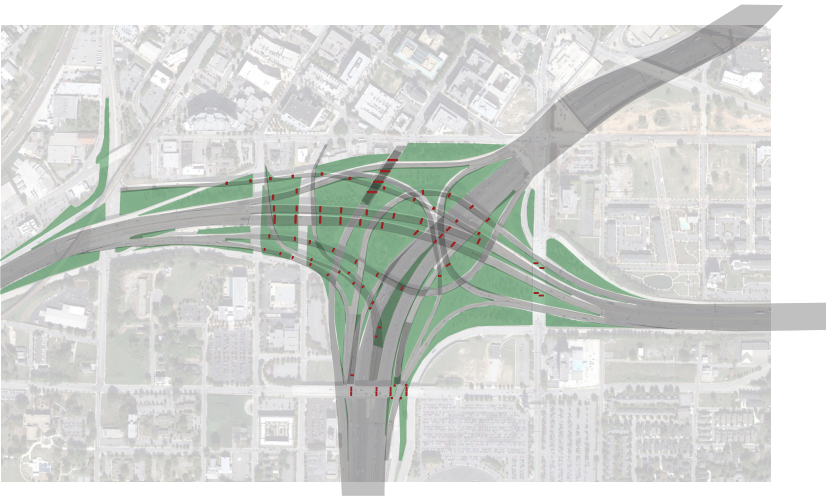
Bridges Over I-75/85



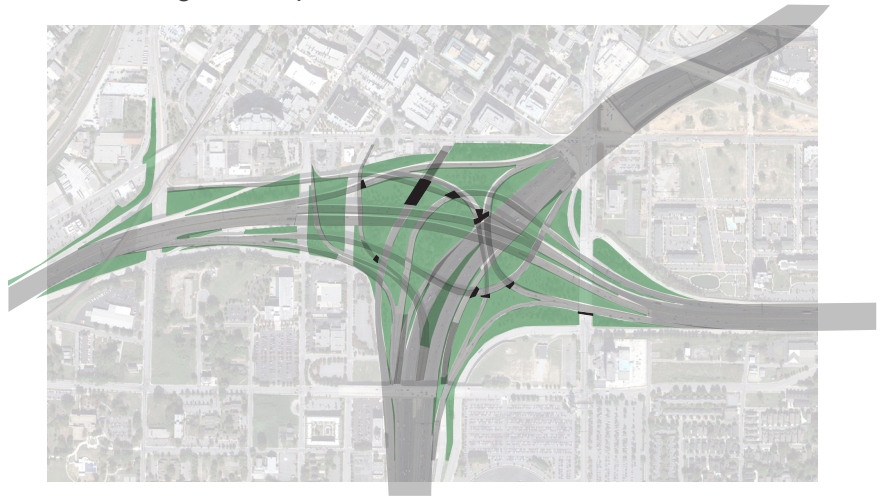
Traffic Flow



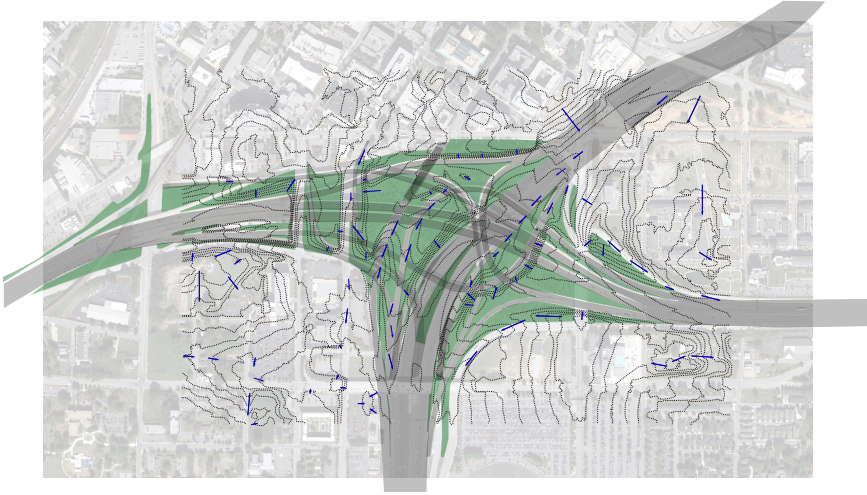
Pillars



Interchange Underpasses



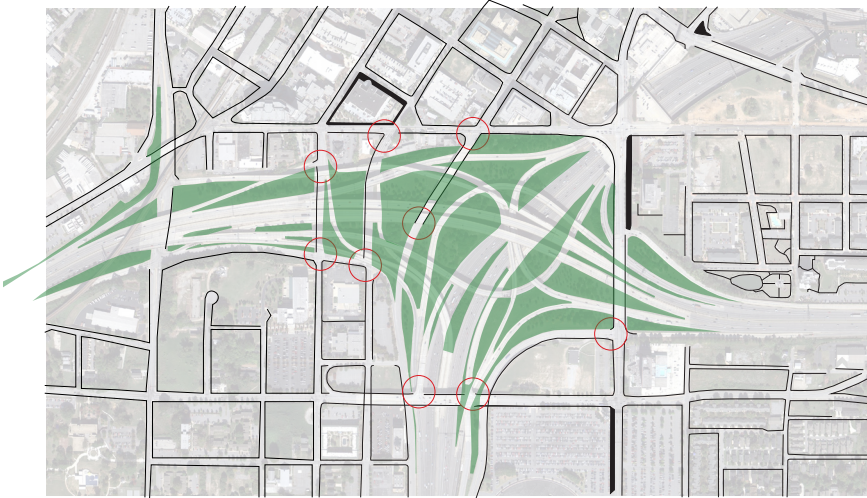
Sheetflow from rainwater



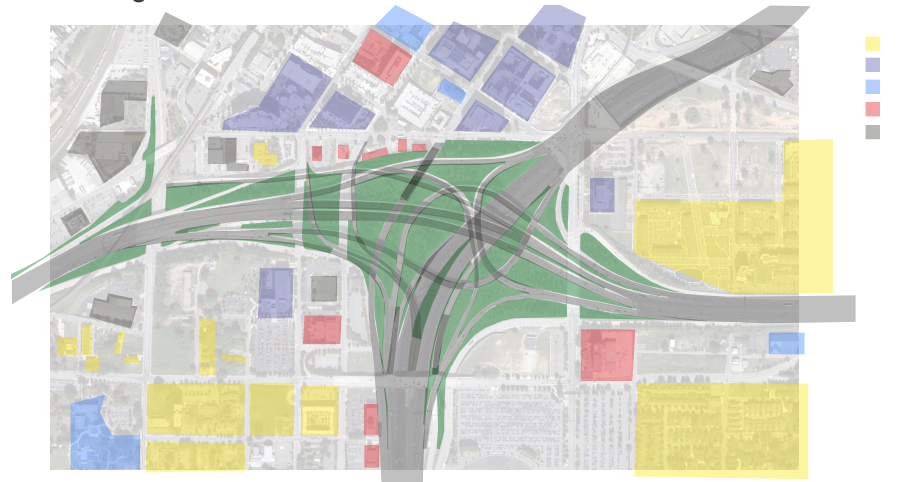
Parking Lots and Decks



Existing Sidewalks and Potential Entry Points



Zoning

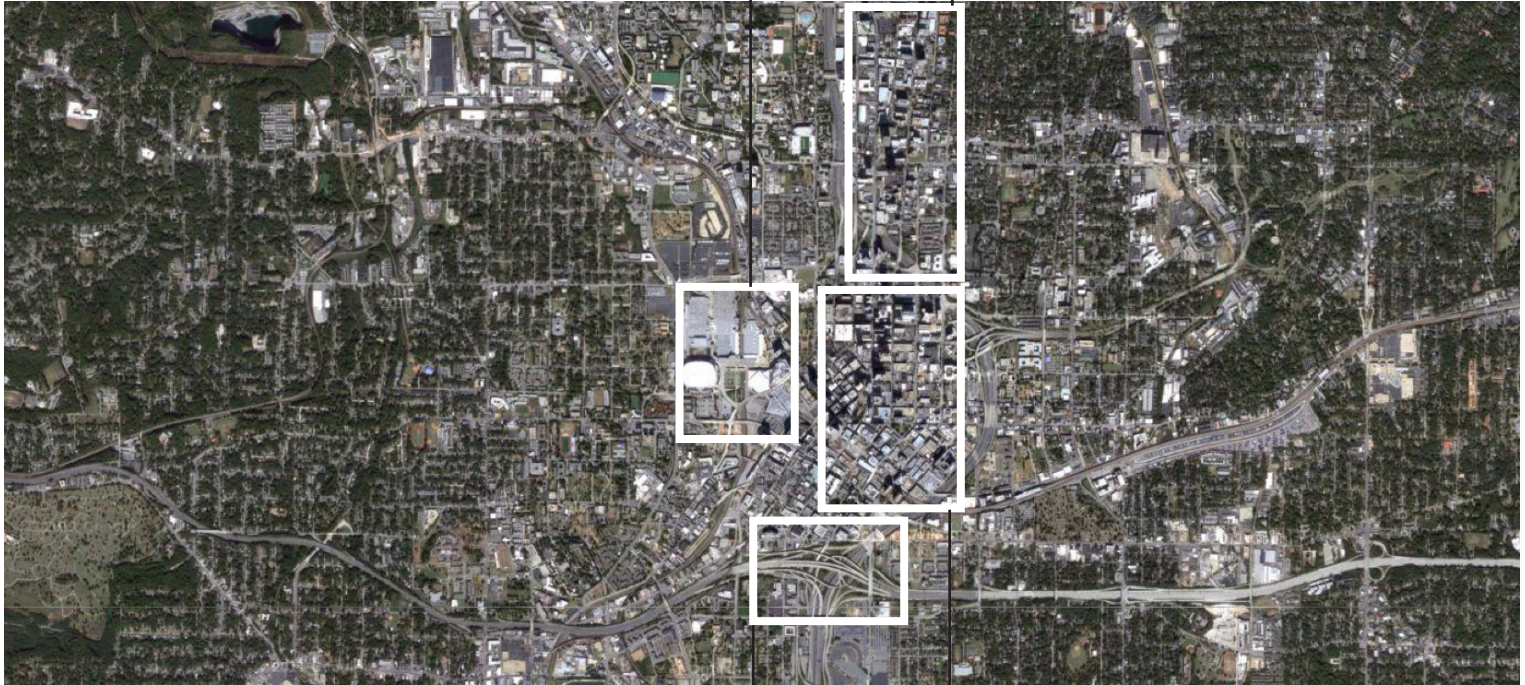


periphery context



Civic Core

Midtown



Site

Downtown Core



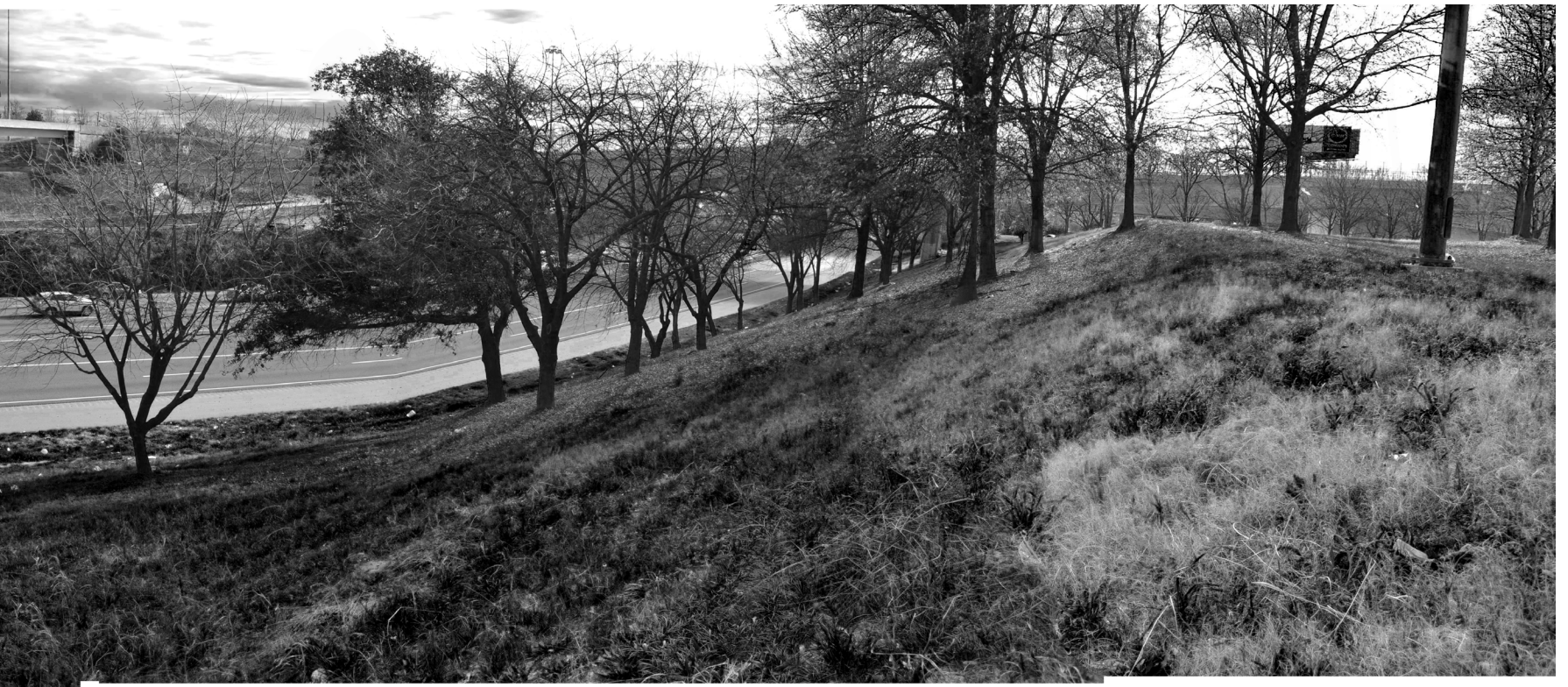


The interspace exists somewhere between **terrain vague** and unincorporated public land







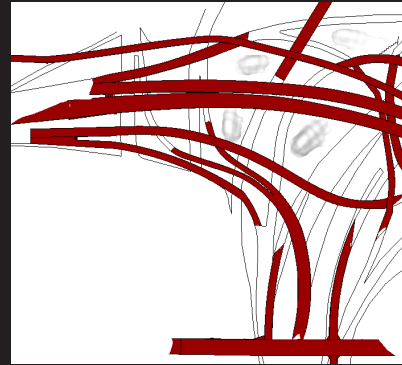
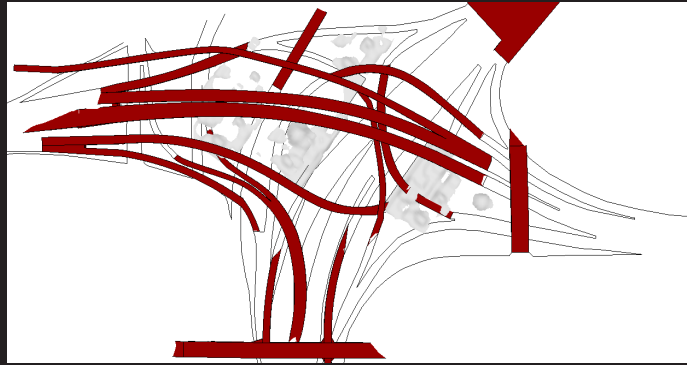
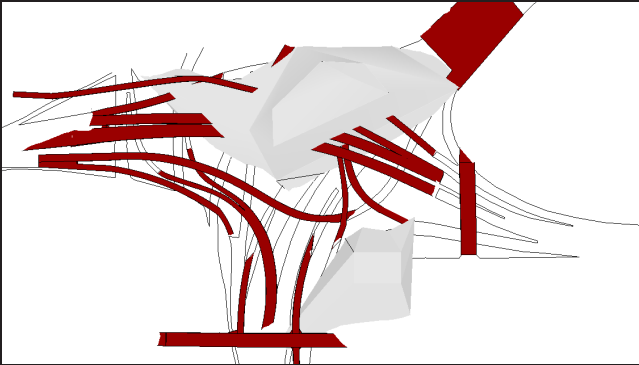
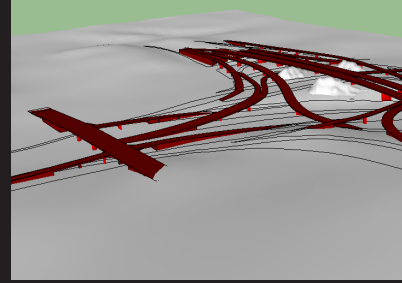
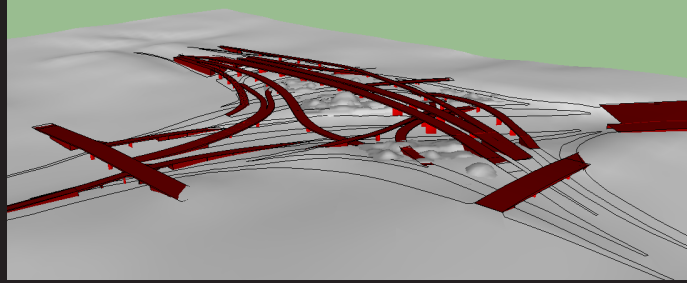
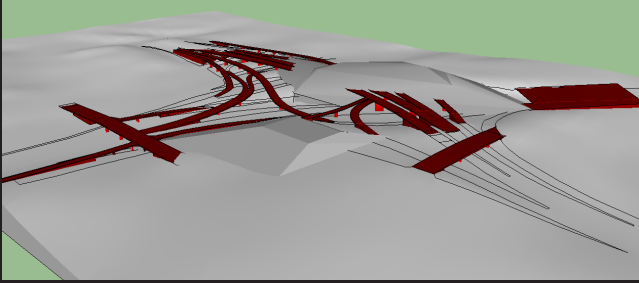




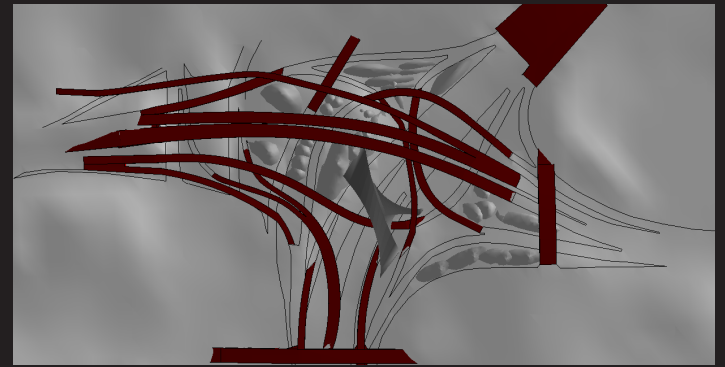
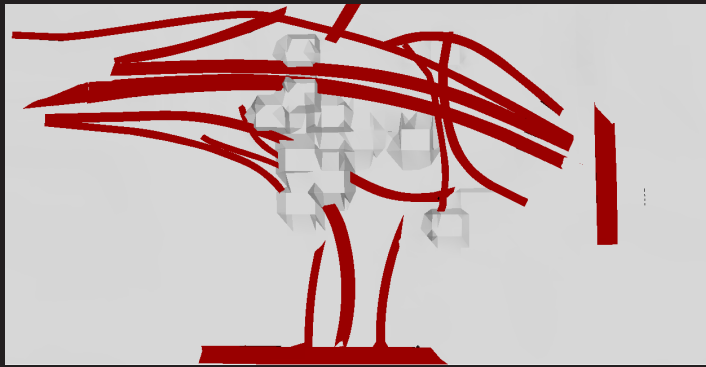
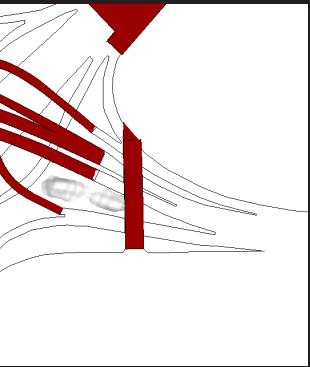
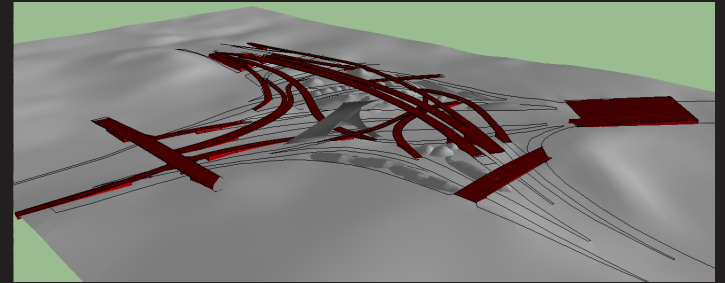
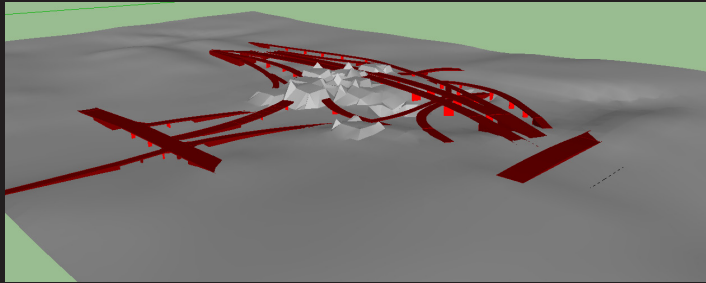
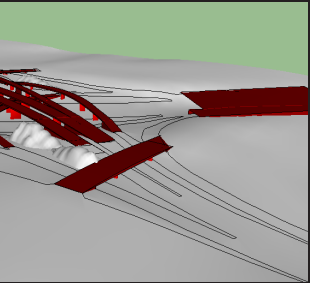
Creates vast **interstitial spaces** in urban core



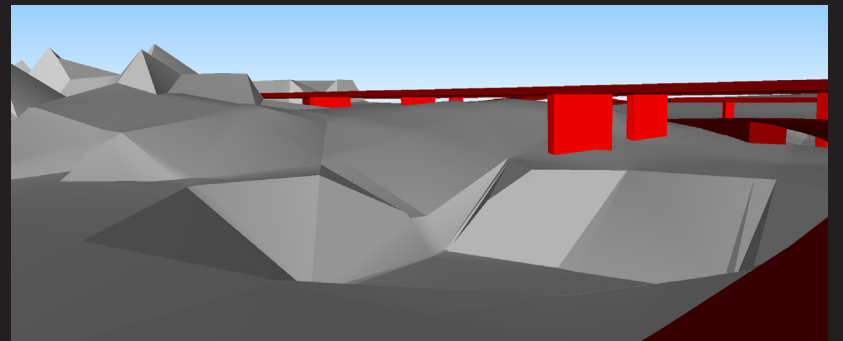
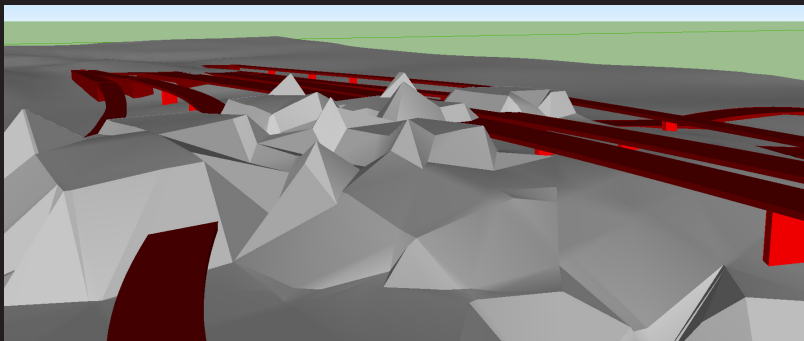
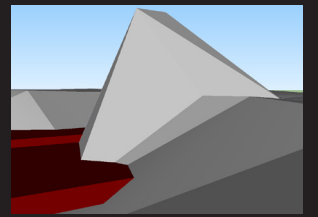
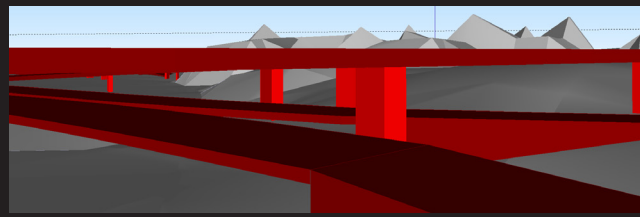
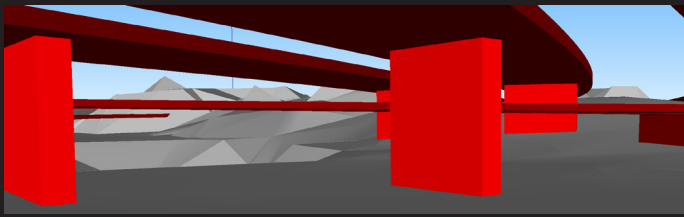
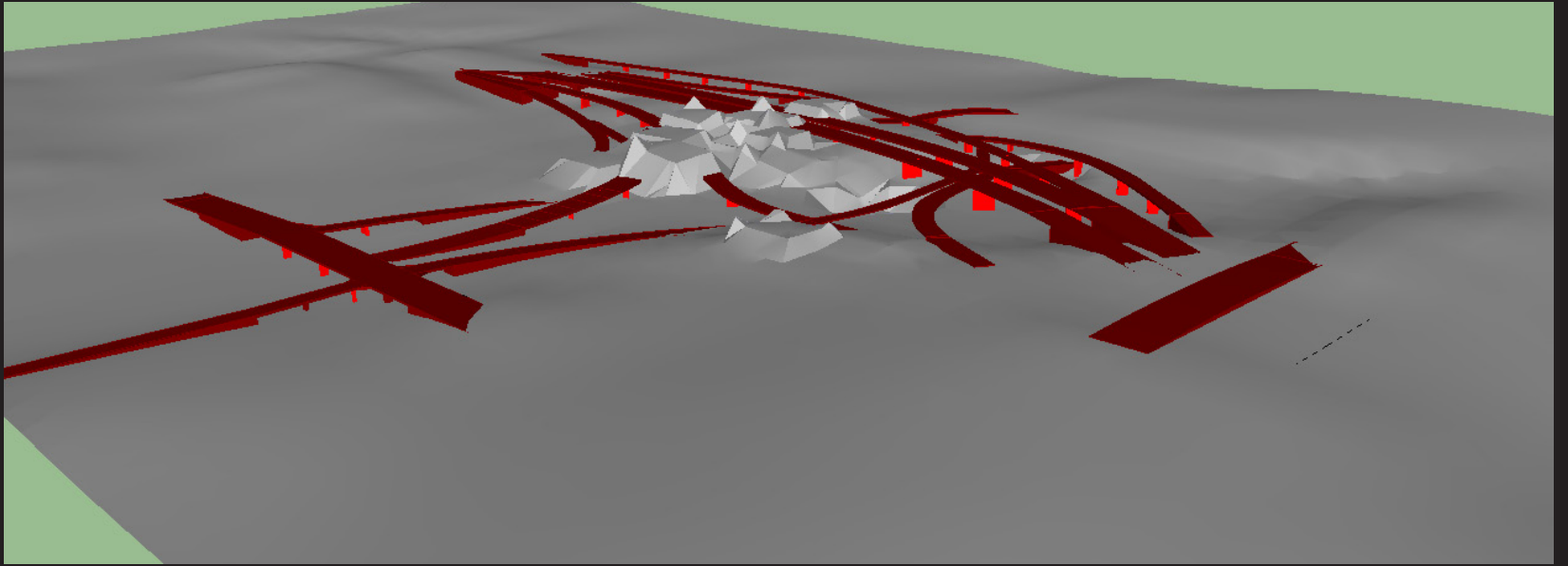
possibility models



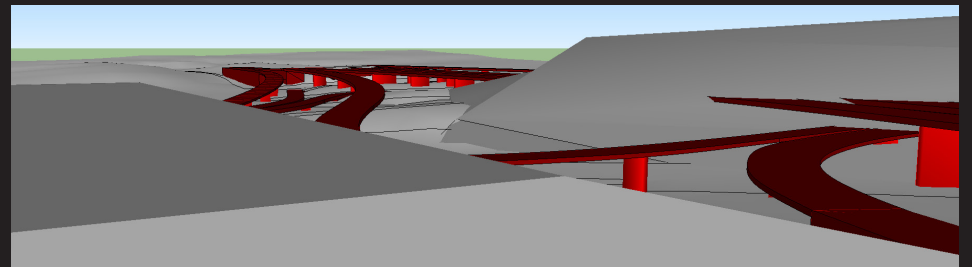
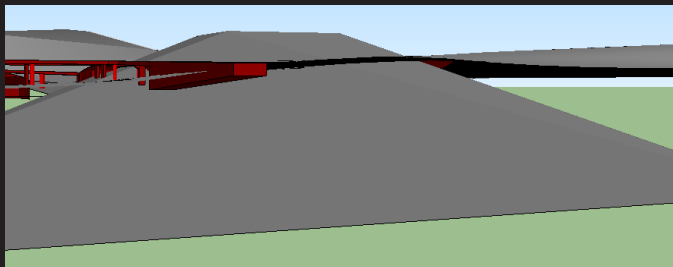
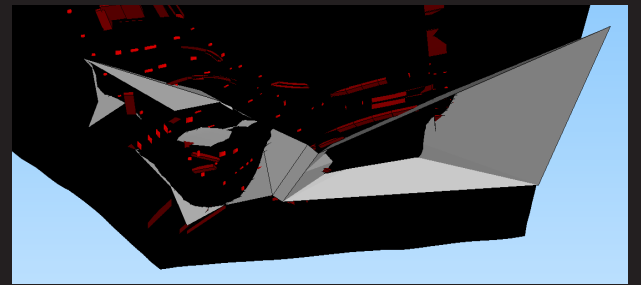
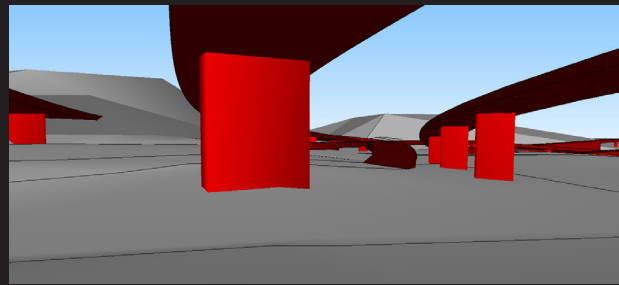
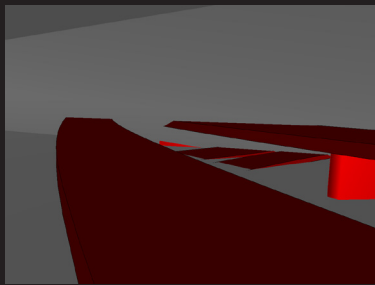
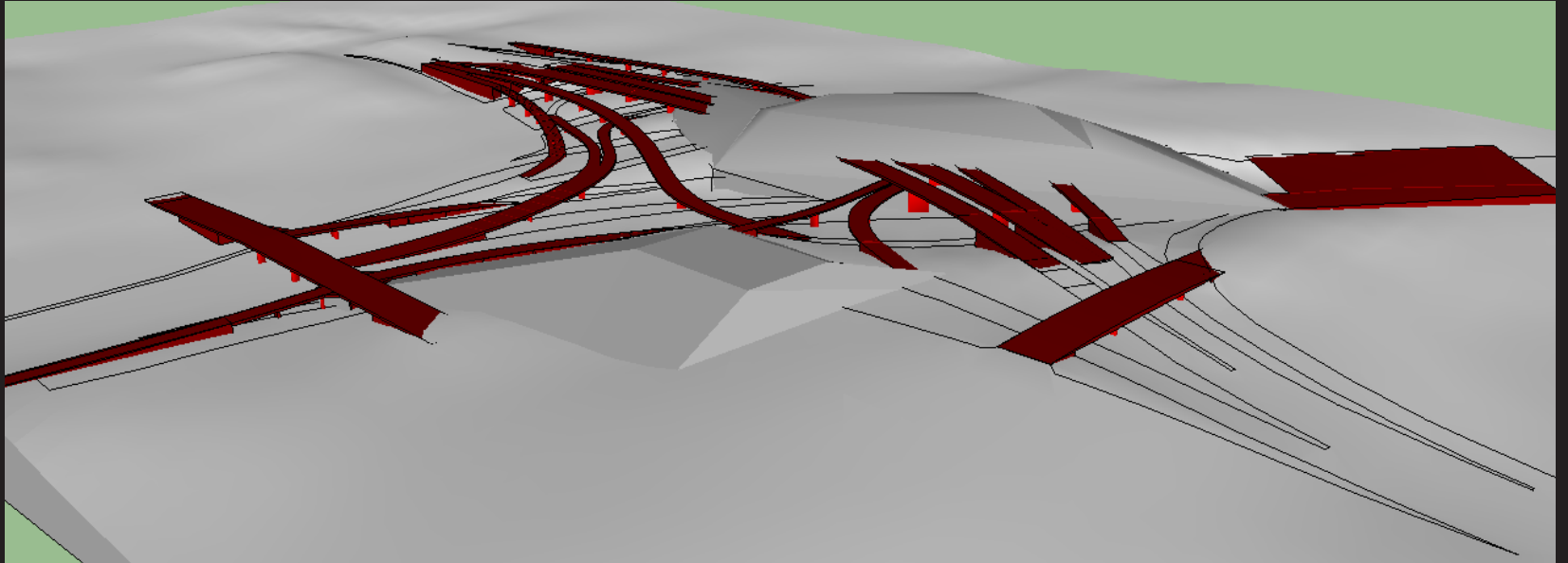
All elements of infrastructure were reconstructed in a 3 dimensional sketchup model. Different varieties of terrain were constructed to see how the two forces of topography and infrastructure could possibly converge with one another.



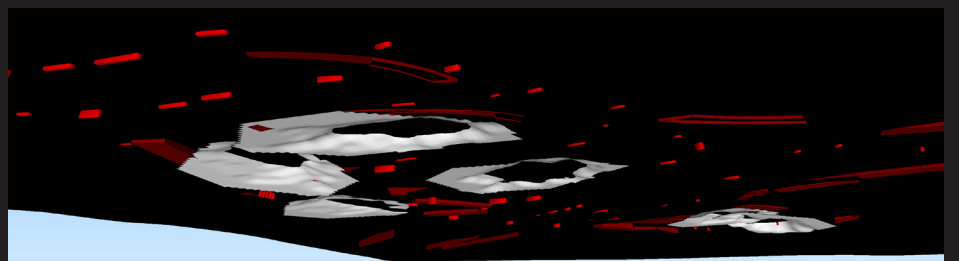
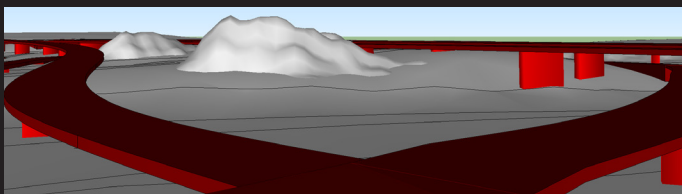
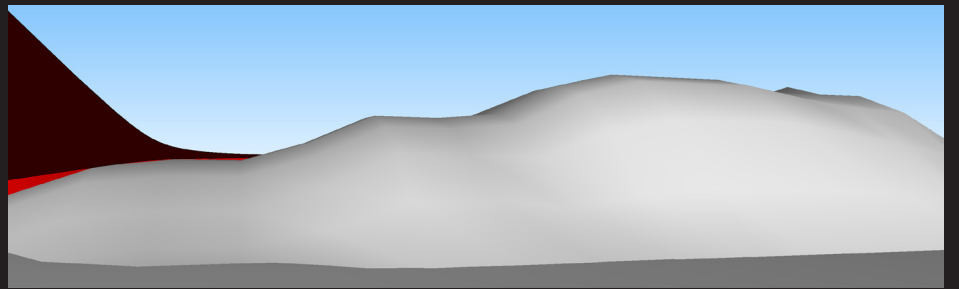
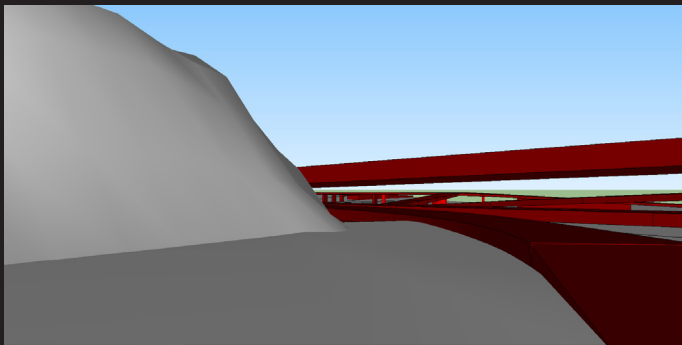
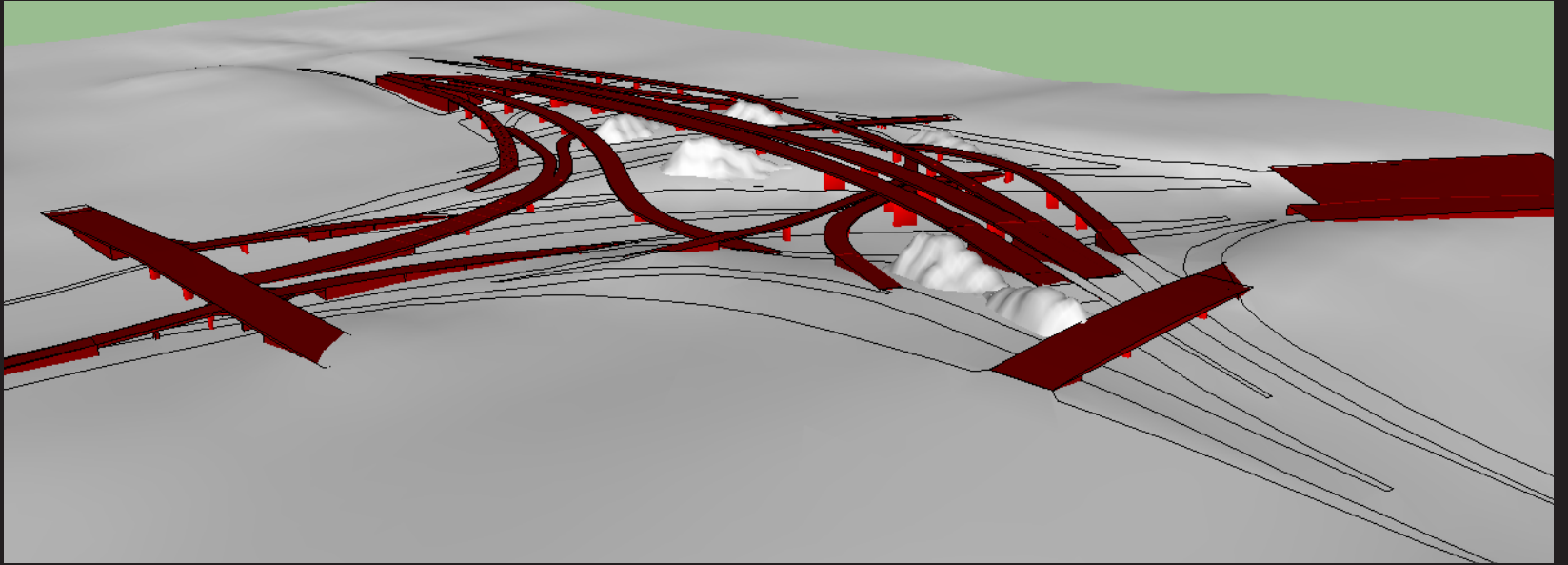
Intensive Field



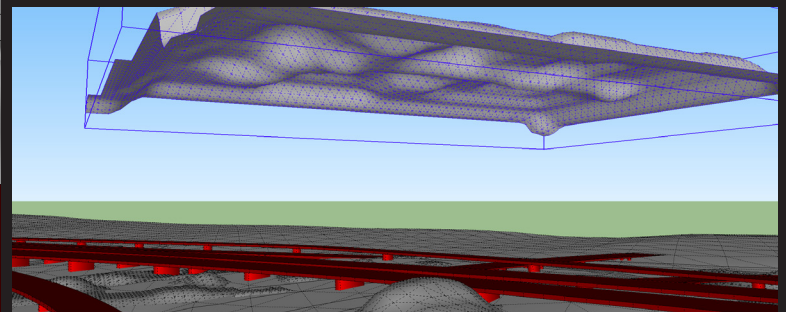
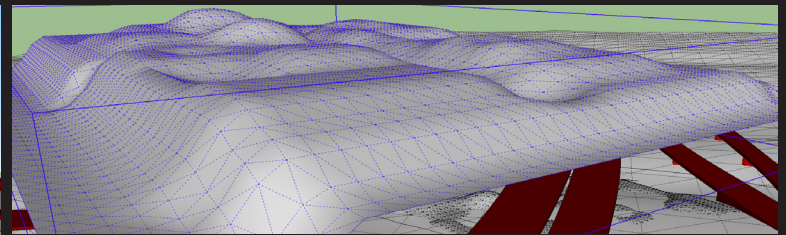
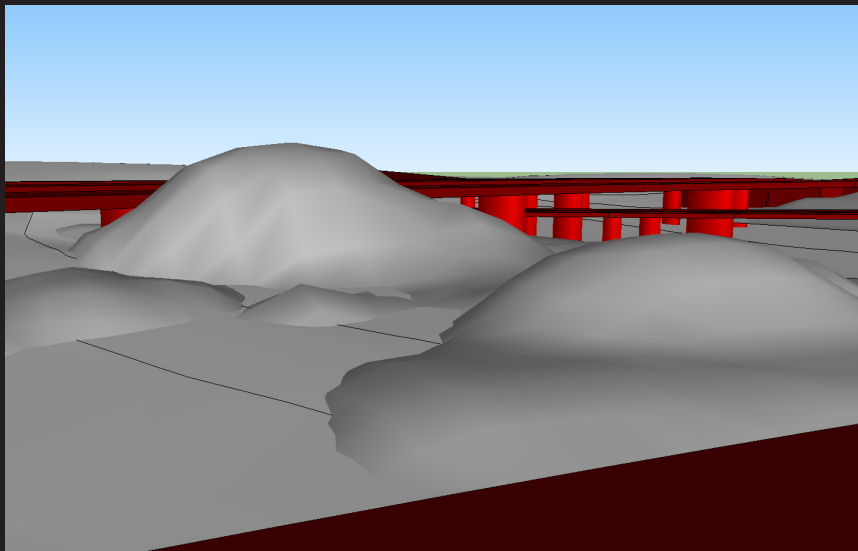
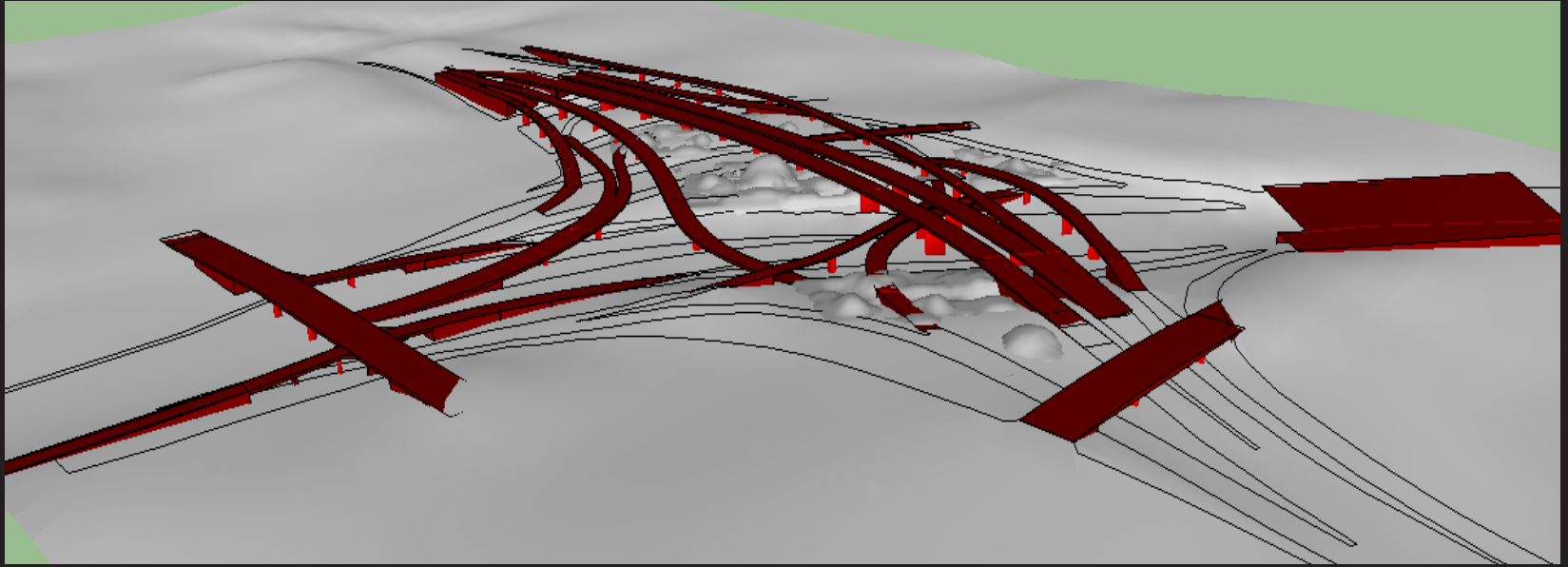
Intensive Object



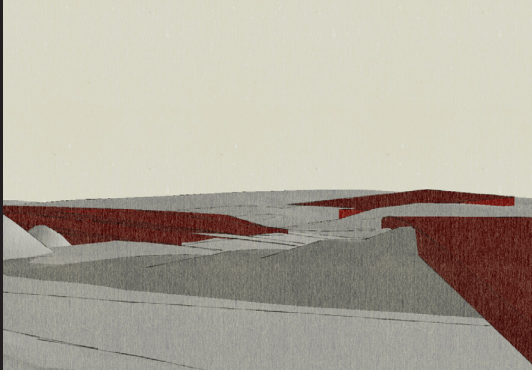
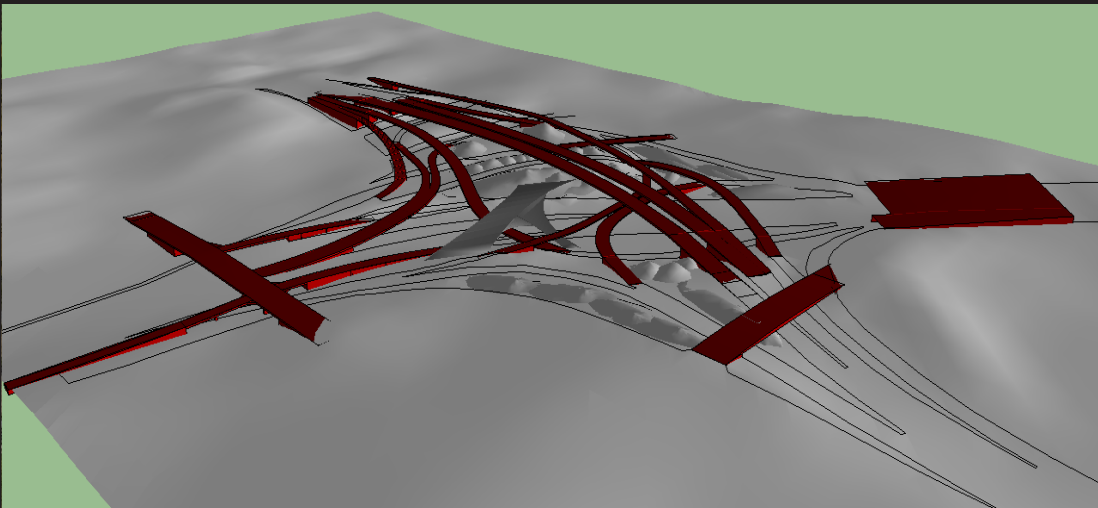
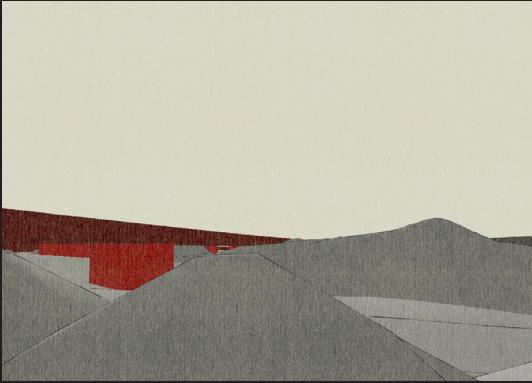
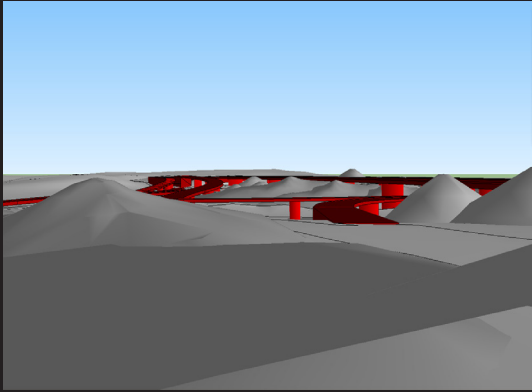
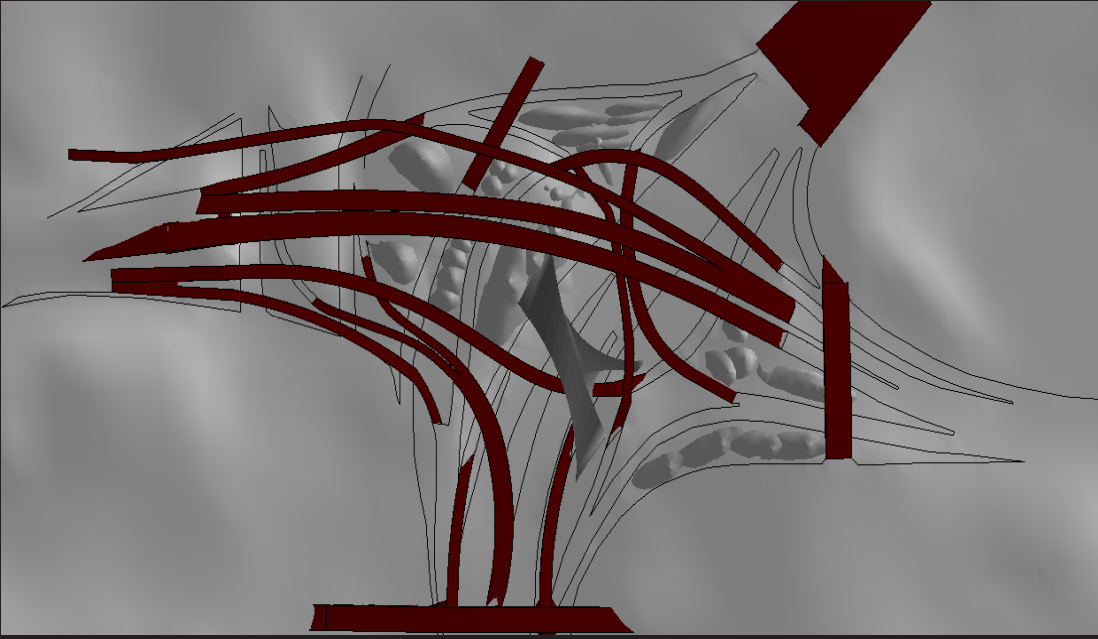
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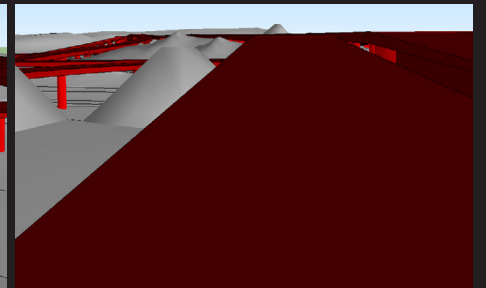
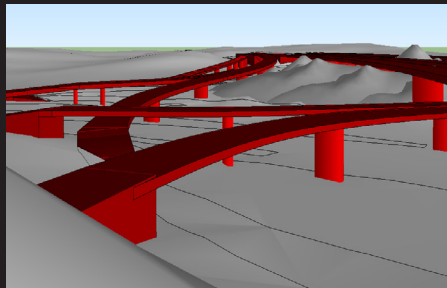
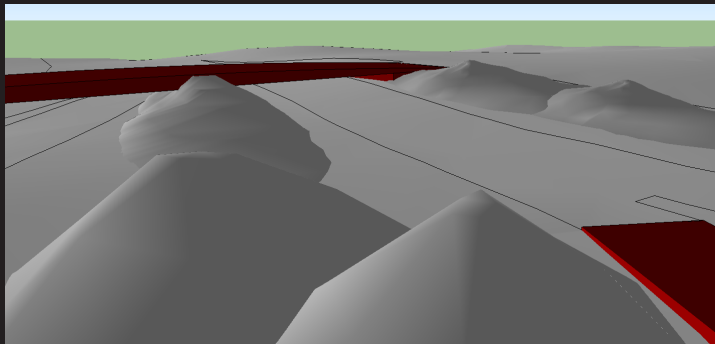
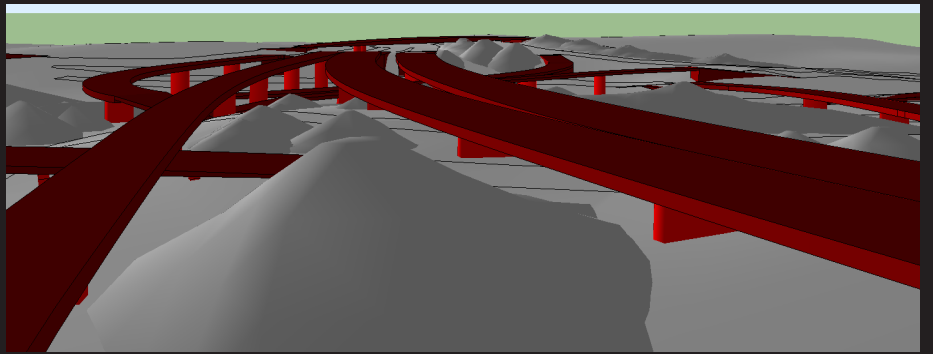
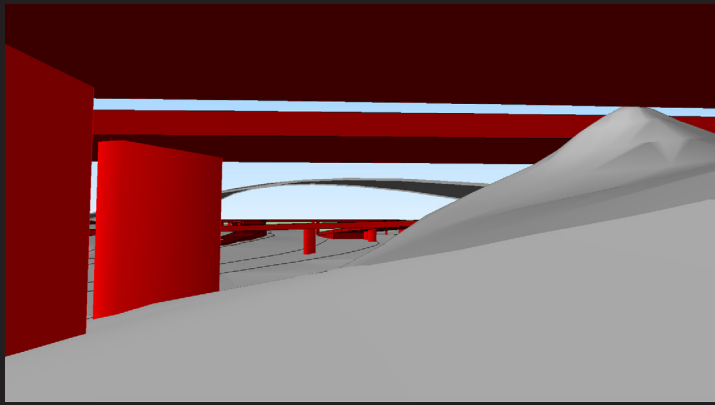
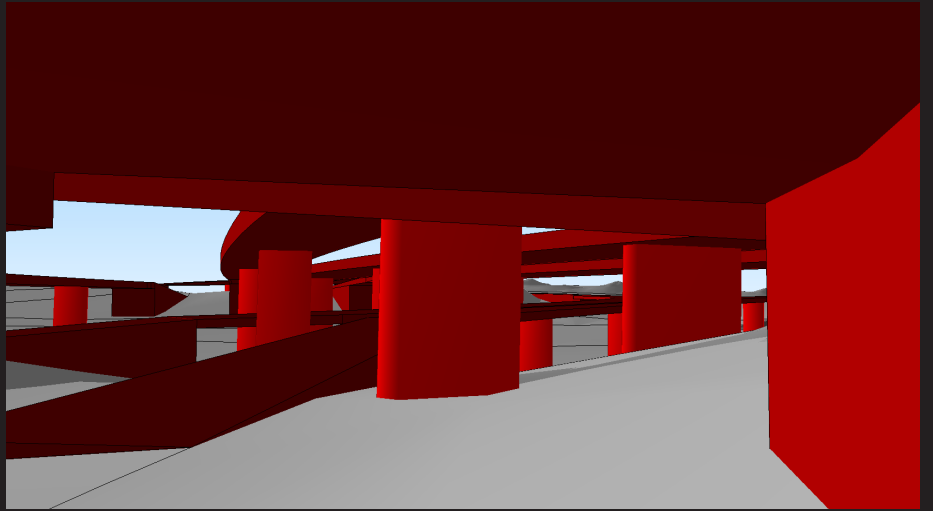
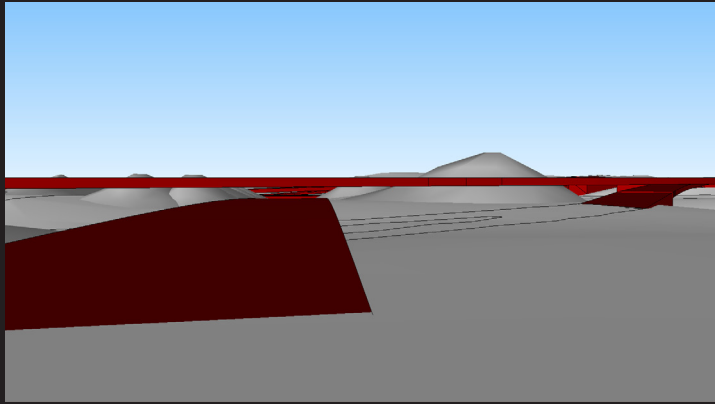


Extensive Field



Extensive Variety





case studies

Three separate case studies relate in various ways to the goals and intentions of this project. Olympic Sculpture Park in Seattle is an example of connecting elements of the city to the waterfront by bridging over a large scale roadway. Navigating safely through a terrain of intensive speed and movement becomes a defining functional element to the design of the interspace. Buffalo Bayou Promenade represents one strategy in utilizing these kinds of sites dominated by transportation infrastructure. For SWA, revitalization of the Houston River became a benchmark of action in transforming this space from one of impairment to one of recreation and leisure for Houston's citizens. The final foot bridge in Istanbul embodies the efforts occurring around the world in addressing the pedestrian experience where cars have come to dominate the urban landscape. Allowing people the choice to move in a variety of ways is essential in any urban condition.

OLYMPIC SCULPTURE PARK

WEISS / MANFREDI

SEATTLE, WASHINGTON



Fig. 21



Fig. 22



Fig. 23

BUFFALO BAYOU PROMENADE

SWA GROUP

HOUSTON, TEXAS



Fig. 24



Fig. 25

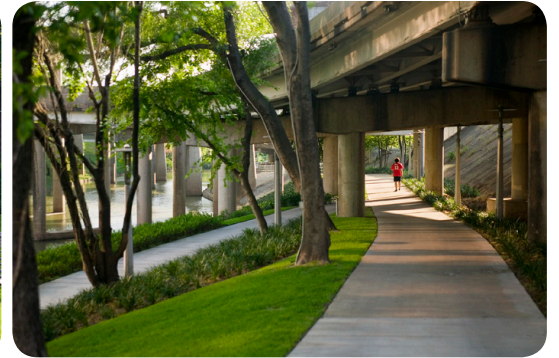


Fig. 26

PEDESTRIAN FOOT BRIDGE

LEA INVENT

ISTANBUL, TURKEY



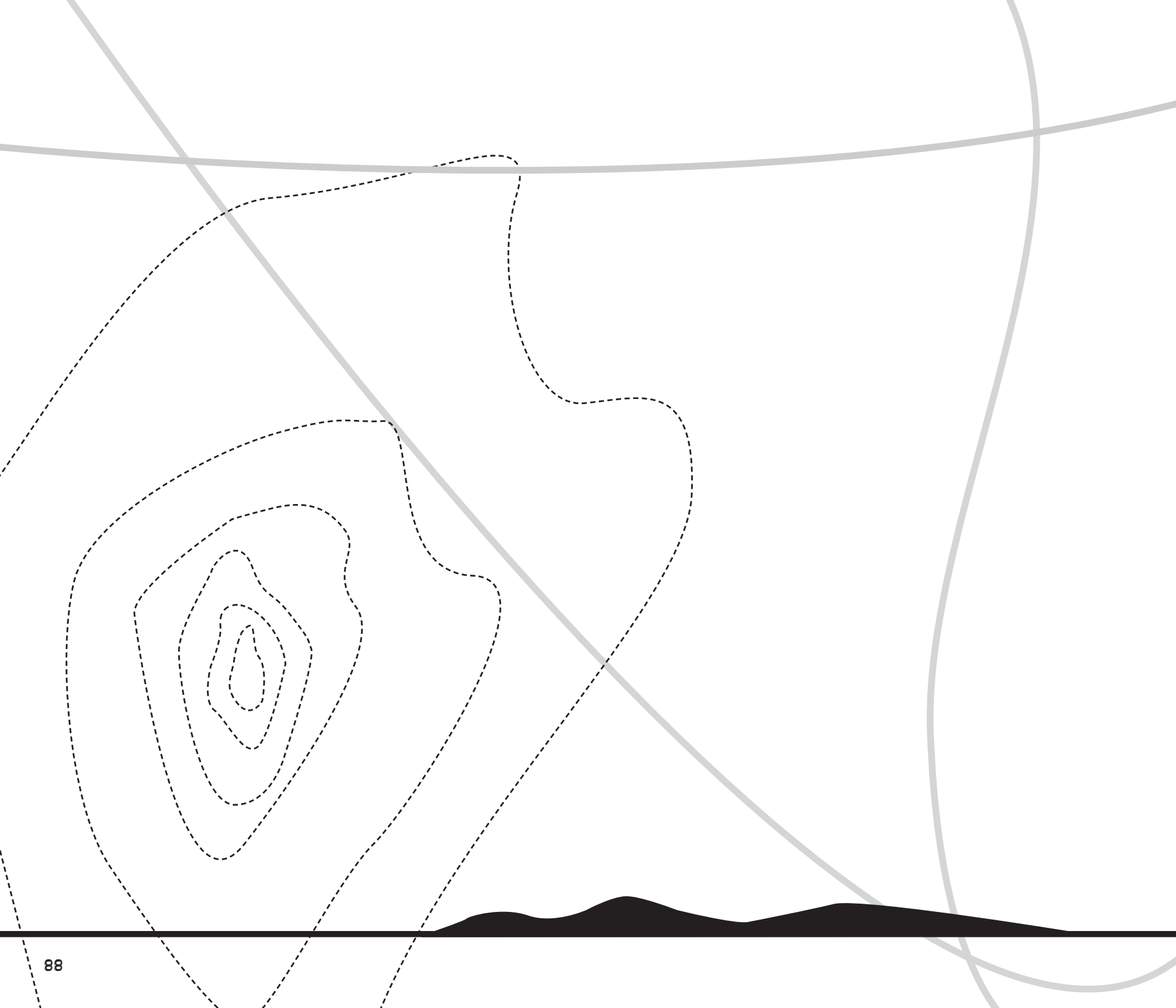
Fig. 27



Fig. 28



Fig. 29





SITE DESIGN


5

city in motion

place of repose

The city is a place of connection. It is the place where so many disparate forces come together to exchange both goods and ideas, and it tends to move at a heightened pace in comparison to other human environments. Terms like progress, “hustle and bustle”, and energized are all associated with the urban. For Atlanta, movement and conveyance occupy a predominant role in defining the city’s identity. With an extensive railroad network, the busiest commercial airport in the world, and one of the largest interstate interchange in the nation, there is no denying Atlanta is a city in motion.

The majority of public space in Atlanta is composed of elements that have a dramatic compulsion to move, especially those elements associated with the street. It is clearly an environment dominated by the automobile. From this juncture we understand the urban environment as an experience of movement, hazard, and obstruction for the pedestrian. The places of repose and contemplation seem limited to the park, the building, and in varied conditions the sidewalk. Even the parking lot, due to its high buildup of personal property, poses threats to a state of lingering or relaxation, further distorting notions of public space. There exist a clear need for increased public spaces in which one can choose to be.



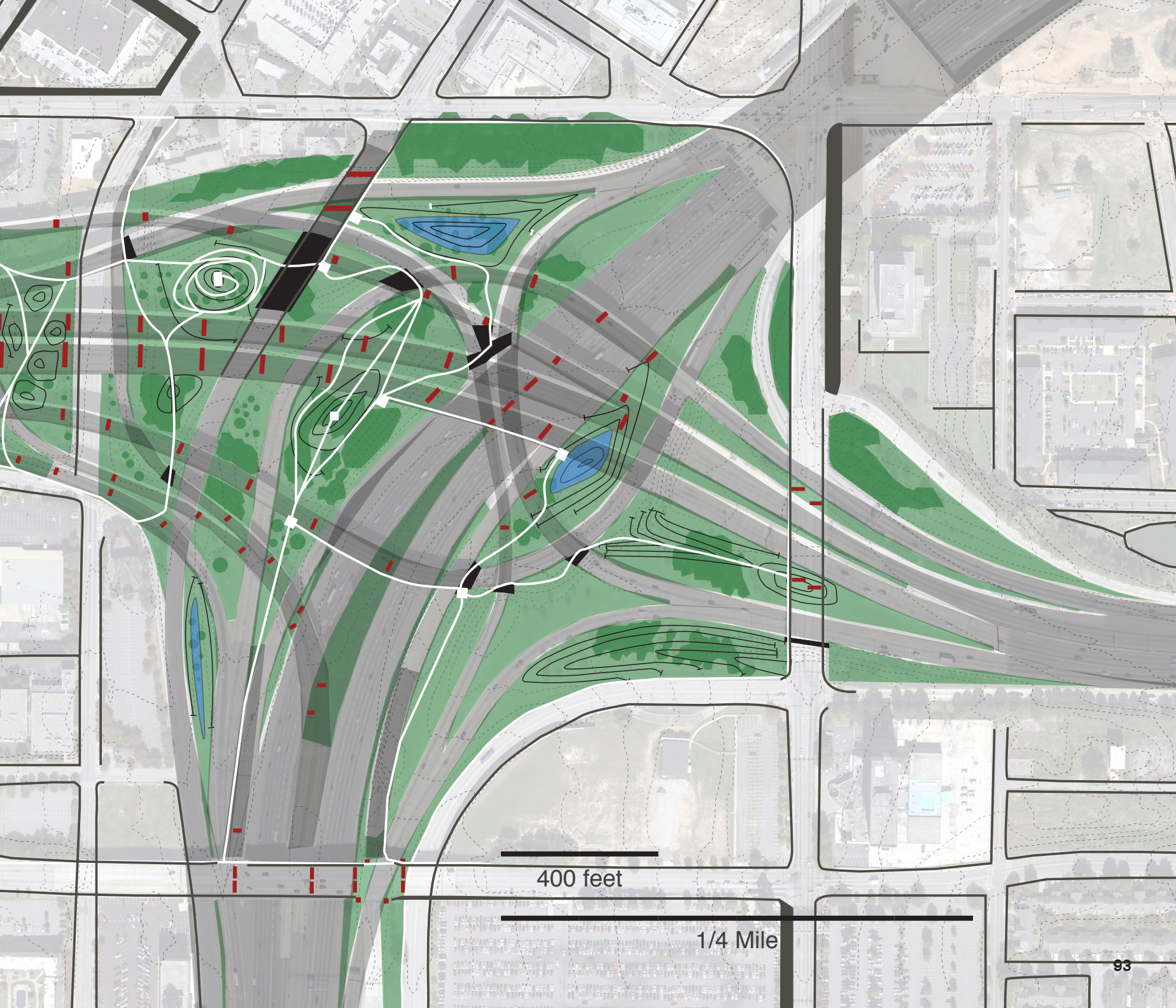
The unique paradox presented in the interspace is its ability to be wholly within and surrounded by the urban condition, yet simultaneously dissociated from it. Due to its scale, the interspace is a unique encapsulation of its own inherent qualities outside the realm of the urban, but still visually connects itself to the fabric of the city. At most points within the interspace, one's tangible proximity to a moving object is far less than that same proximity on any city street. In other words, if you are standing on a city street in Atlanta, you will be closer to a moving automobile; whereas, if you are standing within the interspace, you will be at a much greater distant to this movement. In constructing a landscape that is singularly centered around the functionality of the car, we have created a public urbanscape in which one is further removed from the car by proximity. By embedding ourselves within the possibilities of engagement to this landscape, we make way for a new type of urban experience.

The topographies of this design can create spatial expulsion from as well as direct connection to the city. In occupying and engaging with the landforms presented, the types of spatial proximities usually experienced can be broadened. The park, the plaza, and the street all characterize different aspects and compositions of what is considered public space in the city, and the interspace seeks to create a wholly new and completely different activation of public space for those that inhabit the city.

interspace plan

A series of landform interventions into the existing topography seek to define a series of places that one moves between in this vast interspace.



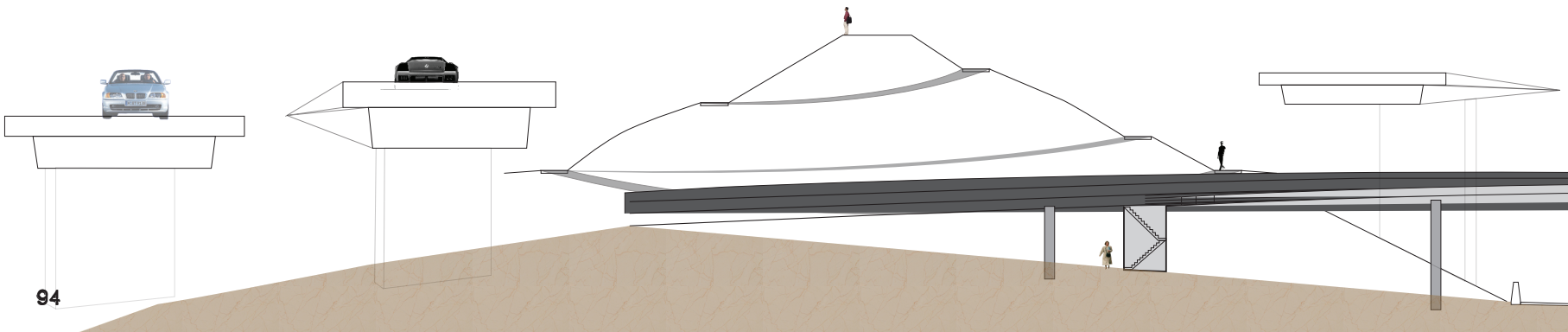
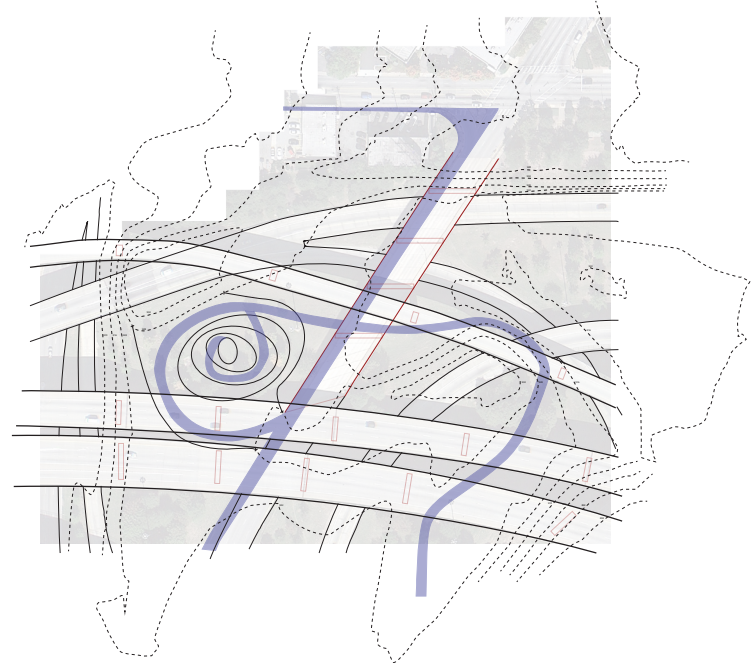


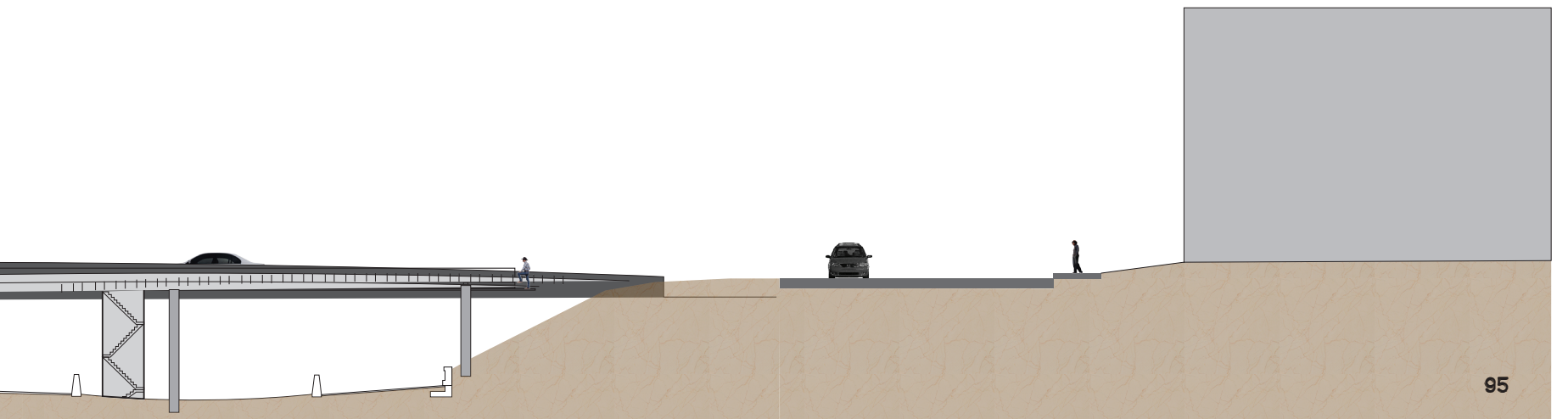
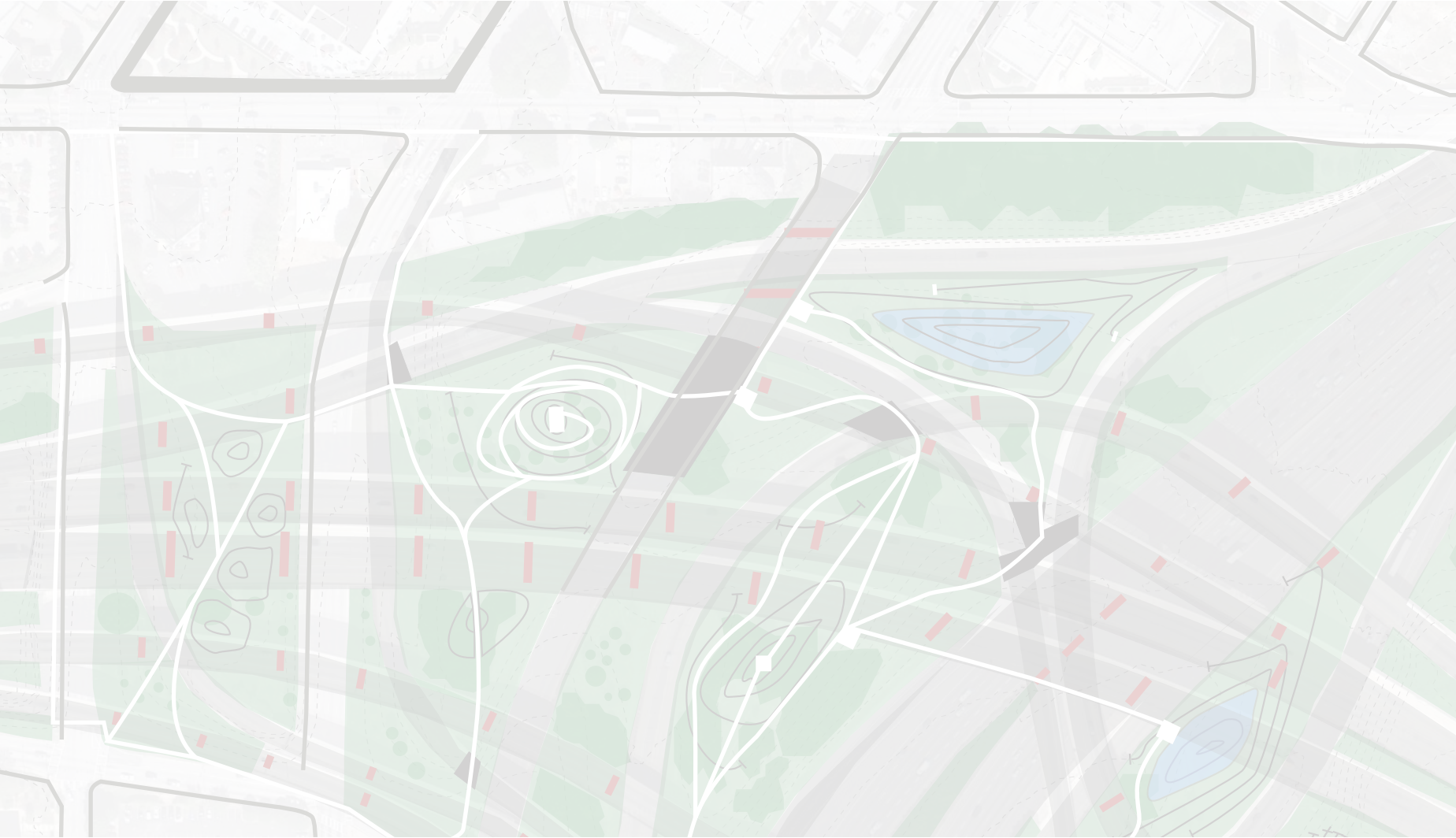
400 feet

1/4 Mile

washington st. bridge entrance

Memorial drive creates the main edge to the central business district, and Washington street acts as the main threshold into the site as it crosses past memorial, leading one directly into the largest interspaces. Existing sidewalks, a small pocket park to the east, and the Washington street bridge make this the ideal location for entrance into the site. One of two large mounds will become visible, even before one enters into the space. The immense object would immediately represent a vast difference from the surrounding terrain. A smaller bridge for pedestrian and bicycle use is added to the existing bridge with it's sidewalks, giving the choice to not become overborne by traffic. Immediate spatial proximity to the bridges would be experienced; their vigorous dimensional characteristics occurring at all levels, above, below, and to all sides. The unique aspect of the interspace becomes an entanglement with the surrounding infrastructure and ones perceptions, whilst wholly removing oneself from the proximity of the movement.





Landing at Hilltop

Pedestrian Bridge Across 75/85

Path on Edge of Landform

Stair

1'

2'6"

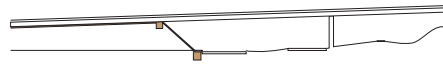
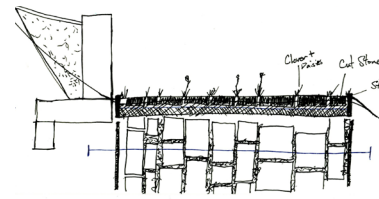
6'8"

6"
Drainage Pipe to Retention Pond

Concrete Seat/Retaining Wall

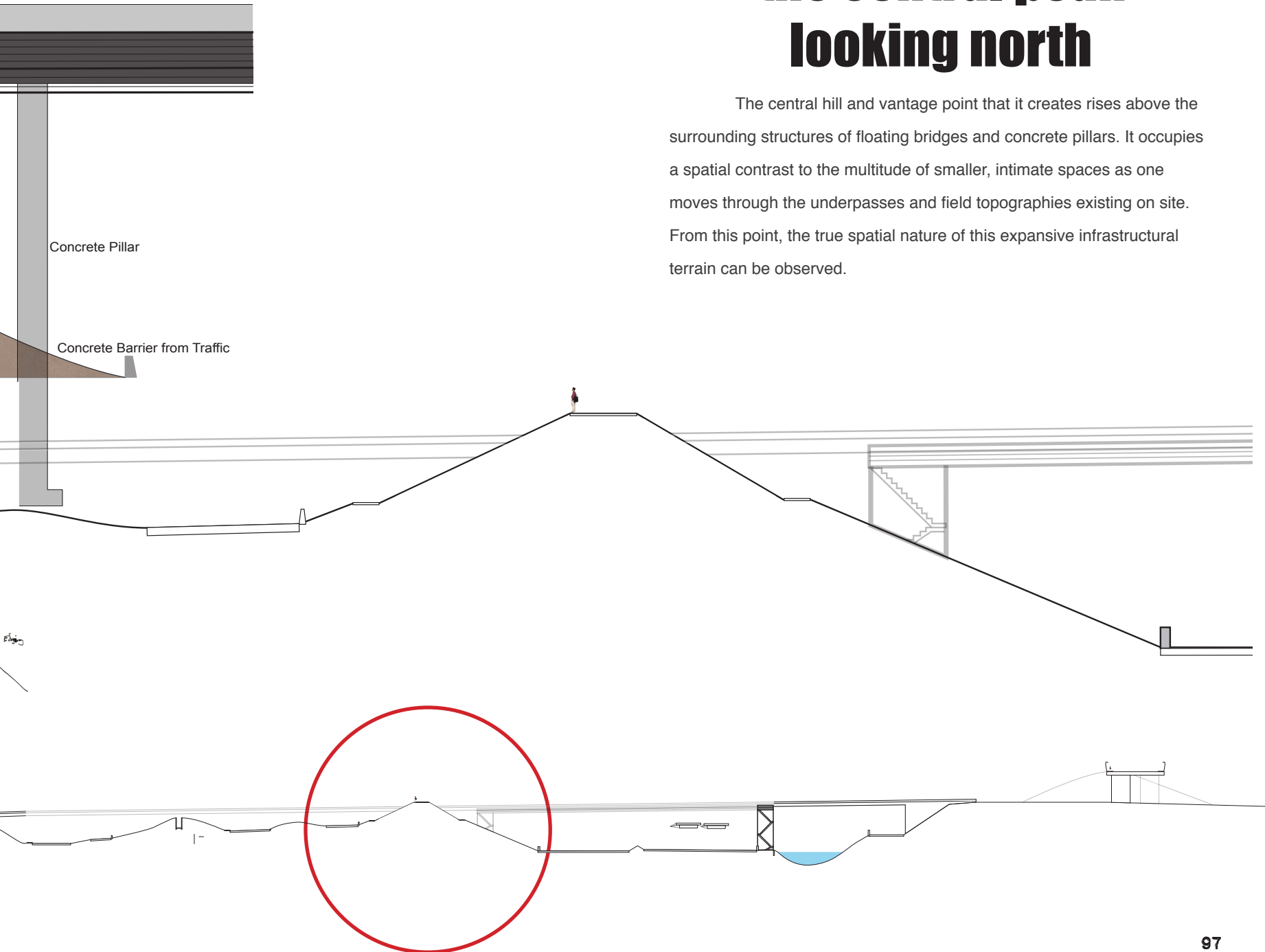
Stone Blocks and Gravel Walk

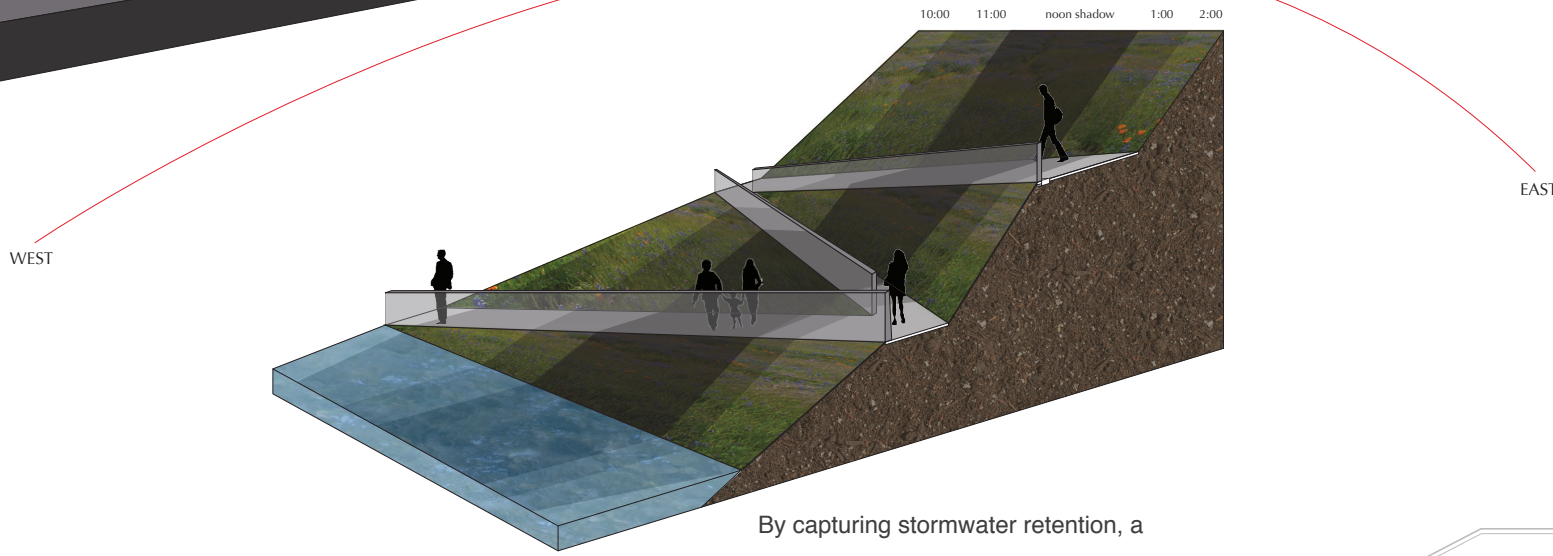
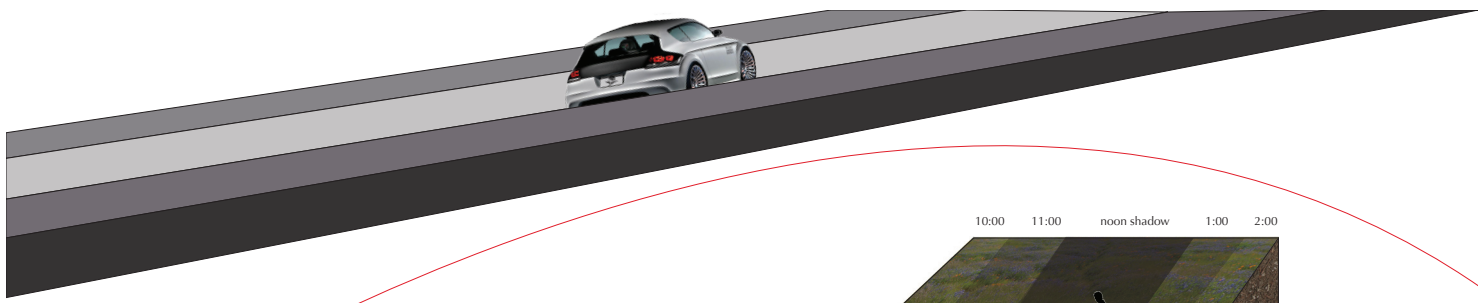
Steel Edging



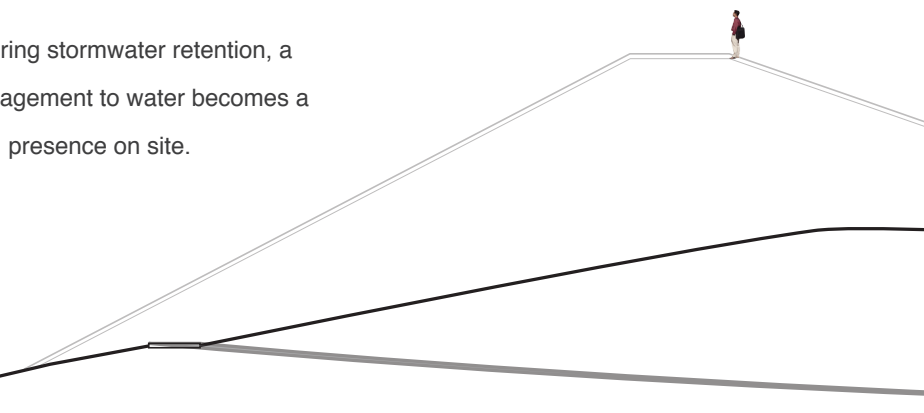
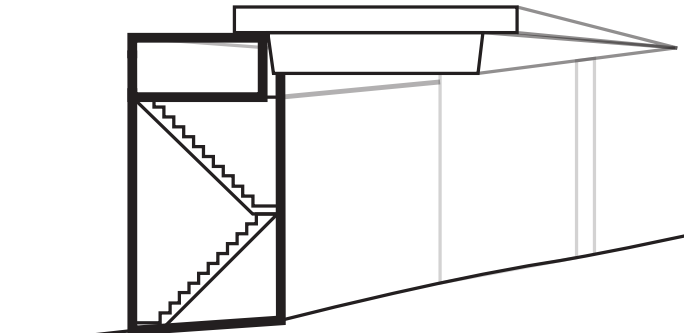
the central peak looking north

The central hill and vantage point that it creates rises above the surrounding structures of floating bridges and concrete pillars. It occupies a spatial contrast to the multitude of smaller, intimate spaces as one moves through the underpasses and field topographies existing on site. From this point, the true spatial nature of this expansive infrastructural terrain can be observed.

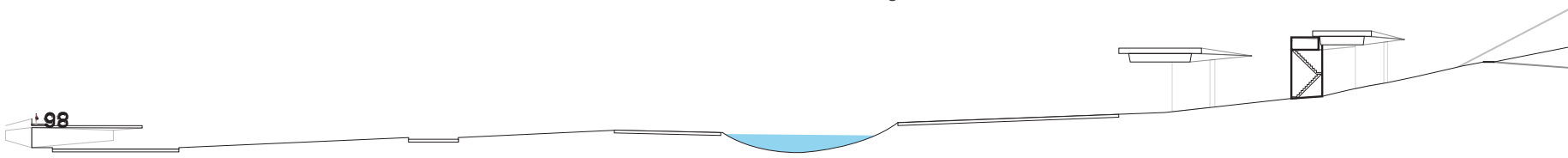


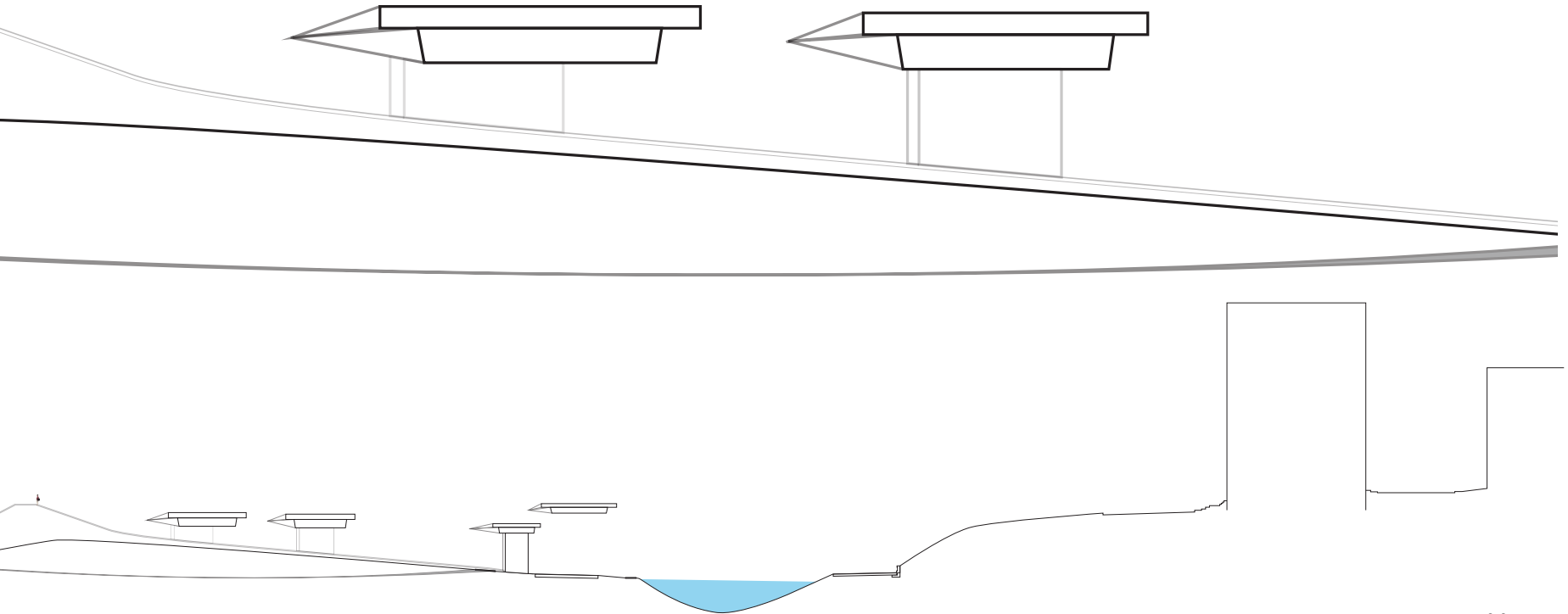
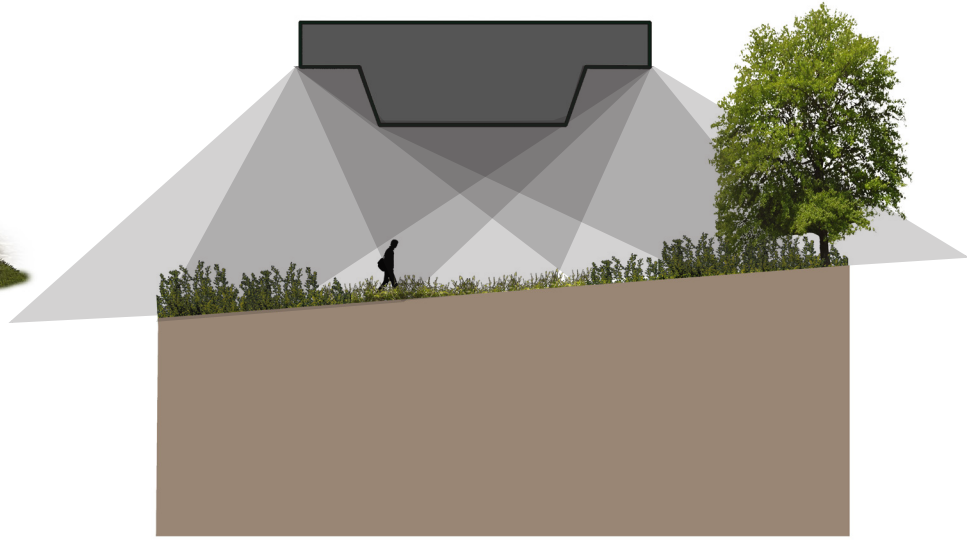
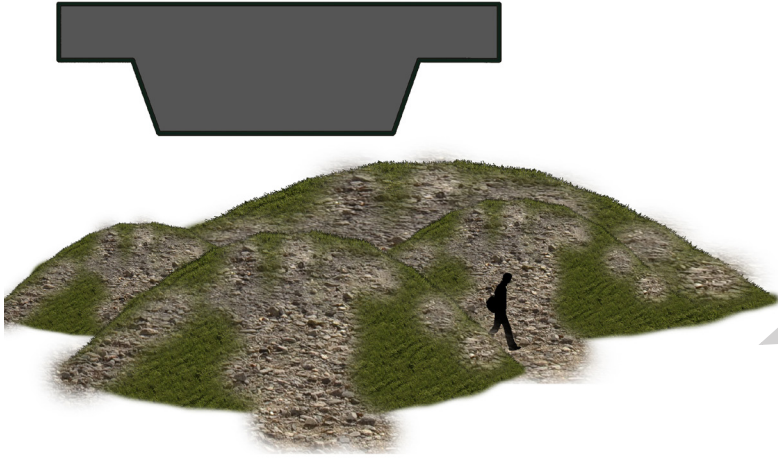


By capturing stormwater retention, a viable engagement to water becomes a presence on site.

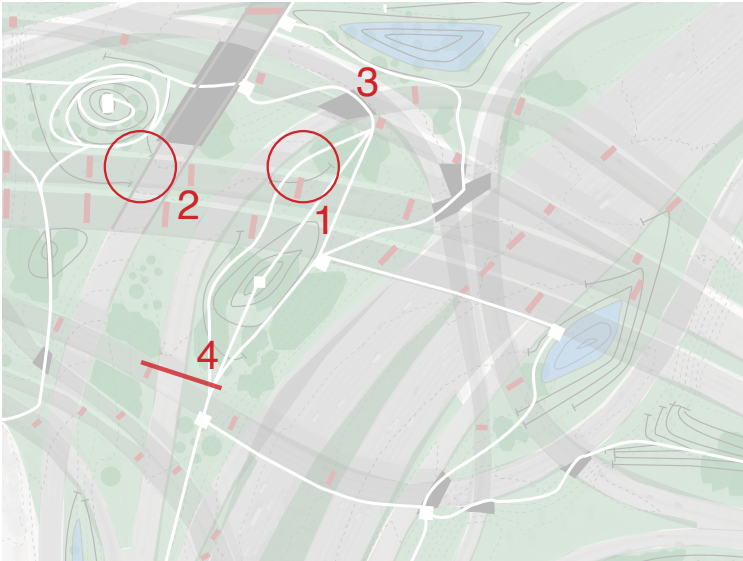


The creation of landforms across the site occurs through a series of cut and fill operations. By building up the terrain in some areas, the excavation of soils creates depressions that will become retention ponds for stormwater runoff in other areas. Maintaining both soil and water on site are integral.





Over time, biologically successional growth based on topographic/hydrologic conditions of site will account for a diversity of habitats and a variance in ecosystems. New topographies capture and direct water across the site, creating dynamic conditions and changing adaptable environments that move towards resiliency. How a condition can respond to its inputs and thrive as a result forms the basis of a performative landscape. Once the initial conditions of topography and hydrology are set, the intentions are that there be no systematic maintenance of the site, allowing it to reach new levels of growth and adaptation.



Taxodium
Bald Cypress

3



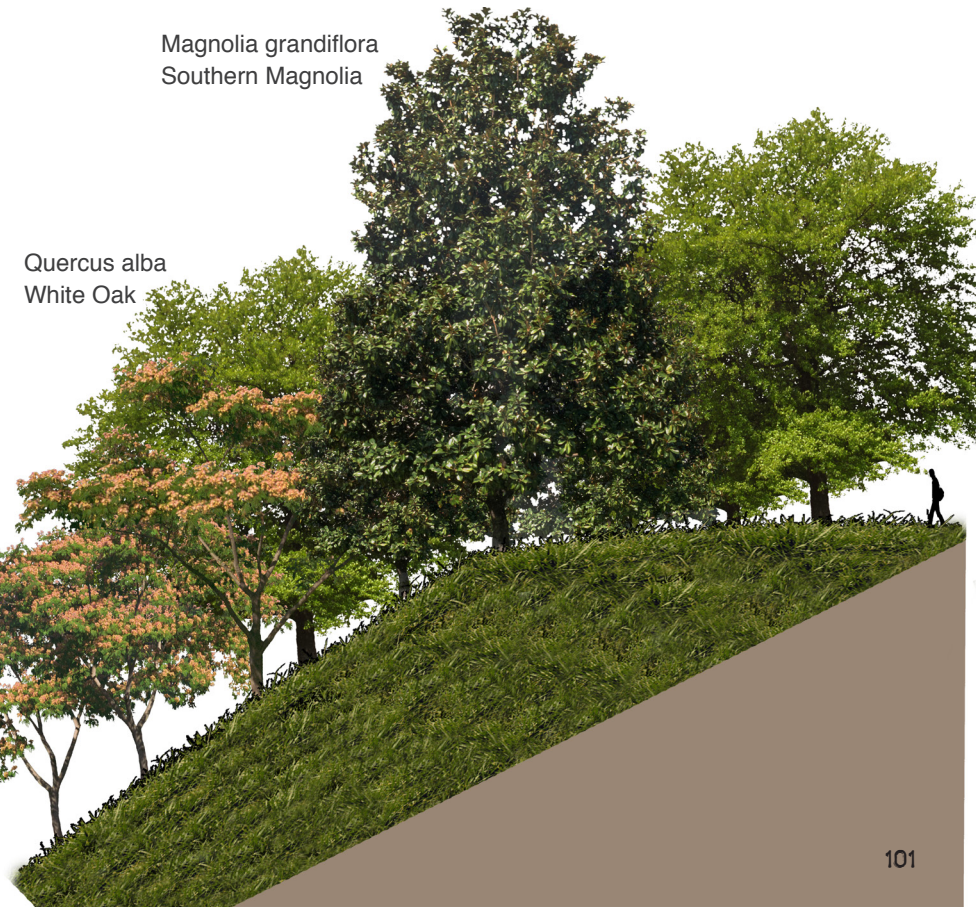


Magnolia grandiflora
Southern Magnolia

Quercus alba
White Oak

Ailanthus altissima
Tree of Heaven

4



main bridge detail

Existing Flyway supports Pedestrian Bridge



Stainless Steel Cables

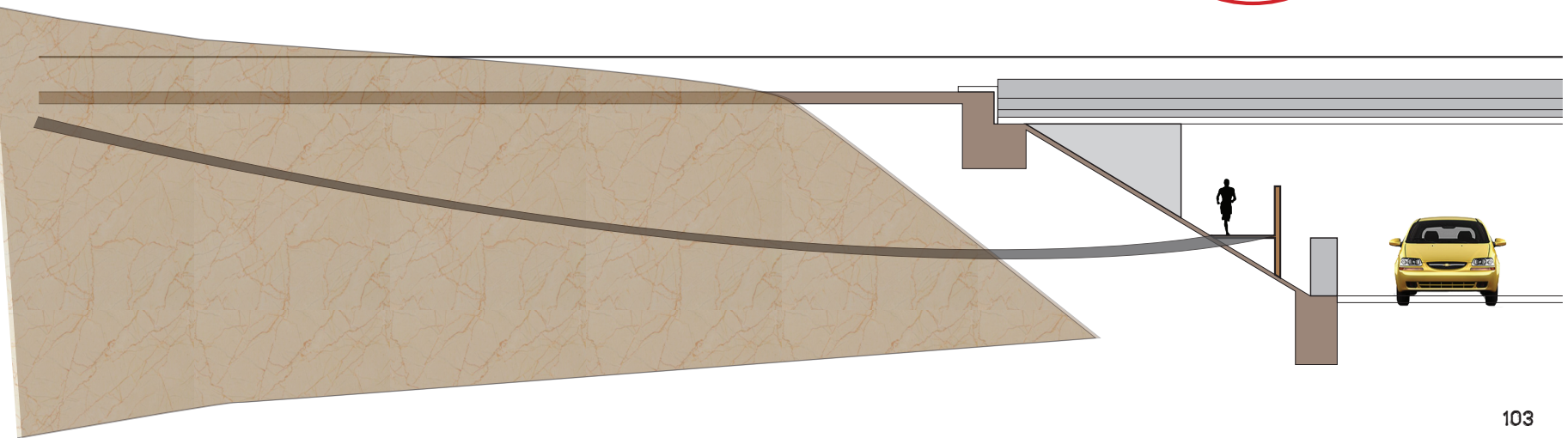
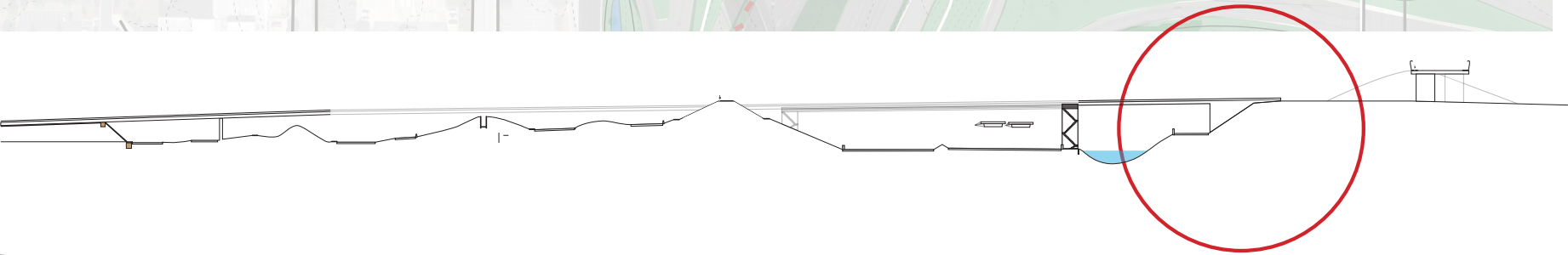
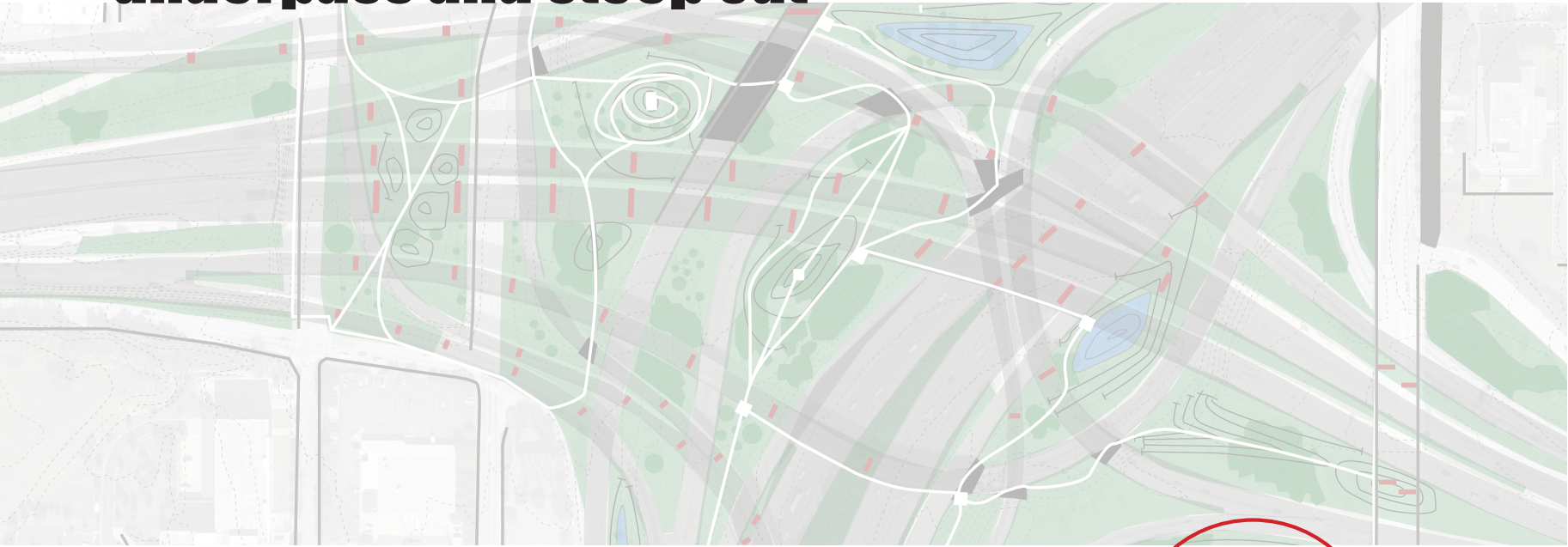


6' Clearance for Trucks

Must be at least 18 feet between the roadway and the bottom edge of the pedestrian bridge



underpass and steep cut



THICKENING THE INTERSPACE

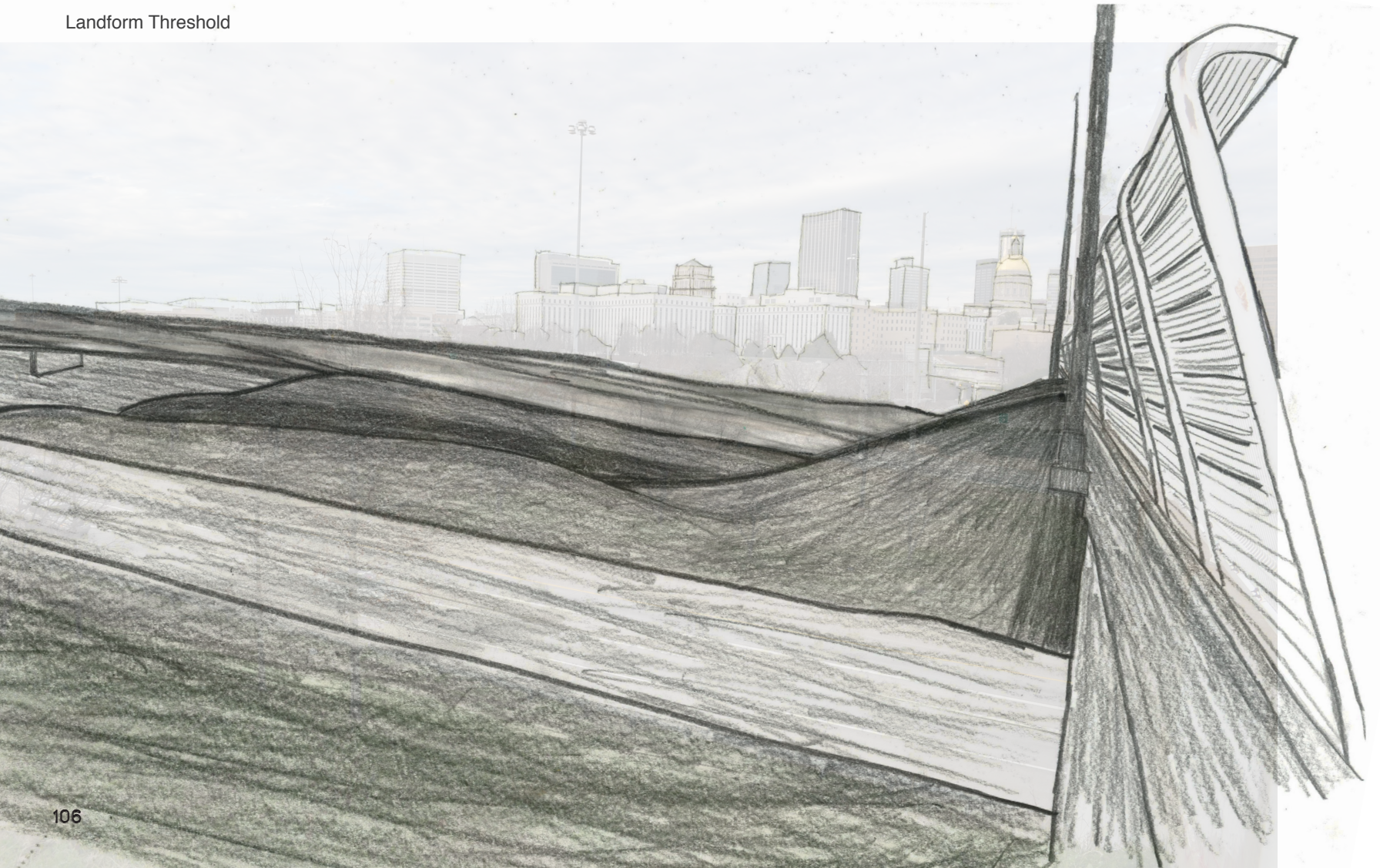
The interspace is not meant to consist of the same functional or civic components that already comprise a city. It sits as an amalgamation of topographically arranged engagements that seek to divulge the inherent spatial impacts of such a terrain. Its role is that of a wholly new occupied space, or more specifically, series of spaces. It represents a fusion of divergent elements within the urban condition, a place in which the city becomes an entirely new set of spatial experiences. Through its arrangement, infrastructure and landform no longer occupy the periphery of sensory perceptions, but rather demand an acute focus to the thickening ground plane strata. As one is squeezed through both path and field, both earthen wall and highway underpass so as to emerge to vast precipices of height and prospect, an accommodation to the elevated sense of perceptive qualities reaches its zenith.

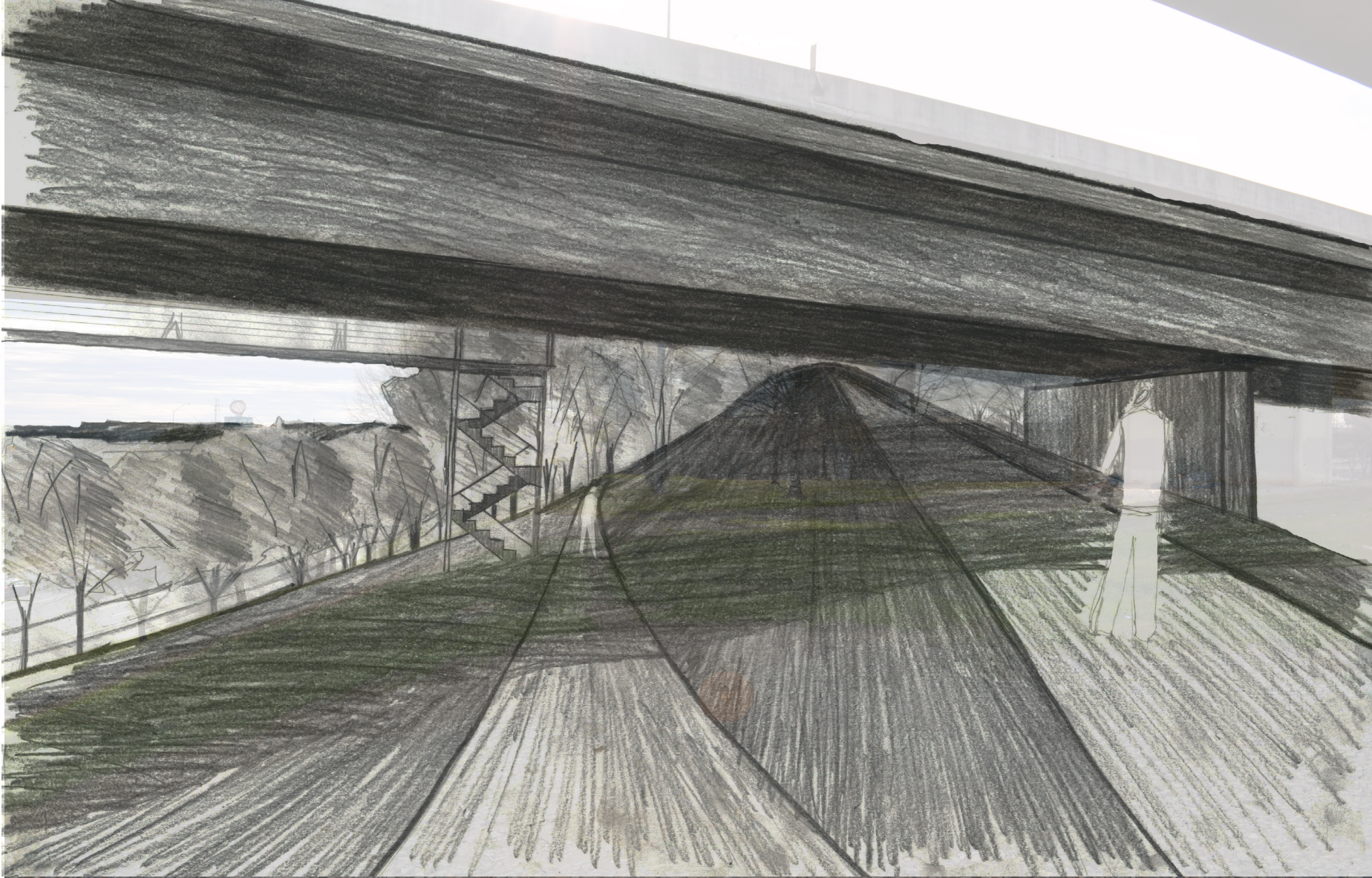




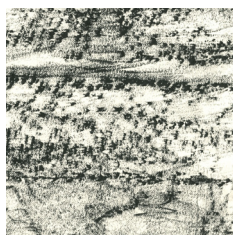
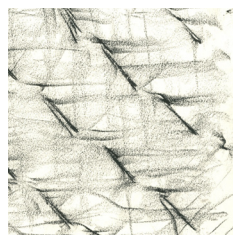
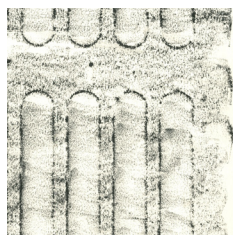
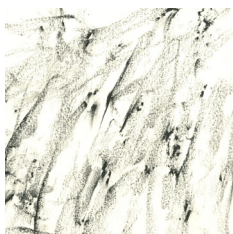
illustrative topographies

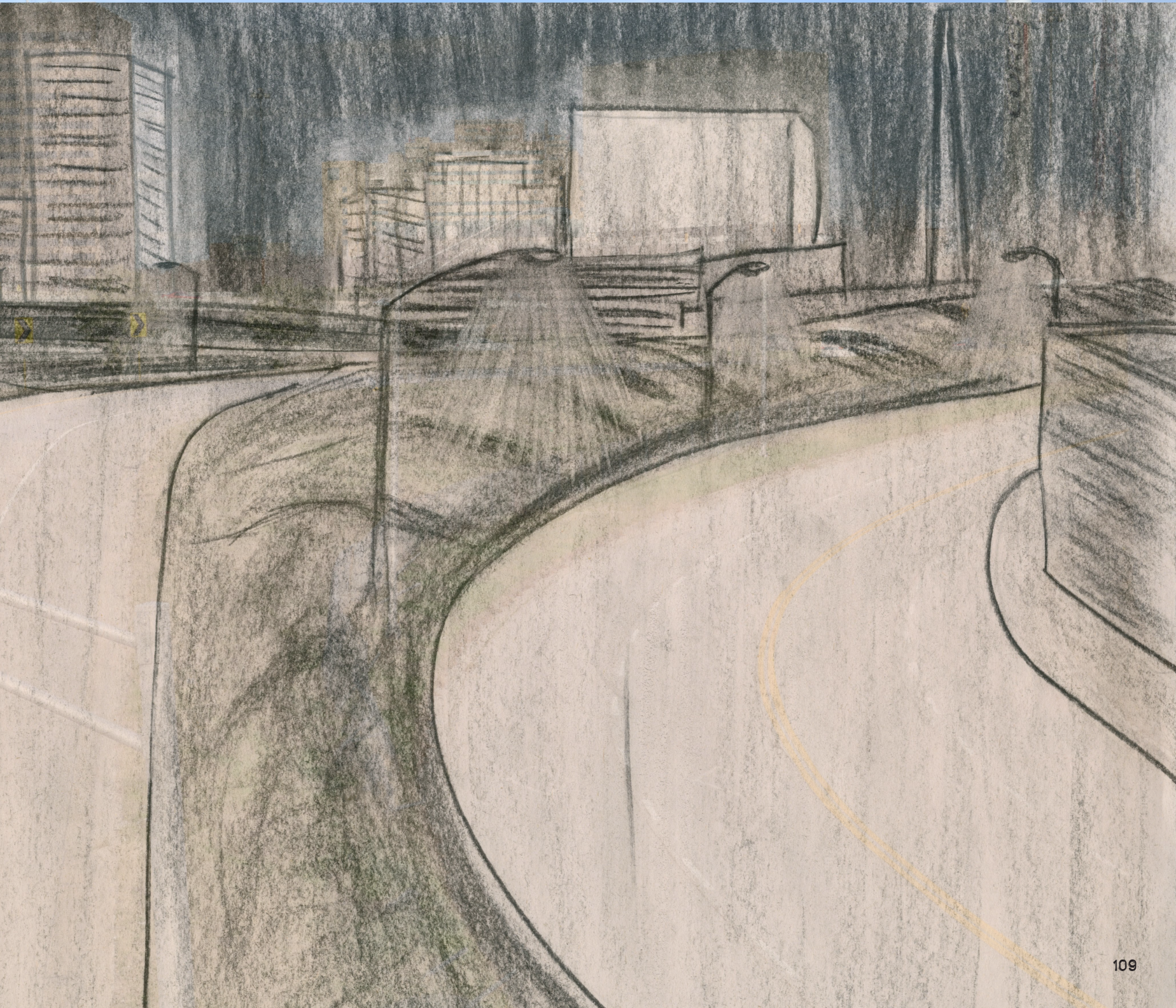
Landform Threshold

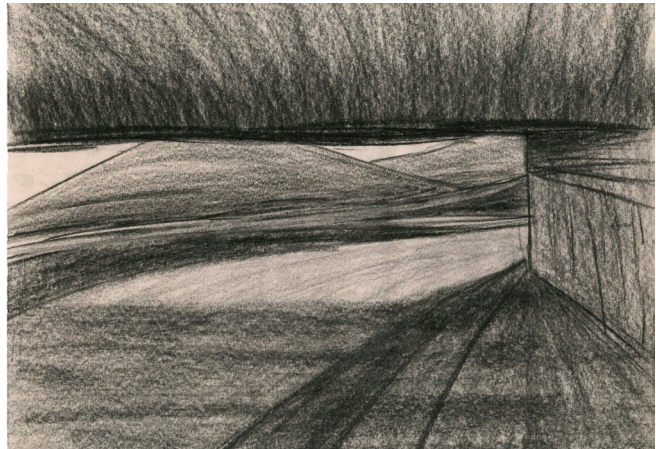
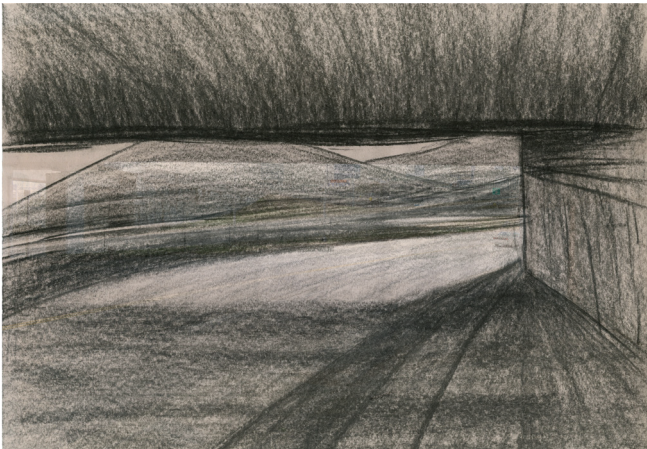
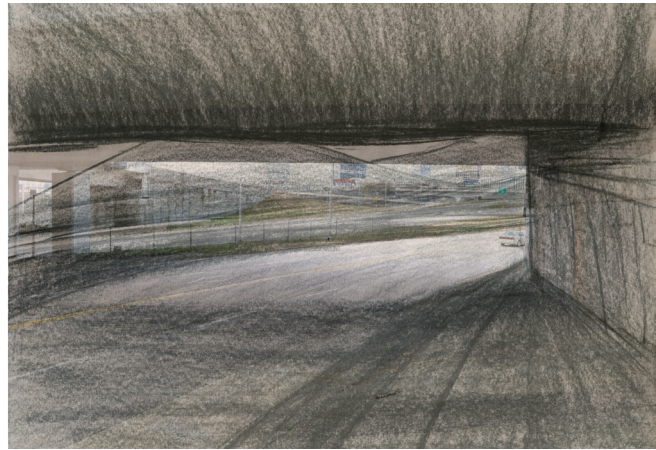
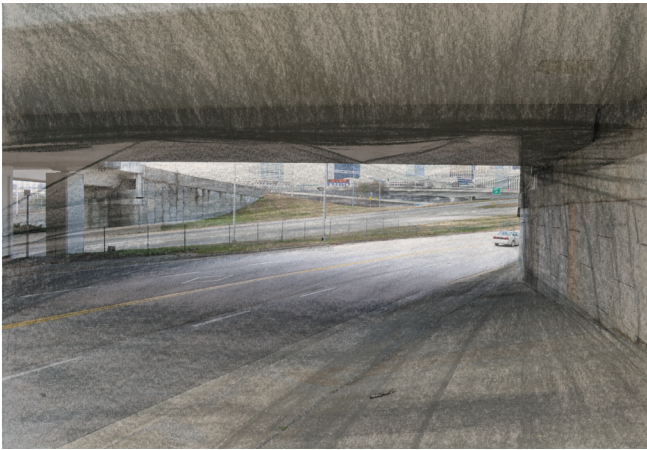




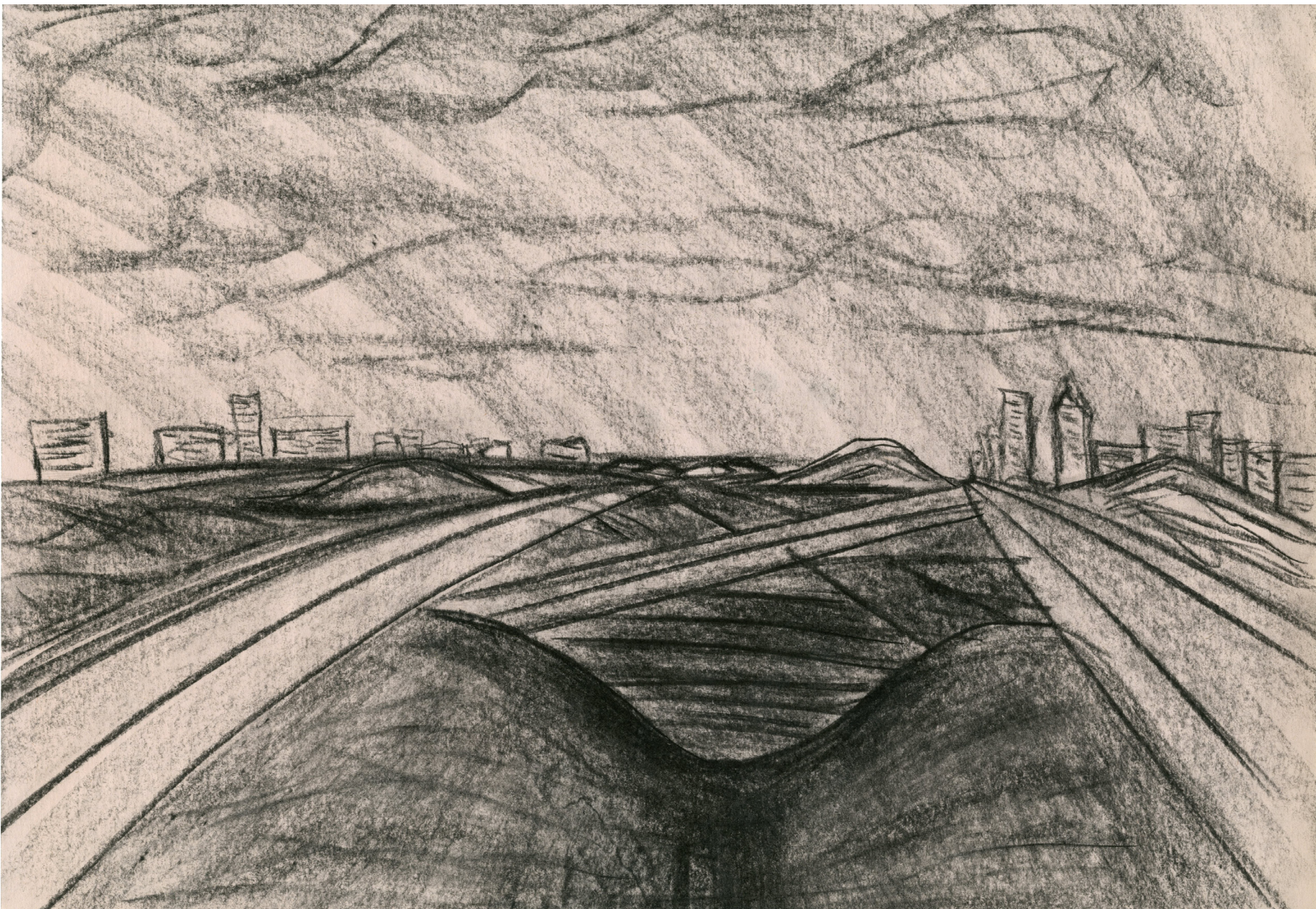
Main Peak's Proximity to Infrastructure





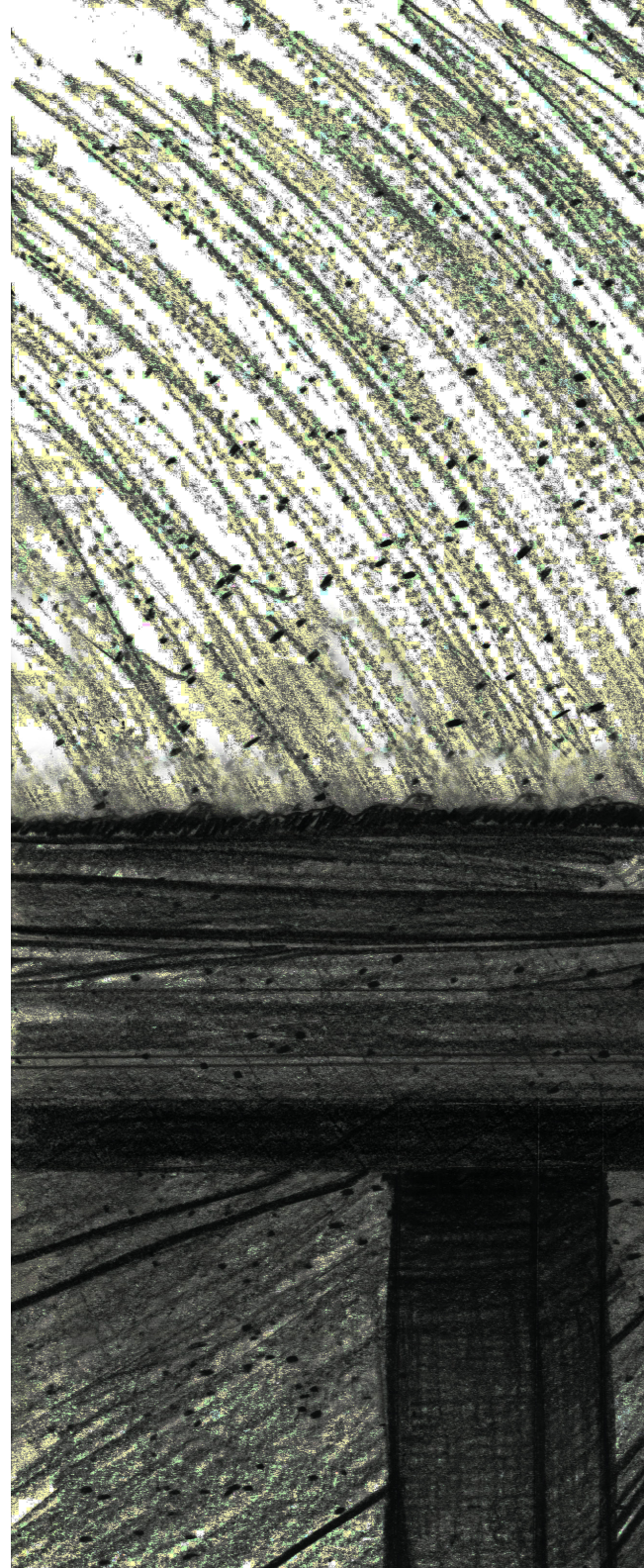


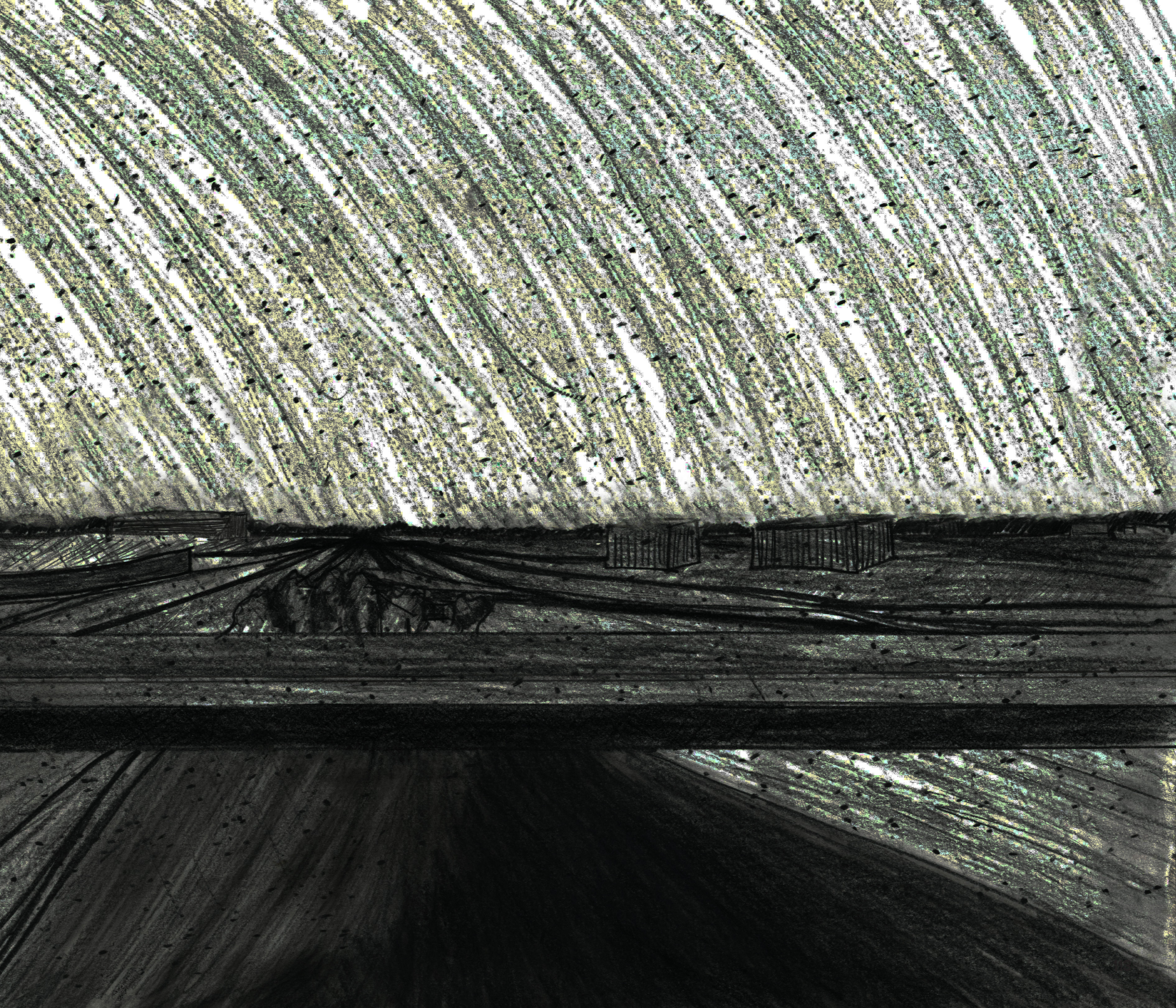
Undercuts

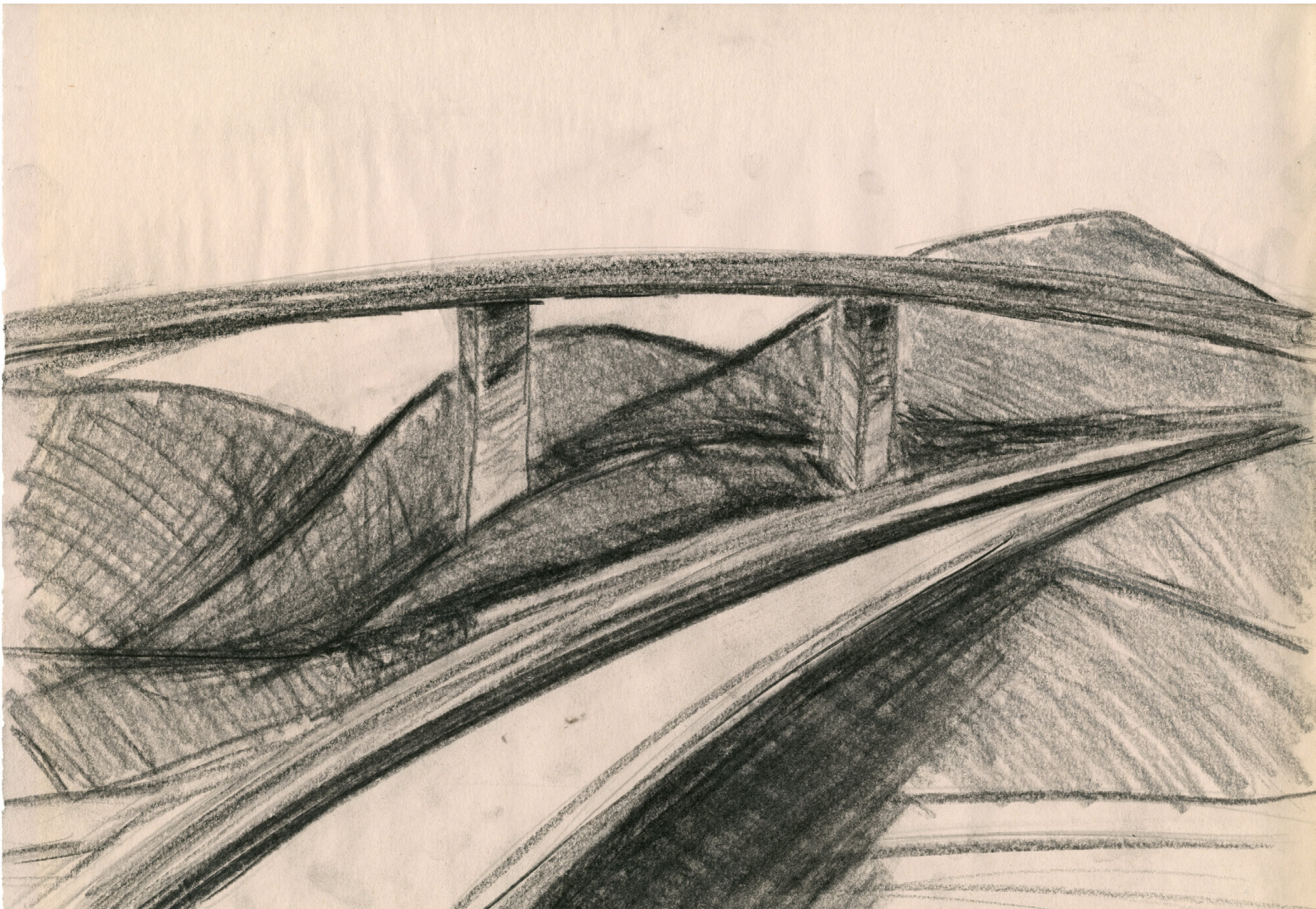


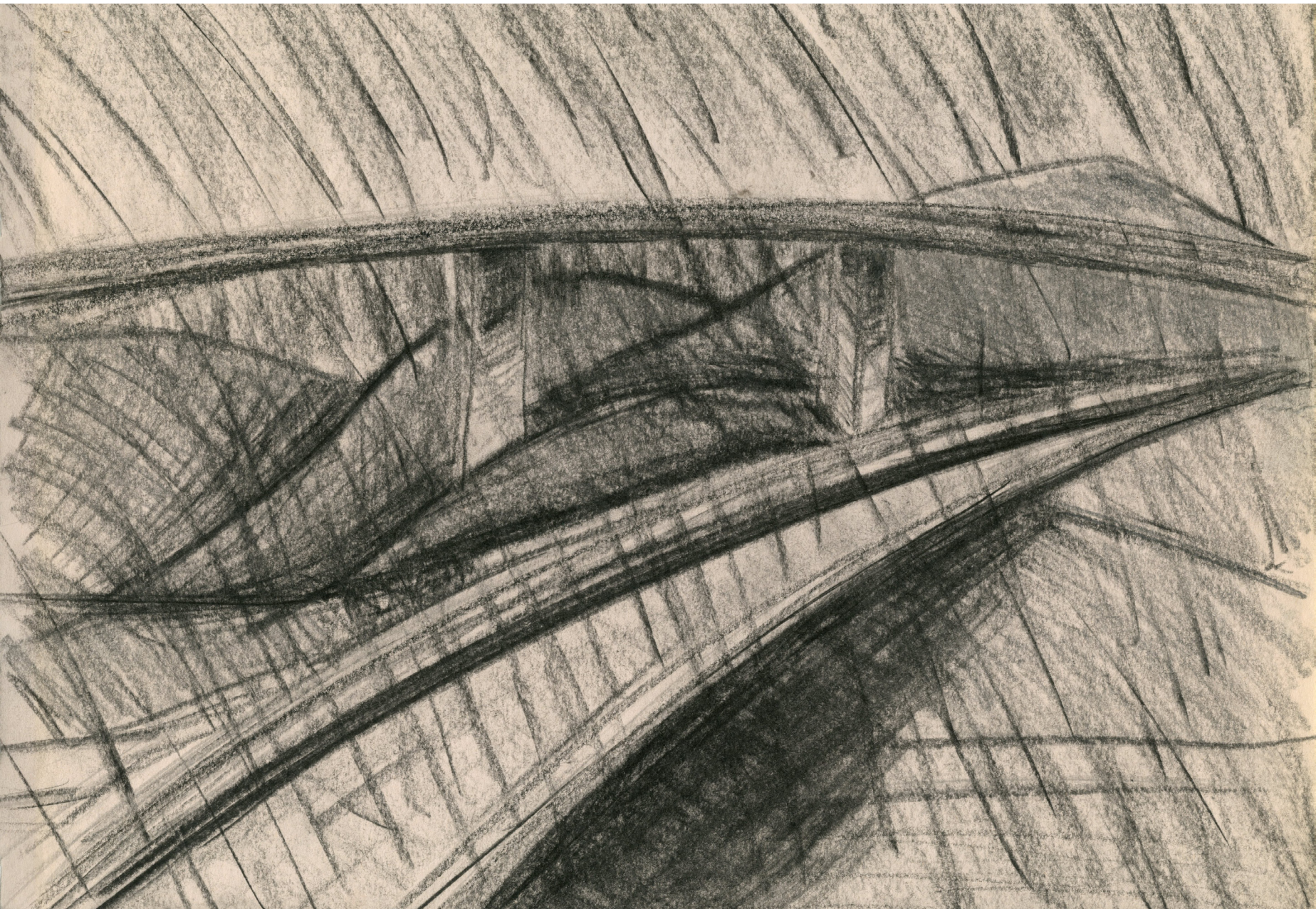
Steep Cut

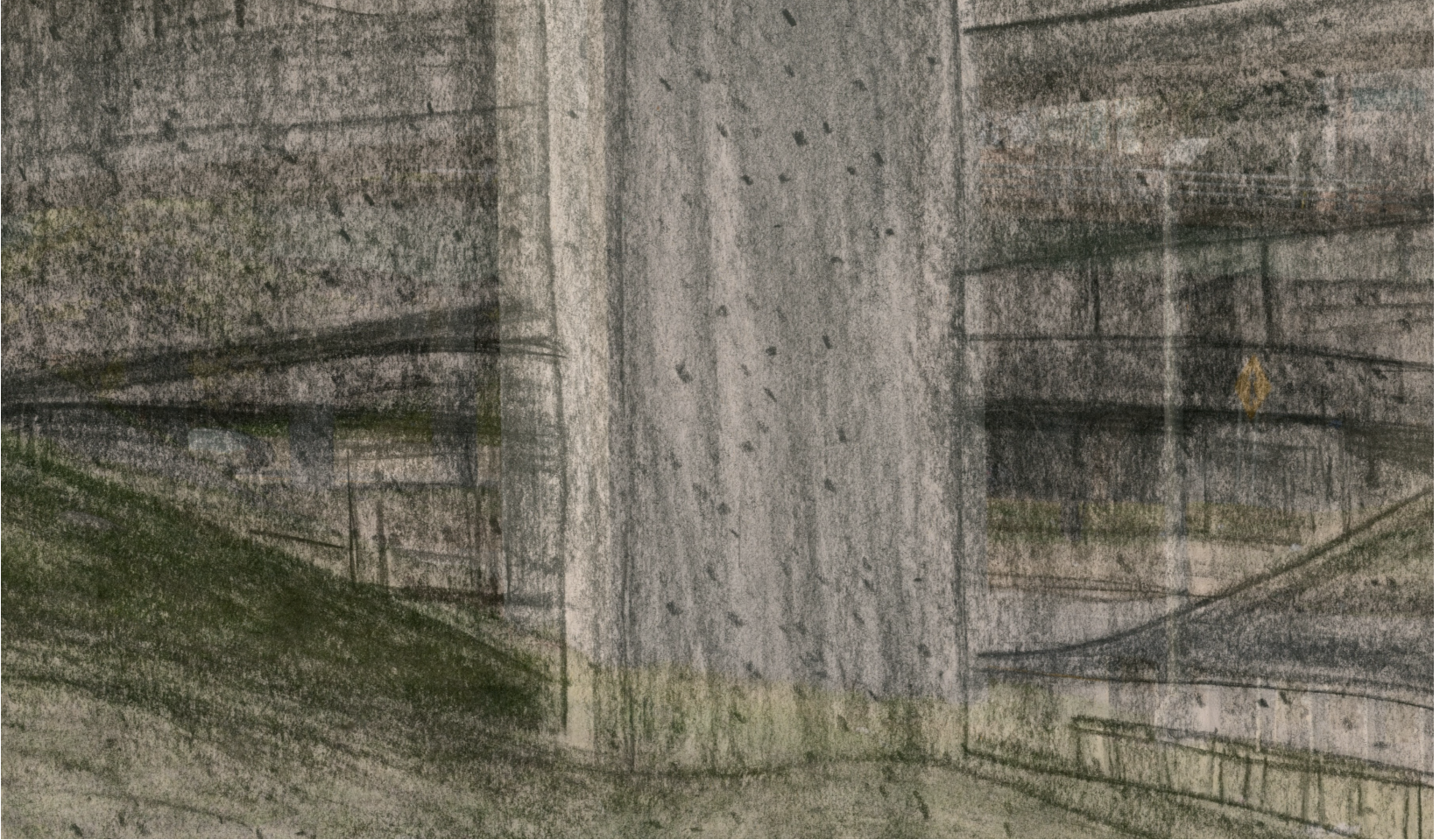
View from Vantage Point in Rain



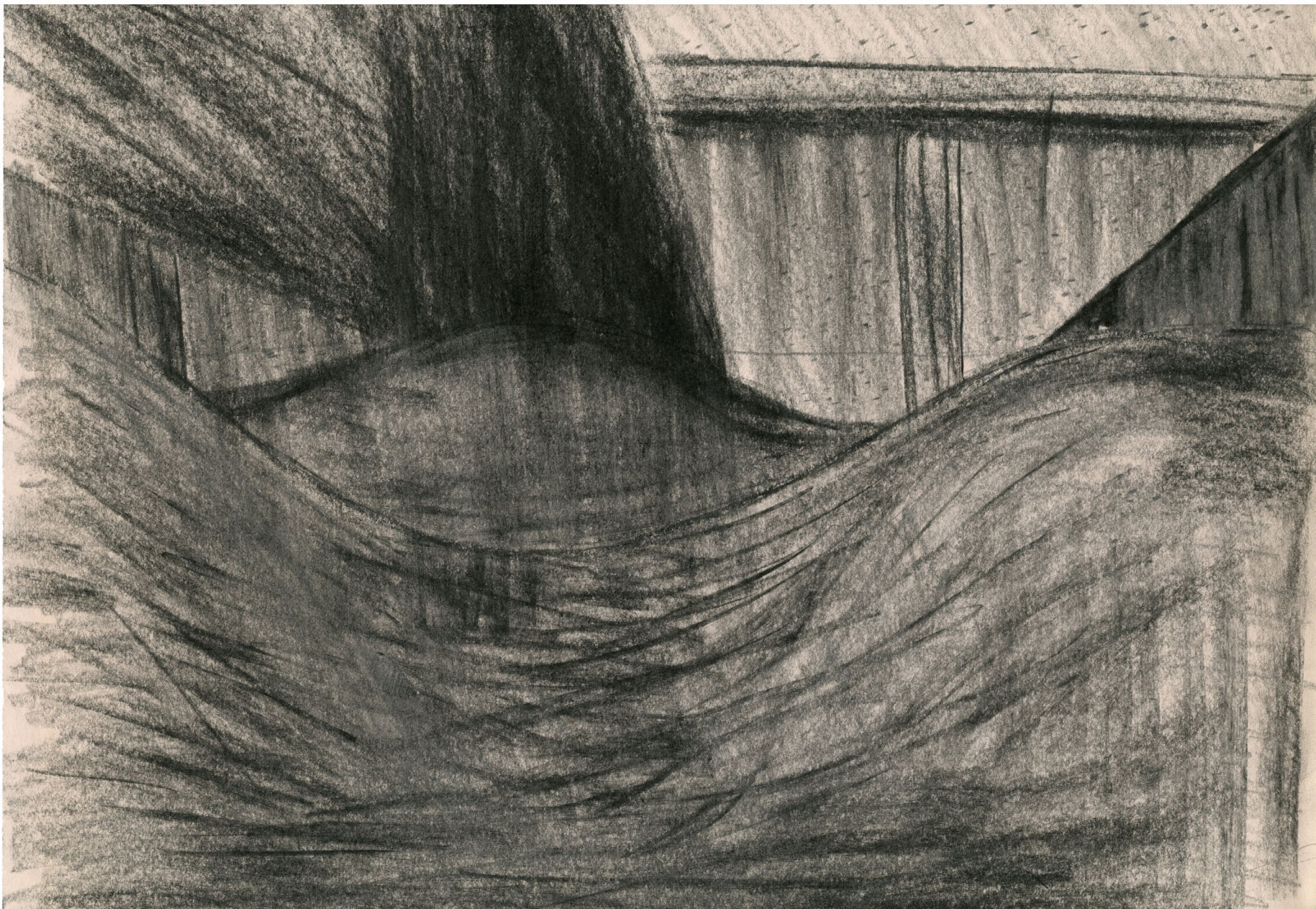








Pillars



Sheet Flows

potentialities

Terrains of Transportation Infrastructure are distributed in abundance across our urban landscapes. They take on a variety of forms and scales, and offer an entire range of possible potentials for design.

Philadelphia, PA



Chicago, IL



Washington D.C.



Los Angeles, CA



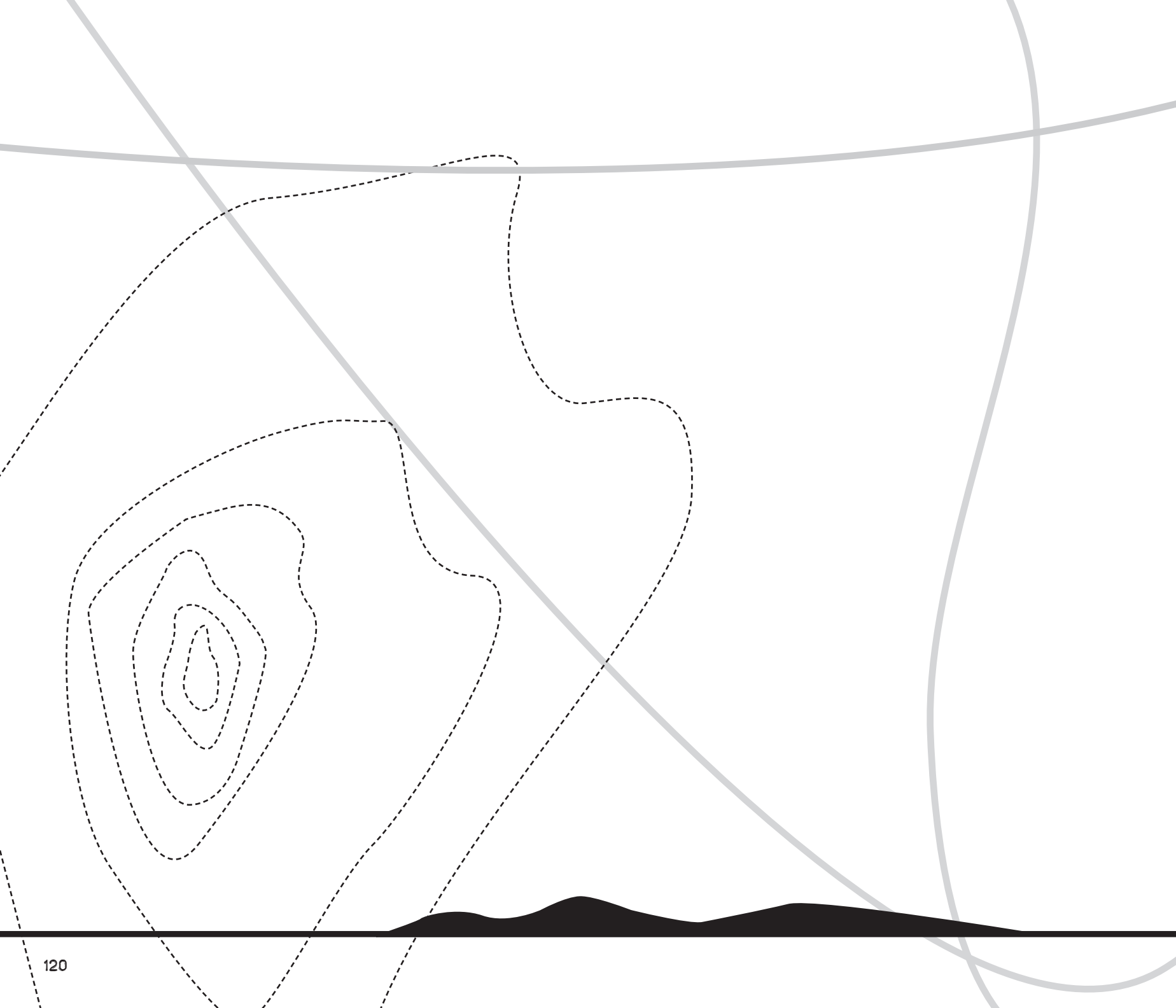
New York, NY



Beijing, China



Fig. 30



REFLECTION

6

critical path

Critical path is a term we used throughout our studio in reference to a kind of personal schedule. It was meant to be a guiding analytical element of not only what we produced, but how we produced it given the allotted time. While purely fascinating and seductively creative, design at times can be a precarious and indeterminate expression of one's ideas and thoughts. When one becomes deeply invested in something, especially something as experimentally abstruse as a design thesis, the frustrations towards undetermined outcomes can run high. But it is specifically within this indeterminate mind-set that one finds the open-ended courage to delve deep into something not entirely understood or defined. We do not approach a thesis with answers, but with questions, and it is not in the hopes of producing immediate remedies that we move earnestly into the realm of doubt, but rather in the hopes of expanding a broader knowledge of something.

Research BY design was the mantra of our thesis studio. I don't believe I really grasped this idea of research fully when it was introduced, having always thought of research as an accumulation of knowledge in the search for new answers. The power of using the design as the research allows for a creative process to unfold in a purely independent way. One is no longer limited by the ideas of the mind, but enriched with new questions, perspectives, and thoughts after every new design or operation. My biggest fallback was becoming entrenched by a specific kind of production, and believing it would provide the answers I was searching for. I wish I had been less rigid and allowed myself to simply create more often, without the timidity of failure. It is only through those failures that we learn and progress.

In regards to the subjects of topography, terrain vague, and urban infrastructure, I believe I have only just started the exploration. I find an intrinsic beauty of truth in these landscapes of difference. They offer up new kinds of opportunities not found elsewhere in the city. It seems only just that landscape architects move out into the terrains yet undetermined by formal arrangement so that we may create new types of encounter between all the daily forces of our lives. I will continue to explore throughout my life questions of space versus place, tranquility versus movement, productive versus barren, and how we define these precepts. In this process, I also became enthralled by the idea of the sacred as something interpretive and intimate. It will be something I continue to contemplate on for a long time to come.

It seems clear that we should approach these massive interspace landscapes with an array of new and inventive ideas. In trying to maintain them as the false formal facades that we do, we lose so much potential in the process. They could fulfill so many more aspirations of our societal needs and desires than they currently contrive to accomplish.

figure reference

Fig. 1 & 2 - **pg. 16** - [http://www.crazyasabagofhammers.com/lost-city-cahokia-archaeologists-uncover-native-americans-sprawling-metropolis-st-louis/#.](http://www.crazyasabagofhammers.com/lost-city-cahokia-archaeologists-uncover-native-americans-sprawling-metropolis-st-louis/#.T6M_UO11820)

T6M_UO11820

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Fig. 4 - **pg. 16** - googlemaps.com

Fig. 5 - **pg. 17** - http://en.wikipedia.org/wiki/Memorial_to_the_Murdered_Jews_of_Europe

Fig. 6 - **pg. 17** - <http://blog.travelpod.com/travel-photo/pdchapla/1/1243988931/holocaust-memorial-in-berlinx-germany.jpg/tpod.html>

Fig. 7 - **pg. 17** - <http://www.geolocation.ws/v/L/5957826202/life-mounds-charles-jencks/en>

Fig. 8 - **pg. 17** - <http://robertorocco.com/2011/10/24/landform-by-charles-jencks-edinburgh-april-2009/>

Fig. 9, 10, & 11 - **pg. 47** - <http://www.morrischia.com/david/portfolio/boozy/research/futurama.html>

Fig. 12 - **pg. 48** - Scanned Image from Auburn Archives in Auburn RBD Library

Fig. 13 & 14 - **pg. 49** - <http://www.skyscrapercity.com/showthread.php?t=565963&page=3>

Fig. 15 & 16 - **pg. 49** - <http://projects.ajc.com/gallery/view/metro/atlanta/atlanta-then-now/14.htm>

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Fig. 24 & 25 - **pg. 87** - <http://arch-sochi.ru/2010/06/park-ne-ot-slova-parkovka/>

Fig. 26 - **pg. 87** - <http://archidose.org/wp/2011/05/02/buffalo-bayou-promenade/>

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Fig. 30 - **pg. 119** - googlemaps.com

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