

Canadian Brownfields Case Study

Pier 8 Redevelopment



Source: Waterfront Shores Corp.

Figure 1: The Pier 8 Redevelopment will dramatically change Hamilton's West Harbour by providing a mixed-use, transit-supportive and pedestrian-friendly waterfront community.

PROJECT SUMMARY

The redevelopment of Pier 8 is a key component of revitalizing and redeveloping Hamilton's West Harbour. In 2018, the City of Hamilton approved Waterfront Shores Corporation as the preferred proponent to deliver a \$140 million redevelopment project that transforms the 13-hectare brownfield into a mixed-use, transit-supportive and pedestrian-friendly community (Figure 1).^{1,2} This post-industrial shipping yard won the 2020 Brownie Award for the Best Large Project and was recognized for innovative approaches that bring the site into a development-ready state, as well as the site's risk management strategy.^{3,4} This project is a central piece of the City of Hamilton's larger efforts to restore the West Harbour area from a heavy industrial era into a developable area that better the local community and the City as a whole.

History

The Hamilton Harbour is located at the most western tip of Lake Ontario and is separated from Lake Ontario by a natural sandbar.⁵ In the 1800s, the Burlington Shipping Channel opened to connect the Hamilton Harbour to Lake Ontario. The deep waters of the harbour and the arrival of the Great Western Railway positioned steel and iron industries to dominate the economies of the areas surrounding the Hamilton

Harbour.⁶ The industrial waterfront was where Hamilton grew its reputation as one of Canada's major manufacturing and steel hubs.

By the 1980s, the Federal and Provincial Governments identified the Hamilton Harbour as an "Area of Concern", as the industrial activity and rapid urbanization had severely polluted and degraded the harbour.⁷

To date, all three levels of government have progressively worked

QUICK FACTS

Location

Hamilton, Ontario, Canada

Project type

Waterfront Brownfield Revitalization

Site size

13 hectares (32.12 acres)

Land uses

Mixed-Use Residential and Commercial, Institutional, Parks and Publicly Accessible Open Spaces

Keywords/special features

Industrial Shipping Yard, Waterfront Redevelopment, Innovation, Sustainability, Complete Community

Website

<https://www.hamilton.ca/build-invest-grow/planning-development/waterfront-redevelopment/pier-8-development>

Project address

65 Guise Street East, Hamilton, ON L8L 8B4

Brownfield Awards

2020 Brownie Award: Best Large Project Award

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Case studies were prepared as a course assignment by students enrolled in PL8312/PLE845: Brownfields & Sustainable Development, School of Urban and Regional Planning, Toronto Metropolitan University (Winter 2023). Information for the case studies was obtained from online sources, available reports, and, in some cases, site visits and direct communication with stakeholders.

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on environmental remediation, recovery and restoration efforts in the harbour.⁸

In the late 19th and 20th centuries, urban waterfronts transformed as rail and road transportation advanced. Furthermore, many shipping industries departed and relocated from Hamilton's West Harbour due to the high Canadian dollar, high energy prices, and overseas competition. Therefore, leaving behind large parcels of land that are vacant and contaminated.⁹

Over 30 years ago, less than 5% of Hamilton's shoreline was accessible to the public.¹⁰ In 2000, the City of Hamilton and the Hamilton Port Authority reached an agreement that the West Harbour Area would be separated from the industrial uses in the East Harbour Area, which resulted in the City taking ownership of Piers 1, 2 and 5-8 lands. Therefore, providing an opportunity for a transition to non-industrial land uses.¹¹ The West Harbour encompasses the lands bounded by the Hamilton Harbour to the north, York Boulevard to the west, Cannon Street to the south and Wellington Street to the east.¹²

In response to the ownership change and gradual disappearance of heavy industry and commercial port activity, the City of Hamilton established the West Harbour Secondary Plan (Setting Sail) to guide detailed development decisions and identify the City's priorities for publicly-funded initiatives.¹³ The West Harbour Secondary Plan is

a culmination of planning processes that began in 2002, which included a Study for land use, transportation and infrastructure opportunities and challenges, as well as an extensive series of public consultation events, and an integrated Environmental Assessment Master Plan.¹⁴ The waterfront, the Barton-Tiffany area located south of the CN Rail Yard, and the former industrial lands along Ferguson Avenue, known as the Ferguson-Wellington Corridor, were emphasized as three areas where major change is appropriate and desirable in the West Harbor Secondary Plan.¹⁵ Pier 8 is located in the waterfront area identified in the West Harbour Secondary Plan.

Site Characteristics

Pier 8 is located on the south shore in Hamilton's West Harbour area. It is approximately 13 hectares of land, and is located at the most southern part of Hughson Street North and Catherine Street North. At various points in time after 1940, Pier 8 was filled and has a long history of industrial and commercial land uses related to port activities. This includes boat storage and maintenance, storage of shipping cargo, phosphate fertilizer storage, commercial activities, transportation uses, and recreational uses.¹⁶

Land uses to the east and south of Pier 8 are predominantly residential and institutional. Land uses to the west of Pier 8 are predominantly commercial and recreational, including the

Marina and revitalized Pier 4 Park, Bayfront Park and Hamilton Waterfront Trails. The CN Hamilton Rail Yard and West Harbour GO Station are also located east of Pier 8.

When the City acquired ownership of Pier 8 in 2000, a 3.3 hectares portion in the west of the Pier was kept by the Federal Government, which includes institutional and recreational uses. In 2015, the Federal Government transferred the 3.3 hectares to the City of Hamilton, thus completing the puzzle of redeveloping Pier 8.¹⁷

Today, the west portion of Pier 8 is still occupied by the former Discovery Centre building, along with a Williams Fresh Cafe, an adjacent park and an outdoor year-round rink. The remaining portion of Pier 8 is mostly vacant, however, some construction and infrastructure works have begun (see Figure 2).

Redevelopment Project

Over the past decade, the City of Hamilton in collaboration with other public and private organizations, have been involved in many projects and initiatives to advance the City of Hamilton's waterfront redevelopment. Specifically, the City of Hamilton has allocated \$140 million to redevelop and transform the West Harbour into a mixed-use, transit-supportive, and pedestrian-friendly waterfront community.¹⁸ In 2011, City Council approved the Waterfront Development Corporation Capital Project to commence key studies to accelerate the public and private



Figure 2: 2016 Aerial Imagery of Pier 7 & 8 Prior to Environmental Work.



Figure 3: Construction Activities Occurring in the Summer of 2021.

sector development of Piers 5-8. This included site servicing, geotechnical, soils, remediation, development phasing, marketability, and valuation studies (see Figure 3).¹⁹

In 2018, the City of Hamilton Council confirmed the selection of the Waterfront Shores Corporation as the preferred proponent for the purchase and development of Pier 8. The Waterfront Shores Corporation is a single-purpose consortium that includes four core partners: residential and mixed-use developers Cityzen Development Corporation and Fernbrook Homes Group; specialized soil remediation and construction services GFL Environmental Inc.; and; real estate investment and assessment management expertise Greybrook Realty Partners Inc. The design team for Pier 8 is comprised of KPMB Architects, gh3, superkul, and Omar Gandhi Architect.²⁰

The proposed redevelopment of Pier 8 is expected to transform the brownfield site into a new waterfront community.²¹ This new community will be developed across 16 development blocks, comprised of 4.9 hectares of parkland and public space, 2.7 hectares of new roads, and 5.4 hectares of residential, mixed-use, and institutional development.²² In terms of the built areas of Pier 8, the breakdown includes 119,850 square metres of residential area, 6,400 square metres of commercial area, and 2,477 square metres of institutional area (see Figure 4). The proposed development includes a total of 1,292 residential units (1,277 condo units and 65 affordable units), 1,376 parking spaces, and various non-residential use blocks (i.e. fitness, restaurant, personal services, etc).²³

Pier 8 is a key part of the City's strategy to redevelop the West Harbour area as the redevelopment increases public access to the water's edge by providing 40% of the site to be publicly accessible. This includes two parks, a beach, a cultural plaza and an additional 1.6km of walkable space.²⁴

Waterfront Shores has also proposed a number of urban innovations for Pier 8, which include unique building design, configuration and materials to shield from close

proximity industrial nuisances; long-term sustainability measures to eliminate natural gas consumption; public art strategy; smart cities incubator and; WELL Building Certification that is focused on the health and well-being of residents and visitors (see Figure 5).²⁵

Key Challenges

As a former industrial shipping yard site, innovative approaches were required to bring the lands into a development-ready state. The lands included in the site remediation and risk management strategies included Piers 5-8.

In order to bring the lands into a development-ready state, engagement across public and private sectors was required to remediate and develop an efficient risk management strategy. The public-private partnership directing the trajectory to bring Pier 8 into a development-ready state is between the City of Hamilton and Dillion Consulting.

Environmental work began in 2014 to fulfil the requirements of the Ministry of Environment and Climate Change (MOECC).²⁶ An environmental site assessment noted that as piers 5-8 were built on dumped fill and used for various industrial shipping activities, in many areas, soil testing showed levels of heavy metals, oils and solvents. Another notable concern was a large area of leaked heating oil in the northeastern end of Pier 8.²⁷ Thus, requiring a phase two environmental assessment, additional groundwater testing, formal risk assessment, remedial strategy, and mitigation measures to make Pier 8 suitable for residential and commercial uses, as well as obtain a Record of Site Condition (RSC) for the development blocks.²⁸ RSC (#231065) provided that hard cap, fill cap, fencing, and sub-slab vapour barriers were installed on Pier 8 as Risk Management Measures, along with several monitoring

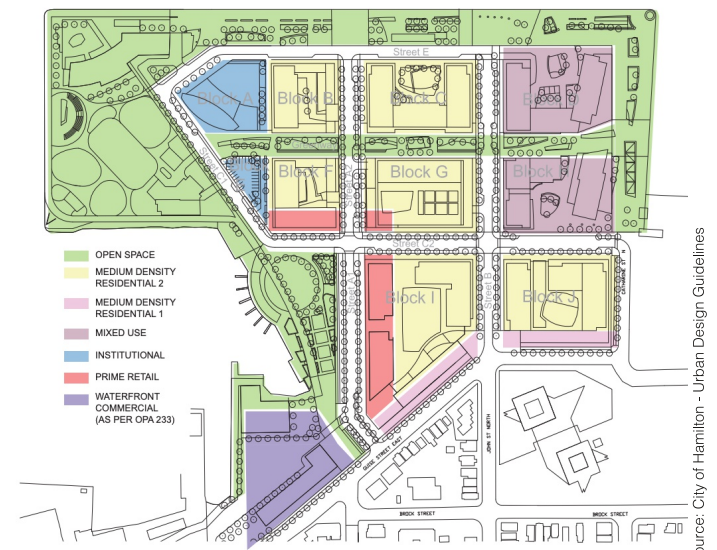


Figure 4: Proposed land use plan for Pier 8.

wells that were drilled and installed for groundwater monitoring. Risk Management Measures for each of the future land use blocks are provided in the Certificate of Property Use (CPU).

Another key challenge in the redevelopment of Pier 8 is the compatibility of surrounding land uses, which includes the active harbour to the east and the CN railway yard to the west. Two surrounding industrial companies (Bunge Canada and P&H Ltd) appealed the redevelopment of Pier 8 as they were concerned new residents would complain about their operations. Negotiations resulted in an agreement between the City of Hamilton and the industrial appellants, which includes a change in orientation and design in Pier 8 buildings to create sound and visual barriers, as well as ensure outdoor amenity spaces do not face the industries and that the new building meets higher environmental noise guideline standards with noise mitigation measures.²⁹

Financing and Funding

The City of Hamilton is recognized as a municipal best practices leader as the municipality has numerous programs to promote brownfield redevelopment, including: ERASE redevelopment (tax-increment) Grant; Downtown/West Harbourfront Remediation Loans; Environmental Study Grants; Tax assistance programs and; municipal acquisition and partnership program.³⁰ The ERASE Study Grant program provides



Figure 5: The Pier 8 Redevelopment provides residents and visitors ease of access to the water's edge year-round with over 40% of the site dedicated as parks and publicly-accessible space.

50% of the cost of a Phase II or Phase III Environmental Site Assessment which includes \$20,000 per study or \$35,000 project maximum for studies per project. The West Harbourfront Remediation Loan includes a low-interest loan at 0% and a maximum repayment period of 5 years. Both these programs have been developed to stimulate redevelopment on brownfield properties in Hamilton's

West Harbourfront.³¹

The City of Hamilton estimated a total cost of environmental work to be \$2,175,000 for the environmental investigation and remediation of Piers 5 to 8. Initially the City Council committed approximately \$1,200,000 for environmental work. However additional funds were required for phase two environmental site investigations, obtain a Record

of Site Condition, and complete environmental clean-up to support future development.³²

As the City of Hamilton currently owns Pier 8, Waterfront Shores Corporation is expected to pay at least \$41,000,000 for the land and the final cost will be dependent on the market value upon completion.³³

Benefits and Lessons Learned

Although timely, the risk assessment for Pier 8 was completed as a single submission for each of the 16 development blocks. This resulted in a fast-tracked developed process and a single CPU.

The City of Hamilton was able to attract more interest from private developers and increase the market value of the development blocks because of the risk assessment and RSC for Pier 8 that Dillion Consulting and the City of Hamilton conquered.

Ultimately, this project benefits the local community, the City of Hamilton as a whole, and the visitors, as this project brings the public closer to the water's edge!

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