

# THE EVERGREEN ON BLACKBURN ONE PLANET ACTION PLAN

**PREPARED FOR:** 





#### **OPL ENDORSED**



The project team acknowledges the peoples and land of the Algonquin Anishinabe Nation. The project team honours all First Nations, Inuit and Métis peoples and their valuable past and present contributions to this land.



This One Planet Action Plan was created by Urban Equation. Urban Equation

is a leading strategic sustainability and development consultancy with a proven

# TABLE OF CONTENTS

SECTION 1 INTRODUCTION	4
SECTION 2 OUR STORY: ALL SAINTS	6
SECTION 3   PROJECT CONTEXT	8
SECTION 4   WHAT MAKES THE EVERGREEN UNIQUE	12
SECTION 5 OUR PLAN	22

# SECTION 1 INTRODUCTION

# Humanity is at a crossroads.

Life on our planet is undergoing unprecedented upheaval.

In North America, we are consuming at a rate that far exceeds our planet's resources. We are consuming as if we have not one planet, but five.

As we enter what many call the defining decade to address our warming climate, the outlook remains bleak. Even if all the current pledges made by global governments were fulfilled, we would still fall short of limiting warming to 1.5C. The heat waves, floods and wildfires of 2021 clearly signal that urgent action is needed to avoid a climate tipping point.

In addition to increasing climate challenges, we are also underdelivering on many of our social foundations. This is causing widening inequality and growing social discontent around the globe.

# A bold, new vision to ensure our future.

While Canada's commitment to the Paris Accord is a good start, reducing our carbon emissions is no longer enough. We need to actively regenerate the living systems on which we depend, and for that we need a bold, new vision.

That vision is "one planet living".

At its heart, one planet living is a vision of a future where it is both attractive and affordable for people to live happy, healthy lives within the limits of our planet's finite resources. It is a world view that not only allows us to reconnect with and live in balance with nature, but to actually regenerate nature and to regenerate our relationships with one another.

# One Planet Living®: A framework for sustainability.

As well as being a world view, one planet living—or One Planet Living®—is also a framework to help citizens, companies and governments create a sustainable future.

One Planet Living® is unique in that it is universal. Its 10 Guiding Principles cover all aspects of social, economic, and environmental sustainability. It addresses all phases of a project, from design to construction, through to operations, programming, and personal lifestyle choices. In this way, One Planet Living embeds sustainability into a project's DNA rather than making it a stand-alone topic.

One Planet Living also reminds us that sustainability is a journey that doesn't end when the doors to a new building open. As we get deeper into the decade that will define the world we leave future generations, it's more important than ever that we find ways to collaborate and walk this journey together.

# The Evergreen: Redefining Sustainability.

At The Evergreen, Windmill Developments is continuing to redefine sustainable development in Ottawa.

One Planet Living will guide our approach to developing a complete and comprehensive plan that will tackle climate change, build resilient communities, and regenerate the living systems around us.

This document represents the preliminary One Planet Action Plan (the Plan) for The Evergreen. The Plan will be submitted to Bioregional, the third-party verifier of One Planet Living community plans.

If Bioregional endorses the project's One Planet Action Plan, The Evergreen will become the second development in Ottawa, and only the third in Canada, to receive this international status.



One Planet Living's 10 Principles address all aspects of social, economic and environmental sustainability



All Saints Anglican Church was a fixture of the Sandy Hill community for more than 100 years. Unique in many ways, All Saints once hosted a Royal wedding, it boasts a rare set of bells, and it has heritage-designated stained-glass windows, one of which is dedicated to Sir Robert Borden while others are World War I memorials.

However, in 2014, the Anglican Church finally decided to sell the property due to the cost of maintenance and a declining congregation.





It was at that time the community stepped in to save the nationally historic building – and reclaim it as an inclusive space. In 2014, they created a working group called 'Save the Saints,' and identified several priorities for the property, including :

- Restore the heritage building;
- Maintain a large open space;
- Develop a vibrant art scene;
- Create a space for all members of the community (not just gentrification);
- Create interesting programming opportunities, such as a music venue, restaurant, coffee shop, and more; Create interesting outdoor space and patios;
- Contribute to the City's housing crisis;Act as an anchor for Prime Ministers' Row;
- Be an example of good, sustainable development; and,
- Contribute to the reinvigoration of Laurier Avenue.

Eventually, the property was purchased by a partnership of local residents and business investors. Together they led a rezoning process to allow for re-development and restoration of the property. Guided by the priorities established by Save the Saints, they created a restaurant and event space, and formed a new community anchor that welcomes neighbours in a relaxed atmosphere to enjoy good food and great company.

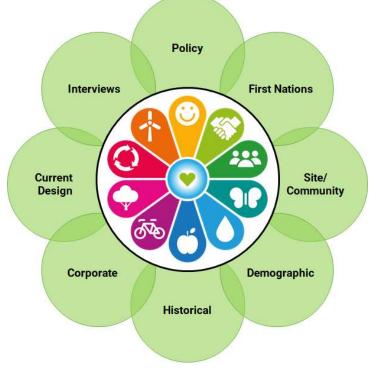
Fast forward to 2023 and the newly named 'allsaints' is ready to take the next step as it partners with the local development community to add new housing and amenities to Sandy Hill. This One Planet Action Plan reflects our early vision for the new development.



# SECTION 3 PROJECT CONTEXT

#### **Development Context Filters**

The project is a product of its local context. It has been shaped by an exploration of local policy, history, current conditions, and other site-specific factors. These, and other filters, are used to inform the projects' approach to sustainability, ensuring the new development optimizes wellness, minimizes its ecological footprint, and capitalizes on opportunities presented by the project location and / or community. The pages that follow summarize this.



# The Site

# Current Site.

The Evergreen is a mixed-use development proposed in Ottawa's historic Sandy Hill neighbourhood.

Located at 315 Chapel Street, the site currently hosts the allsaints event space and restaurant, parking and landscape areas. Spanning approximately 0.62 hectares, the site is bounded by Laurier Avenue East to the north, Chapel Street to the west and Blackburn Avenue to the east. The site also neighbours the Laurier House National Historic Site.

#### Design.

The new development will be a 10-storey mixed-use building, with 121 residential units. Coupled with the existing event hall, restaurant and café in the existing church building, the new development will offer a wide range of services to meet the evolving needs of the Sandy Hill community. The new development will consist of approximately 102,600 square feet.

The project will preserve the historic Anglican Church, constructed in 1900 in Gothic Revival style, which is a designated heritage building. The current design does include demolition of the existing 2-storey Bate Hall.

A key feature of the current design is a high-performance, pre-fabricated building envelope. Additional design features include geothermal heating and cooling, two levels of underground vehicle and bicycle parking, as well as dedicated green space along Laurier avenue.

# **Community Context**

#### Access to nature and recreation.

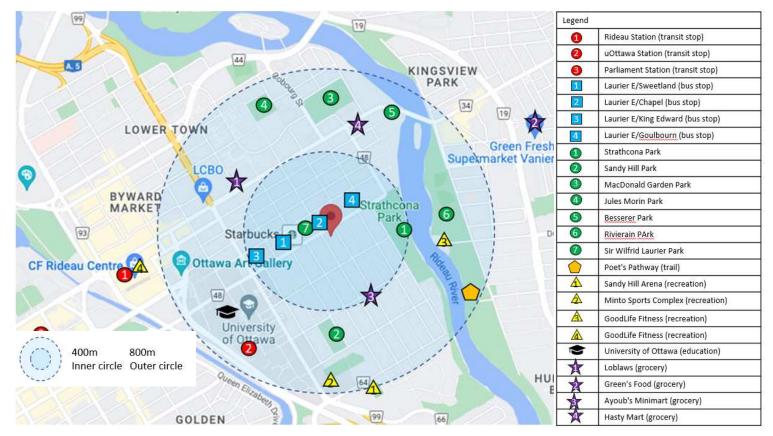
The Evergreen is located in a vibrant, green neighbourhood that provides plentiful recreational opportunities to its residents. The site is a quick walk from a number of large parks, including Strathcona Park, Sandy Hill Park, MacDonal Garden Park, and Rivierain Park to name a few. Furthermore, The Evergreen is only steps away from both the Rideau River and the Rideau Canal, where residents can enjoy various recreational activities year-round. Additional recreation centres in the surrounding area include the Sandy Hill Arena, the Minto Sports Complex, and the Rideau Sports Centre.



Strathcona Park, Ottawa



Laurier House, Ottawa



#### Transit and connectivity.

The Evergreen is a highly connected site. According to walkscore.com, the location is "very walkable" (walk score of 85), a "biker's paradise" (bike score of 99) and has "excellent transit" (transit score of 84).

Transit service is currently provided along Laurier Avenue E by OC Transpo Route 5, with bus stops located directly in front of the The Evergreen site. Additional transit service (routes 7, 12, 14 and 18) is available on Rideau Street, approximately 430m walking distance from the site.

#### Neighbourhood culture and amenities.

Sandy Hill is a unique neighbourhood rich in history. It is only minutes from Parliament Hill, the Byward Market, and the University of Ottawa which makes it a very accessible and convenient place to live. Sandy Hill was the once the wealthiest and most prestigious neighbourhood in Ottawa, providing residence to many famous Canadians including former Prime Ministers Sir John A Macdonald and Sir Wilfred Laurier, Sir Sanford Fleming, Archibald Lampman, Billy Bishop, and Oscar Peterson. In addition to its natural beauty and rich history, Sandy Hill also boasts accessible amenities and a variety of community programs, events, and services.

# Policy Context

#### Ottawa Official Plan.

In October 2021, the City of Ottawa approved a new Official Plan that will guide growth and redevelopment in Ottawa for the next 25 years. The Plan centers around five big moves and is supported by several other plans that provide additional layers of detail around the City's ambitions. Windmill intents to ensure the development aligns with and supports these big moves.

Ottawa Official Plan Big Policy Moves

- Growth Management: Achieve, by the end of the planning period, more growth by intensification than by greenfield development.
- 2. Mobility: By 2046, the majority of trips in the city will be made by sustainable transportation.
- 3. Urban and Community Design: Improve our sophistication in urban and community design and put this knowledge to the service of good urbanism at all scales, from the largest to the very small.
- 4. Climate, Energy and Public Health: Embed environmental, climate and health resiliency and energy into the framework of our planning policies.
- 5. Economic Development: Embed economic development into the framework of our planning policies.

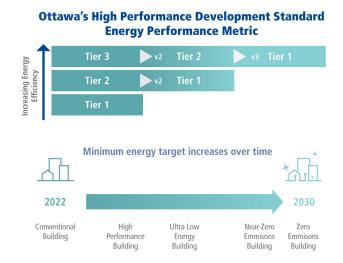
#### **Energy Evolution.**

Energy Evolution is Ottawa's action plan toward reducing greenhouse gas emissions to zero by 2040 within the corporation, and by 2050 city-wide. Its vision is to transform Ottawa into a thriving city powered by clean, renewable energy.

Energy Evolution is one of eight priorities in the Climate Change Master Plan – the City's overarching framework to reduce greenhouse gas emissions and respond to climate change imperatives.

# Ottawa High Performance Development Standard (HPDS).

Stemming from the Official Plan, the HPDS was approved by Ottawa City Council in 2022. The HPDS establishes performance targets for new construction that will help the City achieve sustainable development and climate change goals. While Tier 2 of the Standard is not yet fully defined by the City, Windmill is aiming to meet both Tiers 1 and 2 to demonstrate our commitment to the City's effort to create sustainable communities.



# Cultural Context

#### First Nations.

The site is located on traditional and unceded territory of the Algonquin Anishinaabe peoples.

# **Corporate Context**

#### Windmill Development Group.

Founded in 2003, Windmill is a visionary real estate company focused on creating happy, healthy communities within the resources of our planet.

With a commitment to pursuing One Planet Living endorsement across its projects and an internal 'impact standard' to guide its work, Windmill continues to lead the way in sustainable development throughout Canada.



#### All Saints Developments Inc.

All Saints Developments Inc. is the result of a neighbourhood movement to transform a former Anglican Church into an inclusive urban space. It was founded in 2016 by people who believe that heritage preservation matters and that development can be done better.

The prominent stone building now houses a restaurant and event space. It is a place reclaimed: where friends eat, drink, celebrate and connect.



# SECTION 4 WHAT MAKES THE EVERGREEN UNIQUE

# One Planet Living: A holistic approach to sustainability

The Evergreen is not another run-of-the-mill urban infill project. The stakeholders involved in this project have ambitious goals to leverage the synergies between residential condos, and on-site community amenities. They aspire to create a community that sets itself apart from other developments around Ottawa.

This bold vision requires a bold approach. To guide our path to sustainability, we are using the One Planet Living (OPL) framework. One Planet Living is one of the most holistic sustainability frameworks available to us today. One Planet Living helps create thriving, ecologically responsible communities by encouraging projects to consider sustainability from a triple bottom line perspective – people, planet and prosperity—and across all project phases, including design, construction, operation, and community living.

To achieve One Planet Living, Windmill Developments has prepared this preliminary One Planet Action Plan (the Plan). By addressing all 10 principles which make up One Planet Living, this preliminary Plan establishes direction for the project and is meant to inspire the design team, stakeholders and the broader community.

When completed the Plan will align with the Ottawa High Performance Development Standard, as well as One Planet Living endorsement and LEED Platinum.

# **Our Guiding Themes**

While this Plan addresses each of One Planet Living's 10 principles, it also identifies three "Big Moves."

Collectively, the Big Moves act as The Evergreen's north star. They will influence how we design and build the project, how the building will be operated, and how the project can influence future residents to make lifestyle and behaviour choices that contribute to the overall sustainability of the community. Each Big Move touches on elements of one or more One Planet Living principles. They reflect priorities identified through the context study and workshops; it is the Big Moves that will give The Evergreen its unique and recognizable public identity.

#### Our 3 Big Moves:



ECOLE STON YARDS

Reducing our Ecological Footprint

Creating Dynamic and Inclusive Spaces



Inspiring our Circles of Influence

# O1 BIG MOVE

# REDUCE OUR ECOLOGICAL FOOTPRINT

How we consume has a profound impact on our ecological footprint. Currently we consume far more resources than what the earth can replenish, so applying a social and environmental lens to procurement is critical to reducing our collective impact. Starting with a design that uses less will be our baseline. From there, a focus on materials with low-embodied carbon, and materials from Bate Hall, will become priorities. Operationally, our journey continues by sourcing local food and healthy, sustainable products that can reduce our footprint and improve health outcomes.

Under the Reduce our Ecological Footprint Big Move, we will explore:

- Re-use of Bate Hall materials
- Low-carbon construction
- Procurement of recycled consumables
- Procurement of local food
- Promotion and procurement of healthy products
- Zero Carbon design

# BIG MOVE

# CREATE DYNAMIC AND INCLUSIVE SPACES

Part of Ottawa's cultural landscape since the turn of the 20th century, allsaints is part of a long and complex secular history that continues to evolve. However, its role as a space of service and gathering for the local community continues to remain at the core of allsaints'. New development will blend welcoming and inclusive spaces that connect the past and the future through art, music, innovation, and local partnerships.

Under the Dynamic and Inclusive Spaces Big Move, we will explore:

- Support for local businesses
- Creation of interactive gathering spaces
- Integration of local art and music
- Design of smooth spatial transitions
- Acknowledgement of All Saints' history through design
- Programming including community events, workshops, and more

# OB BIGMOVE

# NURTURE LOCAL COMMUNITY

Located in one of GTA's most diverse neighbourhoods, 2444 Eglinton aims to build upon a strong sense of place by authentically reflecting local voices, blended with community-driven design excellence.

- Under the 'Nurture Local Community' Big Move, we will explore:
- Community gardens
- Locally owned retail
- Public art
- Daycare facility
- Medical/dental clinic
- Community kitchen
- Access to healthy food

# **Our Approach**

The Evergreen One Planet Action Plan is a living Plan. It will continue to evolve with new thinking, innovation, and local and global trends. In addition, ongoing collaboration with the design team and community leaders will continue to foster new ideas that will help us deliver a building we, and the community, can be proud of. In this way, Windmill will ensure the Plan stays meaningful, relevant, and impactful.

With that in mind, the Evergreen One Planet Action Plan is also grounded in several initiatives that are part and parcel to how Windmill approaches development on each of its projects. These include a foundational commitment to carbon, community, sustainable living and innovation.



# Carbon

The Evergreen represents the first of many near-zero carbon residential projects. From the very inception of the development, The Evergreen has embraced the commitment to 'Zero Carbon' aligning itself with global best practices.

As the construction industry increasingly focuses on environmentally responsible solutions, low carbon structures emerges as a promising avenue to address climate change concerns and create a more sustainable and resilient built environment. As part of incorporating low carbon structures, Windmill is exploring the use of alternative pre-fabricated systems, to reduce both operational and embodied carbon.

Additionally, the incorporation of a geo-exchange systems for heating and cooling further supports the decabonization of the built environment. As a result, The Evergreen will significantly reduce greenhouse gas that results from operating the building. In fact, the fully electric building will only use natural gas (a fossil fuel) for back up power when needed.

# Community

Windmill is committed to creating communities that leave a positive impact. As leaders in the development industry, we have an obligation to learn from, and deliver benefits to each of the communities we build in.

At Evergreen our Community Benefits Plan aims to provide real understanding of the local community to ensure local culture, history and needs are well understood. This leads to an individually tailored plan that aims to provide real, impactful social and economic benefits to the community.

The Evergreen Community Benefits Plan includes social hiring requirements to provide opportunities to equityseeking groups, promote diversity, equity and inclusion through social procurement, and support local workforce development.



# **One Planet Lifestyle**

Individually, our lifestyles and day to day choices have a significant impact on both our communities and the environment. The way we get to work, how we dispose of waste, and even our diets - collectively have profound ecological and social impact. At Evergreen, our goal is to empower our residents to reduce these impacts.

Our approach to one planet living begins by paying attention to the role a home plays in our ecological footprint. At The Evergreen, residents will be provided with a head start towards one planet living simply by moving into a zero carbon building.

To continue the journey, residents will be introduced to a new community committed to sustainable living. A community rich in local amenities, pedestrian-friendly avenues, coupled with education and programming, Evergreen's lifestyles will strike a balance between modern comforts and eco-conscious choices. Combined, one planet living lifestyles, and a healthier planet, are within reach.

#### Innovation

The project has a unique and synergistic location adjacent to a historic church structure that serves the community as a restaurant, bakery and event space preserving the neighborhood's cultural heritage. Furthermore, the preservation of the existing church creates opportunities for community redevelopment, bolstering the local economy.

The potential use of prefabricated structure contributes the reduction in construction waste, further reducing the ecological footprint. Unlike conventional materials, the prefabricated system offers adaptable floor plans, enabling flexibility to meet market and housing demands.

The prefab nature necessitates active collaboration among all stakeholders involved in the project. This cross-country collaboration and the transfer of knowledge between provinces exemplifies the importance of sustainable relationship building and progress within green building sector.





# Endorsement from Bioregional.

This document represents the preliminary One Planet Action Plan for The Evergreen. Once the Plan is fleshed out with a full set of goals, indicators, targets and strategies, it will be submitted to Bioregional, the third-party verifier of One Planet Living community plans.



# A roadmap.

This One Planet Action Plan is the guiding document for the The Evergreen development.

When complete, it will serve as the roadmap for the design team, ensuring the development's sustainability outcomes are meaningfully addressed.

As The Evergreen moves beyond the design phase, the Plan will also evolve to include strategies to integrate sustainability into construction, operations and, once the project has been built, community life.



# **OPL TARGETS**

The following key performance indicators and targets are being pursued on all OPL endorsed projects where relevant.



# Sustainable Transportation

- 25% of parking stalls with Level 2 EV chargers and 75% EV Ready infrstructure
- 3 low carbon mobility options provided

- 0.5 Parking ratio per unit

# Zero Waste

- 90% of waste diverted during demolition and construction

# d Sustainable Food

one sustainable food

# **Sustainable Materials**

- 420 kgCO2e/m² Embodied carbon intensity

# Zero Carbon - The project is zer

- The project is zero carbon and combustion free





# **HEALTH AND HAPPINESS**

Encouraging active, social, meaningful lives to promote good health and wellbeing.

#### OUTCOMES

HH1 Residents are among the happiest in Canada

HH2 Residents are among the most physically active in Canada

HH3 Indoor and outdoor spaces are healthy, welcoming and comfortable

# ADDRESSED TOPIC AREA



Outcome ID	Key Performance Indicators	Baseline	Target
HH 1	% positive responses on self-reported health and happiness survey	67%	75%
HH 2	Walkscore or Bikescore	61	>80
HH 2	Minutes per week of moderate to vigorous physical activity	150	180
HH 3	% Of products that meet LEED Low emitting material requirement	N/A	95%
HH 3	% of residents that indicate common spaces are welcoming and comfortable	N/A	>75%



# **HEALTH AND HAPPINESS**

Encouraging active, social, meaningful lives to promote good health and wellbeing.

# STRATEGIES

# HH1: Residents are among the happiest in Canada

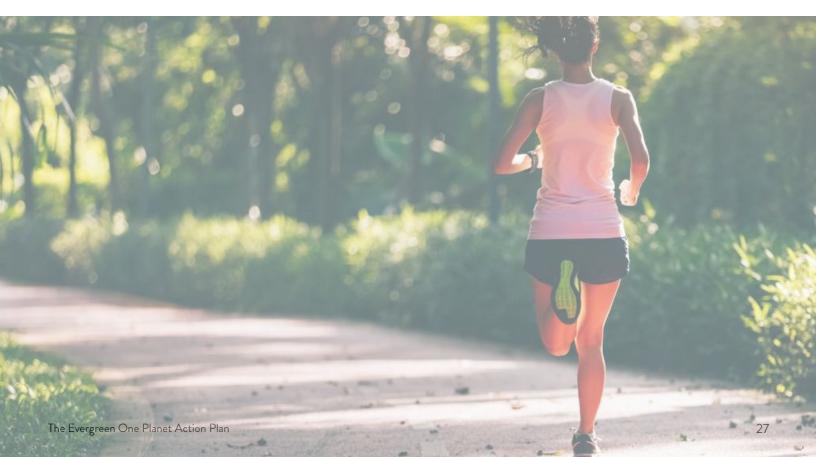
• Administer occupant comfort survey to collect anonymous responses regarding building amenities, programming, lighting, thermal comfort, air quality etc.

# HH2: Residents are among the most physically active in Canada

• Locate the project close to transit stations, walking and biking trails.

# HH3: Indoor and Outdoor spaces are healthy, welcoming and comfortable

- Develop an indoor air quality strategy that addresses carbon monoxide; eliminated fireplaces, woodstoves or unvented combustion appliances; ensures high quality filtration; ensures low emitting products; and prohibits smoking before and after occupancy
- Develop and implement a construction indoor air quality management plan
- Capture dirt and other particulates at all regularly used entrances.





# **EQUITY AND LOCAL ECONOMY**

Creating safe, equitable places to live and work which support local prosperity and international fair trade

#### OUTCOMES

EE1 Economic development opportunities are available to equity-seeking groups

# ADDRESSED TOPIC AREA



EE2 The project delivers local economic benefits





Outcome ID	Key Performance Indicators	Baseline	Target
EE1	% of construction jobs created for equity seeking groups	N/A	20%
EE2	# of total jobs created	N/A	TBD
EE2	% of residents that regularly shop local	66%	>75%



# EQUITY AND LOCAL ECONOMY

Creating safe, equitable places to live and work which support local prosperity and international fair trade

# STRATEGIES

# EE1: Economic development opportunities are available to equity-seeking groups

• Create jobs for equity seeking-groups

# EE2: The project delivers local economic benefits

- Prioritize hiring of local workers
- Support local economy by promoting local businesses to residents



# **CULTURE AND COMMUNITY**

Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.

#### OUTCOMES

#### CC1

There is a culture of sustainability that is rooted in indigenous knowledge and wisdom

### CC2

All residents feel a sense of belonging, regardless of physical ability, ethinic identity, age or economic means

#### CC3

The design embodies local culture and/or history to reveal its narratives

# ADDRESSED TOPIC AREA







Outcome ID	Key Performance Indicators	Baseline	Target
CC1	# of Community Benefits Plan Implemented	N/A	1
CC2	Eco-Concierge program implemented	N/A	Yes
CC2	% of residents who know all or most of their neighbours	24%	75%
CC3	# of artistic expressions installed onsite	N/A	1
CC3	% of residents familiar with the history of the site	N/A	>75%



# **CULTURE AND COMMUNITY**

Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.

## STRATEGIES

# CC1: There is a culture of sustainability that is rooted in indeneous knowledge and wisdom

• Create and implement a Community Benefit Agreement

# CC2: All residents feel a sense of belonging, regardless of physical ability, ethinic identity, age or economic means

- Implement eco-concierge
- Actively enagage with residents through an Eco-Concierge program to nurture a culture of sustainability that values environmental and social advocacy, participation and volunteerism.

# CC3: The design embodies local culture and/or history to reveal its narratives

- Enhance the beauty of the site, and support local artists, by installing one or more artistic expressions.
- Provide educational materials to residents to explain the projects' sustainable features and local history.



# 

# LAND USE AND NATURE

Protecting and restoring land and marine systems for the benefit of people and wildlife.

#### OUTCOMES

LN1 The natural cycles and resource flows of the local ecosystems are respected and regenerated

### ADDRESSED TOPIC AREA



LN2

Connections to the surrounding natural beauty and landscape create a love of nature





Outcome ID	Key Performance Indicators	Baseline	Target
LN1	Project specific biodiversity strategy	0	1
LN2	% of site covered by green, open and outdoor amenity spaces	N/A	30%
LN2	% of dwelling units with unobstructure, quality views to the outdoors	N/A	100%

# 

# LAND USE AND NATURE

Protecting and restoring land and marine systems for the benefit of people and wildlife.

# STRATEGIES

# LN1: The natural cycles and resource flows of the local ecosystems are respected and regenerated

- Plant trees along street frontages to encourage share and enhance biodiversity on and around the site.
- Plant only native, adaptive or drought-tolerant vegetation and consider our pollinator friends and other species in our planting strategy.
- Reduce bird collisions utilizing bird friendly glazing and/or using visual markers on glass.
- Ensure exterior fixtures are dark sky compliant.
- Install green and/or cool roof surfaces across the entire available roof area.
- Treat the site's non-roof hardscape with high albedo paving materials and/ or open grid pavement systems.

# LN2: Connections to the surrounding natural beauty and landscape create a love of nature

- Enable residents to connect with nature by providing outdoor amenity spaces.
- Design landscape encouraging 4 season interaction with nature
- Provide unobstructed view to the outdoors to enhance the health benefits associated with direct views of nature.
- Implement indoor biophilic design strategies.



# SUSTAINABLE WATER

Using water efficiently, protecting local water resources, and reducing flooding and drought.

#### OUTCOMES

SW1 Residents use less potable water

SW2 Water is celebrated as the source of life

SW3 Groundwater and surface water are protected

### ADDRESSED TOPIC AREA



OUTDOOR WATER USE

Outo	come ID	Key Performance Indicators	Baseline	Target
S	SW1	Water consumption per resident (m³/year)	76	36
S	SW1	% reduction of indoor potable water	N/A	50%
S	SW2	# of water features	N/A	1
S	SW3	% of rainwater infiltrated onsite	50%	50%

# SUSTAINABLE WATER

Using water efficiently, protecting local water resources, and reducing flooding and drought.

### STRATEGIES

# SW1: Residents use less potable water

- Install industry leading low flow fixtures and fittings.
- Do not use potable water for irrigation.
- Provide meter and sub-meters in appropriate locations to measure the water consumption on the project, and educate used on consumption.

# SW2: Water is celebrated as the source of life

• Provide at least one water bottle refilling station.

# SW3: Groundwater and surface water are protected

- Retain rainwater on site through infiltration and other low impact development strategies.
- Protext water quality through the long-term removal of total suspended solids from run-off leaving the site.





# LOCAL AND SUSTAINABLE FOOD

Promoting sustainable, humane farming and healthy diets that are high in local, seasonal, organic food and vegetable protein.

#### OUTCOMES

LF1 Residents have access to affordable, healthy, local food

#### ADDRESSED TOPIC AREA



LF2 The carbon footprint associated with food is minimized

(	Outcome ID	Key Performance Indicators	Baseline	Target
	LF1	# of sustainable food initiatives	N/A	1
	LF2	% reduction in meat/ dairy consumption	N/A	25%



## LOCAL AND SUSTAINABLE FOOD

Promoting sustainable, humane farming and healthy diets that are high in local, seasonal, organic food and vegetable protein.

### STRATEGIES

## LF1: Residents have access to affordable, healthy, local food

- Implement one of the sustainable food initiatives
  - CSA Baskets
  - Food programs
  - Education programs

## LF2: The carbon footprint associated with food is minimized

• Provide education materials to promote plant based diet, and reduce emissions associated with high-carbon diets.





## **TRAVEL AND TRANSPORT**

Reduce the need to travel, and encourage walking, cycling and low carbon transport.

#### OUTCOMES

TT1 Low carbon transportation options are the primary means of transport for residents and visitors

### ADDRESSED TOPIC AREA



Parking infrastructure is adaptable and flexible for future re-use and growth

TT2

Outcome ID	Key Performance Indicators	Baseline	Target
TT1	# of low carbon mobility options for residents	N/A	3
TT2	Parking ratio	0.5	0.5
TT2	% of parking spaces with Level 2 EV chargers	N/A	25%
TT2	% of parking spaces with EV Ready Infrastructure	N/A	100%



## **TRAVEL AND TRANSPORT**

Reduce the need to travel, and encourage walking, cycling and low carbon transport.

### STRATEGIES

# TT1: Low carbon transportation options are the primary means of transport for residents and visitors

- Locate the project close to transit station(s).
- Provide bike parking facilities that can accommodate electric bikes.
- Design for future micro mobility options, such as scooters and bike share programs.
- Provide safe, direct, universally accessible pedestrian routes that connect to off-site pedestrian and bike networks,
- Reduce single occupancy vehicle trips by encouraging active mobility.

### TT2: Parking infrastructure is adaptable and flexible for future re-use and growth

- Minimize the impacts associated with building on-site parking.
- Ensure all parking is electrified with no less than 25% of spaces installed with level 2 chargers.





## MATERIALS AND PRODUCTS

Using materials from sustainable sources and promoting products which help people reduce consumption.

#### OUTCOMES

MP1 Embodied carbon is reduced

MP2 Building materials are culturally appropriate and provide a healthy indoor environment for all occupants

#### MP3

Materials for building construction and operations are selected to minimize their life cycle impact

### ADDRESSED TOPIC AREA



Outcome ID	Key Performance Indicators	Baseline	Target
MP1	Embodied carbon intensity (kgCO2/m²)	N/A	420
MP2	No added urea formaldehyde products in the project	No	Yes
MP3	% of building occupants who report purchasing sustainable products and supplies	N/A	75%



## MATERIALS AND PRODUCTS

Using materials from sustainable sources and promoting products which help people reduce consumption.

### STRATEGIES

## MP1: Embodied carbon is reduced

- Conduct a life cycle assessment and identify low carbon material alternatives.
- All wood in the building will be procured from sources that follows sustainable forestry practices, cuch as FSC certification.
- Where possible, procure local materials.
- Purchase materials that have an environmental product declaration (EPD)
- Source responsible materials, such as those with extended product responsibility; include biobased content; are reuse; include recycled content; and/or are within 800 km of the project site.

# MP2: Building materials are culturally appropriate and provide a healthy indoor environment for all occupants

- Ensure no product has added urea formaldehyde
- Install moisture control measures in wet areas such as kitchen, bathrooms and laundry rooms

# MP3: Materials for building construction and operations are selected to minimize their life cycle impact

• Educate residents on how to purchase sustainable products.





## **ZERO WASTE**

Reducing consumption, reusing and recycling to achieve zero waste and zero pollution.

#### OUTCOMES

ZW1 Residents generate less waste

ZW2 The construction process generates less waste

ZW3 A sharing culture is developed and supported by building occupants

### ADDRESSED TOPIC AREA



**Key Performance Indicators Baseline** Target Outcome ID % of units with organic and recyclable collection systems ZW1 N/A 100% ZW1 Total residential waste generated (kg/person/year) 340 255 ZW2 % of waste diverted from landfill N/A 90% # of initiatives for sharing, selling, gifting or refurbishing used ZW3 N/A 3 durable goods



## **ZERO WASTE**

Reducing consumption, reusing and recycling to achieve zero waste and zero pollution.

### STRATEGIES

## ZW1: Residents generate less waste

- Provide cabinet space in all kitchen to support the segregated collection of recyclables, organics and garbage.
- Provide a central waste collection and waste diversion facility on the ground floor for garbage, recycling and organics collection.
- Provide space for bulky items, and a separate area for hazardous waste collection.

## ZW2: The construction process generate less waste

• Develop and implement a construction waste management plan to divert at least 90% of the total construction and demolition waste generated from landfill

## ZW3: A sharing culture is developed and supported by building occupants

• Provide opportunities for residents to donate and/or swap household items, furniture, etc. in good conditions.





## **ZERO CARBON ENERGY**

Making buildings energy efficient and supplying all energy with renewables.

#### OUTCOMES

ZC1 There are zero operational greenhouse gas emissions

### ADDRESSED TOPIC AREA



ZC2 Building occupants enjoy superior indoor thermal comfort year-around



(	Outcome ID	Key Performance Indicators	Baseline	Target	
	ZC1	The project is zero carbon and combustion free	N/A	Yes	
	ZC2	Thermal Energy Demand Intensity (TEDI)(kWh/m²/year)	N/A	<33	



## **ZERO CARBON ENERGY**

Making buildings energy efficient and supplying all energy with renewables.

## STRATEGIES

## ZC1: There are zero operational greenhouse gas emissions

- Do not install any equipment that requires combustion.
- Develop a commissioning plan and complete commissioning process to ensure the efficient operations of the systems.
- Provide meter and sub-meters in appropriate locations to measure the energy consumption on the project, and educate the users on consumption
- Design the building such that the majority of annual energy consumption is drawn from a geoexchange system

## ZC2: Building occupants enjoy superior indoor thermal comfort year-around

 Meet ambitious targets for Total Energy Demand Intensity (TEDI) and Total Enegry Use Intensity (TEUI) through passive design strategies such as, a lower window to wall ratio; a passive house level prefabricated envelope; a lower solar heat gain coefficient for glazing; and, an air tight envelope.



#### **Our Commitments**

This project is targeting the following sustainability commitments

**OHPDS** - Tier 2



#### LEED BD+C v4 – Platinum



#### **One Planet Living - Global Leader**



To achieve these ambitious goals, each project applies our Impact Standard. This internally developed standard outlines more than 100 detailed performance requirements that ensure we can deliver on the certification and endorsement commitments we have made. The Impact Standard is further supported by several other documents that provide the detail necessary to support those working on our projects (see the image below). Underlying the technical requirements is a process that ensures sustainability is woven into the DNA of the project. A robust engagement plan ensures everyone working on our projects understands sustainability, including the challenges we're trying to solve and how we work together to deliver. This engagement touches everyone, including planners, project managers, our design and construction teams (including trades), marketing and sales teams and future residents themselves.

#### **IMPACT STANDARD - Performance Requirements SUSTAINABLE** SUSTAINABLE PROGRAM/ SUSTAINABLE **SUPPORTING** DUE DILIGENCE DESIGN CONSTRUCTION ENGAGEMENT **OPERATIONS** DOCUMENTS CHECKLIST **GUIDELINES GUIDELINES** PLAN **PLAN SUPPORTING PROJECT COMPLIANCE TRACKER** TOOLS **OPL SCORECARD**

## Sources for Baseline Data

#### Health and Happiness

- HH1: The 2020 StatsCanada report for avergae life satisfaction in Canada was 6.71 on a response scale of 0 to 10.
- HH2.1: Walkscore data from Walkscore.ca is used by researchers in the fields of urban planning, real estate and public health. This resource indicates the average walkscore for Ottawa to be 45.
- HH2.2: The Heart and Stroke foundation is well known for its research in physical health. This research has led to a recommendation of at least 150 minutes of moderate to vigorous activity per week.
- HH3.1: No baseline data available.
- HH3.2: No baseline data available.

#### Equity and Local Economy

- EE1: No baseline data available.
- EE2.1: No baseline data available.
- EE2.2: The Canadian Federation of Independent Business conducted a sample poll and found out that 66% of Canadians say that they made efforts to shop local.

#### **Culture and Community**

- CC1: No baseline data available.
- CC2.1: No baseline data available.
- CC2.2: Pew Research Centre conducted research on various metrics related to community life including neighbourly relations. This study found that 24% of urban residents know all or most of their neighbours.
- CC3.1: No baseline data available.
- CC3.2: No baseline data available.

#### Land Use and Nature

• No baseline data available.

#### Sustainable Water

- SW1.1: The per capita water consumption has been extracted from City of Ottawa's Water and Wastewater review study.
- SW1.2: No baseline data available.
- SW2: No baseline data available.
- SW3: Building code requires 50% of rainwater recieved on-site to be retained.

## Sources for Baseline Data

#### Local and Sustainable Food

• No baseline data available

#### **Travel and Transport**

- TT1: No baseline data available
- TT2.1: The City of Ottawa has varrying parking requriements dependent on land use and location, in the Inner Urban Area of the city, the parking requirements for Mid-High rise Dwellings is 0.5 per dwelling unit.
- TT2.2: Ottawa currently does not have any requirements related to EV infrastructure in effect.
- TT2.3: Ottawa currently does not have any requirements related to EV infrastructure in effect.

#### **Material and Products**

• No baseline data available

#### Zero Waste

- ZW1.1: No baseline data available.
- ZW1.2: In 2019, Ottawa reported residents generated 338,894 tonnes of waste; with a population of 994,837 the average waste produced per person per year is 340.65kg.
- ZW2: No baseline data available.
- ZW3: No baseline data available.

#### Zero Carbon

• No baseline data available.

