We propose the radical collision of infrastructures—real and virtual. We propose the re-making of the leftover American landscape, not through the creation of singular spaces, but through the networked rehabilitation of non-sites, and non-places. We propose a re-thinking not only of place, but of our profession of place-making.

In 1973, Gordon Matta-Clark’s *Fake Estates* reified the “gutterspace” of New York City’s land-survey process. The project was amongst to first to highlight the distance between infrastructural planning and lived reality, and to highlight the empty artifacts that result. These are the sites of our proposal for WPA 2.0, sites that we propose to remediate, and populate, using contemporary tools of spatial analysis and parametric design.

Instead of attempting a single solution for these sites, we propose a process, a network of urban catalysts in publicly-owned abandoned sites, designed and built by public and local partnerships. Instead of a biological metaphor of transplant or surgery, we seek instead to highlight, and heal, a lattice of existing urban scars.

The sites of our proposal are the castoffs of the the plans of the last century, whose freeways and other physical frameworks abandoned historic grids and grains. While first highlighted by Matta-Clark in the New York’s land-survey infrastructure, such sites follow interstates and urban investment throughout the whole American landscape. The same digital technologies that have allowed us a glimpse of the true, living nature of cities also allow us to highlight and target such sites in a way that Matta-Clark could only dream of.
Bringing together recent work in the separate fields of Geographic Information Systems (GIS) and building information management (BIM), we propose the specific implementation of a range of local infrastructural gestures, from soil remediation, to victory gardening, to playgrounds and pastures. A complete version of our proposal will include not only parametric guidelines for planning, but also for local site-selection, implementation, and construction — bringing ‘open source architecture’ back into the physical realm.

Mapping, as is often the case, brings meaning, allowing the recycling of space itself for the service of our communities, and ecologies. Confronted with the contemporary ubiquity of digital mapping, Matta-Clark’s peripheral practice is here presented as a central possibility in architectural discourse, driving an emergent design process with geospatial data.

For this initial WPA 2.0 proposal, we have developed a pilot proposal for the City of San Francisco, presenting 1,514 proposals for community facilities on vacant sites, so-called “unaccepted streets.” Work on the second round of the competition will extend this proposal in two ways. First, we will revise and supplement this initial proposal to better integrate with existing city procedures and organizations, focusing not only on more detailed design work, but also the parametric production of instructions, explanatory texts, and forums for neighbourhood-based input and implementation. Secondly, we will extend the lens of this new architectural media to encompass related networks of sites in other cities. These may include the Claireborn/I-10 corridor in New Orleans, as well as similar sites in Seattle and New York City. (Please see the supplement to this entry for related letters of support.)

In this proposal, we do not seek simply to propose the data-based optimization of individual structures. Rather, we wish to suggest a sense of place and locality missing from current debates in digital design, and, in so doing, suggest new approaches not only to public infrastructure, but to the dissemination of design intelligence itself. Given current social and economic developments, the planet’s ecological crisis, and the need to ensure the relevance of our professions and practices to both, we believe that such a possibility is not only feasible, but an urgent necessity.

— July 22, 2009
Culled from a database maintained by the city’s Department of Public Works, the “unaccepted streets” of San Francisco are those interstitial sites which occupy the position of streets in the city grid, but are not maintained by the city, or necessarily even passable to traffic. Seen separately and individually, the sites are litter-filled, residual spaces, condensing around highways and industrial sites. Our proposal seeks to envision these sites choreographed together as a cultural, agricultural and ecological resource. Using both physical variables (such as slope, dimension, aspect and soil type,) as well as more ineffable data (such as demographics and population,) the proposed designs include recycled hardscape, public gardens, play-spaces and facilities for water retention. The unaccepted streets of San Francisco represent a heterogeneous bureaucratic backwater; 1,625 sites are, taken separately, a disjunction, or even irritant, in the city’s neighbourhood infrastructure. Taken together, however, they represent an archipelago of opportunity, resistant to traditional forms of design but, perhaps, open to more radical speculation.
Elevation & Topography
San Francisco's iconic topography is the starting point of several analyses. We compare this data with information on drivability, aspect, and hydrology to formulate landscape and infrastructural responses.

Elevation, along with aspect, microclimate and sun data, is measured in order to determine a landscape response suited for maximum productivity and human comfort.

Slopes of unaccepted streets are mediated with hills, terraces, and walkable paths to create habitable public spaces.

Microclimate
Where each street falls within each of San Francisco's seven microclimate regions influences ground plant mixes and tree palettes designed to provide shade, fruit, or carbon offsets.

Soil Type
Soil maps and information from the San Francisco County soil survey guide plant selection and whether the primary mode of the landscape response is for production, ornament, or remediation.

Hydrology
The watersheds and location of urban creeks and lakes of San Francisco guide design responses such as cisterns for water recycling and use of permeable paving for filtration and hydrologic health.
Population Density & Demographics
As density gets higher, we base the street design on an increasingly more fine-grained grid mesh in order to accommodate a larger variety of people. Further analysis, such as the density of children, shown here, controls the provision for playground equipment and open space.

Economics
We focus the provision of public amenities in neighbourhoods showing high renter (versus owner) occupation.

Crime
Incidence of crime is measured by zip code. With higher crime rates, we provide more street lighting and open sightlines.

Existing Networks: Open Space and Bicycle Routes
The proximity of each street to San Francisco's bicycle network is measured. Amenities such as bicycle racks and shelters are designed accordingly. Distance from public green space and size of the unaccepted streets guides the percentages of hard-scape/green space used.
Summit Street

Oceanview

Partial Caltrans jurisdiction; highway fill / some soil remediation needed.

Soil Code 133: Urban land-Orthents / Cut and Fill complex

Climate Code 6: Moderate to hot temperatures, clear days, light wind.

Children under 5 live nearby; median age is over forty.

Predominately owner-occupied housing.

Local code: output

Wild Grasses: Muhlenbergia rigens

Coastal Succulents: Echium candicans, Stachys byzantina, Erysimum “Bowles Mauve”

Wild mustard (for soil remediation): Brassica kaber

Community Garden

Groundcover: Poa pratensis

Groundcover: Poa annua

Trees: Persea americana, Callistemon citrinus, Washingtonia filifera, Prunus salicina

Grass: Festuca ovina

“Grasscrete”: concrete pavers and Festuca ovina

Benches

Playground equipment

Wild Grasses: Muhlenbergia rigens

Coastal Succulents: Echium candicans, Stachys byzantina, Erysimum “Bowles Mauve”

Wild mustard (for soil remediation): Brassica kaber

Community Garden

Groundcover: Poa pratensis

Groundcover: Poa annua

Trees: Persea americana, Callistemon citrinus, Washingtonia filifera, Prunus salicina

Grass: Festuca ovina

“Grasscrete”: concrete pavers and Festuca ovina

Benches

Playground equipment
3rd Street
Dolores Heights

Drivable, no sidewalk, partial CalTrans jurisdiction.
Median age under forty, children under five nearby.
Moderate to hot temperatures, clear, heavy wind.

Acme Alley
Eureka Valley - Dolores Heights

Pedestrian, Utility Accessway
Median age over forty, renter-occupied housing.
Soil: Urban land-Sirdrak complex
Moderate to hot temperatures, clear, light wind.

Griffith Street
Bayview District

Paper Street, near to water, remediation needed.
Low population density, adjacent industrial site.
Cool to moderate, foggy to clear days, light winds.

Vermont Street
Potrero Hill

Drivable, no sidewalk, partial CalTrans jurisdiction.
Median age over forty, owner-occupied housing.
Soil: Urban land-Orthents / Cut and Fill complex
Moderate to hot temperatures, clear, heavy wind.
4th St.
Mission Bay
Soil Code: 134 / Climate Code: 6

Andover St.
Bernal Heights South
Soil Code: 133 / Climate Code: 6

Bigler Ave.
Clarendon Heights
Soil Code: 124 / Climate Code: 6

Bowman Ct.
Hunters Point
Soil Code: 134 / Climate Code: 7

Chester Ave.
Ingleside Heights
Soil Code: 135 / Climate Code: 4

Chilton Ave.
Glen Park
Soil Code: 124 / Climate Code: 6

Dixie Aly.
Twin Peaks
Soil Code: 133 / Climate Code: 6

Edna St.
Sunnyside
Soil Code: 135 / Climate Code: 6

Esmeralda Ave.
Bernal Heights North
Soil Code: 133 / Climate Code: 6

Tennessee St.
Bayview District
Soil Code: 134 / Climate Code: 6

Hampshire St.
Inner Mission
Soil Code: 131 / Climate Code: 6

Hawes St.
Bayview District
Soil Code: 134 / Climate Code: 7

Kramer Pl.
Telegraph Hill
Soil Code: 131 / Climate Code: 6

Onique Ln.
Diamond Heights
Soil Code: 133 / Climate Code: 6

Orange Aly.
Inner Mission
Soil Code: 131 / Climate Code: 6

Rock Aly.
Forest Hills Extension
Soil Code: 133 / Climate Code: 4
A further 1,262 prototype designs are not shown in the current document.