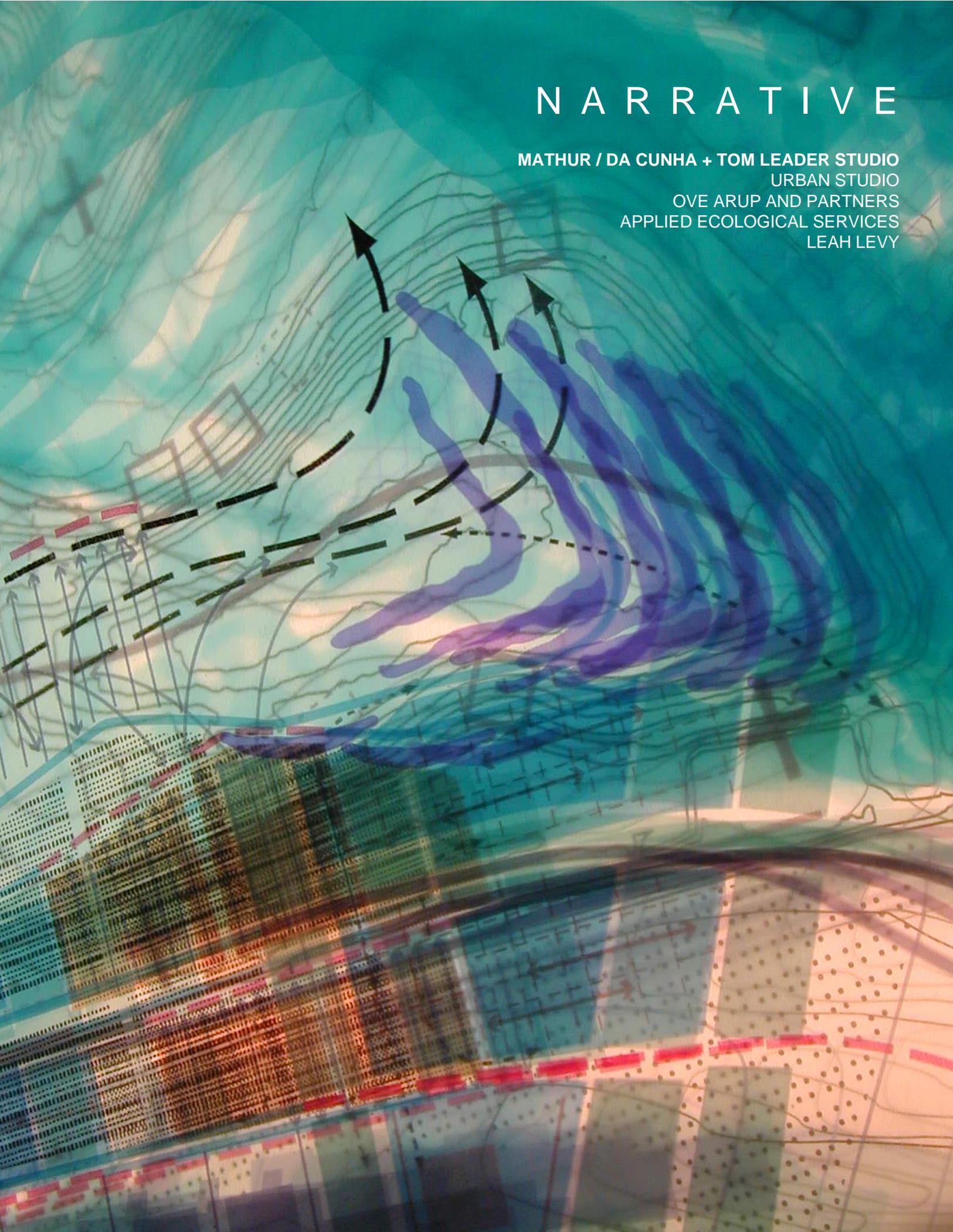


NARRATIVE

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URBAN STUDIO
OVE ARUP AND PARTNERS
APPLIED ECOLOGICAL SERVICES
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I. REFLECTION

We live in a moment swirling with action and concern. Any number of extraordinary measures are underway to redress wrongs, guard our health, maintain our safety, and repair damage of all sorts. The closure and future planning of the Fresh Kills Landfill were the result of many years of citizen action and hard political work. Suddenly we live in a different era. Re-opened Fresh Kills is now receiving 7,000 tons of World Trade Center debris daily. City budgets and staffs are under heavy strain. At the same time, the issues and desires surrounding the Fresh Kills closure remain strongly present. Some of these issues also deal with redressing wrongs – the decades of life on Staten Island affected by the garbage flowing from all of New York – redeemed by a huge park.

There is an understandable desire among many to quickly heal things throughout the city. Frenzied efforts proceed to re-plan and rebuild the WTC site while the full extent of the damage is still being understood, physically and otherwise. One has to question this impulse to rush headlong into solving problems we may not understand yet. We should avoid hyperactivity as a way to paper over deep fissures. We need to make space for reflection prior to action, for thoughtful investigation into the nature of the problems to be solved and the topographies to be altered.

We propose the initiation of a process of learning beginning with the investigative structure of this project and continuing many years into the future to realize a new and evolving landscape growing out of tendencies latent in the Fresh Kills of today.

Seeds/Tendencies

The shifting nature of Fresh Kills confounds interpretations, predictions and conviction necessary for end or phased scenarios. It rather calls for seeds nurtured with agility, immediacy and necessity. We recommend five seeds, each with a tendency – Event Surface, Experimental Field, Material Datum, Depositional Edge, and Tectonic Zone. Their trajectories will intersect on the site but each has the potential to negotiate its way through these intersections. The responsibility and seriousness of stewarding them matters more than the pursuit of a final form.

Boundaries

For good reason, Fresh Kills has been a place with tightly sealed boundaries over the last 50 years. Now however, there is a need to break down some of those barriers so that a new landscape can rejoin the larger whole of Staten Island. Preoccupation with legal and jurisdictional boundaries leads to fragmentary decision-making unrelated to a more logical domain. This project temporarily suspends concerns about who controls what in an effort to open a wide array of possibilities for the future of Fresh Kills.

Extensions/Regions

Each seed takes Fresh Kills beyond its property lines, making it a transformative agent of a region. These extensions range from events that build community at various geographical scales to physical infrastructure that alleviate problems; from research and education programs that carry Fresh Kills to laboratories and classrooms in distant lands to the daily use of the site by local inhabitants.

Community

Conventional means of defining and engaging community need to be reconsidered for Fresh Kills. To hold a series of public workshops, while not useless, does lead to the convenient notion that public “input” has been achieved and the “plan” can proceed. Such a momentary forum involving “issue sorting” and “brainstorming” led by a facilitator with note cards and magic markers finally reduces each person to a spot on a list of public comments.

In the same way that this project tries to engage the dynamics of the site, it also proposes various means by which groups as well as individuals can be engaged as actors in the process, performing as provocateurs, advocates, researchers, artists, and promoters. Whether they come from neighborhoods a block away or across the city, these are the people who will propel FK forward and give it a life far beyond this initial planning process. They should feel this is a place for their own action and initiative not a picturesque place of repose.

What About Garbage?

Garbage is the reason this project came about. The purpose of this competition is to transform the world's biggest landfill into a different kind of civic resource. But where does the garbage go now? New Jersey, Virginia? Where after that? Is it right to plan a great park for Fresh Kills and let those questions go unanswered? New York trails other big cities in waste diversion and recycling. Perhaps this project is a way to start taking more care of our own stuff, to re-engaging the material that we so easily waste.

Depositions/Analog

Fresh Kills is made of many more depositions than the garbage that has acquired such notoriety. These depositions extend from a surface of soil and urban debris, through household garbage, marsh detritus, and glacial till down to rock crushed by continental drift 300 million years ago. These materials make Fresh Kills a richly layered and provocative site rather than a problem awaiting the right solution. We absorb the dynamic and negotiating power of these five stratigraphies into the seeds we recommend for Fresh Kills. The dynamics we uncover will inspire the public to engage Fresh Kills as a rich, complex, and compelling landscape as we move into its future transformations.

Specifically the five depositions that inspire the five seeds and tendencies of our proposal for Fresh Kills are:

Urban Debris: The remains of the World Trade Center and the thousands that died with it are the most recent deposition on Fresh Kills. Unlike earlier depositions, this material was made in an instant, defying any accepted and expected order. But while this material is intrinsically incomprehensible, it is also a defining moment, an event that begins a new order.

Household Garbage: The landfill of Fresh Kills is constituted by waste — rejected matter, from diverse places, cultures, and social strata reduced to a heap. This reduction and leveling of identity in garbage is a carefully orchestrated process of collection, transportation, transfer, and finally, deposition in ‘cells’ ordered by the limits of infrastructure.

Marsh Detritus: The salt marshes of Fresh Kills, most of which are covered by landfill today, are deposits of soil and detritus. The pioneer of this environment is *Spartina alterniflora*, an indigenous salt-tolerant grass that has its beginnings in a seed or a raft that breaks away and roots itself. Spreading rhizomatically, it forms dense baffles that trap sediment and detritus, extend and raise land, and make way for less salt-tolerant species.

Glacial Till: About 10,000 years ago the Laurentide ice sheet retreated from its farthest edge, south of Fresh Kills. In the process it deposited rock material that it had eroded from distant lands in its earlier advancements. The retreat was not linear. It made minor advances, negotiating conditions behind and ahead of it, layering the land in accordance with this mediation.

Crushed Rock: Deep under Fresh Kills is a melange of crushed rocks along a geological fault called Cameron’s Line. The fault marks the collision of two continents 300 million years ago forming the super-continent of Pangea. Pangea later broke up along a fault some miles east of Cameron’s Line leaving behind a compressed zone that would become the foundation of later depositions on Fresh Kills.

GENERAL LAND USE AND PHASING (?)

We embrace the idea that this competition should seek to identify a planning process.

This is quite different in our minds from creating a land use plan or designing a park. Both of these activities place the emphasis on objects, on quantities that are verifiable, easily represented and communicated. The standard tools to describe these things involve illustrative plans, models, and perspective sketches intended to convince the client and the public. Persuasion techniques are usually required because something is being sold – typically a series of useful, proven techniques, sometimes a “signature design” which has particular market value.

At Fresh Kills we have a situation that is really before design in the traditional sense. What is needed here is dedication to learning. Certainly there is detailed knowledge about some key components – the engineering of the landfill itself, the various adjacent neighborhoods, the regulatory framework, the biotic zones, the traffic loads, etc. What are missing are the supple and sophisticated relationships among these components, a less regulatory sense about the region. We need a more personal idea of not just what groups should be consulted about future actions, but who are the individuals that might step forward to be a player in the next 10 years and how can they be engaged at Fresh Kills?

As New York City moves forward with a new administration into a quite unknown series of new circumstances, what is needed is not a short-lived singular solution for anything but instead, a set of multiple, interrelated avenues and possibilities. So if there is something we can do for you in the true consultant sense, it is to offer a fresh, almost child-like look at a place the city staff at least, has been acquainted with for years in a search for how to move forward. We are looking for ways to put a handle on things that are less easily quantifiable. We want to re-examine assumptions. Most of all we want to provide a responsive way to evaluate and critique efforts going forward from here that do try to plan and design things in the ways mentioned above.

II. FIVE STARTING POINTS

As mentioned in the discussion of Seeds/Tendencies, we initiate five physical dynamics, each with a particular tendency. These were found not by looking within ourselves or the volumes of existing site knowledge but by a speculative engagement with the ‘movements’ of five material depositions of landscape at Fresh Kills. We offer these five dynamics as avenues of learning about Fresh Kills on its own terms and discovering key active components of the new emerging landscape. *Within these five dynamics are important aspects of what are referred to as “Community Outreach”, “Natural Resources”, Funding, etc.*

We speculate on a range of future strategic developments inherent to each dynamic. The intent is not to compile these five dynamics into a composite “design” or “plan” but to simply allow them to interact and open possibilities. Our projection of possibilities within each dynamic is only with the intention to demonstrate their tendencies, not to predict end or phased scenarios.

Experimental FIELD

(inspired by the transformative and leveling nature of garbage)

Fresh Kills is a site in material and cultural transition. It is a unique opportunity for research into the changing conditions of this global marker amongst landfills. It is also an opportunity to reflect on and engage the history and future of the waste stream itself and materials newly generated at Fresh Kills. Experiments by scientists and artists are already taking place in this unusual laboratory. As the site opens, we propose a radically expanded program of research and experiment, inviting substantial participation by the public. We see these direct activities on-site as an area of both research and "outreach" – a chance for people to learn about Fresh Kills as they actively encounter it for the first time. In the process we want to turn spectators into actors. This field of experiments and active individuals forms the crucial first period of planning at Fresh Kills – providing the initial reconnaissance and the formative catalyst for all the interventions to come.

The experimental field can proceed immediately in many areas of the site, even on some of the many restricted areas at this point, with adequate coordination. It requires little investment or physical infrastructure. It is in the mode of "camping out". Instead it requires serious involvement of sponsoring institutions and public volunteers for administration. It will be critical to work out a disciplined but liberal program of access to as many areas of the site as possible for the investigations to proceed. Over time, some experiments can lead to larger scale interventions of a more permanent nature, or function as trial balloons for ideas and programs that are seeking backing and funding.

One critical field of operation concerns recycling. Rather than turn the garbage-hauling infrastructure at Fresh Kills into follies and ruins, perhaps there is a greater resonance to re-engaging this engine as an unparalleled facility for recycling, composting, and material processing for re-sale. As the worlds biggest landfill it is only fitting that Fresh Kills become a great laboratory of applied research into both the history and the future of the waste stream – spinning off research activities in art, archaeology, aquaculture, etc.

The World Trade Center debris and those connected with it need their own space right now – at least until the debris operation is complete. In the future artists may be able to play a role in working with families of the victims in thinking how to remember the victims buried on-site.

Material DATUM

(inspired by the pioneering land-making nature of *Spartina alterniflora*)

Spartina alterniflora or smooth cordgrass constructs the foundation for land-building at Fresh Kills. It triggers a vertical zonation of species even as it grows further out to colonize more land from under tidal water. Today, its native successor — the once commercially popular *Spartina patens* or marsh hay — is displaced by the invasive *Phragmites* (giant reed). We propose to cut into the land below the phragmites, lowering its datum and increasing salinity, allowing *Spartina* to recolonize and rebuild. The soil removed will be (after composting) available to construct a series of 'bench nurseries' that intercept the fresh water (and sediment) coming down. We see this as an ongoing process, one that maintains the agency of *Spartina* rather than merely its habitat.

The tidal fluctuations that regulate the salt marsh create one critical datum of which there are many on site, all of which dictate the emergence of species based on available moisture. By nature, this is an insistent horizontal phenomenon. Through manipulation of levels by subtle cutting and filling and utilizing existing slope benching, it is possible to establish a series of new data across the site each giving rise to a particular vegetative association. These new levels would progress uphill from the initial *Spartina* excavation, as access to the landfill slopes becomes provisionally available 10 and 20 years out.

Benches on the mounds constructed in rhythm with the productivity of *Spartina* are meeting grounds for fresh water and sediment run-off from above and composted phragmite substratum and dredging spoils from below. They work as active and passive nurseries for emergent and successional, dry and wet species. The thickened edges of the benches are planted with wildflower and native grasses and sedges to be propagated by wind, water and wildlife. The rest is cultivated with plants that produce seeds for future benches and eventually for other places in the vicinity. They can be maintained as arboreta equivalents where education and other uses of the land can occur.

Each new "bench nursery" on the landfill face becomes a seed producer, promoting the expansion of both "dry" and "wet" species to other potential seedbeds created by successive "stripping" of exotic grasses as the benches climb. Conversely the successive benches control and detain the flow of storm runoff by converting large areas of the site to narrow stepped detention zones. These zones progressively replace the current engineered detention basins on-site which remove storm water from the possibility of promoting new vegetation as well as being cleansed by that same vegetation. In time, all basins would be replaced by the much broader "corrugated" system of levels and benches.

Depositional EDGE

(inspired by the negotiating nature of the Laurentide Ice sheet in retreat)

In an attempt to contain things and protect against the lateral flow of contaminants, landfill engineering must work counter to the negotiated rhythms that characterize so many of the boundary conditions of Fresh Kills. Now however, with the landfill operations receding, these thresholds will become more and more apparent throughout the site, but particularly between Fresh Kills and its neighbors who have erected barriers and screens of all sorts to enforce a separation. These are sites that like the land beneath a retreating glacier become richly layered with material depositions. We foresee a number of possible thresholds between Fresh Kills and its neighbors. Each exhibits a particular means by which the relationships across them forge new landscapes that change continually with advancements and retreats of materials.

Carteret

A fleet of barges of garbage has linked FK to the rest of the city for decades. With its closure we see the link maintained and enhanced for public transport. We see the historic docks at Roosevelt Avenue in Carteret, New Jersey, and at Victory Boulevard in Travis being revived with a new vaporetto service that joins them with FK. The effect of these links will advance onshore, as flows of pedestrians increasingly gravitates to the water network.

Travis

Travis grew along a spine created by Victory Boulevard traversing a spit of land wrapped by water and marsh. The filling operations at FK removed this relationship. We foresee a restoration of the spit with the creation of a new tidal zone on the northern margin of FK. Like lines of fish bones, long crossing streets structure the residential areas. These streets extend into the new wet areas creating new housing areas on “piers” of fill.

Staten Island Mall

Home first to an airport and then a shopping mall, this neighborhood is screened from FK by a long 20-foot forested berm along Richmond Avenue. We propose opening successively larger gaps in the berm, transferring the soil and trees to cross pieces of landscape connecting the mall and the eastern edge of FK. The resulting ‘rooms’ are progressively developed as a marketing area for recycled and processed materials generated on-site. Over time, commercialism and recycling mingle and merge across Richmond Avenue.

Arden Heights Woods

A treasured forest within Arden Heights also contains an important drainage way that feeds Richmond Creek. We suggest detaining more stream behind stone “riffle” structures in successive stages, advancing from Richmond Creek to the top of the woods and creating a stairway of pools and wet areas from Arden Heights down to FK. The resulting terrace levels slope gently toward the stream allowing neighborhood recreation and activities to flow down into the upper portions during the summer.

Tectonic ZONE

(inspired by the tectonic and potential nature of Cameron's Line)

The West Shore Expressway (Rt. 440) is a suture that brings together two fronts of a dynamic, evolving and largely inaccessible site. Presently a compressed environment of road traffic, this expressway has the potential of becoming a venue for the public to engage in the transformative processes of FK even as it is diversified with other movements and trajectories including a light rail, a bicycle path, and the Atlantic flyway. We thus foresee Rt. 440 as a public thoroughfare and a public interface. Beyond the site this corridor will attract commercial ventures. The transforming of 440 will begin with its temporary 'slow down' on September 11, 2002, allowing the public to gather on a meadow adjacent to 1/9 in memory of the WTC tragedy.

Rather than view Route 440 as a divider of the site to be somehow overcome, we propose engaging and expanding on its possibilities for movement and transport not only as it passes through Fresh Kills but across the entire west shore of Staten Island. In response to greater traffic to the area a much larger number of transit modes – pedestrian, jogging, bicycle, autos, shuttles, buses will be attached to the corridor – splaying out across an enlarged area in many places and coming together at a series of intermodal stations.

A little used existing freight rail line connecting eventually with St. George currently runs all the way to the NRG plant and could be extended to Fresh Kills between the separated lanes. For a relatively small initial investment and some ownership transfer, it would then be possible to take an excursion train from the St. George ferry terminal to Fresh Kills in just a few years. Eventually, as the West Side of the island develops, it would be possible to envision an extension of this line to the Staten Island Railroad to the south with more regular commuter light rail service.

Beginning with the siting of a meadow adjacent to 1/9 where the public will gather on September 11, 2002, we foresee Rt. 440 becoming a progressively intensified interface between Fresh Kills and the public. We propose three kinds of venues that 'peel off' the corridor each with a tendency to become a more complex and diverse entity. Concrete platforms that initially serve as transit stop for the rail extension. It has the potential of becoming a larger amenity, a ferry terminal, an exhibition space, perhaps a tracking station for migratory wildlife. Dirt patches that initially serve as places to park. They have the potential of becoming graveled parking groves or sites for temporary events. Grass swaths that become strips of rich foliage and eventually a path on the Atlantic flyway.

Event SURFACE

(inspired by the instantaneous nature of the WTC tragedy and community creation)

The Last Barge that signaled the closure of FK and the WTC tragedy drew attention to the power of an event in activating a city. They also assembled landscapes and endowed them with meaning – the first from a Marine Transfer Station in Queens to FK; the second from Ground 0 to 1/9, being the last journey for a number of the victims. We foresee that the anniversaries of these events will reassemble these landscapes, richen their meaning and reinterpret their significance in a changing context. FK will play a role in these events, as it will in many others of a celebratory, recreational, ecological and cultural significance. They will project FK into landscapes of varying scales, inscribing and re-inscribing its surface with meaning.

A constellation of events will construct a calendar for Fresh Kills. As with Experimental Field, we see this seed taking root early, perhaps in the year 2002, with a gathering near 1/9. But other events can occur on areas deemed safe for the public. It will require little investment or physical infrastructure. We suggest that March 22 also be used constructively to draw attention to the need to minimize waste.

NYC Material Day (March 22)

The Last Barge signaled the closure of Fresh Kills. It also signaled the need to re-engage material homogenized by wastage and concealed in the landfill. We suggest that the public trace the journey of the Last Barge as a public event, made aware of the processes of garbage disposal but also engaging in activities that create an awareness of material.

WTC Memorial Day (September 11)

When the time becomes appropriate, there is a possibility for a memorial journey that follows the path taken by the barges and trucks carrying the remains of WTC to Fresh Kills. At FK the journey circumscribes 1/9 between fences and ends in a gathering on a wildflower meadow along Rt. 440.

III. DYNAMIC COALITION

Stewarding the five tendencies requires the agility and lightness of a dynamic coalition rather than the regulatory authority of a landuse plan. The dynamic coalition will formant, shape and lead design efforts at Fresh Kills. It will be organized in concert with the dynamic of each of the five seeds:

1. Event Surface,
2. Experimental Field,
3. Material Datum,
4. Depositional Edge
5. Tectonic Zone.

In essence these seeds will self-organize through the mechanism of a coalition of *partnership fields*. These partnership fields will incorporate the largest spectrum of players possible. Within each partnership field public and private groups, government agencies, institutions, associations, individuals and groups and participants that represent communities at various scales are sought to actively shape the interventions and programs that will define the Fresh Kills landscape. Central to the formation of partnership fields is the belief that democratic consensus building within the framework of five key areas of intervention will lead to a richer, more complex, more revealing, timely and acute set of design decisions.

Seeding the initial formation and facilitation of each partnership field is a public project management entity or individual that has the ability to bring individual participants, associations, institutions, and entities together. These fields can act as clearinghouses to introduce and coordinate potential partners, apply for funds from public and private sources, provide long-term continuity and project management, and serve as a source for continuous outreach to ever-wider publics. The Office of the Borough President of Staten Island is believed to be ideally suited to lead in the establishment of these partnership fields and facilitate their dynamic coalition. However should this not be the case, other entities including but not limited to the New York City Department of Parks and recreation or a new non-profit organization similar to the Central Parks Conservancy could take on this role.

Our role as designers is to reveal and set in motion five tendencies for Fresh Kills. The identification of these tendencies naturally leads to interest and design emphasis on certain types of interventions and programs as opposed to others. Yet nothing that we are proposing precludes the evolution of these ideas by economic, ecological, neighborhood or social interests that we as designers are either unaware of or cannot anticipate at this time given the decades long development time line.

Funding / Revenue Generation

We see the task of revenue generation as intrinsic to the identity of partnership fields. The task of these fields is made easier by the productive nature of each seed — leasing of land for events, research, art, etc., sale of processed material and recycled goods, services of composting, sale of native species cultivated in the bench nurseries, etc. This ‘self-generation’ of funds, as it were, can be enhanced with grants sought from private and public sources for specific causes. This kind of entrepreneurial/grant funding mechanism gains importance in the present climate when, based on recent events, it may be difficult for the City itself to fund any large-scale improvements at Fresh Kills while the repair of Lower Manhattan and its infrastructure takes priority.

Additionally the impact of each seed extends well beyond the boundaries of the site, raising the possibility of revenue generation from potential beneficiaries elsewhere — for example, commercial ventures along Rt. 440 which could perhaps operate beyond the site as a ‘Tech Corridor’ with the benefits of a light rail (see Zone), the community edge of Travis which could see housing development (see Edge), the Staten Island Mall (see Edge), ferry points (see Edge), etc.

The principle, however, remains one of funding and goal-setting led by innovation and agility rather than funding for a fixed goal.