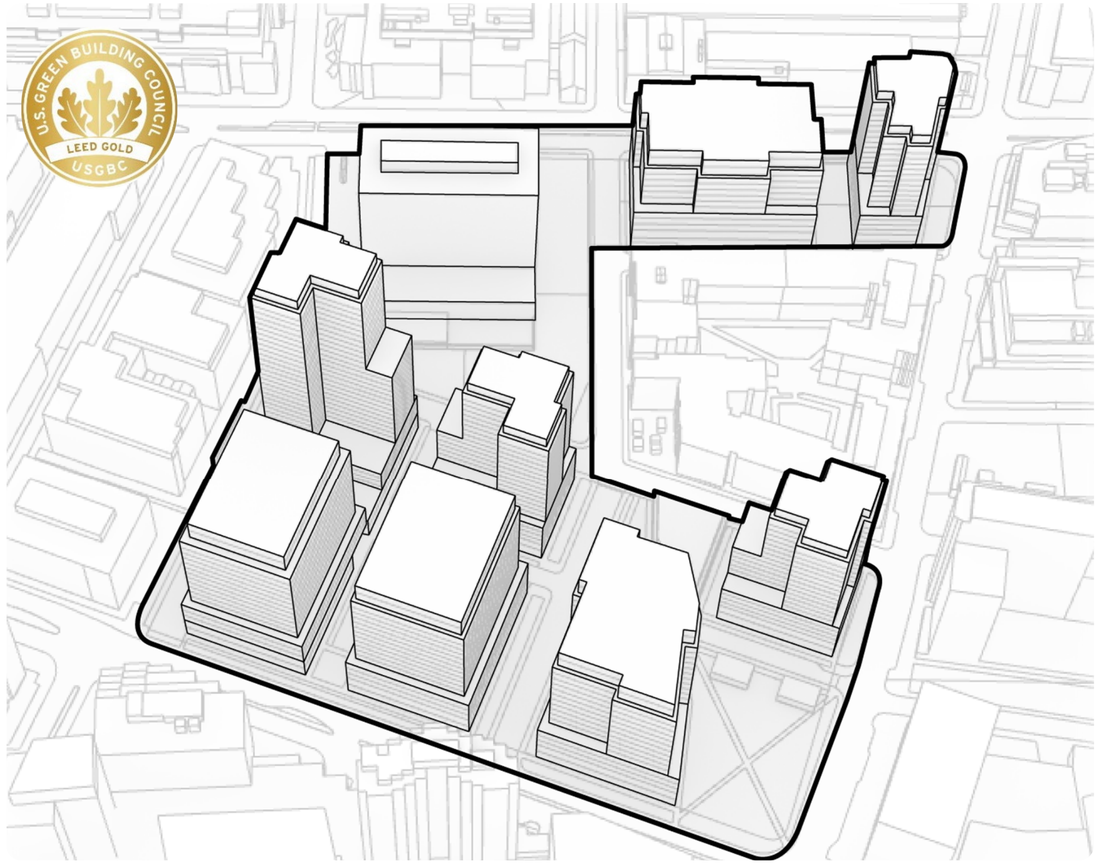
SUSTAINABILITY VISION



- **EFFICIENCY, ELECTRIFICATION, AND PATH TO NET ZERO CARBON**
- **EXEMPLARY ON-SITE WATER TREATMENT AND RESILIENCY APPROACH**
- **DESIGN FOR THE FUTURE OF TRANSPORTATION**
- **A SUSTAINABLE COMMUNITY**

EFFICIENCY, ELECTRIFICATION, AND PATH TO NET ZERO CARBON

RENEWABLE ENERGY

Rooftop PV where feasible.

Potential off-site PPAs or RECs for zero emissions electricity supply.

ENERGY EFFICIENCY

Building energy reduction of 15% from MA Stretch Code via:

Heat exchange between complementary programs.

High performance envelope.

Reduced plug loads.

Reduced lighting loads.

Efficient equipment.

Energy recovery.

ENERGY SUPPLY

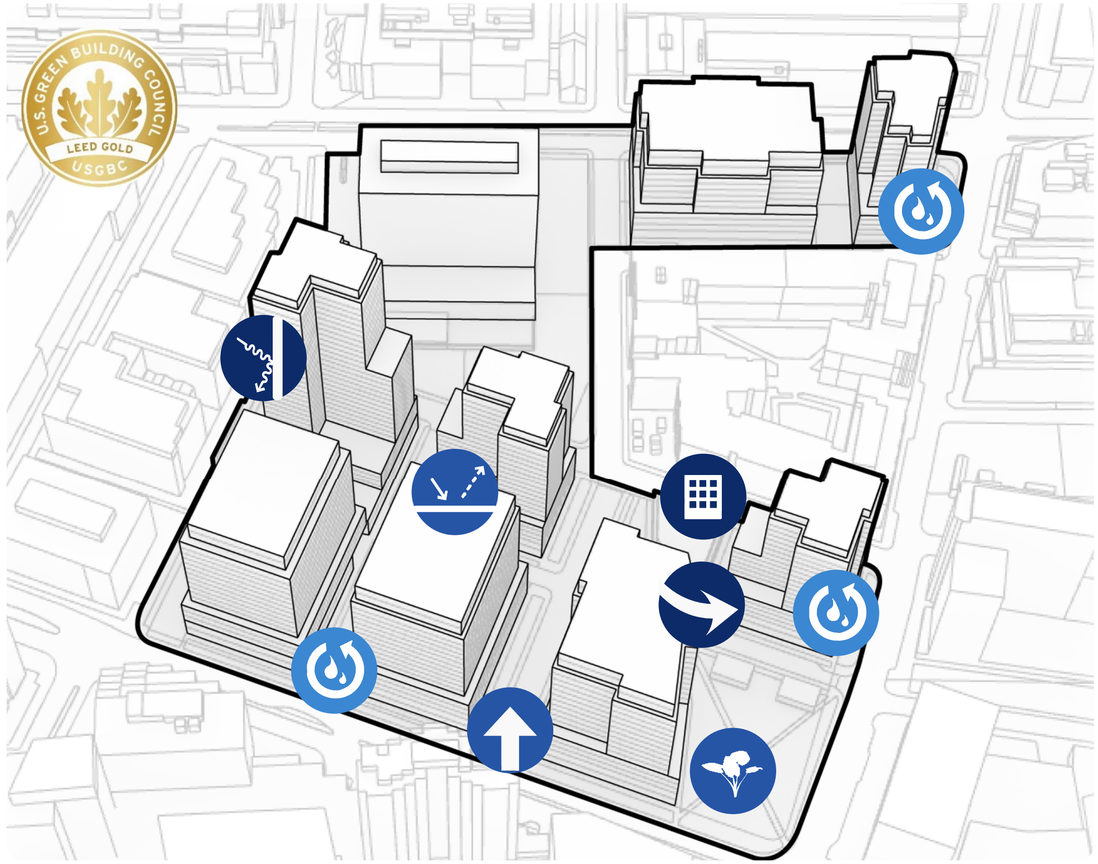
Reduction of on-site fossil fuel use with path to zero emissions site:

Electrified residential buildings.

Commercial buildings designed for future electrification.

PATH TO A NET ZERO OPERATIONAL CARBON EMISSIONS SITE.

EXEMPLARY ON-SITE WATER TREATMENT + RESILIENCY APPROACH



DISTRICT BLACKWATER TREATMENT PLANTS

Three phased blackwater treatment plants located below grade recycle all non-lab water for reuse in toilet flushing and cooling towers.

DESIGN FOR FUTURE 100YR/2070 FLOOD ELEVATION

Elevate all critical equipment.

Exceed minimum flood protection by designing ground floors for 21.4

Cambridge elevation (100yr/2070 event).

ON-SITE STORMWATER MANAGEMENT

Landscape infrastructure to manage stormwater runoff.

Preserve and create vegetation areas.

REDUCE URBAN HEAT ISLAND & INCREASE OUTDOOR COMFORT

Use reflective surfaces to reduce urban heat island effects.

Provide shading for increased outdoor pedestrian comfort.

Create diverse canopy for landscape longevity.

DESIGN FOR PASSIVE SURVIVABILITY

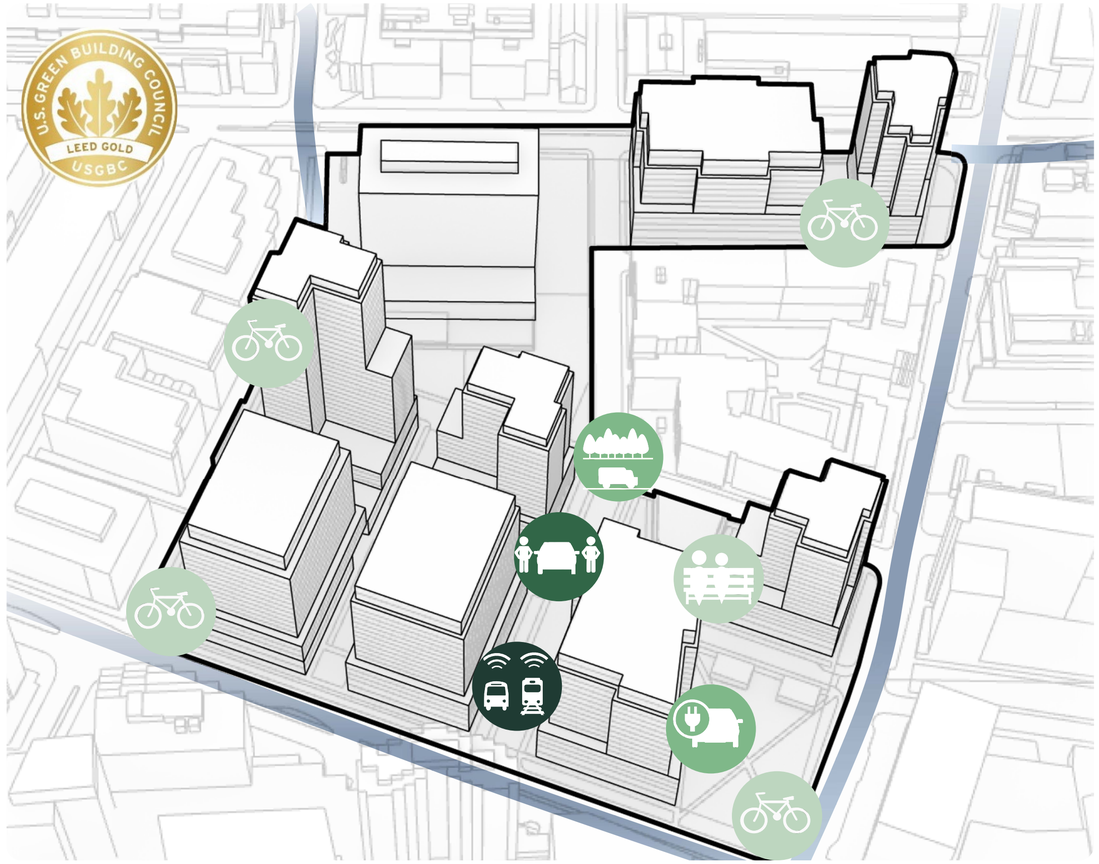
Provide natural ventilation in residential units.

Design insulated and shaded building envelopes.

IMPLEMENT AREA-WIDE STRATEGIES

THE VOLPE DEVELOPMENT WILL MAXIMIZE BUILDING WATER REUSE AND DESIGN FOR CLIMATE RESILIENCY.

DESIGN FOR THE FUTURE OF TRANSPORTATION



ENHANCED PEDESTRIAN AND CYCLE CONNECTIVITY

Integrated bicycle path network.

Shared bike facilities.

Pedestrian priority and active urban layer.

BELOW-GRADE EFFICIENCIES

Electric vehicle charging to encourage electric vehicle use.

Shared commercial and residential parking to reduce total capacity.

Plan for future adaptability of below grade parking area.

NEXT GENERATION OF SHARED TRANSIT

Car share facilities/locations.

Designate rideshare pickup points for efficient street use.

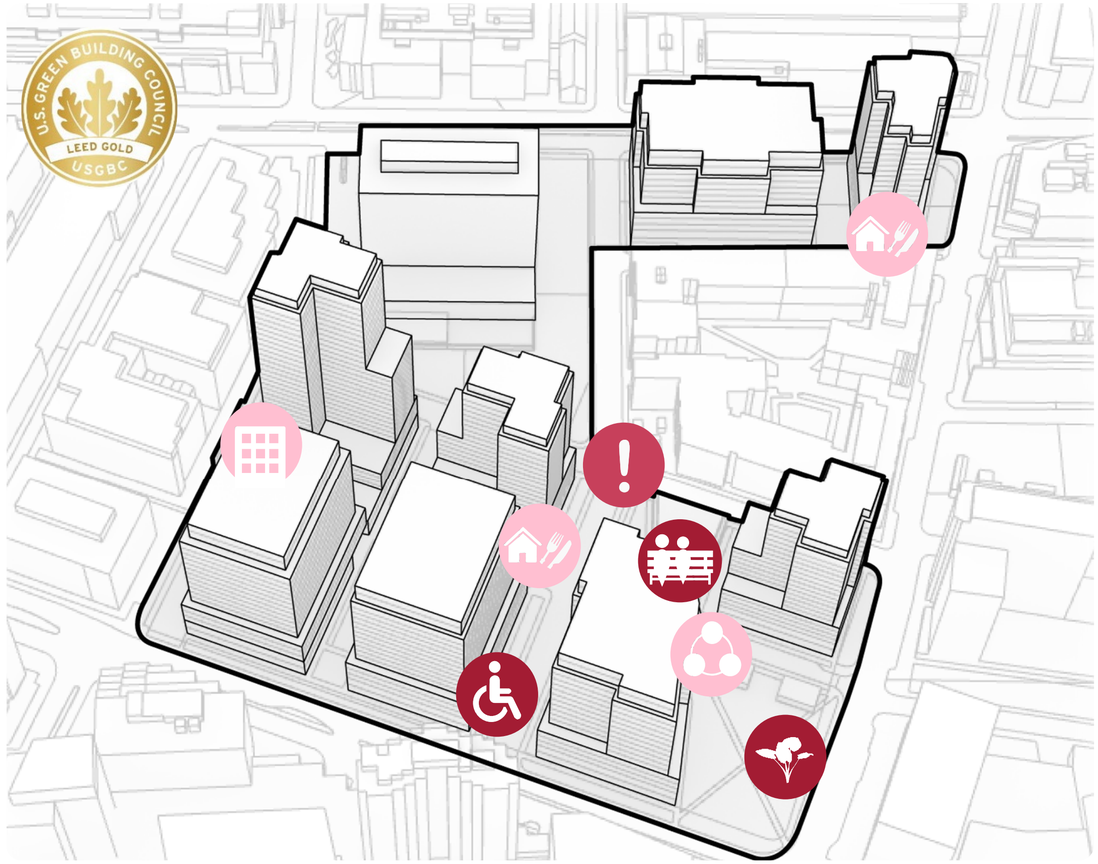
ENHANCED CONNECTION TO TRANSIT NETWORKS

Shuttle buses to Green Line/ North Station through CRTMA.

Transit dashboards for increased convenience and ridership.

THE DEVELOPMENT WILL ESTABLISH A WALKABLE COMMUNITY AND INTEGRATE INNOVATIVE TRANSPORTATION MODELS.

A SUSTAINABLE COMMUNITY



SUPPORT A THRIVING COMMUNITY

Provide community amenities and facilities, including Community Center.

Invite community participation in programming.

Create a retail mix that supports local business.

Promote local job opportunities through the Job Connector.

Housing mix includes affordable and larger family apartments.

PROMOTE SUSTAINABILITY AWARENESS

LEED v4 Gold buildings.

Design visible sustainability features.

Encourage community programming for sustainable living.

Provide energy dashboards and sustainability signage.

Sustainable community center to advance sustainability awareness.

DESIGN FOR HEALTH AND WELLBEING

Provide access to active public community spaces with multi-generational uses.

Design for green spaces of respite with visual connections vegetation.

Select materials for health and transparency in manufacturing.

Universal design and active design to promote physical mobility.

THE VOLPE DEVELOPMENT WILL ESTABLISH A DIVERSE MIXED-USE SUSTAINABLE COMMUNITY INTEGRATING HEALTH AND EQUITY IN DESIGN FOR COMMUNITY, CULTURAL, AND RESIDENTIAL BUILDINGS.