

FOOD

theme overview

planning & design decisions

goal

promote community-based food production

detailed design tasks

fostering sustainable living

Food production and distribution has become a global industry that functions less and less at a local scale. This causes significant greenhouse gas emissions, undermines the community's agricultural base, and weakens food security. Sustainable urban neighbourhoods move towards food sustainability by focusing on the social and economic benefits of local food production and processing, and on the opportunity to source local food products for distribution.

theme overview

why is this theme important?

Conventional food production and distribution can make a significant negative impact on the environment. This impact includes the cost of transportation, which is a staggering consumer of energy. Foods from the grocery store typically have traveled between 2,500 and 4,000 kilometers¹. A diet based on these imported foods can require four times more energy and generate four times more greenhouse gases than the same diet based on local production². Supporting locally grown food products can reduce the carbon footprint associated with transportation.

Support for local food production also ensures a sustained agricultural base in the community, which provides fresh, seasonal food, promotes the local economy and provides employment to residents. Opportunities for local food production and distribution include edible landscaping, community or allotment gardens, educational gardens and farms, local farms both within and around the community, community kitchens and micro-processing facilities, farmers’ markets, and food buying clubs.

Local agricultural systems can also support municipal infrastructure. Organic wastes account for 25 to 40 percent of municipal waste streams, and often end up emitting the greenhouse gas methane from landfills³. An off-site windrow system or an on-site in-vessel composter can recover and use these wastes to amend soils in agricultural production.

why is food important to emerald hills urban village?

As acknowledged in the Strathcona County Municipal Development Plan, “Farming communities are facing many difficult challenges, which in turn threaten the future of agriculture not only in Strathcona County, but throughout the Country. The cost of such things as fuel, fertilizer, chemicals, equipment as well as the cost of living, have steadily been outstripping the return on the commodities that farmers produce.”

“Agriculture contributes greatly not only from an economic perspective, but it adds significantly to the social, environmental, and aesthetic character of the community. Agriculture is and should continue to be an important part of the diversity that is Strathcona...”

how can emerald hills urban village impact on this theme?

Food production and distribution is a global industry that sustainable developments can engage locally. Design and programming strategies can create the spatial framework to support some amount of local food production and processing. Economic and social programs can support nearby farm operations and food processors. Once in place, this framework also provides the capacity for a community to respond to future changes in the food and transportation economy, and to take further steps towards sustainability.

summary table of goals and strategies for food

goal	charrette process strategy
Promote community-based food production.	Layer visible and accessible food production spaces throughout the Village.

¹ Halweil, B. Home Grown. Thomas Prugh, Editor. World-Watch Paper, 163. November 2002.

² Ibid.

³ Recycling Council of BC, Organics Working Group. The Dirt on Composting in British Columbia. April 2002.

planning & design decisions

general intent of this strategy / Food growing opportunities can be integrated into a neighbourhood in a layered way, with both public and private spaces used at different levels of intensity. While the central community gardens offer the most visible and concentrated food growth area, smaller garden plots can be incorporated throughout the Village, and edible native species can be incorporated into the landscaping design.



A community garden is incorporated into the central open space.



Many opportunities exist for balcony gardens throughout the site.



Edible species are incorporated into landscaping along corridors.



goal / promote community-based food production.

strategy / layer visible and accessible food production spaces throughout the village.

area i: institutional, residential, commercial

- Edible landscaping and native food species are incorporated into suncourts and other outdoor spaces, including along the greenway corridor to the south.
- Where appropriate, greenroofs incorporate food growing.
- Parcel-scale community gardens are incorporated into the suncourt.

area ii: residential, commercial

- Edible landscaping and native food species are incorporated into the courtyard and other outdoor spaces, including along the greenway corridor to the north.
- Where appropriate, greenroofs incorporate food growing.
- Parcel-scale community gardens are incorporated into the courtyard.

area iii: residential, commercial

- Edible landscaping and native food species are incorporated into the courtyard and other outdoor spaces, including the naturalized landscape corridor to the south.
- The East-West naturalized landscape corridor provides a linkage to the community gardens located to the southeast.
- Where appropriate, greenroofs incorporate food growing.

municipal reserve & public utility lot

- Community gardens are located along the greenway corridor as it opens out into the central open space, becoming a noticeable feature of the Village.
- Greenway corridors along the Municipal Reserve enhance the visibility and accessibility of the community gardens.
- Edible landscapes and native food species are incorporated into greenway design.

area iv: residential

- Edible landscaping and native food species are incorporated into the courtyard and other outdoor spaces, including the naturalized landscape corridor to the north.
- The East-West naturalized landscape corridor provides a linkage to the community gardens located to the northeast of the parcel.
- Small food plots are permitted in gardens of individual residences.

area v: residential

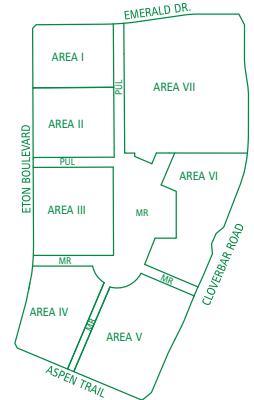
- Edible landscaping and native food species are incorporated into the courtyards and other outdoor spaces, including the naturalized landscape corridor to the north.
- The East-West naturalized landscape corridor provides a linkage to the community gardens located to the northwest of the parcel.
- Small food plots are permitted in gardens of individual residences.

area vi: residential, commercial

- Edible landscaping and native food species are incorporated into the outdoor spaces, including the naturalized landscape corridor to the south.
- The East-West naturalized landscape corridor provides a linkage to the community gardens located to the southwest of the parcel.
- Where appropriate, greenroofs incorporate food growing.

area vii: commercial, residential

- Edible landscaping and native food species are incorporated into the landscape design for the parking field.
- A strong siteline is maintained from the parking field down to the community gardens.
- The parking field offers an opportunity to operate as a location for a farmers' market on weekends in summer months.
- Where appropriate, greenroofs incorporate food growing.



detailed design tasks

general intent / This section highlights design tasks flagged during the charrette process as needing to be addressed during the detailed design process. LEED for Neighbourhood Development prerequisites and credits are to be satisfied.



Community gardens promote social interaction and are available to everyone.

detailed design tasks

- Develop a palette of appropriate plant species that can be incorporated into landscaping design as edible and/or native species.
- Ensure structural design of balconies allows for food planters.
- Research and identify opportunity to incorporate food growth into green roofs.

related leed-neighbourhood development credits

- LEED ND NDP Credit 16: Local Food Production

See www.usgbc.org for more information.



Rooftops provide additional opportunities for food production.



Incorporate edible native species into the landscaping design.

fostering sustainable living

general intent / The detailed design decisions that enable sustainable development at Emerald Hills Urban Village must also foster sustainable living. The Strategies and Initiatives/Activities identified below represent an initial framework and point of departure for generating a Fostering Sustainable Living Program at the Urban Village. They are intended to provide the integrated design team with the sustainable living lens that is to be applied to all detailed design decisions. It is recognized that these lists will evolve and be refined as the detailed design for the Urban Village emerges.

strategies

- Ensure detailed design of built environment supports on-site food production.
- Incorporate edible landscaping throughout the Village.
- Establish food production standards that minimize use of pesticides, herbicides and manufactured fertilizers.
- Engage all Village citizens in creating a sustainable food choices program.
- Create partnerships with local NGOs working on sustainable food issues.
- Leverage green purchasing power to support farmers and distributors, and build local capacity.
- Encourage local food vendors in CRU's.
- Introduce community-based social marketing (CBSM) programs to foster sustainable food choices.
- Promote awareness-building and community mapping.

initiatives / activities

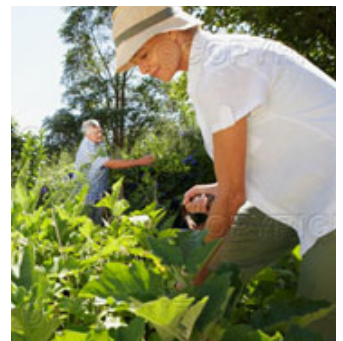
- Window and balcony garden box program for apartment residents.
- Village restaurant or café focused on local and organic produce.
- Community kitchen.
- Kitchen incubator dedicated to early-stage catering businesses.
- Farmers Market.
- Food box delivery program through Village Intranet with provision for drop-off and pick-up.
- Tours of local farms.
- 'Feast of Fields/Tastes of the Village' sustainable food event.
- Slow Food Chapter.
- The Sustainable Potluck.
- Community garden socials.
- Fruit and Nut Tree Project - edible landscaping harvest to support local food bank.
- 'Eating Smart' - CBSM program to foster sustainable food habits.
- 'Fantastic Food' section in the "Living Smart at the Village" intranet handbook.
- Village / community mapping of food smart products, services and opportunities.
- 'Fabulous Food' - a CBSM program to foster sustainable food habits.



Farmers markets draws the community together.



An incubator kitchen provides local business opportunities.



Backyard gardening becomes a family affair.