

LES PLAINES DE NOTRE-DAME

URSB 433 final project
Nicholas Dykstra
Tom McGurk
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In considering the city as a stable and controllable artifact, the disciplines of architecture and planning (as traditionally theorized) valorize that very predictability. Today, however, both are practiced in an environment that is increasingly characterized by uncertainty, a product of the rapid change and constantly fluctuating cultural, political, and economic circumstances of contemporary life. In the fast-paced climate of the present, rather than assuming stability and explaining change, one must assume change and explain stability. Indeed, the circumstances upon which most design strategies are based sometimes shift so quickly that by the time that a plan is realized, it is often already obsolete (Sherman, 2008, p. 238).

The process of discovery involve(s) selecting, reframing, and revising within the layers and remainders of both active and obsolete industrial infrastructure. Unlike specifically formal proposals, the operatives of adjustment involve deflecting, diffusing or reframing and crafting new adjacencies or relationships among multiple parts (Easterling on Benton Mackaye's terra incognita, 1999, p. 42).



Statement of Approach

The underlying concept for this design is a critical approach to the comprehensive master plan. Instead of completely re-formatting the space in question, the basis of this proposal centres on engaging in the ongoing modification of the components and systems that exist within the space.

In effect, this proposal does not seek to ameliorate the site's internal condition by removing its present defining features, it seeks to stage a field that mitigates the more onerous elements of the site while promoting new linkages and opportunities that derive from evolutionary processes of change.

This approach draws upon theories and concepts found in landscape urbanism, contemporary Dutch planning and architecture, and case studies of San Francisco's South of Market District (SOMA).

It seeks to engage in a non-linear process that favours:

- Adaptability vs. Rigidity
- Dynamism vs. Stability
- Fluidity vs. Predictability
- Spontaneity vs. Structured Rationality
- Potentials vs. Programming

It is believed, from this conceptual and practical knowledge base, that such an approach is the best strategy to produce a diverse, complex, and vibrant urban environment. Essential to this *machinic* strategy is the understanding that such diverse, complex, and vibrant environments evolve in locations governed by uncomplicated adaptive rule sets as opposed to rigid hierarchal codes which, despite intentions, often seed banality and stagnation.

An Intelligence Building Design Process



In conjunction with this approach, a procedural strategy was developed to express an appropriate course of action. It is grounded on the notion that only through thorough analysis of the site can fundamentally contextualized strategies be discovered and implemented towards a truly realizable trajectory of development. Upon implementation, the proposed strategies would enter into feedback loops where their outcomes, events, and externalities could be evaluated and, if need be, refashioned before re-entering the development process. Ultimately, such a model could result in iterative and adaptive practices, which in response to ever changing conditions, will inform the gradual evolution of the entire site over the long-term.

Responding to the existence of the current industrial infrastructure and operations as well as the proximity of the convergence of several strategic transportation infrastructures, an initial decision was made to preserve the current industrial space. The site may have the potential to stabilize an area of industrial production, the type of which is found less and less in urban contexts. Such sites can act as bridges traversing a growing spatial mismatch between well paid production based jobs and urban working class populations, who have generally been negatively affected by the de-industrialization of urban centres. This is especially the case for the borough of the Sud-Ouest, where this site is located.

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Assessment of Context:

The networked ecologies that affect the site act as barriers, eliciting the juxtaposition of urban fragments; however, these ecologies also collapse the space-time between disparate activities, and are enmeshed in a productive and distributive landscape that operates on all scales.

It seems necessary to reinstate the role of infrastructure as an integrated element in the city, which is attributed the power of articulation and the weight of urban significance, rather than being an element of separation between adjacent parts. This is one of the major targets of today's urbanistic discipline, which is recovering the strategic, dynamic value of infrastructures, but also their innovative capacity within the urban and territorial landscape. This leads to the hypothesis that urban systems have to be designed in 'networks' that on the one hand ensure their complementary nature, and on the other allow their definition as multipurpose units which are firmly implanted in their territory (Busquets, 2004, p. 16).



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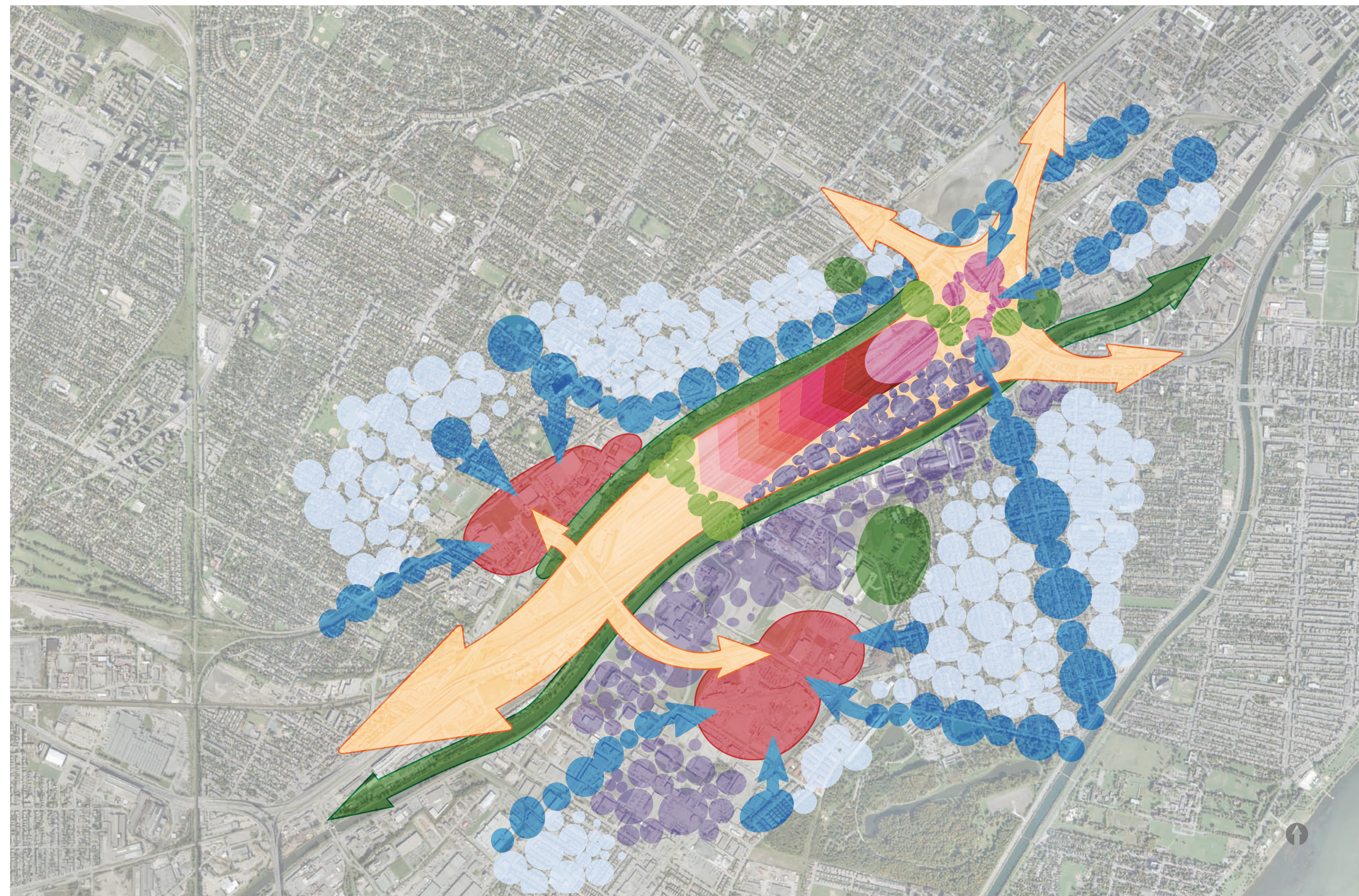
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Discovering Potentials:

External connections across the site primarily follow a West-East axis. The falaise and canal bound the yards to the North and South. Car oriented magnets draw upon surrounding stims; however, some infra-structural paths converge stims in the North-western portion of the area, away from the car-oriented magnets, thereby suggesting a location wherein to initiate the operative strategies of development, predisposing a Westbound axis.

The city is an intense locus of innovation whose collective creativity is always in advance of the disciplines of architecture or urbanism that attempt to control it. We need to learn from the city itself, taking full advantage of the city as a laboratory for future urbanisms. We need to cultivate new ways of working that can respond to unanticipated but inevitable climatic, social, technological, programmatic and economic changes: an architecture and urbanism that parallels the evolving dynamic of the contemporary city (Allen, 2008, p. 18).



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Regional & Interneighbourhood Network Arrangements



The orange area represents the 'initial space of urban development'. This space will be carefully re-engaged with the diverse and dynamic forces that both surround and run through it. The grey area represents the 'urban fallow', a space of purposeful repose. Its eventual design will occur only at a time when it can be informed by the forces of the 'initial space of development'.

To maximize the site's integration with the neighbourhood of St-Henri, the existing pattern will connect to the site's internal pattern.

Vignettes 1 & 2

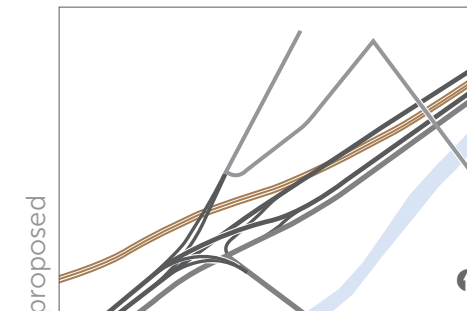
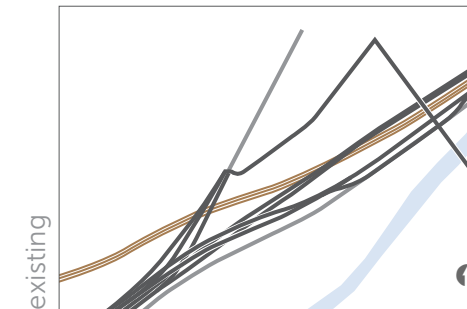
By reducing inefficiencies and redundancies in the autoroute network, creating new smaller interchange structures, and providing alternative commuting pathways and vessels, industrial transport flows can be directed more economically to their destinations, and commuter flows

can be managed under an emergent, more diverse modal framework.

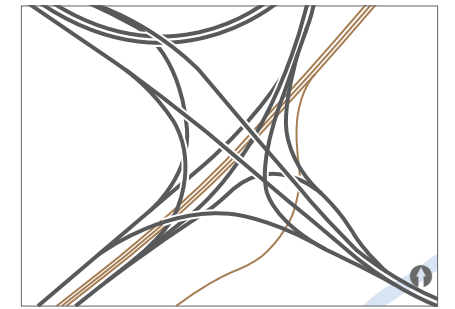
Vignette 3

Establishing new interneighbourhood connections will both reduce unnecessary highway traffic and create new economic and community linkages. The Cavendish connection will run alongside a massive multifaceted parkspace that operates on all scales: providing local community amenities, accommodating interneighbourhood leisure and active transport flows, and assuring that the biodiversity as well as (natural) ecological functionality of the metropolitan urban body will have the space to maintain critical thresholds. At this location, where all networked infrastructures converge, an integrated strategy combining architecture, urbanism and landscape is required, a hybrid simultaneous event space.

1. Angrignon & St-Jacques Interchange



2. Turcot Interchange



3. Cavendish Boulevard & Parkspace Network Connection



Infrastructures are flexible and anticipatory. They work with time and are open to change. By specifying what must be fixed and what is subject to change, they can be precise and intermediate at the same time. They work through management and cultivation, changing slowly to adjust to shifting conditions. They do not progress toward a predetermined state (as with master planning strategies), but are always evolving within a loose envelope of constraints (Allen, 1999, p. 55).

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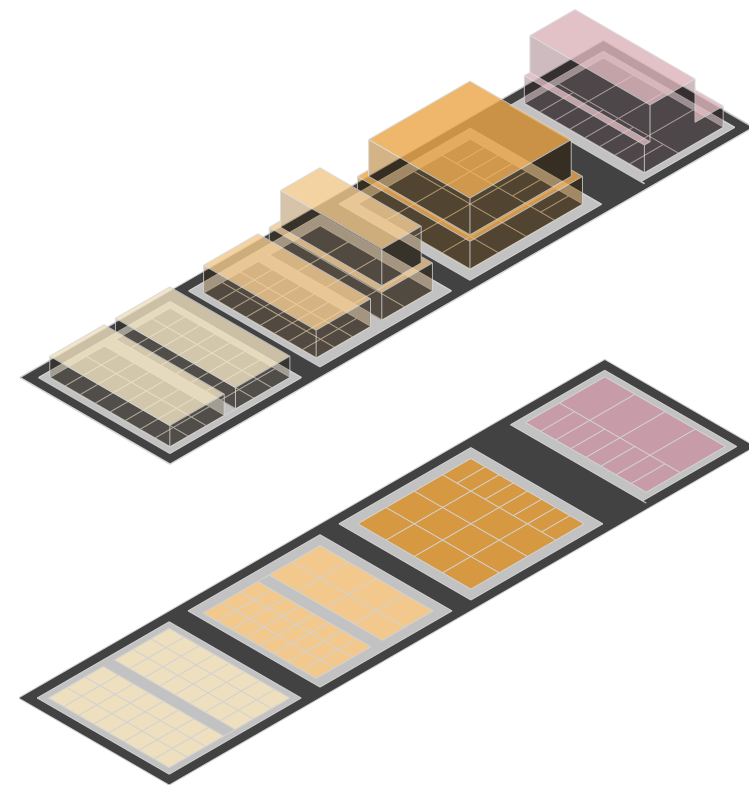
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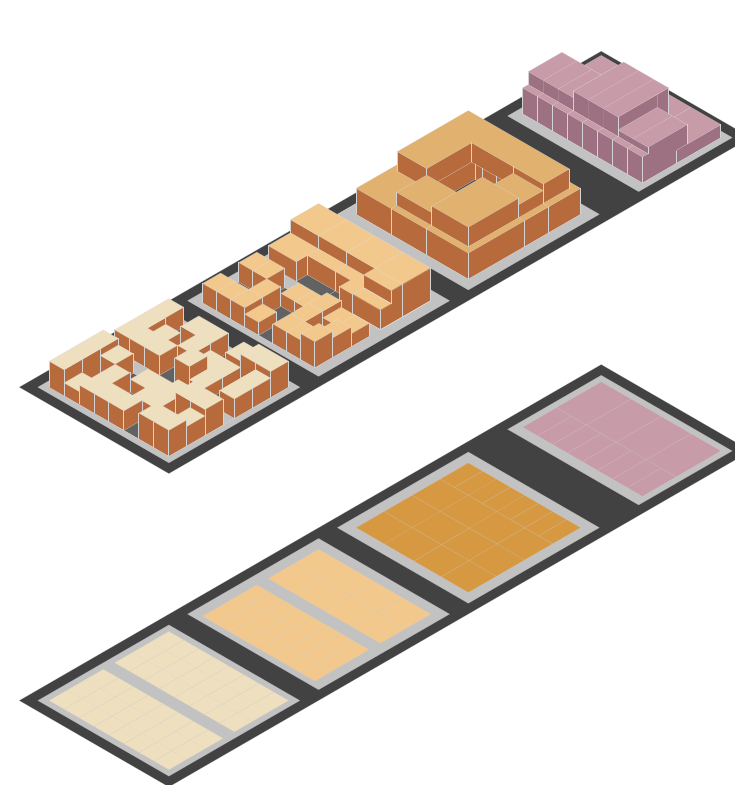
An Adaptive Systems Approach to Building Development & Affordability:

establishing an operative strategy of block/lot modules

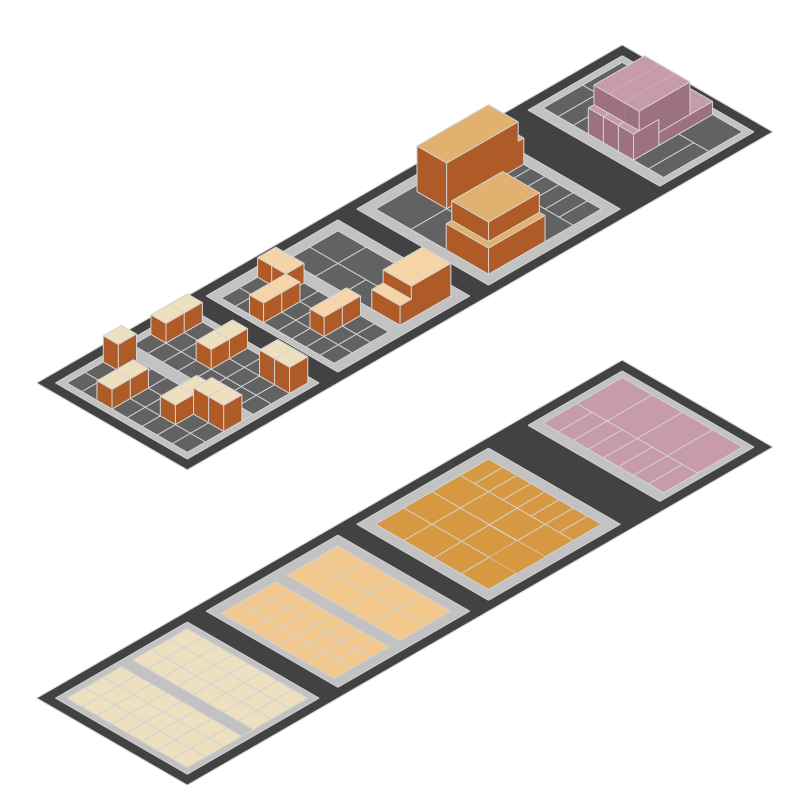
Maximum Envelopes



Potential Interpretation



Programming & Designing Affordability



PDR BLOCK (2-8 floors, 3rd story setback)
 an amalgam of types: conventional industrial façades, diverse retail/office spaces, & residential units arranged vertically and horizontally

8-Story Flex Block (5-8 floors, 3rd story setback)
 an arrangement of commercial, retail & residential potentials

Transition Block
 co-presence of larger & smaller scale buildings

4-Story Flex Block (3 +mezz. floors)
 an uncertain cadastral arrangement that seeds emergent spatial relations fronting streets & alleys

PDR BLOCK
 small production spaces, warehouses, retail, and housing compressed together

8-Story Flex Block
 large structures that maximize the site's capacity, while maintaining acceptable FAR

Transition Block
 mid-scale structures composed appropriately in their context, aside smaller scaled forms

4-Story Flex Block
 small attached forms emerging out of the unfolding actions of present inhabitants: subdivisions, infills

PDR BLOCK
 a high proportion of off market space for PDR operations, managed through a local business incubator, space for SHDM

8-Story Flex Block
 minimum 30% SHDM

Transition Block
 co-presence of neighbouring relationships

4-Story Flex Block
 30% local land trust, availability of extraordinarily small lots, subdivision possibilities, and maximum module ownership limits, designing in affordability

The city is the paradigm system of systems, in which dozens of relational structures intersect and in their interaction with others, create new and more complex, potent and evolutive systems. Those that are able to mutate fastest, to innovate in processes and systems, to attract other elements that contribute intelligence and relational capacity to the system, are the ones with the best chance of success in a highly competitive global economy. In that context, the design of a building, a city, or a territory, insofar as it defines the relational capacity of people or organizations and stimulates or impedes the neuronal connections between elements, is the key to enhancing the intelligence of the territory (Guallart, 2008, p. 120).

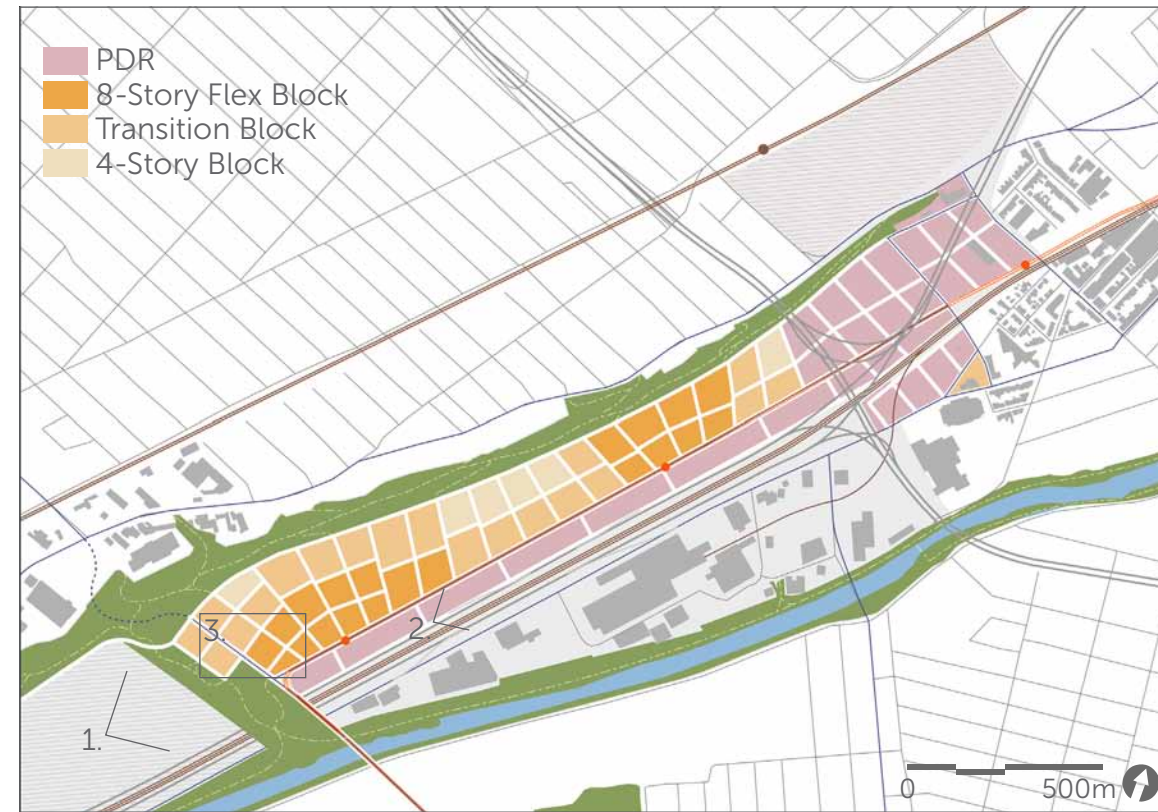
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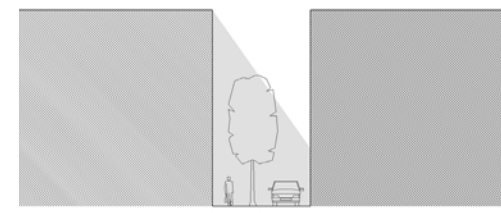
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Creating a Complex & Navigable Urban Milieu

Internal pattern & Spatial Application of the Modules



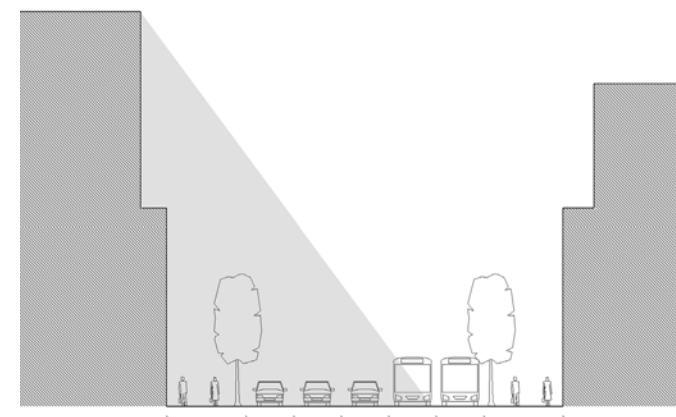
Alleyway: 6m



Local Street: 16m



LRT & Boulevard: 25m

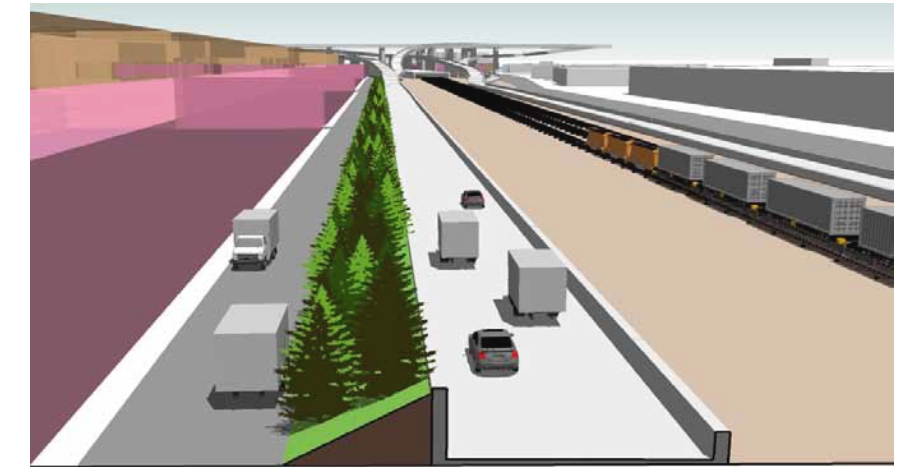


With what power is left to us, it is our ethical responsibility to use our ingenuity to engender an urban fabric aggregated out of topographic fragments within the metabolic interstices of the megalopolis (Frampton, 2007, p. 120).

1. Connecting Park's (hybrid type) Highway/Rail Crossing



2. Mitigating Berm & PDR Access Road.



3. Intricate & Differentiated Pattern of Street Typologies



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Overview

The implicit goal of this plan is to utilize existing conditions in order to stage an urban environment that contains the necessary components to attract a variety of types of development that currently occur over a wide spatial field.

Objectives:

- Integrating the site into the larger urban fabric to address the site's inherent paradox: a site surrounded and traversed by transport infrastructure yet it is an internal periphery.
- Promoting the idea of a life near everything to ameliorate flight from central areas, in effect exploiting the amenity of urbanity itself.
- Promoting equity of access via affordable housing policy (approximately 30% below market rate) coupled with design strategies that promote a variety of housing opportunities accessible to all income scales and demographic groups.
- Promoting legal non-conforming uses (Production, Distribution, & Repair activities) to promote a high degree of land use mix.
- Increasing the overall quantity, quality, and integration of green and leisure spaces.
- Coordinating local public transport stops to facilitate high usage levels via active transport
- Coordinating regional public transport linkages that will validate its use as the optimal method of urban transport.
- Establishing an urban plane capable of generating population densities similar to Le Plateau, and St-Henri, but also capable of growing into even higher densities through time.
- Exploiting the existence of local and regional transport infrastructures in and along the site to maximize (and protect) the economic potential of the site.
- Avoid the deterministic pitfalls of master planning by embracing uncertainty and self-organization.

Not described in great length in the previous panels are three fundamental characteristics essential to the efficacy of this proposal: the provision of high quality public spaces, an integrated transportation strategy, and a production oriented development trajectory that can take advantage of the site's existing context. These elements together aid in the staging of an urban space that is capable of sustaining local economic viability and delivering a high quality human scaled plane for all prospective actors. By staging open spaces that are complex yet navigable, creating transport linkages that are efficient, affordable and sustainable, and promoting economic activities that are not only based on consumption, this site will have a significant competitive advantage with respect to other urban or urbanizing areas.

Public Spaces

Though public spaces are infrastructures that are generally understood as the determining or stabilizing force of any urban strategy, these spaces (boulevards, local streets, alleyways, parks, squares, etc.) are quite capable of being complex and flexible unto themselves. For example, the directional program of a street, its defined function as a one-way street with two lanes parking, can easily be temporally suspended for a block party and/or weekend market, or more structurally as a one lane street with a dominant pedestrian realm. At this early stage of this strategy, there is little value in determining all characteristics of these public spaces; instead, it is paramount that public spaces be provided with the inherent capability to mature into any particular manifestation that is desired by the actors and/or designers that aid in defining its meaning. In this manner, the vertical field of the built environment, its architecture, is defined by the actor's interpretations of the simple rules of the development system, and the horizontal field of public spaces, the more structurally stable field, is an open public canvas awaiting appropriation and articulation.

To achieve this inherent flexibility all streetscapes will be designed with very little material differentiation, creating a subdued and enclosed landscape where surface materials are simple and sidewalks are marked with impermanent bollards. Additionally, the other dominant public

space element in this proposal, the large urban park connecting the Falaise into the existing networked park infrastructure, will be similarly open-ended. Much like *Parc de la Villette's* (Paris) programmatic complexities, and Downsview Park's (Toronto) ecological uncertainties, this space holds the potential to both provide urban functions as an amenity rich space of event, and act as a fundamental component in the unfolding ecological health of the metropolitan body.

Transportation

The internal pattern of this proposal, as well as its external connections, via street, public transport or park pathway, are designed in such a manner as to maximize the efficacy and enjoyment of active transportation. All development opportunities are situated within a 750m trip to one of three LRT stations, 87% of which are within 500m of a station. With this proximity and the highly penetrable circulation pattern of the area in mind, the variety of potential experiential routes would entail effective and enjoyable connections to both activities within the area and within the larger urban body. It is implied that a highly connective tissue centered on specific larger networked connections is the best strategy in providing a complex urban environment and in achieving a modal split necessary to generate a more tenable and habitable local and metropolitan urbanity.

Production Distribution & Repair (PDR)

This proposal allows for a flexibility of uses and building types to accommodate the varying requirements of Production, Distribution, and Repair (PDR) operations. PDR operations employ people who prepare food, write software, deliver packages, plan events, repair machinery and provide a myriad of other critical goods and services while functioning almost invisibly in the current consumptive landscape. This proposal's flexible development system will encourage the placement of PDR operations within the site, allowing for a diverse arrangement of economic activities to exist and grow internally. This strategy has the potential to address, in part, the spatial mismatch issue by situating quality jobs in close proximity to working class areas in Montreal.