

LANDSCAPE DISTURBANCE:

USING INITIAL CONDITIONS TO ESTABLISH URBAN TERRAIN
AS AN ONGOING NEGOTIATION

ACKNOWLEDGEMENTS

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LANDSCAPE DISTURBANCE: USING INITIAL CONDITIONS TO
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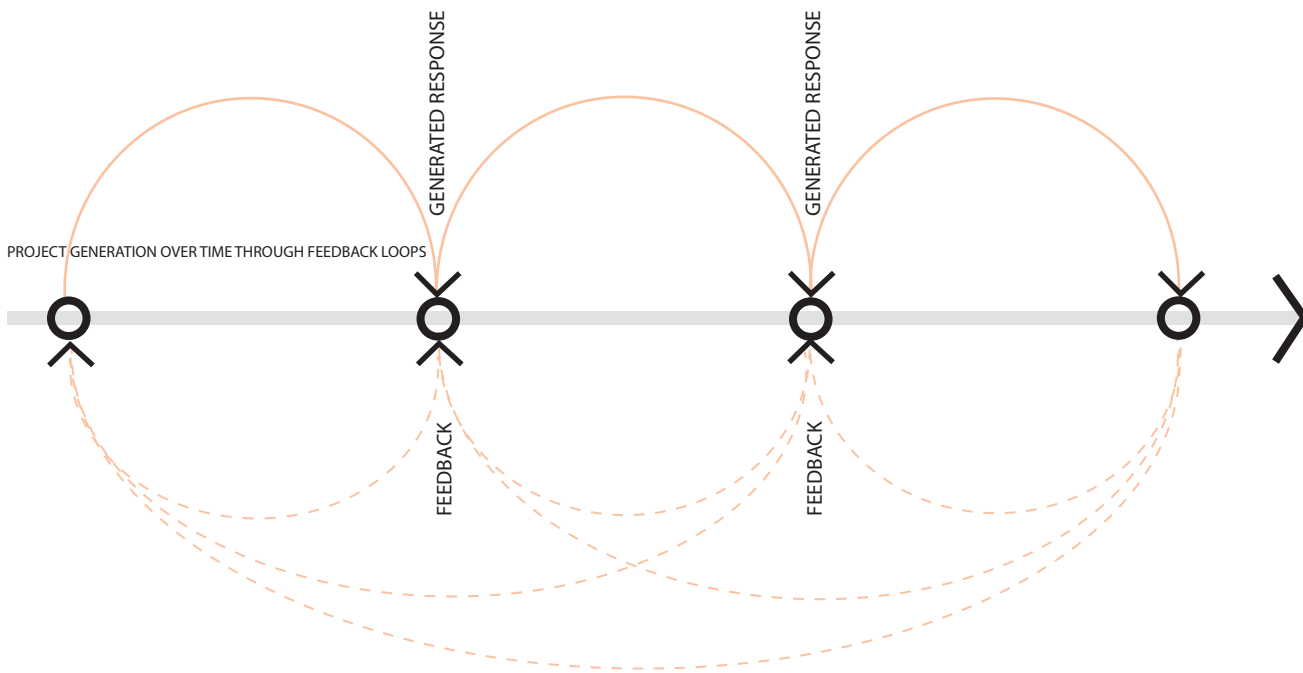
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KEYWORDS

Community Participation, Disturbance,
Environmental Justice, Initial Conditions,
Open Systems



RESEARCH QUESTION: How can a design strategy give people a say in the ongoing development of their spatial futures?

ABSTRACT

Rethinking the traditional urban design function of a master plan has become increasingly important in recent years. Not only is there now a recognized need to design in order to accommodate change over time, but there is also a requirement for civic involvement in the development of the everyday landscape. This study shows how the public may be given a greater role in the ongoing development of its own living environments. It provides a chance for communities to design their own futures. The study utilizes the concept of landscape disturbance to solve the problems associated with traditional design scenarios. By treating urban terrain as a continuing negotiation between people and place, the designer can provide an opportunity for small communities to direct spatial change themselves and have more say in their spatial futures. Territories can unfold on the basis of people's participation, changing over time just like the lives of their users. The study focuses on two sites in North Birmingham. After careful analysis of existing social and environmental conditions in each case, it proposes a readjustment or disturbance of those conditions in order to set in place a sequence of 'stimulus-response' events that enact a transformation of human relationships with their environment. By establishing initial conditions, designers permit environmental change to occur as time goes by, on the basis of feedback from the change itself. The designs focus on specific potential scenarios that are played out through the users' response over time on the site. These responses include pedestrian pattern shifts, tree growth, and the emergence of new gathering spaces, generating a greater range of choice and a rich, open environment.

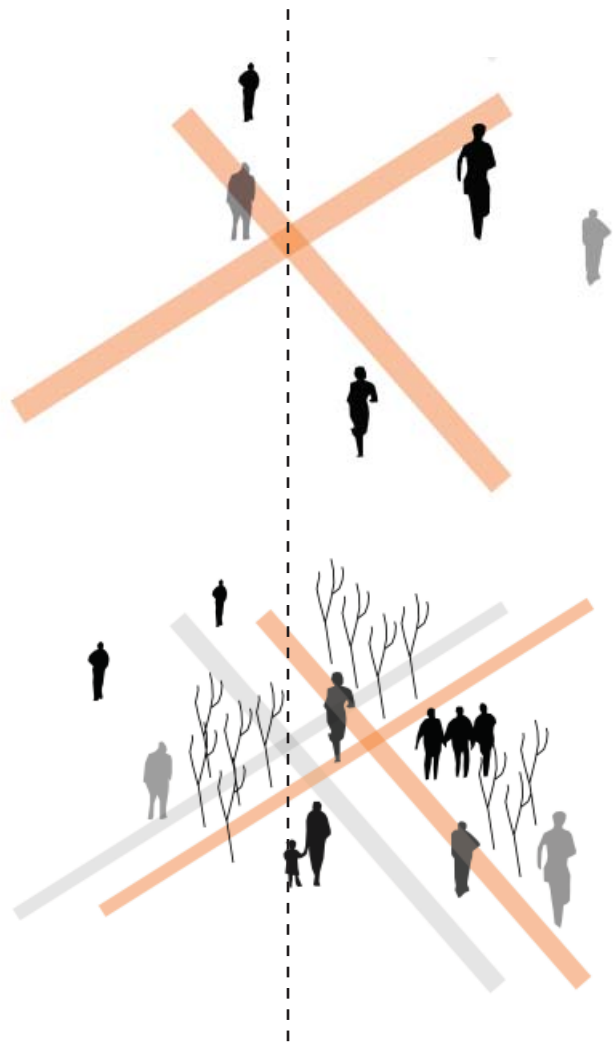


Diagram shows the disturbance which would be created through establishing initial conditions. Shifts in the landscape would reoccur based on citizens' responses to the conditions on site.

INTRODUCTION

Over recent decades there has been much progress in the area of environmental justice. The situation that this movement tries to deal with is that the benefits of urban progress typically lie in geographical contexts associated with those that are better off, while the less valued spaces in our communities tend to accrue around those that are less fortunate. The environmental justice movement has looked at this and tried to create more equitable ways to go about development. While a few designers such as Walter Hood have been heavily involved in this movement, landscape architectural practice has only recently begun to develop approaches to these issues.

One aspect of this research is to try to understand whether an initial conditions approach can provide a better basis for the participation for the underrepresented in the ongoing development of their communities. By going about design investigation using this methodology, the research looks for strategies and techniques that engage change. (Raxworthy, 2006)

The research proceeds on the basis that community involvement does, in fact, have a positive effect on participants in building ownership, increasing an understanding of current conditions and serving as a helpful teaching model. This information has been concluded from documents published by the World Health Organization and other research teams in the fields of psychology and education. Understanding that community involvement is not a brand new idea, charrettes and community projects being commonplace, the approach, developed through the research, focuses on coming to those who may typically be overlooked or not make it to traditional community meetings. Knowing this, the proposal geared toward a scenario that involves a community that has expressed interest in involvement in the creation of their neighborhood's future. (Kahssay, 1999)

The proposal that has developed through the research is one that works towards achieving grant funding in order to establish a site that is open to feedback loops. This goes on the premise that there will be a design implementation, followed by a user response. This cycle, which promotes collaboration between community and designer, will continue through the site's development over time.

The research began with a series of case studies which evaluated projects associated with the same sub-field of landscape architecture. These projects also work with similar design methodology.



Figure 1. Downsview Park

Images courtesy of the Office for Metropolitan Architecture

CASE STUDIES: DOWNSVIEW PARK

This project was chosen as a case study because of its innovation in the field of landscape architecture with its use of initial conditions. While the study mainly focuses on the winning design, "Tree City," many of the proposals for this large green space in Toronto were presented as strategies and 'frameworks' rather than a clean master plan approach (Czerniak, 2001). The "Tree City" proposal draws attention to a kind of "staging of uncertainty" and "the creation of enabling fields that accommodate process" (Czerniak, 2001: 15). Basically the project "offered something like a landscape bill of rights in lieu of specific legislation for the site's development" (Waldheim, 2001: 85). There's more "interest in seeing the forest than the trees" and the "long view of the site's development" (Waldheim, 2001: 81). In dealing with public projects, this approach is seen as beneficial "because it views landscape design as an incremental absorption of civic life, not a fixed master plan" (Berger, 2001: 132).

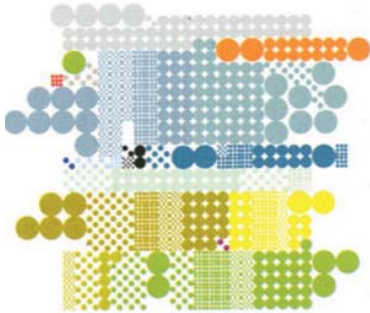


Figure 2.

Images courtesy of the Office for Metropolitan Architecture



Figure 3.



Figure 4. Volgermeer Polder

Image courtesy of Vista Landscape and Urban Design

CASE STUDIES: VOLGERMEER POLDER

This case study looks at a “strategy that guided the regeneration of a bog landscape” in Amsterdam (Barnett, 2009: 1). The plans for the landfill were developed by Vista, a Dutch landscape architecture firm. The contaminated site was sealed with a matting system, fresh top-soil brought to the site, and small dikes constructed (Poole, 2004: 238). The site, “built in a rice-paddy pattern,” has a range of water depths, allowing for “different ecological successions”(Poole, 2004: 238). “The succession of vegetation types in these paddies will mark the passage to time in a slowly evolving landscape.” (Poole, 2004: 238) This type of “process design” provides a brief look into how “initial conditions can be designed to direct the future movement of conditions” on site. (Van Gerwen, 2004: 233)(Barnett, 2009: 1)

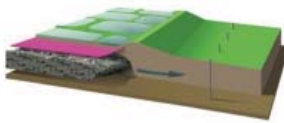


Figure 5.

Images courtesy of Vista Landscape and Urban Design



Figure 6.



Figure 7. Image courtesy of Plan Philly

CASE STUDIES: CENTRAL DELAWARE RIVERFRONT

Images courtesy of Penn Praxis and William Penn Foundation



Figure 8.

This case study looks at a strategy used by Penn Praxis, a division of Penn Design, which “promotes community outreach projects” (Steinberg, 2010). This project, specifically dealing with the “civic visioning process” is set up “more as a campaign rather than traditional planning” strategy (Steinberg,2010). The goal of the Penn Praxis group throughout the development of the vision for the waterfront has been to heavily involve the public, in order that no single group of private investors are able to determine what happens on the riverfront. By doing this the project has gained community support and given a voice to citizens who would often go unheard (Steinberg, 2010).

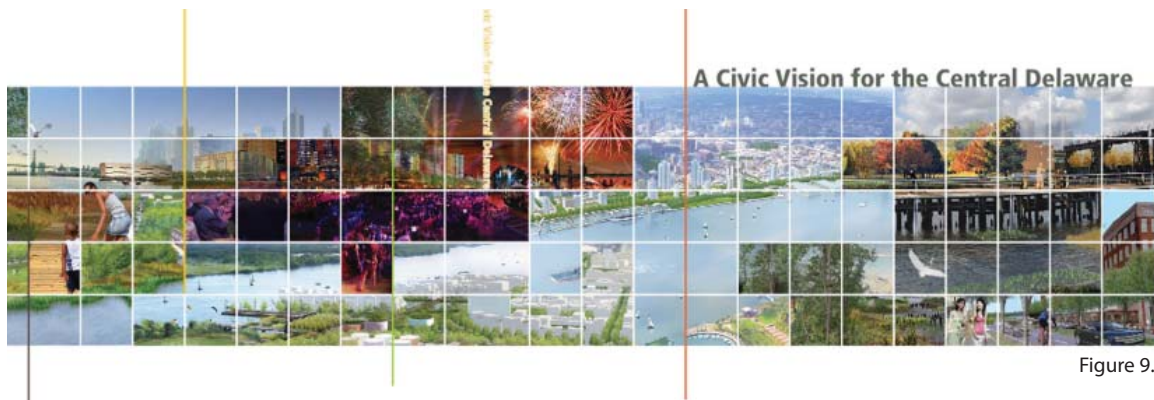
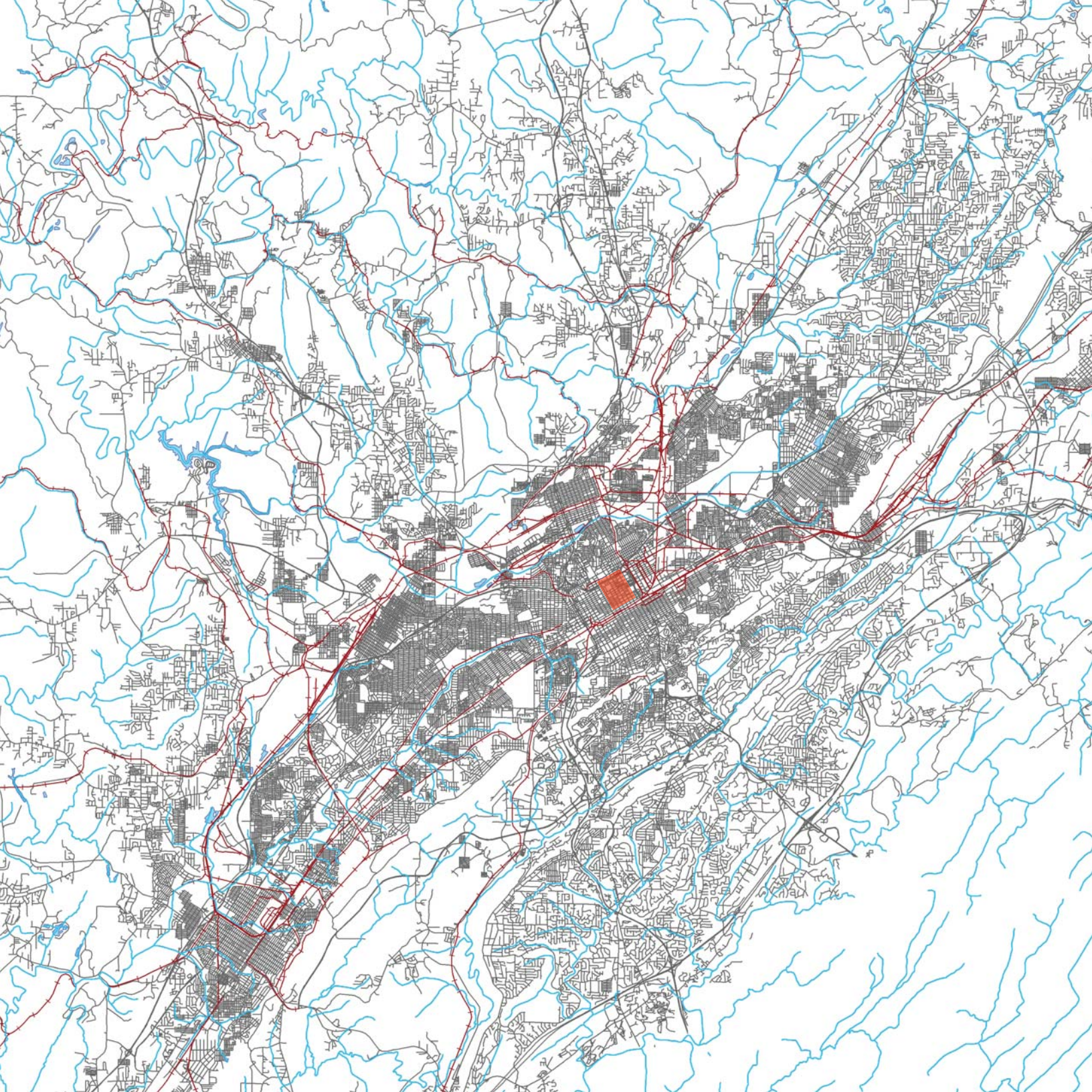


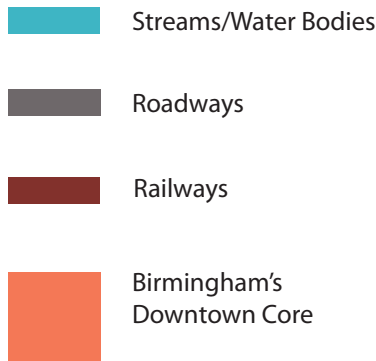
Figure 9.

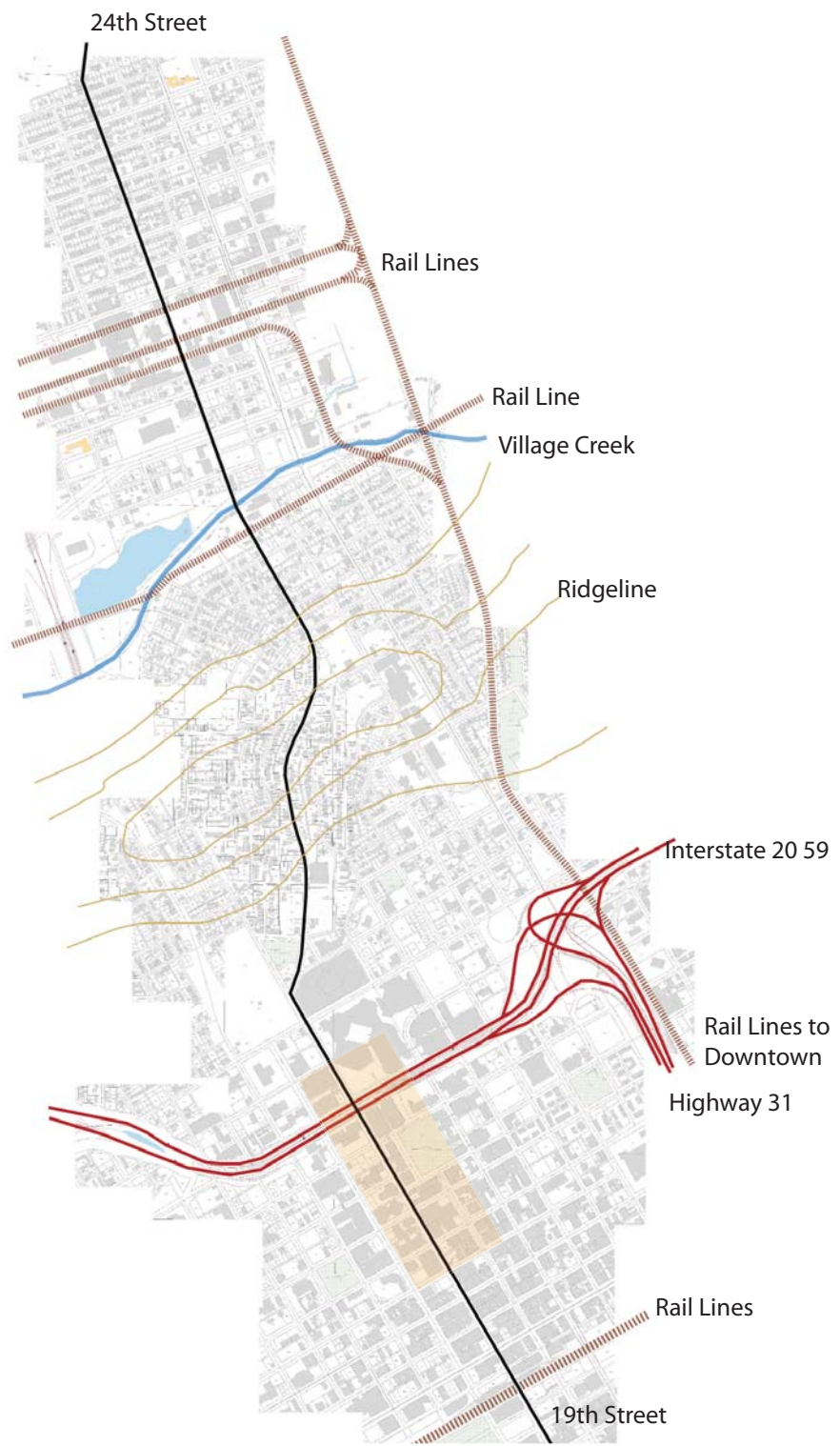


CHAPTER 1: SITE CONTEXT + ANALYSIS

This context map shows the greater Birmingham area through roads, rails, and streams. This map was helpful in locating the first study site, based on criteria developed early on in design investigations. Other sites came from studying other factors such as vacancies within neighborhood centers.

Originally ecological connections were investigated to determine if there was a possibility for a larger city-scale network. As site investigation progressed, an evident need emerged for a stronger physical and social connection within the local urban environment. The need was seen visually through the amount of foot traffic, the lack of space dedicated to the pedestrian, and the fact that there are many objects which cut across the site, prohibiting ease of connection. These were studied and addressed.





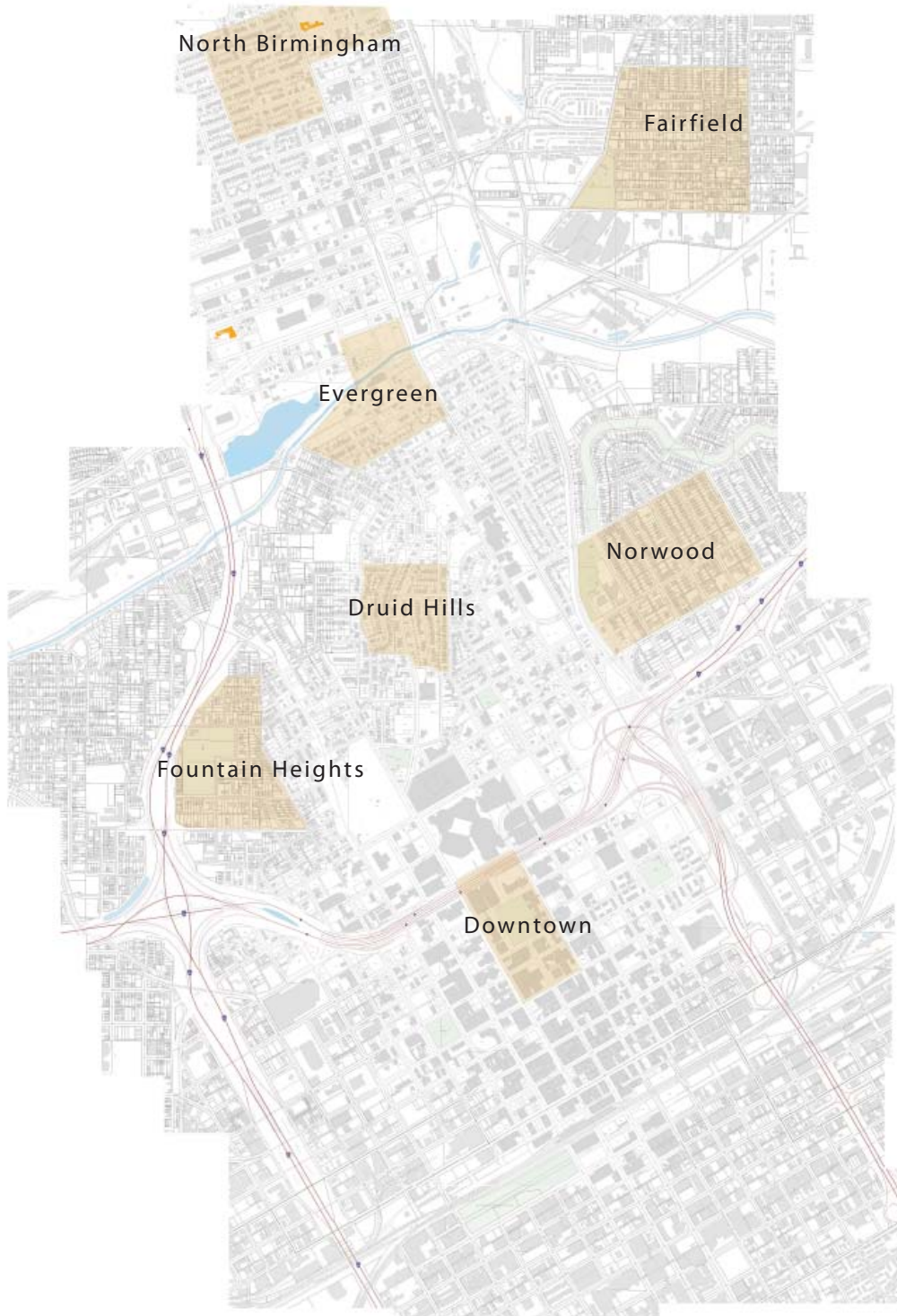
IMPEDED CONNECTION

This map across Birmingham shows how a range of linear conditions impede clear connection from North Birmingham neighborhoods to the downtown area along the 24th Street connection.

North Birmingham
Neighborhoods

Birmingham's
Downtown Core





North Birmingham

Fairfield

Evergreen

Norwood

Druid Hills

Fountain Heights

Downtown

POTENTIAL SITES

This map shows potential sites for investigation. Within the area of study north of downtown Birmingham, six neighborhoods of interest were found. Each had a social center of some sort whether it be a grocery, park space, car wash or a barber shop. The sites were examined to better understand what is currently available to these communities as well as what might best suit their needs for public space. Druid Hills and the Village Creek area were chosen based on local access to public space, relation to each other, and relation to downtown Birmingham. These two came forward as needing the most attention and were further examined to understand spatial relationships and the sites current uses. This study is shown in the following representations of what have been termed matrix, flows, clusters, and circuit ecologies.



Potential Sites



Village Creek

Druid Hills

MATRIX

This graphic shows the base layers of the North Birmingham area which contains the sites that have been investigated through the fall and spring semesters. Druid Hills was chosen because of its relation to Village Creek (also know as Evergreen) the site of initial study, and the opportunity its sites present for design investigation. The layers contained in this map are broken down in the graphics on the following pages.



Public Green Space
parks+open space+cemeteries



Hydrology
village creek+retention areas



Community Centers
school (city owns other unlabeled property)



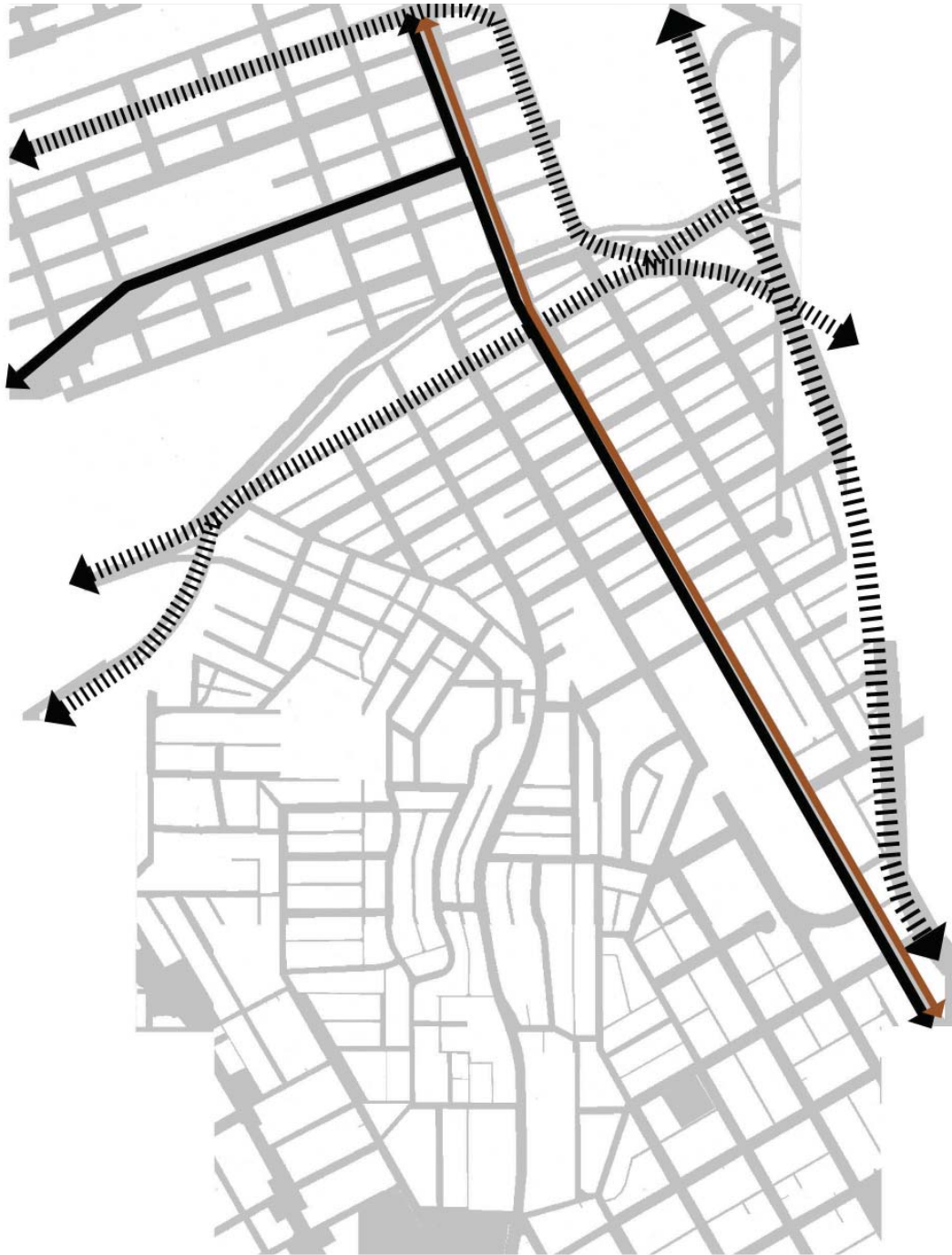
Structures
retail+residential+commercial



Streets
connectors+arterials+highways



Parcels
lot lines+ground plane



FLOWS

This map shows a study of flows which, by in large, relate to automobile traffic. Streets, rail lines, highways, and bus routes are represented. Many of the major flows happen to correspond with objects previously labeled as impediments to connection.

 Local Transit Routes

 Railways







 Connector + Arterial Streets

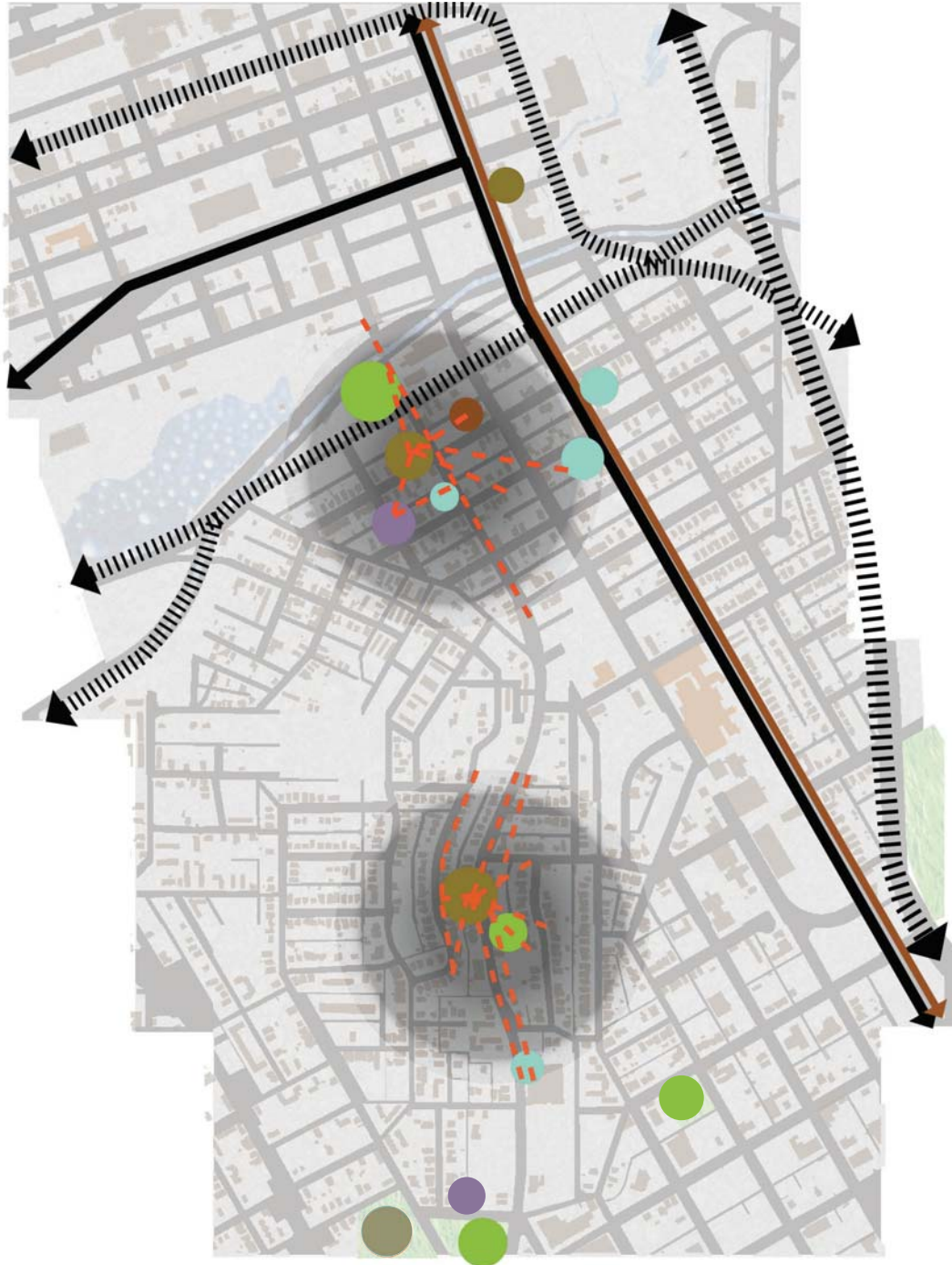
 Major Highways



CLUSTERS

Dots indicate areas of social investment and/or gathering. The main focus was to show those closely related to the residents of the two neighborhoods.

-  park space + site 1a + site 2a
-  residences that are consistently used for social gathering
-  groceries+convenience stores
-  stores+laundromats
-  business/local employer
-  cemeteries



CIRCUIT ECOLOGIES

Along with other layers, this map shows pedestrian traffic in the general vicinity of the two neighborhood centers. Having a better understanding of these circuits is crucial to producing a scheme for increasing social interaction within the core area of the neighborhoods.





CHAPTER 2: SITE HISTORIES

The purpose of the following maps and aerals was to discover a better understanding of the historical context for the greater Birmingham area as well as each study site. While over the years little change was seen on site, each, now being in an unused state, offers the opportunity for community growth.

The two sites shown under the historical analysis of the city are the previously mentioned study sites within the Village Creek and Druid Hills communities.

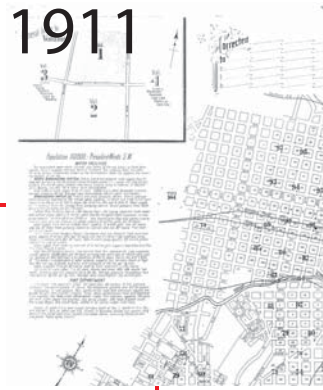
1891



1902



1911

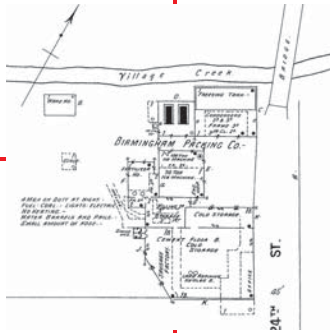


1930-1951



Village Creek Site

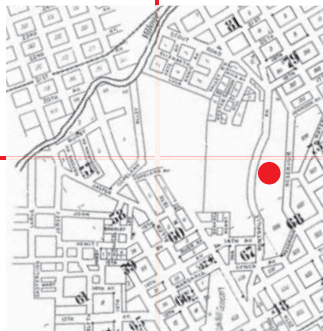
The Village Creek was home to the Birmingham Packing Company for most of its recorded life. The business' structures were some of the early development by the creek. The maps show the growth of the company prior to the abandonment of the site, which now serves as a sort of dumping ground for metal, rubber, and other material.



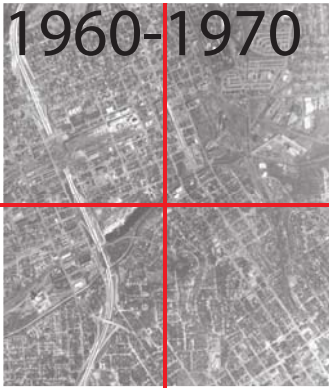
The aerals also show the depletion/partial elimination of a retention area on the north side of the creek. Over the years, this and other changes have caused Village Creek's flooding to be more intense on site.

Druid Hills Site

The Druid Hills site mapping shows the slowed/late development of the area due to topographical issues, such as the ridgeline condition, which caused the community to develop around 1930, behind most of its neighbors.

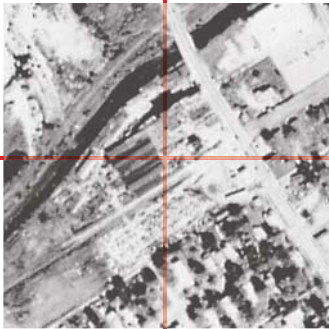


The two sites of focus have gone from unoccupied, to residential space, to remnants of structures within vacant lots.



Birmingham

As the city faces a major financial crisis during the current economic downturn, it is important to develop new ways of thinking about public projects, how to fund them, as well as how to make them successful long term.



Current Site Conditions SITE 1.A

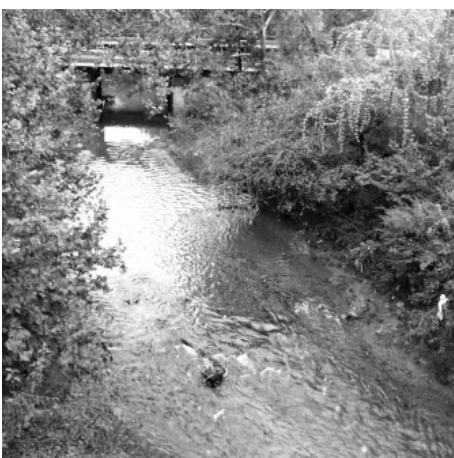
As mentioned, on this site flooding is a main physical issue to deal with. How could the site be designed to better accept the flooding and cause less harm to the stream? The site also needs to perform a social function, open for gathering space for the neighborhood as a whole.



Current Site Conditions SITE 2.A+2.B

Due in part to the steeper terrain, the vacant residential lots suffer from erosion and washing on site. One site currently used as a cut-thru is located closest to the local grocery store and provides as opportunity for increasing social interaction within the community.

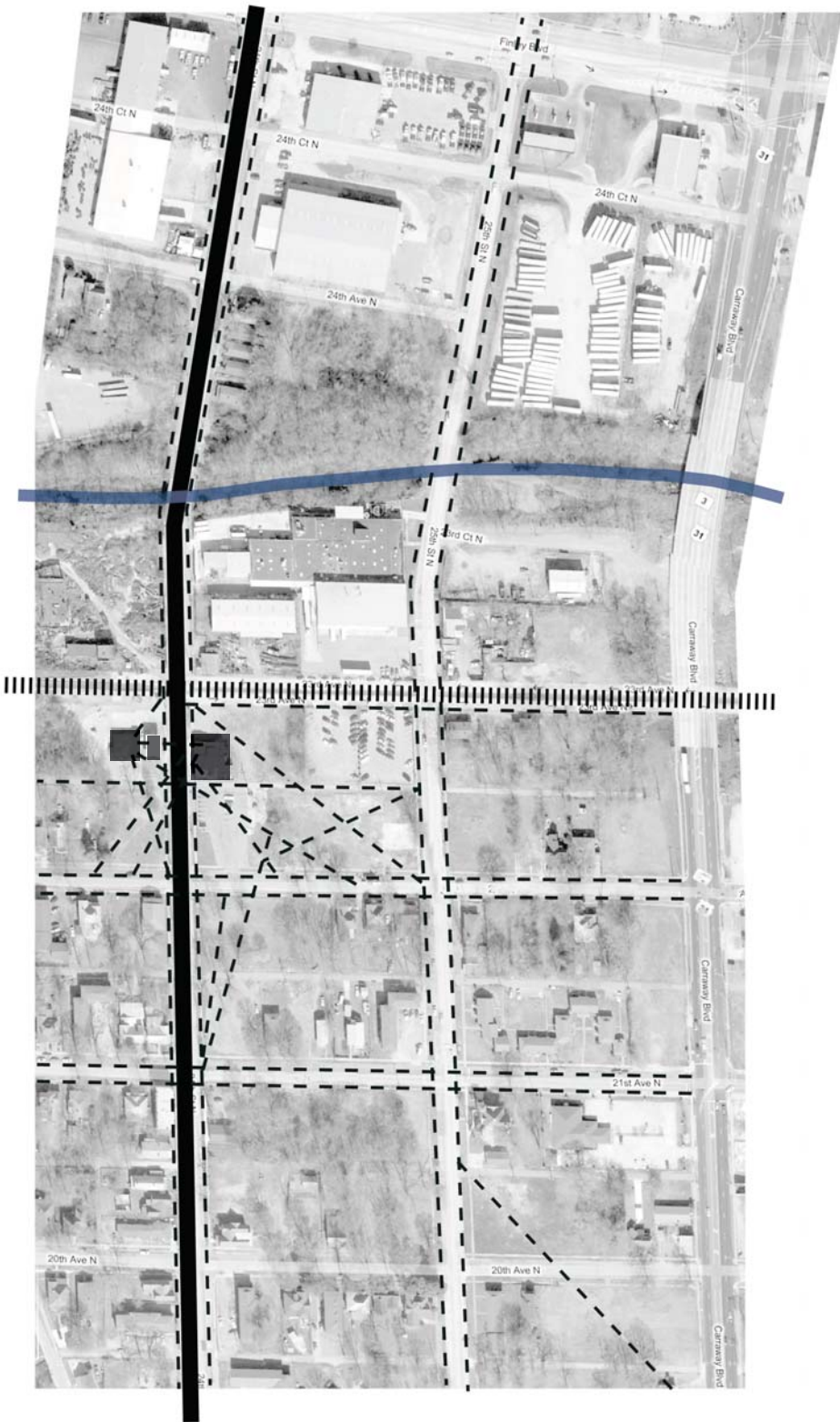




CHAPTER 3: DESIGN INVESTIGATION SITE 1.A






The Village Creek area was selected on the basis of criteria formed from experimental drawings that showed what the project hoped to achieve. These included the following: urban terrain, creek or stream, fragmented ecological and social network.

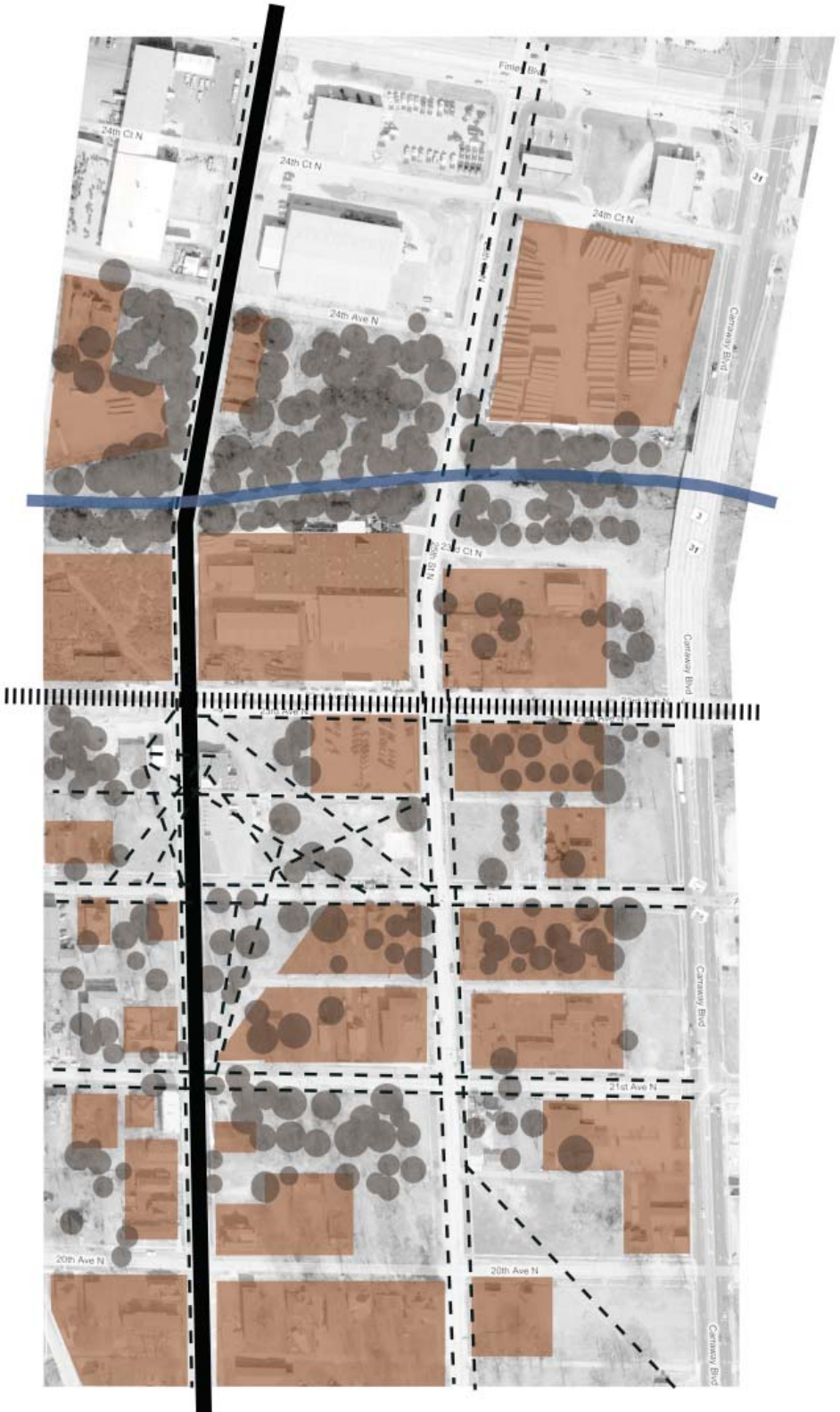
By zooming to a small site scale early in the investigation, the goal was to analyze the site through a series of design inquiries. These would then help to reevaluate the initial contextual analysis.



BASE AERIAL/FLOWS

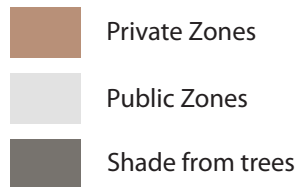
This base map of the core Village Creek area shows the main north/south connection (24th Street), the existing streambed of Village Creek, and rail line, in addition to daily pedestrian traffic routes. The web of dashed lines shows many existing paths that link neighborhood public space, the local grocery, the gas station, and the convenience store.

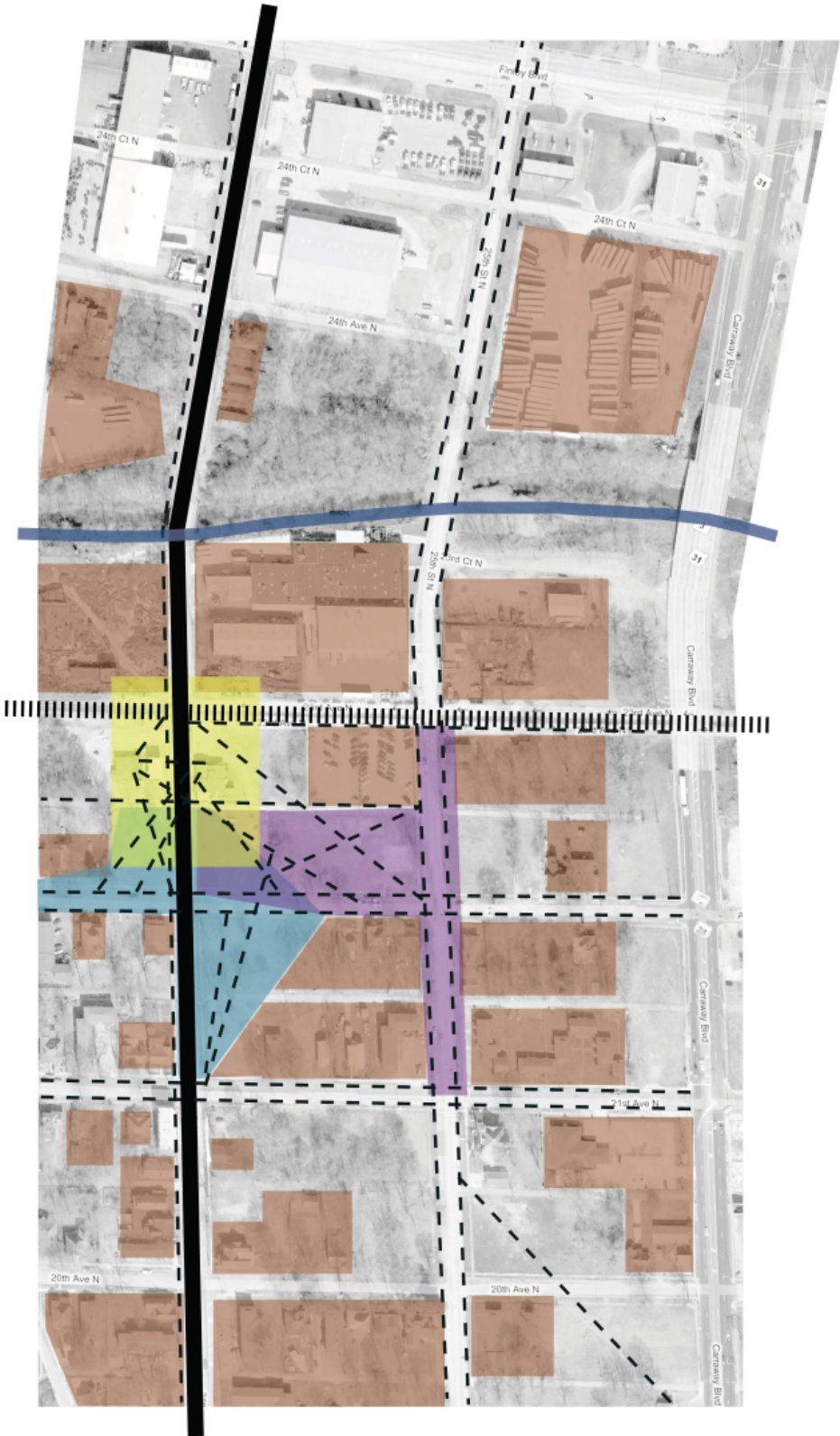
-  Rail Line
-  Pedestrian Paths
-  24th Street
-  Streambed
-  Retail Structures



PUBLIC/PRIVATE + SUN/SHADE STUDY




These layers depict pedestrian connections along with a study of tree canopy and public and private space on the site. While this layer is shown with hard edges, some of the areas between public and private are, in reality, not a defined line while others may be. Examples: side yards, fences, vacant lots.

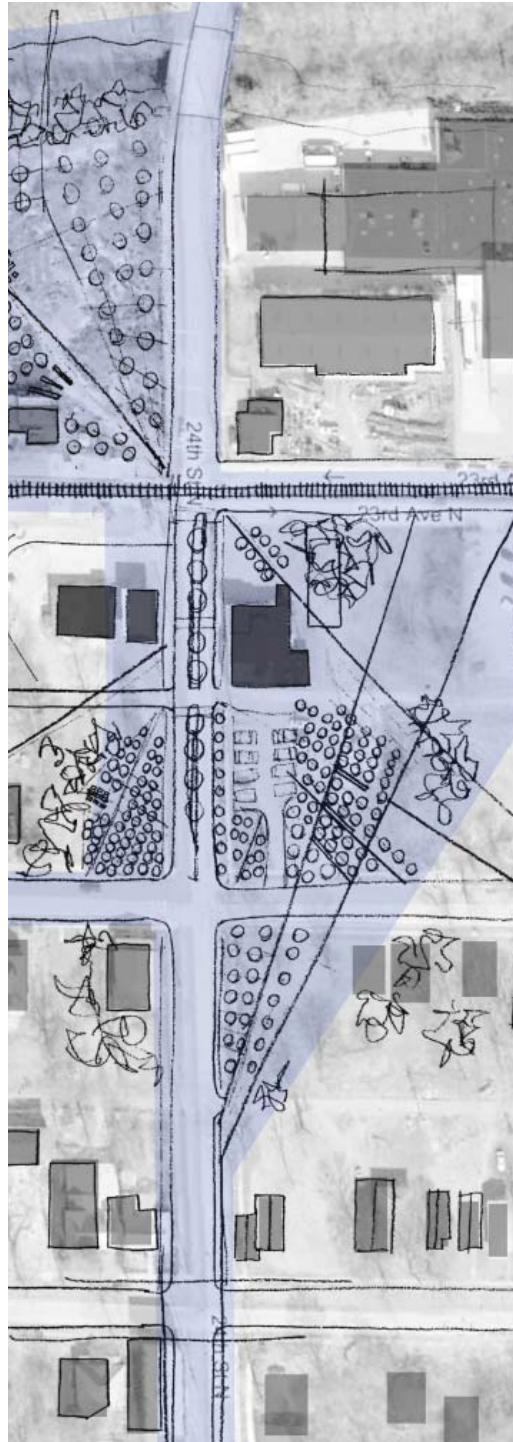




HIEARCHY OF PUBLIC SPACE




In this map, showing different layers of public space, some areas, such as those shown in purple, are looked at as connections or thresholds, used primarily by people in the neighborhood. The blue indicates connecting space used also by those from surrounding areas. The yellow indicates gathering space, where many times groups can be found in casual conversation outside the storefronts.

-  Connection - Neighborhood
-  Connection - Surrounding Areas
-  Gathering

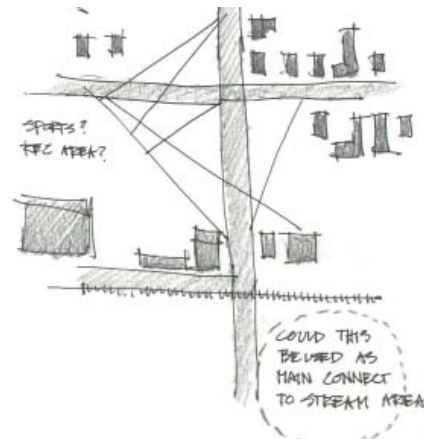
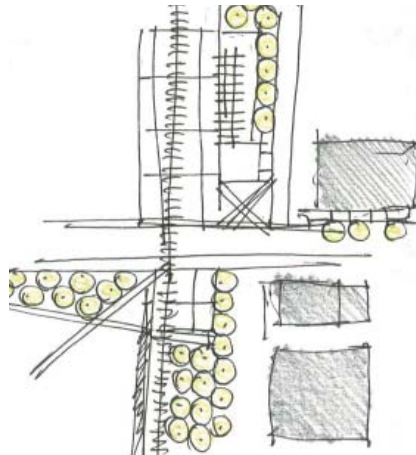
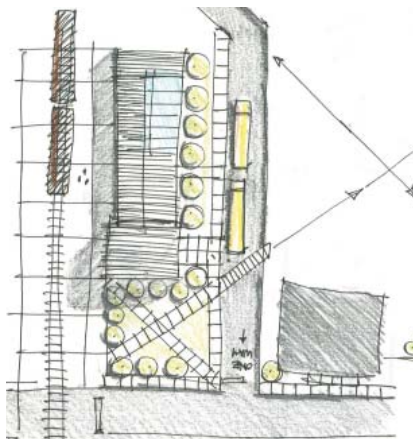
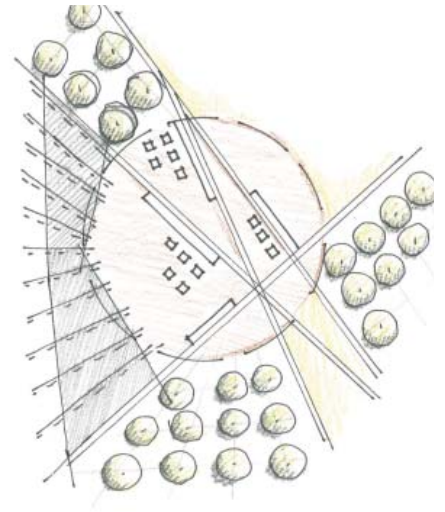
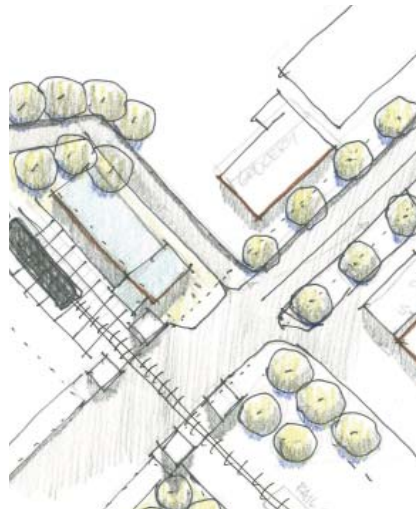
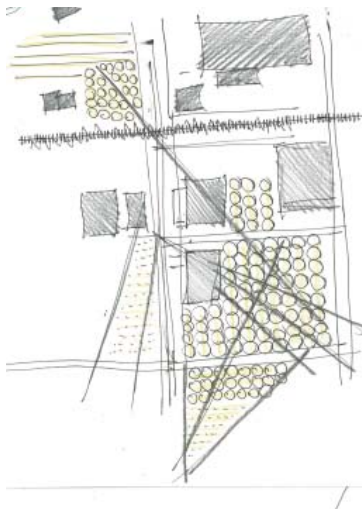
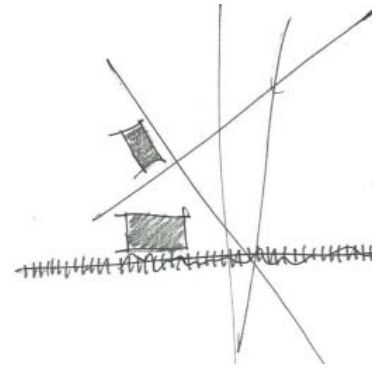
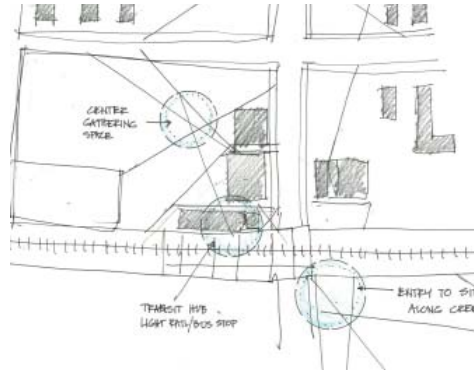
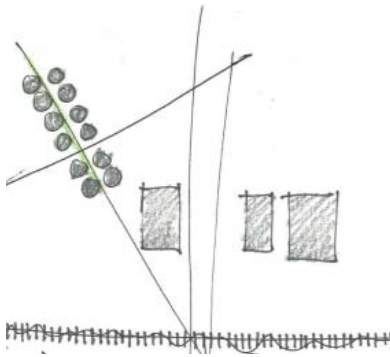


AREA OF FOCUS

This map shows the area that the project finally focused on, shown in blue. This ambiguous and undermarked public space became the subject of design inquiry. How could it be reformulated through [design + negotiation] into a meaningful and inclusive neighborhood place?

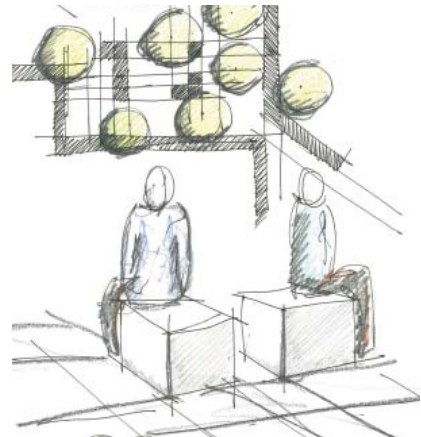
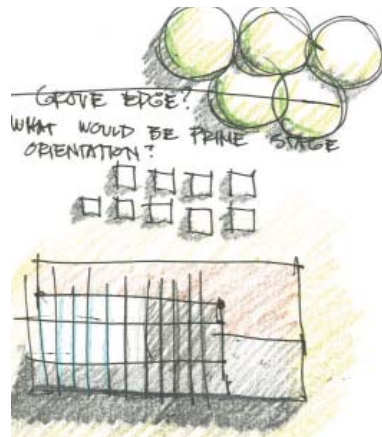
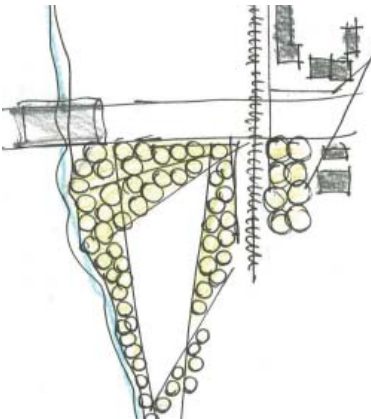
-  Area of Focus
-  Public Retail Structures
-  Residential/Commercial Structures

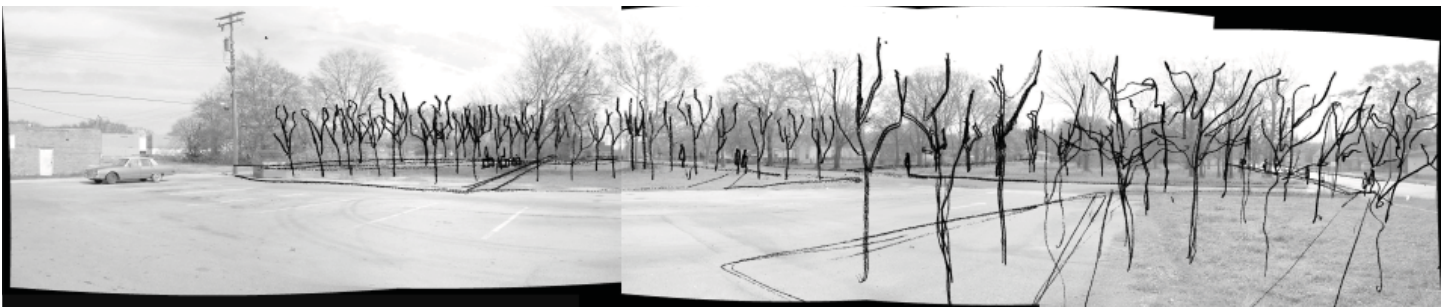
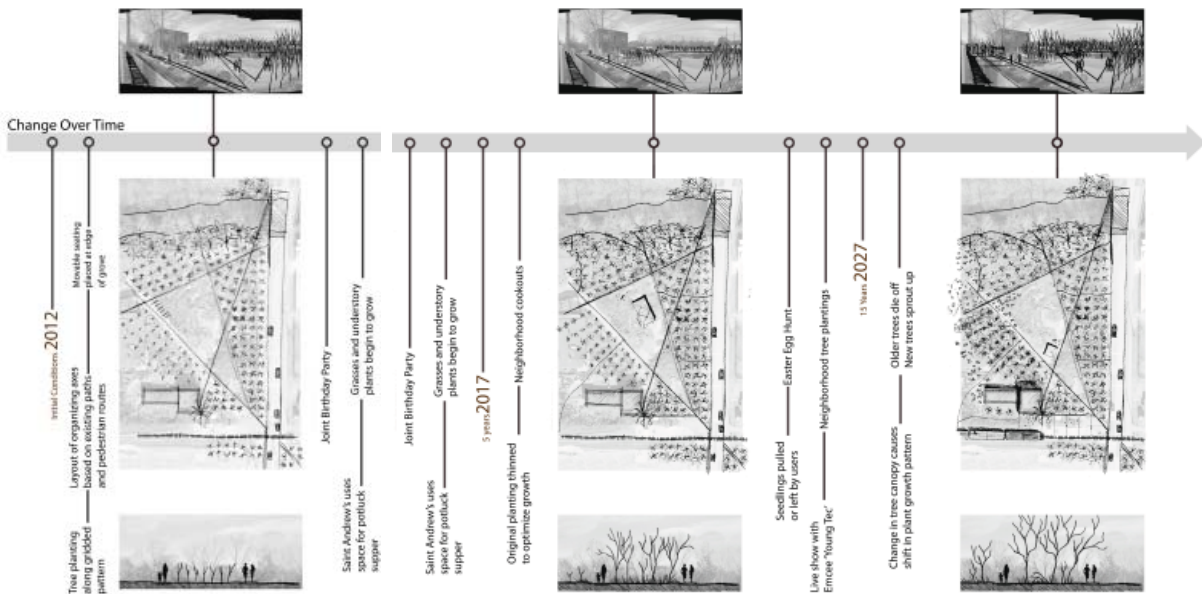




EARLY INVESTIGATIONS

Early design investigation and theoretical framework development made it apparent that a new graphic language would be required in order to properly convey true site conditions, as well as try to show the opportunity for change over time. These impressionistic sketches and drawings show how important small site scale detailing would be. They assisted in the development of guidelines for the initial Site 1. A design scheme.

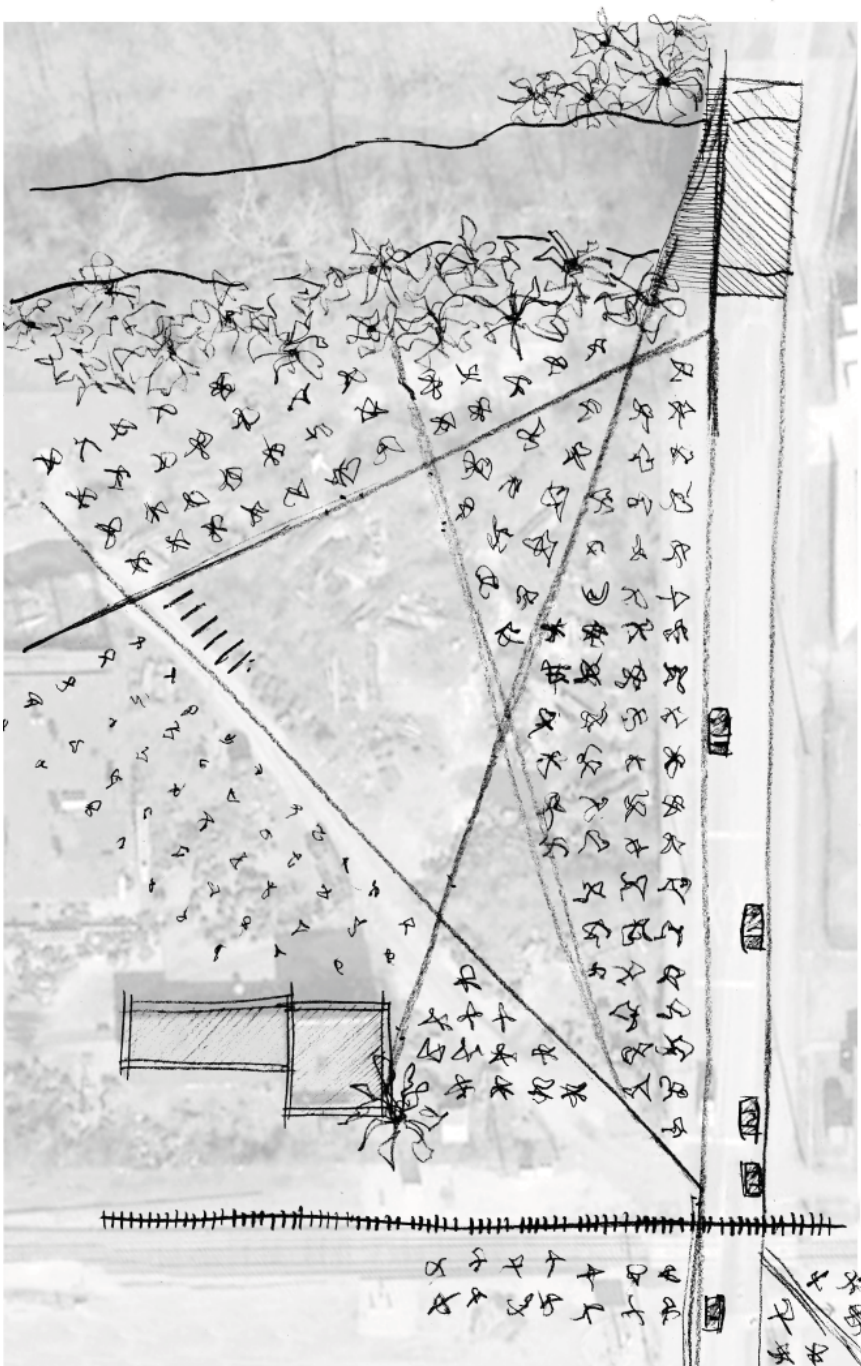




AN INITIAL CONDITIONS APPROACH

After the early, exploratory research phase, it became evident that an initial conditions approach would bring something new to this type of public project. Not only could it give the community a greater chance to have a say in their futures, but it could also provide a low cost solution to public projects. I speculated that, through phasing of the site generation as well as providing a lower maintenance space, the implementation would be financially carried out by the city much more easily than a traditional public park project.

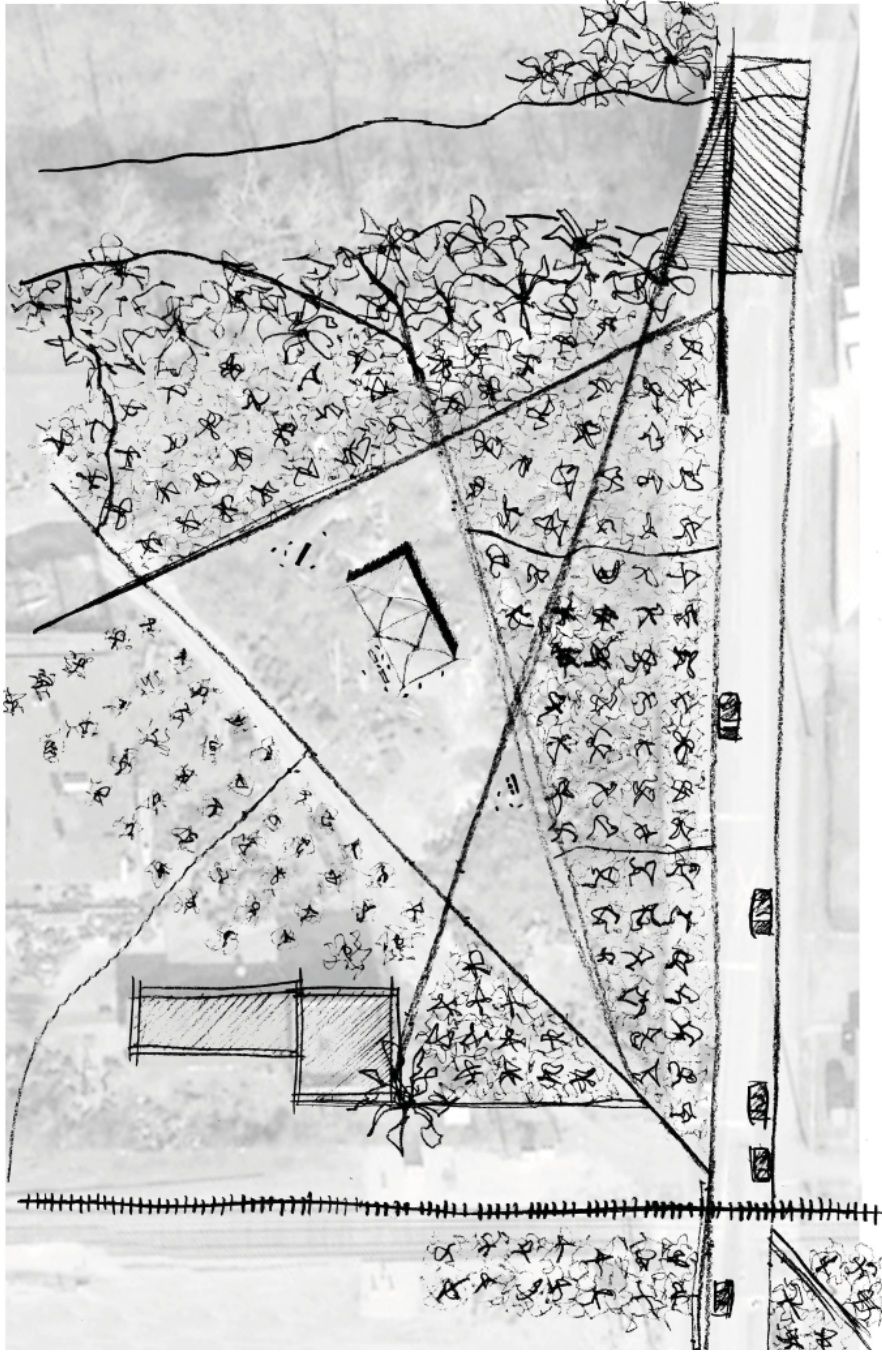
In trying to show a site that can respond to change, it became apparent that it would be necessary to try multiple routes of rendering the site over time. In addition to attempting to show the design intervention through plan, section, and perspective, the project is set up as a time line (left). Rather than a focus on actual construction details, there is a spotlight on post-construction evaluations and site changes.



2012 PROJECTION

Initial site adjustments are comprised of pathway realignment and tree planting. The site would be planted with a grid of small sapling trees which would define the path system that traverses it. Moveable seating would also be located at this point. These small site changes are seen as a test, using the site as a kind of laboratory (Raxworthy, 2006)

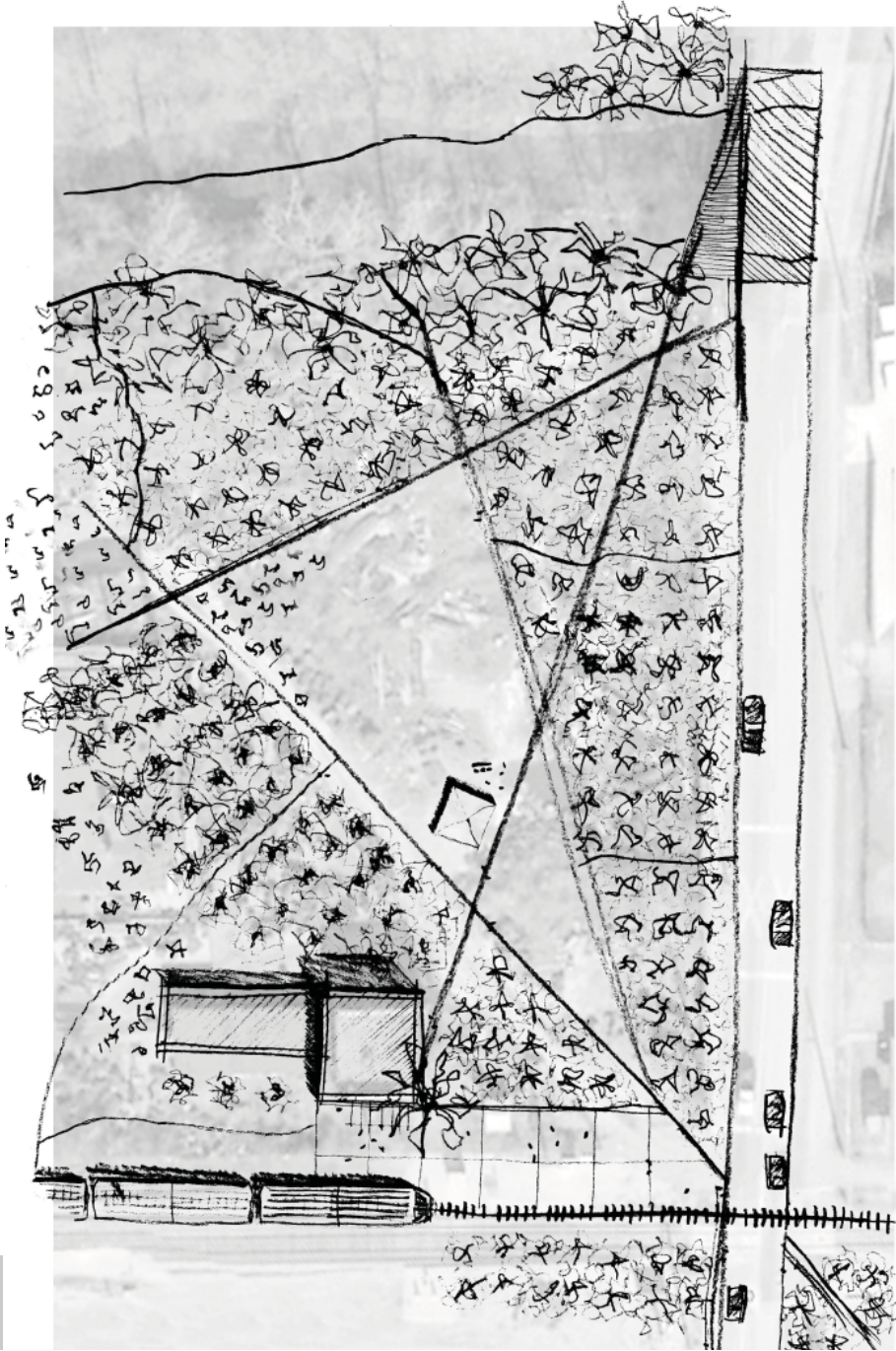




2017 PROJECTION

The plan and section show the site as projected around five years after the initial site construction. The site would hopefully have grown physically but the hope was that it would have grown as a link for social interaction within the greater community. Being somewhat unprogrammed space, the new, emerging condition would provide a place for neighborhood gathering. It could be used for recreation and/or a pedestrian thoroughfare as well. Elements such as the original seating would be checked on to evaluate its success within the space. The seating would be designed to allow it to be moved by two to three people but not just one user. The thought is that even if the seating was moved to nearby residences it could still be considered successful in meeting the community's needs.





2027 PROJECTION

These drawings show the site fifteen years after initial construction and planting. While some of the closely planted trees may have died back and others grown to shade out areas, the space would remain open and changeable. Seedlings could sprout up and colonize areas that are somewhat under-utilized. Neighborhood users would permit, deter, or promote this haptic growth. The site would be evaluated at this stage on its ability to adapt to the needs of the community.





PERSPECTIVE SERIES

The goal of this series of sketches is to show the progression of the site over time. While most of what is shown in the three graphics is vegetative growth, one can also discern a subtle change in usage, shaded space, and enclosure. Although the series shows the growth, it was gathered from these studies that sections often depict change better than plan and even perspective.

REFLECTIONS

The design investigation on Site 1.A helped to establish a graphic style which better represented the direction the research had taken, that of a strategy rather than a master plan. While the site design did explore the representation of the site over time, it failed to look deeper into how the project could be funded. More importantly, there was a need to better understand how the community could become more involved in the establishment of a site that functions properly for their daily use.



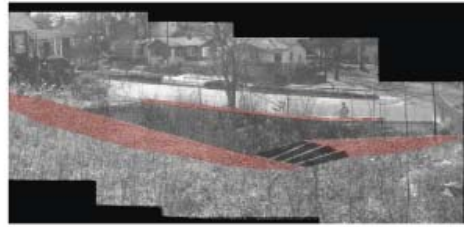
CHAPTER 4: DRUID HILLS ANALYSIS

Druid Hills is the site that I have focused on for the latter half of the project. The neighborhood was selected through the study of alternative sites after the initial investigation of the Village Creek site. It has presented the most promising space to work with, already having an active social center, vacant space, and the need for small physical improvements and increased social interaction. The two smaller sites that I have focused on within Druid Hills are closely related to the physical and social center of the neighborhood. Both are located across the street from the local grocery store which tends to be the meeting spot for the neighborhood. Both sites were originally residential lots and contain remnants of structures such as stairs and partial driveways. While one site tends to me a cut-through or thoroughfare for those walking from apartments to the store, the other seems to have little pedestrian traffic, mainly because of its difficulty to traverse. Both sites have an elevation change of 20'-30' over the depth of each 130' site. While low vegetation and a handful of trees exist, the narrow site closest to the store tends to suffer from erosion and debris washing across it. In the few years since the second site (Site 2.B) was vacated, its slope has entered the early stages of erosion. Increasing the sediment load on the creek will further impair the its water quality.

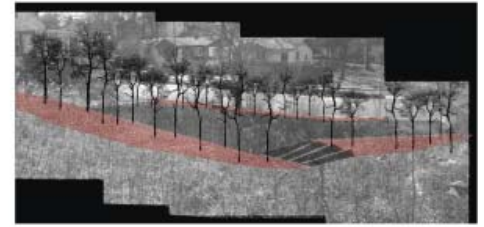




EXISTING CONDITIONS SITE 1.A - - - - ->



EROSION CONTROL . BATTERED BANKS - - - - ->



TREE PLANTING + SEEDING - - - - ->



EXISTING CONDITIONS SITE 2.A - - - - ->



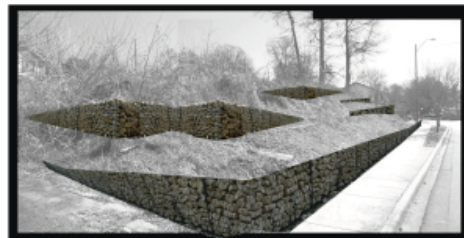
EROSION CONTROL . GABION WALLS - - - - ->



TREE PLANTING + SEEDING - - - - ->



EXISTING CONDITIONS SITE 2.B - - - - ->



EROSION CONTROL . GABION WALLS - - - - ->

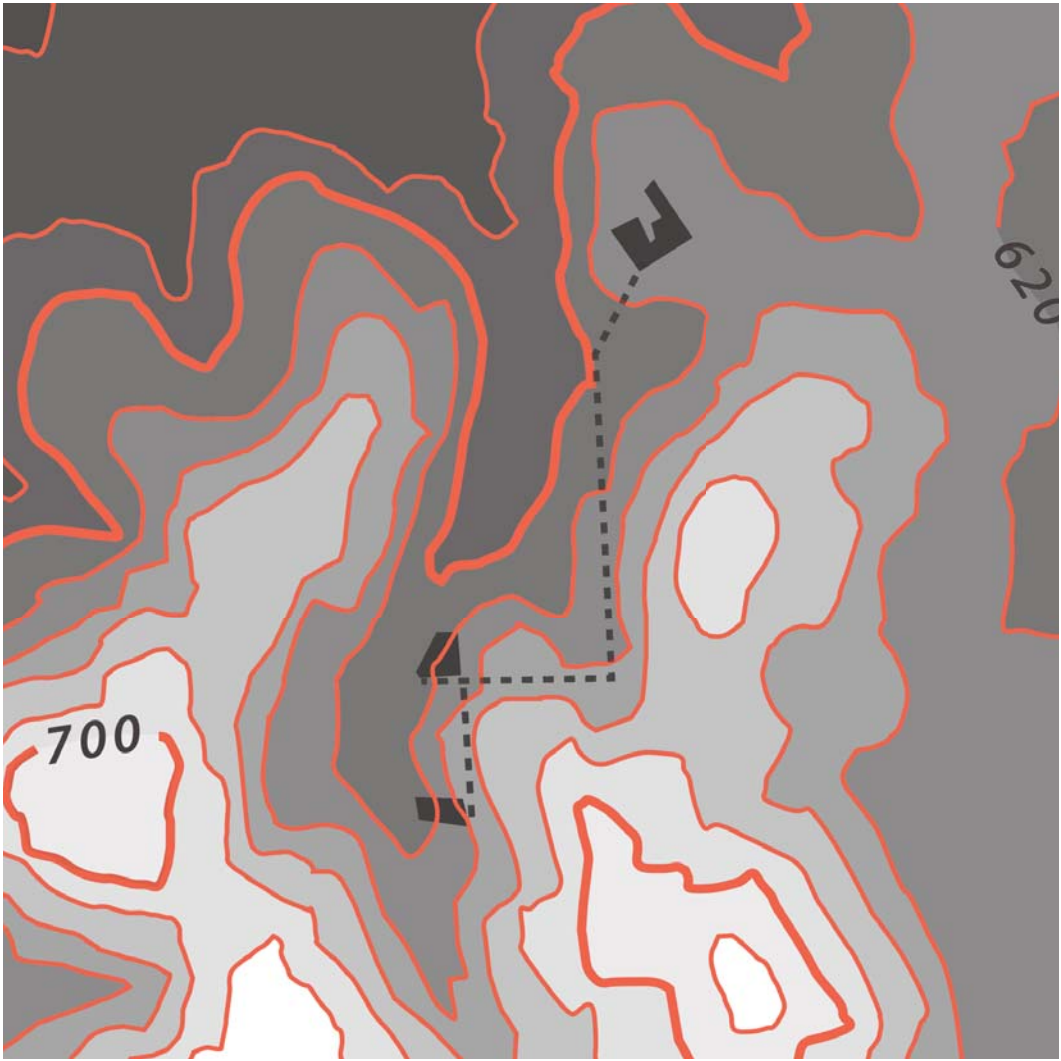


TREE PLANTING + SEEDING - - - - ->

DRUID HILLS PERSPECTIVE SERIES

This series of images shows the existing situation, then with proposed walls, and tree planting and seeding. Each proceeding site investigation will show the interventions in more detail. Part of this design process is understanding possibilities and reactions to the initial conditions. (Raxworthy, 2006)





MATERIALITY + TOPOGRAPHIC RELATIONSHIPS

In addition to the design sites which are currently vacant, there is an abandoned school building very close by. The Druid Hills design provides an opportunity to reuse building materials if the school and/or surrounding buildings are in are in need of demolition due to safety precautions. Much material could be appropriated from the surrounding vacant parking lots alone. The graphic to the left shows the relationship between the two design sites as well as their distance from the nearby potential sites for reuse of materials.





CHAPTER 5: DESIGN INVESTIGATION SITE 2.A

Druid Hills South Site

Site 2.A is close to Triple T's Grocery, the neighborhood's social center. Shown in plan (immediate left), Site 2.A is the narrow residential site near the southern edge of the graphic. Also shown is a bird's eye view of the site (far left).



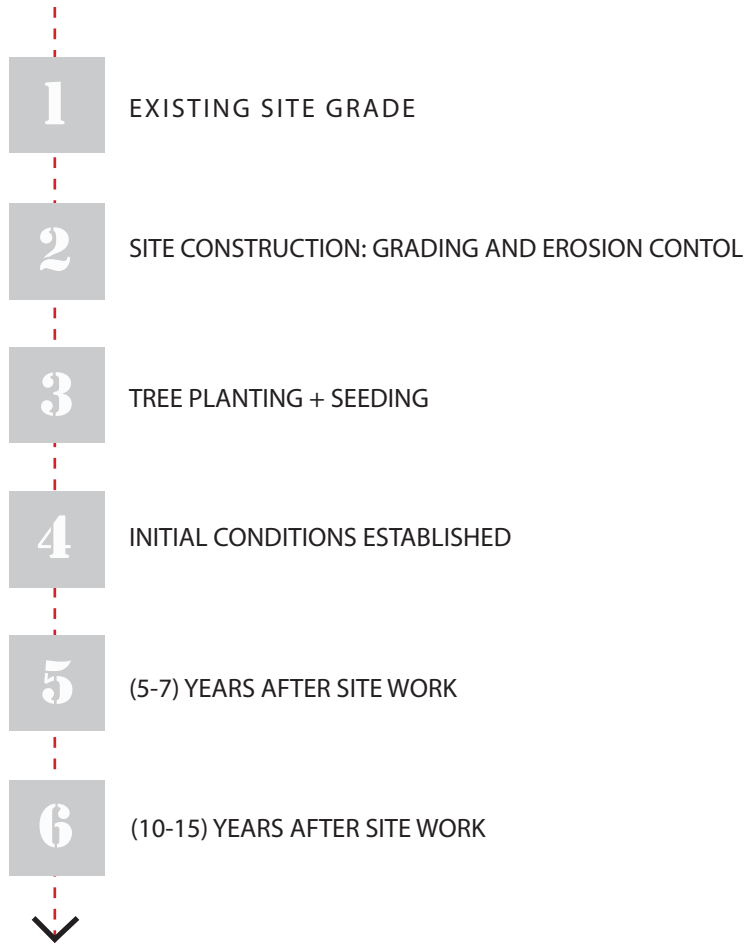
 GROCERY STORE

 SITE 2.A



EXISTING CONDITIONS

Currently 2.A is vacant, but it was once the site of a single-family residence. As is the case with many of the low income areas that have been studied, often when a home falls into disrepair it is left until it reaches a state that is must be demolished due to risk/danger that it brings in the community. All that remains on this site is part of the driveway, which is short and immediately off of Shuttlesworth Drive. While a low retaining wall remains surrounding the driveway area, the site's grade change mainly occurs towards the back of the site. Vegetation, mostly in the form of grasses, has begun to establish itself on site. There still exists an issue with erosion control however, mainly in areas heavily trafficked. As mentioned before, this site is mostly used by residents as a shortcut to the local grocery store, Triple M's.

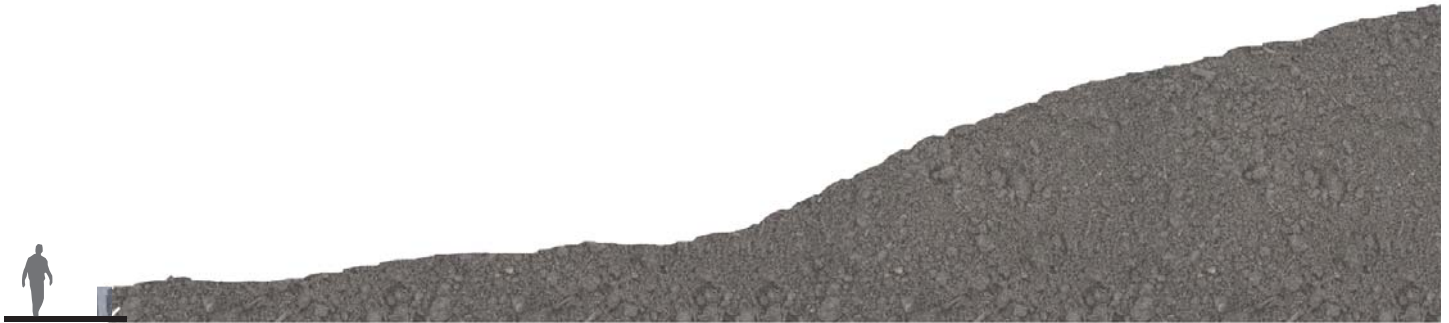


SITE PHASES

As the initial design for the site developed, it became clear that the project would need to be shown in phases, showing movement, site growth, and progression. Much like similar projects such as Downsview Park in Toronto, the site would need to be re-evaluated periodically on the basis of initial criteria (Czerniak, 2001). This reevaluation is part of what would offer a chance to the community to rethink the site and adjust the terrain to best suit their needs. This would be led by a team of specialists, including a landscape architect, which would offer suggestions in his/her area of expertise. The following sections are a kind of playing out of one possible scenario, showing responses to site changes over the years.

1

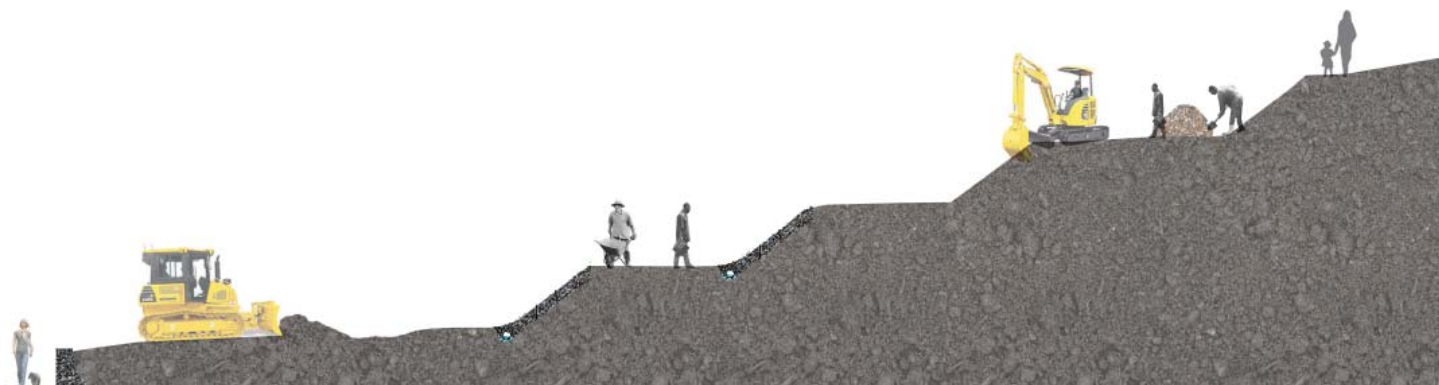
EXISTING SITE GRADE



Initial site needs, both physical and social, are assessed through collaboration between landscape architect, city officials, and local community organization. Major needs are determined to be erosion control and the need for shared, neighborhood gathering space. Grant proposals are submitted based on these needs and general cost estimates.

SITE CONSTRUCTION: GRADING AND EROSION CONTROL

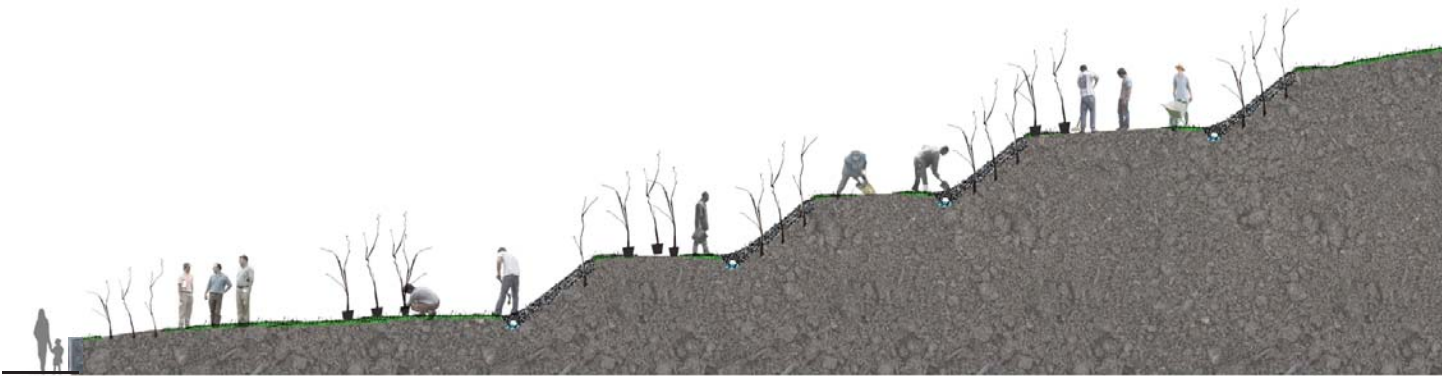
2



Construction of terraces is funded through EPA Smart Growth and Environmental Justice Grants. Community organization provides volunteer labor on weekends to assist hired, local equipment operators. Equipment rental is made possible through funding as well. The main source of material for the banks is to be hauled as crushed debris from nearby abandoned school. While site sections show the overall grading scheme, design is manipulated based on assessment by those participating. This means that while stairs may be suggested in one location, they may be shifted from planned and/or changed width and tread length.

3

TREE PLANTING + SEEDING



During this phase, planting takes place as part of an organized community effort. Grass seed and whips or small seedlings are supplied through the grant funding as well. The suggestion for planting is a gridded pattern with trees spaced only 6'-7' O.C. up to three rows per bank. Realizing that there will be variance in the previous phase, the need and plant quantity would be assessed post construction. As with all phases of construction and reassessment, experts in each field would be on site to participate, answer any technical questions participants may have, or make adjustments on the basis of participant input.

INITIAL CONDITIONS ESTABLISHED

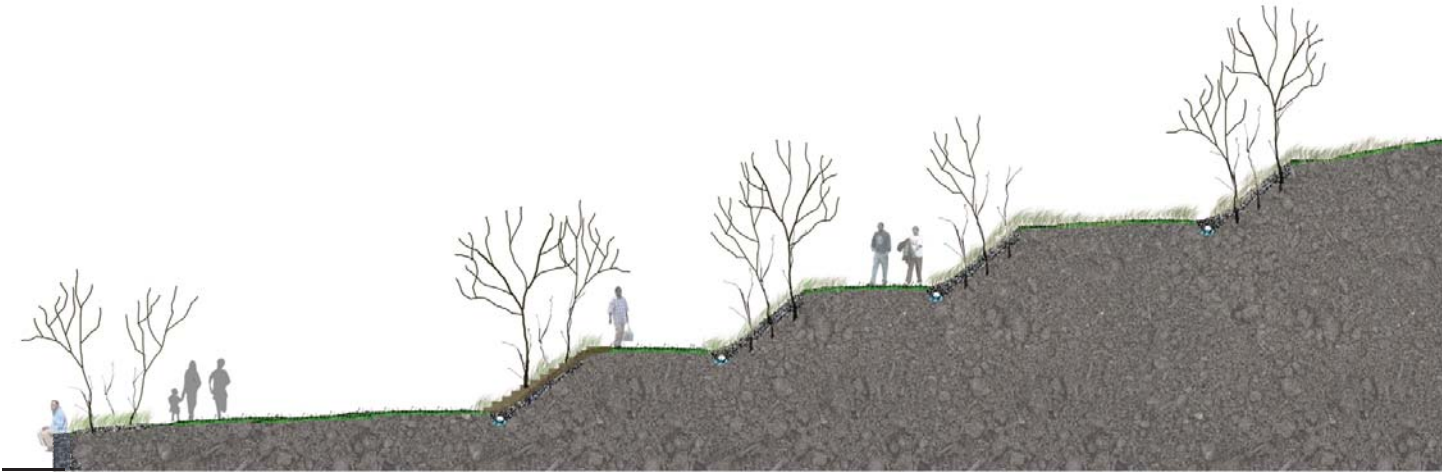
4



After initial conditions are established, the community organization would select neighborhood volunteers to look after the site for its initial upkeep. Potentially, this could be funded through the grant as part of establishing the site. Requirements early on would mainly focus on seeing that the trees and seeded grass is efficiently watered and has a chance for strong growth in the first year after site work has been performed.

5

(5-7) YEARS AFTER SITE WORK



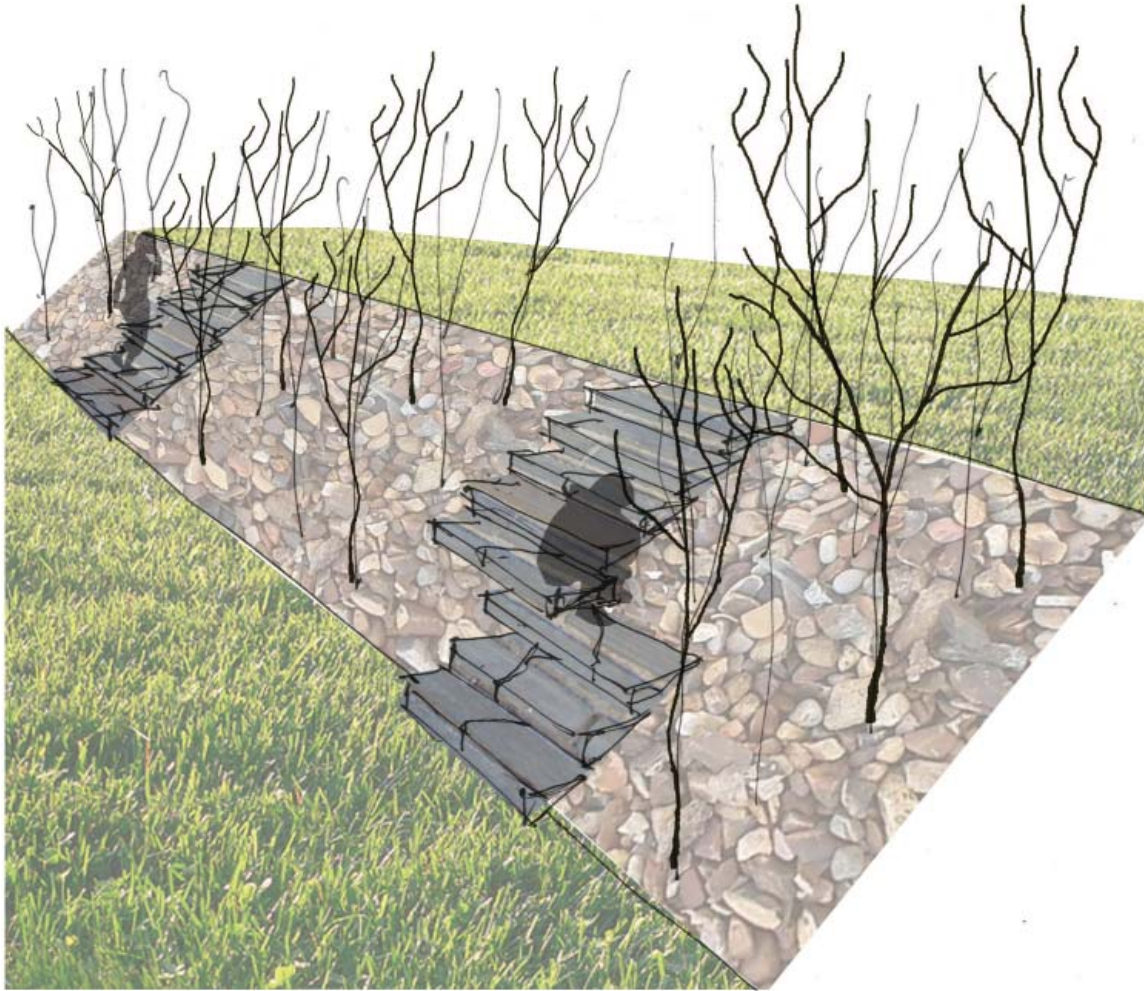
While the site may remain viewed by residents as a main thoroughfare rather than gathering space, it would be assessed again on multiple levels. First, the site changes/success would be measured in terms of whether its social functions had visibly improved. Also, the site walls and vegetation would be assessed based on their ability to eliminate erosion issues and maintain the set grade.

(10-15) YEARS AFTER SITE WORK

6



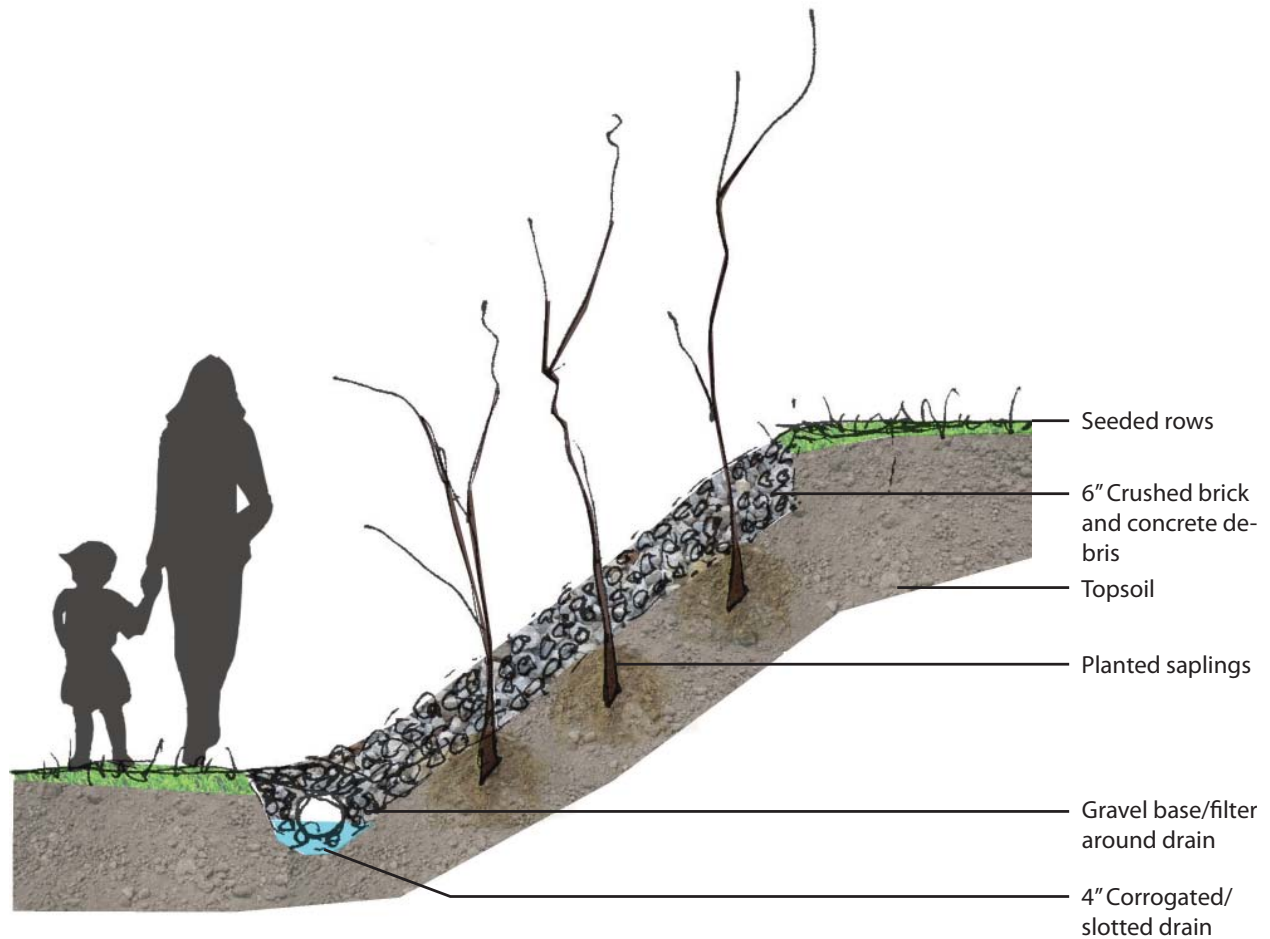
The developing terrain would be observed again, reviewing its status based on previously stated criteria. Residents would be asked to critique site changes/offer suggestions. As shown above, while the site's use may increase in areas, including becoming a gathering space, other areas may become more overgrown and only easily traversed through the use of the more heavily trafficked pathways. The increase/shift in uses combined with working, established erosion control, the site changes would be viewed as successful.



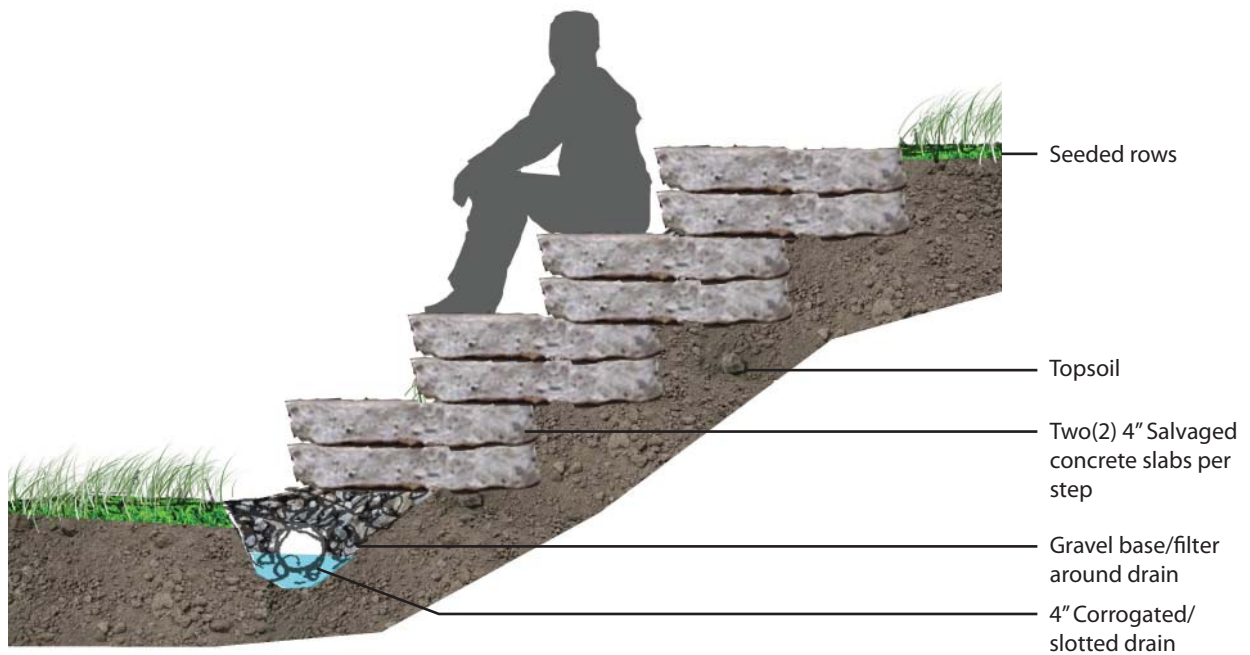
View shows banks, post-construction + planting phases. Stairs are placed based according to emergent pedestrian traffic conditions on site.

SITE 2.A DETAILS

The details shown throughout the next few pages provide a basis for construction of the battered banks on Site 1.A. Their precise guidelines allow for ease of proper construction but also allow for some site details to be manipulated by those installing the materials. For example, while there are four banks that would be installed across the site, their spacing and/or exact location would be determined by the community. As you will see, guidelines for stair spacing, etc. are provided while the actual location or placement is not shown in plan view.



The detail shows the materials needed for the construction of the battered banks on site. The demolition debris would be hauled from nearby delapidated buildings to be using the construction of the slope in order to maintain grade and reduce erosion issues. Similar construction has been used in other contemporary landscape projects (Zimmerman, 2001).



As mentioned before, details like this of the stairs are provided as a suggestion for how they could be constructed. The image shows stacked slabs of concrete placed to form stairs at certain points along the banks. These points are determined by the community but must fulfill certain criteria. The stairs should be placed a maximum of 50' apart, allowing for one to two installations per bank across the width of the site. Guidelines like these would provide clarity to the project and a basis for placement and construction.



View shows the space still being used as a shortcut to the grocery, only now with changes that facilitate an ease of connection.

PERSPECTIVES

This series of perspectives attempt to render site 2.A years after the project inception. The goal of the graphics is to show the range of possible outcomes that could occur based on users responses to site changes. While much of this site's purpose initially would be to provide better connection to the grocery store, the vignettes provide a view of how the site make take advantage of its location to the core neighborhood area and Site 2.B as well. As will be seen later in the text, the design investigation of Site 2.B is set up to work in conjunction with Site 2.A. The two are seen as a pair, each building off of responses to changes on both sites.



View shows the site being used as a space to sell produce from site 2.b through the community garden space.



Shows residents using space for gardening as well as relaxation, often using the first as a means of achieving the second.

REFLECTIONS

The design investigation of Site 2.A did focus more towards how to involve the surrounding community and how to fund initial site design. This can be seen in the perspectives and the phased sections. The specific site changes shown in the scenario were a playing out of how the site could evolve over time with minimal community participation. As a further step in the design process, the research moved to another site in Druid Hills to better understand how the growth of the site over time would be different if there were a scenario with increased community involvement up front as well as throughout the site's growth and feedback loops.



CHAPTER 6:

DESIGN INVESTIGATION SITE 2.B

Druid Hills North Site



As mentioned in the introduction to the Druid Hills community, Site 2.B is currently one of two vacant lots close to the neighborhood's social center. Shown in plan (immediate left), Site 2.B is the slightly larger site out of the pair and is located a few lots north of Site 2.A and Triple T's Grocery. This site was chosen to study the possibilities on a site with greater community involvement, both initially and throughout the site's development over time.



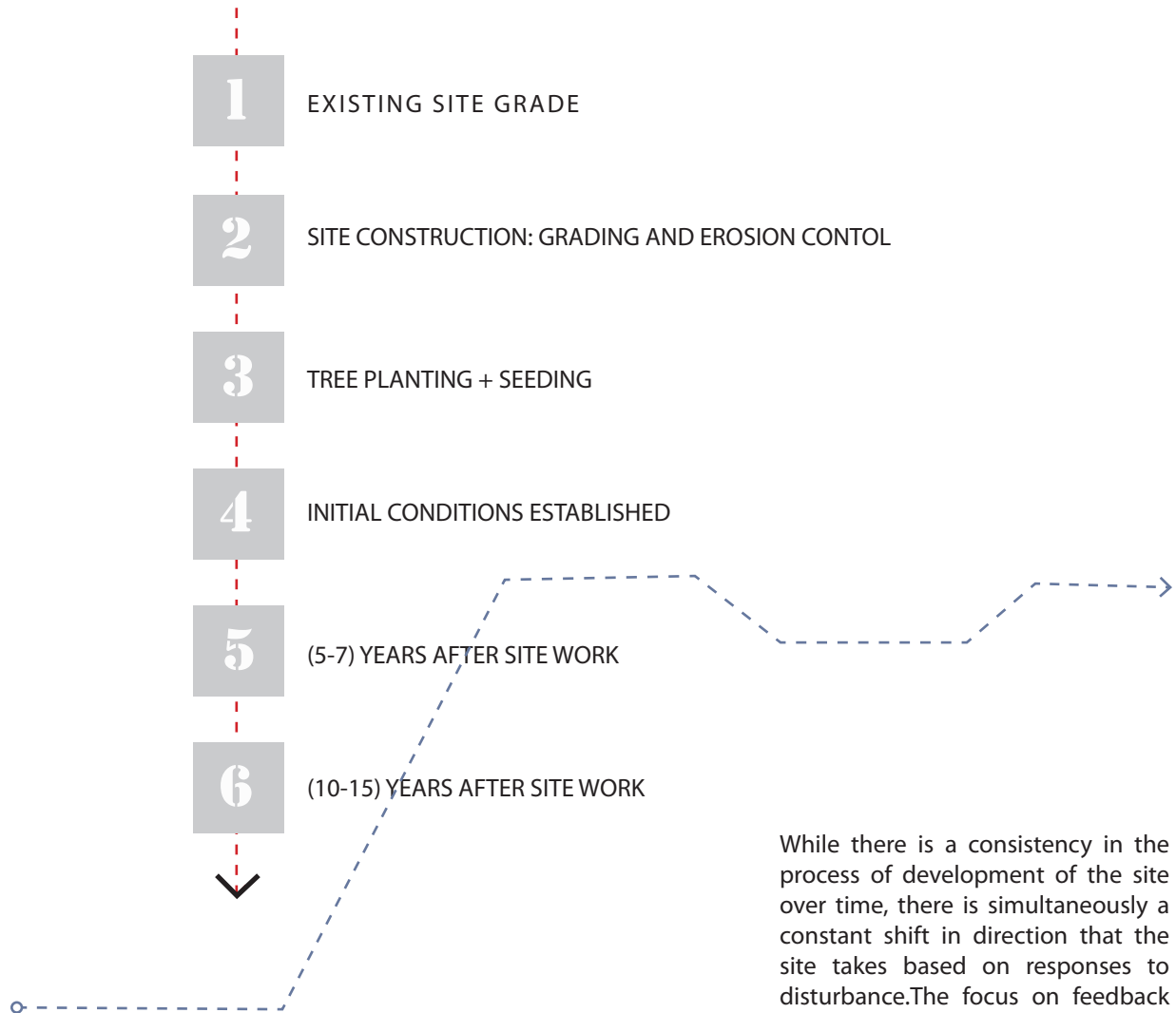


EXISTING CONDITIONS

Currently 2.B is vacant, but it was once the site of a single-family residence. As with Site 2.A, all that remains of the former home on 2.B is part of the driveway, which is on the higher end of the site, and a crumbling stairway that appears to have once led to the front door.

In addition to these remnants, the site's grade change mainly occurs very close to the street edge. Unlike most of the other homes nearby, there are no remaining structures, such as retaining walls, to maintain grade. While vegetation, mostly in the form of grasses, has begun to establish itself on site, there still exist an issue with erosion control similar to Site 2.A.

Unlike the first site though, Site 2.B is not currently used as a thoroughfare. Because of its steep slope and corner position, it is not trafficked as heavily.



While there is a consistency in the process of development of the site over time, there is simultaneously a constant shift in direction that the site takes based on responses to disturbance. The focus on feedback loops is where the project becomes bottom up.

SITE PHASES

The following sections are a playing out of one possible scenario, showing responses to site changes over the years. Each reevaluation phase is part of what would offer a chance to the community to rethink the site and adjust the terrain to best suit their needs. This of course would be led by a team of specialist, including a landscape architect, which would offer suggestions in his or her area of expertise. While using guidelines similar to Site 2.A to achieve initial funding, the scenario for Site 2.B tries to factor in greater community involvement, showing increased usage and changes to the site over time.

I

EXISTING SITE GRADE



Initial site needs, both physical and social, are assessed through collaboration between landscape architect, city officials, and local community organization. Major needs are determined to be erosion control and the need for shared, neighborhood gathering space. Grant proposals are submitted based on these needs and general cost estimates.

SITE CONSTRUCTION: GRADING AND EROSION CONTROL

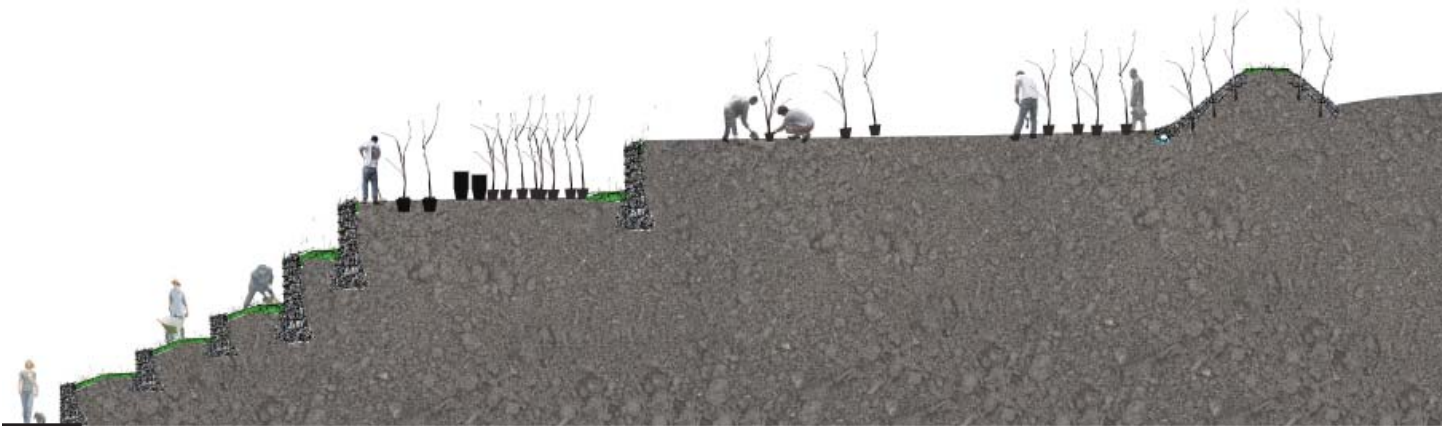
2



Construction of terraces is funded through an EPA Smart Growth Grant. Community organization provides volunteer labor on weekends to assist hired, local equipment operators. Equipment rental is made possible through funding as well. The main source of material for the walls is to be hauled as crushed debris from nearby abandoned school. While site sections show the overall grading scheme, design is manipulated based on assessment by those participating. This means that while stairs may be suggested in one location, they may be shifted from planned location and/or changed width and tread length.

3

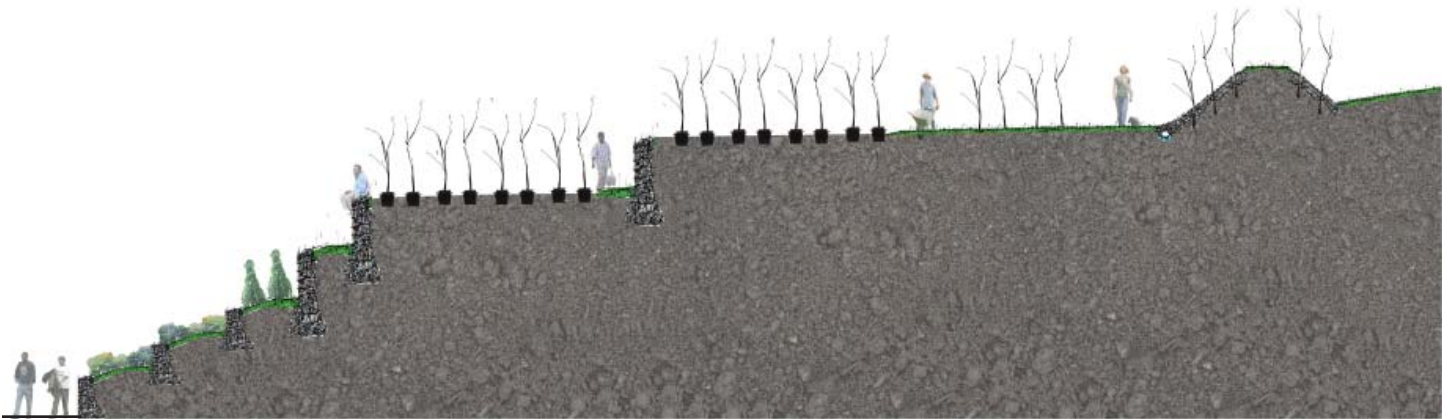
TREE PLANTING + SEEDING



During this phase, similar to the previous, planting takes place as part of an organized community effort. Grass seed and small seedlings are supplied through the grant funding as well. The suggestion for establishing the nursery planting is a gridded pattern with trees spaced only 6'-7' O.C. Rebar and 30 gallon plant containers would be used to plant according to details provided by the landscape architect. Realizing that there will be variance in the previous phase, the need and plant quantity would be assessed post construction. As with all phases of construction and reassessment, experts in each field would be on site to participate and answer any technical questions participants may have, or make adjustments on the basis of participant input.

INITIAL CONDITIONS ESTABLISHED

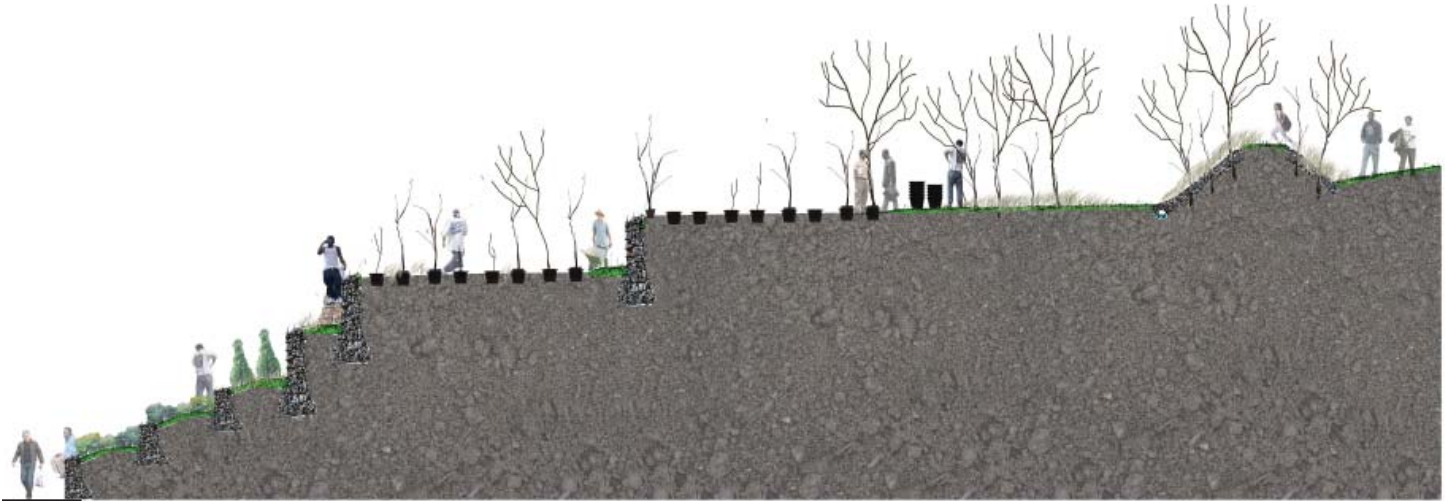
4



After initial conditions are established, the community organization would select neighborhood volunteers to look after the site for its initial upkeep. Potentially, this could be funded through the grant as part of establishing the site. Requirements early on would mainly focus on seeing that the trees and seeded grass is efficiently watered and has a chance for strong growth in the first year after site work has been performed. An initial focus on establishing more interest in the garden aspect would also be key.

5

(5-7) YEARS AFTER SITE WORK



While the site could be mainly geared towards the establishment of the community garden and tree nursery, it would be assessed again on multiple levels. First, the site changes/success would be measured in term of whether the site's social functions had visibly improved. Also, the site walls and vegetation would be assessed based on their ability to eliminate erosion issues and maintain the set grade. Somewhere during this time, tree growth is assessed and transplanted when deemed ready.

(10-15) YEARS AFTER SITE WORK

6



The developing terrain would be observed again, reviewing its status based on previously stated criteria. Residents would be asked to critique site changes/offer suggestions. As shown above, while the site's use may increase in areas, including becoming a gathering space. The increase/shift in uses combined with working, established erosion control, the site changes are viewed as successful. The site is also to be assessed based on its ability to produce trees for the community. If the tree nursery project has been successful to this stage, trees will be replanted in order to prepare for the 3rd phase of neighborhood street trees.

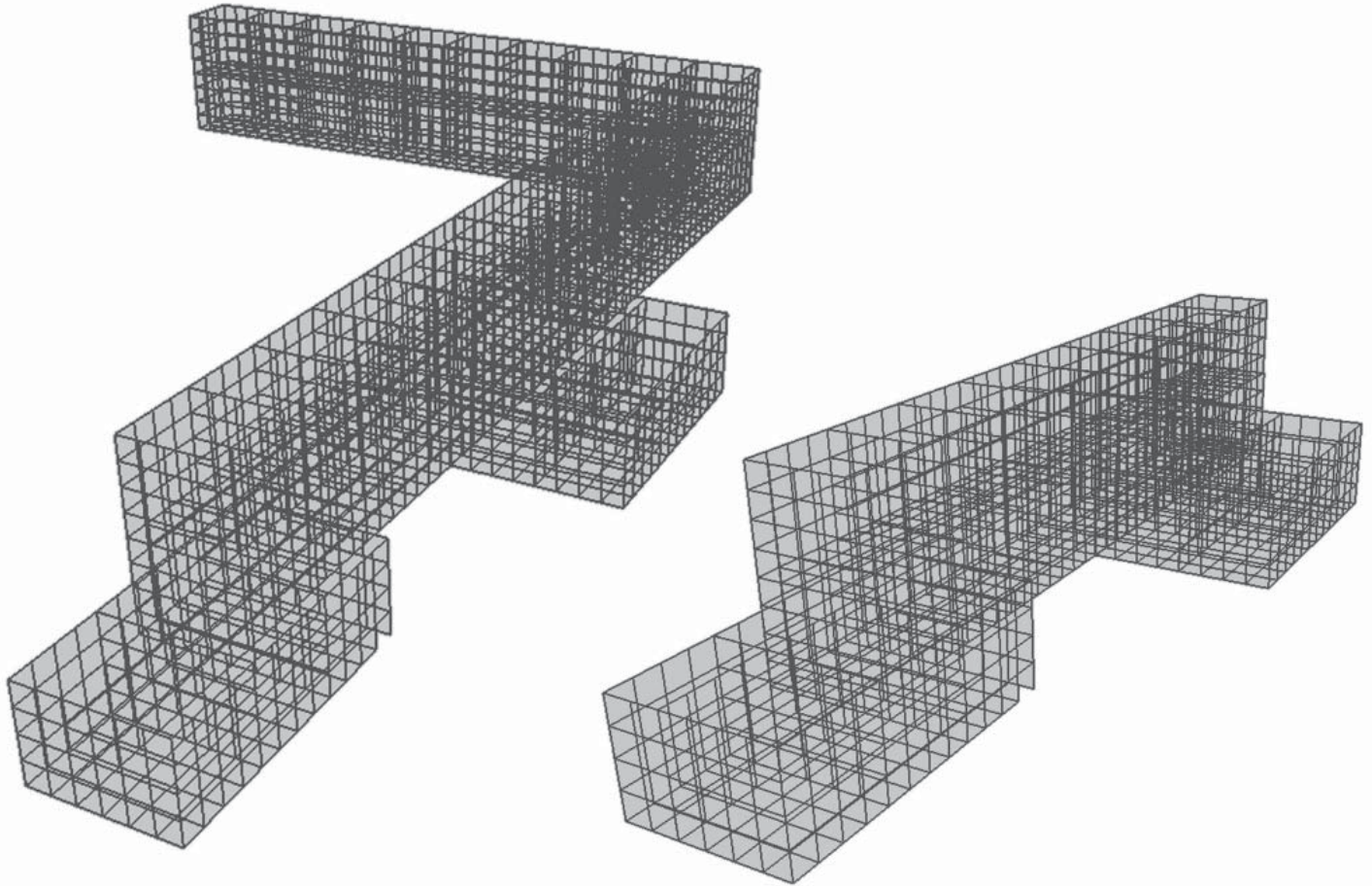


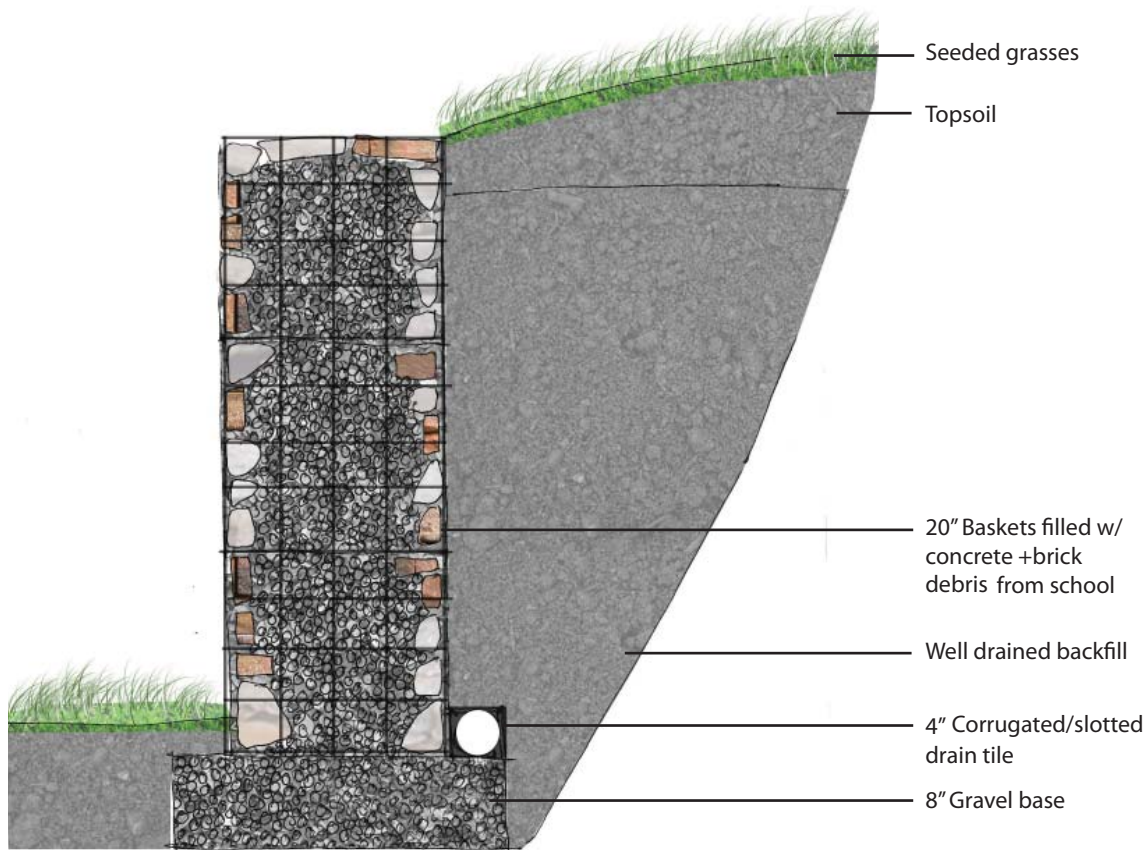
Image shows the gabion baskets designed for the wall structures on site, each 20" cubes formed from welded wire fabric. Cube shape allows for multiple forms to be created from stacking and tiered walls to be easily constructed, as shown in details on the ensuing pages.

SITE 2.B DETAILS

The details shown throughout the next few pages would provide a basis for constructing the retaining walls and tree nursery on Site 1.B. Their precise guidelines allow for ease of proper construction but also allow for some site details to be manipulated by those installing the materials. For example, while placement of the walls on site would be decided by professionals, height and tiering would be directed by community participants. Structures like the gabion walls are shown as a guide for proper construction. Also, tree planting is shown in order to insure proper planting as well as a system that is moveable, yet functions efficiently.



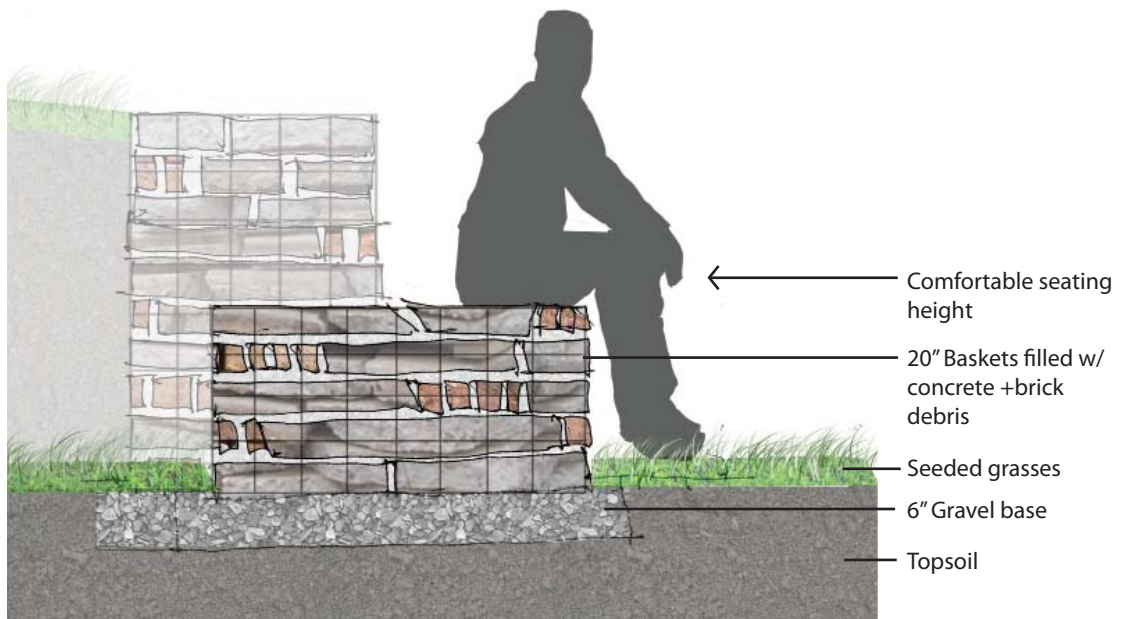
Shows optional way to construct lower walls on site. This method is a little less precise and uses rolled hog wire or chicken wire to retain debris.



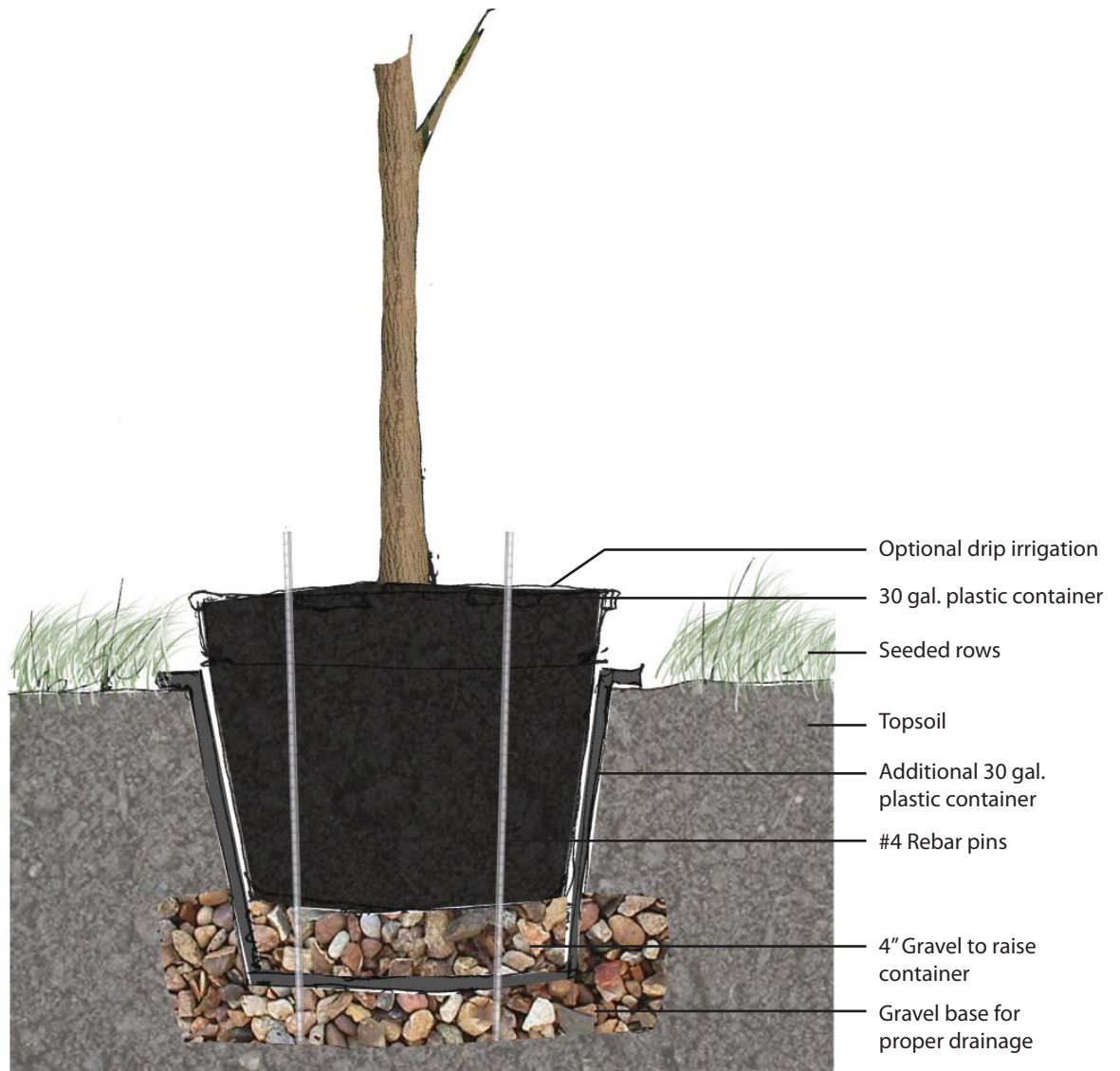
Shows section cut through walls up to 5' using baskets to form gabion walls.



Shows stairs in wall elevation.



Shows tiered wall that allows for prime seating heights.



Shows tree planting in nursery which would allow for easy movement, removal, and replacement.

TREE NURSERY

The planting detail (left) shows how the proposed tree nursery on Site 2.B would be established. The tree species are oaks and maples. They would be planted in traditional containers inset in one another. Rebar pins would be used to stabilize the trees until they are moved. This system allows for easy movement of trees across the site as well as transplanting within the neighborhood. Drip irrigation would be installed to protect the trees from potential drought in extreme summer temperatures.



Shows the site's potential years later. Possibility of lack of participation results in a space that at first has the appearance of overgrown but still maintains a sense of order and original design intent.

PERSPECTIVES

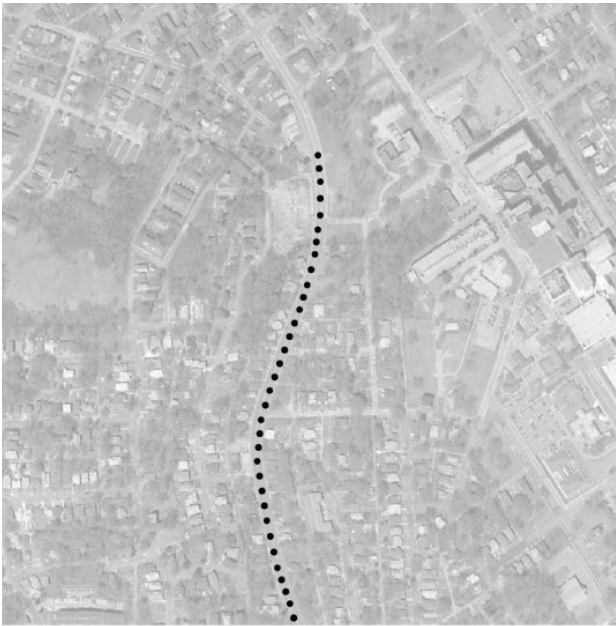
This series of perspectives that show Site 2.B attempt to show the site years after the project inception. These graphics help show the range of possible outcomes that would occur based on users' responses to site changes. It is important to understand that since the site complexity builds off of disturbance and response to the change generated by it, the range of possibilities, goals, and outcomes may not be what was initially suggested during the first phase of the project. An example of this would be the image (left) that shows the site 'overgrown'. Although this is a possible outcome, the initial construction of the site is set in place for its functional purposes but also as a reason for the community to care. (Nassauer, 1995)



Shows the terraced space's many uses.

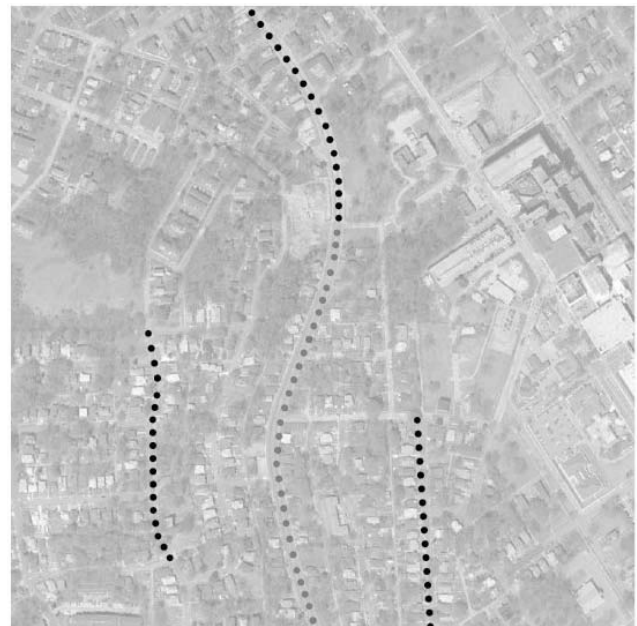


Shows tree nursery being maintained by supporting community members.



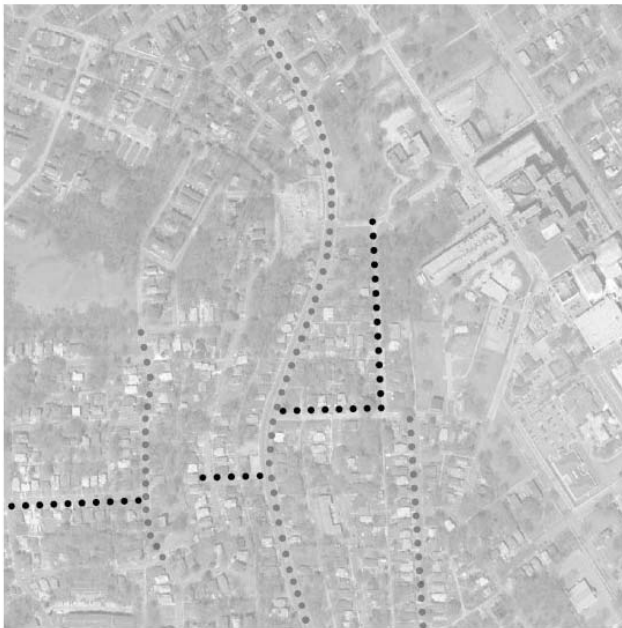
2017

First phase of planting is established through main corridor of Druid Hills neighborhood.



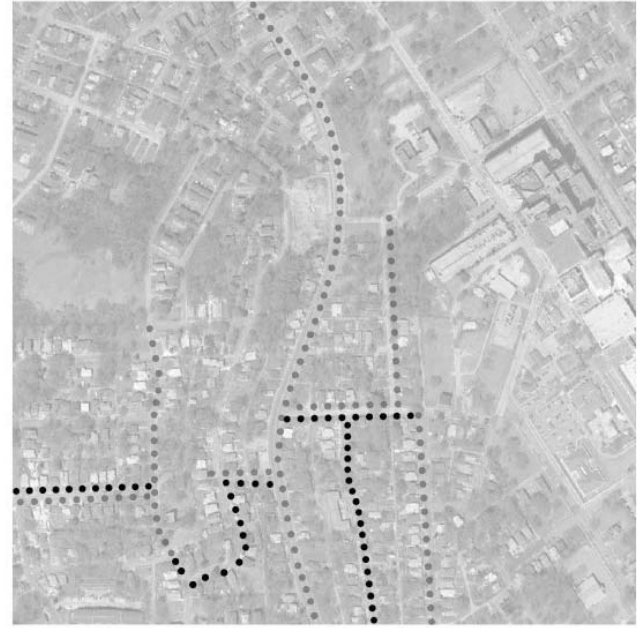
2022

Second phase expands street tree planting to east and west within Druid Hills neighborhood. Streets selected run parallel to phase one planting.



2027

Third phase connects the north/south streets through additional street trees being planted on side streets.

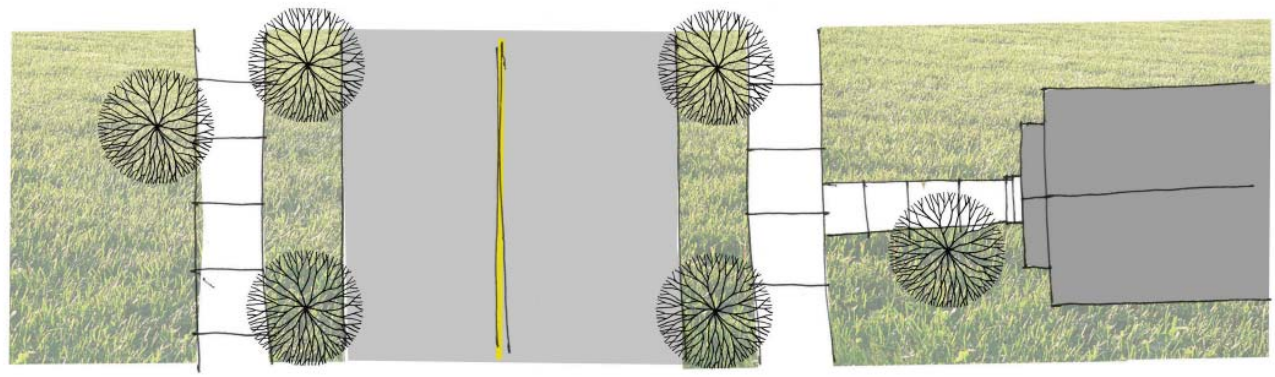


2032

Fourth phase of planting ties in additional side streets within the neighborhood. Much of the planting is an addition of trees to streets from phase three.

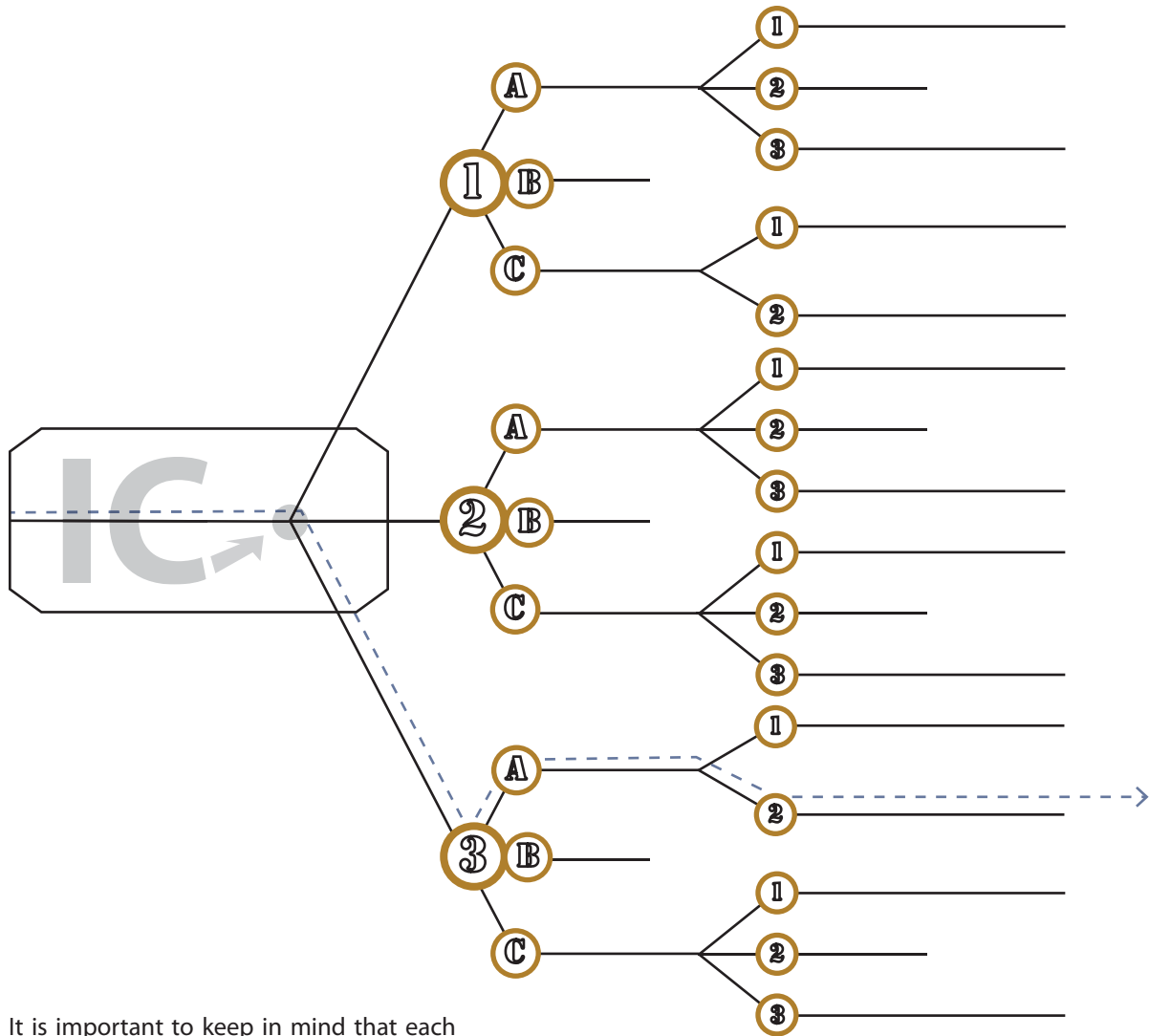
PHASED TREE PLANTING

The series shows one of the overarching goals of the project, which is to establish the site as a resource that has an effect both physically and socially on the Druid Hills community. The small scale site changes would affect the greater whole. The phases, shown as five year increments, would be tree plantings that beautify the neighborhood and improve its streetscape.



PROJECT CULMINATION

The graphic (left) shows not only the change in the neighborhood's public environment through the introduction of more street trees but also a change in the private space as well. Not only is the site effecting the community as a whole on a large scale but it is also providing something personal to its residents. This graphic shows the attention that has been given to the playing out of the site's growth as well as the focus on the relationship between public, private, and community interaction.






It is important to keep in mind that each of the scenarios shown throughout this research are only the playing out of one of many routes with which the site is set up to adapt.

REFLECTIONS

What if the development does not happen the way that was played out in this document? Potentially another scenario evolves such as the one suggested early of an 'overgrown site'. While having a somewhat unmaintained appearance the walls on site could still serve their physical functions and give a sense of tamed, or cared for, urban terrain.

Are the guidelines in place to permit a different but successful scenario? Yes, that is exactly what the re-assessment stages are for. They are put in place to offer a chance to reshape the site and community over time.

What if someone comes back to the community years later and suggest changes based on private ownership of adjacent property, site usage, or offers funding to see his/her changes through? This would be considered disturbance. That is the whole idea behind the project. The thought is that these changes through time within the community would in turn enrich the lives of those who live there and participate in the site changes that do occur.

-  Initial Condition
-  Response
-  Example Scenario

CONCLUSION

While this research appears to have taken the form of a proposal, the underlying goal is to leave each site open to change and disturbance throughout the project's existence. Without true feedback from residents it is difficult to predict what change may occur or what feedback may be generated from physical shifts on site. This being said, each design investigation has proved more thorough in its attention to how to involve the community and how the residents may respond. Each step taken moved the research closer to developing a strategy that encouraged community involvement, social interaction, and most of all, the development of a space which functions properly for those who live nearby.

In conclusion, this research has worked to develop a new strategy for public projects, specifically dealing with the topic of environmental justice. It offers a solution to traditional site design which often leaves the community with little say in the development of their local environment. What has been shown through the studies on each design site is a scenario which exposes what possible changes could occur based on different levels of involvement from the community. This participation from the community is essential to the design strategy. As was shown in each scenario, local residents would be given the opportunity to participate in the initial site design as well as the feedback loops which occur throughout the site's growth. In this cycle, the landscape architect is seen somewhat as a facilitator, helping the community to move forward and achieve set goals, while also offering his or her design expertise. This in turn helps establish the urban terrain as an ongoing negotiation, offering people the chance to design their own spatial futures.

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ILLUSTRATIONS

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Figure 1. Czerniak, J. 2001. *Case: Downsvie Park Toronto*. Munich: Prestel Verlag. (p. 4)

Figure 2. Czerniak, J. 2001. *Case: Downsvie Park Toronto*. Munich: Prestel Verlag. (p. 79)

Figure 3. Czerniak, J. 2001. *Case: Downsvie Park Toronto*. Munich: Prestel Verlag. (cover)

Figure 4. Vista Landscape and Urban Design - <http://www.vista.nl/content/projekt.html>

Figure 5. Vista Landscape and Urban Design - <http://www.vista.nl/content/projekt.html>

Figure 6. Vista Landscape and Urban Design - <http://www.vista.nl/content/projekt.html>

Figure 7. Action Plan for the Central Delaware: 2008-2018
<http://planphilly.com/actionplan>

Figure 8. Action Plan for the Central Delaware: 2008-2018
http://issuu.com/neighborhoodchoice/docs/philadelphia_2040_-_neighborhood_choice__electroni

Figure 9. Action Plan for the Central Delaware: 2008-2018 - http://issuu.com/pennpraxis/docs/actionplan_full