THE CULTURAL CONFIGURATION OF INDUSTRIALISM

THESIS PAPER
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ON89-0027

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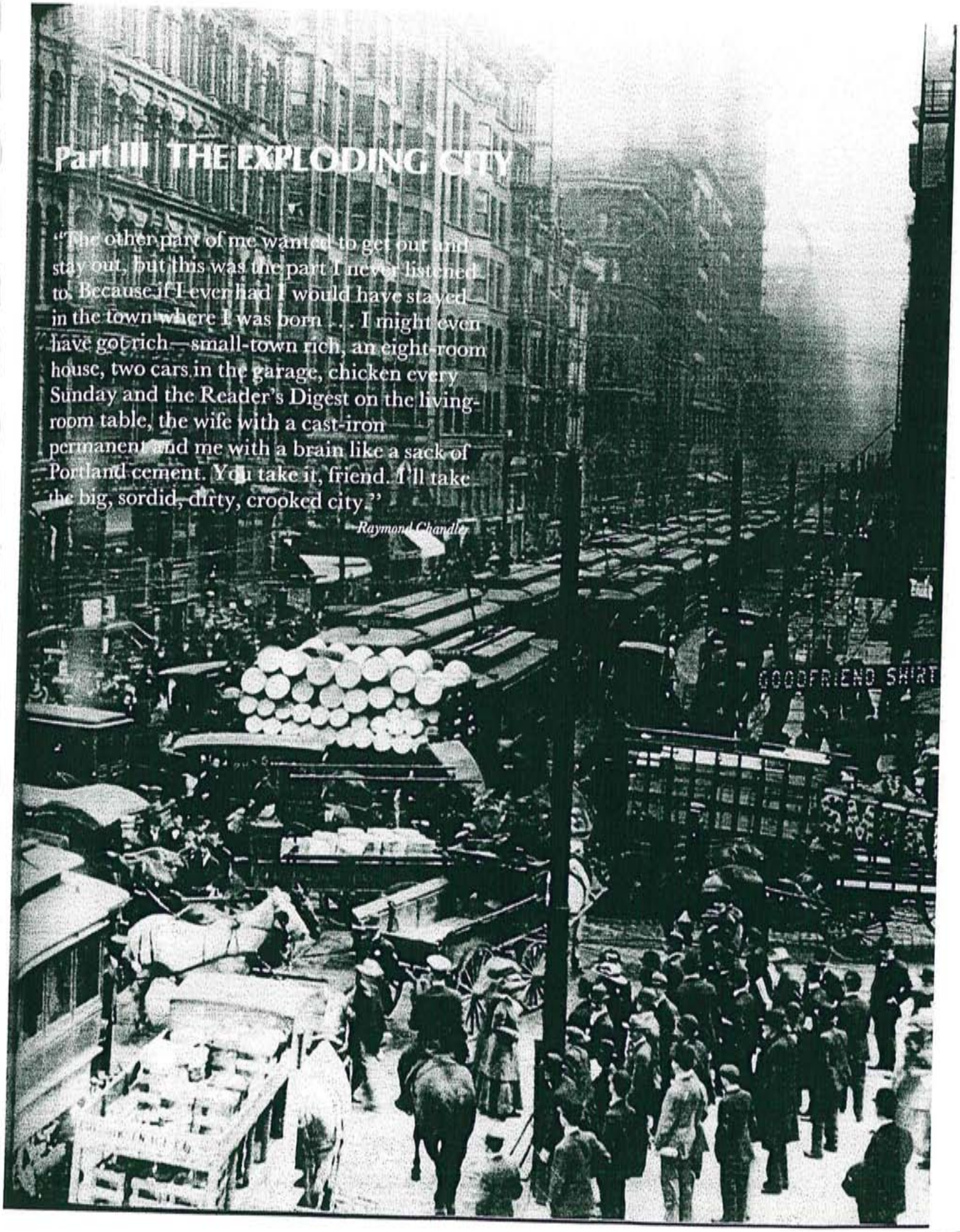

Part III | THE EXPLODING CITY

"The other part of me wanted to get out and stay out, but this was the part I never listened to. Because if I ever had I would have stayed in the town where I was born . . . I might even have got rich—small-town rich, an eight-room house, two cars in the garage, chicken every Sunday and the Reader's Digest on the living-room table, the wife with a cast-iron permanent and me with a brain like a sack of Portland cement. You take it, friend. I'll take the big, sordid, dirty, crooked city."

—Raymond Chandler

1.0 THESIS STATEMENT

The proposal for this thesis is to explore the hypothesis that industry has the ability to form part of the urban fabric. I hope to conclude that a successful urban fabric requires plurality and diversity and that industry could form part of that diversity.

1.1 INTRODUCTION

I believe that communities that have been built on industry, can build upon their past, and do not have to abandon their history. I hope to conclude that the history of a place is integral to the way in which the place redefines itself in the future.

The Hamilton waterfront has a rich history in industrial manufacturing, but in my opinion, there is something terribly wrong with the existing industrial domination. I intend to use this area of study as a vehicle to evaluate the effectiveness of integrating the industrial fabric into the existing communities, promoting industry as a vital part of the urban fabric while maintaining the memory and history of Hamilton's industrial past.

2.0 INDUSTRY WITHIN AN URBAN CONTEXT

2.1 Urban Roots of Industrial History

The first cities were not uniformly laid out, in that streets had only to accommodate pedestrian traffic, and dwellings were arranged on irregular blocks of land. Commerce, manufacturing and agriculture were conducted within these dwellings or lands. Most of these cities had dominant public areas with a few major roads. This type of city structure was to persist until the middle ages in Europe. Development of structured spaces, hierarchy, public space, and districts developed through the centuries to the renaissance.

The industrial revolution broke down the centuries old connection between the town and countryside. The uncontrolled influx of peasantry from the countryside to the urban centres became a pattern throughout England and Europe. London for instance, grew from 1 million people in 1801 to 6.5 million people in 1901. Urban Centres in America underwent similar growth with the influx of Europeans. Chicago grew from a population of 33,000 in 1833 to 2 million by 1901.

The result of this volatile growth was that most cities did not have the communal or private amenities to handle their new population, creating many slums. Dirt, pollution, along with inadequate sanitary and housing facilities, led many of the middle and high income people to leave the city for the fringe. Many of these people were merchants who had lived in the city centre, often in homes which also formed part of their business. Their vacant premises frequently became occupied by several poor families.

Amsterdam was a City developed on commerce with its connection to the harbour. The City Square was the centre of activity. The Town Hall, Exchange and Council Chambers, (Amsterdam's three principal buildings) were adjacent to the square. The Exchange was a visitors' attraction, with shops on upper floors, covered walks and an open court for merchants below. The businesses that took part in transactions within the square were extraordinarily varied. Lower interest rates in Amsterdam led to the construction of many prestigious warehouses integrated with the best homes along the canal structure. As well, some houses provided warehousing in basements and attics.

The combination of the inner harbour being partially filled to provide space for a railway station, thereby eliminating the close contact between the harbour and the City in the 19th century, the deterioration of sanitary conditions, inadequate housing and pollution, forced most merchants in Amsterdam to the outskirts.

In the 19th century large areas of worker housing developed to serve both industry and transport in most cities. Amsterdam South for example, underwent a regionally planned expansion, not by satellite towns but by controlled urban extension. The Amsterdam South Master plan was conceived between 1902-1920 by H.P. Berlage, to provide the extensive housing required on a neighbourhood scale.

In England the cottage industry that had sustained itself in England was decimated with the introduction of mass industrialization into the urban areas. England was the first to undergo the rapid industrial growth, and influx of population, allowing many countries especially Germany to learn from their experiences.

The reactions from the Arts and Crafts movement led by William Morris to industry and mass manufacturing was very strong in England. Many groups throughout Europe began looking towards socialism to alleviate housing problems and the exploitation of the factory workers. Several new visions for industrial towns were pursued, many beginning in England.

As early as 1839 merchants in Manchester, England rapidly began converting homes into mercantile establishments, living close to or on top of their warehouses. Streets resulted in being lined with attractive houses, dwellings with attached or detached warehouses, and houses converted into warehouses. Many cities within England became increasingly dirty, smelly and noisy. As conditions deteriorated, the workers that depended on industries were the majority of those remaining.

It was only after 1870 that Berlin initiated a process of rapid industrialization, thereby learning from other city centres. In England the large-scale manufacture through family run business had run into crisis, where Germany alternatively depended on conserving the system of work done in the home. The Cottage industry continued the use of the pedal loom instead of machine weaving, thereby creating a proliferation of poorly paid small family businesses. These families were provided small garden plots for self subsistence. The large scale mechanized industry worked for the domestic market, while the family manufacturers were producing for export prices that were highly competitive on the international market. Low salaries were therefore a function of economic policy, but so was ownership of their house and garden plot, meaning these families were committed to their home and work. Hermann Muthesius, through the Werkbund would later work to revise the thinking of German Industrial Manufacturing.

In Berlin between 1850 and 1918, tenements proliferated to support the worker housing. They developed as a series of courtyards running back from the street frontage. One complex usually consisted of 3 or 4 courtyards leading into each other, a greater or lesser proportion of which was occupied by workshops or even small factories.

The frontages were endless vistas of six storey tenements, either side of wide streets, behind them enclosed courtyards were energized and alive with people and machinery. The street frontages were often elaborately decorated, while within the courtyards the facades were generally simple, although a successful business sometimes might install a show facade of coloured tiles.

The courtyard system had obvious and serious drawbacks, but it also had a powerful character of its own. The innumerable small workshops that resulted from it were conveniently close to where people lived and provided a back up to the big factories that gave the Berlin industrial economy great resilience and flexibility. Most cities built their tenements on some variant of a courtyard plan.

The strength or values of the communities within the tenement housing is often overshadowed by the negative impacts of the industrial revolution. The social network within these communities was quite remarkable in the way in which these collective environments worked together as an interdependent community. Most workers were also able to lunch at home because of their proximity to the workplace.

Historically squatter settlements, small workplaces, and crudely fashioned residential shelters have grown up around these industrial zones. Today, one third of Mexico City is housed in this manner, that is, homes that are unsanitary, makeshift and crowded. These homes are deprived of the simplest of public amenities and they seem to be symbolic of despair and failure. Although upon closer inspection, there is are indications that the inhabitants are themselves solving their own problems, and typically they are steadily improving their environment, as their occupation continues.

In France the rich and middle class were intrigued with the cult of the working class. They sought out the areas where the poor and artists gathered, recognizing the richness of the community. Wealthy people would dress down in workers clothing, enjoying the thrill of going to cheap cafes and dance halls. Artists began to create their own mixture of studios, tenements, workshops, dance halls, and cabarets. These places were frequented by people of all classes and countries.

Many visitors see these cities as immense impersonal machines, with no knowledge of, or ignorant of the complexities and interrelationships which lay behind them. In contrast, there are those who instinctively delight in the great cities, seeking their energy and inspiration. **"It was so immense, it comprehended the whole of human life. The man who is tired of London is tired of life."** [1]

By encouraging the diverse uses within our environment, including industry, it allows us the experience and drama that comes with the many varieties of life that are a part of our cities. Today, many communities have zones of heavy industry, storage and transportation that occupy large blocks of land on the urban fringe. Often these lands are harsh and busy during the day and bleak and empty at night. Many of these lands occur on urban waterfronts and are undergoing transformation. There are many lessons to be learned through history. We must ensure we discover the positive as well as understand the roots of the negative situations, to ensure we do not eliminate opportunities.

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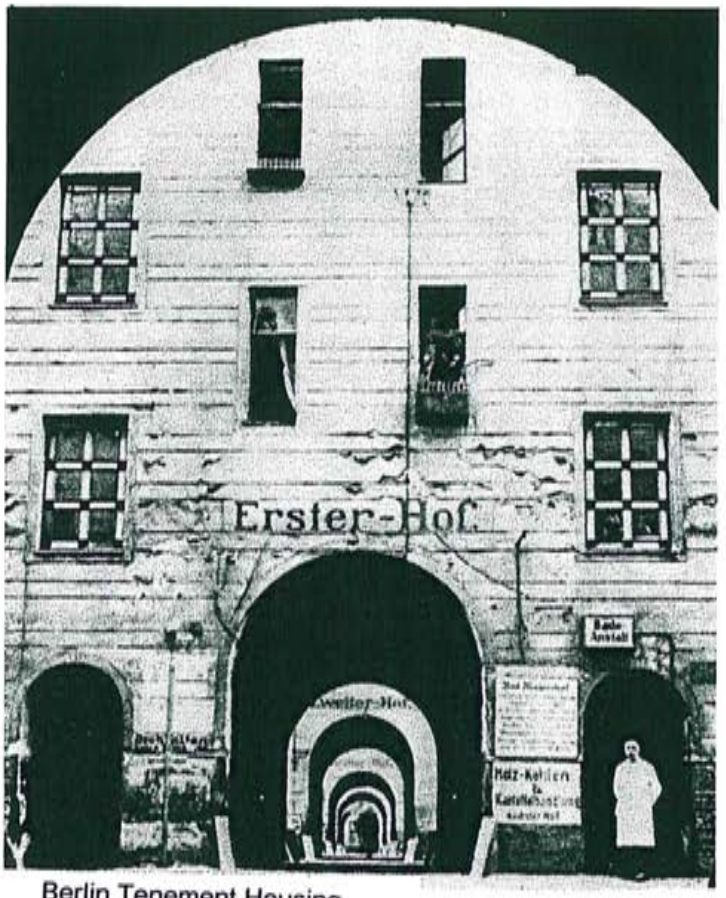
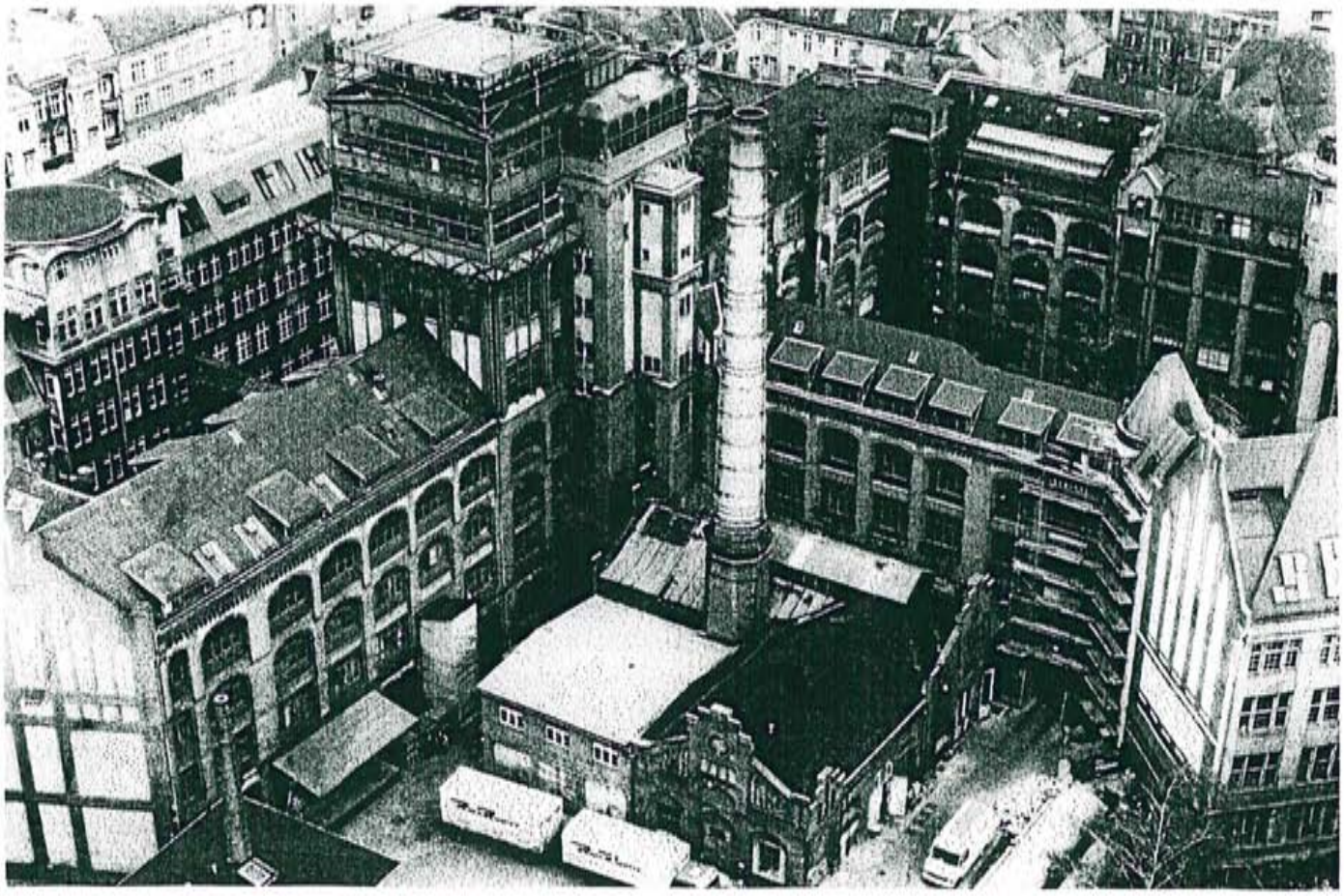
[1]Mark Girouard, Cities & People, A Social and Architectural History

19th Century Workers Housing,
Gatliff Building, London



Berlin Tenement Housing

The Berlin Courtyard



2.2 *Industrial Visions*

The influx of the industrial revolution led to many new visions throughout the 19th century. Many of these new visions were efforts on behalf of the industrialists to take care of their own employees, believing an employee with a positive environment would be a more productive and dependable worker. Many of these new visions were also created through theorists that were concerned about the future of capitalism, the exploitation of the worker, and the new urban poor.

Zoning in many of these new visions, was a reaction to the industrial revolution. Ebenezer Howard's Garden City Concept, in 1988, would lead to precedents for New Suburban Development.

One of the most important 19th century contributors to planning ideas that are still compelling today is Patrick Geddes. Geddes was born in 1854, and educated as a botanist. His concern over the British living conditions led him to Edinburgh's filthiest slum tenements. His pragmatic approach was to use renovation as a way of helping the inhabitants see how they could improve their own living quarters. He appreciated the individual and collective human environment. Geddes comprehended the intertwine of the natural and manufactured, and that improving cities meant understanding them and planning for the reality rather than substituting another urban form. [2]

Industrialists planned many communities, although some of the anti-urban ideology behind many industrial towns was not as much utopian but authoritarian and political.

Bournville, near Birmingham England, was built in 1879 by George and Richard Cadbury. As devout Quakers they had a genuine enthusiasm for bettering the conditions for the working class. It was intended that the Cadbury workers would comprise a minority of its population and that its benefits would reach as widely as possible.

Port Sunlight in Liverpool by Lever Brothers was an investment in their own commercial future and was decidedly for their own workers rather than for outsiders.

Saltaire, four miles from Bradford, England, built by Sir Titus Salte between 1850-1863 was developed on the premise that a good industrial community could resemble a traditional village, with the added advantage of more adequate services. The Town was laid out by Architects Lockwood and Mawson, with a neo-renaissance architecture to reflect a formal dignity. The town of 4400 inhabitants, incorporated a hospital, clubs, schools, parks and infirmaries. The houses were sited on a grid of streets with direct access to the railroad.

Pullman City, developed by George Pullman, near Chicago in 1880, provided housing which the workers would lease back at reasonable rates. Also incorporated in the City were stores, housing, a presbyterian church, schools, theatre, library, playground and parks all withing close proximity to the Pullman factory owned by Pullman. The paternalistic and authoritarian spirit was often dominant in many of these industrial planned towns.

Many of the visions for new towns were inspired by Charles Fourier's radical criticism of industrialized production and social order. Fourier developed writings on "Phalansteries", in which small colonies of about 1800 people formed an ideal community, living on common property and operating as a communal town. The community being predominately agricultural, supplemented by industry.

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[2]Gerald Hodge, Planning Canadian Communities

Cite Industrial, by Architect Tony Garnier 1901-1917 for 35,000 people, was based on a social structure with no private property, church, law courts or police stations, but stressing health and sport. The typology of building type was comprehensive, all concrete with no cornices, typically two storey, many being planned around courtyards with strict standards for the provision of light ventilation and green space. There was segregated zoning and hierarchy of building type, and all undeveloped land was public parkland. Lyons was one of the most progressive industrial cities, Garnier believed the future of the city would be based on industry.

2.3 Celebrating the Architecture of Industry

In Germany, there was a concern that without an inexpensive source of raw materials or a ready source outlet for inexpensive goods manufactures would be limited in their involvement of the new industrial economies. The belief was that they could only compete for a share of the world market through the production of exceptionally high quality goods.

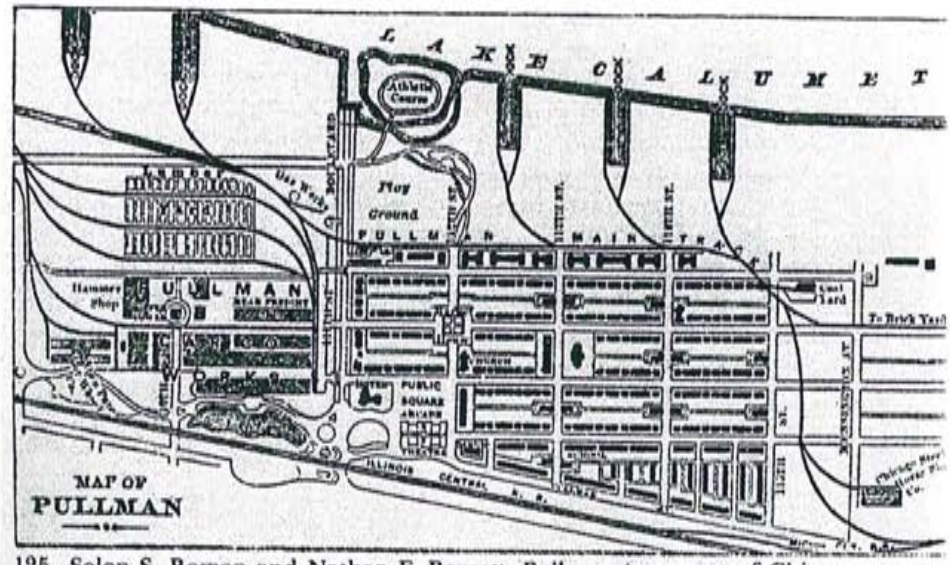
Hermann Muthesius was one of the most vocal proponents of this belief. He travelled to England to study their arts and craft, to emulate and upgrade the quality of the national product design. In 1907 he established the Deutscher Werkbund to forge closer links between German industry and the artists. He saw this as more than a commercial matter, but one to instill pride in German spirit, through industry. Muthesius believed he could raise the national morale through the impact of well designed objects in the market place, home and work place.

Muthesius believed that the quality required for industrial machine production, could only be achieved through artistically cultivated people. The Werkbund dedicated themselves to the betterment of craft education, leading eventually to the creation of the Bauhaus.

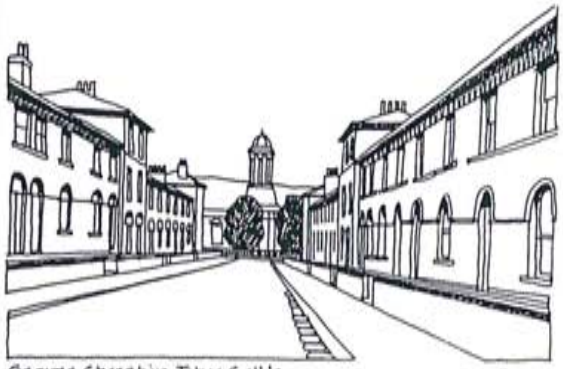
Different architects had different interpretations for industrial architecture, though all were looking for the poetry and genuine cultural potential of industry. Peter Berhens buildings for the AEG Turbine Factory as a re-interpretation of classicism, Expressionism was explored by Bruno Taut , and a more rationalist approach by Walter Gropius.

All over Europe and America, architects were using the industrial buildings as a means not only of accomplishing the functions of the modern world, but symbolizing that world as well.

Today with the refocus on our cities and the impacts of suburban sprawl, we are again looking to Industrial buildings and their role within the urban fabric. Architects again are celebrating the industrial building.



125. Solon S. Beman and Nathan F. Barrett, Pullman (now part of Chicago), Illinois, 1879–80 to 1895.

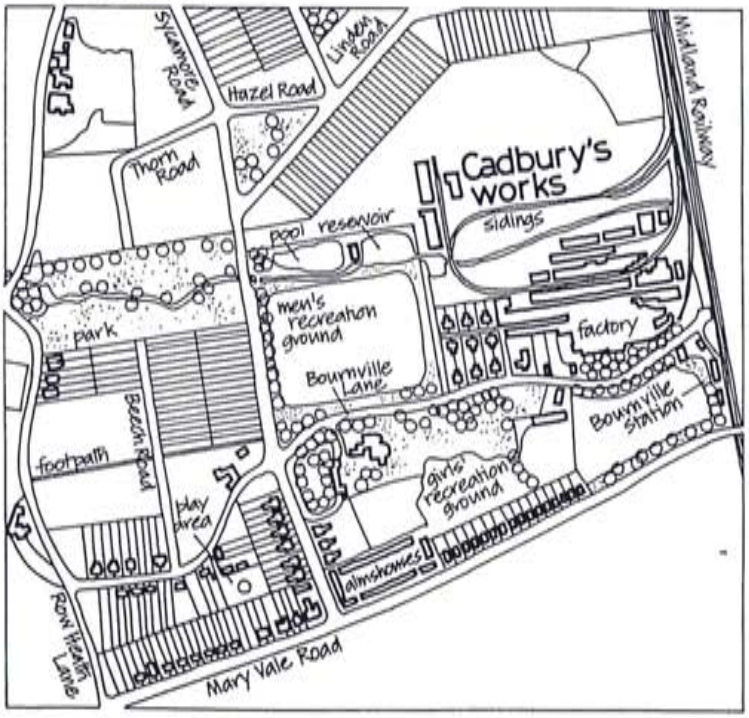


George Street in Titus Salt's **Saltaire**, centred on Lockwood and Mawson's Congregational church – a perpetual call to sobriety

Well-built Tudor-style houses in Lever's **Port Sunlight**, part of the wide variety of architectural styles available

George Gadd's original group of cottages (1879) at Cadbury's **Bournville**, located next to the factory building in Bournville Lane

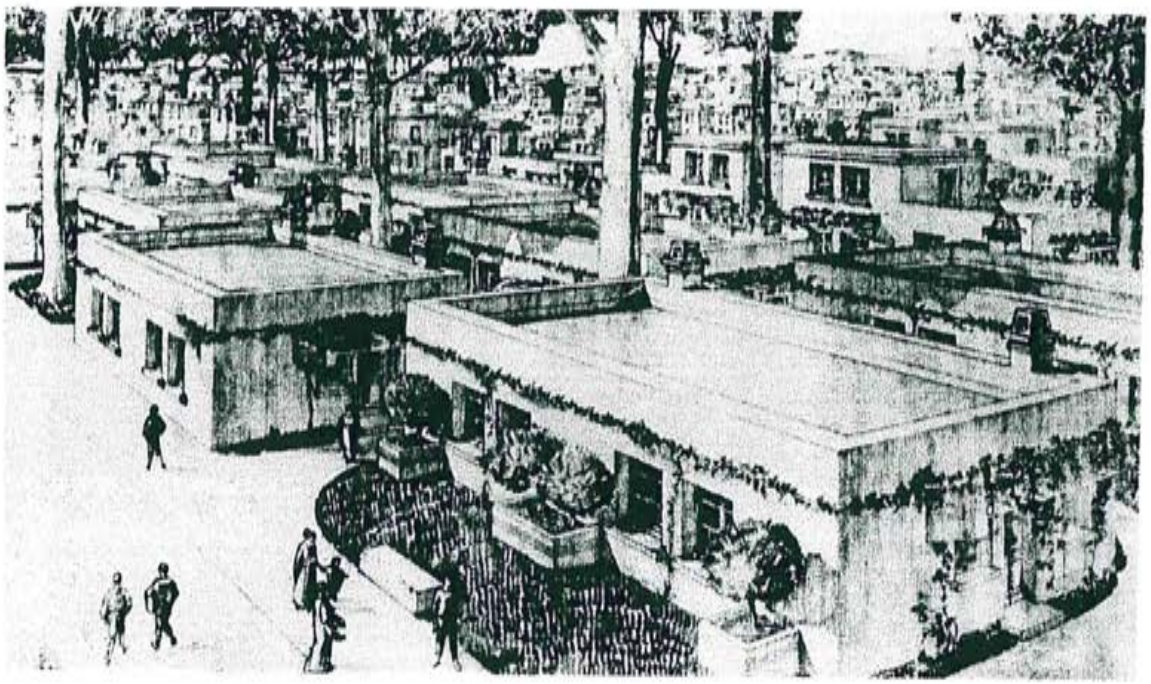
Unlike Port Sunlight, Bournville had an unpretentious, informal layout, with a number of humane features which have become axiomatic in modern town planning



CITY OF PULLMAN

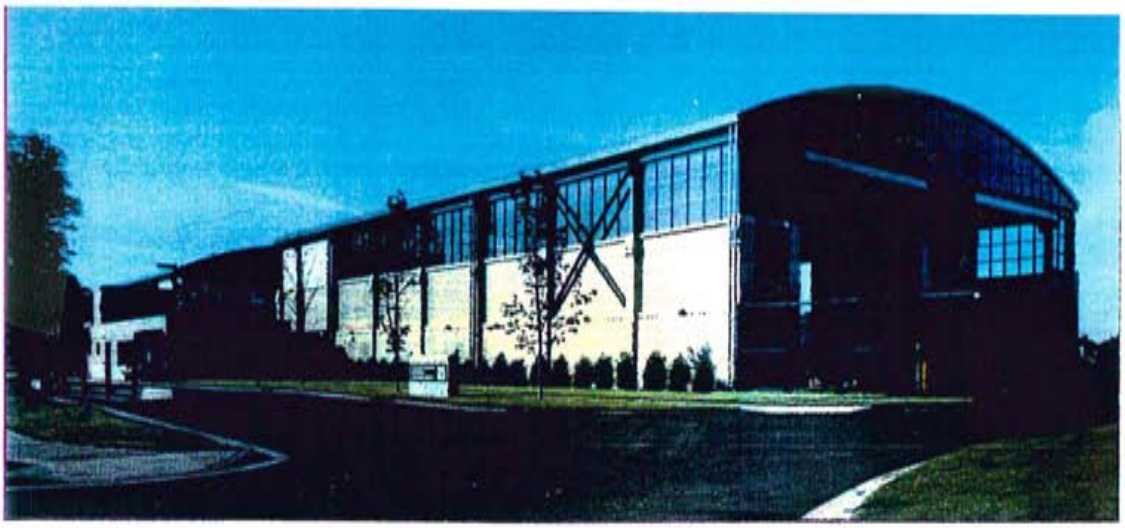
Pullman was a firm believer in the civilizing effect of beauty. The entire complex was designed and planned by Landscape Architect Nathen Barret and Architect Solon Berman. The success of this town, with the relationship between industry and the community is often overshadowed by the riot of the people, reacting to the patronizing political system of the town.

AMSTERDAM SOUTH MASTER PLAN 1915 H.P. BERLAGE
Louis Mumford regarded this as a classic example of organic planning, a magnificent application of economical and social opportunities. Wide boulevards allowing garden strips and trees. Berlage believed dwellings and the Street should be designed as a whole block dwellings being most conducive to this architectural unity.

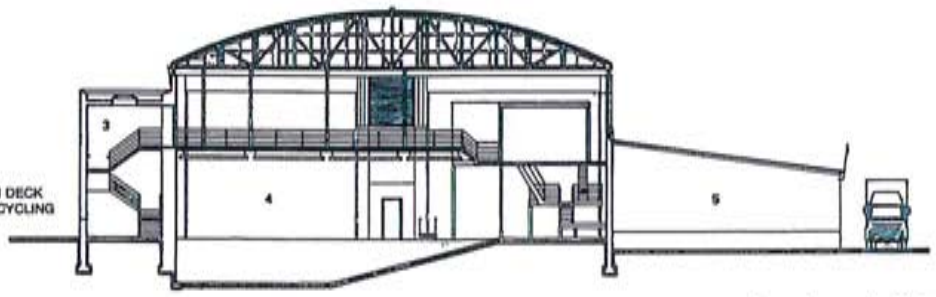


CITE INDUSTRIELLE TONY GARNIER 1904-17
Garnier included the old medieval town within the confines of his centre, recognizing the local cultural importance as a foundation of new building.

A.E.G. TURBINE FACTORY, BERLIN 1909, PETER BEHRENS
This building was constructed to celebrate the architecture of industry, as a temple to industrial power.



RECYCLING FACILITY SEEN FROM STREET



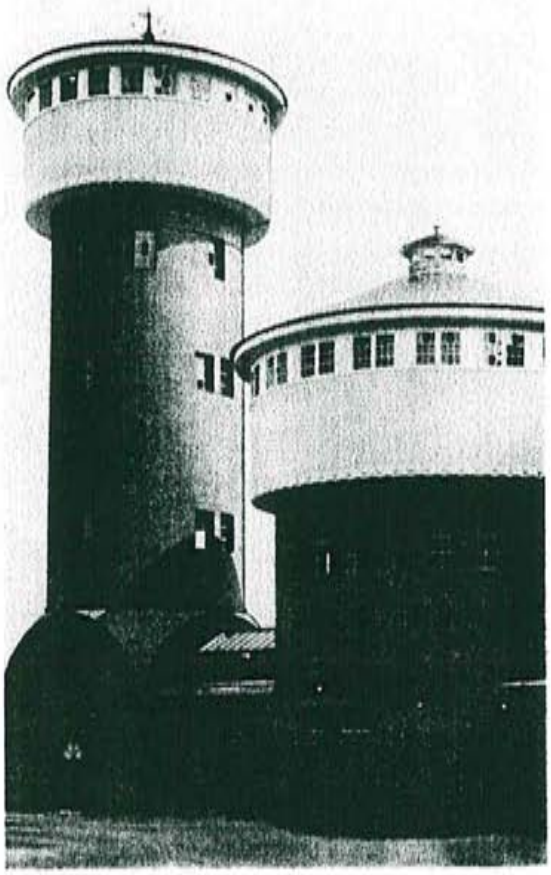
1 TRUCK SCALE
2 ADMINISTRATION
3 STAIR TO OBSERVATION DECK
4 BOTTLES AND CANS RECYCLING
5 MATERIAL STORAGE
6 PAPER BALING
7 PAPER LOADING

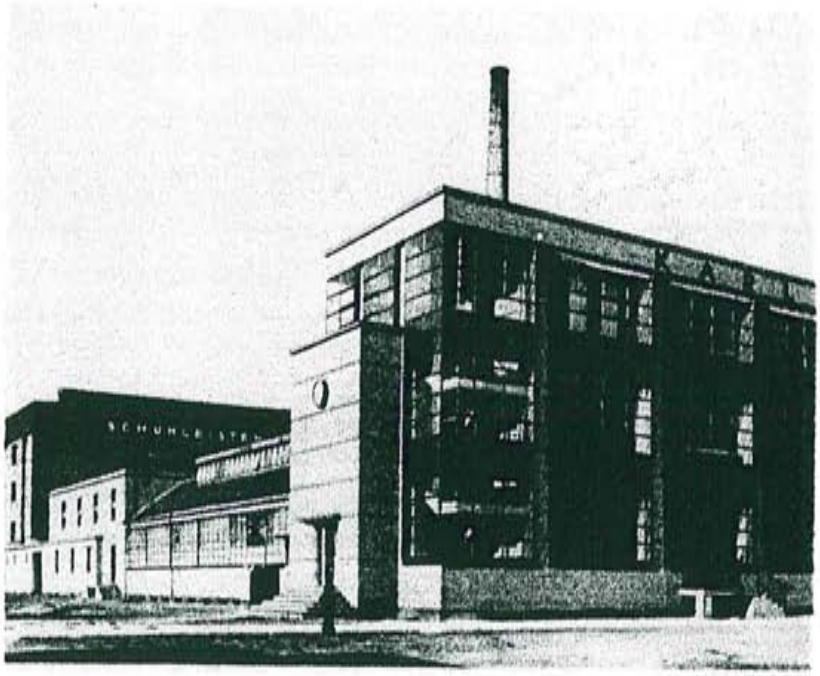
SECTION AA

20'/6m

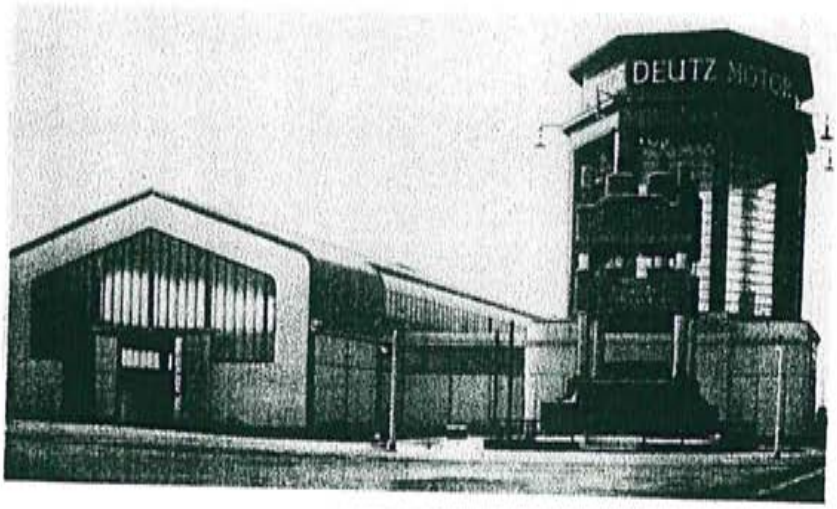
RECYCLING FACILITY, SPRINGFIELD MASSACHUSETTS, MARY WOLFE
Wolfe uses traditional references to give the industrial building a civic presence.
The facility is surrounded by an aging industrial district and residential neighbourhood.

SHOELAST FACTORY, ALFRED 1911, WALTER GROPIUS, AND ADOLF MEYER





GASWORKS BUILDING, FRANKFURT 1911, PETER BEHRENS,
Architects were celebrating the utility buildings, as monuments of new technologies in engineering for hydro, sanitation, gas and water supply.



WERKBUND PAVILION, COLOGNE, 1914, WALTER GROPIUS

2.4 The New Industry

Since the industrial revolution, there have been different phases and approaches to industrial architecture. The early modernists saw the new industry as a way to express their new modern vison and enchantment with the technological age. Countries used the industrial image as a source of pride and employment. Since the depression there has not been much excitement or interest in industrial building. It appears that this may be changing. Architects are becoming more involved in industrial building as young entrepreneurs are looking to portray an image and existing corporations are reassessing future visions.

Retaining and developing skilled workers is becoming crucial to the success of companies, meaning that factories no longer can be seen as enclosures for machines. Factories today must be places for people to be motivated and innovative. With the reduction of white collar and blue collar employees, parking lots are being removed up to make way for trees, outdoor gathering and recreational spaces. Factories are being recreated as cities of with a small population. There is a need to re-humanize work, focussing on our creative skills, and providing employees with a sense of worth.

The expectations of and from employees are also changing. Employees are being treated as business partners with greater expectations on flexibility, training and availability. Training facilities in factories have become central features in keeping current with changing technology. Companies need to encourage employee interest in their companies. This is happening through actions such as employee ownership plans and participation in decisions.

Old factories are being rediscovered as ideal environments in which to start new companies and partnerships. There are currently over 500 incubator firms in the United States where young entrepreneurial firms offer a range of custom services and products. Firms that are succeeding are shifting from high volume to high values. Where mass production of commodities once reigned, innovation and customization are now being seen as the way to profitability, using employees as collaborators.

2.5 Re-urbanizing Industrial Building

Many Federal, regional and municipal transportation policies still encourage the building of major highways into the suburbs rather than public transportation that would link the inner city to outlying areas.

Some cities have taken the initiative to take control of their own urban decay. Detroit's new Mayor, Dennis Archer, is making industrial development a top priority. Three of the major automakers have committed to projects that call for upgrading the city's o
lder manufacturing plants.

Alternatively, The City of Phoenix, Arizona is encouraging urban infil though tax breaks, imposing moratoriums on re-zoning land on its outskirts, and levying higher hook-up fees for utilities in new suburban developments.

In the development of the Clinton Community Master Plan, New York, citizen groups were instrumental in introducing an alternate vision to the City's initial vision for an urban renewal scheme. The initial proposal involved large scale demolition with no allowances for industrial or commercial uses.

The architects of the Clinton Community established a system that linked public spaces in addition to a new central square for the entire neighbourhood. All existing residential buildings were retained and integrated with new construction. All existing commercial and manufacturing structures were preserved

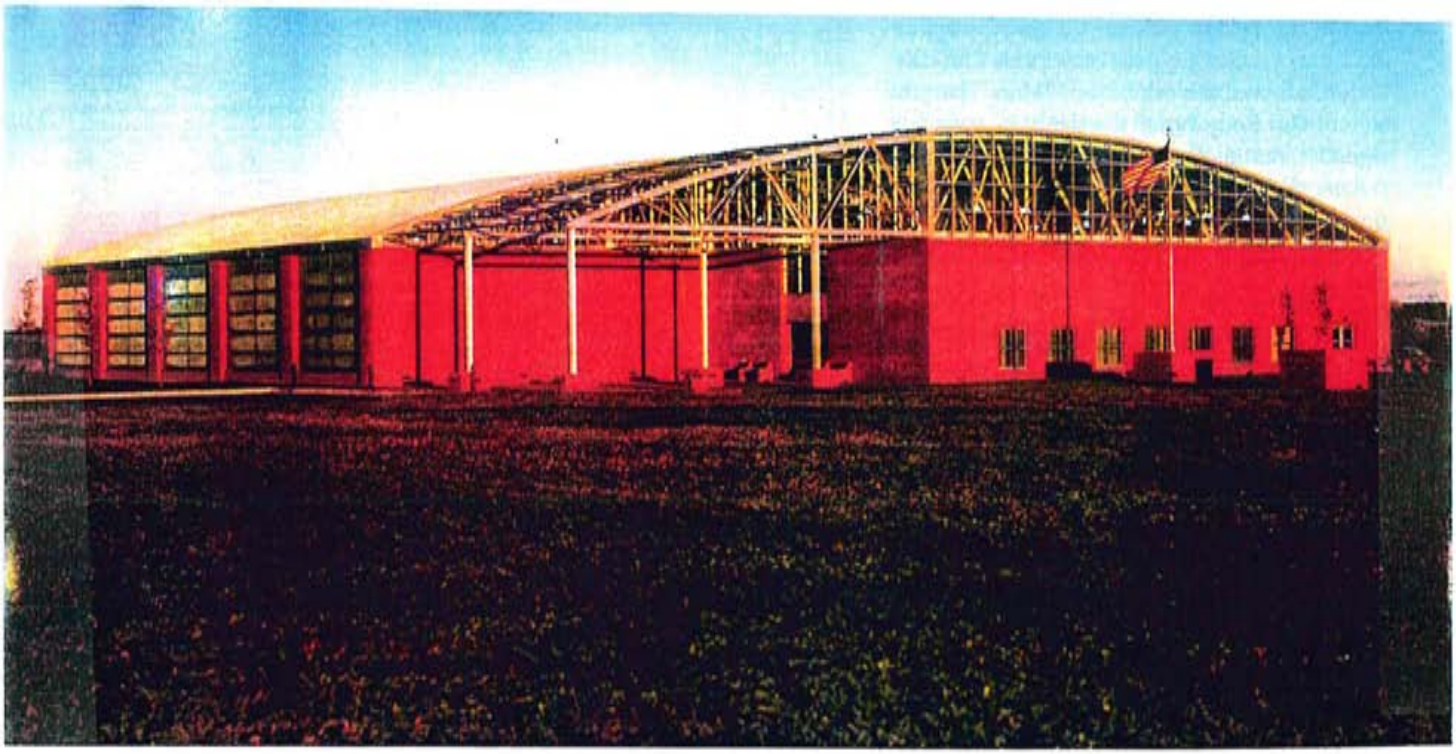
Open spaces required from each building lot were assembled to create the main public space, Clinton Market Square, which comprises mixed use buildings intended primarily for light manufacturing and existing services, with artisan lofts on the upper floors. The square incorporates diverse uses and needs, allowing for loading docks and loading during the day and a community gathering place in the evening.

The example of the intensity of the Berlin Courtyard systems, is re-interpreted in the new Clinton redevelopment in New York. Many of the old European cities' history evolved by a combination of live/work buildings with warehousing and residences co-existing.

Live/Work buildings are becoming the way of the future for many. With the advancement of technology and communication, buildings are being created celebrating the beauty of rugged materials. For instance, Richard Stacy has designed a slender structure that provides living and work spaces for two artists on a narrow lot in San Francisco's Gritty industrial district.

There have been compelling community structures built around industry, and the relationships between industry had many positive, as well as negative elements in providing community life. The noise, dirt and pollution associated with industry was poor, however, the community social fabric was rich.

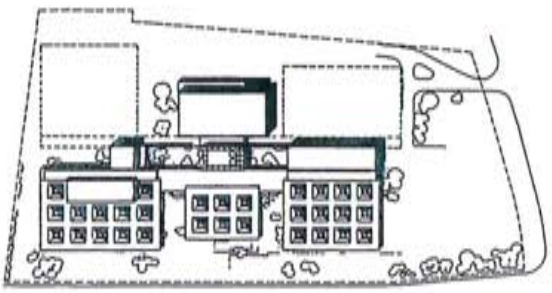
Factories for the Future



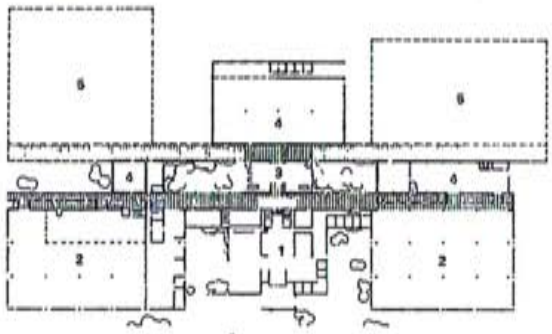
TREBOR CANDY FACTORY, COLCHESTER, ESSEX, ENGLAND

This building works to break down the scale through the creation pavilion buildings. A strong emphasis was placed on the integration of landscape and gardens. A new approach to the industrial workplace. The factory is designed to be sympathetic to the residential building surrounding the facility.

TREBOR FACTORY PRODUCTION PAVILIONS; POWER PLANT AND WAREHOUSE IN BACKGROUND

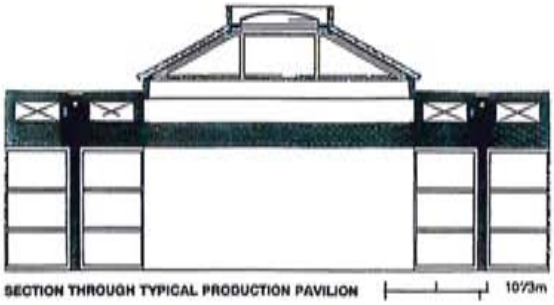


SITE PLAN N 200'/60m

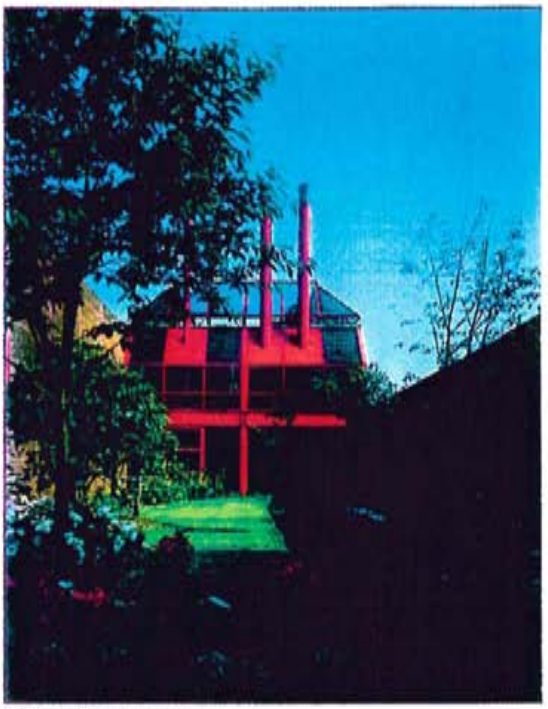


FLOOR PLAN N 100'/30m

1 ADMINISTRATION/CAFETERIA
2 PRODUCTION PAVILIONS
3 POWER PLANT
4 SHED STRUCTURES
5 FUTURE PRODUCTION

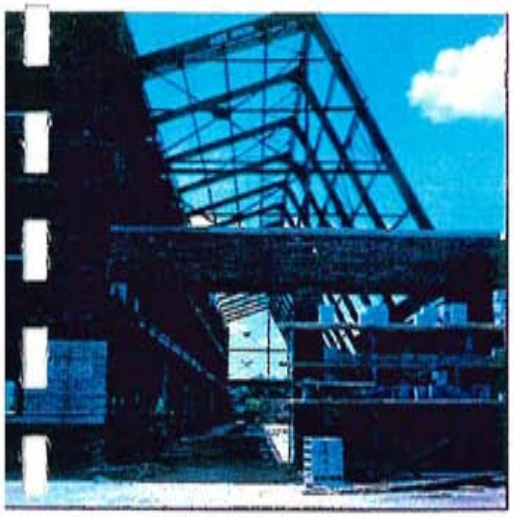


SECTION THROUGH TYPICAL PRODUCTION PAVILION 10'/3m



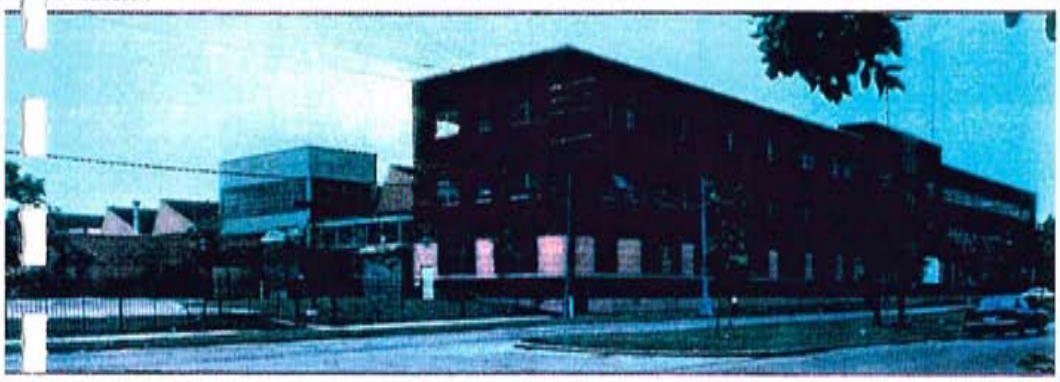
POWER PLANT AND GARDEN

INTERIOR OF TYPICAL PRODUCTION PAVILION

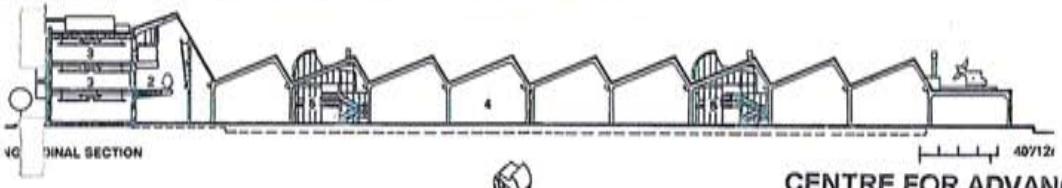


NTER FOR ADVANCED TECHNOLOGIES, NEW SAWTOOTH ROOF ADJACENT TO IGI[illegible] OFFICE BLOCK

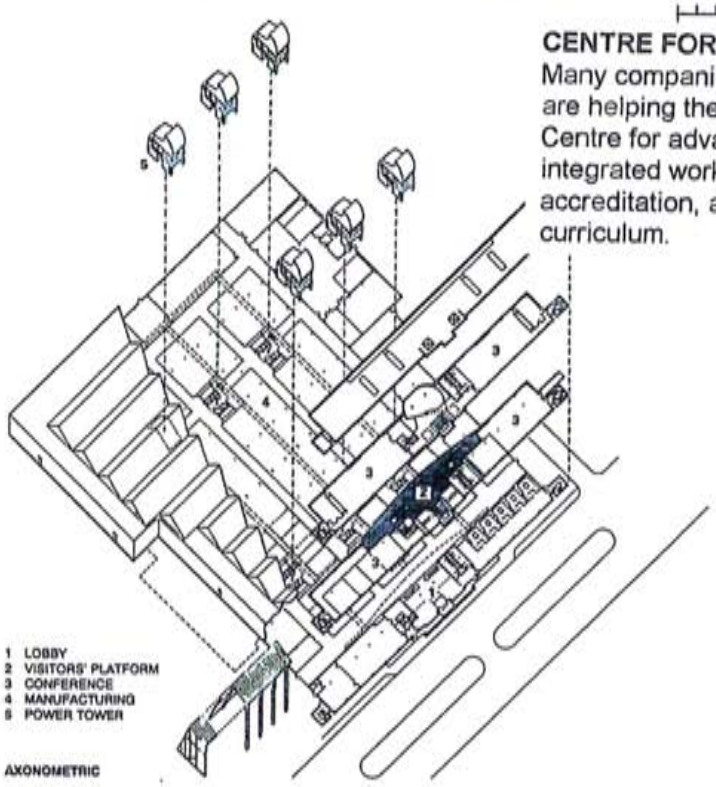
FACTORY/ENGINEERING SCHOOL REHABILITATION IN PROGRESS



TERIOR VIEW; ORIGINAL OFFICE BLOCK IN FOREGROUND; FACTORY/ENGINEERING SCHOOL BEYOND



NG[illegible]DINAL SECTION



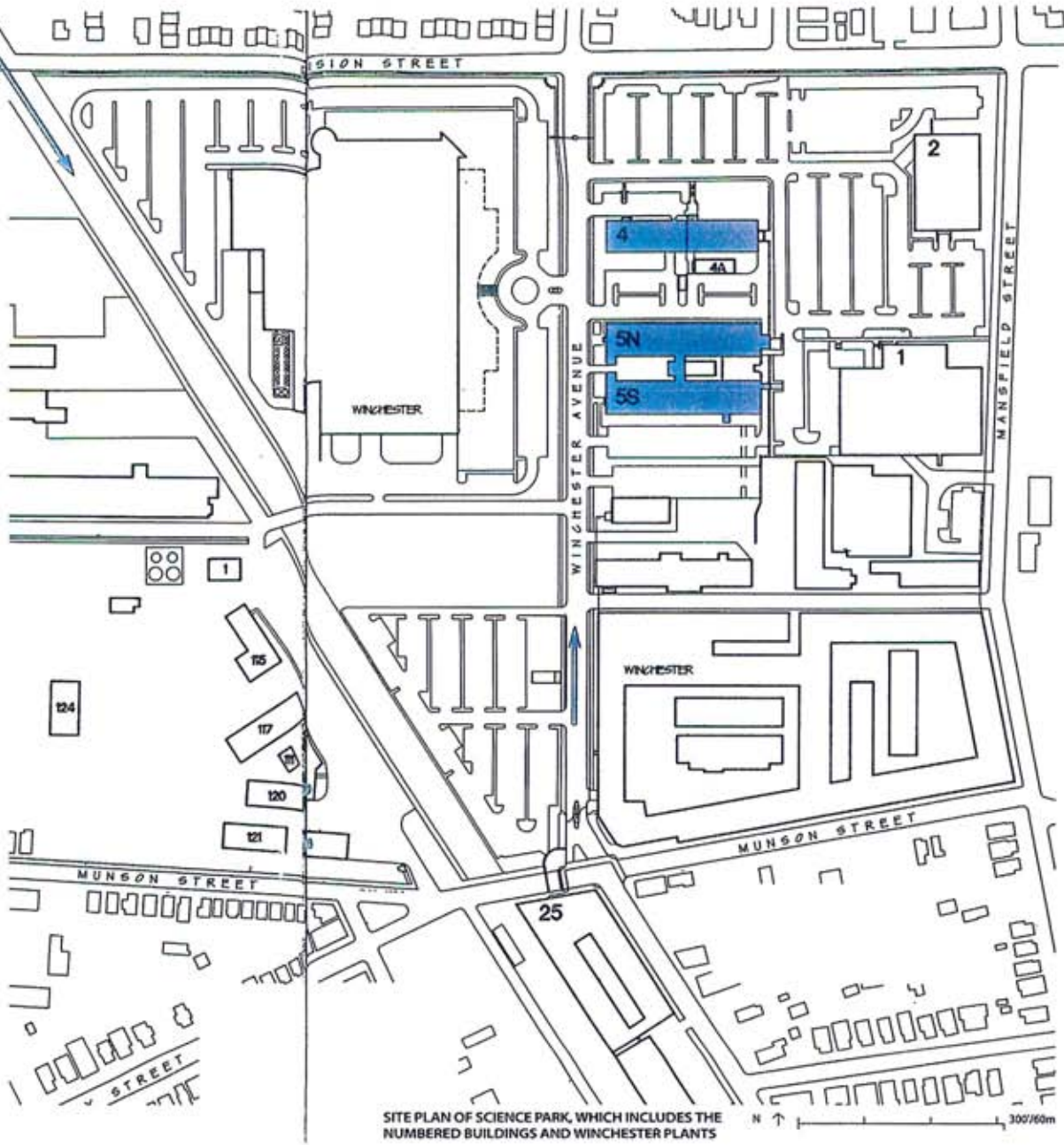
AXONOMETRIC

CENTRE FOR ADVANCED TECHNOLOGIES

Many companies are encouraging ties to universities. These plac are helping the local population connect to the future. In Detroit, T Centre for advanced technologies was developed on the premise integrated work and study. Students earn wages and pending accreditation, a masters degree for completing an intensive six ye curriculum.

PERSPECTIVE OF THE 1987 MASTER PLAN OF SCIENCE PARK, WITH DOWN-TOWN NEW HAVEN IN THE DISTANCE

VIEW OF SCIENCE PARK SHOWING REHABILITATED BUILDINGS FOUR AND FIVE



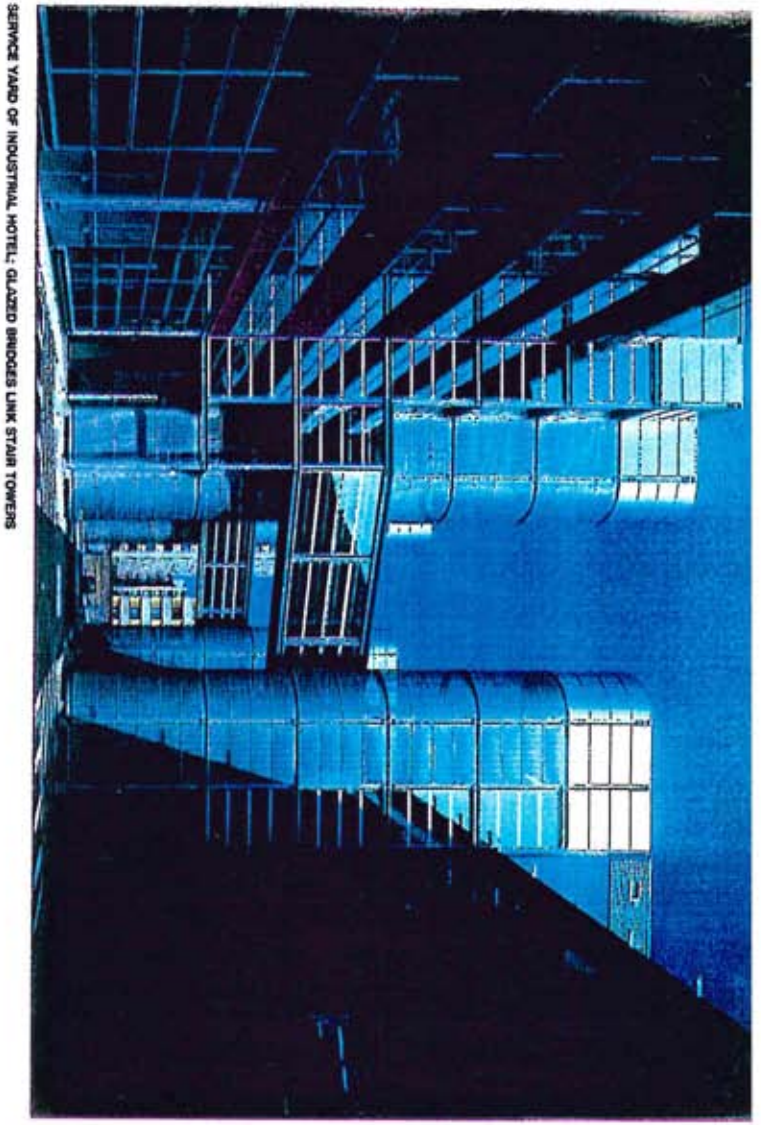
SITE PLAN OF SCIENCE PARK, WHICH INCLUDES THE NUMBERED BUILDINGS AND WINCHESTER PLANTS

SCIENCE PARK-NEW HAVEN , CONNECTICUT
Is an industrial incubator with almost 100 companies employing 2000 people, occupying an 80 acre inner city site.

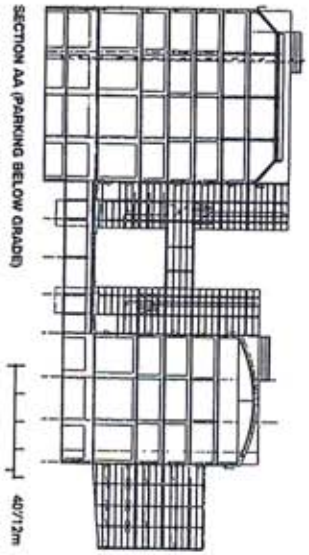
Photos: Stéphane Couturier

AXONOMETRIC

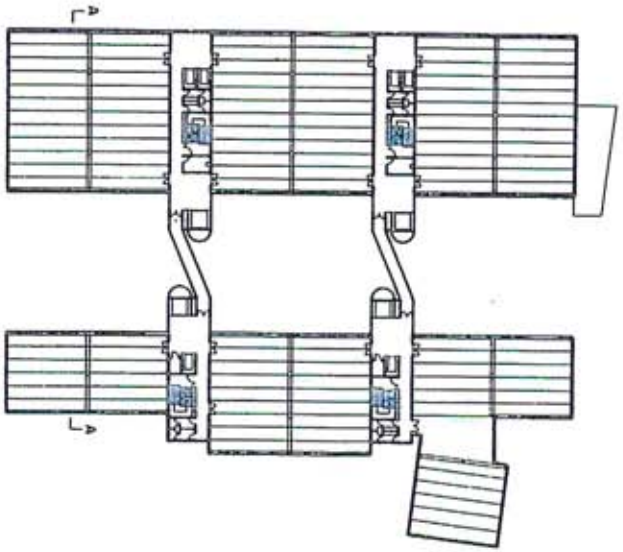
SERVICE YARD AT NIGHT



SERVICE YARD OF INDUSTRIAL HOTEL; GLAZED BRIDGES LINK STAIR TOWERS



SECTION AA (PARKING BELOW GRADE)



TYPICAL FLOOR PLAN WITH SERVICE SPINES FLANKED BY TENANT SPACE

METROPOLE 19

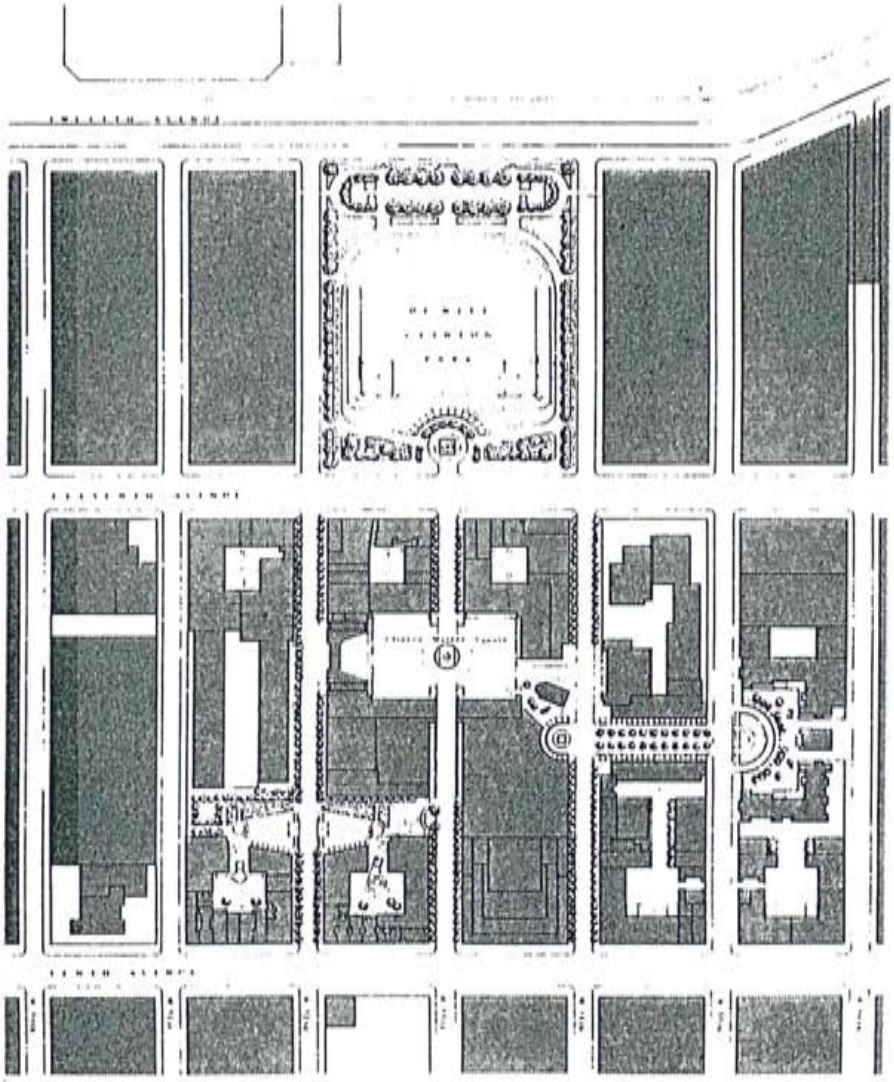
Was developed as a 6 storey urban infil Hotel in Paris. The building offers low rental rates and a high quality architecture as inducements to bring light industry backinto the city. The land was donated by the City of Paris, and today it is home to several start up companies producing car parts, electrical equipment, books and clothing.

Two other industrial hotels have been built adjacent to this building and they are providing the neighbourhood residents with new jobs and healthy juxtaposition of work and living spaces

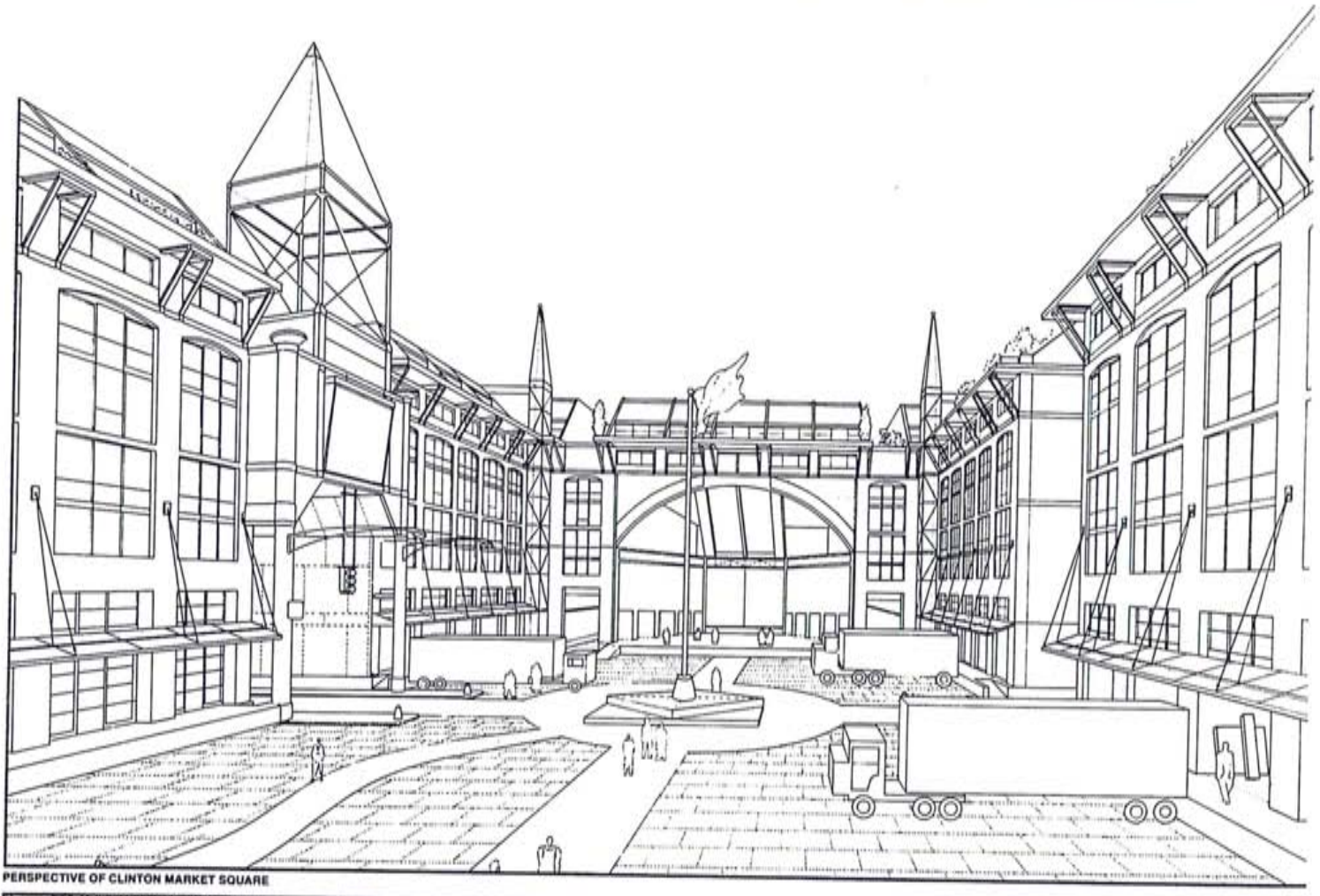
The Clinton community plan (below) defines a network of public and semi-public spaces within the existing city grid. Nearly 1,000 feet in length, this neighborhood's blocks are among the longest in Manhattan.

The proposed plan's new streets and open spaces create a fabric of smaller blocks, thus establishing a more intimate, "residential" scale within the district.

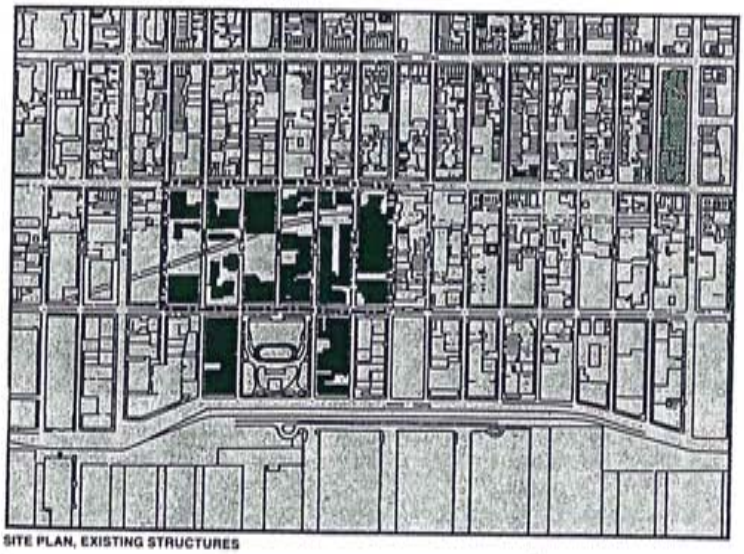
The Clinton Market Square (opposite and center of plan, below) is a public space whose design and usage reflect the working character of the area. During business hours it accommodates truck loading; at other times it functions as the neighborhood square.



The project site is within Manhattan's Chelsea-Clinton district (above), an area formerly known as Hell's Kitchen. A major goal of the master plan was the preservation of the neighborhood's remaining small-scale buildings; many such buildings were lost to high-rise urban renewal projects in the 1960s.



PERSPECTIVE OF CLINTON MARKET SQUARE



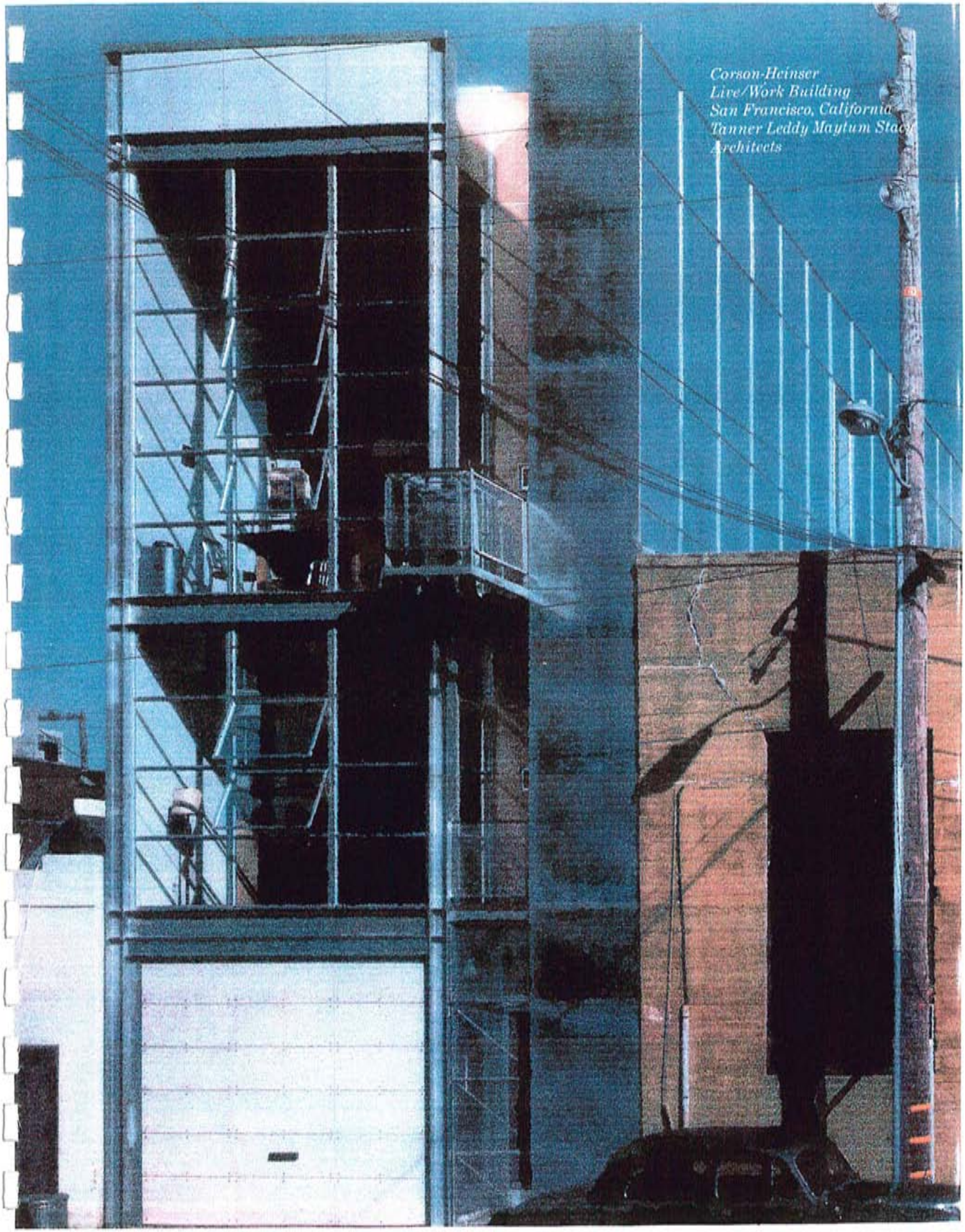
SITE PLAN, EXISTING STRUCTURES

SITE PLAN, PROPOSED URBAN RENEWAL

N 400'/120m

Clinton

New York, New York, 1986



Richard Stacy
Live Work Building

3.0 A SENSE OF PLACE

3.1 History And The Relevance To A Community

A city consists of identifiable parts, be it the buildings, the parks, the streets, or the overall landscape and form. In order for these parts to have any meaning they must identify the character, history, values and aspirations of its people.

The relationships that one is able to interpret from these parts will allow one to understand the place telling its story, a successful story will create meaning. If there is nothing to identity the character of the community within these parts, or the parts fail to convey any information about the people, it will fail to create a place with meaning.

Only when one is able to understand and feel secure in the composition of a place, will it allow development that enhances spiritual and intellectual growth.

The composition of a place is threatened when changes to the identifiable parts dissolve associations and legibility of the whole, thus weakening the story. The reaction is often stagnation, fear or regression as the participants are no longer engaged in any meaningful way. Their values and associations are no longer considered relevant.

Cities will only evolve meaningfully when entrenched in the fabric of what has created them, allowing for participants to exchange information and values, expanding aspirations, and enabling multiplicity. Tradition is needed to communicate, learn and develop tolerance, being careful not to abuse tradition with historical determinism, conveying a false, purified and static landscape.[1]

Modern Architecture has been criticised for the way in which it often decimates communities. Post Modern Architecture is criticised by the way in which it uses history as a means to market lifestyles. Both ignore the tradition and culture of a place, modern architecture focussing on remaking society and post modern architecture with its narrowly focussed and prescribed view of history.[2]

"The Rocks", the site of the first European settlement in Australia in 1788 on Sydney Cove (Sydney) was slated for demolition as part of a major harbour revitalization, as developers asserted that restoration was not economically feasible. Citizen action groups formed to ensure its preservation, effectively barring all demolition, construction or restoration, leading to a review of the planing approach. Consequently a new master plan was developed to preserve existing buildings. This ensured development that worked in conjunction with the existing fabric, and that the future emphasis would be placed on cultural, social and historic values, and less on economic returns. The development resulted in a viable neighbourhood that was also an impressive success economically.

Granville Island, built on False Creek in Vancouver is an interesting example of a community building upon its industrial culture. The industrial history of Granville Island was relatively short. The 41 acre island was completed in 1917, and was fully occupied by 1923, employing only 1200 people during its peak. The occupancy of the island was exclusively industrial except for a small cafe for the workers. By 1950, problems were occurring and by 1963, it was considered an eyesore and on the verge of ruin, with business existing only due to low rents.

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[1]Kevin Lynch, A Theory of Good City Form
[2]Collin Rowe, Collage City

The proper infrastructure or viable port to support a vibrant industrial community was never established. As well, the island lacked any fire protection, thereby resulting in many businesses being destroyed by fire.

Early entrepreneurs saw potential in building upon the industrial character of the place using the existing buildings for alternative uses. This became the roots for an overall master plan that mandated the use of industrial language for new development. Many existing buildings were restored to reflect their original industrial designs.

The development of the island was considered the keystone of the rejuvenation of the whole False Creek Area. Initially, it was hoped that the development would be truly diverse, encouraging industrial, cultural, recreational, retail and residential uses. However the industrial uses have not materialized to the extent initially visioned.

The island is very popular within the community, and as a tourist destination, although I believe the inability to encourage industrial uses weakens the language of the island, limiting all parts of the community to participate in its success.

The size, history and economic viability of Granville Island should be considered when comparing it to a city based on a viable industrial sector or a deep industrial history,

The relocation or loss of waterfront industries has displaced many blue collar workers and constitutes one of today's most fundamental social problems in developed countries.[1] Developers, planners, architects and governments are not dealing with the reality of the existing industrial urban infrastructure, abandoned factories and underutilized waterfronts. There is a need to retain as much of the industrial character as possible as it preserves and maintains the tradition of a community, while providing diverse employment opportunities.

Waterfront redevelopment represents an historic shift away from the transportation and industrial functions that have dominated cities since the turn of the century, toward more varied public uses today. What was once sealed off and forgotten territory has now become desirable. New industrial installations are also a major feature in the development of a number of waterfronts, such as the Coastal Cement Terminal and Offices in Boston and Fisherman's Terminal in Seattle.[2] The Fisherman's Terminal has been operated by the Port of Seattle since 1913. The emphasis is on public spaces not as commercial imagery, but being true to the history of each place.

Many architects and planners have written on the unsuccessful Festival Market Place plans and conclude that often the problem is a lack of context to the cities in which they are part of. Not all waterfronts should or are meant to be a Festival Market Place. The successful developments reflect the spirit of and the aspirations of the city in which they are meant to enhance.

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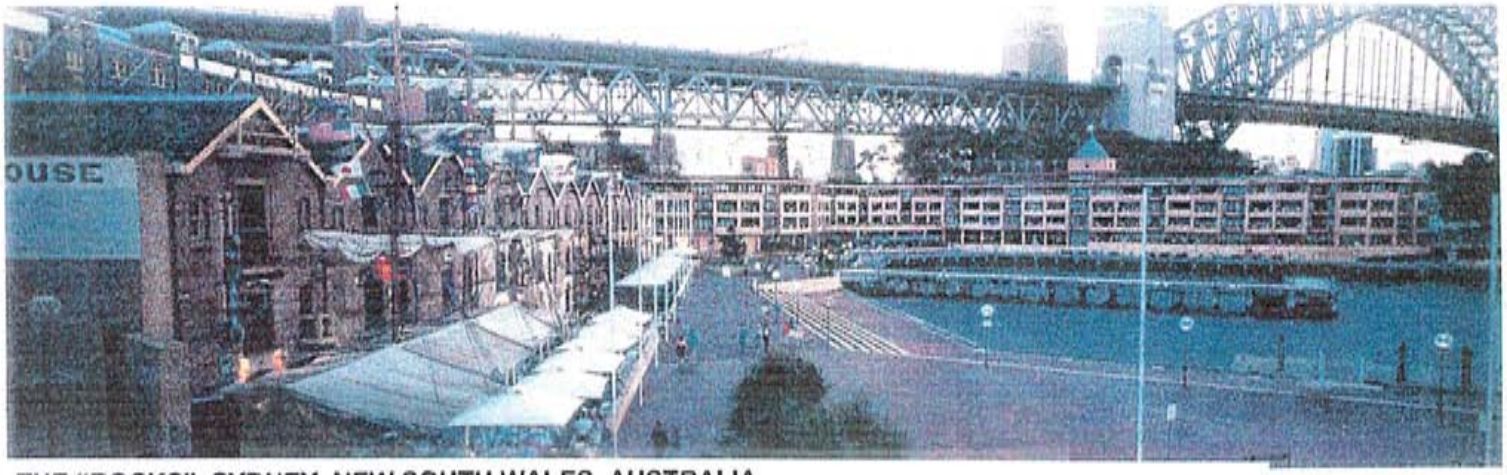
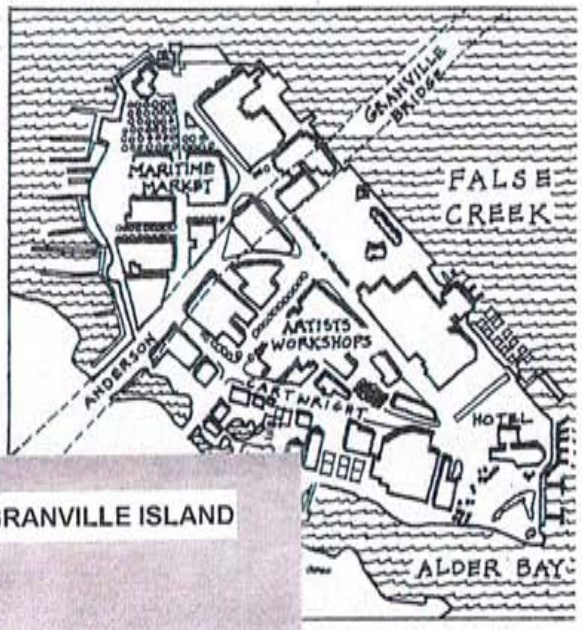
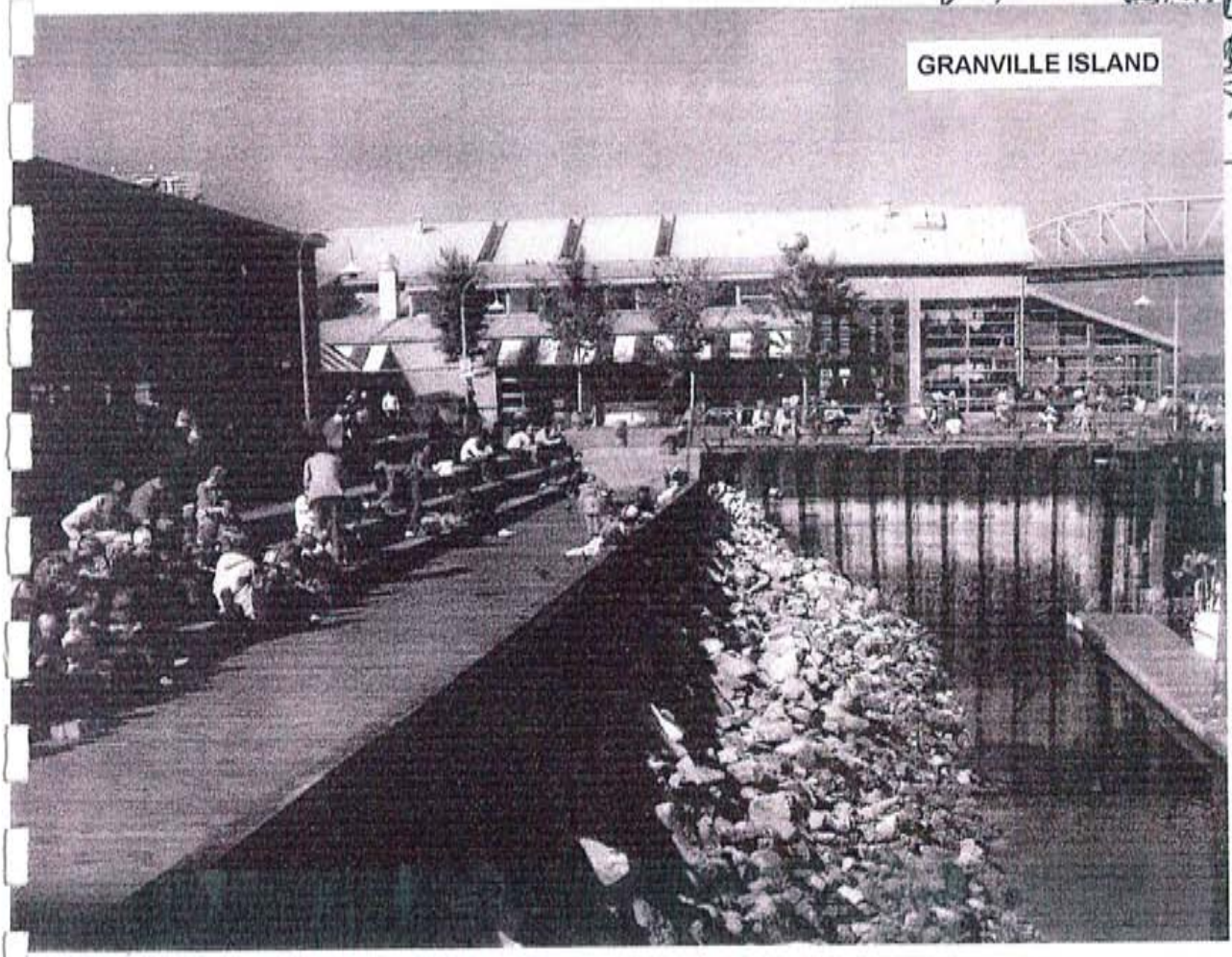
[1]Ann Breen, Dick Rigby, The New Waterfront
[2]Editorial, Architecture



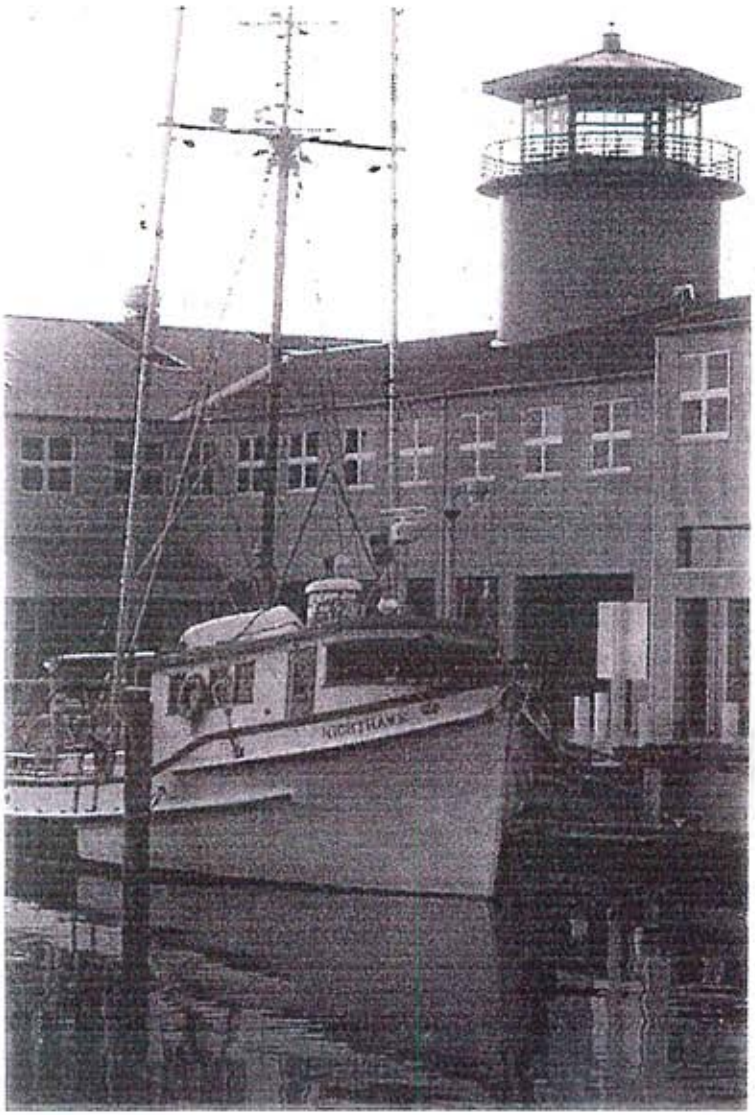
THE "ROCKS", SYDNEY, NEW SOUTH WALES, AUSTRALIA
Restored warehouses dating back from 1838. Despite outward appearances of a slum, the Rocks was a viable postwar neighbourhood. Its fight to preserve what was left typifies the spark that led to the worldwide historic preservation movement in the 1970's.

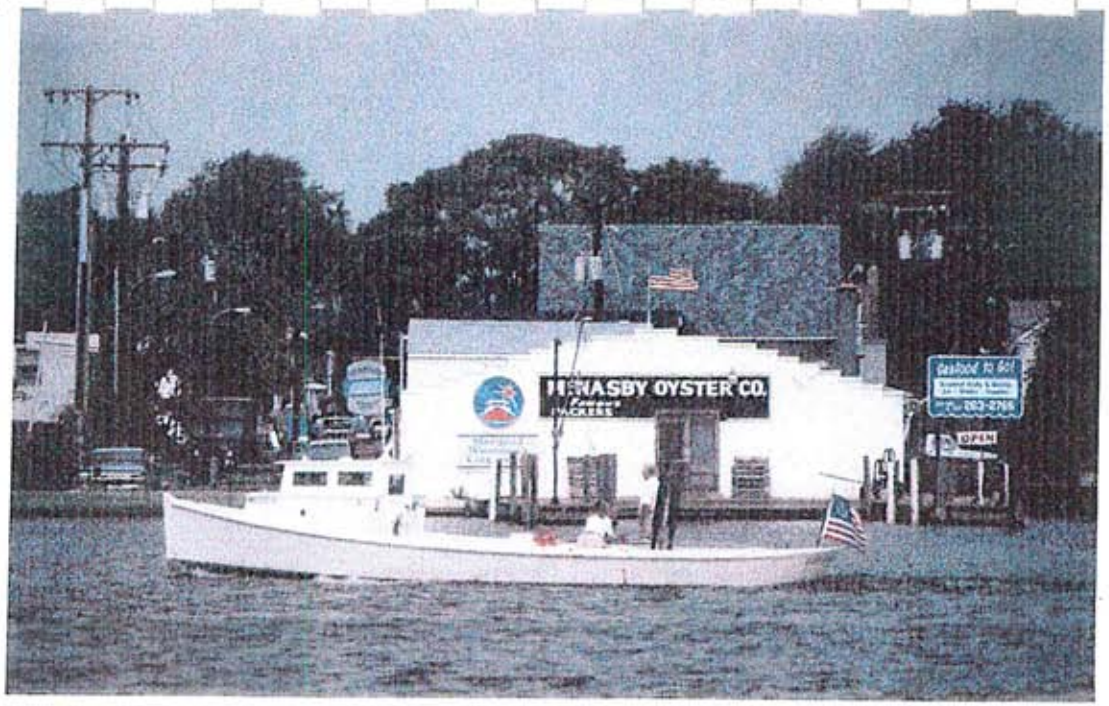


KEY PLAN



COASTAL CEMENT CORPORATION
TERMINAL AND OFFICE, BOSTON, MASSACHUSETTS
This project demonstrates the compatibility of heavy industry with public waterfront access where appropriate. This project won a top honour award for its architecture in 1988, proving the creative potential of industrial architecture. Technology has been used to reduce the environmental and social implications of a facility of this nature.





ANNAPOLIS MARYLAND WATERMEN'S CO-OPERATIVE
Revival of a maritime city's land oyster processing plant
It is becoming increasing difficult to protect the working waterfront, due to the pressure from commercial and high end residential development. Although often the working waterfront incorporated into the master planning achieves an authenticity, reflecting the community pride and history thereby creating a richness to the development.

Annapolis was once home to 18 oyster processing plants, but by 1987 the last of these, McNasby Oyster Company shut its doors. Pressures from condominiums and offices were threatening many of the existing working waterfront industries. A conscious attempt to control this development pressure, led to the enactment of a maritime zone designed to protect the working waterfront. The City of Annapolis bought the 81 year old plant, restoring it to working order and helping to set up a fisherman's co-operative to run it under a lease to the city. This cooperative initiative symbolizes the determination to balance market forces, allowing places to retain their traditional character by taking positive steps to determine the kind of place their community will be.

FISHERMAN'S TERMINAL, SEATTLE
"There was considerable resistance to redevelop the terminal serving Seattle's large fishing fleet. Although outmoded, it was comfortable and authentic. The new terminal wich opened in 1988, resulted from close consultation with the fishing community and its neighbours. It has an industrial feel, but there is a restaurant, a fish market and walkway that overlooks the fleet and features a memorial, their result of a design competition, to those lost at sea."[1]

[1] Ann Breen and Dick Rigby, The New Waterfront

3.2 Effect Of Place On Who We Are And Become

The beauty and richness of our environment is not limited to aesthetics. The richness of a place is often its ability to communicate, allowing the observer to partake in the environment. This means that we must be careful not to neutralize our cities, as it will limit our experience of the place and distort our ability to understand the past, and develop meaningfully in the future.

It is the ability for us to meaningfully participate in society and the richness we realize in relationships and connections to our environment that enables us to attain satisfaction in our physical surroundings. Our physical being is a direct outcome of the society we live in, as our history and the experiences and places that hold meaning for us define who we are and thereby hold value for us. Physical change should support or even induce social change, uniting the environment to the other aspects of our lives.

There are many parts of our environment that create meaning for us and reflect our identity. We must recognize and be aware of our environment and the experiences that we need to protect.

3.3 Effect Of Economic And Societal Changes On Place

In order for a culture to survive, values and change must evolve. There must be a stable framework that identifies the culture of a community to enable creativity and growth through transition and overlap.

An environment in which things do not survive but are rapidly replaced by new forms may be a highly adaptable one. There is social approval for the ability to meet new situations quickly, but a substantial human price has been paid for this mobility. Often adaptability results in the dismantling of social ties and a loss of reference to the past. Maintaining a sense of place and past social ties are often in conflict with adaptability.[1] Therefore it is fundamental to recognize the people that have participated in our built, social and economic history. To ignore this it to ignore the fabric of society.

We are the only species that over and over again deliberately transform our surroundings in order to stretch our capacity for understanding and provoke new accomplishments. The difficulty being that development can negatively impact peoples' mental images of the landscapes that are important to them, be it natural or built. It is therefore necessary that we protect the special places. We need to connect the past to present change and values, allowing the diverse values of users to develop to ensure vibrancy and continuity.

The eco-system model is being recognized as a viable model for community rehabilitation or development, as humans are part of an eco-system and not separate from it. The premise is that everything is connected to everything else, and change in one area ultimately will effect something else. That being the case, society must recognize the costs and benefits of building upon and protecting history, architecture and culturally rich buildings, districts and landscapes that define the place.[2]

The first 5% of development of a countryside comprises 50% of the damage in terms of altering peoples' mental imagery of an area and the next 5% of development enlarges this damage by another 50%. The positive is that this also works in reverse, as a relatively small action that individually seems trivial can create tremendous beneficial effects and have a major impact on the environment,[3] reinforcing the potential to build upon and repair the insensitive installations of the past without ignoring the culture that has created them.

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[1]Kevin Lynch, A Theory of Good City Form
[2]David Crombe, Regeneration
[3]Tony Hiss, The Experience of Place

The personality of the place evaporates and people's lives are immediately diminished when their connections with their environment are blurred or broken. The city is not city if it is not integrated it becomes rootless, aimless, and dis-harmonized. Today, the majority of places along urban waterfronts are in a state of transition. The most important waterfront issues are the restoration of the environment, reworking existing road and transportation infrastructures and development of land uses that relates to the city and its people.

Natural evolution is exemplified by the Leslie Street spit in Toronto. Originally the area was land filled for an industrial port. It exceeded its expectancy and was never used and has evolved into a natural reserve with over 290 different bird species. A similar space is in Hamilton, within an area called the Windermere Basin. Diverse citizens groups are fighting for its future as a natural evolving landscape. If the citizens value a space they will fight for its survival. Many of the participants are environmentalists, but the majority are residents from all parts of the region, who are becoming aware of the potential of the waterfront and discouraged by the ongoing decimation of the harbour.

The Saint Lawrence community, in Toronto, is an example of how building upon existing fabric can be successful. The City of Toronto learned from the failures of Regent Park which developed through the demolition of many homes and the bulldozing of the existing city streets, resulting in a dismantling of the community. Saint Lawrence was developed by building upon the existing community as part of the city. The development encouraged mixed incomes and perimeter mixed use that was reflective of the existing city fabric. The author, Jane Jacobs has been a strong voice in Toronto for the placement of people, by promoting development with an infil approach without destroying the old environments.

3.4 Redevelopment Or Relocation Of Economic Base On The Urban Poor

Too often the improvement of a place is destined to be narrowly focussed on transportation, property values, jobs, poverty or crime and not how the spaces perform. Improved design will happen only when one is able to identify the issues attributing to the quality of a place.

The changing economy has created a decline in manufacturing and restructuring of employment. This type of societal change requires comprehension of the place when restructuring the social, environmental and cultural milieu necessary for sustainable prosperity, so that members of the community respond to changes and feel part of future growth.

The story of Africville, is a model for us to respect and learn about community fabric. Africville, was a small mostly Black community in Nova Scotia, comprising of 80 families, approximately 400 people, dating to the mid 1800's. It was an economically very poor, but spiritually very rich community. Insensitive decisions such as the installation of two major railway lines bisecting the community, expropriation of land for the installation of a garbage dump site, closing of the local school, and inadequate infrastructure, led to the formation of citizen groups to fight for the required services.

The citizens were repeatedly patronized and refused support from local government. Social workers and City officials inspecting the community were disturbed at the conditions. The City officials ignored the fact that the problems were due to their lack of support. While the Social workers reviewed the obvious surface problems in the community and never understood the depth of community fabric.

The community was dismantled and moved. Today there are memorials every year at the site, and an organization to keep the stories and memories of Africville alive. Twenty five years later the community is still in pain over the loss.

The spirit of these people teaches us that this type of action must not happen again. When we look to repair damaged spaces within communities, we must look beyond the aesthetics, and be careful to recognize the values that often have given the community strength in adverse conditions. Often these communities have been dependent on a strong social fabric. This can too easily be dismantled if not understood and valued. Sometimes what appears to be unfortunate to outsiders offers the community a sense of pride and value.

4.0 PRINCIPLES FOR THE INCLUSION OF INDUSTRY TO ENRICH URBAN FORM

INDUSTRIAL INTEGRATION

The principles that relate to the benefits of industry within an urban context are often general principles that determine the success of urban form regardless of use. This chapter works to identify the principles of urban form, that reinforce the need for industry to be included. Two of the key areas for urban renewal are the existing industrial waterfronts effected by changing economies, and downtown city centres that have been decimated through suburban sprawl. These areas allow us to begin to explore the opportunities for diversifying and integrating alternative uses.

There has been considerable tension about just who should benefit from waterfront renewal. Planners speak of the a need for a coherent vision of the waterfront's public functions, that seems to be missing in many waterfront developments, indicated by many waterfront disasters. Much of the early waterfront development was on product and not access. "Urban Development has a disturbing trend to sanitize waterfronts, designers have so overworked the product that they have taken the soul out of it."[1]

Many small communities start by wanting to have an economic component, something that generates cash flow, but many communities are not able to support a festival marketplace, beautification does not bring economic response if the market forces are not there. The urban planners working on Baltimore Harbourfront state that the major lesson learned is the incredible importance of time.[2]

The most successful harbors offer a rich diversity in both older and new buildings and in functions. The older buildings do not have to be architectural monuments, but they often reflect the character of the past waterfront use working to ensure an authenticity to new development. The richness of the waterfront is reinforced by providing a plurality of use and functions.

The Seattle waterfront has achieved a successful and intense harbourfront, through the festival marketplace in Pikes market, the ferries, the ships pulling out designated for Alaska and the quantity of spirited blue collar activity. When tourists go they are seeing genuine waterfront and the local people don't feel that they are in a boutique environment.

4.1 Diversity

Society is made up of the collective and the individual. Diversity allows for the development of the individual, while exposure to others has the ability to reinforce relationships that strengthen the collective, therefore advancing tolerance and value for all forms of life. This exposure to plurality often inspires creativity, learning and discovery, ensuring inspired approaches to planning, housing, transportation, education, and culture. This produces a greater mixture of housing, employment, age and social composition, resulting in a more interesting landscape, authentically reflecting the complexity and the whole of society.

Diversity should be all encompassing and not reduced to facadism, "Main Street was never very pretty or prosperous, but something that celebrated independence and enterprise, encouraging an exchange between all members of the community." [3] Segregation of uses can restrict diversity, limiting the positive and nurturing exchanges within society.

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[1] Al Kopp, Architectural Review
[2] Allen Eskew, Architectural Review
[3] Collin Rowe, Collage City

Diversity cannot exist in isolation one must have a stable structure for change to be accepted. Without this security, acceptance of the unknown is unlikely. "Collage, the richness that comes from the mixture of order and disorder, simple and complex, joint existence of permanent reference and random happening, private and public innovation and tradition."[1] Mixed uses and overlapping activities create the urban form. Cities that have evolved slowly and organically usually have this rich juxtaposition of places for work, play and family life, as well as a blend of styles, aging from many decades and even centuries.

Strong urban centres, provide the complexity and discovery to fulfill and stimulate our intellect, often embraced by a higher skilled workforce. These centres are being rediscovered as neighbourhoods to revitalize attracting people back who had relocated for the suburban ideal. Several city centres have been left with a high population ratio of low income people. The loss of middle and high income residents and employment opportunities has devastated numerous urban communities, due to the failure to recognize the value of ensuring diverse income levels.

Often current planning strategies restrict many types of uses from working together, restricting the variety of use of the spaces, resulting in urban space that lacks vitality. An acceptance of diversity ensures an acceptance of change, growth and development, as we are inspired and motivated to search for new levels of experience and meaning in our environments.

"The street is alive with many activities, each member of the street with their own role to play. The player knows the patterns of street life, monitoring and protecting the other players. Several functions ensures that the street remains vibrant at all times of the day. It also allows the players to work, sleep and play within their neighbourhood setting."[2]

There is tremendous potential in existing Brownfield (existing developed, under utilized or abandoned urban land) sites. The existing underutilized buildings and infrastructure are often unrecognized as an asset by municipal planners. The extension of suburban edges is costly both socially and environmentally and is creating many bleak downtown centres. Infil and plurality have the opportunity to rejuvenate these sites. Existing Industrial sites should include diverse housing, industry, retail and green space, focussing on how the spaces perform, developing working landscapes, dovetailing uses such as community or rooftop gardens.

The Garrison Common, in Toronto, is re-industrializing old industrial areas, by focussing on dynamic sectors of the new economy, while working to develop communities by expanding existing and creating new residential neighbourhoods. Incorporating new industrial uses to the existing industrial fabric, along with alternate programming can only strengthen the urban fabric. The rehabilitation of existing industrial building is leading to opportunities for small entrepreneurs to share resources and build upon an industrial heritage.

In history industry and other uses have co-existed having a close relationship. There are many recent and past examples of industry, designed within the context of the urban fabric, respecting street edges, scale, and context. Industry in suburban parks or industrial zones, eliminates the need for industry to build to any type of fabric, as usually none exists. Re-introducing industry into the urban fabric is opening up opportunities for industrial architecture and society.

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[1]Collin Rowe, Collage City

[2]Jane Jacobs, The Death and Life of Great American Cities

Pennsylvania has introduced a land recycling program as an economic impetus. Currently 100 sites have been remediated with an additional 200 sites currently going through the program. The former York Manufacturing company encompassed several abandoned factory buildings over a 6.2 acre site in the City of York. The factory employed 2500 people until the site was vacated in 1958 and remained empty for 35 years. This new development incorporates engineering services, support groups, community mentoring, real estate, a steel distributor and a business incubator for minority and women owned businesses.

The Victoria and Alfred Waterfront, Cape Town South Africa, built upon the only activities left on the harbour, the fishing fleet and boat repair. The development expanded on the existing use, integrating the working fleet of the pier. The re-use of the former harbour structure, which maintained some quite old mundane sheds, along with the active working harbour gives the Victoria and Alfred Waterfront project a certain authenticity and connection with the past. "There is room for industry as well as for housing and for all in between. The most successful harbours offer a rich diversity of buildings, uses and functions."[1]

Port Credit, Mississauga is diverse in that there are fourteen industries and utilities that require access to the lakeshore but none requires exclusive use of the shoreline. The City of Mississauga has placed importance on public access to the waterfront, through a waterfront trail, and Greenways that connect a series of nodal points, ranging in scale and function.[2]

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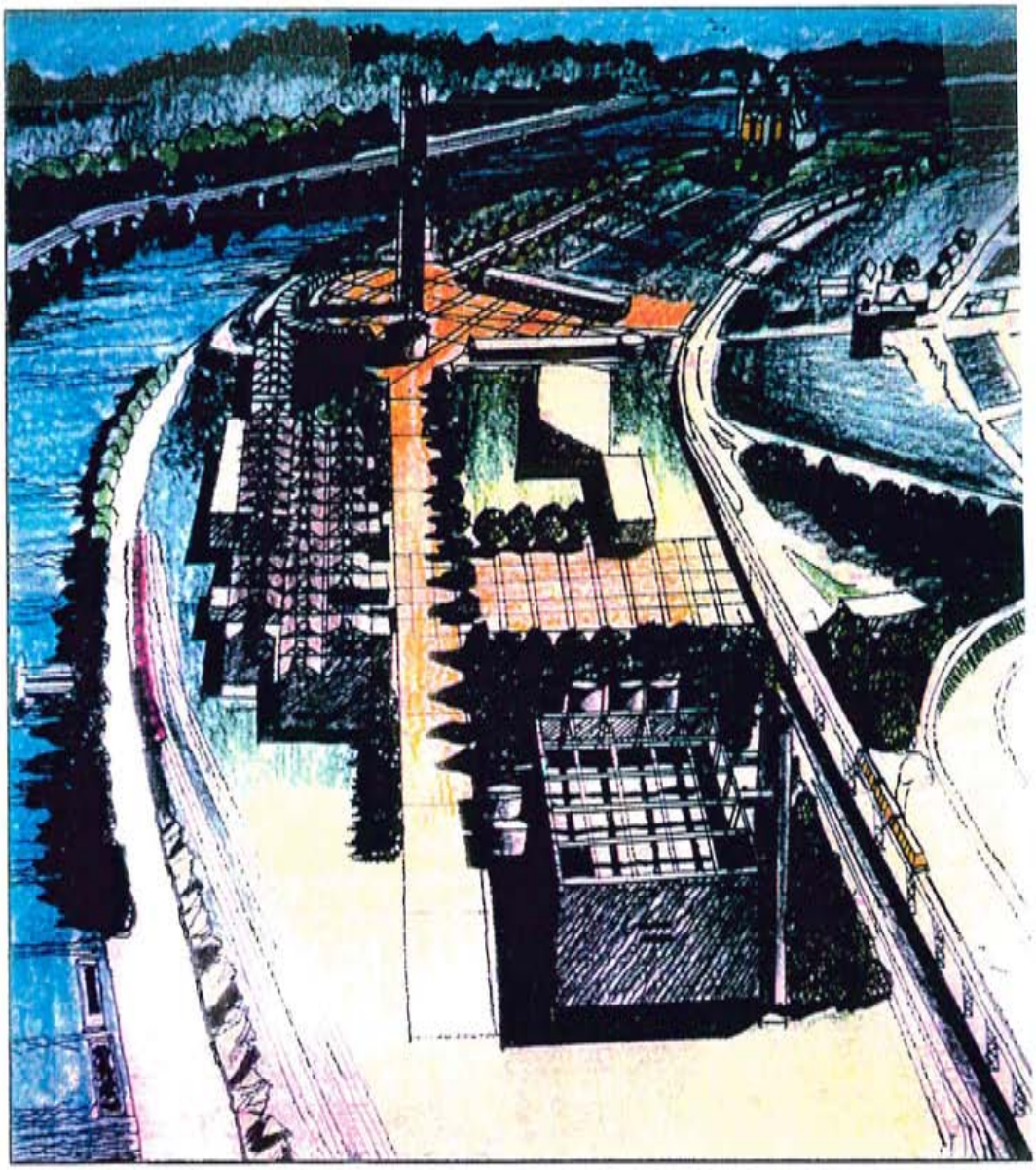
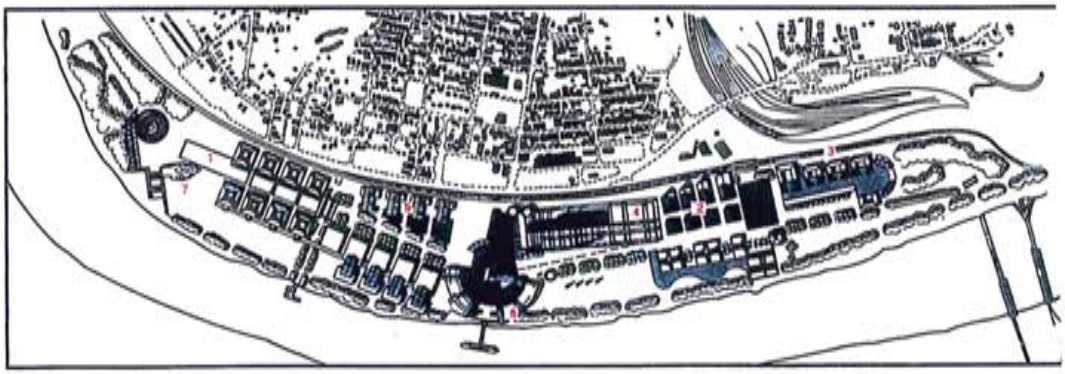
[1]Ann Breen, Dick Rigby, The New Waterfront, p. 56
[2]David Crombe, Regeneration



PERSPECTIVE, INDUSTRIAL INCUBATOR UNITS IN FORMER STEEL MILL STRUCTURE (SCHEME 2)

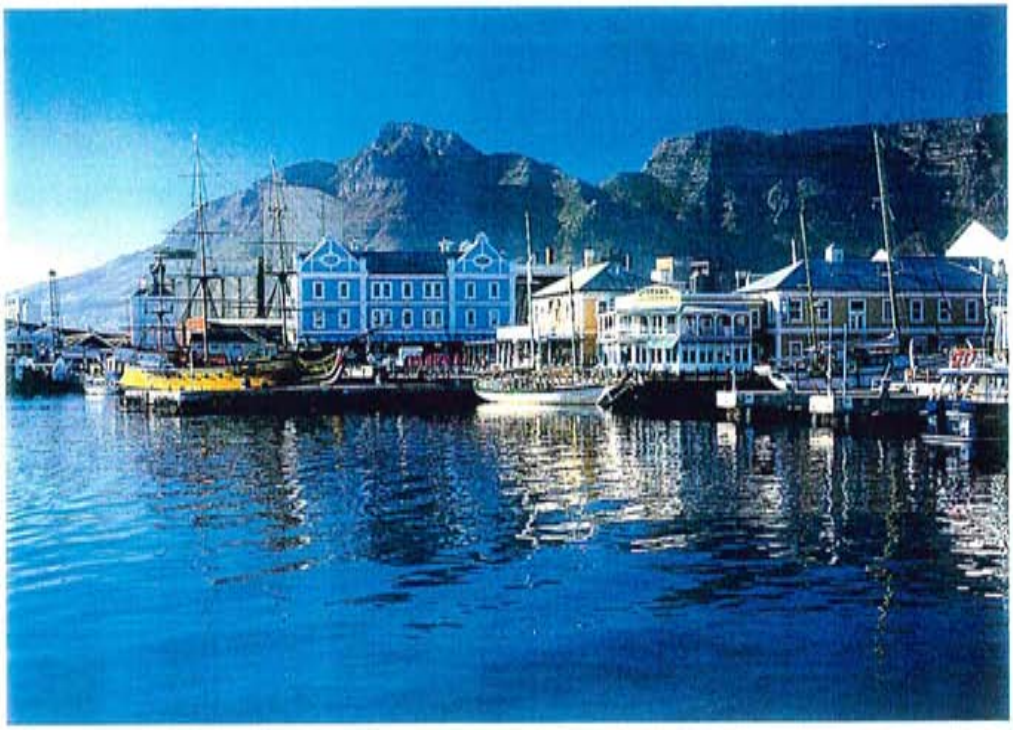


PLAN, SCHEME 2: STEEL MILLS REHABILITATED FOR INDUSTRY & RESEARCH

N 1000'/300m

VACANT STEEL MILLS, DUQUENSE, PENNSYLVANIA

The rehabilitation of the vacant steel mills was based on a program providing studio workshops, park spaces, a recycling plan, industrial incubators, housing and high tech research centres, working to create jobs and link to the city and the Nonogahela River.



THE VICTORIA AND ALFRED WATERFRONT
CAPE TOWN SOUTH AFRICA

The Victoria and Alfred Waterfront, Cape Town South Africa, built upon the only activities left on the harbour, the fishing fleet and boat repair. The development expanded on the existing use, integrating the working fleet of the pier. The re-use of the former harbour structure, which maintained some quite old mundane sheds, along with the active working harbour gives the Victoria and Alfred Waterfront project a certain authenticity and connection with the past, there is room for industry as well as for housing and for all in between, the most successful harbours offer a rich diversity of buildings, uses and functions.[1]

4.2 Scale

Many developments today are out of scale, often due to single use zoning that lacks diversity. Large areas of residential, commercial or industrial uses have created hostile surroundings, lacking cultural or intellectual stimulation, while creating traffic and land use patterns that encourage infrastructure that is either under or over utilized.

To create any type of an urban fabric, one needs to address the size of any one development or building. The older successful European centres also respected the hierarchy of building type, allowing public buildings a symbolic position. London, Paris and Berlin prohibited by law that cathedrals, palaces, or public buildings be overshadowed by commercial structures. Skyscrapers outside North America scarcely existed prior to the 1950's, Paris and Berlin regulated the relationship between building height and street width ensuring a pedestrian street scale.

"The complexity of our historic towns relates to their scale, from private housing to palaces. The compulsive addiction to unarticulated and brutal gigantism is a phenomenon of our time. Never before in the history of building has there been an age in which identical elements have been repeated horizontally and vertically with so little variation as they are today."[1]

In incorporating diverse uses, often the density and intensity of a development can be increased. The importance lies in the structure of the place, for instance the creation of a pedestrian and street scale, addressing the hierarchy of building type, and the incorporation of a public centre. Smaller and plural developments create a more engaging and livable landscape, neighbourhoods that have a human scale.

An inner City Renewal project for Lake West in Texas, which was adjacent to downtown Dallas, looked at the revitalization of one square mile of 3500 nearly identical rowhouse apartment units. To reduce the perceived scale of the housing, it was necessary to address the monotony. The proposed master plan maintains the integrity of the neighbourhood, relocating few inhabitants, by working to modify the units themselves, reinforcing street edges and identifying a residential character.

Establishing a structure and the creation of civic presence through a town centre, worked to achieve a sense of community membership. Addressing the spatial relationships, and the interrelationships of functions allowed for the actual density of the neighbourhood to be increased. In creating mixed programming, pedestrian scale, a centre and defined public and private space encouraged a neighbourhood identity resulting in a vital urban place.

Much of the existing urban waterfront developed as large monopolies of industrialized land, over the last 40 to 50 years, restricting and excluding most alternate types of use. The results have been a total isolation of the waterfront from the rest of the community. With the changing economies, much of this land has become under utilized and quite bleak, leading to opportunities in reworking the scale of industrial land and building, integrating alternative use.

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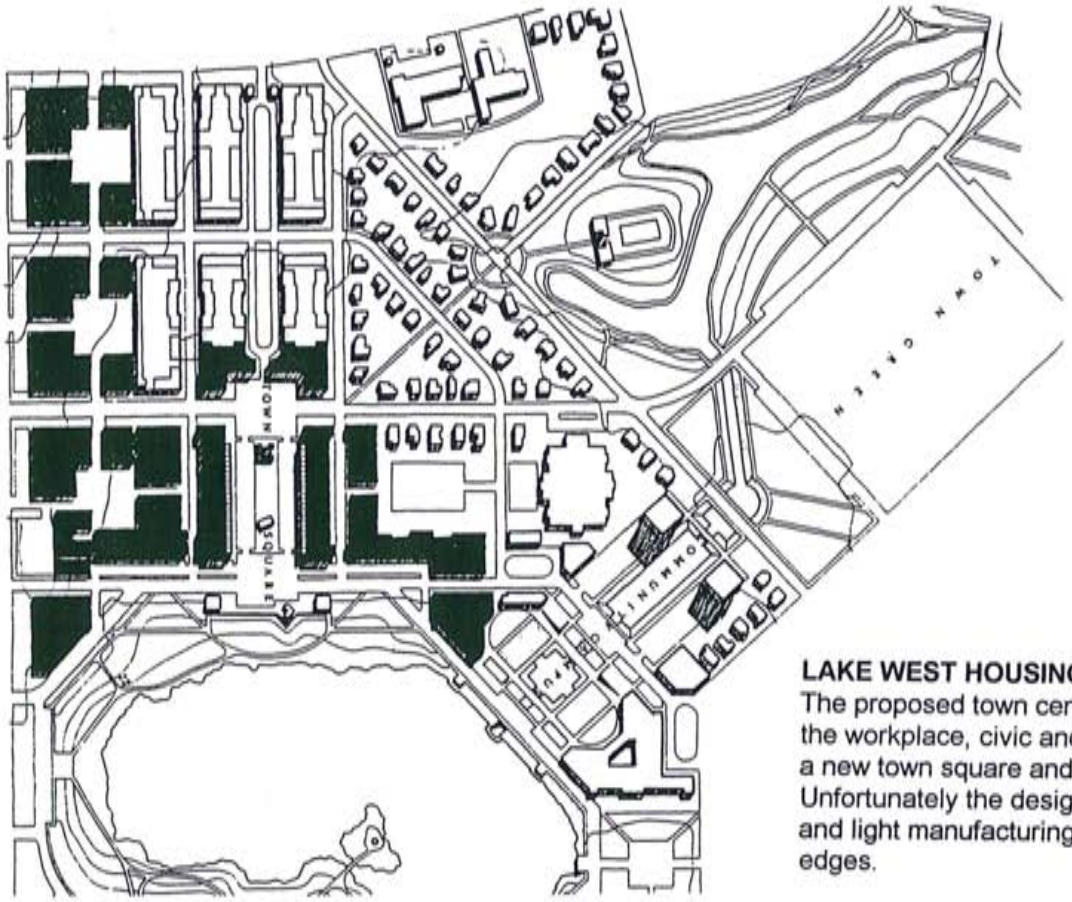
[1] Leon Krier

One of the most interesting waterfronts is along the River Elbe, in Hamburg. This is a working waterfront, that appears to be truly diverse. In the 1980's several businesses relocated further down the River leaving many vacant properties. New buildings are incorporating several functions, such as The Hamburg Ferry and Cruise Terminal and Office building that integrates cruise ship operations, ferry passenger services, police, custom services, offices, a restaurant and public walkway and the architectural firm Von Gerkan, Marg & Partner's own office building, in which they renovated and added to an existing building. This building now incorporates a restaurant, which were terms of the planning approval, an art gallery, villa, car park and public space.

Along the River Elbe, there are also new high quality buildings and careful restoration of existing buildings that incorporate housing dedicating a large proportion to social housing. Along the river derelict remains of middle class 19th century apartment blocks exists that have been occupied by squatters over the last 10 years. The squatters are proposing to stay and upgrade what they now consider to be their own buildings.

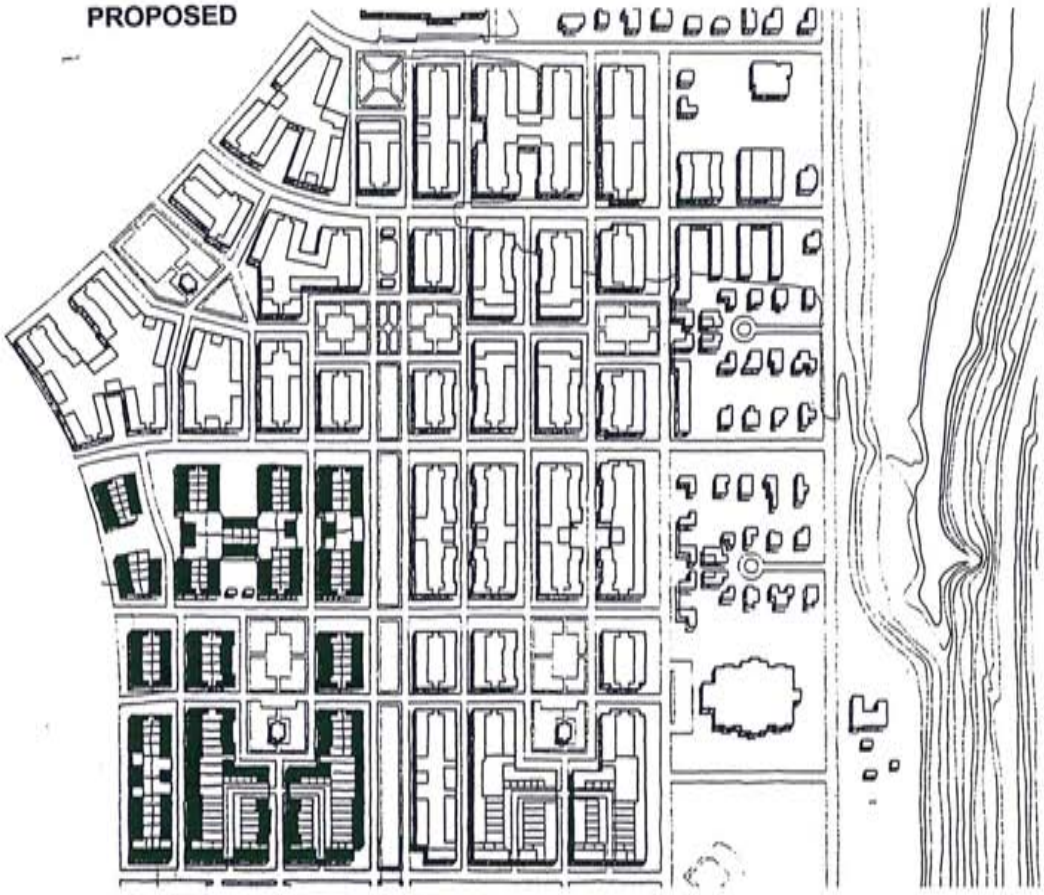
Urban waterfronts need to be developed in much more sensitive ways. There are many opportunities to take advantage of economic and social activities along the waterfront, and there is considerable support for diverse development, although few people support out of scale development such as large apartment buildings that shadow spaces below. The key to new development is to work in partnership with the community to establish strategies that strengthen the values and spirit of the community.

Rivera Beach in Florida, was one of the poorest cities in the Palm Beach County, providing the regions utilitarian needs, through a power plant, working waterfront, boat yards and commercial fishing facilities. Low land prices threatened the way of life through development of high rise, high income residential buildings that would sever the waterfront from the community. A community driven interest group worked in partnership to develop a master plan allowing for new development, enhancing and protecting the communities different identities, deflecting the proposed segregation of their waterfront.



LAKE WEST HOUSING DALLAS
The proposed town centre works to organize the workplace, civic and retails paces around a new town square and existing North End. Unfortunately the designers left the warehouse and light manufacturing facilities at projects outer edges.

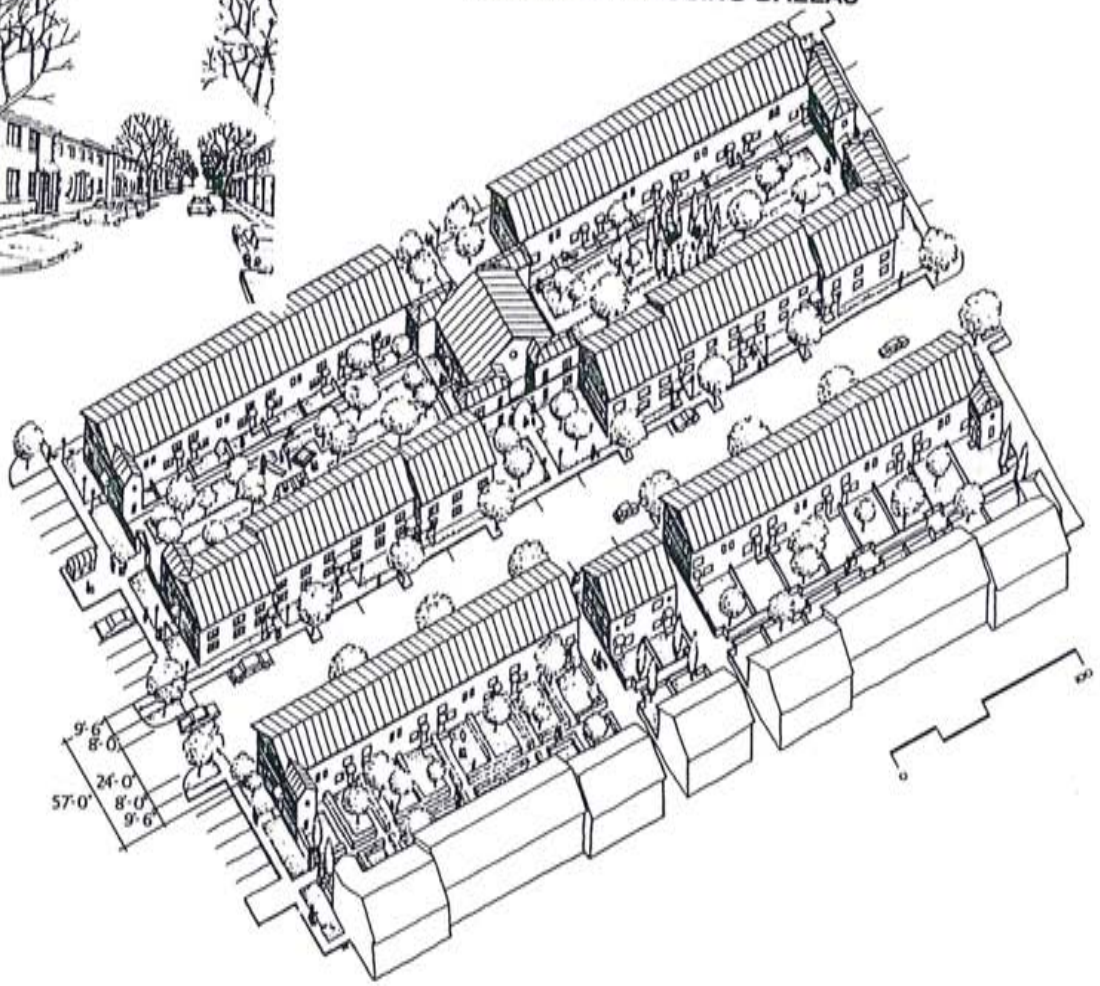
PROPOSED

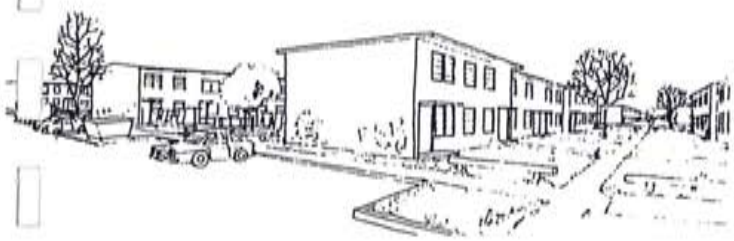


EXISTING

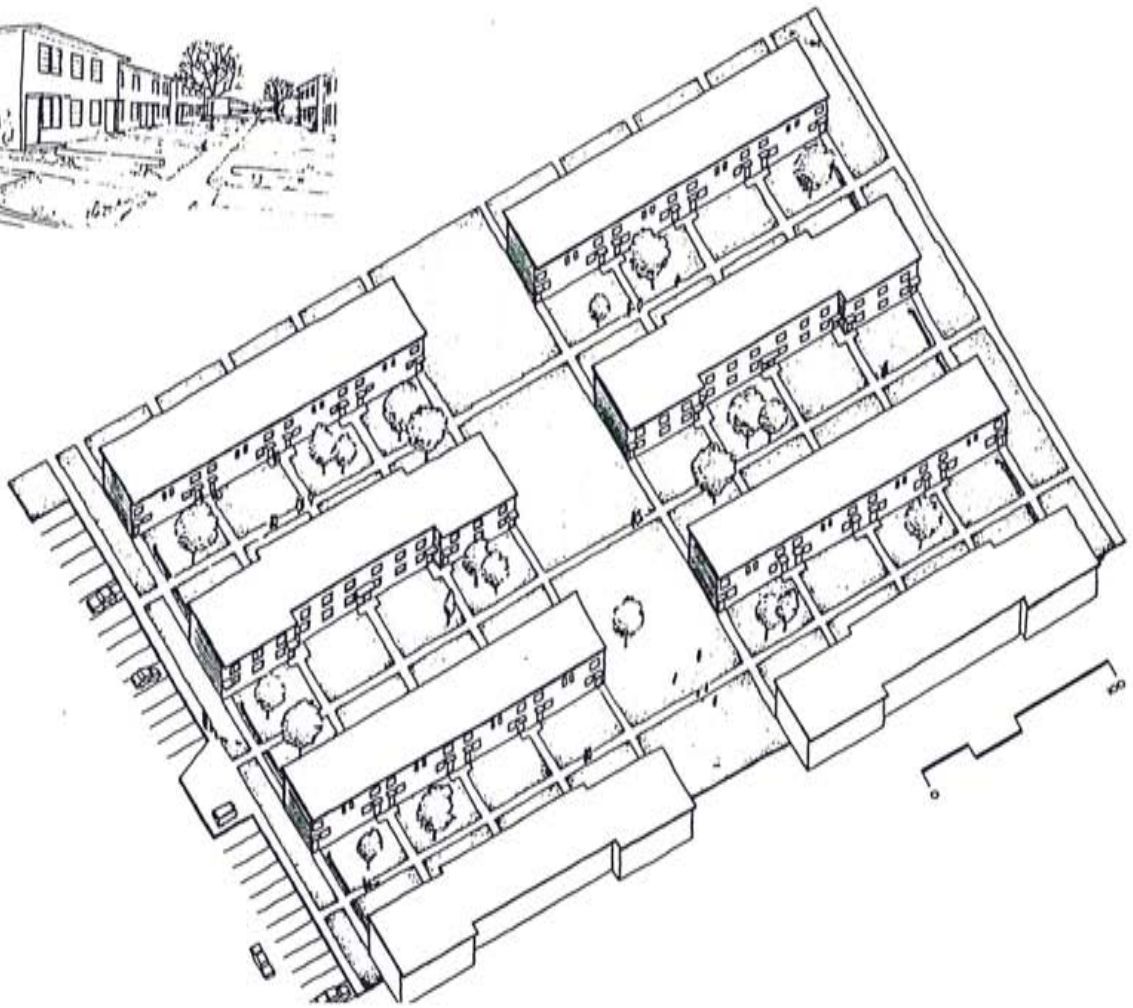
PROPOSED
Working to define street edges, provide public & private space

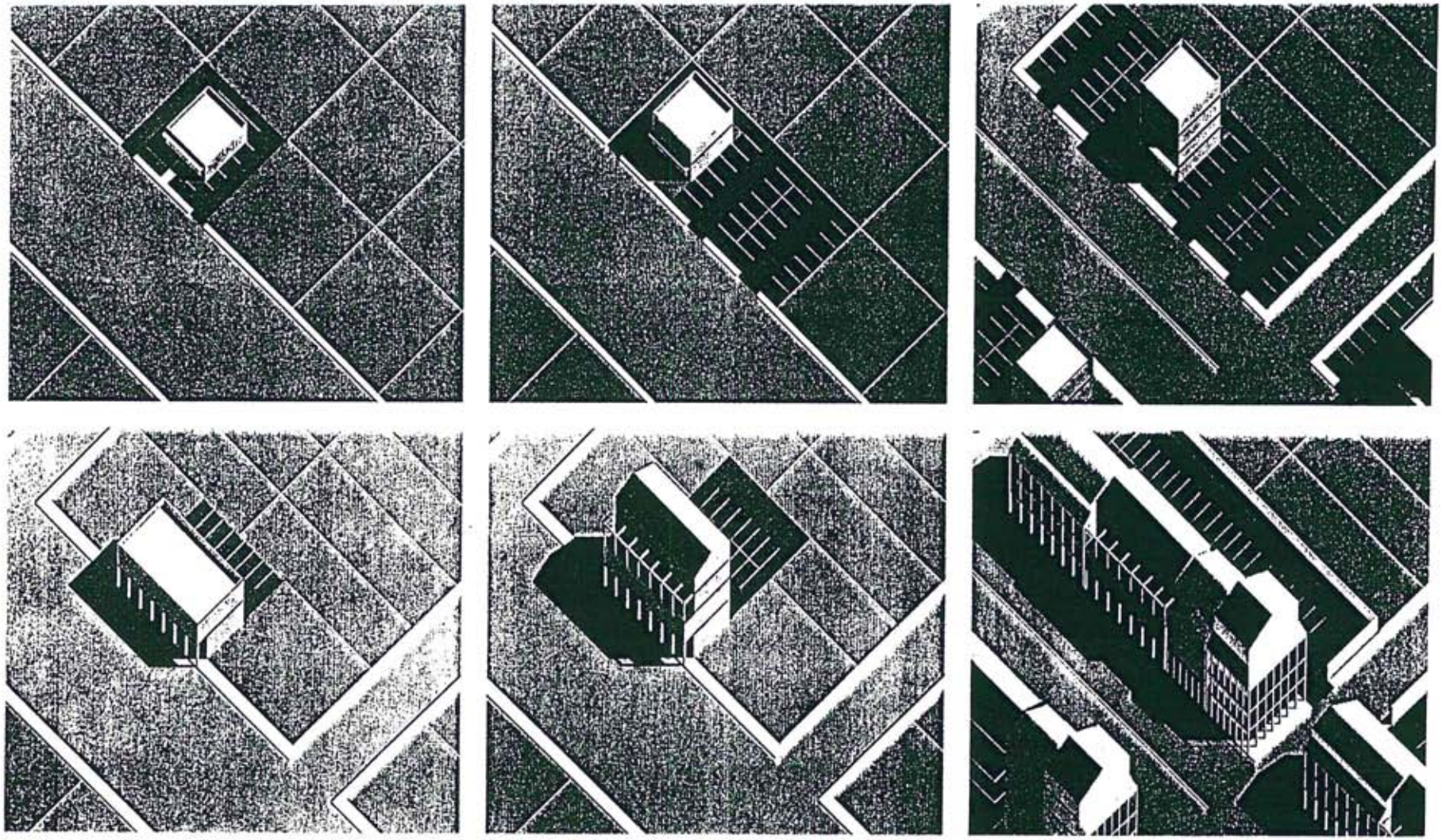
LAKE WEST HOUSING DALLAS





EXISTING
Typical of many housing projects found in numerous urban slum clearances projects of the 1950's. Blank windowless ends. Weak visual connections between streets have created high incidents of crime.



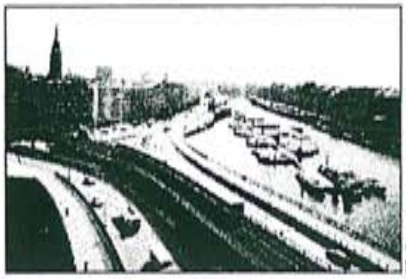


RIVERA BEACH, FLORIDA
Urban planning, street scale studies. Showing present and proposed codes.

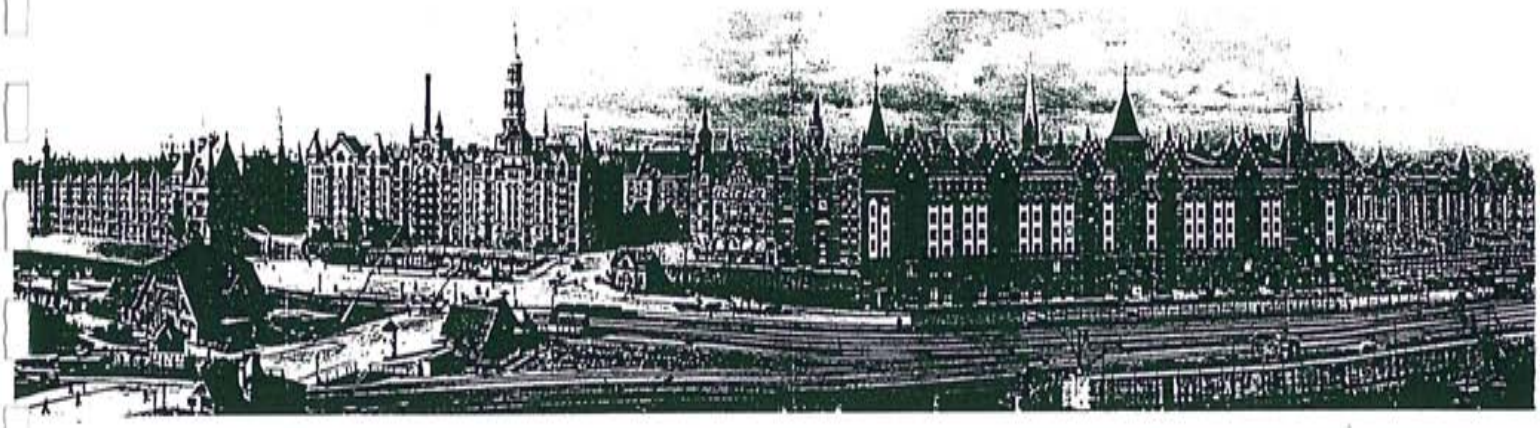
EXISTING CONDITIONS: BROADWAY LOOKING SOUTH

HYPOTHETICAL BUILDOUT OF BROADWAY UNDER MASTER PLAN

RIVERA BEACH, FLORIDA
Urban planning, street scale studies. Showing present and proposed codes.



Speicherstadt/Bonded Warehouse



HAMBURG'S SPEICHERSTADT
Open by Kaiser Wilhelm in 1888. Europe's largest bonded warehouse complex. The elongated brick built warehouse-blocks with street-fronts and water-fronts, some as high as seven stories, present an impressive architectural uniformity. Austere reddish brown facades present a uniformity which is broken by gothic embellishment such as turrets, gables, bases and cornices.

The warehouses serve primarily as storage for high quality import goods. Foodstuffs such as tobacco, coffee, cocoa, tea, rum, dried fruits, nuts spices, etc. and articles such as canned foods, optical and electrical equipment, raw silk and oriental carpets are stored here. The largest carpet warehouse in the world exists here, containing approximately 120,000 sm of hand woven carpets.

VAN GERKAN, MARG AND PARTNER'S OFFICE AND MIXED USE BUILDING

HAMBURG FERRY AND CRUISE TERMINAL

RIVER ELBE WATERFRONT

4.3 Structure and Form

Current development patterns tend to build large homes to enhance the individual, yet dismally fail to produce the collective communal public space, ultimately compromising society as a whole. We continue to develop communities that isolate people, reducing our ability to work as a collective. Yet often people of poor urban communities, that have not been able to leave for the suburban ideal, are still very much dependent on the collective environment. The concern is that these communities are often judged on the aesthetic, economic and the superficial instead of the reality.

Current development patterns have weakened our ability to balance both the individual and the collective, creating communities that are inward and consumed with individualism. We need to be exposed to not only learn from societies complexity, thereby allowing us develop individually and collectively. "We have compromised our growth and lives avoiding the richness offered through complexity."[1]

The successful towns in history have a centre or community focus. Amsterdam, for instance developed an intense core incorporating several types of programming with a city built around it. In Vienna it was the creation of small centres working around two circular ring roads.

The main urban elements are centres, paths and domains--a square functioning as a centre and street as a path, working as enclosures to ensure the coherence of the space. Once the cohesion of the urban form is damaged, nodes, paths and districts lose their identity weakening the image of the town as a whole, depriving the structure and landscape of meaning.

In the old centres, parking and transportation were not the issue of today. Parking can destroy the urban fabric. Therefore methods are required for breaking down the amount of cars in any one place. The concentration created in cluster development allows for an economically viable public transportation system to be established.

Historically cities were developed providing public centres for each neighbourhood, whereas Americans tended more and more to eliminate, therefore neutralize the public centre.

Planners are using historic principles to develop new communities, labelling it the new urbanism, working to incorporate diversity. Many of the new urbanist communities are successful in that the people who have become a part of these communities enjoy the experience, yet they are being designed for middle to high income people and the diversity is very much proscribed.

The difficulty is how to use the successes of what we are learning through the ideas of the new urbanism to create vital environments that truly incorporate plurality. I believe these developments somehow shortchange themselves by not exploring truly diverse environments, thus limiting themselves from learning from societies differences. Few of the new urbanist environments work with the urban poor, blue collar worker, or industrial user.

The new urbanism is successfully proving the positive value in cluster development which portrays a community identity, successfully limiting sprawl by intensifying development and creating more shared neighbourhood space. The new urbanists are addressing the issues of street scale and building type, while investigating at various forms for parking and transportation. Streets are finally being rediscovered as the city's primary resource, recognizing the value in using urban design to reinforce street life and to integrate new development into existing street patterns.

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[1]Richard Sennett, The Conscience of the Eye

The new urbanists are defining an architectural vernacular to structure their communities. Through the writing of codes the new urbanists are implementing controls on the building type, plan, and facade that they believe fit together in groups to make towns. This ensures that the codes will control their three dimensional reality of the town. The goal is to develop a structure and scale that remains pedestrian, defines urban edges, program distribution and building mass to retain an integrity to the street facade.

Although the urban principals are helping address many issues such as street life and pedestrian scale, I have great difficulty in the prescribed architecture that limits diversity. "The code is essential, to the making of the place."[1] I believe that this strict code also restricts many new urbanist communities from fully becoming a place.

Seaside, Florida built in 1981, is one of the most recognized success stories of the new urbanists Duany and Plater-Zyberk. What is missing is the reality, and even the architectural theorist Vincent Scully admits that it seems exclusively for some understood special purpose, and that it can take a good deal of disruption.

What is required in real life is a balance between structure and chaos. Structure is needed for chaos to exists. Chaos is real life. Too much structure neutralizes real life. Shaping a community to foster activity is what is required, and not a stage where the communities become actors in some sort of prescribed play. "The Disney facade eliminates the unpleasantness, tragedy of time and of blemish, the idea is to imitate the perfect Main Street, the real Main Street is neither so facile or felicitous, there is both the registered optimism and desperation."[2]

"Feelings of control have strong psychological consequences as they create feelings of anxiety, satisfaction, pride or submission. Structure without harmony is oppressive. The boundaries, visibility, size, elevation and spatial distancing are controls by physical means. A good settlement is one which places controls that structure the problems of place yet is responsive and congruent to its present and future users." [3]

The town of Windsor planned by Duany and Plater-Zyberk is developed for an extremely rich clientele, offering estate homes around a golf course and along a waterfront shore. The centre, however is a tightly gridded town, which up to now is where every client has wanted to be. **"The rich, who can choose, choose community, or at least its image, and therefore how much more must the poor, who must depend upon it for their lives, want community. If Seaside and the others cannot in the end offer viable models for that, they will remain entirely beautiful but rather sad."**[4]

Structure should focus on zoning that reacts to how the spaces perform. Urban principles, such as creating a centre, limiting cars, shared parking, reinforcing street edges, establishing axial relationships enhance the performance of a space. The structure should create a secure environment, fitting the inhabitants, ensuring their identity, but allowing for growth and diversification.

"Successful Cities are rooted in the solid void dialectic joint existence of overtly planned and genuinely unplanned, the set piece and the accident, the public and private."[5]

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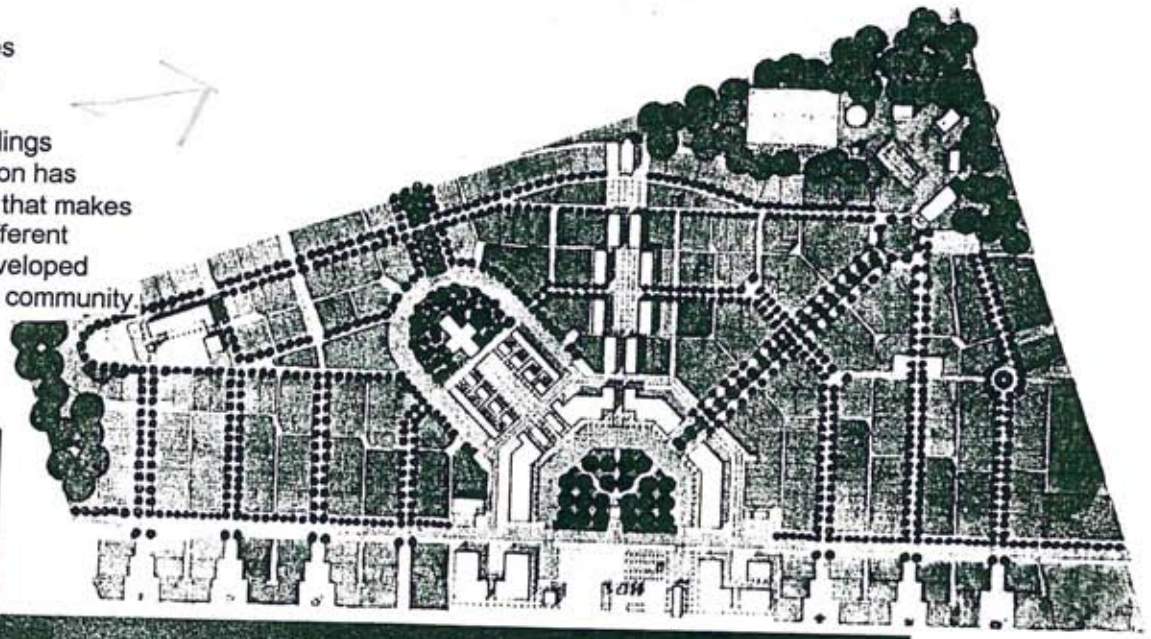
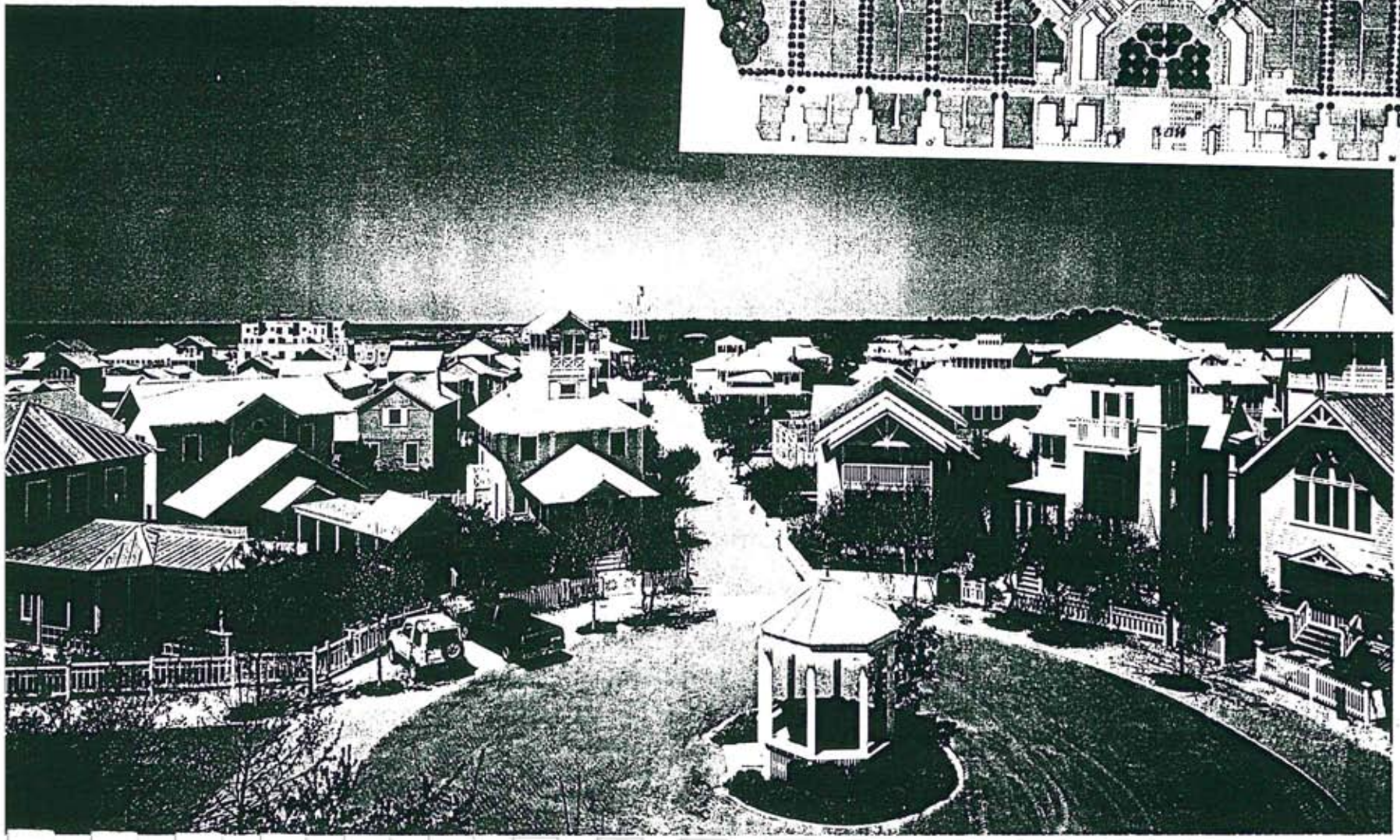
[1]Vincent Scully, The New Urbanism
[2]Collin Rowe, Collage City
[3]Kevin Lynch, A Theory of Good City Form
[4]Vincent Scully, The New Urbanism
[5]Collin Rowe, Collage City

ɪres Duany and Elizabeth Plater-Zyberk have designed this community
ŋg the "New Urbanist Principles". There have incorporated higher densities
l greater diversity. Codes have been created to address pedestrian scale,
ɛet character and relationships to building and street width. Buildings are
ɨgned to reinforce street edges. Parking is shared, vehicle access to buildings
l homes is often at the rear through common parking lots or alleys. Attention has
ɨn paid to the scale of the parking lots. The difficulty may be that the code that makes
town so succesful is also very prescribed limiting the diverse nature of different
ɒples ideas to be displayed. The diversity is also limited, and has been developed
ə high/middle income community. There is no industry incorporated in this community.





BERLIN

(historic center, 1750)

GERMANY

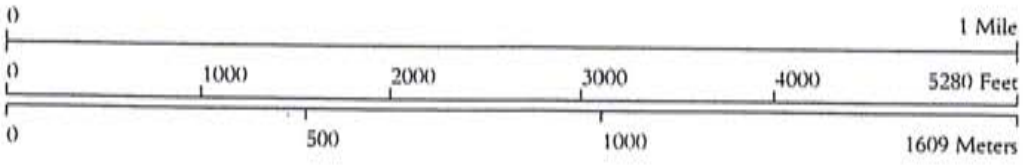


FIGURE GROUND STUDY

BERLIN

(historic center, 1986)

GERMANY

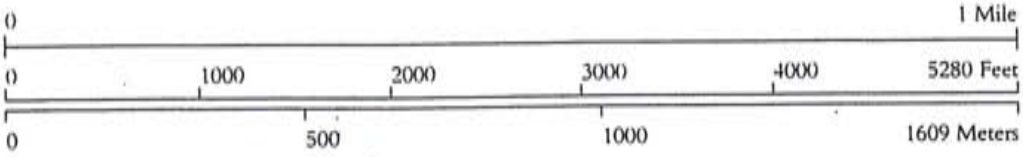


FIGURE GROUND STUDY

VIENNA

(Ringstrasse)

AUSTRIA

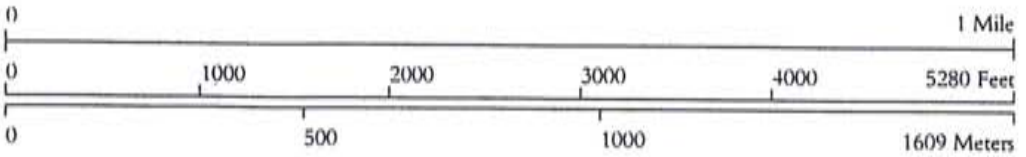


FIGURE GROUND STUDY

AMSTERDAM

THE NETHERLANDS

0 — 1 Mile

0 — 1000 — 2000 — 3000 — 4000 — 5280 Feet

0 — 500 — 1000 — 1609 Meters

FIGURE GROUND STUDY

4.4 Connections

The connection is the relationship and link between the parts, features or characteristics of the city that convey the goals, values and identity of its people. The connections are the various physical and mental relationships that exist within and between the urban parts and the citizenry. Connections occur when a visitor or observer sees a part and reacts to it on a personal level.

The connections structure the parts, conveying the meaning of the whole. The quality, coherence and relevance of the connections, determines how the environment is comprehended and experienced. These connections will identify and orientate the place to the visitor, working to tell the story of its people.

In order for the connections to be relevant, they must have meaning to the people that inhabit the place, retaining and enhancing the natural and built environments. The connections should allow us to experience and become aware of our environments. These connections can, provide sensory pleasures, educate and stimulate mental activity, allowing us to perceive our environment in different ways.

Open spaces permit vistas and panoramas that allow the observer to see the important relationships, and allow for a sense of the city and its relation to oneself. The location, proportion, scale, form, linkages, and definition of these voids or open spaces within a landscape are of primary importance.

Connections are reinforced through pedestrian friendly infrastructure, green infrastructure and vistas. Though the most important connection being to our heritage and tradition. "Perhaps the ideal city would be based on the theatre of memory, and theatre of prophecy if there is no prophecy than there is no hope and without memory there can be no communication."[1]

4.5 Environment

Threats to our security, are more than just military, they are more importantly, the environmental degradation, species extinctions, national morale and economic decline.

In 1985 the United states spent 47 billion in the Persian Gulf or $468 per barrel imported in that year, 18 times what we paid for the oil itself. If we spent the same amount to make buildings energy efficient as was spent in one year on the military forces protecting the middle east oil fields, we could eliminate the need to import oil from the middle east.[2]

Much of the degradation today is blamed on the separation between nature and man. The 19th century thinkers and poets believed in nature to project humanity. The theory being that our culture is suffering from natural experience deprivation and as a result, we cumulatively make poor life planetary decisions. Today we are warned about the loss of connections to our environments, reducing our humanity and ability to make the crucial environmental decisions. The process of maintaining environmental quality is how we perceive use and value our surroundings.

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[1]Collin Rowe, Collage City
[2]Herman Daly and John Cobb, For The Common Good

We can no longer exploit our natural resources for financial gain, opportunities lie in new technologies and working to enhance our environment. The future economies are dependent on the sustainability of our resources, and the extraction of resources will be dictated by the global economy. Companies that do not comply with their environmental responsibilities will cease to exist in the long term. Corporations are dictating who their business partners will be, identifying those that meet established environmental criteria.[1] There is tremendous economic potential in the development of alternatives to natural resource extraction. Governments are looking at penalties and fees for extraction of resources, and larger penalties for environmental degradation.

With the growth of industrialization, we have tended to ignore our cultural heritage and natural environment. Wildlife is threatened with extinction and many natural features are either destroyed or under extreme stress. This condition will diminish the ideal human experience and development.

Thoreau, speaks of the need to understand oneself through understanding ones role in nature and our innate relationship to nature, nature being the source of our life. The heightened self awareness goes hand in hand with a heightened self awareness of nature and the power that comes from that self awareness.

For Emerson and Thoreau the study of Darwinian theories became the master symbol for all natural process. "To cultivate a thing, be it a plant, an animal, or a mind is to make it grow. For man that growth is culture."[2]

Cities give focus and meaning to our existence, and continue to be the habitat of choice for most people, but a city is not separate from nature. The economy, social issues and environment are all interrelated, humans are part of nature not separate from it. Conservation, urban ecosystems, are essential in the development of our continuation in its broadest conceivable sense[3].

In Japan people are considered an important part of nature, not a separate entity, and that the juxtaposition of artificial and natural objects are not abhorred, but are considered natural. The traditional Japanese garden epitomizes this view of nature, gardens as artificial worlds using natural materials for media, and familiar landscapes as models. Tando Ando filters light, implanting an awareness of the richness of a limited urban "nature". Framing views **"shakkei"**, a composition that people can discover anew with each encounter a series of carefully composed views. [4]

We need to create the built environment as an extension of ourselves. This ultimately should be reflected in our understanding of our relationship within the natural environment, taking this relationship as a point of departure. "One cannot have a world that is entirely man made, it would be utterly alien to every man, there would be nothing to challenge or excite the human spirit."[5]

The integration of nature into our buildings is not simplistic, it is not just a matter of digging ponds, planting trees, repairing damaged spaces, creating parkland, or using environmentally friendly building practices. It is cultivating a relationship between the natural, social and built environment.

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[1]Patrick Carson and Julia Moulden, Green is Gold
[2]Henry Thoreau, Walden Pond
[3]David Crombe, Regeneration
[4]Glynis Berry, Progressive Architecture
[5]Kevin Lynch, A Theory of Good City Form

DARLING HARBOUR
SYDNEY, NEW SOUTH WALES
"Tidal Cascade" water feature designed by Robert Woodward

4.6 Transportation

Many urban fabrics have been destroyed by those focussing solely on single user vehicle transportation needs, at the expense of the social and environmental community requirements. The automobile has defined the form of many cities and towns, dictating the scale of streets, encouraging sporadic development and sprawl, that is becoming an economic liability for many communities.

Current zoning practices encourage the use of single user vehicles. Zoning could alternatively foster new standards for efficient transportation, investigating options such as; reducing or eliminating parking ratios, multi tenant parking lots, tax incentives for employers that introduce alternate transportation systems for employees, and the provision of tax credits for bus passes. Penalty taxes or fees for parking spaces could be introduced, once a viable public system is in place. To restore urban space the parking cannot dominate the view.

In California charges for parking spaces were implemented, resulting in single user drivers being reduced by 25%. Ultimately this leading to employers reduced land requirements for parking, and alleviating municipalities requirements for new road systems. Municipal savings being redirected to support diverse public transportation needs. Improved public transit systems ensures mobility to a larger number of people, with diverse limitations and needs.

Pursuing alternate methods of transportation, allows traffic guidelines to focus on infrastructure networks that support pedestrian activity. The formation of pedestrian street life is enhanced when we work to reduce our dependence on the automobile. It is necessary to address density requirements, reducing sprawl in order for many alternate transportation systems to be viable. Smaller vehicles such as mini-vans or buses, servicing transportation nodes, light rapid transit infrastructure, street cars, bike paths and safe pedestrian links are all options that could be investigated.

A recent radio program interview on the CBC discussed how Toronto had fought in the 1950's to keep their street car system, against the voices that considered it to be old fashioned. The Street car system being more economical and easier to construct than subways, is still a vital part of Toronto's transportation network. .

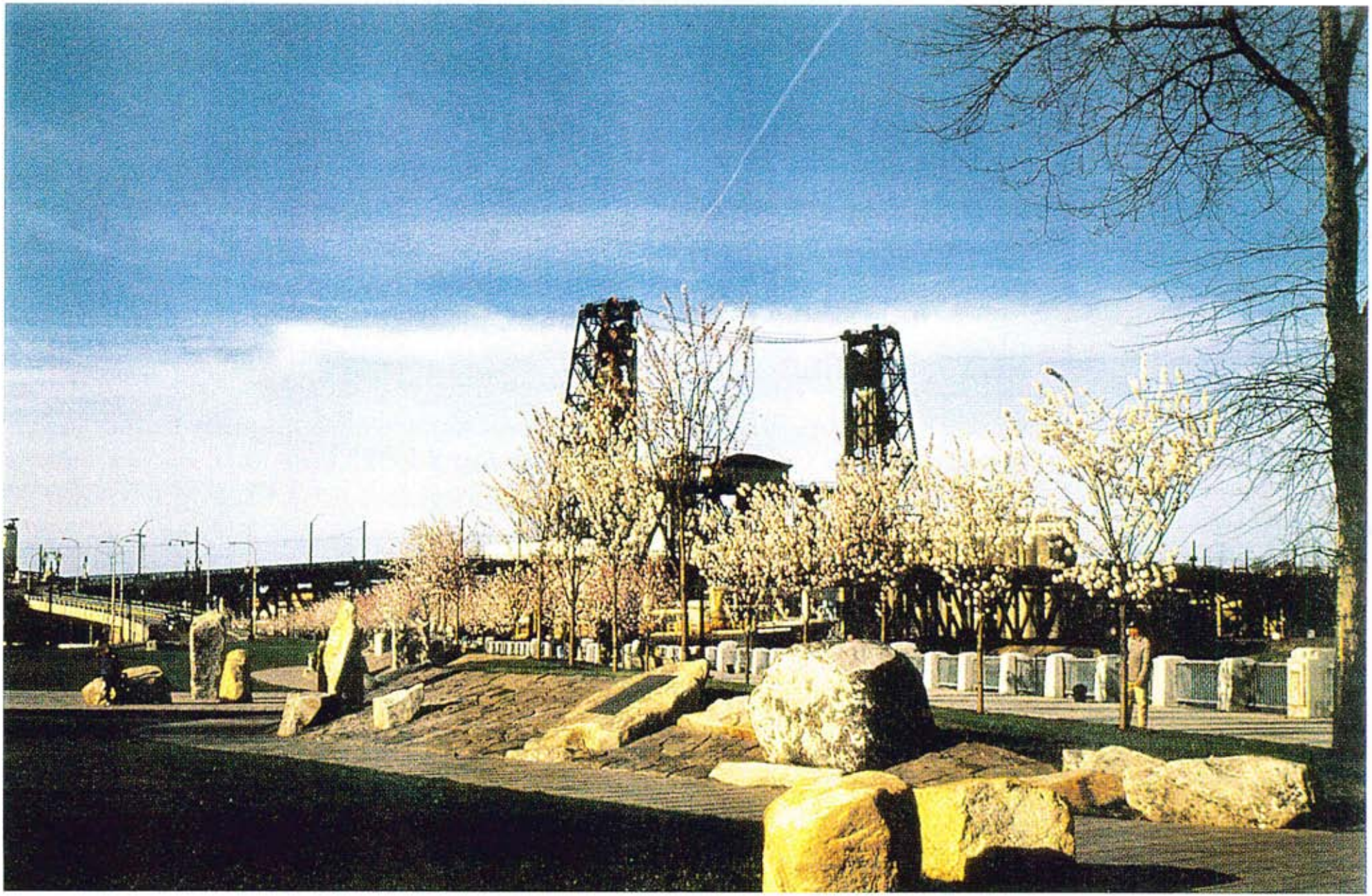
Linking transportation, ultimately could provide an efficient regional infrastructure system that pools resources, eliminating the duplication of services. This infrastructure system could also be explored to reduce the impact of freight transportation, through user fees, alternate use of transportation, reviving ports, ships and rails and transporting during off peak hours.

Sunnyside Park on the Humber Bay in Toronto, had a rich history of recreation and a social sense of place to the community. The construction of the highways, and in 1957 the completion of the Gardener, changed Sunnyside to a corridor instead of a place, a route instead of a destination. The combination of the Gardiner Expressway and Lakeshore Boulevard underneath, and the adjacent rail corridor has created visual, physical and psychological barriers, to the central waterfront. This is typical of many urban waterfronts, including Hamilton. There is a need to eliminate visual barriers, enhance pedestrian activities, and think of streets as a place, interfacing social functions. There is a limit to their capacity to perform this function if they are made to carry too much traffic.

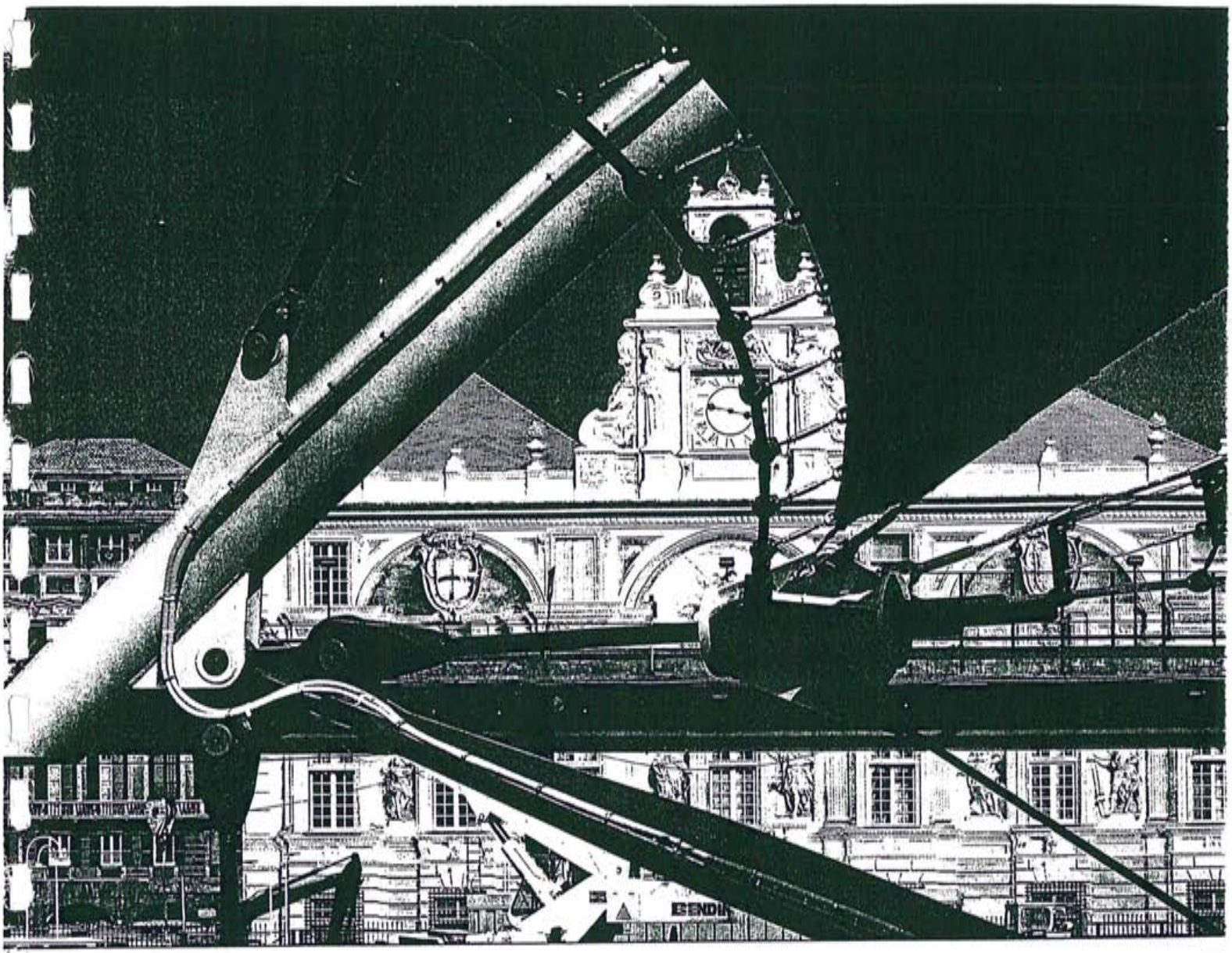
Portland, Oregon, is a seaport on the Columbia River, 108 miles from the Pacific coast. Portland is known as an industrial centre for food processing, textiles, saw milling, chemicals and aluminum. Portland has been going through a progressive re-urbanization program for several years. In the early 1970's, Portland recaptured its riverfront by ripping up a six lane expressway in favour of a linear park, as a memorial for Japanese Americans mistreated during the war.

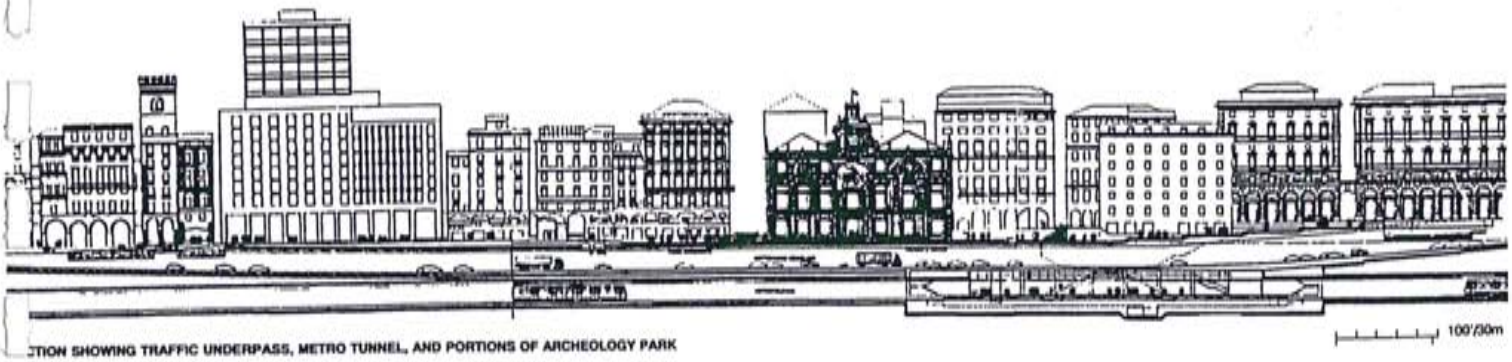
Louisville, is the largest city in Kentucky, with tobacco, iron, tanning and furniture industries. Louisville's waterfront is another example of largely empty industrial land severed from the downtown by an elevated highway. In the Louisville waterfront Master Plan, the planners extended the park under the freeway to reconnect the river with the downtown, working the river system into their design, through river terraces and banks.

Genoa is Italy's chief port on the Mediterranean, with a history in industries such as steel, cement, metallurgy, oil, aircraft supplies and shipbuilding. Genoa was a prosperous trading and banking centre in the Midddle Ages. In Genoa, when the harbour was functioning, it become increasingly out of bounds for ordinary citizens. The 1962 construction of a high level urban motorway along the water's edge, with a surface road running beneath it made separation virtually complete. Complete reintegration of the city and port, demands removal of these roads, but this is noted not to be economically or functionally possible. The docklands were in derelict conditions. Renzo Piano proposed as part of a rehabilitation project to partially tunnel the surface road so that important ancient Piazza Caircamento, which stands between the city centre and the port, is given over to pedestrians. Piano also connects the city with the harbour through a new street that projecting over the water. The existing buildings have been retained, repaired and restored. Politics and financing have jeopardized the development, but one of the major successes of the project was the bold attempt to address the existing infrastructure.



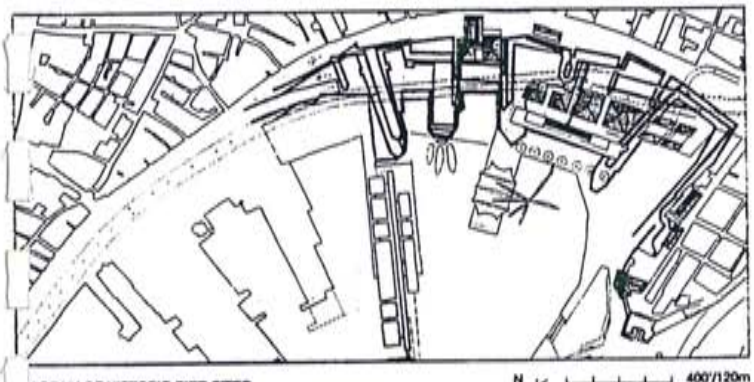
JAPANESE AMERICAN HISTORICAL PLAZA
PORTLAND, OREGON





CTION SHOWING TRAFFIC UNDERPASS, METRO TUNNEL, AND PORTIONS OF ARCHEOLOGY PARK

100'/30m



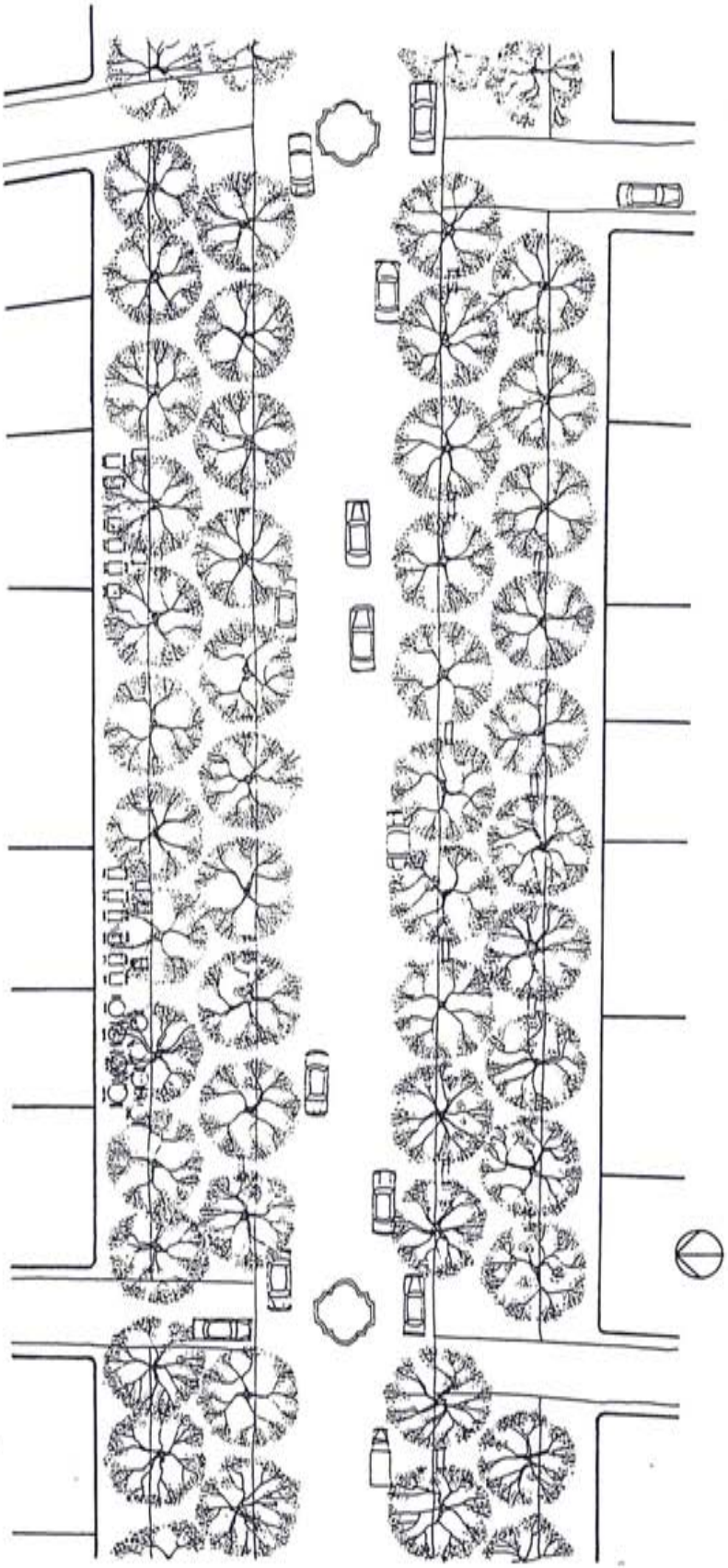
AGRAM OF HISTORIC PIER SITES

N

400'/120m

GENOA, RENZO PIANO
Ancient Piazza Caircarmento beyond.
Section indicates underground roadway

STREET DESIGN STUDY

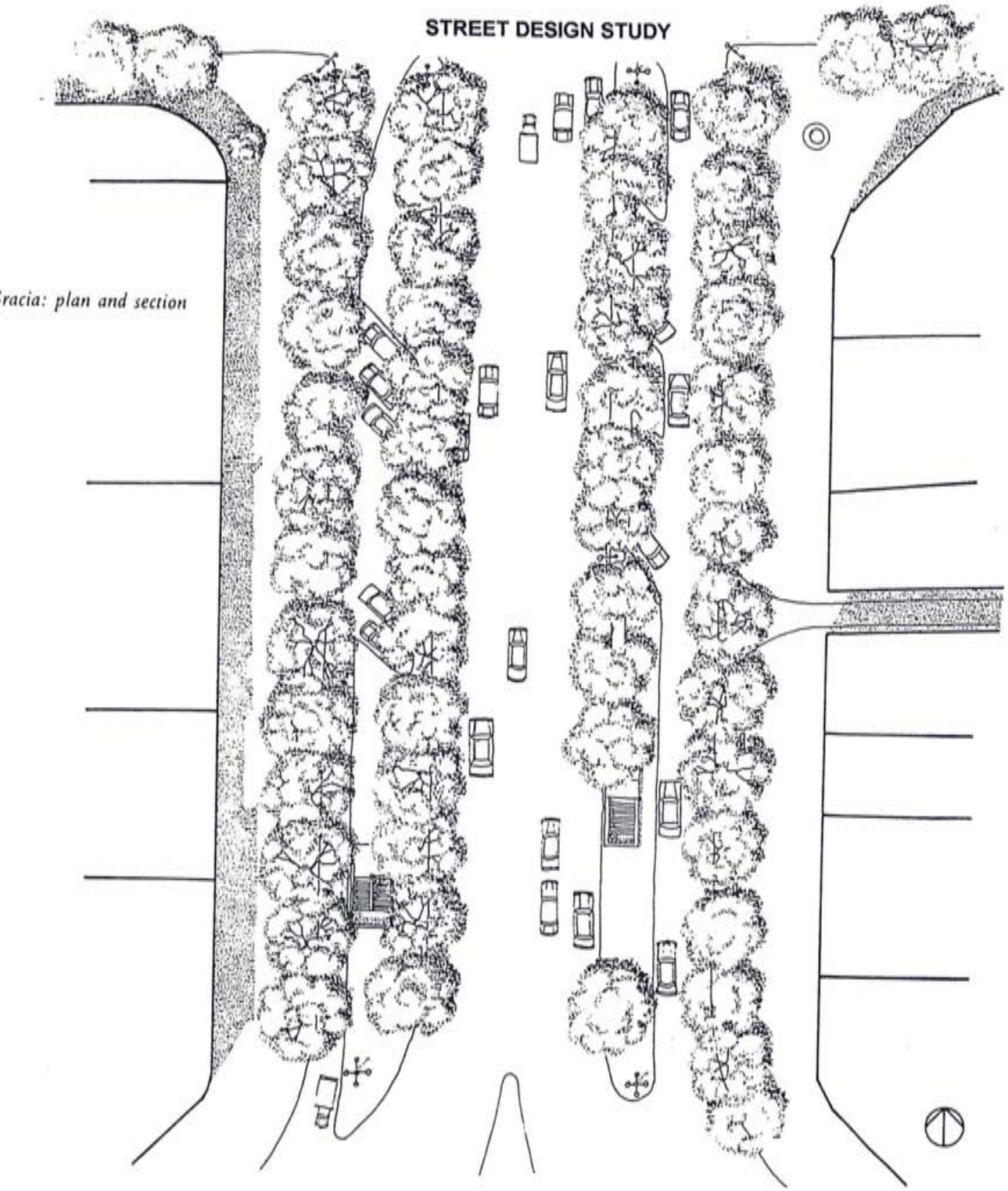


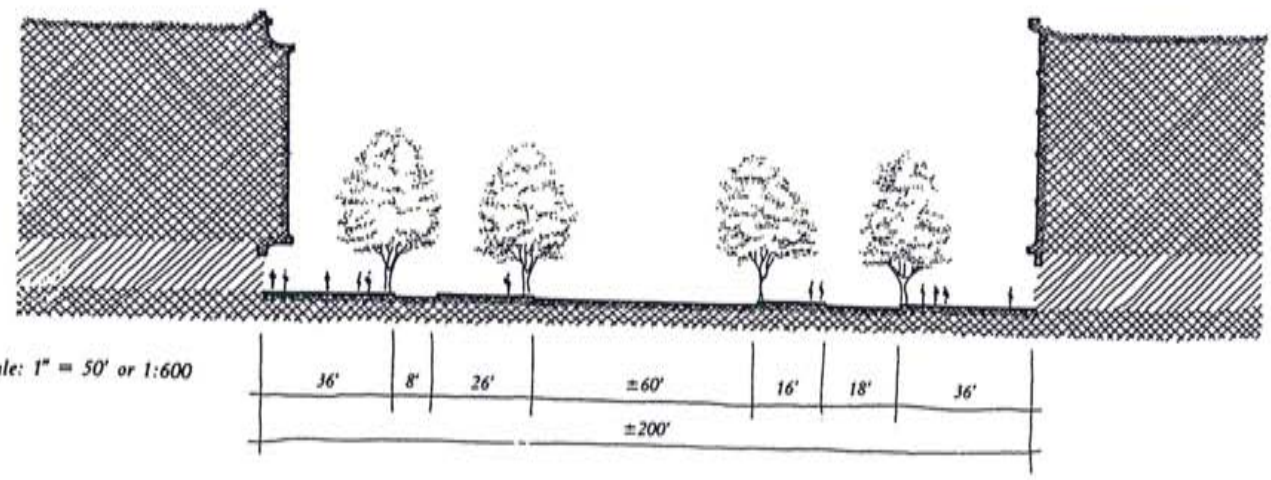
Cours Mirabeau: plan

Approximate scale: 1" = 50' or 1:600

STREET DESIGN STUDY

Paseo de Gracia: plan and section





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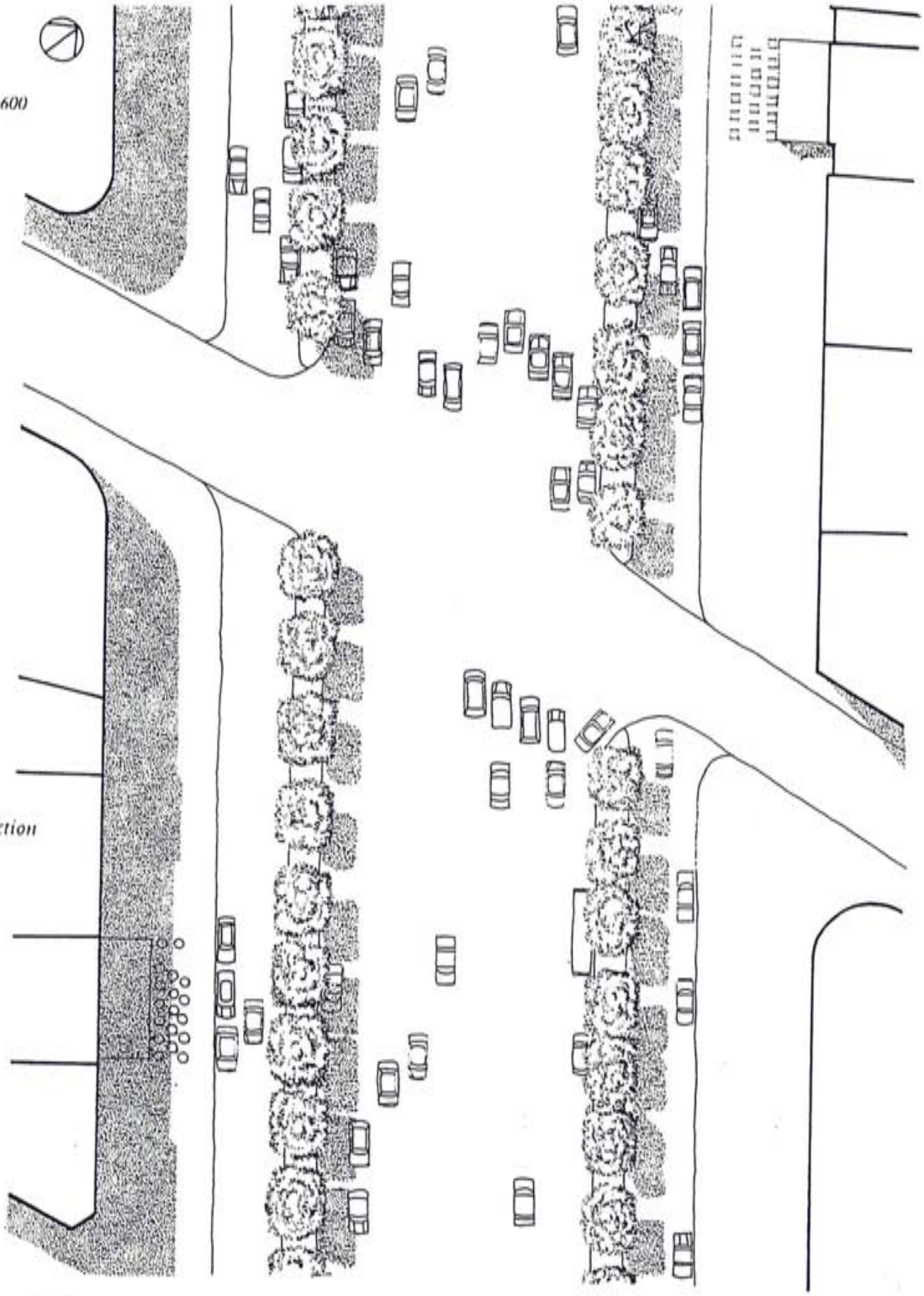
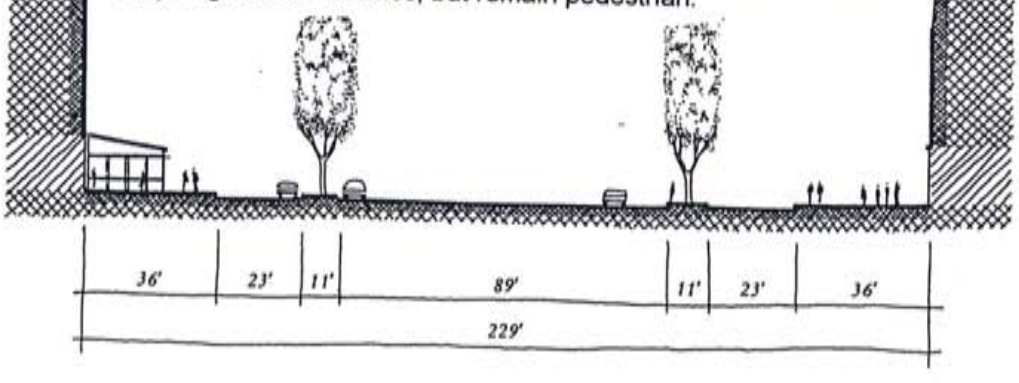


Champs-Elysées: plan and section

STREET DESIGN STUDY

These studies indicate that there are many ways to look at street design. These are only a few examples of major streets designed to carry large traffic volumes, but remain pedestrian.



4.7 Sprawl

Sprawl continues, even though its economic and social costs seem to be apparent to everyone. The tax base does not exist to support the infrastructure required to sustain these new communities. The costs of new infrastructure often greatly exceeds the revenues through taxes. The result is there is no money to rehabilitate existing infrastructure, education, culture or recreational programming, all which are deemed critical in attracting and maintaining a knowledge based economy.

In Stoney Creek and Hamilton, Ontario $11,000, and $15,000 respectively must be borne by tax payers for each new home. On top of these figures, the costs for maintenance, operations, and pollution must be added. Brownfield development alternatively results in about 40% in savings.

The existing downtown centres are becoming empty, as clusters of residential, commercial, and industrial uses are built on the fringes.

Suburban sprawl and urban divestment are an interrelated regional problem that local zoning amendments must recognize and address .There is a need to make tighter, higher density mixed use development. The shifting employment to the suburban parks and fringes has weakened the economic strength of the centre.

The shifting of employment centres and the restructuring of companies in the new and global economies ensures many of the people that do not move from the centres are those that cannot afford to. Many centres become areas for the urban poor.

It is necessary to encourage increased employment opportunities in the urban centres rather than to the suburban edge and highways. We need to revitalize inner city communities by supporting community based organizations, such as linking them to universities and continuing education.

4.8 Regulations

Public safety and engineering standards have tended to be inflexible and constraining to design opportunities. There is an over reliance on existing regulations to control land use and development, based on outdated policies and standards.

Much of the existing zoning encourages sprawl, and out of scale commercial, residential, or industrial development. Existing zoning works to isolate instead of integrate functions, creating patterns of uses that change from centres of activity to isolated wastelands. Most of these centres are supported by single use vehicles, encouraging large areas of asphalt.

Although much of the new planning ideology is based on working to reduce the dependence on the automobile, most municipalities have yet to embrace any modifications to the planning guidelines that discourage sprawl.

Guidelines could alternatively focus on how the spaces perform and not on the reactive guidelines that fail to address many issues. Guidelines that encourage imaginative ways to structure growth patterns could work to integrate diverse types of functions, living spaces, green and pedestrian infrastructure and public space.

Performance standards could also address conservation, pollution, resource extraction and consumption, encouraging environmentally sound business practices. Geneva Steel in Utah chairman is Joe Candon, a former EPA regulator. He is beginning to address the chronic steel industry environmental problems, through the emissions from Coke ovens. Since 1989 Geneva Steel spent over one hundred million for environmental modernization, existing emission control equipment and practices, with these new facilities control more than 95% of Geneva's emissions. If regulations addressed penalty taxes, surcharges or fees that targeted consumption of natural resources, this would ensure responsible companies a competitive edge.

In the development of Coal Harbour, Vancouver, open spaces standards regarding density, threatened the urban form. The aim was to integrate diverse urban waterfront spaces and experiences, with strong links to the existing city fabric. Joe Hruda, the urban designer, noted that one of his greatest frustrations was the tremendous reluctance to re-examine standards about open spaces. Disturbing, in that apparently arbitrary municipal open space standards governed instead of context driven decisions.

In the development of Granville Island, Vancouver, planners were forced to stretch the interpretation of Open Space to include roads and walks, to enable them to create the successful urban form.

There is a consensus that the most successful community rehabilitation projects are those in which citizens groups played an instrumental role in their formation. The Clinton government established a presidential council task force to research the shaping of public policy. The report recommends a greater role for architects and concludes that communities should develop their own strategies for sustainable design. The report suggests that state and federal governments should offer incentives to encourage collaborative regional planning and community growth management, so that sprawl is decreased and open space conserved, working to harmonize zoning and building codes.

4.9 Employment and Economics

The demands on today's work force for flexibility, extensive knowledge, and skills are required in all aspects of work. Employers are dependent on employees with a level of skill that determines the employee type. The result is the place one works is becoming more habitable and equitable, enhancing and encouraging skills development, partnerships and exchange of ideas. The success of the company is often directly linked to the humanization of the work place. New industrial buildings are providing daycare facilities, connections to nature, training and recreational facilities.

Fewer people are now required in the new industries, allowing for green space instead of parking, and smaller facilities that enable a pedestrian scale, to be established. The idea of home/work is also being integrated into business with the advent of communication systems. This extension of the office offers advantages to the employer through reduced capital investment, and to the employee by enabling them to successfully accommodate the commitments required of work and home.

Many communities with their existing infrastructure are looking at ways to rebuild their urban centres, seeing opportunities in Brownfield redevelopment. Many young companies are looking for inventive ways to start up smaller industries and portray an image through industrial incubators or allowing for the balancing of career and home.

Communities where developers have been offered economic incentives to keep their interests in existing urbanized areas has resulted in many successful infil projects. Initially it is cheaper for the developer to build on Greenfield sites (Virgin undeveloped land) but poses a heavier municipal burden. The monies saved by municipalities should be used to subsidize the urban Brownfield development, green infrastructure and preservation.

Centres that encourage plurality in the work force, provide opportunities for various income and skill levels. In order to attract a higher skilled work force, the urban centres could focus on providing environments that stimulate and challenge the mind. Much of the new economy will be driven by a higher skilled workforce, thereby jeopardizing the sustainability of communities that fail to recognize the importance of the cultural and recreational facilities that encourage and maintain the work force within a knowledge based economy.

Seattle is the chief city and port of the Northwestern U.S.A. in West central Washington. Seattle industries include shipbuilding, food processing, brewing, fishing and lumber. Seattle, is a noted successful mixed use port incorporating several functions, but the economic strength of the port is largely the transportation and marine activity. This has generated approximately 25% of the economic activity in alternative port uses such as tourism, hotels and restaurants. The diversity has allowed access, education and enhancement of the existing economy.

Urban vitality must acknowledge economic development as integral to social and environmental issues, encouraging a variety of increased employment opportunities, working with post secondary institutions, corporations, and communities to provide places for training, education, product evaluation, and development.

"The costs and benefits of creating and maintaining a system must be considered together, traditionally we consider only the initial costs and ongoing benefits, while neglecting the ongoing costs and at times the immediate benefits."[1]

Economic pressures through global strategies, make it imperative that regions identify their strengths, particular advantages and the talents of their population, developing the character of their communities and environment.

Planners, economists, environmentalist all agree, the only assurance of a future economy is in sustainable growth through new patterns of co-operation, competition and investment. There is a need for the older productive powers that have built the cities, to work in partnership with the communities in which they belong to recreate themselves to sustain a place in future economies. Governments must encourage and subsidize the "greening" of industry, encouraging investment in responsible corporations ensuring their competitive edge.

Environmental sustainability is integral to the future economy ."Regulations that force you to act epitomises the dinosaur mind set."[2] The root of financial sustainability potentially could be a market driven green revolution, geonomics being the trend for the future in that we begin to pay for the services provided to us by the earth's natural assets, attributing values to all natural resources.

Richard Sennett's cynical view is that spaces full of people in the modern society are spaces limited to and carefully orchestrating consumption, or spaces limited to carefully orchestrating the experience of tourism. The city has been reduced and trivialized to a stage of life. In redefining ourselves, building upon our past, we have the potential to offer a reality and complexity in our lives that will challenge Sennett's cynical view.

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[1]Robert Yaro, A Region at Risk
[2]Frank Carson, Green is Gold

4.10 Education

Education is noted to be the most important single determinant of success in the labour market. Programs should therefore be in place to ensure equal opportunity to advanced and diverse education, eliminating the segregation of peoples ability to pursue a higher education. Programs could be developed promoting creative talent that cultivates, stimulates and advances the participants in a knowledge based economy.

Information based industries and technologies will furnish much of the growth in the new economies. In order for this work force to develop, it will also need cultural and recreational stimulation, ensuring many opportunities for the arts and creative talent.

Education should allow for cultural, social and technical growth. Education must not allow itself to become too narrowly focussed on professional disciplines, but work to ensure tolerance and understanding in the diverse nature of education. With changing work environments, economics, and the range of skills required, embracing life time learning will ensure opportunities and personal growth..

Over the past 15 years the income gap has become wider, driven partly by the global forces, but also by neglect of our human resources. [1]Low skill jobs are being eliminated, therefore creating a need to expand the capacity of post secondary schools, continuing education and adult education. Governments should be ensuring the funds to provide quality education.

Education has the opportunity to advance through the established networks among the community and in assisting firms in training to pool resources and expertise.

4.11 History of Place

Architecture has much in common with the philosophical dimensions of existence; neither can be discussed superficially, it is necessary to recognize the places that define a regions natural and cultural heritage.[2]

History reveals that many working class people built the cities. Their contribution should not be ignored, or slighted, but acknowledged as a vital part of urban growth. To dismiss this is to remove the roots from the city. Many cities are in trouble as they have lost their sense of purpose, with changing economies eroding traditional ways of life, cities are working to redefine themselves, often dismissing their history.

Change can allow for our growth and development, when it is a continuum to what we are, change from outside leads to fear and regression. Using the existing industrial infrastructure to retain our memory of the past integrates our history with the future.

It is necessary to recognize the places that define a region's natural and cultural heritage. Once these places are recognized there must be polices in places to ensure their protection.

The preservation of culture and encouragement of plurality enhances the quality of life in our urban centres. Providing various non-traditional housing types encourages diversity of race, income, and age. This plurality intensifies and enlivens our cities and street, thereby building acceptance and creating a feeling of safety and security.

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[1]Robert Yaro, A Region at Risk
[2]Leon, Krier, Urban Space

Battery park an illustration of life rather than life itself. Battery park is a typical example that you cannot begin something significant by creating immediate fullness, there is a need for invention and discovery, the possibility of surprise, and to think in terms of what visually will make for a narrative beginning. We need to create a sense of beginning, this means radically changing the framework of urban design.[1]

Battery Park City is a sterile imitation of its New York model, the idea failed to keep in mind the great diversity that makes New York a dynamic, and sometimes chaotic city, where people turn streets and parking lots into shopping bazaars, buildings and street light stanchions into billboards and parks into theatres. Design guidelines and zoning are too prescriptive. Battery Park City has the look and feel of a planned community rather that a vital urban place, lacking the complexity on which makes Manhattan thrive.[2]

The over accessibility becomes unstimulating, eroding curiosity, and eliminating intellectual stimulation. There is a need for discovery and mystery, without feeling lost or disoriented. Heritage is often defined within a narrow context, and by narrow opinions as to what it constitutes. Heritage should not be sanitized as it is necessary to understand our past to define ourselves for the future. There is a benefit in working within the fabric of what exists and building slowly upon that fabric. As the community participates in that growth, they ensure the development belongs to them and not the planners.

With the changing economies, many communities are losing their industrial or manufacturing past. Some communities compromise their environment, their community structure and their growth in fear of losing the economic base that has supported them.

Other communities disregard their past in new opportunities, disregarding the people that have participated in the older economies. What both these patterns have tended to create, are large scale Greenfield development, decimated urban centres, and wastelands of existing industrial uses. Neither of these patterns has recognized the strengths of building upon the existing structure or fabric, and ultimately is economically destructive as to the cost burdens of new infrastructure.

" When we assume that progress means degrading our natural and built heritage and that is better to start and over again we are threatening our collective memories."[3] The city is a fact of nature, a metamorphosis, and a conscious work of art, thereby we must build upon the aspects that have defined us.

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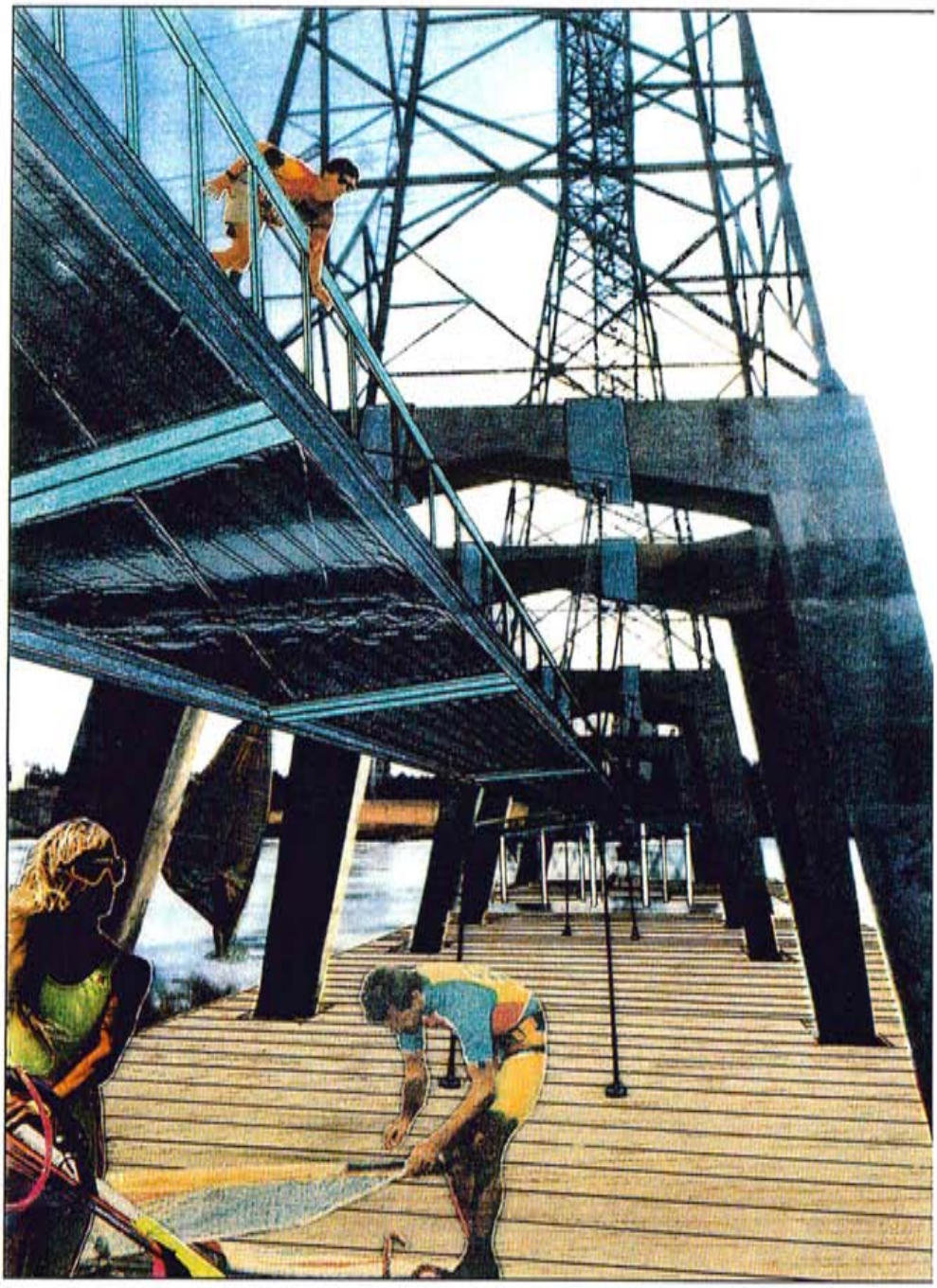
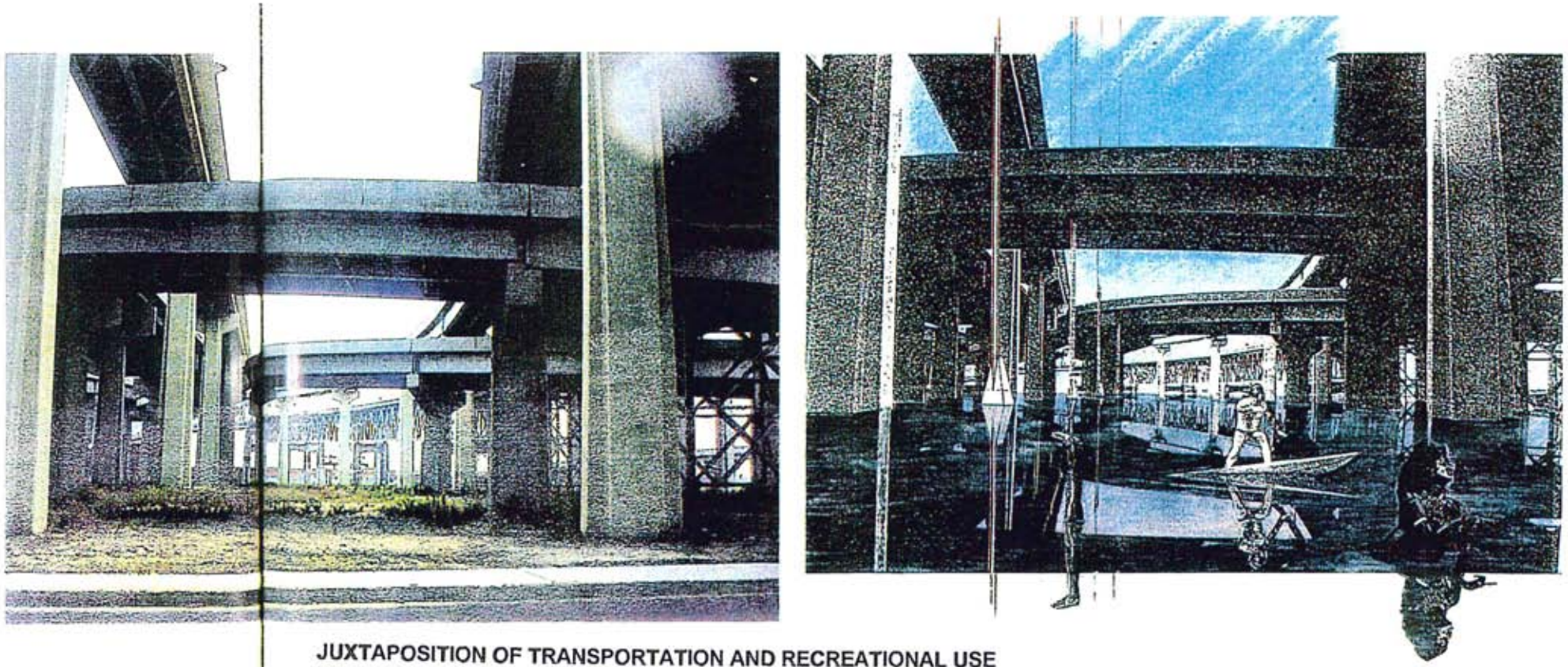
[1]Richard Sennett, The Conscience of the Eye
[2]Abby Bussel, Progressive Architecture, May 1994
[3]David Crombe, Regeneration



JUXTAPOSITION OF HYDRO TOWERS AND BOARDWALK
We need to explore novel ways to combine utilitarian use with public space

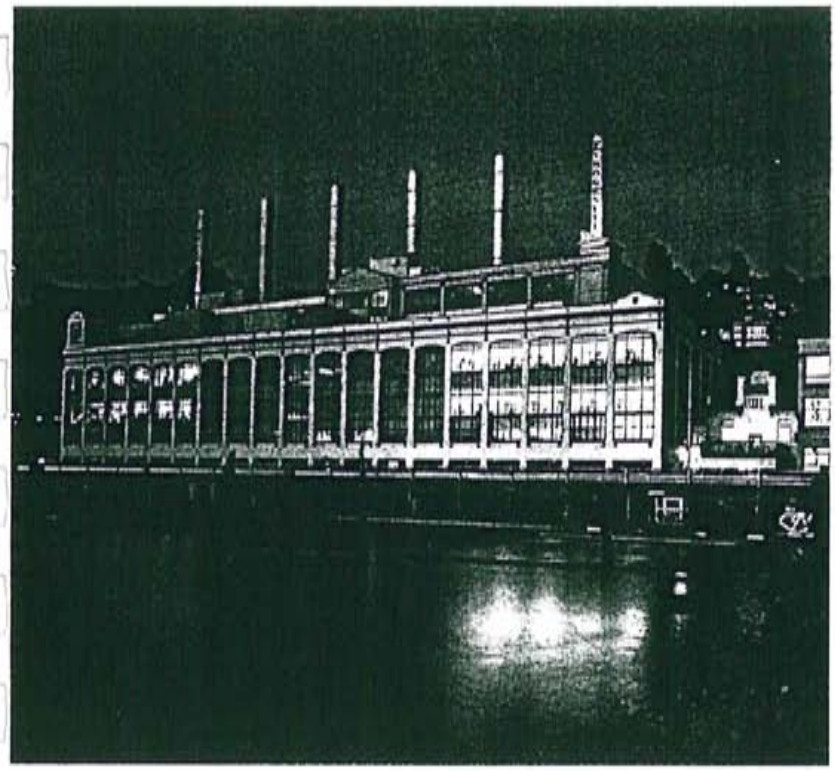


JUXTAPOSITION OF TRANSPORTATION AND RECREATIONAL USE

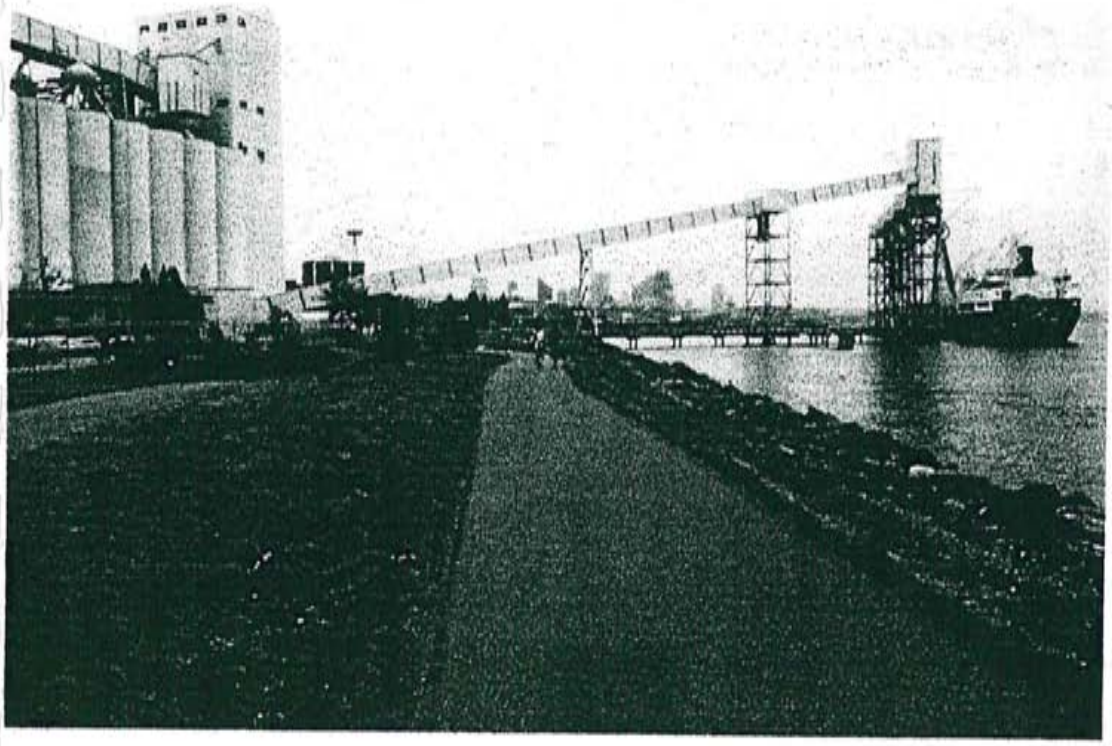
We need to explore novel was to combine required infrastructure with public space

The real challenge for architecture today is to find ways to respect local concerns and respond to the local environment, without giving in to them uncritically. Historically, every vernacular that was vital and meaningful was also constantly changing, pushing the limits of what people knew and expected.

P/A September 1994



LAKE UNION, SEATTLE
A research library has been created from an existing defunct steam plant, while respecting the existing industrial architecture. The original plant was build around 1920, housing seven enormous oil-fired boilers as a city owned backup power plant unit. It ceased operations in 1984. Included in the development is a floating walkway along the lake, a boat launching pier and a restored house that is now a cafe.



SEATTLE
The mixture of public space and industrial activity creates a interesting and convincing juxtaposition. The walkways nicely co-exist with industry.

5.0 RULES AND AXIOMS (CONCLUSIONS)

5.1 Diversity: Through The Inclusion Of Industry Within The Urban Fabric

Encouraging industry to form part of the urban fabric creates an added dimension to the diverse nature of any city. Industry reinforces the ideology behind a successful city, offering exposure to and value for the people that participate in this world, truly integrating different types of employment into the urban landscape. Different types of employment and income levels encourages a variety in housing, age and social composition authentically reflecting the complexity and whole of society. An acceptance of true diversity ensures an acceptance of all, inspiring and motivating us to learn, experience, and exchange ideas.

Many Brownfield sites are a result of industry relocating from the urban centres, often to the suburban edges, with segregating industrial zoning. Many of these sites were vital to the economic sustainability of urban communities. The loss of an economic base in the centre has resulted in a growing segregation between incomes, with high ratios of low income people remaining in the urban centres, while development of exclusionary suburban communities continues on the fringes resulting in new communities that insulate, isolate and neutralize cities.

5.2 Scale: Using Industry To Create Urban Form

The negative impact of industrial installations are related to the scale and daily operations. Many of the daily operations, that negatively effect a community, can be controlled through zoning regulations and planning initiatives. In order to address the issue of scale, it is necessary to ensure the industrial installations form part of the urban fabric.

It is fundamental that we start to break down the large industrial installations that create uninhabitable, intimidating and bleak environments that lack any type of human scale. The vast industrial installations debilitate interaction with the community often segregating the community from their most intriguing and beautiful landscapes, such as the urban waterfront.

In reducing the scale of industrial installations within the urban fabric it is critical to recognize the social and economic benefits offered. There are many industrial installations that work within the urban fabric, adjacent residential, commercial, or cultural buildings.

When industry has developed within the community fabric it has often become part of the community structure. This is exampled through the many parks built by the adjacent industrial buildings, for the neighbouring community, or the financial contributions to ensure community sustainablity.

For any type of urban form to successfully develop it is necessary to limit the size of any one development, be it industrial, commercial or residential.

5.3 Structure And Form: The Culture Of A Place, Must Be The Foundation Of Structure

Historically, we often acknowledge the temples that have built a sense of the surrounding community. In an industrial city those temples are often the industrial artifacts, the chimneys, smokestacks or even buildings. This is the architecture that reflects the spirit of community. If we work with these industrial artifacts as nodes within the community, we can use them to structure the community and respect the monuments that have created a way of life and meaning for the community, acknowledging the reality of the human experience of that society.

The community focus is not necessarily the industrial buildings, though it could be. The community focus should reflect and build on the diverse nature, of society, through intense and various programming, giving structure but acknowledging chaos (individuality.)

The industrial character, or identity of the community, may transpire in nodes, as something that is celebrated, or it may form part of the urban fabric, that reinforces the edges or neighbourhoods.

If one fails to recognizes the opportunities in building upon what exists, be it the industrial, agricultural, or commercial culture of a city, it will produce a form that lacks meaning, negating and discrediting the values and people that have built the community. This will fail to be a place as it fails to build upon real life. The structure must be reflective of society.

5.4 Connections: Spiritual and Physical

The quality of a place is its connections to its peoples through its legibility and meaning. The connections to the particular features, or characteristics identify the goals and values of a culture.

When I see the industrial waterfront, I see beauty, though some might be brushed off as romanticism, it is very much a part of my history. My great grandfather came from England and started a business on the industrial waterfront, and today my father continues the traditions of this family business. As a small child my father and grandfather would take me onto the ships, or into the factories to show me the boilers their company was repairing. Many of the men that worked on those ships are still working for my father today.

This is one story of someone who has grown up in the industrial city. It is difficult for me to convince an outsider of the relevance of our industrial city, without giving it a human face.

I am proud of our industrial heritage, and the contributions that my family has made to its history, as are the many thousands of residents of Hamilton and the neighbouring communities. It is fundamental that we are able to portray our heritage, our identity through sharing our stories, be it verbal or visual, allowing others to connect to our city, and take away some sense of what is so important to our past.

These images allow us to share our common values, grounding us, thereby allowing us to diversify and grow.

5.5 Environment: Nature Being Indigenous To The Way We Create Our Spaces

To be aware of ourselves, means being aware of both the need to grow spiritually, (apart from the sense of religion) and intellectually. Nature being the source of our life, technology being the extension of ourselves. Culture and nature, both being the main elements of what we are. The difficulty being in the past is the separation of these, which is impossible, they must be approached in totality to inspire and strengthen the whole.

It is fundamental that we understand nature and its importance to who we are, and use this as a building block for what we create and build. We need to be aware of the relationship of the built form within the context of that natural environment, whether it be an extension, a window, a discovery, an exploration, or a juxtaposition. If we deprive ourselves of the natural experience in order to celebrate the built experience, we weaken who we are.

The further we drift from our environment, the lest tangible it becomes. There are many opportunities for industrial growth exploring resource alternatives, using industry to preserve and celebrate nature, working to alleviate the need to extract unrenewable resources that will ultimately result in resource depletion.

The green space and open space give the built form meaning. The connection to nature allows one to see the built form in connection to oneself. It reinforces the interrelationship between city and nature.

5.6 Transportation: Using Opportunities In Diverse Environments To Provide Feasible Alternatives

Single use zoning, be it industrial commercial or residential, has been responsible for much of the insensitive, aggressive, out of scale transportation infrastructure. In order to create successful urban form, the existing transportation networks need to be addressed.

Much of the infrastructure that separates the waterfront from the community was initially designed to support the industrial waterfront. Additionally many of these road networks also have developed into corridors. Therefore it is necessary to address the transportation requirements on a municipal as well as regional level.

In order to alleviate the need for major arterial roads, we need to develop a public transportation system that will radically reduce the dependence on the single use vehicle. Transportation links to areas that serve single use zoning, restrict the flexibility and the provision of such a service. In order to be economially viable, diverse and dense clusters need to develop ensuring the transportation network can be convenient to several user groups. By encouraging diverse user groups, you broaden the requirements, therefore enabling the support of a system at several periods of the day and at several locations.

There is also the need to provide alternative modes of transportation. In encouraging diverse uses, several alternative modes will naturally develop, such as walking, car pooling, biking etc. Existing zoning restrictions and governments have become the major impediment to developing a viable and economically sound transportation network. Regions and municipalities need to assess the true cost of the single user vehicle, making those that support this transportation accept its the true cost, allowing more monies to be redirected into public transportation.

Governments need to focus on making public transportation accessible, instead of the historic pattern of making the single use vehicle the most convenient mode of transportation. Roadways required to take large volumes of traffic, need to be designed respecting their environment, alleviating the impact, factoring in the community and working at creating a pedestrian scale.

5.7 Sprawl: Curbing Suburban Sprawl, Strengthening Urban Regrowth

There needs to be regional control on the type of development that occurs, working to reinforce the centres. There needs to be denser, diverse, intense centres, redirecting monies that build additional infrastructure, back into revitalization of the inner cities, introducing public transportation networks, rehabilitating existing infrastructure and encouraging Brownfield development.

There are many wonderful examples of industry working within an urban context. The issues of loading, truck traffic, parking, noise and pollution are all issues that obviously need to be addressed, but in the majority of industrial uses they are in no way large enough issues that validate the removal or abandonment of industry from the urban core.

Industry has the ability to reinforce urbanity though employment to area residents, ensuring the maintenance of an economic base in the centre. Invisionary site development and planning has the ability to take advantage of the existing industrial development for instance; shared parking that takes advantage of parking provided during off peak hours, monies to support transportation networks to their facilities that support adjacent uses and parkland dedication for employee and neighbourhood uses.

Industrial urban uses support diversity, encouraging diverse types of housing, commercial activities, and recreational activities to support the industrial workforce. Industrial uses bring people to the downtown at all times of the day, creating a lively street life. They support adjacent commercial and recreational uses. They provide security through the monitoring of the street. When industry is encouraged to move to suburban industrial parks, often their existing facilities become vacant, or demolished often resulting in parking lots, or underutilised land.

5.8 Regulations: How the Spaces Perform

Existing zoning standards are arbitrary, and work against the development of any urban fabric. Zoning must be revised to reflect the way the place will perform and the actual way the place is intended to be used, working towards context driven decisions.

Instead of isolating uses, such as industry to areas that are planned, so there is no ability to create urban form, regulations should focus on providing guidelines to assist responsible industrial growth within cities. There are rich planning, economic and social opportunities if only governments would work to ensure the beneficial performance of the facility within the community, instead of its removal.

If performance regulations were to be evaluated, it would form the basis of solving the issues to preserve or create urban form. The issues being diversity, structure, connections, environment, transportation, sprawl, economy, education, place and culture.

5.9 Employment And Economics: Providing Diverse Opportunities

The complexity of work, is ensures that many employees involved in the knowledge based economy will also look for cultural and intellectual stimulation, available within a vital urban fabric. The diversity of uses enhances this stimulation.

In concentrating on industry within the urban context, it is of benefit to identify the changing environment within the workplace. The industrial workplaces are becoming much more integrated and diverse in themselves, making it more important to create places that stimulate performance, interaction and exchange of ideas. Workplaces that offer a stimulating environment are more likely to attract a higher skilled workforce.

Insightful economic development provides the economic engines that support other aspects of our being outside of employment such as recreation, culture, entertainment, dining, and shopping. Sound economic development also provides the services that support each other; for instance office support for the neighbouring industrial uses. All which support strong public transportation systems, various housing needs, advanced education and skill development.

The removal of the economic base, such as industry will destroy the urban form of the cities in which this type of economy has been based, socially as well as economically. It is fundamental that governments work with industry to ensure their survival in the context of the urban form, working to overcome the negative issues that are often associated with industrial use.

5.10 Education: Creating Environments For Diverse And Visionary Options To Learning

Providing education and training, interfacing with the post secondary systems and corporations is fundamental in developing and maintaining employment opportunities. Regions must identify their strengths, particular advantages and talents of their population and develop them, networking and pooling resources and expertise.

If the existing strength of a community is industry, the community needs to develop progressive visions for industry in the future. Industry is changing and communities that wish to evolve must address the opportunities offered within industry. This means concentrating on development of a skilled workforce that will work to sustain the economic base within the region. To ignore this threatens the survival of the economic base within these urban centres.

Research and science into resource alternatives, environmental engineering, marine biology, are ways in which industry and universities are working together. In Hamilton, the largest textile industry existed in Canada employing over 3000 people in 1891. The local colleges who had abandoned their textile programs are once again offering them, as the region is beginning to look at the textile industry as a profitable enterprise. Local industries can offer co-operative education with the colleges and universities, as is done in many fields including mechanical, electrical, engineering and technology.

5.11 History of Place: The Industrial Culture

The history of a place is what gives a place meaning and identity, thereby giving the peoples of the place their identity. Our identity or culture is what allows us to develop and grow, and without it we are lost, without direction. Building upon an existing fabric without acknowledging the context will fail to create any meaning. If the resident can no longer make sense of his world, the outsider will never comprehend the meaning of a place.

If the history of a place is industry, this context must not be disregarded. It should be celebrated and given the opportunity to mature, nurturing those that work inside this world.

6.0 CONTEXTUAL STUDY

Through this thesis, I wish to explore a space that was once considered a natural beauty, but over the past one hundred years it has been exploited through indifferent industrial development. The development has devalued one's perception and attachment to the harbour, and ones perception of industries role within our communities.

In my opinion there is something terribly wrong with the existing industrial domination of the Hamilton waterfront. I believe it is necessary to work to integrate the industrial waterfront into the existing communities, making it a vital part of the urban fabric. I believe there is an opportunity for industrial development to be a partner in community growth, exploring the integration of diverse uses and development, while maintaining the memory and history of Hamilton's industrial past.

Hamilton has a rich history of industry and industrial buildings, although often industrial development has been excessive, arrogant and insensitive to the surrounding socio-cultural and natural environments. There is an opportunity to restore value into the industrial development, as the elimination of industry on the Hamilton waterfront weakens our links to the past.

6.1 Industrial History

The lands that make up Hamilton began to be surveyed as early as 1788. Parcels were given to the loyalists who in the early 1800's began to develop the downtown area.

A number of Hamilton people from elite families, such as Richard Beasley, Sir Allan MacNab, Robert land, George Hamilton and Nathaniel Hughson had major roles in the development of Hamilton. George Hamilton and Nathaniel Hughson donated the downtown land now known as Gore park in 1835.

In 1827 Hamilton became a port enabling it to compete as a marketing centre with its rivals Dundas and Ancaster. Hamilton businessmen were instrumental in the building of the Great Western Railway, by-passing Dundas and Ancaster and providing transportation westward to London.

In 1891 Hamilton was the fourth largest city in Canada, with a population of 50,000. The new industries of 1861 built around the railway and with the advent of steam increased in number, size and sophistication.

The Sanford manufacturing company, a textile industry with more that 3000 employees was the largest clothing establishment in Canada in 1891, although manufacturing in Hamilton was still dominated by a large number of small enterprises oriented to the local market. From the beginning the driving forces for the development of Hamilton were always directed towards industrial development.

The sole focus on industrialization soon created fragmentation between social and economic lines, much of which still exists today. The cities north end with the major concentration of working class housing, industry and railways, and to the south escarpment the development of upper class residences.

Places of work and residences were being separated with the emergence of a street railway system and street cars. Public transport was utilized in 1874. The first telephone exchange in Canada was in Hamilton, brought to Hamilton by local civic leaders. The Hamilton Blast Furnace Company, founded in 1893 would lead in 1910 to the formation of the Steel Company of Canada. In 1898 Hamilton entrepreneurs developed and brought from St. Catharines the city the most efficient reliable supply from of electricity available to any urban centre in Ontario. In 1896 Westinghouse company built it first plant, followed by Otis elevator in 1900 and International Harvester in 1903.

Natural gas was provided in the early 1900's from wells near lake Erie. In 1913, 46 American firms had set up branch plants in Hamilton, and between 1905 to 1915 industrial investment tripled. Industrial employment during 1900-1911 in Hamilton grew by 107 percent, twice as quickly as Toronto, encompassing half of Hamilton's labour force. In 1903 the Hamilton Automobile Club was founded the first such club in Canada.

By 1914 Hamilton had become an industrial city, but most of the city's population were working urban poor, ill-housed and unhealthy. Economically much had been achieved; socially, conditions were little better than they had been a quarter of a century earlier.

With the first world war, iron and steel production expanded greatly, and led in 1917 to the creation of Dominion Foundries and Steel Company. The population passed 100,000, however the city was ill equipped to deal with the influx of workers, and the inadequate stock of housing was subjected to an even greater strain. The only public facility added during the war was Gage Park.

Hamilton suffered more severely during the depression than other cities, as 22.5% of the families in the city were on relief. The civic treasury was so depleted that the new Mountain Hospital completed in 1932 could not be opened for six years due to the lack of furnishings and equipment. It was not until 1927, after the outbreak of scarlet fever that city officials began to provide proper services and roadways to access the Hamilton escarpment. Two positive make work projects were the Botanical Rock Gardens building on an abandoned gravel pit, and the Sunken Gardens, on land now occupied by McMaster Medical Centre.

Urban development was hard on the environment, and as long as sewers had existed in Hamilton, they had discharged untreated effluent, industrial waste and chemicals directly into the harbour. It was first reported unsafe for swimming in 1914, but not until 1923 was the water officially declared to be polluted.

The second world war had a greater impact on Hamilton than the first. It was longer and more dependent on heavy artillery. In 1941-74% employable persons were in the manufacturing sector. In 1944 the Hamilton Health Department described the housing situation as deplorable.

After the war, better conditions were demanded, culminating in 1946 with a violent 81 day Stelco strike. Despite concessions granted as a result of the strike, Stelco was able in 1948 and 1949 to undertake a major program of expansion, including a huge land reclamation of the harbour.

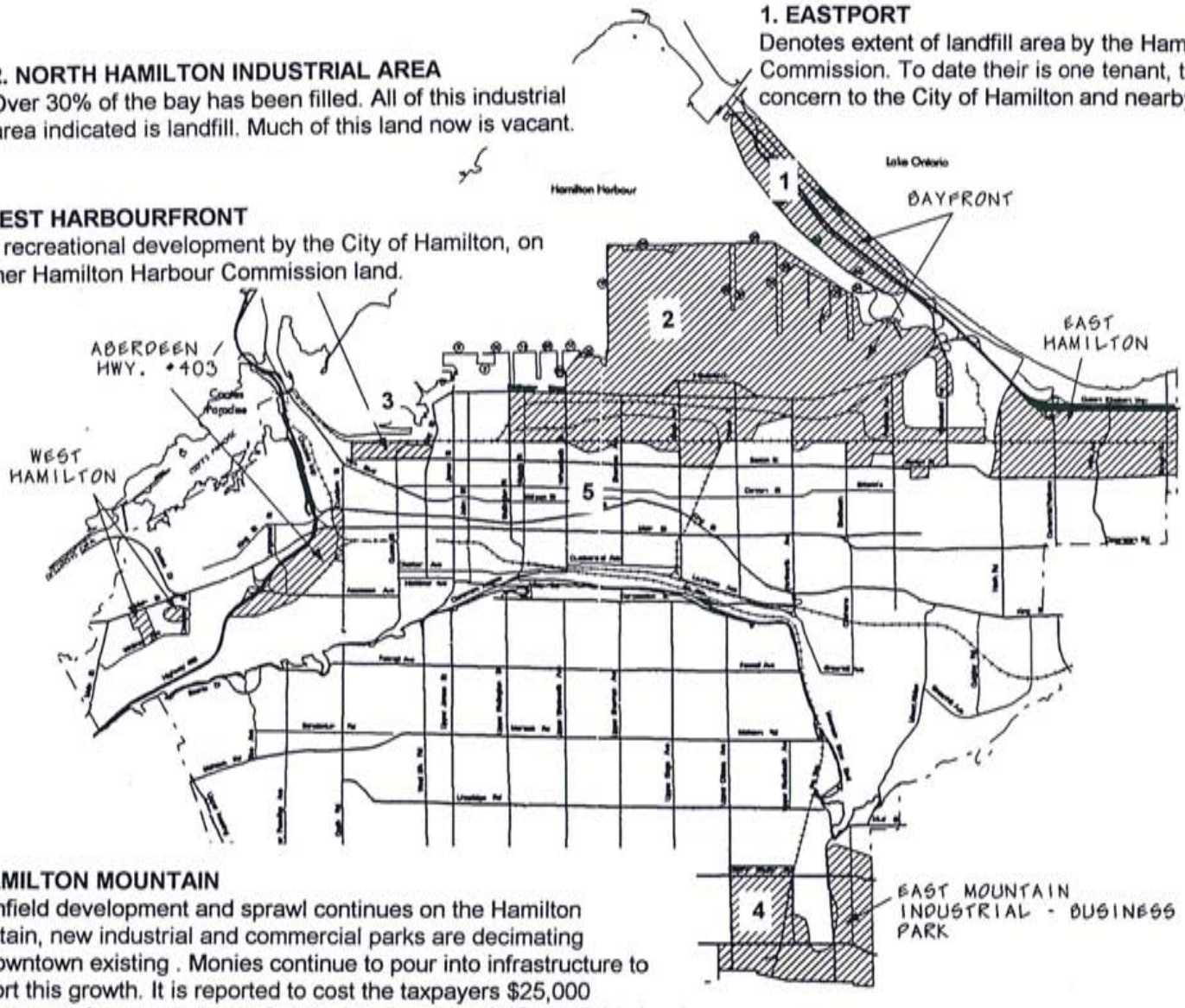
The Canadian steel industry had moderate consistent growth during the 1960's and 70's. Downsizing occurred during the 1980's and 90's and appears to have levelled off. The growth, capacity and performance in international markets are outstanding, however among western nations Canada has been slow to adopt new production technologies.

Industrial Areas in Hamilton

1. EASTPORT
Denotes extent of landfill area by the Hamilton Harbo Commission. To date their is one tenant, that is of sc concern to the City of Hamilton and nearby residents

2. NORTH HAMILTON INDUSTRIAL AREA
Over 30% of the bay has been filled. All of this industrial area indicated is landfill. Much of this land now is vacant.

. WEST HARBOURFRONT
.lew recreational development by the City of Hamilton, on Former Hamilton Harbour Commission land.



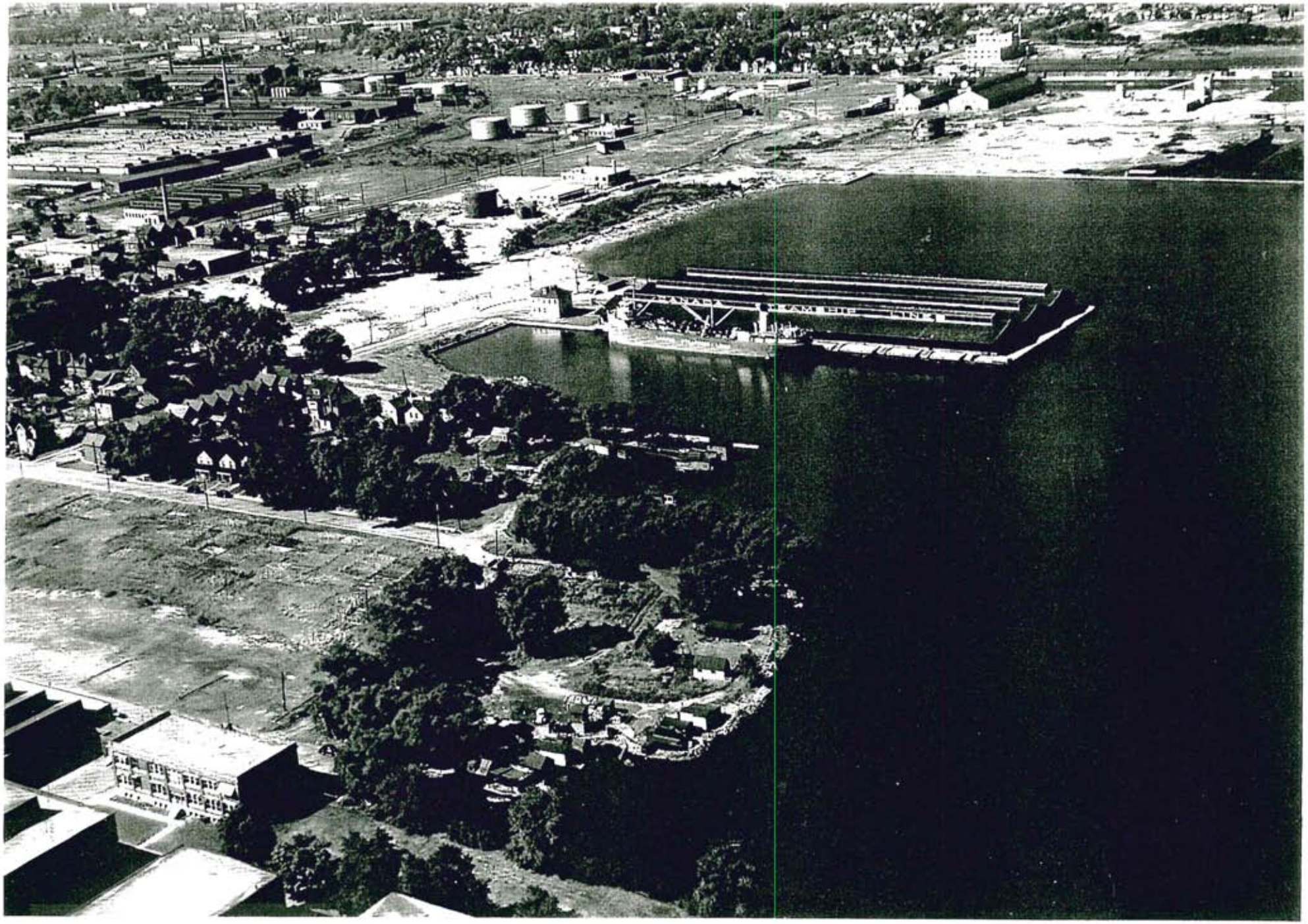
HAMILTON MOUNTAIN
Greenfield development and sprawl continues on the Hamilton Mountain, new industrial and commercial parks are decimating e downtown existing . Monies continue to pour into infrastructure to ipport this growth. It is reported to cost the taxpayers $25,000 for every new home constructed on undeveloped land. (Greenfield sites.)

5. HAMILTON DOWNTOWN
Industrial building was very much a part of many downtown communities. These buildings are now becoming vacant, as owners move to the suburban industrial parks.

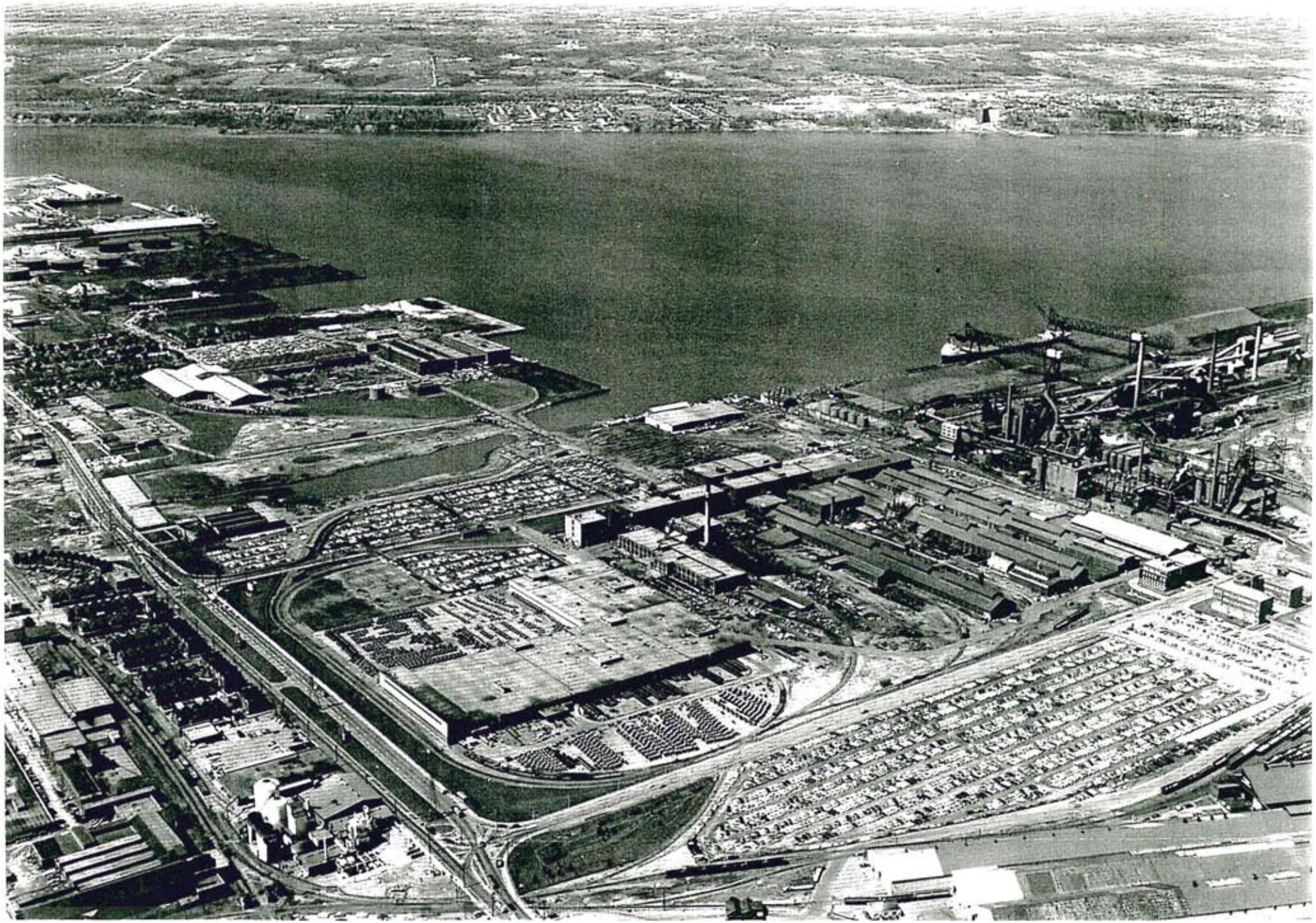
Employment in Hamilton Industrial Areas

Industrial Area	Manufacturing 1982	Manufacturing 1990	Non-Manufacturing 1982	Non-Manufacturing 1990	TOTAL 1982	TOTAL 1990
Bayfront	38,081	31,476	11,914	7,285	49,995	38,761
North Hamilton	452	267	506	13	958	280
West Hamilton	528	226	289	335	817	561
East Mountain	537	920	658	2,651	1,195	3,571
East Hamilton	3,153	3,094	3,282	5,286	6,435	8,380
Aberdeen / 403	2,607	1,248	346	1,078	2,953	2,326
Total Industrial Areas	45,358	37,231	16,995	16,648	62,353	53,879
Total City of Hamilton	50,106	46,068	101,368	117,654	151,474	163,722

Source: 1982 & 1990 Employment Surveys, Region of Hamilton Wentworth



THE FOOT OF NIAGARA STREET 1940



INDUSTRIAL HARBOUR MID 1960'S

6.2 *Existing Industrial Uses*

Hamilton's history has revolved around the harbour, acquiring an extensive history in industry and shipping. In the early 1800's Hamilton was already making its mark as a natural beauty and harbour. In 1832 the construction of the Burlington beach canal was instrumental in setting the future for industrial development in Hamilton.

Today, the changing economy is heavily impacting Hamilton due to its dependence on industry, and the large scale single use steel industries. Statistics as of 1991 show that between the periods of 1971-1991 the manufacturing sector lost 19,625 jobs. In correlation business, personal services, public administration and defence gained 29,425 jobs. In 1982 41.2% of all jobs were in the industrial areas compared to 32.9% in 1990. Today Stelco and Dofasco make up only 20% of the Regions G.D.P, compared to 33% only 15 years ago, with an unemployment rate of only 5.6% Hamilton is successfully moving towards alternative forms of economic development.

There are over 300 Brownfield sites within the north end industrial core. Many of the existing vacant industrial structures need major modifications for new industry, therefore buildings remain vacant and the land remains idle. These industrial sites frequently have contaminated soils that require significant clean up and reduce the market viability of future redevelopment.

There are currently 74 ha of property spread over 104 sites that the Region considers suitable for Brownfield development, most being industrial properties in the Hamilton's North End. Although the Region acknowledges and supports Brownfield development, they have concluded that the only change in zoning they believe feasible is a re-designation from heavy industrial to light industrial. The Region notes that there will not likely be as much soil remediation required if the property maintains its industrial zoning.

"The importance to the industrial manufacturing base has been diminishing", this quote is taken from the city view publication, distributed by the city of Hamilton planning and development department, yet still there is no direction towards residential or diversification of waterfront uses, making the existing harbourfront less industrial intensive.

The scale of companies such as Stelco, Dofasco and National Steel Car is overwhelming, together they consume approximately 40% of the Hamilton harbourfront. Strict security ensures no public access to any of there lands. Due to the recession, and changing economics, much of there properties have become under utilized. The bayfront is Hamilton's oldest and largest industrial area encompassing 3200 acres of land.

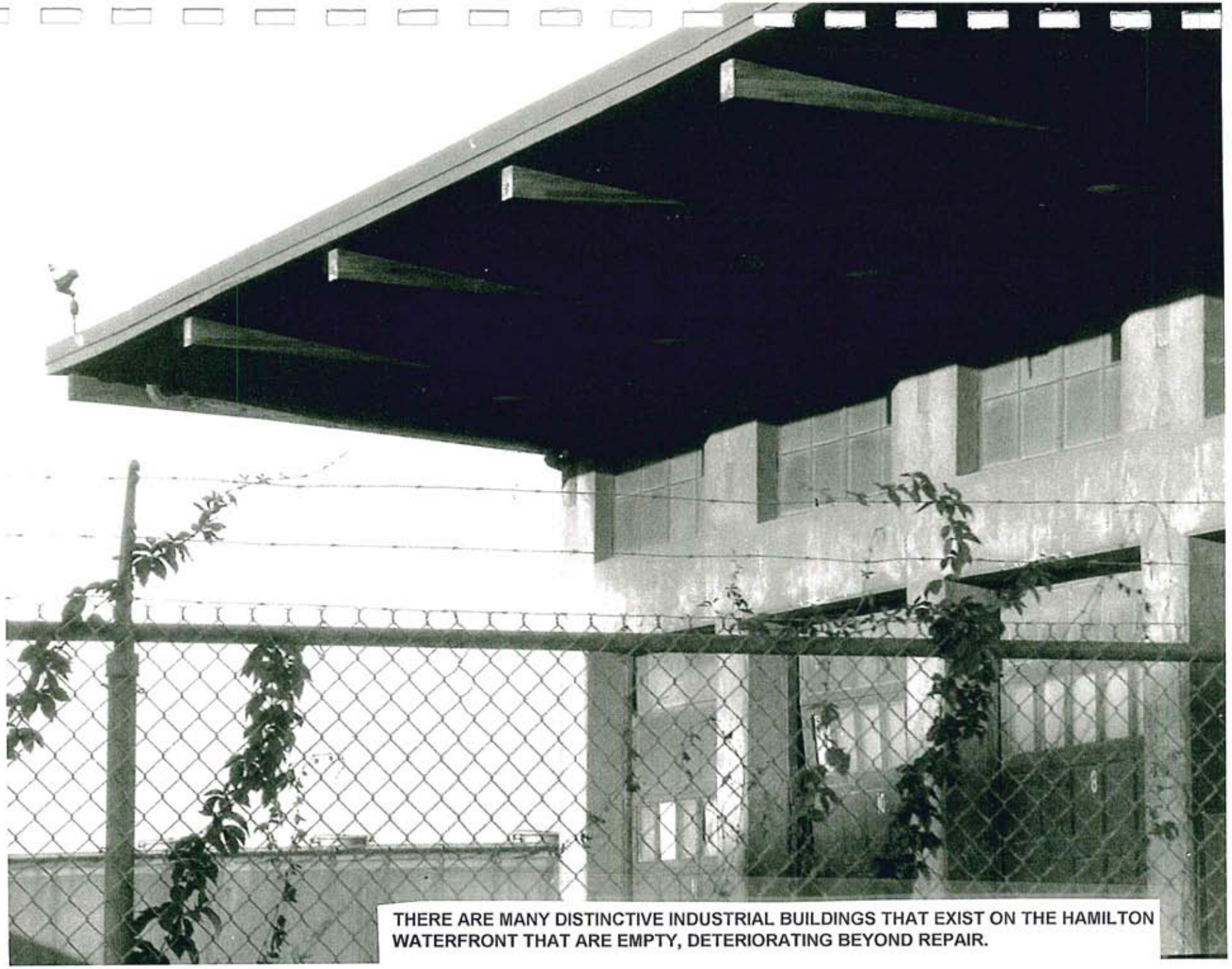
Dofasco ranks number one for single source benzene emissions in the great lakes basin, closely followed by Stelco. Dofasco is in the midst of launching a voluntary cleanup program working with the ministry of environment to reduce pollution and improve air and water quality.

For over 5 years the Province has been after Stelco to cut back emissions, on ovens #6 & 7. Stelco has finally agreed to retrofit oven # 7 at a cost of 108 million dollars, but refused to comment on oven # 6. The Province wants mandatory abatement under environmental protection act. Oven #6 was reopened in June 1996, after years of being left idle the structure has deteriorated. In 1992, two Provincial offence tickets were issued to the Steel Company for creating air pollution, one leading to a $150.00 fine, the other withdrawn. In 1993, four tickets were issued but all were repealed due to technical errors. In June of 1994, four $305.00 tickets issued which led to 10 months of legal negotiations, hundreds of pages of documents and an appearance in court. In the end Stelco agreed to pay 2 tickets. By late 1995 some improvements had been made, but by early 1996 emissions had worsened.

There has been no calculation or determination of the pollution costs of the steel producers, such as the cost of health care due to the higher pollution within the area.

The human side of the operations must also be considered. Twenty Five percent of the Dofasco work forces, age and years of employment equal over 75 years. Many of the employees that work in the factories have been at these factories for the extent of their working lives, and it is a large part of who they are. The difficulty is achieving balance.

There are currently several examples in Hamilton of existing industrial uses that successfully work within the urban core, unfortunately many are being lost through the restructuring economies, unprogressive tax systems and suburban development.



THERE ARE MANY DISTINCTIVE INDUSTRIAL BUILDINGS THAT EXIST ON THE HAMILTON WATERFRONT THAT ARE EMPTY, DETERIORATING BEYOND REPAIR.

LIFE SAVERS

This factory is located in the heart of a residential neighbourhood just east of the downtown. We use to live in this neighbourhood, and often we would visit the Life Savers park built by the company for the community. This practice was typical of many of the industrial factories in Hamilton. Sometimes you could smell the butterscotch, or flavour of the day. This building was very much a part of the community existing in this location since around the 1920's. The facility will be closing, moving to London as it has be bought out by a larger firm.

HATT STREET, DUNDAS

Dundas is a small town adjacent Hamilton. Hatt Street illustrates the successful mix of residential, commercial and industrial. In a few blocks there is Valley City, a large woodworking industry, The Dundas Valley School of Art, Residential condominiums in and old industrial building, an auto body shop, a mechanical garage, a library, a car wash, single family residential, medical offices and small retail outlets. The juxtaposition is what makes Dundas one of the most successful communities in the area.

DARE CANDIES

This parking lot was the location of a wonderful old industrial building, that had diverse uses over many years, from the amity, to a food processing plant. Dare Candies operated the building over the last several years. During the summer evenings you could walk by the building and the employees would be sitting on window ledges watching the activity of the street below. One could park at their facility during the evenings when a skeleton staff would operate the plant. This facility has been relocated to their larger premises in Kitchener, under the Nabisco label, and we have yet another parking lot downtown.

COPPLEY NOYES AND RANDALL

This building was originally constructed in 1856 by John Young, a dry goods merchant. This property is one of the finest surviving pre-confederation stone buildings in the province. In 1883 the building was purchased by GC Coppley, E. Finch Noyes and James Randall, and began producing mens clothing under the Cambridge label. In 1950, Mr Max Enkin purchased the firm, that was thought to be worthless, but has had continued success in the downtown core. Mr. Max Enkin was bestowed with many honours, one being the "Order of Canada" in 1983. Presently the plant employees 600 people, and distributes mens wear throughout Canada and the United states. An excellent example of an industrial use in the urban core. Adjacent this building is a mustard manufacturer, and across the street The Hamilton Public Library. Many of these uses have been relocated to Greenfield suburban sites, or have been bought out by larger firms. Often the result in this area has been their demolition, to create more parking lots.

Workers Custom House

One of the few historical buildings in the industrial core to be revitalized. In 1855 the legislature authorized the construction of a new Custom House in Hamilton to handle the trade flowing though the Port of Hamilton and along the new Great Railway Line. The building was completed by 1860.

The customs Department moved out in 1887, following several tenants and owners, from the Board of Education, YMCA, a home for homeless, a vinegar manufacture, a wool company, Naples Macaroni Company, a martial arts academy and computer firm.

Today the "Workers Custom House" operates as an interpretive centre for workers history and culture.

CNR STATION
Designed by architect J. Schofield, and opening February of 1931 this wonderful old station remains empty today. In 1929 this station was part of a $2,000,000 railway upgrade.

BARTON STREET
Wedged between the Hamilton General Hospital and Hamilton Jail, this old factory will soon be an incubator for native groups

6.3. Exclusive Use Of The Waterfront Edge

There is no public access to 90% of the Hamilton harbour waterfront edge. The waterfront edge is continuously fenced off and posted. The waterfront has been undervalued and forgotten for so many years, that residents of Hamilton and surrounding local communities have just adapted. The waterfront is the part of Hamilton that is ignored and considered to be a blight not an asset to Hamilton in any sense but economic.

At present the existing zoning along the waterfront is dominated by heavy industry. Existing residential buildings are considered legal non-conforming uses, that would have difficulty being replaced if destroyed. The monolithic industrial use is overwhelming and out of scale. The existing zoning has eliminated any chance of positive development along the waterfront. Much of the waterfront is zoned "K", which is among the most lenient zoning restrictions in the province.

The gradual elimination of important features continues, until one day we no longer recognize that they are gone. There is something in our subconscious that tells us that we are not as comfortable or content, but the human adaptability that makes us strong, also shelters us from changing environments.[1] People have shunned the waterfront due to its unsavoury reputation and limited public access.

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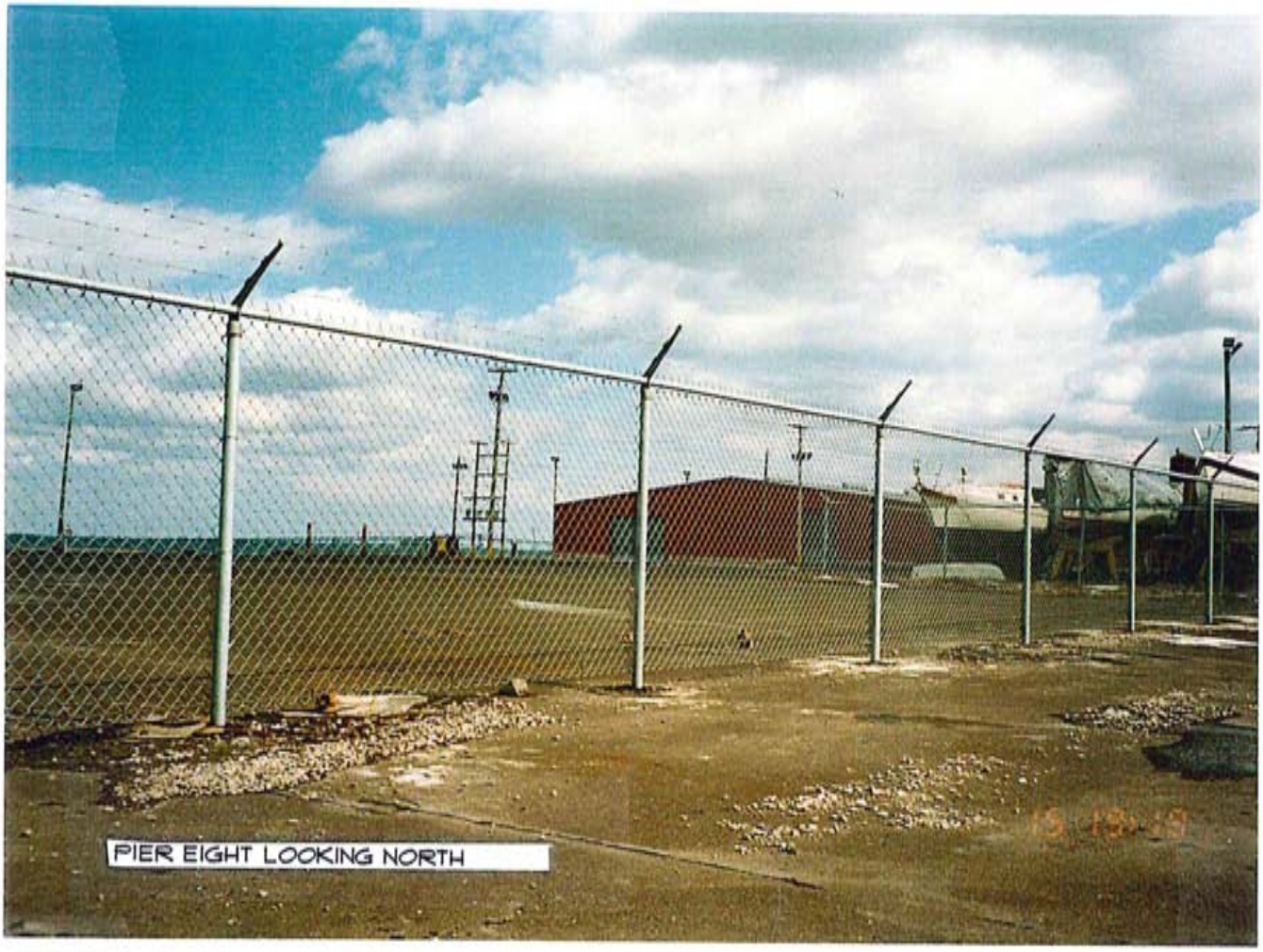
[1]Tony Hiss, The Experience of Place


PIER EIGHT LOOKING NORTH


Federal Marine Terminals
CAUTION
Heavy Equipment In Use
PLEASE BE AWARE !
PRIVATE PROPERTY
NO TRESPASSING
DANGER
KEEP OUT
DEEP WATER
KEEP OUT
NO
TRESPASSING
PRIVATE PROPERTY
NO TRESPASSING


KEEP OUT
NO
TRESPASSING

6.4 Debasing Existing Communities

There has been a concentrated effort by both the city of Hamilton and the Harbour Commission to make the existing residences north of Burlington Street as unfit for community and livability as possible. Many homes have been expropriated for industry, or purchased by the city and leased out. This has created an area for transient users, those that can not afford to move, and those that just will not give up their home and roots, no matter how unpleasant the area has become.

Between 1982 and 1984 the City of Hamilton prepared two reports, "The North End Waterfront Secondary Plan." and Residential Enclaves Study", which surveyed the community. Most residents have lived in their homes for a considerable length of time, therefore populations tended to be older and stable with strong community ties.

The document determined that the residents were disturbed by the existing industrial uses that operated without any regard for their neighbours, as was exemplified with the user mentioned "Steel Town Boxers". This is a medium size building, which is not well maintained, extends up to their property lines with little or no room for employee parking, truck parking and loading. This use continues today in the same manner 14 years after the initial report was released. Conversely Amstel Breweries, now called Lakeport, is a huge industrial operation, which has not been a cause of complaints against odour, noise or any atmospheric emissions.

The general consensus was more space should be made available for public access, commercial and recreational uses that service the community. Issues such as public transportation, determined that 25% of the population depended on public transit, as 30% of the families did not own a vehicle.

The population in this area has gradually declined to 30.5% since 1961, although continues to be an area with rich cultural diversity. The average value of homes is approximately 40% below the city average, with 25% of the families being single parent, twice the city average. Unemployment rates are almost twice the city average, and of those employed 40% are in manufacturing, with family incomes 30% below the city average.

The community watchdog that might have made industry somewhat responsible has been dismantled, so the voices are seldom heard. The residents of this area for the most part are low income, and often the voice of this community has not been listened to at the best of times.

Recently with the "Plastimet" fire the frustration level of the community has unleashed a spirit that is finally getting some attention, although the sincerity of this attention must be questioned. At the same time as the fire is being discussed a preliminary report on the future of the Windemere basin at the eastern edge of the harbour has been released. This area is a sensitive environmental area, made up of landfill with questionable contamination levels. The Hamilton Harbour Commissioners, a Federal body acting as the port authority, wish to extend this area as continued heavy industrial zoning with no regulations, which also negates the required environmental assessment of the land. They have conceded to a public waterfront walkway with lookout points, this minimal compromise, is in my opinion below tokenism, reinforcing the fact that very little will ever change until the Harbour Commission is dismantled or redefined.

The existing use, or lack of use has created a haven for wildlife. The Regional Conservation Authority, the Regions Environmental Department, Hamilton-Wentworth public health department and the Hamilton Beach Preservation Committee would like this to continue at best but are open to discussions on the idea of a modified prestige industrial, with tourism related uses, open spaces with public walkways. The modified industrial zoning would ensure site plan development control. There is also agreement within these parties of the need for full environmental studies of the area.

This land belongs to the Hamilton Harbour Commission, (H.H.C.) and the Harbour Commission is adamant that the continued existing use, which has been positive for the area, or modified industrial use, which would have less impact on local residents, are unacceptable options. Phillips Environmental agrees with the H.H.C., as they intend to develop an auto shredding facility adjacent their existing waste handling operation. The Cities's Economic Development Department also supports the H.H.C. position, even though the environment implications of this continued use are questionable. There appears to be no long term financial assessment, and absolutely no attention to social or environmental concerns.

Insensitive development along the waterfront edge has resulted in the majority of Hamiltonian's not feeling any connection to the Hamilton harbour. They have had to discount this landscape as part of their own.

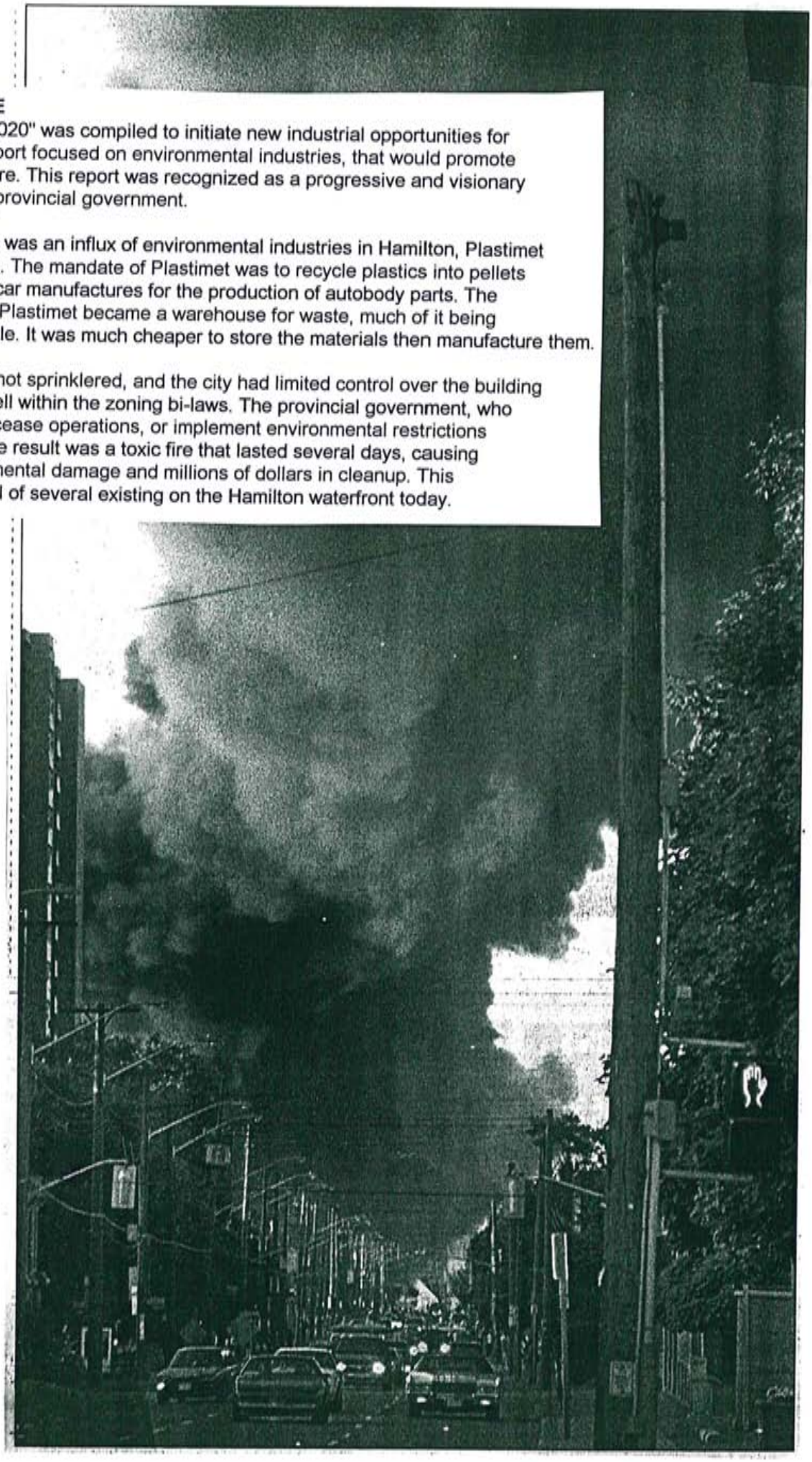
Today 70 companies are involved in recycling, approximately 12 dealing in plastics. At the time of the fire Plastimet had fewer than 12 employees, most paid minimum wage. At the time of this report the total costs of the "Plastimet" fire have cost taxpayers $5,000,000, the owners have paid $250,000 in fines. Hamilton has taken some minor action to address fire safety, but the Province has done nothing.

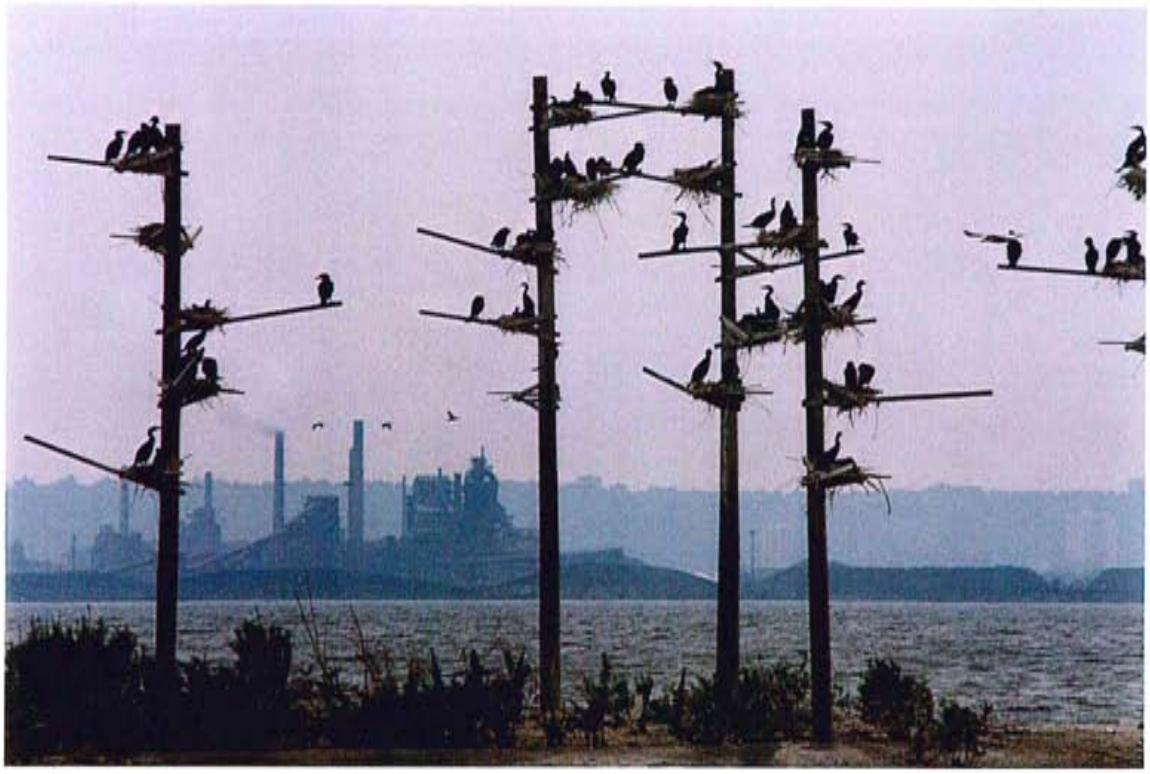
LASTIMET FIRE

report "Vision 2020" was compiled to initiate new industrial opportunities for Hamilton. This report focused on environmental industries, that would promote a sustainable future. This report was recognized as a progressive and visionary cument by the provincial government.

The consequence was an influx of environmental industries in Hamilton, Plastimet ing one of them. The mandate of Plastimet was to recycle plastics into pellets distribution to car manufactures for the production of autobody parts. The actuality was that Plastimet became a warehouse for waste, much of it being toxic and flammable. It was much cheaper to store the materials then manufacture them.

The building was not sprinklered, and the city had limited control over the building as the operation fell within the zoning bi-laws. The provincial government, who d the power to cease operations, or implement environmental restrictions ok no action. The result was a toxic fire that lasted several days, causing unknown environmental damage and millions of dollars in cleanup. This eration is typical of several existing on the Hamilton waterfront today.





STEEL MILLS BEYOND ONE OF THE NESTING GROUNDS FOR THE CORMORANTS'

LAKEPORT BREWERIES

STEELTOWN BOXERS

6.5 The Future Economy/pollution And Environmental Issues

There is a long history of abuse within the Hamilton harbour. The Hamilton harbour accounted for 15% of the Lake Ontario catch in 1900. Misuse killed off the fish virtually wiping out the fishing industry by the 1950's. The beaches were closed for the first time in the 1940's as industrial and sewage discharge continued to dump directly into the harbour until the 1960's.

Since 1960 measures have been taken to reduce dramatically the flow of contaminants into the water, but Hamilton was still identified in the "Great Lakes Basin Report" in the early 1980's as a "hot spot. As recently as this year (1997 Randels Reef, west of Stelco), a hot spot was detected. It has been reported that the cost will be $8.5 million to clean up this hot spot. Negotiations between the Federal and Provincial officials, and Stelco on sharing costs for clean up are proceeding, although to date Stelco has refused to share any cost or blame. (An unconfirmed report noted the cost for clean up is more economical today as technology has reduced the costs associated with clean up fees, Stelco believes that by delaying they have saved Governments money, and that this should be the extent of their contribution.)

In the past 70 years industrial development has destroyed 75% of the marshland shores and has filled in and paved over about 30% of the bay.

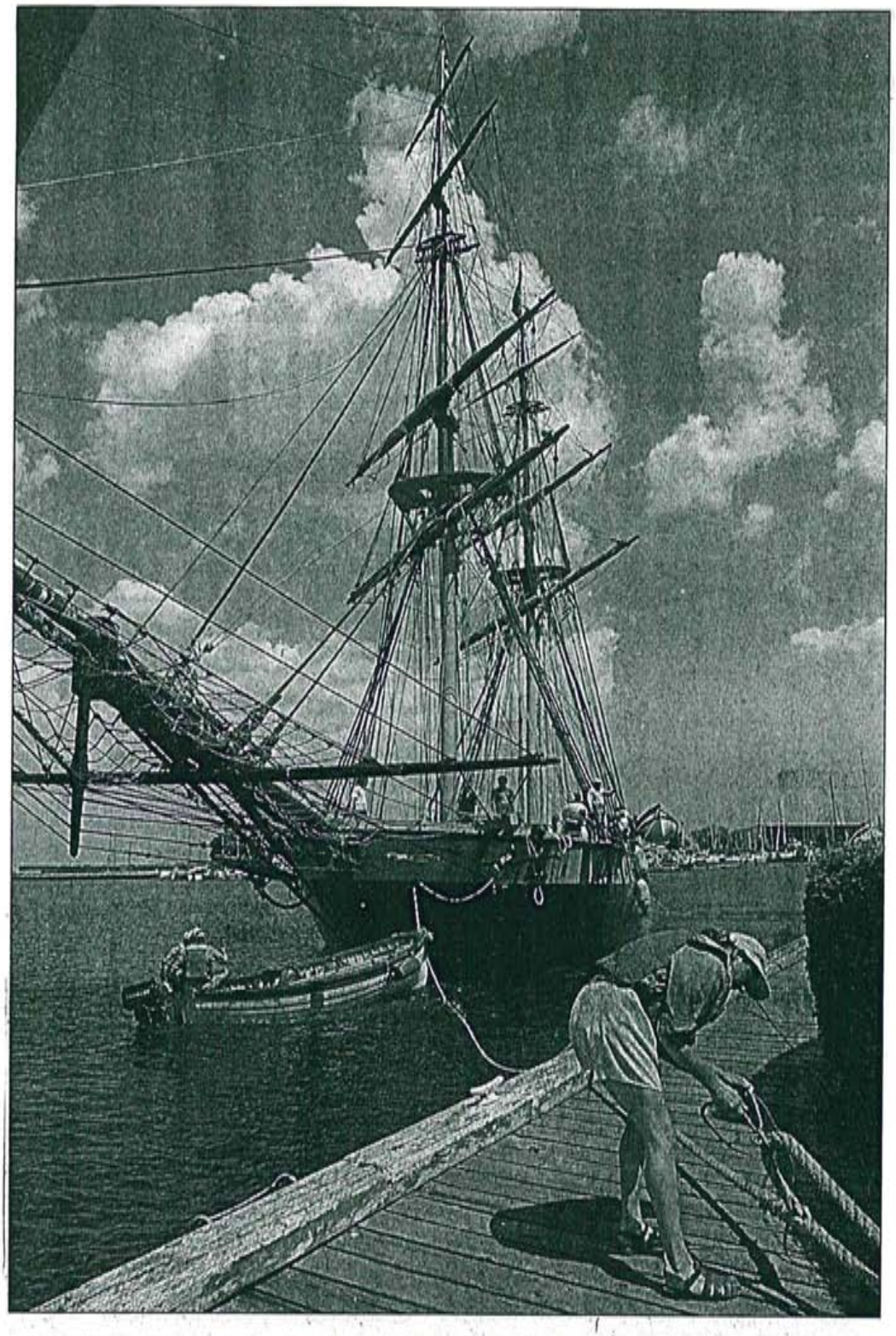
The costs of environmental clean up, are often noted as the impediment for redevelopment of existing industrial sites. Today in the adjacent Town of Dundas, an existing contaminated industrial site, within their urban core, is being redeveloped as a diverse housing project including a new community centre and commercial space. The environmental cleanup for the 12.5 acres is recorded to be $3,000,000, resulting in a cost of $240,000 per acre. The amount of money noted seems unthinkable, until we compare it to the $5,000,000 an acre it is costing the City of Hamilton for the "Plastimet" fire. The developer of the site acknowledges the cost of clean up is only slightly more than what he would have spent had the site been a Greenfield development which would have required the extension of municipal services.

We must support developers with Federal, Provincial and Municipal funds to encourage this kind of redevelopment. The Region of Hamilton Wentworth is currently requesting provincial permission, in order to offer tax incentives for developers who clean up contaminated properties and local eyesores through a system called "Incremental Tax Financing", which is used extensively in the United States. The tax incentive works as follows; the developer buys the property which has a lower tax rated due to vacancy or under utilization and obtains a loan from a financial institution to clean up the property. Once clean up is completed and the property put back into productive use the property would normally be taxed a higher rate due to the increased property value, but under tax incremental financing, that increase in the property tax rate is forwarded to the financial institution that funded the cleanup, rather than to the municipality for a period of years until the loan is paid down.

Mr. Neil Everson, manager of business development for Hamilton Wentworth notes that Canada is approximately a decade behind in Brownfield development. The United Sates makes available an enormous amount of grants and incentives for Brownfield development. Experts say that Six billion will be invested to clean up 14000 Brownfield sites in the United sates over the next four years.

The city has been dependent in the past, and still is to a large degree on single use industry, Stelco and Dofasco employ a large percentage of the city of Hamilton and surrounding areas work force. There has been an influx along the Hamilton harbour of "environmental industries", which are actually waste handling. There are no environmental controls to monitor these industries, limiting the authority of the City over their operations. Most of these companies do not meet the fire or building codes and in the long run will could potentially cost the taxpayers millions in clean up and remedial action, as exemplified by

ROYAL HAMILTON YACHT CLUB HAS THE ONLY SEMI-PUBLIC PIER FOR VISITING SHIPS. THE HAMILTON HARBOUR COMMISSION HAS SEVERAL THAT COULD INCLUDE DIVERSE PROGRAMMING BUT REMAIN EMPTY. IT IS EASIER FOR THE CITY OF HAMILTON TO INVEST SEVERAL MILLION DOLLARS INTO THE CONSTRUCTION OF A NEW PIER THAT TO REACH AN AGREEMENT WITH THE HAMILTON HARBOUR COMMISSIONERS TO SHARE AN EXISTING ONE.



ALL ASHORE

Cathy Coleman, a volunteer aboard the U.S. Brig Niagara, ties the authentic 1813 ship ashore at the Royal Hamilton Yacht Club yesterday afternoon. The ship, based in Erie, Pennsylvania, regularly tours Lake Ontario during the summer months. It stopped over for a private function at the club, and will leave today.

Barry Gray, The Spectato

The Harbour Commission leases land to various clients. The terms of the leases vary to a maximum of 21 years, but it appears that the only pre-qualification criteria is that you are able to make the lease payments. The city on the other hand would like to encourage only those that need the waterfront as part of their operation, to be located on the waterfront edge.

This area has minimal regulatory zoning lacking any site plan or development control guidelines, contributing to the absence of quality in property management, environmental practices and building development. There is minimal incentive or regulation for tenants or landowners to invest money or time to enhance their properties.

The Harbour Commission also owns buildings along the waterfront which are historically rich, but there appears to be no action on their part to encourage investment or alternate use. There appears to be a lack of effort to maintain these buildings and protect them against insensitive renovations, or demolition.

The H.H.C. has had a history of corruption and has had some questionable values. Members of the commission have been charged and faced jail sentences, for example:

The Lax Brothers purchased 40 acres of western harbour property, mostly waterlots in 1959 for $60,000, far below market value. In 1968 they purchased another 51 acres for $152,000, on which only $10,000 was paid. In 1968 they began the fill of 40 acres of the waterlots, for industrial development, despite vigorous objections by environmental agencies. In 1972 the provincial government ruled that the reclamation stop and empowered the Hamilton Region Conservation Authority to enforce that order. In October 1976 the Lax brothers sued the H.H.C. for $35 million for breach of contract in connection with the 51 acre parcel. In March of 1981 the H.H.C., in an out of court settlement agreed to complete the sale of 20 acres to the Brothers for $40,788, give the city 5 acres and keep the rest. In august of 1984 City Council compensated the Lax Brothers $900,000 for its planned expropriation of their 69 acre property. The toxic levels within the land fill were deemed to be so high that the area was fenced off and signed as it posted a risk to human health. There has been hundreds of millions invested in our harbour cleanup and remediation. The Lax brothers still maintain a large parcel of property on Burlington street using it as a scrapyard. This use being typical along Burlington Street, the gateway to Hamilton.

Currently the City of Hamilton is fighting the Harbour Commission over another tenant. The Harbour Commission wants to lease land and building to a rendering plant, Paletta International Corp. The fight has gone all the way to the Ontario Municipal Board. The City has forbidden this type of operation on industrial zoned properties, but the Harbour Commission believes it should be able to lease land to any party it sees fit. The Harbour Commission sees no value in the neighbouring communities.

Twenty five percent of all St. Lawrence seaway cargo comes into Hamilton harbour on its way into and out of north America, Toronto by contrast is 3.3%. in 1996-676 ships from more than 50 nations passed through the Burlington canal carrying 12.9 million tonnes of goods such as iron ore, coal, canola, soybeans molasses, sand, asphalt, gasoline and slab steel. One in five of the almost 4,000 ships navigating the seaway come into Hamilton. Hamilton varies between the fifth and seventh largest port in Canada. What makes Hamilton different from most ports, especially seaports, is that the vast majority of goods coming here stay here, feeding local industries and playing a major role in the economy. Many of the existing docks are vacant and in poor condition.

Only a small proportion of visiting ships take products away from Hamilton. Containerization has changed the way things are done and manufactured goods are now sent mainly by road and rail to coastal ports. It is noted that the St. Lawrence Seaway is to shallow for the big container ships to come into the Great Lakes.

Large investments into harbours with state of the art technology are the way of the future for shipping and cargo handling. Investments are being made into training work forces, modernizing terminals, computerization, and networking container terminals to rail and freeway systems. Manufactures are reducing inventory, requiring ports and cargo systems to be extremely functional to compete within a global economy.

If the Hamilton Harbour Commission intends to build up the Hamilton Port, as their mandate is being the Port Authority, then research and investment should be made analysing the viability, investment required, the economic gains and benefits to the citizens of Hamilton.

The three member Board of Harbour Commissioners is required to hand over any surplus profit to the city. The board states it is not making any money because it puts all revenue, above operating expenses, back into development of the port, with no city input or knowledge of how the money is spent. In fact the city has never received any monies from the commissioners beyond annual property taxes which were 2.7 million in 1996. The City of Hamilton is suing the Hamilton Harbour Commissioners to disclose financial statements to determine where the profits are going.

As discouraging as the role of The Hamilton Harbour Commissioners seems, it promises to become worse if current Federal legislation goes through. The proposed reworking of the Harbour Commission, increases their role over the harbour from only shipping and navigation. All profits are to go to the Federal Government and the City is forced out of the process for setting up the new Port Authority. Instead of 1 representative in 3 the City would be reduced to 1 representative in 7. The Federal Government is changing the status of the Harbour Commission without the cities consent.

In 1993 the Region of Hamilton Wentworth published 'Vision 2020', detailed strategies and actions creating a sustainable region, highlighting many positive steps in the social and environmental development of Hamilton, including many initiatives that would lead towards a more pedestrian city, working with various levels of government to change polices that encourage sustainable development, none of which has been incorporated into the city of Hamilton's official plan.

The City of Hamilton official plan is still based on the separation of uses and cluster industrial development, (except in the downtown core mixed residential and commercial uses are encouraged), with no new visionary ideas for industrial development. The official plan maintains the use of industry on the waterfront.

6.7 Road Systems

The existing road systems, Burlington Street, the Burlington Street overpass, and Industrial Avenue have been constructed as imposing barriers to the waterfront edge. It has restricted any pedestrian movement, thereby restricting the possibility of extending the existing neighbourhoods and communities south of the roadway structures.

The existing construction of the Burlington street overpass extends from the west at Sherman Avenue North to the east connecting to the Queen Elizabeth Way. This is a two lane overpass that bridges over intersections, while ramping down to connect to Burlington Street.

Burlington street at the westerly end is a 4 lane - 2 way street but divides into Burlington Street and Industrial Avenue, creating 8 lanes of traffic, with a combination of industrial properties and medians in between the two road systems.

The road system has been designed to handle the peak loads of the industry that occur along this corridor, taking into consideration the needs only for vehicular circulation. The road system is excessive, with no consideration of pedestrian uses or scale. The community has been ignored in the design and construction of the road system, homes have been expropriated to accommodate new construction of roadways and boulevards. This practice is continuing, even with the decline in the industrial community. To the west of Wentworth Street there are still residences, though future plans will jeopardize their existence, these houses are slowly being torn down to allow for street widening and boulevards. There are future plans to extend Burlington street into York Boulevard, which would create an efficient traffic corridor between the Queen Elizabeth Way and the 403 Highways.

6.8 Transportation

Transportation for the industrial sector along the waterfront has been designed on the basis of single user vehicle, there has been no effort towards a common transportation system to accommodate the industrial work force.

The municipalities have been all too willing to provide the infrastructure to support the single user vehicle. There are no common parking structures, all parking for industry is at grade, usually unpaved and un-landscaped, using prime waterfront lands.

There has been an ongoing debate about the need for a new expressway in Hamilton to service the mountain. Reports indicate that only 57% of the anticipated growth on the Mountain has occurred, and that the Red Hill Creek expressway is proceeding on economic forecasts based on a 1978 report. Between 1991 and 1995 industrial land was consumed in Hamilton Wentworth at a rate of less that 2 HA per year and at that pace it will take over 700 years to use up the new business parks that seemed so necessary in the late 1970's.

Phase One of the expressway has been completed at a reported cost of $364 million. The future costs to widen an existing roadway are determined to be 33.17 million, and the costs of the second phase of the new expressway 200 million. The future extension of the mountain expressway north to the Queen Elizabeth Highway is reported to result to have extensive environmental implications. There is a fear that this construction will cause flooding problems and further damage Hamilton Harbour, confirming Hamilton's reputation as an environmental wasteland.

It is difficult to comprehend why monies are not alternatively used or redirected into the existing infrastructure, and to support public transportation systems.

I believe no studies have been done to determine the impact on the existing industrial waterfront land, and the urban core, but many of the existing industrial uses that made up the urban fabric, such as Life Savers, and Dare Candies, are now relocating to the suburban parks, creating additional Brownfield sites and parking lots.

6.9 West Harbourfront Redevelopment

The ideas for the West Harbourfront include a variety of proposed uses, the architecture has been defined, the relocation of existing buildings has been determined, and the creation of new road structures to support the proposed west harbour front has been decided.

There appears to be a need for the politicians in Hamilton to create this large tourist area, working from outside what is there, taking examples from popular harbourfronts such as Baltimore. They want to infuse community pride by building structures that will attract tourists, and reflect the history of the harbour.

Baltimore Harbour is different than Hamilton, as Baltimore is predominately a commercial and recreational waterfront. The success of the Harbour is attributed to New York Architect Stanton Eckstut, who won a 1995 AIA award in urban design. The plan works to create a strong sense of place through an ensemble of buildings. The planners worked with City leaders, landowners and residents to achieve a plan that satisfies all participants. The lessons of the created partnerships that acknowledge all the participants, is a formula that we should focus on, and not necessarily the type of uses accommodated.

The way that the report "a vision for the future" is written, dictates the protection of our heritage is through facadism and repetition of past architectural styles. Reading the report becomes frustrating and difficult where they believe that these cosmetic solutions will validate our history and give it strength.

Much of the report contemplates proper and appropriate styles, but it appears to me little time is spent on the applicability to Hamilton and the community that this will be part of. This is not a piece of development that respects or acknowledges the fabric of the existing community. Major ideas like tearing apart a neighbourhood by means of a four lane expressway and sound wall, connected to the waterfront by a bridge from a multi cultural garden are proposed to extend a neighbourhood.

The makeup of the housing, community and buildings in the North End is modest, commonly worker housing from the 1920's, which has a richness in their simplicity and diversity. I sense there is a lack of awareness of how strong these communities really are. The slow development of the West Harbourfront Neighbourhood has encouraged the rehabilitation of homes, and neighbourhoods strengthening these existing rich and diverse communities.

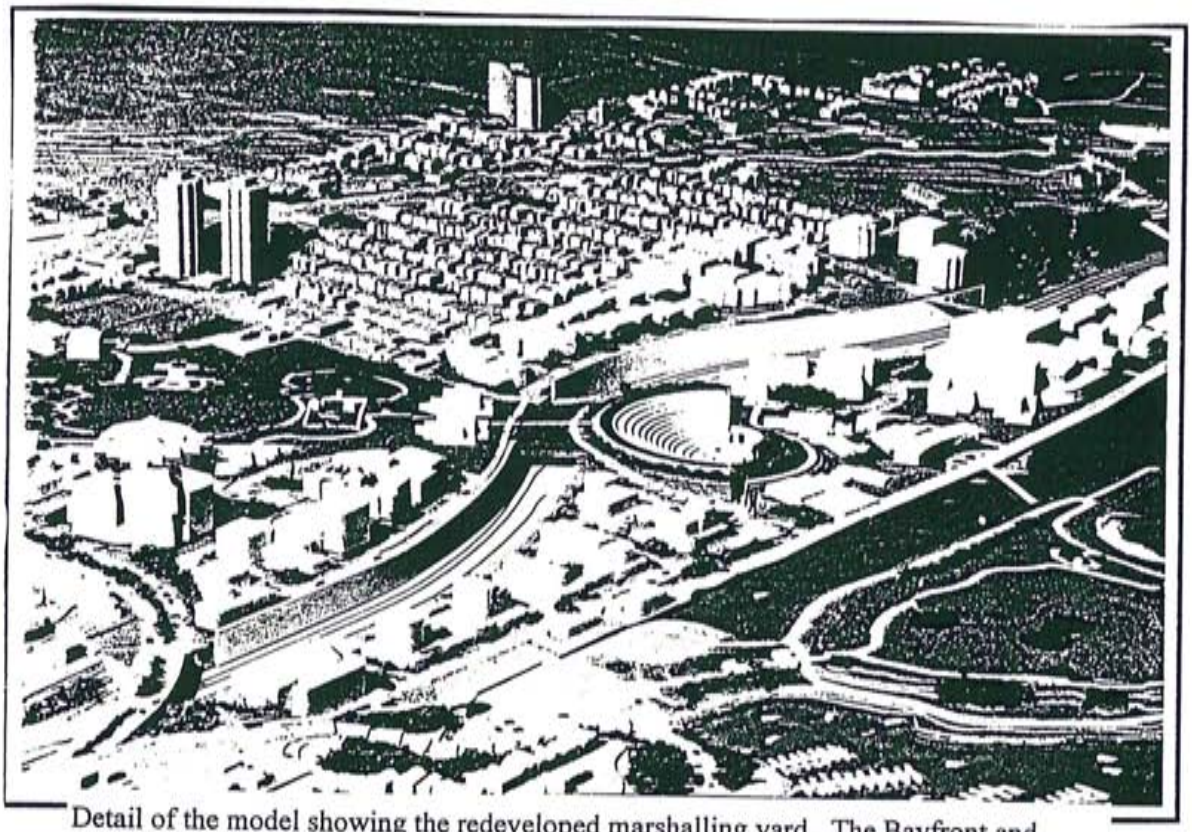
The Leander Rowing Club is a statement of the simple character of the community places, a rowing club since the 1840's. The Leander Rowing Club has a personality, complete with red leather chairs, the wood panelled bar, furniture and a bartender that hasn't changed since the 1950's. The proposal is to take down the existing facility, relocate and build a new facility with predetermined architecture. This was the solution to the adjacent Royal Hamilton Yacht Club, the original building rich in Nautical Language, a simple one storey building, was replaced by a design build pre-engineered steel building with split face concrete block at a price the Yacht Club could never afford. For a short time they lost their Royal status, now they have a small section in the building mostly occupied by the Chamber of Commerce.

The task force report acknowledges the importance of preserving our buildings and heritage sites, encouraging a pride in our historical past, but the preservation is selective and cosmetic. The idea to enhance the Image of the City is agreeable, but there seems to be an attempt to surgically reflect the history of Hamilton, ignoring our blue collar past.

REDEVELOPMENT OF THE WEST HARBOURFRONT "A VISION FOR THE FUTURE"

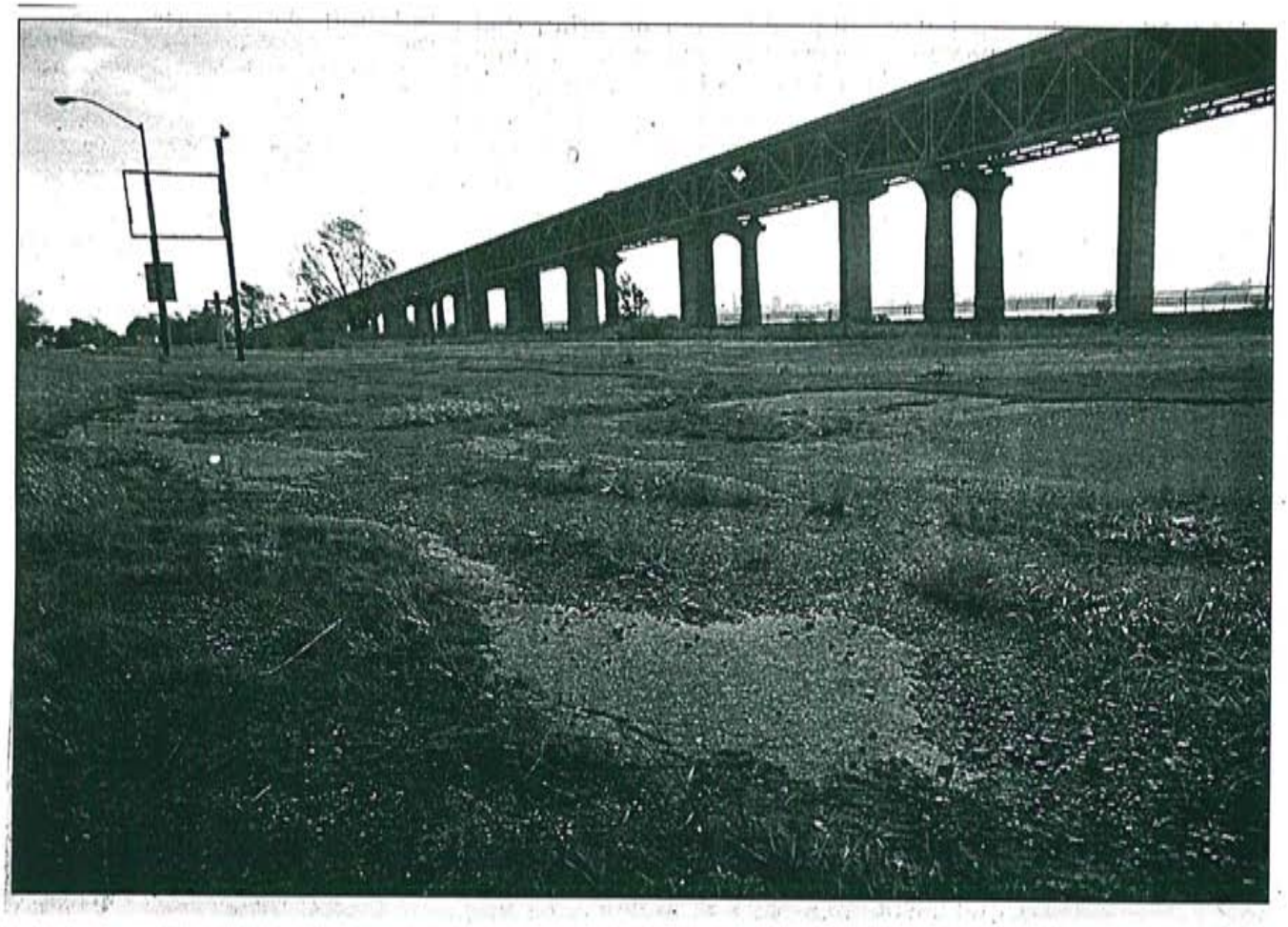
Illustrated below is the proposed roadway extension, that will slice the waterfront off from the existing downtown core and community. The link from a proposed cultural gardens to a proposed ampatheatre is assumed to solve this connection.

The redevelopment of the marshalling yard will cost $99,700,000. The overall cost of implementing the report will be $969,500,000. It is difficult to comprehend why alternatives to look at existing vacant waterfront sites are not being explored.



Detail of the model showing the redeveloped marshalling yard. The Bayfront and Special Attractions Districts are in the centre, the Bay Street District at the left, and Bayfront Park at the right.

Detail of the model showing the amphitheatre and the Special Attractions District in the foreground, with the Gardens District at top left, and the Barton-Locke District at right centre.



THE BURLINGTON STREET OVERPASS

6.10 City Core

The existing Hamilton City Core has been decimated by suburban sprawl, insensitive or poorly chosen development and a tax base in the centre that can not be supported by existing retailers.

The suburban sprawl continues to occur. The mountain area has continually grown, creating new suburban retail malls, business and industrial parks with convenient parking. Recently "Big Box" development on the fringes has further impacted the core. The new developments have acres of free surface parking, are close to highways, and the infrastructure continues to be built to increase the accessibility to these centres. The result is that the existing retail in the centre has been heavily impacted. The City is trying to encourage people back to the Centre with some free parking, but this really fails to address the deep problems within the core.

Within the last 20 years the main "Downtown Mall" underwent a major renovation, doubling the amount of Retail area, incorporating office and bank towers. Although some parts of the project were viable, much of the development has negatively impacted the core.

The Hamilton Market has a history dating back to the mid 1800's, and remains an integral part of the downtown core. The market is vital, and fun, supporting the local farmers, and residents. The construction of the downtown mall incorporated the Hamilton Market and a new downtown Public Library. The library is often used as an extension of the College, University and local schools for extended training or skills upgrading. Public Meetings are facilitated from the Library, and continues to a vibrant and active place for the community. Cutbacks have restricted the hours, and often the Library is closed in the evening impacting street life activity.

A Coliseum forms part of the development, events here have encouraged activity, but unless you know the city, the few restaurants that could create any sort of street life or reflection of the Hamilton character, that are left are not easily found. Much of the activity that could be spun off of events is lost, the coliseum opens onto streets that either have empty buildings or parking lots.

The retail component of the development has been the most tragic component of the whole development. The retail was overbuilt, devastating what was left of the street life. Most of the retail that was dependent on the pedestrian has vanished. The result is what is left of the downtown is a Mall, and the reasons for experiencing a downtown have for the most part evaporated. The building is totally internalized, very little of the retail has addressed the street. The exterior facades, where small shops would have encouraged an interaction with the street and interior mall are non existent, most of the facade is either occupied by banks that operate off the interior concourse, or a blank wall. After office hours their is no street life.

The Downtown was further impacted by actions of the Regional and Municipal governments to foster activity in the downtown core. A large public office building was constructed between the major streets, under the premise that the people within the office building would bring life back to the city. Unfortunately what resulted was the construction of 20 storey brick walls that were blank at grade, did not address the street, and full of the nooks that threaten peoples perception of safety. Today with government cutbacks much of these buildings remain vacant.

The older buildings continue to deteriorate, the public monies put into these insensitive facilities could have been used to encourage office uses within the existing infrastructure above the current street retail space. Now these buildings are vacant, many in threat of being torn down, as the tax system favours vacant property over building, resulted in many areas of asphalt where historical buildings once were.

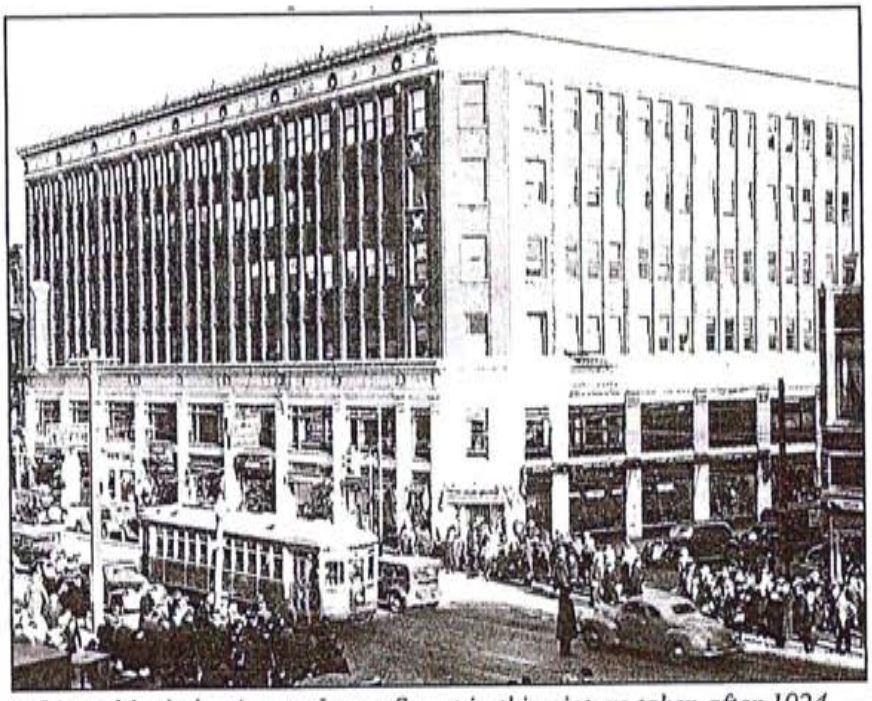
Parking beneath the large office complexes, and retail malls eliminate anyone from having to experience the street. Other office complexes have also developed with the same promise, and same result.

The tax system in the downtown, makes in difficult for any small business to remain. There have been many attempts to restructure the tax system, but the suburban voice continues to dominate.

Hamilton continues to operate in desperation, the downtown currently houses a Bingo Hall and soon is likely to have a Casino. There are attempts to encourage residential in the core, with proposals for student housing and high end residential, but there is little to draw people, and the transit systems do not support student housing.

Recently a planner has been hired to co-ordinate the existing task force to address the issues of the Downtown Core. The meetings are positive and the mistakes have been recognized. There are some new successful restaurants appearing on one of the downtown side streets with links to a downtown theatre district. There are still many residents passionate about the downtown core, but there are major difficulties to overcome, and unless the issue of sprawl, is addressed and redirected towards thoughtful infil and intensification in the core, the future for the downtown is in jeopardy.

LISTER BLOCK, JAMES STREET NORTH, DOWNTOWN HAMILTON 1997

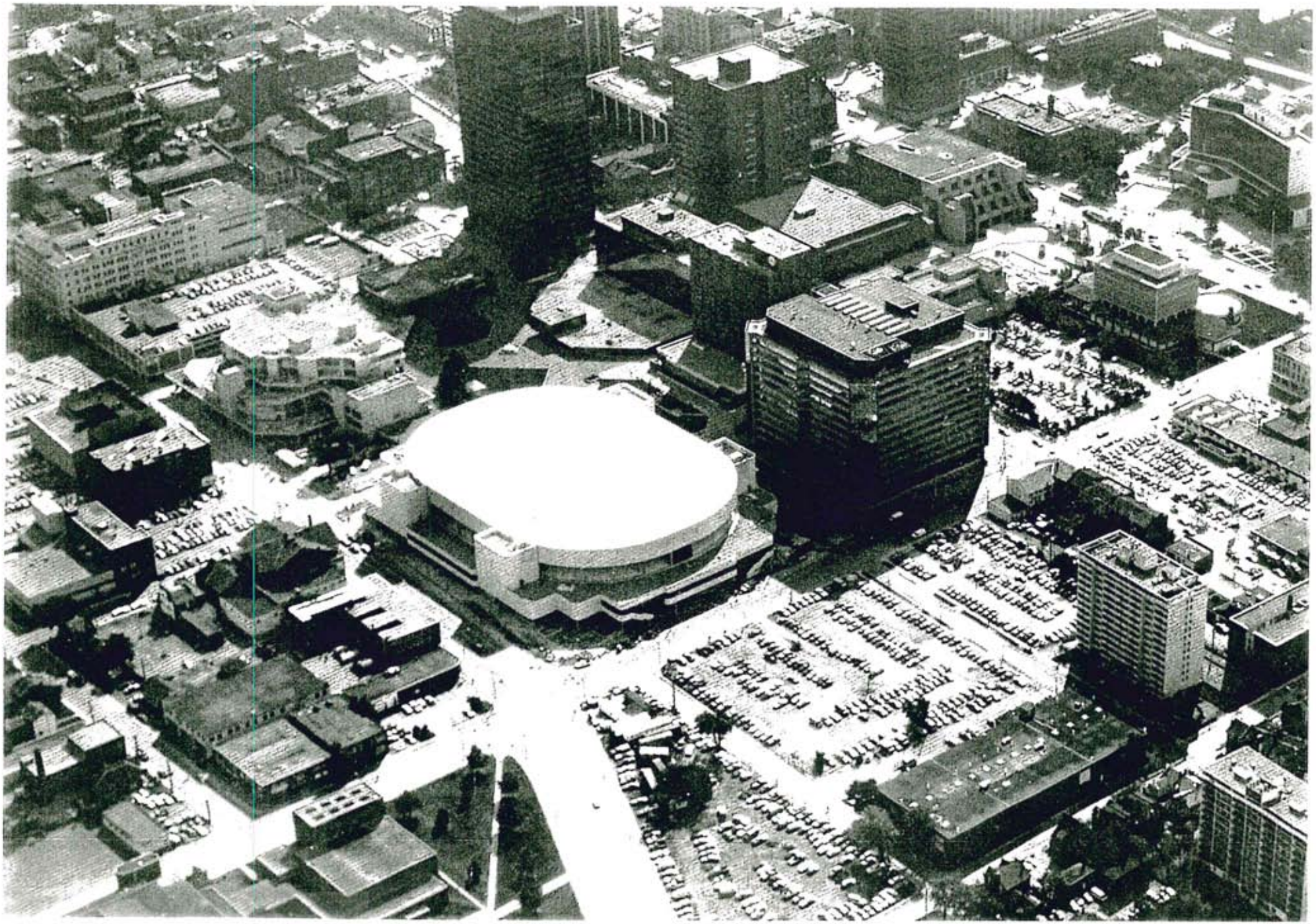


Lister block dominates James Street in this picture taken after 1924

LISTER BLOCK, JAMES STREET NORTH, DOWNTOWN HAMILTON 1924

343 The Farmers Market looking north to Merrick Street from Market Square about 1920. In background along Merrick Street:

MARKET SQUARE LOOKING SOUTHWEST 1910



CENTRAL HAMILTON 1985

CENTRAL HAMILTON 1919

7.0 CONDITIONS THAT MUST BE MET IN ORDER FOR INDUSTRY TO BE A VITAL PART OF THE CITY

Zoning should encourage diversity, working to eliminate and reduce large cluster zones of any one use. Zoning should focus on how the spaces perform, eliminating arbitrary requirements.

Often industrial waterfronts have a monolith of industrial use that is overwhelming and out of scale, thereby discouraging positive development. Much of the industrial waterfront is regulated by overly lenient zoning restrictions.

The limit of industrial land, or the limit of any single use along the waterfront should be determined, along with an optimum scale of new and existing building or development.

There are possible opportunities in working with existing companies and landowners to induce alternative land use. Incentives could be explored to advance land and building use efficiency for land and building reclamation.

There are opportunities to encourage overlapping functions, promoting integrated activities along the waterfront.

Regulating Land and Building Use

Working to formulate a code for development that sets minimum standards that dictate the performance of the space. This code being flexible enough to encourage creativity, yet structured enough to ensure a cohesive urban form.

The code should consider hierarchy, community focus, pedestrian scale, street scale and building scale, while working to reinforce the spiritual and physical connections of the community, thereby supporting intellectual and cultural stimulation.

The code should work to develop landscape criteria through an overall landscape master plan, while cultivating guidelines that encourage creativity, alternative landscape treatments, land art or sculpture.

The code should address building guidelines that work to structure coherent urban form, but that does not intimidate, restrict or dictate design.

Parking and Loading requirements

There is a need for all government levels to develop an overall transportation infrastructure that provides a diverse and flexible public transportation system, reducing the excessive need for surface parking. Codes could then adjust parking and loading requirements. Incentives or retribution to employers and employees such as; tax credits or penalties and free public transit or charges for parking spaces, could be established. Taxies levied and monies saved on the road and maintenance infrastructure would than be transferred into a public transportation system.

Codes should work to reduce parking requirements, develop mutual or shared parking lots, instigate employee commuter plans and transportation networks . A maximum parking area should be set for each building, and taxes levied to those who exceed the requirements. Under no conditions should large grade level parking lots be allowed. Codes must also address truck traffic and loading.

All levels of government interfacing to achieve successful, sustainable development

Planners and theorists commonly reflect on their frustration in the failures of all government levels to co-ordinate and co-operate. Governments often protecting their own self interests and territories at great social, economic, environmental and functional costs to the public.

Co-operation is required in order to link systems and resources such as; transportation, education, employment, environment, planning and economic development. The co-ordination of services will ensure sustainable design, reducing sprawl, providing the dense clusters and centres to support mutual systems.

Brownfield Development

There are many opportunities to reduce the scale of industry, through the integration of alternative use. The development of Brownfield sites should be promoted through the Regional and Municipal Economic Development Departments. Provincial and Federal Governments must financially support infil development through progressive tax structures or incentives.

A moratorium on developing Greenfield Industrial Business parks must be implemented. Governments must work to reduce sprawl, investing in existing urban centres.

Public waterfront edge or public accessibility, the waterfront edge should be diverse

There must be an effort to restore the waterfront edge to the public domain. Existing industrial uses must work to provide accessibility along their waterfront edge, so that they do not continue to have exclusive ownership. As much as possible public ownership is to be restored.

The overall master plan of the waterfront should establish a greenway infrastructure encouraging pedestrian and bicycle use. The code should establish setbacks from the waterfront edge to encourage public participation at the waterfront. The master plan should also identify nodal points incorporating diverse functions such as natural reserves, cultural facilities or recreation space.

Working with industry to ensure sustainable design into the future.

Citizens groups need to be encouraged and rewarded for their involvement in voluntary cleanup programs. Programs to draw upon into this energy should be advanced.

Strict environmental guidelines to reduce pollution, improve in air and water quality, must be developed, implemented, monitored and enforced by all levels of government.

Government intervention can encourage sustainable practices through higher taxes on non-renewable resources, higher fees for water, oil, gas, thereby encouraging efficient building and operating practices, giving those that do practice environmentally an economic advantage. All levels of government should support large fines for environmental abuse, revoking of business licences, and closing of companies where detrimental environmental procedures are found to be in practice.

Options could be pursued to balance the social and environment issues of the community. Often heavy investment is required by industrialists to improve or update equipment that reduces the environmental damage. Tax systems should be structured to assist in environmental upgrading of equipment. Environmental restructuring of industry that reduces land requirements would provide options for infilling of alternative land use.

Economic Development Strategies

There are possibilities in restructuring industrial manufacturing to create niche markets and their associated distinctive industrial products working with smaller companies that specialize in limited product manufacturing.

"Environment Canada's Report", acknowledges the economic potential in incorporating alternative waterfront uses. The strengthening of the waterfront is noted and residential intensification of the downtown core would lead to financial opportunities and infrastructure savings.

Restricted uses

There should be a reclamation of all waterlots to ensure that lakefilling is not continued. Codes should be investigated to dictate building and resource technologies that provide limits to environmental impacts. Waterfront lands being deemed environmentally sensitive, and regulated in accordance with such restrictions.

Industries that remain, and proposed new industrial uses at the waterfront must comply to strict environmental and social guidelines. All development should be evaluated as to their role on the waterfront.

Reconstruction of existing road systems

Many existing road systems have been constructed as imposing barriers to the waterfront edge, restricting any pedestrian movement, thereby restricting the possibility of extending the existing neighbourhoods and communities south of the roadway structures.

Existing infrastructure that segregates the community from the waterfront should be redesigned and in some cases dismantled. Corridors that work only to move cars through cities, must be reassessed as to their impact on the surrounding environment. Roadways should be efficient, but also recognize the social implications. Softening of systems can be achieved through reduced speed, vistas, landscaping and boulevards. High speed through traffic should be redirected to the highway systems, allowing the waterfront boulevard to be restored as either a gateway or path. The scale and treatment of these systems must be established.

Traffic patterns should be analysed, working to reduce the peak loads. Encouraging flexible working hours, and alternate shift times, or implementing penalty fees or toll charges to vehicles and trucks using the roadways at peak periods.

Industrial transportation system

There is a need to work with the commercial and industrial user groups to develop options for loading, truck and rail traffic, perhaps through an underground transportation network, or subsidies for alternative transportation such as shipping.

Heritage Protection

Developing an inventory of existing buildings, and those considered of architectural or social value, meaning buildings are also considered of historical merit in that there functions illustrate the fabric of the community. These buildings and places and their context must be protected.

Education

Provide the framework to encourage and develop relationships between industry and post secondary education. Expand this framework and awareness to include diverse types of education and learning.

8.0 PROJECT

8.1 PROGRAM DEVELOPMENT

Incompatible uses are only incompatible when they are irresponsible. I believe that diversity should not restricted, but encouraged through the establishment of a framework that includes industrial integration.

It is beyond the scope of this thesis to address all the complications of the Hamilton Waterfront. The intent of the thesis is to explore ideas that transform existing development patterns, focussing on diverse land use in conjunction with industry to enrich the social fabric of the community.

The intent is to create a neighbourhood plan, that will identify the modifications to the existing environment that I believe will be necessary to create a successful urban place. I wish to incorporate the social, cultural, environmental and economic issues that affect all communities, exploring the interplay of uses within building types and studying the opportunities given by these relationships.

I wish to investigate the existing educational infrastructure to encourage opportunities for community growth, inquiring into relationships that could possibly develop between the industrial community, diverse education and learning systems.

I would like to explore options that create a neighbourhood focus, and encourage a community spirit, conceivably extending efforts that may involve other parts of the district.

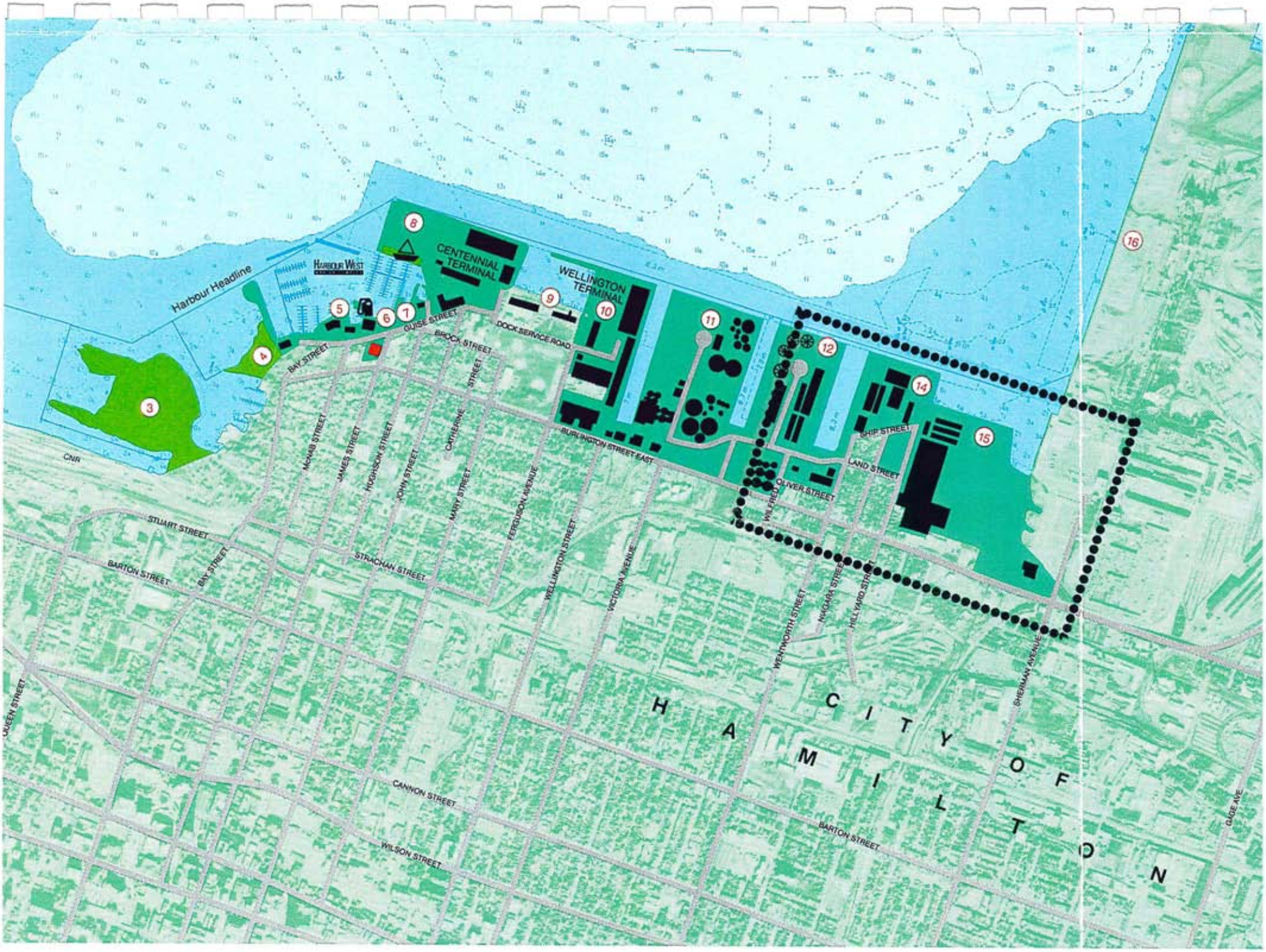
8.2. SITE

The proposed site to explore the hypothesis of this thesis is located within the industrial corridor on the Hamilton Waterfront. This site extends north of Burlington Street, from Wilfred Street on the west edge to Sherman Avenue North on the east.

Directly west, adjacent lands are exclusively industry, however further west, gradual redevelopment of the harbourfront has facilitated rehabilitation, strengthening an existing rich and diverse community. This area. The context south of Burlington Street is generally industrial or single family residential.

To the east, the recent American relocation of J.I. Case has resulted in vacated land, half the area of this site. Job losses of 300 people occurred, however a tremendous opportunity now exists to continue the pattern of rehabilitation as Phase Two. The monopolization of these large scale industrial user groups creates a very vulnerable economy and land use pattern.

The domination of indifferent industrial zoning continues to debilitate this community, and compromise the environment. The substantial residential expropriation to accommodate industrial expansion, augmented with sprawl and globalization perpetuates land use that remain underutilized, questionable and stagnant.


Harbour Headline
HARBOUR WEST
CENTENNIAL TERMINAL
WELLINGTON TERMINAL
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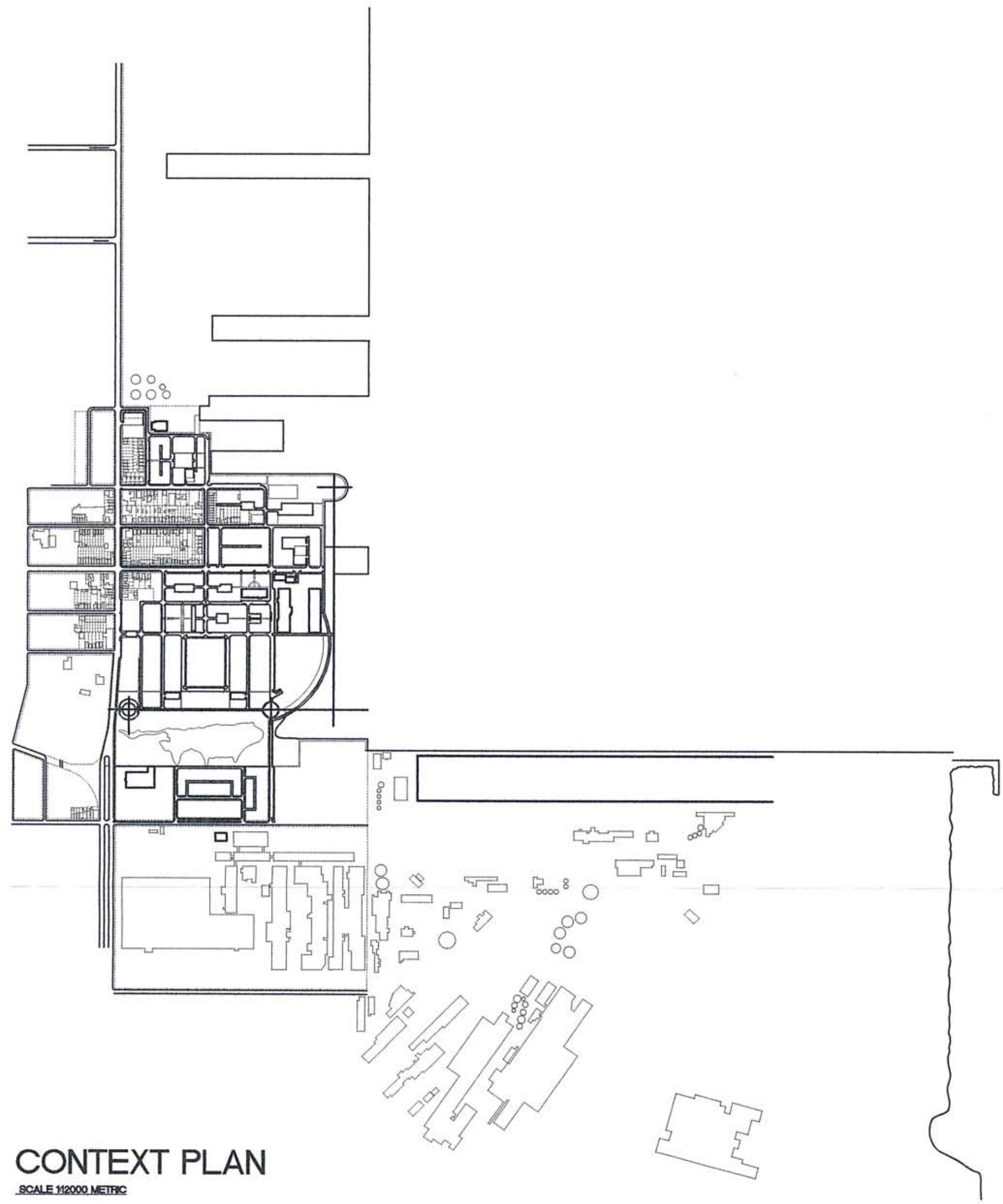
GUISE STREET
DOCK SERVICE ROAD
BROCK STREET
BAY STREET
CATHERINE STREET
BURLINGTON STREET EAST
SHIP STREET
LAND STREET
OLIVER STREET
WILFRED
CNR
MCNAB STREET
JAMES STREET
HUGHSON STREET
JOHN STREET
MARY STREET
FERGUSON AVENUE
WELLINGTON STREET
VICTORIA AVENUE
WENTWORTH STREET
NIAGARA STREET
HILLYARD STREET
SHERMAN AVENUE
STUART STREET
BARTON STREET
BAY STREET
STRACHAN STREET
QUEEN STREET
CANNON STREET
WILSON STREET
BARTON STREET
GAGE AVE
CITY OF HAMILTON

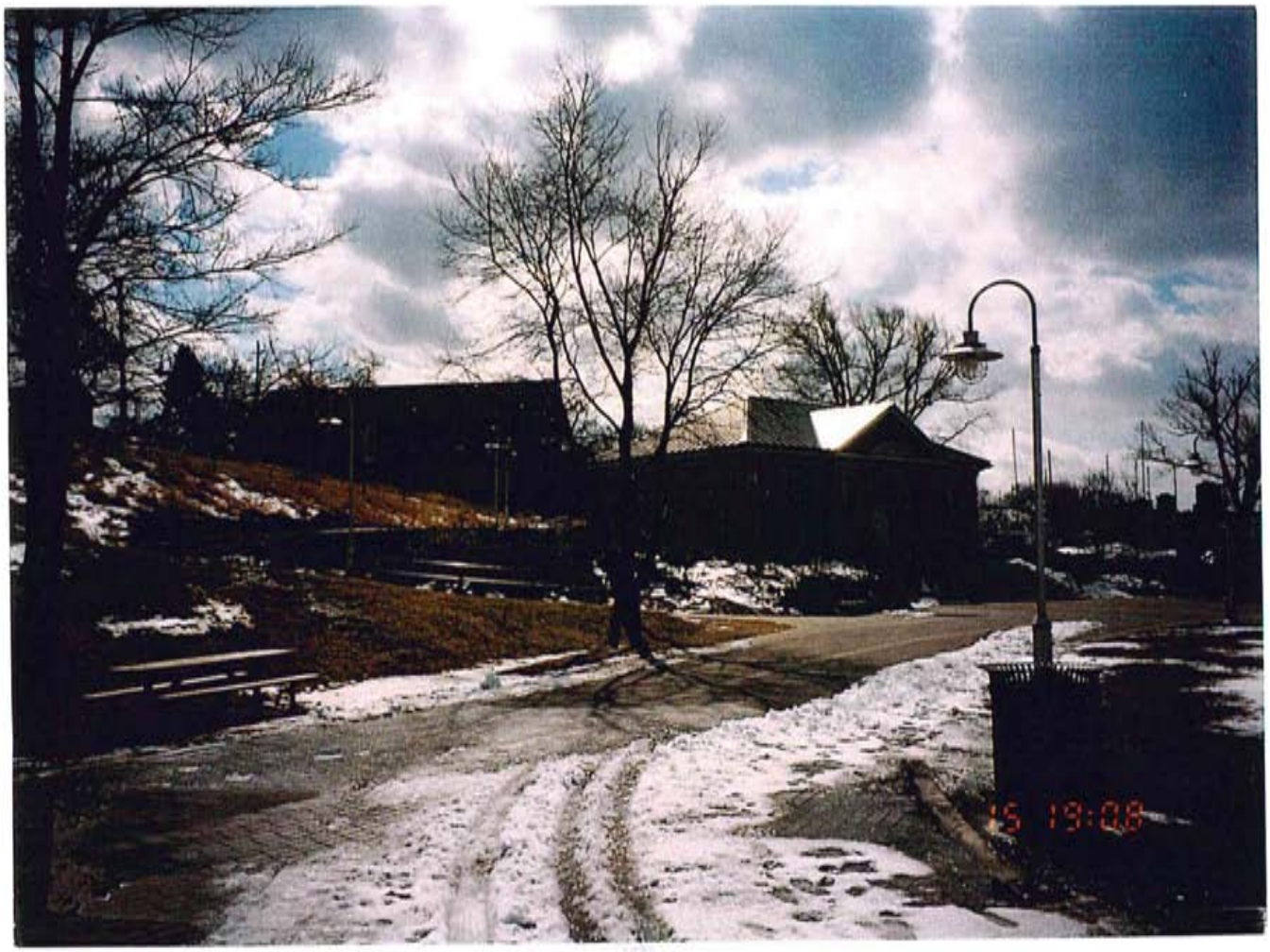


CONTEXT PLAN

SCALE 1/2000 METRIC

Existing infil on the West Harbourfront was reclaimed by the City, to create an open space for the regional community. Historically numerous Hamilton waterfront industries, operated along this shore line. The Bastien Boat Works was one of Hamilton's well known and longest running boat shops, operating as early as 1865, being demolished around 1937. Macassa Bay Boat club currently operates in this location, situated between the new waterfront park and the existing Leander Rowing Club and Royal Hamilton Yacht club. Hamilton officials secured an agreement to allow public access through these lands through a delightful waterfront boulevard.

At the eastern edge of the Boulevard are located two historical buildings. One is the Grant Sail Loft, built in 1869, closing in 1887. Today it again operates as a Sail Loft. The Gartshore-Thompson building was constructed in 1905, it was originally located at the south-west corner of Stuart and Carline streets, but was moved here in 1992, to serve as a multi purpose waterfront park facility.



The Leander Rowing Club is one of the oldest Rowing Clubs in Canada. It originally operated on Bastiens wharf, where the clubs racing shells were built. On the lower floor of this building, they continue to work on boats, adjacent a liquor lock up room left over from the days of prohibition. I believe this to be the third The Royal Hamilton yacht Club building, the first being built in 1891, destroyed in 1915, the second being regretfully torn down to be replaced by the current pre-engineered and concrete block building. The financial repercussions of this new building has enormous negative impact on this club. Today the majority of the building is occupied by the Chamber of Commerce.

8.3 PROGRAM GOALS

The site remains a struggle between the goals of economic development and the sustainability of a community. It is not beyond repair, and is probably key in inspiring future positive infill and intensification of use and repair of the natural environment.

This thesis will attempt to develop a neighbourhood plan that respects the industrial history while working to restore the residential character of the community. The intent is to create an inclusive environmental through the integration of diverse functions, propose alternative solutions to suburban sprawl, build upon existing infrastructure, and cease environmental degradation.

The first goal will be to create a framework that restores balance, self worth and community identity, facilitating the strengthening and stabilization of the existing neighbourhood. This framework will establish codes to protect the existing residences from further decline and intervention, allowing for these spaces to heal themselves by providing a framework for their rehabilitation. The hypothesis being that a stable framework will enhance diversity and accessibility replenishing economic viability.

Research has concluded that the urban poor within these communities are often in need of a social network of support. The changing industrial climate in this neighbourhood has greatly affected a way of life. This program will attempt to comprehend this when restructuring the social and cultural environment, working to ensure positive community response and participation, I believe necessary for sustainability.

The stimulus of this development is to be through the development of an Education Centre, with objectives of becoming a community resource in the exploration, teaching and researching of ideas to support environmental and social remediation and sustainable development. Nodal developments extending the programming of the Education Centre are to be integrated throughout the neighbourhood, unifying the goals of both communities.

Buildings that are considered historically important to the waterfront, community and city, are to be preserved and recognized. It is the intent to create a development plan that provides diverse programming opportunities to stimulate restoration of these buildings.

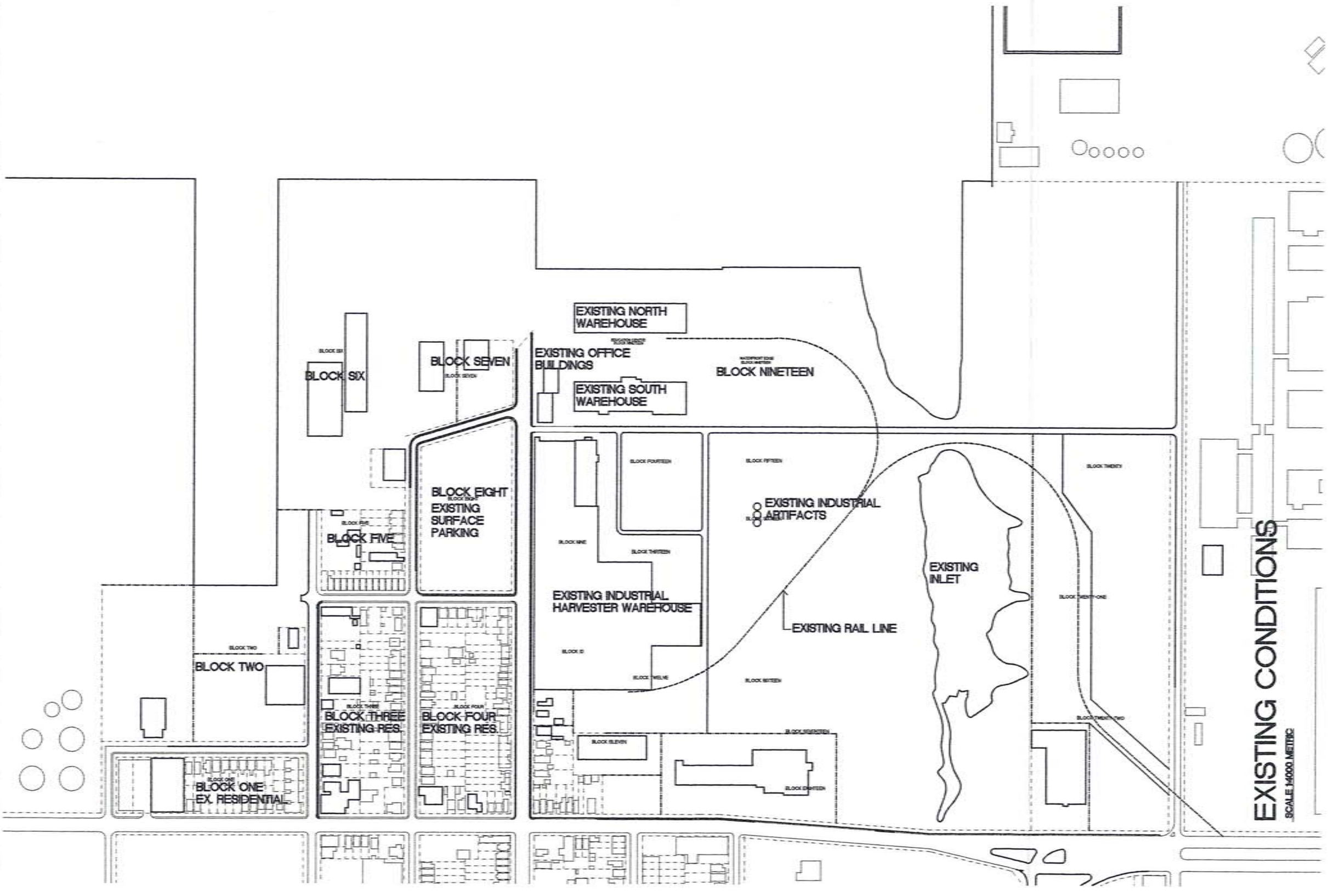
The objective of the development plan will provide public space that cultivates regional interaction, and re-connection to the Hamilton waterfront, while validating and restoring dignity and sense of place to existing residential uses. This resolution is proposed through providing, and integrating diverse types of housing and work environments that acknowledge the reality of the existing context, while working to facilitate industry in redefining itself.

8.4 EXISTING CONDITIONS

Most of the lands within this development were utilized by International Harvester. International Harvester began operations in Hamilton in 1902 and by 1904 it was considered the largest agricultural implement works in the British Empire. Most buildings being built before 1920. Today they are either derelict or abandoned. Many of the International Harvester buildings meaningfully reflect the industrial tradition of the Hamilton waterfront.

Common to Hamilton industry, many workers were from ethnic groups new to Canada. This plant was also one of the first to employ women in non-traditional occupations. Workers often lived nearby, some in housing built by the company. Today a rich ethnic diversity remains within these communities.

Most of this development is owned by the Hamilton Harbour Commission. This exploitation of public land amplifies the frustration of the continued neglect and disregard of our prime resource.


BLOCK SIX
BLOCK SEVEN
EXISTING NORTH WAREHOUSE
EXISTING OFFICE BUILDINGS
EXISTING SOUTH WAREHOUSE
BLOCK NINETEEN
BLOCK EIGHT
EXISTING SURFACE PARKING
BLOCK FIVE
BLOCK TWO
BLOCK THREE
EXISTING RES.
BLOCK FOUR
EXISTING RES.
BLOCK ONE
EX. RESIDENTIAL
EXISTING INDUSTRIAL ARTIFACTS
EXISTING INDUSTRIAL HARVESTER WAREHOUSE
EXISTING RAIL LINE
EXISTING INLET
EXISTING CONDITIONS
SCALE 1:4000 METRIC

DENOTES EXISTING INDUSTRIAL BUILDINGS
WITHIN EXISTING RESIDENTIAL BLOCKS

16

EXISTING INTERNATIONAL
HARVERSETER BUILDINGS

EXISTING INDUSTRIAL BUILDINGS

SCALE 1:4000 METRIC

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Industrial use one; (North side of Oliver Street)
This existing industrial building, appears to have been built in the early 1960's, is now abandoned. The small building is on an extensive waterfront site. I believe this building to be of some value and worth restoring, being able to function as either as industrial, commercial or office use. Inappropriate modifications and lack of maintenance are jeopardizing the possibility of restoration.

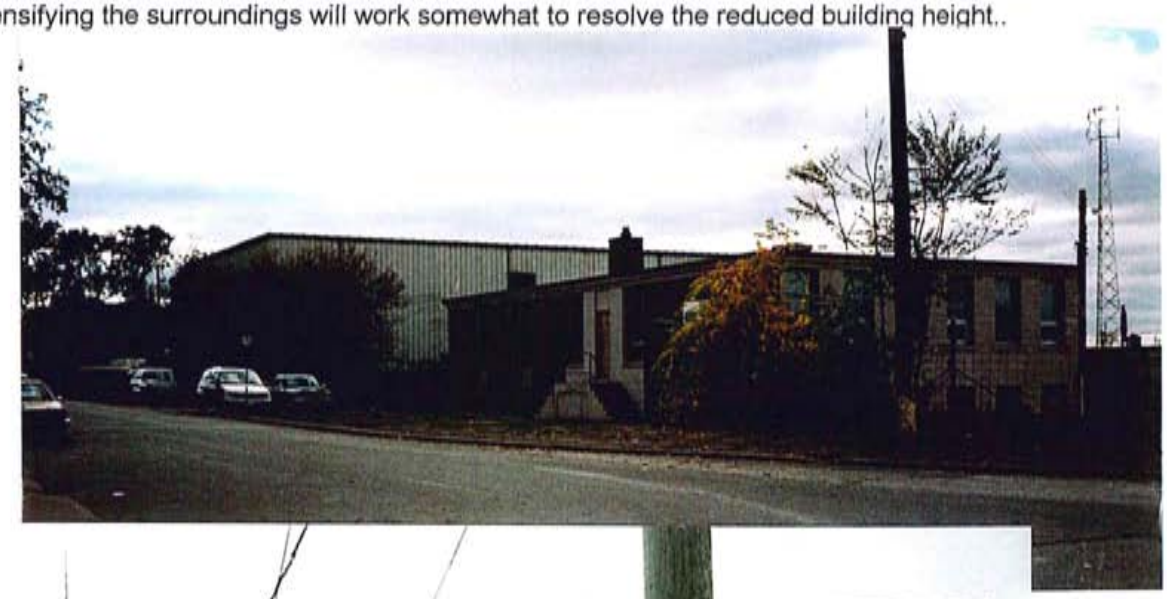
Industrial use two; (South side of Oliver Street- North Star Technical)
This is an existing operating industrial building. The building has had limited maintenance, and has expropriated residential lots on the west side to accommodate their parking. The City or utilities has expropriated the remaining residential uses to accommodate a hydro tower and transformer. The building is to remain, as well as the utilities, but does negatively effect the street. The intent is to positively infil on the east side, and perhaps future enhancement of the area will encourage the owner to improve his building.

Industrial use three; (Oliver Street/Wentworth street)
An existing abandoned pre-eng warehouse that will restrict intensifying of the site. MG Waste disposal is storing their dumping bins within this open space. It is proposed to remove this building, and repramming mixed type residential units.

Looking East on Oliver Street at Wentworth Street. (1) South Side. (2.) North Side.

(1.)West side of Wentworth Street Looking South, just south of Oliver Street. (2.) Looking West on Oliver Street from Wentworth Street.

Industrial use four; (Wentworth Street and Land Street)
An existing operating one storey office building to remain. The finished floor approximately 1.800 m above finished grade with a full basement. Parking currently exists in sideyard, but could easily be reconfigured to rear yard. The one storey building height is quite out of context with the existing, however it is proposed intensifying the surroundings will work somewhat to resolve the reduced building height..

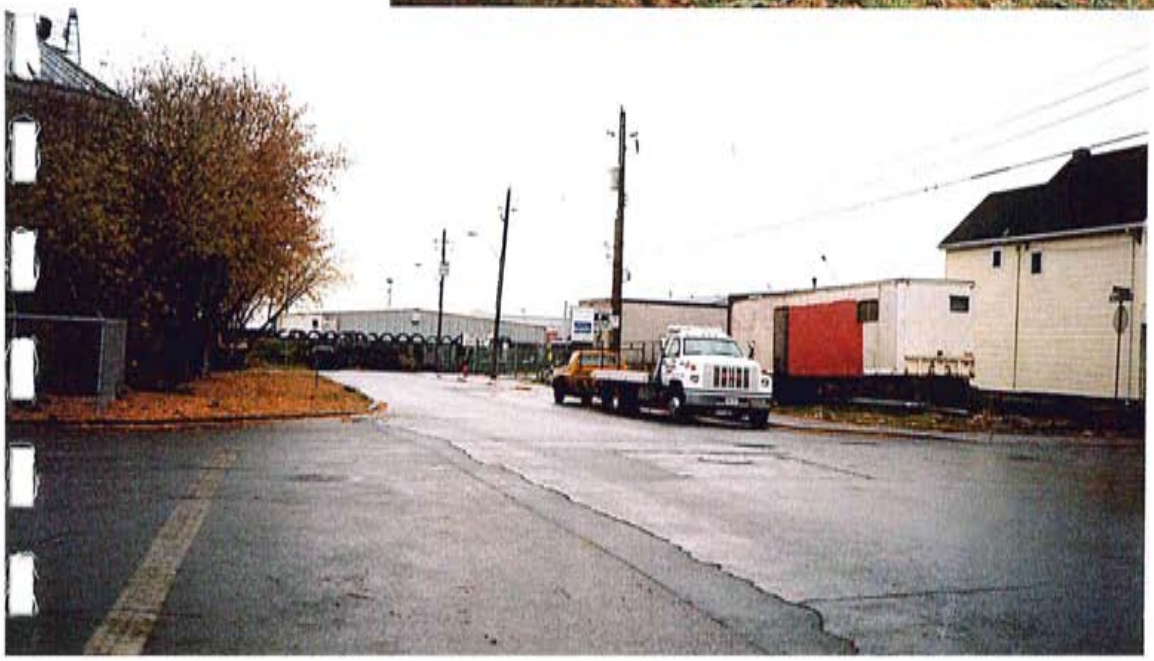


Industrial use Five (Wentworth Street)
This is an existing abandoned industrial building, that works well with the existing residential scale. This building could remain as industrial, or be reprogrammed to incorporate a live work, residential, or commercial use.

Industrial use Six, Wentworth Street, north of Land Street.
Is a vacant warehouse/office with several small perimeter buildings on amalgamated residential lots. These buildings lack any consideration of existing scale or residential fabric. It is proposed to remove these buildings and restore the existing residential lots & zoning, typical to all sections of this block. It is also suggested to extend the existing residential lots north. The residential lots are quite deep and therefore more suited for rear access, but both front and rear access would be appropriate.

Industrial uses seven and eight.
These buildings currently operate as storage warehousing on the waterfront, and of no architectural value. These buildings are owned and operated by the Hamilton Harbour Commission. As they are currently under utilized, incorporating land uses could be explored, but the primary function of the pier should remain industrial.

(Land Street at Wentworth, looking North down Wentworth) Industrial uses Five and Six are on the East side of the street, Industrial Uses Seven and Eight are at the North End of the street, behind the tires.



(1.) Looking North East down Land Street from Wentworth. (2.) East Side of Wentworth looking South, just south of Land Street.

(1.)South side of Land street, between Niagara Street and Wentworth Street, looking east from Wentworth Street. (2.) Looking North up Wentworth Street at the north east corner of Wentworth Street.

Looking West down Land Street from Niagara Street. (1.) North Side (2.) South Side.

East Side of Niagara Street, looking north between Land Street and Ship Street.

(1.) (2.) Niagara Street Looking north from Burlington Street, East side.

(1.) Niagara Street looking north from Burlington Street, west side. (2.) Niagara Street looking south from Land Street.

(1.) East side of Niagara Street, looking south from Land Street. (2.) South Side of Land looking east between Niagara Street and Hillyard Street.

Industrial use Thirteen (Philips Environmental-office building)

This existing building was originally the corporate offices for International Harvester. The building was constructed in 1950's, and appears to be in good condition. The use of this building lends itself to office or industrial use. Philips Environmental currently leases the building, using as their corporate offices. In my opinion Philips has had an extremely negative effect on the Hamilton Harbourfront. The existing open space behind the building, including the last natural inlet is currently being filled and stockpiled with recycled wasted.

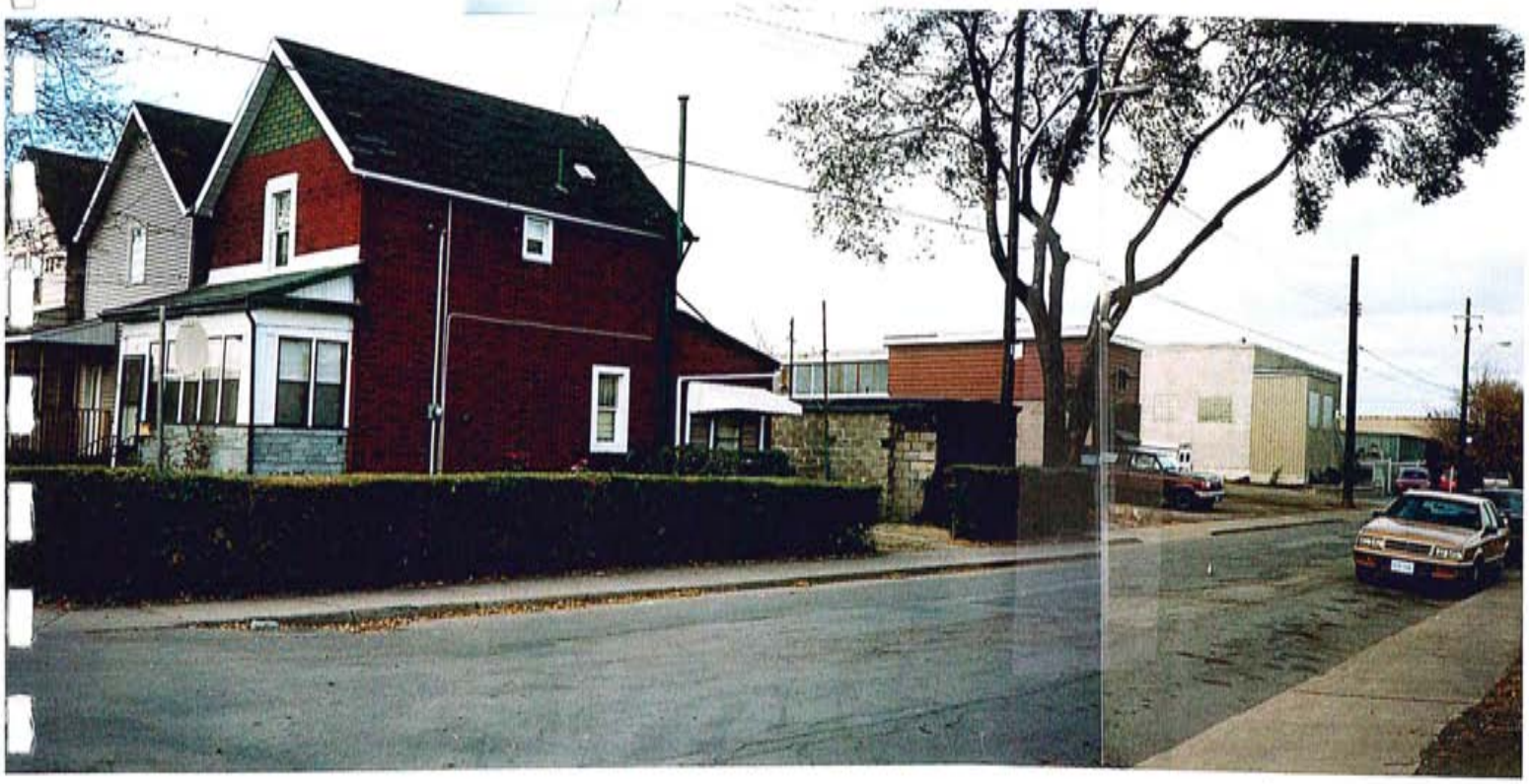
industrial Use fourteen
The existing building is split face concrete block building of little architectural value. The building is 2 storey with a raised ground floor. The building currently operates as an Engineering firm.

The building is larger than the existing residential uses, and with open space on either side the size of the building the larger scale is exaggerated. The building frontyard setback is lees than the existing residential uses, although it does not respect the existing residential setback it does work to reinforce the street edge.

It is proposed to relocate the parking to the rear yard, infilling single family residential on the current southerly sideyard. Boulevard parking to accommodate visitor parking should be provided. It this business were to relocate or close, re-zoning of the property, and lot re-configuration would be permitted. New buildings would be required to respect the current residential setback.

Industrial use fifteen
The existing building is operating as Union Boiler Works. The scale of this building works quite well with the existing residential uses. A part of the existing building has been constructed on the minimum setback line. The building is only problematic in that its maintenance is quite poor. It is the belief that positive infil their will encourage the building owners to improve their space. Union Boiler Works has been in Hamilton for several years.

Looking North West, at the Corner of Land Street and Niagara Street. Residential uses remain along Land Street. Union Boiler Works is the next building, followed by Industrial Use fourteen. Existing residential uses between Union Boiler Works and Industrial Use fourteen have been recently removed, the residential uses are to be restored.



(1.) South side of Land Street between Hillyard Street and Niagara Street, looking west from Hillyard Street. South side of Land Street between Hillyard Street and Niagara Street, looking west from Hillyard Street.

Industrial use no. Nine.
An existing single storey vacant pre-engineered warehouse. This building is to be removed.

Industrial use no. Ten (Lafarge Concrete)
This existing use is to remain. Ship Street is reconfigured to align with the existing ship Street south of the proposed school. This also allows the development of either residential or live work type buildings along Ship street. The Lafarge site is reconfigured so that loading, and service vehicles are in the rear yard. Fencing and landscaping will be required for the perimeter of the rear yard. Sound attenuation will also need to be addressed.

(1) Ship Street looking north east, east corner of Industrial use nine. (2) ship street looking east, Lafarge Concrete on the north west corner of Hillyard Street and Ship Street.

Industrial use no. Sixteen- (Pier base of Hillyard)
This is a ship building company, that has been on the pier since the early 1900's. This company repairs, services and builds ships. There is quite a bit of interesting activity generated on this pier, and the old tugboats often adjacent create added interest.

MAIN INTERNATIONAL HARVESTER BUILDINGS

North warehouse (one); This building is a 4 storey building, exposed concrete structural frame with masonry infil panels. The building is approximately 5000 sm. per floor, 36mx138m (5 bays x 21 bays. The two lower floors are approximately 5.5m floor to floor, and the upper two floors 4.6m floor to floor.

South Warehouse (two); Is a 3 storey building, concrete frame, brick veneer, with large openings where windows once existed. The building is approximately 5,300 sm. per floor, 36m x 138m (6 bays x 25 bays.)The floor to floor height is approximately 6.7 m, making it the same height as warehouse one.

Office Building; This building is a two storey, with a full basement. The ground floor is approximately 1400 mm A.F.F. with the floor to floor height being approximately 4.2m. The building is concrete frame, with brick veneer and large windows between the bays (4 bays x 11 bays).

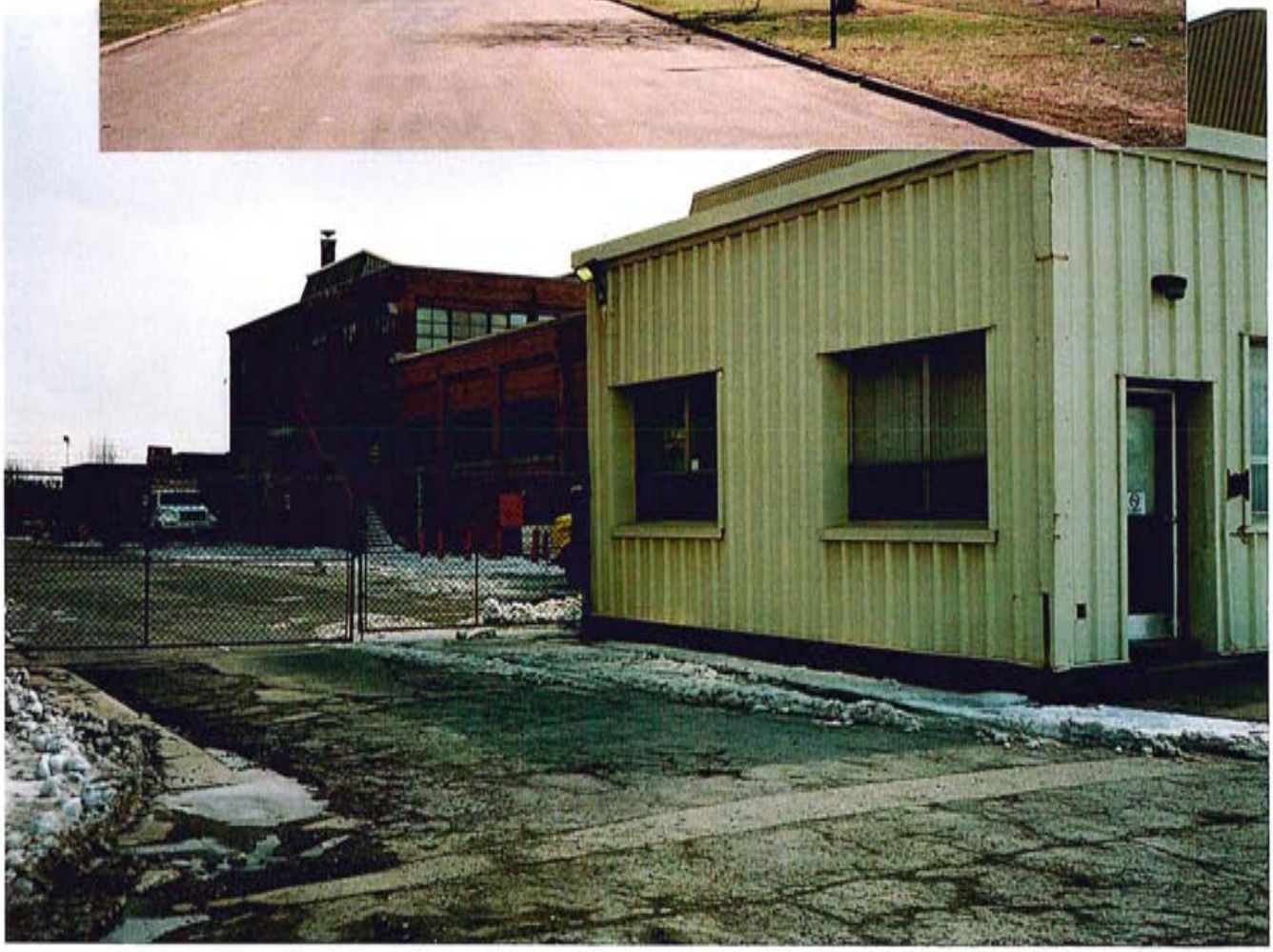
Former Plant: (see industrial use eleven) This is a large industrial facility that occupies much of the existing site, on the East side of Hillyard south of the Warehouse Two. The building appears to have little architectural value, as a result of damage through insensitive renovations and expansions. The building will need work on the west and southern elevations to restore the original facades, but the north and east elevations appear to be relatively intact. The roof has the original skylight framing.

The section of building to remain is 2 stories with generous floor to floor heights, approximately 5.000 m. There a large windows on both floors, around the perimeter of the building. The building is approximately 2,190 sm. (26 x 80m- 6 bays x 13 bays)

These buildings will form the core of the Education Centre.

(1) Looking West from Ship Street at the North and South Warehouses.

(2) Existing Office Building. (Proposed Administration Building) Looking East from Ship Street.



(3.) Looking East at the from Hillyard at Ship Street. The existing north edge of the plant, with the extent of building beyond to remain, as the new Experimental Gardens Building.

Industrial use no. Eleven (International Harvester)
Refer to Experimental gardens for extent of warehousing to remain. The remaining building is to be removed. This is an abandoned warehouse in which Philips is stockpiling recycled waste. This building has been cladded over, and the building itself is quite out of scale. The total enclosures of the street facade further degrades street scale. It would require further surveying to determine whether sections of the building could remain and integrated into the new development plan.

(1) Looking North down Hillyard Street. (2) Looking South down Hillyard Street.

(1.) Looking south up Hillyard Street on west side from Land Street. (2.) North west corner of Hillyard Street and Burlington Street.

(1.) South East corner of Hillyard Street and Burlington Street. (2.) One of the few remaining residences on the East side of Hillyard Street remaining.

Industrial Use no. Twelve (Burlington Street-former International Harvester Truck Sales)
The existing industrial strip mall is in poor condition, failing to create any urban form, it has been a victim to several careless modifications. The intent is to reconfigure the building into two smaller buildings that accommodate as a minimum, the existing industrial and commercial tenants.

(1.) Abandoned pre-engineered warehouse behind Industrial use twelve to be removed. Looking north from Burlington Street from west side of parking lot at Industrial use twelve. (2.) Burlington Street looking east, north side between Wilfred Street and Wentworth Street.

Burlington Street looking West, (1.) North side between Wentworth Street and Niagara Street. (2.) North side between Niagara Street and Hillyard Street.

(1.) South side of Burlington Street looking east from industrial use twelve. (1.) Looking west from industrial use twelve.

8.5 DEVELOPMENT PLAN

The stimulus of this proposal is to develop an Education Centre, with objectives of becoming a community resource in the exploration, teaching and researching of ideas to support sustainable development, environmental and social remediation. Nodes that extend the diverse education and learning systems are to be integrated throughout the neighbourhood, unifying the goals of both communities.

Buildings that are considered historically important are to be preserved and recognized. It is the intent to create a development plan that provides diverse programming opportunities to stimulate their restoration.

The development plan incorporates public space that cultivates regional interaction, and re-connection to the Hamilton waterfront while validating and restoring dignity and sense of place to existing community through the provision, and integration of diverse land uses that acknowledge the reality of the existing context, while working to facilitate this community in redefining itself.

8.6 PARTI

The site is framed by four building nodes that are to be developed in conjunction or as an extension of the Education Centre programming. The nodes will sustain the resources and programming to facilitate the mutual involvement in the repair of the harbourfront, additionally providing social support for the community. The hypothesis is that this will strengthen the community by encouraging a partnership in the repair of their own space, augmented with the exploration and implementation of continuing sustainable and indigenous harbourfront development.

8.7 DEMOLITION

Historically several questionable infil projects in the Hamilton Harbour have occurred, over time 33% of the harbour has been lost to infil. It is reported by local interest groups, that monies made by the Harbour Commission, that permit disposal of controversial fill in the harbour, is why these projects continue. The recent infil at the west edge of this harbour is to be removed. It is fundamental that governing bodies reclaim all water lots and prevent this continuing practice.

Most of the operating industry has been maintained. The Hillyard Street International Harvester Warehouse is to be removed, due to the building scale and detrimental renovations. A small corner is left to function as the Experimental Gardens Building.

Remaining industrial buildings to be removed, are either abandoned, derelict, and of no architectural or historical value. These existing land uses and buildings have decimated street edges and failed to respect adjacent land uses. Three homes will be relocated.

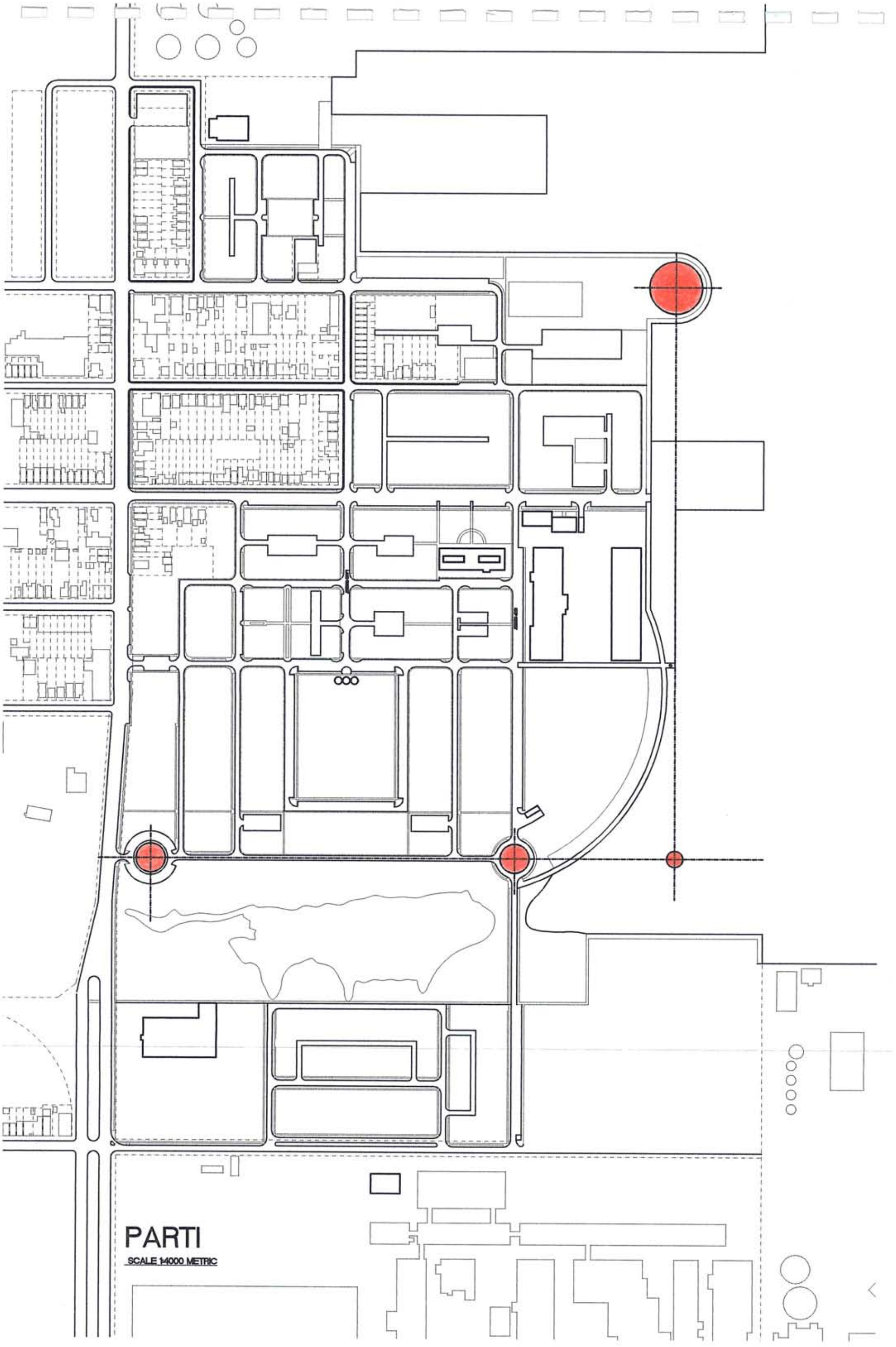
Where possible existing street curbs will be modified to accommodate boulevard parking and landscaping. Many existing homes have no on site parking.

The existing International Harvester Waterfront Warehouse buildings will form the core of the Education Centre. A courtyard will be created between the existing buildings, where a third warehouse has been recently demolished. This courtyard is integral to the functioning of the Education Centre, but flexible enough to program community events. The proposal is to integrate the functions of a school, with programming on the ground level that related to exterior spaces and involve the community, such as libraries, theatres, galleries, and apprentice studios. It is theorized that incubators will form a large part of the Education Centre programming.

The Education Centre nodal interventions are designed to encourage community involvement and exchange, while reflecting the historical context and the intent for positive change, through programming that encourages interaction, learning, participation and support.

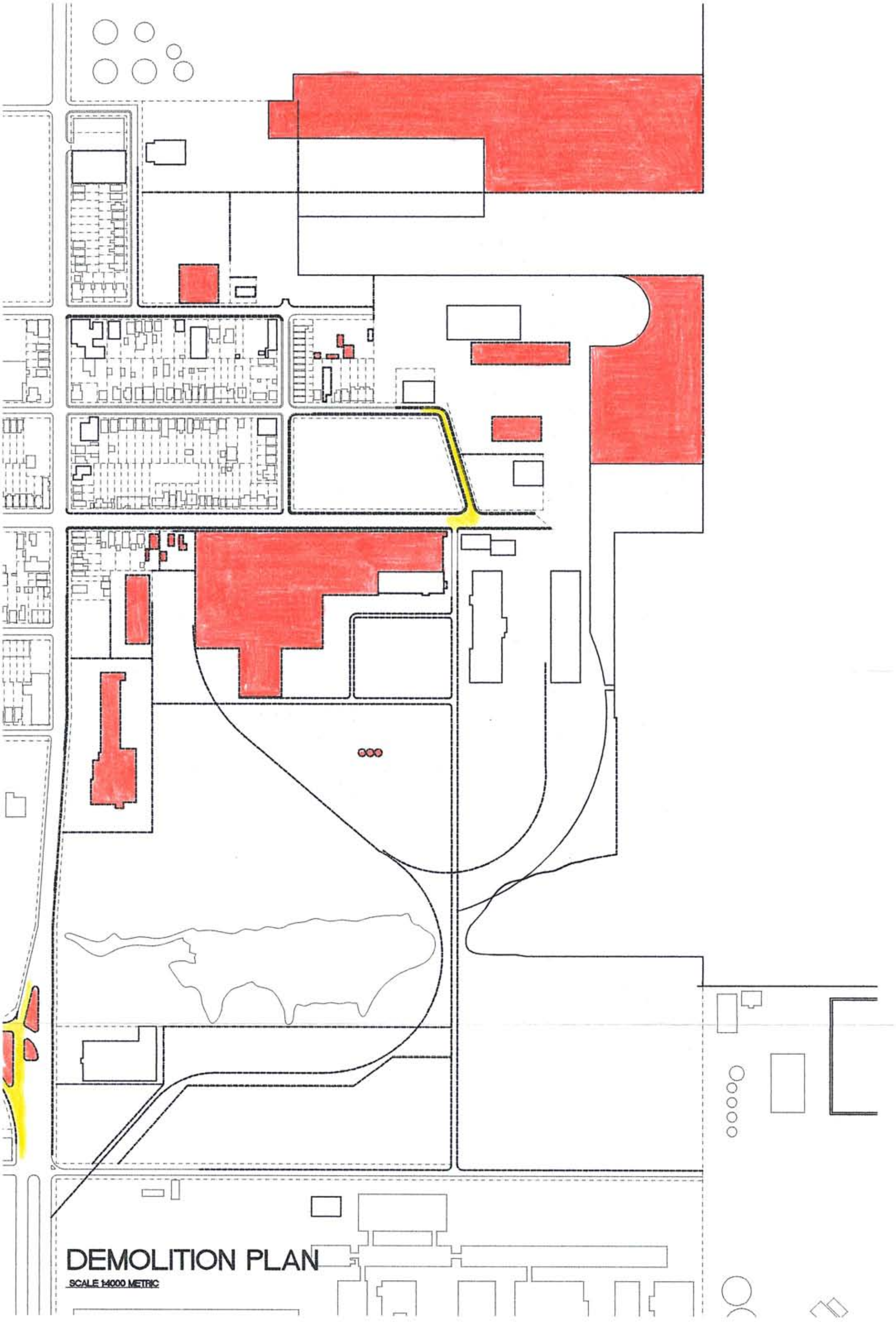
The main warehouse building for International Harvester building has been abandoned and is currently stockpiled with waste from Philips Environmental. This building is proposed to be removed, except for a section that will be developed as an Experimental Gardens building, forming part of the Education Centre, and functioning as a civic node.

The proposal for this building is that it incorporates programming that explores horticulture, plant and food species indigenous to the Hamilton Harbourfront. The existing open space in front of the building is to be developed as community and experimental gardens. It is the goal that programs are developed that integrate urban farming, communal gardening, food preparation, education, food sharing and resource distribution to those in need.



PARTI

SCALE 1:4000 METRIC



DEMOLITION PLAN

SCALE 1:1000 METRIC

8.8. URBAN BORDERS

A neighbourhood code was developed considering the performance of the space, focussing on natural light, urban edges and pedestrian scale. Restrictive guidelines that limit creativity and diversity were eliminated. It was theorized that truly diverse integral land use patterns provide a stimulating environment encouraging the development and exchange of diverse ideas and values, ensuring both physical and cognitive growth.

Setbacks were developed to provide a consistency and rhythm along the street edge. Modifications are permitted to tighten the urban fabric, where it will not effect adjacent land users. The guidelines focus on the width and height ratios that create pedestrian scaled spaces, standard setbacks allow for modifications to facilitate tighter ratios.

A build-to line was determined for all uses, in which 70% of must be defined by an exterior wall or part of the building face. Fencing, porches and garden walls are permitted to extend beyond this build-to line.

Percentages of Increased building height are permitted where adjacent land users are not effected, thereby creating an opportunity for a more interesting street edge.
The residential building lot was based on two residential prototypes, *as illustrated in this sketch.* One is rear access and one is front access. There are specific guidelines for each on building height, setbacks and parking, but none to dictate design criteria.

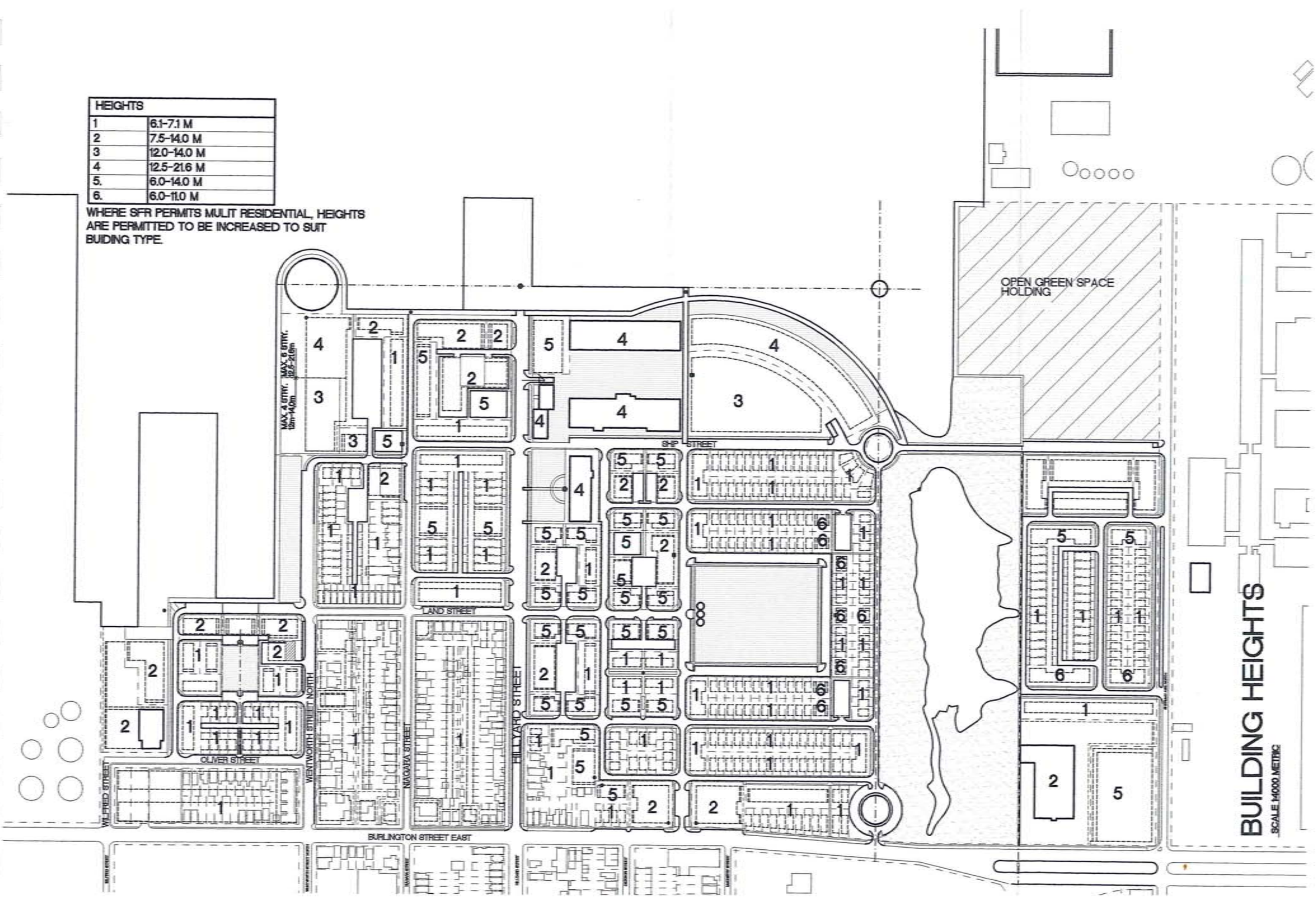
URBAN BORDERS	
	BUILD-OUT LINE
	R.Y. BLDG. SETBACK
	F.Y./SY/R.Y. SETBACK
	PROPERTY LINE

BLOCK SIX
BLOCK SEVEN
EDUCATION CENTRE
BLOCK NINETEEN
WATERFRONT EDGE
BLOCK NINETEEN
OPEN GREEN SPACE
HOLDING
SHIP STREET
EXPERIMENTAL
GARDENS BUILDING
BLOCK FOURTEEN
BLOCK FIFTEEN
BLOCK TWENTY
BLOCK FIVE
BLOCK EIGHT
BLOCK NINE
BLOCK SIXTEEN
BLOCK THIRTEEN
INLET
BLOCK TWENTY-ONE
LAND STREET
BLOCK TWELVE
BLOCK TWO
DENOTES
FUTURE REAR
YARD ACCESS
DRIVE
BLOCK 10
BLOCK SIXTEEN
BLOCK TWENTY-TWO
WENTWORTH STREET NORTH
BLOCK THREE
BLOCK FOUR
NIAGARA STREET
BILLYARD STREET
BLOCK ELEVEN
BLOCK SEVENTEEN
OLIVER STREET
WILFRED STREET
BLOCK ONE
BLOCK EIGHTEEN
BURLINGTON STREET EAST

URBAN BORDERS
SCALE 1:4000 METRIC

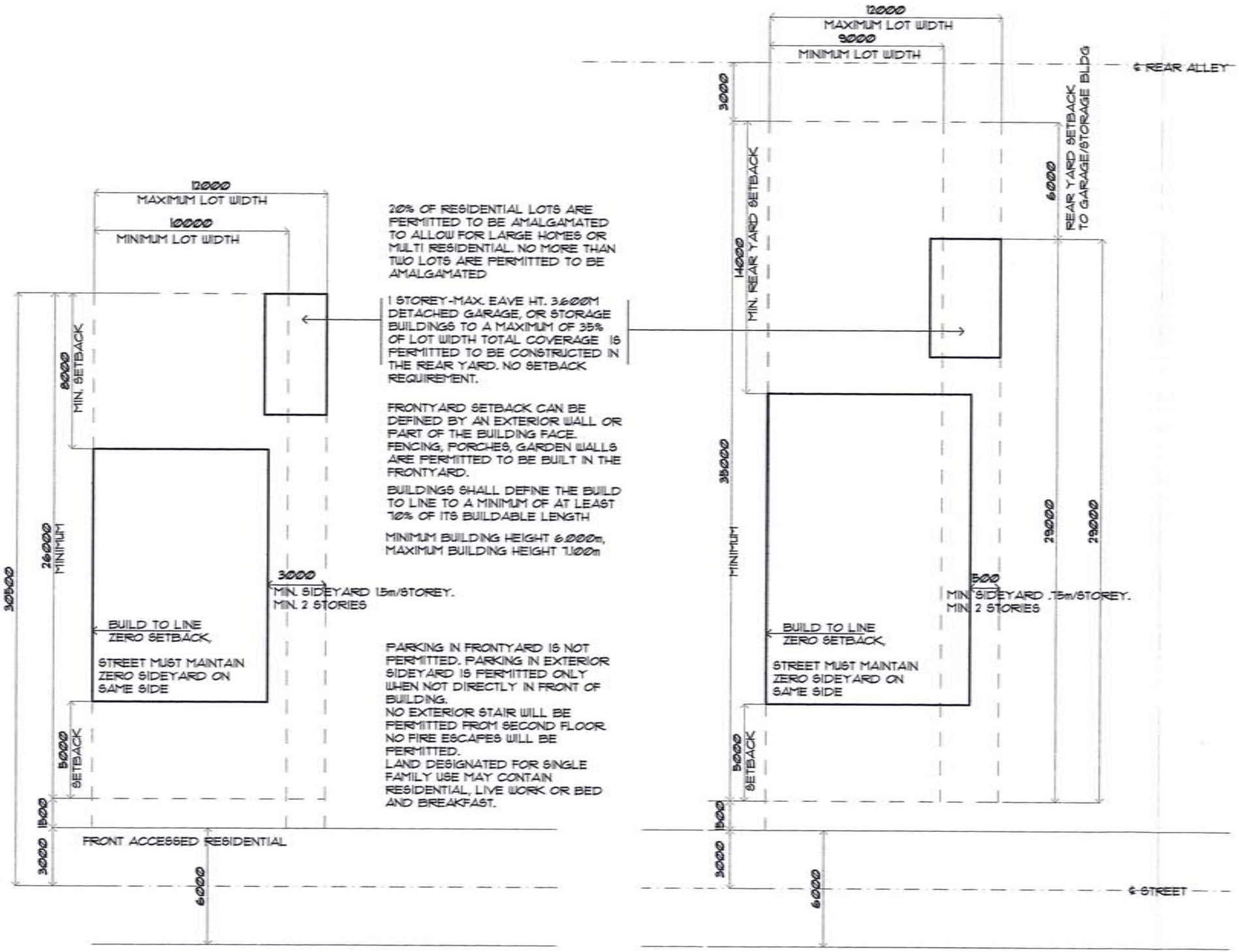
HEIGHTS	
1	6.1-7.1 M
2	7.5-14.0 M
3	12.0-14.0 M
4	12.5-21.6 M
5.	6.0-14.0 M
6.	6.0-11.0 M

WHERE SFR PERMITS MULIT RESIDENTIAL, HEIGHTS ARE PERMITTED TO BE INCREASED TO SUIT BUIDING TYPE.



BUILDING HEIGHTS

SCALE 1:4000 METRIC

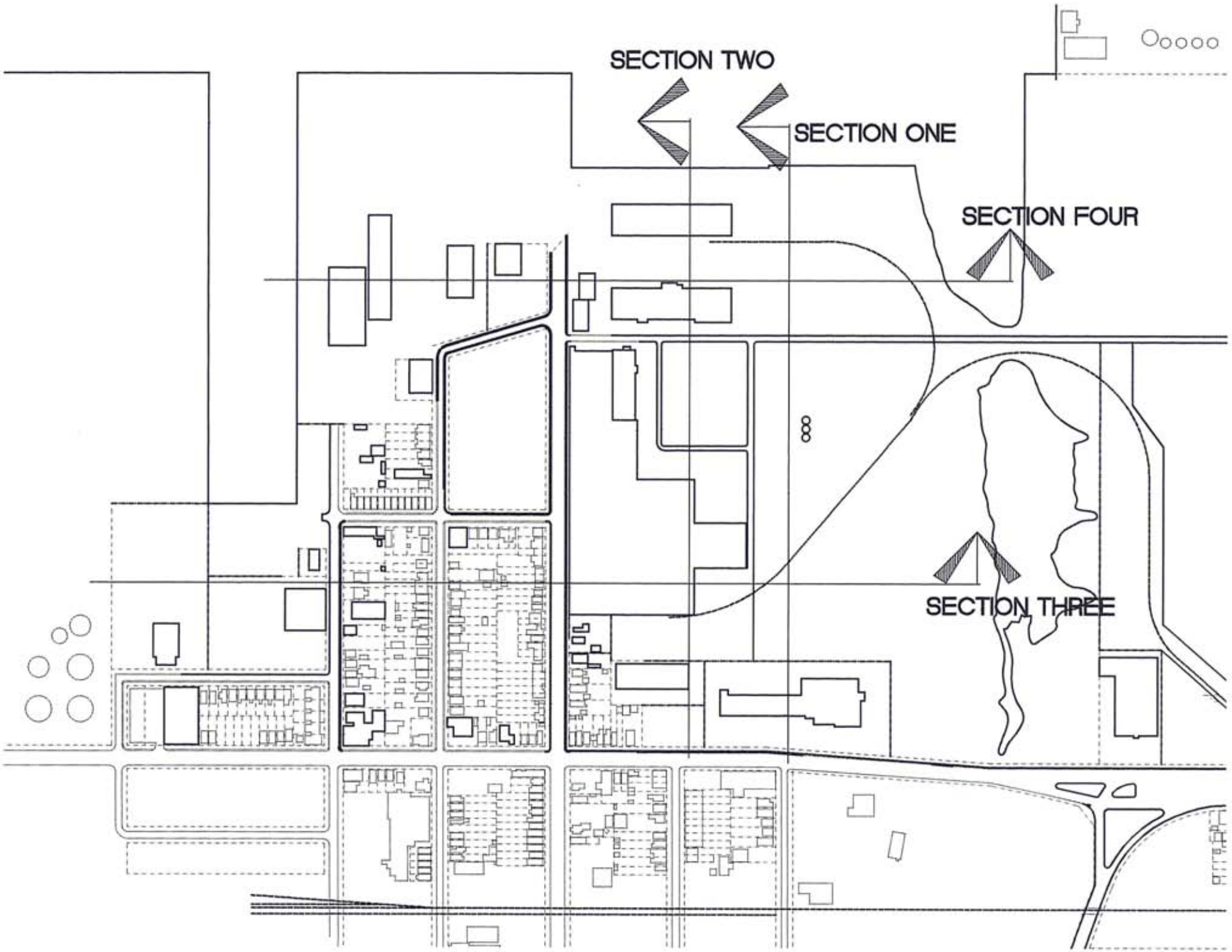


FRONT ACCESS PROTOTYPE

REAR ACCESS PROTOTYPE

PROTOTYPE RESIDENTIAL LOTS

SCALE: 1:200


SECTION TWO
SECTION ONE
SECTION FOUR
SECTION THREE

MASSING STUDIES

SCALE: 1:1200 METRIC

EXISTING FIGURE GROUND

SCALE 1:4000 METRIC

SHIP STREET

SHIP STREET

SHIP STREET

LAND STREET

HILLYARD STREET

SHERMAN AVE. NORTH

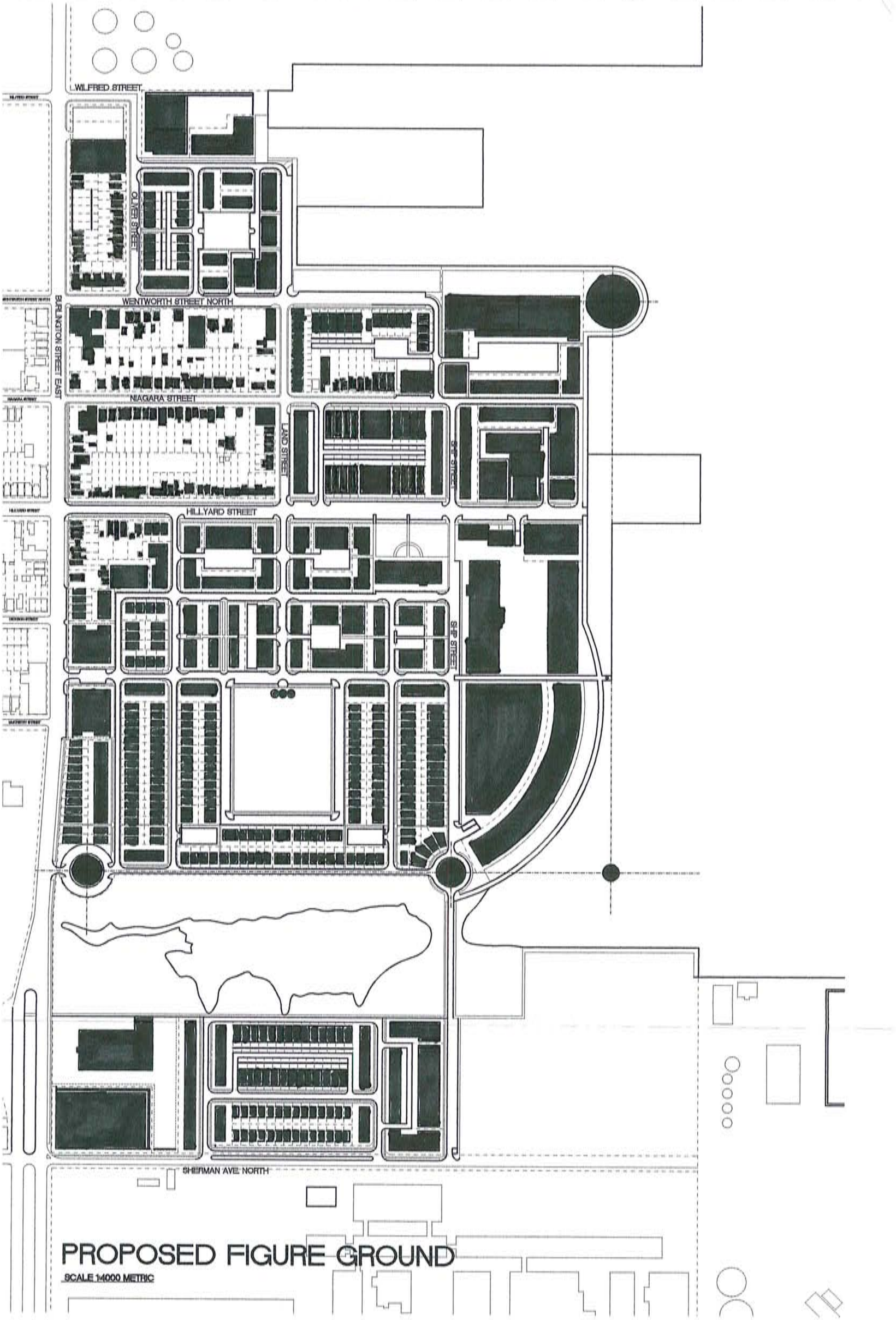
WILFRED STREET

OLIVER STREET

WENTWORTH STREET NORTH

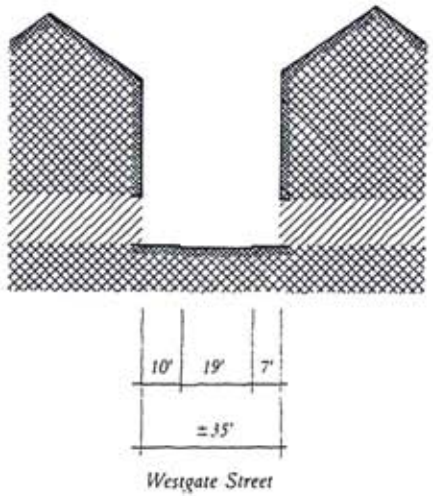
NIAGARA STREET

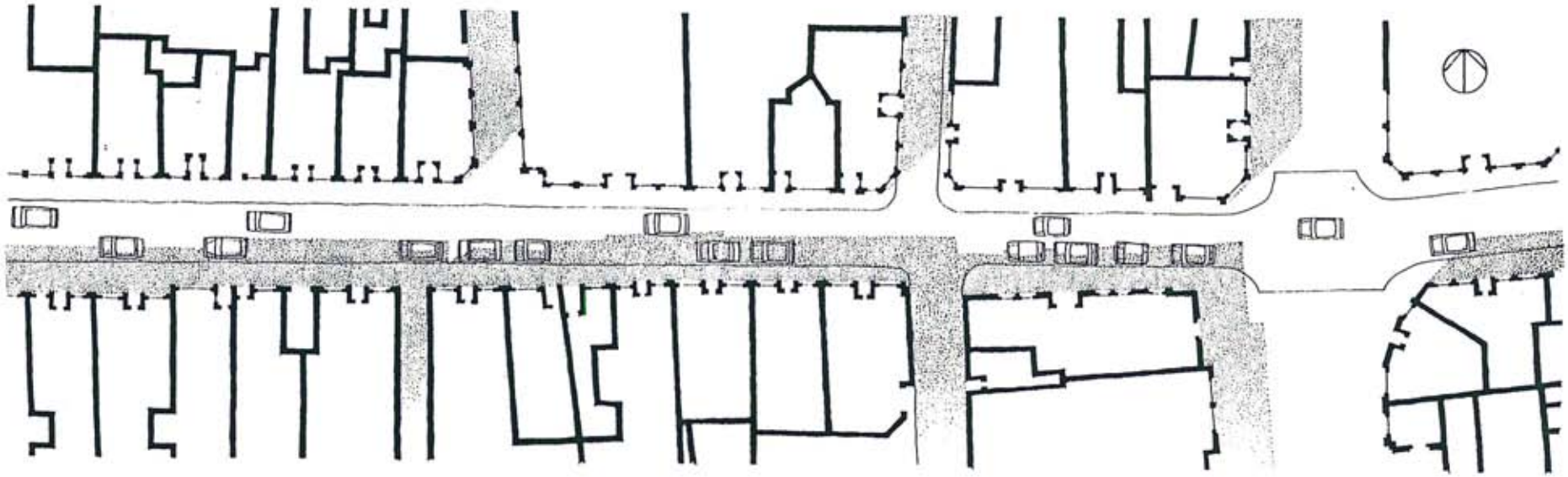
BURLINGTON STREET EAST



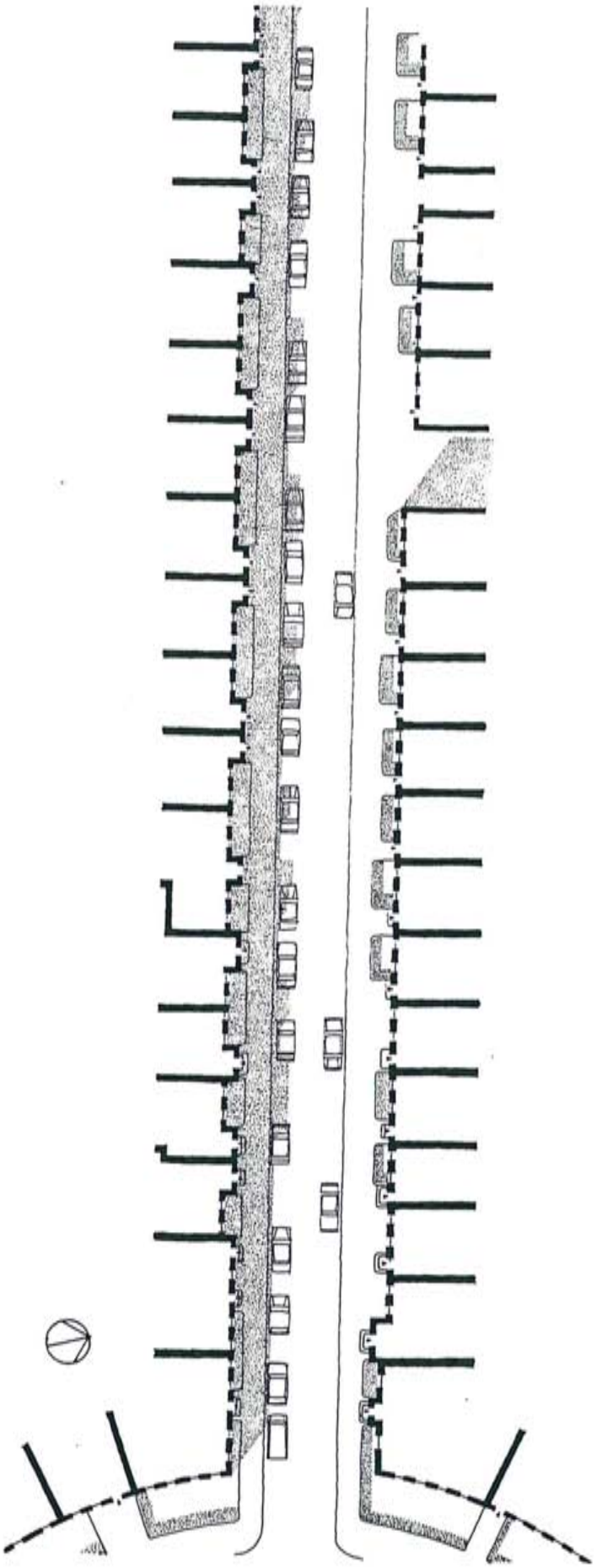
PROPOSED FIGURE GROUND

SCALE 1/4000 METRIC

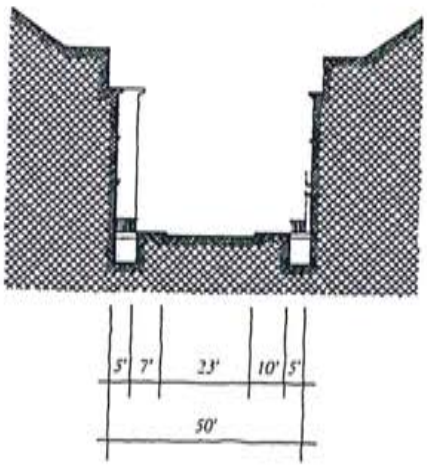




WESTGATE STREET. BATH



Brock Street, Bath: plan and section

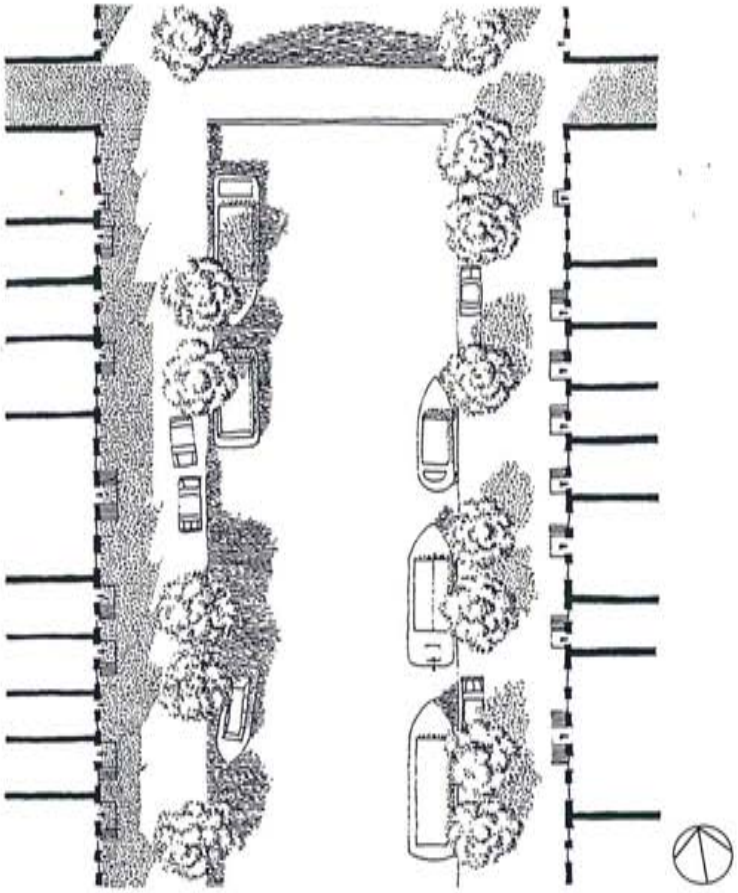


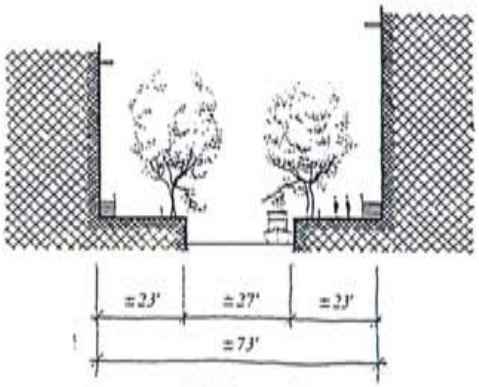
Approximate scale: 1" = 50' or 1:600

BROCK STREET, BATH

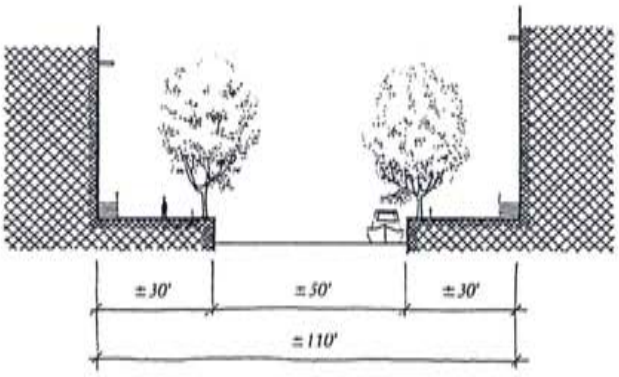
Beaufort Street, toward The Circus

AMSTERDAM STREETS

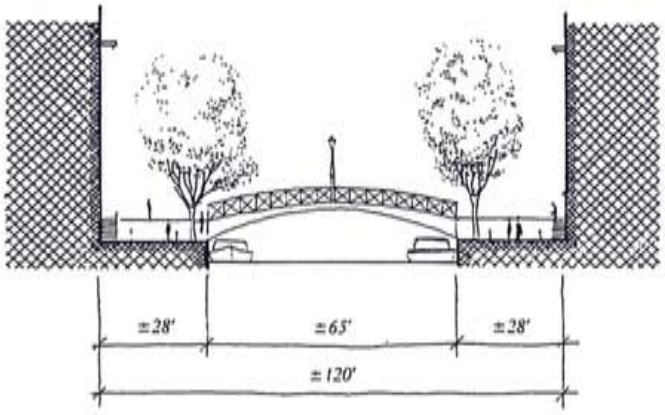




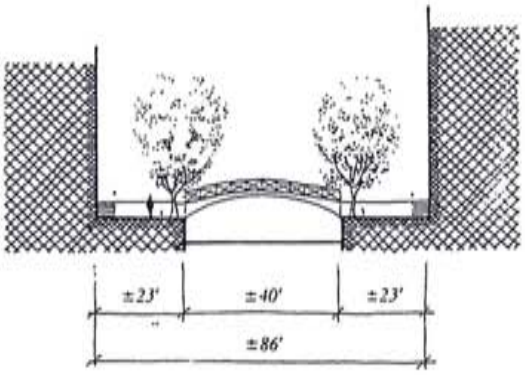
Achterburgwal



Reguliersgracht



Voorburgwal

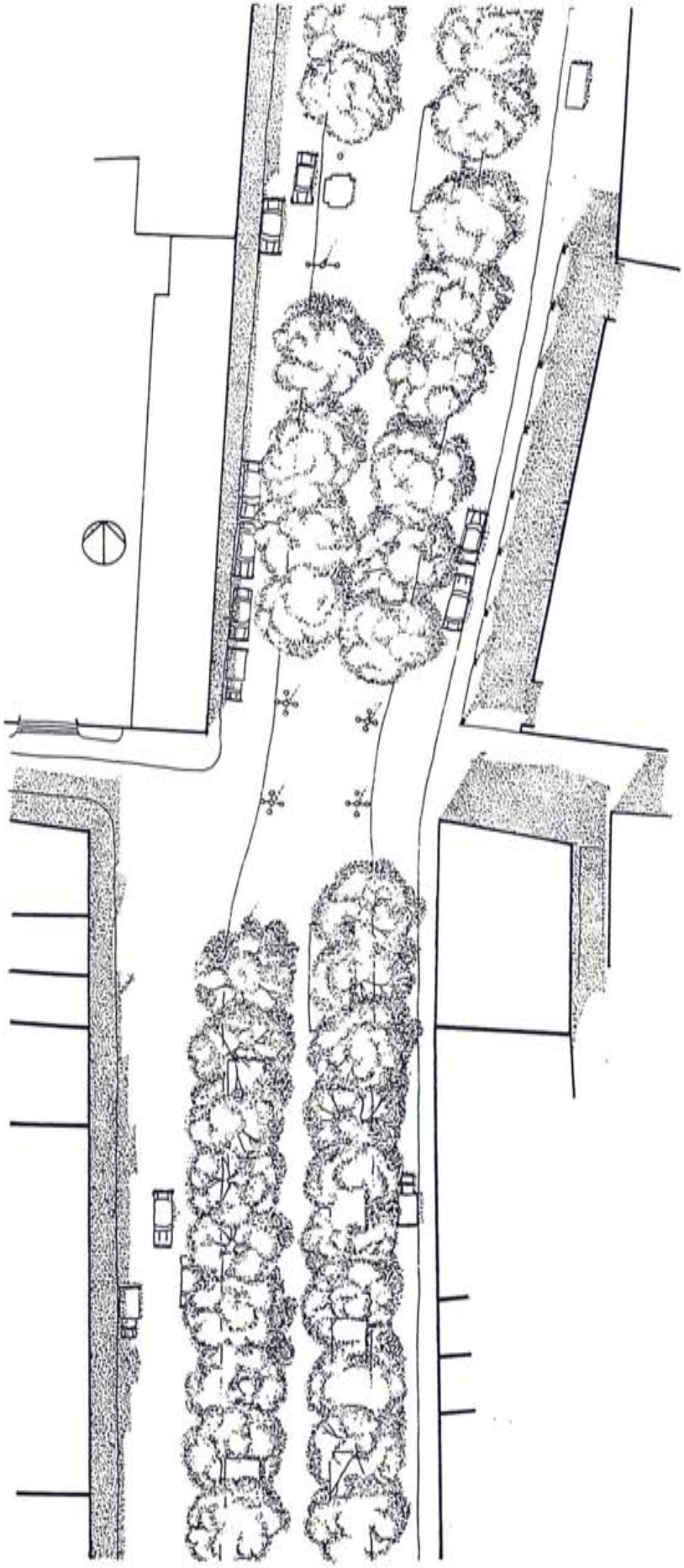


Looiersgracht

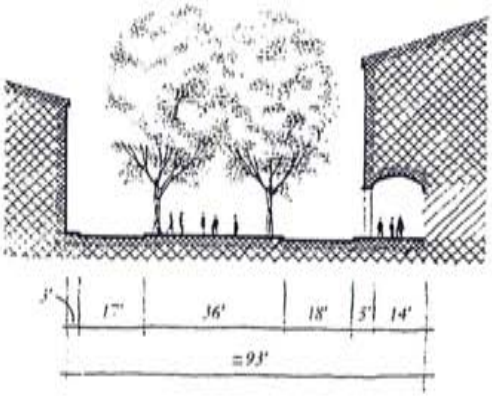
Approximate scale: 1" = 50' or 1:600

AMSTERDAM STREETS

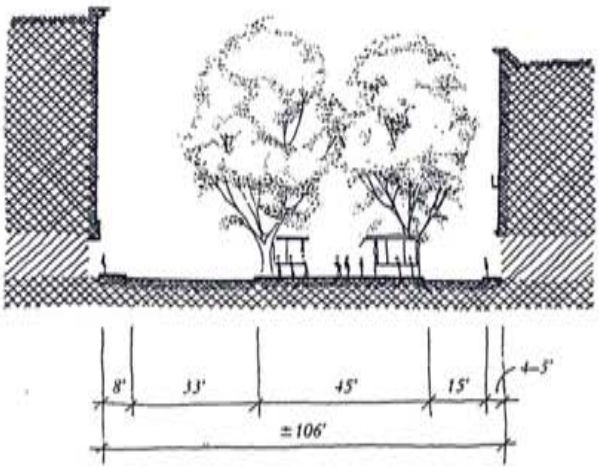
AMSTERDAM STREETS



Ramblas at Carrer dels Tallers: plan and sections



Approximate scale: 1" = 30' or 1:600

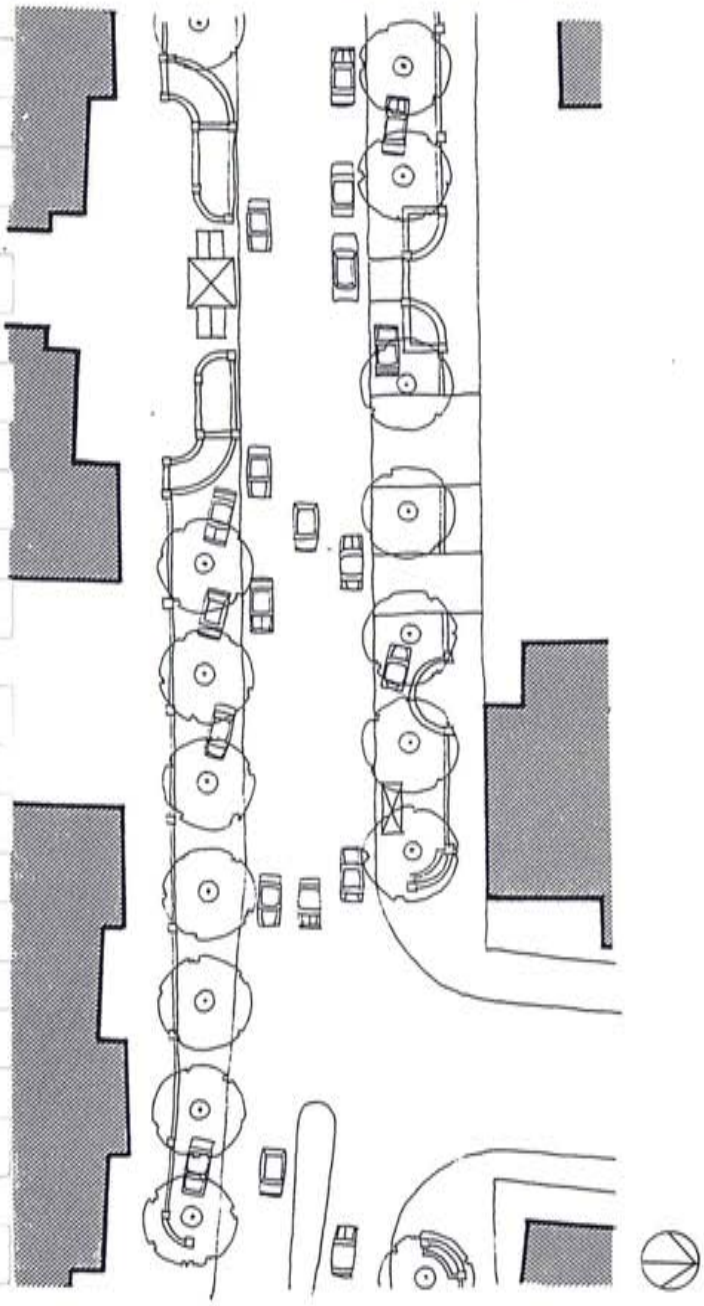


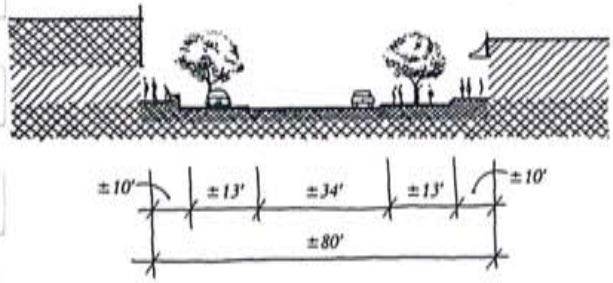
THE RAMBLAS, BARCELONA

Along the Ramblas

Venice Passageway

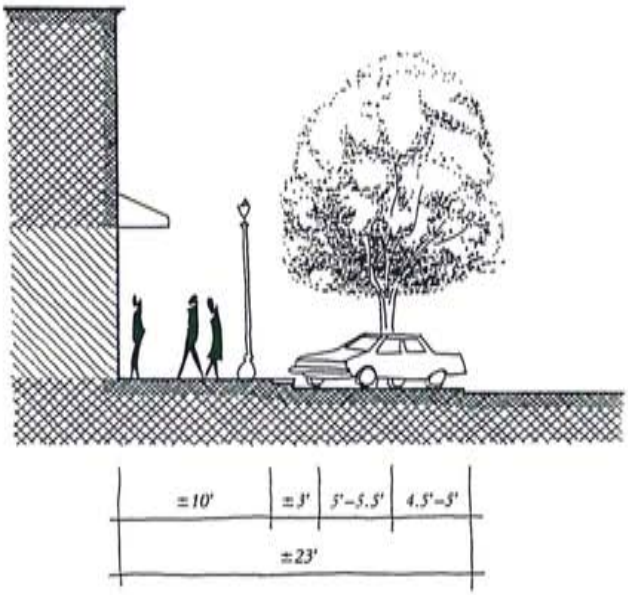
CASTRO STREET, MOUNTAIN VIEW, CALIFORNIA

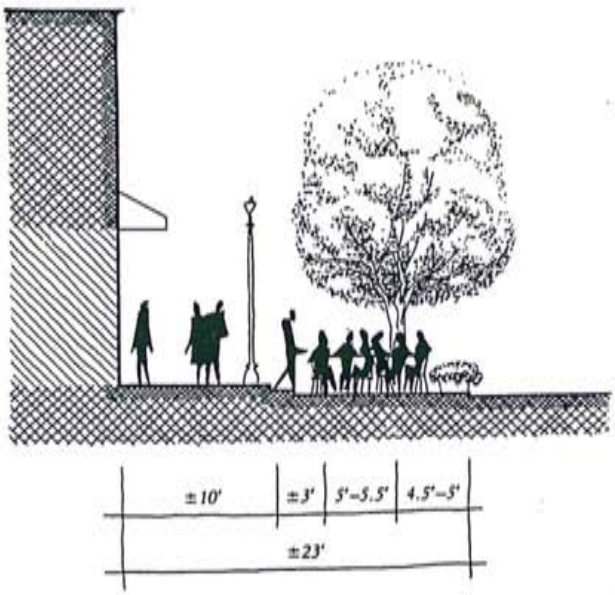




Approximate scale: 1" = 50' or 1:600

An adaptable section: for cars or for cafes or exhibits

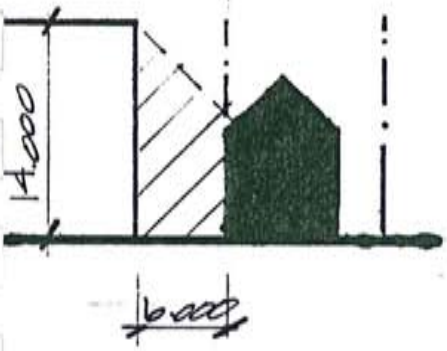


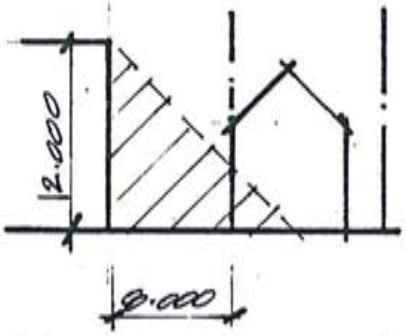


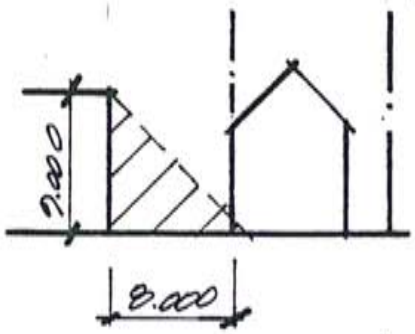
REAR YARD SETBACK

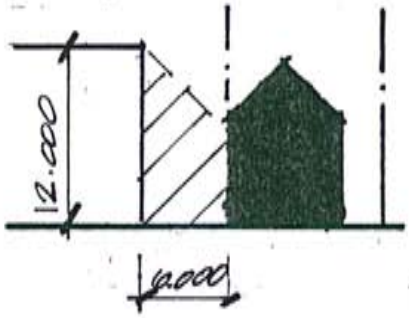
WORST CASE.
14m BUILDING ADJACENT SINGLE-FAMILY RESIDENTIAL @ ZERO SIDEYARD.

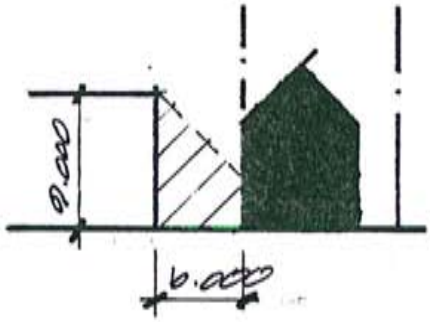
NOTE: ADJACENT BUILDING SHARING SAME FRONTAGE MAY REDUCE REAR YARD SETBACK TO SIDEYARD SETBACK TO THE EXTENT OF ADJACENT PROPERTY REAR YARD SETBACK, THEREFORE:



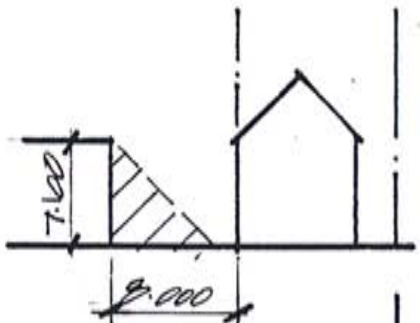


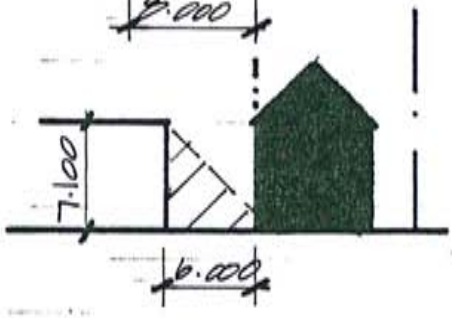




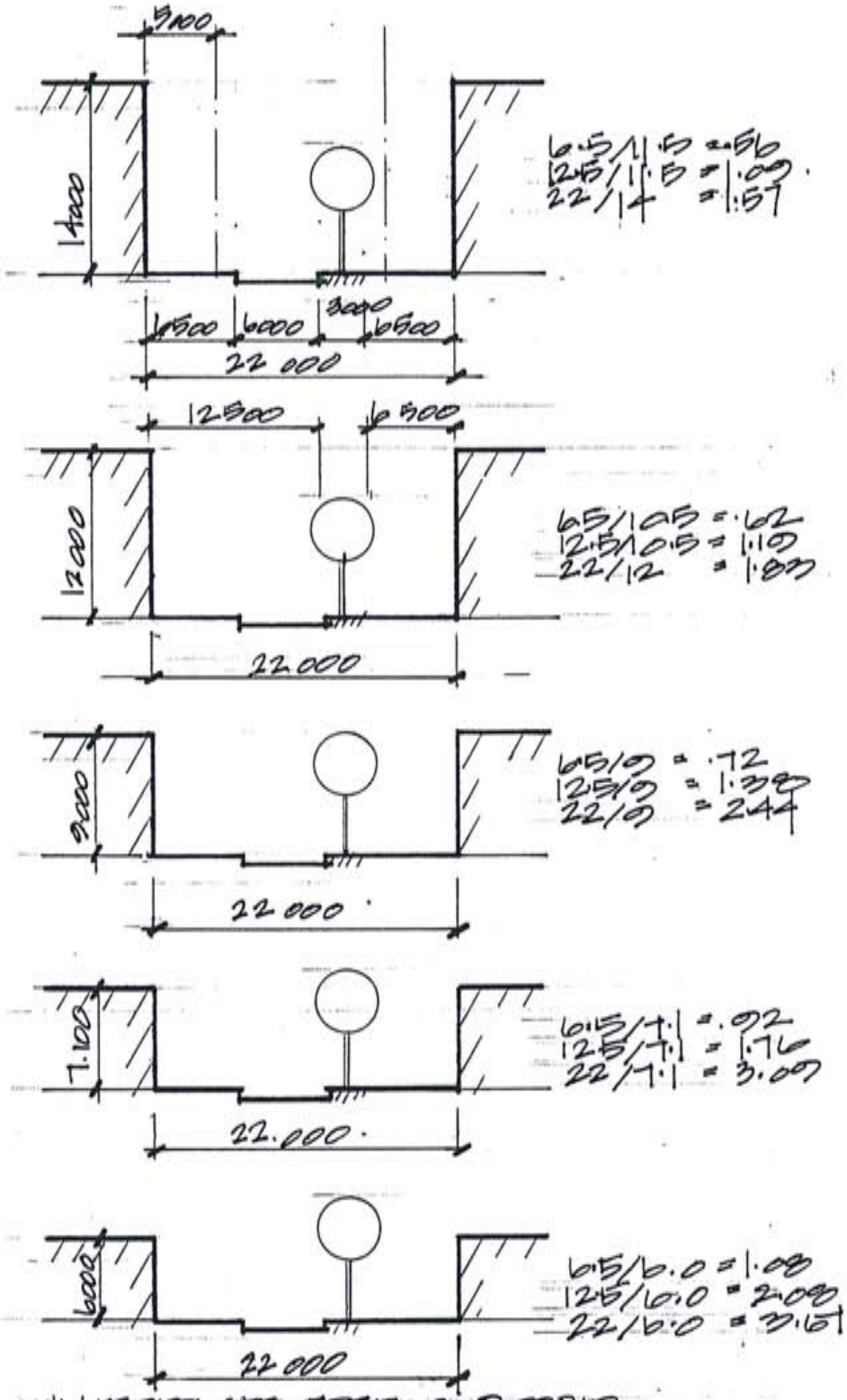


WORKING TO ACHIEVE BALANCE BETWEEN URBAN PEDESTRIAN SCALE - WITH HEIGHT EFFECTS ON ADJACENT PROPERTIES. 14m HIGH BLDG IS RESTRICTED TO 4 STORIES + HILL NORMALLY NOT EXCEED 12m. HT INCREASES. ALLOW FOR LOFT DEVELOPMENT OR 5th. STOREY ONLY WHEN ADJACENT PROPERTY NOT EFFECTED, ALLOWS MORE CREATIVE FREEDOM





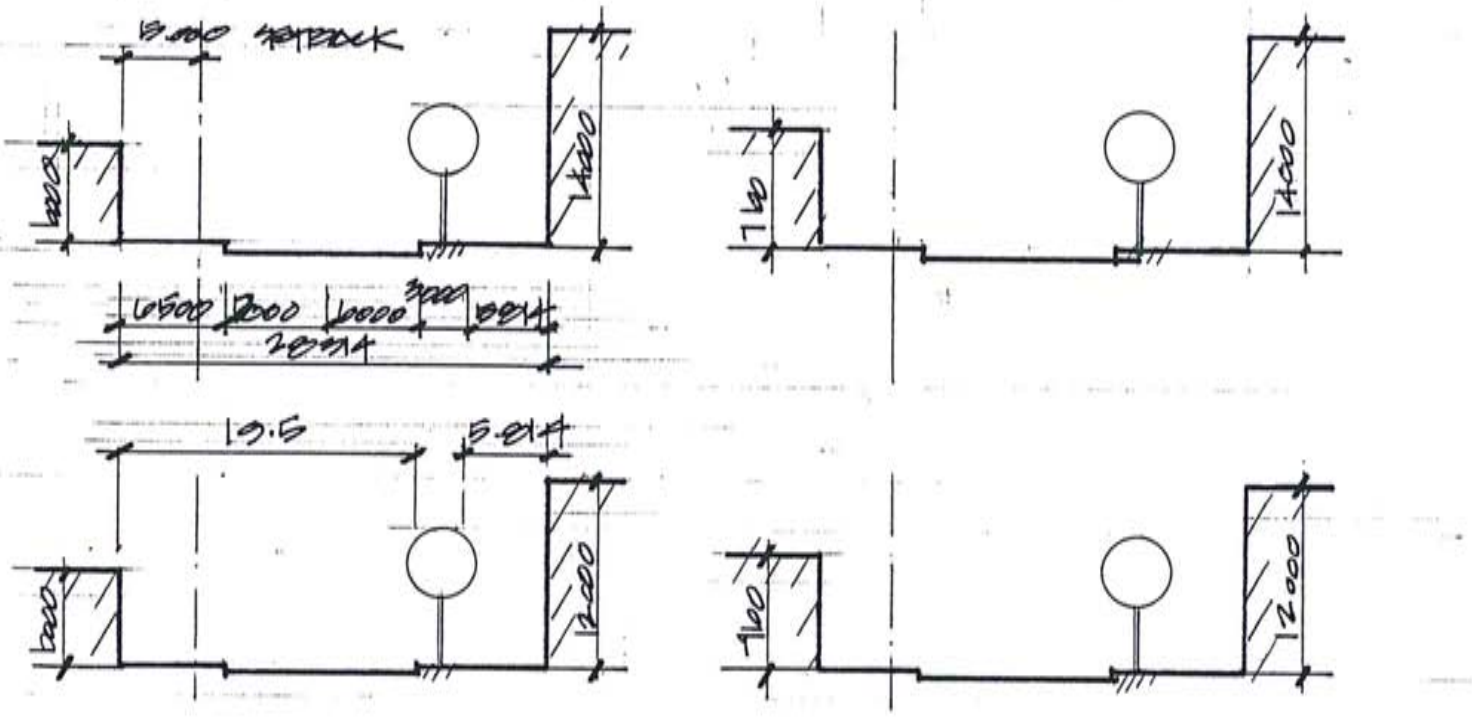
REAR YARD SETBACK DEVELOPMENT



INTERPOLATE TREE @ 9.000m.

2-1800m - SIDEWALK
3000m LANDSCAPE STRIP
6.000m ROADWAY.
5000m . SETBACK

TYPICAL STREET

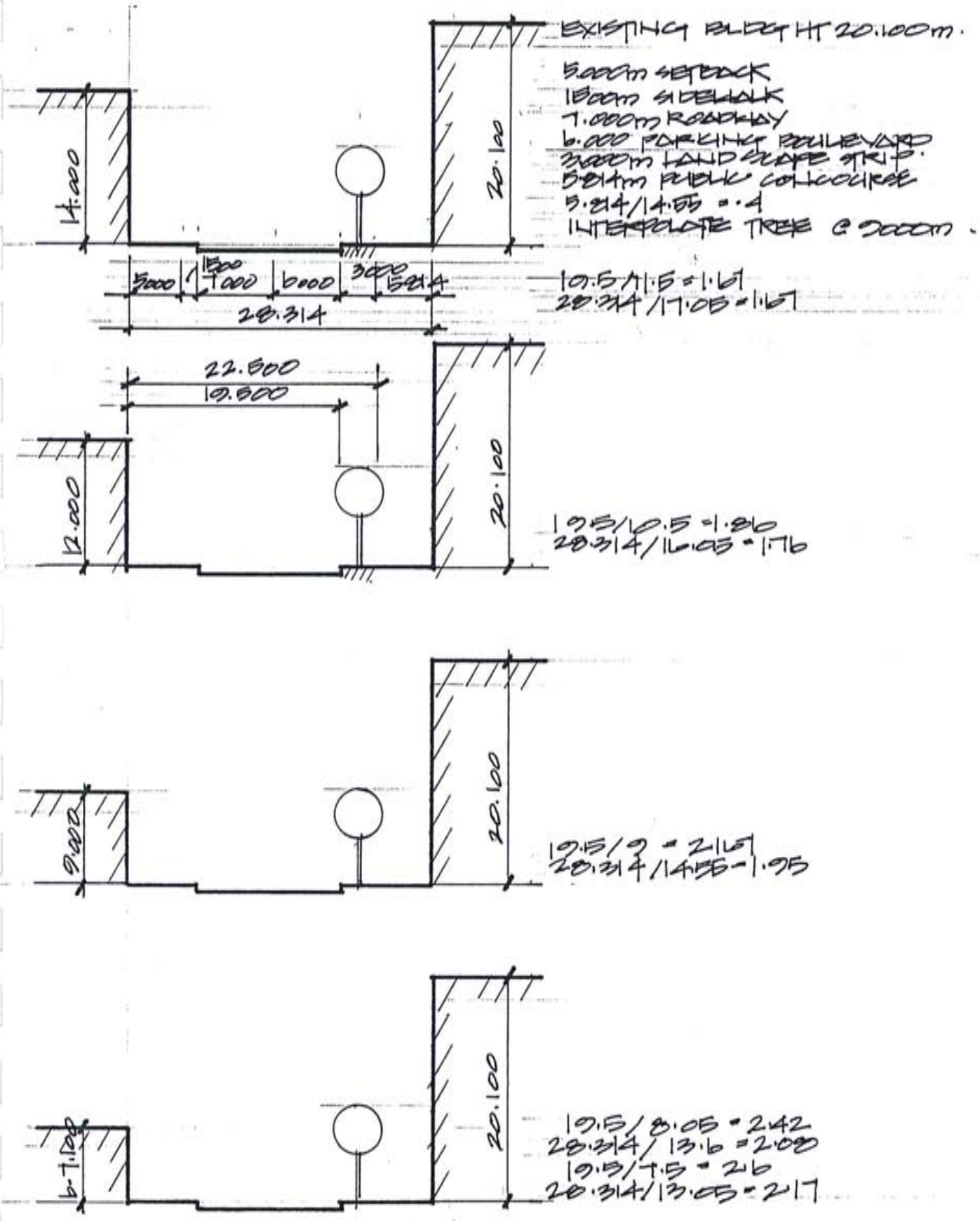


19.5/7.5 = 26
195/805 = 242

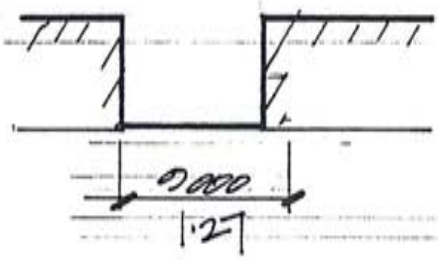
5.814/10.5 = .554
5.814/11.5 = .51
TREE INTERPOLATE @ 9.00m.

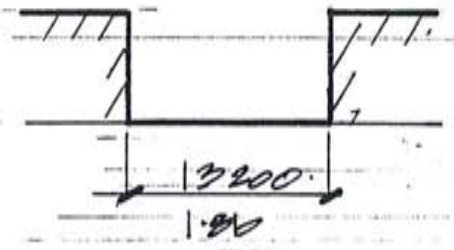
5.000m SETBACK
1.500m SIDEWALK
7.000m ROADWAY
6.000m BOULEVARD PARKING
3.000m LANDSCAPE STRIP
5.814m PUBLIC CONCOURSE

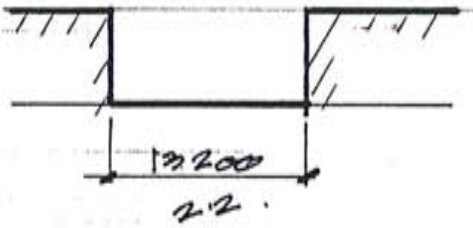
SHIP STREET AT ZONE 13

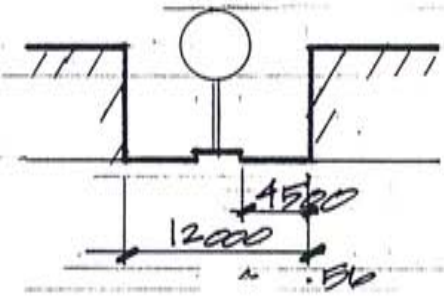


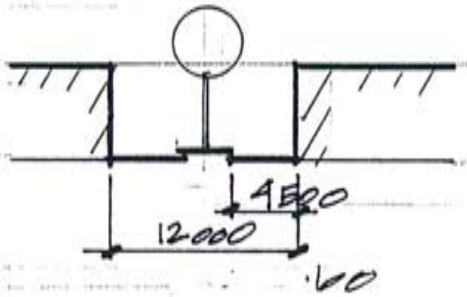
SHIP STREET AT EDUCATION BUILDING

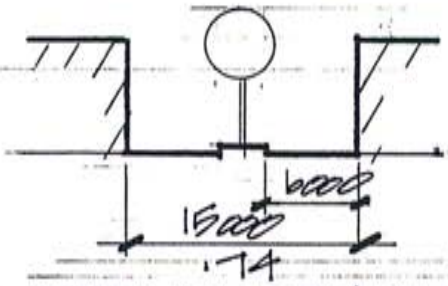




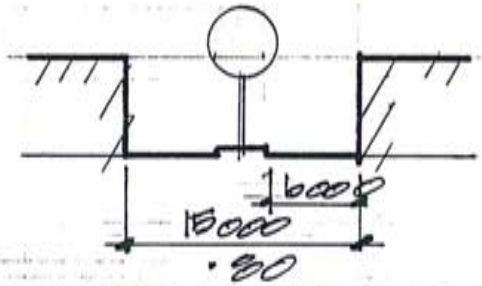








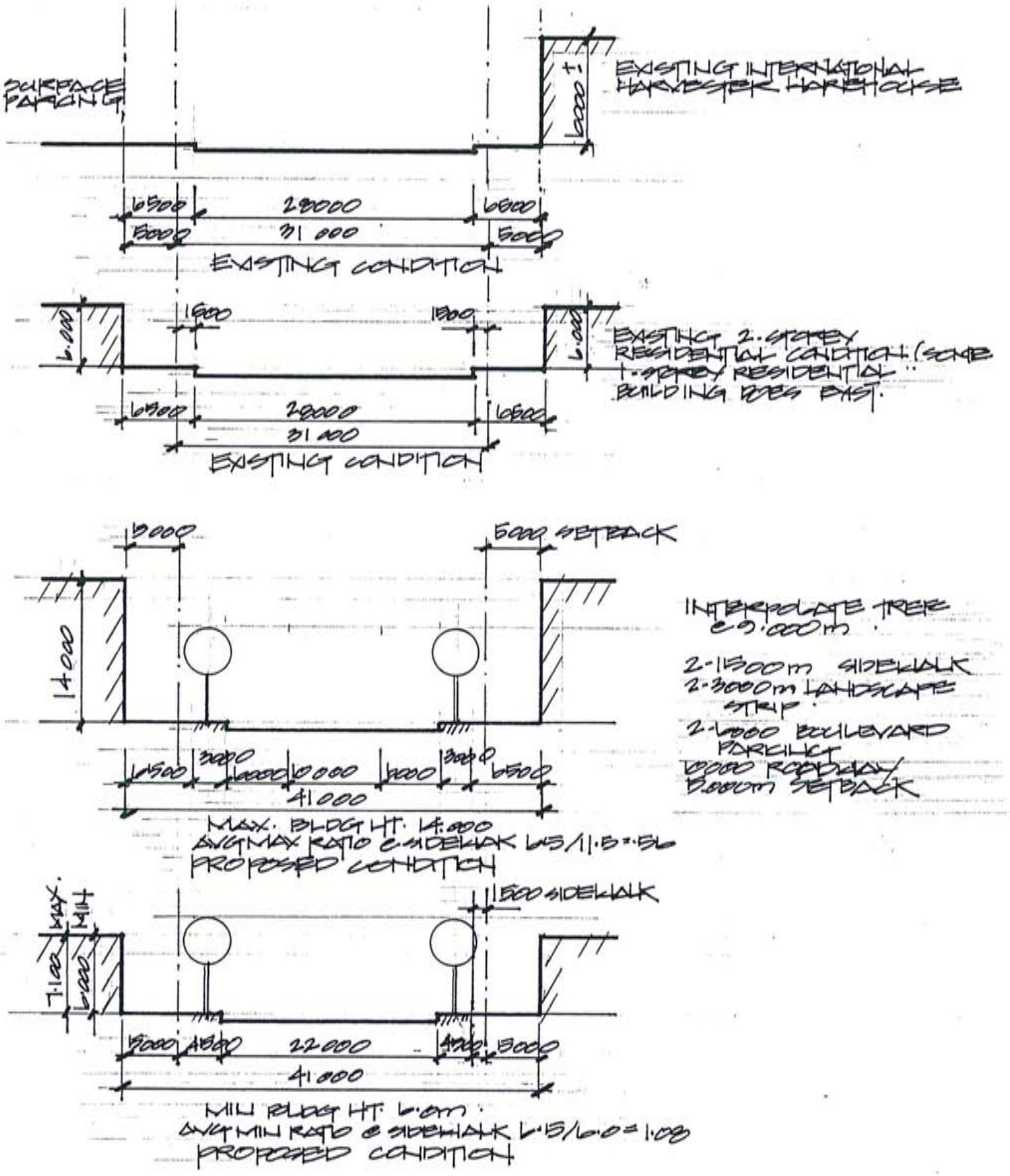
BUILDING HT @ 1.60m ·



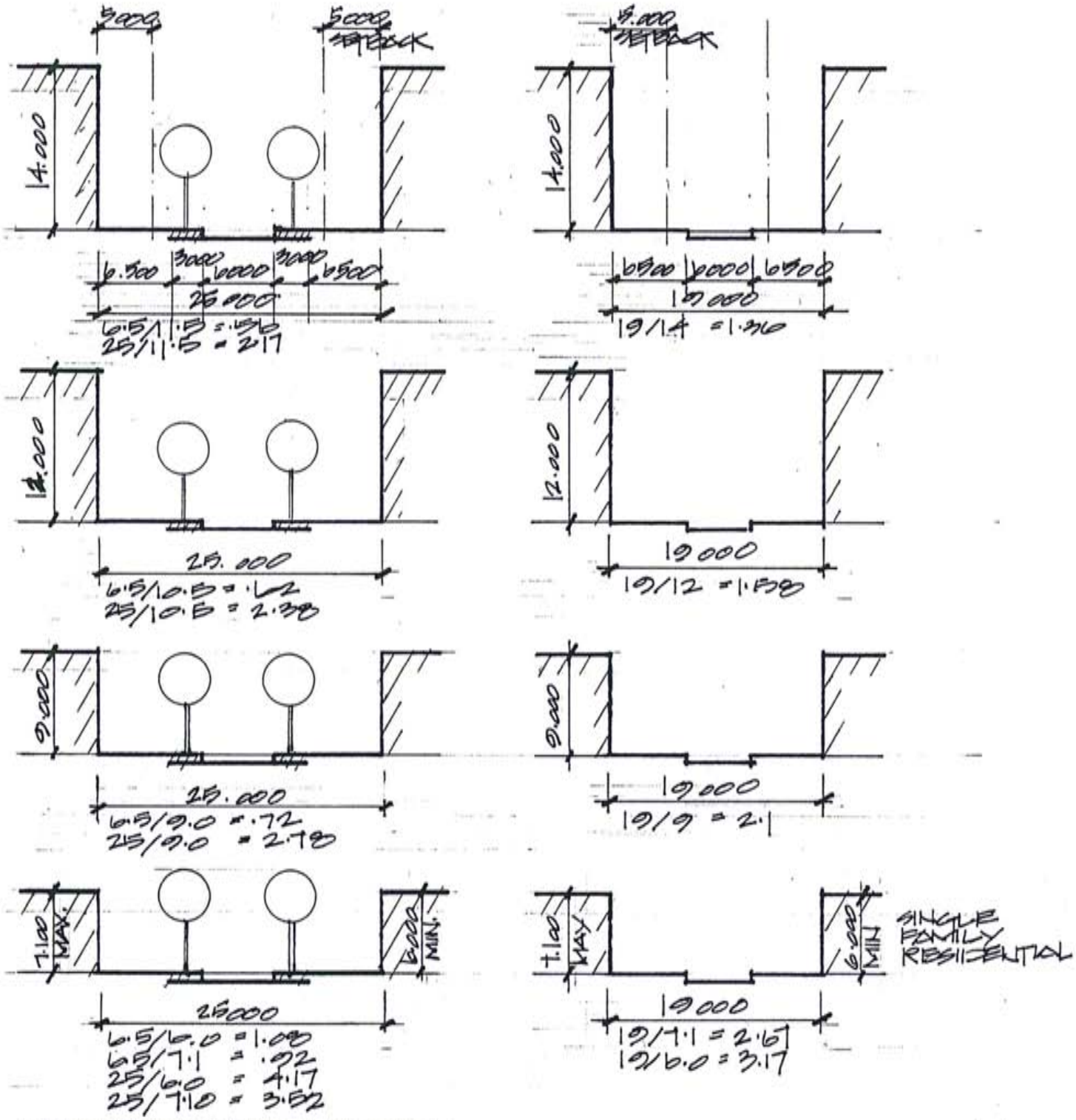
BUILDING HT @ 6.000 ·

15.000m WIDTH · 3m SETBACK
3m PEDESTRIAN PATH
3m LANDSCAPE STRIP ·
ALLOWS FILTERED LIGHT
ALLOWS PORCHES ETC IN FRONT YD.

PEDESTRIAN STREET AT BLOCK 12 STUDY



HILLYARD STREET STUDY

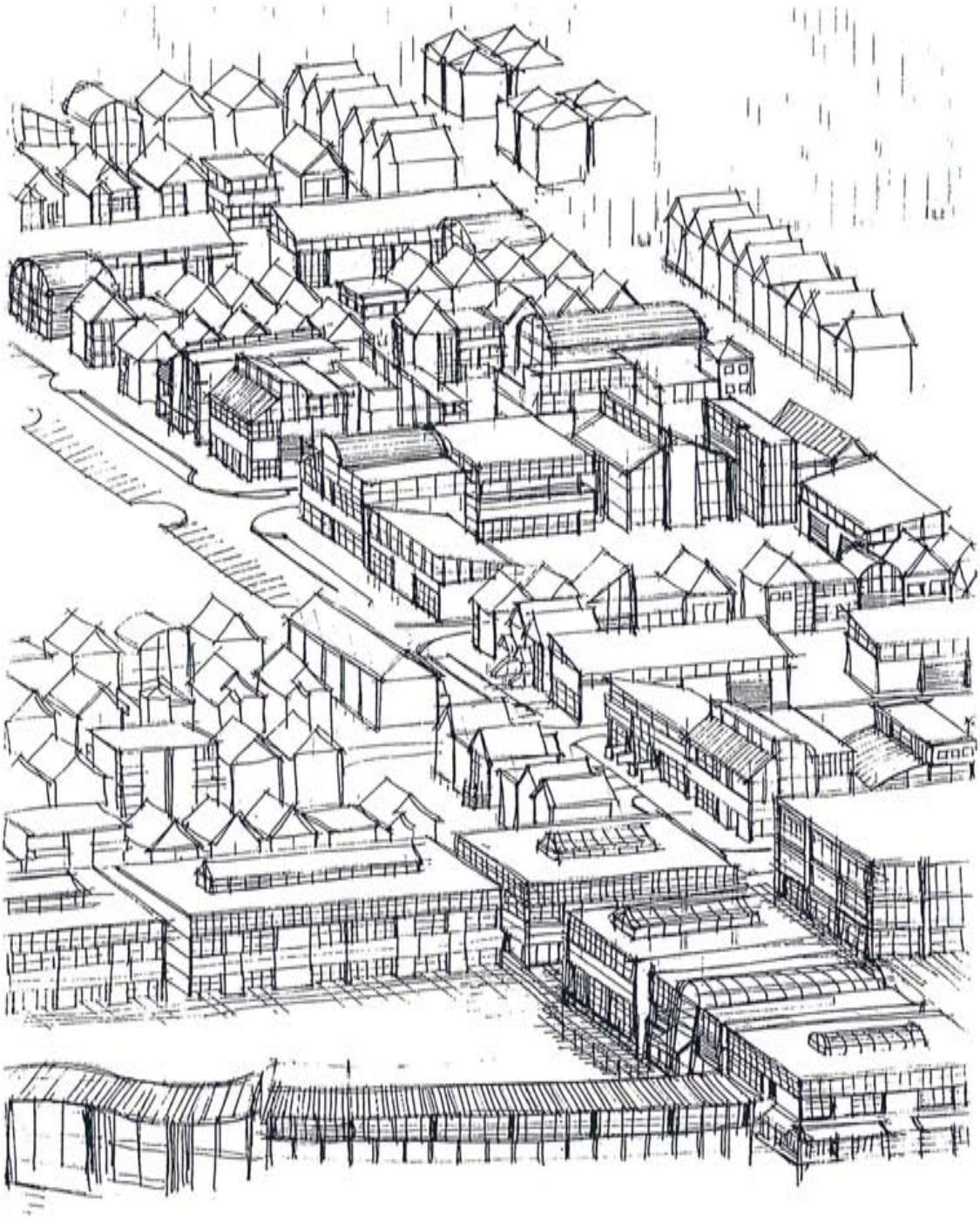


INTERPOLATE TREE @ 9000m.
2 - 3000 W LANDSCAPE STRIPS
2 - 1500 W SIDEWALK
6.000 W ROADWAY
5.000 SETBACK

NO LANDSCAPE STRIP
2 - 1.5m SIDEWALK
6.000 W ROADWAY.
5.000 SETBACK.

REDUCED AND INCREASED STREET WIDTH

MASSING STUDY
HILLYARD STREET LOOKING NORTH



MASSING STUDY
AMELIORATE ROAD LOOKING SOUTH

8.9 SEMIOTIC LANDSCAPE

As noted in the parti, it is proposed to frame the site with building nodes that are to be developed in conjunction or as an extension of the Education Centre programming.

A visual and physical connection is to be developed between node one and the inlet, programming of this node will strengthen this connection.

This site is completely made up of infil. The existing western pier will be partially removed, acknowledging the need to be accountable in the restoration of nature effected by human imposition. Node two is to programmatically and physically support this premise. The Education Centre and Experimental gardens will provide an academic and community resource to facilitate Node Two in stimulating positive human intervention.

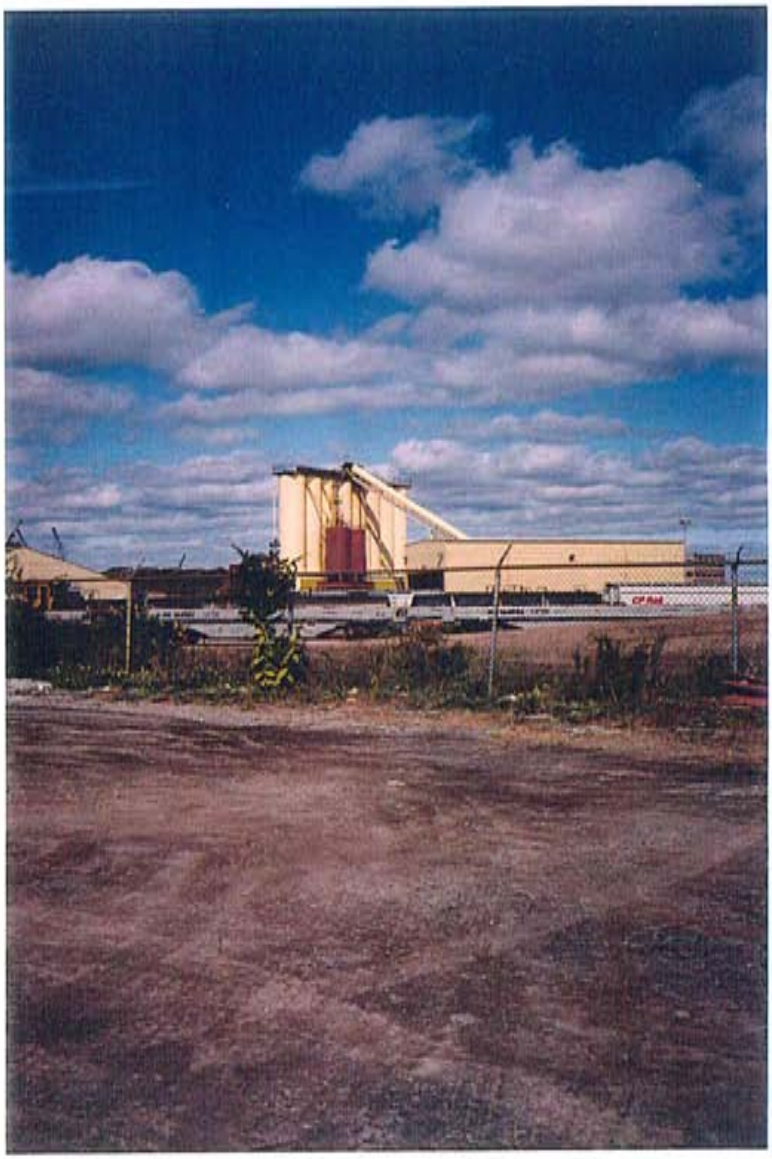
Node Three will be a man made nesting and refuge area for wild birds. Similar islands have been created along the eastern edge of the harbour.

Node Four will provide an area for drop off and commuter parking, developing in conjunction with the Education Centre programming that studies, tests and implements alternative means of transportation. A physical connection is to be made between Node Four and the inlet, utilizing ideas that strengthen compatible human mobility with nature.

The Ship Building operation at the base of Hillyard Street have not been particularly sensitive to the surrounding community. The pier is fenced off and their are guard dogs. Old scrap and derelict boats are scattered along the harbour. Although the lands have not been well maintained, sustaining the harbourfront industrial uses prevents the waterfront form becoming a sanitized or cosmetic approach to development. The recognition of the cultural history ensures a meaningful development that benefits from the excitement of a diverse and vital harbour. Although it may not be practical to walk on his pier, there is ample opportunity to view the activities form the new boardwalk.

As noted the original International Harvester Truck sales building (Industrial use Twelve, on Burlington Street) is to be reconfigured. This reconfiguration would reinforce street edges, create a gateway into the development and allow adjacent infil. The Central Street created runs along the west edge of the new Central Square and is extended by a pedestrian walkway to the harbourfront. This concludes with a focal point, which is to be created by the students of the Education Centre. This physical form of this focal point is intended to change with the rotation of student displays.

Land Street is extended, to the centre axis of the Central Square. Relocated industrial artifacts create a landmark that relates to the industrial history of the site.



Local Architects and Historians have recognized an original International Harvester Office Building on the adjacent J.I. Case Lands as a building of value. Unfortunately this building is threatened by continuing neglect, deterioration and inappropriate modifications. (Looking North on Sherman Avenue)

SEMIOTIC LANDSCAPE

SCALE 1:4000 METRIC

LANDMARK LEGEND

- FP — FOCAL POINT
- NODE
- BF — BUILDING FEATURE
- VISTA/VIEW
- EXISTING BUILDING OF VALUE

NODE TWO

NODE THREE

NODE ONE

NODE FOUR

EDUCATION CENTRE

EXPERIMENTAL GARDENS

INDUSTRIAL ARTIFACTS RELOCATED

SHIP STREET

LAND STREET

HILLYARD STREET

NIAGARA STREET

WENTWORTH STREET NORTH

OLIVER STREET

WILFRID STREET

BURLINGTON STREET EAST

GATEWAY

BRITANNIA AVE. NORTH

8.10 LAND USE PLAN

Although the objective of the code is to create an inclusive community, the impact of existing industrial uses have created inhuman land use patterns. Much of the existing waterfront is utilized by scrap yards, storage and disposal of waste materials. It is the intent to restrict these types of uses, and create guidelines within the neighbourhood code to alleviate the impact of dissimilar adjacent uses.

The most negative feature of the Hamilton waterfront is the restriction of public access. Currently their is no public access to the harbourfront, the neighbourhood code will eliminate any one exclusive use of the waterfront edge. As noted previously a large open public green space has been developed on the western edge of the Hamilton waterfront. Therefore this development has worked to create alternative public access to the waterfront, through programming of higher densities and mixed use.

The existing residential blocks are currently zoned industrial, many existing residences have been removed and replaced with industrial buildings that dis-regard adjacent uses, context or scale. Improvement within existing residential blocks is expected to be stimulated through perimeter development, infil and extension of the residential uses similar in scale and density.

I believe that meaningful improvement within existing blocks will only be successful where people are encouraged to improve their own space. Therefore intervention within the existing residential blocks will be limited to restricting further industrial use, lot amalgamation or expropriation of residential land. All existing vacant industrial lots and buildings will be re-zoned to single family residential in accordance with new proto-type lots standards. An addition, change of tenant, or new owner on an existing industrial property will require the compliance of new code. The user will have the an opportunity to submit compliance alternatives, for any restriction they fail to meet.

In time, a common rear access alley should be constructed within the existing blocks to accommodate on site residential parking.

Industrial uses seven and eight are two pre-engineered warehouses, operated under the Hamilton Harbour Commission. The buildings are under utilized, therefore diverse uses should be incorporated, however the primary ground floor use is to remain industrial. Eventual removal of these existing buildings is anticipated, however new buildings are to respect the existing waterfront setbacks, and no reduction in ground floor lot coverage will be permitted.

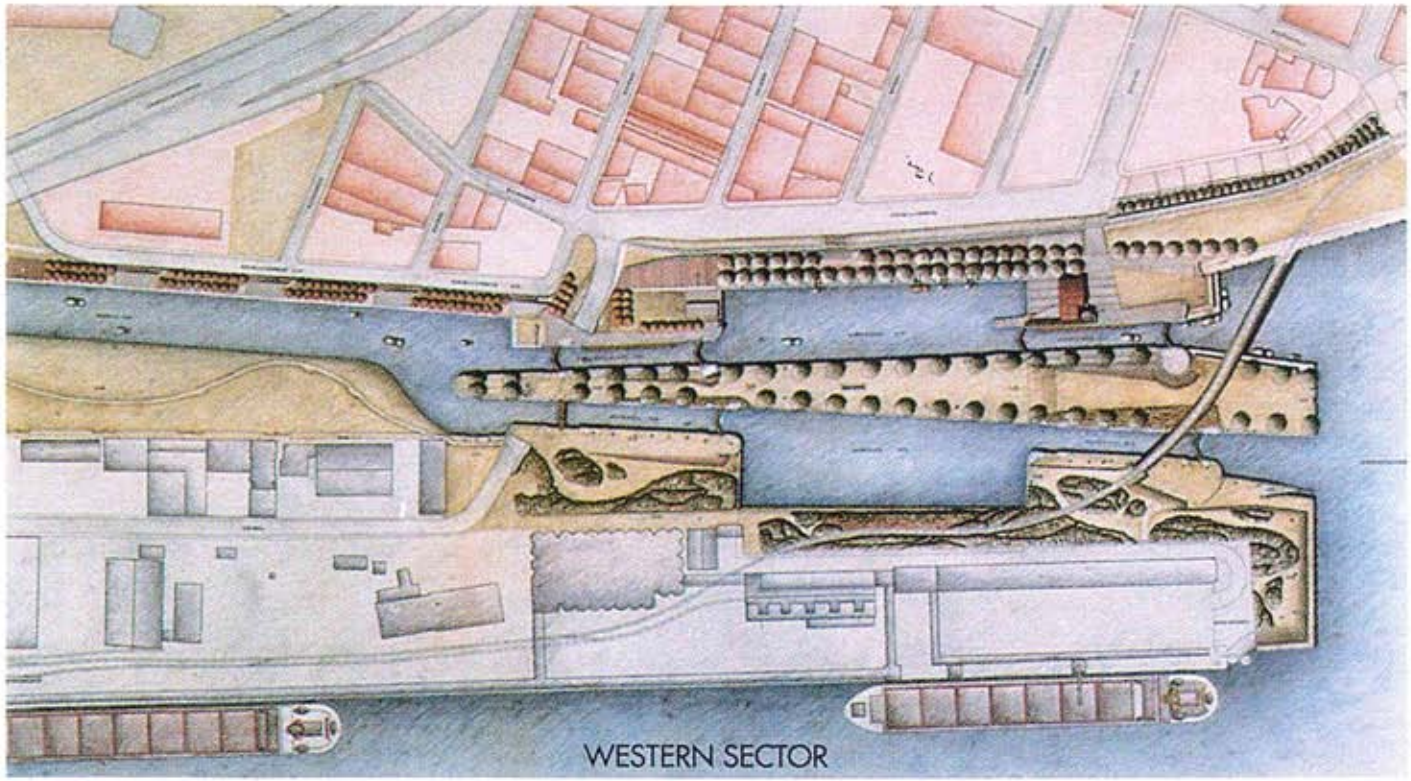
The east edge of the Education Centre is proposed to be developed as a regional destination. Retail uses are required on the north edge ground floor. Amenity retail, or live work retail spaces, would be limited to the South and eastern edges. Upper floors within this area could be either residential office or live work.

Adjacent the Central Square on the west edge higher density mixed land use is programmed. The premise being that this association to the Central Square will strengthen the working communities connections to this neighbourhood, while additionally supporting the facilities that are developed within this square.

Residential uses are proposed for the remaining perimeter. This intensification is intended to reinforce the sense of neighbourhood ownership, stabilizing the citizenry to ensure the integration of mixed use does not fragment or sever the community fabric.

The eastern edge of the site is developed to stimulate the continuing integration of alternative use along the waterfront, confronting the need to pursue change.

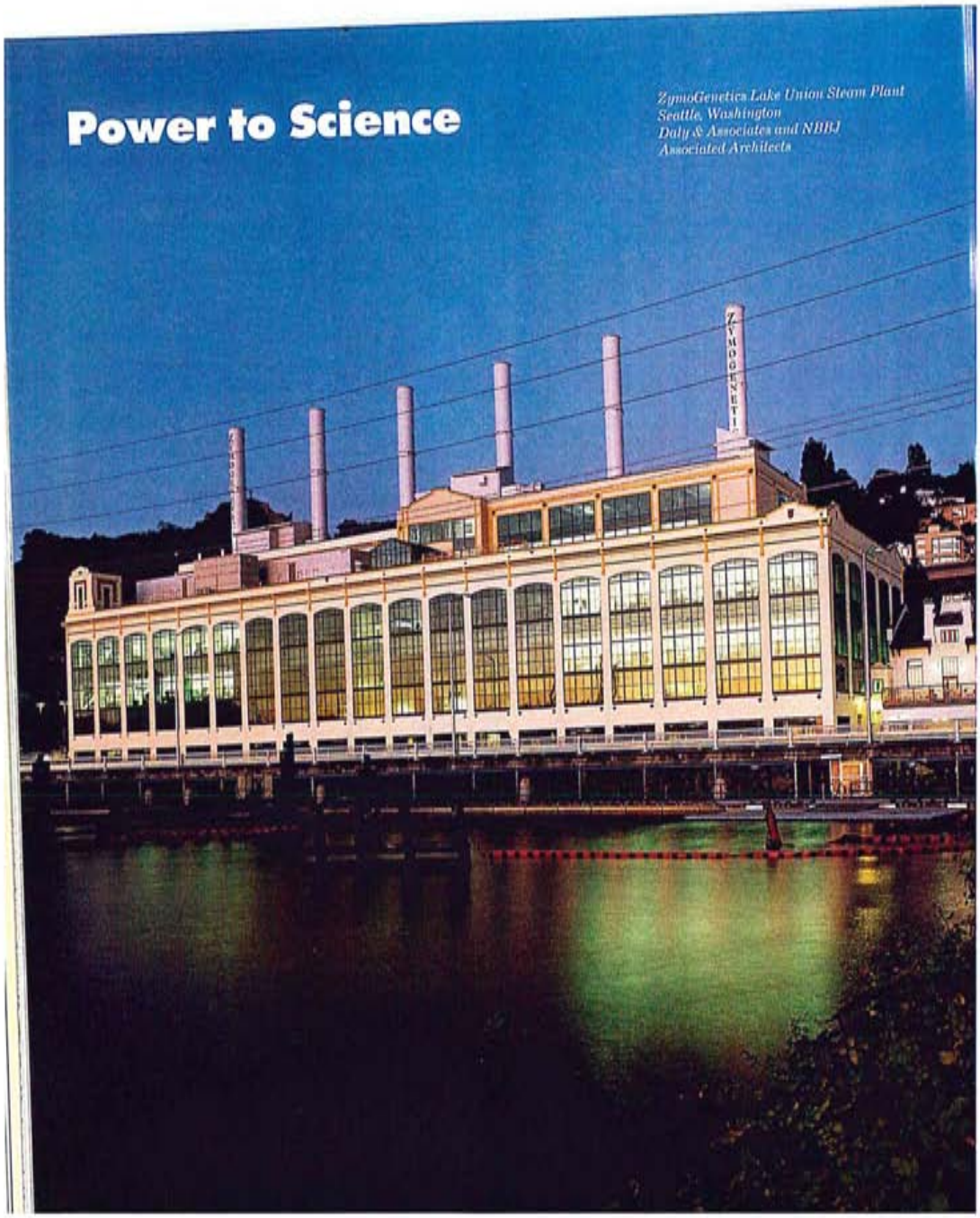
MASTER PLAN



WESTERN SECTOR

LE VIEUX-PORT DE MONTREAL

LE VIEUX-PORT DE MONTREAL



ZYMOGENETICS LAKE UNION STEAM PLANT
SEATTLE, WASHINGTON

LE VIEUX-PORT DE MONTRÉAL
MONTRÉAL QUÉBEC

PETER ROSE ARCHITECT
CARDINAL HARDY ET ASSOCIÉS, ARCHITECTES

THE PROGRAM WAS TO DESIGN A MASTER PLAN FOR THE FUTURE GRADUAL DEVELOPMENT OF THE WATERFRONT FOR USE BY THE GENERAL PUBLIC, WHILE INCORPORATING SOME REMAINING INDUSTRIAL USES. THE NEW RECREATIONAL SPACE HAS BEEN CREATED RETAINING THE HISTORY OF THE COMMERCIAL PORT. THE FORM OF THE ORIGINAL PIERS HAS BEEN RESTORED, WHILE NEW BUILDINGS AND LANDSCAPE ARE GENERALLY UNMISTAKABLY CONTEMPORARY. THE HISTORY OF THE INDUSTRIAL PORT IS CELEBRATED, LIGHTING EMPHASIZES THE MAJESTIC GRAIN ELEVATORS THAT ONCE SERVED THE PORT. THE EXISTING CANAL WAS RE-EXCAVATED AND RESTORED TO ITS WORKING STATE AS A WATERWAY.

(CANADIAN ARCHITECT AUGUST 1994)

THE VIEUX-PORT DE MONTREAL HAS SUCCESSFULLY CRATED RECREATIONAL SPACE FOR THE GENERAL PUBLIC WHILE INCORPORATING SOME REMAINING INDUSTRIAL USE. PETER ROSE ARCHITECT HAS MAINTAINED A RICHNESS OF THE EXISTING THAT IS DIFFICULT TO IN MOST WATERFRONT DEVELOPMENTS. THE CELEBRATION OF INDUSTRIAL USE IS STRENGTHENED AS TI ALLOWED TO BE PORTRAYED IN IT TRUE FORM. IN MY OPINION ROS HAS SUCCESSFULLY CREATED A WATERFRONT THAT IS INHERENT TO THE CANADIAN INDUSTRIAL LANDSCAPE

missing words

ZWMOGENETICS LAKE UNION STEAM PLANT
SEATTLE, WASHINGTON

D.R. HUNTINGTON WAS THE ORIGINAL ARCHITECT OF THIS 100,000 SF HYDROELECTRIC STATION, CONSTRUCTED IN FOUR PHASES BEGINNING IN 1911 AS A TINY MISSION STYLE HOUSE WERE TURBINES GENERATED ELECTRICITY FROM AN UPLAND RESERVOIR. IT SITS ON THE SHORELINE OF SEATTLE'S LAKE UNION, COMPLETE WITH ITS SEVEN SMOKE STAKES. IN 1985 THE PLANT WAS SHUT DOWN, IN 1989 IT WAS DESIGNATED AN HISTORIC LANDMARK. IN 1984 THE BUILDING WAS CONVERTED BY A BIOTECHNOLOGY FIRM "ZYMOGENETICS, FOR THEIR HEADQUARTERS AND RESEARCH LABORATORIES.

AS THE BUILDING HAD BEEN PUBLIC THE CITY REQUIRED SOME FORM OF PUBLIC ACCESS BE MAINTAINED. A NEW PUBLIC DOCK WAS BUILT ON THE WATER, AND THE PUBLIC ALSO HAS ACCESS TO THE ORIGINAL HYDRO PLANT. THERE IS AN ESPRESSO BAR ON THE STREET SIDE AND A DINING COMMUNITY ROOM ON THE WATER SIDE.

(ARCHITECTURAL RECORD FEBRUARY 1995)

DIVERSE LAND USE PATTERNS OFTEN CREATE A MORE ENGAGING LANDSCAPE

ZONING LEGEND

ZONE 1	SF L.W. R	6.0-14m BLDG. HT.	ZONE 8	WC WI M.R. O.	12.5-21.6m BLDG. HT.
ZONE 2	O. L.W. M.R. IND	7.5-14m BLDG. HT.	ZONE 9	SN	6.0-14m BLDG. HT.
ZONE 3	SF L.W. M.R.	6.0-14m BLDG. HT.	ZONE 10	A CS INC	12.5-21.6m BLDG. HT.
ZONE 4	SFR	6.0-7.1m BLDG. HT.	ZONE 11	MR	6.0-11m BLDG. HT.
ZONE 5	R	6.0-14m BLDG. HT.	ZONE 12	WC MR LW O.	12.5-21.6m BLDG. HT.
ZONE 6	SFR RH	6.0-7.1m BLDG. HT.	ZONE 13	SF C MR. L.W. O	12.0-14m BLDG. HT.
ZONE 7	SF C M.R. L.W. O	7.5-14m BLDG. HT.	ZONE 14	WC WI	7.1-14m BLDG. HT.

BUILD-OUT LINE

R.Y. BLDG. SETBACK

F.Y./SY/R.Y. SETBACK

NEIGHBOURHOOD FRAMEWORK DEVELOPMENT GUIDELINE STUDY

		SETBACK IN METRES					BUILDING HT.	
USE	ZONE	HT.	FY.	R.Y.	S.Y.	PARKING	HT. (m)	ZONE
LIVE WORK	1,2,3,7,12,13	7.1-14	5.000	8.000	NOTE 1.	1/UNIT	6-14	1,3,5,9
SHOP FRONT	2,3,7,13	7.1-14	5.000	8.000	NOTE 1.	1/UNIT	6-7.1	4,6
MULTI RESIDENTIAL	1,2,3,4,7,11,12,13	7.1-14	5.000	8.000	NOTE 1.	1/UNIT	7.5-14	2,7,14
S.F. RESIDENTIAL	1,4,5,6,	6.0-7.1	5.000	8.000	NOTE 2	1/UNIT	12.5-21.6	8,10,12
RESIDENTIAL ROW HOUSING	1,2,5,6,	6.0-7.1	5.000	8.000	NOTE 1.	1/UNIT	6-11m	11
INDUSTRIAL	2,8,14,	7.5-14	5.000	8.000	NOTE 1.	1/40 sm	12-14m	13
COMMERCIAL	7,13,	7.5-14	5.000	8.000	NOTE 1.	1/30 sm.		
OFFICE	2,7,8,12,13	7.1-14	5.000	8.000	NOTE 1.	1/30 sm.		
SPECIAL NEEDS	9	6-14	5.000	8.000	NOTE 1.	.3/UNIT		
WATERFRONT INDUSTRIAL	8,14,	7.5-21.6	5.000	8.000	NOTE 1.	1/30 sm.		
WATERFRONT COMMERCIAL	8,12,14	7.5-21.6	5.000	8.000	NOTE 1.	1/30 sm.		
INCUBATOR	10	7.5-21.6	NONE	NONE	NOTE 1.	1/100 sm.		
ACADEMIC	10	7.5-21.6	NONE	NONE	NOTE 1.	1/100 sm.		
COMMUNITY SERVICE	10	7.5-21.6	NONE	NONE	NOTE 1.	1/30 sm.		

NOTE 1- 1.500m/STOREY-MAX. 6.000m OR 25% OF LOT WIDTH WHICH EVER IS LESS.

NOTE 2.-1.500m/STOREY ON ONE SIDE, 0 REQUIREMENT ON OTHER SIDE. THE STREET MUST MAINTAIN THE 0 YARD SETBACK.

M.U.	MIXED USE	O	OFFICE
L.W.	LIVE WORK	WC	WATERFRONT COMMERCIAL
R	RESIDENTIAL	SN	SPECIAL NEEDS
IND.	INDUSTRIAL	A	ACADEMIC
SFR	SINGLE FAMILY RESIDENTIAL	INC.	INCUBATOR
MR	MULTI-RESIDENTIAL	CS	COMMUNITY SERVICE
RRH	RESIDENTIAL ROW HOUSING	C	COMMERCIAL
		WI	WATERFRONT INDUSTRIAL

LAND USE PLAN

SCALE 1:4000 METRIC

NODE TWO

NODE THREE

NODE FOUR

BLOCK ONE

BLOCK TWO

BLOCK THREE

BLOCK FOUR

BLOCK FIVE

BLOCK SIX

BLOCK SEVEN

BLOCK EIGHT

BLOCK NINE

BLOCK TEN

BLOCK ELEVEN

BLOCK TWELVE

BLOCK THIRTEEN

BLOCK FOURTEEN

BLOCK FIFTEEN

BLOCK SIXTEEN

BLOCK SEVENTEEN

BLOCK EIGHTEEN

BLOCK TWENTY

BLOCK TWENTY-ONE

BLOCK TWENTY-TWO

EDUCATION CENTRE
BLOCK NINETEEN

WATERFRONT EDGE

OLIVER STREET

SHIP STREET

LAND STREET

HILLYARD STREET

NIAGARA STREET

WENTWORTH STREET NORTH

WILFRED STREET

BURLINGTON STREET EAST

SHERMAN AVE. NORTH

8.11 LANDSCAPE PLAN

The intent of the overall landscape development plan is to provide a continuous landscaped boulevard along city streets. As part of the code alternative ideas such as landscape sculpture, public art or landscape design are encouraged to create diverse pockets of interest along the street edge. A maximum of 20% of the street edge will be available to alternative proposals.

A green space with an urban scale, for casual use, is proposed along the waterfront edge between the Education Centre and Inlet, adjacent the proposed retail area. The intent of this green space is to provide a landscaped boulevard along the waterfront, that has regional appeal. This space would introduce the area to visitors and reconnect the surrounding community to the Hamilton waterfront. Additionally a harbourfront boardwalk extends along the northern and western edges of the proposed development.

A small scale courtyard will be included in the westerly edge of the development, providing open space to nearby residents.

An urban park is to be developed through a design competition along the western harbour edge. The intent of the park is to celebrate the forms and/or functions of industry. This would be accessible to the public, encouraging the public to participate and learn about the industrial history of this waterfront.

The Central Square functions as a neighbourhood gathering place. Community programming of the space would be developed over time, with the objective of sustaining a multiplicity of uses that respond to diverse group. A percentage of the Square is to remain as open space, ensuring flexible programs and casual socializing.The square will sit on a holding tank that will control all the storm water generated by the proposed development.

This site incorporates the last natural inlet along the entire waterfront. The inlet is currently used for landfill. It is proposed to designate the inlet as protected open space. The programming of the Education Centre and Node One will work to involve the community in the restoration of this space. This space will also work to restore the natural habitat and landscape indigenous to the Hamilton waterfront.

The pier at the North East corner of this development was utilized by J.I. Case. No existing industrial use can be permitted access to this pier. It is proposed to temporarily create an open green space for the regional community, to ensure this parcel is planned in conjunction with the redevelopment of Phase Two.

8.12 TRANSPORTATION INFRASTRUCTURE PLAN

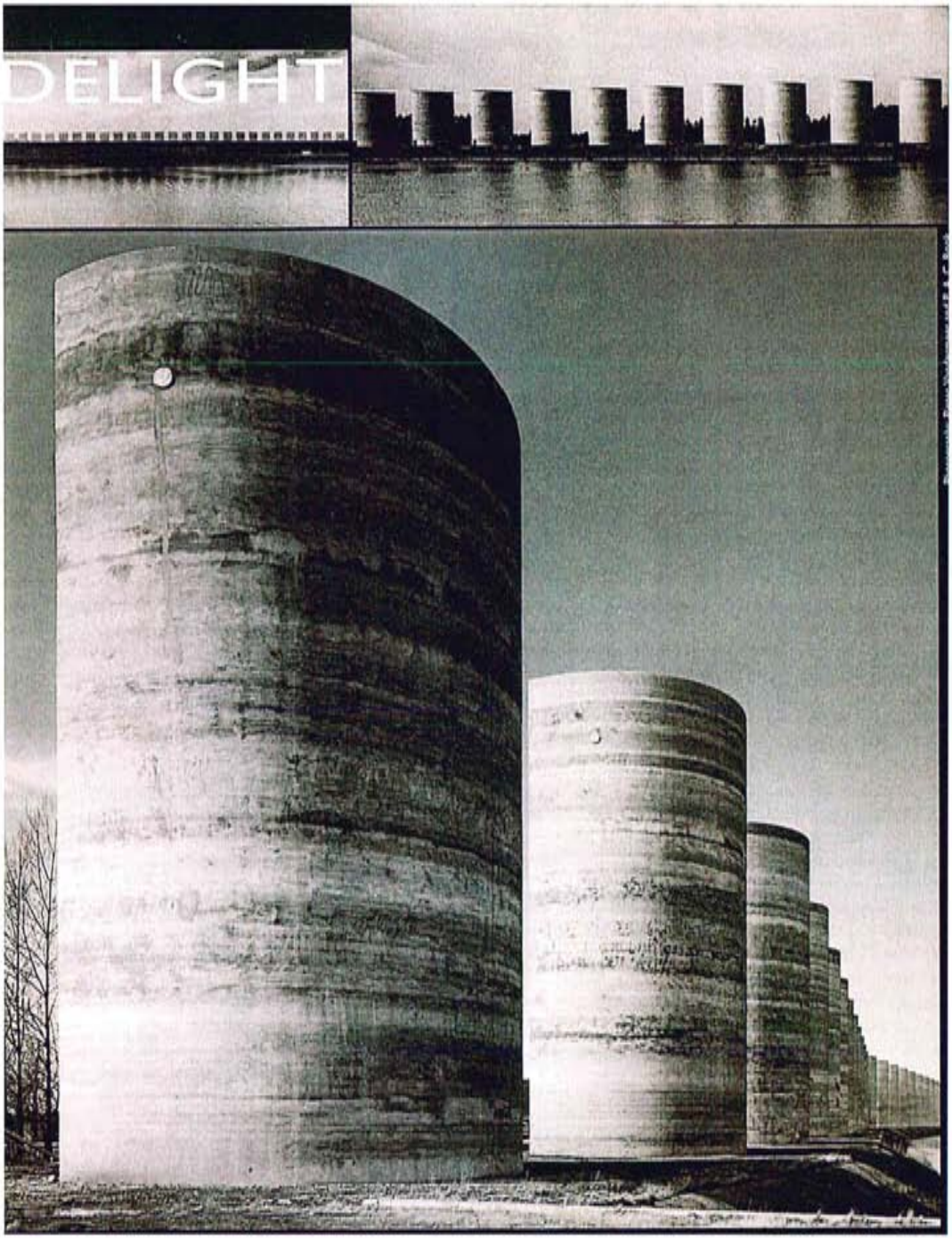
The negative impact of the automobile on urban form is commonly recognized. The framework for this development plan it works to resolve issues through the strategic location of parking, the development of common parking areas, the integration of boulevard parking, and the elimination of large areas of surface parking.

Parts of the code are designed to facilitate the creation of diverse pockets of interest. One of these approaches was to develop a set of guidelines for bus shelters that would encourage outside participation in the design. Standards for security, durability and maintenance would be commonly applicable, while cultivating creative solutions that contribute to high quality design nodes throughout the neighbourhood.

Common parking and Boulevard parking will reduce the applicable user groups requirements. Parking and loading are commonly restricted to the rear yard. Three above grade parking garages are provided. Parking is to be built under the education Centre and easterly waterfront edge to accommodate the high densities anticipated.

Within this area exists one of the last natural inlets in the harbour, however continued unacceptable land use practices jeopardize its survival. It is proposed to designate the inlet as protected open space. The Education Centre and Node One programming will facilitate community involvement to restore the inlets natural habitat and indigenous landscape. Structural intervention will be limited to pathway links at nodes one and four.

An urban park is to be developed through a design competition along the western harbour edge. The intent of the park is to celebrate the forms and/or functions of industry, such as incorporating industrial artifacts, industrial images or working industrial structures. This park would be accessible to the public, encouraging the public to participate and learn about the industrial history of this waterfront.



WIND BARRIER ON A SHIP CANA NEAR ROTTERDAM
(ARCHITECTURAL REVIEW MARCH 1999)

LANDSCAPE LEGEND

- OPEN SPACE-PARK
- OPEN SPACE-PARK HOLDING
- PROTECTED OPEN SPACE-NO DEVELOPMENT
- PEDESTRIAN LINK
- LANDSCAPED BOULEVARD
- CONC. WALK, MIN. 1800mm WIDE
- TRANSITIONAL YARD
- LANDSCAPE WALL

NODE TWO
NODE THREE
NODE FOUR
OPEN GREEN SPACE HOLDING
WATERFRONT PARK
WATERFRONT EDGE
EDUCATION CENTRE BLOCK NINETEEN
CIVIC COURTYARD
BLOCK SEVEN
BLOCK SIX
BLOCK FIVE
BLOCK EIGHT
BOULEVARD LANDSCAPE
COMMUNITY GARDENS
URBAN PARK
TRANSITIONAL YARD
SHIP STREET
LAND STREET
BLOCK FOURTEEN
BLOCK FIFTEEN
BLOCK SIXTEEN
BLOCK NINE
BLOCK THIRTEEN
CENTRAL SQUARE NEIGHBOURHOOD GATHERING/COMMUNITY PROGRAMING
INLET PROTECTED OPEN SPACE
BLOCK TWENTY
BLOCK TWENTY-ONE
BLOCK TWENTY-TWO
SHERMAN AVE. NORTH
BLOCK TEN
BLOCK TWELVE
BLOCK SIXTEEN
BLOCK SEVENTEEN
BLOCK ELEVEN
BLOCK EIGHTEEN
HILLYARD STREET
WENTWORTH STREET NORTH
NIAGARA STREET
COURTYARD
BLOCK TWO
BLOCK THREE
BLOCK FOUR
OLIVER STREET
LANDSCAPE WALL
BLOCK ONE
WILFRED STREET
BURLINGTON STREET EAST
NEW LANDSCAPE BOULEVARD ISLAND

LANDSCAPE PLAN

SCALE 1:4000 METRIC

TRANSPORTATION LEGEND

- PARKING STRUCTURE MAX-4 STOREY+ U/GROUND+ROOF
- COMMON PARKING/LOADING MUNICIPAL REAR ACCESS ROAD
- EXTENT OF UNDERGROUND PARKING
- PEDESTRIAN LINK
- BOULEVARD PARKING MINIMUM 5.000m x 6.000m
  - LANDSCAPE STRIP WHERE APPLICABLE
  - CONC. WALK, MIN. 1500mm WIDE

BLOCK SEVEN

BLOCK SIX

EDUCATION CENTRE BLOCK NINETEEN

WATERFRONT EDGE

BLOCK FIVE

BLOCK EIGHT

BLOCK NINE

BLOCK FOURTEEN

BLOCK FIFTEEN

BLOCK SIXTEEN

BLOCK THIRTEEN

BLOCK TWENTY

BLOCK TWENTY-ONE

BLOCK TWENTY-TWO

BLOCK TWO

BLOCK THREE

BLOCK FOUR

BLOCK 10

BLOCK TWELVE

BLOCK SIXTEEN

BLOCK ELEVEN

BLOCK SEVENTEEN

BLOCK ONE

BLOCK EIGHTEEN

LAND STREET

HILLYARD STREET

NIAGARA STREET

WENTWORTH STREET NORTH

OLIVER STREET

WILFRED STREET

BURLINGTON STREET EAST

SHERMAN AVE NORTH

TRANSPORTATION INFRASTRUCTURE

SCALE 1:4000 METRIC

8.13 LARGE SCALE BLOCK DEVELOPMENT

A section of this neighbourhood plan has been developed to test the proposed code.
Several types of live work and residential buildings have been created along side diverse industrial type buildings.

BLOCK NINE

South of the Experimental Gardens building a housing development with the lower level is designed as small walkout units, targeting students and singles. The upper levels are designed as more traditional larger 3 bedroom units. All accommodating private exterior space.

To the south, on the East side of Hillyard, is a new single use industrial building. A pedestrian link separates the ground floor manufacturing, from the reception and product retail area. Design and administration are on the second and third levels. On the west side of Variegate Road is single family residential.

On the south edge on Land Street is multi residential building with 14 small loft type units, that targets students and singles. A retail space is provided at the South West corner of the building with common outdoor space. Private outdoor study space is provided for each unit. The South east corner would be a 16 unit apartment building, a light well is integrated into each unit.

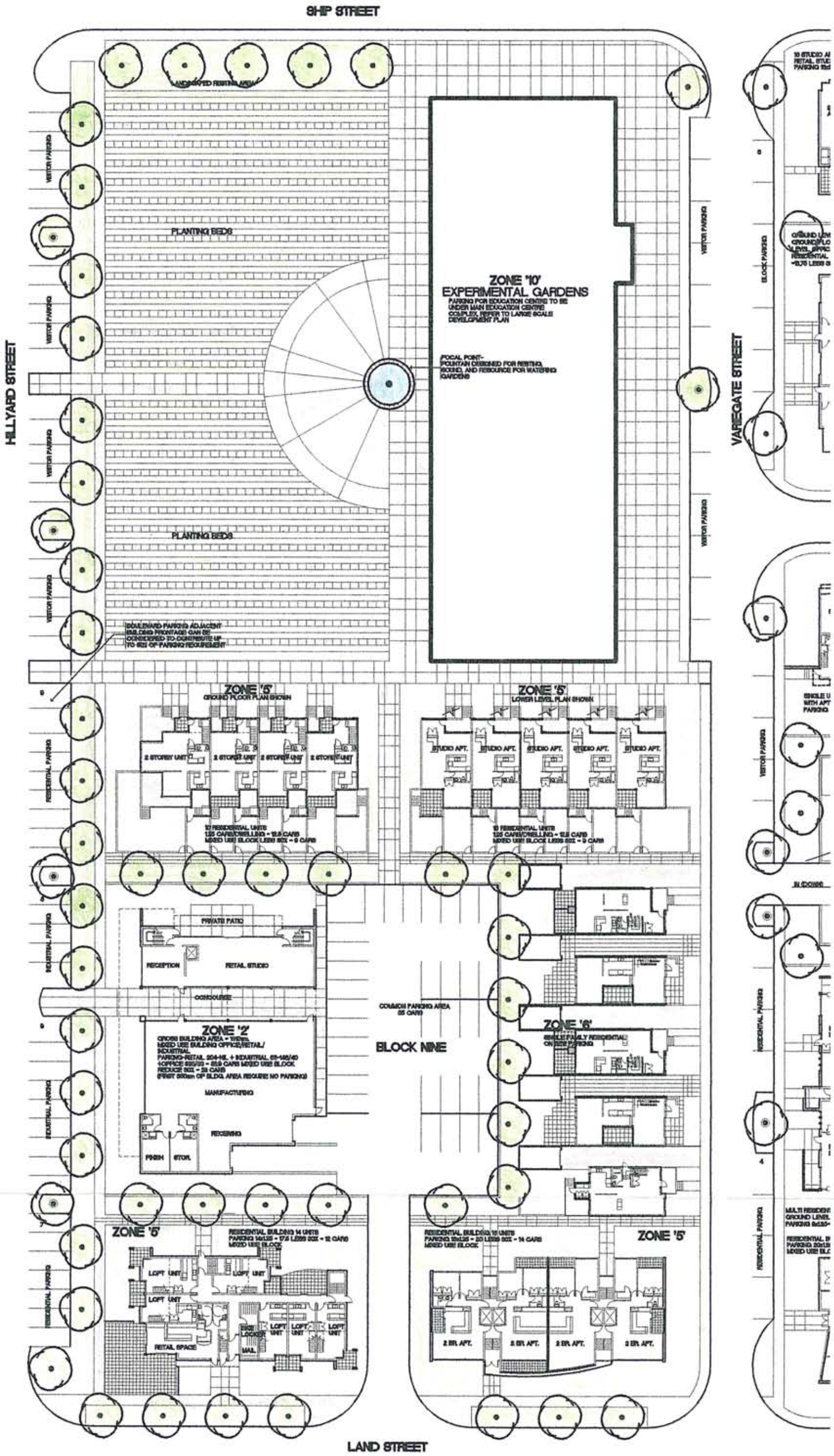
BLOCK THIRTEEN

On Ship Street at Variegate is a communal studio, with 16 studio apartments, to the east are four live work studios with a ground floor retail gallery area.

South of these buildings would be two industrial strip malls. Each building containing three ground floor industrial units, three offices units on the second floor, and three residential units on the third floor.

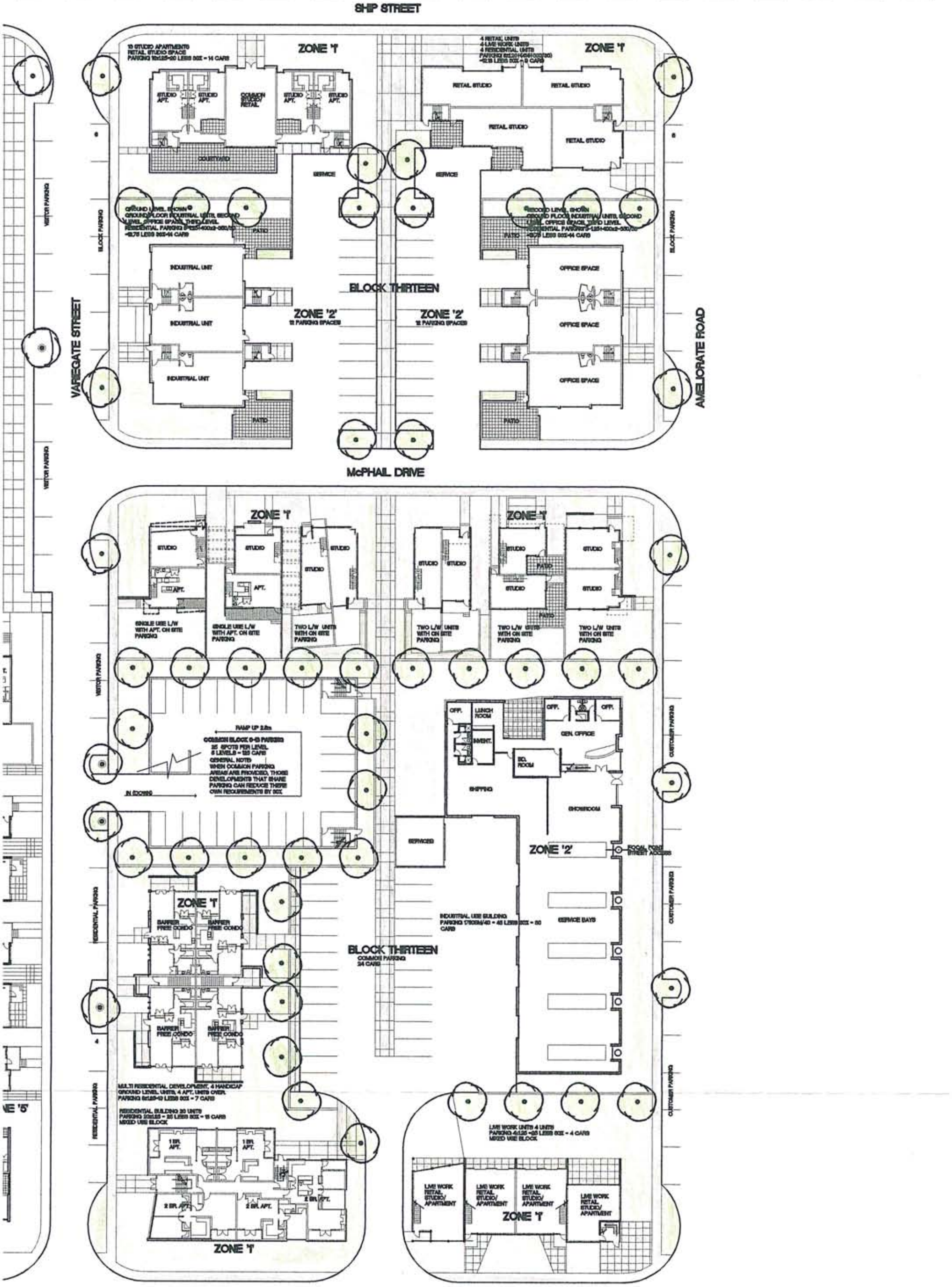
The south side of McPhail Drive, has been divided into six lots, with a combination of live-work studios and apartments. To the south of these unit is another industrial building, the required building feature is accommodated by a chimney, framed by a full height window, being repeated along the face of the building. At each of these windows is a work bay, in which pedestrians are able to walk by and visually participate in the functioning of this plant.

Behind the industrial building fronting Variegate Street, four barrier free condominiums, with apartments units over are proposed. Live work condominiums are being built on the South East corner of Land Street, and a 20 unit apartment building is located on the South West corner.



CONCEPTUAL BLOCK PLAN

SCALE: 1:550 METRIC



CONCEPTUAL BLOCK PLAN

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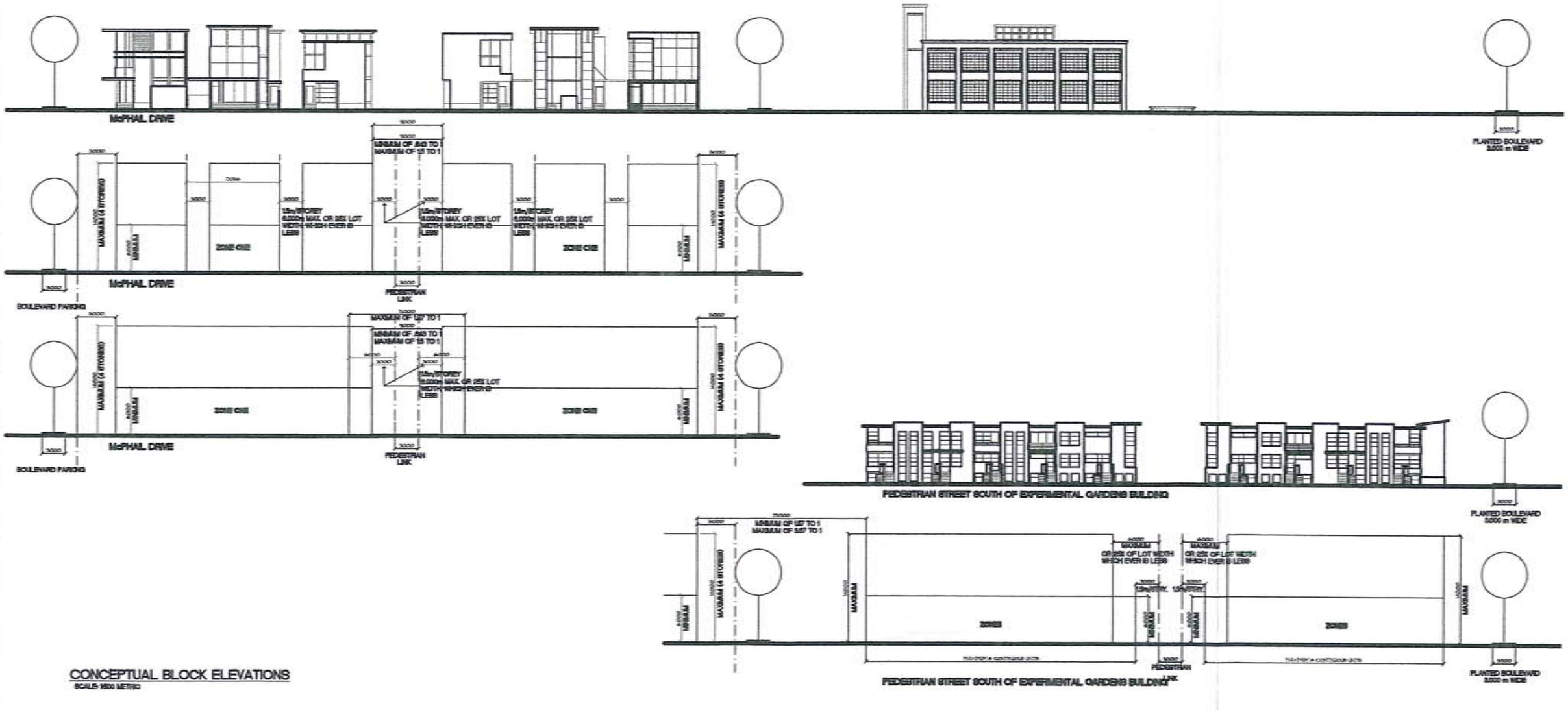
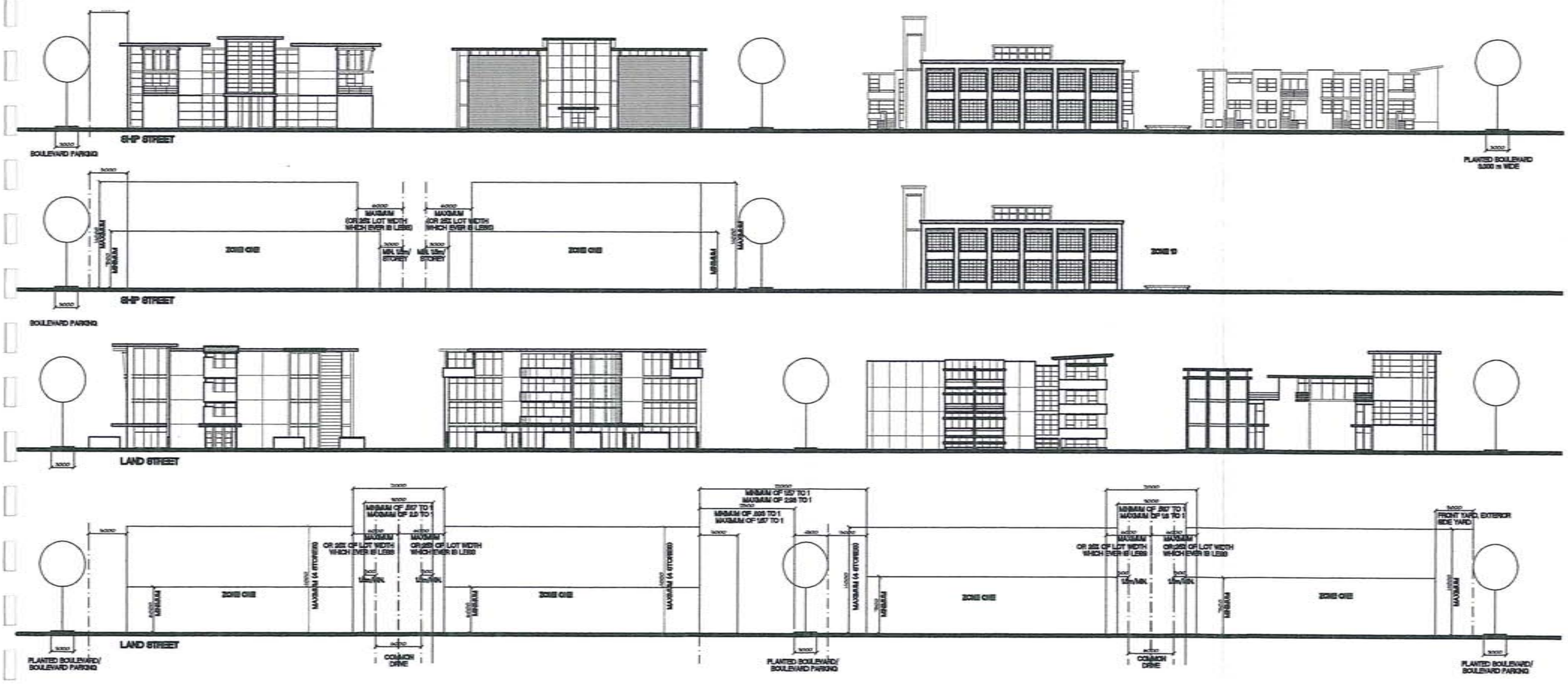


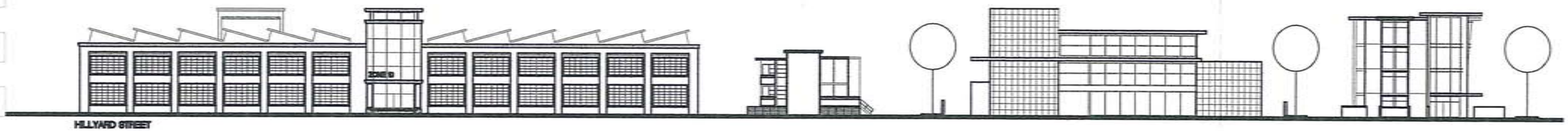
CONCEPTUAL BLOCK ELEVATIONS

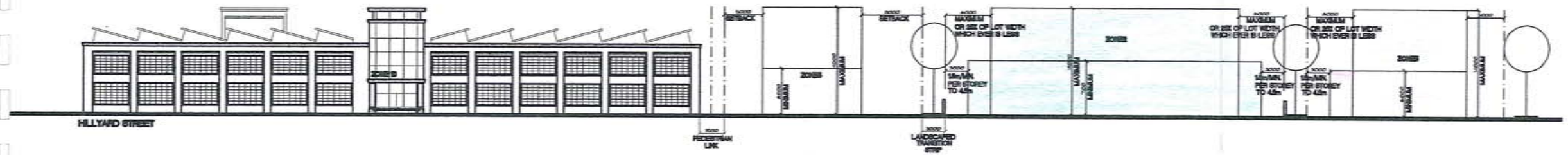
SCALES 1000 METRIC

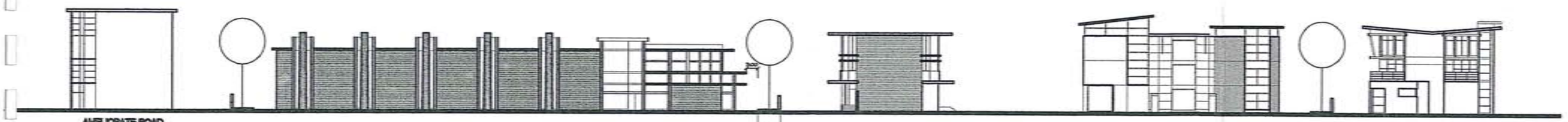


CONCEPTUAL BLOCK ELEVATIONS

SCALE: 1/600 METRIC

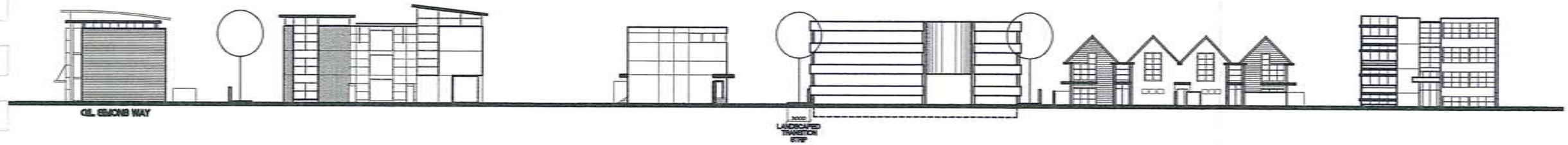


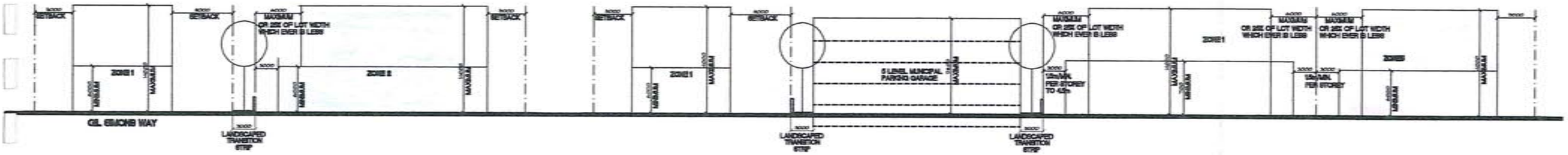


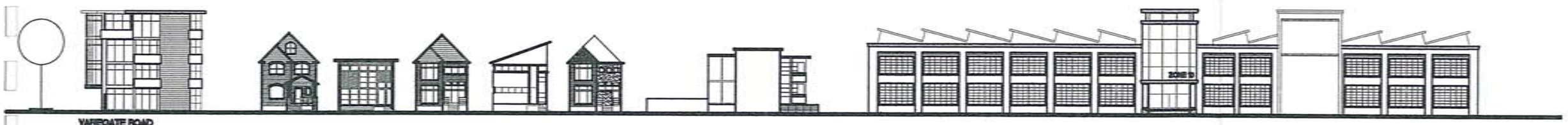


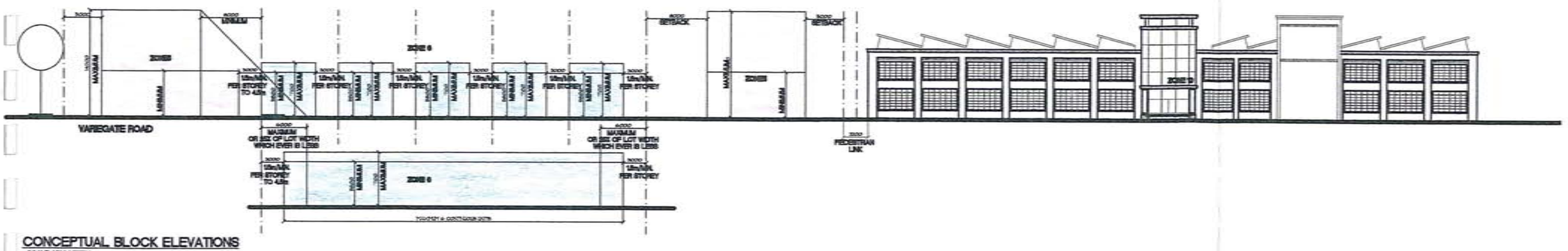
CONCEPTUAL BLOCK ELEVATIONS

SCALE 1:500 METRIC





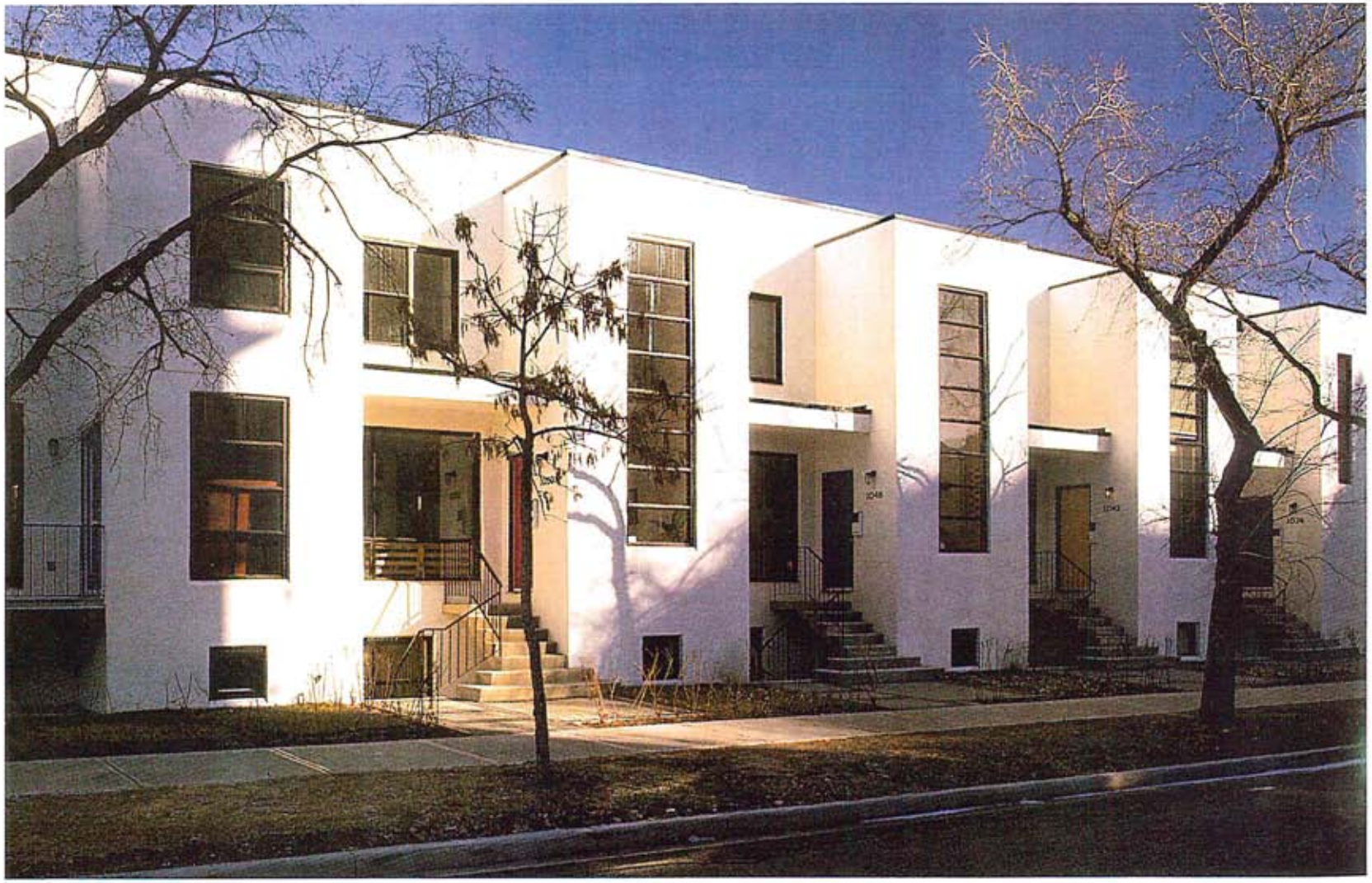




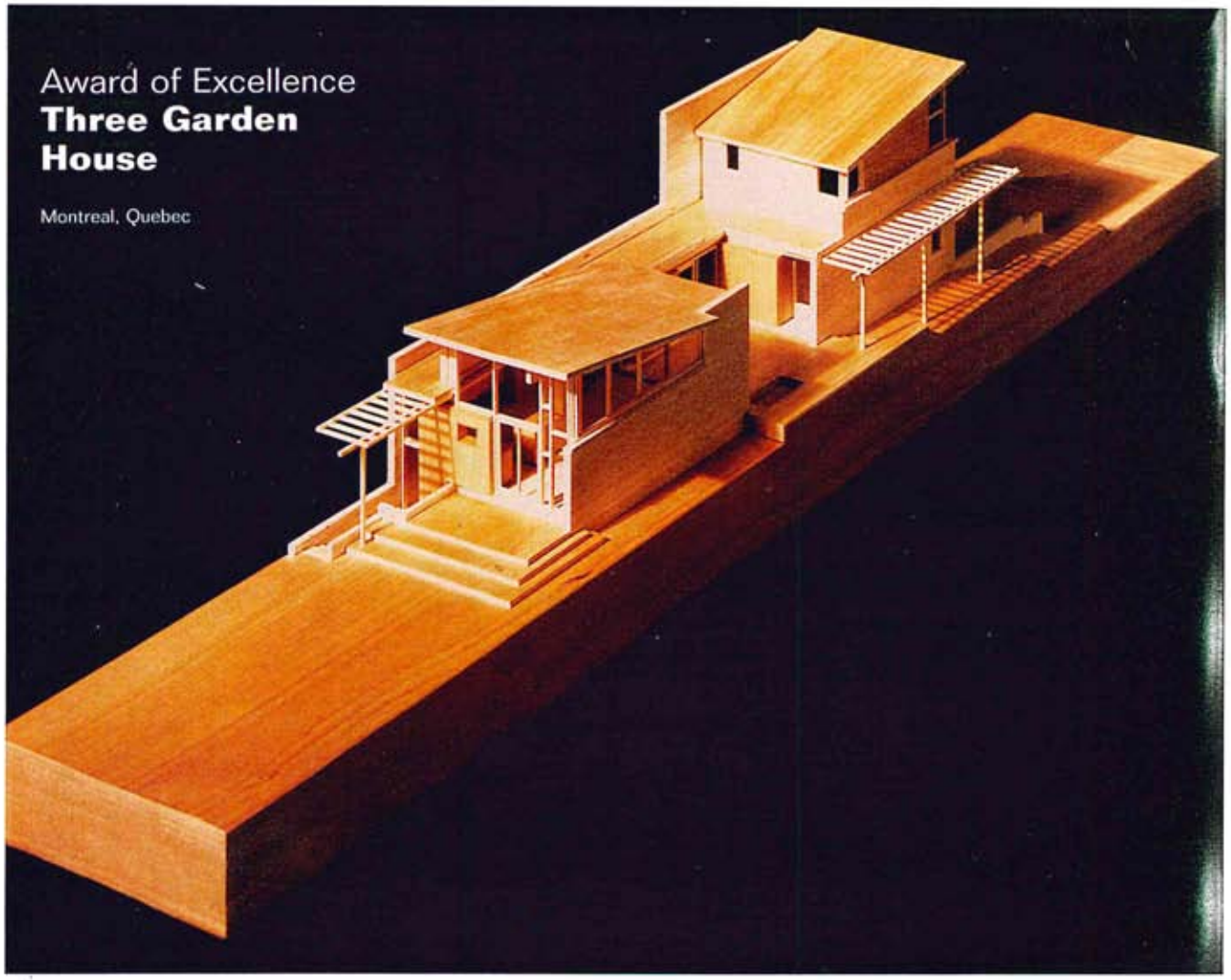
CONCEPTUAL BLOCK ELEVATIONS

SCALE: 1:500 METRIC

THERE SEEMS TO BE TWO BASIC APPROACHES TO INDUSTRIAL ARCHITECTURE. ONE APPROACH EXTRACTS THE RAWNESS, DARKNESS AND ENGINEERING OF INDUSTRY. THE OTHER IS THE URBANIZATION AND HUMANIZATION OF INDUSTRY, AS IN THE WATER TREATMENT PLAN IN TERREBONNE QUEBEC, BY BIRTZ BASTIEN ARCHITECTS. BOTH APPROACHES ARE RELEVANT AND NEED TO BE RECOGNIZED, SO THAT WE DO NO LIMIT OR STERILIZE OUR EXPERIENCES, REDUCING OUR ABILITY TO PARTICIPATE AND LEARN.

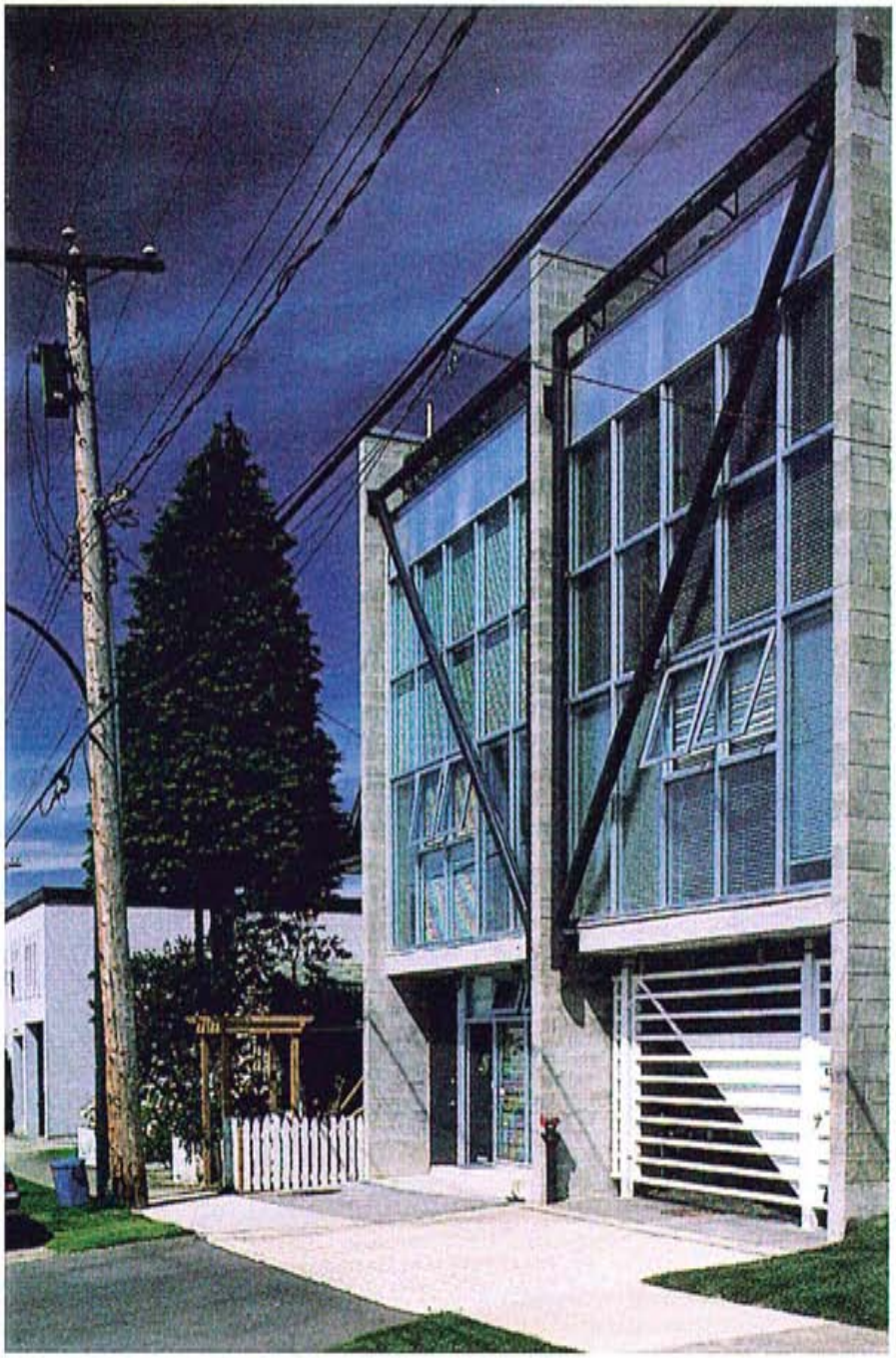


STURGESS ARCHITECTS HAVE DESIGNED THE CONNAUGHT STREET GARDENS COMPLEX USING A SEMI PRIVATE COURTYARD TO STRUCTURE AND ELEGANT AND DIVERSE HOUSING PROJECT. THIS COMPLEX OF 11 UNITS IS LOCATED ON THE EDGE OF A REVITALIZING INNER CITY NEIGHBOURHOOD, SOUTH OF DOWNTOWN CALGARY. THE SOUTH SIDE HAS RECESSED BASEMENT SUITES, WHILE THE NORTH SIDE UNITS ARE LOCATED ABOVE GARAGES. UNITS RANGE FROM 900 TO 1200 SF.



THE THREE GARDEN HOUSE PROJECT IN MONTREAL, DESIGNED BY GAVIN AFFLECK, RICHARD DE LA RIVA, GUY TUDEL AND LEIC GODBOUT- IS A SEMI DETACHED HOUSE WITH A MUTUAL COURTYARD, PROVIDING EACH WITH T A PRIVATE FRONT YARD. THERE ARE SEVERAL EXAMPLES OF DIVERSE HOUSING PROJECTS OF HIGH QUALITY, THAT IN MANY CASES WOULD NOT BE PERMITTED BY THE TRADITIONAL CODES OF THE NEW URBANISM.

THE WYNDELS HOUSE DESIGNED BY NEIL MINUK, JAE SUNG CHAN, JONATHAN HUGHES ARCHITECTS, RESPECTS THE EXISTING URBANITY THROUGH SCALE AND PLACEMENT OF VOLUMES THAT ACKNOWLEDGE SETBACKS OF EXISTING PORCHES AND FACADES. THE LANGUAGE IS CLEARLY MODERN.



THE VALUE OF DIVERSITY IS BEING RECOGNIZED AND RESPECTED, THROUGH VANCOUVER'S RECENT ENLIGHTENED PLANNING CONTROLS THAT ENCOURAGE INNOVATIVE MIXING OF USES IN THE URBAN LANDSCAPE. IN THE CONTEXT OF WOOD FRAMED HOUSES AND SMALL FACTORIES, PETER CARDEW HAS ORGANIZED THIS SMALL LIVE WORK BUILDING AROUND A COURTYARD INCORPORATING FOUR NEW STUDIOS EACH ABOUT 860 SF., WITH SEPARATE GRADE LEVEL WORKSHOPS AND PARKING. SUCCESSFULLY VALIDATES THE HIGH DENSITY DEVELOPMENT AS A DESIRABLE MODEL, PROMOTES IT AS VIABLE ALTERNATIVE TO THE SUBURBAN SPRAWL.

THE BANNER LIVE WORK BUILDING IN SEATTLE WASHINGTON, DESIGNED BY COPELAND ARCHITECTS WAS CONSTRUCTED FOR ARTISTS WHO WANT TO LIVE AND WORK IN THE SAME PLACE. THE CONDOMINIUM PROJECT OFFERS ROUGH TWO STORY UNITS, DELIVERING A MORE FLEXIBLE AND LESS EXPENSIVE FORM OF HOUSING. THE OWNER OF THE BUILDING, WHO RUNS AN ARCHITECTURAL SCULPTURE STUDIO CALLED BANNERWORKS, WANTED TO CREATE A COMMUNITY WHERE ART AND COMMERCE COME TOGETHER AND WHERE STRUGGLING ARTS COULD LIVE WITH MORE ESTABLISHED ONES. THERE ARE DIVERSE COMBINATIONS OF RESIDENTIAL UNITS AND LIVE WORK STUDIOS WITH A COMMERCIAL BASE.

9.0 NEIGHBOURHOOD FRAMEWORK GUIDELINES

9.1 INTENT

The intent of this framework is to allow for the development of fully integrated, mixed-use pedestrian community, that respects the existing industrial character, while working to rehabilitate the residential character of the community. The goal is to create an inclusive environment through the integration of diverse functions, propose alternative solutions to suburban sprawl, build upon existing infrastructure, and cease environmental degradation.

9.2 DEVELOPMENT PROVISIONS

9.2.1 PROHIBITIONS

Any commercial use which encourages patrons to remain in their automobiles while receiving goods or services; outdoor advertising as a principle use; storage or disposal of hazardous waste materials; scrap yards; mobile homes; drive in theatres, service stations, car lots; and any use which produces the following adverse impacts: noise at a level greater than typical street or traffic noise, offensive vibration, emission of noxious solids, liquids, or gases. Satellite dishes are not permitted in the front yard. Satellite dishes greater than 600 mm dia. are prohibited.

No new industrial uses will be permitted within existing residential blocks three and four. All vacant lots within existing residential blocks will be re-zoned to allow for construction of single family housing only. All existing industrial uses will be considered legal non-conforming until the satisfy the requirements of the new code, or proposed accepted compliance alternatives. No change of ownership or major tenant will be permitted until requirement of new code or accepted compliance alternatives have been executed.

9.2.2 BUS SHELTERS

A proposed transportation infrastructure plan had made up part of this development. The design of the bus shelter is to be readily identifiable by user groups, but each shelter is to be designed, paid for and constructed by the adjacent property developer. Designs are to be submitted that conforming to standards provided for Bus Shelter Designs. The developer is encouraged to explore creative solutions to the shelter design, therefor contributing to high quality design nodes throughout the neighbourhood.

9.2.2.1 BUS SHELTER DESIGN STANDARDS

Seating to accommodate 4 persons. Areas for advertising to be incorporated. It is necessary that people inside shelter are visible from three sides. The shelter should screen elements from above and on 3 sides. The developer is to provide a plaque, no larger than 300 mm x 300 mm with their name as constructor and designer of the shelter. Shelter to meet Regional safety and maintenance guidelines.

9.2.3 LANDSCAPING

All boulevard landscaping is to be done in accordance with the Neighbourhood development landscape plan. Large caliper trees are to be installed at 9.000 m O.C. All work to be done by approved contractors, at the expense of developer. Submissions of alternative landscape plans are encouraged. The intent of the overall landscape master plan is to provide a continuous canopy of large maturing deciduous trees along city streets, within landscape boulevard, adjacent curb or sidewalk or integral to sidewalk design. Alternative ideas such as landscape sculpture, public art, or landscape design are encouraged to create diverse pockets of interest, along the street edge. A maximum of 20% of street edge will be available to alternative proposals. Location and design of alternative proposals will be subject to approval.

9.2.4 HISTORIC PRESERVATION

All existing buildings and land uses that are deemed to contribute to the industrial history of the waterfront are to be subject to historic preservation guidelines. The intent is to preserve the historical character of the buildings. The removal of historic materials or alteration of features and spaces that characterise a property shall be avoided. Changes that create a false sense of historical development shall not be undertaken .

Properties that have historical value, that are not considered of architectural value, are to be subject to historic preservation guidelines. The intent is to recognize the traditions of the industrial harbour. Alterations to the building are to recognize the character of the existing building or land use preserving the nature of the building and its relationship to the community.

9.2.5 STORAGE, LOADING AND UTILITY AREAS

No exterior storage will be permitted.

Exterior loading bays must be screened by a minimum 6'-0" high wall, consistent with building design. Walls may require sound attenuation, all developers/tenants are to provide information on loading practices with a engineered sound study report prior to approval of screen walls. No loading, utilities, or equipment may be located in the frontyard or exterior sideyard. All loading must occur in rear yard. Exterior compressors or equipment is to be indicated on drawings, and will require, where deemed necessary engineered and certified sound study reports. All exterior equipment to be screened.

The neighbourhood development has the authority to restrict exterior industrial equipment such as dust collectors, compressors, refrigeration equipment, etc. Existing utilities will adjacent a street will be subject to the guidelines of surface parking lots. **(8.2.12.1.)**

9.2.6 TRANSITIONAL YARD

Transitional yards shall apply to all perimeter side yards and rear yards of industrial properties, except where rear yard is adjacent common parking or loading. Transitional yards shall be the responsibility of the industrial property. The minimum width of a transitional yard to be 3.000 m.

A fence or solid wall consistent with building design shall be erected to a min. height of 1200 mm and maximum height of 2400 mm. A minimum of 1 tree per 6.000 m length of fence or wall shall be planted. Additional vegetation is required that will screen a minimum of 50% of a fence or wall within 3 years. Plantings must be located between the fence or wall and the adjoining property line. The use of an earth berm can reduce the transition yard by 25%. The berm must be planted within the property line, with a minimum height 600 mm, and a minimum crown width 600 mm, and minimum slope 2:1.

9.2.7 PRODUCE STANDS/ SIDEWALK VENDORS

Produce stands, sidewalk vendors will be subject to permits for a maximum 3 month period, location and number of vendors subject to approval. Produce stands, sidewalk vendors must have property owner permission to operate on a private lot, trailers shall not be permitted.

9.2.8 REQUIRED YARDS, FENCE AND WALLS STANDARDS

Fences or walls are permitted in rear and side yards to the extent of front facade, to a maximum height of 2.400 m. Fences or walls within the front yard shall be limited to a height 1.200 m. Stoops, open colonnades, balconies and open porches may encroach into frontyard setback.

9.2.9 URBAN LOT STANDARDS

No existing yard or lot shall be reduced in size or are below the minimum requirements.

No severance or amalgamation of existing residential properties will be permitted.

No established or new use in any district shall be operated as to generate inherent or recurring ground vibrations detectable a the property line wich create a nuisance to any persons of ordinary sensitivities on another property.

Every use of land shall be operated in such a way that regularly recurring noises are not disturbing or unreasonably loud and do not cause injury, detriment or nuisance to any person of ordinary sensitivities.

Every use of land shall be operated in such a way that regularly recurring odours are not disturbing and do not cause injury, detriment or nuisance to any person of ordinary sensitivities on another property.

All exterior garbage to be screened with permanent walls or solid fencing. Garbage compacting devices are to be enclosed as part of the building.

The average ratio between the height of the bounding walls on either side of neighbourhood streets and the distance separating them is not to exceed 1 to 3. All residential development where possible is to work to achieve this ratio. Commercial areas will not be permitted to exceed this ratio. Pathways and pedestrian links should not exceed the ratio of 1 to 2.

All rooftop equipment shall be enclosed in such a manner that the structure or is visually compatible with the building.

9.2.10 PARKING

On-street parking directly fronting adjacent lot shall count toward fulfilling the parking requirement of that lot, for up to 50% of total parking requirement. One parking space credit shall be given for every space in front of the lot that is over 50% of the length of the parking space.

Parking of recreational vehicles will not be permitted in frontyard of any use. No residentially developed lot may be used as the base of operation for any freight hauling truck.

Parking space to be a minimum of 2750 x 5800. Parallel parking space to be a minimum of 2700 x 6.000. Barrier free parking to be a minimum of 3600 x 5800.

A minimum of 3% of required parking is to be barrier free, in close proximity to destination entrances. Boulevard parking perpendicular or angled to sidewalk is to conform to this requirement. Parallel boulevard parking is exempt. Handicap boulevard parking to be provided adjacent ramped sidewalks where possible. Handicap parking to be designated.

Co-operative parking provisions for off-street parking may be made by contract between two or more adjacent property owners. The parking provided on any one lot may be reduced to not less than one-half the number of required parking spaces for the use occupying such lots, or as per specific use guidelines.

9.2.11. PARKING SCHEDULE

Single Family Residential	1 per dwelling
Multi Residential	1 per unit
Special needs-Residential	.3 per unit
institutions of higher learning	1/100 sm
Government Institutions	1/31 sm.
Religious institutions/Cultural facilities	1/30 sm.
Civic/Social/Fraternal Organizations	1/30 sm.
Child Care Centres	1/10 children
Manufacturing/Warehousing	1/115 sm.
All other industrial uses	1/40 sm.
Offices	1/31 sm.
Retail	1/25 sm.
Theatres	1/3 seats
Restaurants	1/30 sm.
All other commercial	1/25 sm.
Bed and Breakfast Inns/Hotels	1 per room or suite
Convention Facilities	1 per 25 sm.

The first 450 sm. of commercial, office or industrial space is exempt from parking requirements, where boulevard parking is provided.

9.2.12 PARKING LOT STANDARDS, BOULEVARD PARKING

9.2.12.1 PARKING LOTS

Parking lots adjacent to a street edge shall provide a planted 3.000 m landscape boulevard within parking lot adjacent parking perimeter and the street yard. Screening must be 900 mm high with no gaps greater than 1200 mm, excluding driveways. Walls or fencing is to be incorporated on parking edge side of landscaped boulevard. Walls or fencing to be a minimum of 600 mm and may not exceed 1200 mm high. Chain link fencing is not acceptable, unless creative alternative suggestions are approved. The intent is to soften the pedestrian edges that are adjacent parking lots. Developers are again encouraged to submit alternative creative designs approaches, for approval. Developer must co-ordinate links to public sidewalk with neighbourhood plan.

9.2.12.2 BOULEVARDS

No more than 10 cars parking perpendicular, or angular to sidewalk are permitted, unless separated by a landscaped island, min. 2.700 m wide x depth of adjacent parking space. Mature tree to be installed, as part of overall landscape development plan.

Nor more than 5 cars parking parallel to sidewalk are permitted unless separated by a landscape island, min. 3.000 m wide by width of adjacent parking space. Mature tree to be installed, as part of overall landscape development plan.

9.2.13. DRIVEWAYS

Driveways shall not be less than 2.800 m in width for one way traffic and 5.400 m in width for two way traffic.

9.2.14 SIDEWALKS

All sidewalks to be incorporate barrier free ramps at intersections, or pedestrian thoroughfares.

9.2.15 INLET

This area is to be maintained as a natural reserve. No structures will be allowed within this area, unless the sole purpose is a requirement of the restoration. The intervention will be limited to restoration.

9.2.15.2 BLOCK TWO COURTYARD

The square shall have a pedestrian walkway around the perimeter. New buildings must face the square on West, East and South side.

9.2.15.3 CENTRAL SQUARE

Fifty percent of the area of the Central Square is to remain as an amalgamated open space. Structures within this area being limited to goal posts or nets required for baseball diamonds, soccer, lacrosse, football fields or similar type field related activities.

Buildings for recreational use will be permitted and encouraged within the remaining area. Structures within this space will be limited to change rooms, clubhouses, field houses, gazebo, BBQ pits, covered picnic areas, sports related auxiliary space, exterior tennis/squash/basketball type courts, lawn bowling, playground equipment, or outdoor swimming/wading pools. Building eave heights are not to exceed 7.100 m. Building areas are not to exceed 600 sm ground floor, 1200 sm. Gross floor area.

The central square is to incorporate a below grade holding tank to control all the storm water generated by the proposed development.

Parking will be restricted to perimeter parking on park side, no internal parking lots will be allowed.

9.2.15.4 WATERFRONT EDGE

The waterfront edge is to incorporate a waterfront boulevard. Greenspace is to be incorporated along the boardwalk for causal passive use. Site furnishings are to be provided, such as benches, picnic tables, and trash containers.

9.2.15.5. URBAN PARK

A urban waterfront park is to be incorporated into the overall landscape plan. This park will work to incorporate industrial artifacts, industrial images, or working industrial structures. This design of this park will be finalized through a design competition.

9.2.16. STREETS & ALLEYS

Street lamps shall be installed on both sides of the street no less than 30 m apart.

Build-to shall be established along all streets and public space frontages, determining the width desired for each street or public space. A minimum percentage build-out at the build-to line shall be established along all streets and public square frontages.

9.3 LAND USE STANDARDS

9.3.1 The maximum sideyard should never exceed 30% of lot width.

9.3.2. Fifty percent of parking requirement can be incorporated into boulevard parking adjacent land use. Where common parking is provided, parking requirement may be reduced by 30%.

9.3.3. The frontyard or exterior sideyard setback can be defined by an exterior wall, or part of the building face. Fencing, porches and garden walls are permitted to be built in the front yard.

9.3.4. When rear yard is adjacent sideyard, rear yard setback may be reduced in accordance with sideyard setback, to the extent of adjacent land use rear yard setback, when both properties share common street frontage.

9.3.5 Except for residential land use, When rear yard is adjacent a common parking lot or driveway, the width of such may be subtracted for the rear yard setback to a maximum of 6.500 m.

9.3.6 Where sideyard is adjacent landscaped transition yard, the required 6.000 m setback due to building height, is not required to exceed 4.500 m.

9.3.7 The minimum sideyard adjacent common drive or pedestrian link is reduced to 7.500 m per storey.

9.3.8. In a zone designated as industrial, the ground floor must be devoted to industrial use.

9.3.9 70 % of build-to line must be defined by either building facade or garden wall.

9.3.10. In a zone designated as single family residential, 20% of residential lots may be amalgamated to permit increased single family housing or multi residential. No more that 2 lots adjacent one another are permitted to be amalgamated.

9.3.11. A detached garage or auxiliary building may not exceed 35% of lot width. No sideyard is required for garage. Maximum eave height of garage is 3.600 m.

9.3.12. Parking in residential front yard is not permitted. No exterior stairs are permitted from floors above the main level.

9.3.13. In a zone designated as single family residential, live work or bed and breakfast uses are permitted.

9.3.14. In a zone with a maximum height of four stories, 50 percent of building may be increased to 5 stories, when increased building height does not effect penetration of natural light into adjacent required rear yard.

9.3.15. A garage or carport must be located behind the front facade. Open canopies used to defined parking in the sideyard are not required a sideyard setback, providing supports extended from grade to not exceed 300 mm in width, in any direction, and canopy supports are not less than 2.400 m apart, and canopy does not exceed 3.600 m. Enclosed garages, or solid roof carports must be built in rear yard. In a rear accessed residential zone, garage must be constructed 6.000 m from rear access drive

9.3.16 A loft may not be considered a storey, if building remains within maximum height restrictions.

9.3.17 For determination of minimum sideyard, every 3.000 m or part of building ht. will be considered a storey.

9.3.1.2. CIVIC DESIGN STANDARDS AND PROVISIONS

Land designated for civic use shall contain but not be limited to the following: community buildings including meeting halls, institutional buildings, libraries, post offices, schools, child care centres, clubhouses, spiritual buildings, recreational facilities, museums, performing art buildings, and municipal buildings. Civic use buildings shall be not be subject to setback or height restrictions, but must meet approval of neighbourhood development group.

9.3.18 SHOPFRONT DESIGN STANDARDS AND PROVISIONS

Land designated as *shopfront* use shall contain residential/live work, and commercial uses.
At least 50% of the building area shall be designated for residential use. Residential uses are not permitted on the ground floors of shopfront buildings. Live work uses are permitted only when retailing of goods from ground floor.

Minimum Lot depth	26.000 m
Maximum Lot depth	45.000 m
Minimum Lot width	9.000 m
Maximum Lot width	22.000 m
Note: Two buildings can be Interconnected, through intermediate courtyards increasing the maximum lot width.	
Maximum Lot width (2)	45.000 m
Minimum Sideyard	1.500 m per storey
Maximum Sideyard	6.000 m.
Minimum building Height	7.1 m
Maximum building Height	14.0 m (4 stories)
Frontyard/Ext. Sideyard	5.000 m
Minimum Rearyard	8.000 m

9.3.19 LIVEWORK DESIGN STANDARDS AND PROVISIONS

Land designated as *livework* use shall contain residential/live work, or commercial uses. At least 50% of the building area shall be designated for residential use.

Minimum Lot depth	26.000 m
Maximum Lot depth	45.000 m
Minimum Lot width	9.000 m
Minimum Sideyard	1.500 m per storey
Maximum Sideyard	6.000 m.
Minimum Building Height	7.100 m
Maximum Building Height	14.000 m (4 stories)
Frontyard/Ext. Sideyard	5.000 m exterior sideyard.
Minimum Rearyard	8.000 m

9.3.20 GUIDELINES FOR APARTMENT BUILDINGS

Minimum Lot depth	26.000 m
Maximum Lot depth	45.000 m
Minimum Lot width	9.000 m
Maximum Lot width	45.000 m
Minimum Sideyard	1.500 m per storey
Maximum Sideyard	6.000 m
Minimum Building Height	7.100 m
Maximum Building Height	14.000 m (4 stories)
Frontyard/Ext. Sideyard	5.000 m
Minimum Rearyard	8.000 m

9.3.21 GUIDELINES FOR ROW/TOWN HOUSING

Minimum Lot depth	26.000 m
Maximum Lot depth	45.000 m
Minimum Lot width	9.000 m
Minimum Sideyard	1.500 m per storey
Maximum Sideyard	6.000 m
Minimum Building Height	6.000 m
Maximum Building Height	7.100 m (2 stories)
Frontyard/Ext. Sideyard	5.000 m
Minimum Rearyard	8.000 m

Note: The maximum continuous number of units is limited to 6

9.2.22 REAR ACCESS SINGLE FAMILY RESIDENTIAL

Minimum Lot dept	35.000 m
Minimum Lot width	9.000 m
Maximum Lot width	12.000 m
Minimum Sideyard	0 m on one side,-.75 m per storey on the other Note: The street must maintain the 0 sideyard on the same side.
Maximum Sideyard	30% of lot width
Minimum Building Height	6.000 m
Maximum Building Height	7.100 m
Frontyard/Ext. Sideyard	5.000 m
Minimum Rearyard	14.000 m

9.3.23 FRONT ACCESS SINGLE FAMILY RESIDENTIAL

Minimum Lot dept	26.000 m
Minimum Lot width	10.000 m
Maximum Lot width	12.000 m
Minimum Sideyard	0 m on one side,- 1.500 m per storey on the other Note: The street must maintain the 0 sideyard on the same side.
Maximum Sideyard	30% of lot width
Minimum Building Height	6.000 m
Maximum Building Height	7.100 m
Frontyard/Ext. Sideyard	5.000 m
Minimum Rearyard	8.000 m

9.3.24 OFFICE DESIGN STANDARDS AND PROVISIONS

Minimum Lot depth	26.000 m
Maximum Lot depth	45.000 m
Minimum Lot width	9.000 m
Minimum Sideyard	1.500 m per storey
Maximum Sideyard	6.000 m.
Minimum Building Height	7.100 m
Maximum Building Height	14.000 m
Frontyard/Ext. Sideyard	5.000 m
Minimum Rearyard	8.000 m

9.3.25 COMMERCIAL DESIGN STANDARDS AND PROVISIONS

Minimum Lot depth	26.000 m
Maximum Lot depth	45.000 m
Minimum Lot width	9.000 m
Minimum Sideyard	1.500 m per storey
Maximum Sideyard	6.000 m.
Minimum Building Height	7.500 m
Maximum Building Height	14.000 m
Frontyard/Ext. Sideyard	5.000 m
Minimum Rearyard	8.000 m

9.3.26 INDUSTRIAL DESIGN STANDARDS AND PROVISIONS

Minimum Lot depth	26.000 m
Maximum Lot depth	45.000 m
Minimum Lot width	9.000 m
Minimum Sideyard	1.500 m per storey
Maximum Sideyard	6.000 m.
Minimum Building Height	7.500 m
Maximum Building Height	14.000 m
Frontyard/Ext. Sideyard	5.000 m
Minimum Rearyard	8.000 m

Note transition yards requirements **8.2.6**

9.3.27 WATERFRONT COMMERCIAL DESIGN STANDARDS AND PROVISIONS

Minimum Lot depth	26.000 m
Minimum Lot width	9.000 m
Minimum Building Height	7.500 m
Maximum Building Height	21.600 m
Minimum Rearyard	8.000 m

Sideyard and Frontyard are site specific.

9.3.28 WATERFRONT INDUSTRIAL DESIGN STANDARDS AND PROVISIONS

Minimum Lot depth	26.000 m
Minimum Lot width	9.000 m
Minimum Building Height	7.500 m
Maximum Building Height	21.600 m
Minimum Rearyard	8.000 m

In a zone designated as Waterfront Industrial, no less that 60% of ground floor area is to remain industrial use. Frontyard and Sideyard are site specific.

9.3.29 SPECIAL NEEDS ZONING

Minimum Lot depth	26.000 m
Minimum Lot width	9.000 m
Minimum Sideyard	1.500 m per storey
Maximum Sideyard	6.000 m.
Minimum Building Height	7.500 m
Maximum Building Height	14.000 m
Frontyard/Ext. Sideyard	5.000 m
Minimum Rearyard	8.000 m

Church Steeples or building monuments are exempt from height restrictions.

The zoning of these areas is to address the segment of society that while they wish to be part of the urban fabric of the community, have particular needs that make it more comfortable for the occupants to surround themselves with people of similar circumstances. Two parcels have been allocated for these particular interest groups.

Uses such as housing for seniors, special education, disabled persons, persons with serious illnesses such as aids, convicts that are working to re-integrate into society, convents, shelters etc. are typical of what should be considered. Diverse uses that advance community interaction are to be included and integrated within these areas, such as churches, community centres, libraries, theatres or galleries.

10.0 CONCLUSION

Again I believe that the principles that relate to the benefits of industry within the urban context are general principals that determine the success of urban form regardless of use. I believe it is necessary to focus on the urban issues of this neighbourhood and not the technical issues that might restrict industrial integration. The technical difficulties obviously need to be addressed, but often technical pre-occupation negates the real issues of creating a place for being explored.

10.1 Diversity

The premise for this neighbourhood development has been structured on the principal of diversity. Several forms of housing are incorporated in conjunction with the integration of diverse building types including industrial. Independently each block takes on different characteristics, working to respond to community requirements and existing context.

Development adjacent existing residential extends the residential context, in order to solidify and stabilise the existing community. Strategic inclusion of higher density housing has been included to respond to individual income levels, and various housing needs.

Existing industrial uses have been incorporated into the development plan, often reconfiguring there property to accountably respond to adjacent land uses. New industrial land use has been included using guidelines that maintain the urban form, and respect alternative adjacent land use.

Conditions with various responses exist within the neighbourhood. The waterfront was designed as a more intense space, with higher densities and land use to not only respond to neighbourhood needs, but provide an area with regional economic and social interest. The blocks east of Hillyard have a increased diversity in land use, to provide an area that provides an opportunity for economic growth, at the same time integrating diverse housing opportunities.

The characteristics of the Central Square are suburban in nature, with the majority of land use being single family residential, although integration of higher density residential is strategically placed. I believe that creating a strong residential neighbourhood foundation will cultivate community stability, that facilitates individual and collective growth to advance tolerance and value.

10.2 Scale

Without creating a human scale in this neighbourhood, it will be impossible to secure this community. Historically the impact of outside intervention will prejudice any existing resident against further change.

Much of the existing land use is dominated by large underutilized factories and vacant industrial land. The perception being that the existing industrial land use is quite out of scale. The opportunity for operating industry within this neighbourhood has actually increased. By removing the vacant out of scale buildings, eliminating unacceptable land used practices, and integrating industry within the urban fabric facilitates a pedestrian scale that will eliminate this perception. Infil of land use adjacent existing buildings that lack urban form or scale reduces their impact through the creation of an urban edge.

Adjacent existing single family residential, the land use developed works to reflect the existing street context and scale. Where existing blocks have been decimated by inappropriate industrial expropriation, change of owner or tenant will require restructuring to restore a pedestrian street scale.

Increased densities and building scale have been incorporated along the waterfront edge, where higher public use is intended. The larger scale buildings and intensification of use is proposed to result in a more engaging landscape, reflecting the history of the harbour while incorporating alternative land uses that enhance experiences.

Hillyard Street, existing as the main access road to the International Harvester plant has been redesigned as a boulevard. The street width is reduced to incorporate boulevard parking and landscape, creating a human scale that permits the intensification of diverse land use, building scale and density.

Along Burlington Street the restoration of the urban edge is proposed through infil, and reconfiguration of an existing industrial strip mall. Boulevard landscaping is introduced where possible to augment the restoration of human scale.

Prototype residential lots have been developed based on existing characteristics, which are quite urban in nature. The lot width ensures a stable urban repetition. The provision to increase lot width was determined to ensure consistency in the form, while accommodatingly diverse housing types, and higher densities.

10.3 Structure and Form

The existing street pattern was used to structure the proposed new development. All existing and proposed North-South axis conclude with a focal point or landmark. Land Street extends East-West, formally concluding at the International Harvester Plant. The street axis is extended to the proposed Central Square, concluding the vista with a landmark. Ship Street is reconfigured to work within the context of the existing grid. Minor streets are introduced within the context of this grid working to create urban scaled blocks

A civic space is created through the introduction of the Education Centre. Nodal interventions from the Education Centre are placed to frame the proposed development, and provide the community with common gathering spaces.

Collective public space is provided on a regional and neighbourhood level along the waterfront, through the education centre and the nodal interventions. Neighbourhood collective public space is provided through the courtyard and Central Square. A form of collective public space is to be programmed within areas designated as special needs zoning. The collective public space is intended to provide community support and programming.

The framing of the site by the main urban elements are designed to provide structural clarity. The location and design of the Education Centre are proposed to create a civic presence. Pedestrian links are provided to all urban elements.

In most cases parking and loading remains restricted to the rear yard. Two small surface lots are provided, and three above grade parking garages, but in all cases where parking is permitted criteria for landscape and screening is regulated. Boulevard parking is provided to reduce the requirement for surface parking, again complying to landscape criteria. Underground parking is to be built under the education centre and easterly waterfront edge to accommodate the high densities anticipated.

The structure of this community incorporates several opportunities for innovative living spaces and land use, ensuring a truly diverse and plural environment. While many of the urban form issues from new urbanism have been studied, I have chosen to discount the prescribed forms of housing type, and limited consideration of mixed use which I believe limits peoples experience, creates a facade environments that will truly fail to be a place.

Historic urban principals, and new urbanism have been studied to establish scales and ratios for street width and pedestrian paths. Historic urban principals often have a tighter ratio than that established by new urbanism. The European street edge often has a very tight street rhythm that becomes difficult to facilitate in a north American environment. Although strong urban form is a goal of this thesis, the scale and densities of the existing context must be considered. These models must be studied, but it is important to develop urbanity indigenous to the existing context.

10.4 Connections

The Cities industrial cultural history supports the premise of this neighbourhood development. The Education Centre and nodal interventions incorporate programming to facilitate people in understanding their past, developing sustainable growth patterns, and rehabilitating their space.

The existing industrial fabric is integrated within the development recognizing the cultural history, while establish growth patterns that enrich these dichotomies.

The storey of the place is relayed through landmarks, open space, focal points and land use. Physical connections are made through vistas, pedestrian links and street grid.

10.5 Environment

The recognition of the environment to sustainable growth is intrinsic to development. The restoration of existing land use is too often ignored. The fact that none of this site is truly natural, except for the inlet is quite disconcerting. This man made development has destroyed all connections to nature, which has jeopardised our ability to understand and appreciate the relevance of this place.

The proposed development will work to instill a neighbourhood commitment to the repair of damaged space and sustainable development through education and participation in the rehabilitation of their own space. This is theorized to become a way of life for the people of this community, advancing the philosophy that people are an important part of nature and not a separate entity, cultivating the relationship between the natural social and built environment.

The focus of the education centre on our cultural history is integral to the educational directives working to support industry, the community and municipality in establishing development patterns that address land use, existing infrastructure, transportation, environmental degradation and sustainable growth patterns, that support a model for subsequent development.

10.6 Transportation

One of the first steps in addressing alternative means of transportation is providing the densities and diversities of land use that will support a public system. Large developments of single use zoning will create peak periods that do not support a fully integrated system.

Many theories are being explored from light rail transit, to providing smaller more flexible vehicles. The densities and diversities of this development may be high enough to support a public system, but without many of these cluster developments the viability of traditional public systems are questioned.

This thesis has incorporated as part of the education centre a transportation node to explore ideas for integration of innovative means of moving people. Ideas such as common cars and linkage of future transportation nodes could be explored. Within the development we have introduced shared parking and reduced parking requirements. A strong pedestrian infrastructure and the integration of diverse land use patterns will reduce the necessity of car dependancy within the development.

The structure of Burlington Street will limit the ability to fully restore the Hamilton harbourfront, particularly in the east end. To continue development patterns that work to restore human dignity, community growth, and environmental responsibility the east section of Burlington Street, and the overpass will need to be completely removed, and reworked as a higher volume boulevard. This is likely only to be feasible with a strong public transportation system in place.

10.7 Sprawl

If the total costs to the community could ever be calculated, the problem of sprawl would be a dead issued. Using the existing urban infrastructure we have provided a community that could support approximately 3200 residents, 3000 students, and a workforce of 1100 people. Studies have confirmed that the integration of diverse land use patterns along the waterfront would lead to economic growth.

There is likely not a considerable tax revenue generated by the existing land users within this development, alternatively if progressive tax incentives, or escalating tax structures were created to intensify and diversify development, the taxes generated long term would be substantial.

Two hundred million has be published to complete the Red Hill Expressway extension from the mountain to the Queen Elizabeth Way, based on the forecasted growth of the mountain. If proposed development patterns were focussed on intensification perhaps strong public infrastructure systems and humanization of existing street networks is feasible. Providing economic viability within the urban areas will work to strengthen the existing downtown, reinforcing the downtown improvement through public transportation connections.

10.8 Regulations

There has been a conscious attempt to reduce the restrictions and regulations that control land use. The focus has been on how the spaces will perform, pedestrian scale, the creation of an urban edge, and natural light. The regulations have focussed on providing diverse land use patterns that will not disrupt or provide discomfort to adjacent user groups.

Many regulations are structured to protect people against the small percentage of development that a governing authority perceives as "ugly" or not conducive. The result is communities that are rather stagnant and limited. The aesthetics of these developments are designed to a set marketable formula. These are the regulations that I have eliminated. Not only are many housing types allowed they are encouraged. The result is that the majority of houses will still be built to a this set marketable formula, but additionally their will be houses will either fail or be rich creative compositions. What will be maintained is a rhythm and urban edge.

10.9 Employment and Economics

As a result of providing diverse functions withing this neighbourhood plan, it is theorized that employees will be attracted to these work environments, as they become more habitable and humanized.

The proximity of the education centre will enable employee development, stimulating a higher skilled work force, exchange of ideas, and attract the employers dependent on this skilled labour. The economy is consistently becoming more depended on a higher skilled workforce, thereby jeopardizing the sustainability of communities that fail to recognize the importance of the cultural and recreational facilities that encourage and maintain this work force.

Often daycare, training and recreational facilities, open green space, form part of the new work place. All these facilities would be integrated within the neighbourhood plan. These diverse functions within the neighbourhood plan will attract both employer and employee.

Part of the programming of the Education Centre will be the inclusion of incubator companies. This provides continuing skills development, while enabling independent career development. The neighbourhood code provides for live work units to form part of the site programming. These units have the opportunity be independent or work in conjunction with the Education Centre Incubators.

This proposed neighbourhood plan works to recognize that economic development must acknowledge the importance of the social and environmental issues, developing regional strengths through education, and sustainable responsible land use practices.

10.10 Education

The Education Centre is proposed to be the catalyst for this development. We are consistently made aware of the importance of education to success in a knowledge based economy. The Education Centre is proposed to facilitate this growth, working in conjunction or as an extension of the existing academic institutions in the community.

The Education Centre will explore diverse ways of learning, while strongly participating in enabling the community to repair damaged spaces and develop sustainable business practices. Programming at MacMaster University is currently deeply involved with the industrial community in these functions through research and development. The Education Centre proposed to incorporate and extend similar functions. Many successful small business ventures have been generated through this integration. The mandate for the Education Centre would also ensure cultural and social development.

10.11 History of Place

The development of this neighbourhood plan has been integral to the history of this place. The framework reflects the character, and history working to reinforce the values of the people, and stabilize a community that has had consistent negative intervention. Only when the community is secure will spiritual and intellectual growth occur.

The retention of industry within this development recognizes the intrinsic culture of this place, acknowledging and preserving the tradition of a community. The commitment and contribution this community has made to Hamilton's industrial past, is not discounted, conversely environments are provided for the community to share, celebrate and communicate their past stories.

The Educational infrastructure integral to this development is proposed to further solidify community relationships that will enable growth that encourages plurality.

The neighbourhood plan provides a structure to encourage various non-traditional housing types and land use patterns. It is proposed this will encourage diversity in race income and age. The theory is that a diverse mix of people creates diverse employment opportunities, intellectual stimulation, and a plurality of opinions ensuring the opportunity for discovery.

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