



MANCHESTER

Vision in 30



ENVIRONMENTAL | UNIVERSITY OF
DESIGN | CALGARY

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ACKNOWLEDGEMENTS

The voyage from commencement to completion has been interjected and invigorated by a number of individuals. We would first like to extend our thanks and appreciation to Thom Mahler, Deborah Cooper, Paul Donker, Afrah Rayes, Jen Malzer, Joe Ceci, and Lothar Wiwojorra for their time and creative energies during our design Charrette in October. We would also like to thank our professors and TA, Brian Sinclair, Denis Gadbois, Noel Keough, and Brad Braun for their patience, assertiveness, and constructive criticism throughout the course. Finally, we thank our juxtaposed EVDS 702 classmates, Maha, Kira, Sara, Azadeh, Andrew, Joe, Matt, Braden, Krista, and Deeter for their camaraderie, friendship, and feeling our pain.

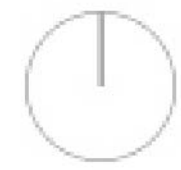
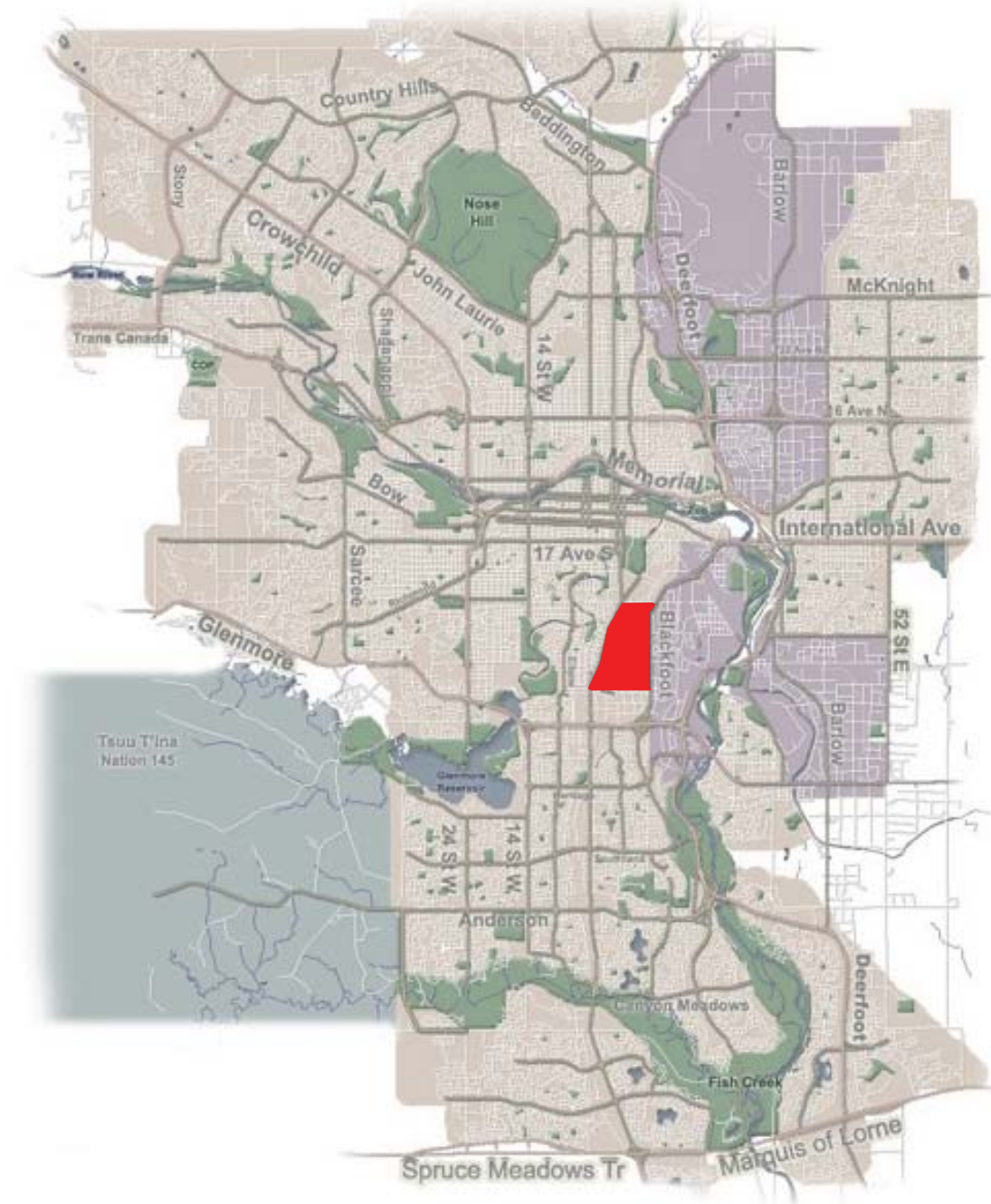




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1.0 BACKGROUND

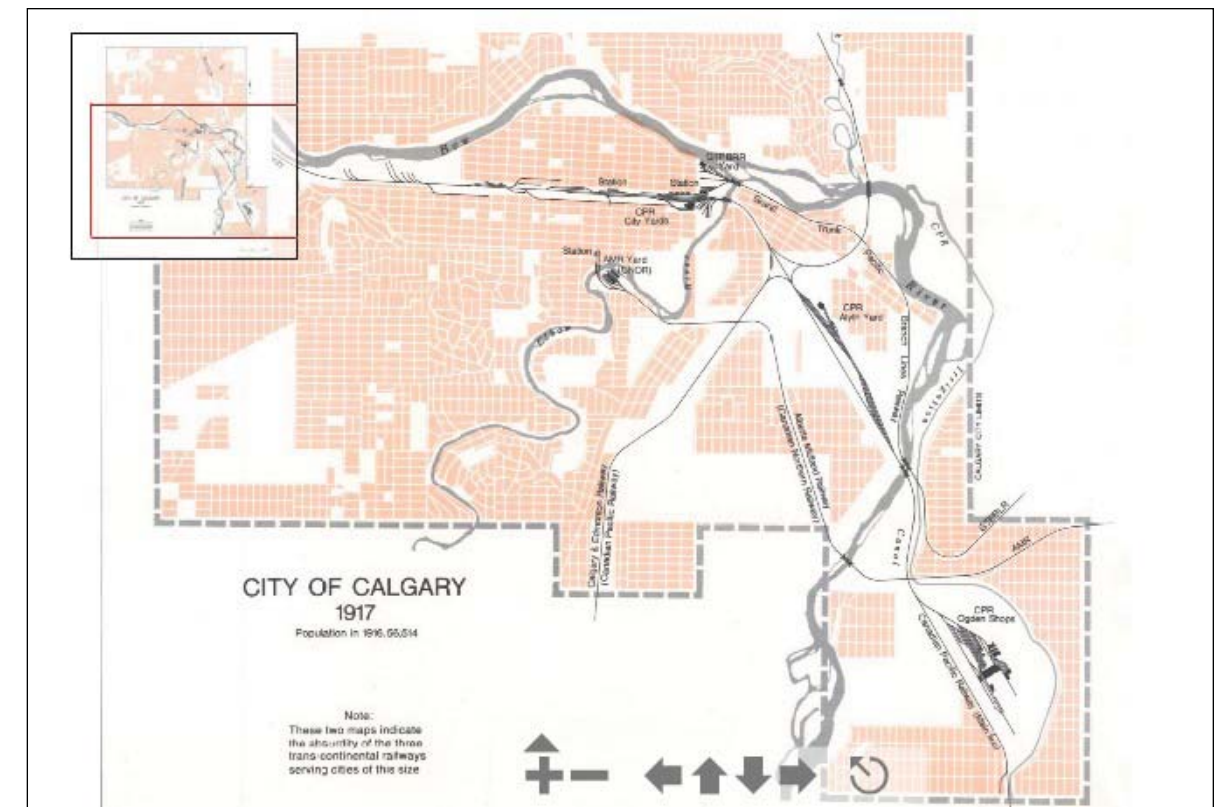
1.1 History

The greater Calgary area was likely first settled by First Nations people following the end of the Ice Age around 10,000 years ago. As recent as the late 19th century, Tsuu T'ina Nation encampments dotted the landscape of present day Calgary. Following European settlement, the City of Calgary was incorporated in 1894. Manchester is situated within the greater Alyth-Bonnybrook-Manchester industrial park of eastern Calgary. The annexation of this region began in 1903, with all of present day Manchester annexed by 1952.

In 1914, world renowned town planner, Thomas Mawson, delivered his report "The City of Calgary Past, Present, and Future: A Preliminary Scheme for Controlling the Economic Growth of the City". His vision was heavily influenced by his concern for how people live, and drew inspiration from the Garden City and City Beautiful Movements of that era. Unfortunately, due to high costs and the poor economic situation of Calgary at that time, Mawson's plan was never implemented, its vision, however, continues to inspire.

1.2 Boundaries

The Manchester North study site is approximately 165 hectares in area (1.65 km²). It is bounded on the west by McLeod Trail and to the east by Blackfoot Trail. The northern boundary is 34th Avenue SE, with the southern boundary at 50th Avenue SE. Both Light Rail Transit and Canadian Pacific Rail lines run through the study area, and 42nd Avenue SE is the only east/west corridor that runs through and beyond the site.



1917 City Limits



CPR Station in Calgary



Tsuu Tina Mount Royal



1.3 Current Context and Analysis

A moment on the ground in Manchester is characterized by dingy, harsh, and often noisy surroundings. Concrete is pervasive and unyielding, making the immenseness of Manchester all the more looming. It is a highly fragmented landscape and disorienting with any attempt to navigate through its disconnected avenues. In spite of its location within the greater Calgary area, Manchester feels isolated and under-utilized.

Yet, for all its ugliness, there is ample opportunity and potential. Bordered to the east and west by the two major thoroughfares of Blackfoot and McLeod Trails, there is a ready stream of humanity to tap into as participants to the area. The proximity to the Bow and Elbow rivers begs for green corridors and ecological connection. Although inefficient in its layout, the “wasted” spaces provide ample entry points for intervention and seeds of change. Manchester is not a depressed area in the classic sense of most redevelopment projects. The region provides important products to the city, and is an integral segment within the greater economic corridor of Calgary’s east end. In spite of the many challenges, Manchester has ample assets that would allow for a positive and exciting transformation.

Analysis Implications

Assets	Issues	Opportunities	Constraints
<u>Proximity</u> to City Centre, Bow and Elbow Rivers	<u>Fragmented</u> by infrastructure and topography	<u>‘waste’</u> spaces make possible connections, public realm, green systems	<u>Economic activities</u> of the area suggests working with what we have
Ample <u>Space</u> to accommodate new uses and activities	<u>Isolated</u> by high traffic ‘highways’. Few connections into Manchester	Existing <u>nodes</u> within manchester suggest starting points for intervention	If we rip up <u>existing infrastructure</u> we should probably have a justification for it
Relatively <u>affordable</u> compared to the City Center	<u>Harsh</u> concrete landscape, few green spaces, noisy <u>Disorienting</u> lack of landmark structures, illegible layout <u>Immense</u> structures, wide streets	Confluence of <u>transit and rails</u> hints at a potential LRT location	



Current Views Throughout Manchester North.



1.4 Planning Philosophy and Needs

Given the large area, proximity to downtown, and the potential for greater harmony in integrated use, this region provides a unique opportunity for the city of Calgary. We consider a variety of contexts in our approach to provide a design for conversion of this industrial zone into an efficient, vibrant and desirable live/work community.

Our plan for the community involves a series of specific gestures as well as more general planning to allow for phasing into the area and ensure minimal strain upon the environment. Each gesture takes into consideration the economics, transportation, culture, ecology, and sense of place for those who live, work and play in Manchester. The design also utilizes innovative concepts from around the world so as to not only bring the community of Manchester to the forefront in the city of Calgary, but to also put forth our own point of reference as a benchmark for future developments.

Vision Statement

"To transform the Manchester District from a low intensity, energy intensive, auto-dependent commercial area into a responsive and resilient mixed use district focused on localized production in the wake of a post-carbon economy. Instead of moving towards deindustrialization we are questioning the merits of an inevitable shift to professional services and instead creatively thinking about how local production can co-exist with the city."



Artisans and Industry working side by side.



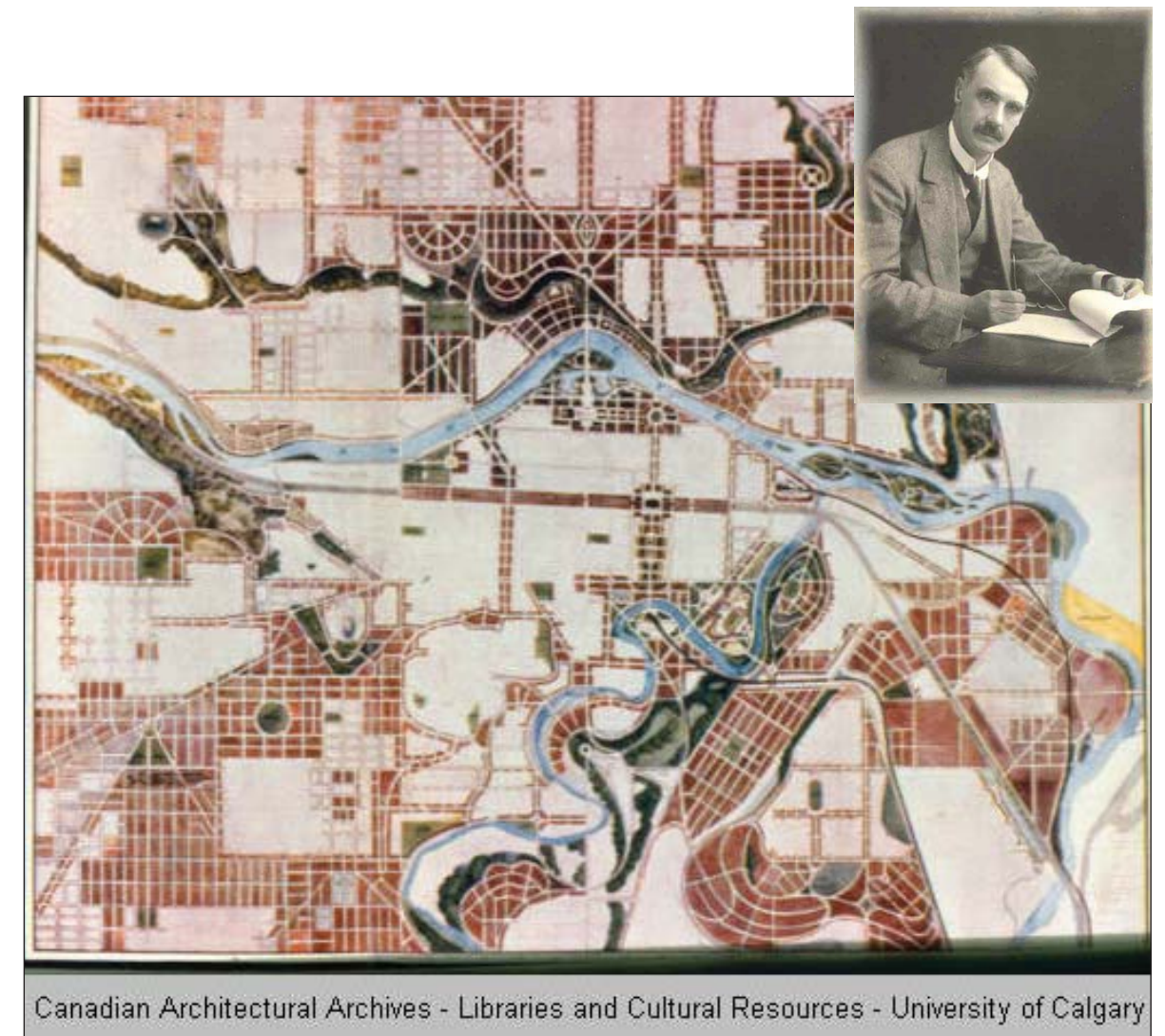
2.0 VISION

2.1 Inspiration

Mawson believed that Calgary did not have to destroy entire neighbourhoods to improve itself and rebuild into an ideal city that would provide an example to the rest of the West. With that philosophy in mind and the terms of reference provided, we consider the major themes of urban, economic, social, and environmental sustainability. We also consider more expansive themes such as economic resilience, and question a number of premises. Why must we ship in goods from all around the world? Why can't Calgary, and its industrial areas, provide for itself and the local area? How will jobs and living spaces transform in the 21st century? Manchester's assets are in industrial production, and thus production has become a key initiative of our vision, but not just production from an industrial sense. We apply it generically to dynamic socio-urban landscapes, ecological function, and transportation services. With production as a core theme, and industry as a central asset, we envision how a truly mixed-use landscape can evolve in the future.

2.2 Key Goals

- Urban sustainability - Allowing for efficient automobile travel when necessary, but emphasizing pedestrian and cycling options will help to design streetscapes around the pedestrian and allow for the creation of aesthetic, vibrant and functional public space. Providing for transportation needs throughout the area is essential towards invigorating the urban character.
- Economic sustainability - Seize upon the assets of the area, accentuate the industrial character, and promote both local production and consumption of goods. Supporting eco-industrial growth and remaining permeable to live/work, production, and commercial endeavours ensures resiliency into the future.
- Social sustainability - A mixed-use area should enhance social interactions by fostering an environment that supports demographic, lifestyle and cultural diversity.
- Environmental sustainability - Green space is an amenity that should be designed to also provide ecological function. Development should encourage and support efficient and sensitive use of natural resources, while protecting or enhancing natural systems.



Canadian Architectural Archives - Libraries and Cultural Resources - University of Calgary

Archived view of Mawsons vision for Calgary



3.0 MASTER PLAN

3.1 Overview and Elements

The Master Plan for Manchester North provides details for incorporating key concepts and achieving stated goals. The specific strategies and techniques employed are detailed below. These methods are specific applications that we envision being broadly incorporated across the entire Manchester North study area. We have organized these methods into four categories that correspond to the specific goals stated above; environment, social, economic, and urban. In addition, Manchester has been divided into districts that will highlight different strategies with different projections of use and development. These include the live/work districts of the north-west and eastern regions, Manchester Centre, centered at 42nd Avenue SE and McLeod Trail, and traditional mixed-use areas around the green features.

3.2 Revitalization

Manchester North comprises approximately 164.5 hectares and currently has about 240 buildings giving a very low UPHA of approximately 6. The Master Plan envisions a modest overall UPHA of 222, accommodating 1700 buildings and 29,000 units while providing 11 hectares of green space throughout the area. The Plan will provide for 112,000 people of which 38,000 (40%) will be residents. Based on current tax rates, the redeveloped area would generate approximately \$150 million in property taxes in addition to business taxes.

3.3 Environmental

Successful urban renewal for the modern world necessitates green design and an emphasis on environmental responsibility. As Manchester undergoes redevelopment, we encourage the use of green architecture, design, and engineering in buildings, streets, and green spaces. This includes the use of photo-voltaic cells for electric power, installing energy efficient electrical systems, planting native species of flora, designing communities that do not rely solely upon automobiles, and employing Manchester as Calgary's first water-sensitive community.

While emphasis on carbon-neutral systems has gained momentum and widespread reception, the concept of water-neutral systems is still struggling for notoriety. Due primarily to economic and population growth, the annual system demand for water has nearly doubled in the last 35 years. Water diverted from the Elbow and Bow rivers averages almost 200 billion litres per year, with average daily demand rising nearly 5% annually. As Calgary continues to grow, these levels will become unsustainable. Designing water-neutral systems is integral for long term viability. In addition, water-sensitive communities have important implications on ecosystem function that can be related directly back to human health and wellness. The centerpiece of our water-sensitive community is the Arts Node, described in detail below.



Busy Urban Environment



Natural Wetland System



3.4 Social

Our design encourages a wide range of mixed use developments and a diversity of housing options to provide availability to different age groups, income levels, and lifestyles. The bold expression of our green strip running through the entirety of the study area provides an ideal interface to develop these kinds of mixed communities, while fostering open space to provide the opportunities for recreation, social interaction, cultural expression and active lifestyles. In addition, the eco-industrial live/work districts encourage private development that supports community participation and interaction in a socio-economic system. The Arts Village provides a center of philosophical and artistic fulfillment in a distinctly ecologically holistic setting. As a whole, the clean, safe and pedestrian friendly environment creates a perception of safety and enhances sense of place and a community identity.

3.5 Urban

The vibrant urban fabric consists of healthy neighbourhoods, sense of community, and active streetscapes. These factors in turn rely directly upon people being active in the urban environment. This is most successfully accomplished by creating a safe, navigable and alluring pedestrian experience. The primary objective in our Manchester plan is to design streets that are places for people to take leisurely walks, where buildings, trees, and other natural elements provide a positive social dimension while maintaining clear boundaries from automobile traffic. The revitalization of 42nd Avenue SE into a pedestrian boulevard provides a feel for the human scale of interaction in an energetic new Manchester.

Streetscapes in Manchester North also prioritize pathways and promote cycling as a mode of transportation. Cycle friendly roadways allow for easy commute for the daily cyclist. The bike pathway network that we envision will not only follow the streets, but also permeate through the greenspace, providing pleasant biking experiences for all users, including tourists, day visitors and locals.

Finally, connecting Manchester with the greater Calgary area is essential to maintaining an animated community. The grand entrance at the Manchester Centre draws people in from the major thoroughfare of McLeod Trail. This Centre provides a staging point to experience the whole of Manchester. Linking up the incredible green spaces in Manchester with the Elbow and Bow rivers provides for a more intimate connection through naturally functioning and aesthetic corridors. The entry (and exit) points of Manchester each provide a sense of destination. Manchester is a place to BE, not just a place to pass through.



Major green belt that borders the Bluff



42nd Avenue looking towards McLeod Trail



3.6 Economic

Across Manchester our plan initiates greater flow of people, partly by providing the means with pedestrian/cycle friendly pathways as well as efficient automobile and public transportation, but also by providing destinations. Areas around Manchester Centre emphasize commercial infrastructure, and the entire southwest quadrant of the study area is composed of rich shopping opportunities. However, even within the residential mixed-use areas, commercial opportunities exist to provide inhabitants places to grab a coffee, locally produced foods, or Manchester original products that are easily accessible from their homes. This model for providing both neighbourhood and regional commercial opportunities in Manchester ensures economic resiliency by drawing in dollars from both internal and external sources.

Specific districts of particular economic interest are the live/work eco-industrial centres. Here we have designed a central distribution center to serve different nodes of industrial business. By centralizing and sharing costs of services such as storage, shipping, parking, and recycling, individual businesses save money, create a stronger network within their industrial community, and free up space for green interventions and friendlier streetscapes that soften the hard and obtrusive industrial environment.

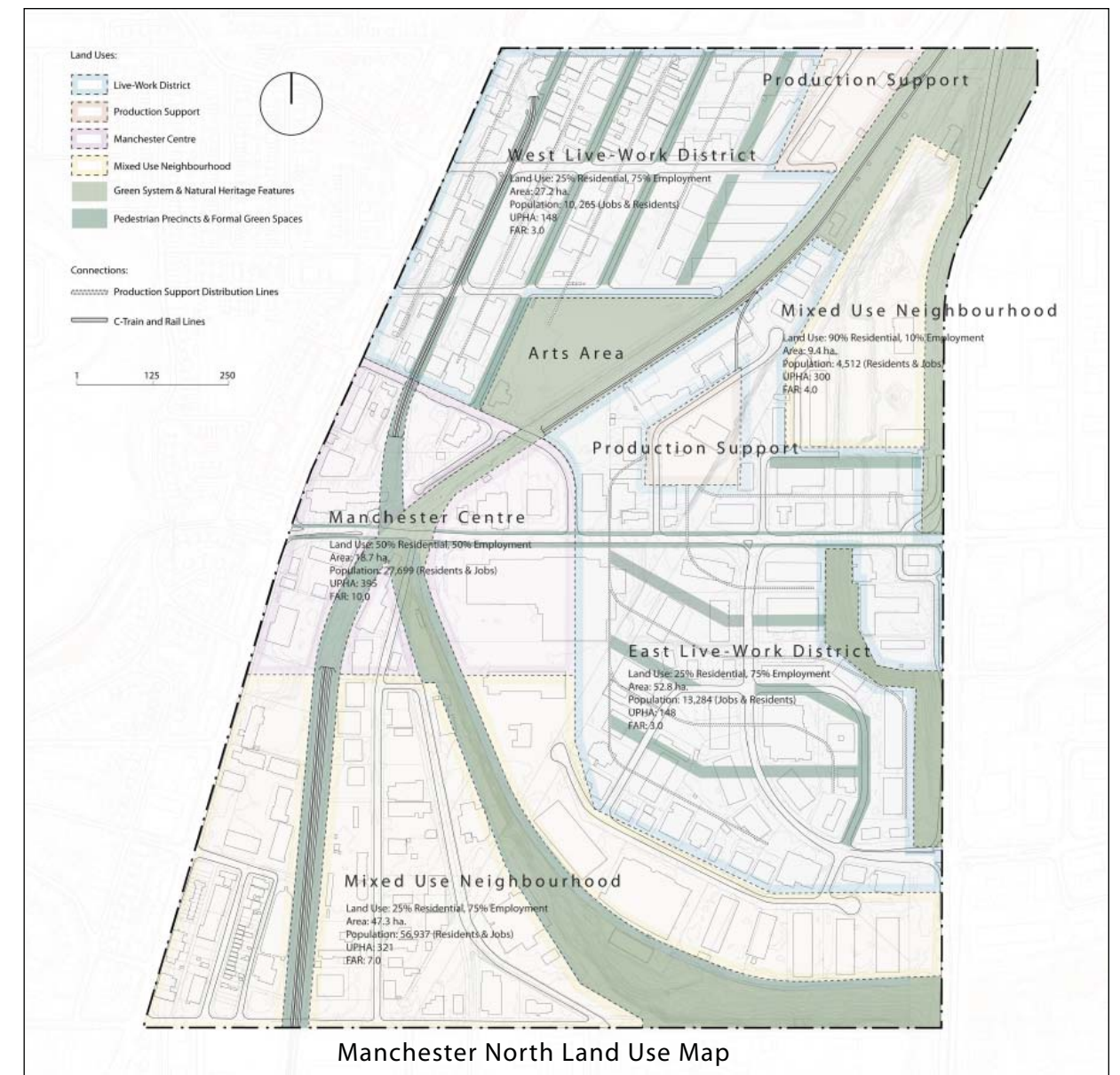
3.7 Focused Interventions

In addition to the elements described above, we also focus and provide vivid details on three main nodes. These nodes provide a degree of intent for the establishment of each node and how each serves as a catalyst of progress to Manchester North as a whole. The nodes are introduced below, and are covered in greater depth in proceeding sections.

Transportation Hub - Situated at the intersection of 42nd Avenue SE and McLeod Trail, the Manchester Centre provides an entrance and a focal point in Manchester for commercial, pedestrian, green space and transportation services.

Distribution Centre - A centralized industrial distribution centre will be organized. This centre allows for businesses to centralize and share their needs for logistical management, shipping, storage, and parking.

Arts Village - In place of what is currently the city impound lot, the Arts Village provides ecological goods and services as a major center of bio-retention, while providing a creative and inspiring venue for studio and live spaces for local and visiting artists.





4.0 MANCHESTER CENTRE

4.1 Transportation Nexus

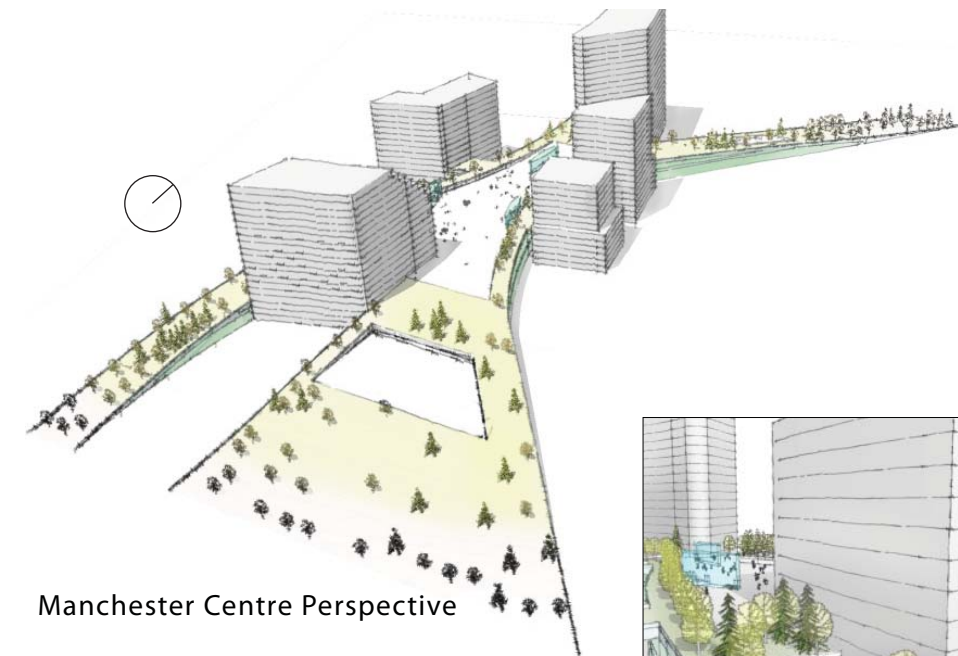
The Manchester of the future fosters greater densities of people and attracts people from throughout Calgary. The current LRT station is generic, featureless, and little more than spiritless concrete slabs. We propose creating a new station, grand in scheme, which connects not only LRT passengers to the area, but is a central hub for cyclists, pedestrians, commuter CPR lines, and automobiles. This hub not only defines the crossroads for travel through the region, but identifies an exciting neighbourhood and destination within Manchester - Manchester Centre.

4.2 The Concept

The LRT station will be moved to the corner of McLeod Trail and 42nd Avenue SE. This new station serves as an architectural centerpiece that connects the spokes of Manchester. The bold greenbelt that winds through Manchester arrives at the station and rises. On the ground, a pedestrian, cyclist or skateboarder finds themselves cresting a gentle hill, arriving at the apex 17 metres above 42nd Avenue, then an easy slope descending on the other side as the park space expands towards the Arts Node. From the street, the center spans 42nd Avenue, composing a grand entrance into Manchester. An east or west bound automobile finds itself at grade, passing underneath the glass canopy. LRT and CPR commuter lines arrive at the node underground, and passengers emerge within the structure to shop or continue their journeys. Nestled within the sinuous green arms of the Centre, 5-10 story buildings intertwine business, residential and commercial function with the green gesture of the park.

4.3 The Theme

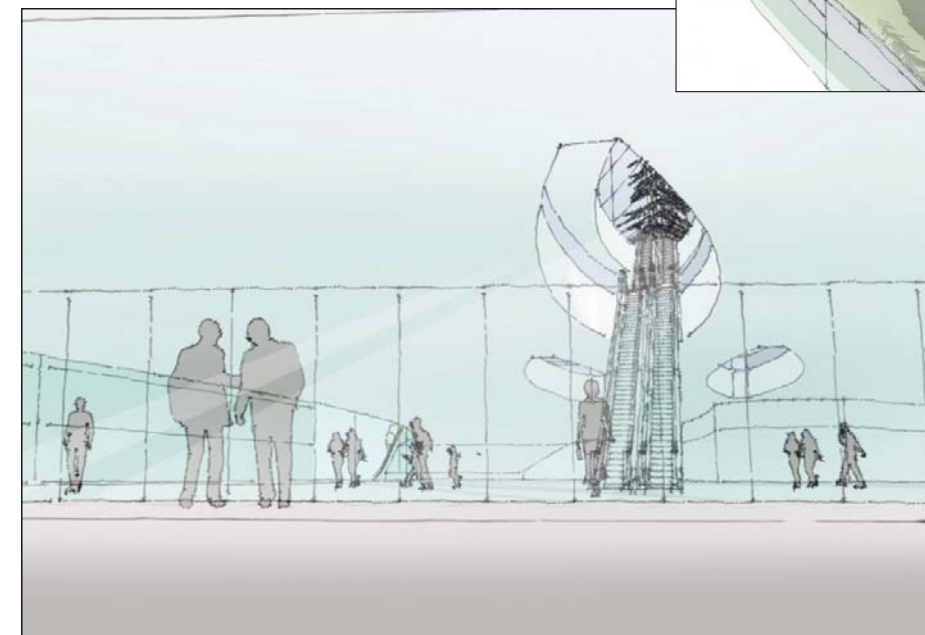
Connection and destination. These are what the Manchester Centre provides. The intervention connects green spaces, mass transport and urban adventurers. The station is a centerpiece for allowing movement to stop. All modes of transportation arrive here, connected, regardless of the purpose, means, or scale of movement. Commuters, wayfarers and wanderers disembark as pilgrims to a destination.



Manchester Centre Perspective



Various viewpoints within Manchester Centre.





5.0 PRODUCTION SUPPORT CENTRES

5.1 Centralized Distribution

Most businesses, particularly the light industrial firms within Manchester, all require storage and parking space, means to ship and distribute goods (such as trucks), as well as means to get rid of wastes; all in addition to manufacturing and work space. In Manchester's proposed eco-industrial sites, we present a more concentrated infrastructure where businesses share this logistical support.

5.2 The Concept

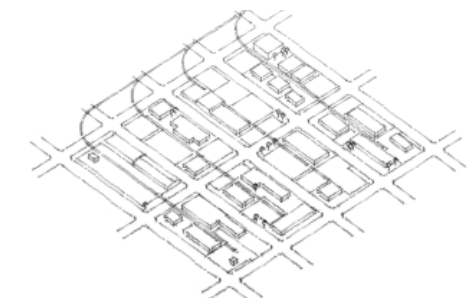
We propose a centralized production support centre that would serve individual districts within Manchester and suggest initiating the first reorganization of manufacturing infrastructure in the northwest quadrant of the study area. A universal movement system for goods would link up individual businesses, creating a neighbourhood of production. This neighbourhood would create a cooperative within the greater community. This cooperative would share in an efficient model of resource use, reducing waste and pollution and consumption of materials, energy and water, while increasing profit margins and improving environmental quality. Additionally, by centralizing and providing a common space for multiple businesses, this leaves the existing support services redundant. These redundancies can be reclaimed for other purposes, such as residential, commercial, or green space.

5.3 The Benefits

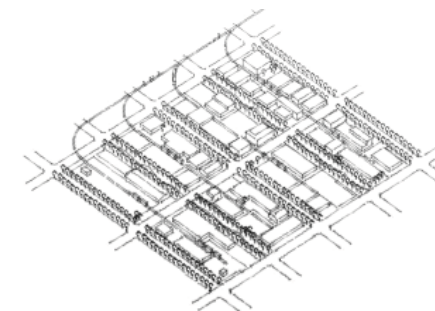
To the businesses that buy into such a centralized distribution service there is potential to lower investment costs, reduce risks, and share knowledge with surrounding partners. The change to the streetscape makes a more inviting environment that positively increases consumer and client exposure. For the community and residents, this centralized system serves to reduce noise, produce less traffic, less pollution, and allows for more aesthetic surroundings for public spaces and increased socio-urban value.



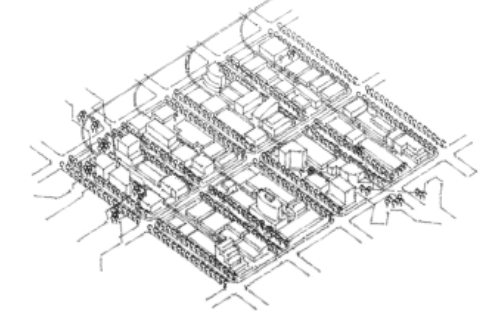
1. Current Industrial Setup



2. Addition of Goods transportation lines



3. Removal of Parking lots and Storage Areas



4. Addition of Pedestrian right of ways and more green spaces

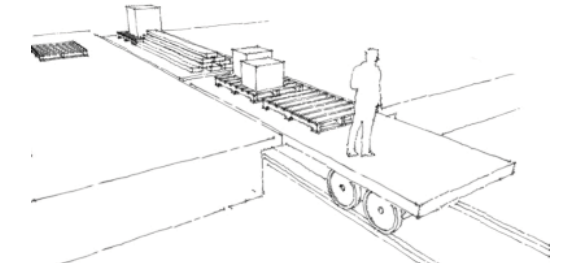
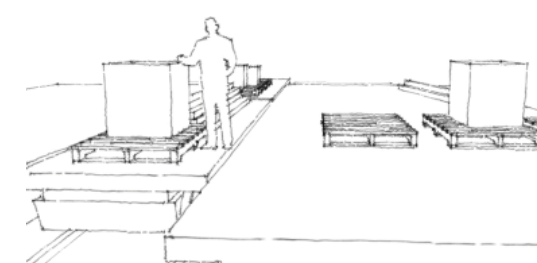


Before



After

McLoed Trail Looking West



Distribution system



6.0 ARTS NODE

6.1 Arts Village

Calgary's art scene is alive and well, but lacks a major hub of influence. For the artists themselves, areas of work and creation are typically separate from venues for display. The typical artist may work in one location, vend their trade in another, and live yet in a third scene. In most cases artists must also travel to additional locations throughout the city to find supplies and materials. In Manchester, Calgary has the opportunity to create a space and facility to elaborate an arts scene, and foster an artist-centric community with live/work/gallery space and ready access to materials.

6.2 The Concept

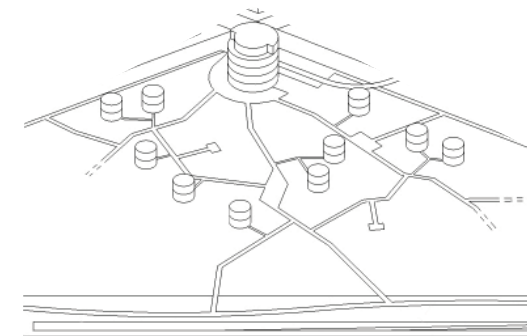
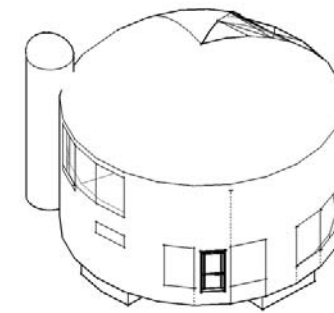
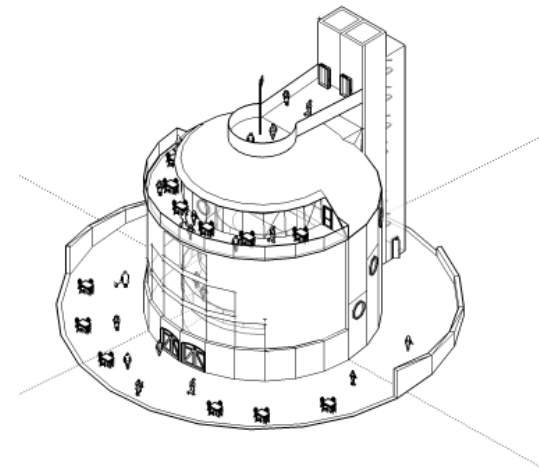
The concept is to create a main building for displays and showings that is synergistic to the artists' work area and residence. The goal then is to create something akin to the Banff Centre, to attract individuals from a global arts community with the provisions for an inspired and productive stay, long or short term, within the Arts Village.

6.3 The Theme

Calgary's heritage is rooted in western values, ranching and farming, a legacy of prosperity through nurturing the land. The Arts Silo is the most prominent structure, designed around the concept of a grain silo. It evokes the excitement of harvest, the comfort of productivity, and the wholesomeness of reaping what you've sown. Scattered about the Arts Silo, the concept envisions Artist Pods, constructions that keep with the silo theme, but on a more personal scale, providing a live/work environment for artists, while also allowing unobtrusive space for public viewing.

6.4 The Scene

This productive and organic Arts Village is complemented in its surroundings by a literally organic and ecologically functioning wetland system. This wetland provides a small refuge for wildlife, with many seasonal and migratory birds stopping through. More importantly, the wetland serves as a large scale system for bio-filtration and water purification. While not the lowest point in Manchester North, the area does provide a basin for natural water flow from more than half of the study area, including significant runoff from the McLeod Trail ridge. The balance and harmony cultivated between designed artistic beauty and natural beauty will provide a functional and dynamic setting for the Arts Village.





7.0 CONCLUDING REMARKS

7.1 The Challenge

Our plan for revitalizing Manchester calls for bold, creative and innovative interventions and planning. The Terms of Reference for the initial challenge called for provisions of change “beyond the conventional private sector development model.” In this plan, we deliver ideas that defy the monotony of conventional methods, yet retain the realism, functionality and practicality that are necessary for tangible implementation.

Specifically, our integration of green space with built form in Manchester Centre pushes the boundaries of predictable transit and pedestrian oriented mixed-use space to present a concept that enhances socio-urban relationships and enriches resident experience while providing a sense of place to all participants. Our progression of conventional green space to functional environmental gestures at the Arts Node creates an organic mix of natural and human ingenuity that share expression and demonstration. Finally, nowhere are paradigms pushed further than with the introduction of a unique eco-industrial neighbourhood built for economic resiliency and proficiency on a centralized distribution system. Elimination of the redundancies between light industry businesses opens these areas to be fresh and revitalized.

7.2 Manchester in 2040

The city of Calgary is projected to continue growing at its current rate into the future, particularly through new immigrant populations. Our revitalization strategy for Manchester provides densification options to provide jobs and residence for over 112,000 people. The concepts presented above are intended to create resplendent neighbourhoods that are bright and open, inviting and safe, ideal communities to foster a diverse demographic. In 2040, Manchester could be a bustling district, a destination for all Calgarians, and a flagship example on growing and enriching urban communities from within.





MANCHESTER

NORTH