

# SECTION C - CHARACTER AND EXPRESSION

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#### INTRODUCTION



#### **I.I Purpose and organization**

This section of the guidelines builds on the public realm plan to set out a more detailed design direction for the key components that together provide the character and expression of this unique community. Architecture, landscape, lighting and commercial design are addressed, the essential attributes of each described and illustrative examples provided.

The section is organized as follows:

**I.0 Historical Character** sets the context and provides the fundamental character-building cues for capturing the essence of this unique place. A Statement of Significance provides a comprehensive overview of EFL historical facts, imagery and artifacts.

2.0 Architecture provides design direction for the various building typologies, identifying the key attributes of each and demonstrating, through illustrations, the diversity of architectural responses anticipated. General direction for building materials is also included, establishing an overall palette for the unique architecture anticipated in EFL.

**3.0 Landscape** provides general direction for hard and soft landscape treatment to the various frontages defining the roads, pedestrian routes, open spaces and parks of the public realm. It also addresses the semi-private spaces that have a direct affect on these public spaces. As integral aspects of the landscape character and the approach to sustainability, planting design, materials, urban agriculture, rainwater management and urban ecology are also addressed.

4.0 Lighting establishes the general approach to illumination for the building typologies identified in Architecture, above, and reflects the importance of the nighttime character of buildings and related landscape to the overall public realm.

5.0 Renderings - A series of renderings are included to provide an overall sense of the intended character for the west neighbourhood. These include an overall aerial as well as several vignettes demonstrating the close relationship between buildings and key open spaces. The renderings illustrate anticipated responses of built form to the unique opportunities of the site – river views, topography, significant park areas, naturalistic settings and streetscapes - with an aim to reinforce and enrich these characteristics.

## 1.2 HISTORICAL CHARACTER

The historic aspects of the White Pine Mill – industrial installations and structures, and elements of the working river – provide references for developing a memorable architectural character for East Fraserlands. It is anticipated that building designs will draw from these references and combine them with a fresh contemporary expression. The architecture will be influenced by the nature of the precinct to which it belongs and historic references. The precincts are characterized as follows:

- Northwest Precinct
  - a more urban expression, relating to city streets Marine, Kerr and Kent
  - a richly articulated expression within townhouse parcels and at frontages on Road E
- Southwest Precinct
  - a more relaxed garden setting complementing the naturalistic parks on its east and south edges
- Southeast Precinct
  - higher density form complementing Central Neighbourhood of which it is a part
- more formal massing of streetwall and townhouse 'fingers' extending to foreshore

There are many elements of the mill and the working river from which an architectural direction may be set. These are loosely organized into the following related groups:

#### Built elements

- Expansive but simple building forms with robust, often dynamic structures
- Steel and wood trusses, columns, bracing and supports
- Continuous roof monitors with clerestoreys
- Sawtooth roof forms with skylights
- Corrugated metal and wood board siding
- Single punched windows, repeated in series
- Massive sliding wood doors and steel rails, hangers and hardware
- Collections and assemblies of simple buildings of different scales
- Heavy timber

The river

- Riverfront piles
- Timber piers supported on piles and floating docks secured to them
- Pile and board retaining walls
- Tugboats, barges and mill boats
- Log booms
- Wooden decks

The industry

- Giant wood log
- Beehive burners
- Heavy striated rollers
- Criss-crossed structure of cranes and conveyors
- Chimneys and furnaces



#### STATEMENT OF SIGNIFICANCE AND HERITAGE INVENTORY

Note: This document follows generally the form of the Statement of Significance (SOS), which has been adopted by the City of Vancouver in accordance with the template developed by Parks Canada and the Historic Places Initiative. It differs somewhat from a standard SOS because it considers a large area rather than a building, and because the historic place is a brownfield site that has been cleared of most buildings and structures.



Image: Google Map

#### **1.3.1 Statement of significance**

#### Description of the Historic Place

The historic place is a 53-hectare former sawmill site on Vancouver's Fraser River flats in the southeast corner of Vancouver. It is bounded by the North Arm of the Fraser River, Boundary Road, S.E. Marine Drive, and Kerr Street. The large site is bisected by the CPR railway line and by E. Kent Street North and South, which run along either side of the tracks.

South of Kent Street, most of the sawmill buildings have been cleared. It is primarily open ground (under remediation). The land is fenced with the entrance on Kent Street. A few buildings and large artifacts remain, notably the 1970s administration building on Kent Street, a large storage building to the east, and a travelling crane along the river to the west. A new pedestrian path runs along the dyke, on the north shore of the river. The river shoreline continues to be used to store and sort logs. Impressive views can be had to Lulu Island and its working river shore to the south, and to Mt. Baker to the southeast.

North of Kent Street, the land is mostly covered in deciduous trees, with a few developed properties, notably a cluster of buildings at Kerr Street, a self-storage warehouse complex near Kinross Street, and a keylock truck-fuelling station at Boundary Road.

#### Heritage Value

The heritage value of the site lies in its richly layered history, which is contained in stories about its past, in aspects of its geography, and in remaining tangible objects.

recorded.

The historic place is located within the traditional territory of the Musqueam First Nation. An archaeological assessment has been completed and no archaeological sites have been

When European settlement took place in the mid-nineteenth century, the East Fraser Lands featured natural pastures and a mixed wet coniferous forest that was susceptible to flooding. Bears, elk, deer, and cougar were sighted in the area. Two creeks crossed the land: one was a short watercourse or tidal slough and the other flowed down from the bench above the flats. Later known as Kinross Creek, the stream was buried by landfill in the early twentieth century and no sign of it remains. Aspects of the historical geography remain legible in the landscape, including its flatness, the relationship to the river, and the views of natural features such as Mount Baker.

Like the Musqueam, the early European settlers placed the river at the centre of their world, using it for transportation, sustenance, and recreation. The early community, called North Arm, was made up of people living on both sides of the river. The earliest settlement along this stretch is associated with the Royal Engineers, who were brought to British Columbia to assist in the establishment of the colony. The land now known as East Fraser Lands was bought at auction by the sons of William Rowling, a Royal Engineer. They bought it (later exchanging it with their father for lands in Richmond) because 'that was where the little natural pastures were where we ran our cows.' Marine Drive, which follows the route of the rough trail built between Marpole (South Vancouver) and New Westminster in the 1860s, is a tangible reminder of this early colonial settlement along the Fraser River.

The site has value for reflecting the transition from agriculture to industry. By the early twentieth century, the Rowlings' cow pasture had been subdivided into long narrow lots and the area now known as Fraser View appeared on some maps as 'Rowling Heights'. In 1909 the BC Electric Railway established an interurban line between Eburne (Marpole) and New Westminster, leasing and electrifying the recently constructed CPR tracks that cross the site today. With both passenger (BCER) and freight (CPR) rail service in place, parts of the waterfront along the north arm of the Fraser began to industrialize, including here at the East Fraser Lands. South of Kent Street, between the river and the railway tracks, a sprawling sawmill complex (with its own interurban railway stop) took shape over a period of several decades. The loading dock, the CPR tracks, and the utility poles and roadway (Kent Street) that flank the tracks on both sides are all important reminders of the role that transportation played in enabling the area's industrial past.

The sawmill complex was known first (in 1923) as Dominion Mills and later as Canadian White Pine. It eventually became part of the empire of British Columbia's mid-20th-century forest industry giant, MacMillan Bloedel Limited. In recent times the mill sawed Douglas fir and manufactured plywood. The latter operation was the first major plywood factory in the Province. The place has particular value because of its association with BC's vital forestry industry in general, and with 'MacBlo' in particular. It also reflects how closely Vancouver's economy was, for many years, tied to the coastal forest sector.

The hustle and bustle of the predominately male workforce, the smell of freshly cut wood, and smoke from the beehive burners are gone now, but the potential for story-telling about Vancouver's industrial history is tremendous. The site has considerable value for its associations with the history of labour in British Columbia, especially of the IWA; the contributions to the sawmill industry of ethno-cultural minorities, particularly Sikhs and Chinese; and the role of women in Canada's wartime effort. The stories of individuals, such as union organizer Darshan Sangha and Gladys Shunaman, the first female to hold an elected office in the IWA, stand out in this regard. Corporate leaders at MacMillan Bloedel were also important public figures associated with the site. This is exemplified by the career of Bert Hoffmeister, who joined Dominion Mills in 1930, returned after wartime service in which he became the most decorated Canadian soldier, and later become the President of MacMillan Bloedel. The site, still known as the Canadian White Pine Mill, was acquired by Weyerhauser of Seattle when it purchased MacBlo in 1999.

A travelling crane, fluted v-rollers used to move raw logs, and a large engine from the hog pit remain on the site as reminders of how the place was all about moving and cutting wood Other tangible remainders include the wood administration building (with its safety signs and other memories of the forestry industry), built in the 1970s; and a large, glulam-arch-roofed storage facility, likely built in the 1960s. Neither is listed on the Vancouver Heritage Register and neither appears to have heritage value. More structures survived until recently, but were demolished when Weyerhauser sold the mill equipment in 2000. Along the shore, piles and decking reflect the central role of the river in transporting raw logs. Log booms, boom boats, and boom-men still work along the edge of the site.

The industrial history of the historic place is well documented. UBC Special Collections hold photographs and papers from MacMillan Bloedel Limited, including a collection of papers relating to the Canadian White Pine Division. A review of maps, aerial photographs, and images of the industrial site shed light on its internal geography as well as providing information about the industrial forms and materials that characterized it. Panoramic images of the site can be found at the Vancouver Public Library. The Vancouver Museum has a collection of Canadian White Pine artifacts.

#### Character-Defining Elements

#### General Setting

- Views and sounds of the North Arm of the Fraser River and its industrial activity, including log booms, piles, and boom boats

- Generally flat topography

#### Boundaries and Corridors

- Existing street network linked to East Kent Street, SE Marine Drive, Kerr Street, and Boundary Road. Kerr and Boundary both go through to the river.
- Boundary Road
- points and fencing

#### Buildings, Structures, and Artifacts

- Wood administration building from the 1970s, with no apparent heritage value
- Arch-roofed storage facility, likely from the 1960s, with no apparent heritage value - Large travelling industrial crane (without its rails) with its off-white colour, 'doghouse', and other early features
- Large engine with its patina of wear
- Signs, such as 'no caulk boots,' that are reminders of the industrial history of the site
- Piles, decking, and other structures along the shoreline

#### Other

- Rise and fall of the river through the day and through the seasons
- The experience of river as a natural habitat
- View southeast to Mount Baker, a view that defines the region
- Treed benchland rising to the north

- Ragged quality of E. Kent Street, particularly in comparison to Marine Drive and
- Railway right of way and track, lined with utility poles
- Large administrative and parking compound south of Kent Street, with fixed entry
- Dike and river shore shaped by industry
- Fluted v-rollers from the mill, with their patina of wear
- Large abandoned pipe (south of the storage building)
- Raised loading dock and remnants of railway siding track (probably more on the
- Archival and photographic record at local repositories

#### 1.3.2 A Note on Industrial History, Geography, and Character

Former features of the East Fraser Lands that relate to its industrial history have been identified from a review of aerial photographs, fire insurance plans, maps, and photographs. These features no longer exist, but could serve to inform the design of the site in terms of forms, materials, and overall geography. The language of sawmilling, documented in the report on the history of the site prepared by Propeller Communications Research, could also be incorporated into the design of the public spaces.

The focus is on the state of the sawmill complex in the mid-twentieth century, when the forest industry dominated British Columbia's economy.

#### Description of the Industrial Complex

Located on the Fraser River, MacMillan Bloedel's 'White Pine Division' sprawled out along the shore between Kerr and Boundary. The most densely developed part of the complex extended west of the Cromwell Street allowance to the Hurley Street allowance. At the centre were two sawmills, a powerhouse, beehive burner, smokestacks, and raised tanks, clustered on the riverfront. Log booms, tugboats, and piles cluttered the riverbanks while along the shore there were wharves, ramps, and scows. The boundary between the water and the land was obscured by buildings that extended out over the water, creating 'rooms' along the shore.

Raw logs were sorted and then moved from the water via jackladders (also called a log haul) and hoists. From here the logs went into the sawmills to be debarked and cut. As the wood worked its way through the mills it was further finished and dimensioned. Behind the mills were kilns, a massive planing mill, and a drying shed that extended out to Kent Street. Administrative offices faced Kent Street. Yards full of stacked lumber extended around the buildings. Motorized Ross Carriers (a specialized truck) were used to move the cut lumber. These yards had an order of there own with lanes and plank roads.

The BCER sidings extended onto the site for shipping. A system of conveyors, ramps, and roads were used to move wood through buildings and around the site.

A third mill was located at the western edge of the White Pine site where there was another sawmill complex extended from the river back to Kent Street. It included kilns, drying sheds, and yards.

Photographs and site plans show large structures framed and sided in wood, with wide doors or open sides for moving machines and materials. Most of the buildings were one-storey high with a variety of roof forms including flat, sawtooth (veneer factory) and arched. The cedar mill at the western edge of the site used a clerestory and monitor roof to supply additional light to interior spaces.

To the east of the sawmill cluster was the Vancouver Plywood Division. This enormous plant straddled the Cromwell Street allowance and ran from the river to Kent Street. Another large lumber yard extended east of the plant.

Further west, off of Kerr Street, there was a cedar mill variously known as the North West Cedar Mill and the BC Red Cedar Shingle Mill. It is not clear whether this was owned by MacMillan Bloedel

In the early years of its operation, before World War Two, Douglas Fir, cut into lengths of up to 40 feet was the main product of the mill. The mill later expanded to cut Western White Pine, Hemlock , Sitka Spruce, and Western Red Cedar.

This intensely developed site had its own BC Electric Station (Dominion Mills). The most obvious points of entry were at the east side of the veneer complex and on the west side of the general offices, where there were time offices. The cedar mill had a separate entry off of Kerr.

Although the site was primarily industrial, site plans show a "Chinese Bunkhouse" at the foot of the Hurley Street road allowance. It was not unusual in British Columbia to find such clearly segregated accommodation on industrial sites.

As with any large industrial site this one had an organic character that shifted with the introduction of new technologies and changes in the lumber market. Photographs from the 1990s reveal an organic industrial complex with large shed like buildings constructed in wood and sheet metal. Industrial green is the most prominent colour although there is some evidence of MacMillan Bloedel's corporate colours of red and white.

The principal boundaries, corridors, buildings, structures, forms and materials are listed below. Maps and photographs have been prepared to show where many of these features were located and to illustrate forms, materials, and use of the site.

Boundaries and Corridors

exactly where the entries were)

Buildings and Structures --General

- Street road allowance
- Lower density on the rest of the site, with a number of stacked lumber across much of the site, with a maze of narrow lanes between the stacks - Huge saws and other machines for cutting, dimensioning, and finishing logs
- Conveyors of various kinds (log haul, jack-ladder, greenchains, rollers) Ross carriers, and cranes for moving logs, cutting them up wood, and moving it again

Forms and Materials – Industrial

- Industrial structure systems with wood columns, large wood beams

Forms and Materials – Riverine

- later metal
- Log booms, enclosed and semi-enclosed spaces on the water
- Scows, tugboats, and boomboats
- Buildings projecting over the water

#### Character Defining Elements of the Former Industrial Land and Riverscape

- Gated entrances to the sawmill complex south of Kent Street, with large signs (not sure

- Internal system of roadways and laneways

- Dense complex of large and small buildings along the river and west of the Cromwell

- Beehive burners and smokestacks, east of the dense complex

- Sprawling, one-storey, wood and/or sheet-metal buildings and shed-like structures.
- Monitor roofs (with clerestory windows) and big doors; sawtooth roofs
- Huge flat and pitched roof planes in asphalt shingle
- Mullion windows in horizontal bands
- Industrial green, rusting sheet metal, metal ramps and stairs

- Forest of piles along the river's edge, projecting out into the water lots
- Ramps, loghauls, wharves, all kinds of ways of linking shore to the river, built of wood and

## 1.3.3 Map Showing Industrial Character Land and Riverscape in the 1940s



Aerial Photograph of the White Pine Mill, circa 1940

1.3.4 Photographs Illustrating Historic Character







Note: These photographs portray the site at mid-century.

**Boundaries** and Corridors Industrial Riverine



#### 1.3.5 Inventory of Extant Heritage Resources

#### INTRODUCTION

The inventory of heritage resources lists what remains on the site. Each resource has been photographed, briefly described, and assigned a reference number. The current locations of all of the resources have been mapped. The historic locations of the large movable resources (BI-B4) have also been mapped.

#### A. Buildings





Resource No.	AI
Description	Storage Building
Location	South of Kent Avenue between right- of-ways for Dudley and Cromwell Streets
Notes:	Arched roof

Resource No.	A2
Description	Administration Building
Location	Just south of Kent Avenue at the foot of Cromwell Street
Notes:	

## B. Structures, Remnants of Structures, Machinery, Linear Features (Land)



Resource No.	BI
Description	Travelling Crane
Location	Near shoreline, just east of Kinross Street
Notes:	

Off white in colour, doghouse and other original features remain intact; no longer on rails

Set on rails and powered by electricity, mobile cranes were used to move sawn lumber from the mill for shipping and storage. Located west of the main sawmill complex near the river.







Resource No.	B2
Description	Fluted V Rollers
Location	In a pile behind (south) of Administration Building, off Kent and Cromwell

Notes:

Patina of wear, rust

The Fluted V Rollers were part of the loader log infeed system used to move the raw logs logs from the water to the mill for debarking and sawing.

Resource No.	B3
Description	Large Engine from the Hog Pit
Location	In a pile behind (south) of Administration Building, off Kent and Cromwell

Notes:

Patina of wear, rust

"Hog" – or sawdust mixed with bark, wood, and shavings, was used as fuel for the powerhouse at the site. A mechanical shredder was used to make the hog from waste materials. This engine likely either drove the shredder or the series of conveyor belts that connected the hog pit to different parts of the mill (where the waste material came from) and to the powerhouse, beehive burner, and scows (where the waste went).

Resource No.	B4
Description	Large pipe across the site
Location	Located in the vicinity of the Dudley Street right-of-way

Notes:

Patina of wear, rust

Early twentieth century maps show the shoreline along the Fraser protected by a dike. In the 1920s ditch ran north south, along the Cromwell Street Allowance, providing drainage between Kent and the river. This ditch is later replaced by a large pipe and a pump connection, which is shown at the foot of Cromwell in the 1950s. This large pipe is likely associated with these drainage features.



Resource No.	B5
Description	Raised loading dock and remnants of railway siding tracks
Location	Between Kinross and Cromwell Streets bordering Kent Avenue
Notes:	
Probably more track and ghosts of track to be found on site	
Associated with BC Electric Railway and shipping of lumber by rail. The rail line was built circa 1908.	



Resource No.	B6
Description	Industrial signs
Location	On the Administration Building (just south off Kent Avenue, bordering Cromwell Street)
Notes:	
Reminders of the industrial history of the site	



Resource No.	В7
Description	Railway right-of-way and tracks
Location	Running parallel to the property on its northern border

Notes:

Built circa 1908 by the Vancouver and Lulu Island Railway, a subsidiary of the CPR. Leased and electrified by BC Electric Railway in 1909.







Resource No.	B8
Description	Piles, decking and other shoreline structures
Location	All along the shoreline of the property between Kerr and Boundary Streets
Notes:	
Has a view across t the foreground.	the river and can see log booms in
Reminders of the i	ndustrial history of the site

## 1.3.6 Map Showing Present Location of Extent Heritage Resources



#### 1.3.7 Map and Photographs Showing Historic Location of Extent Movable Heritage Resources



B1 Travelling Crane

#### **ARCHITECTURE** 2.1 Principles for Architectural Design

#### I. Rich architectural diversity within a cohesive urban fabric.

Design individual buildings with distinctive architectural expression while achieving a complementary response to the overall block and streetwall.

#### 2. A unique architecture that captures the history of the site.

Recall the forms, components, materials and other characteristics of the working river and the historic mill in the design of buildings and blocks. Key opportunities include Kerr Street Landing and Waterfront buildings.

#### 3. A contemporary architecture with a high degree of livability and acknowledgement of place.

Design buildings based on the tenets of west coast modernism:

- A strong relationship between interior and exterior.
- Use of locally-produced materials including natural elements (eg: wood, stone).
- A simple, clean approach to building systems for flexibility and economy.
- Adaptation of natural structures such as the cantilever.
- Orientation for environmental efficiency and views.
- Use of space-making/-expanding properties of the interplay of plane and geometry.

#### 4. A legible sustainable architecture that addresses the social as well as the environmental aspects of building design.

Include physical elements of sustainability such as sun shades, deep roof overhangs and the like as well as social aspects of sustainability such as access to quality outdoor space and highly transparent interior common spaces.

#### 5. An expressive and permeable architecture that enhances the legibility of the urban structure and facilitates connectivity of retail, residential and community facilities.

Create visual cues in building designs that mark key spaces, routes and zones. Where breaks in building frontages occur, these cues will provide important visual connections. Introduce breezeways and arcades in streetwalls to allow views into and secondary routes through development blocks.

#### 6. A distinctive character for each of the three precincts in Area 2.

Northwest Precinct: - a more urban expression, relating to city streets Marine, Kerr and Kent - a richly articulated expression within townhouse parcels and at frontages on Road E

Southwest Precinct: edges

Southeast Precinct: - higher density form complementing Central Neighbourhood of which it is a part - more formal massing of streetwall and townhouse 'fingers' extending to foreshore

# of the community.

Kerr Street landing: Design ground floor spaces with a high degree of transparency. Create diversity and visual interest through details and components such as signage and canopies.

Residential: Design ground floor units with front doors on the street to enhance street vitality and comfort. Enhance the public realm with front terraces with opportunities for planting and create main entrances that are transparent and welcoming.

#### 8. Landscape treatments that give individual parcels their own identity while integrating them with the framework of the public realm.

Landscape design for individual parcels should relate to their respective precincts; perimeter frontages should complement and enhance the public realm.

# comfort.

Lighting should complement the public realm strategy that identifies the specific lighting character zones of the site (Refer to the Public Realm Plan).

#### 10. Integration of sitewide ecological initiatives.

Design buildings and open spaces to demonstrate sustainability initiatives such as the songbird strategy, urban agriculture, rainwater management, solar shading and the like.

- a more relaxed garden setting complementing the naturalistic parks on its east and south

#### 7. An architecture that enhances the pedestrian experience and supports the walkability

#### 9. An approach to lighting design that creates nighttime legibility to reinforce the distinctive character of precincts, public spaces and parcels and places priority on pedestrian





Massing / facades treatment of townhouses to clearly distinguish individual units

THI

Semi-private spaces at grade designed for privacy and landscape contribution to the public realm

TH2

Upper level setbacks providing generous outdoor space and articulation

Simple geometry of northwest modernism contrasting large

glazed areas with solid wall planes

TH3

2.2 Building Typologies

#### Residential

#### 2.2.1 Town homes

The townhouse contributes a low-scale, fine-grain form that gives the individual home a presence in the streetscape. Along with stand alone townhouse development many low and mid-rise residential buildings adopt a townhouse form at grade to extend this intimate, pedestrian-friendly character throughout the public realm.

#### Form and Character:

#### Massing:

Townhouse forms and articulation should clearly distinguish individual units both in plan and elevation. This can be achieved in a variety of ways including projecting bays, recesses, vertical 'framing', individual roofs and entry canopies. Consistent with the concept of a low-scale form, setting back frontage above the second level is encouraged to express the townhouse base in low and mid-rise buildings.

#### Access to outdoors:

An advantage of the stand alone townhouse form is the through unit with front and rear areas at grade. These semi-private spaces should be designed to distinguish individual domiciles while providing a landscaped buffer between house and public realm. At upper levels, balconies, terraces and roof decks are strongly encouraged to provide private outdoor space and increased articulation. Simple but legible roof shapes can provide further architectural interest.

#### Simple, clean expression:

Townhouse designs should reflect the simple geometry of northwest modernism contrasting large glazed areas with solid wall planes and clearly defining outdoor spaces. Landscape walls and projecting wall planes to increase privacy between units are encouraged.

On waterfront parcels, townhouses are anticipated to express a unique response to the riverfront location.









Taking advantage of opportunities for unique outdoor space

TH5

TH4

#### 2.2.2 Multi-family

The most prevalent of the low and mid-rise typology, these buildings are the face of the residential neighbourhoods. Fronting on a wide range of public and semi-public spaces from major streets to local mews and courtyards, these buildings present opportunities for diverse architectural responses, contributing to a high level of visual interest.

#### Form and character

#### Ground-oriented suites:

Many residential frontages will have two storey units at grade. Designed to be individually legible, these units will contribute to a finer, more human scale at the level of the pedestrian. With front doors on the street, these two-storey units generally follow the design principles of townhouse design. Raised entry areas at most ground level suites provide comfortable semi-private space for a garden and patio several steps up from grade. Most ground-oriented suites will also have accessible entries from interior corridors. Other opportunities exist to provide accessibility directly from the public realm through ramping or in some cases fully at-grade units.

#### Massing:

In some instances setting floors back at the upper levels will help soften the building massing, increase access to daylight and create diversity. Setbacks in mid-block courtyards for daylighting and privacy as well as providing generous deck space for residents are supported. Interesting roof shapes are encouraged to enrich the overall texture and visual amenity of the development. Stair enclosures accessing roof decks can also add to this diversity of form.

#### Green roofs:

It is anticipated that green roofs will be provided on concrete buildings. Green roofs should be designed as visual amenity as well as an attractive environment for outdoor common space with opportunities for significant planting and urban agriculture.

#### Transparency and legibility of indoor public spaces:

These buildings are generally double-loaded with a transparent lobby fronting on the primary facing street. Common interior spaces such as entry lobbies, stairs, exercise rooms, and lounges should be as transparent to the exterior as possible, encouraging a visual connection between these spaces and the exterior community.

#### **Balconies:**

The EFL CD-1 bylaws allow for more extensive open balconies than typical to improve solar shading and to enhance the livability and useability of private outdoor space. The design and expression of the balconies should contribute to the articulation and architectural expression of the building.

#### Enclosed balconies:

The CD-1 bylaws allow enclosed balconies in some locations along SE Marine Drive/Marine Way to improve livability by reduction of noise in residential units. Enclosed balconies should:

- be clearly expressed on the exterior of the building
- project somewhat from the main façade
- be highly glazed with transparency and openness at corners
- appear to be open balconies that have been enclosed





Playful massing creates opportunity for grand entryways and rich outdoor semi-private space

MBI

Green roofs as rainwater control and visual amenity (concrete buildings)

MB2

Use of solid and void to create a strong visual language

MB3

2.2.2.1 Low and Mid-rise

#### Overview

Area 2 allows for a range of low and midrise building forms in wood-frame and concrete construction, and it is important that both forms of construction accomplish the urban design and architectural expression aspirations of EFL. The exploration of innovative uses of wood and construction methods is encouraged in EFL.

#### Articulation:

This character is enhanced through the design and articulation of the building - recesses and projections in building frontages creating a more comfortable scale and a more interesting streetscape. The degree of articulation largely depends on the adjacent public realm. For instance, a more vertical, urban streetwall should be designed for prime public street frontage whereas, a more informal treatment with deeper setbacks in both the vertical and horizontal planes is encouraged for private frontages at mid-block locations. While the general massing of wood-frame buildings will likely be simpler, articulation may be accomplished with elements such as broad protective overhangs, horizontal banding, balcony expressions, increased ceiling heights and roof forms to emphasize portions of the building, integrated screens, and distinctions in material, colour and window extent on upper levels.

#### Permeability and Passages:

Breaks in building frontages serve to reduce the apparent mass of these forms and to increase block permeability. Whether in the form of breezeways or passages open to the sky, these offer an opportunity for enriching the public realm, punctuating the streetscape and offering glimpses to inner blocks. In the case of the waterfront blocks entrance lobbies are proposed at these breaks which also provide views of the semi-private gardens and the river beyond. It is important that these passages are welcoming to passersby – sightlines, lighting and materials being key considerations.

#### Transparency:

Building lobbies and stair access in this typology are intended to be as transparent as possible for visual interest and a sense of security.

#### Roofscapes:

A number of these buildings will be concrete construction, allowing for green roofs. Whether treated as accessible garden areas or inaccessible green areas, they are intended to contribute to overall rainwater control and serve as visual amenities. These green areas are also intended to create a more appealing roofscape when viewed from higher buildings in the development.

Roofs in wood-frame, while not required to be 'green roofs' should be designed to accommodate useable roof areas that contribute to the outdoor enjoyment and river views of residents, and enhance overlook from upperstoreys and uplands areas.











Diverse range of outdoor private space

MB5









The stepped form increases livablity through readily accessible outdoor space

More vertical terracing can be used to mitigate scale and

enrich the streetscape

Townhouses at grade to transition scales

MSI

MS2

MS3

Strong horizontals provide shelter from rain and sun, as well as articulating the building facade

MS3





Terracing can be achieved through regular 'steps' (left) or a more varied transition

MS4

2.2.2.2 Terraced Buildings

Terraced building forms are a key element in Area 2, both along the riverfront and in response to the sloping sites of the Northwest Precinct. The topography and relationship to theriverfront is uniquely well suited to this building form and the opportunities it presents to reflect not only the nature of the river and land but to provide generous outdoor decks that enjoy both sun and view.

#### Principles for terraced buildings:

- As a highly desirable outdoor amenity roof terraces should be easily accessed from and adjacent to living areas of the unit.
- expression is intended while the latter is better suited to a quieter character.
- Parcels with taller buildings should use available height to advantage in the extent of terracing provided.
- Overhangs and horizontal projections should be used to accentuate the visual impact of terracing
- All buildings along the riverfront should be terraced to some extent, regardless of whether they are wood-frame or concrete construction, although it is anticipated that taller concrete buildings will be more extensively terraced. Four-storey wood-frame buildings may express the effect of terracing as described in Section 2.6 Massing Parameters, but it is expected that the massing will resolve at a three-storey height for some portion in closest proximity to the riverfront.
- Extensive terraced areas on concrete buildings should be developed as green roofs where not designed as other useable outdoor amenity space for residents.
- Location and design of useable roof decks and green roof areas should consider overlook, privacy, and views of others.

• Stepping can take a variety of forms; whether regular increments or more varied; the former is encouraged where a stronger architectural



Screens integrated into the facades to control sun

Articulation of facade to increase opportunities for views and outdoor space

Τ2

Articulate mass to break down scale

Т3

Opportunities for dynamic forms, especially roofs and overhangs, to especially shape exterior spaces

T4

#### 2.2.2.3 Towers

Generally, towers in Area 2 are more modest in height and less prevalent than in the Central Neighbourhood. However, they are still important as form-givers in the overall development fabric. Location and height are used to: 1. provide a three dimensional composition that helps to visually define the edges of public open spaces including Kinross Park corridor and Playfield Park.

- 2. create 'cues' for navigating the community for example, the tower in Parcel 5B is a clear visual marker viewed from Kent Street as the eastern extent of the Northwest Precint.
- 3. terminate views, especially to provide connectivity between different parts of the community for example, the two towers flanking Kinross

Park South and the three towers marking the south edge of Playfield Park. Towers should be designed and configured to reflect their larger role in the overall plan and to respond to localized urban design conditions. To enable greater design flexibility these guidelines have limited specifications regarding dimensions and configuration. However, the following are important considerations in the design of each tower.

#### Form and character

#### I. Tower Floorplates

Tower floorplates above the 9th storey should not exceed 605m2, including all interior floorspace but excluding exterior balconies, except, at the discretion of the Director of Planning, an increase to 650m2 may be considered where the proposed building demonstrates all of the following:

- a) exceptional green building design, particularly in the area of energy performance. Exceptional green building design and energy performance will be assessed relative to evolving city standards at time of each development permit application.
- b) exceptional architectural design. While all buildings at EFL are expected to achieve a high standard of quality, materiality and architectural design, taller, larger buildings should be exceptional. Particular emphasis should be placed on articulation to de-emphasize perceived building mass.
- role of the building within the overall plan. It should not adversely affect sun on public places, or the perceived scale of buildings adjacent to important public places.

#### 2. Solar Access

Towers should be articulated and shaped to optimize solar access on important public places such as Kinross Park, Playfield Park and the playspaces associated with the school and child care facilities.

#### 3. Views

Views from uphill in Champlain Heights and from within EFL should be considered in the shaping and orientation of towers.

#### 4. General Expression

Towers should recall the simple, strong sculpting and clean expression of elements associated with northwest modernist design. A combination of solid planes, punched windows and larger glazed areas, should mitigate the scale of the towers and provide visual interest. The northwest character, combined with provisions for extensive balcony areas, readily support sustainable design initiatives with deep overhangs offering effective shade, solid or punched planes providing increased thermal value and selected areas of glazed wall and clerestories providing generous access to daylight and views. The intent is to avoid the fully glazed facades associated with Vancouver's downtown towers.

#### 5. Relationship to Streetwall

Tower forms should generally be set back from the streetwall to allow the scale of low and mid-rise buildings to form and define the streetscape, however, in some locations, limited portions of towers such as at corner entry areas may extend uninterrupted to grade as part of the street base. For example, the tower at the northwest corner of Parcel 24 is shown coming to grade to announce the entry to the Southeast precinct and provide a visual terminus at the south end of Kinross Street.

#### 6. Tower Tops

Upper levels should typically have reduced floorplates to accommodate terraces, to enable sculpting and capping, to limit apparent massing, create architectural interest, and contribute to skyline. Elevator penthouses should be screened, integrated into a roof structure, and/or partially concealed by upper levels and volume spaces of top level units.

c) contextually appropriate massing. An increase in building floorplate should be suitable to the localized urban design condition and the





Dynamic roof form to anchor the end of Kerr Street

MCI

Contemporary expression using simple elements of early industrial buildings

MC2



Legibility at the river's edge

MC3

2.2.3 Kerr Street Landing (Parcel W3)

#### Retail Building

The waterfront portion of Parcel W3 is reserved for an iconic building, in concert with the adjacent plaza and the existing pier, will provide a unique place in the western neighbourhood. An informal community hub, a riverfront landmark and visual reminder of the site's industrial heritage. This building is intended to connect to the community with the river through its location, design and local serving retail uses.

#### Form and character

#### Design expression:

The Kerr Street Landing is intended to acknowledge past and present in a contemporary expression. Prevalent characteristics to be considered in design include:

- simple geometric forms and elevations
- strong, heavy timber structures clearly expressed
- clapboard as well as board and batten cladding
- large scale elements like the substantial sloped roofs
- large sliding doors and
- oversized openings contrasting with a more solid exterior

#### Massing:

This building, should recall the ad hoc nature of the industrial sheds reminiscent of BC's many waterfront mills. These iconic forms lend themselves to the creation of dramatic spaces. The retail building of Kerr Street Landing should have a minimum two storey scale - achieved through combination of two levels and/or double height spaces. Residential development should occupy inboard areas of the site, enabling greater flexibility in form and expression at the riverfront that contributes to a memorable and legible community hub. Vertical circulation for the retail building could be extended and expressed as a lookout tower that further enhances legibility and marks the location of this publicly-oriented and community-serving area.

#### Adaptation to current uses:

This building offers multiple design possibilities for dramatic use of volume; solid to void; and materials, expressing contemporary uses within a pragmatic industrial form. This is especially true for those semi-public spaces that extend from interior to exterior – the main gallery in a public activity centre, seating areas of cafes or restaurants. Some potential interventions include large glazed areas, projecting glazed bays, atria, glazed or solid canopies and balconies.

## Residential Building:

The adjacent four storey residential building should complement the general architectural approach to the riverfront retail building, however, it should also express the unique elements of residential design, especially the balconies, porches and decks that provide access to outdoors and views to the river.



Look-out tower marking the community hub in the Western Neighbourhood

MC4



#### Expression of sustainable northwest design

Focal point for social activity

Flexible spaces which can be used for many uses

Highly transparent double-height circulation and social

Opportunities for dynamic forms, especially roofs, to shape exterior gathering spaces.

#### 2.2.4 School / Child Care Facility

The Area 2 school and child care facility site occupies a special location in the EFL development at the interface between the Central and western neighbourhoods. This prominent location calls for buildings with a strong civic presence.

#### Form and Character

#### Configuration

The school and child care facility may be built at different times. As such, the buildings and site should be configured in a way that maximizes flexibility for the school, the child care, and their outside uses. It is intended that preliminary conceptual design work be undertaken for both facilities at the time the first one proceeds. Both the school and child care will likely require underground parking and drop off. Preliminary conceptual designs should seek to maximize efficiencies between the needs of the two facilities such as shared access to underground parking.

In general, the child care facility will occupy the southernmost area of the site and the school will occupy the mid and northern area.

#### Scale

The school is intended as a three storey form fronting on Road A' - a scale well-suited to the midrise blocks opposite. The child care facility will be a two storey form, also fronting on Road 'A', with potential covered connections between the school and child care facility.

#### Expression

Like the Community Centre, the school and child care facility should embody the spirit of EFL, combining industrial and west coast architectural expressions in a contemporary design. Heavy timber structural elements, wood and metal surfaces, extensive glazing and a strong connection between interior and exterior are encouraged.

#### School Entry Atrium

Responding to the neighbourhoods on either side of the school, the entry atrium should be a highly-transparent three-storey space visible from the Community Centre to the east and the playing field and Kinross Park to the west. The design should reflect the importance of the atrium as the prime public space and access for the facility.

#### Child Care Facility

The child care will be a two storey building occupying the southernmost portion of the site. The building should be sited and designed to maximize sunny south and west facing play areas, and to facilitate on-site connections with the school for parents and children alike.

#### Vertical Circulation

Stairs within the school should be as transparent as possible to provide daylight and views to the exterior to encourage use.

#### Green Roofs

Opportunities for green roofs - including 'extensive' treatment over gymnasium and non-usable parts and 'intensive' in selected parts of the child care play areas - should be pursued.

ARCHITECTURE 2.2.4

## MATERIALS

This section describes the general approach to materials anticipated in the East Fraserlands buildings. It does not dictate specific materials but offers a range of possibilities consistent with the aims for character set out in previous sections.

#### General Material Palettes

A number of material palettes evocative of the East Fraserlands spirit are provided below with the intent that they provide a starting point for design. Given the goal for a unique contemporary architectural language that captures both the history and the riverine nature of the site, creative combinations and reinterpretations of the materials presented here are expected in the building designs. Some examples of how these materials might be reinterpreted are also provided.

Note: In developing an architectural expression, the following materials - whether alone or in combination - should be considered within the context of the character precinct to which the building belongs. It is expected that materials will be durable, genuine and true to place.

#### Industrial

- Corrugated metal or polyurethane
- Wood siding
- Large shingled roof planes

  - Galvanized steel

#### Contemporary west coast

- Simple structures in wood, concrete or steel
- Concrete or stone walls, stairs and platforms
- Wood and cementitious wall panels
- Wood windows and doors
- Metal windows and doors • Latticed wood or metal screens
- Wood and metal railings

#### Riverine

- Large glazed doors and windows
- Wood decking
- Wood siding and simple volumes
- Cable railings

• Dramatic industrial structural systems - steel and heavy timber • Large expanses of glazing with mullion grids reminiscent of industrial steel windows

• Industrial grating, stairs and like components

- Generous glazing especially in connection with outdoor space

• Robust structures including wood piles, steel and wood trusses

• Nautical – especially evocative of working boats



These images illustrate the broad range of materials anticipated. Materials are intended to capture the industrial and/or riverine character of EFL within a contemporary west coast expression.

LANDSCAPE

#### 3.1 Introduction

The landscape design for private parcels should complement the public realm design for East Fraserlands while injecting richness and variety into the overall development through a variety of site-specific design solutions. The design and detailing of residential frontages and larger open spaces within development sites and of the proposed surface rights-of-way that permeate the parcels will play an important role in realizing the urban design objectives of the development.

#### 3.2 Approach to Landscape Design

The landscape guidelines provide direction for the range of private realm landscapes that make up the community i.e., residential frontages, common garden courts, internal mews, walkways and vehicular areas. A separate section is provided on planting design.

Fraserlands.

physical contexts.

Private / Public Realm Interface: The design of the private realm landscape must be complementary and supportive of adjoining public realm landscapes. For example, along park edges, the private realm landscape should be designed to take advantage of and complement the park setting and provide natural surveillance.

Sustainability: East Fraserlands has been planned as a sustainable urban community. All aspects of the landscape design should support this philosophy including satisfying the need for prudent water use, provision for bio-diversity, appropriate rainwater management, responsible material selection and the accommodation of urban agriculture. Sustainable aspects of the landscape design such as urban agriculture components, the songbird strategy and rainwater treatment features should be seen as opportunities to provide richness to the visual character of the development.

Design Approach: A wide variety of approaches to the landscape design may be encouraged to create variety and richness within the community. However all design solutions should satisfy a number of landscape design principles that are key to the overall approach to East

Context and Character: Area 2 of East Fraserlands is proposed as a new, high to medium density, sustainable urban community located on an historic industrial site on the banks of the Fraser River. The landscape design for EFL should aim to draw on these historical and





Retail building to enhance the public realm

Outdoor seating and retail displays animate the plaza

#### 3.3 Site Specific Characteristics

3.3.1 Kerr Street Landing

#### General Design and Character:

The only retail frontage in Area 2 is at Kerr Street Landing. The design of this frontage plays an important role in the overall form and character of the wider public space. This parcel provides the opportunity for retail frontages overlooking the plaza and the park space along the river. A generous terrace to accommodate retail displays and seating should be provided on the plaza and river sides of the building. The terrace should be elevated above the plaza to take advantage of views towards the river. Paving and landscape treatments should match or complement the plaza in terms of character and quality. Elements such as walls, steps, railings, signs, lighting and plantings should be considered as important contributors to the character of the plaza.





Trees in paving provide shade for the plaza while allowing views out.







Residential frontages express the character of buildings along the street.

A variety of approaches is encouraged to distinguish each development.

Residential frontages reinforce the expression of individual homes.



Encourage a sense of identity and community.



Provide a balance of privacy and overlook at the street edge.

#### 3.3.2 Residential Frontages

#### General Design and Character

Residential frontages will occur along a wide variety of street types ranging from Marine Way to quieter local roads such as Road H. Differing landscape treatments will be required to suit this range of conditions. Private outdoor residential spaces will vary from simple stoops to larger front yards with opportunities for outdoor relaxation, entertaining, gardening etc. Residential frontages will influence the character and grain of the adjoining streets and parks.

The Public / Private Interface: The interface between the public and private realms needs to be designed to provide public security while maintaining a level of privacy for residents. Visual connection and engagement between residents and street users is typically encouraged.

**Residential Expression:** Residential frontages should reinforce the identity of individual homes, and create a greater sense of community. The treatment of the residential landscape physically and visually connects residences and the street. Residential front doors, entry stoops, pathways, steps, gates, lighting and signage will all play a part in defining personal space and residential character. The design and detailing of each garden frontage should allow for some elements of uniqueness for each unit. Care should be taken in the design and treatment of elevated parking garage surfaces that project above grade to ensure a positive contribution to the public realm and pedestrian experience.

**Materials:** Material selection should match or be complementary to architectural building materials. Concrete, brick or stone should be used as the primary hard materials for walls and stairs. Metalwork, glass and timber will be used to design screens, fences, gates and overhead structures. Heavy timber, metal and glass can reflect the site's riverside location and industrial past. Pre-cast concrete walling units, proprietary timber fence panels and standard aluminum picket fences should not be used.

**Changes in Grade:** Residential units and associated entrances and outdoor spaces should be elevated above the street level to provide a degree of separation and overlook. The change in grade may vary. Most ground-oriented units will be fully accessible from interior corridors or courtyards. Other opportunities exist to provide accessibility directly from the public realm through ramping or in some cases, fully at-grade units. In the Northwest Precinct, where sites slope, careful attention will be required to ensure that grade changes are comfortably reconciled, avoiding abrupt drops, or large retaining walls above grade. Parking structures that project above grade should be mitigated by terraced massing and/or landscape design elements.

Visual Connections: The placement and detailing of residential doors and windows, coupled with the treatment of patios, walls, railings and soft landscaping will determine the effectiveness of the inter-relationship between the public and private realms. Residences will typically be elevated above adjoining streets and parks to allow for a strong sense of overlook from private to public. This arrangement will also increase the sense of privacy for residents. Windows, walls, railings and planting will be arranged to provide privacy for residents inside their homes. Floor to ceiling windows and glazed doors should not face out directly onto a sidewalk. A layered approach and the use of opaque glass and planting can be effective in achieving this effect.

**Usable outdoor space:** Outdoor spaces that encourage outdoor use will increase the level of activity and encourage social interaction at the street level. This will be important to improve security and a sense of community. Careful articulation of the grade change, a variety of heights, orientation and detailing of walls, railings and hedges all play an important role in defining the character of the street edge, expressing individual homes and creating a layered edge to the street. Tall and/or monotonous lines of solid walls, fencing and hedging will be discouraged. Low, layered planting in conjunction with planter walls and low fences will provide privacy and richness while allowing for views out to the street. Elevated terraces with associated plantings can add to the richness of the facade and provide valuable outdoor space.

**Privacy and Neighbourliness:** Separation between adjoining outdoor spaces will be designed to achieve an appropriate balance of privacy and neighbourliness. Typically walls, fences, plantings or a combination of these elements will separate yards. A height of 0.9-1.2m is preferred for lower walls or fences. A taller, more solid screen may be desired depending on architectural design. Hedges, shrubs and vines on fencing or trellises are all possible contributors to the design.

Direct adjacency of residential spaces to other ancillary uses such as loading areas, parking areas, parkade ramps etc. should be avoided or mitigated where necessary with appropriate buffering such as trellises, arbours and planting.



Elevate residential units above the street to provide overlook and privacy

Encourage opportunities for outdoor activity and social interaction.

Utilize a layering of walls, fences and planting to provide richness and define public from private.

Small trees can help to separate units and provide a foil against windows.

**Soft Landscape Treatments:** Small trees may be used to separate one home from another and to provide a foil against windows. Mixed plantings of hedging, shrubs and other plants should be considered to provide separation, soften built structure and provide interest for residents and passers-by. Climbing and trailing plants may be used to soften and enhance walls, screens and fences.

#### Site Specific Recommendations

Marine Drive/ Marine Way: The speed and volume of vehicular traffic along Marine Drive will require a special approach to the design of the residential frontages in this location. The design of these frontages needs to provide a high level of visual screening and, where possible, noise mitigation, from the road while reinforcing the residential nature of the community.

The slope of the site dictates that most lower floor units could be below Marine Drive. Grade changes should be reconciled with planted slopes. Large, exposed retaining walls should be avoided. Fences or walls are anticipated along the proprty line to provide protection at the top of the grade change, to mitigate traffic noise and to form part of the screening along the street. Walls and fencing should be softened with low plantings. Tree plantings located within the street and the parcels will be critical to provide screening for upper units facing the street. Where practical, individual unit and garden entries should be expressed.

Kerr Street and Kent Avenue. These streets are anticipated to have higher levels of vehicular movement than other streets and are also designated as bus routes. In particular Kerr Street plays an important role in defining the character of the community as one arrives and departs by car or bus and is an important part of the arrival experience for EFL.

The design of residential frontages on these streets should express a more urban character while creating a strong sense of the garden and park setting of the west neighbourhood. Traffic volumes suggest a greater need to provide buffering between residences and the street. Visual connection between residences and the street is an important part of the design challenge, as is the expression of individual homes. A combination of walls (concrete, brick, stone), railings and plantings should be explored to define the private/ public edge.

**Roads A, E and H and Mount Baker Way:** These are intended as quieter neigbourhood streets serving local pedestrian and vehicular traffic. They play an important role in reinforcing the residential character of each precinct. Road E is distinctive for its curving alignment sweeping dramatically to Kent Avenue at it's east end. A gentle curve at the midpoint of Road E provides a relaxed character to this riverside precinct. Both streets have been designed with "pinch-points" that slow traffic and provide a place for enhanced streetscape elements such clusters of trees and rain-gardens. The building forms and landscape treatment should be arranged to reinforce and add to the richness and spatial experience of the streetscape.

Building facades should create variety of form, space and character along the street and should emphasize the expression of individual homes. Front yard treatments play an important role in reinforcing this character. Front yard treatments will play a major role in creating a pedestrian scaled, friendly neighbourhood street. High walls, fences or plantings along the street edge or between homes should be discouraged.







Soften fences, screens and walls with climbing and trailing plants.





Internal mews accommodate vehicles, bikes and pedestrians.

**Mews Frontages:** Shared vehicular and pedestrian mews provide access to all but one of the parcels in the Southeast and Southwest precincts. The intent is to create a highly pedestrian friendly environment throughout these riverside precincts, addressing vehicular access as discreetly as possible.

Front yards for residential units facing the Mews should be elevated above the walkway allowing for overlook and privacy. Linear rain-gardens are proposed to provide separation between the public walkway and adjoining yards. The absence of traffic makes these spaces eminently usable as garden spaces. Material selection and detailing should emphasize the residential garden character of the space.

**Parks Frontages:** Residential units face directly onto parks in several locations. These private spaces are completely removed from vehicular traffic. A footpath will be provided along each residential frontage providing access for units to the park, street or lane. Yards and building entrances should be elevated above the park or greenway to provide privacy, to accentuate the potential level of surveillance and add to the opportunity for extensive views. Walls, railings and planting should be kept low to allow for strong visual connections.



Front yards reinforce the tighter urban character of the streets.



Residential facades on mews have minimal setbacks and a



more intimate relationship between the public and private realms.



Utilize paving changes and steps to create a transition between front doors and the street



Reinforce pedestrian permeability through courts

A wide variety of design approaches is encouraged

Reflect the urban, riverside, character







Provide areas for casual relaxation

#### 3.3.3 Common Garden Courts and Roof Gardens

#### General Design and Character

The design and character of common open space plays an important role in determining their level of use, their contribution to sustainability goals and the look and feel of the residential environment. Competition for space for a wide variety of programmatic needs will likely drive the design of many spaces. The allocation of space for each use, it's siting and interrelationships will be key to successful outcomes.

Semi-enclosed garden courts, edged by 4-6 storey building blocks and connected to adjoining streets and the foreshore park by breezeways and passageway are typical of the larger outdoor spaces proposed within the southern precincts. The northwest precinct has more varied open spaces that are typically tighter and more linear in the northern parcels and comprising of smaller "parklets" adjoining internal lanes within the townhouse parcels.

For most parcels, common spaces are typically provided at or near street level over parking garages. Roof garden opportunities also exist on the upper roofs of low-rise apartment and the upper roofs of residential towers.

The character of common garden courts may vary from parcel to parcel and should relate strongly to the proposed architectural direction. The sustainability goals of the project dictate that these spaces are useful spaces that serve the social and ecological needs of the community.

Residential common spaces will need to accommodate a wide range of uses including:

Pedestrian Access Private Yard Spaces Visual Amenity Passive Recreation Active Recreation Children's Play Urban Agriculture Rainwater management features Urban habitat and ecology

Visual Amenity and Connections: Visual amenity is an important goal in the design of common open spaces in high-density housing. Typically common open spaces are enjoyed as much as a visual amenity from surrounding units as they are as an open space, especially in winter months. The design of open spaces therefore needs to be carefully considered in terms of their plan views. Repetitious patterns, strong plan forms, paving patterns, bold plant massing, lighting are all elements that should be considered. Trees can be used to provide privacy to lower floor units and private outdoor spaces, screening oblique views from above.

Common garden courts will make an important contribution to the visual amenity and experience of the Foreshore Park. Garden courts along the riverfront need to be designed with this view in mind, as well as the view from residences within. Consideration should be given to using landscape elements other than fencing to control access while allowing views both in and out. Where fencing is provided it should retain this visual connection.

Where private paths provide access to and from courtyards, care should be taken in location and design to ensure appropriate interface with pedestrian and bike paths in the public realm.



Consider year round visual amenity provided by common outdoor spaces.

Provide a variety of opportunities for passive recreation.

**Passive Recreation:** Common outdoor spaces provide the opportunity for passive outdoor recreation. This may range from seating areas, individual benches, tables and chairs, walls and other elements that create resting opportunities, lawn areas and other treatments that cater to passive recreation. Seating should be provided in both sunny and shady locations. Seating spaces should be located to encourage use, social interaction and to provide a positive relationship with other uses such as play areas, garden plots and adjoining residences. In the Northwest Precinct, especially, many seating locations can take advantage of dramatic river views.

**Children's Play:** Play areas require careful siting to avoid conflict with adjoining uses and to provide a good relationship with compatible uses such as indoor amenity areas, seating spaces and in locations where there is a high level of visual overlook from family sized units. Other opportunities for play should be considered as an integral part of the landscape design. Examples include, sidewalk games areas, circular paved routes for tricycles and bikes, mounded lawns, work tables (for crafts and eating), children's gardens, sand or gravel zones with rocks and small boulders etc.

**Private Yard Space:** Private yards are typically provided for "ground" level units. For higher density sites, where greatest competition exists for common open space, the extent of private gardens should be carefully considered in relation to competing needs of the overall community. Private spaces should be designed, like street frontages, to provide usable outdoor space for residents. Private yards should be enclosed with walls, fences, screens or plantings between adjoining neighbours and common areas. A combination of these elements should be used where possible to create variety in layout and form.











Explore a variety of play opportunities. Consider them as integral parts of the landscape.



Provide opportunities for individual or shared garden plots.

**Urban Ecology:** Creating opportunities for urban wildlife to co-exist (particularly birds) requires a fresh look at plant species selection and design. Reliance on purely ornamental species to produce typically static designed environments is unlikely to serve this goal. The use of mixed plants, including a range of trees, shrubs, herbaceous plants, grasses, ferns, herbs and vines, that offer a range of potential shelter and food are required to make any real contribution. Native plants are typically better host plants for urban wildlife and can be combined with other fruit bearing plants that can contribute as a food source for birds and/or humans. Areas of "wilder" less manicured plantings should be considered in some locations to provide more cover for birds.

**Urban Agriculture:** The accommodation of urban agricultural and rainwater treatment components provides an opportunity to visually emphasize these sustainability-based initiatives as strong generators of character.

Garden plots need to be easily accessible and in areas of highest sun access. These facilities may generate a lot of activity and their siting in relationship to ground floor units should be carefully considered. Individual garden plots and shared garden plots should be integrated into the overall design and located in conjunction with seating and play spaces. Creative layout of garden plots that are integrated into the overall design will be encouraged over highly regimented layouts. Garden plots should be integrated with more permanent plantings of herbaceous plants and shrubs.

Food bearing plants such as fruit trees, berry bushes, vines, herb gardens and other edible landscaping should be integrated into the design of common areas. Innovative design solutions should be sought for the integration of such elements into a modern, high density urban context.

Walls, fences and hedges should be replaced by fruiting vines or other espaliered fruiting plants grown on trellises. Vines can be used as green screens on buildings or around service areas. Planters and pots can also be used to provide incidental gardening opportunities for residents.

Use wall shrubs or climbing plants to soften walls and fences.

Combine shrub plantings, perennial plants and food plants, including trees, shrubs, vines, and groundcovers to provide a variety of food production and wildlife habitat opportunities. Use native plants where appropriate.



Consider rooftop rain-gardens as a means to slow the flow and cleanse run off.

Rainwater Management: The rainwater management approach for EFL proposes that rainwater collection, infiltration and cleansing can be partially accommodated in landscape features within common areas of development parcels. Strategies would include maximizing areas of soft landscaping (and associated soils), permeable surfacing relying on filtering water to sub-level drains, rather than direct drainage to a pipe, use of drought tolerant plant species and high efficiency irrigation systems. Rainwater collected and detained in the landscape may provide the opportunity for landscape features using plants tolerant of inundation by water. Such features may also provide opportunities to create bio-diversity and urban habitat. The accommodation of such features will serve to visually express the sustainability of the development.

In addition rainwater may be collected from roofs or other hard surface areas and directed to cisterns with the potential for re-use for toilets, irrigation or other non-potable uses. Collection systems can also be visibly expressed as building and landscape features.





Utilize collected rainwater as landscape features.







Plant species should be selected for drought tolerance.









Incorporate trees between cars to provide shade and screening.

Higher quality materials, with more finely grained pedestrian scale detailing are encouraged.

Reinforce legibility of routes. Provide clear lines of sight with

continuity of paving and lighting.

Consider environmental impact of paved areas.

#### 3.3.4 Mews And Walkways

Achieving highly permeable urban neighbourhoods is an important objective for the East Fraserlands community. Developments should be designed to encourage free flow of pedestrian and cyclists though parcels via a network of interconnected mews and walkways. Design and detailing of such routes should reinforce their legibility and scale and, where applicable, emphasize their shared use by pedestrians, bikes and vehicles. Their locations are important to provide connectivity and linkages through adjoining sites. Buildings that frame mews should be carefully detailed to emphasize the public nature of the routes and reinforce visual connectivity, framing views and creating safe and legible routes. Higher quality materials, with more finely grained pedestrian scale detailing should be encouraged. The ground plane should explore options for patterning, texture and colour.

Where lanes and passageways meet public roads the interconnection should be very carefully considered. Pedestrian priority should take precedence over vehicular movement. Clear lines-of-sight, continuity of paving materials and a linear arrangement of planting and lighting are some of the devices that may be explored to encourage and invite use.

#### 3.3.5 Internal Lanes and parking areas

Internal lanes and parking areas are proposed in several parcels in the Northwest Precinct to provide vehicular access to parkade ramps or to individual townhouse units. In all cases, internal lanes provide for shared vehicle, bike and pedestrian access and are an important part of the common outdoor space for the development. The architectural and landscape design approaches should reinforce an intimate residential character with clear expression of individual residences.

Internal lanes are a significant component of the public realm for the townhouse parcels in the Northwest Precinct. In this context they can function as multi-use communal open spaces that encourage a wide range of outdoor use and social interaction. Building facades along internal lanes have minimal setbacks and have a more intimate relationship between the private realm and common open space. The design of the residential units facing the lanes will play an important role in defining the character of the lanes. Similarly to street design, individual unit entries and regular tree plantings are important elements of lane character.

Lane treatment should reinforce residential character providing definition of entrances and privacy for doorways and windows through the careful design and layout of the ground plane, grade changes, plantings, walls and other elements.

Steps and ramps leading to front doors can be designed to separate the front door from the lane and provide simple transition space between public and private. Changes in paving materials, textured paving, low wall elements, trellises, bollards and plantings can all be carefully positioned to provide separation along the lane edge of the lane.

High quality paving materials should be carefully selected and detailed to complement the design of buildings and adjoining open spaces. A combination of stone, concrete unit pavers, permeable pavers and well detailed cast concrete may be considered as surface materials. Where space permits, private garden can be carefully designed to provide usable open space while fostering visual and physical connections between residences and the lane. High walls, fences and hedges along the lane edge and between neighbours are discouraged.

#### 3.3.6 Loading Areas

Loading areas should be carefully sited to minimize conflicts with adjoining units and impacts on circulation and views. Where they are located off-street loading areas should be sited to minimize conflicts and to allow for screening. Paving materials should be high quality to match adjoining areas. Vertical screens with climbing plants should be provided to minimize views. Consideration should be given to views from above and mitigation provided.



Trees of appropriate form and size should be accommodated to complement the scale of the buildings.

Hedges can be used to provide evergreen or deciduous "walls" within the design.

#### 3.4 Planting Design

Planting design will play a critical role in defining the character and feel of common spaces. Trees, shrubs, groundcovers, herbaceous plants and climbers should all be considered in the soft landscape design.

Trees of appropriate form and size should complement the scale of the buildings. Trees in courtyards can be used to create privacy, shading (for facades and ground plane) and wildlife habitat. Hedges can be used to provide evergreen or deciduous "walls" within the design. Single species hedges should not be excessively used in order to avoid over compartmentalization of the spaces. A mixture of deciduous and evergreen shrubs and groundcover plants should be used in the overall planting composition. Climbing plants can be used with screens and trellis to "green" vertical facades, provide overhead screening and provide a foil between uses. Herbaceous plants can provide seasonal variation in the landscape and can be successfully used in conjunction with shrubs. Drought tolerant plant materials should be used in all cases to minimize irrigation needs. Native plants may suit this purpose with the added benefit of providing wildlife habitat.

A variety of planting forms, evergreen and deciduous, high, medium and low, dense and open types provide a variety of conditions in a landscape suited to wildlife habitat, particularly for songbirds. A wide range of food producing and edible plants should be incorporated into designs to provide the opportunity for casual harvesting of foods and herbs by residents. Planting within private parcels should be designed to encourage song birds in the urban landscape.



A mixture of deciduous and evergreen shrubs and groundcovers plants should be used in the overall planting composition.







## LIGHTING

Simple surface mounted fixture will provide the required light levels at entries.

Lit planes at entry to accentuate architecture while providing a safe inviting threshold.

Semi-private patios with low level lighting to provide transistion to internal private space.

Surface mount lighting at entries to highlight and provide wayfinding.

Decorative elements will add personality and individuality to the townhouse entries.

#### 4.1 Introduction

#### 4.1.1 Lighting Design Objectives and Character

- Create a safe, compelling, energy effective, and sustainable environment
- Support wayfinding at road crossings and critical decision points
- Promote pedestrian 'centric' usages
- Use a limited palette of standard luminaires and light sources to facilitate long term maintenance
- Use "white light" sources (metal halide, fluorescent, LED) for superior visual acuity and enhanced perception of light

#### 4.1.2 Sustainability Themes

- Follow the Illuminating Engineering Society of North America (IESNA) recommended practices.
- Promote a conscientious use of energy resources
- Utilize long life light sources to minimize maintenance and resource use
- Minimize light trespass, glare, and light pollution

#### 4.1.3 Integration of private and public areas

- Limited palette of luminaires and lamps will be selected considering ease of installation, photometric performance, and visual consistency with the architecture and landscape
- Avoid overlighting by careful integration of private and public realm lighting design
- Retain expert lighting design consultant whenever possible

#### 4.2 Lighting related to building typologies

#### 4.2.1 Town homes

Lighting should provide higher levels of illumination at unit entries for safety and wayfinding. The clear identification of each entrance will create an inviting warmth at townhouse entrances.

Decorative lighting elements at the entrance will enhance the residential style of the homes. These fixtures should follow the aesthetics of the architecture as well as the lighting design objective and character.

Semi-private patio and landscape buffer areas should act as a soft transition from the public realm into areas of private residency. Lighting for these areas should be low level and close to the ground to provide low-glare illumination. These fixtures can accent selected pieces within the landscape and/or be integrated into elements of the hardscape.

The individuality of each entrance will be accentuated by the lighting. Fixtures and lighting will respond to architectural cues to enhance the personality of each townhouse. In addition, the character of the lighting will help to provide wayfinding.











Lighting incorporated into entry areas to highlight hierarchy of building.

The common areas should be illuminated to low light levels.

Decorative options for the entrance can enhance the homes without creating glare.

Series of fixtures mounted in hardscape features and as poles to accentuate wayfinding and highlight pathways.





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4.2.2 Low and Mid-rise

Lighting should prioritize way finding and highlight building entrances by creating a clear hierarchy along the frontage of the building. The techniques for illuminating transition areas should follow the articulation of the building.

Mid block passages that lead to the inner block spaces should be treated as a pedestrian walkway by providing a safe and inviting atmosphere. The lighting levels at these passages should inform pedestrians of the hierarchy of the walkways and guide them to the semi-public passage ways.



Entrances will have personality unique to the architecture. Lighting at entries will help to provide wayfinding and a safe inviting environment.

The connections and pathways will be lit with low level small scale fixtures.

Pathway lighting will help to aide in wayfinding by lighting the way and accentuating the rythm of the site.

Series of light fixtures will aide wayfinding and will create interest in landscape planes at night.

#### 4.2.2.1 Multi-family

Lighting should connect the Public Realm concept with the semi-private areas by applying the same methodology as in the rest of the site. Lighting should assist in defining the identity of the units as well as respecting the characteristics of this building typology.

#### Interior gardens:

Lighting should be kept to a minimum in these areas. Low illumination levels should be provided for safe circulation at night.

Lighting should have a presence within the landscape by accenting selected shrubs or trees and by integrating with hardscape and benches. These lighting elements or shapes can provide delight and playfulness to the area by supporting the simple forms of the architecture.

In addition to the courtyards, the roofs will be developed into usable green spaces. Lighting will provide a simple approach with low level lighting that will caste subtle soft lighting onto the ground.

Ground level oriented units will follow the same concepts as the townhomes with individually highlighted entries that help to provide wayfinding while remaining inviting.



Series of pedestrian scale poles help to highlight wayfinding in connecting spaces.

Public Open space and streetscape will be lit with low glare pedestrian scale poles.

Softly lit facade will help to connect residential and retail environments.

Lighting elements integrated into landscape features and paving will help to provide low level lighting and create wayfinding.

#### 4.2.3 Kerr Street Landing

Lighting for the mixed-use buildings should be more lively in nature than the exclusively residencial parcels. The public realm concepts should take precedence to create a pedestrian experience in an inviting environment.

Canopy mounted accent lights, low-glare pedestrian scale poles, landscape highlights and low level illumination should be the applied vocabulary.

Lighting will be complementary to the public realm lighting. Diversity for individual stores will be emphasized by the lighting. Outdoor seating with integrated lighting will have a night time appeal.



Series of lines or dots help to accentuate the verticality of the buildings.

## 4.2.4 Towers

Lighting for the towers should enhance the clean form and the northwest modernist style. While avoiding glare producing sources and/ or flood distribution fixtures, building lighting is encouraged.

Lighting elements should be integrated to the form of the building to bring a 'pixelated' approach. These pixels can be the shapes, forms, and colours that best fit the characteristics of the tower.

The tower lobbies and building grounds that interact with the public should be treated to match the rest of the community creating a cohesive whole.

The lighting should give the entranceway presence in the street frontage.

Points of light continue to pedestrian level.



LED fixtures for long life and low maintenance installation.

# RENDERINGS



Overall site rendering

5.0





Kerr Street landing







Southeast precinct, looking west

Kent Avenue looking east

North Neighbourhood Park



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