



East Ladner Edge Charrette

East Ladner, Delta, BC

Table of Contents

Agenda

Section 1: Instructions, Background and Resources

- Instructions
- Map of study area
- Background
- Key facts & assumptions
- Design table composition
- List of resources

Section 2: Charrette Goal, Principles and Objectives

- Goal
- Jobs Principle + Objectives
- Corridors Principle + Objectives
- Walkability Principle + Objectives
- Natural Areas and Parks Principle + Objectives
- Infrastructure Principle + Objectives
- Housing Principle + Objectives

Section 3: Design Brief Pull-Outs

- Group 1: Edge pull-out
- Group 2: Civic Centre pull-out
- Group 3: Route 17 pull-out

Section 4: Design Targets + supporting documents

Section 5: Visual Resource

SFU Surrey Centre
Room 630, 13450 102 Avenue, Surrey, BC

thursday 25 may:

welcome & plenary session

8:30 to 10:00 Plenary session all

- Four-day Program and Logistics Fraser Basin Council/Deana
- SxD Overview: Regional Presentation Patrick Condon
- Design Charrette Agenda and Instructions Ray Straatsma
- Review Resources and Materials 1:500/1:2000 Ortho Base Maps, etc.

working session

10:00 to 12:30 Full Participant Teams

- CORRIDOR: Kingsway Burnaby
- NODE: 200th Street Township of Langley
- EDGE: East Ladner Delta

lunch

12:00-1:00

working session

1:00 to 5:00 Design Teams only

SFU Surrey Centre
Room 630, 13450 102 Avenue, Surrey, BC

friday 26 may:

working session

8:30 to 12:00 Full Participant Teams

- CORRIDOR: Kingsway Burnaby
- NODE: 200th Street Township of Langley
- EDGE: East Ladner Delta

lunch

12:00 to 12:30

mid-course correction

12:30 to 1:00 Welcome & lunch all

1:00 to 2:00 Break-out presentations in work rooms

- Draft Sketches taped to wall
- Brief 15 minute presentation from each team Design Leader and Municipal staff
- 45 minute “Open House” Discussion of Draft Design results

working session

2:00 to 5:00 Design Teams only

SFU Surrey Centre
Room 630, 13450 102 Avenue, Surrey, BC

monday 29 may:

design review update

8:30 to 9:30

working session

9:30 to 12:30 Full Participant Teams

- CORRIDOR: Kingsway Burnaby
- NODE: 200th Street Township of Langley
- EDGE: East Ladner Delta

lunch (with team status reports)

12:00 to 1:00 Each team will review work complete & to-be-done

working session

1:00 to late Design Teams only

SFU Surrey Centre
Room 630, 13450 102 Avenue, Surrey, BC

tuesday 30 may:

working session (through lunch)

- 8:30 to 1:00 Full Participant Teams
- CORRIDOR: Kingsway Burnaby
 - NODE: 200th Street Township of Langley
 - EDGE: East Ladner Delta

working session

- 1:00 to 2:00 Presentation preparation

final presentation

- 2:00 to 4:00 Plenary in SFU Surrey Lecture Theatre
- Draft Sketches taped to wall
 - 20 minute presentations from each team Design Leader and Municipal staff
 - 60 minute “Open House” review of Draft Design results

instructions

The role of the design team is **to collectively design a concept plan that incorporates the goals, targets, and other design factors laid out in the Design Brief**. The final result will be a concept plan that achieves the vision identified by stakeholders and input received from experts through the workshop and charrette process. As such, it will represent a conceptual, sustainable plan for the study area that has been designed by the community.

In creating this design, the design team must apply the targets to the identification of constraints and illustrations of possible resolutions to the design questions. These targets – developed from the goal and objectives established with input from the municipalities and representative stakeholders – are organized around the six Sustainability by Design principles:

- 1 GOOD AND PLENTIFUL jobs CLOSE TO HOME**
- 2 MIXED USE corridors ACCESSIBLE TO ALL**
- 3 FIVE MINUTE walking DISTANCEⁱ**
- 4 ACCESS TO natural AREAS AND PARKSⁱⁱ**
- 5 LIGHTER, GREENER, CHEAPER, SMARTER infrastructure**
- 6 DIFFERENT housing TYPESⁱⁱⁱ**

To facilitate the application of these targets, the design team will initially be divided into three breakout groups responsible for two principles each. In this case, the “Edge” team will break out into groups corresponding to certain geographic areas within the study area. These areas were chosen based on the three key issues/areas which emerged from workshop dialogue, i.e. the ‘edge’, the civic centre, and highway 17, including the intersection with Ladner Trunk Road.

The focus of discussion and design for each breakout group are the key design questions, main outputs and targets relating to their assigned principles. Each breakout group will examine existing conditions and opportunities/constraints, and will develop a series of strategies for achieving the outputs and targets within these conditions.

Once established, the breakout group strategies will be applied by the whole design team to the creation of a 1:2000 scale, colour illustrative plan representing the entire study area in 2050. Members from the individual breakout groups will provide the “expertise” on their design solutions for the relevant principles, targets and strategies. In developing the master plan, members from different breakout groups must negotiate with each other to resolve areas of overlap.

A flow of dialogue and information should be maintained between the breakout groups to negotiate areas of overlap between targets, and to draw on the expertise of participants assigned to other groups. Team members are encouraged to initiate dialogue with any other team member wherever appropriate.

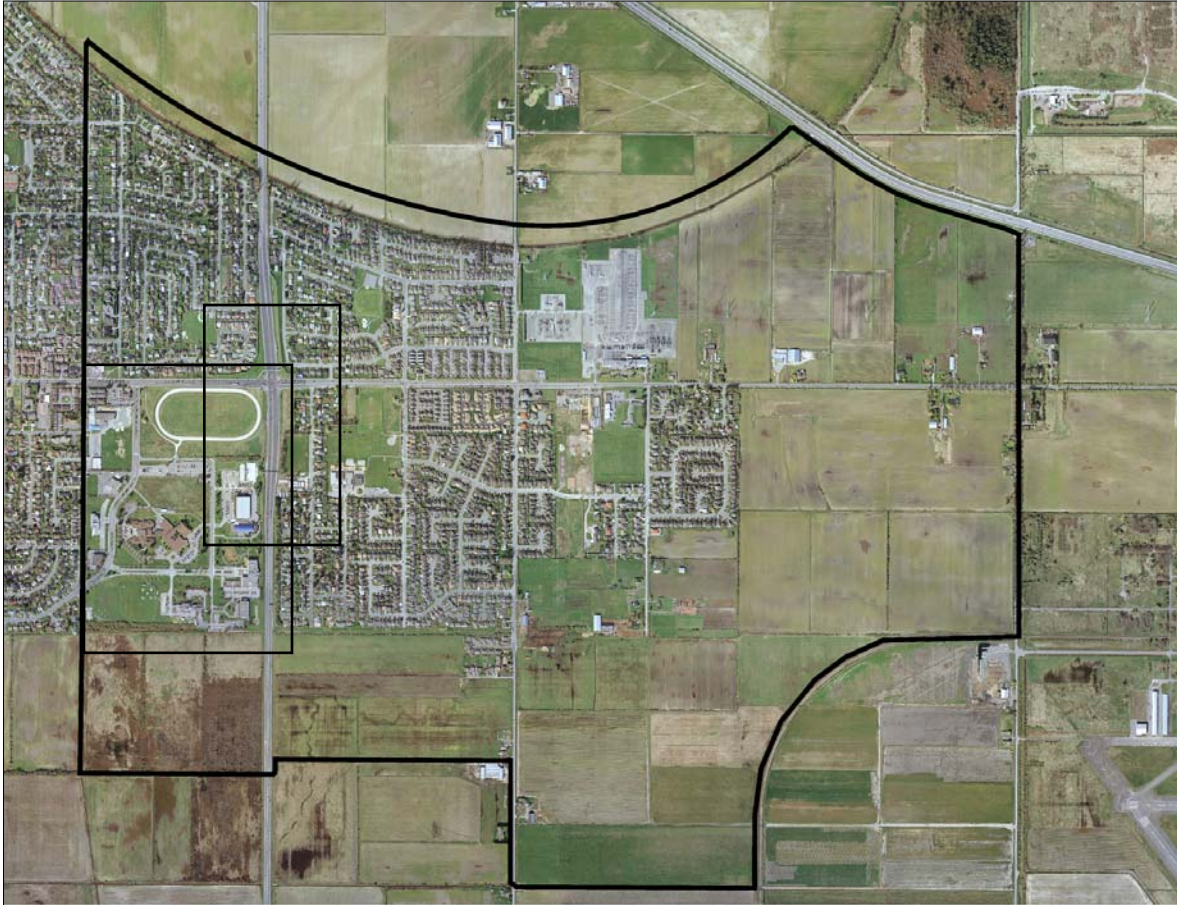
And remember...think like it's 2050.

ⁱ Principle title changed to **WALKABILITY** and the **PUBLIC REALM** for the Edge team.

ⁱⁱ Ibid. **NATURAL** areas **AND PARKS**.

ⁱⁱⁱ Ibid. **HOUSING** and **DENSITY**.

map of study area



The East Ladner, Delta “Edge” charrette study area encompasses an area that is defined by a northern boundary which roughly follows the edge of Crescent Slough, with a western boundary along 57th street, an eastern boundary along 72nd street, and a southern boundary just above the BC rail right-of-way, including land in the Agricultural Land Reserve (ALR).

It is a total area of approximately 1425 acres (576 ha).

background

East Ladner edge

Study purpose:

To provide compelling illustrated design concepts of the East Ladner study area based on current city policy and land-uses together with future growth estimates, to facilitate and implement a long-term sustainable build-out of urban and rural form, community, and street design over the next 50 years.

The following topics summarize three key issues to the study area, and are significant to consider when designing for future growth within the East Ladner community.

EDGE

The edges formed where urban development and agricultural land meet, is the primary focus of this charrette. What will these edges look like in 50 years, and how can the East Ladner community be designed to accommodate new growth for the future, while maintaining its valuable agricultural land base? In 50 years, how will these edges function, and how can we re-enforce and capitalize on these edges such that they contribute to and preserve the integrity of both land uses?

CIVIC CENTRE

The Delta Civic Centre and surrounding area presents an opportunity to become a key node within the community. It is a key location for developing some of the building densities for the estimated community growth in 50 years. Pertinent to this, the area already has a number of elements for developing a vibrant community node: a central transit exchange, recreation centre, hospital, and a central location at the crossroads of the community. How can this area accommodate future housing service and job space? How can potential future land uses within this area and along its edges be designed to integrate and connect the community? How can the Civic Centre district become the heart of the greater Ladner community and the Municipality of Delta?

ROUTE 17

As a consequence of the new South Fraser Perimeter Road, highway 17 will no longer cater primarily to truck and regional commuter traffic. As the bulk of traffic along this road is subsequently reduced, this creates an opportunity to rethink the primary role of this route. How can route 17 serve to connect, rather than divide the community? In what ways can this road and intersection be re-shaped to benefit East Ladner and serve as a vibrant entry point to the community? What elements are required in order to recreate this former highway into a locally-serving route?

Historic Soundbite⁴

Thomas Ladner was not one to miss an opportunity and was one of four partners to build the Delta Cannery in 1878, near Ladner's Landing.

In North Delta the construction of a cannery on Gunderson Slough in 1870 gave rise to a small Norwegian community that came to be known as Annieville. The slough is named after Norwegian pioneer Jacob Gunderson, who arrived in 1897 to work at the Anglo-British Columbia Cannery.

Some say Annieville was named after a Mrs. Laidlaw, whose husband owned the cannery, others say it was named after the wife of pioneer James Symes. The latter version, as told by long-time Annieville resident Edward Erickson, is the more colorful one: on a trip across the Fraser River to New Westminster, the slough was clogged with bullrushes and the crew of a skiff debated how to get through the reeds. According to Erickson, when someone asked who was going to pull the boat through the reeds, the answer came (in a strong Norse accent), "Oh, Annie vill."



Ladner street image courtesy Delta Museum & Archives-www.aabc.bc.ca

⁴ Historic Soundbite taken from [The Greater Vancouver Book: An Urban Encyclopedia](#), Ed. Chuck Davis, Linkman Press, Surrey: 1997, p. 144.

key facts & assumptions

Study area

Land area: approximately 1423.6 acres, (576 ha), (5,761,359.5 m²).

Projected Population & Housing

EAST LADNER - Population and Housing, Proj. Growth to 2050						
	2001	2025	2045	2050	2001 - 2050 Change Absolute	Relative
Population						
0-19	1305	1200	1550	1725	420	32%
20-64	2520	3000	3010	3055	535	21%
65+	625	850	1140	1470	845	135%
Total	4353	5050	5700	6250	1897	44%

Housing						
Ground Or.	1310	1500	1900	2075	765	58%
Apartment	95	150	210	230	135	142%
Dwellings	1423	1650	2110	2305	882	62%

Projected Jobs

The Civic Centre is currently the largest employment area in the East Ladner study area, and in the future may be the main source of employment growth.

Current Employment in Delta's Civic Lands (Municipal Hall, Fire Dept., Police Dept., Recreation Centre): approx. 800 jobs.

Delta Hospital: approx. 550 jobs.
= 1350 current jobs.

Commercial job calculation:

Generally 30,000ft² of commercial space is required per 1000 residents. Given 1897 new residents, there will be $(30,000 \times 1897) / 1000 = 56,910$ or roughly 57,000ft² of new commercial space available in East Ladner. Generally, 1 job per 200ft² is available, so $57,000 / 200 = 285$, or roughly 300 new jobs will be available in the commercial sector, in East Ladner by 2050.

We are further assuming a doubling of jobs (1350) in the Civic Centre to service the City of Delta. Adding that to the new commercial jobs (based on new residents) gives us: $1350 + 285 = 1635$. Our projected total suggests **1635 new jobs**, (or a range from 1620-1650) may be available by 2050.

The South Fraser Perimeter Road (SFPR)

Evidence suggests at this point that the SFPR will be constructed, and will likely be aligned in one of two directions: either a north or south route. Without assuming either one of these routes, this charrette will proceed with three general assumptions which can be made regarding impacts of the SFPR to the study area, regardless of which route is determined. These assumptions are as follows:

- Highway 17 within Ladner will no longer be used primarily as a major truck or commuter route. As such, the highway can be envisioned in 50 years as more of a community-serving road.
- Due to the alignment of the route west of 72nd street, agricultural land within in the study area will be fragmented, creating the opportunity for design strategies to consider possible land uses on the edge of the ALR, at the highway intersection.
- The SFPR will likely 'fly over' Ladner Trunk Road.

design table composition

East Ladner **edge**

This charrette will focus on the edges between urban and agricultural lands and will explore design strategies for re-enforcing, adding value to, and strengthening the integrity of both of these uses. The charrette will also examine strategies for projected community growth, vibrancy and cohesiveness, within a 50 year scope. The following break-out groups are organized by three key issues and areas which emerged out of discussions in previous stakeholder workshops. These are considered pertinent in designing for future growth management within the East Ladner study area.

Design Facilitator: Bob Worden, Principal, Ramsay Worden Architects
Process Facilitator: Susan Milley, UBC Design Centre for Sustainability

Team Members:

Group 1: Edge

Marcy Sangret	Delta: Env. & Agricultural Planning
Nancy McLean	Delta: Senior Planner, Parks, Rec. & Culture
Mark Pickersgill	Delta: Planning
Tony Pellett	Agricultural Land Commission
Robert Butler	Administrator, Delta Farmers' Institute
Kathleen Zimmerman	Ministry of Agriculture and Lands
Markus Merkins	Delta Farmland and Wildland Trust
Jeff Barker	BC Hydro

Group 2: Civic Ctr

Thomas Leathem	Delta: Deputy Director, Planning & Development
Linda Neilsen	Delta: Parks Design Technician
Karen Thomas	Ministry of Agriculture and Lands
Howard Smid	Business & Development Community
Kelly Guichon	President, Ladner Business Association
Gary Haylow	Resident
Alan Wawyk	Resident, Proprietor, Sundance Motel

Group 3: Route 17

Lisa King	Delta: Planning
Sarah Howie	Delta: Engineering
Hon Yee	Delta: Roads and Transportation Division
Roger Emsleys	Resident
Teresa O'Reilly	Planner, Translink

Floating

Sara Fryer	Design Centre for Sustainability
Jone Belausteguigoitia	Design Centre for Sustainability
Lin Ji	UBC Student
Lisa Parker	UBC Student

list of resources

Reference Documents

Edge Team:

Corporation of Delta | Official Community Plan | Feb 2003
Corporation of Delta | Official Community Plan Schedule A | Nov 2005
Corporation of Delta | East Ladner Area Plan | Cons. Aug 2002
Corporation of Delta | Delta Agricultural Land Use Inventory | 2002
Corporation of Delta | Delta Rural Land Use Study | Nov 1994
Corporation of Delta | Delta Parks & Recreation Master Plan | March 1989
Greater Vancouver Regional District | Livable Region Strategic Plan | 1996
Province of B.C. | Gateway Program; Program Definition Report | Jan 2006

And don't forget section 5: visual resources- in the back of this design brief!

Online Resource:

<http://www.corp.delta.bc.ca>

Shared Resources: Corridor, Edge, and Node:

James Taylor Chair; Sustainable Urban Landscapes: The Surrey Design Charrette | 1996
James Taylor Chair; Sustainable Urban Landscapes: The Brentwood Design Charrette | 1999
City of Vancouver; Vancouver's New Neighborhoods: Achievements in Planning & Urban Design | 2003
Jacobs, Allan B; Great Streets | 2001
Institute of Transportation Engineers | Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities | 2006

section 2: charrette goal, principles & objectives —————

charrette goal, principles & objectives

The East Ladner Edge charrette is a collaborative planning and design exercise for illustrating a 50-year vision of how sustainability principles and designs could be realized in the East Ladner study area, with a specific focus on the design of the agricultural-urban edge.

The following Goal, Principles, and Objectives are the results of collaborative dialogue among municipal, business and citizen representatives sharing their views on the opportunities for urban growth and change over the next 50 years within the East Ladner neighbourhood, a period in which the population in the Greater Vancouver region is expected to double.

They are intended as a basis to inform the charrette process and the design proposals arising from that process, and will inform the targets which will guide the output of the charrette. The Goal and Objectives arise from a distillation of local, regional, provincial and national policies and have been amended to incorporate multi-stakeholder dialogue.

Charrette Goal

Facilitate and implement a vision of a complete and sustainable East Ladner community which will:

- Have a vibrant Civic Centre District;
- Integrate, capitalize on, and add value to the edges of selected urban land uses with agricultural and natural areas where appropriate, while respecting their unique needs and functions;
- Support compact communities through infill and strategic edge development to resist developing into surrounding agricultural lands.
- House **1900** new residents by 2050;
- Support between **1620** and **1650** new jobs by 2050;

Charrette Principles & Objectives

1 GOOD AND PLENTIFUL jobs CLOSE TO HOME

Principle: Sustainable communities foster local economic opportunities and growth. Residents can find employment close to home. Government policies and local infrastructure support local businesses and individual enterprise.

Note: Although jobs will largely be directed into the growth concentration area (North Delta), there will be opportunity for some available sites to be located within East Ladner, specifically around the Delta Civic Centre and along Highway 17 and Ladner Trunk Road.

Key Objective: East Ladner and the Delta Civic Centre district will provide as wide a range of economic opportunities as possible to sustain a healthy and diverse economy. Delta's OCP policies support commercial and job development within existing business and commercial lands, rather than expansion of these land bases to accommodate growth. (OCP-A p.2, 17, LRSP p.11, 12)

Objectives:

1. Direct mixed-use developments that include a mix of residential and neighbourhood commercial uses to the Civic Centre and Highway 17 district and to old commercial areas, as the opportunity arises (OCP-A 2.1.7).
2. Provide for economic diversification of farming, and support the use of agricultural land for farming to preserve the economic viability of farming, thereby maintaining the agricultural potential of farmland (OCP-A 19 LRSP 4.4, RLUS, 3.3.4).
3. Recognize farming as the primary use of agricultural land and encourage consolidation, rather than fragmentation, of agricultural parcels (OCP-A 2.5.1-3).
4. Direct new jobs to local and existing employment areas and improve land use efficiency of existing industrial areas (OCP-A 2.2.1, 2.3.1, LRSP 4.6).
5. In order to reduce dependence on the automobile, permit neighbourhood stores where there is a proven need and in locations that minimizes negative impacts on nearby residents (ELAP p.22, OCP-A 2.1.14, LRSP 8.4).
6. Increase the frequency and flexibility of transportation services and develop facilities that support local access to centres and employment areas, and ensure provision, in collaboration with Translink, of a more efficient and convenient public transit service within East Ladner, the Civic Centre, to the rest of Ladner and across the region (ELAP p. 29, LRSP 8.7).

50 Year Objective:

East Ladner and the Delta Civic Centre will provide as much diverse local employment as possible, and will support the preservation and farming of its agricultural lands as a source of local employment.

2 MIXED USE corridors ACCESSIBLE TO ALL

Principle: Sustainable communities allow residents to live, work, shop and play in their local areas. Land and public infrastructure are designed for multiple purposes and mixed use. Transportation corridors and commercial arterials provide both commuter mobility and access to multiple services and daily activities. Corridors enable diverse transportation choices, including access and movement for pedestrians, bicycles, transit and automobiles.

Key Objective: East Ladner's streets anchor neighbourhoods and land-uses that are designed to support pedestrians, bicycles and transit, and attract commercial, civic and social services for a diverse Delta community, including people of all ages, family structures, backgrounds and interests (OCP-A p. 2).

Objectives:

7. Changes to vehicle traffic patterns should enhance urban areas, natural and agricultural areas and does not disrupt farm traffic (OCP-A 2.5.23, 2.9.6, 2.9.27, 2.9.29, ELAP p. 26, RLUS 3.3.7).
8. Provide for an integration of the East Ladner with the Civic Precinct across Hwy 17, and create opportunities to connect the previously divided halves of the community (ELAP p. 26, OCP-A 2.9.10).
9. Provide adequate circulation and enhance connectivity within East Ladner (which prioritizes pedestrian, public transit, and bicycle movement), and provide

adequate routes for the flow of regional traffic and efficient goods movement around East Ladner, (ELAP p. 18, 25, OCP-A 2.9.4, 2.9.10, OCP 2.9.1-2, 2.9.9, 2.9.32-35, LRSP 16.5).

10. Support medium-density residential and mixed-use development near transportation, jobs, and amenities to promote “complete communities” as well as home-based businesses and neighbourhood stores where appropriate, as ways to reduce automobile dependence (OCP 2.1.17, 2.1.14, 2.1.15, OCP-A 2.6.28, LRSP 8.2, 8.4).
11. Anchor new -use development along East Ladner’s primary streets and roads (OCP-A 2.1.3, 2.1.7, 2.1.17).

50 Year Objective:

East Ladner and the Delta Civic Centre will be centered around pedestrian, bicycle and transit-oriented mixed-use corridors which serve the community and the larger Corporation of Delta, while continuing to provide goods movement for local commerce and industry.

3 WALKABILITY and the PUBLIC REALM

Principle: Sustainable communities have compact neighbourhoods with an interconnected street network that ensures quick access to commercial and public services and amenities. Streets and arterials are designed for walking, cycling and transit access – not just for cars. Neighbourhoods have sufficient residential densities and mixed uses to provide sustained transit ridership and service.

Key Objective: East Ladner’s movement network is designed for local functions and multi-modal access to nearby neighbourhoods, residents and employees. Diverse commercial activity and mixed land-uses will be located and developed along these thoroughfares to help build a diverse and vibrant community (OCP-A, p. 2).

Objectives:

12. Ensure infrastructure improvements in neighbourhoods to promote pedestrian, bicycle and other user’s safety and enjoyment in order to reinforce community identity, neighbourhood pride and the promotion of walking and other physical activities (OCP 2.1.12).
13. Require high standards of building and street integration which make a positive contribution to the streetscape, including an attractive pedestrian environment for public art and community events which reinforce area character (OCP-A 2.2.6-7, 2.6.21-23, 2.6.28-9).
14. Encourage efficient and innovative transportation modes and settlement patterns to minimize number/length of vehicle trips, and which will facilitate easy access to the daily needs of an aging population (OCP-A 2.4.37, 2.9.19-23 ELAP p. 28-9, LRSP 11.3-4, 16.2).
15. Encourage the development of safe and attractive main and local streetscapes that serve the farming community and reflect the needs of public transit, traffic-calming and facilities for cyclists and pedestrians, and continue to improve bicycle and trail networks, in order to emphasize the movement of more people in fewer vehicles during peak periods (ELAP, p.27-8, OCP-A 2.2.3, 2.8.34, 2.9.25-26, OCP 2.9.10, 2.9.29-30, LRSP 5.5).
16. Ensure schools, civic and recreation facilities are integrated with, and serve the local community (OCP-A 2.8.7-2.8.10).

17. Encourage the retention of existing neighbourhood small mixed-use commercial nodes, and consider additional development where there is a proven need (OCP 2.1.11, OCP-A 2.2.5).

50 Year Objective:

East Ladner and the Delta Civic Centre will be rich with pedestrian and commercial activity, with numerous safe and accessible routes to local residential communities, destinations and commercial and social services, civic infrastructure, agricultural lands, and natural areas.

4 NATURAL areas AND PARKS

Principle: Sustainable communities respect the natural functions of the landscape, particularly agricultural land, stream systems and aquatic habitats. Well designed communities integrate linked natural systems with human activities, placing high value on community access to natural systems and parks. Sustainable communities maintain and restore ecosystem functions. Effective ecosystem management and restoration can achieve significant energy efficiencies, cost savings, and environmental benefits.

Key Objective: East Ladner, Delta, will conserve and promote linkages between natural resources and local natural features, cultural heritage, and agricultural lands, and the community. The Green Zone in Delta will establish a long-term boundary for urban growth which includes all lands in the ALR, streams, ditches, sloughs, dikes and Environmentally Sensitive Areas (OCP-A p. 2, 18, 63, 74, LRSP 4.2, 4.6).

Objectives:

18. Add new parks and expand and upgrade existing passive and active recreation opportunities in East Ladner, and consider compatible park and natural area use of ALR lands (ELAP, p.18, 23, OCP-A 2.6.26-27, ALU p. 31).
19. Conserve environmental resources including agricultural lands, and acknowledge the Agricultural Land Reserve and the Green Zone as a way of delineating the long-term boundary of urban growth (OCP-A p.19, ELAP p. 31, LRSP 4.6, ALU p. 31, RLUS 3.2.5).
20. Create opportunities for agriculture-oriented transitional land uses which create and foster positive interrelationships between the urban and agricultural environments (OCP-A 2.5.10, 2.5.26-7, ELAP p. 31, ALU p.31, RLUS, 3.3.5, 3.3.7).
21. Conserve, connect where appropriate, and enhance and integrate environmentally significant areas of rural and farmland, as well as watercourses, ravines, forested uplands, wetlands, foreshore and marine areas as habitat and linked corridors for wildlife, and protect and plant more trees (OCP-A 2.4.2, 2.4.6-7, 2.4.8-2.4.15, 2.5.21, 2.5.25, LRSP 4.5, RLU, 3.3).
22. Develop municipal multi-purpose, universally accessible, corridor-trail systems that link local green spaces, recreational facilities, wildlife corridors and places of work, and connect with recreational greenways, the Crescent Slough and other destinations. Include equestrian trails where appropriate (OCP-A 2.6.2, 2.6.10-11, 2.6.18).

50 Year Objective:

East Ladner and the Delta Civic Centre will be an example for the region where the synergy between protected agricultural lands, recreation, parks and natural areas, together with sustainable, walkable, affordable, and complete urban development will be realized.

5 LIGHTER, GREENER, CHEAPER, SMARTER infrastructure

Principle: Sustainable communities optimize the economic, social and ecological impacts of buildings and infrastructure. Innovative development standards and practices will reduce community and environmental impacts as well as private, public, and taxpayer costs of development and infrastructure. Low impact solutions such as green infrastructure and natural drainage systems will save money over the longer-term, ensuring the sustainability of economic growth.

Key Objective: Delta will foster development in a planned and integrated manner that respects natural systems, manages urban growth, preserves built and natural heritage, provides transportation choices, and reinforces neighbourhood identity (OCP-A p. 2, 63, 74, ELAP p. 20).

Objectives:

23. Ensure landscaping incorporates water efficient technology and minimize the amount of land devoted to parking and other automobile related uses (OCP-A 2.2.11, OCP-A 2.2.9).
24. Encourage site planning and infrastructure designs which incorporate principles of environmental sustainability, and encourage options that save energy, reduce waste, and reduce impacts on the environment (OCP 2.1.18, 56; 2.4.27-2.4.29, OCP-A 2.3.26-27, 2.4.35-2.4.40, 2.10.23).
25. Implement streamside protection measures where applicable and require that developments conform to regulations and best management practices for protecting fish and aquatic life, and promote wildlife habitat through “naturescaping” on public and private land (OCP-A 2.4.2, 2.4.6).
26. Develop integrated best practices and site management which promote water conservation as well as low-impact infrastructure services, including drainage and stormwater systems (e.g. through the development of the agricultural edge and streets which infiltrate rainwater and other natural infiltration systems) and which maintain water quality in groundwater aquifers (OCP-A 2.4.23-4, 2.10.4-8, 2.10.17).
27. Manage development in areas prone to hazardous conditions and/or flooding, and encourage land use/development practices that minimize soil erosion or loss of highly productive organic soils, (OCP-A 2.4.30, 2.4.33, ELAP p. 19).
28. Implement LEED certification in all new and retrofitted public buildings.

50 Year Objective:

East Ladner and the Delta Civic Centre will demonstrate, through infrastructure, buildings and transport, how energy efficiency, ecological integration and technical innovation can contribute to urban sustainability, climate change targets and financial savings for the government and taxpayers.

6 HOUSING and DENSITY

Principle: Sustainable communities include a variety of housing in the same neighbourhood, and very often on the same street. A mix of housing types, both owned and rented, allows residents to live affordably in the same community throughout their lives. Good neighbourhood design fully recognizes current and future demographic trends, especially aging populations, empty nesters, single-parent families and smaller, non-traditional households. A mix of housing types also helps accommodate lower income residents (including students and fixed-income seniors), allowing access to local jobs, amenities and medical services.

Key Objective: East Ladner's population requires planning for different housing choices so that residents can remain in the community, and affordable, alternative housing options will be necessary to accommodate a variety of household, life-style, age, and income groups. (OCP-A p. 41, ELAP p.18)

Objectives:

29. Encourage a range of residential housing types, including heritage, support the location of seniors and special needs housing in town centres, and provide incentives to encourage rental, seniors and special needs housing (OCP 2.1.1-2.1.4, LRSP p. 11).
30. Support medium density housing near commercial services, busses, and civic infrastructure to promote "complete communities", and support home-based businesses in residential neighbourhoods (OCP 2.1.15, 2.1.16).
31. Consider older commercial areas or other underused parcels as possible sites for multi-family or mixed-use housing (e.g. developments that include a mix of residential, commercial or other uses) (OCP-A 2.1.7).
32. Focus new residential development, including seniors' housing and care facilities in existing urban areas close to shops, schools, services, transit and other amenities, and not in greenfield sites or on agricultural land (OCP 2.1.3, 2.1.16, OCP-A 2.8.7, 2.8.23).
33. Incorporate current development into the existing community in a way that is both functional and retains the existing community identity (ELAP p. 18).
34. Where the edge is redeveloping, consider density options and seek a variety of options for housing buffered by a green zone.

50 Year Objective:

East Ladner and the Delta Civic Centre will provide affordable homes for a wide range of residents, as many as half of whom will be over the age of 60, in a mixed use and compact community rich in civic services, job opportunities, and commercial activity.

RESOURCES

OCP	Delta Official Community Plan Feb 2003
OCP-A	Delta Official Community Plan Schedule A Nov 2005
ELAP	East Ladner Area Plan Cons. Aug 2002
ALU	Delta Agricultural Land Use Inventory 2002
RLUS	Delta Rural Land Use Study Nov 1994
LRSP	GVRD Livable Region Strategic Plan
GP	Gateway Program; Program Definition Report Jan 2006

breakout group 1: edge design brief pull-out

sustainability by design principles:

4 NATURAL areas AND PARKS

5 LIGHTER, GREENER, CHEAPER, SMARTER infrastructure

The edges formed where urban development and agricultural land meet, is the primary focus of this charrette. What will these edges look like in 50 years, and how can the East Ladner community be designed to accommodate new growth for the future, while maintaining its valuable agricultural land base? In 50 years, how will these edges function, and how can we re-enforce and capitalize on these edges such that they contribute to and preserve the integrity of both land uses?

The focus of discussion and design for this breakout group are the key design questions, main outputs, and targets relating to the inter-relationship between urban, agricultural, and natural areas, within a 50 year timeframe.

The following questions and outputs are organized in order of priority for discussion and design.

Key Design Questions

1. What will East Ladner's edges look like in 50 years, and what design strategies can be employed as either specific or general models, to show how we can re-enforce and capitalize on these edges to maintain the existing valuable agricultural land base, yet integrate with new growth in the community?
2. What design strategies are needed to conserve and connect rural/agricultural and natural area character and requirements with expected future development in East Ladner's neighbourhoods?
3. What design strategies can mitigate impacts on the community caused by the South Fraser Perimeter Road bypass, and what development and edge opportunities emerge?
4. What urban design strategies will help achieve a cohesive and vibrant built environment along East Ladner's local roads that reflect the different needs and identity of the community?

Main Outputs*

1. Series of diagrams examining existing conditions and opportunities/constraints related to the various edges within the East Ladner study area.
2. Series of vignettes and sections illustrating various design elements and land uses for re-enforcing and capitalizing on these different edges.
3. Plans, sections and diagrams illustrating a typology of edge re-enforcing strategies and locations for integrating agricultural, natural, and community areas.
4. Diagrams and text illustrating strategies for mitigating conflicts between urban and non-urban lands.
5. Plan, diagrams, sketches and/or sections of green infrastructure (Environmentally Sensitive Areas, wetlands, parks, tree canopy coverage) and rural/agricultural lots and connectivity between them and urban areas.
6. Plan, sections and sketches illustrating movement systems and important routes and destinations for agricultural, recreational and urban uses.
7. Diagrams, sketches, illustrations and/or images depicting how land uses respond to historic and physical context and contribute to the special nature and identity of East Ladner, and Delta within the GVRD.

* Note: all outputs to be illustrated with drawings in metric scale, with additional supporting text as necessary.

Targets



4 NATURAL areas AND PARKS

11. Explore potential benefits of, and provide options for **re-enforcing and adding value to these ALR-urban-natural edges**, on a case-by-case basis, which will contribute to the awareness and conservation of natural and agricultural land and resources. how we can re-enforce and capitalize on these edges
12. Connect where appropriate, conserve and enhance **100%** of environmental greenway areas, including watercourses and wetland areas as habitat and linked corridors for wildlife.
13. Ensure **40% tree canopy coverage** in urban areas. Protect existing trees and plant replacement trees on private property. Plant 1 tree for every 9m of development and redevelopment. Plant 1 tree for every 4 parking spaces.
14. Ensure **10 acres (4 ha) per 1000 population** of active and passive-use parks, open space, greenways and naturalized areas, throughout the East Ladner study area.
15. Make **all** streets, public parks, compatible edge areas, schoolyards, and civic spaces part of an integrated open space network, connected with universally accessible sidewalks and/or trails to natural areas.

5 LIGHTER, GREENER, CHEAPER, SMARTER infrastructure

16. Reduce impacts to groundwater and streams through the use of low impact infrastructure in developed and undeveloped areas, and infiltrate **1" of storm water per day**. Include the benefits to rainwater management that an ALR/urban edge can contribute, to maintain water quality and to manage quantity.
17. Require **all** new and retrofitted site plans and related infrastructure to incorporate designs for environmental sustainability to save energy, increase biodiversity, reduce waste, and reduce environmental impacts which contribute to climate change.

Images courtesy of Delta Museum and Archives, http://aabc.bc.ca/aabc/delta/gallery/page_01.htm



breakout group **2 civic centre** design brief pull-out

sustainability by design principles:

1 GOOD AND PLENTIFUL jobs CLOSE TO HOME 6 HOUSING and DENSITY

The Delta Civic Centre and surrounding area presents an opportunity to become a key node within the community. It is a key location for developing some of the building densities for the estimated community growth in 50 years. Pertinent to this, the area already has a number of elements for developing a vibrant community node: a central transit exchange, recreation centre, hospital, and a central location at the crossroads of the community. How can this area accommodate future housing service and job space? How can potential future land uses within this area and along its edges be designed to integrate and connect the community? How can the Civic Centre district become the heart of the greater Ladner community and the Municipality of Delta?

The focus of discussion and design for this breakout group are the key design questions, main outputs, and targets relating to jobs and housing within East Ladner as a whole, with the Civic Centre as the “heart”, within a 50 year timeframe.

The following questions and outputs are organized in order of priority for discussion and design.

Key Design Questions

1. How can the East Ladner study area be developed to: incorporate a mix of land uses and associated services; be pedestrian- and transit- supportive; be sensitively integrated into surrounding land uses including agricultural and natural areas; and, to establish attractive and lively entry points into the community?
2. What types of development in the Civic Centre district, and along Ladner Trunk Road and Route 17 will assist the community to attract and capitalize on estimated future job growth and opportunities?
3. How can key areas within the East Ladner study area, in particular the Civic Centre district, be designed and built as attractive and vibrant mixed-use areas for Ladner residents and visitors, with multiple services, functions and pedestrian-friendly character?
4. What urban design strategies will help achieve a cohesive and vibrant built environment along East Ladner's main streets that reflect the needs and identity of the community?

Main Outputs*

1. Series of diagrams examining existing conditions and opportunities/constraints related to the allocation and arrangement of land uses within the East Ladner study area and particularly within and around the Civic Centre district.
2. Land use table giving breakdown of land uses by acre, hectare and percentage of study area for 2050, 2025 and 2001 (pursue in this order)ⁱ.
3. Plans depicting both existing and proposed land uses in 2050, 2025, and 2001.
4. Plans, sections and diagrams illustrating strategies for integrating and connecting the Civic Centre “heart” to the broader community. Also show 5 minute walk radius, bike/trail routes and transit connectivity.
5. Series of vignettes and sections illustrating infill development methods and building typologies for residential, commercial and mixed-use developments proposed, to achieve projected 2050 land use plan.
6. Plans, sections and diagrams illustrating how new development will respond to agricultural and natural context in 2050, and explore designs of value-added land uses for capitalizing on the edges between these land uses.
7. Diagrams, sketches, illustrations and/or images depicting how the Civic “heart” responds to historic and physical context and contributes to community integration and identity.

* Note: all outputs to be illustrated with drawings in metric scale, with additional supporting text as necessary.

ⁱ Refer to projected population and jobs #'s for 2050, 2025 and 2001 in Section 1: Key facts & assumptions.

Targets



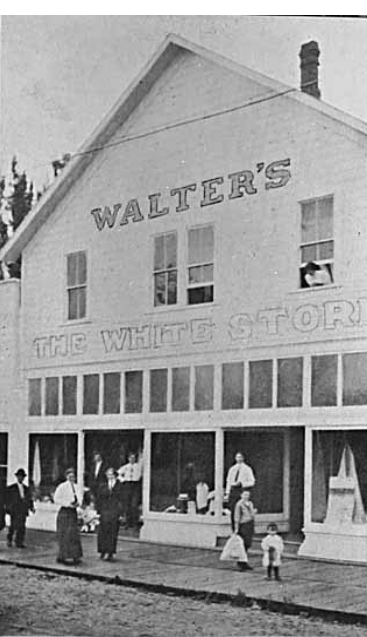
1 GOOD AND PLENTIFUL jobs CLOSE TO HOME

1. **At least 1600** new jobs will be located in public service, neighbourhood commercial, retail development and home-based businesses within East Ladner, including the Civic Centre District and along Ladner Trunk Road and route 17.
2. New job development will be directed to existing business, neighbourhood commercial, home-based businesses, agricultural areas and civic lands. Consider a potential increase of **30%** new jobs as home-based businesses.
3. Maintain the existing and seasonal agricultural employment base and the economic viability of farming within existing ALR lands, and explore **potential employment opportunities of re-enforcing and capitalizing on ALR-urban edges**, on a case-by-case basis.

6 HOUSING and DENSITY

18. Locate **at least 885 new dwelling units** in the East Ladner study area by 2050, in a variety of residential housing densities and types, tenures, environment and locations suitable for a mix of ages, income groups, family types, and stages of life.
19. **Focus new dwellings** in or near the existing Civic Centre and other key areas close to new or existing shops, schools, services, transit and other amenities.
20. Design for **at least 90%** of new residential development in the East Ladner study to be in the form of apartments and multiple unit ground-oriented housing forms (including townhouses, residential infill and secondary suites). Identify sites for any single family developments, if proposed. Locate some higher density developments at the edge, where possible.

Images courtesy of Delta Museum and Archives, http://aabc.bc.ca/aabc/delta/gallery/page_01.htm



breakout group **3 route 17** design brief pull-out

sustainability by design principles:

2 MIXED USE corridors **ACCESSIBLE TO ALL** **3 WALKABILITY** and the **PUBLIC REALM**

As a consequence of the new South Fraser Perimeter Road, highway 17 will no longer cater primarily to truck and regional commuter traffic. As the bulk of traffic along this road is subsequently reduced, this creates an opportunity to rethink the primary role of this route. How can route 17 serve to connect, rather than divide the community? In what ways can this road and intersection be re-shaped to benefit East Ladner and serve as a vibrant entry point to the community? What elements are required in order to recreate this former highway into a locally-serving route?

The focus of discussion and design for this breakout group are the key design questions, main outputs, and targets relating to mixed use corridors and walkability within East Ladner, focusing on Route 17 and its intersection with Ladner Trunk Road, within a 50 year timeframe.

The following questions and outputs are organized in order of priority for discussion and design.

Key Design Questions

1. What design strategies can be employed to maintain Ladner Trunk Road and Route 17 as important community transportation corridors, while creating a suitable environment for pedestrian oriented development and the use of alternatives to the car (public transit, bike and walk)?
2. How can the re-design of Route 17 and Ladner Trunk Road provide connections to the community, attractive and pedestrian friendly spaces, and contribute to the overall identity of East Ladner?
3. What types of development in the Civic Centre District, and along Ladner Trunk Road and Route 17 will assist the town of Ladner to attract and capitalize on future job growth and opportunities?
4. What urban design strategies will help achieve a cohesive and vibrant built environment along East Ladner's main routes and streets that integrate with, connect, and reflect the needs and identity of the community?
5. What design strategies can be introduced to manage traffic volumes along Ladner Trunk Road and Route 17, and mitigate traffic impacts on local neighbourhoods?

Main Outputs*

1. Series of diagrams examining existing conditions and opportunities/constraints related to the re-design of Route 17, and the intersection of Route 17 and Ladner Trunk Road, and connectivity to the surrounding community. Note specific changes to streets which reflect potential lower traffic volumes resulting from an SFPR bypass route.
2. Plan, diagrams, sections, elevations, and sketches illustrating the intersection of Route 17 and Ladner Trunk Road, its relationship to the Civic Centre district, and its function as a main entry point to the "heart" of the community. Illustrate how the intersection and streets connect with their surrounding neighbourhood and facilitate pedestrian and bicycle- oriented designs and spaces.
3. Plan, section/elevations, diagrams of traffic calming strategies for Route 17, showing changes to the corridor which will support pedestrian/bicycle crossing strategies and community integration (this may be designed incrementally, back-casting from 2050, then 2025, and 2010).
4. 2050 proposed road network and movement system diagram illustrating the relation of the East Ladner study area to the surrounding street pattern, including parallel streets, key intersections, and key bicycle, pedestrian, transit routes and trails.
5. 5 minute walk diagram illustrating residential and business connectivity to basic daily needs and transit.

* Note: all outputs to be illustrated with drawings in metric scale, with additional supporting text as necessary.

Targets



2 MIXED USE corridors ACCESSIBLE TO ALL

4. Reduce VKT (vehicle kilometers travelled) in East Ladner by 20% to 50%, through the provision of **commercial and recreational services within a 5 to 10-minute walk**, more frequent and convenient transit service, better pedestrian and bicycle connections, increases in density and an appropriate mix of land uses (residential and commercial).
5. Locate **90% of all homes within a 5 to 10-minute walking distance** (approx. 400m) of commercial services and a transit stop.
6. Transform Hwy 17 and Ladner Trunk Road into **community corridors** that integrate East Ladner with Ladner and South Delta.
7. Identify and preserve functional **corridors that serve the farming community** (e.g. 64th, 66th, and Ladner Trunk Road).

3 WALKABILITY and the PUBLIC REALM

8. Create a design strategy between buildings and streetscapes to establish a **strong, cohesive visual identity** for the East Ladner study area that incorporates and also strengthens the identity of its rural realm.
9. Employ urban design strategies to **create safe and attractive main and local streetscapes and routes** that also serve the farming community and which prioritize public transit, cycling, walking, bicycle and a variety of trail networks.
10. **Strengthen interconnectivity and street integration** within East Ladner. Create safe and robust pedestrian-oriented connections within East Ladner and between local schools, civic, institutional and recreation areas, including potential opportunities to design pedestrian and multi-use linkages on various ALR-urban edge transition zones.

Images courtesy of Delta Museum and Archives, http://aabc.bc.ca/aabc/delta/gallery/page_01.htm



target

At least 1600 new jobs will be located in public service, neighbourhood commercial, retail development and home-based businesses within East Ladner, including the Civic Centre District and along Ladner Trunk Road and route 17.

support

“Delta will provide a wide range of economic opportunities and sustain a healthy and diverse economy”

Official Community Plan, Schedule A, Goal p.2

“...a better balance in jobs and labour force location throughout the region”

Livable Region Strategic Plan, 8.1

“...development of transportation services and facilities that support local access to centres”

LRSP, 8.7

“Sustain a commercially viable agricultural industry in Delta”

Delta Rural Land Use Study, Goal 6, 7.2.2

“... [Minimize] pressure on the Green Zone through management of urban areas”

LRSP, 4.6

target

New job development will be directed to existing business, neighbourhood commercial, home-based businesses, agricultural areas and civic lands. Consider a potential increase of 30% new jobs as home-based businesses.

support

“Consider older commercial areas as possible sites for multi-family or mixed-use housing (e.g. developments that include a mix of residential, commercial and other uses, often with commercial uses on the ground floor, and residential uses above), and wherever possible, ensure that the community preserves its heritage stock”

Official Community Plan, Schedule A, 2.1.7

“Provide for vibrant town centres, sensitive neighbourhood commercial development, and an attractive pedestrian environment in commercial areas...”

Official Community Plan, Schedule A, 2.2.1-2

“Encourage businesses that support and service farming to locate in Delta”

Official Community Plan, Schedule A, 2.5.14

“Support home-based businesses in residential neighbourhoods, provided the impacts on adjoining neighbours are minimal”

Official Community Plan, Schedule A, 2.1.15

“Support emerging industries such as film tourism and eco-tourism in appropriate non-industrial locations”

Official Community Plan, Schedule A, 2.3.8

“In order to reduce dependence on the automobile, permit neighbourhood stores where there is a proven need and in locations that minimize negative impacts on nearby residents”

Official Community Plan, Schedule A, 2.1.14

target

Maintain the existing and seasonal agricultural employment base and the economic viability of farming within existing ALR lands, and explore potential employment opportunities of re-enforcing and capitalizing on ALR-urban edges, on a case-by-case basis.

support

“Support initiatives that reinforce farm uses of agricultural land and the continued development of a viable agricultural industry”

Official Community Plan, Schedule A, 2.5.3

“Support economic diversification initiatives accessory to and compatible with farming that add value to locally produced farm products”

Official Community Plan, Schedule A, 2.5.11

“Support emerging industries such as film, tourism, and eco-tourism in appropriate non-industrial locations”

Official Community Plan, Schedule A, 2.3.8

“Maximize the economic viability of farmland in Delta by encouraging soil-sustainable agricultural practices. Promote and sustain Delta’s agricultural community through the development of a set of active, facilitative policies to address the economic concern of Delta farmers”

Delta Rural Land Use Study, p. 2-22

target

Reduce VKT in East Ladner by 20% to 50%, through the provision of commercial and recreational services within a 5 to 10-minute walk, more frequent and convenient transit service, better pedestrian and bicycle connections, increases in density and an appropriate mix of land uses (residential and commercial).

support

"The major challenge in the future will be to keep existing commercial areas vibrant and to encourage their revitalization with a mix of uses"

Official Community Plan, Schedule A, 2.2

"Encourage the retention of existing neighbourhood corner stores, and consider new neighbourhood corner stores where there is a proven need..."

Official Community Plan, Schedule A, 2.2.5

"Consider older commercial areas as possible sites for multi-family or mixed-use housing (e.g. developments that include a mix of residential, commercial and other uses, often with commercial uses on the ground floor, and residential uses above), and wherever possible, ensure that the community preserves its heritage stock"

Official Community Plan, Schedule A, 2.1.7

"Work with Translink and other agencies to maintain and develop transit priority measures in Delta to improve the reliability of transit services"

Official Community Plan, Schedule A, 2.9.15

"Encourage efficient transportation modes and settlement patterns to minimize number/length of vehicle trips"

Official Community Plan, Schedule A, 2.4.37

target

Locate 90% of all homes within a 5 to 10-minute walking distance (approx. 400m) of commercial services and a transit stop.

support

“Where appropriate, promote innovative street and streetscape design that encourages use by and reflects the needs of transit, cyclists, pedestrians, and the mobility challenged”

Official Community Plan, Schedule A, 2.9.10

“Ensure that road design is attractive and pedestrian friendly”

Official Community Plan, Schedule A, 2.3.10

“Continue to implement policies which concentrate growth, contain urban sprawl, encourage transportation choice, minimize impervious area and locate residential use in proximity to services and transit”

Official Community Plan, Schedule A, 2.4.43

target

Transform Hwy 17 and Ladner Trunk Road into community corridors that integrate East Ladner with Ladner and South Delta.

support

"The network of pedestrian walks, including sidewalks...will connect sub-neighbourhoods, including community facilities, such as parks and the school. Cycle paths will...provide internal loops, connection between sub-neighbourhoods, and routes to the community facilities"

East Ladner Area Plan, p. 28

"Explore options to improve safety, reduce congestion and mitigate the impacts on neighbourhoods resulting from traffic"

Official Community Plan, Schedule A, 2.9.5

"Promote pedestrian and cycle activity in East Ladner by creating a network of pedestrian and cycle routes along local roads, through parks, including the recreation buffer strip along the former railway right-of-way on the south side of the community, and [across] Highway 17"

East Ladner Area Plan, p.28

"Provide new local roads to connect sub-neighbourhoods and permit local traffic flow within and among sub-neighbourhoods, without requiring the use of Ladner Trunk Road"

East Ladner Area Plan, p.25

target

Identify and preserve functional corridors that serve the farming community (e.g. 64th, 66th, and Ladner Trunk Road).

.

support

“Improve the road network where necessary to accommodate and support agricultural vehicles and to minimize conflicts with other vehicles on the road network”.

Official Community Plan, Schedule A, 2.9.28

“... [There is a] need for an adequate farm transportation system (i.e. access across main corridors, road standards and a defined network), and the consideration of the agricultural industries’ requirements during transportation planning studies”

Delta Rural Land Use Study, recommendation (d), p. 7-9

“Farm transportation is a major problem in many areas of Delta because of high volumes of traffic, and the large number of transportation corridors bisecting the municipality. Continued efforts need to be made to improve safety, access and the efficient movement for farm vehicles”.

Delta Rural Land Use Study, Goal 8, p. 7-15

“Ensure transportation and utility corridors have a minimum impact on farming, wildlife, habitat and other resources”.

Delta Rural Land Use Study, Goal 13, p. 9-4

target

Create a design strategy between buildings and streetscapes to establish a strong, cohesive visual identity for the East Ladner study area that incorporates and also strengthens the identity of its rural realm.

support

“Require high standards of building design, which make a positive contribution to the streetscape and which reinforce area character”

Official Community Plan, Schedule A, 2.2.6

“Encourage the retention and improvement of existing heritage buildings so as to enhance the character and ambience of a street or an area”

Official Community Plan, Schedule A, 2.2.8

“Ensure that parking areas do not dominate a site, are well landscaped, and provide for safe and attractive pedestrian connections to buildings”

Official Community Plan, Schedule A, 2.2.9

“Create or enhance existing town squares for community gatherings and celebrations”

Official Community Plan, Schedule A, 2.2.12

“Incorporate current development into the existing community in a way that is both functional and retains the existing community identity”

East Ladner Area Plan, (2) p.35

target

Employ urban design strategies to create safe and attractive main and local streetscapes and routes that also serve the farming community and which prioritize public transit, cycling, walking, bicycle and a variety of trail networks.

support

“Promote development that improves the design, character and attractiveness of Ladner Trunk Road, 56th Street, and Scott Road”.

Official Community Plan, Schedule A, 2.2.3

“Provide public amenities such as street furniture, mini-parks with landscaping and benches, and bicycle parking...”

Official Community Plan, Schedule A, 2.2.11

“Continue to develop Delta’s bicycle network in accordance with recommended design guidelines. Improve cycling linkages between communities within Delta and regionally. Consider the needs of cyclists in road design and upgrading”

Official Community Plan, Schedule A, 2.9.20-22

“Improve the road network where necessary to accommodate and support agricultural vehicles and to minimize conflicts with other vehicles on the road network”

Official Community Plan, Schedule A, 2.9.28

target

Strengthen interconnectivity and street integration within East Ladner. Create safe and robust pedestrian-oriented connections within East Ladner and between local schools, civic, institutional and recreation areas, including potential opportunities to design pedestrian and multi-use linkages on various ALR-urban edge transition zones.

support

“Continue infrastructure improvements in neighbourhoods to promote pedestrian, bicycle and other user’s safety in order to reinforce community identity, neighbourhood pride and the promotion of physical activity”

Official Community Plan, Schedule A, 2.1.12

“Encourage the creation or enhancement of existing neighbourhood focal points where uses are effectively integrated into residential areas (e.g. local park, pathways or trails, heritage building or corner store)”

Official Community Plan, Schedule A, 2.1.11

“Promote pedestrian and cycle activity in East Ladner by creating a network of pedestrian and cycle routes along local roads, through parks, including the recreation buffer strip along the former railway right-of-way on the south side of the community, and [across] Highway 17”

East Ladner Area Plan, p.28

target

Explore potential benefits of, and provide options for re-enforcing and adding value to ALR-urban-natural edges, on a case-by-case basis, which will contribute to the awareness and conservation of natural and agricultural land and resources.

support

“Protect and enhance the urban environment in East Ladner by retaining existing trees and separating the urban area from the adjacent agricultural lands by pursuing buffers, such as playfields, bicycle and pedestrian routes, and other similar landscaped recreational areas”

East Ladner Area Plan, p. 31

“In order to maintain the current population levels of waterfowl, shorebirds, birds of prey, and songbirds [it is recommended that] the Agricultural Land Reserve be maintained; and additional holdings be designated as wildlife areas, if the habitat capabilities of existing farmland drops below present levels”

Delta Rural Land Use Study, p. 2-16

“Work with provincial agencies to increase public awareness in Delta of the requirements of viable agriculture and the understanding and compromise required by both farmers and urban residents”

Delta Rural Land Use Study, (4), p. 7-8

target

Connect where appropriate, conserve and enhance 100% of environmental greenway areas, including watercourses and wetland areas as habitat and linked corridors for wildlife.

support

"Continue to include environmental implications as part of the review of development applications and other land use decisions"

Official Community Plan, Schedule A, 2.4.41

"Work with other agencies to preserve, enhance or restore habitat and natural shoreline processes when development occurs in coastal/foreshore areas"

Official Community Plan, Schedule A, 2.4.21

"Develop Integrated Storm Water Management Plans and require the use of integrated storm water management practices....Work to maintain water quality in groundwater aquifers"

Official Community Plan, Schedule A, 2.4.23-4

"As long-term agricultural [sic] is essential for wildlife, strong consideration to conservation covenants and other management prescriptions is recommended. Other recommendations include lease agreements promoting farm practices that preserve habitat, management of hedgerow and ditches, and compensation for habitat lost to intensive agriculture"

Delta Rural Land Use Study, p.7-9

target

Ensure 40% tree canopy coverage in urban areas. Protect existing trees and plant 2 replacement trees for every 1 removed on private property. Plant 1 tree for every 9m of development and redevelopment. Plant 1 tree for every 4 parking spaces.

support

“Delta’s endorsement of the 2002 street tree planting program and the Green Streets application indicates its commitment to improving the amount and variety of tree cover in the municipality in order to improve the environment”.

Delta Council Report “Green Streets Canada” November 2, 2001

“Retain as many trees as possible during site development or redevelopment. Require a 2:1 replacement ratio for trees removed as part of the development or redevelopment of commercial, multi-family residential, or more than two single-family units”

East Ladner Area Plan, p.31

“The owner of land to which this section applies must plant two replacement trees for every tree removed or damaged, in accordance with sound arboricultural practice, which replacement trees must be of the same species as the trees they are replacing, and the owner must maintain such replacement trees in perpetuity in accordance with the replacement plan approved under subsection 4.4 and sound arboricultural practice”.

*Delta Environmental Bylaw No. 6122, 4.2
Also see Subdivision and Development Bylaw.*

target

Ensure 10 acres (4 ha) of active and passive-use parks, open space, greenways and naturalized areas per 1000 population, throughout the East Ladner study area.

support

“Add new parks and expand existing parks in accordance with the Parks and Recreation Master Plan”

East Ladner Area Plan, p.31

“For community park purposes (including major playfields), a 15 to 25 acre park site is required in East Ladner. Discussions with the Agricultural Land Commission about park use of ALR lands should continue”

East Ladner Area Plan, p.23

“Retain as many trees as possible during site development or redevelopment. Require a 2:1 replacement ratio for trees removed as part of the development or redevelopment of commercial, multi-family residential, or more than two single-family units”

East Ladner Area Plan, p.31

target

Make all streets, public parks, compatible edge areas, schoolyards, and civic spaces part of an integrated open space network, connected with universally accessible sidewalks and/or trails to natural areas.

support

“Neighbourhood parks should be adjacent to elementary schools, where possible; and, that each sub-neighbourhood should have its own local park, where practical”

East Ladner Area Plan, p.23 (from the Delta Parks and Recreation Master Plan)

“Create or enhance existing town squares for community gatherings and celebrations”

Official Community Plan, Schedule A, 2.2.12

“Promote pedestrian and cycle activity in East Ladner by creating a network of pedestrian and cycle routes along local roads, through parks, including the recreation buffer strip along the former railway right-of-way on the south side of the community, and [across] Highway 17”

East Ladner Area Plan, p.28

target

Reduce impacts to groundwater and streams through the use of low impact infrastructure in developed and undeveloped areas, and infiltrate 1" of storm water per day. Include the benefits to rainwater management that an ALR/urban edge can contribute, to maintain water quality and to manage quantity.

support

"Ensure water and energy conservation are practiced by the municipality (e.g. retrofitting municipal facilities with energy and water saving devices, using 'waterwise' landscaping on civic properties)"

Official Community Plan, Schedule A, 2.4.40

"...Ensure landscaping incorporates water efficient technology"

Official Community Plan, Schedule A, 2.2.11

"Protect and enhance the urban environment in East Ladner by retaining existing trees and separating the urban area from the adjacent agricultural lands by pursuing buffers, such as playfields, bicycle and pedestrian routes, and other similar landscaped recreational areas.

Retain as many trees as possible during site development or redevelopment. Require a 2:1 replacement ratio for trees removed as part of the development or redevelopment of commercial, multiple-family residential, or more than two single-family units"

East Ladner Area Plan, p.31

target

Require all new and retrofitted site plans and related infrastructure to incorporate designs for environmental sustainability to save energy, increase biodiversity, reduce waste, and reduce environmental impacts which contribute to climate change.

support

“Promote housing and site design that contains sustainability features, improves energy efficiency, and contributes to the enhancement of neighbourhoods”

Official Community Plan, Schedule A, 2.1.18

“Promote the development and application of best management practices for infrastructure servicing residential, commercial, industrial and agricultural properties (e.g. limiting and mitigating impervious area, appropriate siting of buildings, and application of infiltration devices, open ditches and alternative/innovative street edge design where appropriate)”

Official Community Plan, Schedule A, 2.10.4

“Support pilot projects for innovative and sustainable infrastructure design and explore the use of alternative development standards to reduce storm water runoff”

Official Community Plan, Schedule A, 2.10.5

“Ensure that the Ministry of Environment floodproofing elevations apply to all new construction (East Ladner is located in the ‘200-year flood zone’ and the floodproofing elevation for new construction is 1.60m above sea level)”

East Ladner Area Plan, p. 19

target

Locate at least 885 new dwelling units in the East Ladner study area by 2050, in a variety of residential housing densities and types, tenures, environment and locations suitable for a mix of ages, income groups, family types, and stages of life.

support

“Consider older commercial areas as possible sites for multi-family or mixed-use housing (eg. Developments that include a mix of residential, commercial and other uses, often with commercial uses on the ground floor, and residential uses above), and wherever possible, ensure that the community preserves its heritage stock”

Official Community Plan, Schedule A, 2.1.7

“Consider incentives, such as a bonus density, to encourage the provision of seniors’, rental or special needs housing”

Official Community Plan, Schedule A, 2.1.4

“Encourage and facilitate the production of housing that meets the needs of residents of different income levels”

Official Community Plan, Schedule A, 2.1.2

target

Focus new dwellings in or near the existing Civic Centre and other key areas close to new or existing shops, schools, services, transit and other amenities.

support

“Investigate the potential of redesignating older residential areas close to town centres for higher density housing”

Official Community Plan, Schedule A, 2.1.8

“Encourage seniors’ and special needs housing in town centres, close to shops, services, transit and other amenities”

Official Community Plan, Schedule A, 2.1.3

“Focus new residential development in existing urban areas, and not in greenfield sites or on agricultural land”

Official Community Plan, Schedule A, 2.1.16

“Support medium density housing near transportation, jobs and amenities to promote ‘complete communities’”.

Official Community Plan, Schedule A, 2.1.17

target

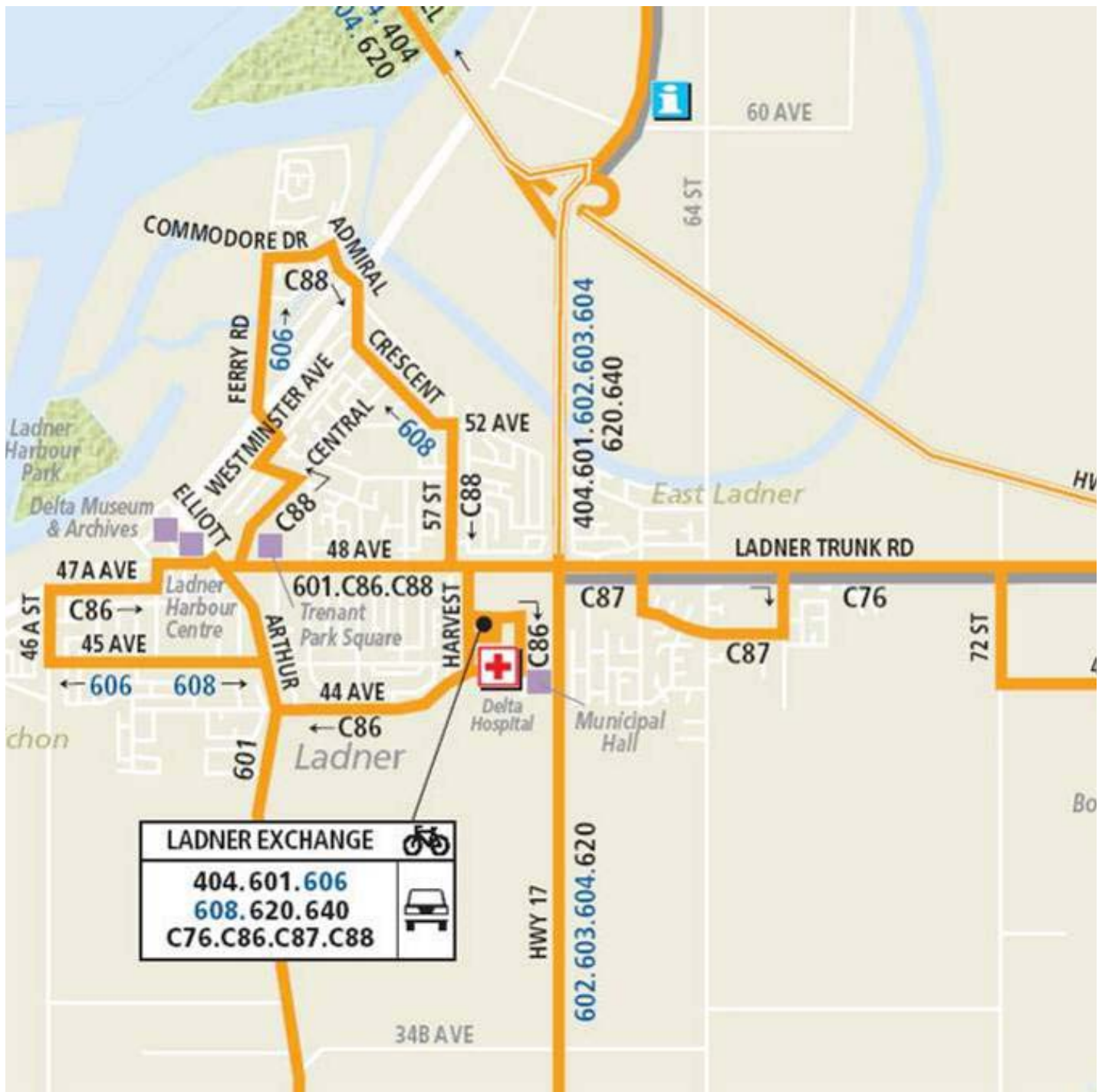
Design for at least 90% of new residential development in the East Ladner study to be in the form of apartments and multiple unit ground-oriented housing forms (including townhouses, residential infill and secondary suites). Identify sites for any single family developments, if proposed. Locate some higher density developments at the edge, where possible.

support

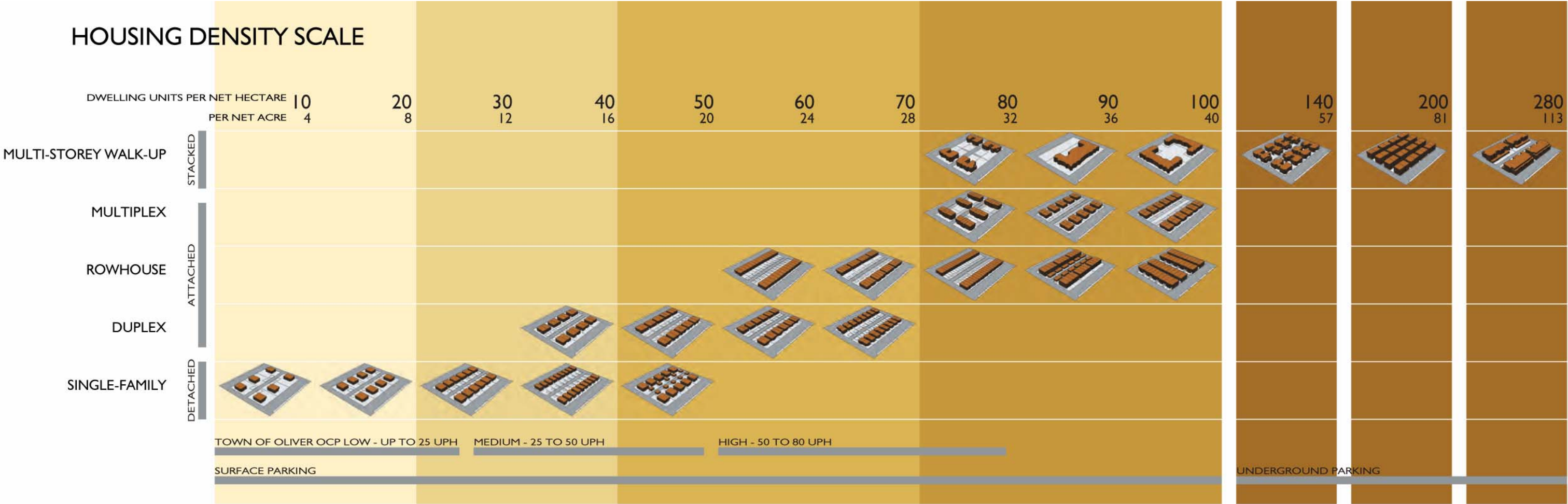
“Households in our municipality are getting smaller; 34% of Delta families do not have children living at home, and 17% have one child only. In 2001, the average household size was 2.90 persons, a decline from the 1981 average of 3.38. Similar declines in household size have been seen in other municipalities in the region.”

“...the number of older people [64+] in our community is predicted to increase significantly.”

Official Community Plan, Schedule A, p.10



Transit Routes, East Ladner



DWELLING UNITS PER NET HECTARE
PER NET ACRE

10

20

30

40

50

60

70

80

90

100

140

200

280

4

8

12

16

20

24

28

32

36

40

57

81

113



HOUSING DENSITY SCALE
IN DWELLING UNITS PER HECTARE

		DETACHED SHARED DRIVEWAY	DETACHED	DETACHED ACCESSORY OVER GARAGE	ATTACHED DUPLEX	ATTACHED ROWHOUSE ACCESSORY OVER GARAGE	ATTACHED ROWHOUSE	ATTACHED ROWHOUSE LIVE / WORK SPACE	STACKED LOWRISE	STACKED LOWRISE
		2 STORY 25 UPH (10 DUA) 2 CAR DETACHED, OFF STREET .24 FAR	3 STORY 31 UPH (13 DUA) 2 CAR DETACHED, OFF ALLEY .84 FAR	2 STORY 39 UPH (16 DUA) 2 CAR DETACHED, OFF ALLEY .78 FAR	2 STORY 59 UPH (24 DUA) 1 CAR DETACHED, OFF ALLEY .79 FAR	3 STORY 62 UPH (25 DUA) 1 CAR DETACHED, OFF ALLEY .93 FAR	2 STORY 73 UPH (29 DUA) 2 CAR DETACHED, OFF ALLEY .95 FAR	3 STORY 84 UPH (34 DUA) 2 CAR ATTACHED, OFF ALLEY 2.27 FAR	3.5 STORY 99 UPH (40 DUA) 1.3 CAR UNDERGROUND 1.32 FAR	2 STORY 103 UPH (41 DUA) 1.1 CAR SURFACE, OFF ALLEY .46 FAR
										
0	10	20	30	40	50	60	70	80	90	100
										
										
		GARRISON WOODS SINGLE FAMILY	CORNELL INFILL HOUSING	MURRAYS CORNER SINGLE FAMILY	2238 COLLINGWOOD	BLINGAROWS	FAIRVIEW ROWHOUSES	ORENCO STATION BROWNSTONES	GARRISON WOODS COURTYARDS	LAUREL GARDENS
DETACHED		NARROW LOT		ATTACHED			STACKED			

ATTACHED ROWHOUSE

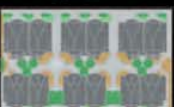


3 STORY
139 UPH (56 DUA)
1 CAR UNDERGROUND
2.28 FAR



KITS MEWS

STACKED TOWNHOUSE

4 STORY
201 UPH (81 DUA)
1 CAR UNDERGROUND
2.43 FAR



HELEN'S COURT

STACKED MIDRISE
OVER COMMERCIAL

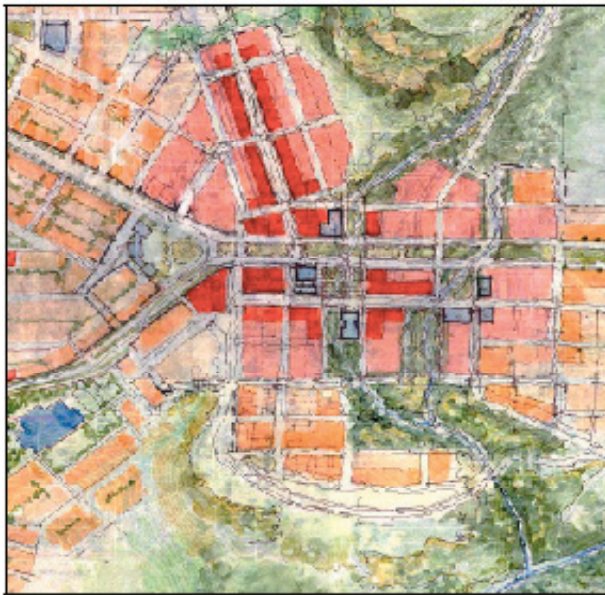
4 STORY
284 UPH (114 DUA)
1 CAR UNDERGROUND
2.84 FAR



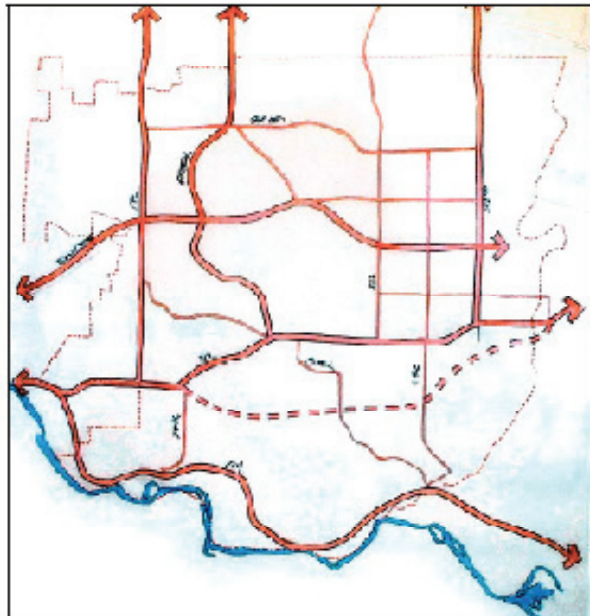
TRIBECA

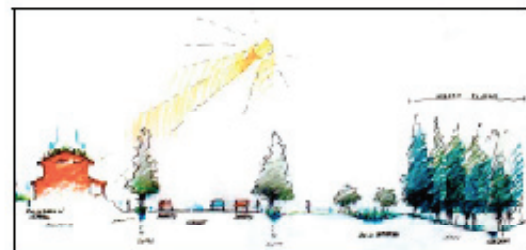
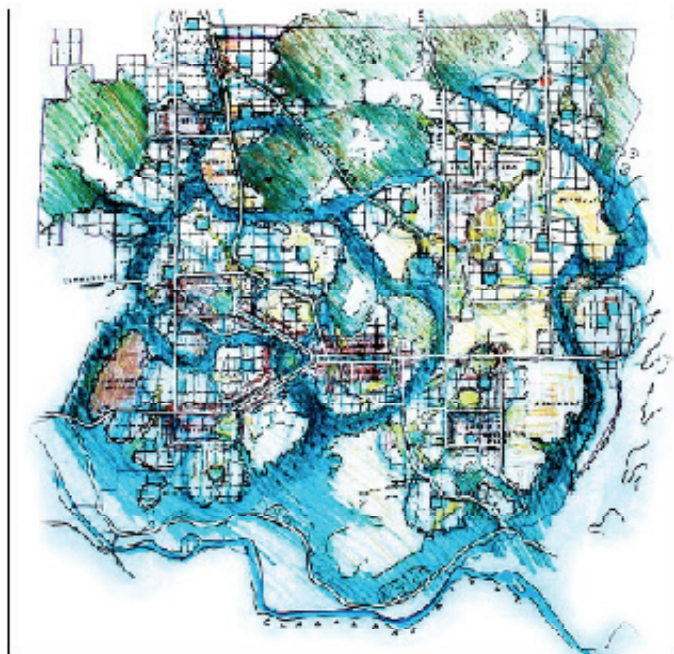
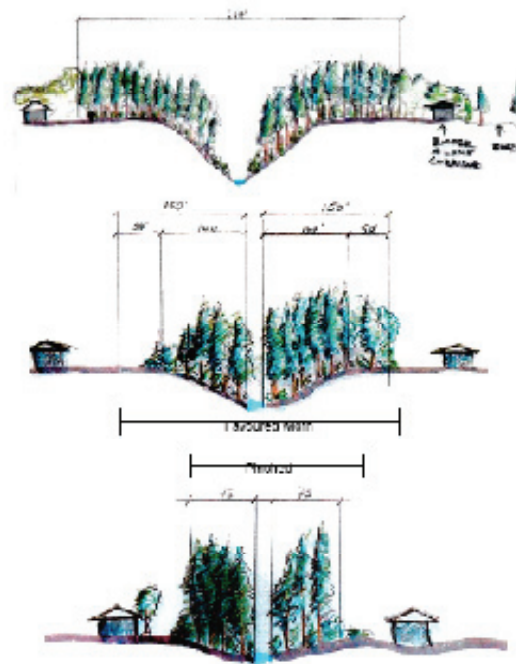
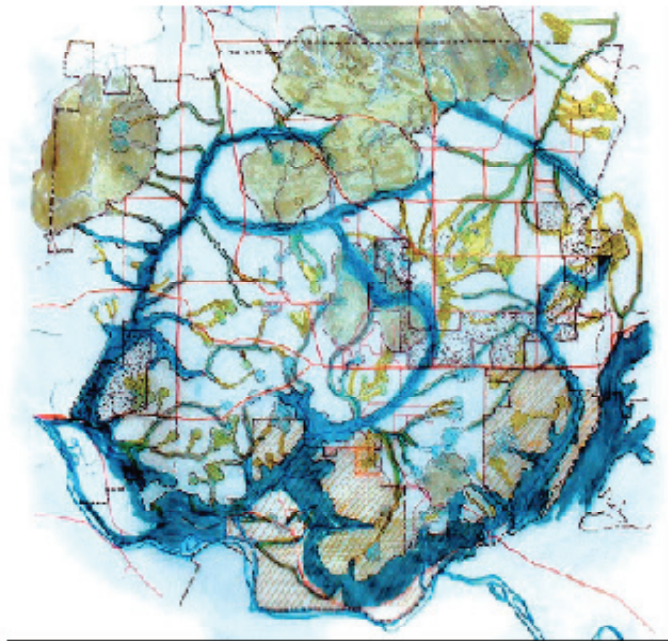


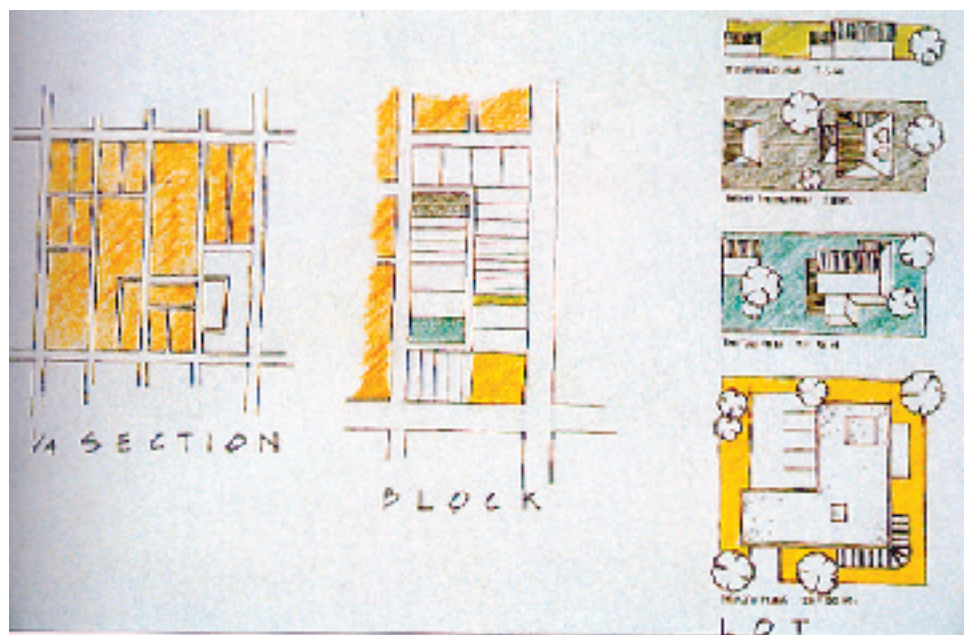
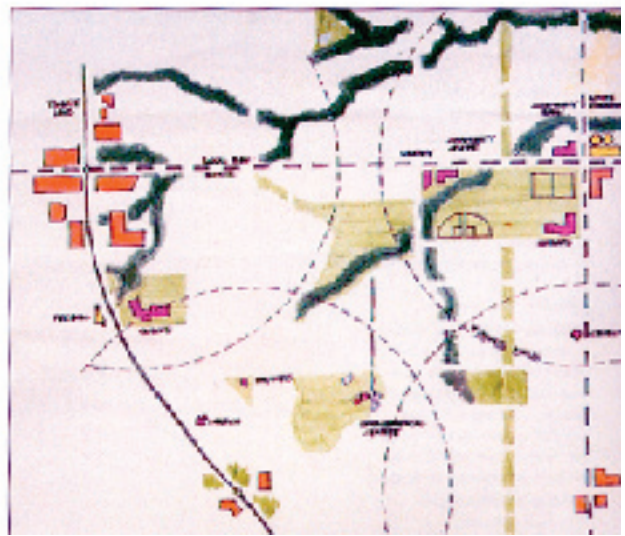
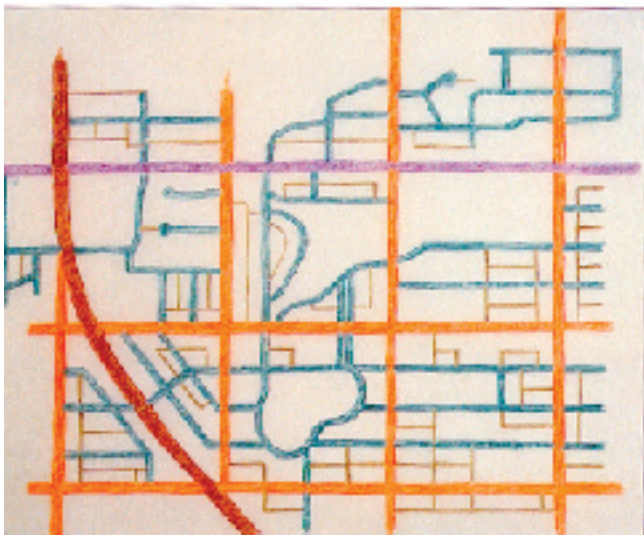
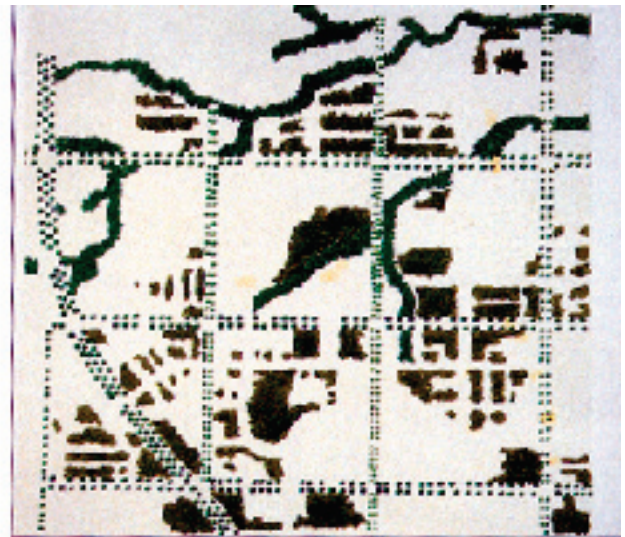
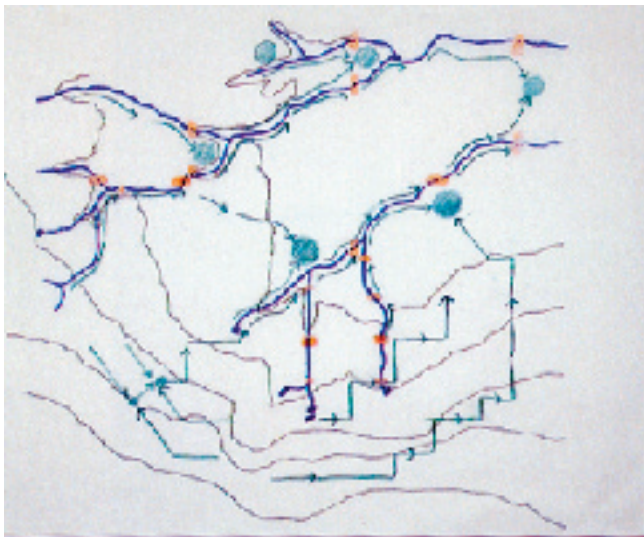
The Home Team



The Go Team









STREET GRID



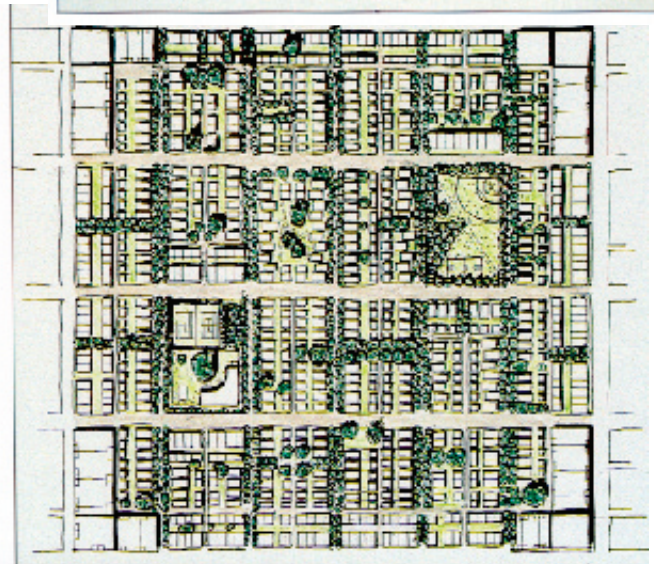
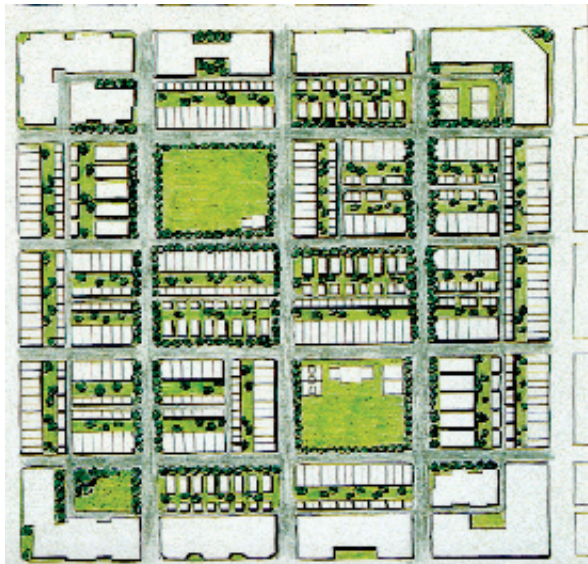
VEGETATION

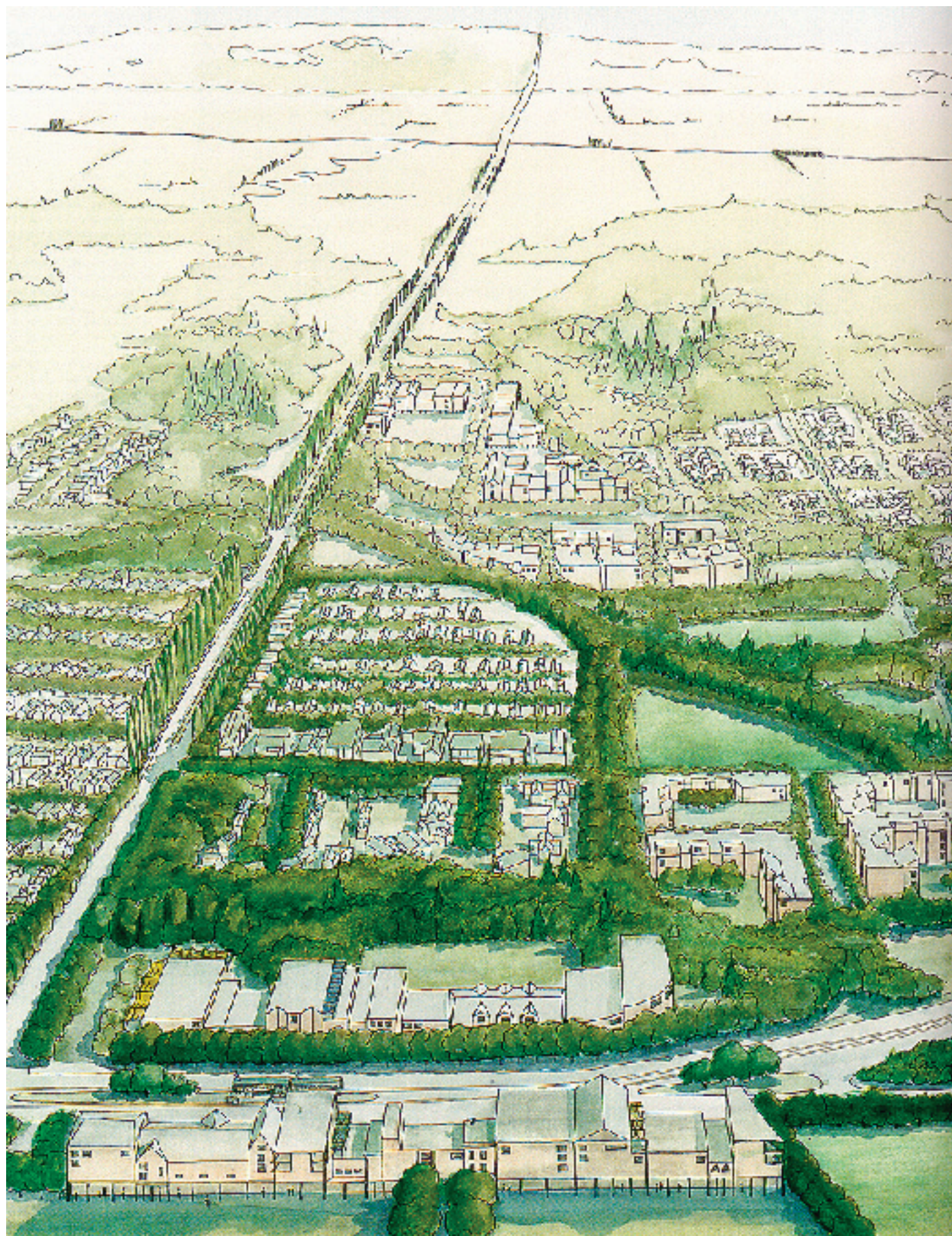


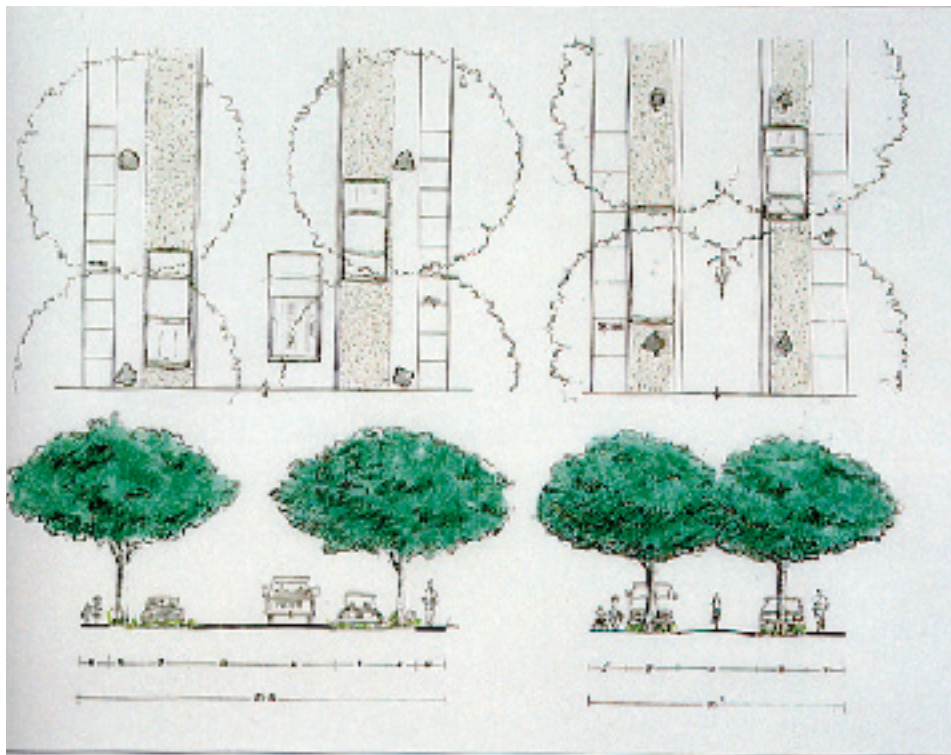
WATER

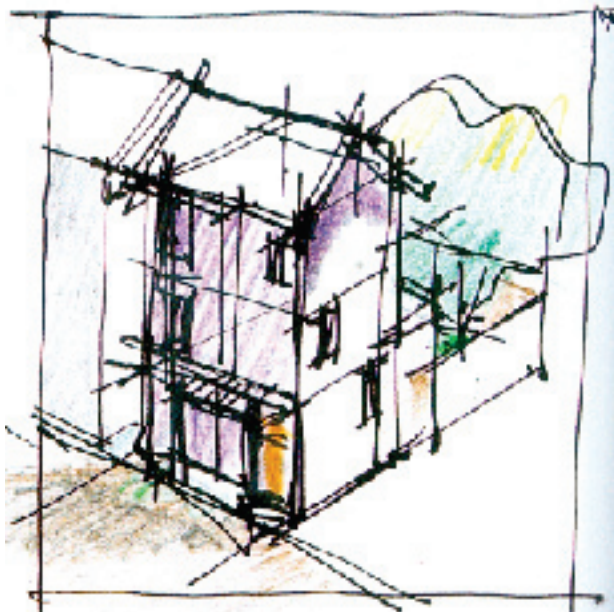


LAND



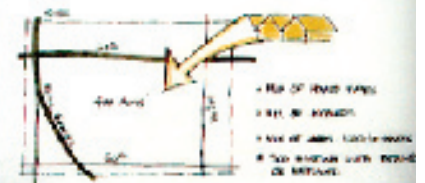




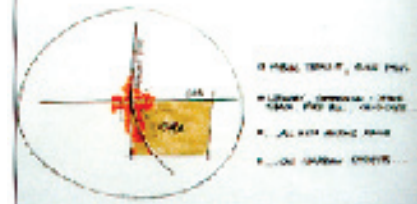


A HOUSE + SMALL LOT
IS STILL AN OPTION.

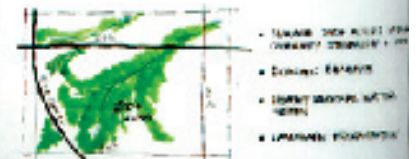
I. ADD 2200 DWELLING UNITS BY 2045



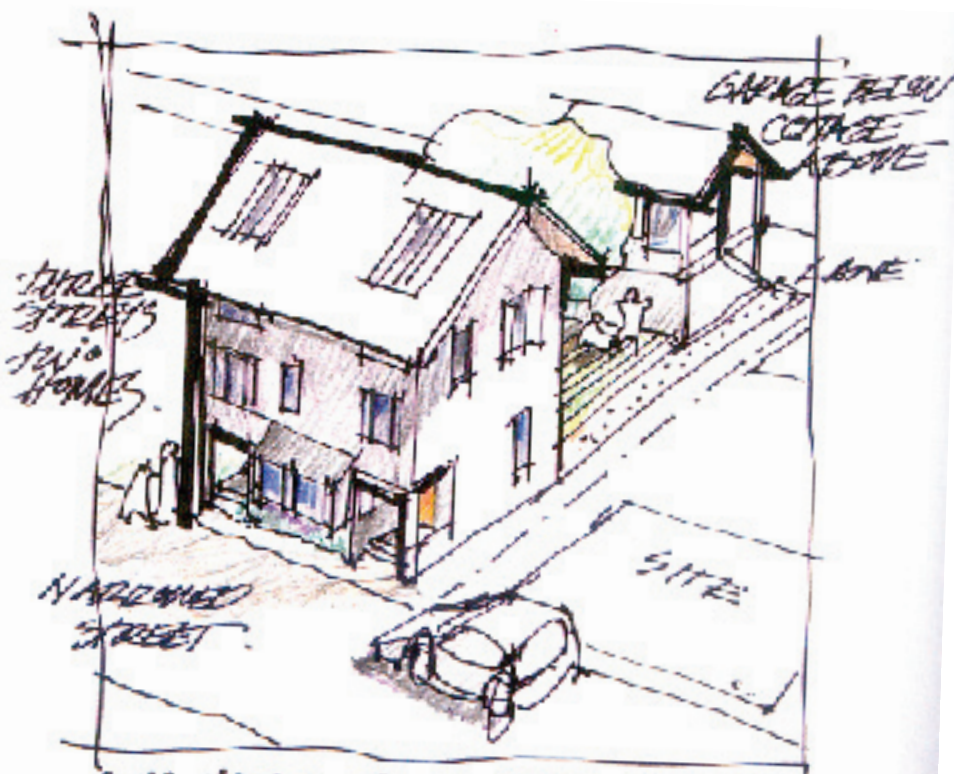
II. CREATE A LIVELY, PEDESTRIAN-SCALE TOWN CENTER AT KING CROSS + GID



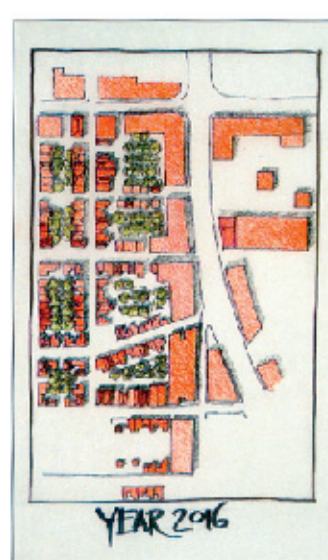
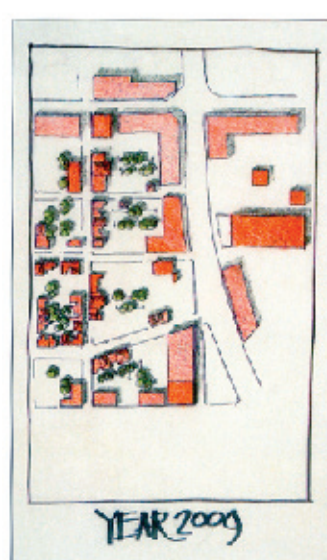
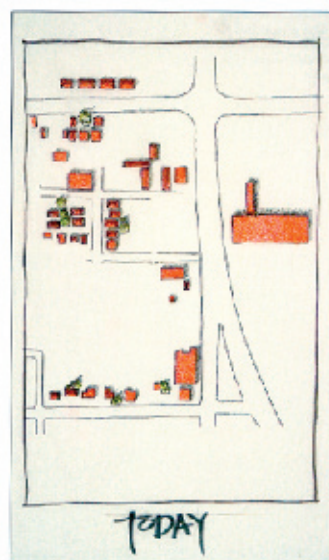
III. NURTURE THE EVOLVING ECOLOGY of the SITE



IV. LOCATE DENSE, MIXED USE BUILDINGS at the EDGE



A HOME FOR TWO FAMILIES + GARAGES



Photoshop Examples

Before



After



Before



After

