

Turcot

LA NOUVELLE ANCRE DE MONTRÉAL



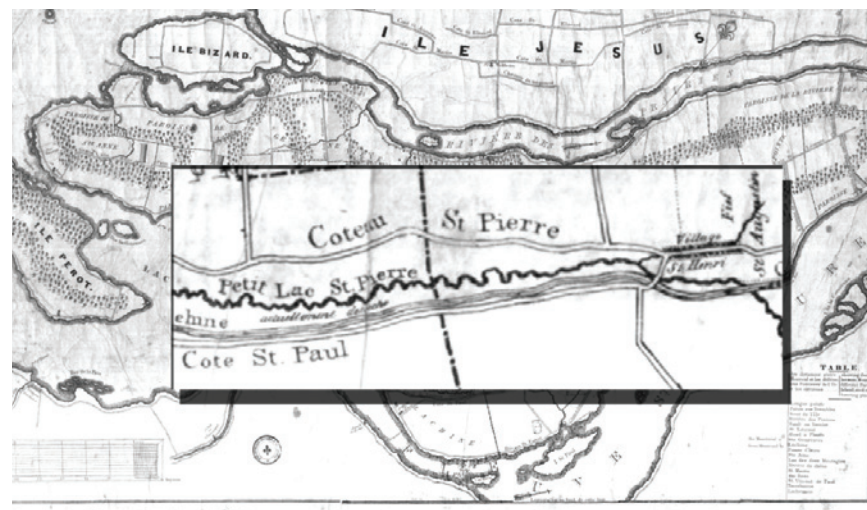
OUTLINE OF APPROACH AND RESULTS

- The strategic assessment of historical data translated into a grand vision.
- The study of socio-economic data and flow patterns depicting the current relationship between boroughs became a backbone.
- An analysis depicting relationships between existing topography and current infrastructure, made way to the creation of 'falaise to terrasses', 'transit routes and nodes' as well as 'water environment'.
- A newly generated topography, extending from the Falaise to the Canal, covering the highway, increased land opportunities and value.
- The breakdown of the area in three distinctive sections; each one is characterized by a specific milieu.
- Housing diversity, integration of water elements and human scale streets characterize this newly created, elaborated, anticipated and innovative environment.

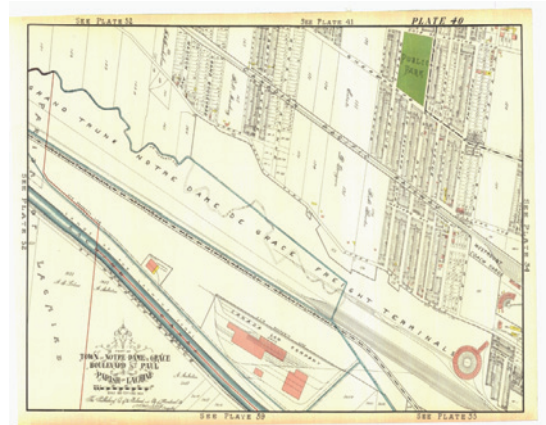
TURCOT: LA NOUVELLE ANCRE DE MONTRÉAL



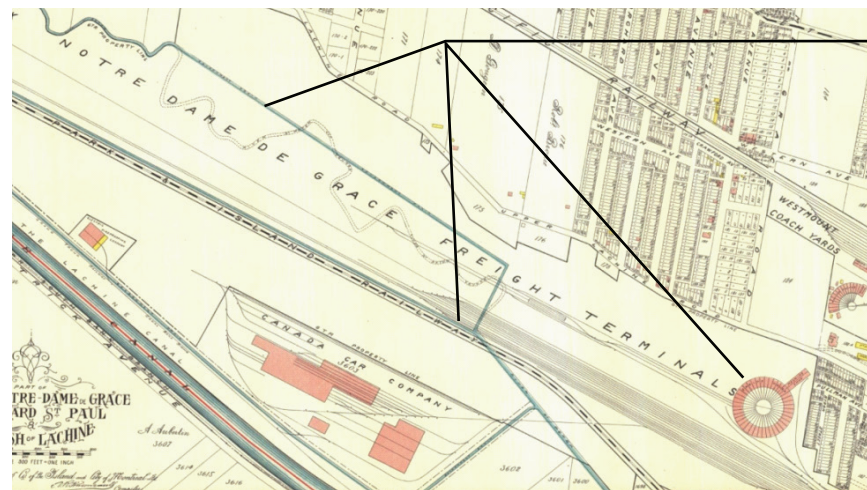
Illustrated by: Bellin, 1744



Illustrated by: Jobin, 1834



Illustrated by: Pinsonneault, 1907



Turcot has been an important part of the metropolitan development for as long as the modern city has existed alongside the locomotive technology. It has undergone many stages of transformation each dictating the next development path, leading to the vast empty land which in its turn has the potential to transform our city.

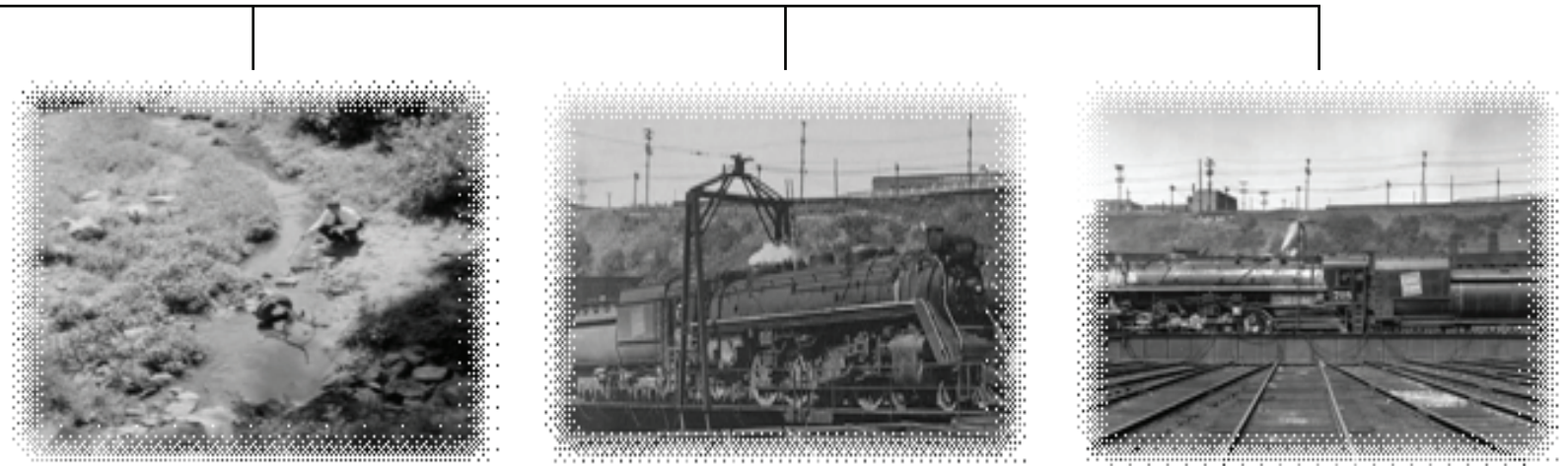
The first major ownership which had a big impact on the land was in the hands of Grand [Trunk] Railway in 1903, a year also characterized by the beginning of construction of the running sheds that no longer exist today. In 1906, the construction of the largest roundhouse in Canada, designed to house 40 locomotives, along with a massive turntable attested to rapid growth of the region. Unfortunately, success and rapid growth were not achieved without sacrifices. Indeed, in 1909, the expansion of the yard facilities required flat land in order to lay down more train tracks for the growing number of locomotives traveling busy routes. It is during that same year that projects were taken by engineers to drain river systems passing in the area. While we had lost the water streams that were once abundant in the Turcot land, in 1940 the massive round house was redesigned and expanded. Ongoing changes focused not only on larger volumes of mammoth steam cars entering the area, but also on an important economic division between citizens.

Activities were abundant in the area, both for local and for out of town crews that would come to work in the city. Eventually, during the 1960s, Turcot lost its prominent industrial productive reputation; it was no longer the hub of transportation, the doors

of entry to the great city Montreal as it was during the 1940s. The roundhouse that dispatched 128 locomotives daily and the turntable would be dismantled along with other buildings in the area to serve other functions related to transportation of goods by containers and trailers until 2002, when the remaining activities were moved to the Taschereau Yards.

Turcot was abandoned and its once important function is now one of a no man's land. It serves as a physical and visual barrier and provides no current opportunities to its surrounding areas. The yards are principally an area for snow dumping; this type of usage does not give justice to this large vacant land which presents much future potential.

Turcot could become a land of development like no other has done so in the past given the right conditions. By embracing its past, it is possible to change the current image of the yards, reintroducing water systems in the area, a natural feature that could potentially attract local and national, and international interest. Furthermore, the falaise Saint-Jacques, a unique park to Montreal is unfortunately limited in access due to the steep hill it is located on. By extending it, we have the potential to increase the amount of land at our disposal will increasing the size the size of this unique environment. While water and landscape will change the image of the Yards, the focus on human sized pedestrian environment, and the high accessibility to alternative means of transportation will reprogram Turcot into a place with a unique character rich in activities.



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Planning Approach:
Contexts



BOROUGH SUD-OUEST



BOROUGH NDG COTE-DES-NEIGES



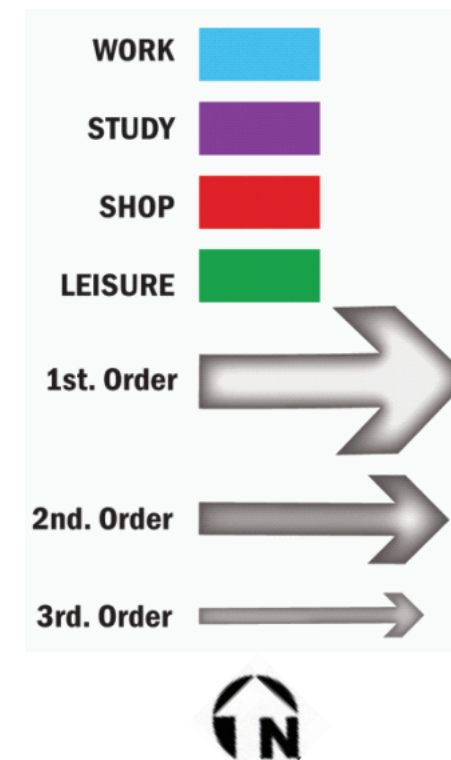
BOROUGH VERDUN



BOROUGH LACHINE



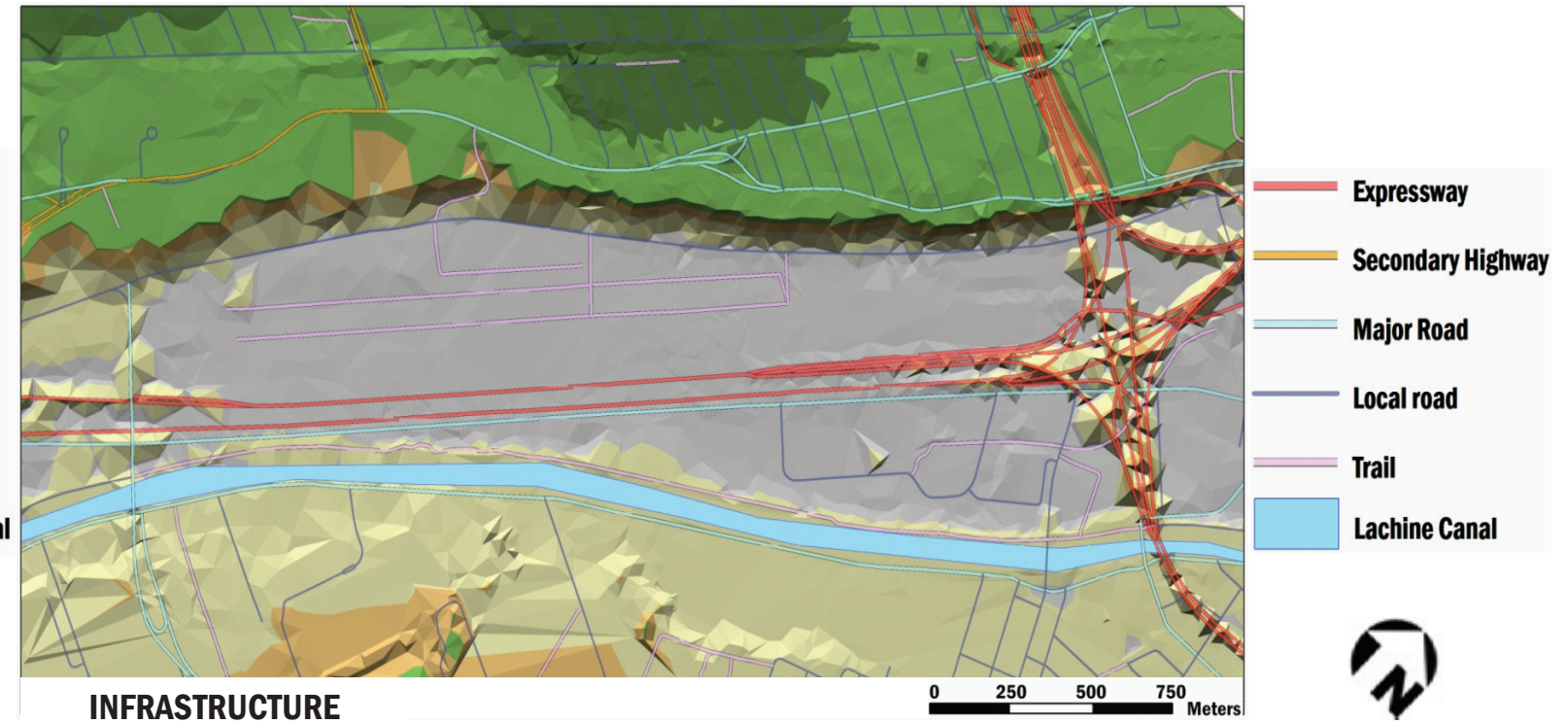
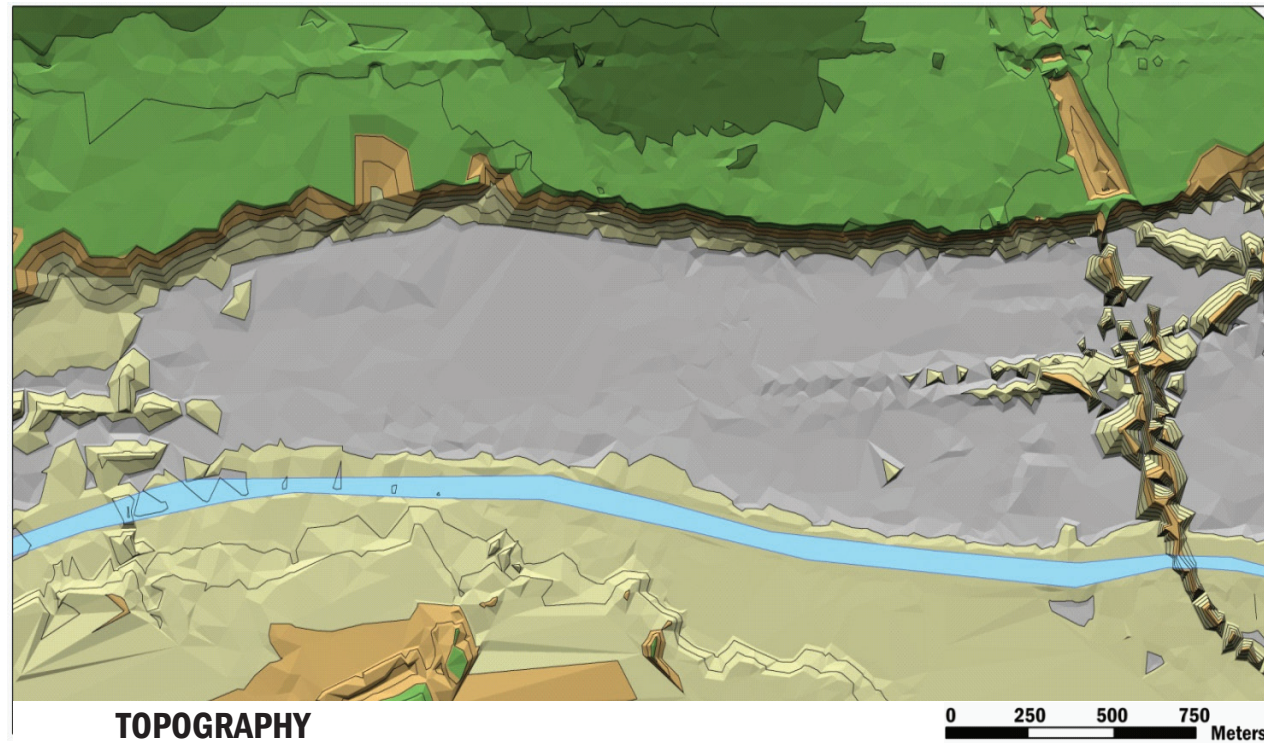
BOROUGH LASALLE



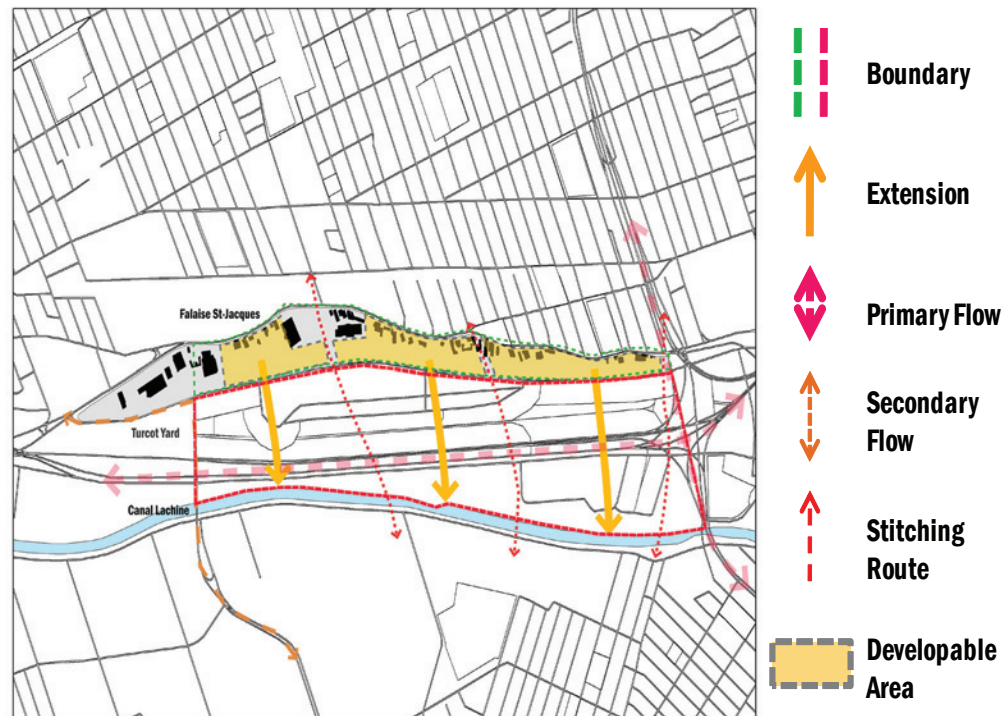
Maps were created here in order to study flows of movement and the various motives for the movements. These arrows and colors might seem arbitrary at first glance but their meaning is much deeper; they depict travel patterns which emerge from each borough surrounding our site of study. The arrows are not associated to numbers but rather to order of importance of travel. The study of movements from the boroughs surrounding the yards gave us a strong basis and became a backbone for many of our ideas. The obvious presence of important horizontal movement was determined but the unexpected vertical movement presented us with significant opportunities. This determines a demand for vertical thoroughfares, which encourages further North-South connections enhancing the linkage amongst boroughs.

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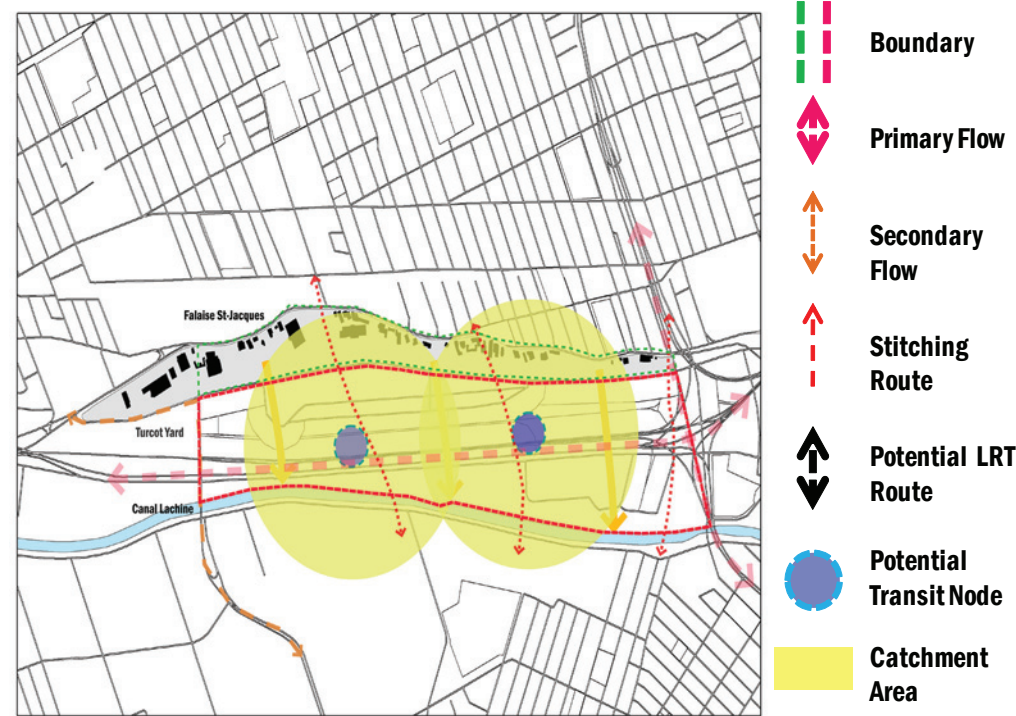
Planning Strategy:
Analysis & Concept



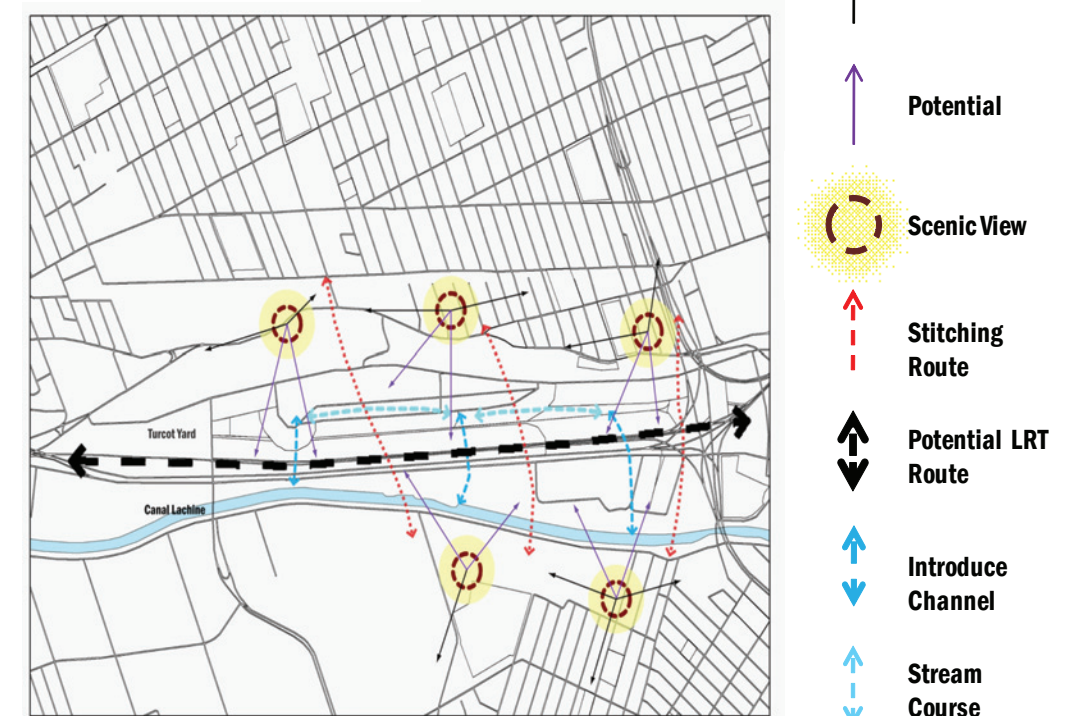
FALAISE TO TERRASSE



TRANSIT ROUTES & NODES

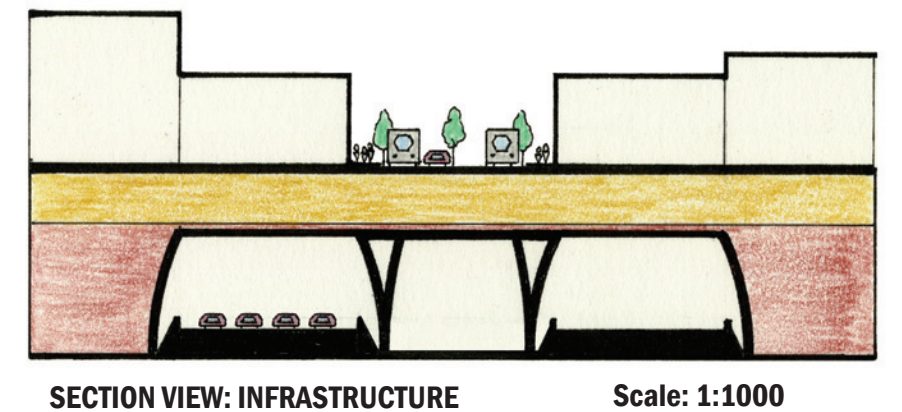
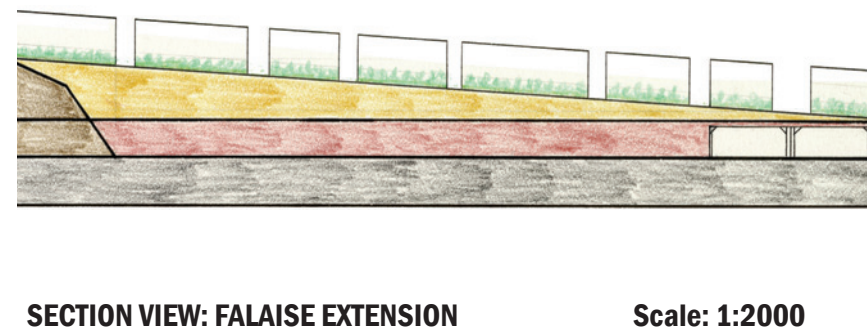
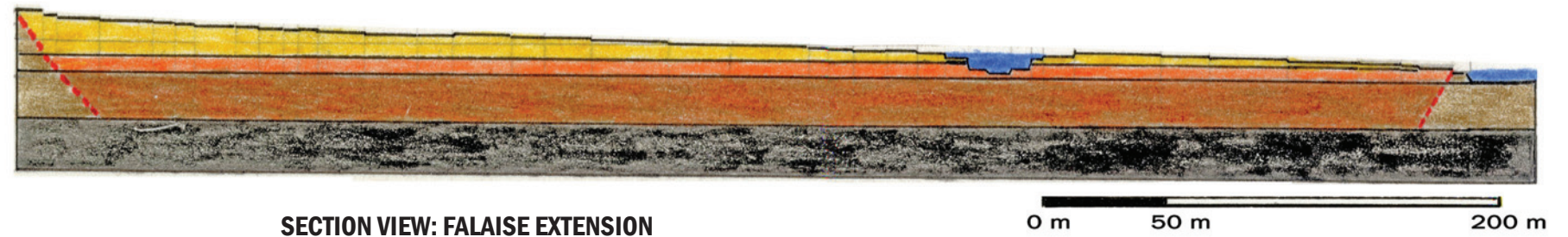
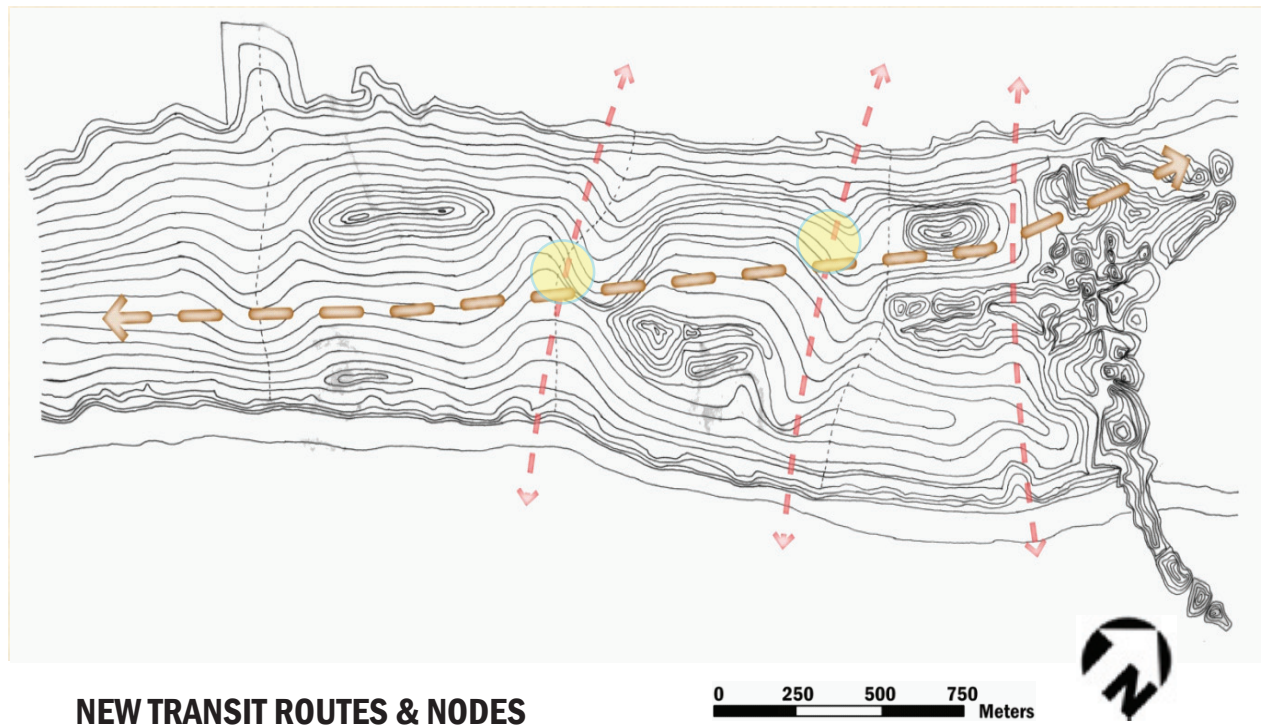
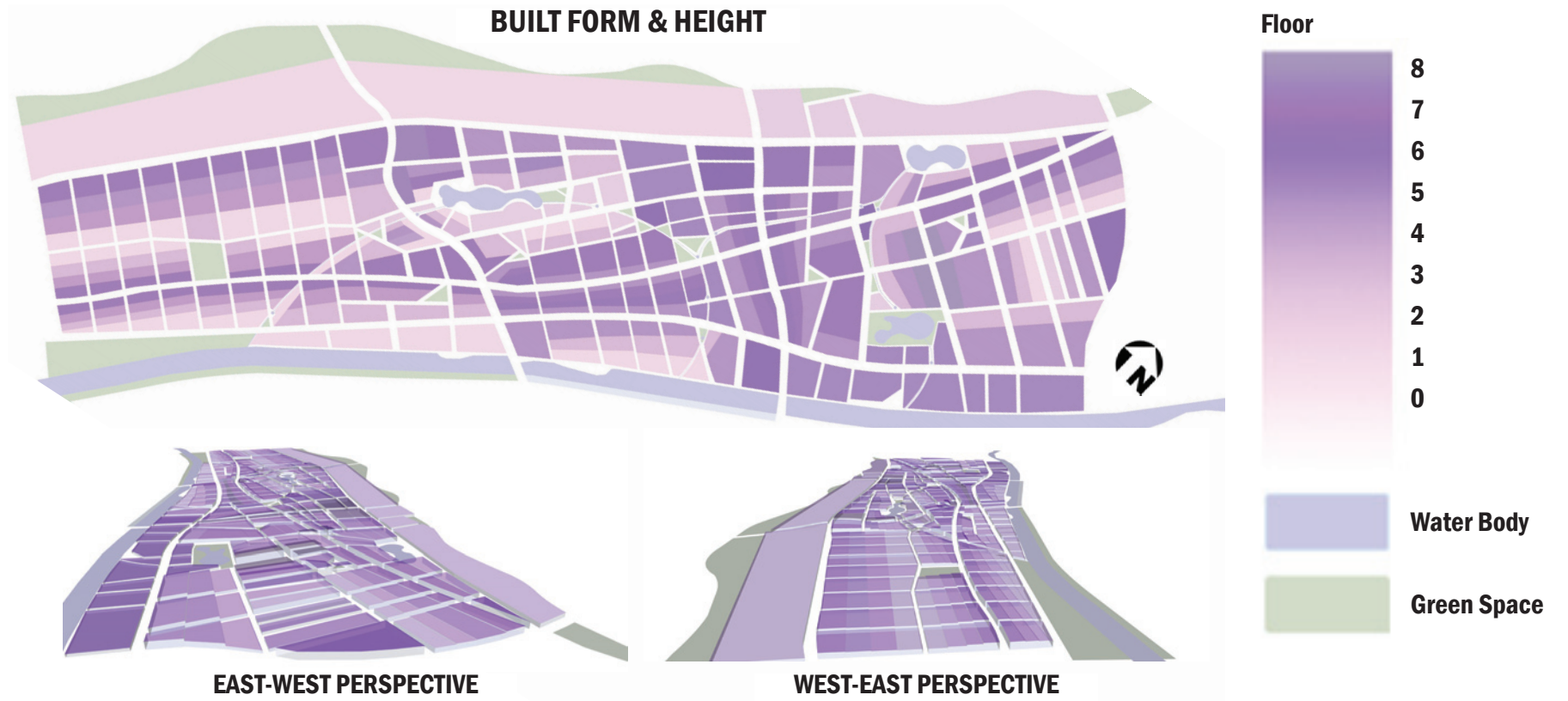
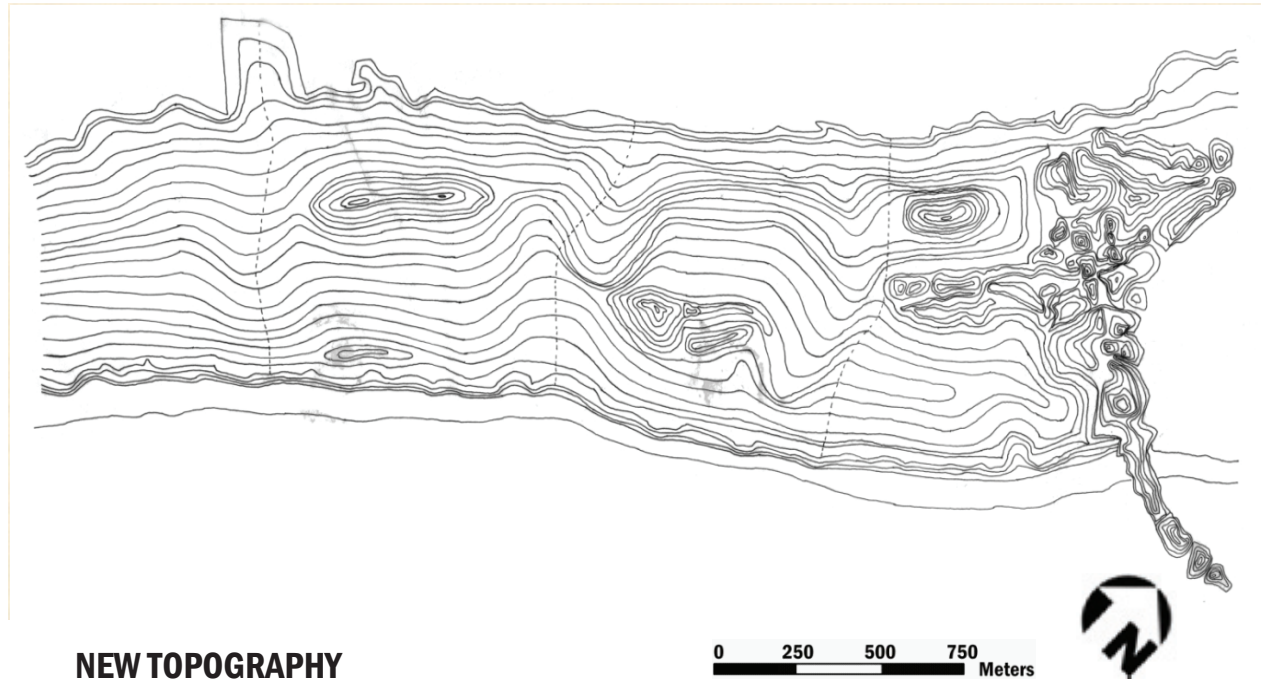


WATER ENVIRONMENT



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Designing Precedent:
New Landscape

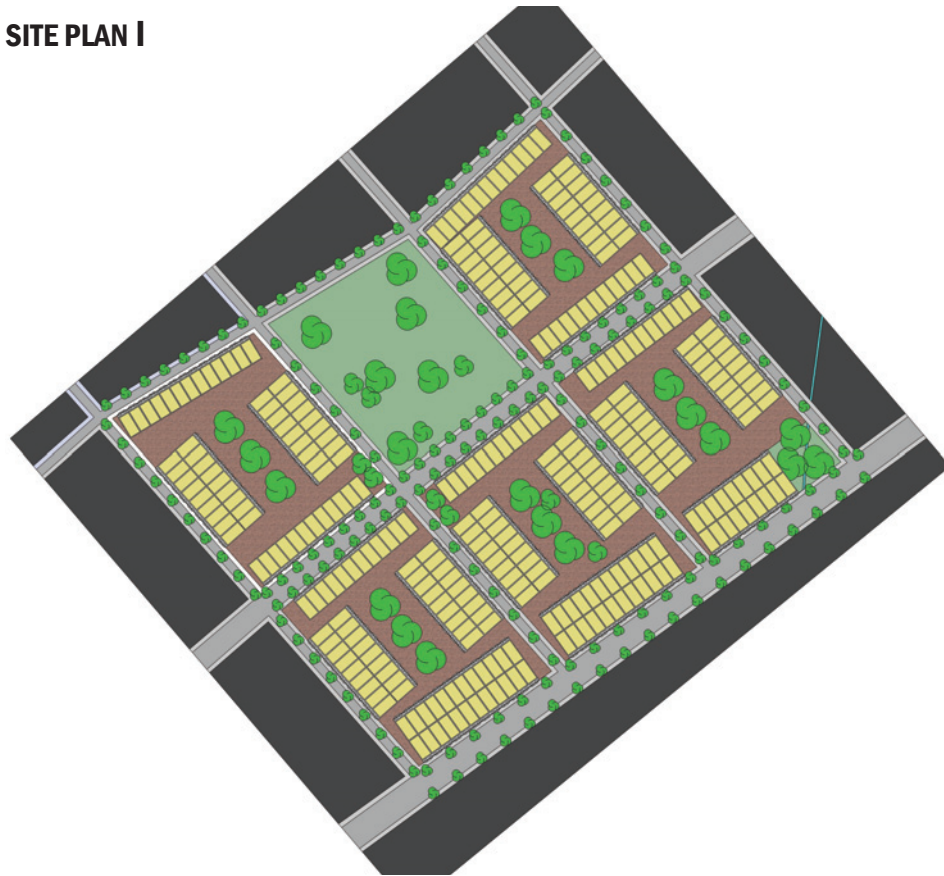


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The breakdown of the area in three sections is represented very distinctively; each one is characterized by specific buildings types and environments. Site plan I exemplifies the focus on residential street-frontage and the existence of common space within blocks. This type of arrangement is mostly present in the western part of our development which has the lowest built form. Site plan II which is adjacent to our main thoroughfare indicates the pedestrian streets surrounded by mix use buildings, as well as our water body surrounded by commercial activity. This district focuses on commercial activity encouraged by a walking environment focusing on pedestrians. Site plan III is characterized by mix-used buildings facilitating the integration of residential and commercial developments. The district is a prime example of desirable living whilst having access to a variety of amenities.

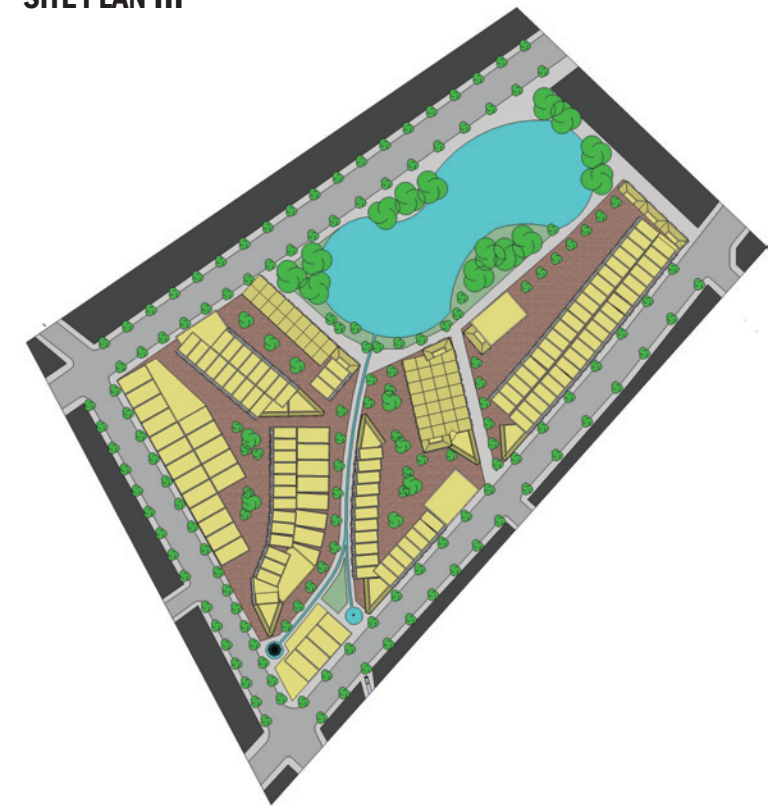
SITE PLAN I



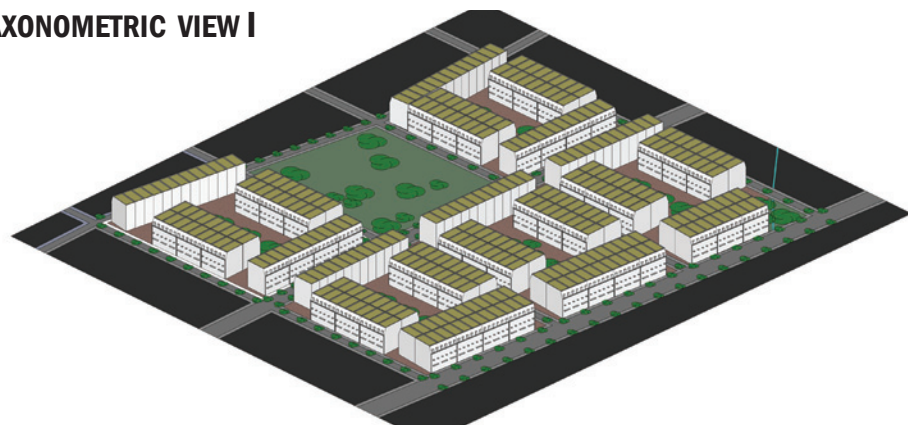
SITE PLAN II



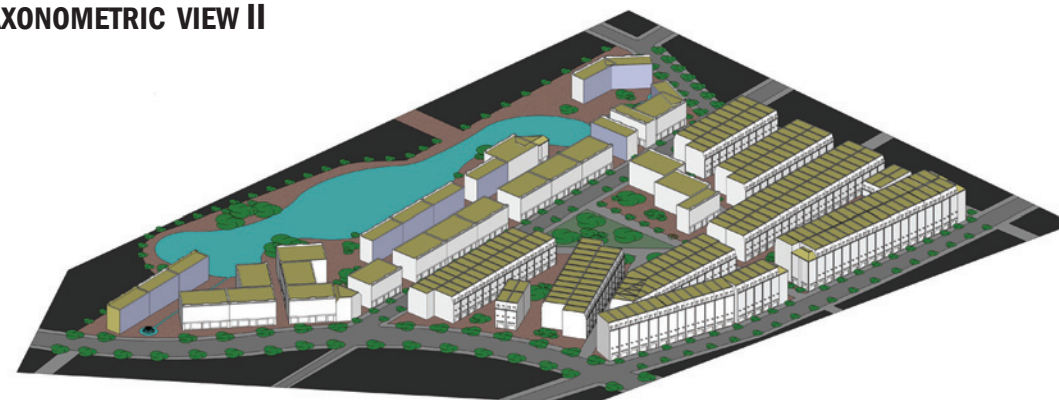
SITE PLAN III



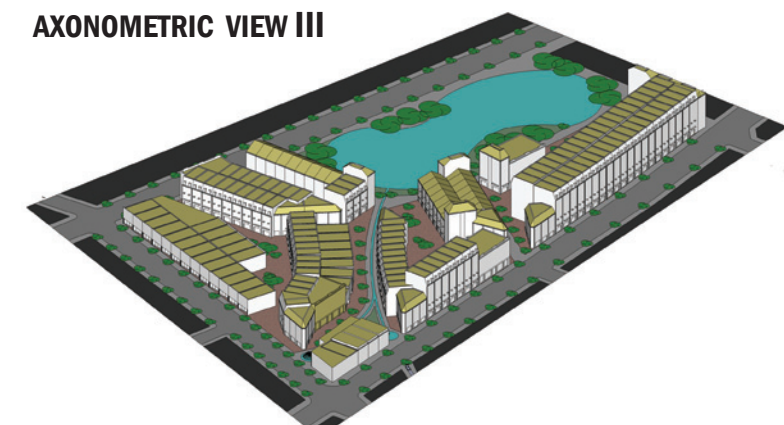
AXONOMETRIC VIEW I



AXONOMETRIC VIEW II

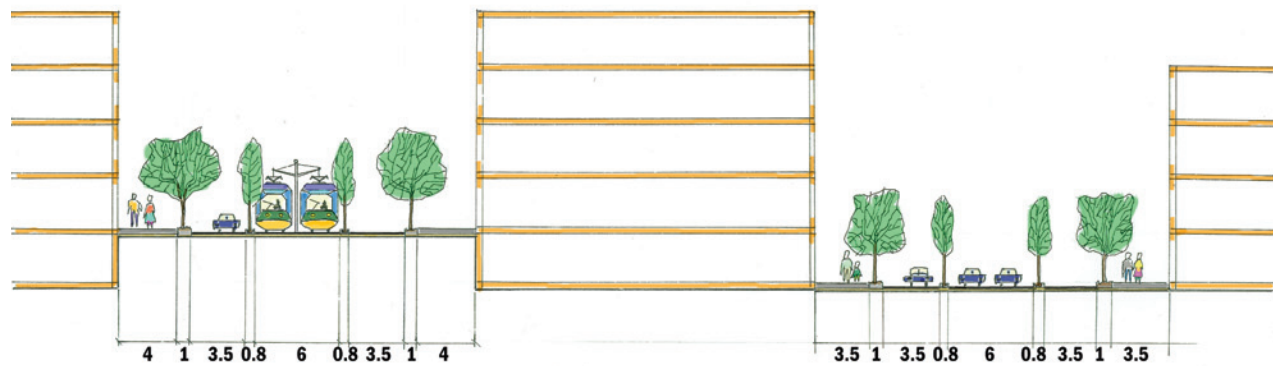
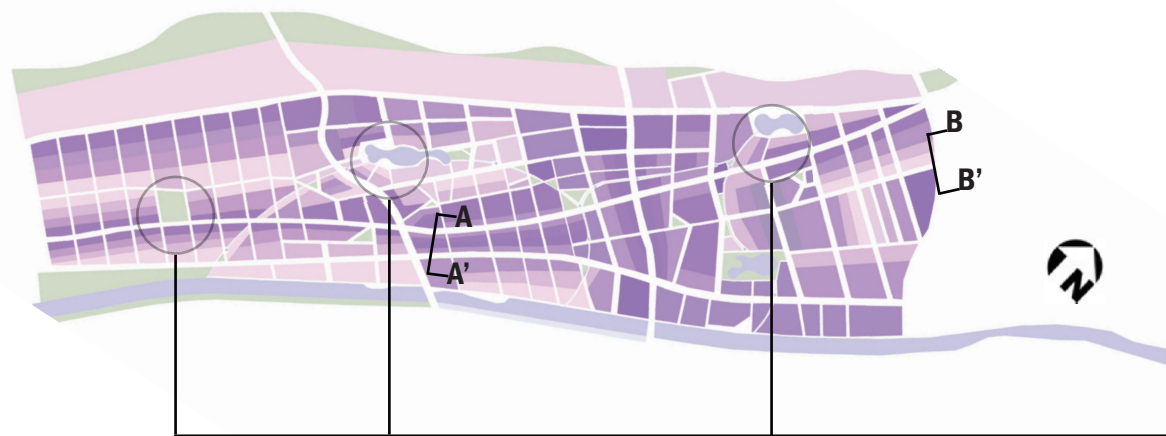


AXONOMETRIC VIEW III

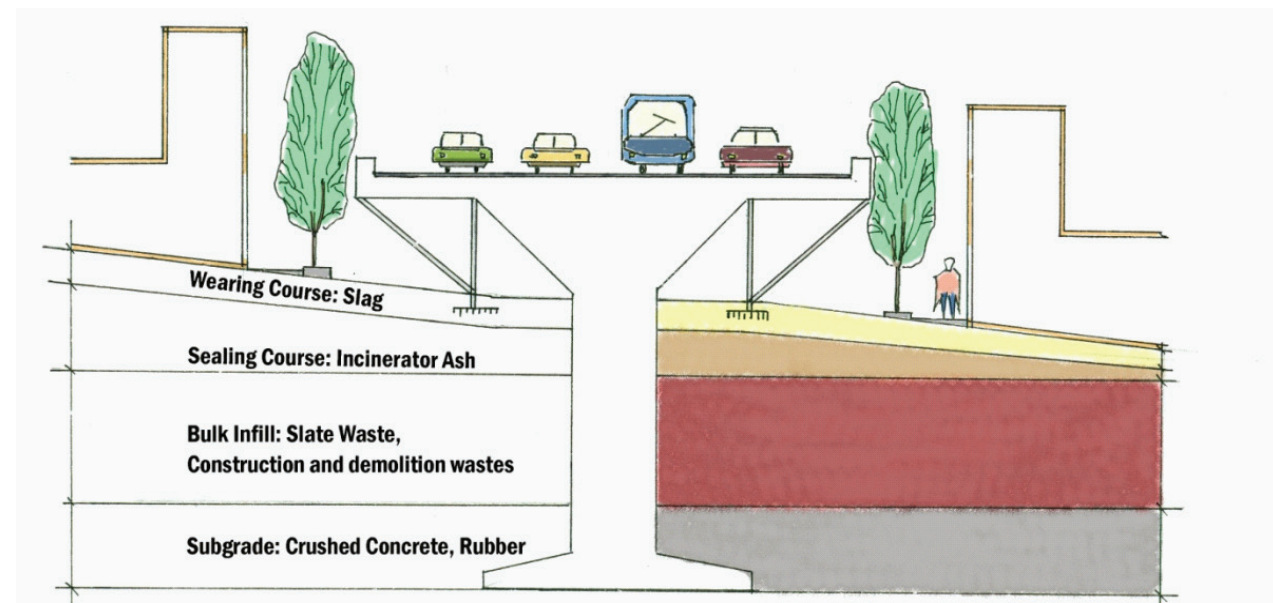


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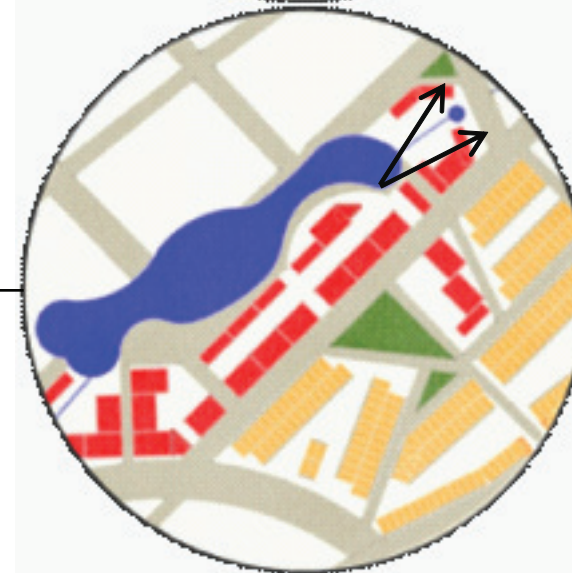
Design Aspects



SECTION A-A': STREET



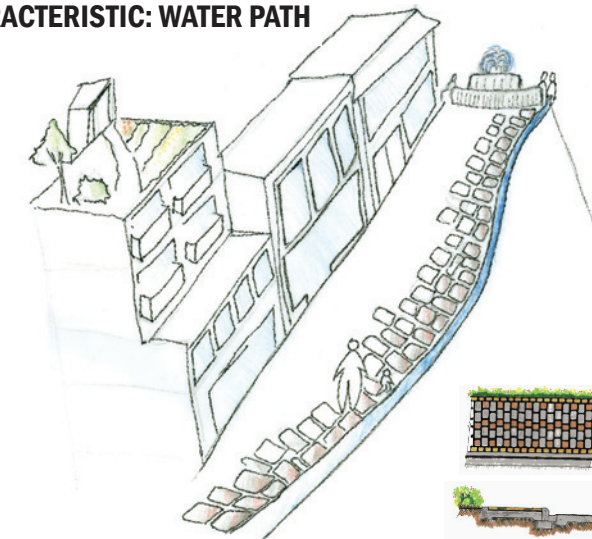
SECTION B-B': INTERCHANGE & INFILL



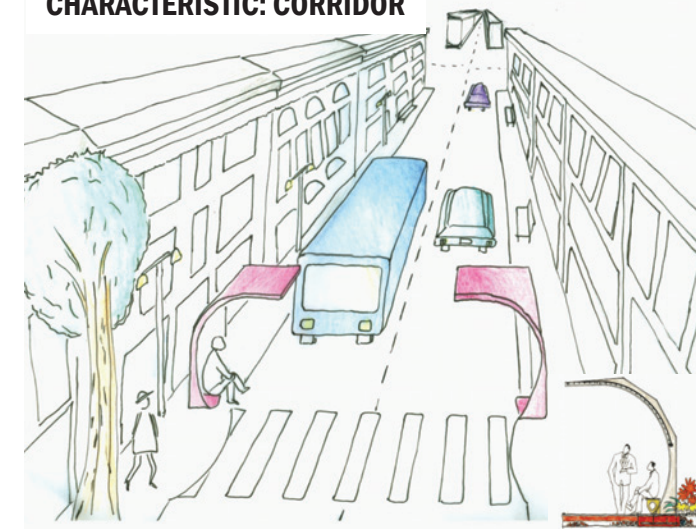
CHARACTERISTIC: LANDSCAPE



CHARACTERISTIC: WATER PATH



CHARACTERISTIC: CORRIDOR



Three- to four-story mixed-use buildings with residential units above commerce's contribute to housing diversity and enhance the pedestrian experience. The focus on rich landscape and a water enhanced environment creates a walking atmosphere in both residential and commercial districts. The well embedded gradual slope integrated into our design will be used to our advantage with an abundance of green spaces and unique public space designs.

High density commercial and mixed-use encourages growth along transit routes and water environment. According to our design aspect, water environment will be created to increase land value, generate street life, and grant the whole area with new meanings, new temperaments. The water paths streaming across the area will create a cycle which will have the Lachine canal as a starting a finishing point.

Neighborhood streets with fewer lanes, street-fronting residential development and a profusion of street furniture. The presence of no more than three storey residential buildings will create human scale streets; the focus will be on interaction and activity rather than vehicular movement and overwhelming structures. The lack of parking facilities and walkability to public transportation will encourage transit usage within, to and from the Yards.

Our grand vision for the area was for it to act as a connector for surrounding boroughs, filling in the existing void, as well as reducing the strong horizontal West-East vehicular movement, and encouraging mix-used development and walkability. The analysis of historical data pertaining to the Turcot yards was insightful in the understanding of the evolution of the yards. This was followed by a study of socio-economic data and movement patterns which presented grand opportunities and became a basis for the implementation of many ideas and procedures.

The specific study areas which we focused on were the Turcot Yard including the current highway all the way to the Lachine Canal, and, the Falaise St Jacques which represented a very important factor in our study because it acts a barrier. Its presence does not benefit either side – the North or the South, and its steep physicality can affect any proposed plan. In response to this a new topography was created extending the escarpment all the way down to the canal. This will be achieved by infilling the land. The materials used for infill will be easily accessible according the document Solid Waste in Canada produced by Statistics Canada 2005. In 2002 Canadians have produced over 30 million tonnes of solid waste which includes industrial, commercial and institutional waste producers, and construction, renovation and demolition projects. For instance, slate waste, crashed concrete and slag etc. For the treatment of the highway we would provide a “tree” shape supporting structure along the highway that has a freight train rail located between the lanes. After researching engineering standards and examples such a man-made skeleton would be able to hold the weight of our new earthwork.

The Yards are directly enveloped by two boroughs which don't have a reason to acknowledge each other's presence. This new topography will facilitate building new important infrastructure running through our site. By creating infrastructure connecting both sides according to depicted scenic views, the potential connection will not only be physical but also visual. Scenic views not only affect the attachment people have to their area but also significantly raise land value. The proposed tram line running through our site is meant to be a direct route between the central business district and the Pierre Elliot Trudeau airport. This implementation could greatly benefit surrounding areas accessibility as well and encourage the usage of public transit to travel towards to and from the downtown area. This tram line would be running over the now covered highway and would have two main transit nodes; the catchment area of 500 metres of these would cover the whole yards. This indicates that our vision of creating a walkable environment is being achieved.

The section views of the Falaise extension indicate how this gradual subtle slope of the new topography does not have major consequences on our possibility of development. Our area has three sections which have distinguishable functions but their physical coexistent is harmonious. The first part focuses on residential street-frontage and the existence of common space within blocks. This type of arrangement is mostly present in the western part of our development

which is residential and has the lowest built form. We envision neighborhood streets with fewer lanes, street-fronting residential development and a profusion of street furniture. The presence of no more than three storey residential buildings will create human scale streets; the focus will be on interaction and activity rather than vehicular movement and overwhelming structures. The lack of parking facilities and walkability to the public transportation will encourage transit usage within, to and from the Yards. The second district which is adjacent to our main thoroughfare indicates the arrangement of pedestrian streets surrounded by mix use buildings, as well as commercial activity focused around water. Site plan III is characterized by mix-used buildings facilitating the integration of residential and commercial developments; it has building with the most floor heights. Even though vehicular thoroughfares dominate this section there is still an emphasis on pedestrian streets.

The focus on rich landscape and a water enhanced environment creates a walking atmosphere in both residential and commercial districts. The well embedded gradual slope integrated into our design will be used to our advantage with an abundance of green spaces and unique public space designs. The presence of water is a very important part of our design and concept; the previous presence of water running through the site and current presence of the Lachine canal were an inspiration. According to our design aspect, water environments will be created to increase land value, generate street life, and grant the whole area with new meanings, new temperaments. The water will naturally flow out of the Lachine canal into artificial lakes, streaming out back into its initial departure point. This cycle will generate an automatic energy flowing through the site in terms of water spirit, which will affect the residents physically and mentally.

The focus on reshaping the Yards topography generated unique concepts and ideas to our project. Our new North-South infrastructure and built form were produced according to this new landscape, which granted meaning to the area. Hopefully this is a precedence to deal with such a vast amount of desolated land. The new hubs created by transit nodes will become a magnet for future residents and visitors. The new arteries frame-worked by transit routes will become vital connections for both local and regional activities. The new water environment generated by landscape will become a breath of fresh air flowing through the Yards.

